Appendix A
OEA, Applicant, and Agency Correspondence

SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

December 10, 2021

Mr. Misael Cabrera
Director
Arizona Department of Environmental Quality
1110 West Washington Street
Phoenix, AZ 85007

Re: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – in Maricopa County, AZ; Preliminary Environmental Consultation

Dear Mr. Cabrera:

I am writing to inform you about a forthcoming proposal from the Union Pacific Railroad Company (UP) to construct and operate approximately six miles of new rail line in Maricopa County, Arizona. UP intends to seek authority from the Surface Transportation Board (Board) to construct and operate the proposed rail line. Before making its decision on whether to grant such authority, the Board must consider the potential environmental impacts of UP's proposal, pursuant to the National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act (NHPA), the Board's environmental rules at 49 C.F.R. Part 1105, and related environmental laws.

The Board's Office of Environmental Analysis (OEA) intends to begin the process of preparing environmental documentation that will analyze the potential environmental and historic impacts of the proposed rail line. OEA will conduct the environmental review in consultation with appropriate federal, tribal, state, and local agencies; other interested stakeholders; and the public. The purpose of this letter is to advise you of the proposed rail line project, request information from your agency on the resources under your jurisdiction that could be affected by the proposed rail line, identify permits and approvals that could be required of UP, and identify any other information that would inform OEA's development of the range of alternatives to be considered during the environmental review. The information you provide will also help us determine what type of NEPA document should be prepared.

Project Background

UP intends to request Board authority to construct and operate new industrial lead railroad track that would connect UP's Phoenix Sub main line track in Maricopa County, Arizona, to industrial properties southeast of the Phoenix-Mesa Gateway Airport (Figures 1 and 2). This project is referred to as the Pecos Industrial Rail Access and Train Extension

(PIRATE) project. According to UP, the proposed track would serve the transportation and logistics needs of existing manufacturing and industrial businesses, as well as prospective businesses looking to relocate to the area. Maps of the proposed project area are attached.

Environmental Review Process

This letter begins the process by which OEA will assess the potential environmental impacts of constructing and operating the proposed rail line. The process will include the preparation of a draft and final environmental document, which for rail construction proposals is normally an environmental impact statement (EIS), as specified in the Board's environmental rules at 49 C.F.R. § 1105.6(a). Your response to this inquiry will assist OEA in determining if an EIS is appropriate in this case or if, alternatively, an environmental assessment (EA) could be prepared.

Pursuant to the Council on Environmental Quality's regulations implementing NEPA (40 C.F.R. §§ 1500–1508) and the Board's environmental rules at 49 C.F.R. § 1105, OEA will be the lead federal agency in the preparation of the environmental document that will evaluate the potential environmental effects of UP's proposal, including reasonable and feasible alternatives and the no-action alternative. The draft environmental document will be distributed to agencies and the public for review and comment pursuant to the requirements of NEPA and the Board's environmental rules. The NEPA document will set forth the Board's independent environmental review of the build alternatives and the no-build or no-action alternative. The alternatives to be considered in the environmental document may include new alternatives developed by OEA. Our agency's process will conclude with the Board's decision on whether to authorize the proposed rail line. In reaching its decision, the Board will consider the entire environmental record, including all public comments, the draft and final environmental documents, and OEA's final recommended environmental mitigation. Jacobs Engineering Group Inc., the third-party contractor for this project, will assist OEA in conducting the environmental review.

Request for Input

We would appreciate your assistance in preliminarily identifying whether any resources of concern to your agency may be affected by the proposed rail line, particularly if any permits or approvals are required of UP, and welcome any additional issues or concerns that you consider appropriate. You may submit comments electronically through the Board's website at www.stb.gov by clicking on the "E-Filing" link on the left side of the home page and then selecting "Environmental Comments." Brief comments may be typed within the comment field provided or you may attach comments as a separate file. You may also send your written comments to Adam Assenza, OEA's Project Manager for this environmental review, by email at Adam.Assenza@stb.gov. Comments received will be made available to the public on the Board's web site. We respectfully request your response by **January 10, 2022**.

If you have any questions or would like to arrange a virtual meeting or conference call with OEA, please feel free to contact Adam Assenza by phone at (202) 245-0301 or by email. We greatly appreciate your assistance and look forward to your participation in the Board's environmental review process for this project.

Sincerely,



Danielle Gosselin
Acting Director
Office of Environmental Analysis

Enclosures:
Figure 1 – Project Vicinity Map
Figure 2 – Project Location Map

cc:
Wayne Miller, Remedial Project Manager

Figure 1. Project Vicinity Map

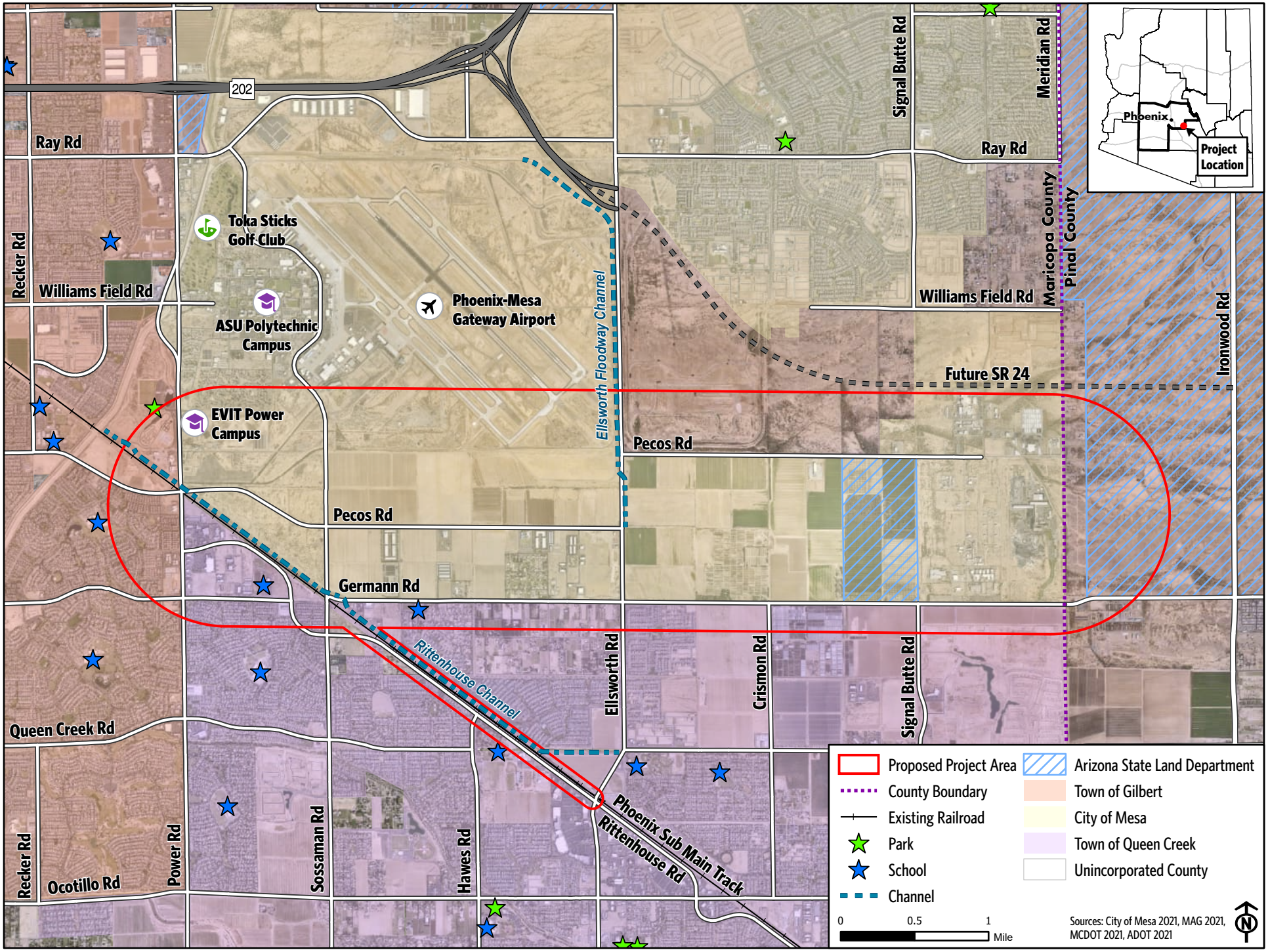
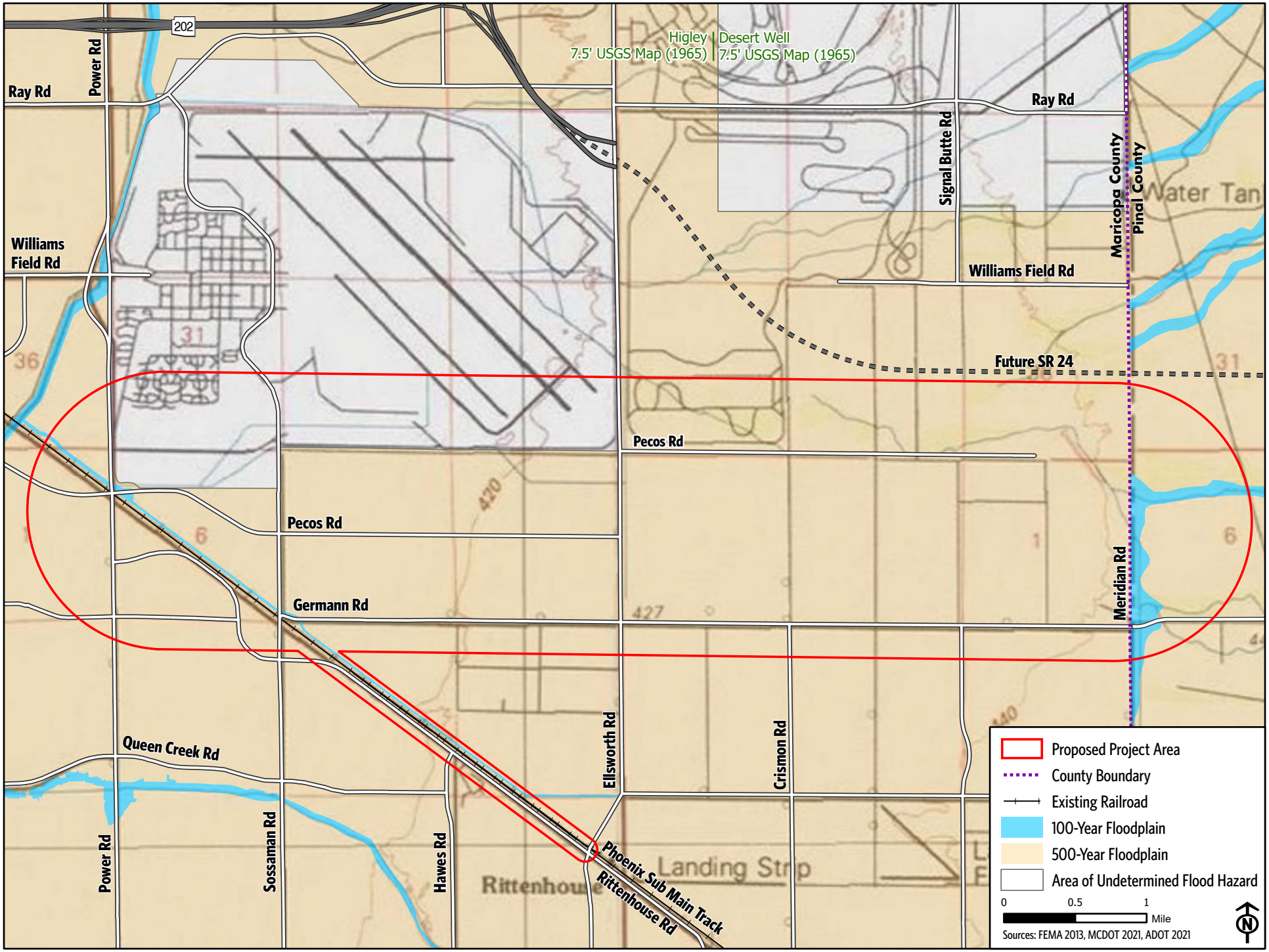


Figure 2. Project Location Map



From: Buckley, Maggie
Sent: Monday, May 2, 2022 10:04 AM
To: Geoffrey McCormick; Safety-Railroad-Web
Cc: Assenza, Adam; Phoebus, Elizabeth (Betsi)
Subject: RE: UP Pecos Industrial Rail Access and Train Extension (PIRATE) Alternatives - Input Requested

Mr. McCormick,

Thank you very much for your input, it is very helpful and we appreciate the prompt reply. We will reach out to you and Mr. Pike if we have further questions as we move through our environmental review.

Thank you,

Maggie Buckley
O: 425.233.3117
M: 206.949.5955

From: Geoffrey McCormick <GMccormick@azcc.gov>
Sent: Thursday, April 28, 2022 4:44 PM
To: Buckley, Maggie <Maggie.Buckley@jacobs.com>; Safety-Railroad-Web <railroad@azcc.gov>
Cc: Assenza, Adam <adam.assenza@stb.gov>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>
Subject: [EXTERNAL] RE: UP Pecos Industrial Rail Access and Train Extension (PIRATE) Alternatives - Input Requested

Good afternoon,

There are some regulatory requirements that should be considered while this project is in the planning stages.

1. The Arizona Corporation Commission requires a filing, a hearing, and then renders a formal decision regarding establishment or modification any public rail/road crossing, including at grade or grade separated.
2. The timeline for such a hearing and decision is conservatively estimated at 90 to 180 days. Beyond getting all parties in alignment regarding the safety aspects of the project, another constraint to be mindful of is getting the docketed item on the hearing schedule. Hearings are scheduled up to 180 days out.

We have some additional concerns, mainly related to what appears to be an increasing frequency grade crossings blocked for an excessively long period of time due to changing operating philosophy on the part of the Union Pacific. Blocking grade crossings for excessive periods of time can post safety risks for local citizens including delayed emergency response etc.

I'm copying our Grade Crossing Sr Inspector, Jason Pike. He is the primary contact for grade crossing inspection, modification, and establishment. He has already established contact with most of the parties involved in this project. I will also be involved with any operating issues.

Thank you for bringing this to our attention. We look forward to helping bring a productive and safe project to fruition.

Geoffrey D. McCormick
Railroad Safety Section Supervisor

Senior Railroad Safety Inspector – Hazardous Materials
Arizona Corporation Commission
1300 W. Washington St., Ste 220
Phoenix, AZ 85007
602-262-5601 desk
602-999-1467 cell
gmccormick@azcc.gov
www.azcc.gov



"Safety through Continuous Improvement"

From: Buckley, Maggie <Maggie.Buckley@jacobs.com>
Sent: Thursday, April 28, 2022 2:54 PM
To: Safety-Railroad-Web <railroad@azcc.gov>
Cc: Assenza, Adam <adam.assenza@stb.gov>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>
Subject: UP Pecos Industrial Rail Access and Train Extension (PIRATE) Alternatives - Input Requested

Hello Mr. McCormick,

The Surface Transportation Board's Office of Environmental Analysis has begun the process of preparing environmental documentation to support the analysis of potential environmental impacts of the proposed rail line. Since our last correspondence, the purpose and need for the rail line has been developed (attached) along with the range of alternatives to be considered during the environmental review. As shown in the attached Alternatives Constraints Map, the environmental document will evaluate two alternative alignments, which are shown as Alternatives 1 and 2. Both alternatives would provide approximately six miles of new industrial lead track from Union Pacific's main line track to the eastern portions of the Pecos Advanced Manufacturing Zone in the City of Mesa. Additional project elements include seven new at-grade roadway crossings, drainage improvements, and utility relocations.

The Office of Environmental Analysis requests feedback from your agency on the proposed alternatives as well as confirmation of any permits or approvals that are needed from your agency in order to construct the project. If a permit or approval is required, we request clarification regarding the regulatory trigger for your agency's involvement as well as application requirements and typical timeline for completing the process.

If you have any questions regarding this request, please contact Adam Assenza, the Board's Office of Environmental Analysis's Project Manager for this project, at (202) 245-0301 or Adam.Assenza@stb.gov. We greatly appreciate your assistance as we move forward with our environmental review.

Thank you,

Maggie Buckley
O: 425.233.3117
M: 206.949.5955

From: Geoffrey McCormick <GMccormick@azcc.gov>
Sent: Friday, December 10, 2021 2:21 PM
To: Buckley, Maggie <Maggie.Buckley@jacobs.com>
Cc: Adam.Assenza@stb.gov; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>; Safety-Railroad-Web <railroad@azcc.gov>
Subject: [EXTERNAL] RE: UPRR Pecos Industrial Rail Access and Train Extension (PIRATE) Preliminary Environmental Consultation

Good afternoon,

Email is fine. In the future, please send to the following address: railroad@azcc.gov. This will include our Director, Grade Crossing, and admin personnel.

Thank you,

Geoffrey D. McCormick
Railroad Safety Section Supervisor
Senior Railroad Safety Inspector – Hazardous Materials
Arizona Corporation Commission
1300 W. Washington St., Ste 220
Phoenix, AZ 85007
602-262-5601 desk
602-999-1467 cell
gmccormick@azcc.gov
www.azcc.gov



"Safety through Continuous Improvement"

From: Buckley, Maggie <Maggie.Buckley@jacobs.com>
Sent: Friday, December 10, 2021 2:59 PM
To: Geoffrey McCormick <GMccormick@azcc.gov>
Cc: Adam.Assenza@stb.gov; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>
Subject: UPRR Pecos Industrial Rail Access and Train Extension (PIRATE) Preliminary Environmental Consultation

Hello Mr. McCormick,

The Union Pacific Railroad Company intends to seek authority from the Surface Transportation Board (Board) to construct and operate six miles of new rail line in Maricopa County, Arizona. An initial agency consultation letter is attached that provides additional information about the project and requests your agency's input regarding the proposed rail line by January 10, 2022. This letter was also mailed to your office on December 9, 2021. Please let us know if you prefer to receive future correspondence by mail or electronically and the preferred point of contact for your agency.

If you have any questions, please contact Adam Assenza, the Board's Office of Environmental Analysis Project Manager, at (202) 245-0301 or Adam.Assenza@stb.gov. We greatly appreciate your assistance and look forward to your participation in the Board's environmental review process for this project.

Thank you,

Maggie Buckley | Jacobs | Environmental Project Manager (she/her)
O: 425.233.3117 | M: 206.949.5955 | maggie.buckley@jacobs.com
999 W Riverside Avenue, Suite 500 | Spokane, WA 99201 | USA

NOTICE - This communication may contain confidential and privileged information that is for the sole use of the intended recipient. Any viewing, copying or distribution of, or reliance on this message by unintended recipients is strictly prohibited. If you have received this message in error, please notify us immediately by replying to the message and deleting it from your computer.

NOTICE - This communication may contain confidential and privileged information that is for the sole use of the intended recipient. Any viewing, copying or distribution of, or reliance on this message by unintended recipients is strictly prohibited. If you have received this message in error, please notify us immediately by replying to the message and deleting it from your computer.

January 10th, 2021

Adam Assenza
Surface Transportation Board
Environmental Analysis Project Manager
Office of Environmental Analysis

Subject: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – in Maricopa County, AZ; Preliminary Environmental Consultation

Dear Adam Assenza:

Thank you for your notification of the forthcoming proposal from the Union Pacific Railroad Company(UP) to construct and operate approximately six miles of new rail line in Maricopa County, Arizona. ADOT would like further coordination as information on the location of the new rail line is available.

Specifically, if entering ADOT Right of Way, there would need to be a review for compliance with ADOT's National Pollution Discharge Elimination System (NPDES) and the Arizona Antiquities Act in order to issue an Encroachment permit.

For further information on potential environmental impacts, please refer to ADOT's Environmental Assessment for the SR 24, Ellsworth Road to Ironwood Road, Phase II Interim project. The "Final Environmental Assessment for State Route SR 802, Williams Gateway freeway" (2011 Final EA) and the "Reevaluation of the final Environmental Assessment" (January 2018), is available on ADOT's website: (https://azdot.gov/projects/central-district-projects/sr-24-interim-phase-ii-ellsworth-rd-ironwood-dr/documents-sr-24).

We appreciate receiving the notice, and the opportunity to review and comment. I am happy to assist with any other questions or concerns.

Sincerely,

Alexis Zaring
Central District Environmental Coordinator
Arizona Department of Transportation, Central District

Enclosures (1): Environmental Assessment Project Area and Summary

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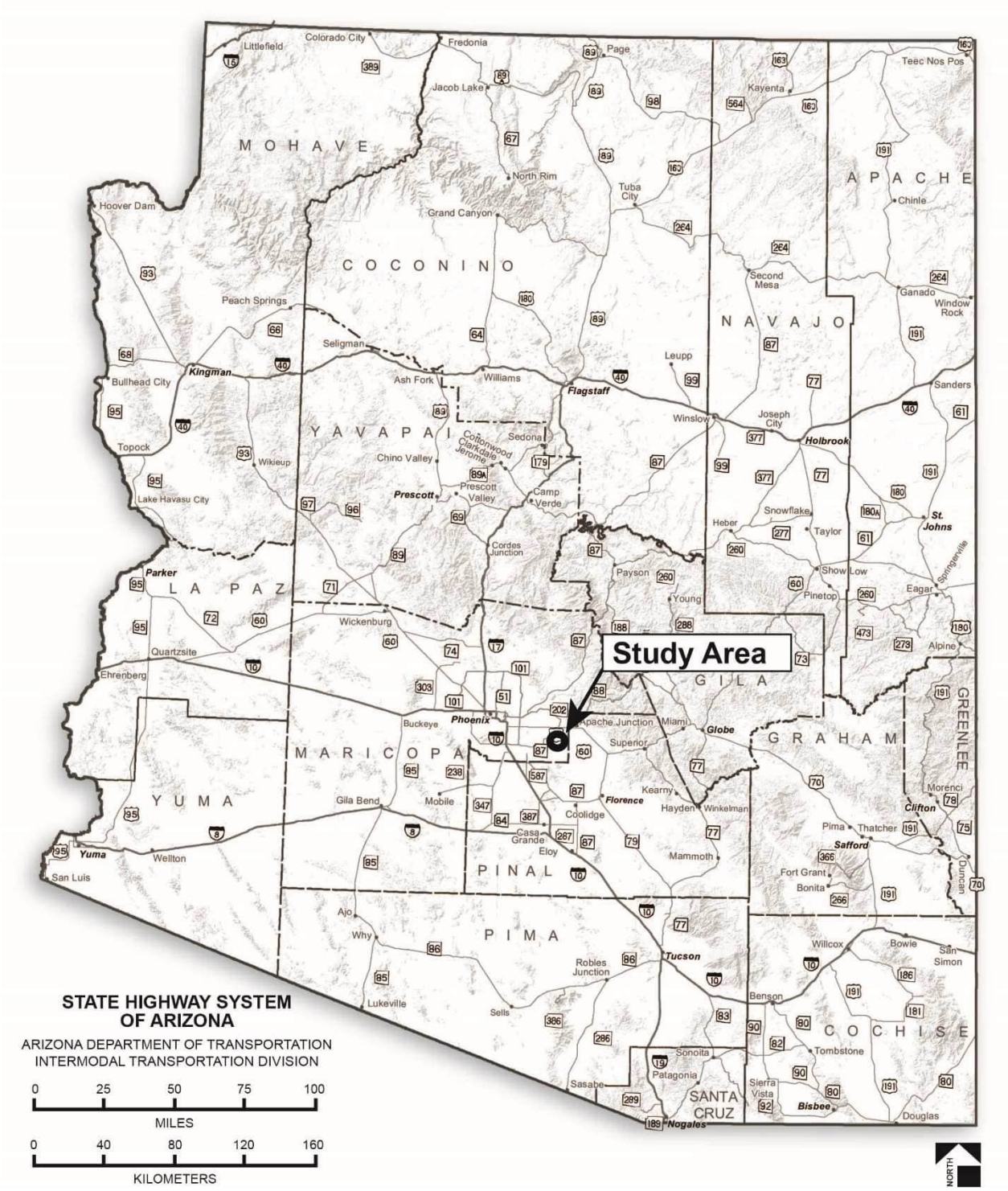


Figure 1. State location map

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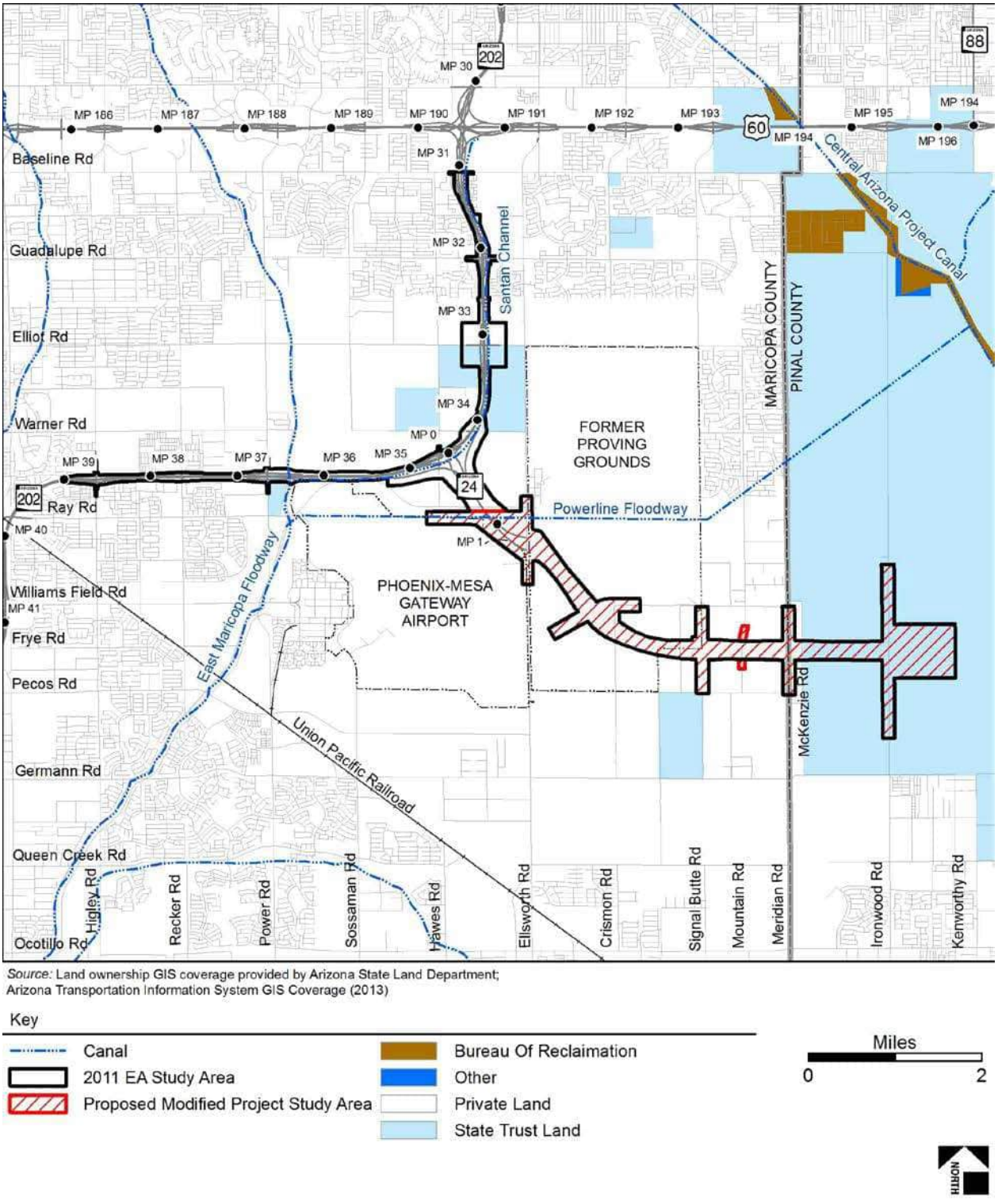


Figure 2. Project vicinity map

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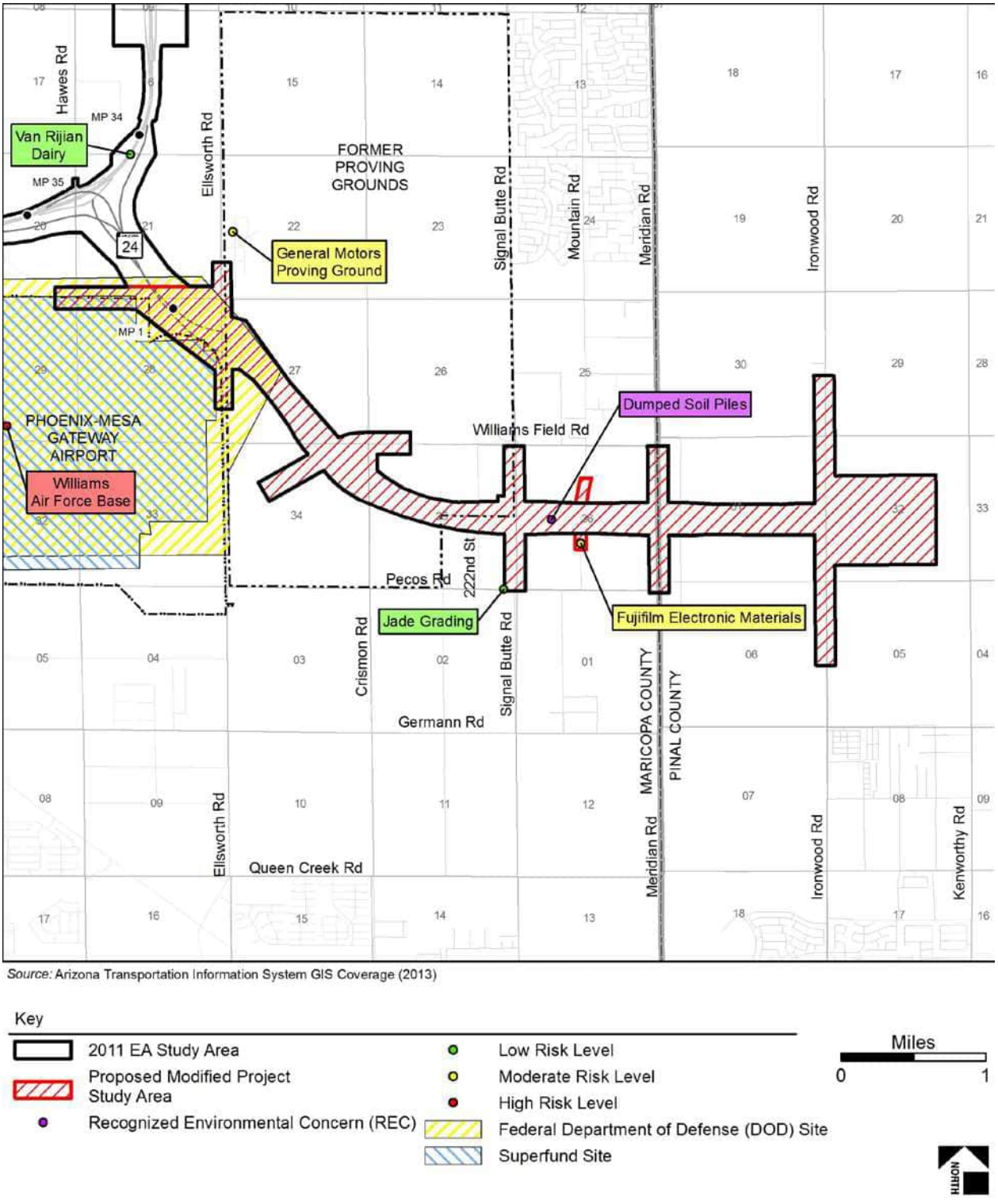


Figure 8. Hazardous Materials map

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TABLE 4. SUMMARY OF ENVIRONMENTAL IMPACTS

Resource	2011 Final EA Finding for the Selected Alternative	Finding for the Proposed Modified Project
Land Ownership, Jurisdiction, and Land Use (including Prime and Unique Farmland)	Would conform to local and regional planning documents; therefore, would cause minimal change to existing and future land uses.	Same
Socioeconomic Conditions (Social Environment, Environmental Justice, and Economic Conditions)	Would require the relocation of approximately four households along the SR 24 alignment; there are no protected populations within the study area; therefore, would not impact these populations; no neighborhoods would be bisected by the Preferred Alternative, and access to local services and facilities would be enhanced due to reduced traffic congestion of surface streets	Would require the relocation of approximately four households along the SR 24 alignment. Protected populations are present within the study area; however, no neighborhoods would be bisected by the Preferred Alternative, and access to local services and facilities would be enhanced due to reduced traffic congestion of surface streets
Cultural Resources	Would impact historic properties and require the preparation of documents for treating and mitigating cultural resources (PA and treatment plan)	Same
Section 4(f)	Would result in direct impact to one planned recreational trail; impacts could be mitigated by design measures	Would result in direct impact to two planned recreational trails (City of Mesa planned shared-use pathway and Pinal County planned trail); impacts would be mitigated by design measures
Air Quality	Would reduce regional impacts of air quality; potential short-term exceedances of CO and PM10 during construction	Same
Noise	Would not result in impacts to receivers that warrant mitigation per ADOT NAP; some receivers would be temporarily affected by construction noise	Same
Utilities	Would require several utility relocations	Same
Visual Resources	Would be a noticeable feature in the landscape; however, impacts are anticipated to be low due to low scenic value throughout the study area and presence of few sensitive viewers	Same

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Resource	2011 Final EA Finding for the Selected Alternative	Finding for the Proposed Modified Project
Drainage and Floodplains	Would traverse two floodplains in the project construction limits—the EMF and a designated 100-year floodplain near the proposed SR 24/Meridian Road TI; potential impacts to the 100-year floodplains would be addressed during the final design; coordination with the floodplain managers would occur during the final design	Same
Clean Water Act Sections 404/401 and Section 402	Would cause temporary and permanent impacts to waters of the US, and the project would require a Section 404 permit; would generate greater than 1 acre of ground disturbance and an AZPDES permit with a SWPPP and Storm Water Monitoring Plan would be required	Would not cause additional impacts on jurisdictional Waters; would require an AZPDES permit with a SWPPP
Biological Resources	Would impact general vegetation and wildlife; would not impact currently listed Threatened or Endangered Species; would impact one candidate species and species protected under the Migratory Bird Treaty Act	Same
Hazardous Materials	Would impact four sites of potential moderate- or high-risk concern	Same, with the addition of impacts to the REC found during the Phase I ESA investigations.
Secondary Impacts	Would tend to create permanent, substantially negative impacts that would fragment habitat, increase the potential for road related mortalities of wildlife, facilitate further destruction of approximately 545 acres of natural desert, threaten cultural resources, and cause additional loss of the natural drainage system	Same
Cumulative Impacts	Would tend to create permanent, substantially negative impacts that would fragment habitat, increase the potential for road related mortalities of wildlife, facilitate further destruction of natural desert, threaten cultural resources, and cause additional loss of the natural drainage system	Same

January 27, 2022

Adam Assenza
Surface Transportation Board
Office of Environmental Analysis
395 E Street SW
Washington, DC 20423

Electronically submitted to: Adam.Assenza@stb.gov

Re: Union Pacific Railroad Company Pecos Industrial Rail Access and Train Extension project

Dear Mr. Assenza:

The Arizona Game and Fish Department (Department) reviewed your Project Evaluation Request dated December 10, 2021, regarding the Union Pacific Railroad Company's (UP's) Pecos Industrial Rail Access and Train Extension (PIRATE) project. This new six mile industrial lead railroad track would connect UP's Phoenix Sub main line track in Maricopa County, Arizona, to industrial properties southeast of the Phoenix-Mesa Gateway Airport. The Department's Online Environmental Tool report created for you (HGIS-15398) on January 27, 2022, indicates western burrowing owls (*Athene cunicularia hypugaea*) have been reported within a three mile radius of your proposed project.

Based on the information provided, the Department offers the following general recommendations:

- The western burrowing owl, a special status species that is regulated under the Migratory Bird Treaty Act (MBTA), has been recorded in the vicinity of your project. The agricultural crop lands in the vicinity of your project may provide suitable habitat for this species, therefore, the Department recommends conducting an occupancy survey for western burrowing owl to determine if this species occurs within your project footprint. Guidelines for conducting this survey are found in *Burrowing Owl Project Clearance Guidance for Landowners*[1] which can be accessed on-line through the Department's website. Please note that the survey should be conducted by a surveyor that is certified by the Department. If an active burrowing owl burrow is detected, please contact the Department and the U.S. Fish and Wildlife Service for direction, in accordance with the *Burrowing Owl Project Clearance Guidance for Landowners*.

[1] https://www.azgfd.com/wildlife/speciesofgreatestconservneed/raptor-management/burrowing-owl-mangement/

GOVERNOR: DOUGLAS A. DUCEY COMMISSIONERS: CHAIRMAN LELAND S. "BILL" BRAKE, ELGIN | JAMES E. GOUGHNOUR, PAYSON
TODD G. GEILER, PRESCOTT | CLAY HERNANDEZ, TUCSON | KURT R. DAVIS, PHOENIX DIRECTOR: TY E. GRAY DEPUTY DIRECTOR: TOM P. FINLEY

The Department appreciates the opportunity to provide an evaluation of impacts to wildlife or wildlife habitats associated with the Union Pacific Railroad Company Pecos Industrial Rail Access and Train Extension project. If you have any questions regarding this letter, please contact me at (623) 236-7615, and visit our website[2] for additional guidelines.

Sincerely,

Cheri Bouchér

Cheri Bouchér
Project Evaluation Program Specialist, Habitat Branch
Arizona Game and Fish Department

AZGFD# M21-12222432

[2] https://www.azgfd.com/wildlife/planning/wildlifeguidelines/

Arizona Environmental Online Review Tool Report

Arizona Game and Fish Department Mission
To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

Pecos Industrial Rail Access and Train Extension (PIRATE)

Project Description:

a forthcoming proposal from the Union Pacific Railroad Company (UP) to construct and operate approximately six miles of new rail line in Maricopa County, Ari zona. UP intends to request Board authority to construct and operate new industrial lead railroad track that would connect UP's Phoenix Sub main line track in Maricopa County, Arizona, to industrial properties southeast of the Phoenix-Mesa Gateway Airport (Figures I and 2). This project is referred to as the Pecos Industrial Rail Access and Train Extension (PIRI\ TE) project. According to UP, the proposed track would serve the transportation and logistics needs of existing manufacturing and industrial businesses, as well as prospective businesses looking to relocate to the area. Maps of the proposed project area are attached.

Project Type:

Transportation & Infrastructure, Railroads (Freight and Passenger), New tracks, bridges, roadway crossing for freight or passenger lines,

Contact Person:

Cheri Boucher

Organization:

Arizona Game and Fish Department

On Behalf Of:

OTHER_FED

Project ID:

HGIS-15398

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. HabiMap Arizona data, specifically Species of Greatest Conservation Need (SGCN) under our State Wildlife Action Plan (SWAP) and Species of Economic and Recreational Importance (SERI), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

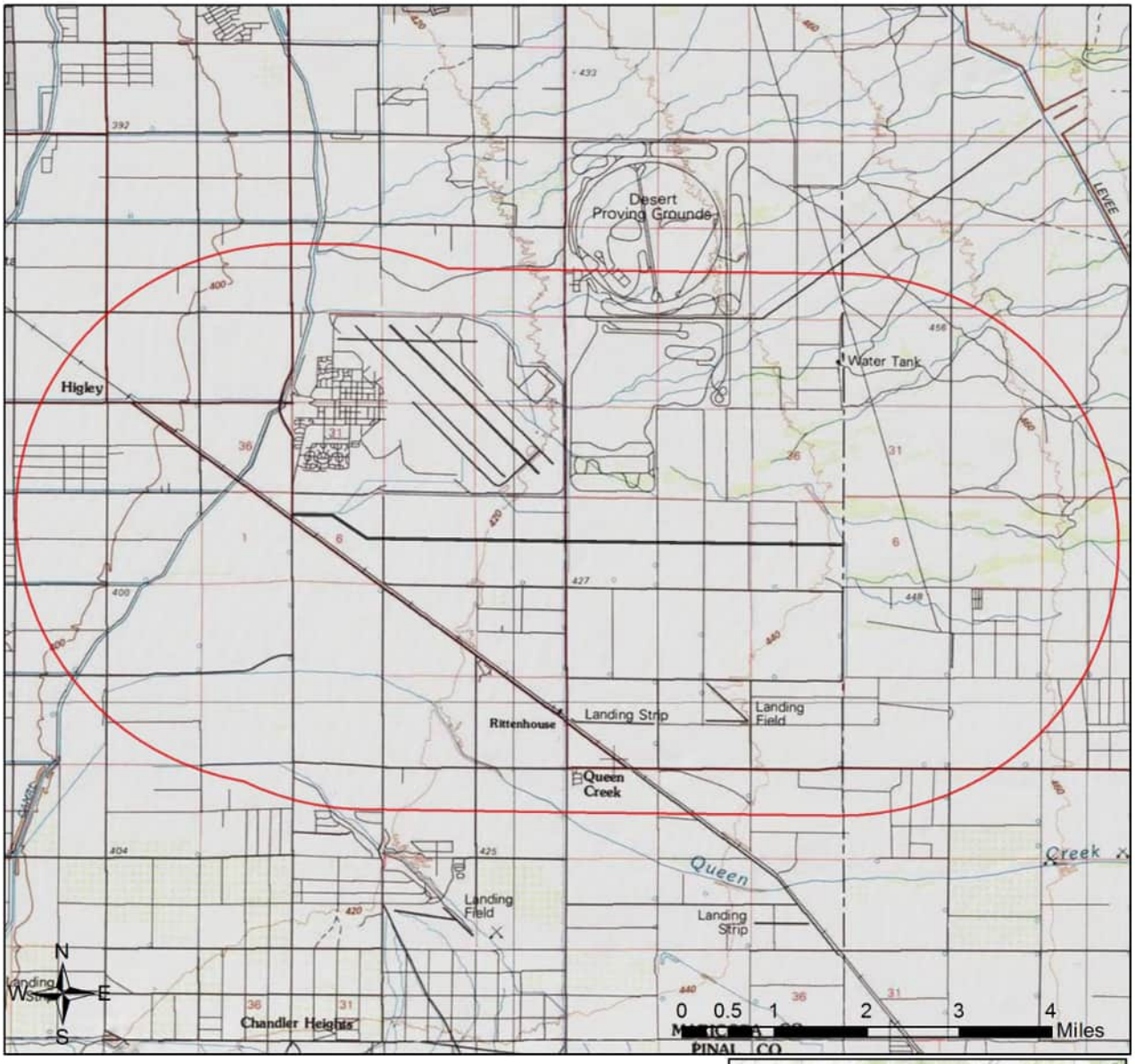
Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
   Project Evaluation Program, Habitat Branch
   Arizona Game and Fish Department
   5000 West Carefree Highway
   Phoenix, Arizona 85086-5000
   Phone Number: (623) 236-7600
   Fax Number: (623) 236-7366
   Or
   PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies

Pecos Industrial Rail Access and Train Extension (PIRATE)

USA Topo Basemap With Locator Map



Project Boundary

Buffered Project Boundary

Project Size (acres): 45.68

Lat/Long (DD): 33.2848 / -111.6347

County(s): Maricopa

AGFD Region(s): Mesa

Township/Range(s): T2S, R7E

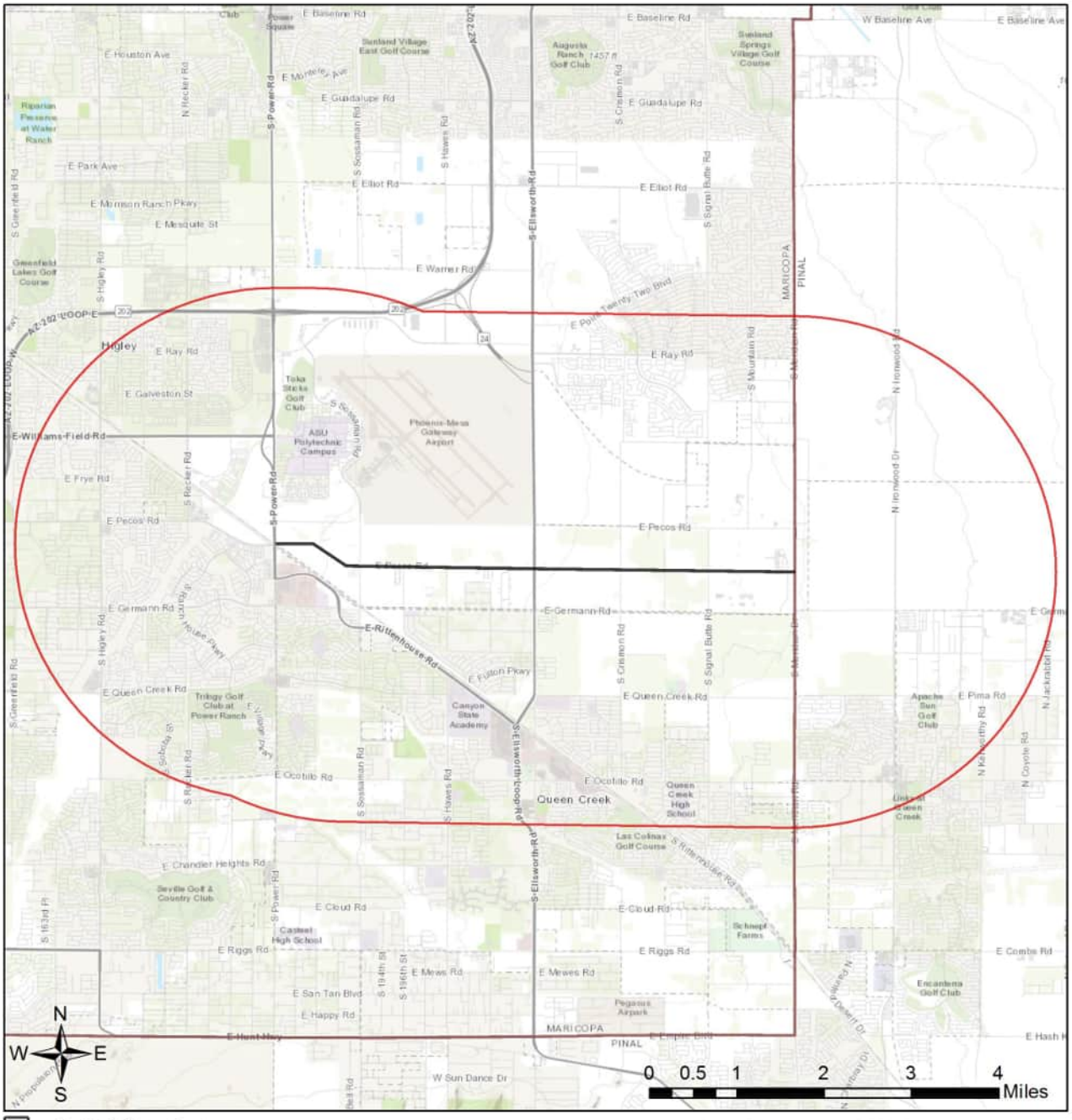
USGS Quad(s): DESERT WELL; HIGLEY



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap

Pecos Industrial Rail Access and Train Extension (PIRATE)

Web Map As Submitted By User



- Project Boundary
- Buffered Project Boundary
- Counties

Project Size (acres): 45.68

Lat/Long (DD): 33.2848 / -111.6347

County(s): Maricopa

AGFD Region(s): Mesa

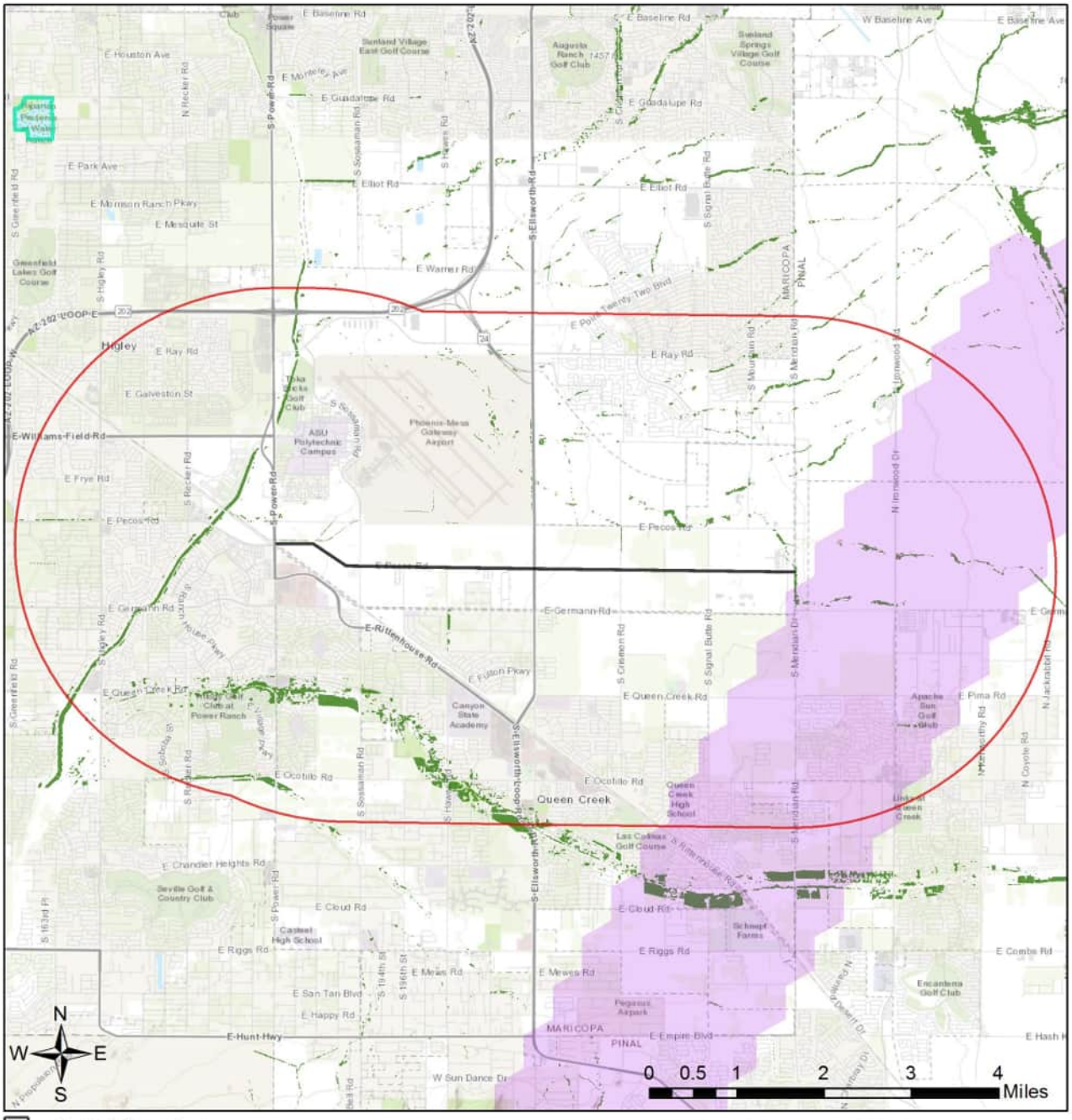
Township/Range(s): T2S, R7E

USGS Quad(s): DESERT WELL; HIGLEY

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Pecos Industrial Rail Access and Train Extension (PIRATE)

Important Areas



- Project Boundary
- Buffered Project Boundary
- Wildlife Connectivity
- Important Connectivity Zones
- Pinal County Riparian
- Critical Habitat
- Important Bird Areas

Project Size (acres): 45.68

Lat/Long (DD): 33.2848 / -111.6347

County(s): Maricopa

AGFD Region(s): Mesa

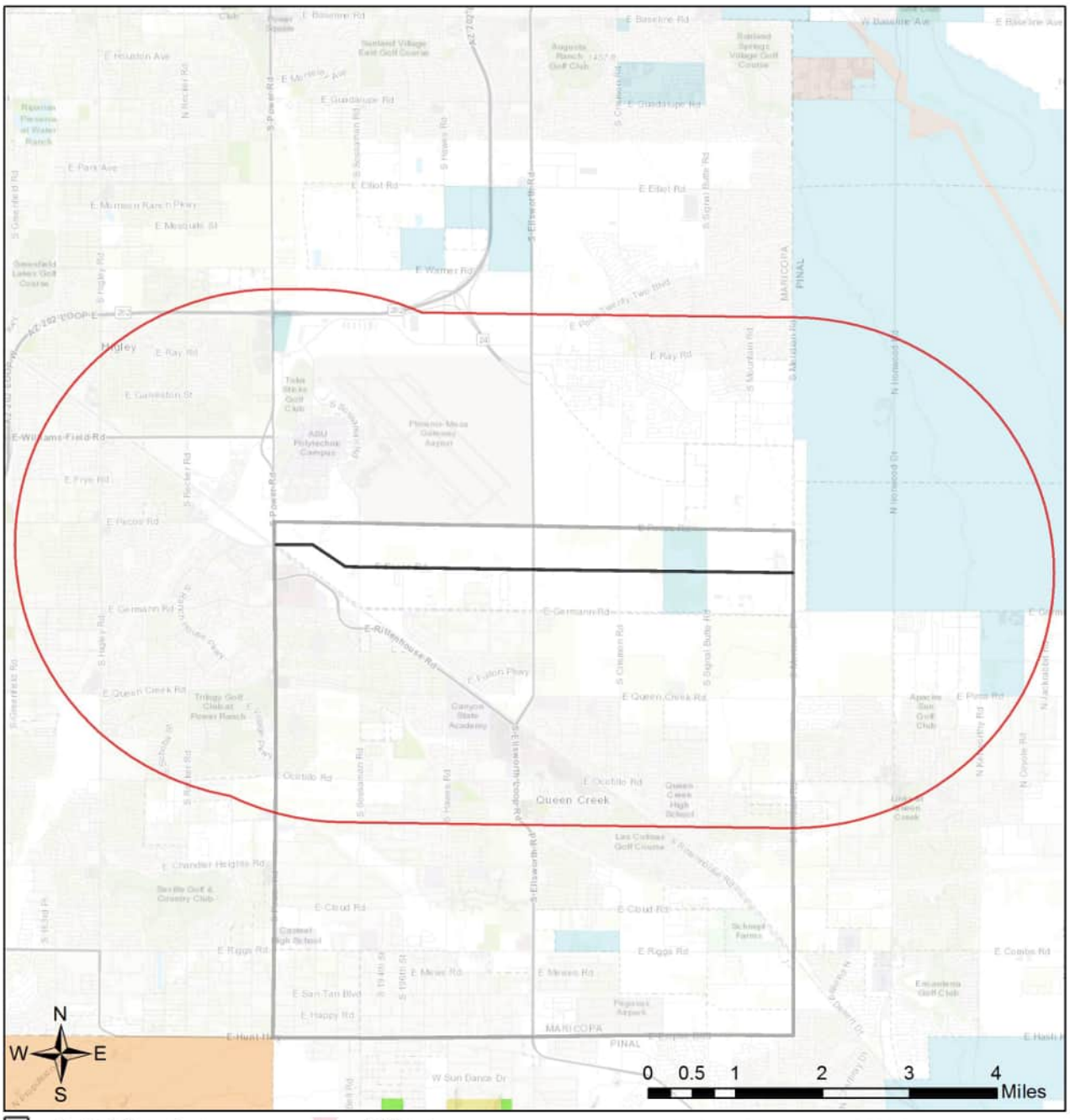
Township/Range(s): T2S, R7E

USGS Quad(s): DESERT WELL; HIGLEY

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Pecos Industrial Rail Access and Train Extension (PIRATE)

Township/Ranges and Land Ownership



- Project Boundary
- Buffered Project Boundary
- Township/Ranges

Land Ownership

- AZ Game & Fish Dept.
- BLM
- BOR
- Indian Res.
- Military
- Mixed/Other
- National Park/Mon.
- Private
- State & Regional Parks
- State Trust
- US Forest Service
- Wildlife Area/Refuge

Project Size (acres): 45.68

Lat/Long (DD): 33.2848 / -111.6347

County(s): Maricopa

AGFD Region(s): Mesa

Township/Range(s): T2S, R7E

USGS Quad(s): DESERT WELL; HIGLEY

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Special Status Species Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		1B
Danaus plexippus	Monarch	C		S		
Lepus alleni	Antelope Jackrabbit					1B

Note: Status code definitions can be found at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/
.

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Riparian Area	Riparian Area					

Note: Status code definitions can be found at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/
.

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Aix sponsa	Wood Duck					1B
Ammospermophilus harrisii	Harris' Antelope Squirrel					1B
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		1B
Botaurus lentiginosus	American Bittern					1B
Buteo regalis	Ferruginous Hawk	SC		S		1B
Calypte costae	Costa's Hummingbird					1C
Chilomeniscus stramineus	Variable Sandsnake					1B
Chionactis annulata	Resplendent Shovel-nosed Snake	SC				1C
Cistothorus palustris	Marsh Wren					1C
Colaptes chrysoides	Gilded Flicker			S		1B
Coluber bilineatus	Sonoran Whipsnake					1B
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC	S	S		1B
Crotalus tigris	Tiger Rattlesnake					1B
Empidonax wrightii	Gray Flycatcher					1C
Euderma maculatum	Spotted Bat	SC	S	S		1B
Eumops perotis californicus	Greater Western Bonneted Bat	SC		S		1B
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S		1A
Gopherus morafkai	Sonoran Desert Tortoise	C	S	S		1A
Haliaeetus leucocephalus	Bald Eagle	SC, BGA	S	S		1A
Heloderma suspectum	Gila Monster					1A
Incilius alvarius	Sonoran Desert Toad					1B
Kinosternon sonoriense sonoriense	Desert Mud Turtle			S		1B
Lasiurus blossevillii	Western Red Bat		S			1B

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Lasiurus xanthinus	Western Yellow Bat		S			1B
Leopardus pardalis	Ocelot	LE				1A
Leptonycteris yerbabuenae	Lesser Long-nosed Bat	SC				1A
Lepus alleni	Antelope Jackrabbit					1B
Macrotus californicus	California Leaf-nosed Bat	SC		S		1B
Melanerpes uropygialis	Gila Woodpecker					1B
Melospiza lincolnii	Lincoln's Sparrow					1B
Melozone aberti	Abert's Towhee		S			1B
Micrathene whitneyi	Elf Owl					1C
Micruroides euryxanthus	Sonoran Coralsnake					1B
Myiarchus tyrannulus	Brown-crested Flycatcher					1C
Myotis occultus	Arizona Myotis	SC		S		1B
Myotis velifer	Cave Myotis	SC		S		1B
Myotis yumanensis	Yuma Myotis	SC				1B
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					1B
Oreoscoptes montanus	Sage Thrasher					1C
Oreothlypis luciae	Lucy's Warbler					1C
Panthera onca	Jaguar	LE				1A
Passerculus sandwichensis	Savannah Sparrow					1B
Phrynosoma goodei	Goode's Horned Lizard					1B
Phrynosoma solare	Regal Horned Lizard					1B
Phyllorhynchus browni	Saddled Leaf-nosed Snake					1B
Setophaga petechia	Yellow Warbler					1B
Sphyrapicus nuchalis	Red-naped Sapsucker					1C
Spizella breweri	Brewer's Sparrow					1C
Tadarida brasiliensis	Brazilian Free-tailed Bat					1B
Toxostoma lecontei	LeConte's Thrasher			S		1B
Troglodytes pacificus	Pacific Wren					1B
Vireo bellii arizonae	Arizona Bell's Vireo					1B
Vulpes macrotis	Kit Fox	No Status				1B

Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Callipepla gambelii	Gambel's Quail					
Zenaida asiatica	White-winged Dove					
Zenaida macroura	Mourning Dove					

Project Type: Transportation & Infrastructure, Railroads (Freight and Passenger), New tracks, bridges, roadway crossing for freight or passenger lines,

Project Type Recommendations:

Bridge Maintenance/Construction

Identify whether wildlife species use the structure for roosting or nesting during anticipated maintenance/construction period. Plan the timing of maintenance/construction to minimize impacts to wildlife species. In addition to the species list generated by the Arizona's On-line Environmental Review Tool, the Department recommends that surveys be conducted at the bridge and in the vicinity of the bridge to identify additional or currently undocumented bat, bird, or aquatic species in the project area. To minimize impacts to birds and bats, as well as aquatic species, consider conducting maintenance and construction activities outside the breeding/maternity season (breeding seasons for birds and bats usually occur spring - summer). Examining the crevices for the presence of bats prior to pouring new paving materials or that the top of those crevices be sealed to prevent material from dripping or falling through the cracks and potentially onto bats. If bats are present, maintenance and construction (including paving and milling) activities should be conducted during nighttime hours, if possible, when the fewest number of bats will be roosting. Minimize impacts to the vegetation community. Unavoidable impacts to vegetation should be mitigated on-site whenever possible. A revegetation plan should be developed to replace impacted communities.

Consider design structures and construction plans that minimize impacts to channel geometry (i.e., width/depth ratio, sinuosity, allow overflow channels), to avoid alteration of hydrological function. Consider incorporating roosting sites for bats into bridge designs. During construction, erosion control structures and drainage features should be used to prevent introduction of sediment laden runoff into the waterway. Minimize instream construction activity. If culverts are planned, use wildlife friendly designs to mitigate impacts to wildlife and fish movement. Guidelines for bridge designs to facilitate wildlife passage can be found on our Wildlife Friendly Guidelines web page under the Widilfe Planning button, at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Fence recommendations will be dependant upon the goals of the fence project and the wildlife species expected to be impacted by the project. General guidelines for ensuring wildlife-friendly fences include: barbless wire on the top and bottom with the maximum fence height 42", minimum height for bottom 16". Modifications to this design may be considered for fencing anticipated to be routinely encountered by elk, bighorn sheep or pronghorn (e.g., Pronghorn fencing would require 18" minimum height on the bottom). Please refer to the Department's Fencing Guidelines located on Wildlife Friendly Guidelines page, which is part of the WIldlife Planning button at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and should be contained within important wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife. Guidelines for many of these can be found at: https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Conduct wildlife surveys to determine species within project area, and evaluate proposed activities based on species biology and natural history to determine if artificial lighting may disrupt behavior patterns or habitat use. Use only the minimum amount of light needed for safety. Narrow spectrum bulbs should be used as often as possible to lower the range of species affected by lighting. All lighting should be shielded, canted, or cut to ensure that light reaches only areas needing illumination.

Minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects and pathogens. Precautions should be taken to wash and/or decontaminate all equipment utilized in the project activities before entering and leaving the site. See the Arizona Department of Agriculture website for a list of prohibited and restricted noxious weeds at https://www.invasivespeciesinfo.gov/unitedstates/az.shtml and the Arizona Native Plant Society https://aznps.com/invas for recommendations on how to control. To view a list of documented invasive species or to report invasive species in or near your project area visit iMapInvasives - a national cloud-based application for tracking and managing invasive species at https://imap.natureserve.org/imap/services/page/map.html.

- To build a list: zoom to your area of interest, use the identify/measure tool to draw a polygon around your area of interest, and select “See What’s Here” for a list of reported species. To export the list, you must have an account and be logged in. You can then use the export tool to draw a boundary and export the records in a csv file.

Follow manufacturer's recommended application guidelines for all chemical treatments. The U.S. Fish and Wildlife Service, Region 2, Environmental Contaminants Program has a reference document that serves as their regional pesticide recommendations for protecting wildlife and fisheries resources, titled "Recommended Protection Measures for Pesticide Applications in Region 2 of the USFWS", http://www.fws.gov/southwest/es/arizona/Documents/ECReports/RPMPA_2007.pdf. The Department recommends that direct or indirect impacts to sensitive species and their forage base from the application of chemical pesticides or herbicides be considered carefully.

Minimization and mitigation of impacts to wildlife and fish species due to changes in water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods) should be evaluated. Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing of the project in order to minimize impacts to spawning fish and other aquatic species (include spawning seasons), and to reduce spread of exotic invasive species. We recommend early direct coordination with Project Evaluation Program for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

Based on the project type entered, coordination with State Historic Preservation Office may be required (http://azstateparks.com/SHPO/index.html).

Design culverts to minimize impacts to channel geometry, or design channel geometry (low flow, overbank, floodplains) and substrates to carry expected discharge using local drainages of appropriate size as templates. Reduce/minimize barriers to allow movement of amphibians or fish (e.g., eliminate falls). Also for terrestrial wildlife, washes and stream corridors often provide important corridors for movement. Overall culvert width, height, and length should be optimized for movement of the greatest number and diversity of species expected to utilize the passage. Culvert designs should consider moisture, light, and noise, while providing clear views at both ends to maximize utilization. For many species, fencing is an important design feature that can be utilized with culverts to funnel wildlife into these areas and minimize the potential for roadway collisions. Guidelines for culvert designs to facilitate wildlife passage can be found on the home page of this application at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Based on the project type entered, coordination with Arizona Department of Environmental Quality may be required (http://www.azdeq.gov/).

Based on the project type entered, coordination with U.S. Army Corps of Engineers may be required (http://www.usace.army.mil/)

Based on the project type entered, coordination with County Flood Control district(s) may be required.

The Department requests further coordination to provide project/species specific recommendations, please contact Project Evaluation Program directly at PEP@azgfd.gov.

Project Location and/or Species Recommendations:
This review has identified **riparian areas** within the vicinity of your project. During the planning stage of your project, avoid, minimize, or mitigate any potential impacts to riparian areas identified in this report. Riparian areas play an important role in maintaining the functional integrity of the landscape, primarily by acting as natural drainages that convey water through an area, thereby reducing flood events. In addition, riparian areas provide important movement corridors and habitat for fish and wildlife. Riparian areas are channels that contain water year-round or at least part of the year. Riparian areas also include those channels which are dry most of the year, but may contain or convey water following rain events. All types of riparian areas offer vital habitats, resources, and movement corridors for wildlife. The Pinal County Comprehensive Plan (i.e. policies *6.1.2.1* and *7.1.2.4*), Open Space and Trails Master Plan, Drainage Ordinance, and Drainage Design Manual all identify riparian area considerations, guidance, and policies. Guidelines to avoid, minimize, or mitigate impacts to riparian habitat can be found at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/. Based on the project type entered, further consultation with the Arizona Game and Fish Department and Pinal County may be warranted.

HDMS records indicate that **Western Burrowing Owls** have been documented within the vicinity of your project area. Please review the western burrowing owl resource page at: https://www.azgfd.com/wildlife/speciesofgreatestconservneed/burrowingowlmanagement/.

January 31, 2022

Adam Assenza
Surface Transportation Board
Office of Environmental Analysis
395 E Street SW
Washington, DC 20423

Electronically submitted to: Adam.Assenza@stb.gov

Re: Union Pacific Railroad Company Pecos Industrial Rail Access and Train Extension project

Dear Mr. Assenza:

The Arizona Game and Fish Department (Department) reviewed your Project Evaluation Request dated December 10, 2021, regarding the Union Pacific Railroad Company's (UP's) Pecos Industrial Rail Access and Train Extension (PIRATE) project. This new six mile industrial lead railroad track would connect UP's Phoenix Sub main line track in Maricopa County, Arizona, to industrial properties southeast of the Phoenix-Mesa Gateway Airport. The Department's Online Environmental Tool report created for you (HGIS-15398) on January 27, 2022, indicates western burrowing owls (*Athene cunicularia hypugaea*) have been reported within a three mile radius of your proposed project.

Based on the information provided, the Department offers the following general recommendations:

- The western burrowing owl, a special status species that is regulated under the Migratory Bird Treaty Act (MBTA), has been recorded in the vicinity of your project. The agricultural crop lands and adjacent native desert scrub in the vicinity of your project may provide suitable habitat for this species, therefore, the Department recommends conducting an occupancy survey for western burrowing owl to determine if this species occurs within your project footprint. Guidelines for conducting this survey are found in *Burrowing Owl Project Clearance Guidance for Landowners*[1] which can be accessed on-line through the Department's website. Please note that the survey should be conducted by a surveyor that is certified by the Department. If an active burrowing owl burrow is detected, please contact the Department and the U.S. Fish and Wildlife Service for direction, in accordance with the *Burrowing Owl Project Clearance Guidance for Landowners*.

[1] https://www.azgfd.com/wildlife/speciesofgreatestconservneed/raptor-management/burrowing-owl-mangement/

It is noted that your project is adjacent to undeveloped native desert habitat within Pinal County. Should your proposed project extend into this native desert vegetation, the the Department offers the following additional general recommendations:

- Minimize impacts to vegetation during project construction. Staging areas should be located in previously disturbed sites, and kept as small as possible. Implement erosion and drainage control measures during the project to prevent the introduction of sediment-laden runoff into adjacent surface waters, and to prevent impacts to surface water quality. Stabilize exposed soils, particularly on slopes, with native vegetation as soon as possible to prevent excess erosion.
- If proposed ground disturbance (both temporary and permanent) will meet or exceed 0.25 acre in areas with native vegetation, please ensure the project complies with Arizona Native Plant Law regulations[2]. A Native Plant Inventory may need to be conducted to identify, record, and coordinate plant salvage efforts for species that are Protected under the Arizona Native Plant Law. In addition, the applicable land management agencies should be consulted regarding guidelines for revegetation efforts.
- Minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects and pathogens. Precautions should be taken to wash and/or decontaminate all equipment utilized in the project activities before entering and leaving the site. Please review the Arizona Department of Agriculture's website for a list of prohibited and restricted noxious weeds[3] and the Arizona Native Plant Society[4] for recommendations on control methods. To view a list of documented invasive species or to report invasive species in or near your project area visit iMapInvasives[5] - a national cloud-based application for tracking and managing invasive species.

The Department appreciates the opportunity to provide an evaluation of impacts to wildlife or wildlife habitats associated with the Union Pacific Railroad Company Pecos Industrial Rail Access and Train Extension project. If you have any questions regarding this letter, please contact me at (623) 236-7615, and visit our website[6] for additional guidelines.

Sincerely,

Cheri Bouchér

Cheri Bouchér
Project Evaluation Program Specialist, Habitat Branch
Arizona Game and Fish Department

AZGFD# M21-12222432

[2] https://agriculture.az.gov/plantsproduce/native-plants
[3] https://agriculture.az.gov/pestspest-control/agriculture-pests/noxious-weeds
[4] https://aznps.com/invas
[5] https://imap.natureserve.org/imap/services/page/map.html
[6] https://www.azgfd.com/wildlife/planning/wildlifeguidelines/

Arizona Environmental Online Review Tool Report

Arizona Game and Fish Department Mission
To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

Pecos Industrial Rail Access and Train Extension (PIRATE)

Project Description:

a forthcoming proposal from the Union Pacific Railroad Company (UP) to construct and operate approximately six miles of new rail line in Maricopa County, Ari zona. UP intends to request Board authority to construct and operate new industrial lead railroad track that would connect UP's Phoenix Sub main line track in Maricopa County, Arizona, to industrial properties southeast of the Phoenix-Mesa Gateway Airport (Figures I and 2). This project is referred to as the Pecos Industrial Rail Access and Train Extension (PIRI\ TE) project. According to UP, the proposed track would serve the transportation and logistics needs of existing manufacturing and industrial businesses, as well as prospective businesses looking to relocate to the area. Maps of the proposed project area are attached.

Project Type:

Transportation & Infrastructure, Railroads (Freight and Passenger), New tracks, bridges, roadway crossing for freight or passenger lines,

Contact Person:

Cheri Boucher

Organization:

Arizona Game and Fish Department

On Behalf Of:

OTHER_FED

Project ID:

HGIS-15398

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. HabiMap Arizona data, specifically Species of Greatest Conservation Need (SGCN) under our State Wildlife Action Plan (SWAP) and Species of Economic and Recreational Importance (SERI), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

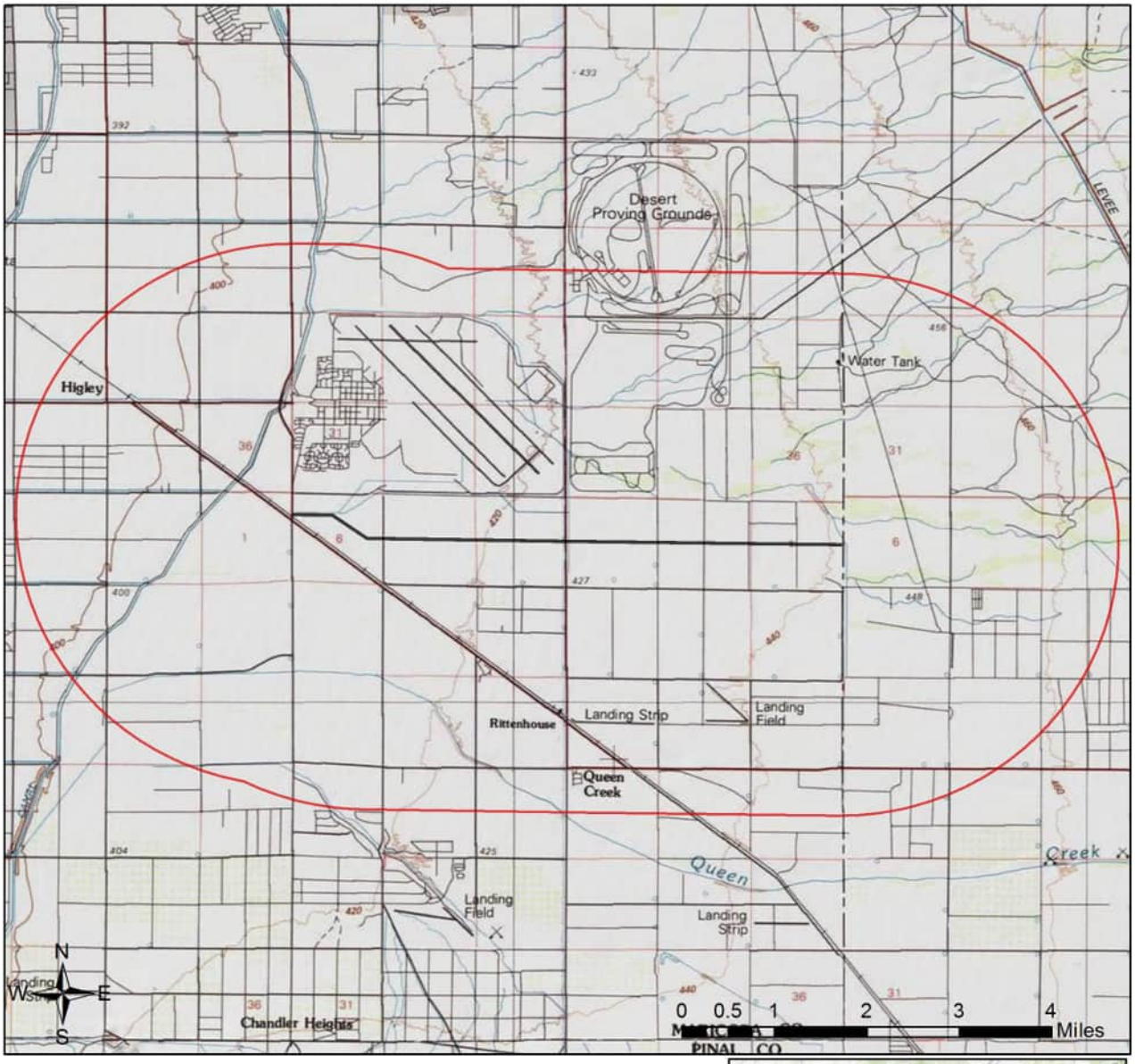
Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
   Project Evaluation Program, Habitat Branch
   Arizona Game and Fish Department
   5000 West Carefree Highway
   Phoenix, Arizona 85086-5000
   Phone Number: (623) 236-7600
   Fax Number: (623) 236-7366
   Or
   PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies

Pecos Industrial Rail Access and Train Extension (PIRATE)

USA Topo Basemap With Locator Map



Project Boundary

Buffered Project Boundary

Project Size (acres): 45.68

Lat/Long (DD): 33.2848 / -111.6347

County(s): Maricopa

AGFD Region(s): Mesa

Township/Range(s): T2S, R7E

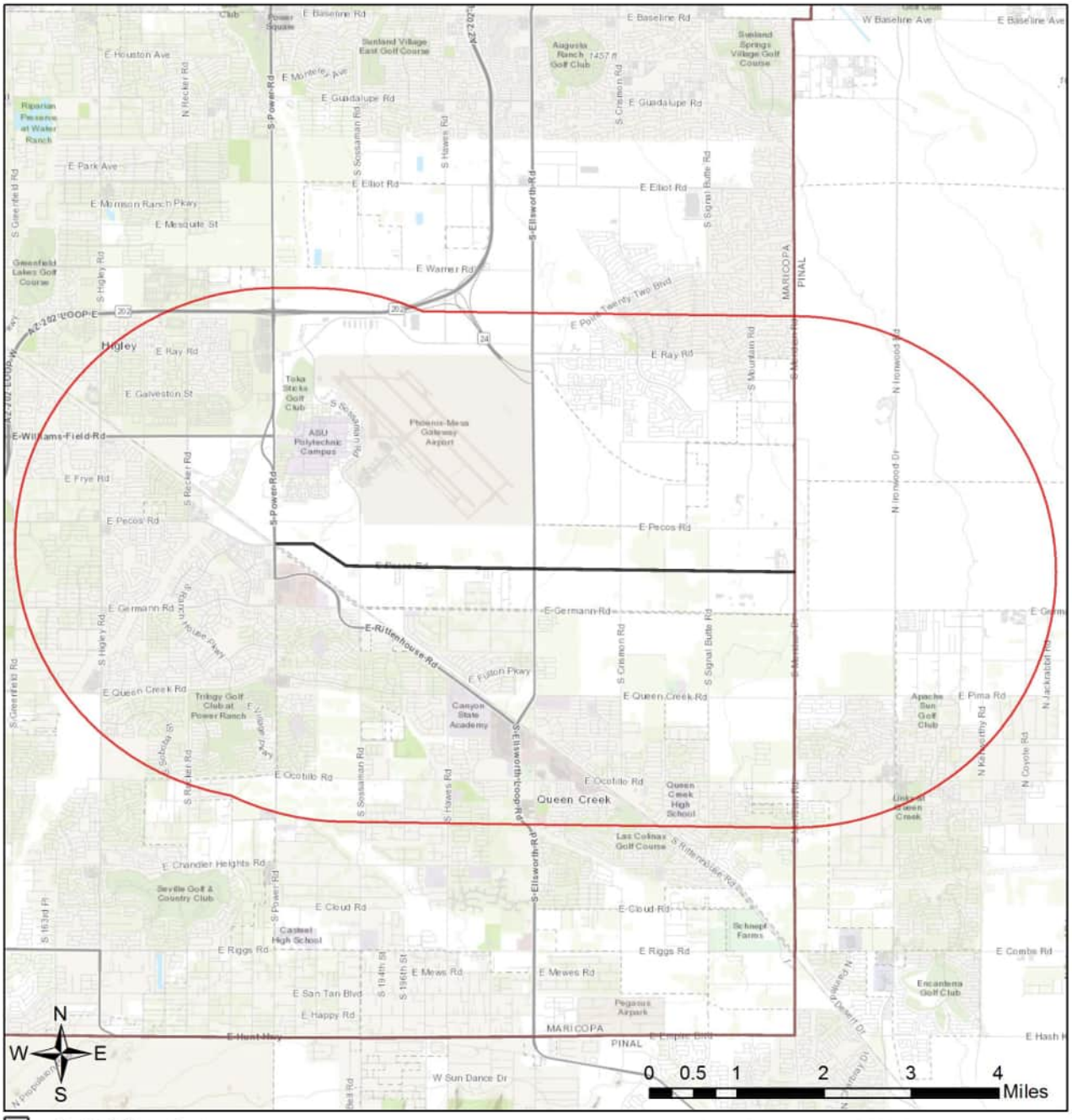
USGS Quad(s): DESERT WELL; HIGLEY



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap

Pecos Industrial Rail Access and Train Extension (PIRATE)

Web Map As Submitted By User



- Project Boundary
- Buffered Project Boundary
- Counties

Project Size (acres): 45.68

Lat/Long (DD): 33.2848 / -111.6347

County(s): Maricopa

AGFD Region(s): Mesa

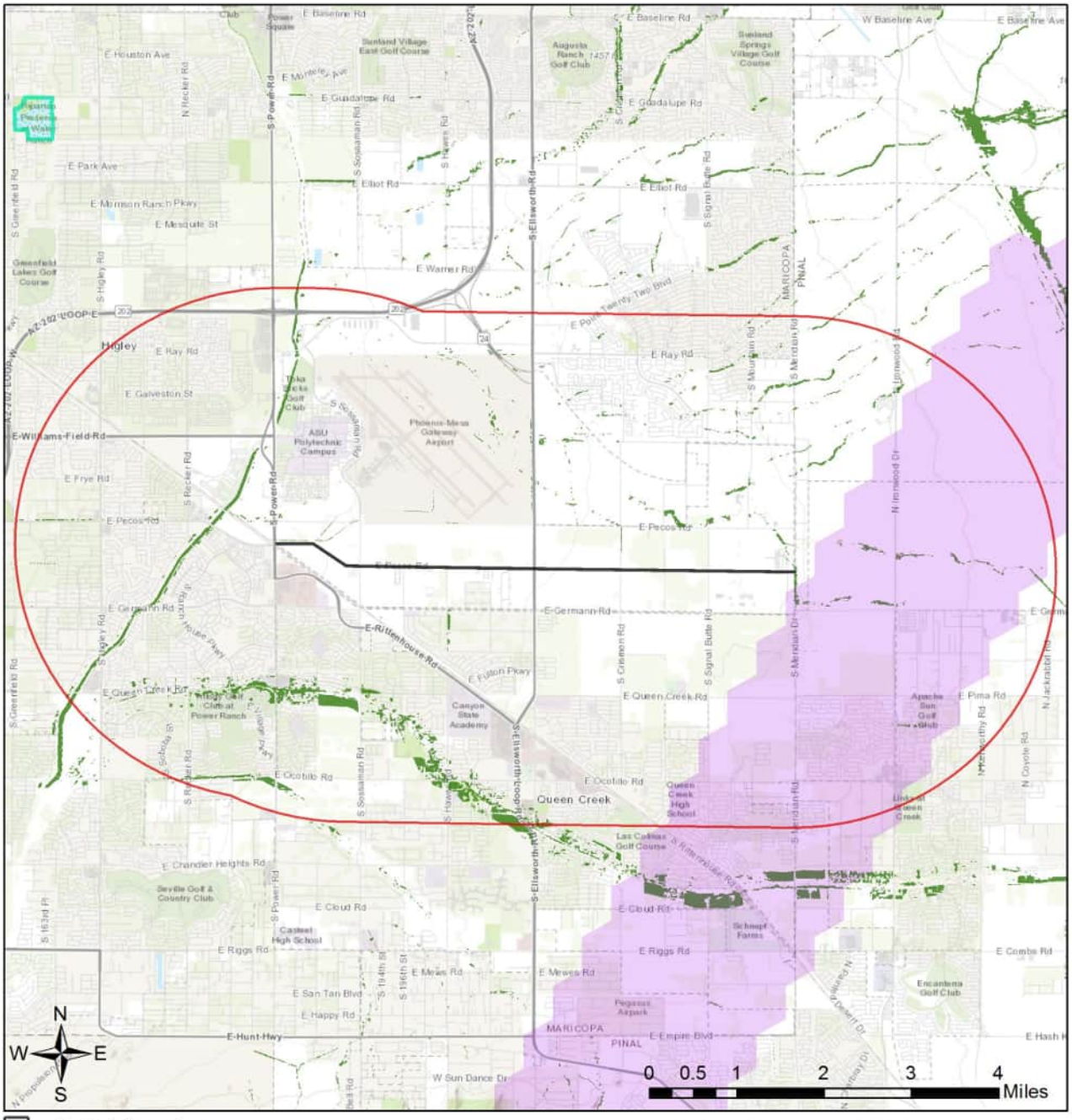
Township/Range(s): T2S, R7E

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Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Pecos Industrial Rail Access and Train Extension (PIRATE)

Important Areas



- Project Boundary
- Buffered Project Boundary
- Wildlife Connectivity
- Important Connectivity Zones
- Pinal County Riparian
- Critical Habitat
- Important Bird Areas

Project Size (acres): 45.68

Lat/Long (DD): 33.2848 / -111.6347

County(s): Maricopa

AGFD Region(s): Mesa

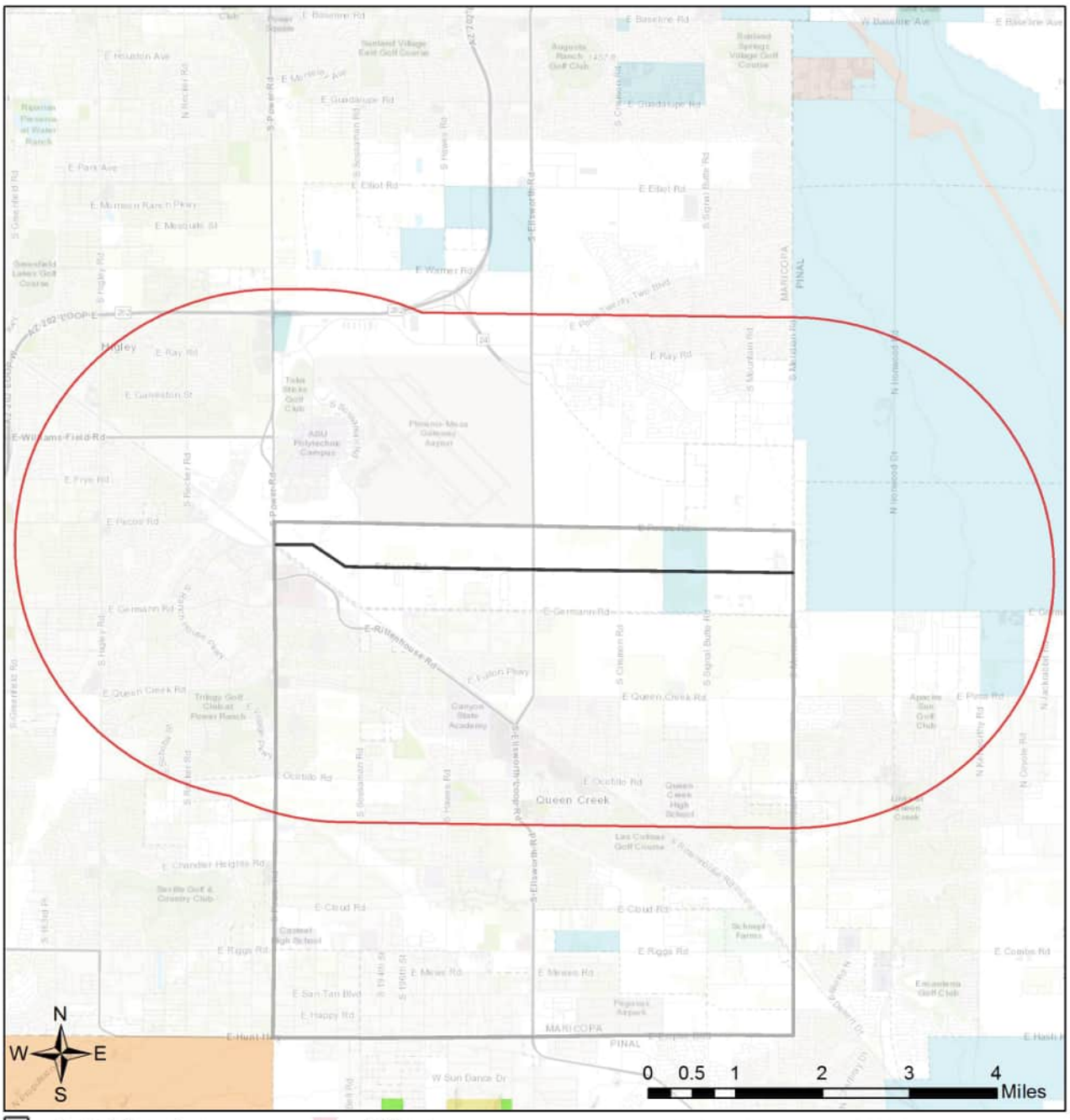
Township/Range(s): T2S, R7E

USGS Quad(s): DESERT WELL; HIGLEY

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Pecos Industrial Rail Access and Train Extension (PIRATE)

Township/Ranges and Land Ownership



- Project Boundary
- Buffered Project Boundary
- Township/Ranges

Land Ownership

- AZ Game & Fish Dept.
- BLM
- BOR
- Indian Res.
- Military
- Mixed/Other
- National Park/Mon.
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- State & Regional Parks
- State Trust
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Project Size (acres): 45.68

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Township/Range(s): T2S, R7E

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Special Status Species Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		1B
Danaus plexippus	Monarch	C		S		
Lepus alleni	Antelope Jackrabbit					1B

Note: Status code definitions can be found at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/
.

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Riparian Area	Riparian Area					

Note: Status code definitions can be found at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/
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Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Aix sponsa	Wood Duck					1B
Ammospermophilus harrisii	Harris' Antelope Squirrel					1B
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		1B
Botaurus lentiginosus	American Bittern					1B
Buteo regalis	Ferruginous Hawk	SC		S		1B
Calypte costae	Costa's Hummingbird					1C
Chilomeniscus stramineus	Variable Sandsnake					1B
Chionactis annulata	Resplendent Shovel-nosed Snake	SC				1C
Cistothorus palustris	Marsh Wren					1C
Colaptes chrysoides	Gilded Flicker			S		1B
Coluber bilineatus	Sonoran Whipsnake					1B
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC	S	S		1B
Crotalus tigris	Tiger Rattlesnake					1B
Empidonax wrightii	Gray Flycatcher					1C
Euderma maculatum	Spotted Bat	SC	S	S		1B
Eumops perotis californicus	Greater Western Bonneted Bat	SC		S		1B
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S		1A
Gopherus morafkai	Sonoran Desert Tortoise	C	S	S		1A
Haliaeetus leucocephalus	Bald Eagle	SC, BGA	S	S		1A
Heloderma suspectum	Gila Monster					1A
Incilius alvarius	Sonoran Desert Toad					1B
Kinosternon sonoriense sonoriense	Desert Mud Turtle			S		1B
Lasiurus blossevillii	Western Red Bat		S			1B

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Lasiurus xanthinus	Western Yellow Bat		S			1B
Leopardus pardalis	Ocelot	LE				1A
Leptonycteris yerbabuenae	Lesser Long-nosed Bat	SC				1A
Lepus alleni	Antelope Jackrabbit					1B
Macrotus californicus	California Leaf-nosed Bat	SC		S		1B
Melanerpes uropygialis	Gila Woodpecker					1B
Melospiza lincolnii	Lincoln's Sparrow					1B
Melozone aberti	Abert's Towhee		S			1B
Micrathene whitneyi	Elf Owl					1C
Micruroides euryxanthus	Sonoran Coralsnake					1B
Myiarchus tyrannulus	Brown-crested Flycatcher					1C
Myotis occultus	Arizona Myotis	SC		S		1B
Myotis velifer	Cave Myotis	SC		S		1B
Myotis yumanensis	Yuma Myotis	SC				1B
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					1B
Oreoscoptes montanus	Sage Thrasher					1C
Oreothlypis luciae	Lucy's Warbler					1C
Panthera onca	Jaguar	LE				1A
Passerculus sandwichensis	Savannah Sparrow					1B
Phrynosoma goodei	Goode's Horned Lizard					1B
Phrynosoma solare	Regal Horned Lizard					1B
Phyllorhynchus browni	Saddled Leaf-nosed Snake					1B
Setophaga petechia	Yellow Warbler					1B
Sphyrapicus nuchalis	Red-naped Sapsucker					1C
Spizella breweri	Brewer's Sparrow					1C
Tadarida brasiliensis	Brazilian Free-tailed Bat					1B
Toxostoma lecontei	LeConte's Thrasher			S		1B
Troglodytes pacificus	Pacific Wren					1B
Vireo bellii arizonae	Arizona Bell's Vireo					1B
Vulpes macrotis	Kit Fox	No Status				1B

Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Callipepla gambelii	Gambel's Quail					
Zenaida asiatica	White-winged Dove					
Zenaida macroura	Mourning Dove					

Project Type: Transportation & Infrastructure, Railroads (Freight and Passenger), New tracks, bridges, roadway crossing for freight or passenger lines,

Project Type Recommendations:

Bridge Maintenance/Construction

Identify whether wildlife species use the structure for roosting or nesting during anticipated maintenance/construction period. Plan the timing of maintenance/construction to minimize impacts to wildlife species. In addition to the species list generated by the Arizona's On-line Environmental Review Tool, the Department recommends that surveys be conducted at the bridge and in the vicinity of the bridge to identify additional or currently undocumented bat, bird, or aquatic species in the project area. To minimize impacts to birds and bats, as well as aquatic species, consider conducting maintenance and construction activities outside the breeding/maternity season (breeding seasons for birds and bats usually occur spring - summer). Examining the crevices for the presence of bats prior to pouring new paving materials or that the top of those crevices be sealed to prevent material from dripping or falling through the cracks and potentially onto bats. If bats are present, maintenance and construction (including paving and milling) activities should be conducted during nighttime hours, if possible, when the fewest number of bats will be roosting. Minimize impacts to the vegetation community. Unavoidable impacts to vegetation should be mitigated on-site whenever possible. A revegetation plan should be developed to replace impacted communities.

Consider design structures and construction plans that minimize impacts to channel geometry (i.e., width/depth ratio, sinuosity, allow overflow channels), to avoid alteration of hydrological function. Consider incorporating roosting sites for bats into bridge designs. During construction, erosion control structures and drainage features should be used to prevent introduction of sediment laden runoff into the waterway. Minimize instream construction activity. If culverts are planned, use wildlife friendly designs to mitigate impacts to wildlife and fish movement. Guidelines for bridge designs to facilitate wildlife passage can be found on our Wildlife Friendly Guidelines web page under the Widilfe Planning button, at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Fence recommendations will be dependant upon the goals of the fence project and the wildlife species expected to be impacted by the project. General guidelines for ensuring wildlife-friendly fences include: barbless wire on the top and bottom with the maximum fence height 42", minimum height for bottom 16". Modifications to this design may be considered for fencing anticipated to be routinely encountered by elk, bighorn sheep or pronghorn (e.g., Pronghorn fencing would require 18" minimum height on the bottom). Please refer to the Department's Fencing Guidelines located on Wildlife Friendly Guidelines page, which is part of the WIldlife Planning button at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and should be contained within important wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife. Guidelines for many of these can be found at: https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Conduct wildlife surveys to determine species within project area, and evaluate proposed activities based on species biology and natural history to determine if artificial lighting may disrupt behavior patterns or habitat use. Use only the minimum amount of light needed for safety. Narrow spectrum bulbs should be used as often as possible to lower the range of species affected by lighting. All lighting should be shielded, canted, or cut to ensure that light reaches only areas needing illumination.

Minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects and pathogens. Precautions should be taken to wash and/or decontaminate all equipment utilized in the project activities before entering and leaving the site. See the Arizona Department of Agriculture website for a list of prohibited and restricted noxious weeds at https://www.invasivespeciesinfo.gov/unitedstates/az.shtml and the Arizona Native Plant Society https://aznps.com/invas for recommendations on how to control. To view a list of documented invasive species or to report invasive species in or near your project area visit iMapInvasives - a national cloud-based application for tracking and managing invasive species at https://imap.natureserve.org/imap/services/page/map.html.

- To build a list: zoom to your area of interest, use the identify/measure tool to draw a polygon around your area of interest, and select “See What’s Here” for a list of reported species. To export the list, you must have an account and be logged in. You can then use the export tool to draw a boundary and export the records in a csv file.

Follow manufacturer's recommended application guidelines for all chemical treatments. The U.S. Fish and Wildlife Service, Region 2, Environmental Contaminants Program has a reference document that serves as their regional pesticide recommendations for protecting wildlife and fisheries resources, titled "Recommended Protection Measures for Pesticide Applications in Region 2 of the USFWS", http://www.fws.gov/southwest/es/arizona/Documents/ECReports/RPMPA_2007.pdf. The Department recommends that direct or indirect impacts to sensitive species and their forage base from the application of chemical pesticides or herbicides be considered carefully.

Minimization and mitigation of impacts to wildlife and fish species due to changes in water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods) should be evaluated. Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing of the project in order to minimize impacts to spawning fish and other aquatic species (include spawning seasons), and to reduce spread of exotic invasive species. We recommend early direct coordination with Project Evaluation Program for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

Based on the project type entered, coordination with State Historic Preservation Office may be required (http://azstateparks.com/SHPO/index.html).

Design culverts to minimize impacts to channel geometry, or design channel geometry (low flow, overbank, floodplains) and substrates to carry expected discharge using local drainages of appropriate size as templates. Reduce/minimize barriers to allow movement of amphibians or fish (e.g., eliminate falls). Also for terrestrial wildlife, washes and stream corridors often provide important corridors for movement. Overall culvert width, height, and length should be optimized for movement of the greatest number and diversity of species expected to utilize the passage. Culvert designs should consider moisture, light, and noise, while providing clear views at both ends to maximize utilization. For many species, fencing is an important design feature that can be utilized with culverts to funnel wildlife into these areas and minimize the potential for roadway collisions. Guidelines for culvert designs to facilitate wildlife passage can be found on the home page of this application at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Based on the project type entered, coordination with Arizona Department of Environmental Quality may be required (http://www.azdeq.gov/).

Based on the project type entered, coordination with U.S. Army Corps of Engineers may be required (http://www.usace.army.mil/)

Based on the project type entered, coordination with County Flood Control district(s) may be required.

The Department requests further coordination to provide project/species specific recommendations, please contact Project Evaluation Program directly at PEP@azgfd.gov.

Project Location and/or Species Recommendations:
This review has identified **riparian areas** within the vicinity of your project. During the planning stage of your project, avoid, minimize, or mitigate any potential impacts to riparian areas identified in this report. Riparian areas play an important role in maintaining the functional integrity of the landscape, primarily by acting as natural drainages that convey water through an area, thereby reducing flood events. In addition, riparian areas provide important movement corridors and habitat for fish and wildlife. Riparian areas are channels that contain water year-round or at least part of the year. Riparian areas also include those channels which are dry most of the year, but may contain or convey water following rain events. All types of riparian areas offer vital habitats, resources, and movement corridors for wildlife. The Pinal County Comprehensive Plan (i.e. policies *6.1.2.1* and *7.1.2.4*), Open Space and Trails Master Plan, Drainage Ordinance, and Drainage Design Manual all identify riparian area considerations, guidance, and policies. Guidelines to avoid, minimize, or mitigate impacts to riparian habitat can be found at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/. Based on the project type entered, further consultation with the Arizona Game and Fish Department and Pinal County may be warranted.

HDMS records indicate that **Western Burrowing Owls** have been documented within the vicinity of your project area. Please review the western burrowing owl resource page at: https://www.azgfd.com/wildlife/speciesofgreatestconservneed/burrowingowlmanagement/.

THE UNIVERSITY OF ARIZONA
ARIZONA STATE MUSEUM

Arizona State Museum
PO Box 210026
Tucson AZ 85721-0026
(520) 621-6281
www.statemuseum.arizona.edu

6 January 2022

Adam Assenza
Surface Transportation Board
Washington, DC 20423

RE: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – In Maricopa County, AZ; Preliminary Environmental Consultation

Dear Mr. Assenza,

Thank you for the opportunity to participate in consultation regarding the above-listed project. As depicted on maps included in your letter to Dr. Patrick Lyons, dated 10 December 2021, the proposed project area is located near the Phoenix-Mesa Gateway Airport, within Maricopa and Pinal Counties, Arizona. The proposed project area crosses multiple jurisdictions, including Arizona State Land Department, the Town of Gilbert, the City of Mesa, and Town of Queen Creek, and Unincorporated Maricopa and Pinal County. a County. At least nine archaeological sites are present within the project area, several of which are listed, or are eligible for listing, on the National Register of Historic Places.

Arizona State Museum (ASM) is responsible for administering the Arizona Antiquities Act (AAA; A.R.S. §41-841 *et seq*.) and which protects cultural resources and human remains on city, county, and state owned lands in Arizona. ASM also administers A.R.S. §41-865, which protects human remains and funerary objects on private lands in Arizona.

In order to comply with the AAA, a professional archaeologist must be consulted to identify any archaeological sites that are located on city, county, state, or private land within the project area. If present, potential adverse effects to these sites must be mitigated by an ASM-approved plan. You can find a list of archaeological consultants currently permitted to work on city, county, or state lands in Arizona here: https://statemuseum.arizona.edu/crm/document/aaa-qualified-consultants

Please don't hesitate to contact me if you have any questions or concerns at splummer@arizona.edu. / 520-621-4795

Sincerely,



Shannon Plummer, M.A., R.P.A.
Arizona State Museum
Arizona Antiquities Act Administrator

To: Buckley, Maggie
Subject: RE: UPRR Pecos Industrial Rail Access and Train Extension (PIRATE) Preliminary Environmental Consultation

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From: Patrick Panetta <Patrick.Panetta@asu.edu>
Sent: Thursday, February 24, 2022 7:31 AM
To: Buckley, Maggie <Maggie.Buckley@jacobs.com>
Cc: Adam.Assenza@stb.gov; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>; Jay Donnelly <Jay.Donnelly@asu.edu>
Subject: [EXTERNAL] RE: UPRR Pecos Industrial Rail Access and Train Extension (PIRATE) Preliminary Environmental Consultation

Hi Maggie,
Thanks for the feedback. Attached is the Proposed Master Plan for ASU's future Polytechnic Research Park (or RP2). You can see the general boundaries identified by the black dashed line, located immediately south of and adjacent to the existing ASU Polytechnic Campus, extending south to Old Pecos Road. Within the master plan are approximately six "superblocks" of proposed development. Without specific users identified at this point, it is difficult to know exactly what kind of research might occur, but it is assumed that it could be both noise and vibration sensitive, hence our interest in not only the proposed spur extension itself, but in the proposed development uses that might occur along that spur. Thank you for the review's consideration of ASU's proposed project, as well as keeping us looped in to the surrounding development and the review process as it progresses.
Sincerely,
Patrick

Patrick Panetta, FAIA
Director, Project Management
University Real Estate Development
Arizona State University
480.965.0900

From: Buckley, Maggie <Maggie.Buckley@jacobs.com>
Sent: Monday, February 21, 2022 2:04 PM
To: Patrick Panetta <Patrick.Panetta@asu.edu>
Cc: Adam.Assenza@stb.gov; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>; Jay Donnelly <Jay.Donnelly@asu.edu>
Subject: RE: UPRR Pecos Industrial Rail Access and Train Extension (PIRATE) Preliminary Environmental Consultation

Hello Patrick,

It's my turn to apologize for the delayed reply. Thank you for taking the time to review the consultation and provide some initial feedback. Is it possible for you to share the specific location and boundaries of your proposed research district? Will any portion of the new facility be considered noise- or vibration-sensitive? This information will be very useful for our team as we begin the environmental review process.

And please rest assured that our team is aware of the archaeological sensitivity of this area, and we'll be addressing this issue through compliance with Section 106 of the National Historic Preservation Act.

Thank you,

Maggie Buckley
O: 425.233.3117
M: 206.949.5955

From: Patrick Panetta <Patrick.Panetta@asu.edu>
Sent: Thursday, January 13, 2022 3:02 PM
To: Buckley, Maggie <Maggie.Buckley@jacobs.com>
Cc: Adam.Assenza@stb.gov; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>; Jay Donnelly <Jay.Donnelly@asu.edu>
Subject: [EXTERNAL] RE: UPRR Pecos Industrial Rail Access and Train Extension (PIRATE) Preliminary Environmental Consultation

Hello Maggie,
Apologies for the delayed reply. The University has reviewed the consultation letter and has the following feedback. The proposed addition of the six miles of new rail is presumably being driven by proposed land uses adjacent to the new rail that would be served by such new infrastructure. The University would be interested in knowing what kinds of uses those might be and would be concerned if they potentially included heavy industrial or other such uses that might be incompatible with the ASU Polytechnic campus research and education mission. The University is planning a new research district on the south side of campus in proximity to where the new spur would originate from, as well existing research uses such as bee, lizard and other animal research habitats that could potentially be affected. The study area is also nearby to archaeologically sensitive areas that should also be taken into consideration. In short, while not specifically opposed to the proposed rail at this time, the University would like to better understand the proposed project and any potentially conflicting impacts to the adjacent neighborhood/community.
Thank you for the opportunity,
Patrick

Patrick Panetta, FAIA
Director, Project Management
University Real Estate Development
Arizona State University
480.965.0900

From: Buckley, Maggie <Maggie.Buckley@jacobs.com>
Sent: Friday, December 10, 2021 3:47 PM
To: Patrick Panetta <Patrick.Panetta@asu.edu>
Cc: Adam.Assenza@stb.gov; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>
Subject: UPRR Pecos Industrial Rail Access and Train Extension (PIRATE) Preliminary Environmental Consultation

Hello Mr. Panetta,

The Union Pacific Railroad Company intends to seek authority from the Surface Transportation Board (Board) to construct and operate six miles of new rail line in Maricopa County, Arizona. An initial agency consultation letter is attached that provides additional information about the project and requests your agency's input regarding the proposed rail line by January 10, 2022. This letter was also mailed to your office on December 9, 2021. Please let us know if you prefer to receive future correspondence by mail or electronically and the preferred point of contact for your agency.

If you have any questions, please contact Adam Assenza, the Board's Office of Environmental Analysis Project Manager, at (202) 245-0301 or Adam.Assenza@stb.gov. We greatly appreciate your assistance and look forward to your participation in the Board's environmental review process for this project.

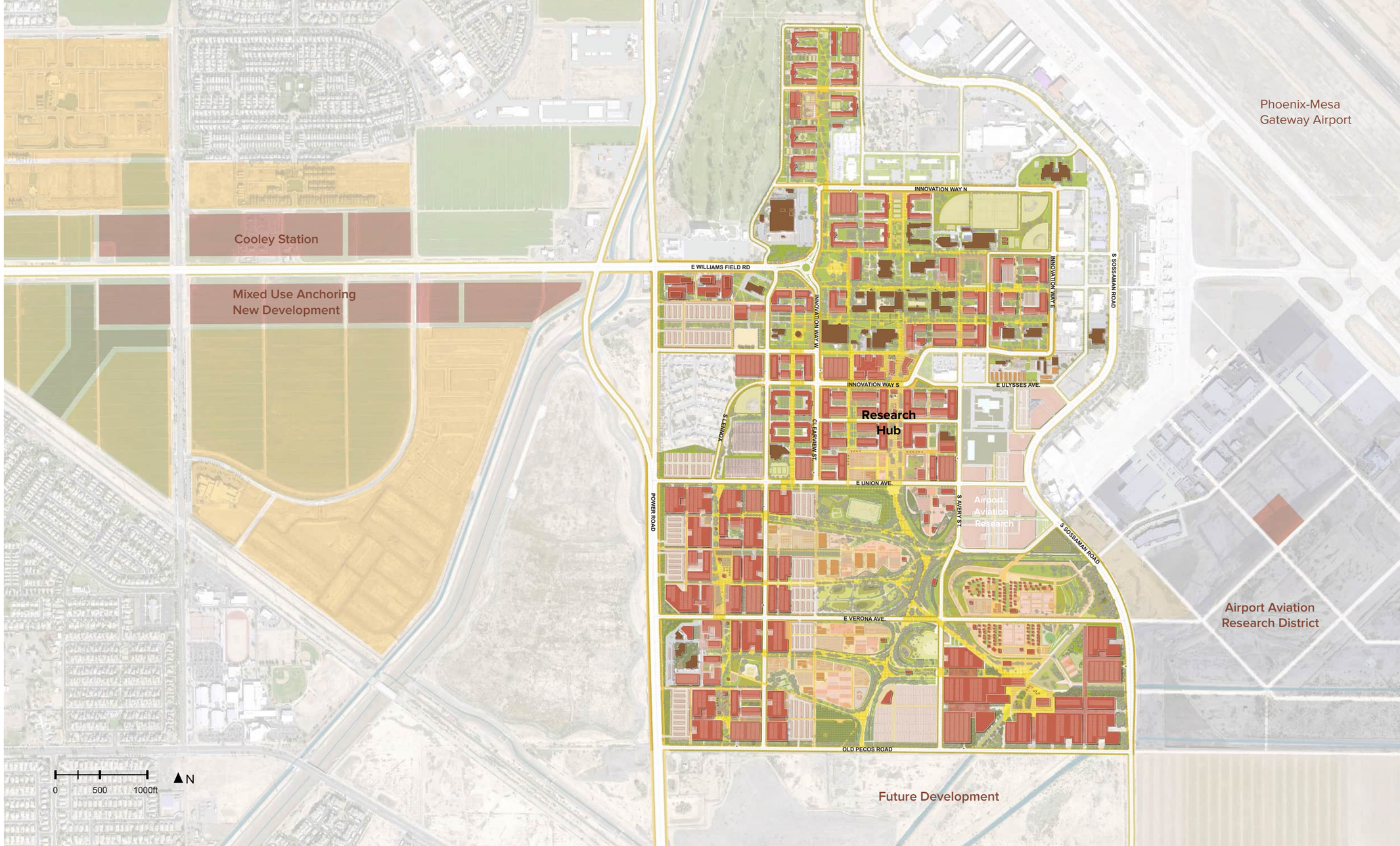
Thank you,

Maggie Buckley | Jacobs | Environmental Project Manager (she/her)
O: 425.233.3117 | M: 206.949.5955 | maggie.buckley@jacobs.com
999 W Riverside Avenue, Suite 500 | Spokane, WA 99201 | USA

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PROPOSED MASTER PLAN



- Proposed Buildings
- Solar Panel \ Shade Structure
- Existing Buildings
- Proposed Garages
- Test Beds

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT
3636 N CENTAL AVENUE, SUITE 900
PHOENIX, ARIZONA 85012-1939

December 13, 2021

SUBJECT: Permit Application Request

Adam Assenza
Surface Transportation Board
395 E Street SW
Washington, District of Columbia 20423

Dear Mr. Assenza:

It has come to my attention that you plan to construct a new industrial lead railroad track that would connect Union Pacific's Phoenix Sub main line track in Maricopa County, Arizona, to industrial properties southeast of the Phoenix-Mesa Gateway Airport, also located within Maricopa County, Arizona.

This activity may require a Department of Army (DA) permit from the U.S. Army Corps of Engineers. A DA permit is required for the discharge of dredged or fill material into, including any redeposit of dredged material other than incidental fallback within, "waters of the U.S.", including wetlands and adjacent wetlands pursuant to Section 404 of the Clean Water Act of 1972. Examples include, but are not limited to the following activities:

a. creating fills for residential or commercial development, placing bank protection, temporary or permanent stockpiling of excavated material, building road crossings, backfilling for utility line crossings and constructing outfall structures, dams, levees, groins, weirs, or other structures;
b. mechanized land clearing and grading which involve filling low areas or land leveling, ditching, channelizing and other excavation activities that would have the effect of destroying or degrading waters of the U.S.;
c. allowing runoff or overflow from a contained land or water disposal area to re-enter a water of the U.S.; and
d. placing pilings when such placement has or would have the effect of a discharge of fill material.

An application for a DA permit is available on our website: http://www.spl.usace.army.mil/Missions/Regulatory/PermitProcess.aspx. If you have any questions, please contact Lisa Robinson at (602) 230-6958 or via email at Lisa.E.Robinson@usace.army.mil. Please refer to this letter and SPL-2021-00653 in your reply. Please help me to evaluate and improve the regulatory experience for others by completing the customer survey form at https://regulatory.ops.usace.army.mil/customer-service-survey/.

Sincerely,

for Sallie Diebolt
Chief, Arizona Branch
Regulatory Division

Enclosure(s)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

January 12, 2022

Adam Assesza
OEA Project Manager
Surface Transportation Board

Submitted through online portal:
https://www.stb.gov/proceedings-actions/e-filing/environmental_comments/

Subject: EPA Comments to Surface Transportation Board Regarding Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – in Maricopa County, AZ; Preliminary Environmental Consultation

Dear Adam Assesza:

The U.S. Environmental Protection Agency has reviewed the December 10, 2021 letter requesting EPA input related to the potential environmental impacts associated with Union Pacific Railroad Company (UP) request to construct and operate the Pecos Industrial Rail Access and Train Extension (PIRATE) project consisting of approximately six miles of new rail line in Maricopa County, Arizona.

The letter stated that UP intends to seek authority from the Surface Transportation Board (Board) to construct and operate the proposed rail line, and that, before making its decision on whether to grant such authority, the Board must consider the potential environmental impacts of UP's proposal, pursuant to the National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act (NHPA), the Board's environmental rules at 49 C.F.R. Part 1105, and related environmental laws.

Our feedback is provided pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. We provide the following information for Surface Transportation Board to consider when determining the level of NEPA compliance to pursue for the proposed project. Should STB determine that an Environmental Assessment and Finding of No Significant Impacts is warranted, EPA recommends that each of the items identified below be presented with rationale and supporting information justifying a determination that no potential impacts are anticipated to be significant. In addition, please include the EPA in future noticing regarding initiation of an EA or EIS scoping period.

National Priorities List

We note that the project area is adjacent to and includes portions of the Former Williams Air Force Base, a Federal National Priorities List site. This former base is 95% transferred to the Phoenix Mesa

Gateway Airport Authority and Arizona State University, and other entities. While most of the soil cleanup remedies, including institutional controls (ICs) have been implemented, Air Force (AF) continues to address contaminated groundwater at the ST12 Fuels Spill Site and LF004 Landfill located within the proposed project boundary and is munitions clearance for the Parcel N Debris area, also within the study area, is not yet complete. EPA recommends that STB confirm that no land disturbance related to project construction or operation will impact contaminated groundwater or soil cleanup actions.

The Air Force should be consulted for potentially significant impacts to Superfund Cleanup efforts and infrastructure. STB and UP must insure that any future rail and potential connected actions will not negatively affect the ongoing remedy. Please coordinate with the Phoenix-Mesa Gateway airport Authority and Arizona State University who operate on the former Williams Air Force Base Property. Information about the Superfund cleanup can be found at the Williams AFB Superfund webpage at: https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0900890

Tribal Coordination

EPA recommends that STB and UP coordinate with US Bureau of Indian Affairs and potentially impacted tribes, including the Gila River Tribe, to determine if the proposed project would have any impacts to cultural resources, traditional cultural properties, traditional plant collecting properties, or other sensitive tribal resources. EPA understands that the landfill and parcel N debris area within the proposed project area are slated to go to BIA in trust for the Gila River Tribe.

Aquatic Resources and Groundwater Impacts

EPA recommends that STB consider if the project or connected actions associated with the project will impact current hydrological flows or wetland, jurisdictional waters, or other desert washes or aquatic resources. Also, there are several water storage projects in the vicinity of Williams Air Force Base which have resulted in an over 60- foot change in the regional water table since the base closed in 1993. Rapid development growth in the area has prompted the City of Mesa to install several large capacity public supply extraction wells in the area to meet the growing demand for water. Clarify if the proposed project will further exacerbate groundwater challenges in the project area. Disclose the source of water for project construction and operation, as well as for any connected actions associated with the ultimate rail project.

Air, Traffic, Noise, and Visual Impacts

EPA recommends that STB consider potential air, noise, health and traffic impacts of future warehouses, industry, manufacturing, good movement operations and storage facilities that this project may contribute to when determining level of significance of the proposed project. Warehouse and distribution center activity, as well as the transport of industrial and/or potentially hazardous materials, may impact public health. Particulate pollution will result from diesel-emitting trains that the project will accommodate. Without commitments for use of the most efficient engine technology and electrification where possible for locomotives and ground servicing equipment, impacts to adjacent residential and commercial districts may be significant. Consider providing air filtration (filters, improved windows) to nearby residents, schools, and businesses.

Construction of a new rail segment provides the opportunity for installing sustainability features along with the rail development. For example, consider installing linear solar arrays along the new corridor

may offset electricity needs of adjacent manufacturing. At warehouses and manufacturing plants that will be using the proposed rail network, consider commitments to reduce air quality impacts, such as providing air filters to capture particulates and providing advanced technologies to improve worker health.

EPA recommends that STB consider the potential for significant noise impacts from 24-hour operations along the future rail and adjacent warehouse and industry locations and consider if restricted hours of operation are needed near adjacent residences and businesses. When considering the potential rail route, include alternatives that can accommodate planting vegetation along the rail facility in order to reduce noise and visual impacts, and provide vegetative cover that can help reduce particulate emissions. Consider alternative routes that can accommodate sound barriers and measures to reduce light pollution.

Hazardous Materials Management and Safety

We note that the area is undergoing rapid residential and mixed use development that could be impacted significantly by rail transport of chemicals or hazardous materials, warranting contingency planning to address potential spills, as well as compliance with any transport/storage regulations related to hazardous materials management. STB should identify if the project will require UP Toxic release inventory disclosure requirements and what community safety planning will be prepared and completed prior to project completion.

Federal Immigrations and Customs Enforcement

The project area appears to be near a Federal Immigrations and Customs Enforcement facility. EPA recommends that STB and UP coordinate closely with ICE regarding potential impacts.

Environmental Justice and Climate Change

Executive Order 14008 on Tackling the Climate Crisis at Home and Abroad (Jan. 27, 2021) recognizes the climate crisis is profound and directs the federal government to drive assessment, disclosure, and mitigation of climate pollution and climate-related risks. The EO also directs federal agencies to achieve environmental justice as a part of their missions by developing programs, policies, and activities to address the disproportionately high and adverse impacts on human health, environmental, climate-related and other cumulative impacts on these communities, as well as the accompanying economic challenges of such impacts.

Additionally, Executive Order 13990 on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crises (Jan. 20, 2021), declares that it is essential that agencies capture the full costs of greenhouse gas emissions as accurately as possible, including taking global damages into account. EPA recommends that STB identify all design, construction, and operations commitments to reduce greenhouse gas emissions and address potential climate change impacts through adaptation planning. Consider using EJSCREEN to assist in the identification of potential communities with environmental justice concerns and associated impacts.

The EPA appreciates the opportunity to provide feedback for consideration by STB as the agency determines what level of NEPA to pursue. When the EA or NOI/DEIS are released for public review,

please notify Connell Dunning, NEPA Transportation Team Lead, at 415-947-4161 or dunning.connell@epa.gov.

Sincerely,

Connell Dunning
Environmental Review Branch

THE HOPI TRIBE

Timothy L. Nuvangyaoma
CHAIRMAN

Craig Andrews
VICE-CHAIRMAN

FEB 07 2022

January 10, 2022

Danielle Gosselin, Acting Director
Attention: Adam Assenza
Surface Transportation Board, Office of Environmental Analysis
Washington, DC 20423

Subject: Docket No. FD 36501 – Union Pacific Railroad Company –
Construction and Operation Exemption – In Maricopa County, Arizona

Dear Director Gosselin,

This letter is in response to your correspondence dated December 10, 2021, regarding Docket No. FD 36501, the Union Pacific Railroad Company proposed Pecos industrial Rail Access and Train Extension Project, to construct and operate approximately six miles of new rail line in Maricopa County, Arizona. The Hopi Cultural Preservation Office appreciates the Surface Transportation Board's solicitation of our input and your efforts to address our concerns.

The Hopi Tribe claims cultural affiliation to the earlier identifiable cultural groups in Arizona. The Hopi Cultural Preservation Office supports the identification and avoidance of our ancestral sites, and we consider the prehistoric archaeological sites of our ancestors to be Traditional Cultural Properties. We request consultation on any proposal that has the potential to adversely affect prehistoric cultural resources in Arizona.

So if the cultural resources survey of the area of potential effect identifies prehistoric sites that cannot be avoided by project activities, we request continuing consultation on this proposal including being provided with copies of the draft environmental assessment and any proposed treatment plans for review and comment.

In addition, we support project design features that if any cultural features or deposits are encountered during project activities, these activities will be discontinued in the immediate area of the remains, and the State Historic Preservation Office will be consulted to evaluate their nature and significance, and if any Native American human remains or funerary objects are discovered during construction they shall be immediately reported as required by law. Thank you for your consideration.

Respectfully,

Stewart B. Koyiyumptewa, Project Manager/THPO
Hopi Cultural Preservation Office

xc: Arizona State Historic Preservation Office

To: Phoebus, Elizabeth (Betsi)
Subject: RE: FW: [EXTERNAL] Fwd: UPRR Pecos Industrial Rail Access and Train Extension (PIRATE) Preliminary Environmental Consultation

From: Jared Taylor <jtaylor@heritageacademyaz.com>
Sent: Tuesday, March 1, 2022 8:37 AM
To: Assenza, Adam <Adam.Assenza@stb.gov>
Cc: Kathleen Lopez <klopez@heritageacademyaz.com>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>; Buckley, Maggie <Maggie.Buckley@jacobs.com>
Subject: Re: FW: [EXTERNAL] Fwd: UPRR Pecos Industrial Rail Access and Train Extension (PIRATE) Preliminary Environmental Consultation

Hi Adam,

Here's a copy of the traffic study around our area. Not sure how helpful it is, but perhaps there are some insights that would be useful.

Thanks,

Jared

P.S. As a side note, there are a few K-12 schools in the area. Speaking only for Heritage, we are big supporters of the rail system and look forward to learning more about your project. In the planning should UP have any interest in supporting schools, a thought would be to add some educational elements to the proposed development that East Valley students might benefit from. I'm not thinking of a full-blown visitor center--although that would be great--but something more passive with educational content. For example, perhaps there is a simple marker or image set placed in a location for a group of 4th graders to safely visit and learn about the rail system and how it benefits their daily lives. Just a thought. Happy to discuss more if this is of any interest.

On Wed, Feb 23, 2022 at 8:58 AM Assenza, Adam <Adam.Assenza@stb.gov> wrote:

> Hello Jared,
>
> In our last correspondence you offered to provide recent traffic studies that may assist in our review of the proposed project area. We don't appear to have received those. Could you please confirm if you sent them to us? We want to make sure we didn't miss anything.
>
> Thanks,
>
> ADAM ASSENZA
>
> Environmental Protection Specialist (he/him)

Office of Environmental Analysis
Surface Transportation Board
P: 202-245-0301
E: Adam.Assenza@STB.gov

From: Assenza, Adam
Sent: Friday, January 7, 2022 9:56 AM
To: Jared Taylor <jtaylor@heritageacademyaz.com>
Cc: Kathleen Lopez <klopez@heritageacademyaz.com>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>; Buckley, Maggie <Maggie.Buckley@jacobs.com>
Subject: RE: FW: [EXTERNAL] Fwd: UPRR Pecos Industrial Rail Access and Train Extension (PIRATE) Preliminary Environmental Consultation

Hi Jared,

Sorry I forgot to add to my previous reply, please do share the recent traffic studies that you have, as they would be helpful in our analysis.

Thanks,

Adam

From: Assenza, Adam
Sent: Tuesday, January 4, 2022 9:51 AM
To: Jared Taylor <jtaylor@heritageacademyaz.com>
Cc: Kathleen Lopez <klopez@heritageacademyaz.com>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>; Buckley, Maggie <Maggie.Buckley@jacobs.com>
Subject: RE: FW: [EXTERNAL] Fwd: UPRR Pecos Industrial Rail Access and Train Extension (PIRATE) Preliminary Environmental Consultation

Hello Jared and Kathleen,

Thank you for the additional information. After we've had the chance to process inbound commentary from our initial outreach, we will develop virtual meetings schedules as several different state and local entities have already begun requesting these.

Adam

From: Jared Taylor <jtaylor@heritageacademyaz.com>
Sent: Monday, January 3, 2022 7:49 PM
To: Assenza, Adam <Adam.Assenza@stb.gov>
Cc: Kathleen Lopez <klopez@heritageacademyaz.com>
Subject: Re: FW: [EXTERNAL] Fwd: UPRR Pecos Industrial Rail Access and Train Extension (PIRATE) Preliminary Environmental Consultation

Hi Adam,

Thank you for this follow up email and additional information. We operate a high school on the corner of Germann and 196th in Queen Creek. Currently we are building a school for grades P-8 and a school for autistic children across the street in Mesa on the corner of Germann and 80th street (same as 196th, just on the Mesa side) The new schools will be operational in the Fall of 2022.

I appreciate your sensitivity to the impact on schools and the surrounding area. We are currently far enough away from the existing UP line that rail sounds do not impact our operations. A new line on Pecos may have more sound, but I don't think it will have a prohibitive effect on our operations provided there are not constant train whistles or loud noises made from activities such as connections, repair/overhaul, loading/unloading, etc. The further North any new rail line could be positioned would benefit not only our schools, but the three other schools which are South of Pecos, but within 2 miles of this area.

While we don't have a bus system our parents arrive from over 30 different zip codes in the region. This means that our traffic is heaviest between 7:30 - 8:00am and 3-4pm Mon-Thursday. I know you probably can't bind future UP schedules, but having excess at-grade crossings and trains blocking traffic at these times would increase our tardy rates. Carefully locating these crossings or requiring UP to install bypass systems will help not only the surrounding school systems, but also the public safety in the area.

I have a background in municipal planning/governance and would be more than happy to join any future meetings to discuss optimal ways to ensure traffic flow during key hours for our schools and other schools in the area. I would also be willing to share our most recent traffic study if that would be helpful in your planning process.

I hope this information is useful. Please let me know if I can be of any future use. I'll CC my Principal on this email and ask her to add anything that may be helpful.

Regards,

Jared

On Mon, Jan 3, 2022 at 5:21 PM Assenza, Adam <Adam.Assenza@stb.gov> wrote:

> Hello Jared,
>
> Happy New Year, and apologies for just not getting back to you. I was only made aware of your response today.
>
> I am the project manager at the Office of Environmental Analysis within the Surface Transportation Board in charge of this environmental review. At this early stage, we are evaluating constraints within the project area that could affect the development of alternatives to be carried forward through the review. The way these projects typically work, a railroad applicant will approach the Board with the intent to construct a rail line connecting an area without rail service to an existing rail line. The applicant, in this case UP, often submits its initial preferred alignment, along with a rationale as to why they've selected that route, but it is on us, the lead federal agency, based on current environmental laws, to devise and evaluate practicable alternatives that would meet the railroad's stated purpose and need.
>
> At present, the railroad's preferred alternative aligns closer to the north end of the project area that we sent you in our initial letter, sticking close to the southern edge of Phoenix-Mesa Gateway Airport, closer to E. Pecos Road and running between agricultural lots. No alternatives have yet been developed that approach Germann Road at 88th St., but we are still in the early stages of alternative development.
>
> What would be particularly helpful to us would be any information about bus routes or sensitive receptors that could be affected by different alignments in the project area. I don't think it would be in any community's best interest to see a new rail line running so close to a school that noise would disrupt education, which is why we do this early outreach to a wide range of local, state, and federal offices with jurisdiction or local facilities in the project area.
>
> If you have any other questions or would like to discuss any aspect of the project, please reach out to me directly at adam.assenza@stb.gov or by phone at 202-245-0301.
>
> Thank you for your interest and cooperation.
>
> ADAM ASSENZA
>
> Environmental Protection Specialist (he/him)
>
> Office of Environmental Analysis
> Surface Transportation Board
> P: 202-245-0301
> E: Adam.Assenza@STB.gov

From: Buckley, Maggie <Maggie.Buckley@jacobs.com>
Sent: Monday, January 3, 2022 1:08 PM
To: Assenza, Adam <Adam.Assenza@stb.gov>
Cc: Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>
Subject: FW: [EXTERNAL] Fwd: UPRR Pecos Industrial Rail Access and Train Extension (PIRATE) Preliminary Environmental Consultation

---

From: Jared Taylor <jtaylor@heritageacademyaz.com>
Sent: Friday, December 10, 2021 6:32 PM
To: Buckley, Maggie <Maggie.Buckley@jacobs.com>
Cc: Kathleen Lopez <klopez@heritageacademyaz.com>; Wade Melchin <wmelchin@heritageacademyaz.com>
Subject: [EXTERNAL] Fwd: UPRR Pecos Industrial Rail Access and Train Extension (PIRATE) Preliminary Environmental Consultation

Hi Maggie,

Thank you for this notice. I operate a school in this area. In order to provide meaningful feedback, we would need more information on what is proposed that would be near 80th and Germann where our schools are located.

Please provide more information and we'd be happy to share our thoughts on any impact.

Regards,

Jared

---------- Forwarded message ---------
From: **Kathleen Lopez** <klopez@heritageacademyaz.com>
Date: Fri, Dec 10, 2021 at 3:58 PM
Subject: Fwd: UPRR Pecos Industrial Rail Access and Train Extension (PIRATE) Preliminary Environmental Consultation
To: Jared Taylor <jtaylor@heritageacademyaz.com>, Shalisa Arnold <shalisa.arnold@heritageacademyaz.com>

FYI

---------- Forwarded message ---------
From: **Buckley, Maggie** <Maggie.Buckley@jacobs.com>
Date: Fri, Dec 10, 2021 at 3:46 PM
Subject: UPRR Pecos Industrial Rail Access and Train Extension (PIRATE) Preliminary Environmental Consultation
To: klopez@heritageacademyaz.com <klopez@heritageacademyaz.com>
CC: Adam.Assenza@stb.gov <Adam.Assenza@stb.gov>, Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>

Hello Ms. Lopez,

The Union Pacific Railroad Company intends to seek authority from the Surface Transportation Board (Board) to construct and operate six miles of new rail line in Maricopa County, Arizona. An initial agency consultation letter is attached that provides additional information about the project and requests your agency's input regarding the proposed rail line by January 10, 2022. This letter was also mailed to your office on December 9, 2021. Please let us know if you prefer to receive future correspondence by mail or electronically and the preferred point of contact for your agency.

If you have any questions, please contact Adam Assenza, the Board's Office of Environmental Analysis Project Manager, at (202) 245-0301 or Adam.Assenza@stb.gov. We greatly appreciate your assistance and look forward to your participation in the Board's environmental review process for this project.

Thank you,

Maggie Buckley | Jacobs | Environmental Project Manager (she/her)

O: 425.233.3117 | M: 206.949.5955 | maggie.buckley@jacobs.com
999 W Riverside Avenue, Suite 500 | Spokane, WA 99201 | USA

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--

Sincerely,

Kathleen Lopez

Kathleen Lopez

Principal

Mathematics Teacher

klopez@heritageacademyaz.com

480-461-4400 * hagateway.com

"Educate and inform the whole mass of the people... They are the only sure reliance for the preservation of our liberty." - Thomas Jefferson

Heritage Academy Gateway
"Building America's Heroes"

USDA
United States Department of Agriculture

06/22/2022

Nancy Shelton
Senior Environmental Planner

Dear Ms. Shelton:

The Natural Resources Conservation Service (NRCS) has reviewed information about a Pecos Industrial Rail and Train Extension (PIRATE) project in Maricopa County, AZ, and acknowledge a request to determine whether the project has potential for environmental impacts that affect farmland as defined in Sec. (658.2 a) of the Code of Federal Regulations (CFR) dealing with the Farmland Protection Policy Act (FPPA).

The NRCS acts as the national Farmland Protection Policy Act (FPPA) steward in reviewing and documenting conversion of farmland (i.e., Prime, Statewide Importance, and /or Local Importance) to non-agricultural use when the project utilizes federal funds.

After reviewing the project proposal, the PIRATE project, the following is noted:

The land is subject to FPPA, and the land evaluation (LE) point score on the NRCS-CPA-106 form has a ranking score of 4.61 determined on a statewide basis. Please complete Parts 3, 6, & 7 of form CPA-106 and return for our records.

If you have any questions, please contact me contact me at 602-280-8789 or via email at scott.woodall@usda.gov.

Sincerely,

Scott Woodall
State Resource Conservationist
USDA-NRCS
Phoenix Arizona

From: Tony Bianchi <TBianchi@gatewayairport.com>
Sent: Thursday, September 22, 2022 7:15 PM
To: Buckley, Maggie; Assenza, Adam; Phoebus, Elizabeth (Betsi); Bushey, Sabra
Cc: Bob Draper
Subject: [EXTERNAL] RE: PIRATE Rail Mtg Follow-Up- Gateway Airport

Hi Maggie:

It is covered broadly in CFR Title 14 Part 77 as a Federal requirement in not creating a hazard to air navigation near an airport, which lighting has the possibility to do. Part 77 primary covers the height of objects, but FAA is concerned with multiple measures of compatible land use since they can tie it to Federal grant assurances. Arizona State Statute (ARS) 28-8462 has similar broad language in not creating a hazard to air navigation.
We try to provide clarity to applicants and communities in our Airport Land Use Compatibility Plan Update, which adjacent communities have adopted flight safety considerations into their zoning ordinances. Lighting needs to be controlled for height, but also any design or uses that could interfere with the vision of pilots and air traffic controllers. For the rail uses you are studying it should not be a large concern, but more of a planning/design consideration.
With the length of the proposed rail alignment located at the end of our three runways at the Airport's southern boundary we wouldn't want any lighting that could be directed upward toward approach paths or any lighting that could be confused for airport navigational lighting, such as flashing red lights found at railroad crossings and lift gates.
Arizona Revised Statute 49-1102 addresses the shielding of outdoor light fixtures and states outdoor lighting shall be fully or partially shielded. There are a few exceptions.

I hope that provides some additional information that you can use or cite.
Please let me know if you have additional questions.

Thanks,
Tony Bianchi, A.A.E., AICP, GISP
Planning Manager
Phoenix-Mesa Gateway Airport Authority
5835 S Sossaman Rd
Mesa, AZ 85212-6014
Office: 480-988-7649
tbianchi@gatewayairport.com
www.gatewayairport.com



Please be advised that our office hours are Monday - Thursday 7 a.m. to 6 p.m. We are closed Fridays.

From: Buckley, Maggie <Maggie.Buckley@jacobs.com>
Sent: Tuesday, September 20, 2022 2:11 PM
To: Tony Bianchi <TBianchi@gatewayairport.com>; Assenza, Adam <adam.assenza@stb.gov>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>; Bushey, Sabra <Sabra.Bushey@jacobs.com>
Cc: Bob Draper <BDraper@gatewayairport.com>
Subject: RE: PIRATE Rail Mtg Follow-Up- Gateway Airport

Good afternoon Mr. Bianchi,

I am following up on an item that was discussed during our March 29th meeting, where the statement was made that all lighting along the new rail line should be directed downward to avoid glare due to the potential safety issues for planes landing at Phoenix-Mesa Gateway Airport. We did not explicitly see a requirement about downward-facing lighting in the information you provided below. Can you please clarify whether that is an FAA requirement and/or is it something that Phoenix-Mesa Gateway Airport would require? We'd like to make sure that we're accurately capturing the requirement in the Draft Environmental Assessment.

Thank you for your help,

Maggie Buckley
O: 425.233.3117
M: 206.949.5955

From: Tony Bianchi <TBianchi@gatewayairport.com>
Sent: Tuesday, April 5, 2022 8:53 AM
To: Buckley, Maggie <Maggie.Buckley@jacobs.com>; Assenza, Adam <adam.assenza@stb.gov>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>; Bushey, Sabra <Sabra.Bushey@jacobs.com>
Cc: Bob Draper <BDraper@gatewayairport.com>
Subject: [EXTERNAL] PIRATE Rail Mtg Follow-Up- Gateway Airport

Greetings:

Thank you again for last week's well-organized and well-run PIRATE rail meeting.
A few action items for me to provide to you included:

- Gateway's most recent noise contours
- Gateway Airport Master Plan Concept
- Gateway Airport Layout Plan
- Gateway Airport Passenger Enplanement and Operations Forecast

I have enclosed those in the attached .zip file.
The noise contours are from 2017 and are our planning scenario noise contours, so they will not be changed for some time.
Those are attached as a projected GIS shapefile.
The others are PDF documents. I'm hoping that meets your intended needs. A GIS Tech could georeference the PDF images in to overlay on any maps you might want to include them on as they are a combination of GIS and CAD data layers.

The forecast is from the FAA's Terminal Area Forecast, which is updated annually. Adjustments were made after 2020 to account for the pandemic and recovery. I would focus on the 'Enplanements' 'Total' and you can double that number to estimate the total passengers served as it is close to a 50/50 split. For operations (takeoffs and landings) you can use the 'Total Ops' column.

Also, below are a few links to information on the FAA's Part 77 and 7460 evaluation process.
New railways in proximity to airports do meet the criteria to file an evaluation and they will typically set the elevation of the railcars above the track at 23' unless another height is known. New users may need to set up a quick profile with the FAA with the link below when filing any cases. As mentioned, if there are other structures that may be needed, such as light poles or crossing lift gates, we can model some heights in software here to see if an airspace penetration would be expected.
Obstruction Evaluation / Airport Airspace Analysis (OE/AAA) (faa.gov)
https://www.faa.gov/documentLibrary/media/Form/FAA_Form_7460-1_022020.pdf

I would appreciate if you could provide the proposed alignments and the environmental sites you included on the presentation maps in GIS format (.shp or .gdb) and I could overlay those in our GIS. Let me know if you encounter any issues with the attached files.
Please take a look at the data and contact me if you have any questions or additional requests.

Thanks,
Tony Bianchi, A.A.E., AICP, GISP
Planning Manager
Phoenix-Mesa Gateway Airport Authority
5835 S Sossaman Rd
Mesa, AZ 85212-6014
Office: 480-988-7649
tbianchi@gatewayairport.com
www.gatewayairport.com



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SHPO-2021-1360(161938)
Rec'd 12/10/21

SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

December 10, 2021

Ms. Kathryn Leonard
State Historic Preservation Officer
Arizona State Parks, State Historic Preservation Office
1110 West Washington Street, Suite 100
Phoenix, AZ 85007

Re: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – in Maricopa County, AZ; Preliminary Environmental Consultation

Dear Ms. Leonard:

I am writing to inform you about a forthcoming proposal from the Union Pacific Railroad Company (UP) to construct and operate approximately six miles of new rail line in Maricopa County, Arizona. UP intends to seek authority from the Surface Transportation Board (Board) to construct and operate the proposed rail line. Before making its decision on whether to grant such authority, the Board must consider the potential environmental impacts of UP's proposal, pursuant to the National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act (NHPA), the Board's environmental rules at 49 C.F.R. Part 1105, and related environmental laws.

The Board's Office of Environmental Analysis (OEA) intends to begin the process of preparing environmental documentation that will analyze the potential environmental and historic impacts of the proposed rail line. OEA will conduct the environmental review in consultation with appropriate federal, tribal, state, and local agencies; other interested stakeholders; and the public. The purpose of this letter is to advise you of the proposed rail line project, request information from your agency on the resources under your jurisdiction that could be affected by the proposed rail line, identify permits and approvals that could be required of UP, and identify any other information that would inform OEA's development of the range of alternatives to be considered during the environmental review. The information you provide will also help us determine what type of NEPA document should be prepared.

Project Background

UP intends to request Board authority to construct and operate new industrial lead railroad track that would connect UP's Phoenix Sub main line track in Maricopa County, Arizona, to industrial properties southeast of the Phoenix-Mesa Gateway Airport (Figures 1 and 2). This project is referred to as the Pecos Industrial Rail Access and Train Extension

(PIRATE) project. According to UP, the proposed track would serve the transportation and logistics needs of existing manufacturing and industrial businesses, as well as prospective businesses looking to relocate to the area. Maps of the proposed project area are attached.

Environmental Review Process

This letter begins the process by which OEA will assess the potential environmental impacts of constructing and operating the proposed rail line. The process will include the preparation of a draft and final environmental document, which for rail construction proposals is normally an environmental impact statement (EIS), as specified in the Board's environmental rules at 49 C.F.R. § 1105.6(a). Your response to this inquiry will assist OEA in determining if an EIS is appropriate in this case or if, alternatively, an environmental assessment (EA) could be prepared.

Pursuant to the Council on Environmental Quality's regulations implementing NEPA (40 C.F.R. §§ 1500–1508) and the Board's environmental rules at 49 C.F.R. § 1105, OEA will be the lead federal agency in the preparation of the environmental document that will evaluate the potential environmental effects of UP's proposal, including reasonable and feasible alternatives and the no-action alternative. The draft environmental document will be distributed to agencies and the public for review and comment pursuant to the requirements of NEPA and the Board's environmental rules. The NEPA document will set forth the Board's independent environmental review of the build alternatives and the no-build or no-action alternative. The alternatives to be considered in the environmental document may include new alternatives developed by OEA. Our agency's process will conclude with the Board's decision on whether to authorize the proposed rail line. In reaching its decision, the Board will consider the entire environmental record, including all public comments, the draft and final environmental documents, and OEA's final recommended environmental mitigation. Jacobs Engineering Group Inc., the third-party contractor for this project, will assist OEA in conducting the environmental review.

Request for Input

We would appreciate your assistance in preliminarily identifying whether any resources of concern to your agency may be affected by the proposed rail line, particularly if any permits or approvals are required of UP, and welcome any additional issues or concerns that you consider appropriate. You may submit comments electronically through the Board's website at www.stb.gov by clicking on the "E-Filing" link on the left side of the home page and then selecting "Environmental Comments." Brief comments may be typed within the comment field provided or you may attach comments as a separate file. You may also send your written comments to Adam Assenza, OEA's Project Manager for this environmental review, by email at Adam.Assenza@stb.gov. Comments received will be made available to the public on the Board's web site. We respectfully request your response by **January 10, 2022**.

If you have any questions or would like to arrange a virtual meeting or conference call with OEA, please feel free to contact Adam Assenza by phone at (202) 245-0301 or by email. We greatly appreciate your assistance and look forward to your participation in the Board's environmental review process for this project.

Sincerely,

Danielle Gosselin
Acting Director
Office of Environmental Analysis

Enclosures:
Figure 1 – Project Vicinity Map
Figure 2 – Project Location Map

Thank you for consulting with our office regarding the above-referenced project. After reviewing your letter and attachments, we recommend that you complete a Class I literature review and potentially a Class III cultural resources survey of the project area in order to identify historic properties. For more information, please refer to the Arizona State Museum's website: https://statemuseum.arizona.edu/crm. I have also attached a list of archaeological consultants who can assist you in this matter.

Please continue to consult with our office as this project progresses.

Sincerely,

Caroline Klebacha
State Historic Preservation Office
January 7, 2022

TOWN OF QUEEN CREEK ARIZONA

January 6, 2022

Ms. Danielle Gosselin
Acting Director
Office of Environmental Analysis
Surface Transportation Board
395 E. Street SW
Washington, D.C. 20423

Re: Docket No. FD 36501, Union Pacific Railroad Company - Construction and Operation Exemption - in Maricopa County, AZ; Preliminary Environmental Consultation

Dear Ms. Gosselin:

Thank you for the opportunity to provide commentary on issues for consideration for the forthcoming environmental review associated with Union Pacific Railroad Company's (UPRR) PIRATE application to construct and operate six miles of new rail line in northeast Mesa, where the Town of Queen Creek (Town) shares a northern border. The Town has jurisdiction from Power Road on the western border, along Germann Road as the northern border extending south and east into Pinal County. It is also important to note that in August of 2019, in coordination with the Arizona State Land Department, the Town annexed 4,150 acres of land held in trust by the State of Arizona into the Town which is located immediately adjacent to the end of the proposed rail line at Meridian Road (State Trust Land). The State Trust Land is anticipated to be developed by large industrial employers and the land has been or is in process of being rezoned for employment purposes.

The Town respectfully requests to be treated as a significant stakeholder throughout the review process initiated by the Surface Transportation Board and offers the following questions and potential issues for consideration during the ongoing review:

Additional information needed relative to the proposed operations of the UPRR PIRATE extension

In order to properly access the impacts of the proposed rail line, the Town of Queen Creek requests additional information from Union Pacific Railroad with respect to its operations plan. The Town is seeking the following:

- The number of trains to utilize the proposed rail line on a daily basis and their anticipated length;
- The frequency in which trains would utilize the proposed rail line;
- The time(s) of day in which the rail line would be actively utilized and crossing major arterials;
- Union Pacific's proposal for the crossing of major north-south arterial connections with access to the new State Route 24 freeway (*i.e.* at-grade or over/under passes);
- If crossings are proposed at-grade, the safety measures which would be utilized to protect motorists;
- The proposed time it would take for the train to pass through all major arterial roadways blocking motorists from crossing;
- If UPRR plans to eliminate any other at-grade crossings as a result of the additional new potential at-grade arterial crossings;
- UPRR's plans to improve the Sossaman/Germann intersection associated with this project;

- What other traffic mitigation plans are included in the proposal to mitigate the significant traffic issues which will be created;
- What development, construction, other activities and/ or improvements within the Town boundaries are anticipated; and
- Examples of similar existing rail lines with similar anticipated environmental factors located in Arizona.

Significant Traffic Arterial Considerations at Major North-South Arterials including Sossaman, Ellsworth, Signal Butte and Meridian Roads

The Town of Queen Creek's current population is over 66,000 residents with another 100,000+ residents located in the unincorporated area immediately to the south known as San Tan Valley located in Pinal County. The Town's growth rate is significant at approximately 7% annually. Additionally, State Route 24 is the closest potential freeway (interim to be open in August 2022) that provides access for these residents often traveling west for employment. This means the Town's north-south arterial network is critical to ensure the continued movement of people and goods. In an effort to provide more access points for residents, in January of 2019, the Town of Queen Creek entered into an agreement with the City of Mesa in which the Town advanced $12 million in funds in order for Mesa to build the needed capacity along Signal Butte Road to alleviate congestion.

The proposed rail line would require major arterial crossings located at Sossaman, Ellsworth, Signal Butte, and potentially Meridian roads. From a practical standpoint, Ellsworth, Signal Butte and Meridian (Signal Butte and Meridian scheduled to open in August 2022) are the Town's primary north south routes out of the community to the metropolitan Phoenix freeway system. A small area transportation study is required to fully investigate the traffic impacts due to the proposed rail line. Additionally, grade-separated crossings should be considered to avoid traffic conflicts and protect motorists. Germann Road, a road of regional significance located south of Pecos, will have increased traffic congestion and will need improvements sooner as a result of the proposed rail line (attached is a 2013 study of this roadway conducted by the Arizona Department of Transportation).

Impacts associated with the building of the PIRATE rail line to the UPRR main track including the Sossaman/Germann intersection

Multiple agencies hold jurisdiction at the Sossaman/Germann intersection that include the City of Mesa, Town of Queen Creek, Union Pacific Railroad and the Maricopa County Flood Control District. The City of Mesa, Town of Queen Creek and Maricopa County are currently collaborating on the re-design of this intersection to accommodate significant increased and planned usage associated with the location of a new charter school (full capacity enrollment planned for 2,400 students, opening in August 2022). This intersection will need an interim solution which is currently under discussion with all the parties. Any improvements in which Union Pacific Railroad intends to conduct at this intersection should not impede the goals or timing of either the interim or the permanent construction of this critical intersection to ultimately make it safer and more efficient.

Neighborhood Considerations for Residential Properties located immediately south of the proposed PIRATE rail line

With the rail line being located just east of Rittenhouse Road, the extended rail line is within close proximity to significant residential development along the length. This presents significant concerns when hearing from a number of the Town's residents as it relates to current railroad noise. Within one-mile of the Town's jurisdictional boundary, there is a total of approximately 10,150 residential units that are constructed or planned for development that may

now be exposed to ongoing rail noise. Quiet Zones may need to be constructed as a result of the approval of the proposed line in these locations.

Land Use Considerations for the State Trust Land
located within the Town's jurisdiction adjacent to the proposed PIRATE rail line

Based on the provided exhibits, it is the Town's understanding that the rail line will run eastward to CMC Steel, or approximately Meridian Road. As you may be aware, the Arizona State Land Department (ASLD) has significant land holdings east of Meridian Road, both within the Town's jurisdiction as well as the City of Apache Junction. As noted above, the Town of Queen Creek recently annexed 4,150 acres. Within the ASLD site, approximately 1,000 acres directly east of Meridian Road has been rezoned for employment uses and has seen a significant amount of interest from advanced manufacturing users (see attached zoning map). Please note that some of the advanced manufacturing users have expressed significant apprehension about being located within close proximity to a rail line due to potential vibrations impacting their operations. Furthermore, the remainder of the ASLD site has the potential for an additional 10,000+ residential units that would be impacted if the rail line were to extend east to Meridian Road.

In order to understand more about this project and properly and fully respond to your request for input on the impacts of the proposed rail line, the Town of Queen Creek is formally requesting a stakeholder meeting be conducted by the Federal Surface Transportation Board to include at a minimum, Union Pacific Railroad, City of Mesa, Phoenix-Mesa Gateway Airport, Pinal County and the Town of Queen Creek. This will assist the Town in better providing additional comments to the Surface Transportation Board during its environmental review of the proposed project, alternatives, and effective mitigation efforts. Additionally, the Town would request that no conditional or final approval to construct the proposed rail line be given to Union Pacific Railroad until the entire environmental analysis is complete, the issues identified by the stakeholders in their responses and through the evaluation process are substantively addressed, and State Trust Land users are better known.

Thank you for your consideration of these issues. Should you need any additional information, please contact Mohamed Youssef (480-358-3144, mohamed.youssef@queencreekaz.gov) or Heather Wilkey (480-358-3913, heather.wilkey@queencreekaz.gov).

Sincerely,

John Kross, ICMA-CM
Town Manager

cc: Adam Assenza, Environmental Protection Specialist, Surface Transportation Board
Maggie Buckley, Jacobs Engineering Group
Betsi Phoebus, Jacobs Engineering Group
Mohamed Youssef, Interim Public Works Director, Town of Queen Creek
Heather Wilkey, Intergovernmental Relations Manager, Town of Queen Creek

Attachments: Arizona Department of Transportation Study, Germann Road Corridor
Zoning Map of the Arizona State Trust Lands

White Mountain Apache Tribe

Office of Historic Preservation
PO Box 1032
Fort Apache, AZ 85926
Ph: (928) 338-3033 Fax: (928) 338-6055

To: Danielle Gosselin, Acting Director Office of Environmental Analysis

Date: December 30, 2021

Re: *Docket No. FD 36501, Union Pacific Railroad Company Construction/Operation Exemption*

……

The White Mountain Apache Tribe Historic Preservation Office appreciates receiving information on the project dated; December 10, 2021. In regards to this, please attend to the following statement below.

Thank you for allowing the White Mountain Apache tribe the opportunity to review and respond to the above proposed construction and operation of approximately six miles of new rail line that would connect UP's Phoenix Sub main line track in Maricopa County, to industrial properties southeast of Phoenix-Mesa Gateway, Phoenix, Arizona.

Please be advised, we reviewed the consultation letter and the information provided, and we've determined the project plans will have ***"No Adverse Effected"*** to the tribe's cultural heritage resources and/or traditional cultural properties, and concur with the recommendations.

Thank you for your continued collaborations in protecting and preserving places of cultural and historical importance.

Sincerely,

Mark T. Altaha

White Mountain Apache Tribe – THPO
Historic Preservation Office

Figure 1. Project Vicinity Map

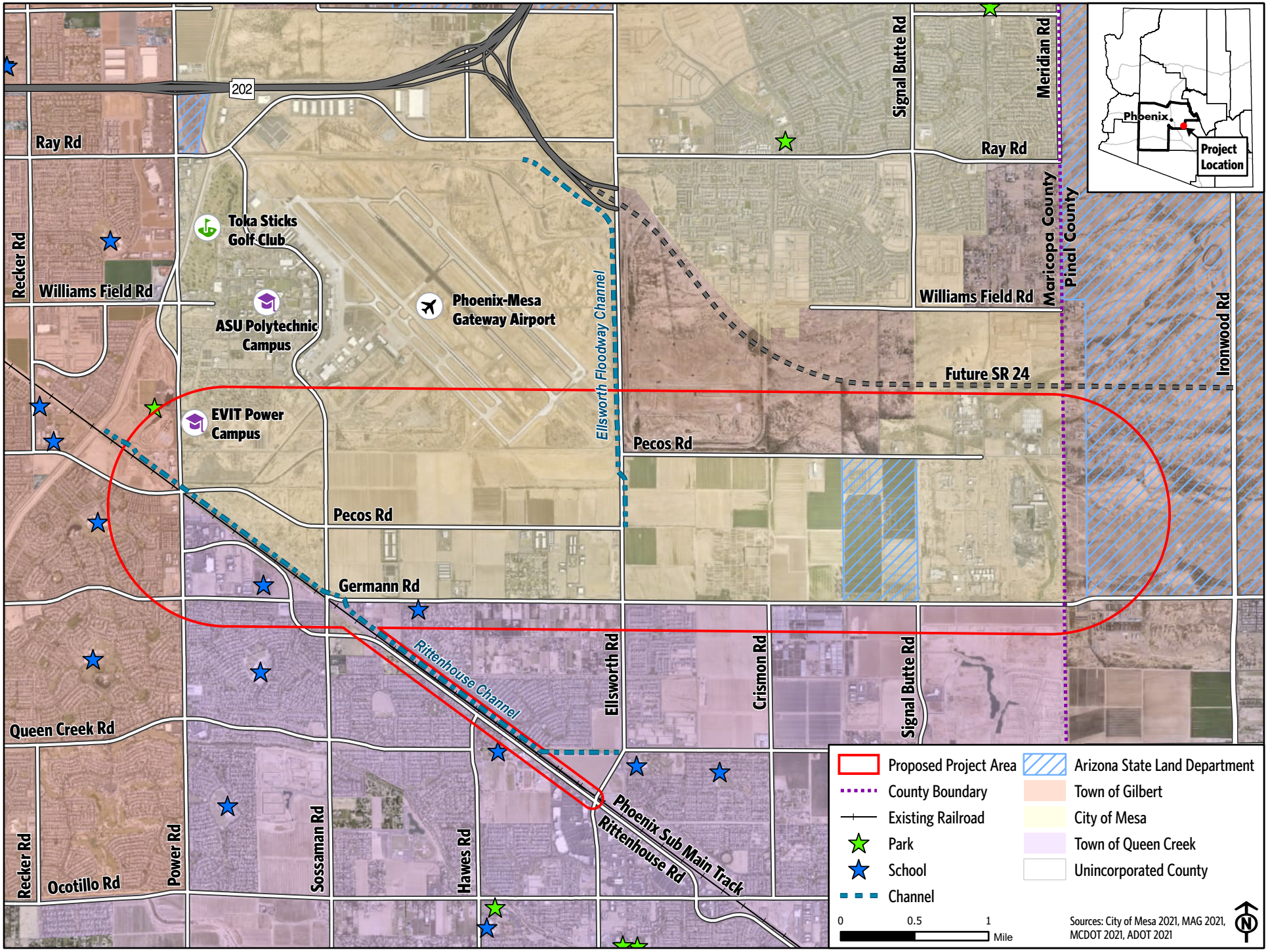
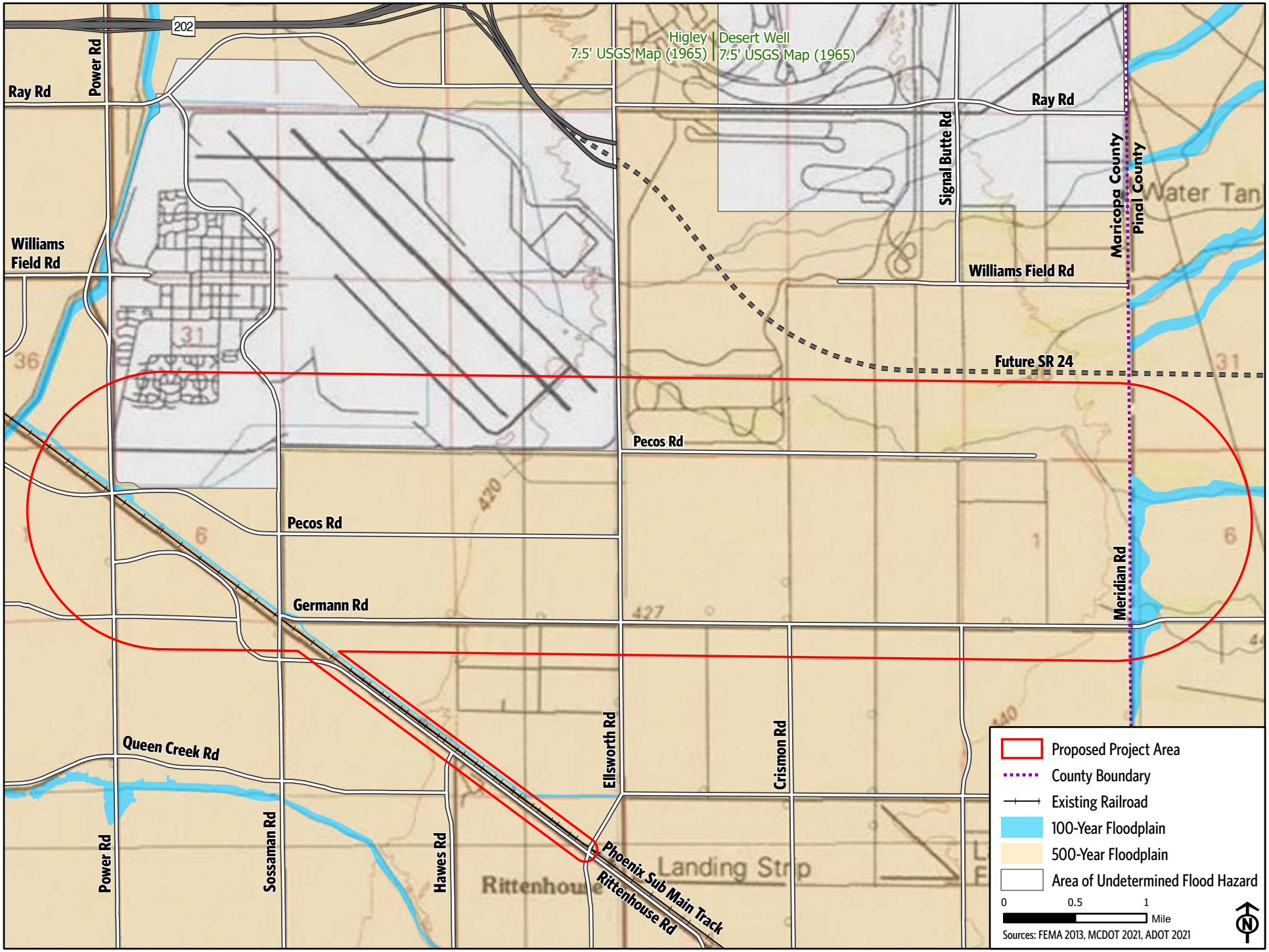


Figure 2. Project Location Map



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Via email

March 24, 2022

Ms. Danielle Gosselin
Director, Office of Environmental Analysis
Surface Transportation Board
395 E Street, S.W.
Washington, D.C. 20423

Re: STB Docket No. FD 36501, Union Pacific Railroad – Construction and Operation Exemption- In Maricopa County, Arizona; Request for Reclassification

Dear Ms. Gosselin:

Pursuant to 49 C.F.R. § 1105.6(d), I am requesting on behalf of Union Pacific Railroad Company ("UPRR"), petitioner in the above-captioned proceeding, to request that the Surface Transportation Board (STB) waive the requirement of 49 C.F.R. §1105.6(a) of the preparation of an Environmental Impact Statement (EIS) in favor of the preparation of an Environmental Assessment (EA). UPRR submits that a reclassification is appropriate because of the proposed construction of Pecos Industrial Rail Access and Train Extension Project ("PIRATE Project") is not likely to have a significant environmental impact such that a waiver under 49 C.F.R. § 1105.6(a) and the preparation of an EA will be sufficient to address the impacts of the proposed construction. In support of this request, UPRR submits the following information in accordance with §1105.6(b)(1) and §1105.7(e).

Background

UPRR intends in the near future to file with the STB a petition to construct and operate a new industrial lead rail line in Maricopa County, Arizona. UPRR has been in discussions with the Office of Environmental Analysis (OEA) regarding the project for several months. Presently, UPRR serves Commercial Metals Company (CMC) at other locations in the United States. CMC closed their Rancho Cucamonga, CA mill in 2020 and is replacing that production with a new mill for straight and merchant bar production in Mesa, AZ. CMC is requesting rail service to support two adjacent mills with production of inbound scrap and outbound bar.

The purpose of the UPRR construction is to provide the new and existing CMC mill rail access. Potential rail development would connect the existing Pecos Advanced Manufacturing Zone (PAMZ)

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Tanya Spratt
Senior General Attorney
Law

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directly to the UPRR main line just west of the project area, running six miles through the PAMZ with a terminus at the border between Maricopa County and Pinal County. This PIRATE project will include a six-mile industrial lead extending from the UPRR Phoenix Subdivision (milepost 935) to CMC's new facility. In addition to granting access to CMC, it will also provide rail development opportunities as the lead cuts through two thousand acres of industrial zoned land.

On April 30, 2021, the OEA approved a waiver of the six-month pre-filing notice otherwise required under 49. C.F.R. § 1105.10(a)(1), and separately approved the selection of Jacobs as the third-party contractor to assist with the preparation of the environmental documentation and review. Currently, the environmental documentation and review process is ongoing. Jacobs and OEA staff have performed preliminary investigations, with onsite inspections to follow in the next few months. Jacobs, as directed by OEA staff, has also helped prepare and send out the environmental notification letters to local, state, and federal agencies. Based on the feedback received from OEA staff to date and UPRR's understanding of the natural resources within the project footprint, UPRR does not believe there will be a significant environmental impact, and therefore UPRR is submitting this request that the OEA prepare an EA instead of an EIS.

UPRR's Proposal is Not Likely to Have a Significant Impact on the Environment

Under 49 C.F.R. § 1105.6(a), an EIS "will normally be prepared for rail construction proposals." However, 49 C.F.R. § 1105.6(d), provides that an applicant can request that the STB instead evaluate a project through an EA, rather than an EIS, if the applicant demonstrates that a proposal is not likely to have a significant environmental impact. Further, under 49 C.F.R. § 1105.6(d), "any request for reclassification must be in writing and, in a rail construction, should be presented with a prefiling notice required by 49 C.F.R. § 1105.10(a)(1) (or request to waive that prefiling notice period)." Pursuant to 49 C.F.R. § 1105.10(c), on April 30, 2021, OEA granted UPRR's request for waiver of the six-month prefiling notice generally required for rail line construction projects.

As stated, the PIRATE project site is an extension to provide additional industrial opportunities. The PIRATE project will result in new rail connection to CMC, as well as potentially new customers locating on the line extension, creating a modest reduction in energy use for train operations versus trucking.

UPRR anticipates traffic to be limited to two trips per day, five days per week once the PIRATE project is operational and therefore does not expect that traffic to be handled over the PIRATE project will exceed the threshold of 8 trips per day for an attainment area as per 49 C.F.R. § 1105.7(e)(5)(i)(A).

Anticipated traffic volume can be expected to lead to a corresponding increase in noise levels. However, the PIRATE project site is situated near the Phoenix-Mesa Gateway Airport and as such it is not anticipated that the PIRATE project will impact sensitive noise receptors.

UPRR does not believe that the PIRATE project is likely to adversely affect endangered or threatened species or areas designated as critical habitat.

UPRR understands that a very small portion of the property is in a Zone A floodplain and that wetlands do not appear to exist in the proximity to the PIRATE project. UPRR is prepared to mitigate or design the project to address any concerns that arise related to the PIRATE project.

UPRR knows of no historic or cultural resources that may be impacted by the PIRATE project but will work with the OEA and the Arizona State Historic Preservation Office to identify any potential impacts. Cultural efforts are on-going and UPRR is prepared to mitigate or design the project to address any concerns that arise related to the PIRATE project.

UPRR does not believe that an environmental impact statement will be necessary because the environmental conditions of this property are known, and the impacts of the PIRATE project are negligible based on the information provided above. Accordingly, UPRR respectfully requests OEA waive the requirement of 49 C.F.R. §1105.6(a), Preparation of an Environmental Impact Statement (EIS), in favor of the preparation of an Environmental Assessment (EA).

Sincerely,

Tanya Spratt

Tanya Spratt
Senior General Attorney - Law

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April 5, 2022

Mr. Adam Assenza
Environmental Protection Specialist
Office of Environmental Analysis
Surface Transportation Board
395 E Street, S.W.
Washington, D.C. 20423

Re: STB Docket No. FD 36501, Union Pacific Railroad – Explanation of Design Changes and Clarification of Construction and Operation Activities with Respect to Adjacent Property

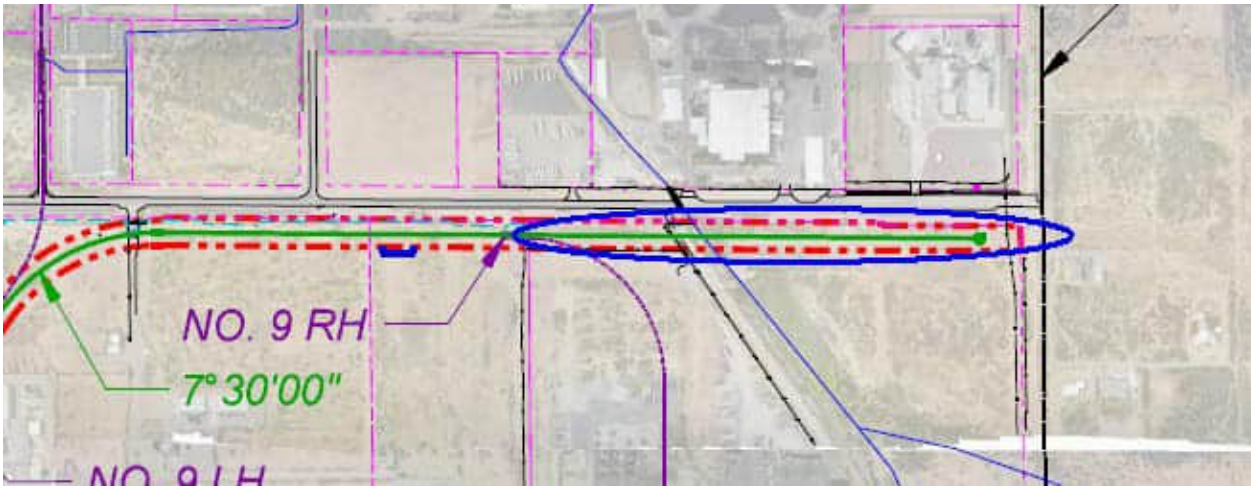
Dear Mr. Assenza:

With regards to the proposed construction of Pecos Industrial Rail Access and Train Extension Project ("PIRATE Project"), the Office of Environmental Analysis (OEA) has requested the Union Pacific Railroad (UPRR) provide an explanation for design changes made from the 10% conceptual level to the current 30% design as well as clarification of UPRR construction and operating activities as it relates to adjacent properties.

Alignment Changes from 10% Concept to 30% Design

There were two alignment changes from the 10% plans to the 30% plans, which shall be referred to as the "East Terminus" and "Hawes Road Spur" for purposes of this letter.

The East Terminus was an approximate 1800' extension of the Pirate I/L track to the East, beyond the future connection point to CMC Steel, as shown below in the 10% plans, circled in blue:



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1400 Douglas Street, 9th Floor
Omaha, Nebraska 68179

Kevin Rice
Senior Manager M/W Environmental Engineering

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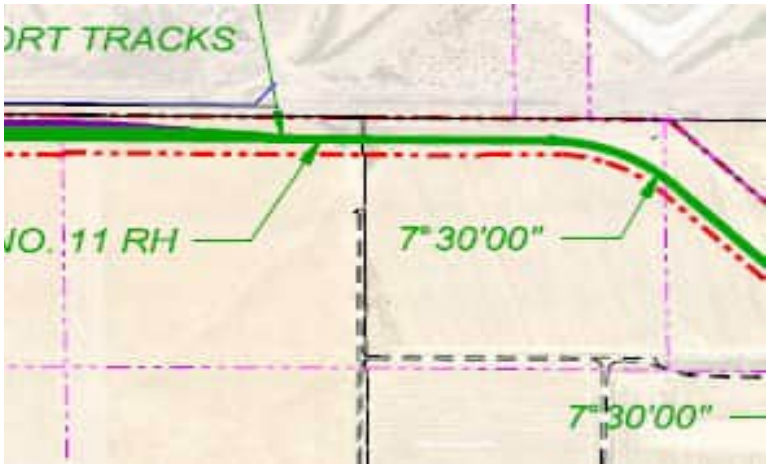
In the conceptual phase, the East Terminus was included in the design because it was thought that there could be a potential of serving additional customers to the East of CMC Steel. However, as design progressed, it was determined that industrial development was not likely East of N Moeur Rd in the short term, and therefore added no value to the project and was subsequently removed from the 30% plans as shown below:



Hawes Road Spur was requested to be included in the 10% Plans by the landowner to the South of the industrial lead alignment. It was a connection to a potential future development of the land, as shown below, circled in blue:



However, through communications with the landowner, it was determined that the future land development was not probable by the current landowner and therefore removed from the 30% plans. Any future development of this tract of land would be the designed, permitted and constructed by the landowner. The current 30% design depicts this area as shown below:

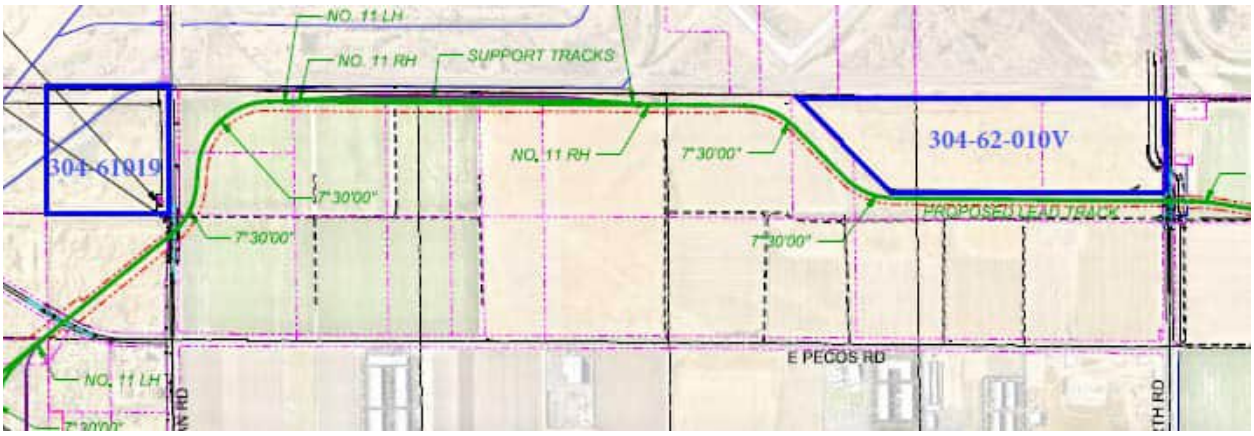


Construction or Operation Outside of UPRR ROW

As the OEA and Jacobs team continues to develop the Environmental Assessment (EA), they need to determine the Area of Potential Effects (APE) as a part of the Section 106 process. A question was posed regarding whether UPRR intends to have any construction or operating activities outside of the ROW or Temporary Construction Easements (TCEs), as shown on the current 30% plans. After careful consideration, UPRR has determined that no construction or operating activities shall be conducted outside of the ROW or TCEs.

Phoenix-Mesa Gateway Airport Authority and United States of America Property (Trust Land)

Both the Phoenix-Mesa Gateway Airport Authority (PMGAA) and the United States of America (USA) own property that abuts the ROW of the proposed PIRATE project. The PMGAA property in question is parcel #'s 304-62-010V. The USA property is parcel # 304-61019. See below for parcels highlighted in blue:



At no time during construction or operation of the proposed line will UPRR encroach on either of these properties.

Please let me know if there is any additional clarifications or information needed to assist in the continued development of the EA.

Sincerely,

Kevin Rice

Senior Manager M/W Environmental

Union Pacific Railroad

SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

April 21, 2022

Tanya Spratt
Union Pacific Railroad Company
1400 Douglass Street, 15th Floor
Omaha, NE 68179

Re: Docket No. FD 36501, Union Pacific Railroad - Construction and Operation Exemption - in Maricopa County, Arizona; Grant of EIS Waiver Request

Dear Ms. Spratt:

Thank you for your March 24, 2022, letter regarding the Union Pacific Railroad Company's (UP) proposed construction and operation of the Pecos Industrial Rail Access and Train Extension Project (PIRATE) in Maricopa County, Arizona. The proposed rail line would extend approximately six miles from UP's main line, located just west of the project area through the Pecos Advanced Manufacturing Zone (PAMZ), ending with a connection to the Commercial Metals Company (CMC) steel mill and would be maintained and operated by UP. The purpose of the new line would be to provide rail service to the CMC steel mill and rail development opportunities to industrial-zoned land in and near the PAMZ.

In your letter, you provide information about the level of potential environmental impacts that may be associated with the proposed construction and operation and request a waiver of the preparation of an environmental impact statement (EIS). Pursuant to 49 C.F.R. § 1105.6(d), the Board's Office of Environmental Analysis (OEA) is granting your request for a waiver of 49 C.F.R. § 1105.6(a), which normally provides for the preparation of an EIS for rail line construction proposals.

Based on the information available to date, OEA believes that the potential environmental impacts of this project would not be significant, and any impacts could most likely be addressed through appropriate mitigation measures. Therefore, OEA has determined that the preparation of an environmental assessment (EA) is appropriate in this case for the following reasons:

1. Since initiating outreach with a wide variety of federal, state, and local agencies and organizations, to date, no group contacted has expressed opposition to the proposed rail line; even groups identifying potential concerns regarding traffic, noise, or other local

impacts still appear to support the PIRATE project and OEA's efforts to identify and mitigate such potential issues.

- During an OEA virtual meeting with local, regional, and state agencies on March 29, 2022, the Town of Queen Creek expressed concern about traffic and noise impacts but noted that it recognizes the importance of the proposed rail line for economic development in the area and therefore supports the project.
- In a comment submitted to OEA on January 12, 2022, the City of Mesa indicated that UP must obtain right-of-way and building permits from the City of Mesa to construct the project and that acquisition of City-owned property would require approval from Mesa City Council but expressed overall support for the project.
- Heritage Academy Gateway, a local school near the project area, initially expressed concerns about traffic impacts from at-grade train crossings in a comment submitted to OEA on January 3, 2022. However, after receiving further information, Heritage Academy Gateway expressed support for the project during an OEA-hosted meeting with local schools on March 28, 2022.

2. After consulting with multiple federal agencies with potential interests in the PIRATE project due to jurisdiction or special expertise, none found the PIRATE project to be of sufficient size, scope, complexity, or interest to warrant participating in the environmental review as a cooperating agency, opting instead to remain consulting parties.

   - During an OEA-hosted interagency meeting on March 29, 2022, both the U.S. Environmental Protection Agency (USEPA) and U.S. Air Force (USAF) declined to participate as cooperating agencies for the environmental review of the PIRATE project. USEPA and USAF requested information coordination only.
   - On December 15, 2021, the Western Area Power Administration (WAPA) requested cooperating agency status if the project were to impact the Rogers to Coolidge 230-kV transmission line. The transmission line would be avoided. Therefore, WAPA is not participating as a cooperating agency.
   - No other federal agencies with jurisdiction or other interests in the project have been identified by OEA.

3. Based on OEA's consultation with various agencies, the potential rail line alternatives appear to be aligned with planned land use. OEA anticipates that any environmental issues identified through the EA process could be addressed by reasonable mitigation measures.

   - No wildlife sanctuaries or refuges, national or state parks, or forests should be affected by the proposed PIRATE project.
   - On February 25, 2022, the U.S. Fish and Wildlife Service (USFWS) provided OEA with a list of threatened and endangered species that may occur in the project area or may be affected by the proposed project. No critical habitats are present. There is no

riparian habitat within or adjacent to the project area. In its transmittal email to OEA, USFWS highlighted information related to migratory birds and bald eagles and recommended coordination with the Arizona Game and Fish Department (AZGFD) regarding species of greatest conservation need, such as the western burrowing owl and the Sonoran desert tortoise. To the extent that any sensitive species would be adversely affected by the proposed project, appropriate mitigation measures would be developed in coordination with USFWS and AZGFD.

- OEA's cultural resource surveys will identify cultural and historic properties that are present within the project area. Tribes and agencies will be consulted throughout the Section 106 process to develop any appropriate mitigation measures for potential impacts to cultural resources.

4. The potential for significant negative regional or national impacts associated with the PIRATE project appears to be negligible.

    - UP does not propose to add additional trains to its main line traffic. Railcars destined to or originating from the proposed PIRATE project would be delivered and collected by existing main line trains. Although these new operating procedures would result in a couple of longer trains per day on UP's main line, little to no impact on regional rail traffic is anticipated.
    - Providing rail service to the PAMZ would remove trucks from local and regional roadways which would have secondary benefits to air quality, traffic, noise, and climate change. No diversion of rail traffic to trucking is associated with the proposed PIRATE project.
    - The entire PAMZ is designated for industrial and commercial development, so providing rail service to this area would not be expected to result in significant adverse cumulative or indirect land use impacts.

After the Draft EA is prepared, OEA will make the document available for public review and comment. OEA will then prepare a Final EA that responds to the substantive comments received and includes any appropriate modifications to its existing analysis or additional analysis. The Final EA will also set forth OEA's final recommended mitigation measures to the Board. The Board will then consider the entire environmental record, including the Draft EA, public comments on the Draft EA, and the Final EA, when making its final decision in this proceeding. However, should the EA process disclose unanticipated impacts that are significant, OEA would require the preparation of an EIS at that time.

If we can be of further assistance, please do not hesitate to contact me or Adam Assenza at 202-245-0301.

Sincerely,



Danielle Gosselin
Director
Office of Environmental Analysis

cc: Kevin Rice

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June 30, 2022

304920

Via Electronic Filing

ENTERED
Office of Proceedings
June 30, 2022
Part of
Public Record

Ms. Cynthia T. Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street, SW
Washington, D.C. 20024

Re: STB Docket No. FD 36501; Union Pacific Railroad Company – Construction and Operation Exemption–In Maricopa County, AZ

Dear Ms. Brown,

Enclosed for E-filing in the above-captioned proceeding is the Petition of Union Pacific Railroad Company for Construction and Operation Exemption under 49 U.S.C. § 10502 from the requirements of 49 U.S.C. § 10901. Pursuant to 49 C.F.R. § 1002.2(f)(12)(iii), the filing fee of $91,600.00 has been paid via pay.gov. If there are any questions, please contact me directly at (402) 544-4735 or by email at tspratt@up.com.

Sincerely,

Tanya L. Spratt

Tanya L. Spratt, Attorney for Union Pacific Railroad Company

F I L E D
June 30, 2022
SURFACE
TRANSPORTATION BOARD

FEE RECEIVED
June 30, 2022
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UNION PACIFIC RAILROAD
1400 Douglas Street, 15th Floor
Omaha, Nebraska 68179

Tanya Spratt
Senior General Attorney

P 402-544-4735
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BEFORE THE
SURFACE TRANSPORTATION BOARD

Finance Docket No. 36501

UNION PACIFIC RAILROAD COMPANY
--CONSTRUCTION AND OPERATION EXEMPTION--
IN MARICOPA COUNTY, AZ

UNION PACIFIC RAILROAD COMPANY'S PETITION FOR EXEMPTION

CRAIG V. RICHARDSON
JAMES B. BOLES
TANYA L. SPRATT
Union Pacific Railroad Company
1400 Douglas Street
Omaha, Nebraska 68179
(402) 544-7004

Attorneys for Union Pacific Railroad Company

Dated: June 30, 2022

BEFORE THE
SURFACE TRANSPORTATION BOARD

Finance Docket No. 36501

UNION PACIFIC RAILROAD COMPANY
--CONSTRUCTION AND OPERATION EXEMPTION--
IN MARICOPA COUNTY, AZ

PETITION FOR EXEMPTION

EXPEDITED CONSIDERATION REQUESTED

Pursuant to 49 U.S.C. § 10502, Union Pacific Railroad Company ("UP") hereby petitions the Surface Transportation Board ("Board" or "STB") for an exemption from the prior approval requirements of 49 U.S.C. § 10901 to construct and operate approximately six (6) miles of rail line in connection with its Pecos Industrial Rail Access and Train Extension Project (the PIRATE project) in southeast Maricopa County, Mesa, Arizona (the "Line"). The proposed rail line would connect the existing Pecos Advanced Manufacturing Zone (PAMZ) directly to the UP main line (the UP Phoenix Subdivision) just west of the project area, running six miles through the PAMZ with a terminus at the border between Maricopa County and Pinal County, Arizona.

The proposed rail line would provide rail service to Commercial Metals Company ("CMC"), which has an existing steel micro mill in Mesa. It would also provide rail service to a new steel micro mill that CMC is constructing that is anticipated to be operational in 2023. The proposed line, which cuts through approximately 2,000 acres of industrial zoned land, would also provide an alternate mode of freight transportation to future shippers.

As set forth below, an exemption from the full application requirements is warranted in this case because they are not necessary to carry out the rail transportation policy at 49 U.S.C. § 10101, the proposed construction is limited in scope, and Board regulation is not necessary to protect any shipper from an abuse of market power. UP's proposed rail construction is consistent with numerous decisions of the Board exempting similar transactions from the prior approval requirements of 49 U.S.C. § 10901.

UP respectfully requests that the Board issue a decision granting the exemption expeditiously upon completion of the environmental review.

This Petition is supported by the statement of Barbara R. Smith, Chairman of the Board, President and Chief Executive Officer of CMC, which is included at Exhibit A.

BACKGROUND

A. Description and Purpose of Proposed Line and Planned Operations

UP proposes to construct and operate approximately six (6) miles of rail line in connection with the PIRATE project in southeast Maricopa County, Mesa, Arizona. The PIRATE project is a public/private initiative to fund, engineer, design and construct a six-mile industrial rail branch in southeast Mesa, Arizona. The proposed rail line will serve the transportation and logistics needs of CMC, and open up competitive advantages to new businesses looking to locate/relocate to the area. The PIRATE project encompasses 4,800 acres of agricultural and industrial land primarily situated on the former Williams Air Force Base.

UP has collaborated with the City of Mesa for several years on this project, which is expected to provide far-reaching public benefits by transferring materials away from public roadways onto rail, while also reducing greenhouse gas emissions, local air pollution, highway maintenance costs, and congestion associated with long-haul trucking. Locally, the project will

drive economic growth and expand high-skilled manufacturing job creation in Maricopa County, Arizona. The project has been supported by the City of Mesa, the Arizona Commerce Authority, the Great Phoenix Economic Council, the Arizona Manufacturers Council the Mesa Chamber of Commerce, and other entities and public officials.

The line will allow CMC to receive raw materials and deliver products to its customers by rail. CMC is the largest manufacturer of steel reinforcing bar (rebar) in North America and Central Europe, and also a leading producer in the steel long products market.[1] UP currently serves CMC at other locations in the United States, and the proposed line will serve CMC's facilities in Mesa, Arizona. CMC has an existing steel micro mill in Mesa, and is currently constructing a new steel micro mill in Mesa capable of producing 500,000 tons of rebar and merchant bar products to replace rebar production from a facility that CMC closed in California.[2] The proposed line will provide rail access to CMC's existing facility and the facility that is being constructed. CMC anticipates that rail access will allow it to receive raw material and deliver products to its customers more efficiently, eliminating an estimated 10,000 trucks per year from current operations and 25,000 trucks per year from its new manufacturing facility in 2023.[3]

Adding a rail transportation option will allow CMC to expand operations, add high-paying manufacturing jobs, provide its customers a low-cost logistics option, and explore additional multi-modal efficiencies that would benefit the region by reducing truck traffic and congestion.[4]

---

[1] Statement of Barbara R. Smith (Smith Statement) at 1.

[2] *Id.* at 2.

[3] *Id.* at 2.

[4] *Id.* at 1-2.

The addition of the proposed line will provide an alternate mode of freight transportation for future customers that could locate along the industrial lead as well.

A map of the proposed rail line is included at Exhibit B.

B. Environmental Review

UP has met with the Board's Office of Environmental Analysis (OEA) on five occasions regarding the environmental and planning considerations for the proposed line, which is not expected to have a significant environmental impact. By letter dated April 1, 2021, UP asked OEA to grant a waiver pursuant to 49 C.F.R. § 1105.10(c) of the requirement under 49 C.F.R. § 1105.10(a) that an applicant meet and provide "written notice of its forthcoming proposal at least six (6) months prior to filing its application."[5] OEA granted UP's waiver request by letter dated April 30, 2021.[6] UP has also contracted and received approval for a third-party contractor, Jacobs Engineering Group Inc. ("Jacobs"), to provide assistance with the environmental documentation.[7] The STB, UP, and Jacobs have also executed a Memorandum of Understanding ("MOU") to ensure that construction of the Line complies with the requirements of the National Environmental Policy Act.[8]

By letter dated March 24, 2022, UP requested a waiver from the requirements of 49 C.F.R. § 1105.6(a) of the preparation of an Environmental Impact Statement (EIS) in favor of

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[5] See EI-31953 (UP letter dated Apr. 1, 2021).

[6] See Exhibit C.

[7] See Exhibit D.

[8] See EI-3672 (MOU).

the preparation of an Environmental Assessment (EA).[9] A waiver to prepare an EA was granted by OEA on April 21, 2022.[10]

UP is working with OEA and Jacobs to support preparation of the Draft EA.

ARGUMENT

Construction and operation of a new common carrier rail line require Board approval under 49 U.S.C. § 10901(a)(1) and (2). However, § 10901(c) directs the Board to authorize construction and operation of a rail line "unless the Board finds that such activities are inconsistent with the public convenience and necessity." Thus, as the Board has stated, "Congress has established a presumption that rail construction projects are in the public interest unless shown otherwise."[11]

Under 49 U.S.C. § 10502(a), the Board "shall," to the maximum extent consistent with the statute, exempt a proposed rail construction and operation from regulation under § 10901 if it finds that (1) such regulation is not necessary to carry out the rail transportation policy of 49 U.S.C. § 10101; and (2) either (a) the transaction or service is of limited scope, or (b) regulation is not needed to protect shippers from the abuse of market power.

As explained herein, the Board should grant the requested exemption because the proposed rail line construction and operation meet the § 10502(a) exemption criteria. UP respectfully requests that the Board issue a decision granting the exemption expeditiously upon completion of the environmental review.

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[9] See EI-31927 (UP letter dated Mar. 24, 2022).

[10] See Exhibit E.

[11] Alaska Railroad—Construction & Operating Exemption—Rail Line Extension to Port MacKenzie, Alaska, FD 35095, at 5 (STB served Nov. 21, 2011), aff'd sub nom. Alaska Survival v. STB, 705 F.3d 1073 (9th Cir. 2013); see also Lone Star R.R.—Track Construction & Operation Exemption—In Howard County, Tex., FD 35874, at 3 (STB served March 3, 2016).

A. Board Regulation Is Not Necessary to Carry Out the Rail Transportation Policy at § 10101

Regulation of the proposed construction and operation is not necessary to carry out the rail transportation policy at § 10101. Rather, granting an exemption will promote several provisions of the rail transportation policy and will not run counter to any of those goals.

Granting the exemption is consistent with the goals at § 10101(4) and (5), to ensure the development and continuation of a sound rail transportation system with effective competition among rail carriers and with other modes to meet the needs of the public, and to foster sound economic conditions in transportation and ensure effective competition and coordination between rail carriers and other modes. The proposed line will provide alternative transportation options for CMC and future shippers, thus enhancing competition. See Palmetto Railways—Construction & Operation Exemption—In Berkeley County, S.C., FD 36095, at 3 (STB served July 22, 2019) (proposed line would enhance competition by providing a freight rail option that did not previously exist, consistent with § 10101(4) & (5)); Six County Assoc. of Governments—Construction & Operation Exemption—Rail Line Between Levan & Selina, UT, FD 34075, at 3 (STB served Oct. 19, 2001) (proposed line would provide a rail service option to shippers in an area where no rail service exists, thereby increasing competition consistent with § 10101(4)).

Also, consistent with the goals at § 10101(2) and (7), an exemption will minimize the need for federal regulatory control over the rail transportation system and reduce regulatory barriers to entry. An exemption here will promote these policies by minimizing the time and administrative expense associated with the construction and commencement of operations, which are intended to bring rail service to an area where none currently exists and help promote economic development and growth. See Palmetto Railways, FD 36095, at 3; Six County Assoc.

of Governments, FD 34075, at 3. An exemption is also consistent with the goals at § 10101(15), to provide for the expeditious handling and resolution of proceedings.

In summary, formal approval under § 10901 is not necessary to carry out the goals of the rail transportation policy.

B. The Transaction Is Limited In Scope and Regulation Is Not Needed to Protect Shippers from an Abuse of Market Power

Although the second test for an exemption is stated in the alternative—either the transaction must be of limited scope or the Board must find that regulation is not needed to protect shippers from an abuse of market power—UP's proposed construction satisfies both elements.

First, the proposed construction is limited in scope. The line to be constructed and operated is only approximately six miles in length. The agency has routinely granted construction exemptions for rail lines of similar length. See, e.g., Ken Tenn Regional Rail Partners, Inc.—Construction & Operation Exemption—In Fulton County, Ky. & Obion County, Tenn., FD 36328, at 1 (STB served Dec. 1, 2020) (conditionally exempting construction of 12.17 miles of rail line); Itasca County Regional Rail Authority—Pet. for Exemption—Construction of a Line of R.R. in Itasca County, MN, FD 34992, at 1 (STB served Sept. 8, 2008) (exempting construction of a 9-mile rail line); Southwest Gulf R.R.—Constr. & Operation Exemption—Medina County, TX, FD 34284, at 1 (STB served May 19, 2003) (conditionally exempting construction of approximately 7-mile line of railroad); Burlington N. & Santa Fe Ry.—Construction & Operation Exemption—Seadrift & Kamey, TX, FD 34003, at 1 (STB served June 19, 2001) (conditionally exempting construction of 7.5 miles of rail line).

Second, regulation is not needed to protect shippers from an abuse of market power. The proposed line will benefit CMC, which supports construction of the line.[12] The proposed line will provide an additional mode of freight transportation for CMC as well as future shippers. The proposed line will therefore enhance transportation services and competition. See Palmetto Railways, FD 36095, at 3 (finding that proposed rail line would enhance competition by providing rail service where it does not currently exist, thereby creating an alternative mode of transportation); Six County Assoc. of Governments, FD 34075, at 3 (finding that the proposed construction was not needed to protect shippers from an abuse of market power because the line would provide another transportation option and enhanced competition).

C. Expedited Consideration Requested

UP respectfully requests that the Board issue a decision granting the exemption expeditiously upon completion of the environmental review. As described above, UP has been collaborating with the City of Mesa and a number of other entities and public officials for several years on the PIRATE project, which is expected to provide far-reaching public benefits, described above. UP has diligently prepared the required documentation for the proposed line, obtaining a waiver of the six-month pre-filing notice and waiver of the EIS requirement. Given the limited scope of the transaction, the fact that the line is not expected to have a significant impact on the environment, and the benefits associated with the project, UP urges the Board to expeditiously complete its environmental review and grant the petition for exemption.

CONCLUSION

UP respectfully requests that this exemption petition be granted.

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[12] Smith Statement at 1-2.

Respectfully submitted,

/s/ CRAIG RICHARDSON

CRAIG V. RICHARDSON
JAMES B. BOLES
TANYA L. SPRATT
Union Pacific Railroad Company
1400 Douglas Street
Omaha, Nebraska 68179
(402) 544-7004

Attorneys for Union Pacific Railroad Company

Dated: June 30, 2022

BEFORE THE
SURFACE TRANSPORTATION BOARD

Finance Docket No. 36501

UNION PACIFIC RAILROAD COMPANY
--CONSTRUCTION AND OPERATION EXEMPTION--
IN MARICOPA COUNTY, AZ

PETITION FOR EXEMPTION

EXHIBIT A

CMC Statement

BEFORE THE
SURFACE TRANSPORTATION BOARD

Finance Docket No. 36501

UNION PACIFIC RAILROAD COMPANY
--CONSTRUCTION AND OPERATION EXEMPTION--
IN MARICOPA COUNTY, AZ

PETITION FOR EXEMPTION

STATEMENT OF Barbara R. Smith, Chairman of the Board, President and Chief Executive Officer, Commercial Metals Company

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Commercial Metals Company (CMC) is a leading provider of construction reinforcement solutions, capable of meeting the most rigorous demands of the markets we serve. As the largest manufacturer of steel reinforcing bar (rebar) in North America and Central Europe, we are a key supplier to the construction markets across two continents. Our Tensar line of innovative subgrade soil stabilization and foundation enhancement solutions reaches customers around the globe and helps to lower the cost and duration of construction projects, while offering unique environmental benefits compared to traditional alternatives.

In addition to rebar, CMC also produces merchant bar, steel fence post and wire rod, making us a leader in the steel long products market. Our products go mostly unseen, but support virtually every element of modern life - from highways, bridges and airports, to sky-scrapers, sports stadiums and hospitals.

With a best-in-class safety record, technologies that reduce carbon emissions, and a commitment to helping the communities in which we operate, we are a responsible corporate citizen.

Union Pacific (UP) is a major logistics service provider to CMC in the markets they serve. Over the last 3 years, we have worked with UP and the local authorities in the development of this important rail solution that will serve our manufacturing facilities in Mesa, Arizona and the Pecos Advanced Manufacturing Zone in the East Valley of Phoenix. CMC is aware that UP is filing this Petition for a Construction and Operation Exemption under 49 U.S.C. § 10504 from the Requirements of 49 U.S.C. § 10901.

As one of the major industrial companies located along the future freight rail track line, we are in strong support of bringing rail freight infrastructure into the region. The addition of rail will allow us to expand operations, add high-paying manufacturing jobs and explore additional multi-

modal efficiencies that will benefit the region by reducing truck traffic and congestion while reducing greenhouse gas emissions.

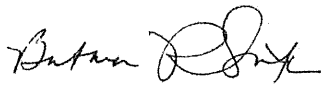
This rail project is critical to the success of our operations in Mesa, Arizona. We built our original steel micromill, capable of producing 275,000 tons per year of steel rebar, in 2009 and have expanded the capability of this facility to 420,000 tons per year over the past 13 years. This expansion has required that we increase our market reach and rail service is critical to providing our customers a low-cost logistics option. Additionally, after an extensive multi-state site search process, we chose Mesa, Arizona to locate a new steel micromill due to its central proximity to growing markets and the potential availability of lower-cost rail freight options that are provided by this project. We are currently constructing the first and one-of-a-kind, state of the art micromill capable of producing 500,000 tons of rebar and merchant bar products to replace rebar production from a facility that we closed in California and to expand our merchant bar production to western U.S. markets. We anticipate completion of this project and startup of manufacturing in mid-2023.

We currently receive and ship 48,000 truckloads per year via over the road freight and an estimated additional 52,000 truckloads per year after completion of our new facility in 2023. Rail will allow us to both receive raw material and deliver products to our customers more efficiently, eliminating an estimated 10,000 trucks per year from current operations and 25,000 trucks per year from our new manufacturing facility in 2023, further reducing traffic congestion and improving safety.

The existing steelmaking facility and the new mill both utilize leading edge micromill steelmaking technology. This technology, developed by CMC and the equipment manufacturer, emits 65% less GHG and uses 87% less energy to produce a ton of steel than the global steelmaking average. Additionally, the reduction of 35,000 over the road trucks per year will reduce GHG emissions further by using more efficient rail logistics for both incoming raw material and outbound finished goods. We estimate that this rail project will reduce GHG logistics emissions by another 20%.

In summary, this rail project is critical to our manufacturing facilities and to the East Valley's efforts in attracting advanced manufacturing to the region. CMC's existing facility will utilize this immediately at completion and significantly increase our usage upon commissioning of our new facility in 2023.

Barbara R. Smith



Chairman of the Board, President and Chief Executive Officer
Commercial Metals Company

BEFORE THE
SURFACE TRANSPORTATION BOARD

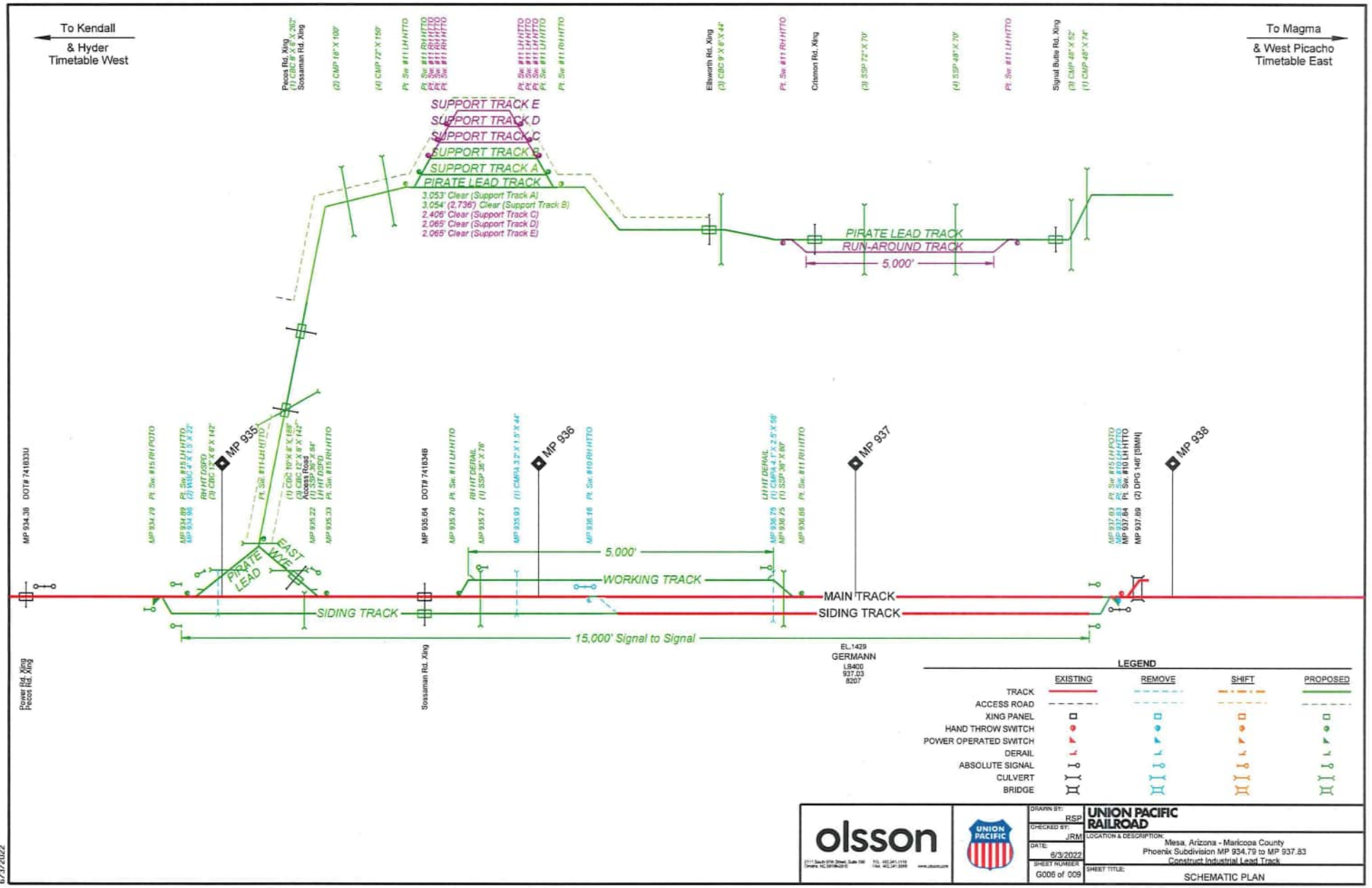
Finance Docket No. 36501

UNION PACIFIC RAILROAD COMPANY
--CONSTRUCTION AND OPERATION EXEMPTION--
IN MARICOPA COUNTY, AZ

PETITION FOR EXEMPTION

EXHIBIT B

Map Condensed Plan



olsson

UNION PACIFIC RAILROAD

DRAWN BY:	RSP
CHECKED BY:	JRM
DATE:	6/3/2022
SHEET NUMBER:	G006 of 009
LOCATION & DESCRIPTION:	Mesa, Arizona - Maricopa County Phoenix Subdivision MP 934.79 to MP 937.83 Construct Industrial Lead Track
SHEET TITLE:	SCHEMATIC PLAN

Color table: K:\Bentley\WorkspaceVB\projects\Clients\UPRR_Track_VB\color_UPRR.tbl
File: 200927_G006_SCHEMATIC PLAN.dgn
Fs\2020\0501-1000\020-0927\40-Design\Microstation\020-0927-RLTK\GEN\Sheets\01_General\T_GEN_200927.dgn
Default
6/3/2022

BEFORE THE
SURFACE TRANSPORTATION BOARD

Finance Docket No. 36501

UNION PACIFIC RAILROAD COMPANY
--CONSTRUCTION AND OPERATION EXEMPTION--
IN MARICOPA COUNTY, AZ

PETITION FOR EXEMPTION

EXHIBIT C

OEA April 30, 2021 Waiver Approval

SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

April 30, 2020

Mr. Jeremy Berman
Union Pacific Railroad Company
1400 Douglas Street
15th Floor
Omaha, NE 68197

Re: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – In Maricopa County, AZ; Waiver of Six-Month Prefiling Notice and Approval of Third-Party Contractor

Dear Mr. Berman:

Thank you for your letter dated April 1, 2021 requesting a waiver of the six-month prefiling notice and approval of a third-party contractor in the above-referenced proceeding. According to your letter, Union Pacific Railroad Company (UP) intends to file a petition with the Surface Transportation Board (Board) for an exemption under 49 U.S.C. § 10502 from the prior approval requirements of 49 U.S.C. § 10901to construct and operate a an approximately 6-mile rail line in Mesa, Arizona. As part of the Board's licensing process, the Board's Office of Environmental Analysis (OEA) will conduct an environmental review for the proposed rail line in compliance with the National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act (NHPA) and the Board's environmental rules at 49 C.F.R. Part 1105.

Waiver from the Six-Month Notice Requirement

Pursuant to 49 C.F.R. § 1105.10(c), OEA is granting your request for waiver of the six-month prefiling notice generally required for rail line construction projects under 49 C.F.R. § 1105.10(a)(l). OEA met with UP representatives on February 19, 2021 regarding the proposed construction and operation of a new rail line in Maricopa County, Arizona. At the meeting, UP's representatives provided OEA with an overview of the project, and OEA discussed the Board's environmental review process.

OEA understands that UP proposes to construct and operate approximately 6 miles of

track in association with its Pecos Industrial Rail Access and Train Extension Project (the PIRATE project) in southeast Mesa, Arizona. The PIRATE project encompasses 4,800 acres of agricultural and industrial land primarily situated on the former Williams Air Force Base. The proposed rail line would connect the existing Pecos Advanced Manufacturing Zone (PAMZ) directly to the UP main line just west of the project area, running six miles through the PAMZ with a terminus at the border between Maricopa County and Pinal County. The proposed rail line would provide rail service to a currently non-rail served facility with future facilities planned for development along the line and would be operated by UP.

Because of what was discussed at the February 19, 2021 meeting, OEA believes that it has adequate information, and that UP is sufficiently aware of the environmental review process, to grant this request.

Third-Party Contractor Approval

Your request for approval under 49 C.F.R. 1105.10(d) and 40 C.F.R. 1506.5 for retention of Jacobs as an independent third-party contractor is also approved. Jacobs will prepare the appropriate environmental document on behalf of the Board in connection with the proposed rail line. Enclosed please find a disclosure statement that we ask you to forward to Jacobs to complete. Once the statement is signed by Jacobs, we request that Jacobs send it back to us. As we discussed in our meeting on February 19, 2021, OEA will directly supervise, review, and approve all environmental documents prepared by the independent third-party contractor.

If we can be of further assistance, please contact me or Adam Assenza of my staff at (202) 245-0301 or by email at adam.assenza@stb.gov.

Sincerely,



Danielle Gosselin
Acting Director
Office of Environmental Analysis

Enclosure

SURFACE TRANSPORTATION BOARD
DISCLOSURE STATEMENT

On behalf of _____, I certify that _____ has
(name of contractor) (name of contractor)

no financial or other interests in the outcome of the prospective petition of the

_____ to construct a rail line in _____.
(name of applicant/petitioner) (location of proposed rail line)

Signature: _____

Printed Name: _____

Title: _____

Date: _____

BEFORE THE
SURFACE TRANSPORTATION BOARD

Finance Docket No. 36501

UNION PACIFIC RAILROAD COMPANY
--CONSTRUCTION AND OPERATION EXEMPTION--
IN MARICOPA COUNTY, AZ

PETITION FOR EXEMPTION

EXHIBIT D

Approval Letter for Jacobs June 10, 2021

SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

June 10, 2021

Jeremy M. Berman
Union Pacific Railroad Company
1400 Douglas Street, 15th Floor
Omaha, Nebraska 68179

Re: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – in Maricopa County, AZ – Request for Signature of Memorandum of Understanding

Dear Mr. Berman:

As you know, the Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) has approved, under 49 C.F.R. § 1105.10(d), Jacobs as the independent third-party consultant for the above-referenced proceeding. Jacobs will assist OEA in preparing the appropriate environmental documentation in connection with Union Pacific Railroad Company's (UP) proposed construction of a rail line in Maricopa County, Arizona. OEA has received the signed disclosure statement from Jacobs. As previously discussed, OEA will direct, supervise, review, and approve all environmental materials prepared by the third-party consultant in this proceeding.

Attached please find a Memorandum of Understanding (MOU) which should be signed by UP, forwarded to Jacobs for signature, and returned to OEA. The purpose of the MOU is to outline each party's responsibilities and establish an understanding regarding the conditions and procedures each party must follow in preparing all environmental documentation.

Thank you for your cooperation in this matter. If you have any questions, please feel free to contact me at 202-245-0300 or Adam Assenza of my staff at 202-245-0301.

Sincerely,

Danielle Gosselin
Acting Director
Office of Environmental Analysis

Enclosures

BEFORE THE
SURFACE TRANSPORTATION BOARD

Finance Docket No. 36501

UNION PACIFIC RAILROAD COMPANY
--CONSTRUCTION AND OPERATION EXEMPTION--
IN MARICOPA COUNTY, AZ

PETITION FOR EXEMPTION

EXHIBIT E

OEA Waiver for EA versus EIS

SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

April 21, 2022

Tanya Spratt
Union Pacific Railroad Company
1400 Douglass Street, 15th Floor
Omaha, NE 68179

Re: Docket No. FD 36501, Union Pacific Railroad - Construction and Operation Exemption - in Maricopa County, Arizona; Grant of EIS Waiver Request

Dear Ms. Spratt:

Thank you for your March 24, 2022, letter regarding the Union Pacific Railroad Company's (UP) proposed construction and operation of the Pecos Industrial Rail Access and Train Extension Project (PIRATE) in Maricopa County, Arizona. The proposed rail line would extend approximately six miles from UP's main line, located just west of the project area through the Pecos Advanced Manufacturing Zone (PAMZ), ending with a connection to the Commercial Metals Company (CMC) steel mill and would be maintained and operated by UP. The purpose of the new line would be to provide rail service to the CMC steel mill and rail development opportunities to industrial-zoned land in and near the PAMZ.

In your letter, you provide information about the level of potential environmental impacts that may be associated with the proposed construction and operation and request a waiver of the preparation of an environmental impact statement (EIS). Pursuant to 49 C.F.R. § 1105.6(d), the Board's Office of Environmental Analysis (OEA) is granting your request for a waiver of 49 C.F.R. § 1105.6(a), which normally provides for the preparation of an EIS for rail line construction proposals.

Based on the information available to date, OEA believes that the potential environmental impacts of this project would not be significant, and any impacts could most likely be addressed through appropriate mitigation measures. Therefore, OEA has determined that the preparation of an environmental assessment (EA) is appropriate in this case for the following reasons:

1. Since initiating outreach with a wide variety of federal, state, and local agencies and organizations, to date, no group contacted has expressed opposition to the proposed rail line; even groups identifying potential concerns regarding traffic, noise, or other local

impacts still appear to support the PIRATE project and OEA's efforts to identify and mitigate such potential issues.

- During an OEA virtual meeting with local, regional, and state agencies on March 29, 2022, the Town of Queen Creek expressed concern about traffic and noise impacts but noted that it recognizes the importance of the proposed rail line for economic development in the area and therefore supports the project.
- In a comment submitted to OEA on January 12, 2022, the City of Mesa indicated that UP must obtain right-of-way and building permits from the City of Mesa to construct the project and that acquisition of City-owned property would require approval from Mesa City Council but expressed overall support for the project.
- Heritage Academy Gateway, a local school near the project area, initially expressed concerns about traffic impacts from at-grade train crossings in a comment submitted to OEA on January 3, 2022. However, after receiving further information, Heritage Academy Gateway expressed support for the project during an OEA-hosted meeting with local schools on March 28, 2022.

2. After consulting with multiple federal agencies with potential interests in the PIRATE project due to jurisdiction or special expertise, none found the PIRATE project to be of sufficient size, scope, complexity, or interest to warrant participating in the environmental review as a cooperating agency, opting instead to remain consulting parties.

   - During an OEA-hosted interagency meeting on March 29, 2022, both the U.S. Environmental Protection Agency (USEPA) and U.S. Air Force (USAF) declined to participate as cooperating agencies for the environmental review of the PIRATE project. USEPA and USAF requested information coordination only.
   - On December 15, 2021, the Western Area Power Administration (WAPA) requested cooperating agency status if the project were to impact the Rogers to Coolidge 230-kV transmission line. The transmission line would be avoided. Therefore, WAPA is not participating as a cooperating agency.
   - No other federal agencies with jurisdiction or other interests in the project have been identified by OEA.

3. Based on OEA's consultation with various agencies, the potential rail line alternatives appear to be aligned with planned land use. OEA anticipates that any environmental issues identified through the EA process could be addressed by reasonable mitigation measures.

   - No wildlife sanctuaries or refuges, national or state parks, or forests should be affected by the proposed PIRATE project.
   - On February 25, 2022, the U.S. Fish and Wildlife Service (USFWS) provided OEA with a list of threatened and endangered species that may occur in the project area or may be affected by the proposed project. No critical habitats are present. There is no

riparian habitat within or adjacent to the project area. In its transmittal email to OEA, USFWS highlighted information related to migratory birds and bald eagles and recommended coordination with the Arizona Game and Fish Department (AZGFD) regarding species of greatest conservation need, such as the western burrowing owl and the Sonoran desert tortoise. To the extent that any sensitive species would be adversely affected by the proposed project, appropriate mitigation measures would be developed in coordination with USFWS and AZGFD.

- OEA's cultural resource surveys will identify cultural and historic properties that are present within the project area. Tribes and agencies will be consulted throughout the Section 106 process to develop any appropriate mitigation measures for potential impacts to cultural resources.

4. The potential for significant negative regional or national impacts associated with the PIRATE project appears to be negligible.

    - UP does not propose to add additional trains to its main line traffic. Railcars destined to or originating from the proposed PIRATE project would be delivered and collected by existing main line trains. Although these new operating procedures would result in a couple of longer trains per day on UP's main line, little to no impact on regional rail traffic is anticipated.
    - Providing rail service to the PAMZ would remove trucks from local and regional roadways which would have secondary benefits to air quality, traffic, noise, and climate change. No diversion of rail traffic to trucking is associated with the proposed PIRATE project.
    - The entire PAMZ is designated for industrial and commercial development, so providing rail service to this area would not be expected to result in significant adverse cumulative or indirect land use impacts.

After the Draft EA is prepared, OEA will make the document available for public review and comment. OEA will then prepare a Final EA that responds to the substantive comments received and includes any appropriate modifications to its existing analysis or additional analysis. The Final EA will also set forth OEA's final recommended mitigation measures to the Board. The Board will then consider the entire environmental record, including the Draft EA, public comments on the Draft EA, and the Final EA, when making its final decision in this proceeding. However, should the EA process disclose unanticipated impacts that are significant, OEA would require the preparation of an EIS at that time.

If we can be of further assistance, please do not hesitate to contact me or Adam Assenza at 202-245-0301.

Sincerely,

Danielle Gosselin
Director
Office of Environmental Analysis

cc: Kevin Rice

BUILDING AMERICA®

April 12, 2023

VIA EMAIL

Ms. Danielle Gosselin
Director, Office of Environmental Analysis
Surface Transportation Board
395 E Street, SW
Washington, DC 20423

Re: STB Docket No. FD 36501 – Union Pacific Railroad – Construction and Operation Exemption - PIRATE Project – Voluntary Mitigation Measures

Dear Ms. Gosselin:

Please find enclosed the proposed voluntary mitigation measures for Union Pacific Railroad's PIRATE Project. Union Pacific Railroad submits these voluntary mitigation measures for consideration in the Draft Environmental Assessment that is currently being prepared by the Surface Transportation Board's Office of Environmental Analysis.

If there are any questions regarding the proposed voluntary mitigation measures, please do not hesitate to contact me.

Sincerely,

/s/

Tanya Spratt

Encl.

cc: Adam Assenza
Maggie Buckley
Kevin Rice

UNION PACIFIC RAILROAD
1400 Douglas Street, 15th Floor,
STOP 1580
Omaha, Nebraska 68179

Tanya Spratt
Senior General Attorney

P 402-544-4735
E tspratt@up.com

Introduction

This report presents the Union Pacific Railroad's (Applicant) draft Voluntary Mitigation Measures (VMs) for the proposed PIRATE Project. These VMs were developed based on the Applicant's understanding of the environmental and built environmental conditions within the rail corridor and are based on feedback received during the environmental review process to date. As appropriate, these VMs may be carried out either by the Applicant or the Applicant's construction contractor(s).

Voluntary Mitigation Measures

The following sections provide the Applicant's VMs. They are presented by resource category.

CONSTRUCTION AND RAIL OPERATIONS SAFETY

VM 1. The Applicant will follow all applicable federal Occupational Safety and Health Administration, Federal Railroad Administration (FRA), and operational safety regulations to minimize the potential for accidents and incidents during construction and operation of the rail line.

GRADE CROSSING SAFETY

VM 2. The Applicant will consultant with appropriate federal, state, and local transportation agencies to determine the final design of the at-grade crossing warning devices. Warning devices on public roadways will be subject to review and approval, depending on location, by the Arizona Corporation Commission (ACC), City of Mesa, and Town of Queen Creek. The Applicant will follow standard safety designs for each at-grade crossing for proposed warning devices and signs. These designs will follow the Federal Highway Administration's ***Manual on Uniform Traffic Control Devices for Streets and Highways*** (MUTCD) and the American Railway Engineering and Maintenance-of-Way Association (AREMA) guidelines for railroad warning devices. They will also comply with applicable ACC, City of Mesa, and Town of Queen Creek requirements.

VM 3. For construction of road crossings, when reasonably practical, the Applicant and Applicant's contractor(s) will consult with local transportation officials regarding construction phasing and temporary traffic control. The Applicant's contractor(s) will be responsible for local agency coordination of construction schedules, detours, and temporary traffic control, as well as obtainment of necessary temporary traffic control permits from the City of Mesa and Town of Queen Creek. As appropriate, the Applicant's contractor(s) will maintain egress or routing of traffic to allow for passage of emergency and other vehicles.

VM 4. The Applicant will consult with the Flood Control District of Maricopa County (FCDMC) to determine the final details and reasonable signage for private at-grade crossings along access roads.

VM 5. The Applicant and Applicant's contractor(s) will consult with appropriate adjacent landowners for coordination of construction schedules and temporary access during construction.

VM 6. The Applicant will consult with the ACC and City of Mesa regarding roadway safety and user expectations, which includes items such as pavement markings, signing, delineators, and active warning devices for vehicles, pedestrians, and bicyclists at proposed at-grade crossings.

HAZARDOUS MATERIALS HANDLING AND SPILLS DURING CONSTRUCTION

VM 7. Prior to initiating any project-related construction activities, the Applicant's contractor(s) will prepare a Hazardous Waste Management Plan (HWMP) detailing the manner in which hazardous wastes will be managed and describing the types and volumes of hazardous wastes anticipated to be managed. The HWMP will address both onsite and offsite hazardous waste management and include the following: description of the methods to be used to ensure accurate piece counts or weights of shipments, waste minimization methods, facilities to be used for treatment, storage, and disposal (TSD), onsite areas designated where hazardous wastes are to be handled, identify whether transfer facilities are to be used, and if so, how the wastes will be tracked to ultimate disposal. Additionally, the Applicant's contractor(s) will document hazardous waste inspections on a weekly basis.

VM 8. In accordance with the Applicant contractor's HWMP and Emergency Management Plan (EMP), and in the event of a spill over the applicable reportable quantity, the Applicant's contractor(s) will comply with its spill prevention, control, and countermeasures plan and applicable federal, state, and local regulations pertaining to spill containment, appropriate clean-up, and notifications.

VM 9. The Applicant will require its construction contractor(s) to implement measures to protect workers' health and safety and the environment in the event that undocumented hazardous materials are encountered during construction. The Applicant will document all activities associated with hazardous material spill sites and hazardous waste sites and will notify the appropriate state and local agencies according to applicable regulations. The goal of the measures is to ensure the proper handling and disposal of contaminated materials including contaminated soil, groundwater, and stormwater, if such materials are encountered. The Applicant will use disposal methods that comply with applicable solid and hazardous water regulations.

VM 10. The Applicant's contractor(s) will responsibly handle and store gasoline, diesel fuel, oil, lubricants, and other petroleum products to reduce the risk of spills

contaminating soils or surface waters. If a petroleum spill occurs in the project area as a result of rail construction, operation, or maintenance and exceeds specific quantities or enters a water body, the Applicant's contractor(s) will be responsible for promptly cleaning up the spill and notifying responsible agencies in accordance with federal and state regulations.

HAZARDOUS MATERIALS TRANSPORT AND EMERGENCY RESPONSE

VM 11. The Applicant will prepare a hazardous materials emergency response plan to address potential derailments or spills. This plan will address the requirements of the Pipeline and Hazardous Materials Safety Administration (PHMSA) and FRA requirements for comprehensive oil spill response plans. The Applicant will distribute the plan to federal, state, and local emergency response agencies. This plan shall include a roster of agencies and people to be contacted for specific types of emergencies during rail construction, operation and maintenance activities, procedures to be followed by particular rail employees, emergency routes for vehicles, and the location of emergency equipment.

VM 12. The Applicant will work with the local agencies to facilitate the development of cooperative agreements with other emergency service providers to share services areas and emergency call response.

VM 13. In the event of a reportable hazardous materials release, the Applicant will notify appropriate federal, and state environmental agencies as required under federal and state law.

VM 14. The Applicant will comply with applicable FRA, PHMSA, and Transportation Security Administration regulations for the safe and secure transportation of hazardous materials.

TOPOGRAPHY, GEOLOGY, AND SOILS

VM 15. The Applicant's contractors(s) will limit ground disturbance to only the areas necessary for project-related construction activities.

VM 16. During project-related earth-moving activities, the Applicant's contractors(s) will remove topsoil and excess earthen material for safe and legal disposal to an offsite location.

VM 17. The Applicant's contractor(s) will stockpile excavated soil in areas away from environmentally or culturally sensitive areas and will use appropriate erosion control measures to prevent or contain erosion.

VM 18. The Applicant's contractor(s) will submit a Notice of Intent (NOI) to request permit coverage under Arizona Pollutant Discharge Elimination System

(AZPDES) Construction Activity General Permit (CGP) AZG2020-001 CGP for construction stormwater management.

VM 19. The Applicant's contractors(s) will submit an application for coverage under the National Pollutant Discharge Elimination System stormwater construction permits pursuant to Section 402 of the Clean Water Act for construction stormwater management.

VM 20. The Applicant's contractor(s) will develop a stormwater pollution prevention plan (SWPPP), which will include construction best management practices (BMPs) to control erosion and reduce the amount of sediment and pollutants entering surface waters, groundwater, and waters of the U.S. The Applicant will require its construction contractor(s) to follow all water quality control conditions identified in all permits, including the Section 404 permit from the U.S. Army Corps of Engineers (USACE) and the Section 401 Water Quality Certification from the Arizona Department of Environmental Quality.

VM 21. The Applicant's contractors(s) will perform finish grading and surface disturbed areas with appropriate BMPs, where practical and in consultation with the City of Mesa and Town of Queen Creek, when construction is completed.

AIR QUALITY

VM 22. In accordance with Maricopa County dust control permitting requirements, the Applicant's contractor(s) will implement appropriate dust control measures to reduce fugitive-dust emissions created during project-related construction activities. The Applicant will require its construction contractor(s) to regularly operate water trucks on haul roads to reduce dust generation.

VM 23. The Applicant will work with its contractor(s) to make sure that construction equipment is properly maintained, and that mufflers and other required pollution-control devices are in working condition in order to limit construction-related air pollutant emissions.

WATER RESOURCES/WETLANDS

VM 24. The Applicant will obtain a permit from USACE under Section 404 of the Clean Water Act before initiating project-related construction activities in wetlands and other jurisdictional waters of the United States. The Applicant will comply with all conditions of the Section 404 permit.

VM 25. The Applicant will obtain a Section 401 Water Quality Certification from the Arizona Department of Environmental Quality. The Applicant will incorporate the conditions of the Section 401 Water Quality Certification into its construction contract specifications and will monitor the project for compliance.

VM 26. The Applicant will minimize impacts to wetlands to the extent practicable in the final design. After all practicable steps have been taken to minimize impacts to wetlands, the Applicant agrees to prepare a mitigation plan for any remaining wetland impacts in consultation with USACE, where applicable.

STREAMS AND PERENNIAL WASHES

VM 27. The Applicant's contractor(s) will construct stream crossings during low-flow periods, when practical.

VM 28. When practical and in consultation with the FCDMC and USACE where applicable, the Applicant's contractor (s) will minimize impacts to streams where impacts are unavoidable. After all practicable steps have been taken to minimize impacts to streams, the Applicant agrees to prepare a mitigation plan for any remaining stream impacts in consultation with USACE, where applicable.

VM 29. For streams and rivers within a floodplain regulated by the FCDMC, the Applicant will design the stream crossing with the goal of not impeding floodwaters and not raising water surface elevations to levels that would change the regulated floodplain boundary. If flood elevations change, the Applicant will coordinate with FEMA and/or local floodplain managers to obtain a Letter of Map Revision where construction of bridges, culverts or embankments results in an unavoidable increase greater than 1 foot to the 100-year water surface elevations.

VM 30. The Applicant will obtain a permit from FCDMC before initiating project-related construction activities in a floodplain regulated by FEMA. The Applicant will comply with all conditions of the floodplain permit.

BIOLOGICAL RESOURCES

VM 31. The Applicant will comply with any conditions and mitigation commitments contained in the EA or similar document, provided by the Arizona Game and Fish Department, and/or the USFWS, for sensitive species that could potentially be impacted by the project.

VM 32. The Applicant will require its contractor(s) to comply with the requirements of the Migratory Bird Treaty Act as applicable. The following measures will be conducted by the Applicant and/or its contractor(s):

a. Where practical, any ground-disturbing, ground-clearing activities or vegetation treatments will be performed before migratory birds begin nesting or after all young have fledged.
b. If activities must be scheduled to start during the migratory bird breeding season, the Applicant will not take steps to prevent migratory birds from establishing nests in the potential impact area. The Applicant or its agents will

not haze or exclude nest access for migratory birds and other sensitive avian species.

c. If activities must be scheduled during the migratory bird breeding season, a qualified biologist will perform a site-specific survey for nesting birds starting no more than 7 days prior to ground-disturbing activities or vegetation treatments. Birds with eggs or young will not be hazed, and nests with eggs or young will not be moved until the young are no longer dependent on the nest.
d. If nesting birds are found during the survey, the Applicant will establish appropriate seasonal or spatial buffers around nests. Vegetation treatments or ground-disturbing activities withing the buffer areas will be postponed, where feasible, until the birds have left the nest. A qualified biologist will confirm that all young have fledged.

THE BURROWING OWL

VM 33. Within 30 days prior to construction, qualified biologists will survey for the federal- and state-protected Burrowing Owl (***Athene cunicularia***) following guidelines provided by the Arizona Game and Fish Department. Survey results will be provided to the Arizona Game and Fish Department.

VM 34. If Burrowing Owls are observed at burrows in the project area, a 100-ft buffer of no activity will be established around the burrow for the duration of the project.

VM 35. If an active Burrowing Owl burrow is in an area that requires impact, a local, qualified rehabber will be contacted to remove the owls from the project area with the appropriate state and federal permits. The burrows will be collapsed by the rehabber to prevent further nesting activities.

VEGETATION

VM 36. The Applicant will comply with any conditions and mitigation commitments contained in the EA or similar document, provided by the Arizona Game and Fish Department, and/or the USFWS, for sensitive plant species that could potentially be impacted by the project.

CULTURAL RESOURCES

VM 37. The Applicant will apply all measures identified in the Historic Properties Treatment Plan (HPTP) regarding development training materials to educate construction supervisors about the importance of protecting cultural resources and the procedures for handling undocumented discoveries.

VM 38. The Applicant and the Applicant’s contractor(s) will comply with the requirements of the Memorandum of Agreement (MOA) and the HPTP developed by OEA, the Advisory Council on Historic Preservation (ACHP), Arizona State Historic

Preservation Office, Native American tribal representatives, and other federal and state agencies in consultation with other consulting parties.

UTILITIES

VM 39. The Applicant will secure agreements with utility owners to establish responsibility for protecting or relocating existing utilities, if impacted by construction.

VM 40. The Applicant will coordinate with Arizona State Land Department (ASLD) to develop irrigation infrastructure protection or relocation plans.

COMMUNITY OUTREACH

VM 41. The Applicant will appoint a liaison to consult with communities, businesses, agencies, Tribal Governments, educational institutions, and non-profit organizations to provide general project information, progress on construction, information on rail operations and safety as needed and will seek to develop cooperative solutions to local concerns regarding construction activities.

VM 42. In accordance with temporary traffic control permitting requirements, the Applicant's contractor(s) will install temporary traffic control including pavement markings, signing, and detours throughout the project areas and applicable work zones.

NOISE AND VIBRATION

VM 43. The Applicant will comply with FRA regulations (49 Code of Federal Regulations Part 210) establishing decibel limits for train operation.

VM 44. The Applicant will work with its contractor(s) to make sure that project-related construction and maintenance vehicles are maintained in good working order with properly functioning mufflers to control noise.

BUILDING AMERICA®

May 17, 2023

Mr. Adam Assenza
Environmental Protection Specialist
Office of Environmental Analysis
Surface Transportation Board
395 E Street, S.W.
Washington, D.C. 20423

Re: STB Docket No. FD 36501, Union Pacific Railroad –Two Un-surveyed Portions of APE

Dear Mr. Assenza:

As it relates to the PIRATE Industrial Lead project, with regards to the two un-surveyed areas depicted in the enclosed documents (titled Unsurveyed Not Acquired East v5.jpg & Unsurveyed Not Acquired West v5.jpg), “buffer areas”, shown as highlighted in yellow and are not currently owned by Union Pacific Railroad (UPRR), UPRR will not:

- Acquire or attempt to acquire the buffer areas
- Acquire temporary construction easements on the buffer areas
- Perform any work in the buffer areas

If there is any additional information or clarification needed with regards to the buffer areas, please don’t hesitate to contact me.

Sincerely,

Kevin Rice

Senior Manager M/W Environmental

Union Pacific Railroad

UNION PACIFIC RAILROAD
1400 Douglas Street, 9th Floor
Omaha, Nebraska 68179

Kevin Rice
Senior Manager M/W Environmental
Engineering

P 402-544-2213
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Appendix B
Traffic Report

TRAFFIC REPORT

PECOS INDUSTRIAL RAIL ACCESS AND TRAIN EXTENSION (PIRATE) PROJECT

Docket No. FD 36501 - Union Pacific Railroad Company
Construction and Operation Exemption - In Maricopa County, Ariz.

May 2023

Summary

The Union Pacific Railroad Company (UP) is seeking authority from the Surface Transportation Board to construct and operate approximately 6.0 miles of new rail line in Maricopa County, Arizona (Docket No. FD 36501) to transport raw materials and commercial freight. The proposed rail line, referred to as Pecos Industrial Rail Access and Train Extension (PIRATE), would connect UP's Phoenix Subdivision main line (Phoenix Subdivision) to industrial properties south of the Phoenix-Mesa Gateway Airport via a single-track rail line. UP also proposes to construct and operate approximately 2.5 miles of planned support tracks along the Phoenix Subdivision between Power Road and Ellsworth Road. The Surface Transportation Board's Office of Environmental Analysis identified two reasonable alternatives that meet the purpose and need for PIRATE: Alternative 1 and Alternative 2.

This traffic analysis and report was developed as supplemental material to the Draft Environmental Assessment. The purpose of the traffic analysis is to determine if PIRATE and the planned Phoenix Subdivision support tracks would negatively affect traffic patterns and cause detrimental delays at neighboring intersections.

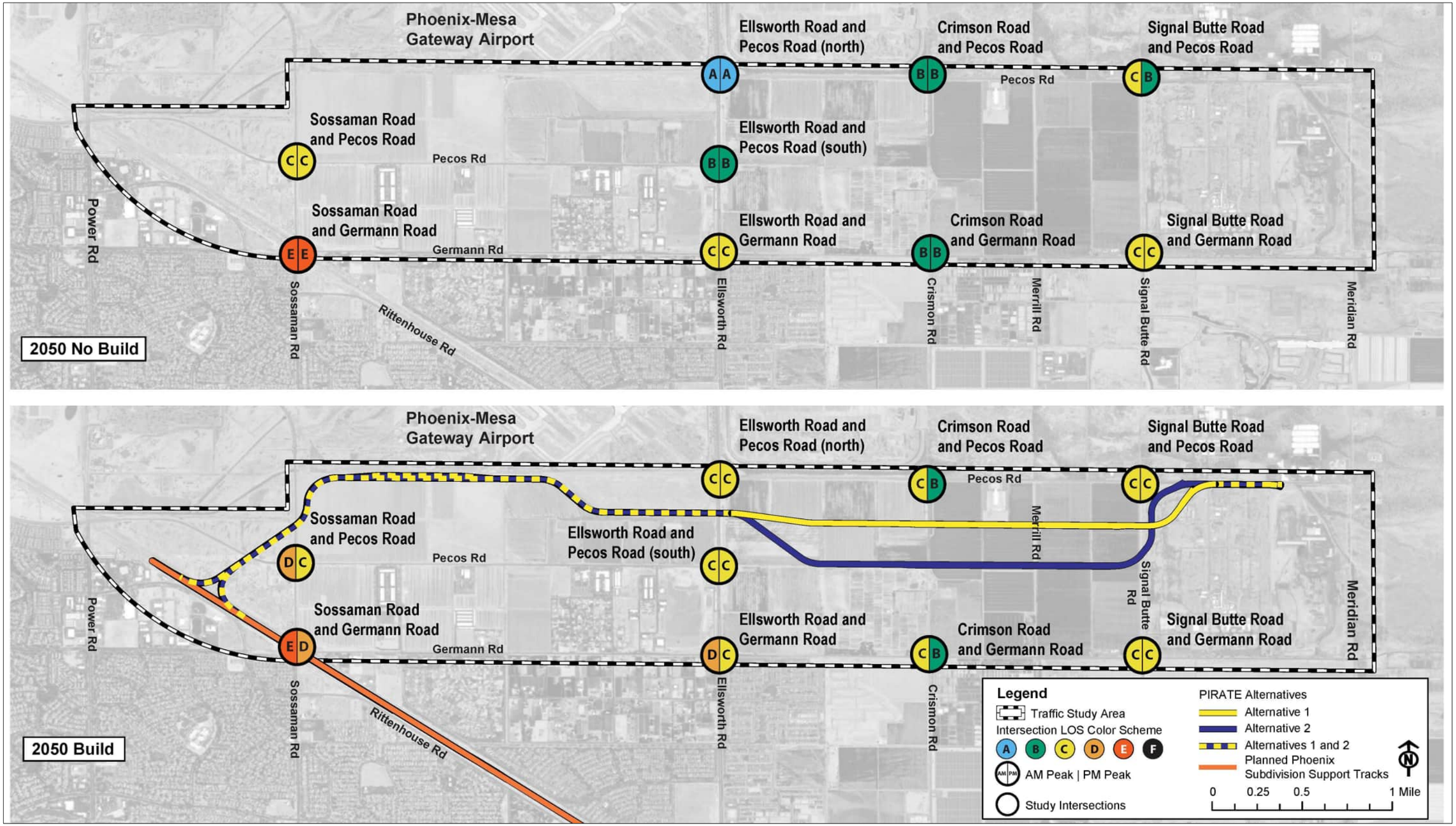
PIRATE and the planned Phoenix Subdivision support tracks would intersect with several arterial streets at grade and could potentially affect traffic operations at adjacent intersections. The arterial streets potentially affected by the project connect the regional freeway system to the residential and commercial establishments in the city of Mesa and the town of Queen Creek.

The region in the immediate vicinity of the project is experiencing tremendous growth; there are several active commercial and residential developments in the town of Queen Creek and several planned commercial developments in the Pecos Advanced Manufacturing Zone. As a result, travel demand in this area is expected to increase significantly by the planning horizon year (2050). The travel demand for the project influence area was estimated using the regional travel demand model. The travel demand forecasts considered socioeconomic and land use changes resulting from the intense growth in the area.

To evaluate the operational impact of the project on adjacent intersections, traffic analyses were conducted for three scenarios: Existing (2022), No Build (2050), and Build (2050). The Existing scenario analysis was completed for both A.M. and P.M. peak periods. Operational analysis was conducted using Synchro, SimTraffic, and VISSIM software. To evaluate a worst-case scenario, it was assumed that peak hour traffic operations are affected by a train on either the proposed rail line or on the existing Phoenix Subdivision. Further, this train was assumed to interrupt traffic operations for 10 minutes in the peak hour. Intersection delays and queue lengths were used as measures of effectiveness to compare operations between the Build and No Build scenarios.

The results of the analysis indicate the intersections near the proposed rail line would experience increased delays during the A.M. and P.M. peak periods. Intersection queue lengths are anticipated to increase overall, yet no drastic changes to levels of service, as illustrated in Figure S-1. The recommended mitigation measures for this project to minimize impacts to traffic on the adjacent street network are to limit train operations during the A.M. and P.M. peak hours for traffic and to minimize train operations from blocking multiple major roadways at the same time to provide alternate routes for traffic and emergency responders in the project vicinity.

Figure S-1. 2050 Level of Service Summary



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Appendix C. Synchro Analysis Outputs
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Acronyms and Abbreviations

Board	Surface Transportation Board
EB	eastbound
Gilbert	Town of Gilbert
ICU	intersection capacity utilization
Jacobs	Jacobs Engineering Group Inc.
LOS	level of service
MAG	Maricopa Association of Governments
Mesa	City of Mesa
NASEM	National Academies of Sciences, Engineering, and Medicine
NB	northbound
OEA	Office of Environmental Analysis
Phoenix Subdivision	Phoenix Subdivision main line
PIRATE	Pecos Industrial Rail Access and Train Extension
Queen Creek	Town of Queen Creek
SB	southbound
SR	State Route
TAZ	Traffic Analysis Zone
TDM	travel demand model
UP	Union Pacific Railroad Company
vpd	vehicles per day
WB	westbound

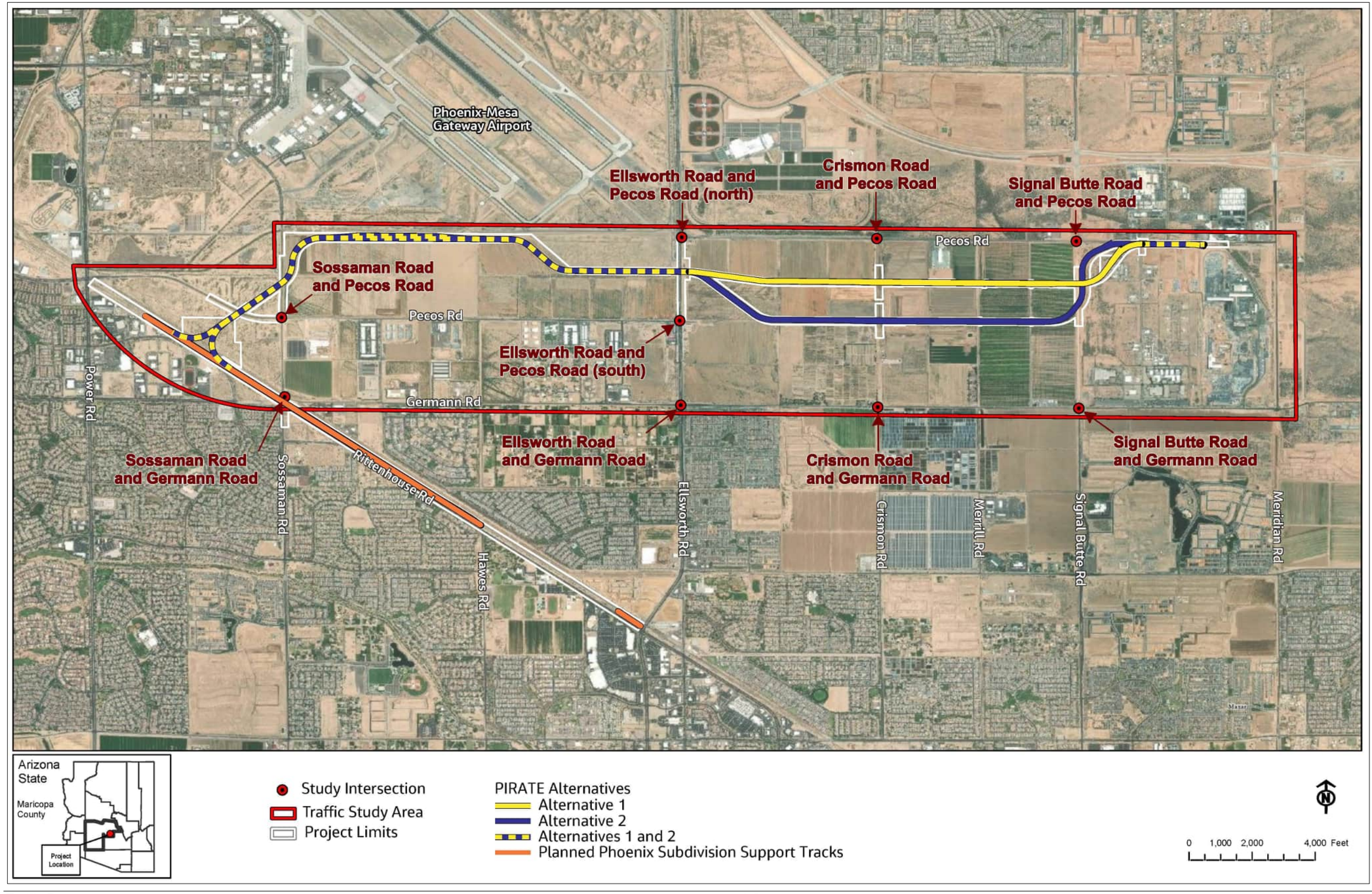
Chapter 1
Introduction

The Union Pacific Railroad Company (UP) is seeking authority from the Surface Transportation Board (Board) to construct and operate approximately 6.0 miles of new rail line in Maricopa County, Arizona (Docket No. FD 36501) for purposes of transporting raw materials and commercial freight. The proposed rail line, referred to as Pecos Industrial Rail Access and Train Extension (PIRATE), would connect UP's Phoenix Subdivision main line (Phoenix Subdivision) to industrial properties southeast of the Phoenix-Mesa Gateway Airport via a single-track rail line accompanied. UP also proposes to construct and operate approximately 2.5 miles of planned support tracks along the Phoenix Subdivision between Power Road and Ellsworth Road.

The purpose of PIRATE is to meet the transportation and logistics needs of existing and future manufacturing businesses within the Pecos Advanced Manufacturing Zone and adjacent areas. The Board's Office of Environmental Analysis (OEA) identified two reasonable alternatives that meet the purpose and need for PIRATE. The two Action Alternatives (Alternative 1 and Alternative 2), the No-Action Alternative, and the planned Phoenix Subdivision support tracks are described in detail in Chapter 2 of the Draft Environmental Assessment.

The project is located in southeast Maricopa County and lies within the city of Mesa and the town of Queen Creek. As shown in Chapter 2 of the Draft Environmental Assessment, PIRATE extends from Power Road and Pecos Road to the west to Pecos Road and Meridian Road to the east. The Phoenix Subdivision portion of the project limits extends from Power Road to Ellsworth Loop. The study area for this traffic analysis is bounded by Power Road and Rittenhouse Road to the west, Meridian Road to the east, Pecos Road to the north, and Germann Road to the south. For this traffic analysis, on behalf of OEA, Jacobs Engineering Group Inc. (Jacobs), OEA's third-party contractor, evaluated major intersections within the study limits for three scenarios: Existing (2022), No Build (2050), and Build (2050). Figure 1-1 depicts the study area for the traffic operational analysis.

Figure 1-1. Study Area Limits for Traffic Operational Analysis



Chapter 2
Traffic Forecasting

On behalf of OEA, Jacobs conducted a study area intersection operational analysis for the Existing (2022), No Build (2050), and Build (2050) conditions. No Build conditions include the network improvements programmed and anticipated to be completed by the year 2050. In addition to No Build conditions roadway improvements, the Build conditions assume construction and operation of PIRATE and the planned Phoenix Subdivision support tracks.

The project vicinity is evolving rapidly; several active industrial, commercial, and residential developments are under construction. In addition to the active developments near PIRATE and the Phoenix Subdivision, anticipated developments in the city of Mesa, the town of Queen Creek, and farther south in San Tan Valley are expected to influence the travel patterns and roadway demand affected by the railroad operations. This section discusses the approach to traffic forecasts for the affected roadways and summarizes existing and future conditions.

2.1 Technical Process and Assumptions

Travel demand models (TDM) are tools used to assess how future transportation systems will perform based on the land use and the forecasted growth in a region. A TDM allows for modeling, evaluating, and assessing future improvements on study area roadways and surrounding facilities. The impact of major activity centers and roadway characteristics, such as the number of lanes, travel speeds, and functional classification, can also be assessed. Future transportation deficiencies can be identified based on model inputs, and planning level recommendations can be formulated and evaluated based on forecasted traffic. The regional model output can also be used for the more detailed operational analysis conducted at the corridor design level and anytime during or after construction.

TDMs are usually developed at a regional scale and have varying demand estimation accuracy. Typically, these models provide good estimates for high functional classification roadways, such as freeways and principal arterials. The model accuracy drops for low-volume roadways, such as collectors and local roads. To account for model estimate discrepancy, model outputs for study areas are compared to observed traffic volumes. The discrepancies in the existing conditions are used to refine model forecasts for horizon years. For this study, the 2050 model forecasts were post-processed using the methodologies outlined in National Cooperative Highway Research Program's *Analytical Travel Forecasting Approaches for Project-Level Planning and Design* (Horowitz et al. 2014).

2.2 Existing Conditions

This section summarizes the current land use and socioeconomic conditions and evaluates the existing transportation system condition. The existing traffic counts were taken during the A.M. and P.M. peak periods at the following intersections:

- Ellsworth Road and Pecos Road (north)
- Ellsworth Road and Pecos Road (south)

- Sossaman Road and Pecos Road

The 24-hour vehicle volume and classification data were also taken at the following locations:

- Power Road, south of Pecos Road
- Sossaman Road, north of Pecos Road
- Ellsworth Road, north of Pecos Road
- Germann Road, east of Ellsworth Road
- Germann Road, east of Sossaman Road
- Pecos Road, east of Power Road
- Pecos Road, east of Signal Butte Road
- Pecos Road, west of Power Road

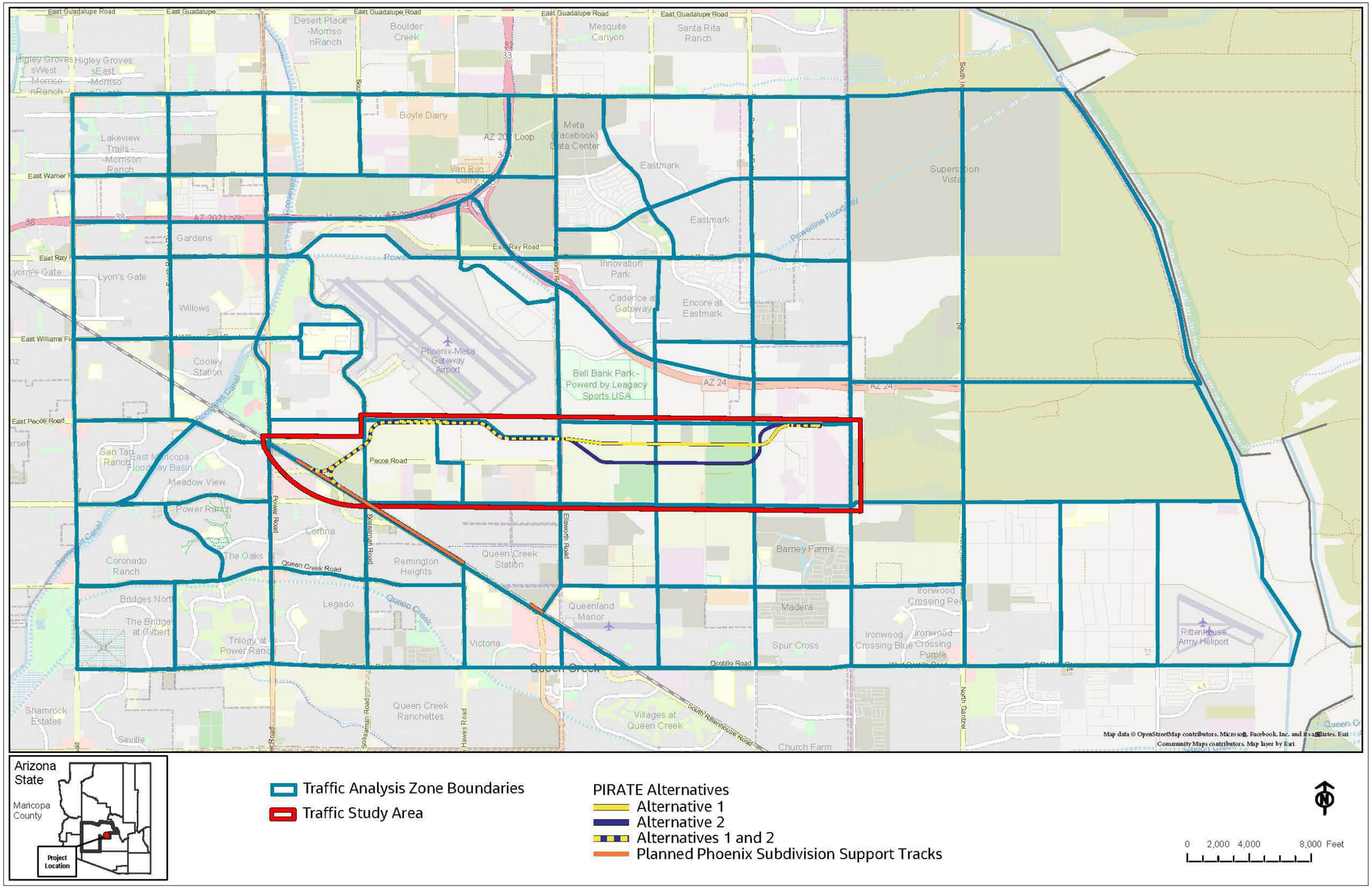
The traffic volumes and vehicle data are included in Appendix A of this report.

2.2.1 Socioeconomic Conditions

Socioeconomic data in the Maricopa Association of Governments (MAG) TDM model is comprised of population, housing units, and employment estimates and is compiled at the Traffic Analysis Zone (TAZ) level. TAZs are geographic zonal units used to tabulate land use and trip generation data. TAZ boundaries are defined based on similar land uses, physical barriers, and major streets in the transportation system. Figure 2-1 displays the MAG model TAZ boundaries that intersect the study area, as well as the additional TAZs that comprise the project influence area. The project influence area is the region from which the data is sourced and used in the MAG TDM model to calculate the travel demand in the study area. The 2050 socioeconomic estimates for the TAZ boundaries identified in Figure 2-1 are summarized below (MAG 2022):

- Total Population – 63,067
- Total Employment – 13,559
- Single-Family Households – 18,417
- Multi-Family Households – 434

Figure 2-1. Traffic Analysis Zone Boundaries in the Project Influence Area



2.2.2 Roadway Network

Within the study area, the existing roadway network is comprised of regional and local routes; there are seven major corridors:

- Power Road: A six-lane (three lanes each direction with a raised median and left-turn pockets), north-south arterial providing direct access to the State Route (SR) 202 loop north of the study area.
- Sossaman Road: A two-lane (single lane each direction with a two-way, left-turn lane), north-south arterial.
- Ellsworth Road: A four- to six-lane (two to three lanes each direction with a raised median or two-way, left-turn lane), north-south arterial providing direct access to SR 24, north of the project limits.
- Pecos Road (north): A two-lane, east-west arterial providing access from Ellsworth Road to Meridian Road.
- Pecos Road (south): A two-lane, east-west arterial providing access from Ellsworth Road to Power Road, west of the project limits.
- Germann Road: A two-lane, east-west arterial providing access from Power Road to Ironwood Road.
- Rittenhouse Road: A four- to six-lane (two to three lanes each direction with a raised median), diagonal arterial extending northwest to southeast between Power Road and Ellsworth Road.

The Phoenix Subdivision travels in a similar direction to, and near, Rittenhouse Road. At-grade railroad crossings are located at the intersection of Power Road and Pecos Road, at Sossaman Road near Germann Road, and at Ellsworth Road near Rittenhouse Road.

2.2.3 Traffic Volumes

Existing year 2022 daily traffic count data (field counts conducted by United Civil Group; Appendix A) was obtained for major arterial roadways within the study area. Below are key observations obtained from the data:

- Ellsworth Road carries the highest amount of traffic through the study area, with an approximate average of 49,100 vehicles per day (vpd).
- Power Road carries approximately 29,100 vpd near Pecos Road.
- Pecos Road (south) carries nearly 13,400 vpd between Sossaman Road and Power Road.
- Pecos Road (north) carries nearly 4,900 vpd between Crismon Road and Signal Butte Road.
- Germann Road estimated daily volumes are nearly 11,500 vpd.
- Sossaman Road daily volume averages around 6,000 vpd.
- Rittenhouse Road daily volume average is 21,000 vpd.

Table 2-1 lists the 2022 traffic counts used to verify existing TDM estimates and to refine model forecasts for the No Build and Build conditions (MAG 2022).

Table 2-1. Traffic Counts in the Project Influence Area

Segment	Traffic Count (24-hour period)
Power Road south of Riggs Road	12,325
Power Road north of Hunt Highway	3,055
Power Road north of Williams Field Road	26,530
Sossaman Road north of Pecos Road	6,188
Sossaman Road north of Hunt Highway	1,422
Sossaman Road south of Riggs Road	3,228
Riggs Road east of Hawes Road	9,355
Germann Road east of Sossamon Road	7,436
Germann Road east of Hawes Road	4,418
Germann Road east of Ellsworth Road	5,546
Rittenhouse Road northwest of Combs Road	22,149
Gantzel Road south of Combs Road	5,3740
Combs Road west of Kenworthy Road	23,552
Ocotillo Road west of Meridian Road	23,084
Queen Creek Road west of Meridian Road	11,510
Ocotillo Road east of Ironwood Road	12,826
Ocotillo Road west of Ironwood Road	20,358
Germann Road east of Ironwood Road	9,557
Ironwood Road north of Pima Road	42,987
Schnepf Road north of Stage Coach Road	8,518

2.3 Future Conditions

The development information provided by the City of Mesa (Mesa) and Town of Queen Creek (Queen Creek) were used to refine the socioeconomic forecasts in the horizon year (2050) models. Appendix B illustrates the major developments that are projected to come online in the future years. Model-based socioeconomic forecasts were adjusted to account for new developments identified by the project stakeholders. Generally, the industrial and commercial developments identified by Mesa are adequately represented in the conformity models. Residential activity in the town of Queen Creek along with the newly approved LG Plant are not represented in the TDM. The socioeconomic data were revised to account for these discrepancies and study area forecasts were developed. The final socioeconomic analysis data is listed below:

- Total Population – 145,860
- Total Employment – 49,956

- Single Family Households – 35,842
- Multi Family Households – 7,240

In addition to the growth in the study area, the models include background population growth in the town of Queen Creek and San Tan Valley.

2.3.1 2050 No Build Roadway Network Conditions

No Build scenarios are often used to determine how future transportation systems operate with programmed and funded improvements without the facility/project currently under study. For this study, the No Build scenario does not include PIRATE or the planned Phoenix Subdivision support tracks. However, the existing Phoenix Subdivision main line track is included in the No Build scenario as an existing condition. The No Build roadway network consists of facilities identified in local and regional transportation plans for the year 2050. The 2050 No Build improvements consist of approved new roadway alignments and capacity improvements at the intersection of Ellsworth Road and Pecos Road (south).

The future No Build conditions are identical to the Existing conditions except for the intersection of Ellsworth Road and Pecos Road (south). Therefore, there are no changes to functional classification or number of lanes for the 2050 No Build Scenario.

2.3.2 2050 Build Roadway Network

The Build scenario is used to determine how future transportation systems operate with the planned improvements. The Build scenario incorporates all the elements from the No Build scenario, including the existing Phoenix Subdivision main line track and at-grade crossing with Sossaman Road, as well as Alternative 1 and Alternative 2. PIRATE would generally run parallel to Pecos Road and extends from the intersection of Power Road and Pecos Road to the intersection of Pecos Road and Meridian. PIRATE would have at-grade crossings with Pecos Road, Sossaman Road, Ellsworth Road, Signal Butte Road, and with the future alignment of Crismon Road.

Two alternative alignments are being evaluated for PIRATE. The alignments for the proposed rail line are located within 0.25 mile of one another between Ellsworth Road and Signal Butte Road. From a traffic operations standpoint, both alternatives would have similar impacts on the adjacent roadways and intersections. Hence, only one alternative has been analyzed for traffic impacts on the study network.

The Build scenario only adds the proposed rail line and does not include improvements to the adjacent intersections. The roadway configurations for the Build network would remain the same as the No Build network, except improvements to the roadways for the at-grade and existing rail crossings. The conditions and key observations for the Build scenario are therefore the same as in the No Build conditions.

2.4 2050 Travel Demand Forecasts

The revised model forecasts were post-processed for all the links that are affected by railroad operations. The post-processed 24-hour model forecasts for the year 2050 are included below:

- Ellsworth Road carries the highest amount of traffic through the study area, with an average of approximately 45,000 to 52,000 vpd.
- Power Road carries approximately 43,000 to 54,000 vpd near Pecos Road.
- Signal Butte Road carries approximately 45,000 vpd near SR 24.
- Pecos Road (south) carries between 25,000 and 30,000 vpd.
- Pecos Road (north) carries 20,000 vpd.
- Germann Road estimated daily volumes range between 16,500 and 30,000 vpd.
- Sossaman Road daily volume averages between 18,000 and 27,000 vpd.
- Rittenhouse Road carries 20,000 vpd.

Chapter 3
Operational Analysis

3.1 Roadway Geometry and Traffic Volumes

The roadway network for the operational analysis encompasses the major roadways affected by PIRATE and the planned Phoenix Subdivision support tracks within the study area, including signalized intersections adjacent to rail crossings.

3.1.1 Existing Conditions

The existing roadway network and the existing traffic volumes are as identified in Section 2.2. Traffic counts were collected in March and July 2022 (Appendix A); the A.M. and P.M. peak hour turning movement traffic counts were conducted at the following intersections:

- Sossaman Road and Pecos Road
- Sossaman Road and Germann Road
- Ellsworth Road and Pecos Road (north)
- Ellsworth Road and Pecos Road (south)
- Ellsworth Road and Germann Road

It should be noted that the intersection of Power Road and Pecos Road was not included in the operational analysis as neither PIRATE nor the planned Phoenix Subdivision support tracks would extend past this intersection and the project would not alter the existing intersection configuration. The Phoenix Subdivision currently diagonally crosses the intersection and is anticipated to remain in the future conditions as well.

Figures 3-1 and 3-2 show the existing roadway geometry and the A.M. and P.M. peak hour turning movement volumes at each of the study intersections. Near the Sossaman Road and Pecos Road intersection, traffic flows northwest in the A.M. peak period and southeast in the P.M. peak period. Along Ellsworth Road, traffic flows predominately north in the A.M. peak period and south in the P.M. peak period. Appendix A contains the existing turning movement data.

3.1.2 Future Conditions

The peak hour turning movement volumes were developed using the daily traffic volumes obtained from the TDM. The A.M. and P.M. peak hour traffic volumes were developed for the design year 2050 at the following intersections:

- Sossaman Road and Pecos Road
- Sossaman Road and Germann Road
- Ellsworth Road and Pecos Road (north)
- Ellsworth Road and Pecos Road (south)

- Ellsworth Road and Germann Road
- Pecos Road and Crismon Road
- Germann Road and Crismon Road
- Pecos Road and Signal Butte Road
- Germann Road and Signal Butte Road

Figures 3-3 through 3-9 depict the 2050 No Build and 2050 Build peak hour traffic volumes and the roadway configurations. The future traffic travel patterns are similar to the existing patterns, where traffic generally travels northwest in the A.M. peak period and southeast in the P.M. peak period. The study area will experience tremendous growth in the future year 2050 conditions by the addition of SR 24 and connecting Signal Butte Road and Williams Field Road to this freeway.

Figure 3-1. Existing Sossaman Road Roadway Network and Traffic Volumes

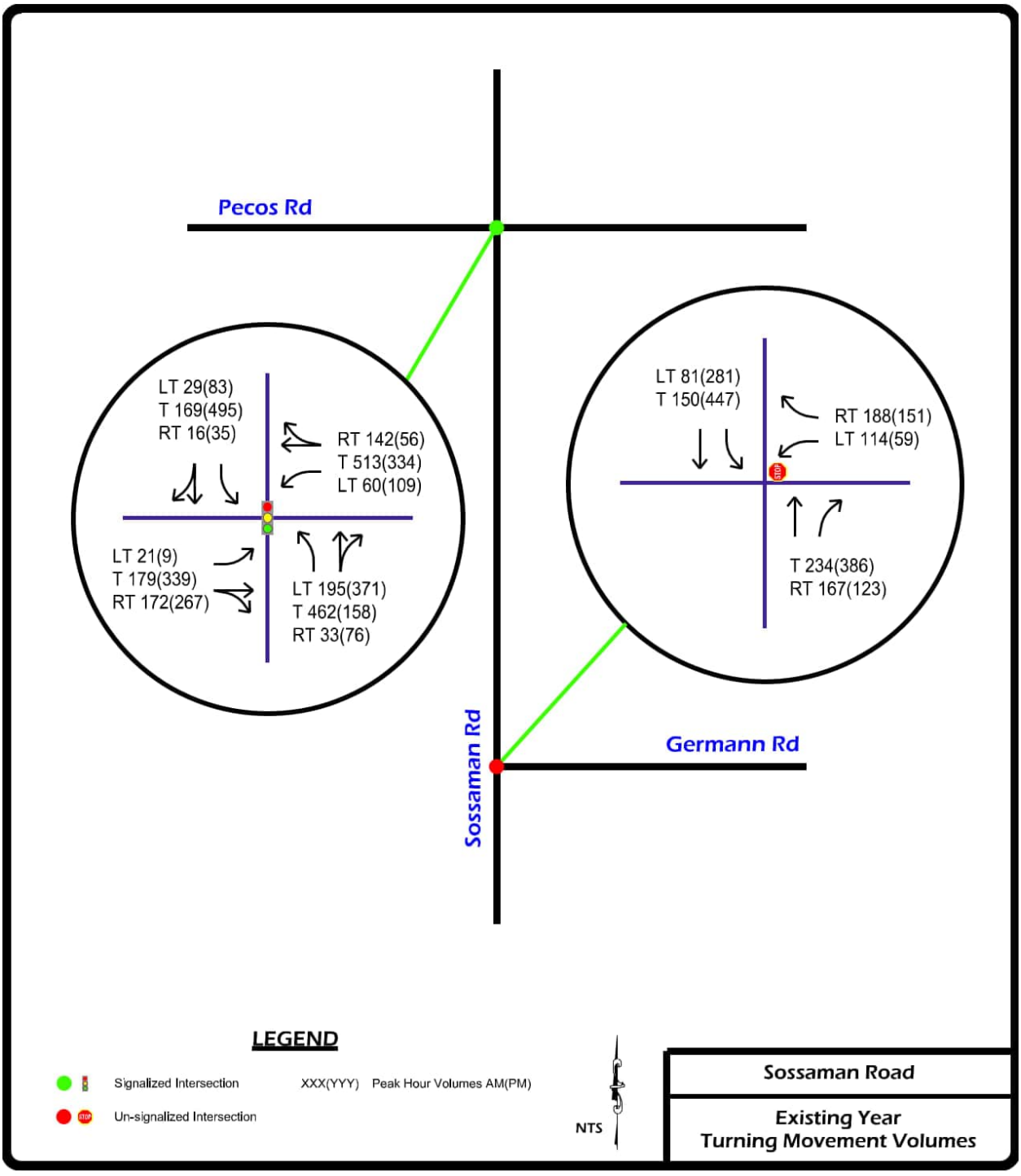


Figure 3-2. Existing Ellsworth Road Roadway Network and Traffic Volumes

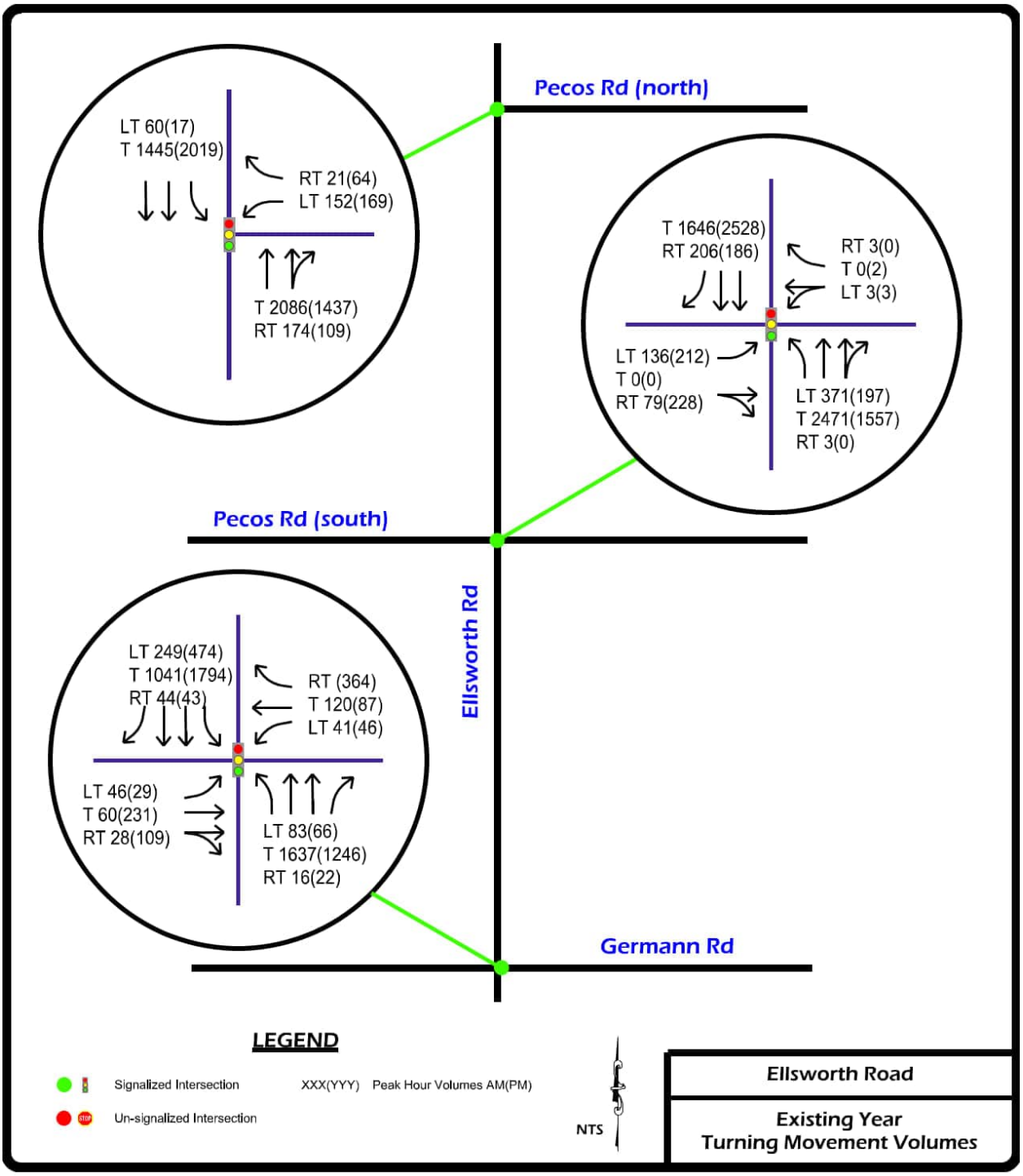


Figure 3-3. 2050 No Build Sossaman Road Roadway Network and Traffic Volumes

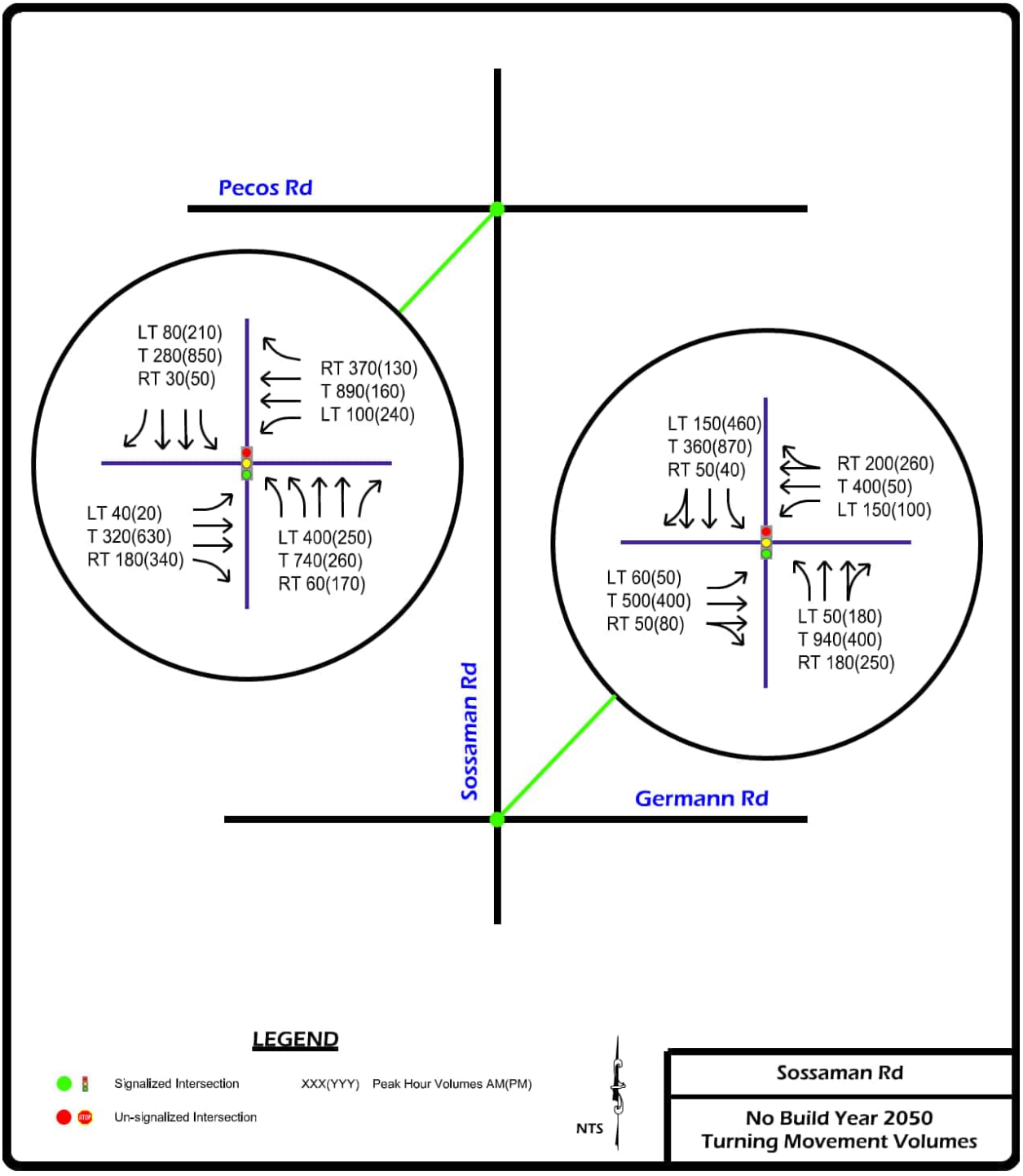


Figure 3-4. 2050 No Build Ellsworth Road Roadway Network and Traffic Volumes

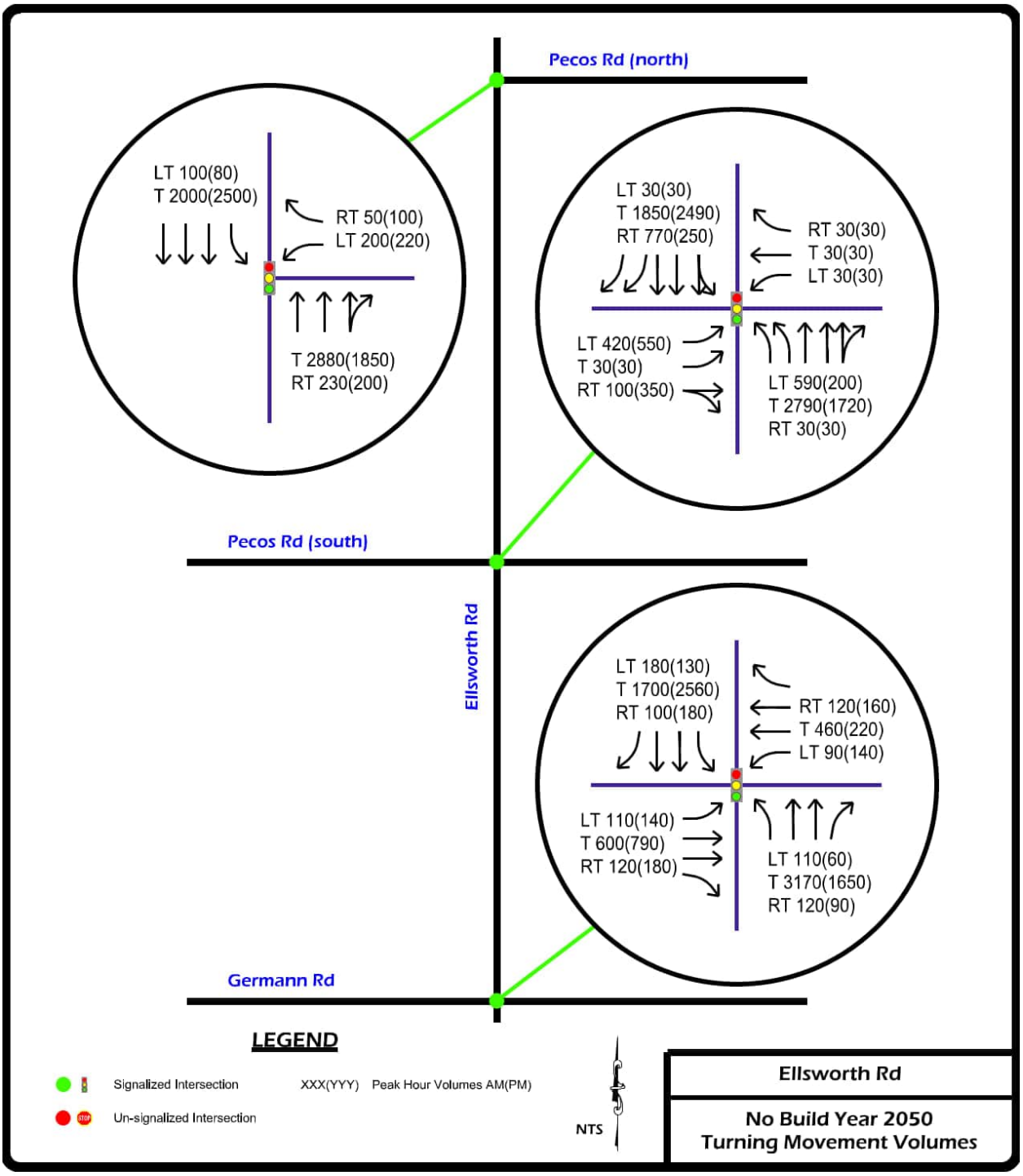


Figure 3-5. 2050 No Build Germann Road Roadway Network and Traffic Volumes

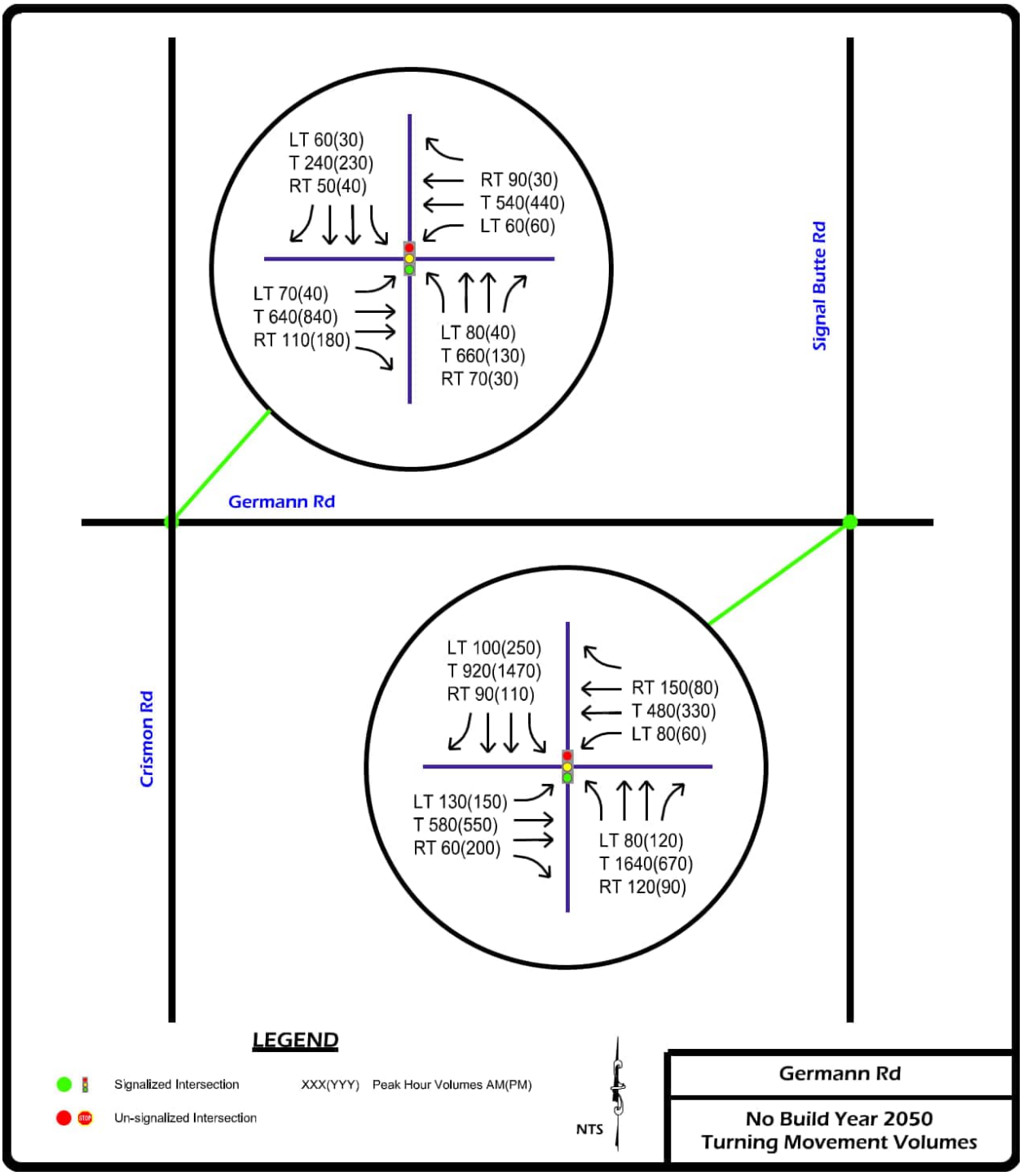


Figure 3-6. 2050 Build Sossaman Road Roadway Network and Traffic Volumes

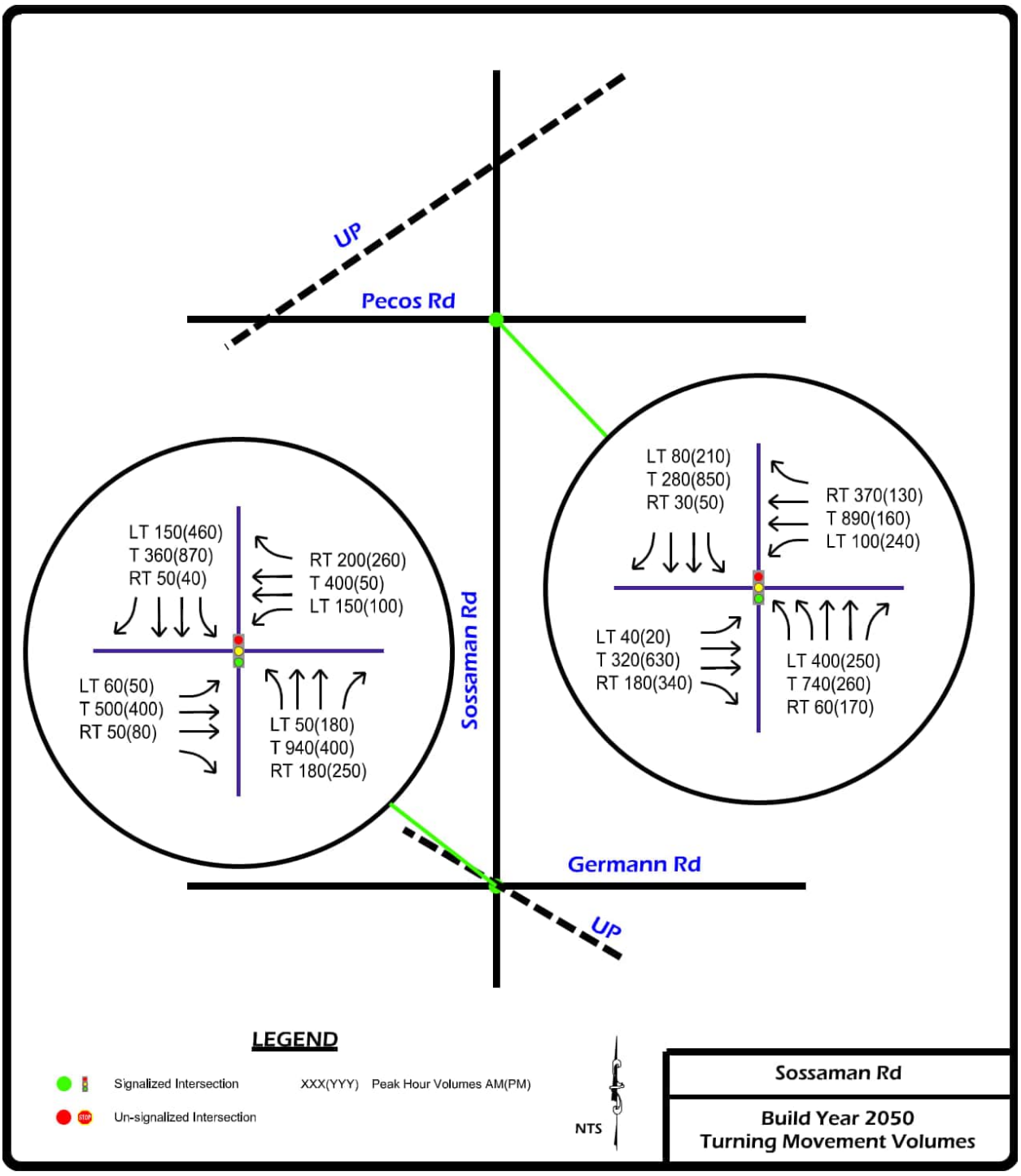


Figure 3-7. 2050 Build Ellsworth Road Roadway Network and Traffic Volumes

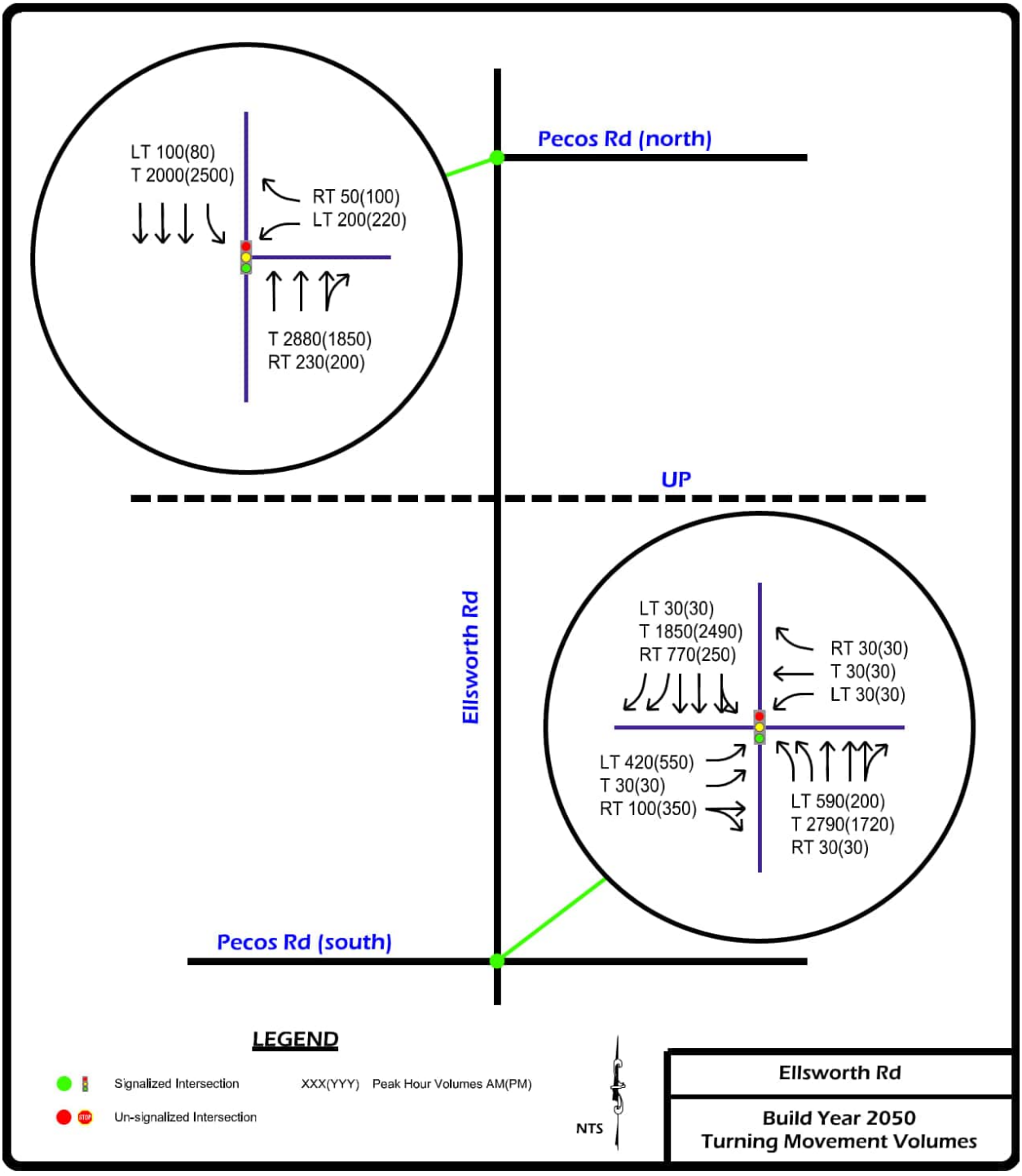


Figure 3-8. 2050 Build Pecos Road Roadway Network and Traffic Volumes

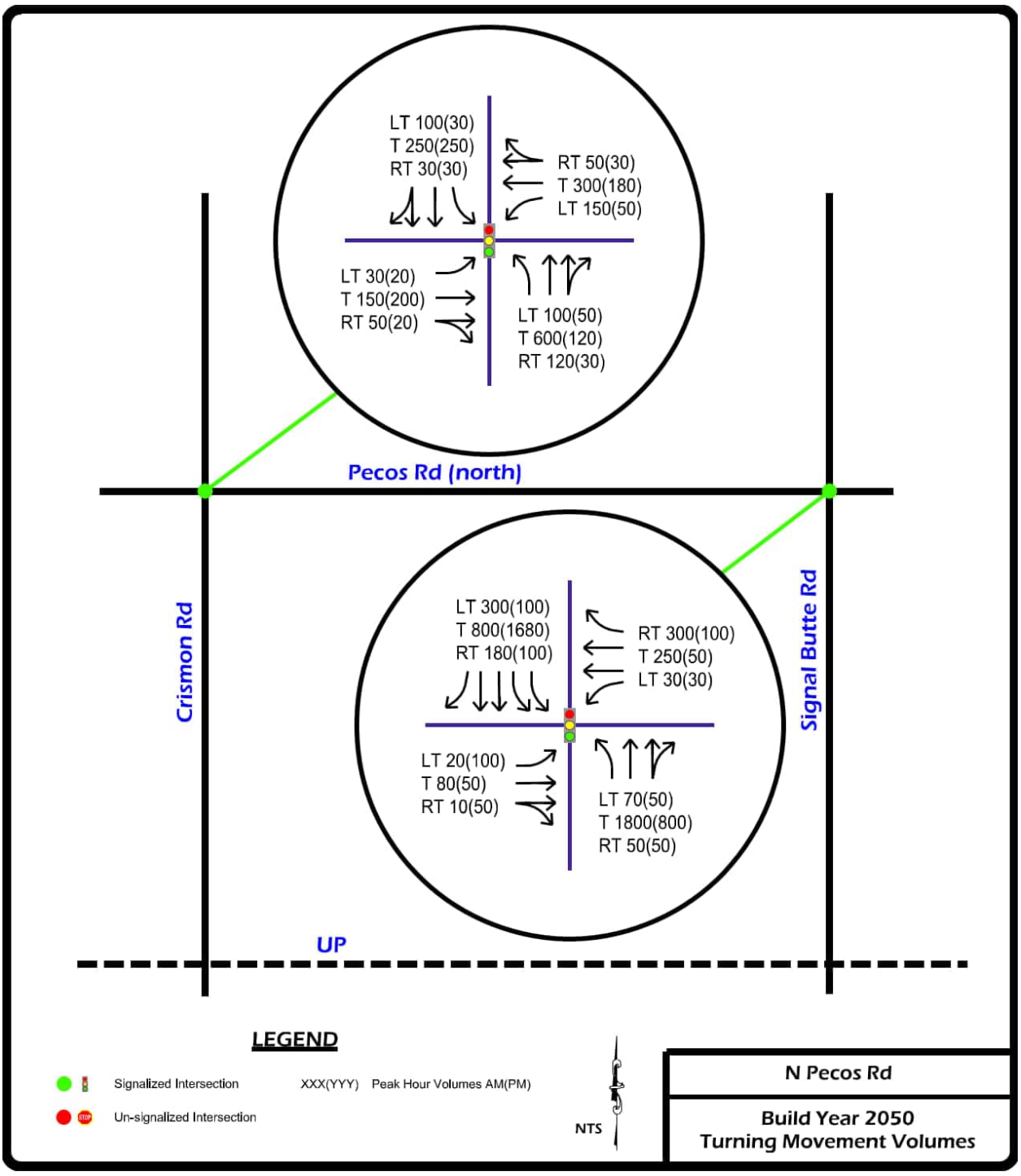
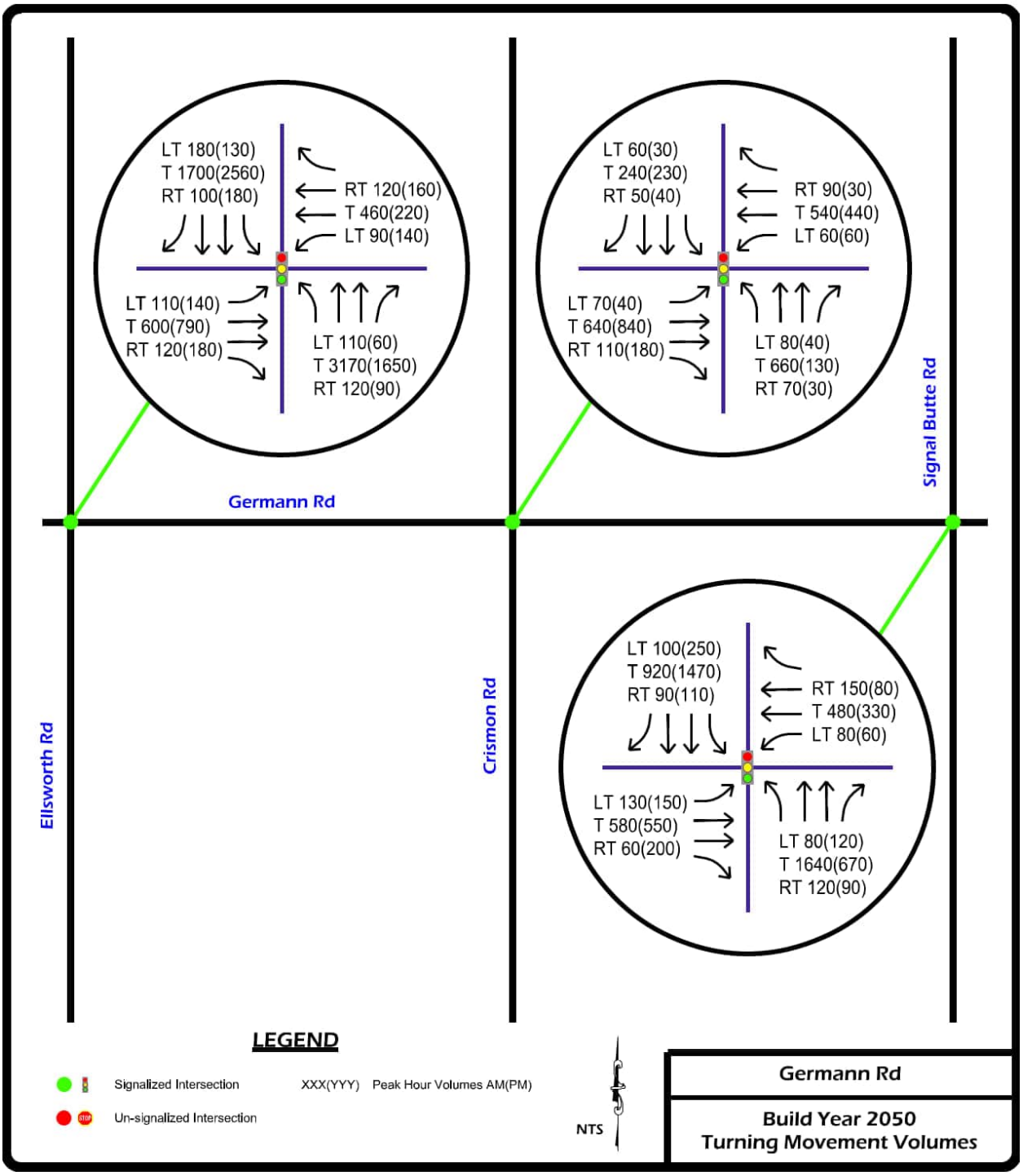


Figure 3-9. 2050 Build Germann Road Roadway Network and Traffic Volumes



3.2 Criteria for Traffic Performance

Intersection level of service (LOS) analysis for signalized and unsignalized intersections was conducted using Synchro 10 and SimTraffic (Trafficware Ltd. 2022) in accordance with procedures outlined in the *Highway Capacity Manual* (National Academies of Sciences, Engineering, and Medicine [NASEM) 2022). The No Build and Build scenarios were modeled using VISSIM software, Version 11 (PTV North America 2022) to accurately model the operational scenarios on the adjacent roadway network. Appendices C and D include the results of these analyses.

LOS is generally described in terms of speed, travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. Six levels of service are used to define operating conditions, designated by the letters A through F. LOS A represents the best operating conditions while LOS F represents heavily congested flow with traffic demand exceeding roadway capacity. Mesa has a goal of maintaining traffic operations at LOS D or better (Mesa 2021; Section 204.4.21) for urban intersections.

The traffic analysis used the following assumptions/input parameters:

- Signal timings are 110 seconds, with optimized splits.
- The proposed rail operations include two train crossings per day (one inbound and one outbound). To assume a worst-case scenario, one train crossing was modeled for each peak hour (A.M. and P.M. peak).
- Based on the operating train speed and train length, the following train crossing scenario was developed: one train crossing for each peak hour for a duration of 10 minutes, with one interruption.

Tables 3-1 and 3-2 summarize the LOS criteria at unsignalized intersections and signalized intersections, respectively. Figure 3-10 illustrates the five LOSs (A through F).

Table 3-1. Unsignalized Intersection LOS Criteria

Level of Service	Description	Average Control Delay (seconds/vehicle)
A	Little or no delay	0 to 10
B	Minor delays	greater than 10 to 15
C	Average delays	greater than 15 to 25
D	Moderate delays	greater than 25 to 35
E	Lengthy delays	greater than 35 to 50
F	Excessive delays/gridlock	greater than 50

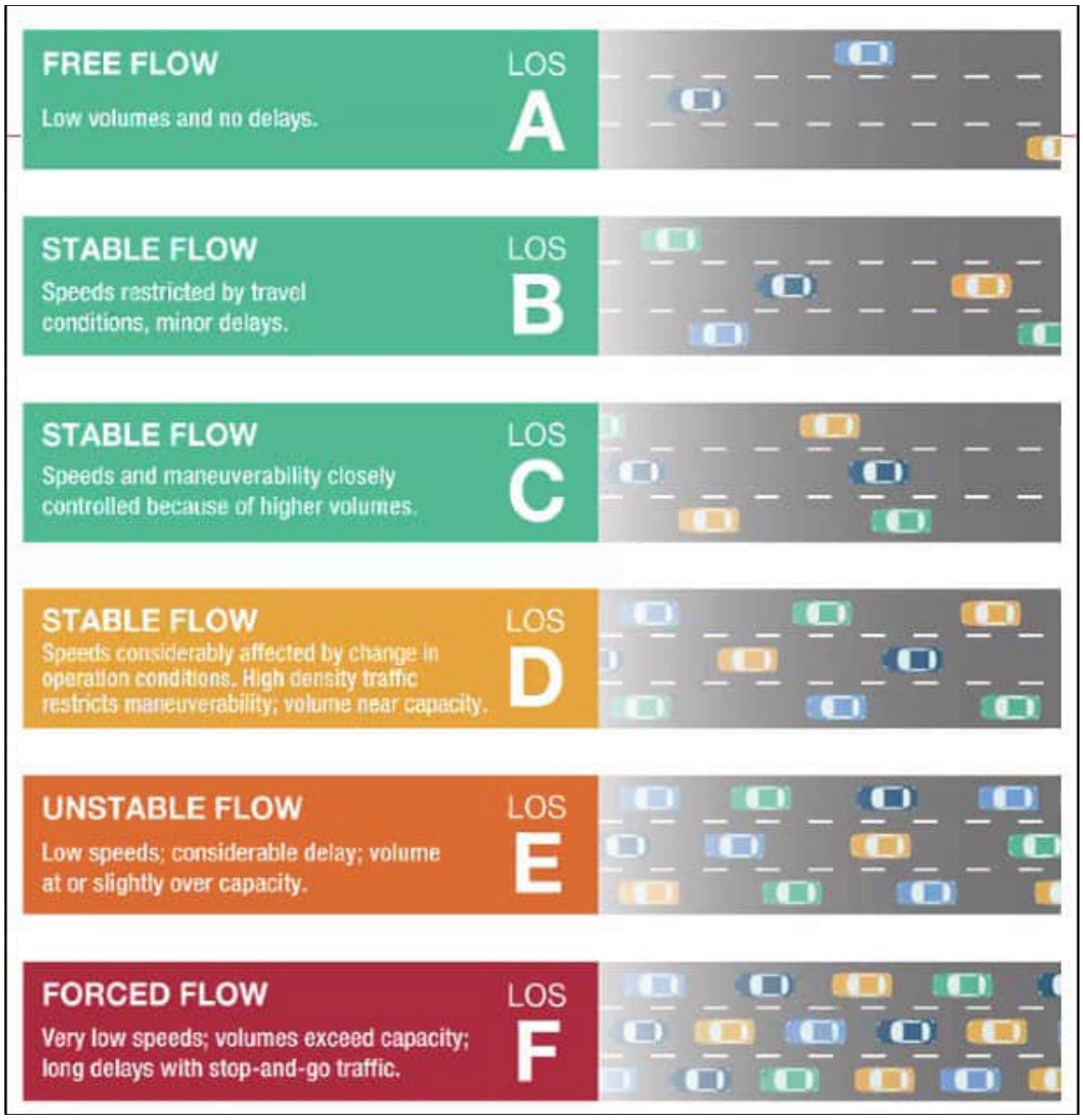
Source: NASEM 2022.

Table 3-2. Signalized Intersection LOS Criteria

Level of Service	Description	Average Control Delay (seconds/vehicle)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	less than or equal to 10
B	Operations with low delay occurring with good progression and/or short cycle lengths.	greater than 10 to 20
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	greater than 20 to 35
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop and individual cycle failures are noticeable.	greater than 35 to 55
E	Operations with high delay values, indicating poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	greater than 55 to 80
F	Operations with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	greater than 80

Source: NASEM 2022.

Figure 3-10. Levels of Service

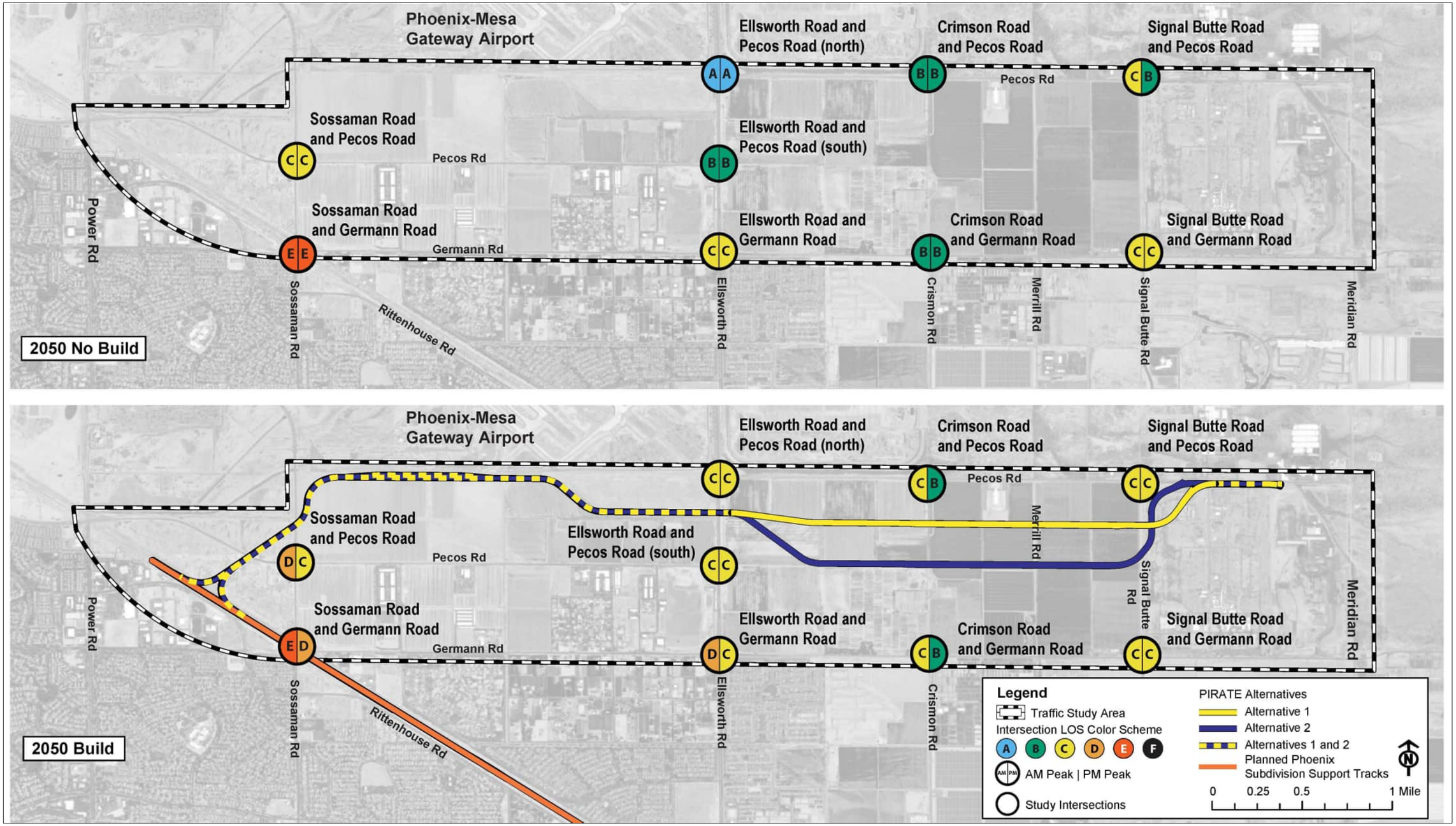


Source: Kuntzman 2020.

3.3 Traffic Operational Analysis Results

This section presents the results of the intersection operational analysis for the Existing, 2050 No Build, and 2050 Build scenarios. Appendices C and D provide detailed copies of the Synchro and VISSIM analyses, respectively, for the intersections. Figure 3-11 shows a comparative LOS for both the A.M. and P.M. peak hours in the 2050 No Build and 2050 Build conditions. The subsequent sections of the report discuss the findings of the traffic operational analysis.

Figure 3-11. 2050 Project Level of Service Summary



3.3.1 Existing Conditions

Using the peak hour volumes shown on Figures 3-1 and 3-2, queue lengths, directional, and intersection LOS for existing conditions were calculated and are listed in Tables 3-3 through 3-7. Key analysis results include the following:

- The critical peak period is during the P.M. peak hour.
- The Sossaman Road and Pecos Road intersection operates at LOS D during the A.M. and P.M. peak hours.
- The Sossaman Road and Germann Road intersection operates at LOS C during the A.M. peak hour and LOS E during the P.M. peak hour.
- The Ellsworth Road and Pecos Road (north) intersection operates at LOS C during the A.M. peak hour and LOS B during the P.M. peak hour.
- The Ellsworth Road and Pecos Road (south) intersection operates at LOS D during the A.M. peak hour and LOS F during the P.M. peak hour.

3.3.2 2050 No Build Conditions

The queue lengths, directional, and intersection LOS for 2050 No Build conditions were calculated and are listed in Tables 3-8 through 3-16.

- The Sossaman Road and Pecos Road intersection would operate at LOS C during the A.M. and P.M. peak hours.
- The Sossaman Road and Germann Road intersection would operate at LOS E during the A.M. and P.M. peak hours.
- The Ellsworth Road and Pecos Road (north) intersection would operate at LOS A during the A.M. and P.M. peak hours. However, the westbound approach would operate at LOS D during the A.M. and P.M. peak hours.
- The Ellsworth Road and Pecos Road (south) intersection would operate at LOS B during the A.M. and P.M. peak hours. The eastbound approach would operate at LOS E during the A.M. peak hour.
- The Ellsworth Road and Germann Road intersection would operate at LOS C during the A.M. and P.M. peak hours.
- The Crismon Road and Pecos Road intersection would operate at LOS B during the A.M. and P.M. peak hours.
- The Crismon Road and Germann Road intersection would operate at LOS B during the A.M. and P.M. peak hours.
- The Signal Butte Road and Pecos Road intersection would operate at LOS C during the A.M. peak hour and LOS B during the P.M. peak hour. The eastbound approach would operate at LOS E during the A.M. peak hour.

- The Signal Butte and Germann Road intersection would operate at LOS C during the A.M. and P.M. peak hours.

3.3.3 2050 Build Conditions

The queue lengths, directional, and intersection LOS for 2050 Build conditions were calculated and are listed in Tables 3-17 through 3-25.

- The Sossaman Road and Pecos Road intersection would operate at LOS D during both the A.M. and P.M. peak hours. The southbound approach would operate at LOS D during the P.M. peak hour. The approaches for this intersection display increased delays in the Build conditions compared to the No Build conditions.
- The Sossaman Road and Germann Road intersection would operate at LOS E during both the A.M. and P.M. peak hours. The approaches for this intersection display similar delays and LOS in the Build conditions compared to the No Build conditions. It is anticipated that the No Build and Build conditions for this intersection would be identical and that the Phoenix Subdivision main line track would continue to operate at grade in both the scenarios. Due to the presence of the existing Phoenix Subdivision main line track in both the No Build and Build scenarios, the extension of the existing Germann siding to cross Sossaman Road would not have any adverse impacts on this intersection.
- The Ellsworth Road and Pecos Road (north) intersection would operate at LOS C during both the A.M. and P.M. peak hours. The westbound approach would operate at LOS F during the A.M. and P.M. peak hours. The approaches for this intersection display increased delays and decreased LOS in the Build conditions compared to the No Build conditions.
- The Ellsworth Road and Pecos Road (south) intersection would operate at LOS C during the A.M. and P.M. peak hours. The eastbound approach would operate at LOS F during the A.M. peak hour and LOS D during the P.M. peak hour. The approaches for this intersection display increased delays and decreased LOS in the Build conditions compared to the No Build conditions.
- The Ellsworth Road and Germann Road intersection would operate at LOS D during the A.M. peak hour and LOS C during the P.M. peak hour. During the A.M. peak hour, the approaches for this intersection display increased delays and decreased LOS in the Build conditions compared to the No Build conditions.
- The Crismon Road and Pecos Road intersection would operate at LOS C during the A.M. peak hour and LOS B during the P.M. peak hour. The approaches for this intersection display increased delays and decreased LOS in the Build conditions compared to the No Build conditions.
- The Crismon Road and Germann Road intersection would operate at LOS C during the A.M. peak hour and LOS B during the P.M. peak hour. During the A.M. peak hour, the approaches for this intersection display increased delays and decreased LOS in the Build conditions compared to the No Build conditions.

- The Signal Butte Road and Pecos Road intersection would operate at LOS C during the A.M. and P.M. peak hours. The eastbound approach would operate at LOS E during the A.M. peak hour and LOS D during the P.M. peak hour. This intersection displays increased delays in the Build conditions compared to the No Build conditions.
- The Signal Butte Road and Germann Road intersection would operate at LOS C during the A.M. and P.M. peak hours. This intersection would operate at similar levels of delays and LOS in the Build conditions compared to the No Build conditions. However, the northbound and southbound queues would be longer in the Build conditions compared to the No Build conditions.

3.3.4 Queuing Analysis

A queuing analysis was conducted at the proposed and existing at-grade railroad crossings and major signalized intersections in the study area. The queuing was calculated using average queue length and maximum queue length in feet from the intersection or crossing. Maximum queue (feet) is defined as the maximum observed distance from the stop bar to the back of the queue over the analysis period. Queuing can occur due to operations of the at-grade railroad crossings on the project, but the overall intersection performance is calculated using the parameter "average control delay" for all the approaches at an intersection over the entire analysis period. It is anticipated that maximum queueing would occur during the analysis period, and the queues would dissipate over the next few cycles of operation and the overall control delay would still be within the acceptable range for the intersection.

The maximum queue lengths for the 2050 No Build and 2050 Build conditions are listed in Tables 3-26 through 3-34. Maximum queuing would occur at higher levels in Build conditions compared to No Build conditions. However, the LOS and overall control delay for the study intersections would not change drastically. The key takeaways from the queuing analysis are summarized below:

- Sossaman Road and Pecos Road intersection: During the A.M. peak period, the westbound and the northbound approaches would experience longer queues in the Build conditions compared to the No Build conditions. The southbound and eastbound approaches displayed higher queuing during the Build conditions compared to the No Build conditions during the P.M. peak period.
- Sossaman Road and Germann Road intersection: Queue lengths would be similar in the Build scenario at this intersection compared to the No Build scenario due to the presence of the Phoenix Subdivision main line track. The extension of the existing Germann siding to cross Sossaman Road would not add any additional delays to this intersection's movements.
- Ellsworth Road and Pecos Road (north) intersection: The southbound and westbound approaches would experience longer queues in the Build conditions compared to the No Build conditions during the A.M. peak period. During the P.M. peak period, the southbound and northbound approaches would experience longer queues in the Build conditions compared to the No Build conditions.

- Ellsworth Road and Pecos Road (south) intersection: The southbound and eastbound approaches would experience longer queues in the Build conditions compared to the No Build conditions during the A.M. peak period. During the P.M. peak period, the southbound and northbound through-movements along with the eastbound left-turn movement would experience longer queues in the Build conditions compared to the No Build conditions.
- Crismon Road and Pecos Road intersection: The northbound left turn and the through movements queue length would be longer in the Build A.M. peak period compared to the No Build A.M. peak period queue lengths.
- Signal Butte Road and Pecos Road intersection: The northbound approach queue lengths would be longer in the Build scenario compared to the No Build scenario for the A.M. and P.M. peak period queue lengths.
- Ellsworth Road and Germann Road intersection: The northbound through movement would have longer queues in the Build scenario compared to the No Build scenario in the A.M. peak period. During the P.M. peak period, the southbound approach would experience longer queues in the Build scenario compared to the No Build scenario.
- Crismon Road and Germann Road intersection: The southbound through approach would experience longer queues in the Build scenario compared to the No Build scenario in the A.M. and P.M. peak periods.
- Signal Butte Road and Germann Road intersection: The northbound approach would experience longer queues in the Build conditions compared to the No Build conditions during the A.M. peak period. During the P.M. peak period, the southbound approach would experience longer queues in the Build conditions compared to the No Build conditions.

Table 3-3. Existing Conditions Operations Analysis Results - Sossaman Road and Pecos Road Intersection

Direction	Movement	A.M. Movement Max Queue (feet)	A.M. Approach LOS	A.M. Approach Delay (seconds)	A.M. Intersection LOS	A.M. Intersection Delay (seconds)	P.M. Movement Max Queue (feet)	P.M. Approach LOS	P.M. Approach Delay (seconds)	P.M. Intersection LOS	P.M. Intersection Delay (seconds)
EB	L	71.0	C	23.9	D	36.3	48.0	**E**[1]	56.4	D	50.9
EB	T	262.0	C	23.9	D	36.3	913.0	**E**[1]	56.4	D	50.9
EB	R	Not applicable	C	23.9	D	36.3	Not applicable	**E**[1]	56.4	D	50.9
WB	L	125.0	D	46.3	D	36.3	125.0	C	29.9	D	50.9
WB	T	388.0	D	46.3	D	36.3	203.0	C	29.9	D	50.9
WB	R	Not applicable	D	46.3	D	36.3	Not applicable	C	29.9	D	50.9
NB	L	125.0	C	33.1	D	36.3	125.0	D	45.5	D	50.9
NB	T	1,416.0	C	33.1	D	36.3	322.0	D	45.5	D	50.9
NB	R	Not applicable	C	33.1	D	36.3	Not applicable	D	45.5	D	50.9
SB	L	125.0	D	37.8	D	36.3	125.0	**E**[1]	66.4	D	50.9
SB	T	229.0	D	37.8	D	36.3	866.0	**E**[1]	66.4	D	50.9
SB	R	Not applicable	D	37.8	D	36.3	Not applicable	**E**[1]	66.4	D	50.9

[1] Bolded values indicate project locations with adverse delays.

Table 3-4. Existing Conditions Operations Analysis Results - Sossaman Road and Germann Road Intersection

Direction	Movement	A.M. Movement Max Queue (feet)	A.M. Approach LOS	A.M. Approach Delay (seconds)	A.M. Intersection ICU LOS	A.M. Intersection Delay (seconds)	P.M. Movement Max Queue (feet)	P.M. Approach LOS	P.M. Approach Delay (seconds)	P.M. Intersection ICU LOS	P.M. Intersection Delay (seconds)
WB	L	Not Applicable	D	33.4	C	10.4	Not Applicable	**F**[1]	54.9	**E**[1]	11.3
WB	T	Not Applicable	Not Applicable	Not Applicable	C	10.4	Not Applicable	Not Applicable	Not Applicable	**E**[1]	11.3
WB	R	250.0	D	33.4	C	10.4	182.0	**F**[1]	54.9	**E**[1]	11.3
NB	L	Not Applicable	Not Applicable	Not Applicable	C	10.4	Not Applicable	Not Applicable	Not Applicable	**E**[1]	11.3
NB	T	Not Applicable	FREE	Not Applicable	C	10.4	Not Applicable	FREE	Not Applicable	**E**[1]	11.3
NB	R	71.0	FREE	Not Applicable	C	10.4	107.0	FREE	Not Applicable	**E**[1]	11.3
SB	L	Not Applicable	A	3.4	C	10.4	Not Applicable	A	5.0	**E**[1]	11.3
SB	T	Not Applicable	Not Applicable	Not Applicable	C	10.4	Not Applicable	Not Applicable	Not Applicable	**E**[1]	11.3
SB	R	55.0	A	3.4	C	10.4	213.0	A	5.0	**E**[1]	11.3

[1] Bolded values indicate project locations with adverse delays.
ICU = intersection capacity utilization

Table 3-5. Existing Conditions Operations Analysis Results - Ellsworth Road and Pecos Road (North) Intersection

Direction	Movement	A.M. Movement Max Queue (feet)	A.M. Approach LOS	A.M. Approach Delay (seconds)	A.M. Intersection LOS	A.M. Intersection Delay (seconds)	P.M. Movement Max Queue (feet)	P.M. Approach LOS	P.M. Approach Delay (seconds)	P.M. Intersection LOS	P.M. Intersection Delay (seconds)
EB	L	Not applicable	Not applicable	Not applicable	C	30.4	Not applicable	Not applicable	Not applicable	B	15.8
EB	T	Not applicable	Not applicable	Not applicable	C	30.4	Not applicable	Not applicable	Not applicable	B	15.8
EB	R	Not applicable	Not applicable	Not applicable	C	30.4	Not applicable	Not applicable	Not applicable	B	15.8
WB	L	114.0	D	48.3	C	30.4	114.0	D	46.2	B	15.8
WB	T	Not applicable	D	48.3	C	30.4	Not applicable	D	46.2	B	15.8
WB	R	279.0	D	48.3	C	30.4	228.0	D	46.2	B	15.8
NB	L	Not applicable	D	43.9	C	30.4	Not applicable	B	14.7	B	15.8
NB	T	558.0	D	43.9	C	30.4	325.0	B	14.7	B	15.8
NB	R	530.0	D	43.9	C	30.4	328.0	B	14.7	B	15.8
SB	L	136.0	A	8.3	C	30.4	54.0	B	13.1	B	15.8
SB	T	211.0	A	8.3	C	30.4	372.0	B	13.1	B	15.8
SB	R	Not applicable	A	8.3	C	30.4	Not applicable	B	13.1	B	15.8

Table 3-6. Existing Conditions Operations Analysis Results - Ellsworth Road and Pecos Road (South) Intersection

Direction	Movement	A.M. Movement Max Queue (feet)	A.M. Approach LOS	A.M. Approach Delay (seconds)	A.M. Intersection LOS	A.M. Intersection Delay (seconds)	P.M. Movement Max Queue (feet)	P.M. Approach LOS	P.M. Approach Delay (seconds)	P.M. Intersection LOS	P.M. Intersection Delay (seconds)
EB	L	237.0	D	49.9	D	37.7	357.0	**F**[1]	80.4	**F**[1]	138.1
EB	T	129.0	D	49.9	D	37.7	275.0	**F**[1]	80.4	**F**[1]	138.1
EB	R	Not applicable	D	49.9	D	37.7	Not applicable	**F**[1]	80.4	**F**[1]	138.1
WB	L	27.0	D	38.6	D	37.7	31.0	D	49.8	**F**[1]	138.1
WB	T	Not applicable	D	38.6	D	37.7	Not applicable	D	49.8	**F**[1]	138.1
WB	R	26.0	D	38.6	D	37.7	Not applicable	D	49.8	**F**[1]	138.1
NB	L	225.0	D	42.5	D	37.7	225.0	**F**[1]	168.1	**F**[1]	138.1
NB	T	1,374.0	D	42.5	D	37.7	2,572.0	**F**[1]	168.1	**F**[1]	138.1
NB	R	1,364.0	D	42.5	D	37.7	2,571.0	**F**[1]	168.1	**F**[1]	138.1
SB	L	Not applicable	C	28.9	D	37.7	1,767.0	**F**[1]	128.2	**F**[1]	138.1
SB	T	814.0	C	28.9	D	37.7	1,846.0	**F**[1]	128.2	**F**[1]	138.1
SB	R	325.0	C	28.9	D	37.7	325.0	**F**[1]	128.2	**F**[1]	138.1

[1] Bolded values indicate project locations with adverse delays.

Table 3-7. Existing Conditions Operations Analysis Results - Ellsworth Road and Germann Road Intersection

Direction	Movement	A.M. Movement Max Queue (feet)	A.M. Approach LOS	A.M. Approach Delay (seconds)	A.M. Intersection LOS	A.M. Intersection Delay (seconds)	P.M. Movement Max Queue (feet)	P.M. Approach LOS	P.M. Approach Delay (seconds)	P.M. Intersection LOS	P.M. Intersection Delay (seconds)
EB	L	83	D	38.4	D	45.7	174	D	46.0	D	48.7
EB	T	64	D	38.4	D	45.7	237	D	46.0	D	48.7
EB	R	39	D	38.4	D	45.7	223	D	46.0	D	48.7
WB	L	68	**E**[1]	62.9	D	45.7	96	D	41.8	D	48.7
WB	T	151	**E**[1]	62.9	D	45.7	2,575	D	41.8	D	48.7
WB	R	377	**E**[1]	62.9	D	45.7	445	D	41.8	D	48.7
NB	L	250	D	49.8	D	45.7	249	**E**[1]	64.2	D	48.7
NB	T	950	D	49.8	D	45.7	964	**E**[1]	64.2	D	48.7
NB	R	249	D	49.8	D	45.7	951	**E**[1]	64.2	D	48.7
SB	L	259	C	34.2	D	45.7	260	D	41.5	D	48.7
SB	T	439	C	34.2	D	45.7	636	D	41.5	D	48.7
SB	R	275	C	34.2	D	45.7	40	D	41.5	D	48.7

[1] Bolded values indicate project locations with adverse delays.

Table 3-8. 2050 No Build Operations Analysis Results - Sossaman Road and Pecos Road Intersection

Approach Direction	Movement	A.M. Delay (all vehicles) (seconds)	A.M. Weighted Delay by Approach	A.M. Approach LOS	A.M. Intersection Delay	A.M. Intersection LOS	P.M. Delay (all vehicles) (seconds)	P.M. Weighted Delay by Approach	P.M. Approach LOS	P.M. Intersection Delay	P.M. Intersection LOS
SB	R	4.7	33.9	C	22.8	C	7.4	34.7	C	29.0	C
SB	T	31.5	33.9	C	22.8	C	31.5	34.7	C	29.0	C
SB	L	53.4	33.9	C	22.8	C	53.4	34.7	C	29.0	C
WB	R	7.3	18.8	B	22.8	C	4.6	25.9	C	29.0	C
WB	T	20.9	18.8	B	22.8	C	21.1	25.9	C	29.0	C
WB	L	44.1	18.8	B	22.8	C	50.0	25.9	C	29.0	C
NB	R	6.4	26.6	C	22.8	C	5.9	30.3	C	29.0	C
NB	T	24.3	26.6	C	22.8	C	29.3	30.3	C	29.0	C
NB	L	33.4	26.6	C	22.8	C	46.5	30.3	C	29.0	C
EB	R	4.7	16.7	B	22.8	C	8.3	25.0	C	29.0	C
EB	T	20.3	16.7	B	22.8	C	32.9	25.0	C	29.0	C
EB	L	42.8	16.7	B	22.8	C	54.5	25.0	C	29.0	C

Table 3-9. 2050 No Build Operations Analysis Results - Sossaman Road and Germann Road Intersection

Approach Direction	Movement	A.M. Delay (all vehicles) (seconds)	A.M. Weighted Delay by Approach	A.M. Approach LOS	A.M. Intersection Delay	A.M. Intersection LOS	P.M. Delay (all vehicles) (seconds)	P.M. Weighted Delay by Approach	P.M. Approach LOS	P.M. Intersection Delay	P.M. Intersection LOS
SB	R	45.7	86.2	**F**[1]	67.6	**E**[1]	26.2	52.1	D	64.3	**E**[1]
SB	T	57.6	86.2	**F**[1]	67.6	**E**[1]	44.2	52.1	D	64.3	**E**[1]
SB	L	166.0	86.2	**F**[1]	67.6	**E**[1]	69.7	52.1	D	64.3	**E**[1]
WB	R	45.8	67.9	**E**[1]	67.6	**E**[1]	45.7	65.5	**E**[1]	64.3	**E**[1]
WB	T	71.1	67.9	**E**[1]	67.6	**E**[1]	77.1	65.5	**E**[1]	64.3	**E**[1]
WB	L	89.3	67.9	**E**[1]	67.6	**E**[1]	110.7	65.5	**E**[1]	64.3	**E**[1]
NB	R	23.6	48.5	D	67.6	**E**[1]	38.2	66.0	**E**[1]	64.3	**E**[1]
NB	T	50.3	48.5	D	67.6	**E**[1]	65.9	66.0	**E**[1]	64.3	**E**[1]
NB	L	100.8	48.5	D	67.6	**E**[1]	105.0	66.0	**E**[1]	64.3	**E**[1]
EB	R	37.2	87.5	**F**[1]	67.6	**E**[1]	53.9	90.1	**F**[1]	64.3	**E**[1]
EB	T	87.1	87.5	**F**[1]	67.6	**E**[1]	95.8	90.1	**F**[1]	64.3	**E**[1]
EB	L	130.7	87.5	**F**[1]	67.6	**E**[1]	101.7	90.1	**F**[1]	64.3	**E**[1]

[1] Bolded values indicate project locations with adverse delays.

Table 3-10. 2050 No Build Operations Analysis Results - Ellsworth Road and Pecos Road (North) Intersection

Approach Direction	Movement	A.M. Delay (all vehicles) (seconds)	A.M. Weighted Delay by Approach	A.M. Approach LOS	A.M. Intersection Delay	A.M. Intersection LOS	P.M. Delay (all vehicles) (seconds)	P.M. Weighted Delay by Approach	P.M. Approach LOS	P.M. Intersection Delay	P.M. Intersection LOS
SB	R	Not applicable	3.6	A	9.6	A	Not applicable	3.7	A	7.1	A
SB	T	0.7	3.6	A	9.6	A	0.8	3.7	A	7.1	A
SB	L	68.2	3.6	A	9.6	A	97.2	3.7	A	7.1	A
WB	R	7.0	45.0	D	9.6	A	6.2	37.9	D	7.1	A
WB	T	Not applicable	45.0	D	9.6	A	Not applicable	37.9	D	7.1	A
WB	L	54.5	45.0	D	9.6	A	52.2	37.9	D	7.1	A
NB	R	8.2	10.8	B	9.6	A	6.1	8.1	A	7.1	A
NB	T	11.0	10.8	B	9.6	A	8.3	8.1	A	7.1	A
NB	L	Not applicable	10.8	B	9.6	A	Not applicable	8.1	A	7.1	A

Table 3-11. 2050 No Build Operations Analysis Results - Ellsworth Road and Pecos Road (South) Intersection

Approach Direction	Movement	A.M. Delay (all vehicles) (seconds)	A.M. Weighted Delay by Approach	A.M. Approach LOS	A.M. Intersection Delay	A.M. Intersection LOS	P.M. Delay (all vehicles) (seconds)	P.M. Weighted Delay by Approach	P.M. Approach LOS	P.M. Intersection Delay	P.M. Intersection LOS
SB	R	15.4	8.0	A	16.7	B	15.6	9.5	A	12.5	B
SB	T	4.9	8.0	A	16.7	B	8.9	9.5	A	12.5	B
SB	L	Not applicable	8.0	A	16.7	B	Not applicable	9.5	A	12.5	B
NB	R	Not applicable	17.3	B	16.7	B	Not applicable	12.0	B	12.5	B
NB	T	16.1	17.3	B	16.7	B	11.8	12.0	B	12.5	B
NB	L	23.4	17.3	B	16.7	B	14.5	12.0	B	12.5	B
EB	R	5.9	50.1	D	16.7	B	7.8	21.9	C	12.5	B
EB	T	Not applicable	50.1	D	16.7	B	Not applicable	21.9	C	12.5	B
EB	L	60.4	50.1	D	16.7	B	30.9	21.9	C	12.5	B

Table 3-12. 2050 No Build Operations Analysis Results - Crismon Road and Pecos Road Intersection

Approach Direction	Movement	A.M. Delay (all vehicles) (seconds)	A.M. Weighted Delay by Approach	A.M. Approach LOS	A.M. Intersection Delay	A.M. Intersection LOS	P.M. Delay (all vehicles) (seconds)	P.M. Weighted Delay by Approach	P.M. Approach LOS	P.M. Intersection Delay	P.M. Intersection LOS
SB	R	5.5	17.2	B	19.9	B	4.3	10.0	A	13.7	B
SB	T	12.4	17.2	B	19.9	B	8.9	10.0	A	13.7	B
SB	L	33.2	17.2	B	19.9	B	25.4	10.0	A	13.7	B
WB	R	10.5	26.6	C	19.9	B	7.3	16.8	B	13.7	B
WB	T	18.3	26.6	C	19.9	B	16.8	16.8	B	13.7	B
WB	L	48.0	26.6	C	19.9	B	22.9	16.8	B	13.7	B
NB	R	11.4	16.9	B	19.9	B	3.6	11.4	B	13.7	B
NB	T	15.4	16.9	B	19.9	B	8.1	11.4	B	13.7	B
NB	L	33.2	16.9	B	19.9	B	24.3	11.4	B	13.7	B
EB	R	10.7	20.2	C	19.9	B	8.8	18.0	B	13.7	B
EB	T	21.6	20.2	C	19.9	B	18.1	18.0	B	13.7	B
EB	L	28.0	20.2	C	19.9	B	25.5	18.0	B	13.7	B

Table 3-13. 2050 No Build Operations Analysis Results - Signal Butte and Pecos Road Intersection

Approach Direction	Movement	A.M. Delay (all vehicles) (seconds)	A.M. Weighted Delay by Approach	A.M. Approach LOS	A.M. Intersection Delay	A.M. Intersection LOS	P.M. Delay (all vehicles) (seconds)	P.M. Weighted Delay by Approach	P.M. Approach LOS	P.M. Intersection Delay	P.M. Intersection LOS
SB	R	3.6	28.1	C	30.1	C	4.5	12.9	B	14.8	B
SB	T	13.9	28.1	C	30.1	C	11.8	12.9	B	14.8	B
SB	L	78.8	28.1	C	30.1	C	38.9	12.9	B	14.8	B
WB	R	8.9	34.1	C	30.1	C	5.9	21.6	C	14.8	B
WB	T	59.8	34.1	C	30.1	C	40.9	21.6	C	14.8	B
WB	L	65.8	34.1	C	30.1	C	43.0	21.6	C	14.8	B
NB	R	19.3	26.2	C	30.1	C	9.0	13.7	B	14.8	B
NB	T	23.1	26.2	C	30.1	C	11.7	13.7	B	14.8	B
NB	L	105.8	26.2	C	30.1	C	48.8	13.7	B	14.8	B
EB	R	20.5	58.6	**E**[1]	30.1	C	9.0	31.6	C	14.8	B
EB	T	41.6	58.6	**E**[1]	30.1	C	35.0	31.6	C	14.8	B
EB	L	67.4	58.6	**E**[1]	30.1	C	41.6	31.6	C	14.8	B

[1] Bolded values indicate project locations with adverse delays.

Table 3-14. 2050 No Build Operations Analysis Results – Ellsworth Road and Germann Road Intersection

Approach Direction	Movement	A.M. Delay (all vehicles) (seconds)	A.M. Weighted Delay by Approach	A.M. Approach LOS	A.M. Intersection Delay	A.M. Intersection LOS	P.M. Delay (all vehicles) (seconds)	P.M. Weighted Delay by Approach	P.M. Approach LOS	P.M. Intersection Delay	P.M. Intersection LOS
SB	R	4.4	10.9	B	25.6	C	8.1	18.8	B	24.8	C
SB	T	10.4	10.9	B	25.6	C	18.5	18.8	B	24.8	C
SB	L	31.5	10.9	B	25.6	C	30.1	18.8	B	24.8	C
WB	R	11.2	42.8	D	25.6	C	8.8	35.7	D	24.8	C
WB	T	50.6	42.8	D	25.6	C	49.8	35.7	D	24.8	C
WB	L	45.6	42.8	D	25.6	C	43.5	35.7	D	24.8	C
NB	R	8.8	23.6	C	25.6	C	3.6	18.9	B	24.8	C
NB	T	24.3	23.6	C	25.6	C	19.6	18.9	B	24.8	C
NB	L	18.8	23.6	C	25.6	C	23.0	18.9	B	24.8	C
EB	R	8.8	50.0	D	25.6	C	12.5	45.2	D	24.8	C
EB	T	59.2	50.0	D	25.6	C	53.5	45.2	D	24.8	C
EB	L	46.5	50.0	D	25.6	C	41.0	45.2	D	24.8	C

Table 3-15. 2050 No Build Operations Analysis Results – Crismon Road and Germann Road Intersection

Approach Direction	Movement	A.M. Delay (all vehicles) (seconds)	A.M. Weighted Delay by Approach	A.M. Approach LOS	A.M. Intersection Delay	A.M. Intersection LOS	P.M. Delay (all vehicles) (seconds)	P.M. Weighted Delay by Approach	P.M. Approach LOS	P.M. Intersection Delay	P.M. Intersection LOS
SB	R	4.2	16.4	B	19.8	B	3.9	14.3	B	17.9	B
SB	T	15.5	16.4	B	19.8	B	13.6	14.3	B	17.9	B
SB	L	33.0	16.4	B	19.8	B	33.8	14.3	B	17.9	B
WB	R	5.7	22.2	C	19.8	B	4.2	20.8	C	17.9	B
WB	T	23.5	22.2	C	19.8	B	19.9	20.8	C	17.9	B
WB	L	35.4	22.2	C	19.8	B	35.5	20.8	C	17.9	B
NB	R	3.7	16.9	B	19.8	B	3.8	15.3	B	17.9	B
NB	T	16.4	16.9	B	19.8	B	12.3	15.3	B	17.9	B
NB	L	33.9	16.9	B	19.8	B	33.7	15.3	B	17.9	B
EB	R	6.3	22.7	C	19.8	B	7.0	17.9	B	17.9	B
EB	T	24.0	22.7	C	19.8	B	19.1	17.9	B	17.9	B
EB	L	35.6	22.7	C	19.8	B	41.8	17.9	B	17.9	B

Table 3-16. 2050 No Build Operations Analysis Results – Signal Butte Road and Germann Road Intersection

Approach Direction	Movement	A.M. Delay (all vehicles) (seconds)	A.M. Weighted Delay by Approach	A.M. Approach LOS	A.M. Intersection Delay	A.M. Intersection LOS	P.M. Delay (all vehicles) (seconds)	P.M. Weighted Delay by Approach	P.M. Approach LOS	P.M. Intersection Delay	P.M. Intersection LOS
SB	R	4.6	20.6	C	27.6	C	7.5	23.1	C	31.9	C
SB	T	19.0	20.6	C	27.6	C	20.1	23.1	C	31.9	C
SB	L	51.5	20.6	C	27.6	C	47.3	23.1	C	31.9	C
WB	R	5.7	29.0	C	27.6	C	5.0	31.1	C	31.9	C
WB	T	34.2	29.0	C	27.6	C	34.3	31.1	C	31.9	C
WB	L	43.6	29.0	C	27.6	C	49.0	31.1	C	31.9	C
NB	R	11.5	26.9	C	27.6	C	4.2	21.7	C	31.9	C
NB	T	25.6	26.9	C	27.6	C	20.6	21.7	C	31.9	C
NB	L	55.6	26.9	C	27.6	C	51.8	21.7	C	31.9	C
EB	R	5.9	35.6	D	27.6	C	12.6	60.0	**E**[1]	31.9	C
EB	T	36.3	35.6	D	27.6	C	43.4	60.0	**E**[1]	31.9	C
EB	L	46.6	35.6	D	27.6	C	196.6	60.0	**E**[1]	31.9	C

[1] Bolded values indicate project locations with adverse delays.

Table 3-17. 2050 Build Operations Analysis Results - Sossaman Road and Pecos Road Intersection

Approach Direction	Movement	A.M. Delay (all vehicles) (seconds)	A.M. Weighted Delay by Approach	A.M. Approach LOS	A.M. Intersection Delay	A.M. Intersection LOS	P.M. Delay (all vehicles) (seconds)	P.M. Weighted Delay by Approach	P.M. Approach LOS	P.M. Intersection Delay	P.M. Intersection LOS
SB	R	14.5	67.2	**E**[1]	46.2	D	19.5	48.6	D	44.1	D
SB	T	47.4	67.2	**E**[1]	46.2	D	41.1	48.6	D	44.1	D
SB	L	160.5	67.2	**E**[1]	46.2	D	85.9	48.6	D	44.1	D
WB	R	26.6	42.3	D	46.2	D	10.9	46.4	D	44.1	D
WB	T	47.0	42.3	D	46.2	D	42.4	46.4	D	44.1	D
WB	L	60.3	42.3	D	46.2	D	76.3	46.4	D	44.1	D
NB	R	18.7	53.3	D	46.2	D	5.8	37.9	D	44.1	D
NB	T	48.0	53.3	D	46.2	D	26.8	37.9	D	44.1	D
NB	L	67.2	53.3	D	46.2	D	69.3	37.9	D	44.1	D
EB	R	9.3	25.1	C	46.2	D	23.1	41.3	D	44.1	D
EB	T	25.9	25.1	C	46.2	D	49.8	41.3	D	44.1	D
EB	L	91.3	25.1	C	46.2	D	76.9	41.3	D	44.1	D

[1] Bolded values indicate project locations with adverse delays.

Table 3-18. 2050 Build Operations Analysis Results - Sossaman Road and Germann Road Intersection

Approach Direction	Movement	A.M. Delay (all vehicles) (seconds)	A.M. Weighted Delay by Approach	A.M. Approach LOS	A.M. Intersection Delay	A.M. Intersection LOS	P.M. Delay (all vehicles) (seconds)	P.M. Weighted Delay by Approach	P.M. Approach LOS	P.M. Intersection Delay	P.M. Intersection LOS
SB	R	45.7	86.2	**F**[1]	67.6	**E**[1]	26.2	52.1	D	64.3	**E**[1]
SB	T	57.6	86.2	**F**[1]	67.6	**E**[1]	44.2	52.1	D	64.3	**E**[1]
SB	L	166.0	86.2	**F**[1]	67.6	**E**[1]	69.7	52.1	D	64.3	**E**[1]
WB	R	45.8	67.9	**E**[1]	67.6	**E**[1]	45.7	65.5	**E**[1]	64.3	**E**[1]
WB	T	71.1	67.9	**E**[1]	67.6	**E**[1]	77.1	65.5	**E**[1]	64.3	**E**[1]
WB	L	89.3	67.9	**E**[1]	67.6	**E**[1]	110.7	65.5	**E**[1]	64.3	**E**[1]
NB	R	23.6	48.5	D	67.6	**E**[1]	38.2	66.0	**E**[1]	64.3	**E**[1]
NB	T	50.3	48.5	D	67.6	**E**[1]	65.9	66.0	**E**[1]	64.3	**E**[1]
NB	L	100.8	48.5	D	67.6	**E**[1]	105.0	66.0	**E**[1]	64.3	**E**[1]
EB	R	37.2	87.5	**F**[1]	67.6	**E**[1]	53.9	90.1	**F**[1]	64.3	**E**[1]
EB	T	87.1	87.5	**F**[1]	67.6	**E**[1]	95.8	90.1	**F**[1]	64.3	**E**[1]
EB	L	130.7	87.5	**F**[1]	67.6	**E**[1]	101.7	90.1	**F**[1]	64.3	**E**[1]

[1] Bolded values indicate project locations with adverse delays.

Table 3-19. 2050 Build Operations Analysis Results - Ellsworth Road and Pecos Road (North) Intersection

Approach Direction	Movement	A.M. Delay (all vehicles) (seconds)	A.M. Weighted Delay by Approach	A.M. Approach LOS	A.M. Intersection Delay	A.M. Intersection LOS	P.M. Delay (all vehicles) (seconds)	P.M. Weighted Delay by Approach	P.M. Approach LOS	P.M. Intersection Delay	P.M. Intersection LOS
SB	R	Not Applicable	28.3	C	23.7	C	Not Applicable	28.8	C	23.0	C
SB	T	25.2	28.3	C	23.7	C	25.8	28.8	C	23.0	C
SB	L	96.9	28.3	C	23.7	C	130.3	28.8	C	23.0	C
WB	R	30.3	103.5	**F**[1]	23.7	C	19.3	80.0	**F**[1]	23.0	C
WB	T	Not Applicable	103.5	**F**[1]	23.7	C	Not Applicable	80.0	**F**[1]	23.0	C
WB	L	121.5	103.5	**F**[1]	23.7	C	107.4	80.0	**F**[1]	23.0	C
NB	R	9.2	12.6	B	23.7	C	9.1	11.1	B	23.0	C
NB	T	12.9	12.6	B	23.7	C	11.3	11.1	B	23.0	C
NB	L	Not Applicable	12.6	B	23.7	C	Not Applicable	11.1	B	23.0	C

[1] Bolded values indicate project locations with adverse delays.

Table 3-20. 2050 Build Operations Analysis Results - Ellsworth Road and Pecos Road (South) Intersection

Approach Direction	Movement	A.M. Delay (all vehicles) (seconds)	A.M. Weighted Delay by Approach	A.M. Approach LOS	A.M. Intersection Delay	A.M. Intersection LOS	P.M. Delay (all vehicles) (seconds)	P.M. Weighted Delay by Approach	P.M. Approach LOS	P.M. Intersection Delay	P.M. Intersection LOS
SB	R	35.2	15.9	B	32.7	C	17.8	14.4	B	27.3	C
SB	T	8.1	15.9	B	32.7	C	14.0	14.4	B	27.3	C
SB	L	Not Applicable	15.9	B	32.7	C	Not Applicable	14.4	B	27.3	C
NB	R	Not Applicable	35.2	D	32.7	C	Not Applicable	36.6	D	27.3	C
NB	T	37.2	35.2	D	32.7	C	38.6	36.6	D	27.3	C
NB	L	25.6	35.2	D	32.7	C	19.4	36.6	D	27.3	C
EB	R	9.6	91.9	**F**[1]	32.7	C	12.5	45.0	D	27.3	C
EB	T	Not Applicable	91.9	**F**[1]	32.7	C	Not Applicable	45.0	D	27.3	C
EB	L	111.8	91.9	**F**[1]	32.7	C	65.6	45.0	D	27.3	C

[1] Bolded values indicate project locations with adverse delays.

Table 3-21. 2050 Build Operations Analysis Results - Crismon Road and Pecos Road Intersection

Approach Direction	Movement	A.M. Delay (all vehicles) (seconds)	A.M. Weighted Delay by Approach	A.M. Approach LOS	A.M. Intersection Delay	A.M. Intersection LOS	P.M. Delay (all vehicles) (seconds)	P.M. Weighted Delay by Approach	P.M. Approach LOS	P.M. Intersection Delay	P.M. Intersection LOS
SB	R	5.1	16.5	B	23.1	C	4.0	9.8	A	14.5	B
SB	T	11.6	16.5	B	23.1	C	8.6	9.8	A	14.5	B
SB	L	32.7	16.5	B	23.1	C	26.3	9.8	A	14.5	B
WB	R	11.7	26.3	C	23.1	C	7.0	17.2	B	14.5	B
WB	T	19.0	26.3	C	23.1	C	17.1	17.2	B	14.5	B
WB	L	45.3	26.3	C	23.1	C	24.0	17.2	B	14.5	B
NB	R	19.5	24.9	C	23.1	C	5.2	13.8	B	14.5	B
NB	T	22.8	24.9	C	23.1	C	9.2	13.8	B	14.5	B
NB	L	45.0	24.9	C	23.1	C	29.9	13.8	B	14.5	B
EB	R	10.5	20.6	C	23.1	C	9.6	18.8	B	14.5	B
EB	T	22.3	20.6	C	23.1	C	18.9	18.8	B	14.5	B
EB	L	27.8	20.6	C	23.1	C	27.0	18.8	B	14.5	B

Table 3-22. 2050 Build Operations Analysis Results - Signal Butte and Pecos Road Intersection

Approach Direction	Movement	A.M. Delay (all vehicles) (seconds)	A.M. Weighted Delay by Approach	A.M. Approach LOS	A.M. Intersection Delay	A.M. Intersection LOS	P.M. Delay (all vehicles) (seconds)	P.M. Weighted Delay by Approach	P.M. Approach LOS	P.M. Intersection Delay	P.M. Intersection LOS
SB	R	4.4	32.1	C	33.4	C	11.0	27.7	C	25.2	C
SB	T	20.0	32.1	C	33.4	C	28.0	27.7	C	25.2	C
SB	L	79.5	32.1	C	33.4	C	39.5	27.7	C	25.2	C
WB	R	9.0	35.0	D	33.4	C	5.7	27.5	C	25.2	C
WB	T	60.5	35.0	D	33.4	C	39.5	27.5	C	25.2	C
WB	L	78.3	35.0	D	33.4	C	84.6	27.5	C	25.2	C
NB	R	22.5	29.3	C	33.4	C	10.4	16.2	B	25.2	C
NB	T	26.2	29.3	C	33.4	C	13.1	16.2	B	25.2	C
NB	L	112.8	29.3	C	33.4	C	69.8	16.2	B	25.2	C
EB	R	20.6	61.0	**E**[1]	33.4	C	44.7	39.3	D	25.2	C
EB	T	44.1	61.0	**E**[1]	33.4	C	35.3	39.3	D	25.2	C
EB	L	70.0	61.0	**E**[1]	33.4	C	38.4	39.3	D	25.2	C

[1] Bolded values indicate project locations with adverse delays.

Table 3-23. 2050 Build Operations Analysis Results – Ellsworth Road and Germann Road Intersection

Approach Direction	Movement	A.M. Delay (all vehicles) (seconds)	A.M. Weighted Delay by Approach	A.M. Approach LOS	A.M. Intersection Delay	A.M. Intersection LOS	P.M. Delay (all vehicles) (seconds)	P.M. Weighted Delay by Approach	P.M. Approach LOS	P.M. Intersection Delay	P.M. Intersection LOS
SB	R	5.4	12.2	B	39.5	D	10.5	21.8	C	26.1	C
SB	T	11.2	12.2	B	39.5	D	21.2	21.8	C	26.1	C
SB	L	42.6	12.2	B	39.5	D	37.0	21.8	C	26.1	C
WB	R	38.4	51.6	D	39.5	D	8.7	36.0	D	26.1	C
WB	T	54.6	51.6	D	39.5	D	51.0	36.0	D	26.1	C
WB	L	54.4	51.6	D	39.5	D	42.8	36.0	D	26.1	C
NB	R	15.5	49.1	D	39.5	D	3.6	18.9	B	26.1	C
NB	T	51.1	49.1	D	39.5	D	19.4	18.9	B	26.1	C
NB	L	28.6	49.1	D	39.5	D	27.0	18.9	B	26.1	C
EB	R	9.1	52.1	D	39.5	D	12.4	44.9	D	26.1	C
EB	T	58.9	52.1	D	39.5	D	53.2	44.9	D	26.1	C
EB	L	63.3	52.1	D	39.5	D	40.6	44.9	D	26.1	C

Table 3-24. 2050 Build Operations Analysis Results – Crismon Road and Germann Road Intersection

Approach Direction	Movement	A.M. Delay (all vehicles) (seconds)	A.M. Weighted Delay by Approach	A.M. Approach LOS	A.M. Intersection Delay	A.M. Intersection LOS	P.M. Delay (all vehicles) (seconds)	P.M. Weighted Delay by Approach	P.M. Approach LOS	P.M. Intersection Delay	P.M. Intersection LOS
SB	R	6.9	20.6	C	20.5	C	6.0	16.4	B	18.5	B
SB	T	19.2	20.6	C	20.5	C	16.0	16.4	B	18.5	B
SB	L	40.5	20.6	C	20.5	C	33.7	16.4	B	18.5	B
WB	R	5.5	22.5	C	20.5	C	4.1	21.5	C	18.5	B
WB	T	23.9	22.5	C	20.5	C	20.6	21.5	C	18.5	B
WB	L	35.1	22.5	C	20.5	C	36.6	21.5	C	18.5	B
NB	R	3.7	16.3	B	20.5	C	3.7	15.0	B	18.5	B
NB	T	15.7	16.3	B	20.5	C	11.8	15.0	B	18.5	B
NB	L	33.3	16.3	B	20.5	C	33.6	15.0	B	18.5	B
EB	R	6.2	23.1	C	20.5	C	7.0	18.4	B	18.5	B
EB	T	24.5	23.1	C	20.5	C	19.5	18.4	B	18.5	B
EB	L	35.4	23.1	C	20.5	C	44.5	18.4	B	18.5	B

Table 3-25. 2050 Build Operations Analysis Results – Signal Butte Road and Germann Road Intersection

Approach Direction	Movement	A.M. Delay (all vehicles) (seconds)	A.M. Weighted Delay by Approach	A.M. Approach LOS	A.M. Intersection Delay	A.M. Intersection LOS	P.M. Delay (all vehicles) (seconds)	P.M. Weighted Delay by Approach	P.M. Approach LOS	P.M. Intersection Delay	P.M. Intersection LOS
SB	R	6.3	22.3	C	34.0	C	11.1	28.1	C	33.1	C
SB	T	19.1	22.3	C	34.0	C	25.7	28.1	C	33.1	C
SB	L	68.4	22.3	C	34.0	C	49.8	28.1	C	33.1	C
WB	R	21.1	32.5	C	34.0	C	5.0	31.0	C	33.1	C
WB	T	34.4	32.5	C	34.0	C	34.3	31.0	C	33.1	C
WB	L	43.6	32.5	C	34.0	C	48.5	31.0	C	33.1	C
NB	R	16.6	38.1	D	34.0	C	4.0	20.5	C	33.1	C
NB	T	37.4	38.1	D	34.0	C	19.3	20.5	C	33.1	C
NB	L	62.5	38.1	D	34.0	C	50.2	20.5	C	33.1	C
EB	R	6.2	38.8	D	34.0	C	12.3	56.5	**E**[1]	33.1	C
EB	T	36.9	38.8	D	34.0	C	41.4	56.5	**E**[1]	33.1	C
EB	L	62.3	38.8	D	34.0	C	180.6	56.5	**E**[1]	33.1	C

[1] Bolded values indicate project locations with adverse delays.

Table 3-26. 2050 No Build and Build Queue Lengths - Sossaman Road and Pecos Road Intersection

Approach Direction	Movement	2050 No Build		2050 Build	
		A.M. Max Queue (feet)	P.M. Max Queue (feet)	A.M. Max Queue (feet)	P.M. Max Queue (feet)
SB	R	0.0	3.3	5.4	5.3
SB	T	129.8	430.1	657.3	1,069.0
SB	L	129.7	412.0	627.2	1,068.2
WB	R	78.4	11.8	1,494.8	26.2
WB	T	323.9	229.2	1,551.5	981.9
WB	L	142.0	307.3	228.5	700.8
NB	R	0.0	46.0	3.7	54.7
NB	T	264.9	119.6	1,314.5	126.2
NB	L	181.7	146.2	1,180.2	256.5
EB	R	11.2	74.2	489.7	1,054.9
EB	T	122.7	331.3	825.0	1,104.2
EB	L	78.5	55.1	469.7	72.0

Table 3-27. 2050 No Build and Build Queue Lengths - Sossaman Road and Germann Road Intersection

Approach Direction	Movement	2050 No Build		2050 Build	
		A.M. Max Queue (feet)	P.M. Max Queue (feet)	A.M. Max Queue (feet)	P.M. Max Queue (feet)
SB	R	64.8	20.6	64.8	20.6
SB	T	1,005.2	1,068.4	1,005.2	1,068.4
SB	L	912.8	1,071.6	912.8	1,071.6
WB	R	1,551.4	812.9	1,551.4	812.9
WB	T	1,549.8	66.1	1,549.8	66.1
WB	L	1,231.9	688.2	1,231.9	688.2
NB	R	254.3	1,393.0	254.3	1,393.0
NB	T	1,648.7	1,565.8	1,648.7	1,565.8
NB	L	146.7	1,466.9	146.7	1,466.9
EB	R	59.9	122.7	59.9	122.7
EB	T	1,285.3	1,175.9	1,285.3	1,175.9
EB	L	337.9	157.2	337.9	157.2

Table 3-28. 2050 No Build and Build Queue Lengths - Ellsworth Road and Pecos Road (North) Intersection

Approach Direction	Movement	2050 No Build		2050 Build	
		A.M. Max Queue (feet)	P.M. Max Queue (feet)	A.M. Max Queue (feet)	P.M. Max Queue (feet)
SB	R	Not applicable	Not applicable	Not applicable	Not applicable
SB	T	59.0	72.6	1,560.7	1,566.8
SB	L	147.6	182.4	995.7	568.9
WB	R	4.9	12.4	9.1	14.4
WB	T	Not applicable	Not applicable	Not applicable	Not applicable
WB	L	257.0	212.6	770.7	526.6
NB	R	727.6	329.4	896.9	965.9
NB	T	908.7	483.6	1,059.7	1,063.0
NB	L	Not applicable	Not applicable	Not applicable	Not applicable

Table 3-29. 2050 No Build and Build Queue Lengths - Ellsworth Road and Pecos Road (South) Intersection

Approach Direction	Movement	2050 No Build		2050 Build	
		A.M. Max Queue (feet)	P.M. Max Queue (feet)	A.M. Max Queue (feet)	P.M. Max Queue (feet)
SB	R	138.5	70.4	980.5	80.9
SB	T	196.7	363.8	1,216.6	1,553.0
SB	L	Not applicable	Not applicable	Not applicable	Not applicable
NB	R	Not applicable	Not applicable	Not applicable	Not applicable
NB	T	2,135.9	440.4	2,707.1	1,610.0
NB	L	111.7	81.0	110.0	85.9
EB	R	0.0	42.4	7.1	391.4
EB	T	Not applicable	Not applicable	Not applicable	Not applicable
EB	L	273.1	224.9	703.5	1,115.7

Table 3-30. 2050 No Build and Build Queue Lengths - Crismon Road and Pecos Road Intersection

Approach Direction	Movement	2050 No Build		2050 Build	
		A.M. Max Queue (feet)	P.M. Max Queue (feet)	A.M. Max Queue (feet)	P.M. Max Queue (feet)
SB	R	11.1	3.8	5.6	6.2
SB	T	94.2	77.1	83.9	84.2
SB	L	127.3	55.5	122.3	52.1
WB	R	108.7	16.0	102.9	16.3
WB	T	165.4	78.6	159.6	78.2
WB	L	222.0	57.3	201.6	59.6
NB	R	142.6	0.0	1,328.1	101.8
NB	T	212.4	56.9	1,397.9	166.7
NB	L	113.8	65.3	498.6	182.5
EB	R	26.7	22.2	26.4	24.9
EB	T	89.5	85.9	89.2	89.5
EB	L	55.7	50.8	57.9	47.1

Table 3-31. 2050 No Build and Build Queue Lengths - Signal Butte Road and Pecos Road Intersection

Approach Direction	Movement	2050 No Build		2050 Build	
		A.M. Max Queue (feet)	P.M. Max Queue (feet)	A.M. Max Queue (feet)	P.M. Max Queue (feet)
SB	R	9.3	0.0	4.7	0.0
SB	T	263.2	467.9	611.6	1,254.8
SB	L	243.6	81.6	289.1	91.7
WB	R	50.1	0.0	49.2	0.0
WB	T	174.9	55.3	163.4	58.9
WB	L	64.8	66.7	65.3	71.0
NB	R	979.9	220.1	1,338.2	1,304.9
NB	T	1,043.5	283.7	1,401.8	1,368.4
NB	L	431.0	101.6	776.7	310.6
EB	R	34.7	38.3	40.5	80.0
EB	T	74.6	83.1	85.3	124.8
EB	L	281.6	142.1	315.5	135.4

Table 3-32. 2050 No Build and Build Queue Lengths – Ellsworth Road and Germann Road Intersection

Approach Direction	Movement	2050 No Build		2050 Build	
		A.M. Max Queue (feet)	P.M. Max Queue (feet)	A.M. Max Queue (feet)	P.M. Max Queue (feet)
SB	R	1.7	0.0	7.7	0.0
SB	T	229.6	490.9	444.7	1,089.3
SB	L	97.9	171.2	167.1	633.5
WB	R	0.0	43.3	180.5	29.6
WB	T	310.7	158.7	340.5	170.3
WB	L	73.8	117.9	86.3	117.4
NB	R	0.0	0.0	0.0	0.0
NB	T	871.6	273.8	1,970.3	274.0
NB	L	84.9	66.1	89.4	72.8
EB	R	2.1	1.7	0.0	1.6
EB	T	386.0	530.0	377.9	532.1
EB	L	92.6	104.4	96.4	100.0

Table 3-33. 2050 No Build and Build Queue Lengths – Crismon Road and Germann Road Intersection

Approach Direction	Movement	2050 No Build		2050 Build	
		A.M. Max Queue (feet)	P.M. Max Queue (feet)	A.M. Max Queue (feet)	P.M. Max Queue (feet)
SB	R	0.0	0.0	4.1	40.1
SB	T	112.2	86.3	710.8	430.6
SB	L	92.0	57.6	406.0	81.2
WB	R	0.0	0.0	3.3	0.0
WB	T	229.2	190.3	215.4	194.0
WB	L	92.6	97.8	89.6	102.9
NB	R	0.0	0.0	0.0	0.0
NB	T	184.3	54.9	177.1	56.9
NB	L	112.4	65.7	102.5	68.1
EB	R	0.0	0.0	0.0	1.5
EB	T	252.7	305.8	253.2	317.4
EB	L	100.3	75.5	97.9	79.2

Table 3-34. 2050 No Build and Build Queue Lengths – Signal Butte Road and Germann Road Intersection

Approach Direction	Movement	2050 No Build		2050 Build	
		A.M. Max Queue (feet)	P.M. Max Queue (feet)	A.M. Max Queue (feet)	P.M. Max Queue (feet)
SB	R	0.0	0.0	0.0	0.0
SB	T	318.2	660.9	1,398.8	3,733.7
SB	L	125.4	453.5	473.8	3,735.2
WB	R	0.0	0.0	155.7	0.0
WB	T	206.6	160.5	204.6	160.4
WB	L	124.1	113.8	124.1	113.6
NB	R	0.0	0.0	0.0	0.0
NB	T	892.0	229.5	1,916.2	218.9
NB	L	446.3	139.5	1,585.9	135.6
EB	R	0.0	100.3	0.0	41.0
EB	T	299.4	526.4	323.3	499.6
EB	L	167.7	558.1	231.6	526.0

3.4 Traffic Operations During Construction

This section presents the traffic operations summary during project construction and identifies potential detour routes. PIRATE and the planned Phoenix Subdivision support tracks include at-grade crossings at the following locations on the adjacent roadway network:

- Sossaman Road, just south of Germann Road
- Pecos Road between Power Road and Sossaman Road
- Sossaman Road, just north of Pecos Road
- Ellsworth Road between Pecos Road (south) and Pecos Road (north)
- Crismon Road between Pecos Road and Germann Road
- Signal Butte Road between Pecos Road and Germann Road

The proposed at-grade crossings fall under Mesa jurisdiction, except for the Sossaman Road crossing just south of Germann Road, which falls in Queen Creek jurisdiction. For any work conducted in the public streets within the city or the town, the applicant would be required to obtain permits from Mesa and Queen Creek. The permit processes include providing temporary traffic control plans to maintain traffic during construction and/or to detour traffic to adjacent roadways, as needed. The temporary traffic control plans would need to be developed by the applicant and would be stipulated by Mesa's *Temporary Traffic Control Manual* (Mesa n.d.) and

the traffic control permit processes established by Queen Creek and the Town of Gilbert (Gilbert).

The project construction activities and the potential detours are expected to affect the following roadways:

- Sossaman Road
- Ellsworth Road
- Pecos Road
- Germann Road
- Crismon Road
- Signal Butte Road
- Ray Road (for potential detours)
- Power Road (for potential detours)

The agency traffic control permits generally require the temporary traffic control plans to be reviewed and approved by the respective agency at least 21 calendar days prior to the actual closure.

Pedestrian facilities are defined as sidewalks or pathways (paved or unpaved), marked or unmarked crosswalks (including school crosswalks), and bus stops within the public right-of-way. The temporary traffic control plans shall also consider impacts to any pedestrian facilities, if currently existing, within the at-grade rail crossings. Section 7.0 of Mesa's *Temporary Traffic Control Manual* requires that the pedestrian facilities be maintained through the duration of construction, but if they need to be closed for construction, then the applicant is required to prepare a pedestrian detour plan and obtain approval from the respective agency (Mesa n.d.).

Chapter 4
Conclusions

The traffic operations analysis conclusions for the existing, 2050 No Build, and 2050 Build conditions are provided below.

4.1 Existing Conditions

The study intersections of Sossaman and Pecos Roads and Ellsworth and Pecos Roads (north) operate at an acceptable LOS D or better during A.M. and P.M. peak hours. The intersection of Ellsworth and Pecos Roads (south) operates at LOS F during the P.M. peak hour while the Sossaman and Germann Roads intersection operates at LOS E during the P.M. peak hour. Currently, the existing roadways (such as Sossaman Road, Ellsworth Road, and Pecos Road) and the signalized intersections along these roadways are unable to serve the increasing volumes.

Mesa is currently widening Ellsworth Road from two lanes in each direction to three lanes in each direction, with capacity improvements at the signalized intersections. For Ellsworth Road, Mesa anticipates project completion by 2024, which should provide adequate capacity at the study intersections along this roadway.

4.2 2050 No Build and Build Conditions

A comparative analysis of the operational performance for the year 2050 No Build and Build conditions shows that all the study intersections, with exception to the Sossaman Road and Germann Road intersection, would operate at an acceptable LOS D or better during A.M. and P.M. peak hours. The Sossaman Road and Germann Road intersection would operate at an overall LOS E during both the No Build and the Build conditions for year 2050. It should be noted that the approaches for several of the study intersections during the Build scenario exhibit longer delays when compared to the No Build scenario. The longer delays in the Build scenario are mainly attributed to the presence of the train operations from the project during A.M. and P.M. peak hours. It should also be noted that the average hourly overall intersection LOS for the Build scenario would continue to be within the thresholds (with exception to the Sossaman Road and Germann Road intersection) identified in this report.

Due to high traffic volumes on these corridors during the analysis year 2050, queue lengths would likely be longer, but the maximum queues would dissipate within the first few cycles of the traffic signal operations, thereby showing that the overall intersection LOS would be within the acceptable levels identified in this report.

4.3 Traffic Operations During Construction

Jacobs, on behalf of OEA, analyzed each crossing location to evaluate adjacent study intersections impacts during construction of PIRATE and the planned Phoenix Subdivision support tracks. Construction impacts are expected to be high on heavy -traffic corridors such as Ellsworth Road, Sossaman Road and Pecos Road and the detour routes are anticipated to affect other roadways such as: Ray Road, Power Road, and Germann Road. The applicant would be responsible for preparing the temporary traffic control plans for impacts to roadways/pedestrian facilities at the proposed and existing at-grade crossing locations and should follow the procedures for obtaining a permit to work from the respective local agency.

Chapter 5
Recommended Mitigation

OEA is recommending the following mitigation measures, which include voluntary measures proposed by UP, to minimize the impacts of the rail operations on the adjacent roadways and major signalized intersections:

- UP will consult with appropriate federal, state, and local transportation agencies to determine the final design of the at-grade crossing warning devices. Warning devices on public roadways will be subject to review and approval, depending on location, by the Arizona Corporation Commission, Mesa, and Queen Creek. UP will follow standard safety designs for each at-grade crossing for proposed warning devices and signs. These designs will follow the Federal Highway Administration's *Manual on Uniform Traffic Control Devices for Streets and Highways* (2022) and the American Railway Engineering and Maintenance-of-Way Association's guidelines for railroad warning devices. UP will also comply with applicable Arizona Corporation Commission, Mesa, and Queen Creek requirements.
- UP shall conduct train operations on or over the PIRATE at-grade crossings outside the A.M. (7:00 to 9:00 a.m.) and P.M. (3:00 to 6:00 p.m.) peak periods to the maximum extent practicable.
- Prior to increasing the frequency of trains on PIRATE beyond one per day or routinely conducting trains operations at grade crossings on or over PIRATE during peak periods (7:00 to 9:00 a.m. or 3:00 to 6:00 p.m.), UP shall consult with and comply with the reasonable requirements of the Arizona Corporation Commission.
- UP shall not block at-grade crossings and adjacent signalized intersections on major arterials along PIRATE for more than 10 minutes at a time, when reasonably practical, unless mechanical failure, an obstruction on the track, or a similar emergency condition prevents a train from being moved clear of the crossing. Major arterials include Pecos Road (south and north), Sossaman Road, Germann Road, Ellsworth Road, Crismon Road, and Signal Butte Road.
- UP shall conduct the consultations required in the subsequent three mitigation measures at least 30 days prior to intersection or roadway closures and comply with any reasonable requirements of those agencies, unless it is not reasonably practical. Additionally, the requirements in the subsequent three mitigation measures, as needed, shall also apply to the Town of Gilbert.
- Prior to construction of road crossings, when reasonably practical, UP and its contractor(s) will consult with local transportation officials regarding construction phasing and temporary traffic control. UP's contractor(s) will be responsible for local agency coordination of construction schedules, detours, and temporary traffic control, as well as obtainment of necessary temporary traffic control permits from Mesa and Queen Creek. As appropriate, UP's contractor(s) will maintain egress or traffic routing to allow for passage of emergency and other vehicles.

- Prior to project-related construction, UP will consult with the Arizona Corporation Commission and Mesa regarding roadway safety and user expectations, which includes items such as pavement markings, signing, delineators, and active warning devices for vehicles, pedestrians, and bicyclists at proposed at-grade crossings.
- Prior to and during project-related construction, in accordance with temporary traffic control permitting requirements, UP's contractor(s) will install temporary traffic control, including pavement markings, signing, and detours, throughout the project limits and applicable work zones.

Chapter 6
References

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Appendix A
Existing Traffic Counts

United Civil Group

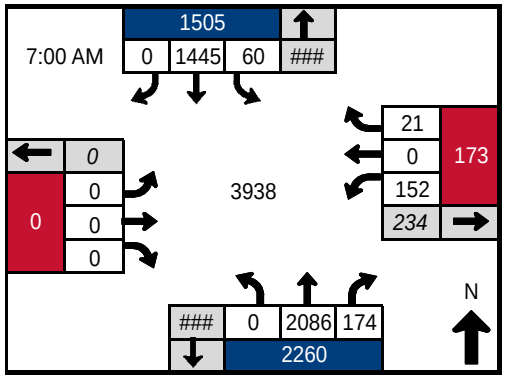
Turning Movement Count

	Speed Limit	Lt	Lt\T	T	T/Rt	Rt	Lt/T/Rt	Lt/Rt
Northbound	50			1	1			
Southbound	50	1		2				
Eastbound								
Westbound	45	1				1		

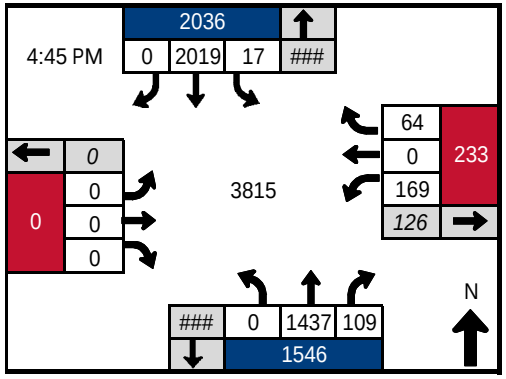
Project No: TC22031

March 29, 2022 (Tuesday)

Location: Ellsworth Road
and Pecos Road (North)
Intersection Configuration: Signalized



	Ellsworth Road				Ellsworth Road				Pecos Road (North)				Pecos Road (North)				Total	Peak Hour
	Northbound				Southbound				Eastbound				Westbound					
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds		
7:00 AM	0	569	44	0	8	347	0	0	0	0	0	0	29	0	4	0	1001	
7:15 AM	0	533	50	0	10	344	0	0	0	0	0	0	31	0	5	0	973	
7:30 AM	0	520	39	0	20	422	0	0	0	0	0	0	45	0	8	0	1054	
7:45 AM	0	464	41	0	22	332	0	0	0	0	0	0	47	0	4	0	910	3938
8:00 AM	0	490	23	0	25	329	0	0	0	0	0	0	28	0	5	0	900	3837
8:15 AM	0	496	41	0	17	348	0	0	0	0	0	0	31	0	4	0	937	3801
8:30 AM	0	478	22	0	28	358	0	0	0	0	0	0	26	0	4	0	916	3663
8:45 AM	0	401	24	0	13	318	0	0	0	0	0	0	25	0	4	0	785	3538
Peak Hour Total	0	2086	174	0	60	1445	0	0	0	0	0	0	152	0	21	0	3938	



	Ellsworth Road				Ellsworth Road				Pecos Road (North)				Pecos Road (North)				Total	Peak Hour
	Northbound				Southbound				Eastbound				Westbound					
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds		
4:00 PM	0	394	27	0	3	477	0	0	0	0	0	0	35	0	14	0	950	
4:15 PM	0	363	24	0	5	474	0	1	0	0	0	0	36	0	7	0	909	
4:30 PM	0	347	29	0	2	442	0	0	0	0	0	0	51	0	11	0	882	
4:45 PM	0	366	24	0	5	513	0	0	0	0	0	0	43	0	15	0	966	3707
5:00 PM	0	354	35	0	7	517	0	0	0	0	0	0	54	0	18	0	985	3742
5:15 PM	0	354	27	0	1	466	0	0	0	0	0	0	40	0	15	0	903	3736
5:30 PM	0	363	23	0	4	523	0	0	0	0	0	0	32	0	16	0	961	3815
5:45 PM	0	338	26	0	10	462	0	0	0	0	0	0	37	0	10	0	883	3732
Peak Hour Total	0	1437	109	0	17	2019	0	0	0	0	0	0	169	0	64	0	3815	

United Civil Group

Turning Movement Count

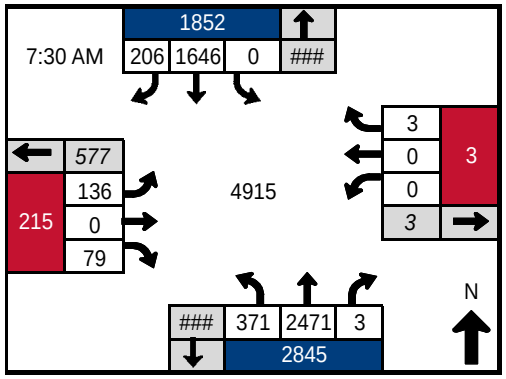
	Speed Limit	Lt	Lt\T	T	T/Rt	Rt	Lt/T/Rt	Lt/Rt
Northbound	50	1		2				
Southbound	50			2		1		
Eastbound	45	1				1		
Westbound								

Project No: TC22031

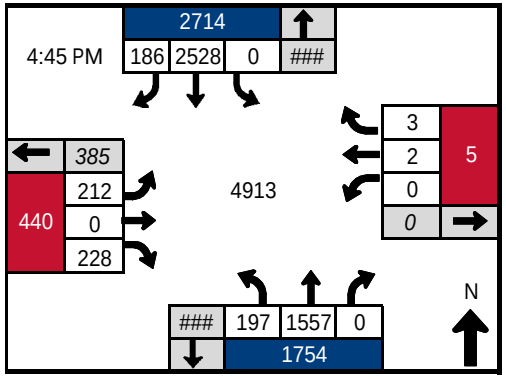
March 29, 2022 (Tuesday)

Location: Ellsworth Road
and Pecos Road (South)

Intersection Configuration: Signalized



	Ellsworth Road				Ellsworth Road				Pecos Road (South)				Pecos Road (South)				Total	Peak Hour
	Northbound				Southbound				Eastbound				Westbound					
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds		
7:00 AM	46	568	0	0	1	363	47	0	28	0	13	0	0	0	1	0	1067	
7:15 AM	78	592	0	0	1	412	38	0	24	0	18	0	0	0	0	0	1163	
7:30 AM	87	615	0	0	0	480	42	0	25	0	17	0	0	0	1	0	1267	
7:45 AM	122	621	0	0	0	398	68	0	35	0	14	0	0	0	0	0	1258	4755
8:00 AM	95	626	3	0	0	383	52	0	40	0	16	0	0	0	2	0	1217	4905
8:15 AM	67	609	0	0	0	385	44	0	36	0	32	1	0	0	0	0	1173	4915
8:30 AM	99	541	0	0	1	471	52	0	45	0	21	0	0	0	0	0	1230	4878
8:45 AM	88	490	0	0	0	379	54	0	40	1	21	0	1	0	1	0	1075	4695
Peak Hour Total	371	2471	3	0	0	1646	206	0	136	0	79	1	0	0	3	0	4915	



	Ellsworth Road				Ellsworth Road				Pecos Road (South)				Pecos Road (South)				Total	Peak Hour
	Northbound				Southbound				Eastbound				Westbound					
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds		
4:00 PM	58	423	1	0	0	581	35	0	53	0	46	0	0	0	0	0	1197	
4:15 PM	53	394	0	1	0	555	35	0	38	0	66	0	0	0	0	0	1141	
4:30 PM	62	379	0	0	0	577	40	0	51	0	56	0	0	0	0	0	1165	
4:45 PM	60	424	0	0	0	643	53	0	53	0	50	0	0	0	0	0	1283	4786
5:00 PM	45	387	0	0	0	616	33	0	52	0	72	0	0	1	0	0	1206	4795
5:15 PM	51	386	0	1	0	604	42	0	50	0	42	0	0	1	0	0	1176	4830
5:30 PM	41	360	0	0	0	665	58	0	57	0	64	0	0	0	3	0	1248	4913
5:45 PM	88	404	0	0	0	561	73	0	61	0	48	0	0	0	3	0	1238	4868
Peak Hour Total	197	1557	0	1	0	2528	186	0	212	0	228	0	0	2	3	0	4913	

UCG
United Civil Group

Turning Movement Count

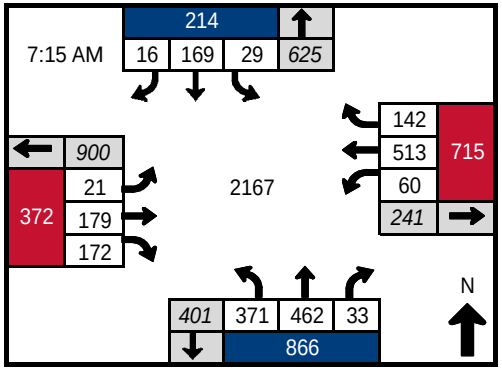
Project No: TC22031

March 29, 2022 (Tuesday)

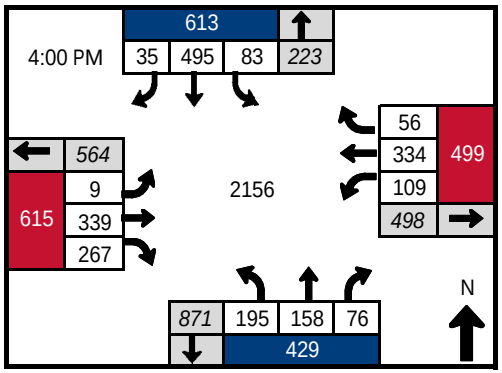
Location: Sossaman Road
and Pecos Road

Intersection Configuration: Signalized

	Speed Limit	Lt	Lt\T	T	T/Rt	Rt	Lt/T/Rt	Lt/Rt
Northbound	45	1			1			
Southbound	45	1			1			
Eastbound	45	1			1			
Westbound	45	1			1			



	Sossaman Road Northbound				Sossaman Road Southbound				Pecos Road Eastbound				Pecos Road Westbound				Total	Peak Hour
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds		
7:00 AM	134	120	3	0	5	31	4	0	6	24	20	0	24	103	30	0	504	
7:15 AM	113	118	7	0	6	26	2	0	5	44	47	0	14	137	28	0	547	
7:30 AM	102	110	10	0	4	32	4	0	4	34	50	0	13	143	35	0	541	
7:45 AM	78	125	6	0	7	48	2	0	7	52	43	0	20	127	40	0	555	2147
8:00 AM	78	109	10	0	12	63	8	0	5	49	32	0	13	106	39	0	524	2167
8:15 AM	88	66	8	0	11	52	1	0	13	55	27	0	11	71	24	0	427	2047
8:30 AM	82	61	15	0	5	24	5	0	8	43	26	0	17	102	14	0	402	1908
8:45 AM	65	63	11	0	3	22	5	0	7	49	22	0	9	65	17	0	338	1691
Peak Hour Total	371	462	33	0	29	169	16	0	21	179	172	0	60	513	142	0	2167	



	Sossaman Road Northbound				Sossaman Road Southbound				Pecos Road Eastbound				Pecos Road Westbound				Total	Peak Hour
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds		
4:00 PM	53	43	22	0	15	127	6	0	2	77	52	0	32	109	11	0	549	
4:15 PM	50	48	9	0	24	131	8	0	2	71	72	0	32	67	18	0	532	
4:30 PM	47	33	18	0	21	117	15	0	1	82	72	0	22	86	13	0	527	
4:45 PM	45	34	27	0	23	120	6	0	4	109	71	0	23	72	14	0	548	2156
5:00 PM	41	31	20	0	11	116	7	0	4	86	72	0	33	107	16	0	544	2151
5:15 PM	45	25	11	0	29	118	5	0	1	78	71	0	19	95	11	0	508	2127
5:30 PM	41	29	22	0	19	124	7	0	2	94	77	0	21	57	12	0	505	2105
5:45 PM	46	31	39	0	8	86	5	0	0	96	72	0	19	87	8	0	497	2054
Peak Hour Total	195	158	76	0	83	495	35	0	9	339	267	0	109	334	56	0	2156	

United Civil Group

2803 N. 7th Avenue

Street : Power Road
Location : S. of Pecos Road

Site: TC22031
3/31/2022
Thursday

24 Hour Volume, per Channel

SB

Interval Start				Interval Start			
3/31/2022	00:00	30	102	12:00	277	1143	
	00:15	31		12:15	289		
	00:30	17		12:30	332		
	00:45	24		12:45	245		
	01:00	15	53	13:00	198	1026	
	01:15	15		13:15	267		
	01:30	15		13:30	279		
	01:45	8		13:45	282		
	02:00	12	45	14:00	286	1377	
	02:15	9		14:15	284		
	02:30	15		14:30	389		
	02:45	9		14:45	418		
	03:00	2	26	15:00	419	1746	
	03:15	8		15:15	419		
	03:30	5		15:30	447		
	03:45	11		15:45	461		
	04:00	13	81	16:00	466	1838	
	04:15	16		16:15	458		
	04:30	16		16:30	458		
	04:45	36		16:45	456		
	05:00	40	205	17:00	436	1790	
	05:15	33		17:15	447		
	05:30	69		17:30	466		
	05:45	63		17:45	441		
	06:00	109	548	18:00	421	1620	
	06:15	103		18:15	424		
	06:30	164		18:30	418		
	06:45	172		18:45	357		
	07:00	190	1027	19:00	311	1210	
	07:15	251		19:15	331		
	07:30	298		19:30	306		
	07:45	288		19:45	262		
	08:00	300	1151	20:00	280	984	
	08:15	327		20:15	258		
	08:30	270		20:30	242		
	08:45	254		20:45	204		
	09:00	236	845	21:00	216	714	
	09:15	179		21:15	174		
	09:30	204		21:30	178		
	09:45	226		21:45	146		
	10:00	252	930	22:00	102	414	
	10:15	211		22:15	137		
	10:30	212		22:30	89		
	10:45	255		22:45	86		
	11:00	280	1049	23:00	71	201	
	11:15	244		23:15	58		
	11:30	232		23:30	39		
	11:45	293		23:45	33		

24 Hour Total
20125

00:00 - 12:00

12 Hour Count	6062
Peak Hour	07:30
Peak Volume	1213
Factor	0.93

12:00 - 00:00

12 Hour Count	14063
Peak Hour	15:45
Peak Volume	1843

Factor 0.99

United Civil Group

2803 N. 7th Avenue

Street : Sossaman Road
Location : 500 ft N of Pecos Road
Lat, Long : 33.286443, -111.669548

6/29/2022
Wednesday

24 Hour Classification

NB

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
10:00	188	1	102	49	5	18	1	0	2	10	0	0	0	0
11:00	194	3	94	51	1	26	0	0	7	11	0	1	0	0
12:00	161	0	80	51	1	13	0	0	5	10	0	1	0	0
13:00	167	2	84	43	6	16	0	0	7	9	0	0	0	0
14:00	165	1	85	55	4	8	0	0	3	8	0	1	0	0
15:00	173	0	102	47	2	17	0	1	3	1	0	0	0	0
16:00	142	0	90	38	2	11	0	0	1	0	0	0	0	0
17:00	133	0	86	34	0	12	0	0	1	0	0	0	0	0
18:00	98	1	67	23	0	6	0	0	1	0	0	0	0	0
19:00	66	0	44	17	0	5	0	0	0	0	0	0	0	0
20:00	53	0	38	9	0	6	0	0	0	0	0	0	0	0
21:00	29	0	25	4	0	0	0	0	0	0	0	0	0	0
22:00	34	0	25	7	0	2	0	0	0	0	0	0	0	0
23:00	13	0	10	3	0	0	0	0	0	0	0	0	0	0
6/30/2022 00:00	10	0	8	2	0	0	0	0	0	0	0	0	0	0
01:00	11	0	9	2	0	0	0	0	0	0	0	0	0	0
02:00	13	0	6	5	0	2	0	0	0	0	0	0	0	0
03:00	42	2	28	8	0	4	0	0	0	0	0	0	0	0
04:00	106	0	62	31	0	13	0	0	0	0	0	0	0	0
05:00	267	5	142	88	0	30	1	0	1	0	0	0	0	0
06:00	252	2	132	75	1	36	1	0	2	3	0	0	0	0
07:00	299	3	181	67	1	25	0	0	7	14	0	1	0	0
08:00	234	2	129	62	3	27	1	0	4	6	0	0	0	0
09:00	180	1	93	43	3	22	0	0	6	11	0	1	0	0
Total	3030	23	1722	814	29	299	4	1	50	83	0	5	0	0
%		0.8	56.8	26.9	1.0	9.9	0.1	0.0	1.7	2.7	0.0	0.2	0.0	0.0

United Civil Group

2803 N. 7th Avenue

Street : Sossaman Road
Location : 500 ft N of Pecos Road
Lat, Long : 33.286443, -111.669548

6/29/2022
Wednesday

24 Hour Classification

SB

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
10:00	133	6	65	29	14	13	0	0	2	4	0	0	0	0
11:00	186	4	98	47	12	21	0	0	3	0	0	1	0	0
12:00	179	1	91	51	10	20	1	0	1	3	0	1	0	0
13:00	196	5	97	52	11	19	0	0	5	7	0	0	0	0
14:00	257	2	137	72	8	27	0	1	7	3	0	0	0	0
15:00	340	4	187	109	5	28	0	0	3	4	0	0	0	0
16:00	401	2	242	97	9	46	0	0	5	0	0	0	0	0
17:00	344	2	210	99	3	29	0	0	1	0	0	0	0	0
18:00	195	0	130	48	1	16	0	0	0	0	0	0	0	0
19:00	108	0	76	26	0	6	0	0	0	0	0	0	0	0
20:00	98	0	73	18	0	7	0	0	0	0	0	0	0	0
21:00	69	0	44	17	1	6	0	0	1	0	0	0	0	0
22:00	42	0	27	14	0	1	0	0	0	0	0	0	0	0
23:00	54	0	40	14	0	0	0	0	0	0	0	0	0	0
6/30/2022 00:00	12	0	11	1	0	0	0	0	0	0	0	0	0	0
01:00	33	1	19	12	0	1	0	0	0	0	0	0	0	0
02:00	12	0	9	2	0	1	0	0	0	0	0	0	0	0
03:00	6	0	5	1	0	0	0	0	0	0	0	0	0	0
04:00	31	0	22	9	0	0	0	0	0	0	0	0	0	0
05:00	84	3	45	18	3	9	3	1	1	1	0	0	0	0
06:00	56	0	35	9	0	8	0	0	2	2	0	0	0	0
07:00	113	4	54	19	14	9	1	0	0	11	0	1	0	0
08:00	103	0	55	24	5	10	0	0	5	4	0	0	0	0
09:00	106	1	50	24	7	10	1	1	3	9	0	0	0	0
Total	3158	35	1822	812	103	287	6	3	39	48	0	3	0	0
%		1.1	57.7	25.7	3.3	9.1	0.2	0.1	1.2	1.5	0.0	0.1	0.0	0.0

United Civil Group

2803 N. 7th Avenue

Street : Sossaman Road
Location : 500 ft N of Pecos Road
Lat, Long : 33.286443, -111.669548

6/29/2022
Wednesday

24 Hour Volume

Interval Start	NB		SB		Combined	
10:00	46	188	32	133	78	321
10:15	38		36		74	
10:30	55		31		86	
10:45	49		34		83	
11:00	50	194	39	186	89	380
11:15	59		49		108	
11:30	47		61		108	
11:45	38		37		75	
12:00	22	161	47	179	69	340
12:15	35		43		78	
12:30	53		35		88	
12:45	51		54		105	
13:00	48	167	64	196	112	363
13:15	37		36		73	
13:30	40		56		96	
13:45	42		40		82	
14:00	30	165	53	257	83	422
14:15	44		55		99	
14:30	44		69		113	
14:45	47		80		127	
15:00	41	173	91	340	132	513
15:15	46		82		128	
15:30	49		93		142	
15:45	37		74		111	
16:00	22	142	90	401	112	543
16:15	48		89		137	
16:30	38		128		166	
16:45	34		94		128	
17:00	31	133	101	344	132	477
17:15	39		86		125	
17:30	30		80		110	
17:45	33		77		110	
18:00	28	98	67	195	95	293
18:15	36		47		83	
18:30	12		50		62	
18:45	22		31		53	
19:00	20	66	30	108	50	174
19:15	18		30		48	
19:30	12		25		37	
19:45	16		23		39	
20:00	14	53	19	98	33	151
20:15	13		14		27	
20:30	18		32		50	
20:45	8		33		41	
21:00	11	29	26	69	37	98
21:15	6		13		19	
21:30	4		12		16	
21:45	8		18		26	
22:00	4	34	11	42	15	76
22:15	14		4		18	
22:30	9		17		26	
22:45	7		10		17	
23:00	4	13	14	54	18	67
23:15	3		17		20	
23:30	5		15		20	
23:45	1		8		9	
6/30/2022 00:00	3	10	4	12	7	22
00:15	3		2		5	
00:30	2		3		5	
00:45	2		3		5	
01:00	2	11	8	33	10	44
01:15	6		13		19	
01:30	1		11		12	
01:45	2		1		3	
02:00	0	13	4	12	4	25
02:15	4		5		9	
02:30	3		3		6	
02:45	6		0		6	
03:00	12	42	1	6	13	48
03:15	10		2		12	
03:30	10		0		10	
03:45	10		3		13	
04:00	16	106	5	31	21	137
04:15	16		4		20	
04:30	34		7		41	
04:45	40		15		55	
05:00	50	267	21	84	71	351
05:15	55		26		81	
05:30	73		22		95	
05:45	89		15		104	
06:00	43	252	16	56	59	308
06:15	70		9		79	
06:30	62		12		74	
06:45	77		19		96	
07:00	64	299	29	113	93	412
07:15	70		20		90	
07:30	91		23		114	
07:45	74		41		115	
08:00	73	234	17	103	90	337
08:15	69		24		93	
08:30	52		38		90	
08:45	40		24		64	
09:00	35	180	25	106	60	286
09:15	38		25		63	
09:30	58		31		89	
09:45	49		25		74	

Volume Totals

	NB	SB	Combined
00:00 - 12:00	1796	875	2671
	(67.2%)	(32.8%)	
12:00 - 00:00	1234	2283	3517
	(35.1%)	(64.9%)	
24 Hours	3030	3158	6188
	(49.0%)	(51.0%)	

Peak Hours

00:00 - 12:00

	NB	SB	Combined
Started	07:15	11:00	07:00
Volume	308	186	412
Factor	0.85	0.76	0.90

12:00 - 00:00

	NB	SB	Combined
Started	12:30	16:15	16:15
Volume	189	412	563
Factor	0.89	0.80	0.85

United Civil Group

2803 N. 7th Avenue

Street : Ellsworth Road
Location : N. of Pecos Road

Site: TC22031
3/31/2022
Thursday

24 Hour Classification

NB

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
00:00	132	2	98	15	0	8	1	0	0	7	0	1	0	0
01:00	108	3	66	18	2	7	2	2	4	2	0	2	0	0
02:00	150	3	94	23	1	9	3	7	3	7	0	0	0	0
03:00	305	6	178	84	1	21	5	3	0	6	0	1	0	0
04:00	812	10	459	253	10	49	4	2	9	13	0	3	0	0
05:00	1434	16	828	391	21	106	4	1	40	14	0	12	0	1
06:00	1814	12	1156	422	27	93	8	3	54	15	1	22	0	1
07:00	1854	21	1210	377	50	74	11	2	69	21	1	17	0	1
08:00	1746	9	1093	395	49	83	14	0	69	20	0	13	0	1
09:00	1497	8	895	377	32	86	13	2	50	22	2	8	0	2
10:00	1360	14	801	320	35	76	10	5	59	34	0	6	0	0
11:00	1351	9	743	349	54	95	18	5	51	20	0	7	0	0
12:00	1341	11	750	348	41	91	11	4	51	23	1	8	1	1
13:00	1392	7	781	365	55	94	9	4	44	22	1	9	0	1
14:00	1553	15	853	407	49	122	11	1	59	22	0	13	0	1
15:00	1587	13	937	392	55	84	6	3	67	12	1	16	0	1
16:00	1646	8	1068	368	36	86	5	0	53	7	0	14	0	1
17:00	1605	11	1129	318	25	51	6	0	52	5	1	7	0	0
18:00	1297	9	933	252	19	46	2	1	23	4	0	8	0	0
19:00	1157	2	831	241	10	39	1	1	22	3	0	7	0	0
20:00	870	4	652	161	5	32	3	0	7	3	0	3	0	0
21:00	664	2	512	104	6	21	6	0	8	2	0	3	0	0
22:00	390	1	311	53	3	11	2	0	3	2	0	4	0	0
23:00	167	0	133	24	0	4	0	0	3	3	0	0	0	0
Total	26232	196	16511	6057	586	1388	155	46	800	289	8	184	1	11
%		0.7	62.9	23.1	2.2	5.3	0.6	0.2	3.0	1.1	0.0	0.7	0.0	0.0

United Civil Group

2803 N. 7th Avenue

Street : Ellsworth Road
Location : N. of Pecos Road

Site: TC22031
3/31/2022
Thursday

24 Hour Volume, per Channel

NB

Interval Start				Interval Start			
3/31/2022	00:00	37	132	12:00	355	1341	
	00:15	33		12:15	356		
	00:30	33		12:30	335		
	00:45	29		12:45	295		
	01:00	31	108	13:00	336	1392	
	01:15	22		13:15	341		
	01:30	26		13:30	303		
	01:45	29		13:45	412		
	02:00	25	150	14:00	361	1553	
	02:15	31		14:15	391		
	02:30	54		14:30	387		
	02:45	40		14:45	414		
	03:00	51	305	15:00	386	1587	
	03:15	56		15:15	362		
	03:30	88		15:30	428		
	03:45	110		15:45	411		
	04:00	132	812	16:00	362	1646	
	04:15	172		16:15	426		
	04:30	242		16:30	439		
	04:45	266		16:45	419		
	05:00	275	1434	17:00	368	1605	
	05:15	378		17:15	411		
	05:30	408		17:30	420		
	05:45	373		17:45	406		
	06:00	381	1814	18:00	351	1297	
	06:15	429		18:15	327		
	06:30	539		18:30	296		
	06:45	465		18:45	323		
	07:00	467	1854	19:00	300	1157	
	07:15	479		19:15	288		
	07:30	473		19:30	317		
	07:45	435		19:45	252		
	08:00	471	1746	20:00	257	870	
	08:15	457		20:15	250		
	08:30	401		20:30	186		
	08:45	417		20:45	177		
	09:00	354	1497	21:00	162	664	
	09:15	401		21:15	187		
	09:30	374		21:30	192		
	09:45	368		21:45	123		
	10:00	319	1360	22:00	99	390	
	10:15	357		22:15	106		
	10:30	329		22:30	96		
	10:45	355		22:45	89		
	11:00	320	1351	23:00	43	167	
	11:15	312		23:15	47		
	11:30	358		23:30	37		
	11:45	361		23:45	40		

24 Hour Total
26232

00:00 - 12:00

12 Hour Count	12563
Peak Hour	06:30
Peak Volume	1950
Factor	0.90

12:00 - 00:00

12 Hour Count	13669
Peak Hour	16:15
Peak Volume	1652

Factor 0.94

United Civil Group

2803 N. 7th Avenue

Street : Ellsworth Road
Location : N. of Pecos Road

Site: TC22031
3/31/2022
Thursday

24 Hour Classification

SB

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
00:00	129	2	78	22	1	15	5	2	3	1	0	0	0	0
01:00	117	2	57	19	0	14	7	2	5	9	0	2	0	0
02:00	137	1	69	24	4	17	11	3	4	4	0	0	0	0
03:00	327	1	129	91	11	55	10	1	12	13	0	4	0	0
04:00	1060	8	418	324	34	180	10	3	53	19	0	10	1	0
05:00	1337	11	502	415	60	178	11	2	107	20	1	28	0	2
06:00	1445	25	645	367	53	198	8	2	99	25	1	21	0	1
07:00	1352	16	590	401	52	174	6	3	70	26	0	13	1	0
08:00	1145	11	498	334	34	148	8	1	59	25	2	20	1	4
09:00	1238	10	558	360	44	150	8	3	58	32	1	13	0	1
10:00	1255	9	587	343	51	152	5	3	54	29	2	19	0	1
11:00	1302	11	642	346	53	140	8	2	62	21	0	17	0	0
12:00	1470	11	764	357	73	167	2	3	70	12	0	10	0	1
13:00	1599	13	814	414	70	173	4	4	76	4	0	26	0	1
14:00	1068	14	475	233	74	107	1	1	109	2	1	41	0	10
15:00	1001	10	492	201	65	78	3	0	85	2	2	44	5	14
16:00	1101	21	589	209	56	76	2	1	85	3	0	48	1	10
17:00	1435	12	802	325	68	112	2	0	76	1	0	35	0	2
18:00	1554	17	931	384	61	104	3	0	42	0	0	10	1	1
19:00	1232	13	740	301	36	109	2	1	23	1	0	6	0	0
20:00	1105	4	719	252	26	72	3	0	19	3	0	7	0	0
21:00	697	6	447	156	11	55	1	0	16	1	0	4	0	0
22:00	392	4	251	86	2	41	0	0	5	2	0	1	0	0
23:00	211	3	129	43	4	26	0	0	4	1	0	1	0	0
Total	23709	235	11926	6007	943	2541	120	37	1196	256	10	380	10	48
%		1.0	50.3	25.3	4.0	10.7	0.5	0.2	5.0	1.1	0.0	1.6	0.0	0.2

United Civil Group

2803 N. 7th Avenue

Street : Ellsworth Road
Location : N. of Pecos Road

Site: TC22031
3/31/2022
Thursday

24 Hour Volume, per Channel

SB

Interval Start				Interval Start		
3/31/2022	00:00	37	129	12:00	348	1470
	00:15	41		12:15	325	
	00:30	19		12:30	413	
	00:45	32		12:45	384	
	01:00	36	117	13:00	381	1599
	01:15	30		13:15	424	
	01:30	27		13:30	466	
	01:45	24		13:45	328	
	02:00	22	137	14:00	275	1068
	02:15	29		14:15	292	
	02:30	32		14:30	266	
	02:45	54		14:45	235	
	03:00	44	327	15:00	211	1001
	03:15	51		15:15	256	
	03:30	111		15:30	284	
	03:45	121		15:45	250	
	04:00	129	1060	16:00	314	1101
	04:15	239		16:15	217	
	04:30	342		16:30	291	
	04:45	350		16:45	279	
	05:00	312	1337	17:00	349	1435
	05:15	346		17:15	325	
	05:30	333		17:30	372	
	05:45	346		17:45	389	
	06:00	323	1445	18:00	357	1554
	06:15	361		18:15	433	
	06:30	401		18:30	371	
	06:45	360		18:45	393	
	07:00	353	1352	19:00	315	1232
	07:15	338		19:15	315	
	07:30	335		19:30	309	
	07:45	326		19:45	293	
	08:00	270	1145	20:00	313	1105
	08:15	260		20:15	320	
	08:30	286		20:30	271	
	08:45	329		20:45	201	
	09:00	276	1238	21:00	200	697
	09:15	321		21:15	194	
	09:30	338		21:30	161	
	09:45	303		21:45	142	
	10:00	287	1255	22:00	116	392
	10:15	336		22:15	104	
	10:30	319		22:30	96	
	10:45	313		22:45	76	
	11:00	279	1302	23:00	55	211
	11:15	308		23:15	63	
	11:30	359		23:30	47	
	11:45	356		23:45	46	

24 Hour Total
23709

00:00 - 12:00

12 Hour Count	10844
Peak Hour	06:15
Peak Volume	1475
Factor	0.92

12:00 - 00:00

12 Hour Count	12865
Peak Hour	12:45
Peak Volume	1655

Factor 0.89

United Civil Group

2803 N. 7th Avenue

Street : Germann Road
Location : 500 ft E of Ellsworth Road
Lat, Long : 32.277671, -111.628089

6/29/2022
Wednesday

24 Hour Classification

EB

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
12:00	139	1	102	22	2	8	1	2	1	0	0	0	0	0
13:00	187	1	135	32	2	10	1	4	1	1	0	0	0	0
14:00	234	1	171	51	0	5	1	2	3	0	0	0	0	0
15:00	223	1	167	45	2	6	0	0	2	0	0	0	0	0
16:00	265	2	184	60	0	15	0	1	2	0	0	1	0	0
17:00	258	2	201	47	1	6	0	0	1	0	0	0	0	0
18:00	217	0	173	36	0	7	1	0	0	0	0	0	0	0
19:00	132	0	109	20	0	3	0	0	0	0	0	0	0	0
20:00	79	0	56	20	0	3	0	0	0	0	0	0	0	0
21:00	48	0	39	9	0	0	0	0	0	0	0	0	0	0
22:00	47	0	40	7	0	0	0	0	0	0	0	0	0	0
23:00	35	0	30	5	0	0	0	0	0	0	0	0	0	0
6/30/2022 00:00	20	0	20	0	0	0	0	0	0	0	0	0	0	0
01:00	10	0	5	4	0	0	0	0	1	0	0	0	0	0
02:00	11	0	9	2	0	0	0	0	0	0	0	0	0	0
03:00	13	0	6	1	2	0	0	3	1	0	0	0	0	0
04:00	17	0	9	0	0	0	1	5	2	0	0	0	0	0
05:00	51	1	28	13	0	2	0	4	1	2	0	0	0	0
06:00	98	0	68	24	0	5	0	1	0	0	0	0	0	0
07:00	223	1	162	52	1	5	0	1	1	0	0	0	0	0
08:00	150	0	112	30	2	4	0	0	1	1	0	0	0	0
09:00	113	1	81	20	1	8	0	0	2	0	0	0	0	0
10:00	74	0	54	11	2	5	0	0	1	1	0	0	0	0
11:00	128	0	94	24	0	8	0	0	2	0	0	0	0	0
Total	2772	11	2055	535	15	100	5	23	22	5	0	1	0	0
%		0.4	74.1	19.3	0.5	3.6	0.2	0.8	0.8	0.2	0.0	0.0	0.0	0.0

United Civil Group

2803 N. 7th Avenue

Street : Germann Road
Location : 500 ft E of Ellsworth Road
Lat, Long : 32.277671, -111.628089

6/29/2022
Wednesday

24 Hour Classification

WB

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
12:00	145	0	103	26	3	6	5	0	1	1	0	0	0	0
13:00	140	0	94	29	1	10	4	1	1	0	0	0	0	0
14:00	154	0	111	27	1	8	3	2	0	2	0	0	0	0
15:00	227	0	166	46	3	9	2	0	0	1	0	0	0	0
16:00	188	0	146	34	1	6	1	0	0	0	0	0	0	0
17:00	182	0	133	37	1	10	0	0	1	0	0	0	0	0
18:00	143	0	109	23	0	7	0	0	2	2	0	0	0	0
19:00	80	0	60	17	0	2	1	0	0	0	0	0	0	0
20:00	57	0	44	6	0	7	0	0	0	0	0	0	0	0
21:00	49	0	37	10	0	1	0	0	1	0	0	0	0	0
22:00	27	0	23	4	0	0	0	0	0	0	0	0	0	0
23:00	17	0	15	2	0	0	0	0	0	0	0	0	0	0
6/30/2022 00:00	12	0	10	1	0	1	0	0	0	0	0	0	0	0
01:00	6	0	6	0	0	0	0	0	0	0	0	0	0	0
02:00	6	0	4	2	0	0	0	0	0	0	0	0	0	0
03:00	6	1	2	1	0	0	2	0	0	0	0	0	0	0
04:00	41	0	28	7	0	2	4	0	0	0	0	0	0	0
05:00	103	0	62	35	0	3	3	0	0	0	0	0	0	0
06:00	242	0	167	58	3	9	4	0	0	1	0	0	0	0
07:00	296	2	218	57	1	16	2	0	0	0	0	0	0	0
08:00	244	0	184	47	4	7	0	0	2	0	0	0	0	0
09:00	164	1	116	39	2	4	0	0	1	1	0	0	0	0
10:00	106	0	77	24	0	4	0	0	0	1	0	0	0	0
11:00	139	1	101	24	1	6	0	0	4	2	0	0	0	0
Total	2774	5	2016	556	21	118	31	3	13	11	0	0	0	0
%		0.2	72.7	20.0	0.8	4.3	1.1	0.1	0.5	0.4	0.0	0.0	0.0	0.0

United Civil Group

2803 N. 7th Avenue

Street : Germann Road
Location : 500 ft E of Ellsworth Road
Lat, Long : 32.277671, -111.628089

6/29/2022
Wednesday

24 Hour Volume

Interval Start	EB		WB		Combined	
12:00	35	139	42	145	77	284
12:15	22		40		62	
12:30	38		30		68	
12:45	44		33		77	
13:00	64	187	27	140	91	327
13:15	37		28		65	
13:30	42		36		78	
13:45	44		49		93	
14:00	57	234	42	154	99	388
14:15	49		30		79	
14:30	74		40		114	
14:45	54		42		96	
15:00	48	223	69	227	117	450
15:15	46		42		88	
15:30	56		59		115	
15:45	73		57		130	
16:00	61	265	41	188	102	453
16:15	65		48		113	
16:30	76		45		121	
16:45	63		54		117	
17:00	73	258	39	182	112	440
17:15	59		42		101	
17:30	62		48		110	
17:45	64		53		117	
18:00	59	217	41	143	100	360
18:15	56		28		84	
18:30	50		38		88	
18:45	52		36		88	
19:00	36	132	28	80	64	212
19:15	39		21		60	
19:30	26		17		43	
19:45	31		14		45	
20:00	21	79	17	57	38	136
20:15	22		14		36	
20:30	16		12		28	
20:45	20		14		34	
21:00	13	48	12	49	25	97
21:15	13		9		22	
21:30	9		14		23	
21:45	13		14		27	
22:00	20	47	3	27	23	74
22:15	9		7		16	
22:30	12		7		19	
22:45	6		10		16	
23:00	13	35	5	17	18	52
23:15	6		5		11	
23:30	11		4		15	
23:45	5		3		8	

Interval Start	EB		WB		Combined	
6/30/2022 00:00	6	20	3	12	9	32
00:15	4		3		7	
00:30	3		2		5	
00:45	7		4		11	
01:00	3	10	2	6	5	16
01:15	4		1		5	
01:30	0		2		2	
01:45	3		1		4	
02:00	2	11	1	6	3	17
02:15	3		0		3	
02:30	1		3		4	
02:45	5		2		7	
03:00	6	13	1	6	7	19
03:15	2		0		2	
03:30	4		0		4	
03:45	1		5		6	
04:00	4	17	5	41	9	58
04:15	3		8		11	
04:30	2		11		13	
04:45	8		17		25	
05:00	6	51	20	103	26	154
05:15	3		19		22	
05:30	13		21		34	
05:45	29		43		72	
06:00	24	98	50	242	74	340
06:15	16		41		57	
06:30	30		71		101	
06:45	28		80		108	
07:00	50	223	94	296	144	519
07:15	60		65		125	
07:30	50		66		116	
07:45	63		71		134	
08:00	46	150	70	244	116	394
08:15	39		70		109	
08:30	35		55		90	
08:45	30		49		79	
09:00	33	113	44	164	77	277
09:15	30		35		65	
09:30	30		44		74	
09:45	20		41		61	
10:00	17	74	31	106	48	180
10:15	14		22		36	
10:30	23		29		52	
10:45	20		24		44	
11:00	28	128	33	139	61	267
11:15	38		25		63	
11:30	28		46		74	
11:45	34		35		69	

Volume Totals

	EB	WB	Combined
00:00 - 12:00	908	1365	2273
	(39.9%)	(60.1%)	
12:00 - 00:00	1864	1409	3273
	(57.0%)	(43.0%)	
24 Hours	2772	2774	5546
	(50.0%)	(50.0%)	

Peak Hours

00:00 - 12:00

	EB	WB	Combined
Started	07:00	06:30	07:00
Volume	223	310	519
Factor	0.88	0.82	0.90

12:00 - 00:00

	EB	WB	Combined
Started	16:15	15:00	15:45
Volume	277	227	466
Factor	0.91	0.82	0.90

United Civil Group

2803 N. 7th Avenue

Street : Germann Road
Location : 500 ft E of Sossaman Road
Lat, Long : 33.277972, -111.667123

6/29/2022
Wednesday

24 Hour Classification

EB

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
10:00	210	4	123	55	1	20	1	0	3	3	0	0	0	0
11:00	225	4	136	63	2	12	0	2	4	1	0	1	0	0
12:00	226	1	134	64	3	18	2	1	3	0	0	0	0	0
13:00	247	1	141	72	8	22	0	1	2	0	0	0	0	0
14:00	314	3	186	98	3	17	0	1	5	1	0	0	0	0
15:00	393	4	252	102	2	24	0	0	6	3	0	0	0	0
16:00	428	5	299	96	3	23	0	0	2	0	0	0	0	0
17:00	466	3	330	93	2	35	0	0	3	0	0	0	0	0
18:00	315	1	234	72	1	6	0	0	1	0	0	0	0	0
19:00	201	0	155	38	0	6	0	0	2	0	0	0	0	0
20:00	139	0	94	36	0	9	0	0	0	0	0	0	0	0
21:00	116	0	89	20	0	7	0	0	0	0	0	0	0	0
22:00	44	1	29	11	0	3	0	0	0	0	0	0	0	0
23:00	25	0	19	5	0	1	0	0	0	0	0	0	0	0
6/30/2022 00:00	8	0	7	1	0	0	0	0	0	0	0	0	0	0
01:00	7	0	4	2	0	1	0	0	0	0	0	0	0	0
02:00	11	0	7	2	0	1	0	0	0	1	0	0	0	0
03:00	10	0	4	3	0	3	0	0	0	0	0	0	0	0
04:00	61	1	30	22	0	6	0	0	1	1	0	0	0	0
05:00	135	0	68	46	0	9	0	3	5	4	0	0	0	0
06:00	112	1	55	35	0	11	1	0	7	2	0	0	0	0
07:00	143	1	79	44	2	12	2	0	2	1	0	0	0	0
08:00	196	1	114	53	3	17	0	0	7	1	0	0	0	0
09:00	186	0	97	64	0	15	3	1	5	1	0	0	0	0
Total	4218	31	2686	1097	30	278	9	9	58	19	0	1	0	0
%		0.7	63.7	26.0	0.7	6.6	0.2	0.2	1.4	0.5	0.0	0.0	0.0	0.0

United Civil Group

2803 N. 7th Avenue

Street : Germann Road
Location : 500 ft E of Sossaman Road
Lat, Long : 33.277972, -111.667123

6/29/2022
Wednesday

24 Hour Classification

WB

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
10:00	247	2	132	68	9	30	1	0	5	0	0	0	0	0
11:00	231	0	119	69	8	28	3	0	4	0	0	0	0	0
12:00	197	1	117	53	5	18	0	0	2	1	0	0	0	0
13:00	167	1	90	50	8	14	3	0	1	0	0	0	0	0
14:00	174	0	103	49	6	14	0	0	1	1	0	0	0	0
15:00	193	1	108	63	2	16	0	0	3	0	0	0	0	0
16:00	175	1	105	51	4	12	0	0	2	0	0	0	0	0
17:00	165	0	95	52	1	17	0	0	0	0	0	0	0	0
18:00	141	0	100	31	0	9	0	0	1	0	0	0	0	0
19:00	126	0	82	32	0	12	0	0	0	0	0	0	0	0
20:00	78	0	52	24	0	2	0	0	0	0	0	0	0	0
21:00	75	0	58	15	0	2	0	0	0	0	0	0	0	0
22:00	40	0	28	9	0	3	0	0	0	0	0	0	0	0
23:00	10	0	8	2	0	0	0	0	0	0	0	0	0	0
6/30/2022 00:00	8	0	7	0	0	1	0	0	0	0	0	0	0	0
01:00	7	0	5	1	0	1	0	0	0	0	0	0	0	0
02:00	5	0	4	0	0	1	0	0	0	0	0	0	0	0
03:00	20	0	9	8	0	2	0	0	0	1	0	0	0	0
04:00	59	0	30	17	0	10	0	0	2	0	0	0	0	0
05:00	131	0	71	38	2	15	1	1	3	0	0	0	0	0
06:00	243	0	142	59	3	27	3	0	7	2	0	0	0	0
07:00	280	2	163	76	4	29	1	2	1	2	0	0	0	0
08:00	287	2	148	98	3	27	2	0	5	2	0	0	0	0
09:00	159	0	78	54	2	22	0	0	2	1	0	0	0	0
Total	3218	10	1854	919	57	312	14	3	39	10	0	0	0	0
%		0.3	57.6	28.6	1.8	9.7	0.4	0.1	1.2	0.3	0.0	0.0	0.0	0.0

United Civil Group

2803 N. 7th Avenue

Street : Germann Road
Location : 500 ft E of Sossaman Road
Lat, Long : 33.277972, -111.667123

6/29/2022
Wednesday

24 Hour Volume

Interval Start	EB		WB		Combined	
10:00	55	210	68	247	123	457
10:15	46		62		108	
10:30	43		68		111	
10:45	66		49		115	
11:00	50	225	55	231	105	456
11:15	45		59		104	
11:30	69		67		136	
11:45	61		50		111	
12:00	71	226	46	197	117	423
12:15	54		50		104	
12:30	57		51		108	
12:45	44		50		94	
13:00	55	247	45	167	100	414
13:15	65		41		106	
13:30	64		39		103	
13:45	63		42		105	
14:00	72	314	42	174	114	488
14:15	58		41		99	
14:30	88		40		128	
14:45	96		51		147	
15:00	84	393	54	193	138	586
15:15	107		43		150	
15:30	98		56		154	
15:45	104		40		144	
16:00	77	428	42	175	119	603
16:15	116		54		170	
16:30	127		35		162	
16:45	108		44		152	
17:00	91	466	50	165	141	631
17:15	148		36		184	
17:30	117		43		160	
17:45	110		36		146	
18:00	87	315	30	141	117	456
18:15	83		42		125	
18:30	80		36		116	
18:45	65		33		98	
19:00	55	201	28	126	83	327
19:15	62		32		94	
19:30	40		34		74	
19:45	44		32		76	
20:00	31	139	12	78	43	217
20:15	36		26		62	
20:30	32		18		50	
20:45	40		22		62	
21:00	45	116	15	75	60	191
21:15	28		24		52	
21:30	34		23		57	
21:45	9		13		22	

Interval Start	EB		WB		Combined	
22:00	14	44	7	40	21	84
22:15	8		7		15	
22:30	12		15		27	
22:45	10		11		21	
23:00	7	25	6	10	13	35
23:15	7		2		9	
23:30	8		1		9	
23:45	3		1		4	
6/30/2022 00:00	3	8	5	8	8	16
00:15	2		1		3	
00:30	1		1		2	
00:45	2		1		3	
01:00	0	7	0	7	0	14
01:15	2		2		4	
01:30	5		1		6	
01:45	0		4		4	
02:00	4	11	0	5	4	16
02:15	3		0		3	
02:30	3		4		7	
02:45	1		1		2	
03:00	0	10	3	20	3	30
03:15	2		3		5	
03:30	4		6		10	
03:45	4		8		12	
04:00	3	61	8	59	11	120
04:15	14		14		28	
04:30	18		19		37	
04:45	26		18		44	
05:00	25	135	21	131	46	266
05:15	25		29		54	
05:30	53		32		85	
05:45	32		49		81	
06:00	24	112	47	243	71	355
06:15	27		63		90	
06:30	29		63		92	
06:45	32		70		102	
07:00	28	143	58	280	86	423
07:15	31		67		98	
07:30	34		87		121	
07:45	50		68		118	
08:00	44	196	48	287	92	483
08:15	48		73		121	
08:30	44		81		125	
08:45	60		85		145	
09:00	60	186	43	159	103	345
09:15	36		39		75	
09:30	37		38		75	
09:45	53		39		92	

Volume Totals

	EB	WB	Combined
00:00 - 12:00	1304	1677	2981
	(43.7%)	(56.3%)	
12:00 - 00:00	2914	1541	4455
	(65.4%)	(34.6%)	
24 Hours	4218	3218	7436
	(56.7%)	(43.3%)	

Peak Hours

00:00 - 12:00

	EB	WB	Combined
Started	10:45	08:00	08:15
Volume	230	287	494
Factor	0.83	0.84	0.85

12:00 - 00:00

	EB	WB	Combined
Started	16:30	14:45	16:30
Volume	474	204	639
Factor	0.80	0.91	0.87

United Civil Group

2803 N. 7th Avenue

Street : Pecos Road
Location : E. of Power Road

Site: TC22031
3/31/2022
Thursday

24 Hour Classification

WB

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
00:00	16	0	13	3	0	0	0	0	0	0	0	0	0	0
01:00	15	0	15	0	0	0	0	0	0	0	0	0	0	0
02:00	16	0	12	4	0	0	0	0	0	0	0	0	0	0
03:00	25	0	10	12	0	3	0	0	0	0	0	0	0	0
04:00	86	0	45	31	1	6	0	0	3	0	0	0	0	0
05:00	189	2	97	56	2	30	0	0	1	1	0	0	0	0
06:00	526	7	301	132	19	58	1	0	7	0	0	1	0	0
07:00	974	10	593	223	42	86	1	0	18	1	0	0	0	0
08:00	808	8	467	214	34	65	2	0	15	1	0	2	0	0
09:00	621	4	335	184	20	60	0	0	13	3	0	2	0	0
10:00	603	4	357	158	24	45	1	0	13	1	0	0	0	0
11:00	604	5	346	157	21	61	2	0	11	1	0	0	0	0
12:00	514	6	280	136	23	53	5	0	9	1	1	0	0	0
13:00	527	8	320	110	20	58	3	0	6	1	0	1	0	0
14:00	568	11	330	142	12	61	5	0	5	1	0	1	0	0
15:00	581	6	331	165	23	48	0	0	5	3	0	0	0	0
16:00	663	7	413	137	25	56	9	0	13	2	1	0	0	0
17:00	552	9	361	103	10	61	2	0	6	0	0	0	0	0
18:00	508	10	331	104	17	39	3	0	3	1	0	0	0	0
19:00	394	7	277	72	10	25	1	0	1	1	0	0	0	0
20:00	294	7	199	51	6	26	5	0	0	0	0	0	0	0
21:00	201	1	149	35	1	15	0	0	0	0	0	0	0	0
22:00	95	2	71	13	1	6	2	0	0	0	0	0	0	0
23:00	32	0	27	3	0	1	0	0	1	0	0	0	0	0
Total	9412	114	5680	2245	311	863	42	0	130	18	2	7	0	0
%		1.2	60.3	23.9	3.3	9.2	0.4	0.0	1.4	0.2	0.0	0.1	0.0	0.0

United Civil Group

2803 N. 7th Avenue

Street : Pecos Road
Location : E. of Power Road

Site: TC22031
3/31/2022
Thursday

24 Hour Classification

EB

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
00:00	19	0	14	5	0	0	0	0	0	0	0	0	0	0
01:00	18	0	15	3	0	0	0	0	0	0	0	0	0	0
02:00	4	0	3	1	0	0	0	0	0	0	0	0	0	0
03:00	9	0	6	2	0	1	0	0	0	0	0	0	0	0
04:00	43	1	24	9	0	5	2	0	0	2	0	0	0	0
05:00	153	1	73	61	2	14	0	0	1	1	0	0	0	0
06:00	223	4	119	64	8	23	1	1	0	3	0	0	0	0
07:00	267	3	143	81	13	22	1	0	4	0	0	0	0	0
08:00	277	5	157	83	11	16	1	0	3	1	0	0	0	0
09:00	221	8	110	67	5	24	2	0	4	1	0	0	0	0
10:00	258	4	148	64	9	20	1	1	7	4	0	0	0	0
11:00	348	6	192	114	4	25	0	1	4	2	0	0	0	0
12:00	404	2	231	105	12	38	3	1	9	3	0	0	0	0
13:00	355	8	188	125	9	17	1	1	5	1	0	0	0	0
14:00	410	5	241	117	10	27	1	1	8	0	0	0	0	0
15:00	557	12	325	140	25	46	1	1	5	2	0	0	0	0
16:00	580	9	358	145	31	33	0	0	4	0	0	0	0	0
17:00	605	5	392	137	25	38	0	0	8	0	0	0	0	0
18:00	559	6	374	128	20	30	0	0	0	1	0	0	0	0
19:00	453	7	309	102	6	24	0	0	5	0	0	0	0	0
20:00	353	4	239	85	1	20	0	0	4	0	0	0	0	0
21:00	201	0	155	36	2	8	0	0	0	0	0	0	0	0
22:00	107	0	81	24	0	1	0	0	0	1	0	0	0	0
23:00	51	0	39	11	0	1	0	0	0	0	0	0	0	0
Total	6475	90	3936	1709	193	433	14	7	71	22	0	0	0	0
%		1.4	60.8	26.4	3.0	6.7	0.2	0.1	1.1	0.3	0.0	0.0	0.0	0.0

United Civil Group

2803 N. 7th Avenue

Street : Pecos Road
Location : E. of Power Road

Site: TC22031
3/31/2022
Thursday

24 Hour Volume

Interval Start	WB		EB		Combined	
00:00	7	16	4	19	11	35
00:15	4		6		10	
00:30	3		5		8	
00:45	2		4		6	
01:00	2	15	4	18	6	33
01:15	5		4		9	
01:30	5		8		13	
01:45	3		2		5	
02:00	5	16	2	4	7	20
02:15	4		0		4	
02:30	1		2		3	
02:45	6		0		6	
03:00	3	25	2	9	5	34
03:15	2		2		4	
03:30	10		2		12	
03:45	10		3		13	
04:00	14	86	4	43	18	129
04:15	13		10		23	
04:30	23		15		38	
04:45	36		14		50	
05:00	38	189	52	153	90	342
05:15	43		30		73	
05:30	43		25		68	
05:45	65		46		111	
06:00	90	526	60	223	150	749
06:15	100		56		156	
06:30	146		49		195	
06:45	190		58		248	
07:00	223	974	66	267	289	1241
07:15	260		60		320	
07:30	262		58		320	
07:45	229		83		312	
08:00	206	808	80	277	286	1085
08:15	236		85		321	
08:30	204		60		264	
08:45	162		52		214	
09:00	179	621	51	221	230	842
09:15	139		67		206	
09:30	138		55		193	
09:45	165		48		213	
10:00	154	603	62	258	216	861
10:15	145		68		213	
10:30	159		72		231	
10:45	145		56		201	
11:00	159	604	93	348	252	952
11:15	151		82		233	
11:30	150		87		237	
11:45	144		86		230	

Interval Start	WB		EB		Combined	
12:00	135	514	100	404	235	918
12:15	139		106		245	
12:30	111		99		210	
12:45	129		99		228	
13:00	121	527	98	355	219	882
13:15	132		72		204	
13:30	125		100		225	
13:45	149		85		234	
14:00	152	568	85	410	237	978
14:15	142		98		240	
14:30	131		94		225	
14:45	143		133		276	
15:00	163	581	130	557	293	1138
15:15	157		121		278	
15:30	127		173		300	
15:45	134		133		267	
16:00	181	663	184	580	365	1243
16:15	173		129		302	
16:30	162		142		304	
16:45	147		125		272	
17:00	162	552	126	605	288	1157
17:15	154		163		317	
17:30	99		173		272	
17:45	137		143		280	
18:00	133	508	186	559	319	1067
18:15	154		123		277	
18:30	120		139		259	
18:45	101		111		212	
19:00	108	394	140	453	248	847
19:15	95		120		215	
19:30	118		96		214	
19:45	73		97		170	
20:00	91	294	113	353	204	647
20:15	100		93		193	
20:30	53		67		120	
20:45	50		80		130	
21:00	66	201	54	201	120	402
21:15	50		57		107	
21:30	48		43		91	
21:45	37		47		84	
22:00	36	95	26	107	62	202
22:15	30		24		54	
22:30	14		38		52	
22:45	15		19		34	
23:00	10	32	14	51	24	83
23:15	6		16		22	
23:30	5		11		16	
23:45	11		10		21	

Volume Totals

	WB	EB	Combined
00:00 - 12:00	4483	1840	6323
	(70.9%)	(29.1%)	
12:00 - 00:00	4929	4635	9564
	(51.5%)	(48.5%)	
24 Hours	9412	6475	15887
	(59.2%)	(40.8%)	

Peak Hours

00:00 - 12:00

	WB	EB	Combined
Started	07:00	11:00	07:00
Volume	974	348	1241
Factor	0.93	0.94	0.97

12:00 - 00:00

	WB	EB	Combined
Started	16:00	17:15	16:00
Volume	663	665	1243
Factor	0.92	0.89	0.85

United Civil Group

2803 N. 7th Avenue

Street : Pecos Road
Location : E. of Signal Butte Road

Site: TC22031
3/31/2022
Thursday

24 Hour Classification

WB

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
00:00	18	0	10	5	0	3	0	0	0	0	0	0	0	0
01:00	12	0	9	0	0	3	0	0	0	0	0	0	0	0
02:00	14	0	10	0	0	3	0	0	0	1	0	0	0	0
03:00	10	0	0	2	0	3	4	0	0	1	0	0	0	0
04:00	20	0	5	4	0	0	6	0	0	5	0	0	0	0
05:00	38	0	15	6	0	2	6	0	2	7	0	0	0	0
06:00	78	0	45	12	4	9	5	0	0	3	0	0	0	0
07:00	172	1	109	25	5	16	4	0	5	7	0	0	0	0
08:00	156	0	75	44	10	14	1	0	5	7	0	0	0	0
09:00	97	0	46	26	3	11	3	0	2	6	0	0	0	0
10:00	142	2	57	39	7	11	11	0	6	9	0	0	0	0
11:00	117	3	57	24	8	9	6	0	3	7	0	0	0	0
12:00	129	0	52	39	2	12	14	0	5	5	0	0	0	0
13:00	124	0	66	27	8	6	5	0	3	9	0	0	0	0
14:00	166	2	87	49	1	14	2	1	2	7	0	1	0	0
15:00	199	2	122	47	7	13	4	0	2	2	0	0	0	0
16:00	249	2	170	56	2	14	1	0	4	0	0	0	0	0
17:00	229	0	170	45	0	13	0	0	0	1	0	0	0	0
18:00	156	1	119	34	0	2	0	0	0	0	0	0	0	0
19:00	89	0	67	17	0	4	0	1	0	0	0	0	0	0
20:00	43	0	29	7	0	6	0	0	0	1	0	0	0	0
21:00	31	0	25	3	0	3	0	0	0	0	0	0	0	0
22:00	16	0	12	2	0	1	0	0	0	1	0	0	0	0
23:00	14	0	9	2	0	1	1	0	0	1	0	0	0	0
Total	2319	13	1366	515	57	173	73	2	39	80	0	1	0	0
%		0.6	58.9	22.2	2.5	7.5	3.1	0.1	1.7	3.4	0.0	0.0	0.0	0.0

United Civil Group

2803 N. 7th Avenue

Street : Pecos Road
Location : E. of Signal Butte Road

Site: TC22031
3/31/2022
Thursday

24 Hour Classification

EB

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
00:00	11	0	2	7	0	2	0	0	0	0	0	0	0	0
01:00	6	0	3	0	0	2	0	0	0	1	0	0	0	0
02:00	5	0	1	1	0	3	0	0	0	0	0	0	0	0
03:00	19	1	2	1	0	4	1	4	0	4	0	2	0	0
04:00	23	0	11	4	0	0	0	3	0	5	0	0	0	0
05:00	58	0	24	18	1	9	0	0	1	5	0	0	0	0
06:00	166	1	70	51	13	20	3	1	2	5	0	0	0	0
07:00	185	0	85	55	9	20	7	0	1	8	0	0	0	0
08:00	206	2	134	32	2	17	4	1	5	7	0	2	0	0
09:00	106	2	34	29	8	13	6	0	7	7	0	0	0	0
10:00	106	0	45	27	4	9	4	5	6	6	0	0	0	0
11:00	126	0	50	34	5	17	3	2	7	8	0	0	0	0
12:00	129	2	52	37	5	12	8	2	5	6	0	0	0	0
13:00	99	1	53	26	4	4	4	0	4	3	0	0	0	0
14:00	141	1	77	39	3	10	2	0	4	5	0	0	0	0
15:00	147	1	94	26	1	10	5	2	7	1	0	0	0	0
16:00	142	0	94	31	2	7	2	2	3	1	0	0	0	0
17:00	105	0	69	28	0	6	0	1	1	0	0	0	0	0
18:00	102	0	66	23	0	10	0	0	1	2	0	0	0	0
19:00	69	0	42	22	0	4	0	0	1	0	0	0	0	0
20:00	68	0	42	18	0	7	0	0	0	1	0	0	0	0
21:00	40	0	26	9	0	4	1	0	0	0	0	0	0	0
22:00	35	0	23	8	0	2	1	0	0	1	0	0	0	0
23:00	17	0	12	2	0	2	0	0	0	1	0	0	0	0
Total	2111	11	1111	528	57	194	51	23	55	77	0	4	0	0
%		0.5	52.6	25.0	2.7	9.2	2.4	1.1	2.6	3.6	0.0	0.2	0.0	0.0

United Civil Group

2803 N. 7th Avenue

Street : Pecos Road
Location : E. of Signal Butte Road

Site: TC22031
3/31/2022
Thursday

24 Hour Volume

Interval Start	WB		EB		Combined	
00:00	3	18	5	11	8	29
00:15	9		1		10	
00:30	5		1		6	
00:45	1		4		5	
01:00	4	12	0	6	4	18
01:15	1		0		1	
01:30	1		2		3	
01:45	6		4		10	
02:00	7	14	0	5	7	19
02:15	3		3		6	
02:30	2		2		4	
02:45	2		0		2	
03:00	0	10	2	19	2	29
03:15	2		7		9	
03:30	4		6		10	
03:45	4		4		8	
04:00	4	20	6	23	10	43
04:15	4		4		8	
04:30	4		8		12	
04:45	8		5		13	
05:00	8	38	10	58	18	96
05:15	2		14		16	
05:30	7		10		17	
05:45	21		24		45	
06:00	17	78	49	166	66	244
06:15	16		45		61	
06:30	17		34		51	
06:45	28		38		66	
07:00	46	172	45	185	91	357
07:15	37		51		88	
07:30	40		43		83	
07:45	49		46		95	
08:00	49	156	71	206	120	362
08:15	47		48		95	
08:30	25		49		74	
08:45	35		38		73	
09:00	22	97	25	106	47	203
09:15	21		27		48	
09:30	24		22		46	
09:45	30		32		62	
10:00	28	142	22	106	50	248
10:15	30		29		59	
10:30	37		22		59	
10:45	47		33		80	
11:00	30	117	31	126	61	243
11:15	29		19		48	
11:30	32		36		68	
11:45	26		40		66	
12:00	39	129	31	129	70	258
12:15	37		27		64	
12:30	33		26		59	
12:45	20		45		65	
13:00	29	124	27	99	56	223
13:15	37		28		65	
13:30	32		23		55	
13:45	26		21		47	
14:00	31	166	30	141	61	307
14:15	50		46		96	
14:30	32		25		57	
14:45	53		40		93	
15:00	39	199	40	147	79	346
15:15	44		33		77	
15:30	62		35		97	
15:45	54		39		93	
16:00	81	249	36	142	117	391
16:15	53		41		94	
16:30	50		38		88	
16:45	65		27		92	
17:00	58	229	35	105	93	334
17:15	64		26		90	
17:30	51		26		77	
17:45	56		18		74	
18:00	55	156	25	102	80	258
18:15	39		31		70	
18:30	33		21		54	
18:45	29		25		54	
19:00	28	89	14	69	42	158
19:15	21		25		46	
19:30	22		15		37	
19:45	18		15		33	
20:00	10	43	29	68	39	111
20:15	15		15		30	
20:30	10		14		24	
20:45	8		10		18	
21:00	8	31	11	40	19	71
21:15	5		7		12	
21:30	9		12		21	
21:45	9		10		19	
22:00	5	16	13	35	18	51
22:15	8		10		18	
22:30	2		6		8	
22:45	1		6		7	
23:00	3	14	4	17	7	31
23:15	3		5		8	
23:30	4		3		7	
23:45	4		5		9	

Volume Totals

	WB	EB	Combined
00:00 - 12:00	874 (46.2%)	1017 (53.8%)	1891
12:00 - 00:00	1445 (56.9%)	1094 (43.1%)	2539
24 Hours	2319 (52.3%)	2111 (47.7%)	4430

Peak Hours

00:00 - 12:00

	WB	EB	Combined
Started	07:30	07:45	07:30
Volume	185	214	393
Factor	0.94	0.75	0.82

12:00 - 00:00

	WB	EB	Combined
Started	15:30	15:45	15:30
Volume	250	154	401
Factor	0.77	0.94	0.86

United Civil Group

2803 N. 7th Avenue

Street : Pecos Road
Location : W. of Power Road

Site: TC22031
4/12/2022
Tuesday

24 Hour Classification

EB

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
12:00	625	2	351	174	24	61	0	1	10	0	0	2	0	0
13:00	658	4	352	207	20	45	1	0	23	3	0	3	0	0
14:00	626	7	309	162	43	62	2	0	35	2	0	4	0	0
15:00	575	5	295	128	42	59	1	0	36	1	0	8	0	0
16:00	570	7	280	120	52	55	1	0	46	1	0	8	0	0
17:00	734	2	407	221	27	63	0	0	10	0	0	4	0	0
18:00	541	0	343	129	21	42	0	0	5	0	0	1	0	0
19:00	403	1	263	94	8	35	0	0	2	0	0	0	0	0
20:00	222	0	154	48	0	16	0	0	2	1	0	1	0	0
21:00	122	1	87	21	0	12	0	0	0	1	0	0	0	0
22:00	69	1	53	9	0	6	0	0	0	0	0	0	0	0
23:00	34	0	24	8	0	2	0	0	0	0	0	0	0	0
4/13/2022 00:00	26	0	19	6	0	1	0	0	0	0	0	0	0	0
01:00	14	0	10	2	0	2	0	0	0	0	0	0	0	0
02:00	17	0	13	2	0	1	0	0	1	0	0	0	0	0
03:00	84	0	36	34	0	14	0	0	0	0	0	0	0	0
04:00	187	0	85	69	3	27	0	0	1	2	0	0	0	0
05:00	350	1	187	87	11	50	0	1	10	0	0	3	0	0
06:00	528	1	306	130	19	52	2	1	15	2	0	0	0	0
07:00	537	1	276	173	14	58	1	1	10	1	0	2	0	0
08:00	430	1	249	102	11	56	0	1	8	1	0	1	0	0
09:00	488	0	301	118	11	45	3	1	7	2	0	0	0	0
10:00	588	3	383	132	12	46	2	0	7	0	0	3	0	0
11:00	647	4	361	174	29	56	3	1	17	0	0	2	0	0
Total	9075	41	5144	2350	347	866	16	7	245	17	0	42	0	0
%		0.5	56.7	25.9	3.8	9.5	0.2	0.1	2.7	0.2	0.0	0.5	0.0	0.0

United Civil Group

2803 N. 7th Avenue

Street : Pecos Road
Location : W. of Power Road

Site: TC22031
4/12/2022
Tuesday

24 Hour Volume, per Channel

EB

Interval Start			Interval Start		
12:00	151	625	4/13/2022 00:00	8	26
12:15	165		00:15	6	
12:30	149		00:30	8	
12:45	160		00:45	4	
13:00	163	658	01:00	1	14
13:15	185		01:15	6	
13:30	163		01:30	4	
13:45	147		01:45	3	
14:00	180	626	02:00	3	17
14:15	131		02:15	1	
14:30	141		02:30	5	
14:45	174		02:45	8	
15:00	169	575	03:00	7	84
15:15	141		03:15	13	
15:30	152		03:30	24	
15:45	113		03:45	40	
16:00	130	570	04:00	25	187
16:15	122		04:15	46	
16:30	146		04:30	45	
16:45	172		04:45	71	
17:00	192	734	05:00	60	350
17:15	201		05:15	89	
17:30	179		05:30	102	
17:45	162		05:45	99	
18:00	122	541	06:00	114	528
18:15	144		06:15	124	
18:30	131		06:30	151	
18:45	144		06:45	139	
19:00	132	403	07:00	171	537
19:15	108		07:15	116	
19:30	89		07:30	139	
19:45	74		07:45	111	
20:00	67	222	08:00	97	430
20:15	55		08:15	114	
20:30	49		08:30	100	
20:45	51		08:45	119	
21:00	37	122	09:00	101	488
21:15	34		09:15	116	
21:30	25		09:30	118	
21:45	26		09:45	153	
22:00	27	69	10:00	130	588
22:15	20		10:15	145	
22:30	11		10:30	140	
22:45	11		10:45	173	
23:00	10	34	11:00	163	647
23:15	9		11:15	164	
23:30	7		11:30	172	
23:45	8		11:45	148	

24 Hour Total
9075

00:00 - 12:00

12 Hour Count	3896
Peak Hour	10:45
Peak Volume	672
Factor	0.97

12:00 - 00:00

12 Hour Count	5179
Peak Hour	16:45
Peak Volume	744

Factor 0.93

United Civil Group

2803 N. 7th Avenue

Street : Pecos Road
Location : W. of Power Road

Site: TC22031
3/31/2022
Thursday

24 Hour Classification

WB

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
00:00	36	0	31	4	0	1	0	0	0	0	0	0	0	0
01:00	19	0	17	2	0	0	0	0	0	0	0	0	0	0
02:00	28	0	20	4	1	2	0	0	0	1	0	0	0	0
03:00	34	0	19	10	2	3	0	0	0	0	0	0	0	0
04:00	117	2	70	25	2	10	5	0	3	0	0	0	0	0
05:00	234	8	131	56	5	25	4	0	2	1	1	0	0	1
06:00	515	16	286	93	20	58	14	1	14	5	3	1	1	3
07:00	913	17	553	135	54	76	41	0	16	9	1	11	0	0
08:00	819	12	478	187	41	39	15	1	31	6	0	8	0	1
09:00	694	13	411	152	35	46	10	0	16	4	0	5	1	1
10:00	710	9	408	171	44	37	11	0	21	3	1	5	0	0
11:00	704	9	418	152	41	55	2	0	23	0	0	4	0	0
12:00	663	4	405	149	28	41	5	0	25	0	0	5	0	1
13:00	666	15	391	141	31	51	7	1	21	2	0	6	0	0
14:00	717	23	398	156	35	64	5	0	27	6	0	3	0	0
15:00	748	24	397	147	54	83	11	1	21	2	1	6	0	1
16:00	908	26	488	155	61	112	14	1	32	7	2	7	2	1
17:00	760	20	430	117	48	94	13	1	26	5	1	2	0	3
18:00	758	20	431	130	25	108	16	0	20	5	1	1	0	1
19:00	595	15	379	107	19	50	9	0	11	2	0	3	0	0
20:00	446	7	278	92	7	46	8	0	6	0	2	0	0	0
21:00	344	7	227	52	13	32	6	0	4	1	1	1	0	0
22:00	179	2	139	25	1	10	2	0	0	0	0	0	0	0
23:00	82	3	55	14	2	8	0	0	0	0	0	0	0	0
Total	11689	252	6860	2276	569	1051	198	6	319	59	14	68	4	13
%		2.2	58.7	19.5	4.9	9.0	1.7	0.1	2.7	0.5	0.1	0.6	0.0	0.1

United Civil Group

2803 N. 7th Avenue

Street : Pecos Road
Location : W. of Power Road

Site: TC22031
3/31/2022
Thursday

24 Hour Volume, per Channel

WB

Interval Start				Interval Start			
3/31/2022	00:00	10	36	12:00	170	663	
	00:15	12		12:15	180		
	00:30	9		12:30	159		
	00:45	5		12:45	154		
	01:00	4	19	13:00	176	666	
	01:15	8		13:15	161		
	01:30	2		13:30	160		
	01:45	5		13:45	169		
	02:00	6	28	14:00	169	717	
	02:15	5		14:15	182		
	02:30	3		14:30	188		
	02:45	14		14:45	178		
	03:00	4	34	15:00	186	748	
	03:15	5		15:15	207		
	03:30	7		15:30	158		
	03:45	18		15:45	197		
	04:00	19	117	16:00	202	908	
	04:15	19		16:15	258		
	04:30	31		16:30	221		
	04:45	48		16:45	227		
	05:00	38	234	17:00	211	760	
	05:15	50		17:15	185		
	05:30	65		17:30	183		
	05:45	81		17:45	181		
	06:00	96	515	18:00	165	758	
	06:15	95		18:15	205		
	06:30	155		18:30	205		
	06:45	169		18:45	183		
	07:00	183	913	19:00	163	595	
	07:15	262		19:15	143		
	07:30	276		19:30	166		
	07:45	192		19:45	123		
	08:00	202	819	20:00	127	446	
	08:15	187		20:15	129		
	08:30	236		20:30	103		
	08:45	194		20:45	87		
	09:00	200	694	21:00	120	344	
	09:15	175		21:15	72		
	09:30	148		21:30	93		
	09:45	171		21:45	59		
	10:00	194	710	22:00	69	179	
	10:15	169		22:15	51		
	10:30	177		22:30	33		
	10:45	170		22:45	26		
	11:00	196	704	23:00	24	82	
	11:15	191		23:15	23		
	11:30	150		23:30	18		
	11:45	167		23:45	17		

24 Hour Total
11689

00:00 - 12:00

12 Hour Count	4823
Peak Hour	07:15
Peak Volume	932
Factor	0.84

12:00 - 00:00

12 Hour Count	6866
Peak Hour	16:15
Peak Volume	917

Factor 0.89

United Civil Group

2803 N. 7th Avenue

Street : Power Road
Location : S. of Pecos Road

Site: TC22031
4/12/2022
Tuesday

24 Hour Classification

NB

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
13:00	898	10	483	247	30	86	2	0	36	2	0	2	0	0
14:00	1025	9	578	242	41	111	3	0	35	1	0	5	0	0
15:00	1022	7	553	235	77	87	2	0	49	3	0	7	0	2
16:00	1040	12	638	235	46	71	1	0	27	1	0	7	0	2
17:00	1026	8	619	214	60	74	2	0	33	0	0	15	0	1
18:00	893	15	496	222	47	85	0	0	18	2	0	8	0	0
19:00	699	1	446	150	18	59	1	0	22	0	0	1	0	1
20:00	485	1	342	90	5	35	0	0	9	0	0	3	0	0
21:00	310	0	223	55	6	24	0	0	2	0	0	0	0	0
22:00	163	1	125	28	0	9	0	0	0	0	0	0	0	0
23:00	90	0	77	7	0	5	0	0	1	0	0	0	0	0
4/13/2022 00:00	44	1	34	7	0	1	0	0	1	0	0	0	0	0
01:00	27	0	20	5	1	0	0	0	1	0	0	0	0	0
02:00	22	0	18	2	0	2	0	0	0	0	0	0	0	0
03:00	48	0	28	12	0	6	0	0	1	1	0	0	0	0
04:00	125	0	73	26	0	21	0	0	5	0	0	0	0	0
05:00	329	3	179	85	3	47	0	0	11	0	0	1	0	0
06:00	771	5	390	209	46	91	0	0	26	0	0	4	0	0
07:00	1430	13	778	305	130	113	5	0	54	2	0	23	1	6
08:00	1481	18	738	344	129	141	4	0	66	8	1	25	2	5
09:00	1044	10	580	270	41	96	1	0	32	5	0	9	0	0
10:00	968	6	513	253	38	108	2	1	40	1	0	6	0	0
11:00	975	6	527	245	42	112	2	0	29	1	0	11	0	0
12:00	1084	9	600	275	32	130	3	0	26	3	0	6	0	0
Total	15999	135	9058	3763	792	1514	28	1	524	30	1	133	3	17
%		0.8	56.6	23.5	5.0	9.5	0.2	0.0	3.3	0.2	0.0	0.8	0.0	0.1

United Civil Group

2803 N. 7th Avenue

Street : Power Road
Location : S. of Pecos Road

Site: TC22031
4/12/2022
Tuesday

24 Hour Volume, per Channel

NB

Interval Start			Interval Start		
13:00	214	898	01:00	6	27
13:15	210		01:15	9	
13:30	227		01:30	2	
13:45	247		01:45	10	
14:00	251	1025	02:00	4	22
14:15	252		02:15	0	
14:30	236		02:30	4	
14:45	286		02:45	14	
15:00	255	1022	03:00	12	48
15:15	223		03:15	7	
15:30	263		03:30	10	
15:45	281		03:45	19	
16:00	275	1040	04:00	19	125
16:15	268		04:15	19	
16:30	271		04:30	30	
16:45	226		04:45	57	
17:00	238	1026	05:00	67	329
17:15	270		05:15	53	
17:30	252		05:30	86	
17:45	266		05:45	123	
18:00	279	893	06:00	139	771
18:15	226		06:15	158	
18:30	201		06:30	197	
18:45	187		06:45	277	
19:00	197	699	07:00	282	1430
19:15	168		07:15	334	
19:30	201		07:30	392	
19:45	133		07:45	422	
20:00	151	485	08:00	437	1481
20:15	114		08:15	357	
20:30	119		08:30	369	
20:45	101		08:45	318	
21:00	101	310	09:00	277	1044
21:15	74		09:15	260	
21:30	71		09:30	241	
21:45	64		09:45	266	
22:00	43	163	10:00	267	968
22:15	56		10:15	215	
22:30	37		10:30	259	
22:45	27		10:45	227	
23:00	32	90	11:00	246	975
23:15	25		11:15	223	
23:30	20		11:30	247	
23:45	13		11:45	259	
4/13/2022 00:00	12	44	12:00	324	1084
00:15	14		12:15	254	
00:30	11		12:30	256	
00:45	7		12:45	250	

24 Hour Total
15999

00:00 - 12:00

12 Hour Count	7264
Peak Hour	07:30
Peak Volume	1608
Factor	0.92

12:00 - 00:00

12 Hour Count	8735
Peak Hour	15:45
Peak Volume	1095

Factor 0.97

United Civil Group

2803 N. 7th Avenue

Street : Power Road
Location : S. of Pecos Road

Site: TC22031
3/31/2022
Thursday

24 Hour Classification

SB

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
00:00	102	1	84	12	0	1	0	0	0	4	0	0	0	0
01:00	53	0	39	8	0	3	0	0	2	1	0	0	0	0
02:00	45	0	36	4	0	3	0	0	1	1	0	0	0	0
03:00	26	0	17	7	0	2	0	0	0	0	0	0	0	0
04:00	81	0	48	18	0	10	0	1	1	3	0	0	0	0
05:00	205	2	129	50	1	16	1	0	6	0	0	0	0	0
06:00	548	2	320	155	9	32	2	0	20	2	0	5	0	1
07:00	1027	10	660	210	35	56	3	0	35	5	0	11	0	2
08:00	1151	6	696	290	37	72	1	0	39	2	0	6	0	2
09:00	845	3	524	195	17	65	2	0	26	6	0	7	0	0
10:00	930	10	580	235	15	46	0	0	30	4	0	10	0	0
11:00	1049	9	672	235	27	58	2	0	36	1	0	8	0	1
12:00	1143	9	722	265	33	65	7	0	30	1	0	10	1	0
13:00	1026	3	663	219	30	61	3	0	39	2	0	5	0	1
14:00	1377	9	900	277	54	69	1	1	52	1	0	12	0	1
15:00	1746	14	1114	384	59	98	3	0	51	3	0	19	0	1
16:00	1838	17	1191	353	87	86	4	0	69	3	0	24	1	3
17:00	1790	20	1157	350	79	86	1	0	72	1	0	23	0	1
18:00	1620	7	1134	291	50	60	4	0	53	1	1	19	0	0
19:00	1210	10	859	231	23	50	0	0	25	0	1	11	0	0
20:00	984	9	707	206	15	22	2	0	15	2	0	6	0	0
21:00	714	10	531	134	3	28	1	0	6	0	0	1	0	0
22:00	414	2	318	80	4	7	0	0	3	0	0	0	0	0
23:00	201	3	165	26	0	4	0	0	2	1	0	0	0	0
Total	20125	156	13266	4235	578	1000	37	2	613	44	2	177	2	13
%		0.8	65.9	21.0	2.9	5.0	0.2	0.0	3.0	0.2	0.0	0.9	0.0	0.1

Appendix B
Future Development Figures

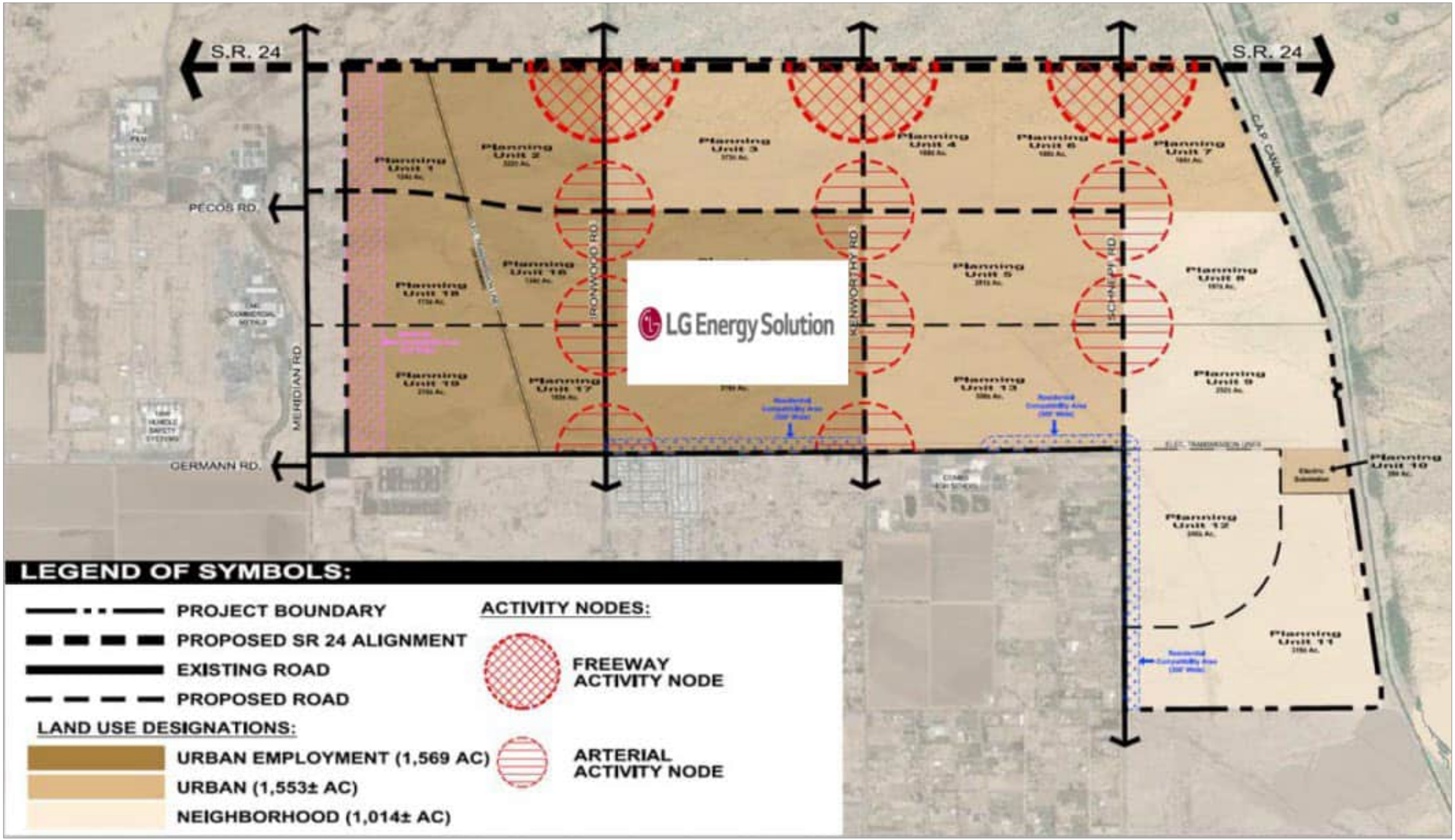
Figure B-1. Industrial and Commercial Developments within and near the Study Area - North of SR 202 Loop and SR 24 (Mesa)



Figure B-2. Industrial and Commercial Developments within and near the Study Area - South of SR 202 loop and SR 24 (Mesa)



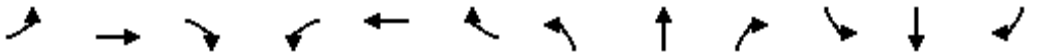
Figure B-3. Additional Developments in Queen Creek Considered in the Travel Demand Model



Appendix C
Synchro Analysis Outputs

HCM Signalized Intersection Capacity Analysis
7: Power Rd & Pecos Rd

08/26/2022



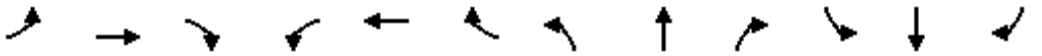
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	193	280	29	610	212	519	1512	38	123	565	58
Future Volume (vph)	117	193	280	29	610	212	519	1512	38	123	565	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.91		1.00	0.91	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	5085	1583	3433	5067		1770	5014	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3539	1583	1770	5085	1583	3433	5067		1770	5014	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	127	210	304	32	663	230	564	1643	41	134	614	63
RTOR Reduction (vph)	0	0	253	0	0	186	0	2	0	0	11	0
Lane Group Flow (vph)	127	210	51	32	663	44	564	1682	0	134	666	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)	15.5	18.5	18.5	18.1	21.1	21.1	26.3	42.9		12.5	29.1	
Effective Green, g (s)	15.5	18.5	18.5	18.1	21.1	21.1	26.3	42.9		12.5	29.1	
Actuated g/C Ratio	0.14	0.17	0.17	0.16	0.19	0.19	0.24	0.39		0.11	0.26	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Grp Cap (vph)	249	595	266	291	975	303	820	1976		201	1326	
v/s Ratio Prot	c0.07	0.06		0.02	c0.13		c0.16	c0.33		0.08	0.13	
v/s Ratio Perm			0.03			0.03						
v/c Ratio	0.51	0.35	0.19	0.11	0.68	0.15	0.69	0.85		0.67	0.50	
Uniform Delay, d1	43.7	40.5	39.3	39.1	41.3	37.0	38.1	30.6		46.8	34.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.16	0.89		1.00	1.00	
Incremental Delay, d2	7.3	1.6	1.6	0.8	3.8	1.0	4.6	4.8		16.2	1.4	
Delay (s)	51.0	42.1	40.9	39.9	45.1	38.0	48.9	31.9		62.9	35.7	
Level of Service	D	D	D	D	D	D	D	C		E	D	
Approach Delay (s)		43.3			43.2			36.2			40.2	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	39.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



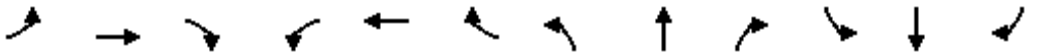
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	152	21	2086	174	60	1445
Future Volume (vph)	152	21	2086	174	60	1445
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3498		1770	3539
Flt Permitted	0.95	1.00	1.00		0.05	1.00
Satd. Flow (perm)	1770	1583	3498		96	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	165	23	2267	189	65	1571
RTOR Reduction (vph)	0	19	6	0	0	0
Lane Group Flow (vph)	165	4	2450	0	65	1571
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			2		1	6
Permitted Phases	3	8			6	
Actuated Green, G (s)	18.3	18.3	72.9		82.7	82.7
Effective Green, g (s)	18.3	18.3	72.9		82.7	82.7
Actuated g/C Ratio	0.17	0.17	0.66		0.75	0.75
Clearance Time (s)	4.5	4.5	4.5		4.5	4.5
Lane Grp Cap (vph)	294	263	2318		152	2660
v/s Ratio Prot			c0.70		0.02	c0.44
v/s Ratio Perm	c0.09	0.00			0.30	
v/c Ratio	0.56	0.01	1.06		0.43	0.59
Uniform Delay, d1	42.2	38.3	18.5		28.9	6.1
Progression Factor	1.00	1.00	0.81		1.00	1.00
Incremental Delay, d2	7.5	0.1	28.9		8.6	1.0
Delay (s)	49.7	38.4	43.9		37.5	7.1
Level of Service	D	D	D		D	A
Approach Delay (s)	48.3		43.9			8.3
Approach LOS	D		D			A

Intersection Summary			
HCM 2000 Control Delay	30.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	0	79	3	0	3	371	2471	3	0	1646	206
Future Volume (vph)	136	0	79	3	0	3	371	2471	3	0	1646	206
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5	4.5	4.5	4.5			4.5	4.5
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95			0.95	1.00
Frt	1.00	0.85			1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected	0.95	1.00			0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)	1770	1583			1770	1583	1770	3539			3539	1583
Flt Permitted	0.76	1.00			0.70	1.00	0.06	1.00			1.00	1.00
Satd. Flow (perm)	1408	1583			1298	1583	119	3539			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	148	0	86	3	0	3	403	2686	3	0	1789	224
RTOR Reduction (vph)	0	72	0	0	0	3	0	0	0	0	0	101
Lane Group Flow (vph)	148	14	0	0	3	0	403	2689	0	0	1789	123
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8		8	2					6
Actuated Green, G (s)	18.0	18.0			18.0	18.0	83.0	83.0			58.0	58.0
Effective Green, g (s)	18.0	18.0			18.0	18.0	83.0	83.0			58.0	58.0
Actuated g/C Ratio	0.16	0.16			0.16	0.16	0.75	0.75			0.53	0.53
Clearance Time (s)	4.5	4.5			4.5	4.5	4.5	4.5			4.5	4.5
Lane Grp Cap (vph)	230	259			212	259	397	2670			1866	834
v/s Ratio Prot		0.01					0.19	c0.76			0.51	
v/s Ratio Perm	c0.11				0.00	0.00	c0.58					0.08
v/c Ratio	0.64	0.05			0.01	0.00	1.02	1.01			0.96	0.15
Uniform Delay, d1	43.0	38.8			38.6	38.5	37.9	13.5			24.9	13.3
Progression Factor	1.00	1.00			1.00	1.00	0.84	1.60			0.78	0.66
Incremental Delay, d2	13.1	0.4			0.1	0.0	41.6	16.3			11.9	0.3
Delay (s)	56.1	39.2			38.7	38.5	73.7	37.9			31.4	9.2
Level of Service	E	D			D	D	E	D			C	A
Approach Delay (s)		49.9			38.6			42.5			28.9	
Approach LOS		D			D			D			C	

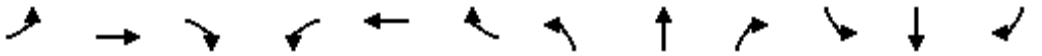
Intersection Summary			
HCM 2000 Control Delay	37.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	91.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	179	172	60	513	142	371	462	33	29	169	16
Future Volume (vph)	21	179	172	60	513	142	371	462	33	29	169	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.97		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1726		1770	1802		1770	1844		1770	1839	
Flt Permitted	0.10	1.00		0.35	1.00		0.36	1.00		0.33	1.00	
Satd. Flow (perm)	192	1726		656	1802		666	1844		612	1839	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	195	187	65	558	154	403	502	36	32	184	17
RTOR Reduction (vph)	0	32	0	0	9	0	0	3	0	0	3	0
Lane Group Flow (vph)	23	350	0	65	703	0	403	535	0	32	198	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	40.7	38.9		45.1	41.1		43.2	36.0		21.6	18.9	
Effective Green, g (s)	40.7	38.9		45.1	41.1		43.2	36.0		21.6	18.9	
Actuated g/C Ratio	0.41	0.39		0.45	0.41		0.43	0.36		0.22	0.19	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	106	674		341	743		508	666		164	348	
v/s Ratio Prot	0.00	0.20		c0.01	c0.39		c0.16	c0.29		0.01	0.11	
v/s Ratio Perm	0.08			0.08			0.19			0.04		
v/c Ratio	0.22	0.52		0.19	0.95		0.79	0.80		0.20	0.57	
Uniform Delay, d1	22.8	23.2		16.5	28.2		21.5	28.6		31.3	36.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	0.7		0.3	20.8		8.3	7.0		0.6	2.1	
Delay (s)	23.8	23.9		16.8	49.0		29.8	35.6		31.8	38.8	
Level of Service	C	C		B	D		C	D		C	D	
Approach Delay (s)		23.9			46.3			33.1			37.8	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	36.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	99.6	Sum of lost time (s)	18.0
Intersection Capacity Utilization	85.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	107	50	548	112	61	44	311	939	68	56	1325	49
Future Volume (vph)	107	50	548	112	61	44	311	939	68	56	1325	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5034		1770	5058	
Flt Permitted	0.71	1.00	1.00	0.72	1.00	1.00	0.09	1.00		0.25	1.00	
Satd. Flow (perm)	1330	1863	1583	1345	1863	1583	173	5034		463	5058	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	116	54	596	122	66	48	338	1021	74	61	1440	53
RTOR Reduction (vph)	0	0	237	0	0	33	0	7	0	0	3	0
Lane Group Flow (vph)	116	54	359	122	66	15	338	1088	0	61	1490	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	35.5	35.5	35.5	35.5	35.5	35.5	65.5	55.4		44.1	38.5	
Effective Green, g (s)	35.5	35.5	35.5	35.5	35.5	35.5	65.5	55.4		44.1	38.5	
Actuated g/C Ratio	0.32	0.32	0.32	0.32	0.32	0.32	0.60	0.50		0.40	0.35	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Grp Cap (vph)	429	601	510	434	601	510	429	2535		252	1770	
v/s Ratio Prot		0.03			0.04		c0.16	0.22		0.01	c0.29	
v/s Ratio Perm	0.09		c0.23	0.09		0.01	0.31			0.08		
v/c Ratio	0.27	0.09	0.70	0.28	0.11	0.03	0.79	0.43		0.24	0.84	
Uniform Delay, d1	27.6	26.0	32.6	27.7	26.2	25.5	29.3	17.3		20.4	32.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.40	1.12	
Incremental Delay, d2	1.5	0.3	7.9	1.6	0.4	0.1	13.6	0.5		2.2	4.9	
Delay (s)	29.2	26.3	40.6	29.4	26.5	25.6	42.9	17.8		30.8	41.8	
Level of Service	C	C	D	C	C	C	D	B		C	D	
Approach Delay (s)		37.8			27.8			23.7			41.4	
Approach LOS		D			C			C			D	

Intersection Summary			
HCM 2000 Control Delay	33.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	78.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 7: Power Rd & Pecos Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	L	T	T	T	R	L	L	T
Maximum Queue (ft)	138	138	125	172	51	259	238	198	288	187	200	606
Average Queue (ft)	76	72	44	25	21	200	158	81	64	165	196	364
95th Queue (ft)	138	128	92	90	49	255	225	185	183	222	214	521
Link Distance (ft)		1276	1276			999	999	999				2024
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225			225	260				275	175	175	
Storage Blk Time (%)						0			1	2	19	24
Queuing Penalty (veh)						0			1	11	96	126

Intersection: 7: Power Rd & Pecos Rd

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	TR	L	T	T	TR
Maximum Queue (ft)	577	396	209	222	190	144
Average Queue (ft)	324	277	95	154	125	65
95th Queue (ft)	456	382	164	198	182	134
Link Distance (ft)	2024	2024		1196	1196	1196
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			185			
Storage Blk Time (%)			0	2		
Queuing Penalty (veh)			0	2		

Intersection: 11: Germann Rd & Sossaman Rd

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	250	71	55
Average Queue (ft)	104	12	27
95th Queue (ft)	190	50	57
Link Distance (ft)	900	1241	2493
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 14: Ellsworth Rd & Pecos Rd

Movement	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	R	T	TR	L	T	T
Maximum Queue (ft)	114	279	558	530	136	190	211
Average Queue (ft)	97	69	397	411	42	87	98
95th Queue (ft)	128	196	524	518	92	141	159
Link Distance (ft)		15528	2583	2583		3810	3810
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	90				150		
Storage Blk Time (%)	26				0	0	
Queuing Penalty (veh)	5				0	0	

Intersection: 27: Ellsworth Rd & Pecos Rd

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	LT	R	L	T	TR	T	T	R
Maximum Queue (ft)	237	129	27	26	225	1374	1364	772	814	325
Average Queue (ft)	111	37	3	1	203	849	845	459	459	172
95th Queue (ft)	191	81	15	9	263	1556	1556	721	739	406
Link Distance (ft)	10496	10496	477	477		2539	2539	2583	2583	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)					200					300
Storage Blk Time (%)					17	14			25	0
Queuing Penalty (veh)					216	51			52	1

Intersection: 34: Sossaman Rd & Pecos Rd

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	71	262	125	388	125	1416	125	229
Average Queue (ft)	15	118	40	256	122	684	30	112
95th Queue (ft)	44	225	103	392	130	1367	87	197
Link Distance (ft)		1055		10496		2493		1805
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100		100		100		100	
Storage Blk Time (%)		9	0	34	43	34		15
Queuing Penalty (veh)		2	0	20	212	127		4

Intersection: 35: Rittenhouse Rd & Power Rd

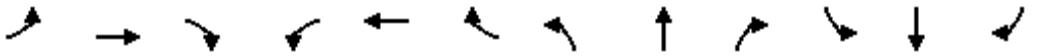
Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	T	TR	L	T
Maximum Queue (ft)	99	632	100	116	96	72	185	437	420	162	260	391
Average Queue (ft)	57	274	95	70	35	22	160	205	152	85	52	256
95th Queue (ft)	103	569	112	114	75	52	214	338	280	146	151	360
Link Distance (ft)		583			909							2024
Upstream Blk Time (%)		1										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)	75		75	150		150	160				235	
Storage Blk Time (%)	11	3	38				13	9				15
Queuing Penalty (veh)	65	21	59				42	27				9

Intersection: 35: Rittenhouse Rd & Power Rd

Movement	SB	SB
Directions Served	T	TR
Maximum Queue (ft)	363	329
Average Queue (ft)	243	231
95th Queue (ft)	332	312
Link Distance (ft)	2024	2024
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 1150



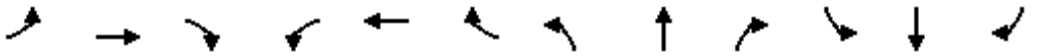
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	482	420	64	379	90	419	935	43	176	1189	64
Future Volume (vph)	87	482	420	64	379	90	419	935	43	176	1189	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.91		1.00	0.91	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	5085	1583	3433	5052		1770	5046	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3539	1583	1770	5085	1583	3433	5052		1770	5046	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	95	524	457	70	412	98	455	1016	47	191	1292	70
RTOR Reduction (vph)	0	0	363	0	0	75	0	4	0	0	5	0
Lane Group Flow (vph)	95	524	94	70	412	23	455	1059	0	191	1357	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)	12.5	20.6	20.6	18.1	26.2	26.2	18.5	32.6		20.7	34.8	
Effective Green, g (s)	12.5	20.6	20.6	18.1	26.2	26.2	18.5	32.6		20.7	34.8	
Actuated g/C Ratio	0.11	0.19	0.19	0.16	0.24	0.24	0.17	0.30		0.19	0.32	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Grp Cap (vph)	201	662	296	291	1211	377	577	1497		333	1596	
v/s Ratio Prot	c0.05	c0.15		0.04	c0.08		c0.13	0.21		0.11	c0.27	
v/s Ratio Perm			0.06			0.01						
v/c Ratio	0.47	0.79	0.32	0.24	0.34	0.06	0.79	0.71		0.57	0.85	
Uniform Delay, d1	45.7	42.7	38.6	40.0	34.7	32.4	43.9	34.5		40.6	35.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.29	0.72		1.00	1.00	
Incremental Delay, d2	7.8	9.4	2.8	1.9	0.8	0.3	9.1	2.5		7.0	5.9	
Delay (s)	53.4	52.0	41.4	41.9	35.5	32.7	65.5	27.2		47.6	41.0	
Level of Service	D	D	D	D	D	C	E	C		D	D	
Approach Delay (s)		47.6			35.8			38.7			41.8	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	41.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



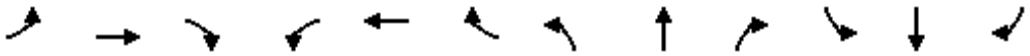
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	169	64	1437	109	17	2019
Future Volume (vph)	169	64	1437	109	17	2019
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3502		1770	3539
Flt Permitted	0.95	1.00	1.00		0.08	1.00
Satd. Flow (perm)	1770	1583	3502		140	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	184	70	1562	118	18	2195
RTOR Reduction (vph)	0	58	5	0	0	0
Lane Group Flow (vph)	184	12	1675	0	18	2195
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			2		1	6
Permitted Phases	8	8			6	
Actuated Green, G (s)	19.5	19.5	72.0		81.5	81.5
Effective Green, g (s)	19.5	19.5	72.0		81.5	81.5
Actuated g/C Ratio	0.18	0.18	0.65		0.74	0.74
Clearance Time (s)	4.5	4.5	4.5		4.5	4.5
Lane Grp Cap (vph)	313	280	2292		177	2622
v/s Ratio Prot			0.48		0.00	c0.62
v/s Ratio Perm	c0.10	0.01			0.07	
v/c Ratio	0.59	0.04	0.73		0.10	0.84
Uniform Delay, d1	41.6	37.5	12.6		10.3	9.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	7.9	0.3	2.1		1.1	3.4
Delay (s)	49.4	37.8	14.7		11.4	13.1
Level of Service	D	D	B		B	B
Approach Delay (s)	46.2		14.7			13.1
Approach LOS	D		B			B

Intersection Summary			
HCM 2000 Control Delay	15.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	212	0	228	3	2	0	197	1557	0	0	2528	186
Future Volume (vph)	212	0	228	3	2	0	197	1557	0	0	2528	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5		4.5	4.5			4.5	4.5
Lane Util. Factor	1.00	1.00			1.00		1.00	0.95			0.95	1.00
Frt	1.00	0.85			1.00		1.00	1.00			1.00	0.85
Flt Protected	0.95	1.00			0.97		0.95	1.00			1.00	1.00
Satd. Flow (prot)	1770	1583			1808		1770	3539			3539	1583
Flt Permitted	0.95	1.00			0.86		0.05	1.00			1.00	1.00
Satd. Flow (perm)	1770	1583			1598		90	3539			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	230	0	248	3	2	0	214	1692	0	0	2748	202
RTOR Reduction (vph)	0	165	0	0	0	0	0	0	0	0	0	49
Lane Group Flow (vph)	230	83	0	0	5	0	214	1692	0	0	2748	153
Turn Type	Split	NA		Perm	NA	Perm	Perm	NA			NA	Perm
Protected Phases	4	4			8			2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)	18.0	18.0			18.0		83.0	83.0			83.0	83.0
Effective Green, g (s)	18.0	18.0			18.0		83.0	83.0			83.0	83.0
Actuated g/C Ratio	0.14	0.14			0.14		0.63	0.63			0.63	0.63
Clearance Time (s)	4.5	4.5			4.5		4.5	4.5			4.5	4.5
Lane Grp Cap (vph)	240	215			217		56	2216			2216	991
v/s Ratio Prot	c0.13	0.05						0.48			0.78	
v/s Ratio Perm					c0.00		c2.38					0.10
v/c Ratio	0.96	0.39			0.02		3.82	0.76			1.24	0.15
Uniform Delay, d1	56.9	52.2			49.6		24.8	17.7			24.8	10.2
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	48.3	5.2			0.2		1311.8	2.6			112.1	0.3
Delay (s)	105.1	57.4			49.8		1336.5	20.3			136.8	10.6
Level of Service	F	E			D		F	C			F	B
Approach Delay (s)		80.4			49.8			168.1			128.2	
Approach LOS		F			D			F			F	

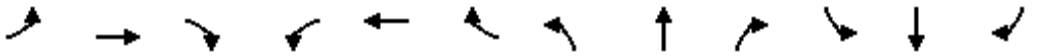
Intersection Summary			
HCM 2000 Control Delay	138.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.80		
Actuated Cycle Length (s)	132.5	Sum of lost time (s)	13.5
Intersection Capacity Utilization	110.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	339	267	109	334	56	195	158	76	83	495	35
Future Volume (vph)	9	339	267	109	334	56	195	158	76	83	495	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.98		1.00	0.95		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1740		1770	1823		1770	1772		1770	1844	
Flt Permitted	0.39	1.00		0.08	1.00		0.10	1.00		0.58	1.00	
Satd. Flow (perm)	717	1740		154	1823		184	1772		1083	1844	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	368	290	118	363	61	212	172	83	90	538	38
RTOR Reduction (vph)	0	25	0	0	5	0	0	16	0	0	2	0
Lane Group Flow (vph)	10	633	0	118	419	0	212	239	0	90	574	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	44.9	43.9		54.1	48.6		51.3	42.3		40.6	36.1	
Effective Green, g (s)	44.9	43.9		54.1	48.6		51.3	42.3		40.6	36.1	
Actuated g/C Ratio	0.39	0.38		0.47	0.42		0.45	0.37		0.35	0.32	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	290	667		153	774		230	655		411	581	
v/s Ratio Prot	0.00	c0.36		c0.04	0.23		c0.09	0.14		0.01	c0.31	
v/s Ratio Perm	0.01			0.33			0.33			0.07		
v/c Ratio	0.03	0.95		0.77	0.54		0.92	0.37		0.22	0.99	
Uniform Delay, d1	21.8	34.2		25.3	24.6		29.8	26.3		25.1	38.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	22.7		21.0	0.8		38.4	0.3		0.3	33.9	
Delay (s)	21.8	56.9		46.3	25.3		68.2	26.6		25.4	72.8	
Level of Service	C	E		D	C		E	C		C	E	
Approach Delay (s)		56.4			29.9			45.5			66.4	
Approach LOS		E			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	50.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	114.4	Sum of lost time (s)	18.0
Intersection Capacity Utilization	94.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	36	380	82	67	37	606	1493	67	49	806	33
Future Volume (vph)	98	36	380	82	67	37	606	1493	67	49	806	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5052		1770	5055	
Flt Permitted	0.71	1.00	1.00	0.73	1.00	1.00	0.13	1.00		0.15	1.00	
Satd. Flow (perm)	1322	1863	1583	1363	1863	1583	240	5052		281	5055	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	107	39	413	89	73	40	659	1623	73	53	876	36
RTOR Reduction (vph)	0	0	329	0	0	32	0	4	0	0	4	0
Lane Group Flow (vph)	107	39	84	89	73	8	659	1692	0	53	908	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	22.5	22.5	22.5	22.5	22.5	22.5	78.5	67.7		32.8	26.5	
Effective Green, g (s)	22.5	22.5	22.5	22.5	22.5	22.5	78.5	67.7		32.8	26.5	
Actuated g/C Ratio	0.20	0.20	0.20	0.20	0.20	0.20	0.71	0.62		0.30	0.24	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Grp Cap (vph)	270	381	323	278	381	323	831	3109		169	1217	
v/s Ratio Prot		0.02			0.04		c0.34	0.33		0.02	0.18	
v/s Ratio Perm	c0.08		0.05	0.07		0.01	c0.22			0.08		
v/c Ratio	0.40	0.10	0.26	0.32	0.19	0.03	0.79	0.54		0.31	0.75	
Uniform Delay, d1	37.9	35.5	36.8	37.2	36.2	35.0	21.0	12.2		33.4	38.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.15	1.34	
Incremental Delay, d2	4.3	0.5	2.0	3.0	1.1	0.1	7.7	0.7		2.9	2.5	
Delay (s)	42.2	36.1	38.7	40.3	37.3	35.1	28.6	12.9		41.2	54.2	
Level of Service	D	D	D	D	D	D	C	B		D	D	
Approach Delay (s)		39.2			38.2			17.3			53.5	
Approach LOS		D			D			B			D	

Intersection Summary			
HCM 2000 Control Delay	29.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	73.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 7: Power Rd & Pecos Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	L	T	T	T	R	L	L	T
Maximum Queue (ft)	212	248	275	250	94	236	201	141	55	187	199	374
Average Queue (ft)	66	175	164	119	46	128	107	12	5	167	179	160
95th Queue (ft)	141	240	250	252	91	200	176	57	32	215	224	297
Link Distance (ft)		1276	1276			999	999	999				2024
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225			225	260				275	175	175	
Storage Blk Time (%)	0	2	2	0						3	13	0
Queuing Penalty (veh)	0	2	8	1						8	42	0

Intersection: 7: Power Rd & Pecos Rd

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	TR	L	T	T	TR
Maximum Queue (ft)	184	196	210	475	464	341
Average Queue (ft)	129	139	168	268	257	209
95th Queue (ft)	180	186	255	388	365	305
Link Distance (ft)	2024	2024		1196	1196	1196
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			185			
Storage Blk Time (%)			3	26		
Queuing Penalty (veh)			11	45		

Intersection: 11: Sossaman Rd

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	182	104	213
Average Queue (ft)	79	28	76
95th Queue (ft)	139	77	164
Link Distance (ft)	900	1241	2493
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 14: Ellsowrth Rd/Ellsworth Rd & Pecos Rd

Movement	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	R	T	TR	L	T	T
Maximum Queue (ft)	114	228	325	328	54	361	372
Average Queue (ft)	92	100	114	139	15	210	230
95th Queue (ft)	144	210	273	304	43	304	326
Link Distance (ft)		15528	2583	2583		3810	3810
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	90				150		
Storage Blk Time (%)	20	0				10	
Queuing Penalty (veh)	13	0				2	

Intersection: 27: Ellsworth Rd/Ellsowrth Rd & Pecos Rd

Movement	EB	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	LT	L	T	TR	T	T	R
Maximum Queue (ft)	357	275	31	225	2572	2571	1767	1846	325
Average Queue (ft)	206	138	7	216	2227	2227	1590	1634	106
95th Queue (ft)	319	235	26	232	3115	3125	1795	1871	325
Link Distance (ft)	10496	10496	656		2539	2539	2583	2583	
Upstream Blk Time (%)					37	42			
Queuing Penalty (veh)					292	332			
Storage Bay Dist (ft)				200					300
Storage Blk Time (%)				100	8			36	0
Queuing Penalty (veh)				778	16			67	0

Intersection: 34: Sossaman Rd & Pecos Rd

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	48	913	125	203	125	322	125	866
Average Queue (ft)	5	359	54	90	110	184	52	511
95th Queue (ft)	24	654	111	172	150	325	119	785
Link Distance (ft)		1055		10496		2493		1805
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100		100		100		100	
Storage Blk Time (%)		51	2	4	23	15		61
Queuing Penalty (veh)		5	6	5	54	28		51

Intersection: 35: Rittenhouse Rd & Power Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	T	TR	L	T
Maximum Queue (ft)	100	368	100	131	117	90	185	747	668	231	68	263
Average Queue (ft)	58	127	87	57	40	22	184	442	322	122	24	182
95th Queue (ft)	103	272	115	102	89	53	190	695	582	199	57	232
Link Distance (ft)		583			909							2024
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	75		75	150		150	160				235	
Storage Blk Time (%)	19	3	16	0			31	6				1
Queuing Penalty (veh)	78	13	21	0			155	36				0

Intersection: 35: Rittenhouse Rd & Power Rd

Movement	SB	SB
Directions Served	T	TR
Maximum Queue (ft)	296	299
Average Queue (ft)	212	230
95th Queue (ft)	280	292
Link Distance (ft)	2024	2024
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 2068

Appendix D
VISSIM Analysis Outputs

PIRATE and Phoenix Subdivision Support Tracks - Node Evaluation

2050 AM Build Scenario

Delay/ LOS

Intersection	Approach Direction	Movement	From Link	To Link	Delay (All Veh) by movement (sec)	Volume (Output) (All Veh) by (vph)	Approach Volume (Output) (vph)	Approach Volume (Input) (vph)	Output / Input	Intersection (vph)	Mvmt. % Approach Volume	Approach % Total Volume	Mvmt. Delay Weighted by Volume	Delay (All Veh) by movement (sec)	Weighted Delay by Approach	Approach LOS	Intersection Delay	Intersection LOS	Avg Queue (feet)	Max Queue (feet)
Sossaman and Pecos	SB	R	71	10	14.5	30					8%		1.13	14.5					0.0	5.4
		T	69	6	47.4	279	385	390	99%		72%	11%	34.37	47.4	67.2	E			91.0	657.3
		L	5	15	160.5	76					20%		31.69	160.5					96.2	627.2
	WB	R	76	3	26.6	373					27%		7.25	26.6					254.1	1494.8
		T	13	10	47.0	899	1367	1360	101%		66%	39%	30.91	47.0	42.3	D			400.0	1551.5
		L	12	6	60.3	95				3492	7%		4.19	60.3			46.2	D	28.0	228.5
	NB	R	77	15	18.7	55					5%		0.86	18.7					0.0	3.7
		T	1	3	48.0	733	1198	1200	100%		61%	34%	29.40	48.0	53.3	D			203.1	1314.5
		L	2	10	67.2	410					34%		23.01	67.2					141.5	1180.2
	EB	R	70	6	9.3	183					34%		3.13	9.3					11.1	489.7
		T	8	15	25.9	319	542	540	100%		59%	16%	15.27	25.9	25.1	C			41.4	825.0
		L	11	3	91.3	40					7%		6.74	91.3					24.9	469.7
Ellsworth and Pecos (South)	SB	R	20	27	35.2	639					29%		10.16	35.2					113.3	980.5
		T	67	22	8.1	1574	2213	2620	84%		71%	40%	5.73	8.1	15.9	B			83.0	1216.6
		L	-	-	-	-					-		-	-					-	-
	NB	R	-	-	-	-					-		-	-					-	-
		T	139	17	37.2	2287	2771	3380	82%	5499	83%	50%	30.68	37.2	35.2	D	32.7	C	1600.2	2707.1
		L	23	27	25.6	484					17%		4.47	25.6					5.3	110.0
	EB	R	25	22	9.6	100					19%		1.87	9.6					0.0	7.1
		T	-	-	-	-	515	520	99%		-	9%	-	-	91.9	F			-	-
		L	24	17	111.8	415					81%		90.06	111.8					140.7	703.5
Ellsworth and Pecos (North)	SB	R	-	-	-	-					-		-	-					#N/A	#N/A
		T	32	18	25.2	2019	2111	2100	101%		96%	42%	24.06	25.2	28.3	C			236.7	1560.7
		L	33	19	96.9	92					4%		4.22	96.9					82.4	995.7
	WB	R	29	31	30.3	50					20%		5.99	30.3					0.0	9.1
		T	-	-	-	-	253	250	101%		-	5%	-	-	103.5	F	23.7	C	-	-
		L	30	18	121.5	203				5069	80%		97.52	121.5					172.5	770.7
	NB	R	74	19	9.2	193					7%		0.66	9.2					47.2	896.9
		T	66	31	12.9	2512	2705	3110	87%		93%	53%	11.96	12.9	12.6	B			134.2	1059.7
		L	-	-	-	-					-		-	-					-	-
Crismon and Pecos	SB	R	44	37	5.1	29					8%		0.38	5.1					0.0	5.6
		T	44	38	11.6	257	384	380	101%		67%	20%	7.75	11.6	16.5	B			7.9	83.9
		L	46	43	32.7	98					26%		8.36	32.7					15.6	122.3
	WB	R	41	45	11.7	49					10%		1.17	11.7					3.8	102.9
		T	41	37	19.0	290	489	500	98%		59%	25%	11.24	19.0	26.3	C			16.6	159.6
		L	42	38	45.3	150					31%		13.89	45.3					36.0	201.6
	NB	R	64	43	19.5	127				1925	15%		3.02	19.5			23.1	C	111.2	1328.1
		T	64	45	22.8	598	822	820	100%		73%	43%	16.56	22.8	24.9	C			134.1	1397.9
		L	39	37	45.0	97					12%		5.31	45.0					30.8	498.6
	EB	R	36	38	10.5	47					20%		2.15	10.5					0.2	26.4
		T	36	43	22.3	152	230	230	100%		66%	12%	14.72	22.3	20.6	C			11.5	89.2
		L	40	45	27.8	31					13%		3.74	27.8					3.9	57.9
Signal Butte and Pecos	SB	R	56	41	4.4	173					14%		0.60	4.4					0.0	4.7
		T	54	47	20.0	797	1275	1280	100%		63%	33%	12.52	20.0	32.1	C			45.5	611.6
		L	55	49	79.5	305					24%		19.01	79.5					78.9	289.1
	WB	R	75	53	9.0	298					51%		4.58	9.0					0.5	49.2
		T	50	41	60.5	257	583	580	101%		44%	15%	26.69	60.5	35.0	D			46.8	163.4
		L	51	47	78.3	28					5%		3.76	78.3					9.4	65.3
	NB	R	62	49	22.5	44				3883	3%		0.57	22.5			33.4	C	440.4	1338.2
		T	62	53	26.2	1631	1740	1920	91%		94%	45%	24.52	26.2	29.3	C			482.7	1401.8
		L	48	41	112.8	65					4%		4.21	112.8					58.9	776.7
	EB	R	43	47	20.6	10					4%		0.72	20.6					0.7	40.5
		T	43	49	44.1	80	285	290	98%		28%	7%	12.39	44.1	61.0	E			13.0	85.3
		L	52	53	70.0	195					68%		47.89	70.0					79.0	315.5
ermann	SB	R	96	88	45.7	47					9%		3.91	45.7					8.0	64.8
		T	94	84	57.6	353	550	560	98%		64%	18%	36.98	57.6	86.2	F			205.7	1005.2
		L	95	89	166.0	150					27%		45.28	166.0					223.4	912.8
	WB	R	92	93	45.8	202					27%		12.45	45.8					197.5	1551.4

PIRATE and Phoenix Subdivision Support Tracks - Node Evaluation

2050 AM Build Scenario

Delay/ LOS

Intersection	Approach Direction	Movement	From Link	To Link	Delay (All Veh) by movement (sec)	Volume (Output) (All Veh) by (vph)	Approach Volume (Output) (vph)	Approach Volume (Input) (vph)	Output / Input	Intersection (vph)	Mvmt. % Approach Volume	Approach % Total Volume	Mvmt. Delay Weighted by Volume	Delay (All Veh) by movement (sec)	Weighted Delay by Approach	Approach LOS	Intersection Delay	Intersection LOS	Avg Queue (feet)	Max Queue (feet)
Sossaman and Ge		T	91	88	71.1	394	744	750	99%	3088	53%	24%	37.68	71.1	67.9	E	67.6	E	224.0	1549.8
		L	90	84	89.3	148					20%		17.77	89.3					131.4	1231.9
	NB	R	82	89	23.6	177					15%		3.53	23.6					56.9	254.3
		T	81	93	50.3	952	1180	1170	101%		81%	38%	40.61	50.3	48.5	D			533.9	1648.7
		L	83	88	100.8	51					4%		4.36	100.8					26.9	146.7
	EB	R	86	84	37.2	48					8%		2.91	37.2					6.0	59.9
		T	85	89	87.1	505	614	610	101%		82%	20%	71.65	87.1	87.5	F			307.0	1285.3
		L	87	93	130.7	61					10%		12.98	130.7					52.1	337.9

PIRATE and Phoenix Subdivision Support Tracks - Node Evaluation

2050 AM Build Scenario - Delay/LOS

Intersection	Direction	Average Queue Length	Max Queue Length
Pecos Crossing	EB	110.69	1134.17
	WB	183.57	1164.29
Sossaman Crossing	SB	66.75	731.22
	NB	164.53	1130.09
Ellsworth Crossing	SB	290.40	1121.98
	NB	298.64	1651.44
Crismon Crossing	SB	82.34	892.91
	NB	205.56	1860.31
Signal Butte Crossing	SB	165.68	1416.03
	NB	1389.54	3948.75

PIRATE and Phoenix Subdivision Support Tracks - Node Evaluation
2050 AM Build Scenario - Delay/LOS

Intersection	Movement	Approach Delay (sec/veh)	Approach LOS	Intersection Delay (sec/veh)	Intersection LOS
Sossaman and Pecos	SB	67.2	E	46.2	D
	WB	42.3	D		
	NB	53.3	D		
	EB	25.1	C		
Sossaman and Germann	SB	86.2	F	67.6	E
	WB	67.9	E		
	NB	48.5	D		
	EB	87.5	F		
Ellsworth and Pecos (South)	SB	15.9	B	32.7	C
	NB	35.2	D		
	EB	91.9	F		
Ellsworth and Pecos (North)	SB	28.3	C	23.7	C
	WB	103.5	F		
	NB	12.6	B		
Crismon and Pecos	SB	16.5	B	23.1	C
	WB	26.3	C		
	NB	24.9	C		
	EB	20.6	C		
Signal Butte and Pecos	SB	32.1	C	33.4	C
	WB	35.0	D		
	NB	29.3	C		
	EB	61.0	E		
Ellsworth and Germann	SB	20.6	C	20.5	C
	WB	22.5	C		
	NB	16.3	B		
	EB	23.1	C		
Crismon and Germann	SB	20.6	C	20.5	C
	WB	22.5	C		
	NB	16.3	B		
	EB	23.1	C		
Signal Butte and Germann	SB	22.3	C	34.0	C
	WB	32.5	C		
	NB	38.1	D		
	EB	38.8	D		

PIRATE and Phoenix Subdivision Support Tracks - Node Evaluation

2050 PM Build Scenario

Delay/ LOS

Intersection	Approach Direction	Movement	From Link	To Link	Delay (All Veh) by movement (sec)	Volume (Output) (All Veh) by (vph)	Approach Volume (Output) (vph)	Approach Volume (Input) (vph)	Output / Input	Intersection (vph)	Mvmt. % Approach Volume	Approach % Total Volume	Mvmt. Delay Weighted by Volume	Delay (All Veh) by movement (sec)	Weighted Delay by Approach	Approach LOS	Intersection Delay	Intersection LOS	Avg Queue (feet)	Max Queue (feet)
Sossaman and Pecos	SB	R	71	10	19.5	49					5%		0.91	19.5					0.0	5.3
		T	69	6	41.1	808	1057	1110	95%		76%	28%	31.40	41.1	48.6	D			381.5	1069.0
		L	5	15	85.9	200					19%		16.25	85.9					375.4	1068.2
	WB	R	76	3	10.9	130					13%		1.43	10.9					0.1	26.2
		T	13	10	42.4	618	986	990	100%		63%	27%	26.57	42.4	46.4	D			122.9	981.9
		L	12	6	76.3	238				3713	24%		18.43	76.3			44.1	D	128.5	700.8
	NB	R	77	15	5.8	160					24%		1.36	5.8					0.2	54.7
		T	1	3	26.8	262	679	680	100%		39%	18%	10.34	26.8	37.9	D			20.9	126.2
		L	2	10	69.3	257					38%		26.21	69.3					48.8	256.5
	EB	R	70	6	23.1	337					34%		7.87	23.1					202.2	1054.9
		T	8	15	49.8	633	991	980	101%		64%	27%	31.83	49.8	41.3	D			266.2	1104.2
		L	11	3	76.9	21					2%		1.63	76.9					6.1	72.0
Ellsworth and Pecos (South)	SB	R	20	27	17.8	231					9%		1.54	17.8					11.5	80.9
		T	67	22	14.0	2433	2664	2740	97%		91%	48%	12.81	14.0	14.4	B			310.6	1553.0
		L	-	-	-	-					-		-	-					-	-
	NB	R	-	-	-	-					-		-	-					-	-
		T	139	17	38.6	1745	1942	1920	101%	5519	90%	35%	34.68	38.6	36.6	D	27.3	C	238.3	1610.0
		L	23	27	19.4	197					10%		1.97	19.4					4.0	85.9
	EB	R	25	22	12.5	354					39%		4.84	12.5					6.9	391.4
		T	-	-	-	-	913	900	101%		-	17%	-	-	45.0	D			-	-
		L	24	17	65.6	559					61%		40.15	65.6					133.0	1115.7
Ellsworth and Pecos (North)	SB	R	-	-	-	-					-		-	-					#N/A	#N/A
		T	32	18	25.8	2511	2584	2580	100%		97%	50%	25.07	25.8	28.8	C			395.4	1566.8
		L	33	19	130.3	73					3%		3.68	130.3					101.3	568.9
	WB	R	29	31	19.3	69					31%		6.00	19.3					0.0	14.4
		T	-	-	-	-	222	320	69%		-	4%	-	-	80.0	F	23.0	C	-	-
		L	30	18	107.4	153				5119	69%		74.04	107.4					88.5	526.6
	NB	R	74	19	9.1	221					10%		0.87	9.1					46.7	965.9
		T	66	31	11.3	2092	2313	2050	113%		90%	45%	10.25	11.3	11.1	B			121.8	1063.0
		L	-	-	-	-					-		-	-					-	-
Crismon and Pecos	SB	R	44	37	4.0	29					9%		0.37	4.0					0.0	6.2
		T	44	38	8.6	257	315	310	102%		82%	33%	7.03	8.6	9.8	A			5.3	84.2
		L	46	43	26.3	29					9%		2.42	26.3					3.2	52.1
	WB	R	41	45	7.0	23					12%		0.81	7.0					0.0	16.3
		T	41	37	17.1	138	198	260	76%		70%	21%	11.95	17.1	17.2	B			7.0	78.2
		L	42	38	24.0	37					19%		4.49	24.0					3.8	59.6
	NB	R	64	43	5.2	29				950	15%		0.76	5.2			14.5	B	0.4	101.8
		T	64	45	9.2	120	198	200	99%		61%	21%	5.60	9.2	13.8	B			2.9	166.7
		L	39	37	29.9	49					25%		7.40	29.9					7.4	182.5
	EB	R	36	38	9.6	19					8%		0.77	9.6					0.1	24.9
		T	36	43	18.9	200	239	240	100%		84%	25%	15.82	18.9	18.8	B			10.8	89.5
		L	40	45	27.0	20					8%		2.26	27.0					2.3	47.1
nal Butte and Pecos	SB	R	56	41	11.0	98					5%		0.58	11.0					0.0	0.0
		T	54	47	28.0	1673	1870	1880	99%		89%	60%	25.07	28.0	27.7	C			405.1	1254.8
		L	55	49	39.5	99					5%		2.09	39.5					13.8	91.7
	WB	R	75	53	5.7	100					56%		3.24	5.7					0.0	0.0
		T	50	41	39.5	49	177	180	98%		28%	6%	10.93	39.5	27.5	C			7.1	58.9
		L	51	47	84.6	28					16%		13.38	84.6					7.5	71.0
	NB	R	62	49	10.4	51				3140	6%		0.60	10.4			25.2	C	64.9	1304.9
		T	62	53	13.1	790	893	900	99%		88%	28%	11.55	13.1	16.2	B			80.7	1368.4
		L	48	41	69.8	52					6%		4.06	69.8					21.3	310.6

PIRATE and Phoenix Subdivision Support Tracks - Node Evaluation

2050 PM Build Scenario

Delay/ LOS

Intersection	Approach Direction	Movement	From Link	To Link	Delay (All Veh) by movement (sec)	Volume (Output) (All Veh) by (vph)	Approach Volume (Output) (vph)	Approach Volume (Input) (vph)	Output / Input	Intersection (vph)	Mvmt. % Approach Volume	Approach % Total Volume	Mvmt. Delay Weighted by Volume	Delay (All Veh) by movement (sec)	Weighted Delay by Approach	Approach LOS	Intersection Delay	Intersection LOS	Avg Queue (feet)	Max Queue (feet)
Sig	EB	R	43	47	44.7	52					26%		11.63	44.7					3.4	80.0
		T	43	49	35.3	47	200	200	100%		24%	6%	8.29	35.3	39.3	D			13.6	124.8
		L	52	53	38.4	101					51%		19.41	38.4					19.3	135.4
Sossaman and Germann	SB	R	96	88	26.2	37					3%		0.75	26.2					2.3	20.6
		T	94	84	44.2	829	1292	1370	94%		64%	42%	28.39	44.2	52.1	D			440.4	1068.4
		L	95	89	69.7	426					33%		23.00	69.7					501.8	1071.6
	WB	R	92	93	45.7	255					63%		28.87	45.7					110.9	812.9
		T	91	88	77.1	50	404	410	99%		12%	13%	9.54	77.1	65.5	E			8.6	66.1
		L	90	84	110.7	99					25%		27.12	110.7					93.5	688.2
	NB	R	82	89	38.2	256				3069	30%		11.64	38.2			64.3	E	214.1	1393.0
		T	81	93	65.9	403	841	830	101%		48%	27%	31.60	65.9	66.0	E			271.7	1565.8
		L	83	88	105.0	182					22%		22.72	105.0					249.5	1466.9
	EB	R	86	84	53.9	79					15%		8.00	53.9					16.5	122.7
		T	85	89	95.8	404	532	530	100%		76%	17%	72.78	95.8	90.1	F			227.9	1175.9
		L	87	93	101.7	49					9%		9.37	101.7					28.6	157.2

PIRATE and Phoenix Subdivision Support Tracks - Node Evaluation

2050 AM Build Scenario - Delay/LOS

Intersection	Direction	Average Queue Length	Max Queue Length
Pecos Crossing	EB	276.78	1438.88
	WB	157.89	1162.59
Sossaman Crossing	SB	480.31	1449.16
	NB	68.76	729.45
Ellsworth Crossing	SB	345.95	1132.99
	NB	314.61	1650.51
Crismon Crossing	SB	53.12	587.91
	NB	29.46	331.32
Signal Butte Crossing	SB	250.89	1418.67
	NB	230.97	2100.08

PIRATE and Phoenix Subdivision Support Tracks - Node Evaluation
2050 PM Build Scenario - Delay/LOS

Intersection	Movement	Approach Delay (sec/veh)	Approach LOS	Intersection Delay (sec/veh)	Intersection LOS
Sossaman and Pecos	SB	48.6	D	44.1	D
	WB	46.4	D		
	NB	37.9	D		
	EB	41.3	D		
Sossaman and Germann	SB	52.1	D	64.3	E
	WB	65.5	E		
	NB	66.0	E		
	EB	90.1	F		
Ellsworth and Pecos (South)	SB	14.4	B	27.3	C
	NB	36.6	D		
	EB	45.0	D		
Ellsworth and Pecos (North)	SB	28.8	C	23.0	C
	WB	80.0	F		
	NB	11.1	B		
Crismon and Pecos	SB	9.8	A	14.5	B
	WB	17.2	B		
	NB	13.8	B		
	EB	18.8	B		
Signal Butte and Pecos	SB	27.7	C	25.2	C
	WB	27.5	C		
	NB	16.2	B		
	EB	39.3	D		
Ellsworth and Germann	SB	21.8	C	26.1	C
	WB	36.0	D		
	NB	18.9	B		
	EB	44.9	D		
Crismon and Germann	SB	16.4	B	18.5	B
	WB	21.5	C		
	NB	15.0	B		
	EB	18.4	B		
Crismon and Pecos	SB	28.1	C	33.1	C
	WB	31.0	C		
	NB	20.5	C		
	EB	56.5	E		

Appendix C
Air Quality Report

AIR QUALITY REPORT

PECOS INDUSTRIAL RAIL ACCESS AND TRAIN EXTENSION (PIRATE) PROJECT

Docket No. FD 36501 – Union Pacific Railroad Company
Construction and Operation Exemption - In Maricopa County, Ariz.

May 2023

Summary

The Union Pacific Railroad Company (UP) is seeking authority from the Surface Transportation Board to construct and operate approximately 6.0 miles of new rail line in Maricopa County, Arizona (Docket No. FD 36501) to transport raw materials and commercial freight. The proposed rail line, referred to as the Pecos Industrial Rail Access and Train Extension (PIRATE), would connect UP's Phoenix Subdivision main line (Phoenix Subdivision) to industrial properties south of the Phoenix-Mesa Gateway Airport via a single-track rail line. UP also proposes to construct and operate approximately 2.5 miles of planned support tracks along the Phoenix Subdivision between Power Road and Ellsworth Road. The Surface Transportation Board's Office of Environmental Analysis identified two reasonable alternatives that meet the purpose and need for PIRATE: Alternative 1 and Alternative 2.

This air quality analysis and report was developed as supplemental material to the Draft Environmental Assessment. The Office of Environmental Analysis performed an air quality analysis to evaluate the potential short- and long-term impacts of the project on air quality due to emissions of criteria pollutants, mobile source air toxics (MSAT), and greenhouse gases (GHG) from construction and operation and to demonstrate compliance with the general conformity requirements. Table S-1 provides a summary of air quality impacts for the No-Action and Action Alternatives.

Construction of either alternative and the planned Phoenix Subdivision support tracks would cause temporary emissions. Construction emissions would be below the general conformity de minimis thresholds; therefore, project emissions are not anticipated to cause violations of National Ambient Air Quality Standards (NAAQS).

Locomotives on the proposed rail line would cause operational emissions of criteria pollutants. However, PIRATE would reduce truck emissions in the region when industrial facilities in the Pecos Advanced Manufacturing Zone switch from shipping raw materials and products using trucks to using rail. Overall, the project is anticipated to result in a net decrease of air pollutants emissions and have a beneficial impact on the region's air quality. Localized violations of NAAQS are not expected during project operation. The MSAT effects to nearby receptors would be minor, and the effects would be partially offset by the reduction of MSAT emissions due to reduced diesel truck trips.

Construction and operation of the project would cause GHG emissions. GHG emissions from locomotives would be offset by the GHG emission reduction due to the reduced diesel truck trips, resulting in a long-term net decrease of GHG emissions.

Table S-1. Comparison of Impacts by Alternative

Impact Type	No-Action Alternative	Alternatives 1 and 2 and the Planned Phoenix Subdivision Support Tracks
Short-term Construction Emissions of Criteria Pollutants	No effect	Temporary, minor effects; emissions would not cause violations of NAAQS. Meets general conformity requirements.
Long-term Operation Emissions of Criteria Pollutants	No effect	Beneficial effect from PIRATE; emission reductions from the reduced diesel truck trips would offset emissions from the train operation, resulting in net emission decreases. Criteria pollutants emissions would not cause violations of NAAQS.
Localized Carbon Monoxide Impacts at Intersections	No effect	Minor effect at three intersections. Vehicles at the intersections would not cause violations of carbon monoxide NAAQS.
Mobile Source Air Toxics	No effect	Minor effect
Greenhouse Gases	No effect	Beneficial effect; emission reductions from the reduced diesel truck trips would offset emissions from the train operation, resulting in net emission decreases.

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Acronyms and Abbreviations

CHEMICALS

CH_4	Methane
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
GHG	greenhouse gas
NO_2	nitrogen dioxide
NO_x	nitrogen oxide
PM	particulate matter
PM_{10}	particulate matter less than 10 micrometers in aerodynamic diameter
$PM_{2.5}$	particulate matter less than 2.5 micrometers in aerodynamic diameter
SO_2	sulfur dioxide
SO_x	sulfur oxide
VOC	volatile organic compound

GENERAL TERMS

ADEQ	Arizona Department of Environmental Quality
Board	Surface Transportation Board
CAA	Clean Air Act
C.F.R.	Code of Federal Regulations
CEQ	Council on Environmental Quality
EO	Executive Order
EPA	U.S. Environmental Protection Agency
Jacobs	Jacobs Engineering Group Inc.
MAG	Maricopa Association of Governments
MCAQD	Maricopa County Air Quality Department
Mesa	City of Mesa
MSAT	mobile source air toxic
N/A	not applicable or information is not available
NAAQS	National Ambient Air Quality Standards

NEPA	National Environmental Policy Act
NHTSA	National Highway Traffic Safety Administration
OEA	Office of Environmental Analysis
PAMZ	Pecos Advanced Manufacturing Zone
Phoenix Subdivision	Phoenix Subdivision main line
PIRATE	Pecos Industrial Rail Access and Train Extension
SIP	State Implementation Plan
UP	Union Pacific Railroad Company
U.S.C.	United States Code

MEASUREMENTS

$^{\circ}$F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
mph	miles per hour
ppb	parts per billion (by volume)
ppm	parts per million (by volume)

Chapter 1
Introduction

The Union Pacific Railroad Company (UP) is seeking authority from the Surface Transportation Board (Board) to construct and operate approximately 6.0 miles of new rail line in Maricopa County, Arizona (Docket No. FD 36501) for purposes of transporting raw materials and commercial freight. The proposed rail line, referred to as the Pecos Industrial Rail Access and Train Extension (PIRATE), would connect UP's Phoenix Subdivision main line (Phoenix Subdivision) to industrial properties southeast of the Phoenix-Mesa Gateway Airport via a single-track rail line. UP also proposes to construct and operate approximately 2.5 miles of planned support tracks along the Phoenix Subdivision between Power Road and Ellsworth Road.

The purpose of PIRATE is to meet the transportation and logistics needs of existing and future manufacturing businesses within the Pecos Advanced Manufacturing Zone (PAMZ) and adjacent areas. The Board's Office of Environmental Analysis (OEA) identified two reasonable alternatives that meet the purpose and need for PIRATE. The two Action Alternatives (Alternative 1 and Alternative 2), the No-Action Alternative, and the planned Phoenix Subdivision support tracks are described in detail in Chapter 2 of the Draft Environmental Assessment.

This report evaluates the potential air quality impacts due to emissions of criteria pollutants, mobile source air toxics (MSAT), and greenhouse gases (GHG) from project construction and operation and demonstrates compliance with the general conformity requirements for construction-related emissions.

Chapter 2
Studies and Coordination

2.1 Study Methods

OEA based its air quality analysis on the requirements of the Clean Air Act (CAA) and the National Environmental Policy Act (NEPA). Pollutants of concern for mobile sources typically include criteria pollutants such as carbon monoxide (CO); particulate matter with an aerodynamic diameter equal to or smaller than 10 micrometers (PM_{10}) and 2.5 micrometers ($PM_{2.5}$); ozone and its precursors, including nitrogen oxides (NO_x) and volatile organic compounds (VOC); MSATs; and GHG. OEA calculated project construction and operation emissions of criteria pollutants and GHG using the following methods:

- Construction equipment and vehicle emission factors were modeled using the U.S. Environmental Protection Agency's (EPA) MOVES3 program (2021b).
- Locomotive emission factors were derived using EPA's guidance on locomotive emission estimates (EPA 2009).
- EPA AP-42 compilation of Air Emission Factors (EPA 1998, 2006, 2011) were reviewed to estimate dust emissions from earthmoving activities and re-entrained dust from paved and unpaved roads.

The project is located in an area that is in nonattainment for ozone and PM_{10} and is in maintenance for CO under the National Ambient Air Quality Standards (NAAQS); therefore, the project is subject to general conformity requirements. OEA performed a general conformity applicability analysis for ozone's precursors of NO_x, VOCs, PM_{10}, and CO from project construction. Short-term project construction emissions were compared to the general conformity de minimis thresholds to demonstrate conformity.

Operation emissions from the project would be due to the train trips on the proposed rail line. Unlike construction emissions, locomotive emissions during rail operations are not subject to the General Conformity Rule because the Board does not exercise continuing program control over rail operations and would not exercise such control over the operation of the proposed rail line or the planned Phoenix Subdivision support tracks. Based on the number of diesel truck trips to be eliminated once the proposed rail line starts operation and average diesel truck trip distances, OEA evaluated the corresponding reduction in emissions.

Localized impacts of CO at intersections were evaluated using the EPA's CAL3QHC modeling program (EPA 1995) for the intersections that would have deteriorated traffic conditions due to the project. CO concentrations modeled at the affected intersections were compared to the NAAQS to determine if the project would cause localized violations of the NAAQS.

2.2 Regulatory Context

2.2.1 Federal Regulation

Clean Air Act and National Ambient Air Quality Standards

Federal air quality policies are regulated through the federal CAA. The United States Congress adopted the CAA in 1970 and its amendments in 1977 and 1990. Pursuant to the CAA, the EPA established national air quality standards to protect public health and welfare with an adequate margin of safety. These federal standards, known as the NAAQS, were developed for criteria pollutants, including ozone, nitrogen dioxide (NO_2), CO, PM_{10}, $PM_{2.5}$, sulfur dioxide (SO_2), and lead (EPA 2022a).

The NAAQS represent safe levels of each pollutant to avoid specific adverse effects on human health and the environment. The EPA established two types of NAAQS: primary and secondary standards. Primary standards set limits to protect public health, especially that of sensitive populations such as asthmatics, children, and seniors. Secondary standards set limits to protect public welfare, including protection against decreased visibility and damage to animals, crops, and buildings. Table 2-1 summarizes the NAAQS.

Table 2-1. National Ambient Air Quality Standards

Pollutant	Averaging Time	Primary Standards	Secondary Standards	Standard Form
Ozone	8 hours	0.070 ppm	0.070 ppm[1]	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
PM_{10}	24 hours	150 µg/m^3	150 µg/m^3	Not to be exceeded more than once per year on average over 3 years
$PM_{2.5}$	Annual arithmetic mean	12 µg/m^3	15 µg/m^3	Annual mean, averaged over 3 years
$PM_{2.5}$	24 hours	35 µg/m^3	35 µg/m^3	98th percentile, averaged over 3 years
CO	8 hours	9 ppm	No standard	Not to be exceeded more than once per year
CO	1 hour	35 ppm	No standard	Not to be exceeded more than once per year
NO_2	Annual arithmetic mean	0.053 ppm	0.053 ppm	Annual mean
NO_2	1 hour	100 ppb	No standard	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
SO_2	3 hours	No standard	0.5 ppm	Not to be exceeded more than once per year

Pollutant	Averaging Time	Primary Standards	Secondary Standards	Standard Form
SO_2	1 hour	0.075 ppm[2]	No standard	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
Lead	Calendar quarter	1.5 µg/m^3 (certain areas)	1.5 µg/m^3 [3]	Not to be exceeded
Lead	Rolling 3-month average	0.15 µg/m^3	No standard	Not to be exceeded

Source: EPA 2022a.

[1] Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) ozone standards also remain in effect in some areas.

[2] The previous SO_2 standards (0.14 ppm 24-hour and 0.03 ppm annual) will remain in effect in certain areas: (a) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (b) any area for which an implementation plan providing for attainment of the current (2010) standard has not been submitted and approved and which is designated nonattainment under the previous SO_2 standards or does not meet the requirements of a State Implementation Plan (SIP) call under the previous SO_2 standards (40 C.F.R. § 50.4[3]). A SIP call is an EPA action requiring a state to resubmit all or part of its SIP to demonstrate attainment of the required NAAQS.

[3] In areas designated nonattainment for the lead standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 µg/m^3 as a calendar quarter average) also remain in effect.

µg/m^3 = micrograms per cubic meter; ppb = parts per billion (by volume); ppm = parts per million (by volume)

The EPA classifies regions with respect to each criteria pollutant, depending on whether the area's monitored air quality meets the NAAQS. A region that is meeting the air quality standard for a given pollutant is designated as being in "attainment" for that pollutant. If the region does not meet the air quality standard, it is designated as being in "nonattainment" for that pollutant. An area that was designated as nonattainment and has been redesignated to attainment and has a federally approved maintenance plan is in "maintenance" for that pollutant.

The 1977 CAA Amendments require each state to develop and maintain a SIP for each criteria pollutant that violates the applicable NAAQS. The SIP serves as a tool to avoid and minimize pollutant emissions that would exceed ambient threshold criteria and to achieve compliance with the NAAQS. In 1990, the CAA was amended to strengthen regulation of both stationary and mobile emission sources for criteria pollutants.

General Conformity

Federal actions located in nonattainment and maintenance areas are subject to conformity requirements. Under the conformity provisions of the CAA, no federal agency can approve or undertake a federal action or project unless it has been demonstrated to conform to the applicable SIP. The EPA Final Conformity Rule implements Section 176(c) of the CAA, as amended in

42 U.S.C. § 7506(c). This rule was originally published in the *Federal Register* on November 30, 1993, and took effect on January 31, 1994. In March 2010, the EPA revised the Final Conformity Rule and published it in the *Federal Register* in April 2010 (75 FR 17253). The revised rule, which took effect in July 2010, improves the process federal entities use to demonstrate that their actions would not contribute to a violation of any national ambient air quality standard. These conformity provisions were enacted so that federal agencies would not interfere with efforts to attain the NAAQS. The EPA has issued two conformity regulations: one is the transportation conformity rules that apply to transportation plans and projects, and the other is the general conformity rules that apply to all other federal actions. Because the proposed project is not a Federal Highway Administration or Federal Transit Administration transportation project, the project is subject to general conformity requirements.

Applicable only in areas designated as nonattainment or maintenance for NAAQS, the general conformity rule prohibits any federal action that does not conform to the applicable air quality attainment plan or SIP. The purpose of the rule is to ensure that federal actions do not cause or contribute to the following:

- New violations of the NAAQS
- Worsening of existing violations of the NAAQS
- Delays in attaining the NAAQS

Mobile Source Air Toxics

In addition to the criteria pollutants, the EPA also regulates air toxic emissions. Controlling air toxic emissions became a national priority with the CAA Amendments of 1990. Congress mandated that the EPA regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in its rule on the "Control of Hazardous Air Pollutants from Mobile Sources" (72 FR 8427) and identified a group of 93 compounds emitted from mobile sources that are listed in EPA's Integrated Risk Information System (EPA 2018). In addition, the EPA identified nine compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from EPA's *National Air Toxics Assessment* (EPA 2014). These are priority MSATs that include 1,3-butadiene, acetaldehyde, acrolein, benzene, diesel PM, ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. Unlike the criteria pollutants, MSATs do not have ambient air quality standards.

Greenhouse Gases

GHGs include both naturally occurring and human-caused gases, such as carbon dioxide (CO_2), methane (CH_4), nitrous oxide, hydro-chlorofluorocarbons, perfluorocarbons, and sulfur hexafluoride. These gases trap the energy from the sun and help maintain the temperature of the Earth's surface, creating a process known as the greenhouse effect. The accumulation of GHGs in the atmosphere influences the long-term range of average atmospheric temperatures.

The EPA's authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA*, 415 F.3d 50 (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing CAA and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the EPA finalized an endangerment finding in December 2009. Based on the endangerment

finding, the EPA and the National Highway Traffic Safety Administration (NHTSA) took coordinated steps to enable the production of a new generation of clean vehicles with reduced GHG emissions and improved fuel efficiency from on-road vehicles and engines.

The EPA, in conjunction with the NHTSA, issued the first of a series of GHG emission standards for new cars and light-duty vehicles in April 2010 and substantially increased the fuel economy standards for all new passenger cars and light trucks sold in the country. In April 2020, the NHTSA and EPA issued the Safer Affordable Fuel-Efficient Vehicles Rule to amend the corporate average fuel economy and tailpipe CO_2 emissions standards for passenger cars and light trucks covering model years 2021 to 2026 (85 FR 24174). The updated standards will result in avoiding more than 3 billion tons of GHG emissions through 2050 (86 FR 74434).

In October 2016, the NHTSA and EPA issued a Final Rule for "Phase 2" for medium- and heavy-duty vehicles to improve fuel efficiency and cut carbon pollution (that is, GHG emissions). The agencies estimate that the standards will save up to 2 billion barrels of oil and reduce CO_2 emissions by up to 1.1 billion metric tons over the lifetimes of model year 2018 to 2027 vehicles.

In March 2017, Executive Order (EO) 13783, "Promoting Energy Independence and Economic Growth," was signed (82 FR 16093). EO 13783 orders all federal agencies to apply cost-benefit analyses to regulations of GHG emissions and evaluations of the social cost of carbon, N_2O, and CH_4.

GHGs, climate change, and the associated effects are being addressed through various efforts at the federal level to improve fuel economy and energy efficiency, manage GHG emissions, and mitigate climate change impacts. Upon taking office on January 20, 2021, President Biden rescinded President Trump's EO 13783 and issued EO 13990, "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis" (86 FR 7037). EO 13990 calls for all federal agencies to review climate-related regulations and actions taken in the past 4 years and tasks the Council on Environmental Quality (CEQ) to update its final guidance entitled, "Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews," (81 FR 51866). Pursuant to EO 13990, CEQ rescinded the draft GHG-related NEPA guidance issued in 2019 and reviewed the 2016 final guidance for revision and update (CEQ 2021). On January 9, 2023, CEQ issued the interim *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change*; the public comment period ended April 10, 2023 (88 FR 10097). CEQ intends to revise the guidance in response to public comments or finalize the interim guidance. The Environmental Assessment and supporting technical analysis for this project did not consider the interim guidance due to the timing of issuance relative to preparation of this report.

2.2.2 State and Local Regulations

Air Quality Jurisdiction and Regulations

The Arizona Department of Environmental Quality (ADEQ) administers air quality programs throughout the state. ADEQ directly administers two programs in Maricopa County: vehicle emissions inspection and nonattainment area SIPs. The other air quality programs are authorized to and administered by Maricopa County.

The Maricopa County Air Quality Department (MCAQD) is the air pollution control agency for Maricopa County. MCAQD has statutory authority (Arizona Revised Statutes § 49-402.B) for air quality programs and receives direct delegation/authority from the EPA for certain air quality programs. In addition, the department has responsibility through a formal agreement with ADEQ and the Maricopa Association of Governments (MAG) for emission inventories, air quality monitoring data, and its Travel Reduction Program.

MCAQD administers the permitting of stationary sources and oversees regulatory compliance, air quality monitoring, and the Maricopa County air pollution control program. Regulations applicable to the project include Rule 310 and 310.1, which limit the emissions of PM into the ambient air from any property, operation, or activity that may serve as a fugitive dust source.

Greenhouse Gases

Currently the state of Arizona or Maricopa County have not adopted a climate action plan. UP's 2021 Climate Action Plan (UP 2021) outlines UP's framework to reduce GHG impact. The Climate Action Plan established a target to reduce direct and energy-related indirect GHG emissions and GHG emissions on a well-to-wheel basis from locomotive operations by 26 percent from a 2018 baseline by 2030. The plan also has a goal to achieve net zero GHG emissions by 2050.

The City of Mesa (Mesa) created the Mesa Climate Action Plan (2022) that sets forth community-focused goals that will contribute to the overall climate impact for Mesa. Mesa's goals include achieving carbon neutrality by 2050 and prioritizing the use of renewable, resilient energy to achieve 100 percent renewable energy by 2050.

Chapter 3
Affected Environment

3.1 Topography and Climate

The project is in the city of Mesa and the town of Queen Creek in Maricopa County, Arizona. Arizona has great climatic diversity, ranging from scorching lowland desert to cool mountain forests. Its diverse and rugged topography, mountain ranges, and narrow valleys vary in elevation from about 2,000 to more than 10,000 feet above sea level. Maricopa County, which lies in the Sonoran Desert, has four well-defined seasons. Summers display the classic characteristics of the desert: daily high temperatures in the lower elevations often exceed 100 degrees Fahrenheit (°F), with lows in the 70s. The summer heat usually is tempered by low relative humidity, which may increase for several weeks during July and August in association with moist monsoonal wind flows from the south. In the Phoenix area, the average lowest and highest temperatures in the past 20 years during summer months ranged between 71°F to 115°F and between 36°F to 78°F in winter months (National Weather Service 2022). Generally, temperatures during the spring and fall are moderate.

3.2 Existing Air Quality

3.2.1 Attainment Status

The project is within the Phoenix-Mesa Area, which is designated as being in moderate nonattainment for 2008 ozone NAAQS, marginal nonattainment for 2012 ozone NAAQS, serious nonattainment for PM_{10}, and maintenance for CO. The area is in attainment/unclassified for other criteria pollutants (EPA 2022b).

The CAA Amendments require a state to develop and maintain a SIP for each criteria pollutant that violates the applicable NAAQS. The MAG was designated by the governor of Arizona in 1978 and recertified by the Arizona Legislature in 1992 to serve as the Regional Air Quality Planning Agency to develop plans to address air pollution problems (Arizona Revised Statutes Section 49-406 A). The latest nonattainment and maintenance plans for ozone, PM_{10}, and CO for Maricopa County are listed below:

- *MAG 2012 Five Percent Plan for PM-10 for the Maricopa County Nonattainment Area* (MAG 2012)
- *MAG 2013 Carbon Monoxide Maintenance Plan for the Maricopa County Area* (MAG 2013)
- *MAG 2017 Eight-Hour Ozone Moderate Area Plan for the Maricopa Nonattainment Area* (MAG 2016)
- *MAG 2020 Eight-Hour Ozone Plan - Submittal of Marginal Area Requirements for the Maricopa Nonattainment Area* (MAG 2020)

3.2.2 Air Monitoring Data

ADEQ and MCAQD maintain a network of monitoring stations in the Phoenix-Mesa area that measure pollutant concentrations in the ambient air. These stations provide data to assess compliance with the NAAQS and evaluate the effectiveness of pollution control strategies. Several air monitoring stations are located near the project, which includes both the proposed rail line and the planned Phoenix Subdivision support tracks. Air monitoring data from the last 5 years were obtained from these stations and summarized in Table 3-1 as described below:

- Higley station at 2207 South Higley Road in Gilbert, approximately 3 miles northwest of the project. Monitors PM_{10} only.
- West Chandler station at 275 South Ellis in Chandler, approximately 12 miles west of the project. Monitors ozone, CO, and PM_{10}.
- Eastwood station at 4135 South 36th Street in Phoenix, approximately 20 miles northwest of the project. Monitors NOx, starting in 2021.
- Diablo station at 1919 West Fairmont Drive in Tempe, approximately 18 miles northwest of the project. Monitored NOx before 2020.
- Mesa station at 310 South Brooks in Mesa, approximately 14 miles northwest of the project. Monitors $PM_{2.5}$.
- Durango Complex station at 2702 RC Esterbrooks Boulevard in Phoenix, approximately 27 miles northwest of the project. Monitors SO_2.

Table 3-1 summarizes the monitored pollutant concentrations and the numbers of days each year that the measured concentrations were greater than the NAAQS from 2017 to 2021. The 24-hour average PM_{10} concentration exceeded NAAQS in 2 out of the 5 years; and the 8-hour ozone concentrations exceeded NAAQS in all 5 years. NAAQS were not exceeded for other pollutants and averaging time periods.

Table 3-1. Monitored Pollutant Concentrations Near the Project

Pollutant	Parameter	2017	2018	2019	2020	2021
CO	Maximum 1-hour concentration (ppm)	1.8	2.4	1.3	1.5	1.4
CO	Maximum 8-hour concentration (ppm)	1.5	1.7	1.0	1.3	1.2
CO	Number of days over 1-hour standard of 35 ppm	0	0	0	0	0
CO	Number of days over 8-hour standard of 9 ppm	0	0	0	0	0
Ozone	4th maximum 8-hour concentration (ppm)	0.074	0.069	0.073	0.075	0.073
Ozone	Number of days over 8-hour standard of 0.070 ppm	8	2	6	5	8

Pollutant	Parameter	2017	2018	2019	2020	2021
NO_x	98th percentile 1-hour concentration (ppb)	64	56	50	N/A	52
NO_x	Annual average (ppm)	0.02171	0.01893	0.01683	N/A	0.016
NO_x	Number of days over 1-hour standard of 100 ppb	0	0	0	N/A	0
PM_{10}	2nd maximum 24-hour concentration (µg/m3)	114	196	91	107	207
PM_{10}	Number of days over 24-hour standard of 150 µg/m3	0	5	0	0	2
$PM_{2.5}$	98th percentile 24-hour concentration (µg/m3)	19	19	11	17	18
$PM_{2.5}$	Annual average (µg/m3)	8.1	7.4	5.2	7.3	6.8
$PM_{2.5}$	Number of days over 24-hour standard of 35 µg/m3	N/A	N/A	N/A	N/A	N/A
SO_2	99th percentile 1-hour concentration (ppb)	10	8	5	7	6
SO_2	Number of days over 1-hour standard of 75 ppb	0	0	0	0	0

Source: EPA 2022c.
N/A = Information is not available.
CO and ozone data from West Chandler station.
NOx data in 2021 from Eastwood station.
NOx data in 2017 to 2019 from Diablo station.
PM_{10} data from Higley station.
$PM_{2.5}$ data from Mesa station.
SO_2 data from Durango Complex station.

3.2.3 Mobile Source Air Toxics

MSATs are hazardous air pollutants emitted from on-road and non-road vehicles that can cause cancer and noncancer health risks. Rail operation projects may affect the regional or local air toxic concentrations due to the MSAT emissions from locomotives. Nationwide mobile source air toxics emissions are expected to be lower than present levels in future years as a result of the EPA's national emissions control programs and fuel economy standards. Estimated emissions using the EPA's MOVES2014a model indicate that even if vehicle miles traveled increase by 45 percent from 2010 to 2050 as forecasted, a combined reduction of 91 percent in the total annual emissions for the priority MSATs is projected for the same time period. Diesel PM is the dominant component of mobile source air toxics emissions, making up 50 to 70 percent of all priority mobile source air toxics pollutants by mass, depending on calendar year (Federal Highway Administration 2016).

3.2.4 Greenhouse Gases

Each GHG's effect on global warming is a combination of its emission volume and 100-year global warming potential. Global warming potential indicates how much a given GHG could contribute to global warming relative to how much warming would be caused by the same mass of CO_2. CH_4 and NO_x are substantially more potent than CO_2. In emissions inventories, GHG emissions typically are reported in terms of carbon dioxide equivalents (CO_2e), which are calculated as the product of the mass emitted of a given GHG and its specific global warming potential.

The majority of GHG emissions from transportation are CO_2 resulting from the combustion of petroleum-based products, like gasoline and diesel fuel, in internal combustion engines. In 2020, the GHG emissions from transportation accounted for about 27 percent of total United States GHG emissions, making it the largest contributor of U.S. GHG emissions (EPA 2022d).

GHG emissions from UP's operation, including the direct, energy indirect, and the well-to-tank emissions, are 15.29 million metric tons CO_2e (UP 2021). Locomotive operations represent the greatest source of GHG emissions. In 2018, GHG emissions from locomotives comprised 85.4 percent of the total calculated GHG emissions for UP.

In 2018, the Maricopa County community generated approximately 51.27 million metric tons of CO2e (MCAQD 2020). The two largest sources of GHG emissions are electricity generation and mobile sources, which represent 42.6 percent and 40.7 percent of GHGs generated by the Maricopa County community, respectively. In 2018, electricity use exceeded mobile sources and was the county's largest sector of GHGs. The dominant GHG emitted is CO_2, primarily from fossil fuel combustion.

3.2.5 Sensitive Receptors

The project limits are mixed industrial, commercial, and agricultural land use. Several industrial facilities are located in the PAMZ and adjacent areas near the east end of the proposed rail line. Although much of the area is agricultural land use, the PAMZ is rapidly being built out according to its commercial and industrial zoning designations. The Phoenix-Mesa Gateway Airport is located north of the proposed rail line, near Ellsworth Road. There are residential areas approximately 2,400 feet south of the proposed rail line, west of Ellsworth Road. Dense residential areas are located to the west of UP's Phoenix Subdivision. The closest school is Benjamin Franklin High School, located west of the junction of the proposed rail line and the Phoenix Subdivision.

Chapter 4
Environmental Effect Assessment

This section discusses the potential air quality impacts associated with emissions from project construction and operation. The analysis was performed based upon the requirements of NEPA and the conformity provisions of the CAA.

4.1 Short-term Construction Emissions

4.1.1 No-Action Alternative

Under the No-Action Alternative, UP would not construct and operate the proposed rail line or the planned Phoenix Subdivision support tracks. Therefore, no construction activities would occur, and no emissions or air quality impacts would occur.

4.1.2 Alternative 1

Construction is anticipated to last approximately 9 months, starting in year 2023 for the project. Emissions during construction of the proposed rail line would include engine exhaust from vehicle trips traveled by construction workers and haul trucks, off-road construction equipment, and the locomotive use. These emissions would primarily consist of CO, NO_x, PM_{10}, $PM_{2.5}$, SO_2, VOC, and GHGs. In addition, earth-moving activities and re-entrained dust from vehicle travel on paved and unpaved roads would result in fugitive dust emissions.

OEA estimated emissions from off-road construction equipment and on-road vehicles during construction using emission factors from EPA's Motor Vehicle Emission Simulator Version 3 (MOVES3) program (2021b):

- For off-road equipment, emissions were calculated based on projected construction durations, hours of equipment operation, and estimated numbers and types of equipment for each year. Project-specific equipment information has been used when available, supplemented with default settings and parameters, such as horsepower ratings and load factors.
- For on-road vehicles, including haul trucks and worker commute vehicles, emissions were calculated based on the anticipated number of trips and trip distances. All haul trucks were assumed to be heavy-duty diesel vehicles and worker commute vehicles were assumed to be gasoline-powered, light-duty auto and light-duty trucks.

Locomotive emission factors come from the EPA's 2009 "Technical Highlights: Emission Factors for Locomotives." Emission factors of Tier 0 switch locomotives were used for the construction emission estimates.

Project construction would result in fugitive dust emissions from earthmoving activities, demolition, material handling, and re-entrained road dust from vehicle travel on paved and unpaved roads. Fugitive dust emission factors were obtained from EPA AP-42 Fifth Edition Compilation of Air Pollutant Emissions Factors (EPA 1998, 2006, 2011).

Table 4-1 lists the construction emissions from Alternative 1 and the planned Phoenix Subdivision support tracks. Appendix A provides detailed construction information and emission calculations.

Table 4-1. Construction Emissions from Alternative 1 and the Planned Phoenix Subdivision Support Tracks

Pollutants	VOC (ton/year)	NOx (ton/year)	CO (ton/year)	SO_x (ton/year)	PM_{10} (ton/year)	$PM_{2.5}$ (ton/year)
Nonroad Construction Equipment	1.29	15.39	3.12	0.013	0.64	0.62
On-road Vehicles	0.93	18.82	11.27	0.013	1.30	0.75
Fugitive Dust	N/A	N/A	N/A	N/A	18.56	3.00
Total Construction Emissions	**2.22**	**34.21**	**14.39**	**0.026**	**20.51**	**4.37**

Construction emissions would be short term, occurring only while construction work is in progress. Potential air quality impacts during project construction would be temporary. Construction equipment and vehicles used for the project would comply with the EPA's emissions standards for on-road vehicles and off-road construction equipment. In addition, the project would comply with applicable dust-control requirements in MCAQD regulations and implement best management practices to reduce emissions, which may include but are not limited to the following:

- Apply water or stabilizers to disturbed areas and unpaved access roads.
- Maintain areas in a stabilized condition by restricting vehicle access.
- Install wind barriers, if necessary. During high winds, cease outdoor activities that disturb the soil.
- Keep bulk materials sufficiently saturated when handling. When storing bulk materials, apply water to the surface or cover the storage pile with a tarp.
- Load haul trucks with freeboard no less than 3 inches and cover haul trucks with a tarp or other suitable cover or wet the top of the load enough to limit visible dust emissions.
- Clean the interior of cargo compartments on emptied haul trucks prior to leaving a site.
- Prevent track-out by installing a track-out control device.
- Limit vehicle speed to less than 15 miles per hour (mph) on the work site and on unpaved roads
- Minimize unnecessary construction vehicle trips and idling time
- Maintain construction equipment in good operating condition, according to manufacturer's specifications

4.1.3 Alternative 2

The construction schedule and activities of Alternative 2 and the planned Phoenix Subdivision support tracks would be similar to Alternative 1. Therefore, short-term construction emissions and impacts from Alternative 2 and the planned Phoenix Subdivision support tracks would be similar to Alternative 1.

4.2 Long-term Operation Emissions

4.2.1 No-Action Alternative

Under the No-Action Alternative, UP would not construct and operate PIRATE or the planned Phoenix Subdivision support tracks. Current and future businesses in the PAMZ would continue to receive raw materials and trucks would ship finished product. Therefore, there would be no new emissions from proposed rail line operations under the No-Action Alternative. Emissions from the truck trips would continue to increase as industrial and commercial development intensifies.

4.2.2 Alternative 1

Operation Emissions

Operation of the proposed rail line would not affect the number of trips on the Phoenix Subdivision. Therefore, operation of the planned Phoenix Subdivision support tracks would not cause emission increases and this part of the project is not addressed further in this Operation Emissions section.

Operation of the proposed rail line would cause emissions from locomotives due to daily train trips coming in and out of the PAMZ and the locomotive operation in the PIRATE yard. However, operation of the proposed rail line would reduce the diesel truck trips to and from the PAMZ. The reduced diesel truck trips would reduce emissions in the region, benefiting the region's air quality.

Locomotive Emissions

Operation activities on the proposed rail line would use locomotives to pick up and drop off the railcars between the Phoenix Subdivision and the PAMZ. The locomotives would also sort and assemble the railcars at the PIRATE yard. Operation emissions from the locomotives were quantified using locomotive emission factors from the EPA's 2009 "Technical Highlights: Emission Factors for Locomotives." The following operational assumptions were used as the basis for the emissions analysis:

- Two locomotives would use the proposed rail line between the PAMZ and the Phoenix Subdivision. The locomotives are anticipated to be rated at 3,800 horsepower each at full power; however, only one locomotive would operate at any given time. The second locomotive would only be used if there is a failure of the first locomotive or if required to move the load of cars that exceeds the capabilities of a single locomotive. Emission factors for Tier 0 line haul locomotives, which are locomotives 30 years or older in 2023, were used for the locomotive operation emission estimates at the first year of the operation.

- The locomotive would operate 6.5 hours per day during an 8-hour shift on weekdays.
- Because the locomotives would operate at multiple operation modes, from idling to traveling at various speeds with different numbers of full or empty railcars, they would not operate at full power throughout the 8-hour workday. An average load factor of 0.127 (12.7 percent of full power) was used to calculate the locomotive emissions.

  The load factor was estimated using a Rail Traffic Controller model to simulate locomotive operation on PIRATE and on a short section of the Phoenix Subdivision. UP provided or agreed to a set of operational assumptions for PIRATE. These assumptions included PIRATE yard operations with some switching that accounted for blocking inbound rail cars for the industries, picking up rail cars from the industries delivered to the planned Phoenix Subdivision support tracks, dropping rail cars at the industries, and then back to exit PIRATE for other areas.

  The model provides the locomotive run time and the corresponding percentages of full power needs at each throttle notch position during a typical working day. Load factor at each throttle notch position over the course of a working day was calculated by multiplying the percentage of full power needed by the percentage of operating time at each throttle notch. Overall locomotive load factor during a working day was derived based on the weighted average of the load factors at each throttle notch. Attachment B provides details of the percentages of operating time in each notch, the corresponding percentages of full power needed, and the calculation of the overall locomotive load factor.

Table 4-2 summarizes the operation emissions from the locomotives. Appendix B provides detailed operation emission calculations.

Emission Reduction from Eliminated Truck Trips

Currently, over 6,100 trucks travel to and from the PAMZ monthly. This includes over 400 trucks per month that travel over 80 miles round trip to and from the downtown Phoenix transload facility (Mesa 2021). Providing direct rail access within the PAMZ area would remove approximately 30,000 truck trips off public roadways in its first year of operation (Mesa 2021). Emission reductions due to the reduced truck trips were calculated for the reduced trips in the area (30,000 round trips per year) during the first year of operation.

Table 4-2 summarizes vehicle emission reductions due to PIRATE. Locomotive emission increases would be offset by the emission reductions due to reduced truck trips, resulting in net decreases of emissions of all criteria pollutants starting the first year of project operation. Locomotive operation and the anticipated truck trip reduction at full build-out is not yet available, thus the emissions at full PIRATE build-out were not quantified in this study. However, the trend of net emissions decreases due to the truck trip reduction, and the associated benefits to air quality are anticipated to remain valid for future year operation of PIRATE.

Table 4-2. Alternative 1 Operational Emissions

Pollutants	VOC (ton/year)	NO_x (ton/year)	CO (ton/year)	SO_x (ton/year)	PM_{10} (ton/year)	$PM_{2.5}$ (ton/year)
Emission Increase from Locomotives	0.46	7.76	1.16	0.00	0.29	0.28
Emission Reduction - Reduced Truck Trips Overall	-0.92	-20.71	-7.16	-0.01	-1.24	-0.80
Net Change in Emissions	**-0.46**	**-12.95**	**-6.00**	**-0.01**	**-0.95**	**-0.52**

Localized CO and PM Impacts

OEA analyzed localized CO and PM impacts in the area around the entire project, which includes both PIRATE and the planned Phoenix Subdivision support tracks.

CO Hot Spot Analysis

CO emissions tend to accumulate in areas where a large number of vehicles are idling or traveling on low speeds at intersections. According to the PIRATE traffic report (Board 2022), the following intersections would have a deteriorated level of service D or worse due to project operations.[1]

- Sossaman Road and Pecos Road (morning and afternoon peak hours)
- Sossaman Road and Germann Road (morning and afternoon peak hours)
- Ellsworth Road and Germann Road (morning peak hour)

Microscale CO modeling was performed for the project using EPA's 2021 MOVES3 emissions model and EPA's 1995 CAL3QHC air quality dispersion model to estimate future (2050) CO levels at the Sossaman and Pecos Roads intersection. The analysis follows the EPA's *Guideline for Modeling Carbon Monoxide from Roadway Intersections* (EPA 1992) and *Using MOVES3 in Project-Level Carbon Monoxide Analyses* (EPA 2021b).

Vehicle emission factors were obtained for both free-flow speeds and idle periods for the analysis year of 2050 for all vehicle and fuel type combinations. Speeds between 5 and 75 mph were used to represent free-flow speeds for the intersections based on intersection-specific average progression data to the nearest 5 mph. A speed of 0 mph was used to calculate an idle emission factor. The MOVES3 default data for Maricopa County were used for this analysis except for the meteorological data, which were developed for the project from the Phoenix Sky Harbor International Airport for the years 2014 through 2018 to develop monthly and hourly

[1] Level of service D indicates traffic conditions where speeds are considerably lower due to congestion, high traffic densities restrict vehicles' ability to maneuver, and the road's volume is near capacity.

averages for the region. The link source type fractions were developed using the MOVES3 national level default source type hour totals.

A project-level MOVES3 analysis was used to develop the emission factors for a winter morning hour (a day in January from 7 a.m. to 8 a.m.) and a summer afternoon hour (a day in July from 4 p.m. to 5 p.m.) to capture the worst-case CO emissions. Both running exhaust and crankcase running exhaust emission processes were included in calculating the emission factors. Appendix C provides traffic data used for the modeling, including the intersection vehicle volumes, level of service, and Synchro output files.

The CAL3QHC air dispersion model (EPA 1995) was used to estimate the 1-hour CO concentrations in the vicinity of the affected intersections. Vehicle turning movements at intersections used in the CAL3QHC model were obtained from the Synchro 10 outputs provided in the traffic study (Board 2022). The 8-hour CO concentrations were obtained by multiplying the highest 1-hour CO concentrations by a persistence factor of 0.7 (EPA 1992). The persistence factor accounts for the fact that over 8 hours (as distinct from a single hour), vehicle volumes will fluctuate downward from the peak hour, vehicle speeds may vary, and meteorological conditions (including wind speed and wind direction) will vary compared to the conservative assumptions used for the single hour.

Mesa, the Town of Queen Creek, and Maricopa County are planning on expanding the intersection at Sossaman Road and Germann Road (Town of Queen Creek 2021). The CO modeling for the Sossaman Road and Germann Road intersection assumed that the intersection would have been expanded as planned and used a standard intersection geometry with the expected number of lanes after the expansion.

For the Build scenario for all intersections, a conservative cycle time of 600 seconds was used to account for the worst-case 10-minute delay that would occur with a train crossing, leading to additional vehicle queueing.

Receptors were placed around the intersections at distances of 0, 25, and 50 meters along each approach. The receptors were placed 3 meters from the edge of the roadway to ensure that they were not within the mixing zone of the travel lanes (EPA 1992). Table 4-3 summarizes the input values used in the CAL3QHC modeling. While the EPA guidance recommends using atmospheric stability Class D[2] for urban conditions, the CO hot spot modeling used a more conservative stability Class E to account for the stable conditions during inversions.

[2] Property of ambient air that either enhances (unstable) or suppresses (stable) vertical motion of air parcels; depends on the vertical temperature profile or sounding of the ambient air and whether air parcels are saturated (cloudy) or unsaturated (clear).

Table 4-3. CO Modeling - CAL3QHC Input Parameters

Parameter	Value[1]
Surface roughness	0.75 centimeter
Wind speed	1 meter per second
Stability class	E
Mixing height	1,000 meters
Wind direction increment	10 degrees
Receptor height	1.8 meters
Source height	0 meter
Signal type	Actuated
Intersection arrival rate	Average progression

[1] EPA 1992.

The background CO concentrations were added to the respective modeled 1- and 8-hour CO concentrations to establish the design values for each modeled intersection. The background concentrations were obtained from the West Chandler Station. The maximum 1- and 8-hour CO concentrations are 2.4 and 1.7 ppm, respectively, from 2017 to 2021. Table 4-4 lists the predicted 1- and 8-hour CO design value concentrations at the modeled intersections.

Table 4-4. Maximum Predicted CO Concentrations[1]

Intersection	2050 No Build Scenario		2050 Build Scenario	
	1 hour (ppm)	8 hour (ppm)	1 hour (ppm)	8 hour (ppm)
(NAAQS for CO)	**35**	**9**	**35**	**9**
Sossaman Road and Pecos Road (morning peak hour)	2.7	2.0	2.9	2.2
Sossaman Road and Pecos Road (afternoon peak hour)	2.8	2.1	2.9	2.2
Sossaman Road and Germann Road (morning peak hour)	2.7	2.0	2.8	2.1
Sossaman Road and Germann Road (afternoon peak hour)	2.7	2.0	2.8	2.1
Ellsworth Road and Germann Road (morning peak hour)	2.9	2.2	3.0	2.3

[1] The above results include the maximum 1- and 8-hour background concentrations of 2.4 ppm and 1.7 ppm, respectively, measured during 2019 to 2021 at the EPA monitor station located at 275 South Ellis Street, Chandler, AZ (ID: 04-013-4004). This monitor station is housed at the City of Chandler's Fire Station No. 283, about 12 miles west of the project limits.

The modeling results in Table 4-4 demonstrate that the CO concentrations at the intersections with the worst-case traffic conditions would not cause exceedances of the 1- or 8-hour CO NAAQS in 2050. Other intersections near the project would have level of service C or better or would be better under the Build scenario (which assumes construction of PIRATE and the planned Phoenix

Subdivision support tracks) and thus would not cause CO hot spots.[3] Therefore, the project would not cause new violations of the NAAQS for CO within the project limits.

PM Hot Spots

Localized accumulation of $PM_{10}/PM_{2.5}$ emissions tend to occur at locations where multiple diesel vehicles are aggregating. The rail operation would reduce the diesel vehicle trips going to and leaving the PAMZ, and locomotive idling would not occur at one single location for extended periods of time. Therefore, accumulation of $PM_{10}/PM_{2.5}$ emissions from locomotives or on-road vehicles are not anticipated during project operation.

4.2.3 Alternative 2

Operation of Alternative 2 and the planned Phoenix Subdivision support tracks would be similar to Alternative 1. Therefore, operational emissions and impacts from Alternative 2 and the planned Phoenix Subdivision support tracks would be similar to Alternative 1.

4.3 General Conformity Applicability Analysis

4.3.1 No-Action Alternative

Under the No-Action Alternative, UP would not construct and operate the proposed rail line or the planned Phoenix Subdivision support tracks. Current and future businesses in the PAMZ would continue to receive raw materials and trucks would ship finished product. General conformity does not apply to the No-Action Alternative because no emission increases would occur.

4.3.2 Alternative 1

The project is located in a nonattainment area for 8-hour ozone and in a maintenance area for PM_{10} and CO under NAAQS. As a result, the project is subject to general conformity requirements unless exempt under 40 CFR 93.153. To determine if a detailed conformity demonstration is needed for the project, a General Conformity Applicability Analysis was performed for the project.

General conformity applicability analysis requires quantification of direct and indirect construction and operation emissions for the project in tons per year and comparison of those emission levels to baseline emission levels. An action is exempt from further general conformity analysis (i.e., the action is presumed to conform) if the total net project-related emissions (construction and operation) would be less than the de minimis thresholds as in 40 CFR 93.153(b). If the net emissions increases associated with the project exceed the applicable general conformity de minimis levels for the peak year or any milestone year for attainment of NAAQS, a formal general conformity demonstration is required. An action that would produce emissions that exceed conformity thresholds is required to demonstrate conformity with the SIP through mitigation or other accepted practices.

[3] Level of service C indicates traffic conditions where speeds and maneuverability are somewhat affected by higher traffic volumes, but are more free-flowing than level of service D.

In accordance with the conformity requirements of 40 CFR Sections 51.853 and 93.153(b)(1), the general conformity de minimis threshold for a federal action in a moderate ozone nonattainment area is 100 ton per year for each ozone precursor pollutant (NOx and VOC). The de minimis threshold for PM_{10} is 70 tons per year for serious nonattainment areas, and CO is 100 tons per year for a maintenance area.

Table 4-5 compares the project's construction emissions to the applicable general conformity de minimis thresholds. The analysis results indicate that none of the applicable general conformity de minimis thresholds would be exceeded. Therefore, the project would not cause new violations of the NAAQS, worsening of existing violations of the NAAQS, or delays in attaining the NAAQS. The project construction is exempt from further conformity determination requirements under the federal General Conformity Rule.

Table 4-5. Comparison of Project Emissions Increases to General Conformity De Minimis Thresholds

Pollutants	VOC (ton/year)	NO_x (ton/year)	CO (ton/year)	SO_x (ton/year)	PM_{10} (ton/year)	$PM_{2.5}$ (ton/year)
Construction 2023	2.22	34.21	14.39	0.026	20.51	4.37
General Conformity De Minimis Thresholds	100	100	100	N/A	70	N/A

Unlike construction emissions, locomotive emissions during rail operations are not subject to the General Conformity Rule because the Board does not exercise continuing program control over rail operations and would not exercise such control over the operation of the proposed rail line or the planned Phoenix Subdivision support tracks.

4.3.3 Alternative 2

Construction and operation activities of Alternative 2 and the planned Phoenix Subdivision support tracks would be similar to Alternative 1. Therefore, construction and operational emissions from Alternative 2 and the planned Phoenix Subdivision support tracks would be similar to Alternative 1. General conformity applicability analysis for Alternative 2 and the planned Phoenix Subdivision support tracks is the same as discussed in Section 4.3.2, Alternative 1.

Operation of Alternative 2 and the planned Phoenix Subdivision support tracks is not subject to the General Conformity Rule because the Board does not exercise continuing program control over rail operations and would not exercise such control over project operations.

4.4 Mobile Source Air Toxics

4.4.1 No-Action Alternative

Under the No-Action Alternative, UP would not construct and operate the proposed rail line or the planned Phoenix Subdivision support tracks. Current and future businesses in the PAMZ

would continue to receive raw materials and trucks would ship finished product. There would be no change to the MSAT emissions or to the effects from No-Action Alternative.

4.4.2 Alternative 1

As discussed in Section 4.2, the project would not cause increased train trips on the Phoenix Subdivision. The project would cause MSAT emissions, such as diesel PM, from locomotives traveling on the Phoenix Subdivision, traveling on the proposed rail line to and from the PAMZ, and operations in the PIRATE yard. Locomotives would not idle on the proposed rail line or the planned Phoenix Subdivision support tracks for extended periods of time during normal operation to cause accumulation of MSAT emissions that would affect the nearby residents and other sensitive receptors. Locomotives working in the PIRATE yard may need to keep the engine running during winter when the temperature is lower than 35°F. However, historically in the Phoenix-Mesa area, temperatures below 35°F are rare. In addition, PIRATE would reduce the heavy-duty diesel truck trips to and from the PAMZ, which would reduce MSAT emissions from truck travel.

The land use surrounding the proposed rail line is industrial, agricultural, and open space. No sensitive receptors are located immediately adjacent to the proposed rail line. The closest residential areas are approximately 2,400 feet from the proposed rail line. MSAT emissions from the locomotives on the proposed rail line are not anticipated to cause substantial effects to these residences due to the infrequent train trips and the distance between PIRATE and the residences. In addition, project operations would not cause train trips on the Phoenix Subdivision to increase; therefore, project operations would have minimal MSAT effects to the dense residential areas along the Phoenix Subdivision.

Because the project would not have a large number of locomotives operating or idling at a single location and the project is expected to reduce diesel truck emissions in the region, high levels of MSAT impacts to nearby receptors are unlikely. There may be localized areas where ambient concentrations of MSATs under Alternative 1 would be higher than under the No-Action Alternative, such as in the areas along the proposed rail line. However, the magnitude and the duration of these potential effects cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific health impacts. Also, on a region-wide basis, the EPA's vehicle and fuel regulations, coupled with fleet turnover, will cause substantial reductions over time such that in almost all areas MSAT levels in the future will be substantially lower than today. Local conditions may differ from these national projections in terms of fleet mix and turnover, vehicle-miles-traveled growth rates, and local control measures. However, the EPA-projected reductions are so substantial (even after accounting for vehicle-miles-traveled growth) that MSATs in the project limits are likely to be lower in the future as well.

4.4.3 Alternative 2

Operation of Alternative 2 and the planned Phoenix Subdivision support tracks would be similar to Alternative 1. Therefore, MSAT effects of Alternative 2 and the planned Phoenix Subdivision support tracks would be the same as for Alternative 1.

4.5 Greenhouse Gases

4.5.1 No-Action Alternative

Under the No-Action Alternative, UP would not construct and operate the proposed rail line or the planned Phoenix Subdivision support tracks. Current and future businesses in the PAMZ would continue to receive raw materials and trucks would ship finished product. Therefore, there would be no emissions of GHG from the project. GHG emissions from the truck trips would remain and GHG emissions would not change under the No-Action Alternative.

4.5.2 Alternative 1

Currently, no national standards have been established regarding GHGs, nor has the EPA established criteria or thresholds for ambient GHG concentrations pursuant to its authority to establish motor vehicle emission standards for CO_2 under the CAA.

GHG emissions of the project were estimated using EPA's 2021 MOVES3 program and the same methodology as described in Sections 4.1 and 4.2 for criteria pollutants. Table 4-6 summarizes the project GHG emissions for construction activities and operation.

Table 4-6. Project GHG Emissions as CO_2e

Emission Sources	Alternative 1 CO_2e (metric tons/year)
Construction 2023	6,553.55
Locomotive Operation (2023 and beyond)	401.80
Truck Trip Reduction (2023 and beyond)	-3,908.59

As shown in Table 4-6, while the locomotive operation would cause GHG emissions from the construction and operation of the proposed rail line and the planned Phoenix Subdivision support tracks, the emission increase from the project would be offset by the reduced truck trips that would otherwise occur without the project. The project would reduce GHG emissions compared to the No-Action Alternative.

4.5.3 Alternative 2

Construction and operation activities of Alternative 2 and the planned Phoenix Subdivision support tracks would be similar to Alternative 1. Therefore, construction and operational emissions from Alternative 2 and the planned Phoenix Subdivision support tracks would be similar to Alternative 1.

Chapter 5
Mitigation

Based on the analysis discussed in Section 4, the project's construction and operation are not expected to cause substantial adverse effects on air quality. The project would comply with applicable dust control requirements in the MCAQD's Rule 310 and Rule 310 and would include implementation of best management practices to reduce emissions, as discussed in Section 4.1.2. Additional mitigation measures beyond what is included in the best management practices and what is required by state and regional regulations are not required.

Chapter 6
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Appendix A
Project Construction Emissions

Construction Emissions - Summary

Construction Emissions Summary

	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$	CO_2e
	tons/year	tons/year	tons/year	tons/year	tons/year	tons/year	metric tons/year
Construction 2023							
Nonroad Construction Equipment	1.29	15.39	3.12	0.013	0.64	0.62	2925.81
Onroad Vehicles	0.93	18.82	11.27	0.013	1.30	0.75	3627.74
Fugitive Dust	-	-	-	-	18.56	3.00	-
Subtotal	*2.22*	*34.21*	*14.39*	*0.026*	*20.51*	*4.37*	*6553.55*
Total Project Construction Emissions 2023	**2.22**	**34.21**	**14.39**	**0.026**	**20.51**	**4.37**	**6553.55**
General Conformity De Minimis Thresholds [1]	**100**	**100**	**100**	**NA**	**70**	**NA**	**NA**
Over Threshold? (Yes/No)	**No**	**No**	**No**	**NA**	**No**	**NA**	**NA**

Notes:

NA = not applicable

1. General Conformity De Minimis Thresholds are from 40 CFR 93.153 (b)(1) and (b)(2) and apply to non-attainment and maintenance areas. Maricopa County, AZ is in non-attainment and maintenance status as follows:

- Moderate non-attainment for Ozone and serious nonattainment for PM_{10}
- Maintenance for CO

Construction Emissions - Offroad Construction Equipment

Offroad Construction Equipment Emissions

Construction Equipment Name	Fuel Type [2]	Horsepower	Number of Equipment	Hours per Day	Number of Days [3]	Total Hours	Year	Emission Factors [1]							Emissions						
								VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$	CO_2e	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$	CO_2e
								g/hr	g/hr	g/hr	g/hr	g/hr	g/hr	g/hr	tons/year	tons/year	tons/year	tons/year	tons/year	tons/year	metric tons/year
Construction 2023																					
D6 Dozer	Diesel	215	4	9	154	5544	2023	2.562	39.160	11.358	0.200	2.426	2.354	74587.520	0.016	0.239	0.069	0.001	0.015	0.014	413.513
330 Trackhoe	Diesel	273	2	9	154	2772	2023	2.162	31.830	8.667	0.197	1.952	1.893	73890.609	0.007	0.097	0.026	0.001	0.006	0.006	204.825
352 Trackhoe	Diesel	424	3	9	110	2970	2023	6.938	119.385	41.689	0.356	6.903	6.696	130043.093	0.023	0.391	0.136	0.001	0.023	0.022	386.228
140 Motor Grader	Diesel	179	3	9	154	4158	2023	2.471	37.392	10.822	0.196	2.332	2.262	73225.563	0.011	0.171	0.050	0.001	0.011	0.010	304.472
815 Compactor	Diesel	249	3	9	110	2970	2023	2.562	39.160	11.358	0.200	2.426	2.354	74587.520	0.008	0.128	0.037	0.001	0.008	0.008	221.525
CS12 GC compactor	Diesel	121	1	9	110	990	2023	3.366	49.641	19.072	0.116	4.612	4.473	41869.235	0.004	0.054	0.021	0.000	0.005	0.005	41.451
966 Wheel Loader	Diesel	321	2	9	198	3564	2023	13.749	266.858	93.154	0.381	12.798	12.414	132819.770	0.054	1.048	0.366	0.001	0.050	0.049	473.370
262D3 Skid Steer	Diesel	74	2	9	176	3168	2023	14.468	68.716	74.846	0.030	10.860	10.535	8400.955	0.051	0.240	0.261	0.000	0.038	0.037	26.614
35 Ton Crane	Diesel	164	2	9	66	1188	2023	2.971	42.590	11.610	0.092	2.833	2.748	33153.860	0.004	0.056	0.015	0.000	0.004	0.004	39.387
AP1000F Paver	Diesel	225	1	9	44	396	2023	3.167	45.571	14.067	0.189	2.886	2.799	70026.229	0.001	0.020	0.006	0.000	0.001	0.001	27.730
TLM (UPRR)	Diesel	3800	1	9	22	198	2023	179.472	1628.727	699.466	0.686	107.019	103.809	214450.408	0.039	0.355	0.153	0.000	0.023	0.023	42.461
963 Track Loader (UPRR)	Diesel	202	1	9	22	198	2023	20.632	124.228	56.750	0.085	10.662	10.342	26289.108	0.005	0.027	0.012	0.000	0.002	0.002	5.205
6700 Tamper (UPRR)	Diesel	280	2	9	44	792	2023	20.503	132.346	72.529	0.097	13.965	13.546	30753.815	0.018	0.116	0.063	0.000	0.012	0.012	24.357
966 Wheel Loader	Diesel	321	2	9	44	792	2023	13.749	266.858	93.154	0.381	12.798	12.414	132819.770	0.012	0.233	0.081	0.000	0.011	0.011	105.193
4600 Regulator (UPRR)	Diesel	250	2	9	44	792	2023	20.503	132.346	72.529	0.097	13.965	13.546	30753.815	0.018	0.116	0.063	0.000	0.012	0.012	24.357
Locomotive (UPRR)	Diesel	2200	1	9	44	396	2023	2339.766	27720.000	4026.000	13.895	968.000	938.960	1477585.234	1.021	12.100	1.757	0.006	0.423	0.410	585.124
														Total 2023	**1.291**	**15.392**	**3.119**	**0.013**	**0.644**	**0.625**	**2925.812**

Notes:

1. Emission factors were obtained from a MOVES3 Nonroad Module run for Maricopa County, AZ, weekdays only. Emission factors are 12-month averages based on MOVES3 defaults. The only exception is the "Locomotive (UPRR)" construction equipment, where emission factors came from the Environmental Protection Agency Technical Highlights Emission Factors for Locomotives, April 2009. To be conservative, it was assumed that this locomotive is rated Tier 0 and uses diesel fuel with 15 ppm sulfur content.

2. All equipment were provided to be diesel-fueled.

3. Equipment usage duration was provided by month, and it was assumed that there would be 22 working days per month (5 days a week).

Construction Emissions - Onroad Vehicles

Onroad Vehicles Emissions

Vehicles	Vehicle Type	Fuel Type	Number of Vehicles	Number of Roundtrips per Day per Vehicle	Miles per Roundtrip	Number of Days [7]	Total Vehicle Miles	Year	Emission Factors [1,4]							Emissions						
									VOC	NO_x	CO	SO_x	PM_{10} [3]	$PM_{2.5}$ [3]	CO_2e	VOC	NO_x	CO	SO_x	PM_{10} [3]	$PM_{2.5}$ [3]	CO_2e
									g/mile	g/mile	g/mile	g/mile	g/mile	g/mile	g/mile	tons/year	tons/year	tons/year	tons/year	tons/year	tons/year	metric tons/year
Construction 2023																						
Worker Commute [2]	Passenger Car or Truck [1]	Gasoline	70	1	30	198	415,800	2023	0.060	0.306	5.180	0.001	0.038	0.008	409.652	0.028	0.140	2.374	0.000	0.017	0.004	170.333
Pickup Trucks [5]	Light Commercial Truck	Gasoline	8	1	180	198	285,120	2023	0.074	0.310	5.846	0.001	0.041	0.009	441.649	0.023	0.097	1.837	0.000	0.013	0.003	125.923
Pickup Trucks (UPRR) [5]	Light Commercial Truck	Gasoline	6	1	180	44	47,520	2023	0.074	0.310	5.846	0.001	0.041	0.009	441.649	0.004	0.016	0.306	0.000	0.002	0.000	20.987
730 Articulated Truck [5]	Combination Short-haul Truck	Diesel	18	1	90	154	249,480	2023	0.716	13.572	5.464	0.008	1.174	0.573	2330.250	0.197	3.732	1.503	0.002	0.323	0.157	581.351
Tractor Trailer [5]	Combination Short-haul Truck	Diesel	18	1	90	88	142,560	2023	0.716	13.572	5.464	0.008	1.174	0.573	2330.250	0.113	2.133	0.859	0.001	0.185	0.090	332.200
Haul Trucks (Earthwork) [6]	Combination Short-haul Truck	Diesel	14,000	1	80	1	1,120,000	2023	0.348	7.830	2.705	0.006	0.470	0.303	1628.580	0.430	9.667	3.340	0.007	0.580	0.374	1824.010
Haul Trucks (Aggregate Base) [6]	Combination Short-haul Truck	Diesel	7,036	1	50	1	351,800	2023	0.348	7.830	2.705	0.006	0.470	0.303	1628.580	0.135	3.036	1.049	0.002	0.182	0.118	572.934
															Total 2023	**0.929**	**18.822**	**11.268**	**0.013**	**1.302**	**0.746**	**3627.739**

Notes:

1. Emission factors were obtained from a MOVES3 Onroad Module run at the Project Scale for Maricopa County, AZ. Emission factors represent the maximum emission rate between winter morning and summer afternoon. For worker commute vehicles, the maximum emission factors between the passenger car and passenger truck MOVES3 vehicle classes were chosen for each pollutant.

2. Passenger vehicles included gasoline cars and gasoline trucks. Emission factors represent the higher emission rate of the two types of vehicles.

3. PM emission factors includes tirewear and brakewear.

4. Emission factors are at an average vehicle speed of 40 mph for the worker commute, pickup truck, and haul truck vehicles and are at an average vehicle speed of 15 mph for the 730 Articulated Truck and Tractor Trailer vehicles.

5. It was assumed that the pickup trucks would drive 20 miles for each hour worked and that the 730 Articulated Trucks and Tractor Trailers would drive 10 miles for each hour worked.

6. For haul trucks, the "Number of Vehicles" represents the number of total haul truck trips for the entire project. The Number of Roundtrips per Day per Vehicle and Number of Days were set to 1 to appropriately calculate emissions from haul truck trips. Haul trucks for earthwork movement trips and aggregate base movement trips were assumed to be 80 miles and 50 miles per roundtrip, respectfully.

7. Vehicle usage duration was provided by month, and it was assumed that there would be 22 working days per month (5 days a week).

Construction Emissions - Fugitive Dust Emissions

A) Bulldozing

Fugitive Dust Emissions from Bulldozing [1]

Activity	Equipment	Number of Equipment	Daily Hours	Number of Days [2]	Emission Factor PM_{10} lbs/hr	Emission Factor $PM_{2.5}$ lbs/hr	Daily Emissions PM_{10} lbs/day	Daily Emissions $PM_{2.5}$ lbs/day	Annual Emissions PM_{10} tons/year	Annual Emissions $PM_{2.5}$ tons/year
Construction 2023	Dozer or Similar	4	9	147	0.753	0.414	27.10	14.90	1.99	1.09
								Total 2023	**1.99**	**1.09**

Notes:

1. PM emissions were calculated using the following equation and parameters (AP-42 Table 11.9-1 for Bulldozing, Overburden):

   Emission Factor (lb/hr)= $k \times (s)^{1.5} / (M)^{1.4}$ For PM10 and $k \times 5.7 \times (s)^{1.2} / (M)^{1.3}$ for PM2.5

   k = Scaling Constant (0.75 for PM10 and 0.105 for PM2.5)

   s = Silt Content (6.9% per AP-42 Table 11.9-3 default for overburden)

   M = Moisture Content (7.9% per AP-42 Table 11.9-3 default for overburden)

2. Equipment usage duration was provided by month, and it was assumed that there would be 21 working days per month (5 days a week).

B) Grading

Fugitive Dust Emissions from Grading [1]

Activity	Equipment	Number of Grading Equipment	# acres/equipment-day	Acreage Graded/Day	Total Acres Graded [3]	Number of Days [2]	Grader/Scraper VMT miles/day	Grader/Scraper VMT miles/year	Emission Factors PM_{10} lbs/VMT	Emission Factors $PM_{2.5}$ lbs/VMT	Daily Emissions PM_{10} lbs/day	Daily Emissions $PM_{2.5}$ lbs/day	Annual Emissions PM_{10} tons/year	Annual Emissions $PM_{2.5}$ tons/year
Construction 2023	Grader	3	0.5	1.5	100	67	1.03	68.75	1.54	0.167	1.59	0.17	0.05	0.01
												Total 2023	**0.05**	**0.01**

Notes:

1. PM emissions were calculated using the following equation and parameters:

   Emission factor (lb/VMT) = $k \times 0.051 \times (S)^{2.0}$ for PM10 and $k \times 0.040 \times (S)^{2.5}$ for PM2. (AP-42 Table 11.9-1)

   k = Scaling Constant (0.60 for PM10 and 0.031 for PM2.5)

   S = Mean Vehicle Speed, default = 7.1 miles/hour per AP-42 Table 11.9-3

   VMT = As / Wb X 43,560 (sqft/acre) /5280 (ft/mile)

   VMT: vehicle miles traveled

   As: the acreage of the grading site (Assumes 0.5 acres graded per grader per day, 0.5 acres graded per scraper per day)

   Wb: blade width of the grader. Assumed Wb = 12 ft.

2. Number of days calculated from the total acres graded and acres graded per day (which assumed 0.5 acres graded per grader per day).

3. Total acreage graded was assumed to be the total acreage disturbed.

C) Earth Material Loading/Handling

Fugitive Dust Emissions from Material Loading [1,2]

Activity	Total Amount Handled	Material Amount		Material Amount		Emission Factors		Daily Emissions		Annual Emissions	
						PM_{10}	$PM_{2.5}$	PM_{10}	$PM_{2.5}$	PM_{10}	$PM_{2.5}$
	cy	cy/day	cy/year	tons/day	tons/year	lbs/ton	lbs/ton	lbs/day	lbs/day	tons/year	tons/year
Construction 2023 - Material Export (Earthwork)	280,000	1,905	280,000	2,857	420,000	0.00029	0.000044	1.66	0.25	0.1217	0.0184
Construction 2023 - Material Import (Aggregate Base)	86,000	585	86,000	1,053	154,800	0.00029	0.000044	0.61	0.09	0.0449	0.0068
									Total 2023	**0.17**	**0.03**

Notes:

1. Fugitive dust from materials unloading from trains and/or trucks are calculated using the following equations and parameters:

   Emission factor (lb/ton) = $(k)(0.0032)[(U/5)^{1.3}]/[(M/2)^{1.4}]$ (AP-42 13.2.4)

   k = Particle Size Constant (0.35 for PM_{10} and 0.053 for $PM_{2.5}$)

   U = average wind speed = 3.13 m/s (7.0 mph) for Mesa, AZ (Source: https://weatherspark.com/y/2610/Average-Weather-in-Mesa-Arizona-United-States-Year-Round)

   M = moisture content = 3.4% (AP-42 Table 13.2.4-1 for Exposed Ground)

   Earthwork material density: 1.5 tons/cy (typical soil density)

   Aggregate Base material density: 1.8 tons/cy (provided in data)

2. Emissions include those from loading and unloading (handling of the material twice).

3. Earthwork and aggregate base material loading and handling was given to last approximately 7 months, and it was assumed that there would be 21 working days per month (5 days a week).

D) Re-entrained Fugitive Dust Emissions from Vehicle Travel on Paved Roads

Paved Road Fugitive Dust Emissions [1]

Activity	Total VMT	Percent Miles on Paved Road [2]	PM_{10}	$PM_{2.5}$
	VMT/year	%	tons/year	tons/year
Construction 2023	2,612,280	99.5	1.58	0.40
		Total 2023	**1.58**	**0.40**

Notes:

Emission factor (g/VMT) = k X (sL)^0.91 X W^1.02 X (1-P/4N)

		PM_{10}	$PM_{2.5}$
k		1.0	0.25
sL	g/m^2	0.20	0.20
W	tons	2.4	2.4
EF	g/VMT	0.553	0.138

Notes:

1. Equation from: AP-42 13.2.1

   k (particle size multipliers) is from EPA AP-42 Table 13.2.1-1

   sL (silt loading) of 0.2 is from EPA AP-42 Table 13.2.1-2 for ADT category 500 - 5000. This is a conservative assumption since the roadways would have higher ADT and lower sL value.

   W (mean vehicle weight) of 2.4 tons per California Air Resources Board's data at https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf

   P = number of days in a year with at least 0.01 inch of precipitation, 30 days used for the calculation per EPA AP-42 Figure 13.2.1-2.

   N = number of days in the annual average period (default 365).

2. Assumption that vehicles would travel on paved roads 99.5% of the time and unpaved roads 0.5% of the time.

Unpaved Road Fugitive Dust Emissions [1]

Activity	Total VMT	Percent Miles on Unpaved Road [2]	PM_{10}	$PM_{2.5}$
	VMT/year	%	tons/year	tons/year
Construction 2023	2,612,280	0.5	14.77	1.48
		Total 2023	**14.77**	**1.48**

Notes:

Emission factor (g/VMT) = k X (s/12)^a X (W/3)^b * 453.6

		PM_{10}	$PM_{2.5}$
k	lb/VMT	1.5	0.15
a		0.90	0.90
b		0.45	0.45
s	%	8.3	8.3
W	tons	16	16
EF	g/VMT	1025.549	102.555

Notes:

1. Equation from: AP-42 13.2.2

   k (particle size multipliers) is from EPA AP-42 Table 13.2.2-2

   a (constant) is from EPA AP-42 Table 13.2.2-2

   b (constant) is from EPA AP-42 Table 13.2.2-2

   s (surface material silt content) is taken for haul trucks from http://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/particulate-matter-emission-factors-for-processes-equipment-at-asphalt-cement-concrete-and-aggragate-product-plants.pdf

   W (mean vehicle weight) is calculated using the weighted average of vehicles used during the project, excluding worker commute vehicles which would rarely travel on unpaved road, based on typical vehicle weight and miles traveled.

2. Assumption that vehicles would travel on paved roads 99.5% of the time and unpaved roads 0.5% of the time.

Summary of Fugitive Dust Emissions

Year	Annual Emissions	
	PM_{10}	$PM_{2.5}$
	tons/year	tons/year
2023	18.56	3.00

Appendix B
Project Operation Emissions

Operation Emissions - Locomotive Operation Emissions

Operating hours	6.5	hours/day	(out of 8-hour shift)
Operating days	260	days/year	(5 days per week, 52 weeks per year)
locomotive horsepower	3800	hp	(2 locomotives onsite, only one operating at any given time, rated at 3800 hp each)
Load factor switching/traveling	0.127		(based on simulation by the Rail Traffic Controller Software)

Locomotive Line Haul Emission Factors Locomotives [1,2,3,4]

	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$	CO_2e	HC	CO_2	CH_4
	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr
Line Haul (Tier 0)	0.51	8.60	1.28	0.00	0.32	0.31	490.82	0.48	490.77	0.0020

Notes:

1. Locomotive emission factors come from the Environmental Protection Agency Technical Highlights Emission Factors for Locomotives, April 2009. Tier 0 emission factors are used. Per this guidance, VOC emissions can be assumed to be equal to 1.053 times the HC emissions. $PM_{2.5}$ emissions can be estimated as 0.97 times the PM_{10} emissions.

2. Per the guidance, the conversion factor from bhp-hr to gal for the locomotive are:

Line Haul	1 gal =	20.8	bhp-hr
Switching	1 gal =	15.2	bhp-hr

3. Per the guidance, SO_x and CO_2 calculations for fuel are as follows.
Per guidance, the fraction of fuel sulfur emitted as SO_2 may be as low as 95 percent while the rest of the sulfur is oxidized even further. Thus, SO_x is calculated assuming 95% of SO_x is SO_2. Fuel density for diesel is assumed to be 3,200 g/gal. S content of fuel is assumed to be 15 ppm. C content of fuel assumed to be 87 percent by mass.
SO_2 (g/gal) = (fuel density) × (conversion factor) × (64 g SO_2/32 g S) × (S content of fuel)
[Modified Equation] SO_x (g/gal) = (fuel density) × (64 g SO_2/32 g S) × (S content of fuel)
CO_2 (g/gal) = (fuel density 3200 g/gal) × (44 g CO_2/12 g C) × (C content of fuel, 0.87 for diesel)

4. The guidance does not include emission factors for N_2O or CH_4. N_2O is considered insignificant and is not calculated. CH_4 is calculated assuming an emission factor of 4.462 g/hp-hr, which came from a MOVES3 Nonroad Module run for Maricopa County, AZ, weekdays only, 12-month averages, for construction equipment in the "Railway Maintenance" category.

5. To calculate the CO_2e emissions factor, global warming potential values from the IPCC Fourth Assessment Report (AR4) were used.

GWP Values	
CO_2	1
CH_4	25
N_2O	298

Locomotive Operation Emissions

	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$	CO_2e
	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	MT/year
Locomotives	0.46	7.76	1.16	0.00	0.29	0.28	401.8

Locomotive load factor from the Rail Traffic Controller model simulation

Throttle Notch	% of Full Power in Notch	Actual Operating Time in Notch	% of Operating Time in Notch	Average Operating Time	% Full Power X % Operating Time
Dynamic Braking	2.1%	1:08:35	17.8%	6:25:00	0.004
Idle	0.4%	2:24:50	37.6%		0.002
1	5.0%	1:12:52	18.9%		0.009
2	11.4%	0:25:52	6.7%		0.008
3	23.5%	0:14:58	3.9%		0.009
4	34.3%	0:15:55	4.1%		0.014
5	48.1%	0:11:11	2.9%		0.014
6	64.3%	0:07:26	1.9%		0.012
7	86.6%	0:03:54	1.0%		0.009
8	102.5%	0:17:31	4.5%		0.047
			Average Op Time Load Factor =		0.127

Note:

1. The load factor was determined through the use of an Rail Traffic Controller model to simulate the locomotive operation on the PIRATE industrial lead and a short section of the UP Phoenix subdivision mainline (the mainline was only included where the PIRATE local occupied the main track).
2. The dynamic braking settings account for all 8 DB notches, since the fuel/energy uses are the same for all DB notches. This may be overly conservative since in reality, a switching operation will likely have very little dynamic braking usage based on the setup time required for shift from power to braking (approximately 10 seconds). This may allow for the use of idle settings where the dynamic braking would otherwise be used, since when using the automatic or independent brakes, the throttle will in idle (this would not be applicable with Power braking)

Operation Emissions - Emission Reductions from Reduced Haul Truck Trips

Trip Reduction

	Reduced Trips	Reduced Trips	Roundtrip distance	Reduced VMT
	Roundtrip/Month	Roundtrip/year	Miles/roundtrip	Miles/year
Trips reductions	2,500	30,000	80	2,400,000

Note:

An average distance of 80 miles per round trip for truck trips to all destinations were estimated based on the average travel distance to Phoenix, AZ.

Haul Truck Emission Factors

	VOC	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**	**CO_2e**
	g/mile	**g/mile**	**g/mile**	**g/mile**	**g/mile**	**g/mile**	**g/mile**
Emission factors	0.35	7.83	2.71	0.01	0.47	0.30	1628.58

Notes:

Emission factors are from MOVES3. Emission factors for combination short haul trucks are used in the emission calculation.

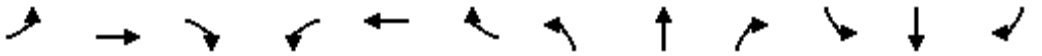
Haul Truck Emissions Reduction

	VOC	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**	**CO_2e**
	ton/year	**ton/year**	**ton/year**	**ton/year**	**ton/year**	**ton/year**	**MT/year**
Emission Reduction	0.92	20.71	7.16	0.01	1.24	0.80	3908.59

Appendix C
Traffic Information for CO Hot Spot Modeling

Summary of LOS and Delay

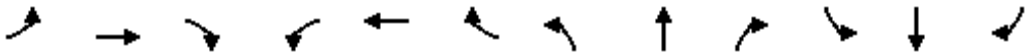
		2050 No AM Build				2050 No PM Build Scenario				2050 AM Build Scenario				2050 PM Build Scenario			
Intersection	Movement	Approach Delay (sec/veh)	Approach LOS	Intersection Delay (sec/veh)	Intersection LOS	Approach Delay (sec/veh)	Approach LOS	Intersection Delay (sec/veh)	Intersection LOS	Approach Delay (sec/veh)	Approach LOS	Intersection Delay (sec/veh)	Intersection LOS	Approach Delay (sec/veh)	Approach LOS	Intersection Delay (sec/veh)	Intersection LOS
Sossaman and Pecos	SB	33.9	C	22.8	C	34.7	C	29.0	C	67.2	E	46.2	D	48.6	D	44.1	D
	WB	18.8	B			25.9	C			42.3	D			46.4	D		
	NB	26.6	C			30.3	C			53.3	D			37.9	D		
	EB	16.7	B			25.0	C			25.1	C			41.3	D		
Sossaman and Germann	SB	86.2	F	67.6	E	52.1	D	64.3	E	86.2	F	67.6	E	52.1	D	64.3	E
	WB	67.9	E			65.5	E			67.9	E			65.5	E		
	NB	48.5	D			66.0	E			48.5	D			66.0	E		
	EB	87.5	F			90.1	F			87.5	F			90.1	F		
Ellsworth and Pecos (south)	SB	8.0	A	16.7	B	9.5	A	12.5	B	15.9	B	32.7	C	14.4	B	27.3	C
	NB	17.3	B			12.0	B			35.2	D			36.6	D		
	EB	50.1	D			21.9	C			91.9	F			45.0	D		
Ellsworth and Pecos (north)	SB	3.6	A	9.6	A	3.7	A	7.1	A	28.3	C	23.7	C	28.8	C	23.0	C
	WB	45.0	D			37.9	D			103.5	F			80.0	F		
	NB	10.8	B			8.1	A			12.6	B			11.1	B		
Crismon and Pecos	SB	17.2	B	19.9	B	10.0	A	13.7	B	16.5	B	23.1	C	9.8	A	14.5	B
	WB	26.6	C			16.8	B			26.3	C			17.2	B		
	NB	16.9	B			11.4	B			24.9	C			13.8	B		
	EB	20.2	C			18.0	B			20.6	C			18.8	B		
Signal Butte and Pecos	SB	28.1	C	30.1	C	12.9	B	14.8	B	32.1	C	33.4	C	27.7	C	25.2	C
	WB	34.1	C			21.6	C			35.0	D			27.5	C		
	NB	26.2	C			13.7	B			29.3	C			16.2	B		
	EB	58.6	E			31.6	C			61.0	E			39.3	D		
Ellsworth and Germann	SB	10.9	B	25.6	C	18.8	B	24.8	C	12.2	B	39.5	D	21.8	C	26.1	C
	WB	42.8	D			35.7	D			51.6	D			36.0	D		
	NB	23.6	C			18.9	B			49.1	D			18.9	B		
	EB	50.0	D			45.2	D			52.1	D			44.9	D		
Crismon and Germann	SB	16.4	B	19.8	B	14.3	B	17.9	B	20.6	C	20.5	C	16.4	B	18.5	B
	WB	22.2	C			20.8	C			22.5	C			21.5	C		
	NB	16.9	B			15.3	B			16.3	B			15.0	B		
	EB	22.7	C			17.9	B			23.1	C			18.4	B		
Signal Butte and Germann	SB	20.6	C	27.6	C	23.1	C	31.9	C	22.3	C	34.0	C	28.1	C	33.1	C
	WB	29.0	C			31.1	C			32.5	C			31.0	C		
	NB	26.9	C			21.7	C			38.1	D			20.5	C		
	EB	35.6	D			60.0	E			38.8	D			56.5	E		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	600	120	90	460	120	110	3170	120	100	1700	180
Future Volume (vph)	110	600	120	90	460	120	110	3170	120	100	1700	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.86	1.00	1.00	0.86	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	1770	6408	1583	1770	6408	1583
Flt Permitted	0.22	1.00	1.00	0.22	1.00	1.00	0.08	1.00	1.00	0.08	1.00	1.00
Satd. Flow (perm)	792	3539	1583	777	3539	1583	140	6408	1583	149	6408	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	652	130	98	500	130	120	3446	130	109	1848	196
RTOR Reduction (vph)	0	0	105	0	0	106	0	0	54	0	0	89
Lane Group Flow (vph)	120	652	25	98	500	24	120	3446	76	109	1848	107
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)	24.6	19.6	19.6	22.6	18.6	18.6	61.4	53.1	53.1	55.4	50.1	50.1
Effective Green, g (s)	24.6	19.6	19.6	22.6	18.6	18.6	61.4	53.1	53.1	55.4	50.1	50.1
Actuated g/C Ratio	0.25	0.20	0.20	0.23	0.19	0.19	0.61	0.53	0.53	0.55	0.50	0.50
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	326	693	310	281	658	294	221	3402	840	168	3210	793
v/s Ratio Prot	c0.02	c0.18		0.01	0.14		c0.05	c0.54		0.03	0.29	
v/s Ratio Perm	0.07		0.02	0.06		0.02	0.29		0.05	0.32		0.07
v/c Ratio	0.37	0.94	0.08	0.35	0.76	0.08	0.54	1.01	0.09	0.65	0.58	0.14
Uniform Delay, d1	30.0	39.6	32.9	31.8	38.6	33.6	12.2	23.4	11.6	21.9	17.5	13.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	20.9	0.1	0.8	5.0	0.1	2.7	18.7	0.2	8.3	0.8	0.4
Delay (s)	30.7	60.5	33.0	32.5	43.6	33.8	14.9	42.2	11.8	30.2	18.3	13.7
Level of Service	C	E	C	C	D	C	B	D	B	C	B	B
Approach Delay (s)		52.6			40.4			40.2			18.4	
Approach LOS		D			D			D			B	

Intersection Summary			
HCM 2000 Control Delay	35.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	87.2%	ICU Level of Service	E
Analysis Period (min)	15		

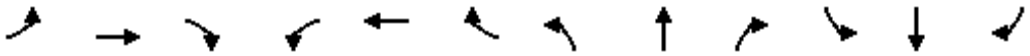
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	500	50	150	400	200	50	940	180	150	360	50
Future Volume (vph)	60	500	50	150	400	200	50	940	180	150	360	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.95		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3491		1770	3363		1770	3454		1770	3475	
Flt Permitted	0.22	1.00		0.95	1.00		0.47	1.00		0.13	1.00	
Satd. Flow (perm)	414	3491		1770	3363		868	3454		235	3475	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	543	54	163	435	217	54	1022	196	163	391	54
RTOR Reduction (vph)	0	7	0	0	62	0	0	16	0	0	11	0
Lane Group Flow (vph)	65	590	0	163	590	0	54	1202	0	163	434	0
Turn Type	Perm	NA		Split	NA		Perm	NA		Perm	NA	
Protected Phases		4		8	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	18.0	18.0		18.0	18.0		50.5	50.5		50.5	50.5	
Effective Green, g (s)	18.0	18.0		18.0	18.0		50.5	50.5		50.5	50.5	
Actuated g/C Ratio	0.18	0.18		0.18	0.18		0.50	0.50		0.50	0.50	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	74	628		318	605		438	1744		118	1754	
v/s Ratio Prot		c0.17		0.09	c0.18			0.35			0.12	
v/s Ratio Perm	0.16						0.06			c0.69		
v/c Ratio	0.88	0.94		0.51	0.97		0.12	0.69		1.38	0.25	
Uniform Delay, d1	39.9	40.5		37.0	40.8		13.1	18.8		24.8	14.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	64.1	21.8		1.4	30.0		0.1	1.2		215.6	0.1	
Delay (s)	104.0	62.3		38.4	70.8		13.2	19.9		240.3	14.1	
Level of Service	F	E		D	E		B	B		F	B	
Approach Delay (s)		66.4			64.3			19.7			74.7	
Approach LOS		E			E			B			E	

Intersection Summary			
HCM 2000 Control Delay	49.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	78.8%	ICU Level of Service	D
Analysis Period (min)	15		

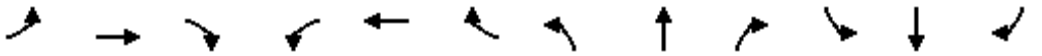
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	400	80	100	50	260	180	400	250	460	870	40
Future Volume (vph)	50	400	80	100	50	260	180	400	250	460	870	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	0.87		1.00	0.94		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3451		1770	3093		1770	3335		1770	3516	
Flt Permitted	0.55	1.00		0.19	1.00		0.27	1.00		0.13	1.00	
Satd. Flow (perm)	1022	3451		351	3093		495	3335		241	3516	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	435	87	109	54	283	196	435	272	500	946	43
RTOR Reduction (vph)	0	13	0	0	210	0	0	76	0	0	2	0
Lane Group Flow (vph)	54	509	0	109	127	0	196	631	0	500	987	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.1	21.8		36.7	27.9		38.9	26.4		62.2	45.2	
Effective Green, g (s)	26.1	21.8		36.7	27.9		38.9	26.4		62.2	45.2	
Actuated g/C Ratio	0.24	0.20		0.34	0.26		0.36	0.24		0.58	0.42	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	277	697		256	799		326	815		582	1472	
v/s Ratio Prot	0.01	c0.15		c0.04	0.04		0.07	0.19		c0.25	0.28	
v/s Ratio Perm	0.04			0.10			0.15			c0.25		
v/c Ratio	0.19	0.73		0.43	0.16		0.60	0.77		0.86	0.67	
Uniform Delay, d1	32.0	40.3		26.3	30.9		24.8	38.0		27.2	25.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	3.9		1.1	0.1		3.1	4.6		12.0	1.2	
Delay (s)	32.3	44.2		27.5	31.0		28.0	42.6		39.2	26.5	
Level of Service	C	D		C	C		C	D		D	C	
Approach Delay (s)		43.1			30.2			39.4			30.8	
Approach LOS		D			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	35.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	107.9	Sum of lost time (s)	18.0
Intersection Capacity Utilization	78.7%	ICU Level of Service	D
Analysis Period (min)	15		

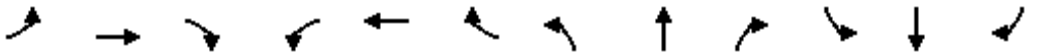
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	320	180	100	890	370	400	740	60	80	280	30
Future Volume (vph)	40	320	180	100	890	370	400	740	60	80	280	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.15	1.00	1.00	0.48	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	271	3539	1583	893	3539	1583	3433	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	348	196	109	967	402	435	804	65	87	304	33
RTOR Reduction (vph)	0	0	125	0	0	117	0	0	43	0	0	26
Lane Group Flow (vph)	43	348	71	109	967	285	435	804	22	87	304	7
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Actuated Green, G (s)	38.6	35.7	35.7	42.0	37.4	37.4	18.4	32.9	32.9	8.0	22.5	22.5
Effective Green, g (s)	38.6	35.7	35.7	42.0	37.4	37.4	18.4	32.9	32.9	8.0	22.5	22.5
Actuated g/C Ratio	0.39	0.36	0.36	0.42	0.38	0.38	0.19	0.33	0.33	0.08	0.23	0.23
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	149	1273	569	418	1334	596	636	1173	525	142	802	359
v/s Ratio Prot	0.01	0.10		c0.01	c0.27		c0.13	c0.23		0.05	0.09	
v/s Ratio Perm	0.10		0.04	0.10		0.18			0.01			0.00
v/c Ratio	0.29	0.27	0.12	0.26	0.72	0.48	0.68	0.69	0.04	0.61	0.38	0.02
Uniform Delay, d1	20.8	22.5	21.3	17.7	26.5	23.5	37.7	28.7	22.5	44.1	32.4	29.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	0.1	0.1	0.3	2.0	0.6	3.0	1.7	0.0	7.6	0.3	0.0
Delay (s)	21.8	22.7	21.4	18.0	28.5	24.1	40.7	30.4	22.5	51.7	32.7	29.8
Level of Service	C	C	C	B	C	C	D	C	C	D	C	C
Approach Delay (s)		22.2			26.5			33.4			36.4	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay	29.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	99.2	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	630	340	240	610	130	250	260	170	210	850	50
Future Volume (vph)	20	630	340	240	610	130	250	260	170	210	850	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.40	1.00	1.00	0.17	1.00	1.00	0.12	1.00	1.00	0.50	1.00	1.00
Satd. Flow (perm)	745	3539	1583	309	3539	1583	446	3539	1583	936	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	685	370	261	663	141	272	283	185	228	924	54
RTOR Reduction (vph)	0	0	148	0	0	58	0	0	129	0	0	37
Lane Group Flow (vph)	22	685	222	261	663	83	272	283	56	228	924	17
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)	31.1	29.4	29.4	49.6	43.4	43.4	41.9	32.4	32.4	46.5	34.7	34.7
Effective Green, g (s)	31.1	29.4	29.4	49.6	43.4	43.4	41.9	32.4	32.4	46.5	34.7	34.7
Actuated g/C Ratio	0.29	0.27	0.27	0.46	0.40	0.40	0.39	0.30	0.30	0.43	0.32	0.32
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	232	969	433	356	1431	640	438	1068	477	497	1144	511
v/s Ratio Prot	0.00	0.19		c0.11	0.19		c0.05	0.08		c0.05	c0.26	
v/s Ratio Perm	0.03		0.14	c0.23		0.05	0.19		0.04	0.15		0.01
v/c Ratio	0.09	0.71	0.51	0.73	0.46	0.13	0.62	0.26	0.12	0.46	0.81	0.03
Uniform Delay, d1	27.4	35.1	32.9	21.0	23.4	20.1	24.1	28.4	27.1	19.9	33.2	24.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	2.4	1.0	7.6	0.2	0.1	2.7	0.1	0.1	0.7	4.3	0.0
Delay (s)	27.6	37.4	33.9	28.6	23.7	20.2	26.8	28.5	27.2	20.6	37.5	24.9
Level of Service	C	D	C	C	C	C	C	C	C	C	D	C
Approach Delay (s)		36.0			24.4			27.6			33.8	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	30.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	107.3	Sum of lost time (s)	18.0
Intersection Capacity Utilization	76.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

PIRATE Rail Project - Node Evaluation

2050 AM Build Scenario

Delay/ LOS

Intersection	Approach Direction	Movement	From Link	To Link	Delay (All Veh) by movement (sec)	Volume (Output) (All Veh) by (vph)	Approach Volume (Output) (vph)	Approach Volume (Input) (vph)	Output / Input	Intersection (vph)	Mvmt. % Approach Volume	Approach % Total Volume	Mvmt. Delay Weighted by Volume	Delay (All Veh) by movement (sec)	Weighted Delay by Approach	Approach LOS	Intersection Delay	Intersection LOS	Avg Queue (feet)	Max Queue (feet)
Sossaman and Pecos	SB	R	71	10	14.5	30	385	390	99%	3492	8%	11%	1.13	14.5	67.2	E	46.2	D	0.0	5.4
		T	69	6	47.4	279					72%		34.37	47.4					91.0	657.3
		L	5	15	160.5	76					20%		31.69	160.5					96.2	627.2
	WB	R	76	3	26.6	373	1367	1360	101%		27%	39%	7.25	26.6	42.3	D			254.1	1494.8
		T	13	10	47.0	899					66%		30.91	47.0					400.0	1551.5
		L	12	6	60.3	95					7%		4.19	60.3					28.0	228.5
	NB	R	77	15	18.7	55	1198	1200	100%		5%	34%	0.86	18.7	53.3	D			0.0	3.7
		T	1	3	48.0	733					61%		29.40	48.0					203.1	1314.5
		L	2	10	67.2	410					34%		23.01	67.2					141.5	1180.2
	EB	R	70	6	9.3	183	542	540	100%		34%	16%	3.13	9.3	25.1	C			11.1	489.7
		T	8	15	25.9	319					59%		15.27	25.9					41.4	825.0
		L	11	3	91.3	40					7%		6.74	91.3					24.9	469.7
Sossaman and Germann	SB	R	96	88	45.7	47	550	560	98%	3088	9%	18%	3.91	45.7	86.2	F	67.6	E	8.0	64.8
		T	94	84	57.6	353					64%		36.98	57.6					205.7	1005.2
		L	95	89	166.0	150					27%		45.28	166.0					223.4	912.8
	WB	R	92	93	45.8	202	744	750	99%		27%	24%	12.45	45.8	67.9	E			197.5	1551.4
		T	91	88	71.1	394					53%		37.68	71.1					224.0	1549.8
		L	90	84	89.3	148					20%		17.77	89.3					131.4	1231.9
	NB	R	82	89	23.6	177	1180	1170	101%		15%	38%	3.53	23.6	48.5	D			56.9	254.3
		T	81	93	50.3	952					81%		40.61	50.3					533.9	1648.7
		L	83	88	100.8	51					4%		4.36	100.8					26.9	146.7
	EB	R	86	84	37.2	48	614	610	101%		8%	20%	2.91	37.2	87.5	F			6.0	59.9
		T	85	89	87.1	505					82%		71.65	87.1					307.0	1285.3
		L	87	93	130.7	61					10%		12.98	130.7					52.1	337.9
Ellsworth and Germann	SB	R	138	105	5.4	150	1688	1980	85%	6049	9%	28%	0.48	5.4	12.2	B	39.5	D	0.0	7.7
		T	22	104	11.2	1456					86%		9.64	11.2					27.8	444.7
		L	99	110	42.6	82					5%		2.07	42.6					14.4	167.1
	WB	R	108	21	38.4	119	656	670	98%		18%	11%	6.96	38.4	51.6	D			4.4	180.5
		T	107	105	54.6	451					69%		37.55	54.6					74.6	340.5
		L	109	104	54.4	86					13%		7.13	54.4					15.1	86.3
	NB	R	101	110	15.5	103	2893	3400	85%		4%	48%	0.55	15.5	49.1	D			0.0	0.0
		T	98	21	51.1	2699					93%		47.66	51.1					815.8	1970.3
		L	100	105	28.6	91					3%		0.90	28.6					2.9	89.4
	EB	R	102	104	9.1	120	812	830	98%		15%	13%	1.34	9.1	52.1	D			0.0	0.0
		T	97	110	58.9	580					71%		42.06	58.9					104.7	377.9
		L	103	21	63.3	112					14%		8.73	63.3					15.4	96.4

PIRATE Rail Project - Node Evaluation

2050 PM Build Scenario

Delay/ LOS

Intersection	Approach Direction	Movement	From Link	To Link	Delay (All Veh) by movement (sec)	Volume (Output) (All Veh) by (vph)	Approach Volume (Output) (vph)	Approach Volume (Input) (vph)	Output / Input	Intersection (vph)	Mvmt. % Approach Volume	Approach % Total Volume	Mvmt. Delay Weighted by Volume	Delay (All Veh) by movement (sec)	Weighted Delay by Approach	Approach LOS	Intersection Delay	Intersection LOS	Avg Queue (feet)	Max Queue (feet)
Sossaman and Pecos	SB	R	71	10	19.5	49					5%		0.91	19.5					0.0	5.3
		T	69	6	41.1	808	1057	1110	95%		76%	28%	31.40	41.1	48.6	D			381.5	1069.0
		L	5	15	85.9	200					19%		16.25	85.9					375.4	1068.2
	WB	R	76	3	10.9	130					13%		1.43	10.9					0.1	26.2
		T	13	10	42.4	618	986	990	100%		63%	27%	26.57	42.4	46.4	D			122.9	981.9
		L	12	6	76.3	238				3713	24%		18.43	76.3			44.1	D	128.5	700.8
	NB	R	77	15	5.8	160					24%		1.36	5.8					0.2	54.7
		T	1	3	26.8	262	679	680	100%		39%	18%	10.34	26.8	37.9	D			20.9	126.2
		L	2	10	69.3	257					38%		26.21	69.3					48.8	256.5
	EB	R	70	6	23.1	337					34%		7.87	23.1					202.2	1054.9
		T	8	15	49.8	633	991	980	101%		64%	27%	31.83	49.8	41.3	D			266.2	1104.2
		L	11	3	76.9	21					2%		1.63	76.9					6.1	72.0
Sossaman and Germann	SB	R	96	88	26.2	37					3%		0.75	26.2					2.3	20.6
		T	94	84	44.2	829	1292	1370	94%		64%	42%	28.39	44.2	52.1	D			440.4	1068.4
		L	95	89	69.7	426					33%		23.00	69.7					501.8	1071.6
	WB	R	92	93	45.7	255					63%		28.87	45.7					110.9	812.9
		T	91	88	77.1	50	404	410	99%		12%	13%	9.54	77.1	65.5	E			8.6	66.1
		L	90	84	110.7	99				3069	25%		27.12	110.7			64.3	E	93.5	688.2
	NB	R	82	89	38.2	256					30%		11.64	38.2					214.1	1393.0
		T	81	93	65.9	403	841	830	101%		48%	27%	31.60	65.9	66.0	E			271.7	1565.8
		L	83	88	105.0	182					22%		22.72	105.0					249.5	1466.9
	EB	R	86	84	53.9	79					15%		8.00	53.9					16.5	122.7
		T	85	89	95.8	404	532	530	100%		76%	17%	72.78	95.8	90.1	F			227.9	1175.9
		L	87	93	101.7	49					9%		9.37	101.7					28.6	157.2
Ellsworth and Germann	SB	R	138	105	10.5	119					4%		0.45	10.5					0.0	0.0
		T	22	104	21.2	2508	2803	2870	98%		89%	45%	18.99	21.2	21.8	C			143.9	1089.3
		L	99	110	37.0	176					6%		2.32	37.0					39.6	633.5
	WB	R	108	21	8.7	156					30%		2.62	8.7					0.1	29.6
		T	107	105	51.0	220	516	520	99%		43%	8%	21.76	51.0	36.0	D			35.7	170.3
		L	109	104	42.8	140					27%		11.62	42.8					20.2	117.4
	NB	R	101	110	3.6	90				6210	5%		0.18	3.6			26.1	C	0.0	0.0
		T	98	21	19.4	1669	1814	1800	101%		92%	29%	17.87	19.4	18.9	B			48.7	274.0
		L	100	105	27.0	55					3%		0.82	27.0					3.6	72.8
	EB	R	102	104	12.4	175					16%		2.02	12.4					0.0	1.6
		T	97	110	53.2	758	1077	1110	97%		70%	17%	37.44	53.2	44.9	D			142.0	532.1
		L	103	21	40.6	144					13%		5.42	40.6					18.8	100.0

Figure 3-3. 2050 No Build Sossaman Road Roadway Network and Traffic Volumes

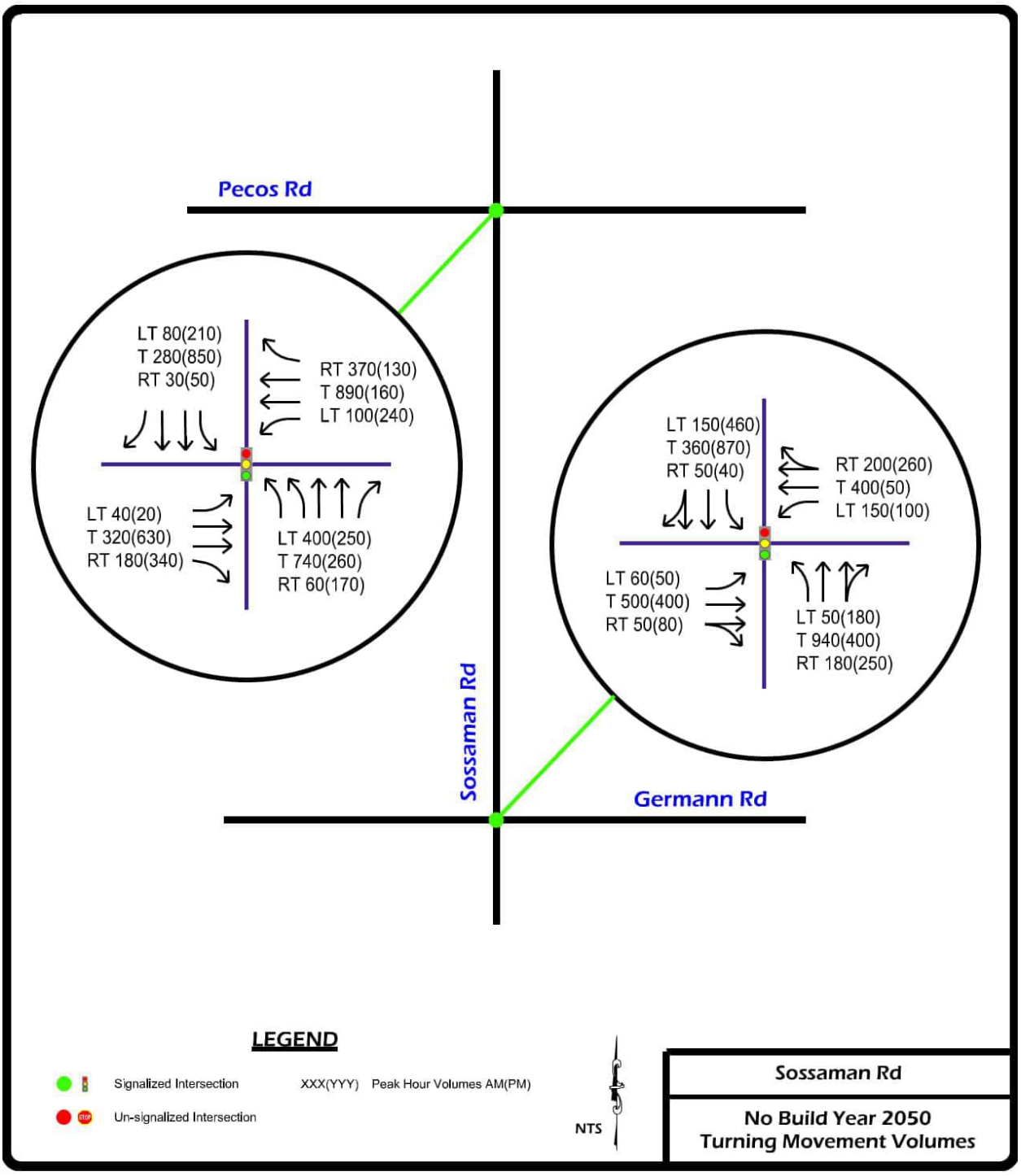


Figure 3-4. 2050 No Build Ellsworth Road Roadway Network and Traffic Volumes

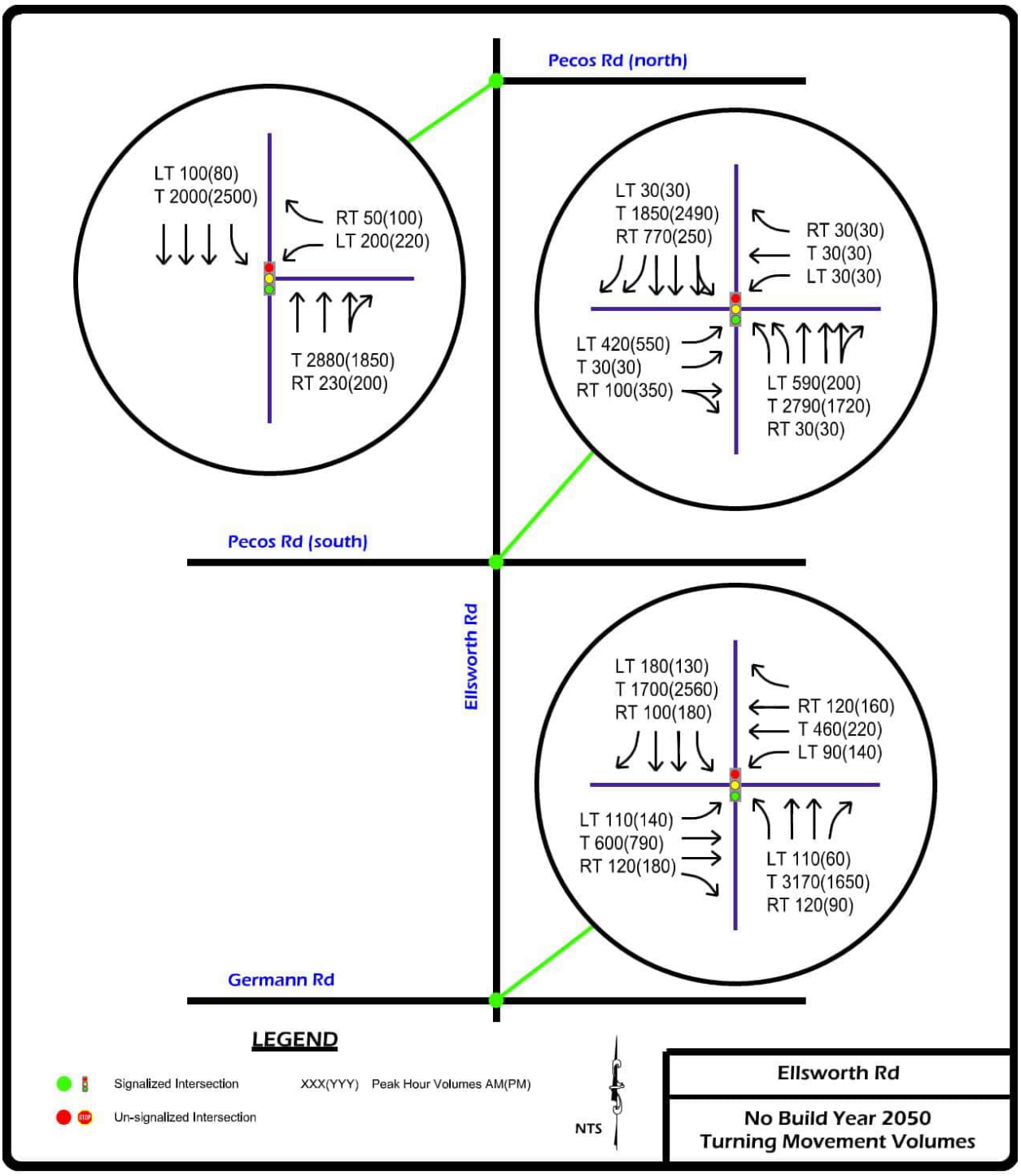


Figure 3-6. 2050 Build Sossaman Road Roadway Network and Traffic Volumes

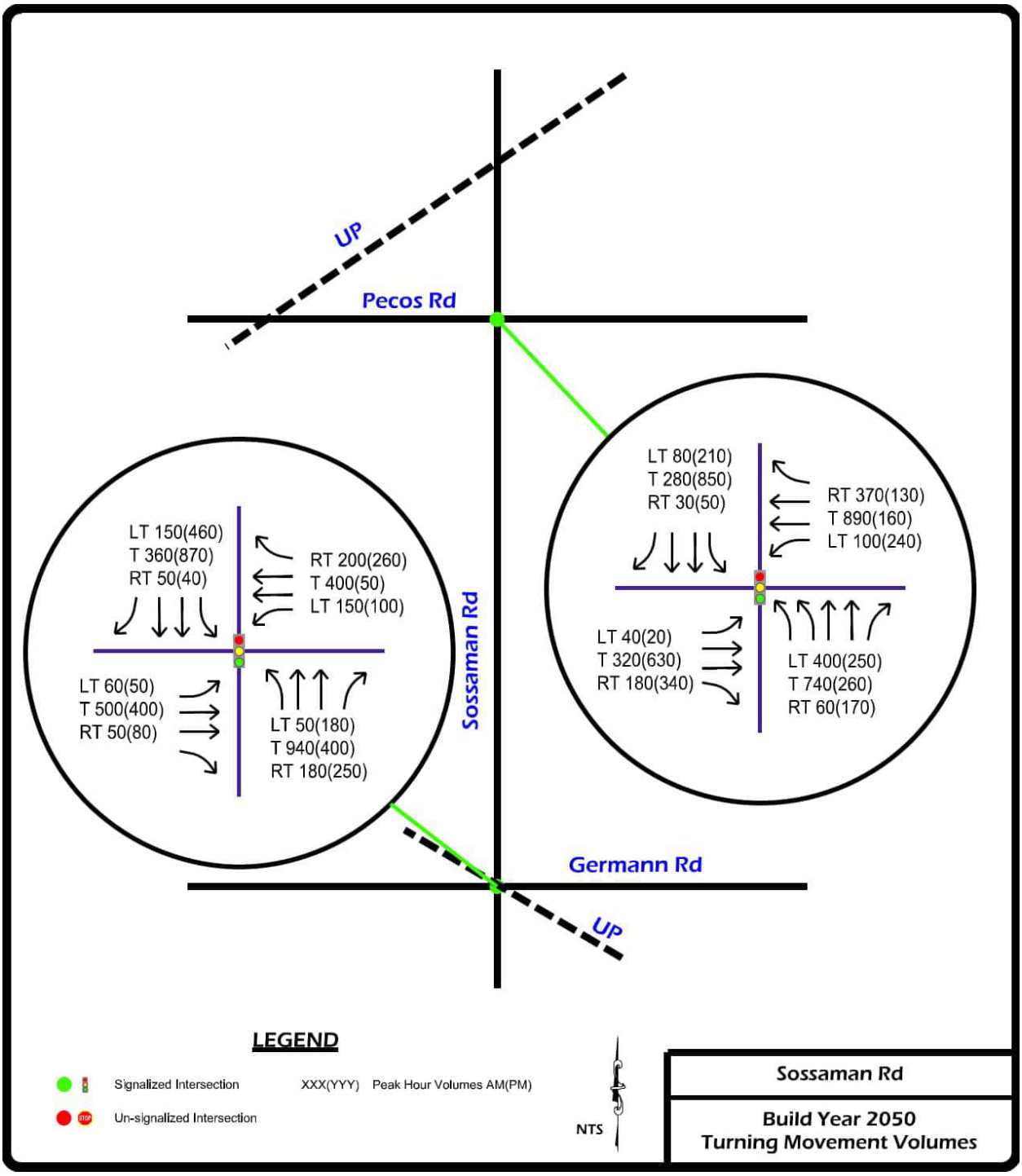
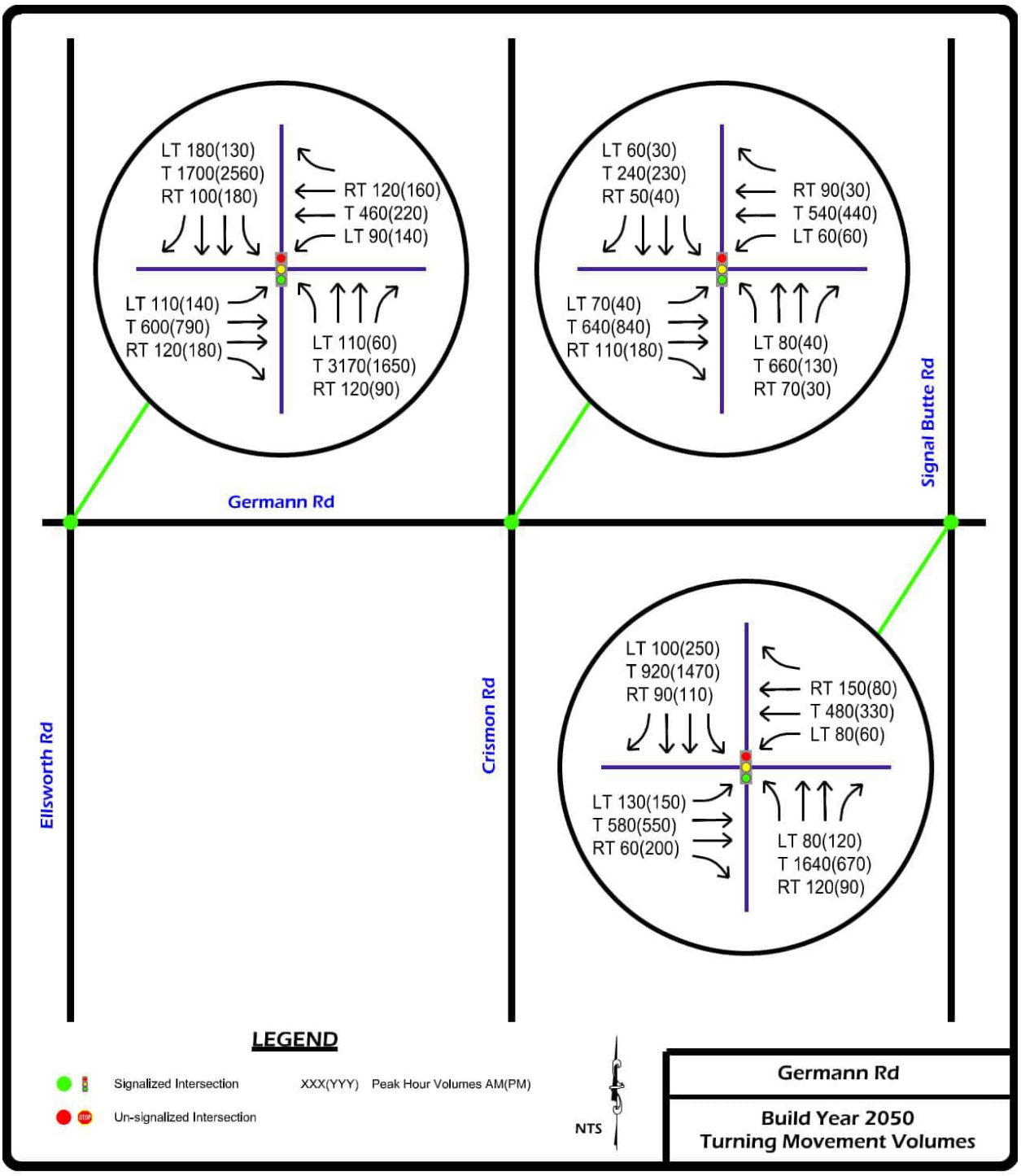
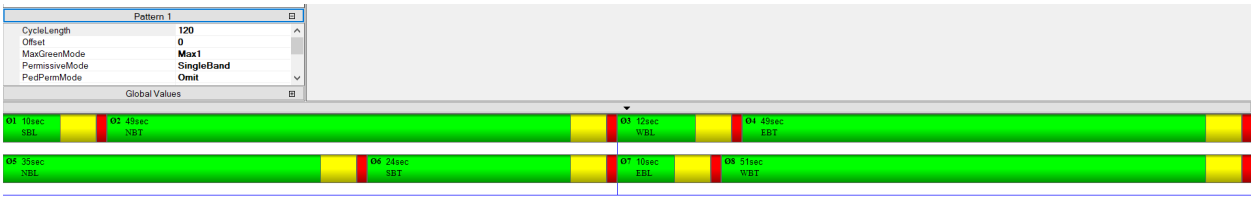


Figure 3-9. 2050 Build Germann Road Roadway Network and Traffic Volumes

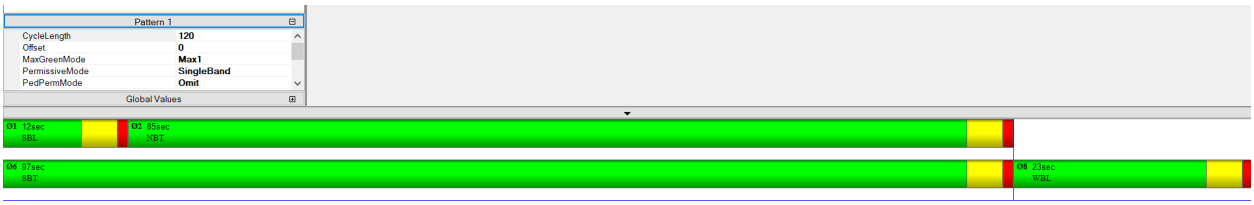


NO-BUILD AM

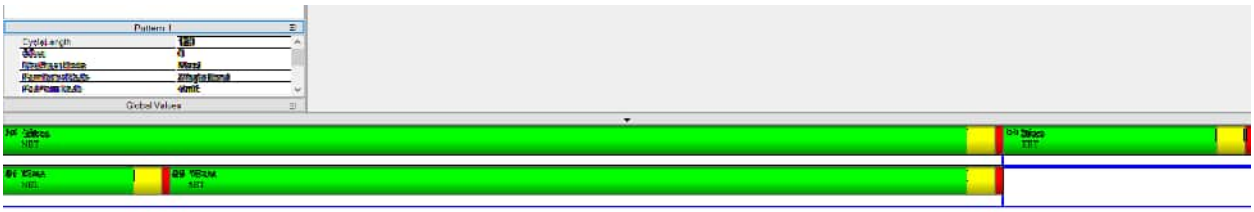
Sossaman & Pecos



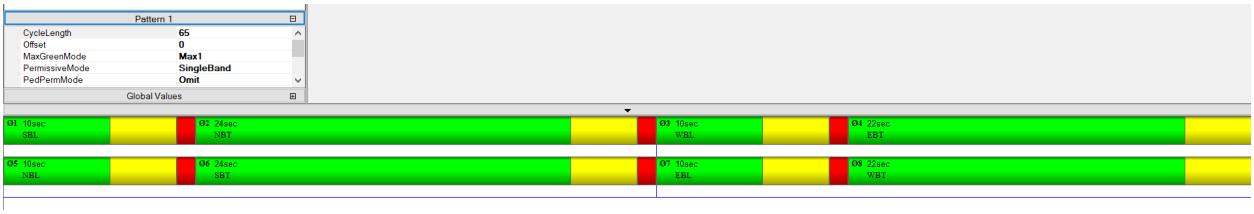
Ellsworth & Pecos (North)



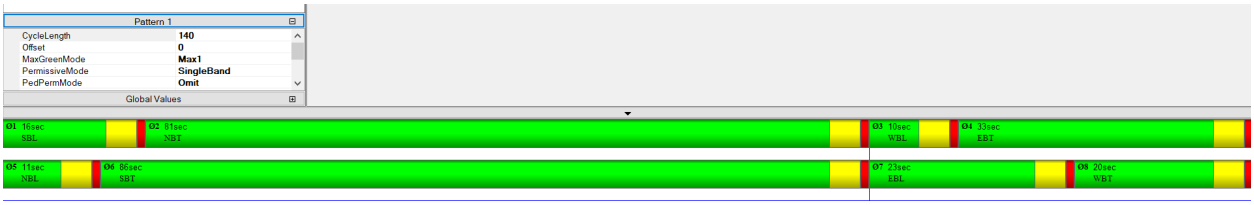
Ellsworth & Pecos (South)



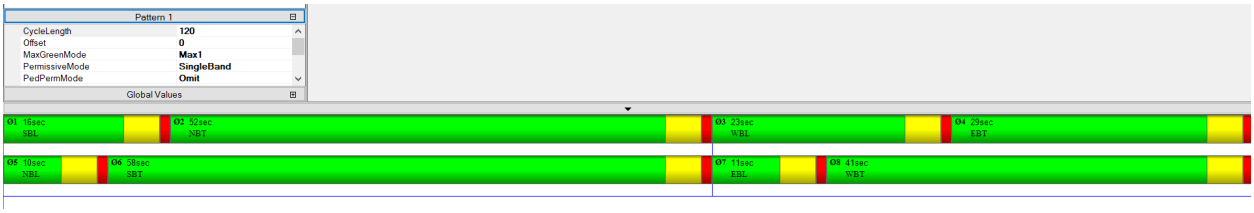
Crismon & Pecos



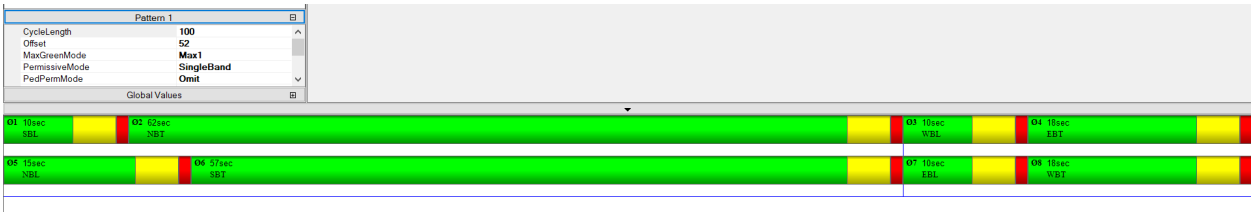
Signal Butte & Pecos



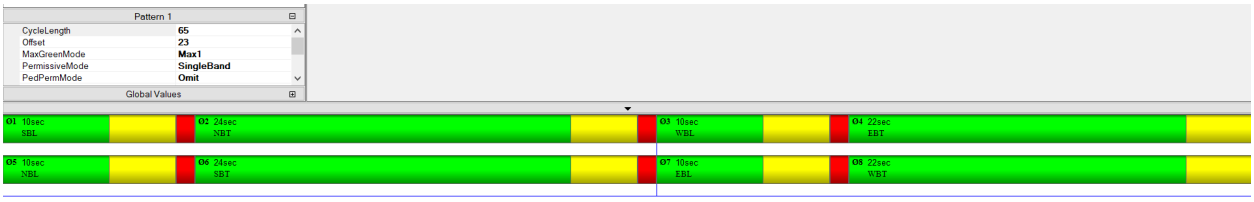
Sossaman & Germann



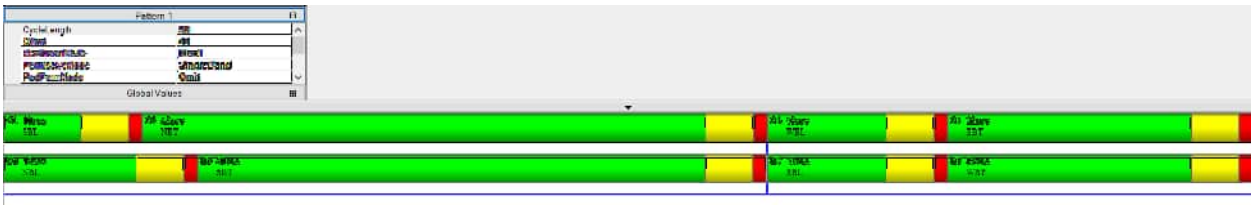
Ellsworth & Germann



Crismon & Germann

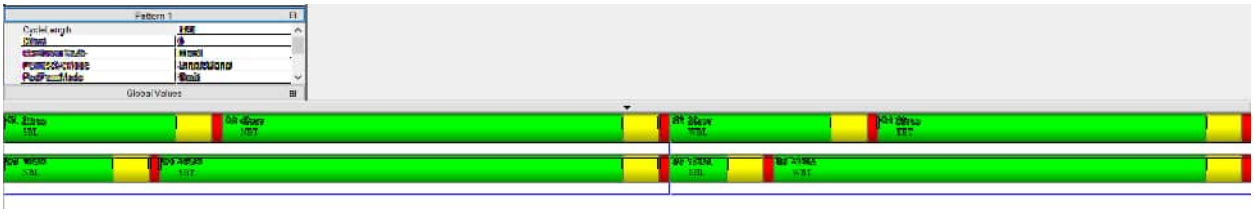


Signal Butte & Germann

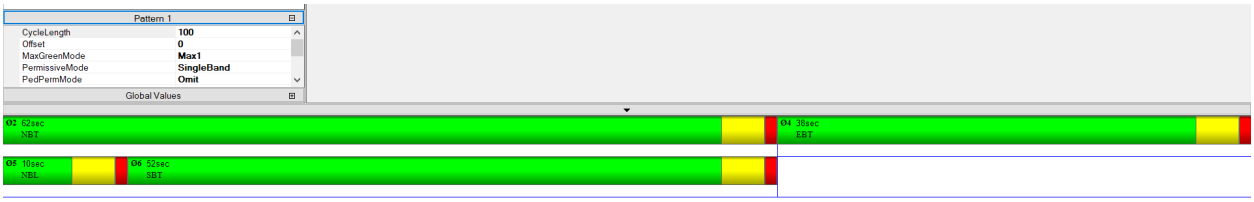


NO-BUILD PM

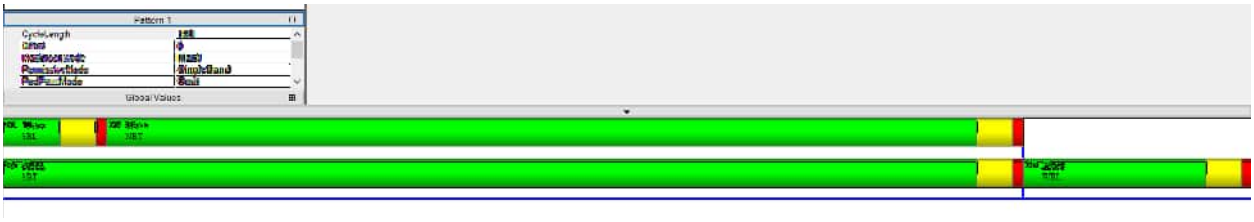
Sossaman & Pecos



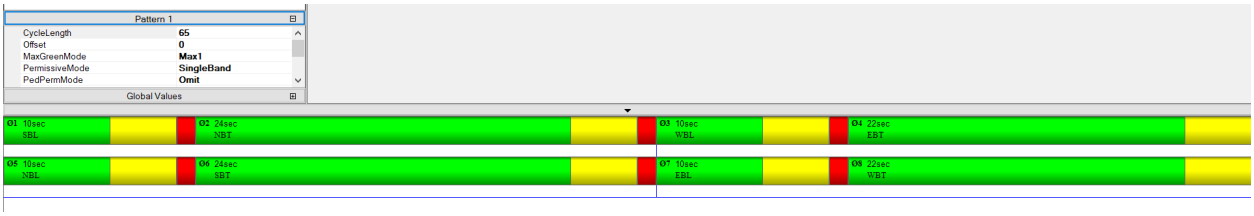
Ellsworth & Pecos (North)



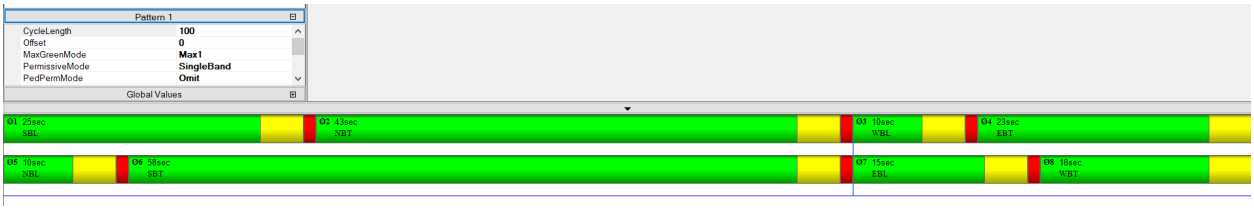
Ellsworth & Pecos (South)



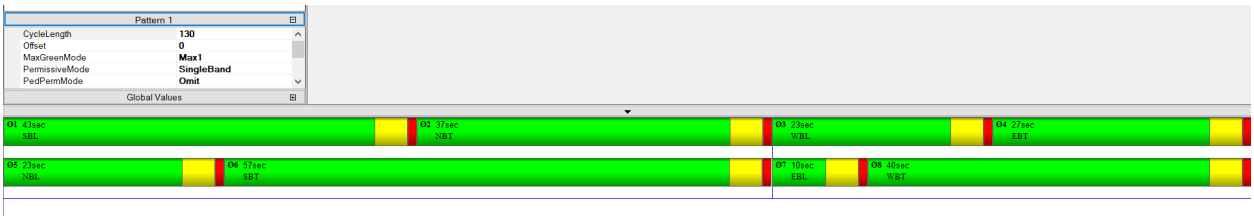
Crismon & Pecos



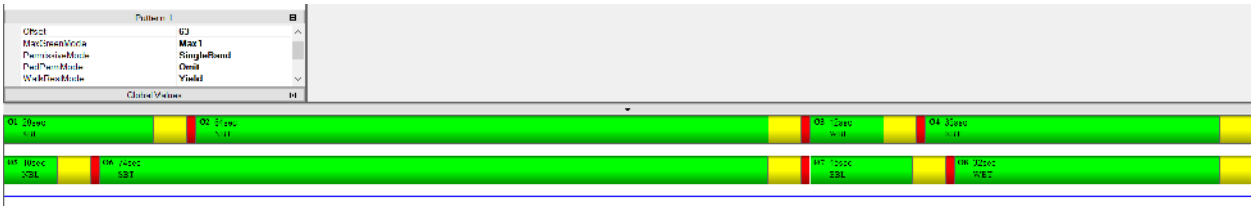
Signal Butte & Pecos



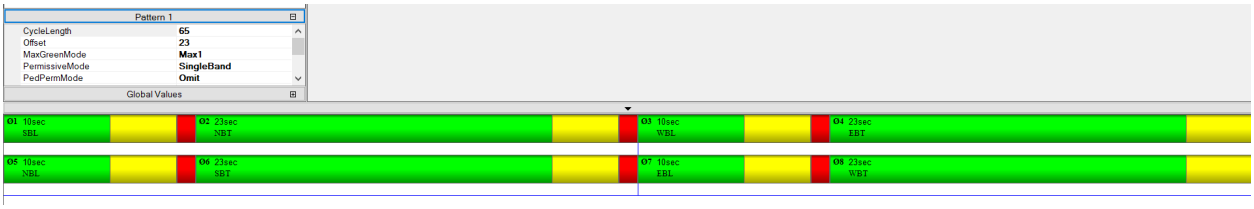
Sossaman & Germann



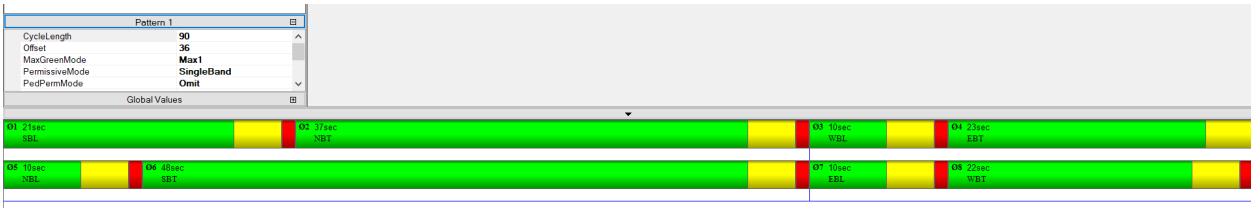
Ellsworth & Germann



Crismon & Germann

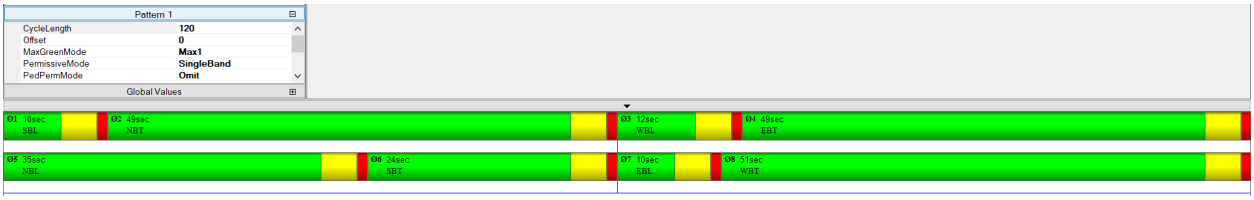


Signal Butte & Germann

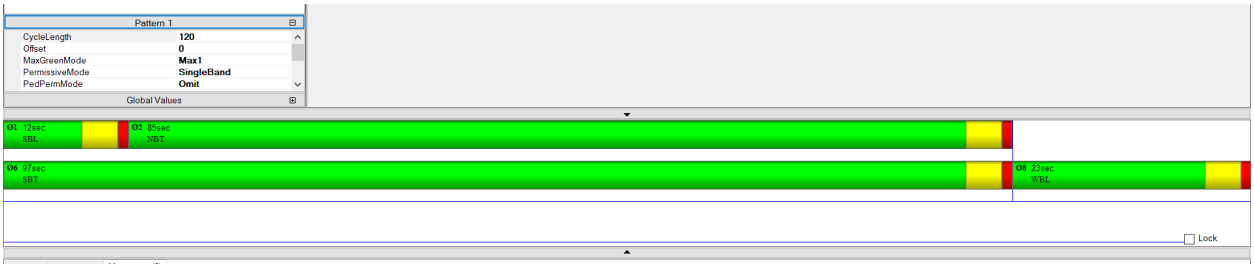


BUILD AM

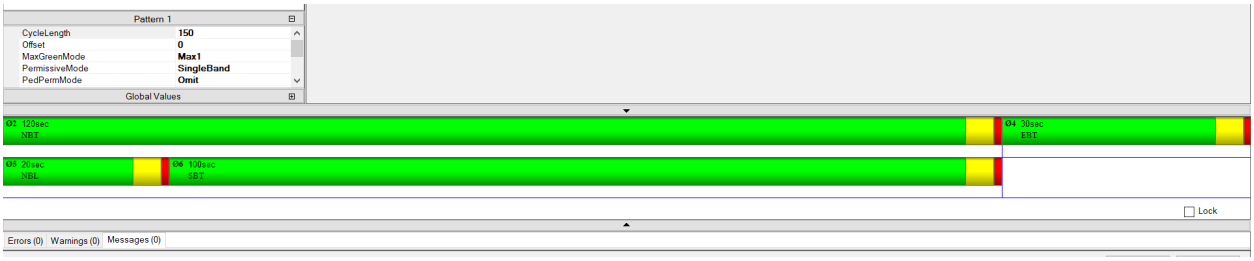
Sossaman & Pecos



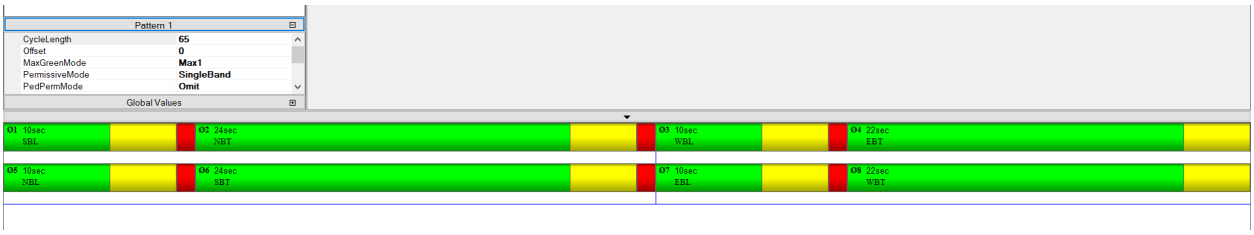
Ellsworth & Pecos (North)



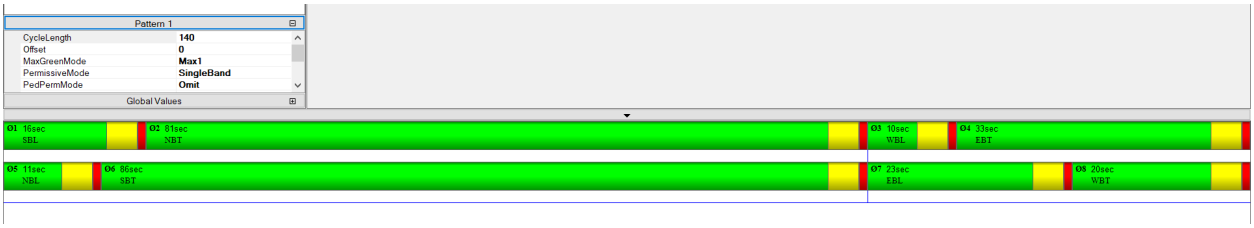
Ellsworth & Pecos (South)



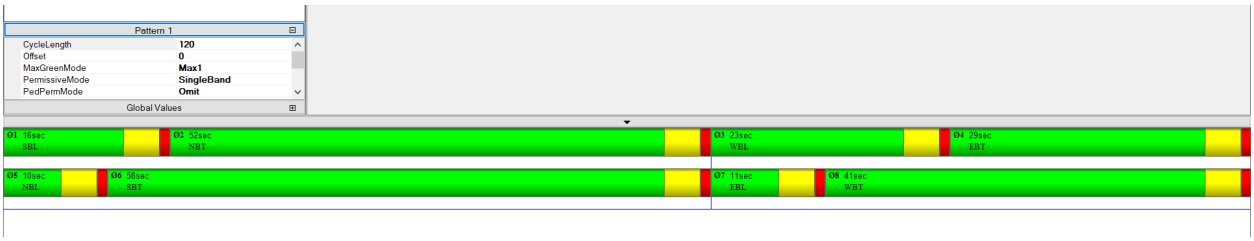
Crismon & Pecos



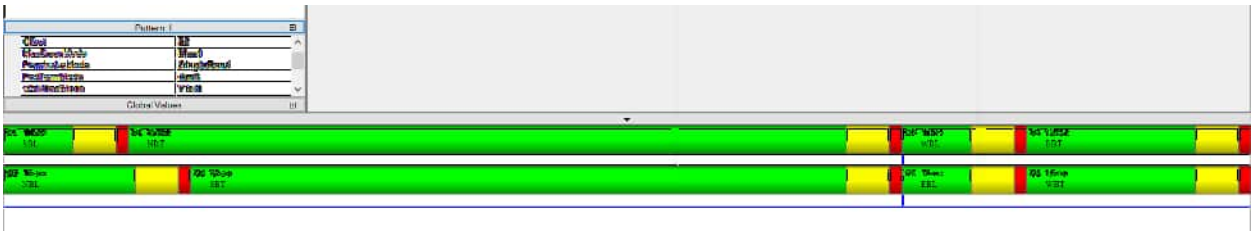
Signal Butte & Pecos



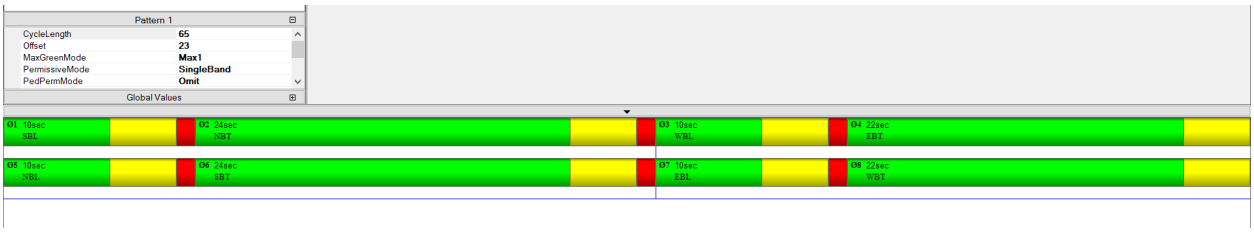
Sossaman & Germann



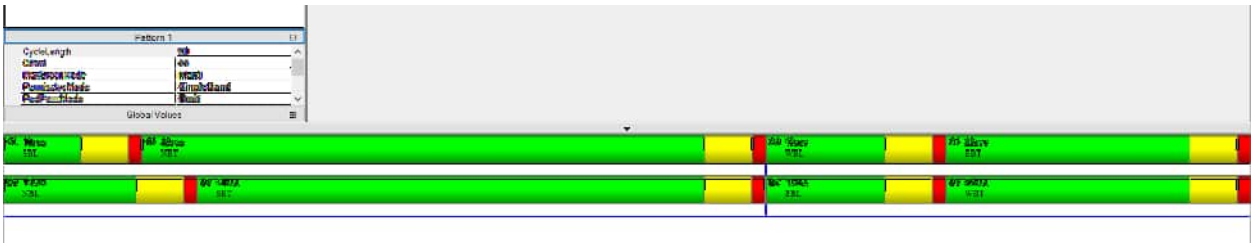
Ellsworth & Germann



Crismon & Germann

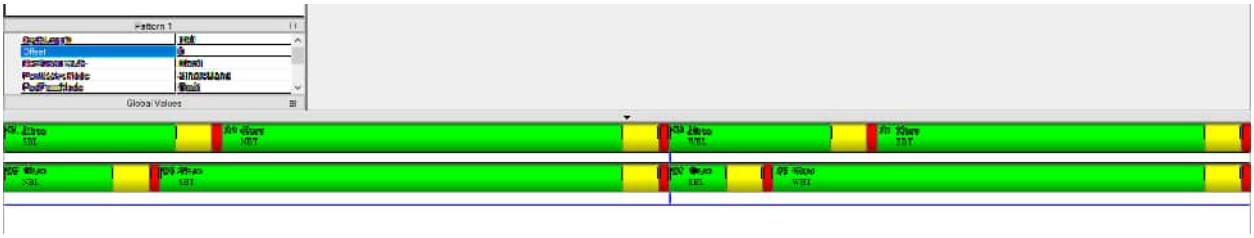


Signal Butte & Germann

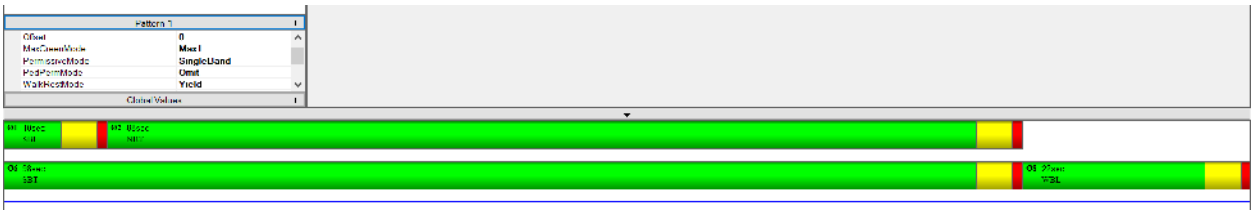


BUILD PM

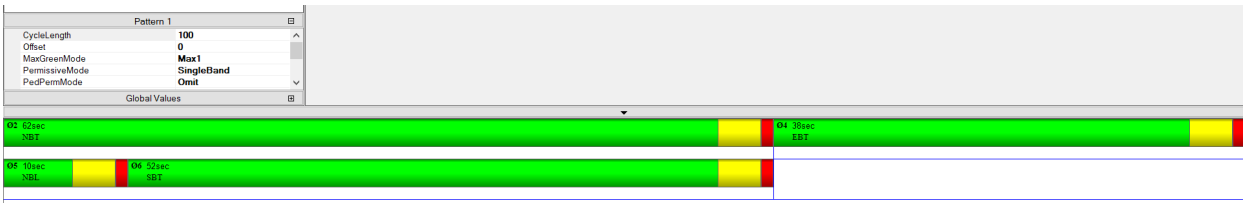
Sossaman & Pecos



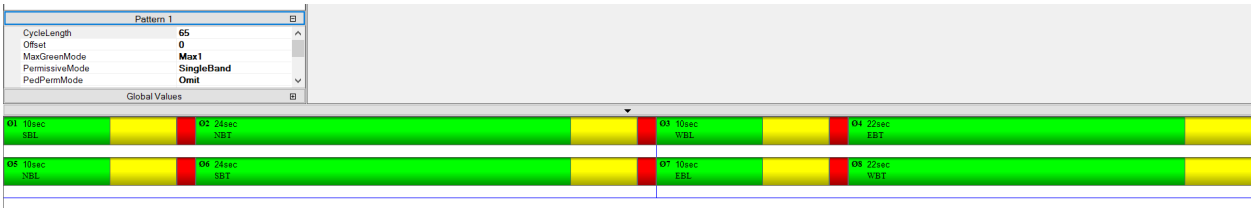
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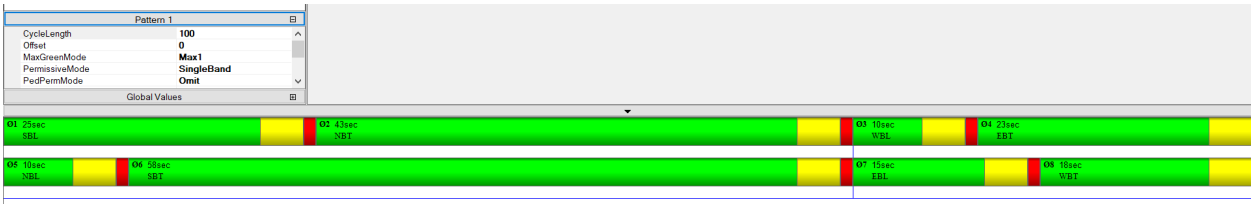
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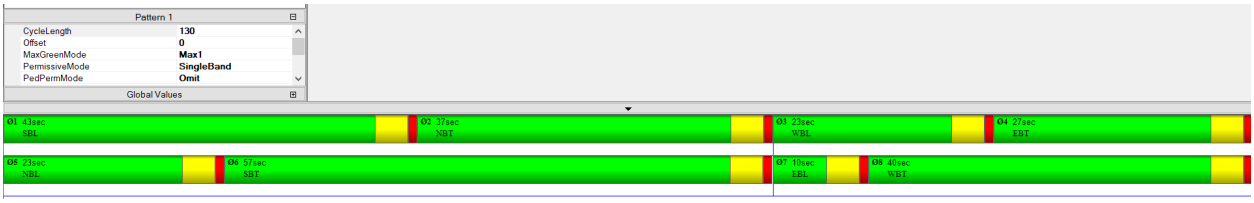
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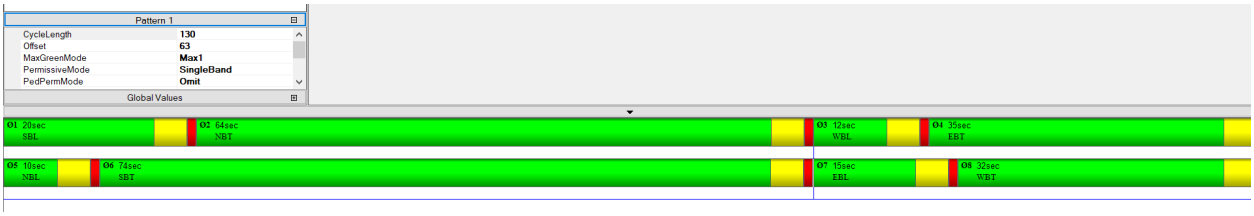
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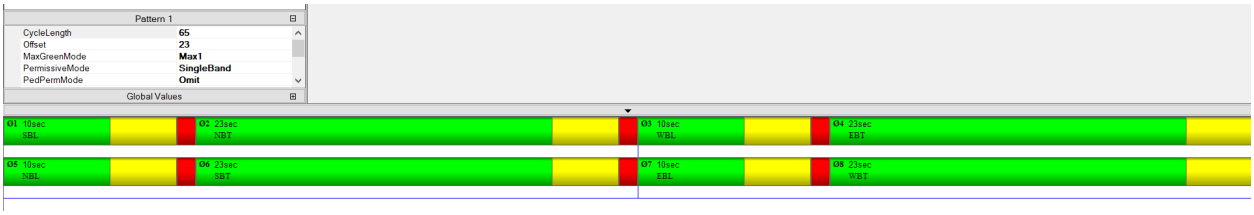
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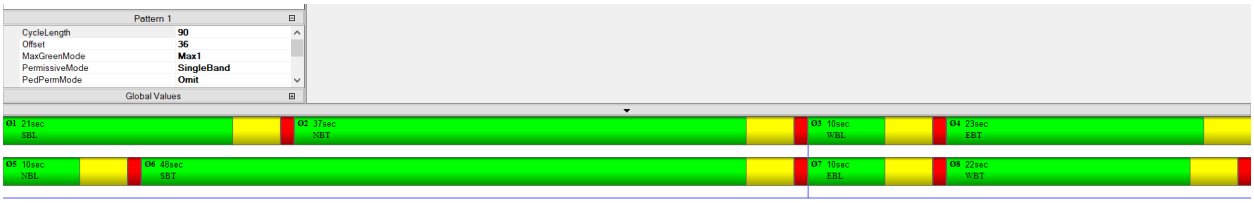
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Crismon & Germann



Signal Butte & Germann



Appendix D
Noise and Vibration Analysis

NOISE AND VIBRATION ANALYSIS

PECOS INDUSTRIAL RAIL ACCESS AND TRAIN EXTENSION (PIRATE) PROJECT

Docket No. FD 36501 - Union Pacific Railroad Company
Construction and Operation Exemption - In Maricopa County, Ariz.

May 2023

Summary

The Union Pacific Railroad Company (UP) is seeking authority from the Surface Transportation Board to construct and operate approximately 6.0 miles of new rail line in Maricopa County, Arizona (Docket No. FD 36501) to transport raw materials and commercial freight. The proposed rail line, referred to as Pecos Industrial Rail Access and Train Extension (PIRATE), would connect UP's Phoenix Subdivision main line (Phoenix Subdivision) to industrial properties south of the Phoenix-Mesa Gateway Airport via a single-track rail line. UP also proposes to construct and operate approximately 2.5 miles of planned support tracks along the Phoenix Subdivision between Power Road and Ellsworth Road. The Surface Transportation Board's Office of Environmental Analysis identified two reasonable alternatives that meet the purpose and need for PIRATE: Alternative 1 and Alternative 2.

This noise and vibration analysis and report was developed as supplemental material to the Draft Environmental Assessment. The purpose of this analysis is to evaluate the potential impact of PIRATE and the planned Phoenix Subdivision support tracks on the existing noise and vibration environment and to determine potential impacts, if any.

Neither the No-Action Alternative, Alternative 1, Alternative 2, nor the planned Phoenix Subdivision support tracks would impact any Federal Transit Administration (FTA)- or Federal Railroad Administration (FRA)-defined Land Use Category 2 (residential) or Land Use Category 3 (institutional) locations within the noise and vibration study areas.

As shown in Table S-1, the No-Action Alternative, Alternative 1, Alternative 2, and the planned Phoenix Subdivision support tracks would not result in operational noise or vibration impacts. Project-generated noise is not likely to cause community annoyance as defined by FTA/FRA and operational mitigation is not required. No project construction vibration impacts were identified, but temporary construction noise impacts could occur and the daily project construction schedule must adhere to local time restrictions that limit nighttime construction.

Table S-1. Comparison of Operational Impacts by Alternative

Impact Type	No-Action Alternative	Alternative 1 and the Planned Phoenix Subdivision support tracks	Alternative 2 and the Planned Phoenix Subdivision support tracks
No Impact (number of receptors by type)	West of Power Road and South of Pecos Road Residential: 28 Institutional: 1 East of Power Road and West of Phoenix Subdivision Residential: 39 Institutional: 6 East of Mesquite Drive Residential: 30 Institutional: 0 West of Fulton Parkway Residential: 88 Institutional: 0 Residential Total: 185 Institutional Total: 7	West of Power Road and South of Pecos Road Residential: 28 Institutional: 1 East of Power Road and West of Phoenix Subdivision Residential: 39 Institutional: 6 East of Mesquite Drive Residential: 30 Institutional: 0 West of Fulton Parkway Residential: 88 Institutional: 0 Residential Total: 185 Institutional Total: 7	West of Power Road and South of Pecos Road Residential: 28 Institutional: 1 East of Power Road and West of Phoenix Subdivision Residential: 39 Institutional: 6 East of Mesquite Drive Residential: 30 Institutional: 0 West of Fulton Parkway Residential: 88 Institutional: 0 Residential Total: 185 Institutional Total: 7
Moderate[1] and Severe Noise[2]	None	None	None
Ground-Borne Noise and Vibration[3]	None	None	None

[1] Project noise not likely to cause community annoyance.
[2] The threshold at which the percentage of people highly annoyed by project noise becomes measurable.
[3] FTA has established standards for categories of buildings with varying sensitivity to ground-borne noise and ground-born vibration.[1]

[1] Federal Transit Administration. 2018. Transit Noise and Vibration Impact Assessment Manual. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed June 16, 2022.

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Acronyms and Abbreviations

Board	Surface Transportation Board
C.F.R.	Code of Federal Regulations
dB	decibel
dBA	A-weighted decibel
EA	Environmental Assessment
FRA	Federal Railroad Administration
FTA	Federal Transit Authority
GBN	ground-borne noise
GBV	ground-borne vibration
Gilbert	Town of Gilbert
hp	horsepower
HUD	U.S. Department of Housing and Urban Development
Jacobs	Jacobs Engineering Group Inc.
Ldn	day-night noise level
Leq	equivalent noise level
Leq(1hr)	1-hour equivalent noise level
Lmax	maximum noise or sound level
Lv	root-mean-square velocity in decibels
Mesa	City of Mesa
mph	miles per hour
OEA	Office of Environmental Analysis
PAMZ	Pecos Advanced Manufacturing Zone
Phoenix Subdivision	Phoenix Subdivision main line
PIRATE	Pecos Industrial Rail Access and Train Extension
PPV	peak particle velocity
Queen Creek	Town of Queen Creek
RCNM	Roadway Construction Noise Model
RMS	root-mean-square
UP	Union Pacific Railroad Company
VdB	root-mean-square vibration velocity

Chapter 1
Introduction

The Union Pacific Railroad Company (UP) is seeking authority from the Surface Transportation Board (Board) to construct and operate approximately 6.0 miles of new rail line in Maricopa County, Arizona (Docket No. FD 36501) for purposes of transporting raw materials and commercial freight. The proposed rail line, referred to as Pecos Industrial Rail Access and Train Extension (PIRATE), would connect UP's Phoenix Subdivision main line (Phoenix Subdivision) to industrial properties southeast of the Phoenix-Mesa Gateway Airport via a single-track rail line. UP also proposes to construct and operate approximately 2.5 miles of planned support tracks along the Phoenix Subdivision between Power Road and Ellsworth Road.

The purpose of PIRATE is to meet the transportation and logistics needs of existing and future manufacturing businesses within the Pecos Advanced Manufacturing Zone (PAMZ) and adjacent areas. The Board's Office of Environmental Analysis (OEA) identified two reasonable alternatives that meet the purpose and need for PIRATE. The two Action Alternatives (Alternative 1 and Alternative 2), the No-Action Alternative, and the planned Phoenix Subdivision support tracks are described in detail in Chapter 2 of the Draft Environmental Assessment (EA).

This report evaluates the potential impact of the No-Action Alternative, Alternative 1, Alternative 2, and the planned Phoenix Subdivision support tracks on the existing noise and vibration environment within the study area (defined in Section 2.2.1). Scenarios evaluated include the following:

- The existing noise and vibration environment at noise-sensitive locations in the study area with 2022 as the baseline year.
- The impact of the No-Action Alternative on the existing noise and vibration environment, including planned rail traffic on the Phoenix Subdivision, which is scheduled to increase by one train daily beginning in 5 years or in the year 2027.
- The impact of Alternative 1, Alternative 2, and the planned Phoenix Subdivision support tracks on the existing noise and vibration environment, which includes one additional daily train on the Phoenix Subdivision beginning in the year 2027, extension of the existing Phoenix Subdivision Germann siding, a planned Phoenix Subdivision support track, and two trains per day on either PIRATE alternative.

Chapter 2
Studies and Coordination

The Board's regulations at 49 C.F.R. § 1105.7(e)(6) include two specific thresholds for noise analysis:

- An increase in noise exposure as measured by a day-night average noise level
- 3 A-weighted decibels (dBA) or more

If the thresholds are exceeded, OEA identifies the receptors in the study area and quantifies the noise increase for these receptors. An adverse noise impact occurs when the noise level at a receptor increases by 3 dBA or more and reaches or exceeds a noise level of 65 dBA when combined with the existing background noise.[1]

The study methods used were also guided by the Federal Transit Authority's (FTA) *Transit Noise and Vibration Impact Assessment Manual* (2018) and the Federal Railroad Administration's (FRA) *High-Speed Ground Transportation Noise and Vibration Impact Assessment* (2012) technical guidance manuals. These manuals define noise-sensitive land use categories and establish metrics for determining potential project impacts for locations within each category. The manuals also provide methods for defining the study area, establishing the existing noise and vibration environment within the study area, and identifying future impacts at sensitive locations within the study area through assessing existing noise and vibration sources and project design elements and rail traffic within the study area. A discussion of the regulatory context and application of the FTA and FRA methods for this project follows.

2.1 Regulatory Context

2.1.1 Fundamentals of Noise

Sound is created when an object vibrates and radiates part of its energy as acoustic pressure or waves through a medium, such as air, water, or a solid object. Noise is generally defined as any loud or undesired sound. Noise is measured in terms of sound pressure and is expressed in decibels (dB). Since the human ear does not respond equally to all frequencies (or pitches), measured noise levels (in dB at standard frequency bands) are often adjusted or weighted to correspond to the frequency of human hearing and the human perception of loudness. The weighted noise level is designated a dBA.

The descriptors Leq (equivalent noise level), Ldn (day-night noise level), and Lmax (maximum sound level) correlate with the human perception of noise levels. The Leq is the level of a constant sound in dBA with the same sound energy as the time-varying sound over the same period, typically 1 hour. One-hour equivalent noise levels measured every hour over a continuous 24-hour period are sometimes used to calculate a composite 24-hour noise exposure

[1] Although the Surface Transportation Board's regulations at 49 C.F.R. § 1105.7(e)(6) indicate that *either* an increase of 3 dBA *or* an increase to an Ldn of 65 dBA would be an adverse impact, research indicates that *both* conditions must be met or exceeded for an adverse noise impact from rail operations to occur (Surface Transportation Board 1998; Coate 1999).

measure called the Ldn, which adds 10 dBA to nighttime levels between the hours of 10:00 p.m. and 7:00 a.m. to account for the increased noise sensitivity of people during sleeping hours. For trains and roadway vehicles, Lmax is the maximum pass by sound level.

Use of Leq and Ldn is appropriate for transportation noise analysis because these levels are sensitive to both the frequency of occurrence and duration of noise events, including freight and commuter rail operations that may be characterized by infrequent noise. Typical Ldn noise levels at a 50-foot setback range from 50 to 90 dBA for non-freight sources and 70 to 95 dBA for trains, including freight and commuter rail pass by events or up to 114 dBA with a warning horn blowing (FRA 2020).

The ability of an average individual to perceive changes in noise levels is well documented. Generally, changes in noise levels of 3 dBA will be barely perceived by most listeners, whereas a 10 dBA change normally is perceived as a doubling of noise levels. Typical sound levels experienced by people range from about 40 dBA, the daytime level in a typical quiet living room, to 85 dBA, the approximate level occurring near the sidewalk adjacent to heavy traffic.

The U.S. Department of Housing and Urban Development (HUD) has developed noise standards, criteria, and guidelines to ensure that housing projects supported by HUD achieve the goal of a suitable living environment. The HUD acceptability standards (24 C.F.R. 51B) define 65 dB (Ldn) as the threshold for a normally unacceptable living environment and 75 dB (Ldn) as the threshold for an unacceptable living environment, or "threshold of annoyance." These standards are equivalent to the impact standards established by FTA and FRA in their guidance documents, as explained below, and have been adopted in their guidance documents.

Noise Impact Standards

Part 210 of Title 49 of the *Code of Federal Regulations* (49 C.F.R. Part 210) contains the Railroad Noise Emission Compliance Regulations implemented by the FTA and the FRA to comply with U.S. Environmental Protection Agency Noise Emission Standards for Interstate Rail Carriers. Both agencies have established criteria for noise and vibration impacts. The FTA first published the *Transit Noise and Vibration Impact Assessment Manual* guidance document in 1995 with subsequent revisions (FTA 2018). The FRA first published the *High-Speed Ground Transportation Noise and Vibration Impact Assessment* guidance document in 2005 with subsequent revisions (FRA 2012), establishing criteria for noise and vibration impacts that are identical to those established by the FTA.

The FTA/FRA noise criteria are based on a comparison of the rail (or freight) system noise with the outdoor ambient noise from other sources in the surrounding community. They incorporate both absolute criteria, which consider annoyance caused by the system alone, and relative criteria, which consider annoyance due to the change in noise environment caused by the system. The criteria evaluate noise impacts on the basis of cumulative, dBA noise exposure, in terms of either Leq or Ldn. Ldn is applied to residences and other buildings where people normally sleep, and Leq is applied to all other noise-sensitive land use categories. Table 2-1 lists the noise impact metrics for three land use categories and provides a description of land uses in each category.

Table 2-1. Land Use Categories and Metrics for Rail Noise Impact Criteria

Land Use Category	Land Use Type	Noise Metric, dBA	Description of Land Use Category
1	High Sensitivity	Outdoor Leq(1hr)[1]	Land where quiet is an essential element of its intended purpose. Example land uses include preserved land for serenity and quiet, outdoor amphitheaters and concert pavilions, and national historic landmarks with considerable outdoor use. Recording studios and concert halls are also included in this category.
2	Residential	Outdoor Ldn	This category is applicable to all residential land uses and buildings where people normally sleep, such as hotels and hospitals.
3	Institutional	Outdoor Leq(1hr)[1]	This category is applicable to institutional land uses, primarily with daytime and evening use. Example land uses include schools, libraries, theaters, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material. Places for meditation or study associated with cemeteries, monuments, museums, campgrounds, and recreational facilities are also included in this category.

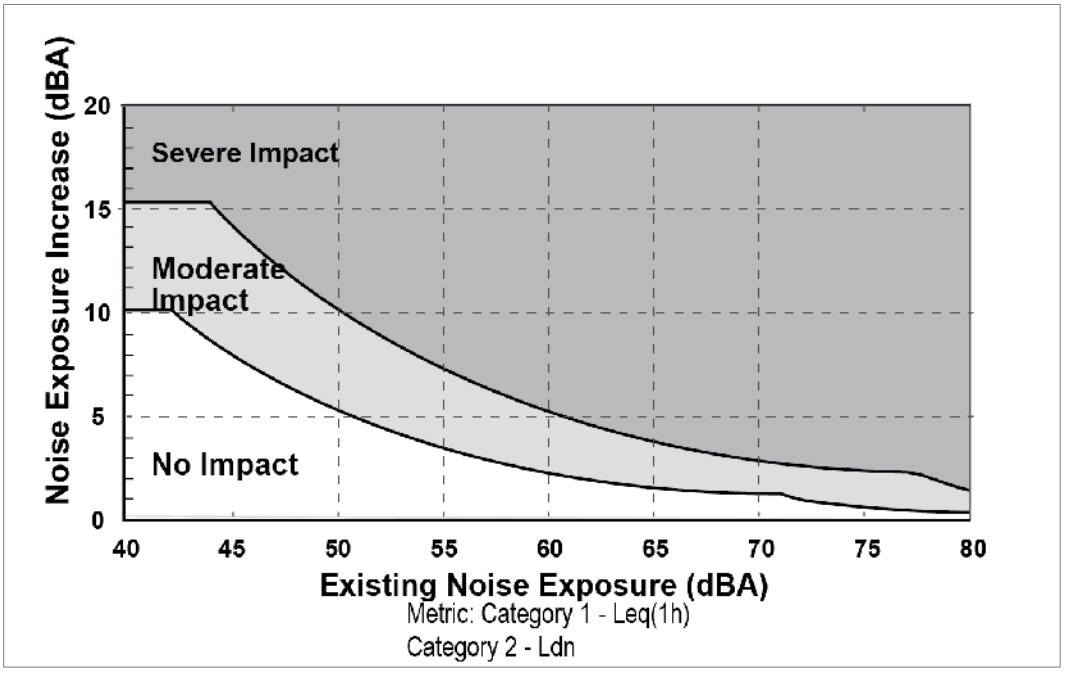
Source: FTA 2018.
[1] Leq(1hr) for the loudest hour of project-related activity during hours of noise sensitivity.

The FTA/FRA noise impact criteria are established by two curves, representing severe and moderate noise impacts, defined as follows:

- No Impact: Project-generated noise is not likely to cause community annoyance. Noise projections in this range are considered acceptable by the FTA/FRA and mitigation is not required.
- Moderate Impact: The threshold at which the percentage of people highly annoyed by project noise becomes measurable. The magnitude of the project impact and need for mitigation will depend upon other factors, such as existing noise levels, the predicted future increase in noise levels, and the types and number of land uses affected.
- Severe Impact: The percentage of people highly annoyed by project noise increases significantly. Noise mitigation must be considered if it is not practical to change the location of the project or under extenuating circumstances that prevent it (a practical mitigation method does not exist).

Figure 2-1 illustrates the increase above existing noise levels before a moderate or severe noise impact occurs. The curves shown on Figure 2-1 apply to land use Categories 1 and 2. Category 1 land uses including amphitheaters, concert pavilions, and National Historic Landmarks; Category 2 land uses include residential areas.

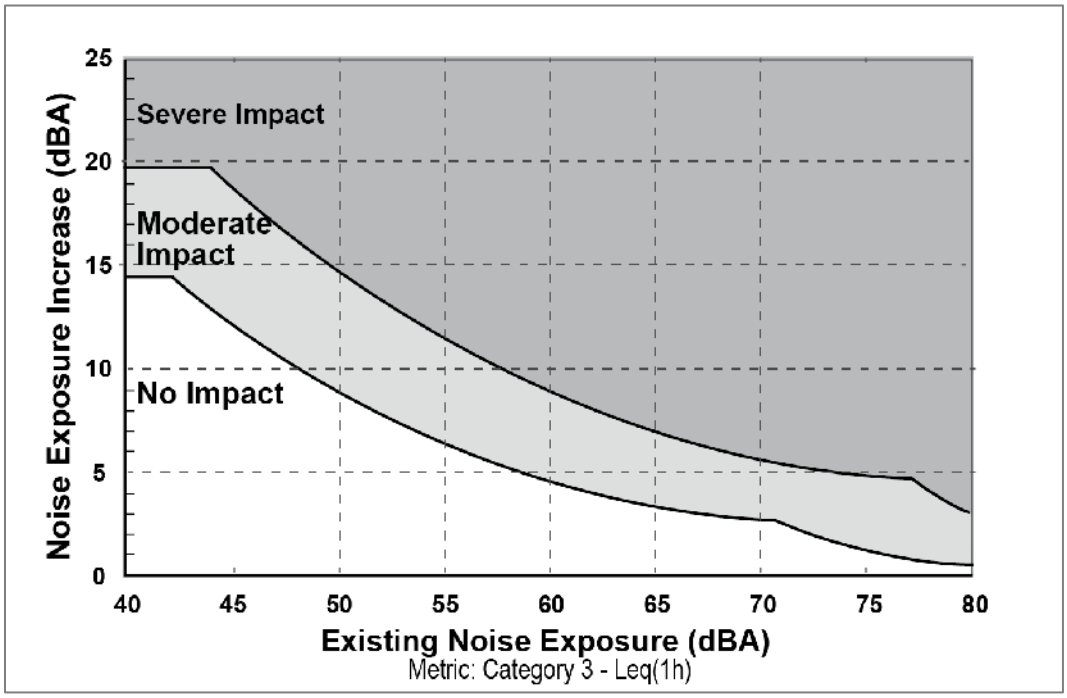
Figure 2-1. FTA/FRA Allowable Noise Increase Land Use Categories 1 and 2



Source: FTA 2018.

Figure 2-2 illustrates this relationship for land use Category 3. Category 3 land uses are comprised of institutional activities, such as schools, libraries, and churches.

Figure 2-2. FTA/FRA Allowable Noise Increase Land Use Category 3



Source: FTA 2018.

Fundamentals of Vibration

In addition to airborne noise, the operation of transportation facilities is a potential source of ground-borne vibration (GBV). GBV describes rapid fluctuating motions through the ground. In contrast to airborne noise, GBV is not a phenomenon experienced by most people on a daily basis. A typical background vibration velocity level in residential areas is 50 VdB or lower, below the threshold of perception for humans, which is around 65 VdB. In addition, the vibration of the building structure and room surfaces can radiate a low-frequency rumble called ground-borne noise (GBN). This analysis evaluates airborne noise, GBV, and GBN of the proposed freight rail facilities consistent with FTA and FRA guidance. Noise and vibration receptors, or locations potentially affected by airborne noise, GBV, and GBN, include residences, businesses, parks, schools, recreation areas, churches, libraries, and hospitals.

Vibration Impact Standards

The FRA's 2018 guidance document implements vibration impact criteria established by FTA. Impact criteria are defined by three land use categories that vary slightly from those considered for noise impacts. The categories are defined as follows:

- Vibration Category 1 – High Sensitivity: Buildings where vibration would interfere with the operations taking place there, including levels well below those of normal human annoyance. These include vibration-sensitive research and manufacturing, hospitals with vibration-sensitive equipment, and university research operations.
- Vibration Category 2 – Residential: Includes all residential land uses and buildings where people sleep, such as hotels and hospitals.
- Vibration Category 3 – Institutional: Includes schools, churches, and other institutions and quiet offices, except office space located in areas zoned for industrial use.

The criteria for acceptable GBV are expressed in terms of VdB in units of 1-micro-inch/second and the criteria for acceptable GBN are expressed in terms of dBA in units of 20 micropascals. Table 2-2 identifies the relevant impact criteria for each land use category.

Table 2-2. Ground-Borne Vibration and Ground-Borne Noise Impact Criteria

Land Use Category	GBV Impact Levels Frequent Events[1]	GBV Impact Levels Occasional Events[2]	GBV Impact Levels Infrequent Events[3]	GBN Impact Levels Frequent Events[1]	GBN Impact Levels Occasional Events[2]	GBN Impact Levels Infrequent Events[3]
Category 1: Buildings where vibration would interfere with interior operations	65 VdB[4]	65 VdB[4]	65 VdB[4]	Not applicable [4][5]	Not applicable [4][5]	Not applicable [4][5]
Category 2: Residences and buildings where people normally sleep	72 VdB	75 VdB	80 VdB	35 VdB	38 VdB	43 VdB
Category 3: Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB	40 VdB	43 VdB	48 VdB

Source: FTA 2018.

[1] A frequent event is defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category.

[2] An occasional event is defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have these many operations.

[3] An infrequent event is defined as fewer than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines.

[4] This criterion limit is based on levels that are acceptable for most moderately sensitive equipment, such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the heating, ventilation, and air conditioning systems and stiffened floors.

[5] Vibration-sensitive equipment is generally not sensitive to GBN.

2.2 Study Methods

2.2.1 Determining the Noise Analysis Level

Three levels of analysis are used to evaluate noise on a rail project based on the type and scale of the project, stage of project development, and environmental setting. These levels, described below, are the noise screening procedure, the general noise assessment, and the detailed noise analysis.

Noise Screening Procedure

The noise screening procedure is a simplified method of identifying study area receptors or locations where a rail project may have the potential for noise impacts. This procedure accounts for impact criteria, the type of project, and noise-sensitive land uses. For screening purposes, all receptors are considered to be in a single category, typically land use Category 2 as residential use impacts are of primary concern. If no noise-sensitive land uses or receptors are present in the analysis area, then no further assessment is needed. If noise-sensitive receptors are identified, the next step is to conduct a general assessment and/or a detailed analysis, depending on the project development stage and available data.

General Noise Assessment

The general noise assessment is used to characterize potentially impacted areas identified in the screening procedure by examining the location and estimated severity of noise impacts, if any. The assessment is based upon noise sources and land use information. Estimates are made of project noise levels and existing noise conditions to model the location of a noise impact contour that defines the outer limit of an impact corridor or area. This modeling method uses rail or transit-specific noise and adjustment data (in tabular and graphical form) for the noise computations. A detailed review of the general noise assessment procedure is provided in the FTA (2018) and FRA (2020) guidance manuals.

The FRA developed the CREATE Rail Noise Model (CREATE), an Excel spreadsheet that simplifies the general noise assessment and is available on the FRA's website at https://railroads.dot.gov/elibrary/create-freight-noise-and-vibration-model-ms-excelc-spreadsheet-model. Similarly, the FTA has developed a Noise Impact Assessment Spreadsheet to conduct the general noise assessment for transit projects. It is on FTA's website at https://www.transit.dot.gov/regulations-and-guidance/environmental-programs/noise-impact-assessment-spreadsheet. The FRA has also developed the Grade Crossing Horn Noise Model (Horn Noise) tool for estimating potential noise impacts for at-grade crossing where sounding of a horn is required per the FRA "Horns Rule" (49 C.F.R. Parts 222 and 229) occurs.

Detailed Noise Analysis

The detailed noise analysis procedure is a comprehensive assessment method that produces the most accurate estimates of noise impacts for a project. Use of the detailed noise analysis methods will not provide more accurate results than the general noise assessment unless more detailed and case-specific input data are used. The project must be defined to the extent that location, alignment, transit mode, day and nighttime hourly operational schedules, speed profiles, plan and profiles of tracks or guideways, locations of access roads, and landform topography

(including terrain and building features) are determined. A detailed noise analysis may be warranted as part of the development of an EA if there are potentially severe impacts due to the proximity of noise-sensitive land uses.

Project-Level Noise Screening

On behalf of OEA, Jacobs Engineering Group Inc. (Jacobs), OEA's third-party contractor, completed a noise screening of PIRATE and the planned Phoenix Subdivision support tracks to establish the noise study area, followed by a general noise assessment. The need for a detailed noise analysis for PIRATE and the planned Phoenix Subdivision support tracks is merited if the general noise assessment identifies the potential for one or more severe impacts or numerous moderate impacts. As presented later in this report, no severe or even moderate project impacts were identified in the general noise assessment for the project; therefore, a detailed noise analysis for the project was not completed.

Impacts due to project-related noise require avoidance and minimization measures, whereas impacts due to non-project sources would not.

Table 2-3 lists the appropriate screening distances for various project types and was adapted from Table 4-7 in the FTA guidance manual (2018), which focuses on commuter rail systems including rapid rail transit and light rail transit. The FRA guidance document (2020) establishes screening distances that are more appropriately applied to trains operating at speeds in excess of the existing and projected UP freight traffic in the study area; therefore, the FTA guidelines were referenced.

Table 2-3. Screening Distance for Noise Assessments

Fixed Guideway Systems	Screening Distance, feet Unobstructed	Screening Distance, feet Intervening Buildings
Commuter Rail Main Line	750	375
Commuter Rail Station with Horn Blowing	1,600	1,200
Commuter Rail Station without Horn Blowing	250	200
Commuter Railroad Crossing with Horns and Bells	1,600	1,200
Rapid Rail Transit	700	350
Rail Rapid Station	200	100
Light Rail Transit	350	175
Streetcar	200	100
Yards and Shops	1,000	650

Source: Adapted from Table 4-7 of the FTA guidance manual (FTA 2018).

The distances used to develop the noise and vibration study area were measured from specific elements of the existing Phoenix Subdivision and the proposed PIRATE alternatives. These elements are shown in Chapter 2 of the Draft EA and are referenced by name in this noise analysis.

- Main line track – existing Phoenix Subdivision track
- Germann siding – 1.6 miles of existing track adjacent and parallel to the Phoenix Subdivision main line track
- Germann siding extension and planned working track – 2.5 miles of planned support tracks adjacent and parallel to the Phoenix Subdivision main line track
- Wye – two tracks that connect the Phoenix Subdivision and PIRATE
- Industrial lead – approximately 6.0 miles of PIRATE track between the Phoenix Subdivision and the eastern PIRATE terminus in the PAMZ
- PIRATE yard – two to five, 2,500-foot-long yard tracks north of the PIRATE industrial lead and east of Sossaman Road that would house rail cars, locomotives, and/or trains waiting to move back on the proposed rail line or on the Phoenix Subdivision
- Run-around track – a second, 5,100-foot-long track south of the PIRATE industrial lead generally between Crismon and Signal Butte Roads that would allow trains to change directions by shifting off of the proposed rail line, moving the locomotive from one end to the other, and shifting back onto the proposed rail line in the opposite direction

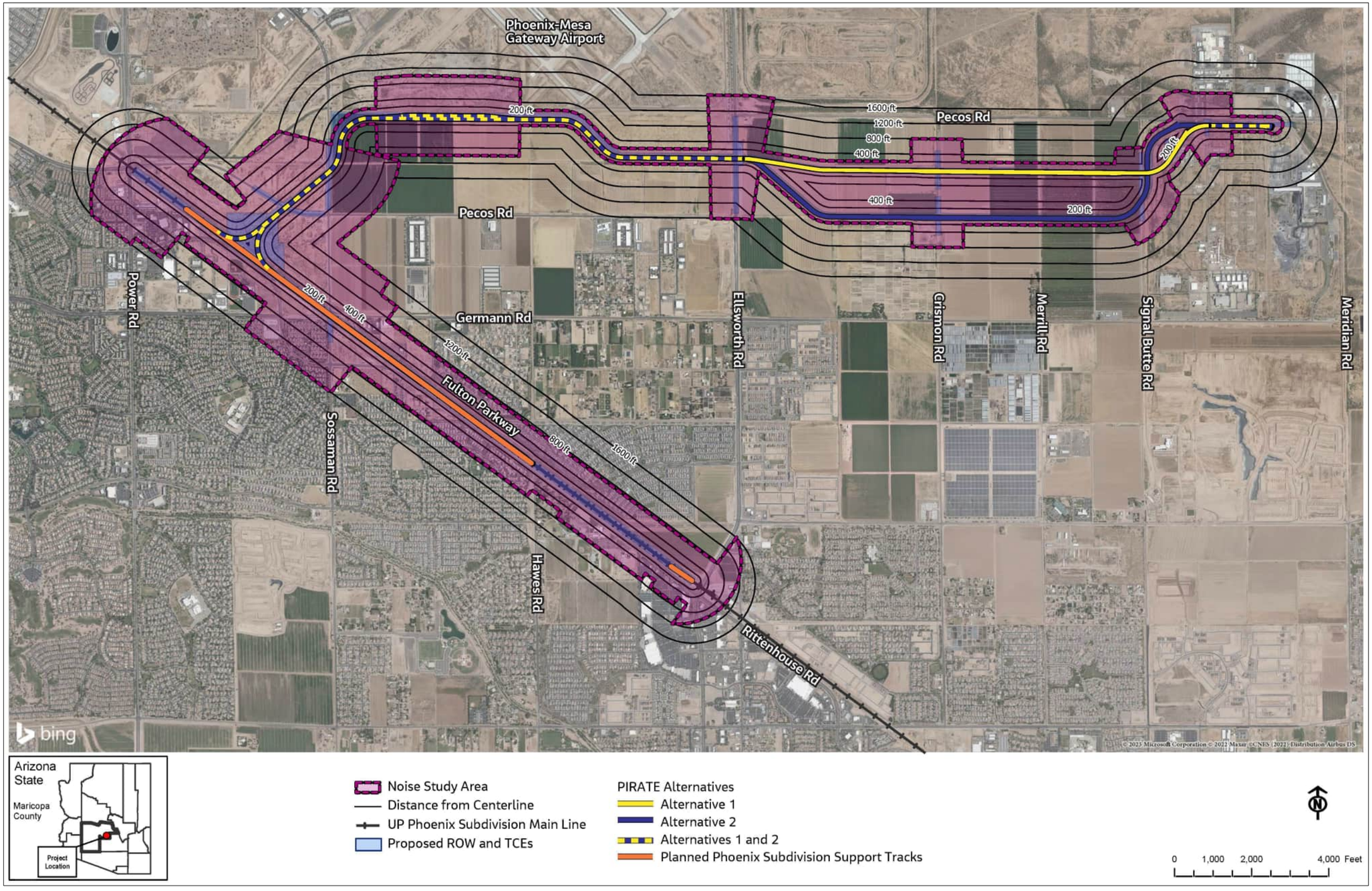
Based on these defined project elements, the study area for identifying noise and vibration impacts is defined as follows:

- Noise - Phoenix Subdivision all tracks: 375 feet to 750 feet, depending on the presence of shielding from buildings
- Noise - PIRATE wye, industrial lead, and run-around tracks: 200 feet
- Noise - PIRATE yard: 1,000 feet
- Noise - At-grade crossings existing and future: 1,200 feet shielded to 1,600 feet unshielded
- Vibration - 120 feet for PIRATE all tracks to 200 feet for Phoenix Subdivision all tracks

As a worst-case scenario for establishing the noise study area, the commuter rail line screening distances were selected for the Phoenix Subdivision main line track. For the PIRATE industrial lead and run-around tracks, FTA's unobstructed streetcar screening distances were selected based on similar operational speeds. Finally, for the PIRATE yard, FTA's yards and shops screening distance was selected.

Figure 2-3 shows the selected noise screening distances along the Phoenix Subdivision and the PIRATE alternatives, which establish the study area for the noise impact analysis. Variation in screening distances reflects the presence or lack of intervening buildings to adjacent noise receptors. The noise receptors closest to the potential noise-generating elements of the project were included in the general assessment rather than all noise receptors within the study area.

Figure 2-3. Noise Study Area



Project-Level General Noise Assessment

The general noise assessment for the project evaluated the existing scenario and three operational scenarios: Alternatives 1 and 2, each with the planned Phoenix Subdivision support tracks, and the No-Action Alternative, as described in Chapter 1.

Table 2-4 details the existing and future train activity for each of the scenarios analyzed. On March 17, 2022, UP provided operational details about current and planned train activity on the Phoenix Subdivision and planned train activity on PIRATE (UP 2022). One nighttime train operating between the hours of 10:00 p.m. and 7:00 a.m. on the Phoenix Subdivision was assumed as a worst-case for each operational scenario.

Non-project noise sources include surface street traffic and plane takeoff and landing activity at the Phoenix-Mesa Gateway Airport (formerly Williams Gateway Airport). Appendix A shows hourly traffic volumes for surface streets in and around the noise study area. These volumes were developed from field counts completed in March to June of 2022 (United Civil Group 2022) and modeled with Highway Capacity Manual Synchro traffic analysis software to determine hourly flow rates (Jacobs 2022). Future traffic volumes were estimated based on a 2 percent annual growth rate. The noise contours from the airport are shown in Appendix B (Phoenix-Mesa Gateway Airport Authority 2017).

The FRA CREATE and Horn Noise tools were used to generate a 65 dBA Ldn noise contour for the existing scenario and the future Alternative 1, Alternative 2, and Phoenix Subdivision noise environments using the project and non-project data inputs described above. The graphical representation of the distance from existing and proposed rail facilities to receptors was used to illustrate where moderate noise impacts might occur.

The evaluated receptors do not represent all similar uses in the study area. Rather, they represent the noise-sensitive locations closest to the 65 dBA Ldn contour for each operational scenario. Noise-sensitive uses located within the study area but farther outside this contour did not need to be evaluated.

Noise levels at each receptor were then calculated to determine potential noise impacts from PIRATE and the planned Phoenix Subdivision support tracks. A potential project impact would create a future noise environment at the receptors such that it would be perceived as moderately or even severely annoying, relative to existing levels. The methodology consists of using the impact curves presented in Figures 2-1 and 2-2 and noting where the intersection of the existing noise level on the x-axis of the figure with the moderate and severe impact curves yield the minimum project-related noise level increase on the y-axis sufficient to produce a noise impact.

Appendix C shows the model input data and analysis results used to generate the 65 Ldn dBA noise contour and noise level calculations at receptors representing noise-sensitive locations in the study area. To generate the noise contour, noise levels were calculated at every 100 feet along the Phoenix Subdivision and at representative locations between the planned at-grade crossings on each PIRATE alternative.

Table 2-4. Train Operational Activity Summary

Project Element	Existing (2022)	No-Action Alternative (2027)	Alternatives 1 and 2 and the Planned Phoenix Subdivision support tracks (2027)
Phoenix Subdivision Main Line Track	4 trains per day (2 in and 2 out) 4 locomotives per 100 freight cars per train at 60 mph	5 trains per day (3 in and 2 out) 4 locomotives per 100 freight cars per train at 60 mph	5 trains per day (3 in and 2 out) 4 locomotives per 123 freight cars per train at 60 mph
Phoenix Subdivision Germann Siding	1 train per day, 4 locomotives per 100 freight cars per train at 10 mph	2 trains per day, 4 locomotives per 100 freight cars per train at 10 mph	2 trains per day, 4 locomotives per 135 freight cars per train at 10 mph
Phoenix Subdivision Germann Siding Extension	Not Applicable	Not Applicable	2 trains per day 4 locomotives per 135 freight cars per train at 30 mph
Planning Phoenix Subdivision Working Track	Not Applicable	Not Applicable	2 trains per day 2 locomotives per 35 freight cars at 20 mph
PIRATE Wye	Not Applicable	Not Applicable	2 trains per day 2 locomotives per 35 freight cars at 20 mph
PIRATE Industrial Lead	Not Applicable	Not Applicable	1 train per day 4 locomotives per 70 cars per train at 20 mph
PIRATE Yard	Not Applicable	Not Applicable	Specific movements unknown 6 trains per day, 2 locomotives per 12 car trains per day
PIRATE Run-around Track	Not Applicable	Not Applicable	6 trains per day 2 locomotives per 12 rail cars

Source: Developed from data provided by UP 2022.

2.2.2 Determining the Vibration Analysis Level

Three levels of analysis are used to evaluate vibration on a rail project based on the type and scale of the project, stage of project development, and environmental setting. These levels, described below, are the vibration screening procedure, the general vibration assessment, and the detailed vibration analysis.

Vibration Screening Procedure

Similar to the screening procedure for project noise, the vibration screening procedure is a simplified methodology for identifying study area receptors or locations where vibration impacts from rail projects are likely to occur and takes into account impact criteria, project type, and vibration-sensitive land uses. As with project noise screening, all receptors are considered a single category and are most commonly land use Category 2 (residential). If no vibration-sensitive land uses or receptors are present in the study area, then no further assessment is needed. If vibration-sensitive receptors are identified, the next step is to conduct a general assessment and/or a detailed analysis, depending on the project development stage and available data.

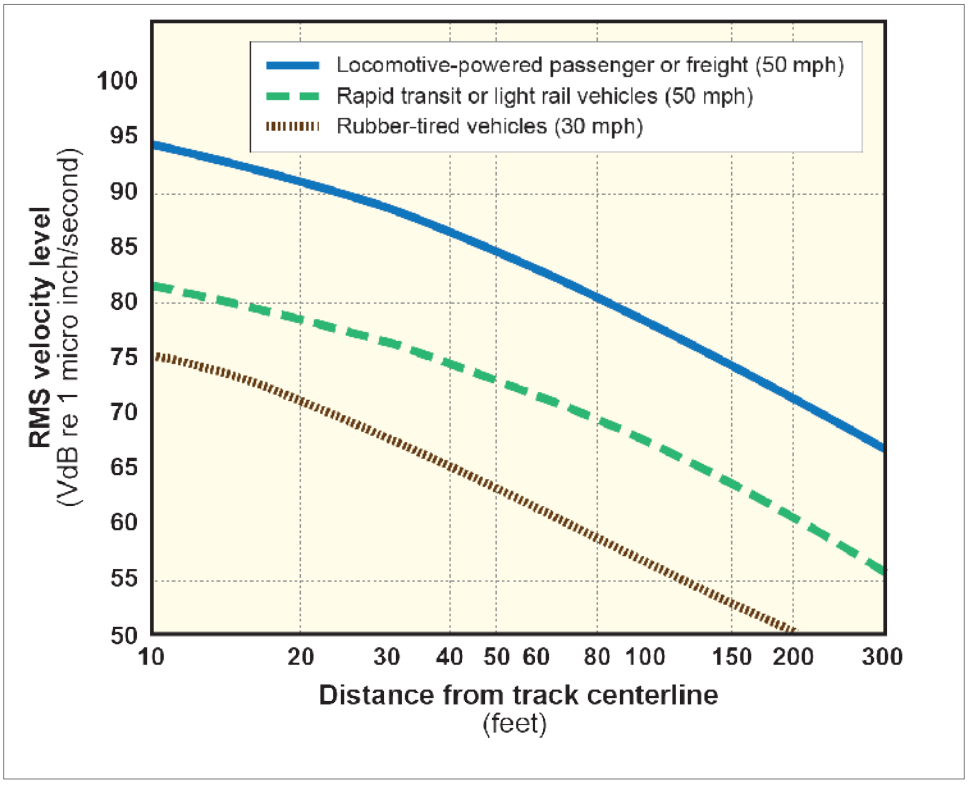
General Vibration Assessment

The FRA and FTA guidance documents provide procedures for conducting a general vibration assessment. As with the general noise assessment, it is used to characterize potentially impacted areas identified in the screening procedure by examining the location and estimated severity of impacts but for vibration rather than noise. The basic approach is to conduct the following:

- Determine the appropriate vibration impact criteria, as shown in Table 2-2.
- Select a curve that predicts the overall GBV as a function of distance from the source.
- Apply adjustments to the curve to account for factors such as vehicle speed, geologic conditions, building type, and receptor location within the building.
- Inventory the project vibration impact.

Figure 2-4 presents curves developed from measurements of GBV at representative North American transit systems (FTA 2018) and can be used to represent vibration characteristics for standard transportation systems in the general vibration assessment. When the vehicle type is not covered by these curves, it is necessary to define an appropriate curve, either by extrapolating from existing information or performing measurements at an existing facility. The FRA has developed two curves for steel wheel at-grade, high-speed rail and Maglev facilities, which vary in terms of intensity and distance to impact.

Figure 2-4. Generalized Ground Surface Vibration Curves



Source: FTA 2018.

Detailed Vibration Analysis

A detailed vibration analysis requires developing estimates of the frequency components of the vibration signal generated by the transportation source, usually in terms of one-third octave-band spectra. The analytical techniques for solving vibration problems are complex, with the technology continually advancing. The basic steps for these analyses include the following:

- Characterizing the existing vibration conditions through measurements.
- Estimating the vibration impact based on site-specific tests of vibration propagation conducted by FTA and FRA.
- Assess vibration impact by comparison to the impact standards presented in Table 2-2.
- Determine vibration mitigation measures.

Similar to a detailed analysis of project noise, a detailed vibration analysis may be warranted as part of the development of an EA if there are potentially severe impacts due to the proximity of vibration-sensitive land uses.

Project-Level Vibration Screening

Table 2-5 lists the appropriate screening distances for various project types. This table was adapted from Table 6-8 in the FTA guidance manual (2018), which focuses on commuter rail systems, including rapid rail transit and light rail transit. The FRA guidance document (2020) establishes screening distances that are more appropriately applied to trains operating at speeds in excess of the existing and projected UP freight traffic in the study area; therefore, the FTA guidelines were referenced.

Table 2-5. Screening Distance for Vibration Assessments

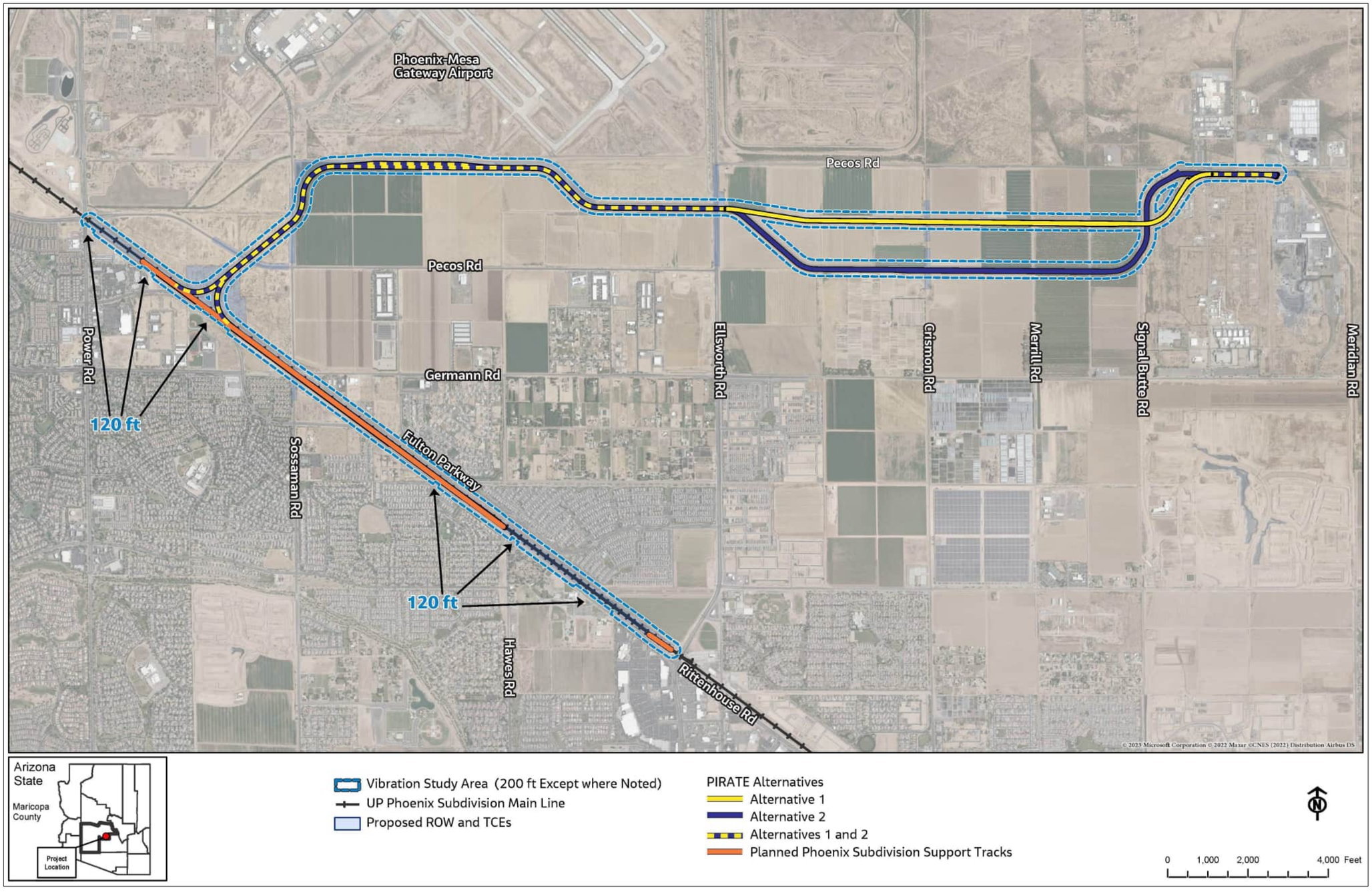
Type of Project	Critical Distance, feet Land Use Category 1	Critical Distance, feet Land Use Category 2	Critical Distance, feet Land Use Category 3
Conventional Commuter Railroad	600	200	120
Rapid Rail Transit	600	200	120
Light Rail Transit and Streetcars	450	150	100
Intermediate Capacity Transit	200	100	50
Bus Projects	100	50	Not applicable

Source: Adapted from Table 6-8 of the FTA guidance manual (2018).

As a worst-case scenario for establishing the vibration study area, the commuter rail line screening distances were selected for the Phoenix Subdivision. For a commuter rail line, FTA has determined a screening distance of 120 feet for land use Category 3 and 200 feet for land use Category 2 from the track alignment. There are no land use Category 1 locations in the study area. For the PIRATE industrial lead, yard, and run-around tracks, the FTA streetcar screening distance of 100 feet for land use Category 3 and 150 feet for land use Category 2 was applied, based on similar operational speeds. These screening distances were also applied to the Phoenix Subdivision existing Germann siding, proposed Germann siding extension, and planned working track, as shown in Chapter 2 of the Draft EA.

Figure 2-5 shows the selected vibration screening distances along the Phoenix Subdivision and the PIRATE alternatives, which establish the study area for the vibration impact analysis.

Figure 2-5. Vibration Study Area



Project-Level General Vibration Assessment

The general vibration assessment for this project evaluates the three operational scenarios: Alternatives 1 and 2, each with the planned Phoenix Subdivision support tracks, and the No-Action Alternative. The appropriate impact criteria from Table 2-2 for the project are listed below.

Ground-borne Vibration:

- Land Use Category 1 – 65 VdB
- Land Use Category 2 – 72 VdB
- Land Use Category 3 – 75 VdB

Ground-borne Noise:

- Land Use Category 1 – Not applicable as GBN does not interfere with the operation of the highly vibration-sensitive equipment
- Land Use Category 2 – 43 dBA
- Land Use Category 3 – 48 dBA

As shown in the Figure 2-5, no vibration-sensitive locations exist within the screening distances listed in Table 2-5. This includes the new fine arts auditorium for Benjamin Franklin High School, shown as receptor R1-A, which is located outside the screening distance for land use Category 3 (institutional) uses. Therefore, a general vibration assessment and a detailed vibration analysis are not required for this project.

Chapter 3
Affected Environment

3.1 Noise Characteristics of the Study Area

The study area is characterized by medium-density residential areas and commercial uses located west of the existing Phoenix Subdivision and a combination of low- to medium-density residential, undeveloped parcels and scattered industrial uses within the PAMZ. The ambient noise environment can range between 50 to 55 dBA Ldn in the less densely populated areas within the PAMZ and up to 65 dBA Ldn closer to the existing roadway and rail noise sources. Areas with a higher ambient noise level are less likely to be impacted by additional rail traffic, whereas impacts are more likely in areas with a lower ambient noise level.

3.1.1 Noise-Sensitive Land Uses

Residences represented by land use Category 2 comprise most of the noise-sensitive locations within in the study area developed by the noise screening procedure. Table 3-1 lists the number of receptors in land use Category 2 and land use Category 3 that were included in the noise analysis for PIRATE and the planned Phoenix Subdivision support tracks. No land use Category 1 receptors are in the study area.

Table 3-1. Affected Environment, Noise-Sensitive Land Uses

Land Use Category	Phoenix Subdivision All Scenarios[1] Modeled Receptors (Locations Represented)	PIRATE Alternative 1 Modeled Receptors	PIRATE Alternative 2 Modeled Receptors
Category 1	0 (0)	0 Receptors	0 Receptors
Category 2	38 (185)	0 Receptors	0 Receptors
Category 3	7 (7)	0 Receptors	0 Receptors

[1] Includes the existing scenario and No-Action Alternative.

3.1.2 Existing Noise Levels

Figure 3-1 shows the existing 65 dBA Ldn contour and receptor locations in the study area. This contour was calculated only along the existing Phoenix Subdivision main line track and Germann siding as no existing noise-sensitive land uses would be represented by receptors located along either PIRATE alternative.

Figure 3-1. Existing Noise Environment

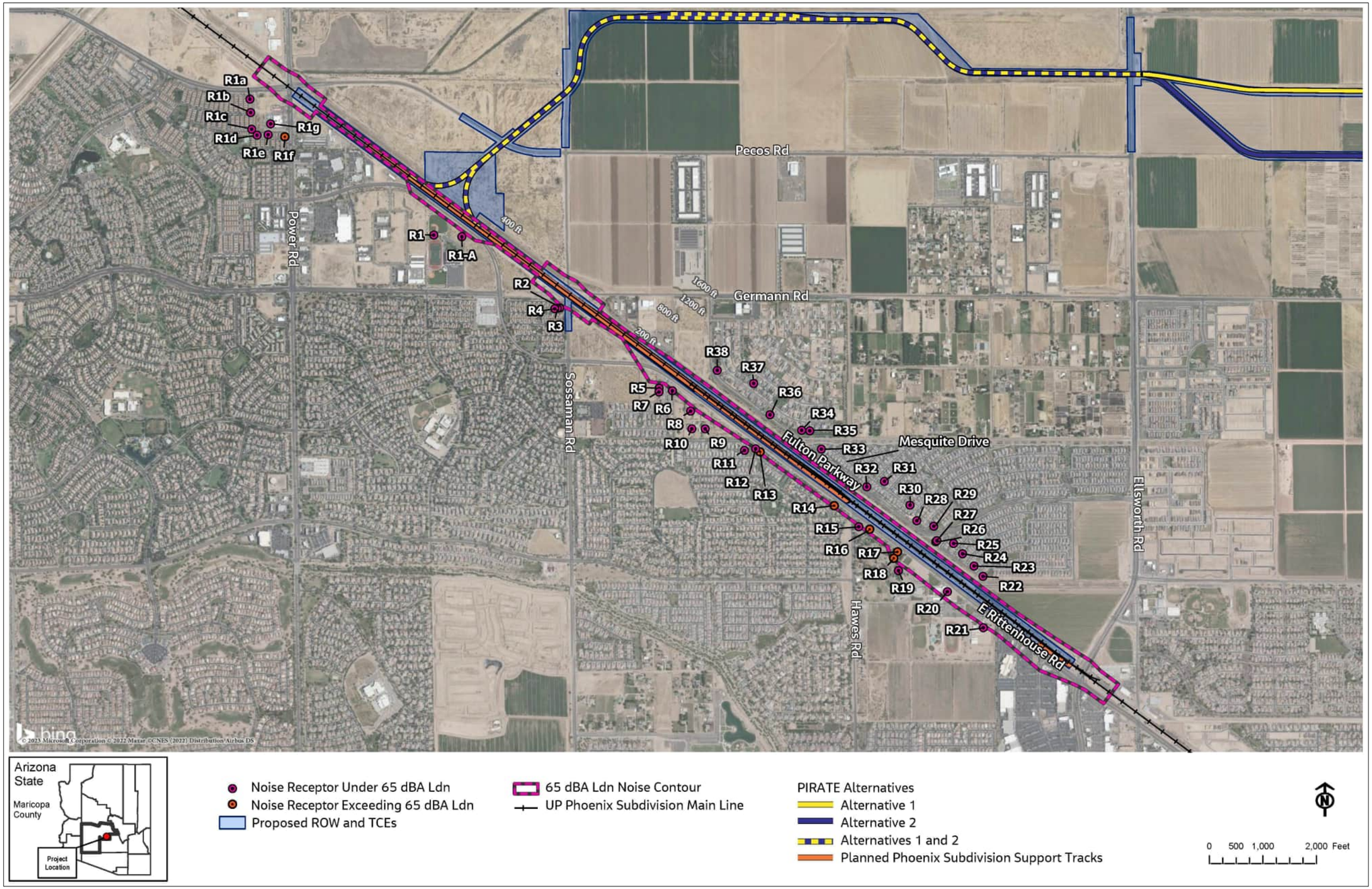


Table 3-2 shows existing noise levels at receptors in the vicinity of the 65 dBA Ldn contour. These same receptor locations were evaluated for the No-Action Alternative, Alternatives 1 and 2, and the planned Phoenix Subdivision support tracks, and then compared to the existing noise levels to identify future impacts for each of these scenarios.

Table 3-2. Existing Noise Levels in the Study Area

Receptor	Land Use Category	Number of Locations Represented	Distance to Phoenix Subdivision Main Line Track (feet)	Shielding[1]	Existing Ldn (Leq [h])[2]
R1a	2	5	862	Wall	58
R1b	2	5	923	Wall	54
R1c	2	3	1,077	Wall	54
R1d	2	7	1,075	Wall	51
R1e	2	6	950	Wall	53
R1f	2	2	860	Wall	**66**[3]
R1g	3	1	758	Building row	(55)
R1	3	1	617	None	(49)
R1-A	3	1	334	None	(55)
R2	2	1	317	Wall	60
R3	2	2	348	Wall and building	58
R4	2	2	385	Wall and building	56
R5	2	1	423	Wall	60
R6	2	1	312	Wall	63
R7	2	2	483	Wall and building	59
R8	2	1	416	Wall	60
R9	2	1	522	None	63
R10	2	1	668	None	61
R11	2	2	408	Wall	60
R12	3	1	258	None	(63)
R13	2	7	260	Wall	**66**[3]
R14	2	10	259	Wall	**67**[3]
R15	3	1	304	Building row	(57)
R16	2	2	222	Wall	**70**[3]

Receptor	Land Use Category	Number of Locations Represented	Distance to Phoenix Subdivision Main Line Track (feet)	Shielding[1]	Existing Ldn (Leq [h])[2]
R17	2	2	251	Wall	**67**[3]
R18	2	1	390	None	**66**[3]
R19	2	3	523	None	64
R20	3	1	296	None	(62)
R21	3	1	441	Building row	(53)
R22	2	4	329	Wall	58
R23	2	4	385	Wall and building	56
R24	2	7	442	Wall and building	53
R25	2	7	493	Wall and building	53
R26	2	4	324	Wall	57
R27	2	4	352	Wall and building	57
R28	2	8	429	Wall	56
R29	2	3	535	Wall	55
R30	2	12	587	Wall and building	54
R31	2	14	661	Wall and building	52
R32	2	8	384	Wall	56
R33	2	14	438	Wall	55
R34	2	5	526	Wall	55
R35	2	1	604	Wall	54
R36	2	6	409	Wall	56
R37	2	12	698	Wall and building	52
R38	2	5	492	Wall	55

[1] The locations represented by the noise receptor are shielded from existing transportation noise sources by a wall, one or more rows of buildings, or both.
[2] Land use Category 3 noise levels are expressed in hourly Leq(1hr).
[3] Bolded noise levels exceed the 65 Ldn dBA, indicating general “annoyance” at these locations.

As shown in Table 3-2, existing noise levels at 6 receptors (R1f, R13, R14, and R16 through R18) representing 24 residential properties in land use Category 2 exceed the 65 Ldn "threshold of annoyance." This does not indicate impacts at these locations, which is determined by future project noise relative to the existing noise environment. Rather, it indicates that existing noise sources, such as roadway traffic and current train activity, may already be causing annoyance at these properties.

Receptor R1f is located adjacent to Power Road, where current hourly traffic volumes are as high as approximately 3,500 vehicles during daytime hours (7:00 a.m. to 10:00 p.m.) and 1,800 vehicles during nighttime hours (10:00 p.m. to 7:00 a.m.). Traffic is the primary noise source at this location. Similarly, traffic on Rittenhouse Road is the primary noise source for receptors R13, R14, and R16 through R18, in addition to existing Phoenix Subdivision train activity.

3.2 Vibration Characteristics of the Study Area

Vibration travels from the source through the ballast and other railway structures, if present, and excites the adjacent ground. This creates vibration waves that propagate through soil layers and rock strata to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the building structure, creating a low-frequency rumble that produces GBN. Soil and subsurface conditions have a strong influence on GBV levels. The stiffness and internal damping of the soil and the depth to bedrock are among the most important factors (FTA 2018).

As discussed in further detail in the Geology and Soils section of the Draft EA, soil types in the study area include type Qyc, or modern channel deposits composed of moderately sorted to poorly sorted sand, gravel, pebbles, and cobbles, and type Qy, or Holocene alluvium composed of well-sorted, fine-grained clay loam (Arizona Geological Survey 2022). These soil types are characterized as tending toward loose sandy soil, which attenuates or dampens vibration more readily compared to stiffer clay-type soils. The buildings closest to the limits of the vibration study area are single-story, single-family residential and some two-story and multi-story commercial and institutional structures (schools and ancillary facilities). Heavier building foundations are more effective in decoupling from vibration propagating through the ground into a building.

Chapter 4
Environmental Effect Assessment

4.1 Operational Noise Impacts

A 65 dBA Ldn noise contour was generated for Alternatives 1 and 2 and for the planned Phoenix Subdivision support tracks. Figure 4-1 shows the 65 dBA Ldn contour along the Phoenix Subdivision. Figure 4-2 shows the 65 dBA Ldn contour west of Ellsworth Road along PIRATE, and Figure 4-3 shows the contour east of Ellsworth Road along PIRATE. The contours identify a setback distance from the project where exceedance of the FTA/FRA-adopted HUD 65 Ldn threshold is expected from future rail operations, which is a preliminary indication of potential noise impacts. As shown on Figures 4-1, 4-2, and 4-3, sensitive receptors are not located within the moderate or severe impact zones.

Figure 4-1. Phoenix Subdivision Noise Environment

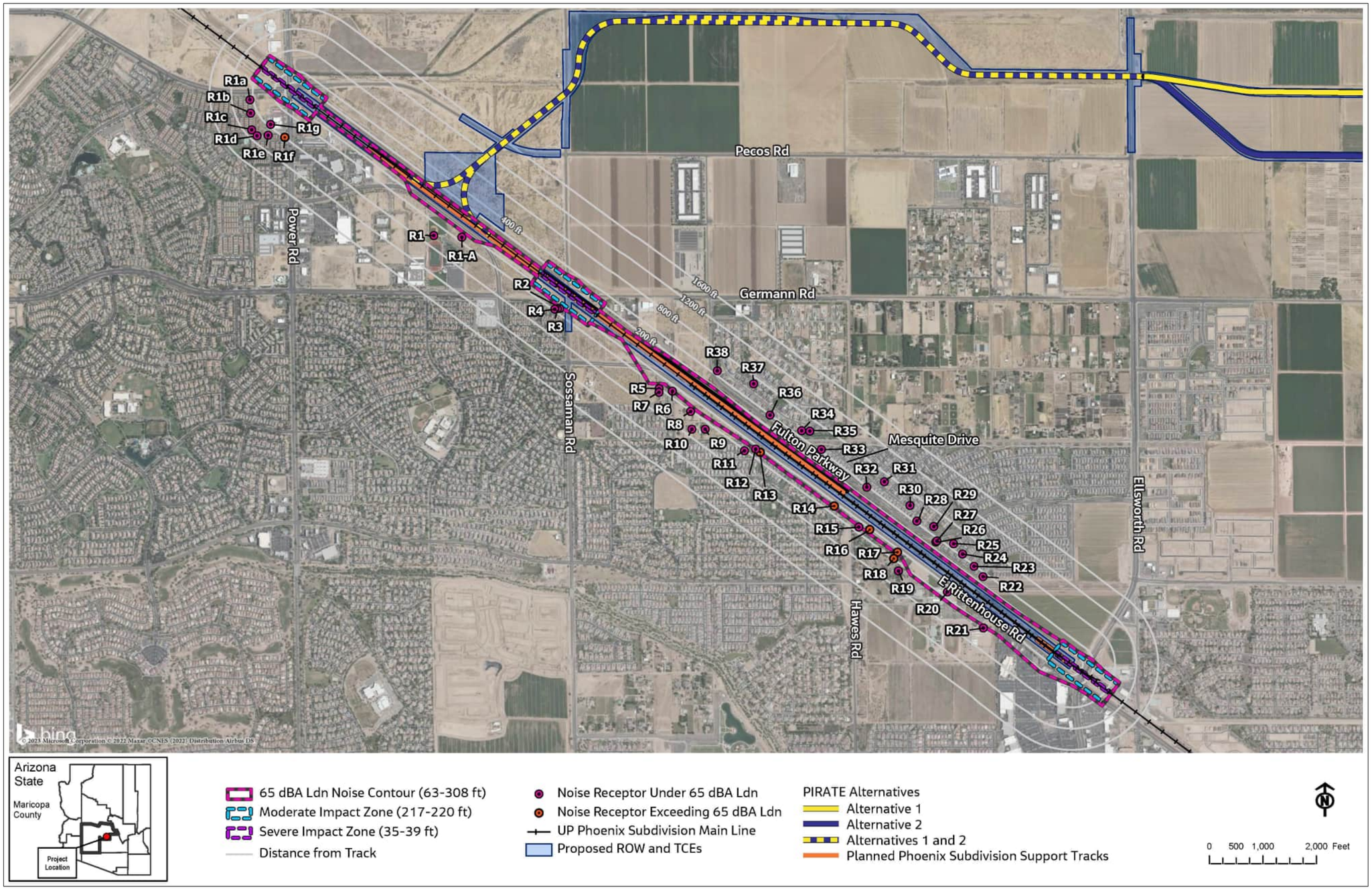


Figure 4-2. Action Alternatives Noise Environment PIRATE West

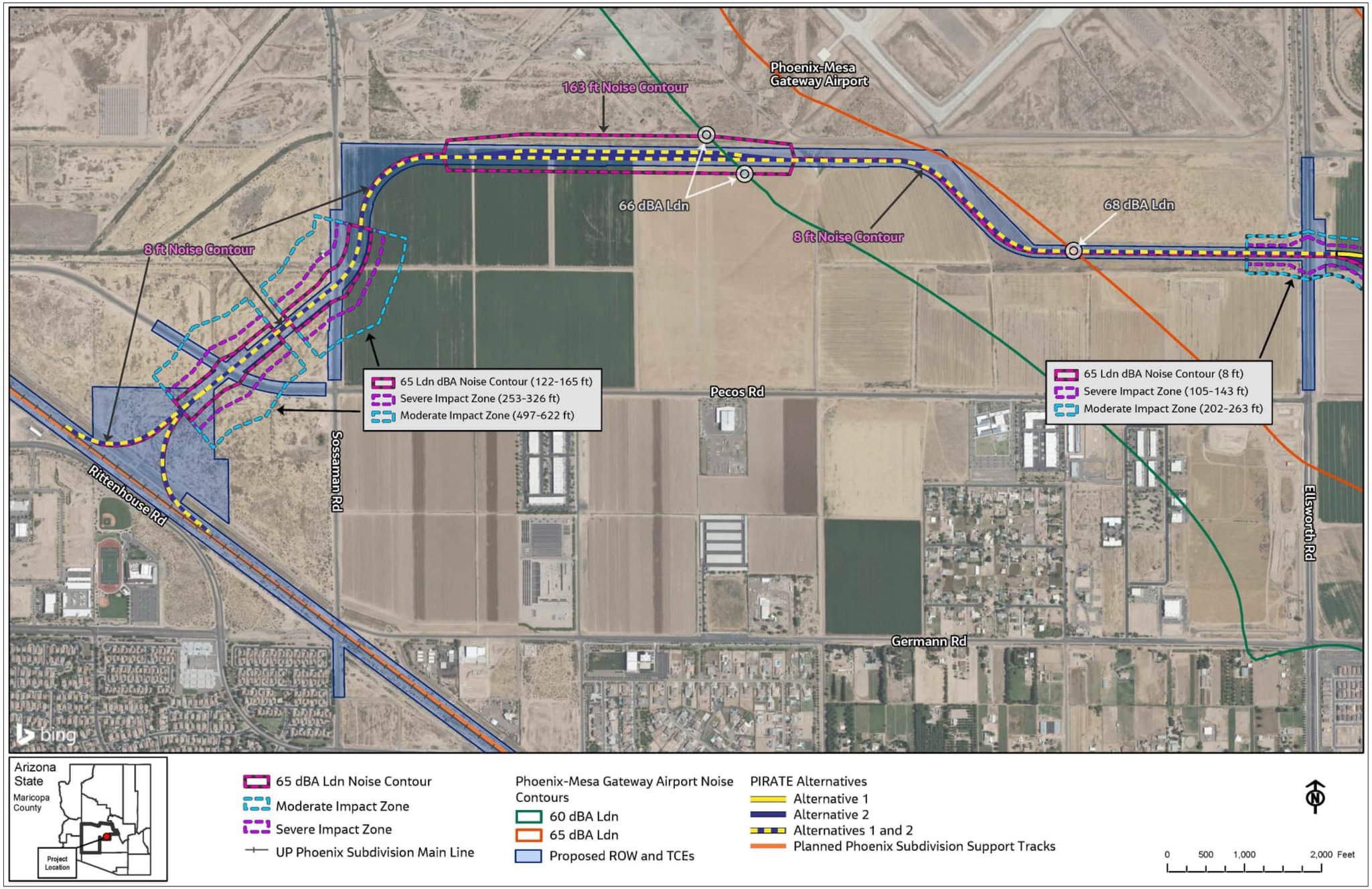
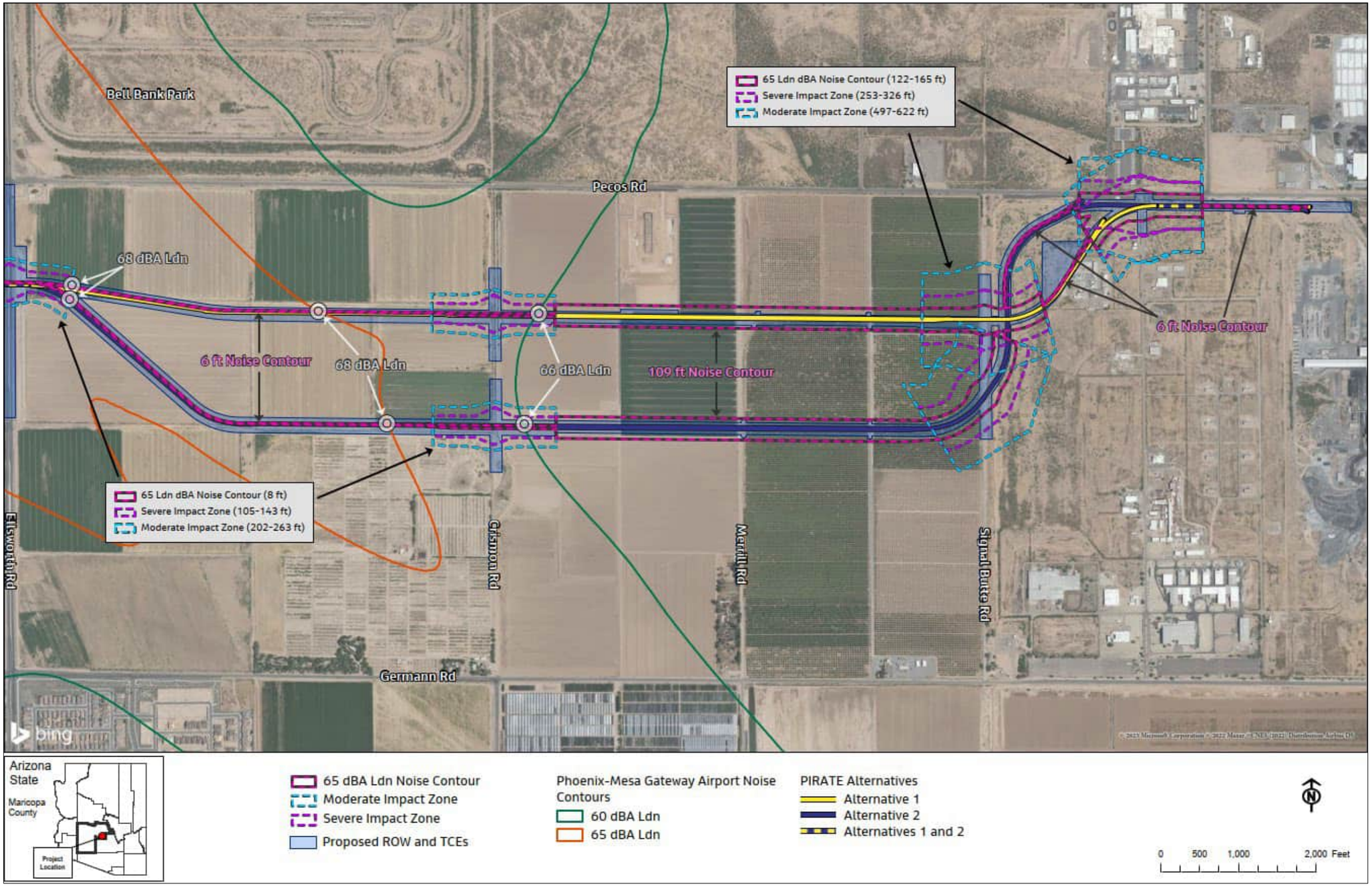


Figure 4-3. Action Alternatives Noise Environment PIRATE East



4.1.1 No-Action Alternative

Noise levels for the No-Action Alternative were calculated to support the comparison of potential impacts relative to Alternatives 1 and 2 and the planned Phoenix Subdivision support tracks. Based on anticipated train and roadway traffic activity, a No-Action Alternative noise contour would fall somewhere between the contours for the existing condition and Alternatives 1 and 2 or somewhere between the contours for the existing condition and the planned Phoenix Subdivision support tracks. A noise contour was not developed for the No-Action Alternative since it would not affect the assessment of potential impacts at the noise receptors.

Table 4-1 shows noise levels that were calculated at the same receptor locations. Existing condition noise levels are also presented for reference in the project impact determination.

Table 4-1. No-Action Alternative Noise Levels in the Study Area

Receptor	Existing dBA Ldn (Leq[1hr])[1]	No-Action Alternative dBA Ldn (Leq[1hr])[1]	Increase dBA Ldn (Leq[1hr])[1]
R1a	58	58	0
R1b	54	54	0
R1c	54	54	0
R1d	51	52	1
R1e	53	53	0
R1f	**66**[2]	**66**[2]	0
R1g	(55)	(55)	0
R1	(49)	(50)	0
R1-A	(55)	(55)	0
R2	60	60	0
R3	58	58	0
R4	56	57	1
R5	60	61	1
R6	63	64	1
R7	59	59	0
R8	60	61	1
R9	63	64	1
R10	61	61	0
R11	60	61	1
R12	(63)	(64)	1
R13	**66**[2]	**66**[2]	0
R14	**67**[2]	**67**[2]	0
R15	(57)	(57)	0

Receptor	Existing dBA Ldn (Leq[1hr])[1]	No-Action Alternative dBA Ldn (Leq[1hr])[1]	Increase dBA Ldn (Leq[1hr])[1]
R16	**70**[2]	**70**[2]	0
R17	**67**[2]	**68**[2]	1
R18	**66**[2]	**67**[2]	1
R19	64	64	0
R20	62	63	1
R21	53	54	1
R22	58	58	0
R23	56	57	1
R24	53	54	1
R25	53	53	0
R26	57	57	0
R27	57	59	2
R28	56	56	0
R29	55	55	0
R30	54	54	0
R31	52	53	1
R32	56	57	1
R33	55	56	1
R34	55	55	0
R35	54	54	0
R36	56	56	0
R37	52	53	1
R38	55	56	1

[1] Land Use Category 3 noise levels are hourly and expressed in Leq(1hr).
[2] Bolded noise levels exceed the 65 Ldn dBA, indicating general "annoyance" at these locations.

As shown in Table 4-1, noise at 6 receptors representing 24 residential properties in land use Category 2 would exceed the HUD 65 dBA Ldn annoyance threshold for the No-Action Alternative. As with the existing condition evaluation, this does not necessarily indicate noise impacts at these locations. To determine noise impacts, the increase in noise relative to the existing noise environment must be determined.

Table 4-2 shows the noise level increases above existing that would trigger a moderate or severe impact at these 6 receptors using the impact curves in Figure 2-1. As shown in Table 4-2, no impacts would occur with the No-Action Alternative. The noise increases shown in the table are relative to the existing condition and were determined by referencing impact curves in Figure 2-1.

Table 4-2. No-Action Alternative Noise Impact Evaluation

Receptor	Existing dBA Ldn	No-Action Alternative Increase dBA Ldn	Moderate Impact Increase dBA Ldn	Severe Impact Threshold dBA Ldn	Noise Impact (Yes/No)
R1f	66	0	>1	>3	No
R13	66	0	>1	>3	No
R14	67	0	>1	>3	No
R16	70	0	1	>2	No
R17	67	1	>1	>3	No
R18	66	1	>1	>3	No

4.1.2 Alternatives 1 and 2

No noise-sensitive land use Category 1, 2, or 3 uses are located along Alternative 1 or Alternative 2. Therefore, the following discussion focuses only on impacts to noise-sensitive land uses from the planned Phoenix Subdivision support tracks.

West of Ellsworth Road

Noise levels associated with the planned Phoenix Subdivision support tracks were calculated to compare to existing noise levels at the same receptors evaluated for the existing condition. Table 4-3 shows calculated noise levels at each receptor for both future scenarios and the existing condition for reference in the project impact determination.

Table 4-3. Phoenix Subdivision Noise Levels in the Study Area

Receptor	Existing dBA Ldn (Leq[1hr])[1]	Planned Phoenix Subdivision support tracks dBA Ldn (Leq[1hr])[1]	Increase dBA Ldn (Leq[1hr])[1]
R1a	58	58	0
R1b	54	54	0
R1c	54	54	0
R1d	51	52	1
R1e	53	53	0
R1f	**66**[2]	**66**[2]	0
R1g	(55)	(55)	0
R1	(49)	(51)	2

Receptor	Existing dBA Ldn (Leq[1hr])[1]	Planned Phoenix Subdivision support tracks dBA Ldn (Leq[1hr])[1]	Increase dBA Ldn (Leq[1hr])[1]
R1-A	(55)	(56)	1
R2	60	60	0
R3	58	59	1
R4	56	58	2
R5	60	61	1
R6	63	64	1
R7	59	59	0
R8	60	61	1
R9	63	64	1
R10	61	62	1
R11	60	61	1
R12	(63)	(64)	1
R13	**66**[2]	**66**[2]	0
R14	**67**[2]	**67**[2]	0
R15	(57)	(57)	0
R16	**70**[2]	**70**[2]	0
R17	**67**[2]	**68**[2]	1
R18	**66**[2]	**67**[2]	1
R19	64	64	0
R20	62	63	1
R21	53	54	1
R22	58	58	0
R23	56	57	1
R24	53	55	2
R25	53	53	0
R26	57	57	0
R27	57	59	2
R28	56	56	0
R29	55	55	0
R30	54	55	1
R31	52	53	1
R32	56	57	1
R33	55	56	1
R34	55	55	0
R35	54	55	1
R36	56	56	0
R37	52	53	1
R38	55	56	1

[1] Land Use Category 3 noise levels are hourly expressed in Leq(1hr).

[2] Bolded noise levels exceed the 65 Ldn dBA, indicating general "annoyance" at these locations.

As shown in Table 4-3, noise at 6 receptors representing 24 residential properties in land use Category 2 would exceed the HUD 65 dBA Ldn annoyance threshold for the planned Phoenix Subdivision support tracks. As with the evaluation of the existing condition and No-Action Alternative, this does not indicate noise impacts at these locations. To determine that, the increase in noise relative to the existing noise environment must be determined.

Table 4-4 shows the noise level increases above existing that would trigger a moderate or severe impact at these 6 receptors using the impact curves in Figure 2-1. As shown in Table 4-4, the planned Phoenix Subdivision support tracks would have no noise impacts west of Ellsworth Road. The noise increases shown in Table 4-4 are relative to the existing condition and were determined by referencing impact curves in Figure 2-1. Operational noise levels would not exceed the Board's threshold for an adverse impact.

Table 4-4. Phoenix Subdivision Noise Impact Evaluation

Receptor	Existing All Sources dBA Ldn	Planned Phoenix Subdivision support tracks Increase dBA Ldn	Moderate Impact Increase dBA Ldn	Severe Impact Increase dBA Ldn	Noise Impact (Yes/No)
R1f	66	0	>1	>3	No
R13	66	0	>1	>3	No
R14	67	0	>1	>3	No
R16	70	0	1	>2	No
R17	67	1	>1	>3	No
R18	66	1	>1	>3	No

East of Ellsworth Road

As discussed in Chapter 3, Affected Environment, and shown in Table 3-1 of this report, no noise receptors in land use Categories 1, 2, or 3 are located within the noise study area east of Ellsworth Road. Therefore, noise impacts would not occur east of Ellsworth Road for Alternatives 1 and 2. The 65 dBA Ldn noise contour shown in Figure 4-2 and Figure 4-3 can be referenced to avoid potential future noise impacts specifically for any planned development of land use Category 2 (residential) uses.

4.2 Operational Vibration Impacts

Per the vibration screening procedure discussed in the Section 2.2.2 of this report, no vibration-sensitive locations exist within the study area. Therefore, no project impacts are predicted to occur. However, the vibration screening procedure can be useful in guiding future development to ensure that vibration-sensitive uses are located outside the setback distances developed for land use Category 1 (120 feet) and land use Category 2 (200 feet) from the planned Phoenix Subdivision support tracks and from PIRATE.

4.3 Construction Noise Impacts

Local ordinances regulating construction noise in the municipalities surrounding the noise study area set time restrictions but do not establish noise thresholds.

- Town of Gilbert, Arizona (Gilbert) – Municipal Code Section 42-63 Noise Ordinance
  - Residential and Commercial Zones – Construction work limited to 5:00 a.m. to 10:00 p.m.
  - Weekends and Holidays – Construction work limited to 7:00 a.m. to 7:00 p.m., concrete pouring limited to 6:00 a.m. to 7:00 p.m.

- City of Mesa, Arizona (Mesa) – Municipal Code Section 6-12-6(G), General Exemptions
  - The following activities are exempted: construction, repair, remodeling, demolition, drilling, landscape maintenance, landscaping, lawn or yard work, wood cutting, including crafts and hobbies, or excavation work conducted between 6:00 a.m. through 8:00 p.m. Mondays through Fridays.
  - Application for an AfterHours Work permit and inspection detailing dates, times and specific locations, schedule of hours and days, scope of work to be performed and the anticipated noise generated during construction can be requested via email at permitservices@mesaaz.gov (Mesa 2022).

- Town of Queen Creek, Arizona (Queen Creek) – Ordinance 282-04, Construction Start Time
  - Prior to 6:00 a.m. and after 7:00 p.m. Monday through Friday from September 16 through May 14.
  - Prior to 5:00 a.m. and after 7:00 p.m. Monday through Friday from May 15 through September 15.
  - Prior to 7:00 a.m. and after 5:00 p.m. on Saturdays throughout the year.
  - At all times on Sundays and legal holidays as defined by Queen Creek.

Thresholds for construction noise are typically set at the property line of the adjacent noise-sensitive land use; however, these municipalities have not established thresholds in their ordinances. Table 4-5 lists suggested limits as a general guideline for assessing potential construction noise impacts, although its guidance document expressly states these are not standardized criteria.

Table 4-5. FTA General Assessment Construction Noise Criteria

Land Use	Day Lmax	Night Lmax
Residential	90	80
Commercial	100	100
Industrial	100	100

Table 4-6 shows a list of equipment that would be used for project construction and a general summary of activities provided by UP. The project would be constructed over a period of 9 months, with 10-hour workdays and equipment running 9 of the 10 hours. The time of usage restrictions established by each of the municipalities listed above would allow sufficient time to accommodate the planned daily construction activities.

A general assessment of construction noise was completed to estimate typical construction noise at noise receptors located in the proximity of construction activities for the project. The receptor closest to the construction activities is R16, living quarters on the Canyon State Academy campus located 222 feet southwest of the Phoenix Subdivision (Figure 4-1); however, this location is shielded by a privacy wall. The closest unshielded location is Receptor R12, a gazebo in the Emperor Estates neighborhood that is located 258 feet southwest of the Phoenix Subdivision main line track (Figure 4-1). The neighborhood property line adjacent to the gazebo is 219 feet southwest of the main line tracks. The property line location was analyzed to identify the potential maximum noise impact from project construction.

No noise-sensitive land use Category 1, 2, or 3 uses are located near either PIRATE alternative. However, FTA suggests limits for construction noise near industrial uses, which are located within the PAMZ that would be served by PIRATE. As a worst-case, a hypothetical industrial facility located within 50 feet of the future lead tracks was evaluated.

Table 4-6. Project Construction Equipment and Usage Profile

Equipment	Quantity	Fuel	HP	Hours/Day	Duration (months)	Construction Phase and Usage Notes
D6 Dozer	4	Diesel	215	9	7	Earthwork and Subballast
330 Trackhoe	2	Diesel	273	9	7	Earthwork and Culverts
352 Trackhoe	3	Diesel	424	9	5	Earthwork
730 Articulated Truck	18	Diesel	370	9	7	Earthwork, this could be tractors and pans, scrapers, or road haul trucks depending on means and methods
140 Motor Grader	3	Diesel	179	9	7	Earthwork and Subballast
815 Compactor	3	Diesel	249	9	5	Earthwork
CS12 GC compactor	1	Diesel	121	9	5	Subballast and Paving
AP1000F Paver	1	Diesel	225	9	2	Road work
Tractor Trailer	18	Diesel	400	9	4	Aggregate base hauling
966 Wheel Loader	2	Diesel	321	9	9	Culverts, Box Culverts and Misc.
262D3 Skid Steer	2	Diesel	74	9	8	Misc.
35 Ton Crane	2	Diesel	164	9	3	Box Culverts
Pickup	8	Gas	300	9	9	Contractor Supervision
TLM (UP)	1	Not applicable	Not applicable	9	1	Track
963 Track Loader (UP)	1	Diesel	202	9	1	Track, to pull the TLM
6700 Tamper (UP)	2	Diesel	280	9	2	Track
966 Wheel Loader	2	Diesel	321	9	2	Track
4600 Regulator (UP)	2	Diesel	250	9	2	Track
Locomotive (UP)	1	Diesel	2,200	9	2	Track, Moving ballast cars
Pickup (UP)	6	Gas	300	9	2	Track Supervision

Source: UP 2022.
hp = horsepower

The Federal Highway Administration Roadway Construction Noise Model (RCNM) was used to estimate noise generated by the various construction activities. As shown in Table 4-7, there are five phases to the construction in no particular order: earthwork, paving, hauling, miscellaneous (culvert installation, supervision activities), and track installation.

Per FTA guidance (2018), the two loudest pieces of equipment for each construction phase were analyzed in RCNM to determine the Lmax for each phase. The Lmax values for each phase were then added using rules of dB addition to determine a single Lmax for a typical hour of construction. Table 4-7 lists the loudest equipment by construction phase.

Table 4-7. Loudest Construction Equipment 50-Foot Reference Noise Levels by Phase

Construction Phase	Equipment	Manufacturer Specification dBA Lmax	Actual dBA Lmax
Earthwork	352 Trackhoe	85	Not applicable
Earthwork	815 Compactor	80	83.2
Paving	CS12 GC compactor	80	83.2
Paving	AP1000F Paver	85	77.2
Hauling	Tractor Trailer	84	74.3
Misc., Culvert	966 Wheel Loader	80	79.1
Misc., Culvert	35 Ton Crane	85	80.6
Track Installation	4600 Regulator	85	Not applicable
Track Installation	Locomotive	90	Not applicable

Source: RCNM (Federal Highway Administration 2008).

4.3.1 No-Action Alternative

No construction activities are associated with the No-Action Alternative; therefore, no construction noise impacts would occur at receptors located in the noise study area.

4.3.2 Alternatives 1 and 2

West of Ellsworth Road

Table 4-8 shows the estimated noise level at R12, assuming simultaneous activity for all five phases of project construction. Although unlikely, this approach provides a worst-case scenario for assessing potential project impacts from construction noise.

Table 4-8. Estimated Construction Noise at Closest Unshielded Noise Receptor

Location	Land Use	Earthwork Noise dBA Lmax	Paving Noise dBA Lmax	Hauling Noise dBA Lmax	Misc. Activity Noise dBA Lmax	Track Placement Noise dBA Lmax	Total Noise dBA Lmax
R12 property line	Residential	72.2	70.4	61.4	72.2	77.5	80.1
Facility in PAMZ	Industrial	85.0	83.2	74.3	85.0	90.3	92.9

As shown in Table 4-8, project construction noise levels for each phase or under a worst-case scenario with all phases overlapping would not exceed the 90 dBA daytime limit suggested by FTA for residential and institutional uses or 100 dBA for industrial uses. Total project construction noise for all phases overlapping would slightly exceed the FTA suggested nighttime limit of 80 Lmax for residential properties. Project construction noise would exceed the Board's threshold for an adverse impact by increasing noise levels by 3 dBA or more and exceeding a noise level of 65 dBA if the maximum values shown for any phase except hauling or with all phases simultaneously occurred during the entire 9-hour construction day. This adverse impact would be temporary. Adherence to local nighttime restrictions on construction would avoid a potential impact at the Receptor R12 property line. This location is within the town of Queen Creek; therefore, a Mesa AfterHours Work permit would not be available for construction activities at this location.

East of Ellsworth Road

As shown in Table 4-8, maximum construction noise levels for the planned Phoenix Subdivision support tracks and either PIRATE alternative would be below the suggested FTA limits for daytime and nighttime construction adjacent to industrial uses. However, project construction noise would exceed the Board's threshold for an adverse impact by increasing noise levels by 3 dBA or more and exceeding a noise level of 65 dBA if the maximum values shown for any phase except hauling or with all phases simultaneously occurred during the entire 9-hour construction day. This adverse impact would be temporary.

4.4 Construction Vibration Impacts

Construction activity can cause ground vibration of varying intensity depending on the equipment and methods employed. Operation of construction equipment creates vibrations that spread through the ground and diminish in strength with distance. Buildings with foundations on the soil near the construction site respond to these vibrations with varying results, ranging from no perceptible effects at the lowest levels, low rumbling sounds and perceptible vibrations at moderate levels, and slight damage at the highest levels.

While ground vibrations from construction activities do not often reach levels that can damage structures, some buildings must receive special consideration because of age and fragility. The construction vibration criteria include consideration of the building condition.

A general assessment was completed to estimate typical construction vibration at noise receptors located in the proximity of construction activities. Rather than the property line, the building shell is the relevant location for assessing impacts. Receptor R15, a church on the Canyon State Academy campus, is the closest structure with the building shell located 219 feet southwest of the existing Phoenix Subdivision main line track and 204 feet southwest of the existing Germann siding (Figure 4-1).

The three municipalities—Gilbert, Mesa, and Queen Creek—have not established vibration thresholds in their ordinances. Table 4-9 lists suggested limits as a general guideline for assessing potential damage to structures from construction vibration, although the FTA guidance document (2018) expressly states these are not standardized criteria.

Table 4-9. FTA General Assessment Vibration Damage Criteria

Building/Structural Category	PPV[1], at 25 feet, inches/second	Approximate Lv[2] at 25 feet
I. Reinforced-concrete, steel or timber (no plaster)	0.5	102
II. Non-engineered timber and masonry buildings	0.3	98
III. Buildings extremely susceptible to vibration damage	0.2	94
IV. Buildings extremely susceptible to damage	0.12	90

Source: FTA guidance manual Table 7-5 (FTA 2018).
[1]Peak particle velocity
[2]Lv = Root-mean-square (RMS) velocity in dB, VdB re: 1 micro-inches/second

Table 4-10 shows average vibration source levels in terms of speed (inches/second or micro-inches/second) for four types of construction equipment that would be used during project construction, according to UP. The listed vibration source levels are measured under a wide range of construction activities. Although only single values are listed for each piece of equipment, considerable variation in measured vibration levels from construction activities has been reported. The PPV metric provides a means of assessing potential building damage whereas the Lv metric is an indication of annoyance. Of the types of equipment listed, large and small bulldozers and the loaded trucks would be used during project construction.

Table 4-10. Vibration Source Levels for Construction Equipment

Equipment	PPV[1] at 25 feet, inches/second	Approximate Lv[2] at 25 feet
Vibratory Roller [3]	0.017	75
Large bulldozer[4]	0.089	87
Loaded trucks[5]	0.076	86
Small bulldozer[4]	0.003	58

Source: Developed from FTA guidance manual Table 7-4 (2018).
[1] Peak particle velocity
[2] Lv = RMS velocity in dB, VdB re: 1 micro-inches/second
[3] Same type of equipment as CS12 GC Compactor in Table 4-6.
[4] Same type of equipment as D6 Dozer in Table 4-6.
[5] Same type of equipment as Tractor Trailer in Table 4-6.

Damage and Annoyance Assessment

Building damage can be assessed by applying a propagation adjustment to the PPV values shown in Table 4-10. The assessment is done for each piece of equipment individually. The equation for adjusting the values is shown in Appendix D. The assessment of annoyance from construction vibration is done separately for each piece of equipment. The equation for estimating GBV related to human annoyance in VdB is shown in Appendix D.

4.4.1 No-Action Alternative

No construction activities are associated with the No-Action Alternative; therefore, no construction vibration impacts would occur at receptors located in the noise study area.

4.4.2 Alternatives 1 and 2

No vibration-sensitive locations were identified within the vibration study area established by the general vibration screening for train activity associated with Alternatives 1 and 2 and the planned Phoenix Subdivision support tracks; however, the screening methodology does not apply to construction activities. Therefore, a damage and annoyance assessment of construction activities was completed for the project.

West of Ellsworth Road

Table 4-11 compares estimated vibration at the Receptor R12 building shell from the four pieces of project construction equipment listed in Table 4-10.

Table 4-11. Project Construction Vibration Assessment West of Ellsworth Road

Equipment	Estimated PPV[1], inches/second	Category II PPV[1] Criteria, inches/second	Potential Impact	Estimated Lv[2]	Approximate Lv[2] Criteria	Potential Impact
Vibratory Roller	0.0007	0.3	None	46.72	94	None
Large Bulldozer	0.0030	0.3	None	58.72	94	None
Small Bulldozer	0.0002	0.3	None	29.72	94	None
Loaded Truck	0.0030	0.3	None	57.72	94	None

[1] Peak particle velocity
[2] Lv = RMS velocity in dB, VdB re: 1 micro-inches/second

As shown in Table 4-11, the estimated PPV of the four listed pieces of equipment is below the building Category II damage criteria. Similarly, the estimated Lv of the four pieces of equipment is below the approximate threshold of annoyance.

East of Ellsworth Road

Table 4-12 compares estimated vibration from the four pieces of project construction equipment listed in Table 4-10 at a hypothetical industrial facility located within 50 feet of either PIRATE alternative. As shown in Table 4-12, the estimated PPV of the four listed pieces of equipment is below the building Category II damage criteria. Similarly, the estimated Lv of the four pieces of equipment is below the approximate threshold of annoyance.

Table 4-12. Project Construction Vibration Assessment East of Ellsworth Road

Equipment	Estimated PPV[1], inches/second	Category II PPV[1] Criteria, inches/second	Potential Impact	Estimated Lv^2	Approximate Lv^2 Criteria	Potential Impact
Vibratory Roller	0.006	0.3	None	65.97	94	None
Large Bulldozer	0.030	0.3	None	77.97	94	None
Small Bulldozer	0.001	0.3	None	48.97	94	None
Loaded Truck	0.030	0.3	None	76.97	94	None

[1] Peak particle velocity
[2] Lv = RMS velocity in dB, VdB re: 1 inches/second

Chapter 5
Recommended Mitigation

5.1 Operational Mitigation

Because the general noise assessment did not identify operational noise impacts for the project, no additional mitigation measures are recommended for operation of PIRATE or the planned Phoenix Subdivision support tracks.

5.2 Construction Mitigation

The general assessment of construction noise for PIRATE and the planned Phoenix Subdivision support tracks identified a possible exceedance of the FTA-suggested 80 dBA Lmax nighttime noise threshold and the Board's thresholds for an adverse noise impact. Gilbert, Mesa, and Queen Creek do not establish thresholds for construction noise; however, the daily project construction schedule must adhere to local time restrictions that limit nighttime construction (see Section 4.3). Within city of Mesa limits, if UP intends to perform project-related construction activities outside of these local time restrictions, UP must apply for a special use permit to allow nighttime construction.

The general assessment of construction vibration for PIRATE and the planned Phoenix Subdivision support tracks did not identify exceedances of the FTA-suggested criteria for assessing building damage or annoyance at the building likely to be closest to construction activities; therefore, no mitigation measures are required and implementation of any of the measures listed below can be considered best practices.

If implemented, the following recommended mitigation measures would reduce potential noise and vibration during project-related construction:

- Design and layout considerations:
  - Construct temporary noise barriers from excavated materials.
  - Reroute construction truck traffic away from residential streets.
  - Idle construction equipment as far away from receptors as possible.
  - Operate earthmoving equipment on the construction site as far away as possible.
  - Construct walled enclosures around especially noise activities.

- Sequence operations:
  - Combine noisy operations to occur in the same time period. The total noise level produced will not be significantly greater than the level produced by operations performed separately.
  - For vibration generating activities, phase demolition, earthmoving, and ground-impacting operations so as not to occur simultaneously.
  - Avoid nighttime activities. Sensitivity to noise increases during the nighttime hours in residential neighborhoods.

- Alternative construction methods: Use specially quieted equipment, including quieted and enclosed air compressors and properly working mufflers on all engines.

Chapter 6
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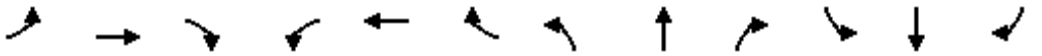
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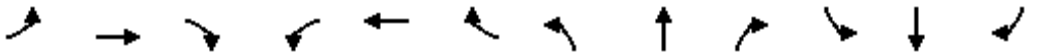
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Appendix A
Roadway Traffic Data



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	504	43	15	796	211	80	224	27	53	128	76
Future Volume (vph)	60	504	43	15	796	211	80	224	27	53	128	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3428		1770	1863	1583	1770	1863	1583
Flt Permitted	0.13	1.00	1.00	0.41	1.00		0.60	1.00	1.00	0.45	1.00	1.00
Satd. Flow (perm)	241	3539	1583	755	3428		1108	1863	1583	847	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	548	47	16	865	229	87	243	29	58	139	83
RTOR Reduction (vph)	0	0	25	0	21	0	0	0	21	0	0	61
Lane Group Flow (vph)	65	548	22	16	1073	0	87	243	8	58	139	22
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6
Actuated Green, G (s)	59.0	51.5	51.5	55.0	49.5		35.9	29.4	29.4	34.1	28.5	28.5
Effective Green, g (s)	59.0	51.5	51.5	55.0	49.5		35.9	29.4	29.4	34.1	28.5	28.5
Actuated g/C Ratio	0.54	0.47	0.47	0.50	0.45		0.33	0.27	0.27	0.31	0.26	0.26
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lane Grp Cap (vph)	233	1656	741	428	1542		400	497	423	309	482	410
v/s Ratio Prot	c0.02	0.15		0.00	c0.31		c0.01	c0.13		0.01	0.07	
v/s Ratio Perm	0.13		0.01	0.02			0.06		0.00	0.05		0.01
v/c Ratio	0.28	0.33	0.03	0.04	0.70		0.22	0.49	0.02	0.19	0.29	0.05
Uniform Delay, d1	15.8	18.4	15.8	14.0	24.2		26.3	34.0	29.7	27.3	32.6	30.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.5	0.1	0.2	2.6		1.2	3.4	0.1	1.3	1.5	0.2
Delay (s)	18.8	18.9	15.8	14.1	26.8		27.5	37.4	29.8	28.7	34.1	30.9
Level of Service	B	B	B	B	C		C	D	C	C	C	C
Approach Delay (s)		18.7			26.7			34.4			32.0	
Approach LOS		B			C			C			C	

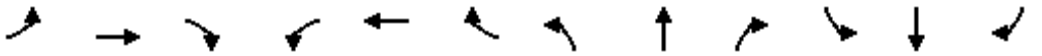
Intersection Summary			
HCM 2000 Control Delay	26.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	193	280	29	610	212	519	1512	38	123	565	58
Future Volume (vph)	117	193	280	29	610	212	519	1512	38	123	565	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.91		1.00	0.91	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	5085	1583	3433	5067		1770	5014	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3539	1583	1770	5085	1583	3433	5067		1770	5014	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	127	210	304	32	663	230	564	1643	41	134	614	63
RTOR Reduction (vph)	0	0	253	0	0	186	0	2	0	0	11	0
Lane Group Flow (vph)	127	210	51	32	663	44	564	1682	0	134	666	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)	15.5	18.5	18.5	18.1	21.1	21.1	26.3	42.9		12.5	29.1	
Effective Green, g (s)	15.5	18.5	18.5	18.1	21.1	21.1	26.3	42.9		12.5	29.1	
Actuated g/C Ratio	0.14	0.17	0.17	0.16	0.19	0.19	0.24	0.39		0.11	0.26	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Grp Cap (vph)	249	595	266	291	975	303	820	1976		201	1326	
v/s Ratio Prot	c0.07	0.06		0.02	c0.13		c0.16	c0.33		0.08	0.13	
v/s Ratio Perm			0.03			0.03						
v/c Ratio	0.51	0.35	0.19	0.11	0.68	0.15	0.69	0.85		0.67	0.50	
Uniform Delay, d1	43.7	40.5	39.3	39.1	41.3	37.0	38.1	30.6		46.8	34.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.98	1.48		1.00	1.00	
Incremental Delay, d2	7.3	1.6	1.6	0.8	3.8	1.0	4.6	4.8		16.2	1.4	
Delay (s)	51.0	42.1	40.9	39.9	45.1	38.0	41.8	50.1		62.9	35.7	
Level of Service	D	D	D	D	D	D	D	D		E	D	
Approach Delay (s)		43.3			43.2			48.0			40.2	
Approach LOS		D			D			D			D	

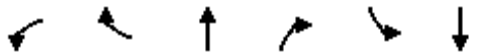
Intersection Summary			
HCM 2000 Control Delay	45.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



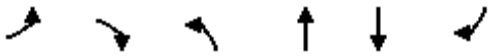
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	60	28	41	120	364	83	1637	16	249	1041	44
Future Volume (vph)	46	60	28	41	120	364	83	1637	16	249	1041	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.95		1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3372		1770	1863	1583	1770	3534		1770	3539	1583
Flt Permitted	0.58	1.00		0.69	1.00	1.00	0.20	1.00		0.07	1.00	1.00
Satd. Flow (perm)	1077	3372		1290	1863	1583	365	3534		126	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	50	65	30	45	130	396	90	1779	17	271	1132	48
RTOR Reduction (vph)	0	25	0	0	0	170	0	1	0	0	0	21
Lane Group Flow (vph)	50	70	0	45	130	226	90	1795	0	271	1132	27
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	23.6	18.5		23.6	18.5	18.5	61.2	54.7		72.9	61.9	61.9
Effective Green, g (s)	23.6	18.5		23.6	18.5	18.5	61.2	54.7		72.9	61.9	61.9
Actuated g/C Ratio	0.21	0.17		0.21	0.17	0.17	0.56	0.50		0.66	0.56	0.56
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Lane Grp Cap (vph)	263	567		299	313	266	286	1757		288	1991	890
v/s Ratio Prot	c0.01	0.02		0.01	0.07		0.02	c0.51		c0.12	0.32	
v/s Ratio Perm	0.03			0.03		c0.14	0.16			0.51		0.02
v/c Ratio	0.19	0.12		0.15	0.42	0.85	0.31	1.02		0.94	0.57	0.03
Uniform Delay, d1	35.0	38.9		34.8	40.9	44.4	12.2	27.6		36.3	15.5	10.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.60	2.06	1.00
Incremental Delay, d2	1.6	0.4		1.1	4.0	27.4	2.9	27.2		20.6	0.4	0.0
Delay (s)	36.6	39.3		35.9	44.9	71.8	15.1	54.8		42.3	32.3	10.7
Level of Service	D	D		D	D	E	B	D		D	C	B
Approach Delay (s)		38.4			62.9			52.9			33.5	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	46.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	83.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



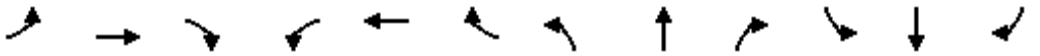
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	152	21	2086	174	60	1445
Future Volume (vph)	152	21	2086	174	60	1445
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3498		1770	3539
Flt Permitted	0.95	1.00	1.00		0.05	1.00
Satd. Flow (perm)	1770	1583	3498		96	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	165	23	2267	189	65	1571
RTOR Reduction (vph)	0	19	6	0	0	0
Lane Group Flow (vph)	165	4	2450	0	65	1571
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			2		1	6
Permitted Phases	3	8			6	
Actuated Green, G (s)	18.3	18.3	72.9		82.7	82.7
Effective Green, g (s)	18.3	18.3	72.9		82.7	82.7
Actuated g/C Ratio	0.17	0.17	0.66		0.75	0.75
Clearance Time (s)	4.5	4.5	4.5		4.5	4.5
Lane Grp Cap (vph)	294	263	2318		152	2660
v/s Ratio Prot			c0.70		0.02	c0.44
v/s Ratio Perm	c0.09	0.00			0.30	
v/c Ratio	0.56	0.01	1.06		0.43	0.59
Uniform Delay, d1	42.2	38.3	18.5		28.9	6.1
Progression Factor	1.00	1.00	1.06		1.00	1.00
Incremental Delay, d2	7.5	0.1	29.0		8.6	1.0
Delay (s)	49.7	38.4	48.8		37.5	7.1
Level of Service	D	D	D		D	A
Approach Delay (s)	48.3		48.8			8.3
Approach LOS	D		D			A

Intersection Summary			
HCM 2000 Control Delay	33.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



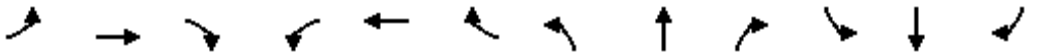
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	136	79	371	2471	1646	206
Future Volume (vph)	136	79	371	2471	1646	206
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.95	1.00	0.06	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583	119	3539	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	148	86	403	2686	1789	224
RTOR Reduction (vph)	0	72	0	0	0	101
Lane Group Flow (vph)	148	14	403	2686	1789	123
Turn Type	Perm	Perm	pm+pt	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases	4	4	2			6
Actuated Green, G (s)	18.0	18.0	83.0	83.0	58.0	58.0
Effective Green, g (s)	18.0	18.0	83.0	83.0	58.0	58.0
Actuated g/C Ratio	0.16	0.16	0.75	0.75	0.53	0.53
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Grp Cap (vph)	289	259	397	2670	1866	834
v/s Ratio Prot			0.19	c0.76	0.51	
v/s Ratio Perm	c0.08	0.01	c0.58			0.08
v/c Ratio	0.51	0.05	1.02	1.01	0.96	0.15
Uniform Delay, d1	42.0	38.8	37.9	13.5	24.9	13.3
Progression Factor	1.00	1.00	0.69	2.11	1.30	2.99
Incremental Delay, d2	6.4	0.4	41.4	16.0	11.9	0.3
Delay (s)	48.3	39.2	67.7	44.4	44.1	40.1
Level of Service	D	D	E	D	D	D
Approach Delay (s)	45.0			47.5	43.7	
Approach LOS	D			D	D	

Intersection Summary			
HCM 2000 Control Delay	45.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



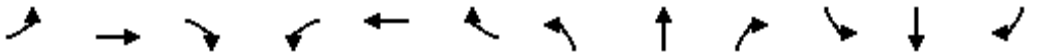
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	107	50	548	112	61	44	311	939	68	49	1325	56
Future Volume (vph)	107	50	548	112	61	44	311	939	68	49	1325	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5034		1770	5054	
Flt Permitted	0.71	1.00	1.00	0.72	1.00	1.00	0.09	1.00		0.25	1.00	
Satd. Flow (perm)	1330	1863	1583	1345	1863	1583	173	5034		463	5054	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	116	54	596	122	66	48	338	1021	74	53	1440	61
RTOR Reduction (vph)	0	0	237	0	0	33	0	7	0	0	4	0
Lane Group Flow (vph)	116	54	359	122	66	15	338	1088	0	53	1497	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	35.5	35.5	35.5	35.5	35.5	35.5	65.5	55.4		44.1	38.5	
Effective Green, g (s)	35.5	35.5	35.5	35.5	35.5	35.5	65.5	55.4		44.1	38.5	
Actuated g/C Ratio	0.32	0.32	0.32	0.32	0.32	0.32	0.60	0.50		0.40	0.35	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Grp Cap (vph)	429	601	510	434	601	510	429	2535		252	1768	
v/s Ratio Prot		0.03			0.04		c0.16	0.22		0.01	c0.30	
v/s Ratio Perm	0.09		c0.23	0.09		0.01	0.31			0.07		
v/c Ratio	0.27	0.09	0.70	0.28	0.11	0.03	0.79	0.43		0.21	0.85	
Uniform Delay, d1	27.6	26.0	32.6	27.7	26.2	25.5	29.3	17.3		20.3	33.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.48	1.42	
Incremental Delay, d2	1.5	0.3	7.9	1.6	0.4	0.1	13.6	0.5		1.8	5.1	
Delay (s)	29.2	26.3	40.6	29.4	26.5	25.6	43.0	17.8		31.9	52.0	
Level of Service	C	C	D	C	C	C	D	B		C	D	
Approach Delay (s)		37.8			27.8			23.7			51.3	
Approach LOS		D			C			C			D	

Intersection Summary			
HCM 2000 Control Delay	37.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	78.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



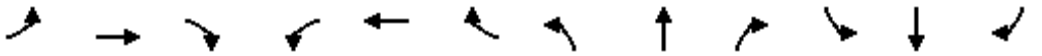
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	1186	59	32	657	129	58	172	49	206	238	47
Future Volume (vph)	67	1186	59	32	657	129	58	172	49	206	238	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3452		1770	1863	1583	1770	1863	1583
Flt Permitted	0.23	1.00	1.00	0.08	1.00		0.60	1.00	1.00	0.38	1.00	1.00
Satd. Flow (perm)	427	3539	1583	156	3452		1116	1863	1583	705	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	73	1289	64	35	714	140	63	187	53	224	259	51
RTOR Reduction (vph)	0	0	34	0	15	0	0	0	43	0	0	37
Lane Group Flow (vph)	73	1289	30	35	839	0	63	187	10	224	259	14
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6
Actuated Green, G (s)	56.6	50.9	50.9	55.8	50.5		26.3	20.8	20.8	40.3	30.3	30.3
Effective Green, g (s)	56.6	50.9	50.9	55.8	50.5		26.3	20.8	20.8	40.3	30.3	30.3
Actuated g/C Ratio	0.51	0.46	0.46	0.51	0.46		0.24	0.19	0.19	0.37	0.28	0.28
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lane Grp Cap (vph)	289	1637	732	156	1584		299	352	299	403	513	436
v/s Ratio Prot	c0.01	c0.36		0.01	0.24		0.01	0.10		c0.08	0.14	
v/s Ratio Perm	0.12		0.02	0.10			0.04		0.01	c0.13		0.01
v/c Ratio	0.25	0.79	0.04	0.22	0.53		0.21	0.53	0.03	0.56	0.50	0.03
Uniform Delay, d1	14.8	25.0	16.2	18.4	21.3		33.0	40.2	36.4	25.9	33.5	29.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.1	3.9	0.1	3.3	1.3		1.6	5.6	0.2	5.4	3.5	0.1
Delay (s)	16.9	28.9	16.3	21.7	22.5		34.6	45.8	36.6	31.3	37.1	29.3
Level of Service	B	C	B	C	C		C	D	D	C	D	C
Approach Delay (s)		27.7			22.5			41.9			33.9	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	72.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	482	420	64	379	90	419	935	43	176	1189	64
Future Volume (vph)	87	482	420	64	379	90	419	935	43	176	1189	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.91		1.00	0.91	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	5085	1583	3433	5052		1770	5046	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3539	1583	1770	5085	1583	3433	5052		1770	5046	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	95	524	457	70	412	98	455	1016	47	191	1292	70
RTOR Reduction (vph)	0	0	363	0	0	75	0	4	0	0	5	0
Lane Group Flow (vph)	95	524	94	70	412	23	455	1059	0	191	1357	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)	12.5	20.6	20.6	18.1	26.2	26.2	18.5	32.6		20.7	34.8	
Effective Green, g (s)	12.5	20.6	20.6	18.1	26.2	26.2	18.5	32.6		20.7	34.8	
Actuated g/C Ratio	0.11	0.19	0.19	0.16	0.24	0.24	0.17	0.30		0.19	0.32	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Grp Cap (vph)	201	662	296	291	1211	377	577	1497		333	1596	
v/s Ratio Prot	c0.05	c0.15		0.04	c0.08		c0.13	0.21		0.11	c0.27	
v/s Ratio Perm			0.06			0.01						
v/c Ratio	0.47	0.79	0.32	0.24	0.34	0.06	0.79	0.71		0.57	0.85	
Uniform Delay, d1	45.7	42.7	38.6	40.0	34.7	32.4	43.9	34.5		40.6	35.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.29	0.72		1.00	1.00	
Incremental Delay, d2	7.8	9.4	2.8	1.9	0.8	0.3	9.1	2.5		7.0	5.9	
Delay (s)	53.4	52.0	41.4	41.9	35.5	32.7	65.5	27.2		47.6	41.0	
Level of Service	D	D	D	D	D	C	E	C		D	D	
Approach Delay (s)		47.6			35.8			38.7			41.8	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	41.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



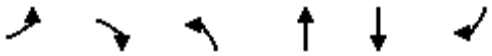
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	231	109	46	87	309	66	1246	22	474	1794	43
Future Volume (vph)	29	231	109	46	87	309	66	1246	22	474	1794	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.95		1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3369		1770	1863	1583	1770	3530		1770	3539	1583
Flt Permitted	0.67	1.00		0.34	1.00	1.00	0.10	1.00		0.09	1.00	1.00
Satd. Flow (perm)	1250	3369		626	1863	1583	178	3530		161	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	251	118	50	95	336	72	1354	24	515	1950	47
RTOR Reduction (vph)	0	51	0	0	0	281	0	1	0	0	0	20
Lane Group Flow (vph)	32	318	0	50	95	55	72	1377	0	515	1950	27
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	23.0	18.0		23.0	18.0	18.0	46.8	41.8		73.5	64.0	64.0
Effective Green, g (s)	23.0	18.0		23.0	18.0	18.0	46.8	41.8		73.5	64.0	64.0
Actuated g/C Ratio	0.21	0.16		0.21	0.16	0.16	0.43	0.38		0.67	0.58	0.58
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Lane Grp Cap (vph)	285	551		182	304	259	148	1341		505	2059	921
v/s Ratio Prot	0.01	c0.09		c0.01	0.05		0.02	0.39		c0.25	0.55	
v/s Ratio Perm	0.02			0.04		0.03	0.18			c0.43		0.02
v/c Ratio	0.11	0.58		0.27	0.31	0.21	0.49	1.03		1.02	0.95	0.03
Uniform Delay, d1	35.0	42.5		35.6	40.5	39.9	24.7	34.1		34.4	21.4	9.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.97	0.87	1.00
Incremental Delay, d2	0.8	4.4		3.7	2.7	1.9	11.0	31.6		17.4	1.3	0.0
Delay (s)	35.8	46.8		39.3	43.2	41.7	35.7	65.7		50.7	20.0	9.8
Level of Service	D	D		D	D	D	D	E		D	C	A
Approach Delay (s)		46.0			41.8			64.2			26.1	
Approach LOS		D			D			E			C	

Intersection Summary			
HCM 2000 Control Delay	40.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	90.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



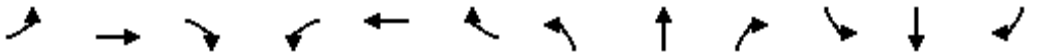
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	169	64	1437	109	17	2019
Future Volume (vph)	169	64	1437	109	17	2019
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3502		1770	3539
Flt Permitted	0.95	1.00	1.00		0.08	1.00
Satd. Flow (perm)	1770	1583	3502		140	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	184	70	1562	118	18	2195
RTOR Reduction (vph)	0	58	5	0	0	0
Lane Group Flow (vph)	184	12	1675	0	18	2195
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			2		1	6
Permitted Phases	8	8			6	
Actuated Green, G (s)	19.5	19.5	72.0		81.5	81.5
Effective Green, g (s)	19.5	19.5	72.0		81.5	81.5
Actuated g/C Ratio	0.18	0.18	0.65		0.74	0.74
Clearance Time (s)	4.5	4.5	4.5		4.5	4.5
Lane Grp Cap (vph)	313	280	2292		177	2622
v/s Ratio Prot			0.48		0.00	c0.62
v/s Ratio Perm	c0.10	0.01			0.07	
v/c Ratio	0.59	0.04	0.73		0.10	0.84
Uniform Delay, d1	41.6	37.5	12.6		10.3	9.7
Progression Factor	1.00	1.00	0.92		1.00	1.00
Incremental Delay, d2	7.9	0.3	1.6		1.1	3.4
Delay (s)	49.4	37.8	13.2		11.4	13.1
Level of Service	D	D	B		B	B
Approach Delay (s)	46.2		13.2			13.1
Approach LOS	D		B			B

Intersection Summary			
HCM 2000 Control Delay	15.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	212	228	197	1557	2528	186
Future Volume (vph)	212	228	197	1557	2528	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.95	1.00	0.05	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583	90	3539	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	230	248	214	1692	2748	202
RTOR Reduction (vph)	0	6	0	0	0	50
Lane Group Flow (vph)	230	242	214	1692	2748	152
Turn Type	Prot	Perm	Perm	NA	NA	Perm
Protected Phases	4			2	6	
Permitted Phases		4	2			6
Actuated Green, G (s)	18.0	18.0	83.0	83.0	83.0	83.0
Effective Green, g (s)	18.0	18.0	83.0	83.0	83.0	83.0
Actuated g/C Ratio	0.16	0.16	0.75	0.75	0.75	0.75
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Grp Cap (vph)	289	259	67	2670	2670	1194
v/s Ratio Prot	0.13			0.48	0.78	
v/s Ratio Perm		c0.15	c2.38			0.10
v/c Ratio	0.80	0.93	3.19	0.63	1.03	0.13
Uniform Delay, d1	44.2	45.4	13.5	6.3	13.5	3.7
Progression Factor	1.00	1.00	2.31	1.95	1.09	2.52
Incremental Delay, d2	19.9	41.4	1006.9	0.6	23.2	0.2
Delay (s)	64.2	86.8	1038.1	13.0	37.9	9.4
Level of Service	E	F	F	B	D	A
Approach Delay (s)	75.9			128.1	36.0	
Approach LOS	E			F	D	

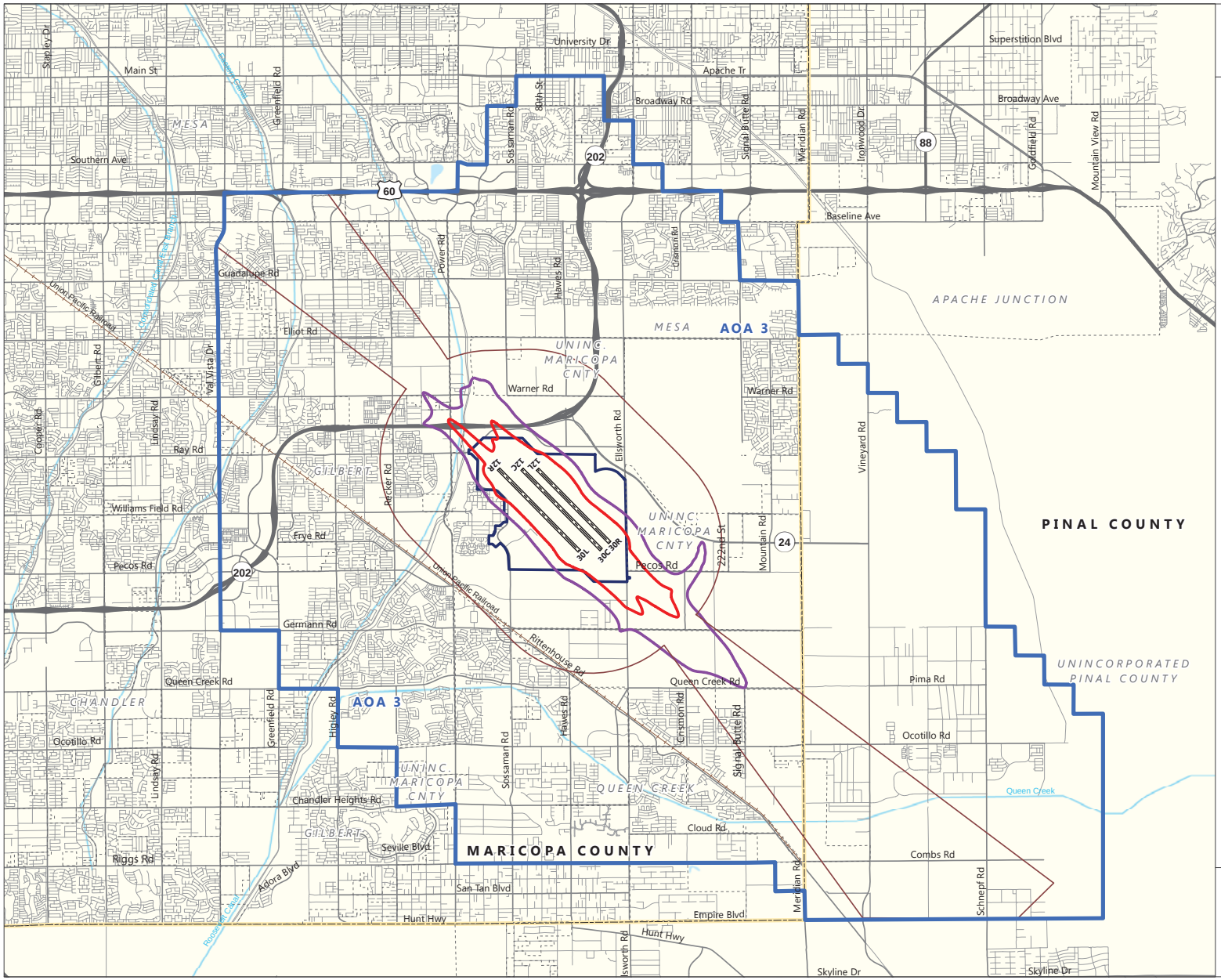
Intersection Summary			
HCM 2000 Control Delay	72.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	2.76		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	103.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	36	380	82	67	37	606	1493	67	49	806	49
Future Volume (vph)	98	36	380	82	67	37	606	1493	67	49	806	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5052		1770	5042	
Flt Permitted	0.71	1.00	1.00	0.73	1.00	1.00	0.13	1.00		0.15	1.00	
Satd. Flow (perm)	1322	1863	1583	1363	1863	1583	240	5052		281	5042	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	107	39	413	89	73	40	659	1623	73	53	876	53
RTOR Reduction (vph)	0	0	329	0	0	32	0	4	0	0	6	0
Lane Group Flow (vph)	107	39	84	89	73	8	659	1692	0	53	923	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	22.5	22.5	22.5	22.5	22.5	22.5	78.5	67.7		32.8	26.5	
Effective Green, g (s)	22.5	22.5	22.5	22.5	22.5	22.5	78.5	67.7		32.8	26.5	
Actuated g/C Ratio	0.20	0.20	0.20	0.20	0.20	0.20	0.71	0.62		0.30	0.24	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Grp Cap (vph)	270	381	323	278	381	323	831	3109		169	1214	
v/s Ratio Prot		0.02			0.04		c0.34	0.33		0.02	0.18	
v/s Ratio Perm	c0.08		0.05	0.07		0.01	c0.22			0.08		
v/c Ratio	0.40	0.10	0.26	0.32	0.19	0.03	0.79	0.54		0.31	0.76	
Uniform Delay, d1	37.9	35.5	36.8	37.2	36.2	35.0	21.0	12.2		33.4	38.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.15	1.34	
Incremental Delay, d2	4.3	0.5	2.0	3.0	1.1	0.1	7.7	0.7		2.9	2.7	
Delay (s)	42.2	36.1	38.7	40.3	37.3	35.1	28.7	12.9		41.2	54.6	
Level of Service	D	D	D	D	D	D	C	B		D	D	
Approach Delay (s)		39.2			38.2			17.3			53.9	
Approach LOS		D			D			B			D	

Intersection Summary			
HCM 2000 Control Delay	30.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Appendix B
Phoenix-Mesa Gateway Airport 2017 Noise Contours



LEGEND

- Existing Airport Boundary
- Municipal Boundary
- County Boundary
- Updated AOA 1
- Updated AOA 2
- Updated AOA 3
- 14 CFR Part 77 Horizontal and Outer Approach Surfaces
- Highway
- Arterial Street
- Local Street
- Railroad
- Waterways

NORTH 0 8,800 ft.

SOURCES: Phoenix-Mesa Gateway Airport Layout Plan, April 8, 2015 (airport property boundary); Airport Airspace Drawing, April 2015 (14 Part 77); Maricopa County Department of Transportation, 2012 (streets and highways); U.S. Census Bureau, 2014 (municipal boundaries, railroad); Ricondo & Associates, based upon a review of aircraft flight tracks and noise complaint location data, August 2014 (Study Area); Ricondo & Associates, based upon a review of aircraft flight tracks and noise complaint location data, October 2016 (Potential New AOA)

PREPARED BY: Ricondo & Associates, Inc., January 20167

Exhibit 1

Updated Airport Planning Area and Overlay Zones

W:\Projects\WA\Land Use Compatibility\MXD\Exhibit_1_Proposed Updated Airport Planning Area and Overlay Zones with Park77.mxd

Appendix C
FRA CREATE and Grade Crossing Horn Noise Model Data

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
Copyright 2006, HMMH Inc.
Case: E1 @ STA 1481 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	61	58
Source 1	65	61	58
Source 2	49	44	42
Source 3	44	37	37
Source 4	0	0	0
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14										
Distance (source to receiver)	distance (ft)	61	distance (ft)	61	distance (ft)	854										
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45										
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	338										
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45										
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	384										
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N										
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	2										

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E2 @ STA 1491 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	61	59
Source 1	65	60	58
Source 2	48	44	41
Source 3	56	49	50
Source 4	0	0	0
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14										
Distance (source to receiver)	distance (ft)	66	distance (ft)	66	distance (ft)	311										
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45										
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	338										
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45										
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	384										
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N										
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0										

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E3 @ STA 1501 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	61	59
Source 1	64	60	57
Source 2	48	44	41
Source 3	59	52	52
Source 4	0	0	0
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14										
Distance (source to receiver)	distance (ft)	70	distance (ft)	70	distance (ft)	221										
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45										
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	338										
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45										
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	384										
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N										
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0										

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E4 @ STA 1511 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	61	59
Source 1	65	60	58
Source 2	48	44	41
Source 3	57	50	51
Source 4	0	0	0
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14										
Distance (source to receiver)	distance (ft)	68	distance (ft)	68	distance (ft)	269										
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45										
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	338										
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45										
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	384										
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N										
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0										

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: E5 @ STA 1521 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	61	59
Source 1	65	60	58
Source 2	48	44	41
Source 3	50	43	44
Source 4	56	50	49
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	66	distance (ft)	66	distance (ft)	781	distance (ft)	538								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	338	vehicles/hour	859								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	384	vehicles/hour	752								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: E6 @ STA 1531 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	60	59
Source 1	63	59	56
Source 2	47	42	40
Source 3	55	47	49
Source 4	60	54	54
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	84	distance (ft)	84	distance (ft)	1204	distance (ft)	276								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	859								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	752								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: E7 @ STA 1541 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	60	59
Source 1	64	59	57
Source 2	47	43	40
Source 3	59	52	53
Source 4	51	45	45
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	76	distance (ft)	76	distance (ft)	638	distance (ft)	1077								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	859								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	752								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: E8 @ STA 1551 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	59	59
Source 1	60	55	53
Source 2	43	39	36
Source 3	64	56	58
Source 4	48	42	41
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	145	distance (ft)	145	distance (ft)	312	distance (ft)	1925								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	859								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	752								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: E9 @ STA 1561 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	59	59
Source 1	59	55	52
Source 2	42	38	36
Source 3	64	56	58
Source 4	44	37	38
Source 5	43	45	30
Source 6	23	23	13
Source 7	15	17	-38
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	159	distance (ft)	159	distance (ft)	309	distance (ft)	2730	distance (ft)	174	distance (ft)	174	distance (ft)	582		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.06667		
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: E10 @ STA 1571 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	59	59
Source 1	59	55	53
Source 2	43	39	36
Source 3	64	56	58
Source 4	43	36	36
Source 5	44	45	31
Source 6	24	24	14
Source 7	4	6	-48
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	149	distance (ft)	149	distance (ft)	302	distance (ft)	3530	distance (ft)	164	distance (ft)	164	distance (ft)	1557		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.06667		
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E11 @ STA 1581 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	59	59
Source 1	59	55	53
Source 2	43	39	36
Source 3	64	56	58
Source 4	41	34	35
Source 5	44	45	31
Source 6	24	24	14
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	149	distance (ft)	149	distance (ft)	302	distance (ft)	4305	distance (ft)	164	distance (ft)	164				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E12 @ STA 1591 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	59	59
Source 1	59	55	53
Source 2	43	39	36
Source 3	64	56	58
Source 4	40	33	34
Source 5	44	45	31
Source 6	24	24	14
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	149	distance (ft)	149	distance (ft)	302	distance (ft)	5138	distance (ft)	164	distance (ft)	164				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E13 @ STA 1601 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	59	59
Source 1	59	55	52
Source 2	43	38	36
Source 3	64	56	58
Source 4	48	42	41
Source 5	44	45	30
Source 6	23	23	13
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	154	distance (ft)	154	distance (ft)	320	distance (ft)	4663	distance (ft)	169	distance (ft)	169				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E14 @ STA 1611 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	59	59
Source 1	59	55	52
Source 2	43	38	36
Source 3	64	56	58
Source 4	49	43	43
Source 5	44	45	30
Source 6	23	23	13
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	154	distance (ft)	154	distance (ft)	320	distance (ft)	3664	distance (ft)	169	distance (ft)	169				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E15 @ STA 1621 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	59	59
Source 1	59	55	52
Source 2	43	38	36
Source 3	64	56	57
Source 4	51	45	45
Source 5	44	45	30
Source 6	23	23	13
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	154	distance (ft)	154	distance (ft)	329	distance (ft)	2654	distance (ft)	169	distance (ft)	169				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	2846	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E16 @ STA 1631 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	59	59
Source 1	59	55	52
Source 2	43	38	36
Source 3	64	56	57
Source 4	54	48	48
Source 5	44	45	30
Source 6	23	23	13
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	154	distance (ft)	154	distance (ft)	327	distance (ft)	1656	distance (ft)	169	distance (ft)	169				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	2846	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E17 @ STA 1641 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	59	59
Source 1	57	53	50
Source 2	41	36	34
Source 3	62	55	56
Source 4	61	54	55
Source 5	42	43	29
Source 6	22	22	12
Source 7	17	19	-35
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	213	distance (ft)	213	distance (ft)	400	distance (ft)	638	distance (ft)	228	distance (ft)	228	distance (ft)	452		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.06667		
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	2846	trains/hour	0.06667	trains/hour	0.06667	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	3283	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W1 @ STA 1481 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	61	58
Source 1	65	61	58
Source 2	49	44	42
Source 3	45	38	38
Source 4	0	0	0
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14										
Distance (source to receiver)	distance (ft)	61	distance (ft)	61	distance (ft)	766										
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45										
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	338										
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45										
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	384										
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N										
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	2										

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W2 @ STA 1491 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	61	59
Source 1	64	60	57
Source 2	47	43	41
Source 3	60	53	54
Source 4	0	0	0
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14										
Distance (source to receiver)	distance (ft)	74	distance (ft)	74	distance (ft)	180										
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45										
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	338										
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45										
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	384										
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N										
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0										

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: W3 @ STA 1501 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	59	59
Source 1	56	52	49
Source 2	40	35	33
Source 3	64	58	58
Source 4	0	0	0
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14										
Distance (source to receiver)	distance (ft)	240	distance (ft)	240	distance (ft)	91										
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45										
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	338										
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45										
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	384										
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N										
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0										

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: W4 @ STA 1511 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	60	59
Source 1	63	59	56
Source 2	47	42	40
Source 3	61	55	55
Source 4	0	0	0
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14										
Distance (source to receiver)	distance (ft)	83	distance (ft)	83	distance (ft)	143										
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45										
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	338										
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45										
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	384										
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N										
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0										

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: W5 @ STA 1521 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	61	59
Source 1	65	60	58
Source 2	48	44	41
Source 3	51	44	45
Source 4	55	49	49
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	66	distance (ft)	66	distance (ft)	691	distance (ft)	617								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	338	vehicles/hour	859								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	384	vehicles/hour	752								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: W6 @ STA 1531 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	60	59
Source 1	59	55	52
Source 2	43	38	36
Source 3	56	48	50
Source 4	64	58	57
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	154	distance (ft)	154	distance (ft)	1048	distance (ft)	165								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	859								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	752								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: W7 @ STA 1541 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	60	59
Source 1	63	59	56
Source 2	47	42	40
Source 3	61	53	55
Source 4	52	46	45
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	83	distance (ft)	83	distance (ft)	502	distance (ft)	982								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	859								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	752								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: W8 @ STA 1551 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	58	59
Source 1	52	48	46
Source 2	36	32	29
Source 3	65	57	59
Source 4	48	41	41
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	433	distance (ft)	433	distance (ft)	263	distance (ft)	1598								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: W9 @ STA 1561 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	63	55	56
Source 1	49	45	42
Source 2	33	28	26
Source 3	62	55	56
Source 4	45	38	39
Source 5	34	35	21
Source 6	14	14	4
Source 7	8	10	-44
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	339	distance (ft)	339	distance (ft)	188	distance (ft)	2434	distance (ft)	324	distance (ft)	324	distance (ft)	658		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.06667		
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y	Y/N	Y		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W10 @ STA 1571 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	57	59
Source 1	50	46	43
Source 2	34	30	27
Source 3	65	57	59
Source 4	43	36	37
Source 5	36	37	23
Source 6	16	16	6
Source 7	-2	0	-54
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	279	distance (ft)	279	distance (ft)	127	distance (ft)	3270	distance (ft)	264	distance (ft)	264	distance (ft)	1638		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.06667		
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y	Y/N	Y		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W11 @ STA 1579 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	58	59
Source 1	50	46	43
Source 2	34	29	27
Source 3	65	57	59
Source 4	43	36	37
Source 5	35	37	22
Source 6	15	15	5
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	286	distance (ft)	286	distance (ft)	123	distance (ft)	3270	distance (ft)	271	distance (ft)	271				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W12 @ STA 1591 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	58	59
Source 1	50	46	43
Source 2	34	29	27
Source 3	65	57	59
Source 4	40	33	34
Source 5	35	37	22
Source 6	15	15	5
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	286	distance (ft)	286	distance (ft)	123	distance (ft)	4839	distance (ft)	271	distance (ft)	271				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: W13 @ STA 1601 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	58	59
Source 1	50	46	43
Source 2	34	29	27
Source 3	65	57	59
Source 4	47	42	41
Source 5	35	37	22
Source 6	15	15	5
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	286	distance (ft)	286	distance (ft)	121	distance (ft)	4751	distance (ft)	271	distance (ft)	271				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: W14 @ STA 1611 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	58	59
Source 1	53	49	46
Source 2	36	32	30
Source 3	65	57	59
Source 4	47	42	41
Source 5	40	42	27
Source 6	20	20	10
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	405	distance (ft)	405	distance (ft)	260	distance (ft)	4751	distance (ft)	271	distance (ft)	271				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W15 @ STA 1621 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	58	59
Source 1	52	48	46
Source 2	36	32	29
Source 3	65	57	59
Source 4	51	45	44
Source 5	40	42	27
Source 6	20	20	10
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	434	distance (ft)	434	distance (ft)	262	distance (ft)	2832	distance (ft)	271	distance (ft)	271				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W16 @ STA 1631 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	58	59
Source 1	53	49	46
Source 2	37	32	30
Source 3	65	57	58
Source 4	46	40	40
Source 5	40	42	27
Source 6	20	20	10
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	389	distance (ft)	389	distance (ft)	282	distance (ft)	1786	distance (ft)	271	distance (ft)	271				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	3	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W17 @ STA 1641 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	58	59
Source 1	52	48	45
Source 2	36	31	29
Source 3	65	57	59
Source 4	53	47	46
Source 5	37	39	24
Source 6	17	17	7
Source 7	-1	1	-54
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	448	distance (ft)	448	distance (ft)	266	distance (ft)	813	distance (ft)	433	distance (ft)	433	distance (ft)	1638		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.06667		
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	2	number of rows	0	number of rows	0	number of rows	1		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

FRA Grade Crossing Noise Model

User Input	
Noise Situation (Pick from List)	1
Horn Lmax (dBA) @ 100 feet	104
Horn Location on Locomotive(Pick from List)	1
Non Train Noise Environment (pick from list)	2
Shielding (Pick from List)	4
Length of Impact Area (pick from list)	1
Existing Train Speed (mph)	60
Future Train Speed (mph)	60
Number of Existing Trains in one Direction	2
Number of Future Trains in one Direction	2
Existing Number of Day Trains (7 am to 10 p.m.)	1.25
Future Number of Day Trains (7 am to 10 p.m.)	1.25
Existing Number of Night Trains (10 p.m. to 7 am)	0.75
Future Number of Night Trains (10 p.m. to 7 am)	0.75
Existing Average Number of Cars	100
Future Average Number of Cars	100
Existing Average Number of Locomotives	4
Future Average Number of Locomotives	4

Noise Situation	
Horns Existing and Future	1
Horns in Future Only	2
No Horns Existing and Future	3

Horn Location on Locomotive			
National Average (50% front, 50% middle)			1
All Front Mounted			2
All Middle Mounted			3
User Defined	80	% front mounted horns	4

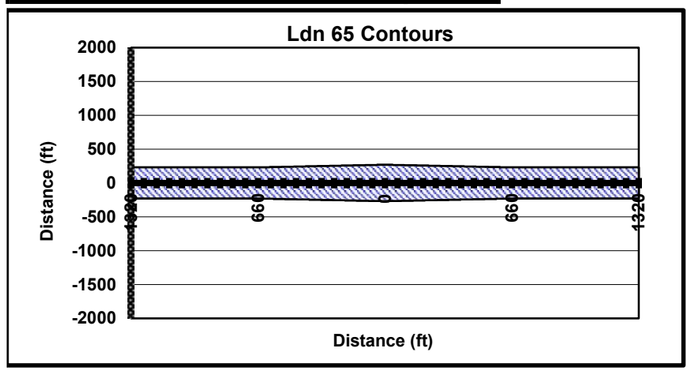
Non Train Noise Environment			
Urban			1
Suburban			2
Rural			3
User Defined Ldn =	50	dBA	4

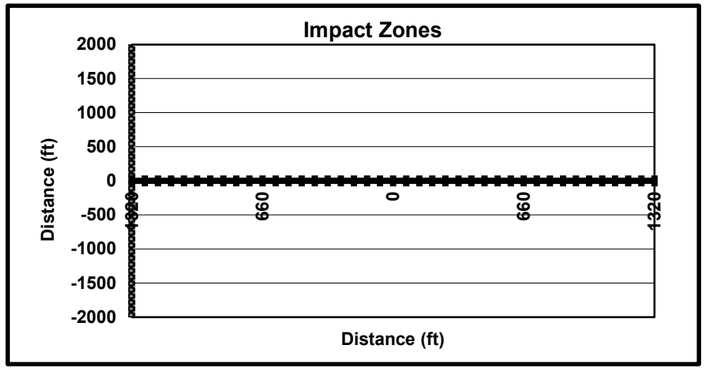
Shielding	
Dense Urban	1
Light Urban	2
Dense Suburban	3
Light Suburban	4
Rural	5
No Shielding	6

Length of Impact Area	
1/4 mile	1
20 seconds	2
15 seconds	3

Ldn 65 Contours Numeric Output (in feet)	
Existing 65 Ldn Contour at X-ing	269
Future 65 Ldn Contour at X-ing	269
Existing 65 Ldn Contour at 1/2 zone length	229
Future 65 Ldn Contour at 1/2 zone length	229
Zone Length	1320
1/2 Zone Length	660

Impact Zones Numeric Output (in feet)	
Impact Distance at X-ing	0
Severe Impact Distance at X-ing	0
Impact Distance at 1/2 zone length	0
Severe Impact Distance at 1/2 zone length	0
Zone Length	1320
1/2 Zone Length	660





Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W1 @ STA 1481 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	62	58
Source 1	65	62	58
Source 2	49	45	42
Source 3	45	38	39
Source 4	32	33	19
Source 5	12	12	2
Source 6	40	42	23
Source 7	21	22	6
Source 8	12	14	-39

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10	Crossover	13
Distance (source to receiver)	distance (ft)	63	distance (ft)	63	distance (ft)	766	distance (ft)	998	distance (ft)	998	distance (ft)	565	distance (ft)	565	distance (ft)	658
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30	trains/hour	0.13333
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	371.8	trains/hour	0.06667	trains/hour	0.06667	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	141.727
	locos/train	4	length of cars (ft) / train	60			locos/train	4	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60		
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0	trains/hour	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0	duration of one train (sec)	0
	locos/train	4	length of cars (ft) / train	60			locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0		
Wheel Flats?			% of cars w/ wheel flats						% of cars w/ wheel flats				% of cars w/ wheel flats			
Jointed Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Embedded Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	2	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W2 @ STA 1491 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	62	58
Source 1	63	59	55
Source 2	46	43	39
Source 3	61	54	55
Source 4	46	47	33
Source 5	26	26	16
Source 6	52	54	35
Source 7	33	35	18
Source 8	23	25	-28

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10	Crossover	13
Distance (source to receiver)	distance (ft)	97	distance (ft)	97	distance (ft)	159	distance (ft)	111	distance (ft)	111	distance (ft)	82	distance (ft)	82	distance (ft)	231
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30	trains/hour	0.13333
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	371.8	trains/hour	0.06667	trains/hour	0.06667	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	141.727
	locos/train	4	length of cars (ft) / train	60			locos/train	4	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60		
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0	trains/hour	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0	duration of one train (sec)	0
	locos/train	4	length of cars (ft) / train	60			locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0		
Wheel Flats?			% of cars w/ wheel flats						% of cars w/ wheel flats				% of cars w/ wheel flats			
Jointed Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Embedded Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W3 @ STA 1501 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	60	59
Source 1	57	53	49
Source 2	40	37	33
Source 3	65	58	58
Source 4	36	38	23
Source 5	17	18	6
Source 6	45	47	28
Source 7	26	28	11
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10		
Distance (source to receiver)	distance (ft)	240	distance (ft)	240	distance (ft)	91	distance (ft)	540	distance (ft)	540	distance (ft)	241	distance (ft)	241		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30		
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	371.8	trains/hour	0.1	trains/hour	0.1	trains/hour	0.13333	trains/hour	0.13333		
	locos/train	4	length of cars (ft) / train	60			locos/train	3	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60		
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0		
	locos/train	4	length of cars (ft) / train	60			locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0		
Wheel Flats?			% of cars w/ wheel flats						% of cars w/ wheel flats				% of cars w/ wheel flats			
Jointed Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Embedded Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W4 @ STA 1511 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	62	58
Source 1	62	59	55
Source 2	46	42	39
Source 3	62	55	56
Source 4	45	46	32
Source 5	27	28	15
Source 6	54	56	36
Source 7	35	36	19
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10		
Distance (source to receiver)	distance (ft)	101	distance (ft)	101	distance (ft)	142	distance (ft)	134	distance (ft)	134	distance (ft)	67	distance (ft)	67		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30		
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	371.8	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333		
	locos/train	4	length of cars (ft) / train	60			locos/train	2	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60		
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0		
	locos/train	4	length of cars (ft) / train	60			locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0		
Wheel Flats?			% of cars w/ wheel flats						% of cars w/ wheel flats				% of cars w/ wheel flats			
Jointed Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Embedded Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W5 @ STA 1521 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	62	58
Source 1	64	61	57
Source 2	48	44	40
Source 3	52	45	45
Source 4	55	49	49
Source 5	32	33	19
Source 6	14	15	2
Source 7	54	56	37
Source 8	35	37	20

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	76	distance (ft)	76	distance (ft)	679	distance (ft)	628	distance (ft)	1031	distance (ft)	1031	distance (ft)	61	distance (ft)	61
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	371.8	vehicles/hour	944.9	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	2	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	vehicles/hour	827.2	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: W6 @ STA 1531 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	60	59
Source 1	57	53	50
Source 2	40	37	33
Source 3	56	49	50
Source 4	64	58	58
Source 5	40	41	27
Source 6	22	23	10
Source 7	49	51	32
Source 8	30	31	15

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	232	distance (ft)	232	distance (ft)	1048	distance (ft)	165	distance (ft)	298	distance (ft)	298	distance (ft)	140	distance (ft)	140
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	944.9	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	2	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	827.2	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: W7 @ STA 1541 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	61	59
Source 1	62	59	55
Source 2	46	43	39
Source 3	61	54	55
Source 4	52	47	46
Source 5	47	48	34
Source 6	29	30	17
Source 7	51	52	33
Source 8	31	33	16

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	98	distance (ft)	98	distance (ft)	491	distance (ft)	974	distance (ft)	95	distance (ft)	95	distance (ft)	109	distance (ft)	109
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	944.9	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	2	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	827.2	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W8 @ STA 1551 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	58	59
Source 1	52	49	45
Source 2	36	33	29
Source 3	65	57	59
Source 4	48	41	42
Source 5	37	38	24
Source 6	19	20	7
Source 7	41	43	24
Source 8	22	23	7

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	457	distance (ft)	457	distance (ft)	285	distance (ft)	1561	distance (ft)	445	distance (ft)	445	distance (ft)	472	distance (ft)	472
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	2	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W9 @ STA 1561 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	63	56	57
Source 1	49	46	42
Source 2	33	29	26
Source 3	63	55	56
Source 4	45	38	39
Source 5	37	38	21
Source 6	16	17	4
Source 7	39	40	26
Source 8	21	22	9

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	339	distance (ft)	339	distance (ft)	188	distance (ft)	2434	distance (ft)	324	distance (ft)	324	distance (ft)	351	distance (ft)	351
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W10 @ STA 1571 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	58	59
Source 1	51	47	43
Source 2	34	31	27
Source 3	65	58	59
Source 4	43	36	37
Source 5	38	40	23
Source 6	18	19	6
Source 7	40	41	27
Source 8	22	23	10

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	279	distance (ft)	279	distance (ft)	127	distance (ft)	3270	distance (ft)	264	distance (ft)	264	distance (ft)	294	distance (ft)	294
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W11 @ STA 1579 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	58	59
Source 1	50	47	43
Source 2	34	31	27
Source 3	65	57	59
Source 4	42	35	36
Source 5	38	40	22
Source 6	17	18	5
Source 7	40	41	27
Source 8	22	23	10

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	286	distance (ft)	286	distance (ft)	136	distance (ft)	3903	distance (ft)	271	distance (ft)	271	distance (ft)	301	distance (ft)	301
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W12 @ STA 1591 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	58	59
Source 1	50	47	43
Source 2	34	31	27
Source 3	65	58	59
Source 4	41	34	35
Source 5	38	40	22
Source 6	17	18	5
Source 7	40	41	27
Source 8	22	23	10

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	289	distance (ft)	289	distance (ft)	126	distance (ft)	4839	distance (ft)	274	distance (ft)	274	distance (ft)	302	distance (ft)	302
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W13 @ STA 1601 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	58	59
Source 1	50	47	43
Source 2	34	30	27
Source 3	65	58	59
Source 4	48	42	41
Source 5	38	40	22
Source 6	17	18	5
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	292	distance (ft)	292	distance (ft)	127	distance (ft)	4751	distance (ft)	276	distance (ft)	276				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W14 @ STA 1611 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	58	59
Source 1	53	49	45
Source 2	36	33	29
Source 3	65	57	59
Source 4	49	43	43
Source 5	42	44	26
Source 6	22	22	9
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	447	distance (ft)	447	distance (ft)	278	distance (ft)	3840	distance (ft)	312	distance (ft)	312				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W15 @ STA 1621 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	58	59
Source 1	53	49	45
Source 2	36	33	29
Source 3	65	57	59
Source 4	51	45	45
Source 5	43	44	27
Source 6	22	23	10
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	451	distance (ft)	451	distance (ft)	281	distance (ft)	2826	distance (ft)	288	distance (ft)	288				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: W16 @ STA 1631 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	58	59
Source 1	53	50	46
Source 2	37	34	30
Source 3	65	57	59
Source 4	47	41	40
Source 5	43	45	27
Source 6	22	23	10
Source 7	4	6	-51
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	389	distance (ft)	389	distance (ft)	282	distance (ft)	1786	distance (ft)	271	distance (ft)	271	distance (ft)	1334		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.13333		
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	3	number of rows	0	number of rows	0	number of rows	1		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: W17 @ STA 1641 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	58	59
Source 1	52	49	45
Source 2	36	32	29
Source 3	65	57	59
Source 4	53	47	47
Source 5	40	41	24
Source 6	19	20	7
Source 7	13	15	-42
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	467	distance (ft)	467	distance (ft)	285	distance (ft)	848	distance (ft)	452	distance (ft)	452	distance (ft)	592		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.13333		
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	2	number of rows	0	number of rows	0	number of rows	1		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E1 @ STA 1481 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	62	58
Source 1	65	62	58
Source 2	49	45	42
Source 3	44	37	38
Source 4	32	33	19
Source 5	12	12	2
Source 6	39	41	22
Source 7	20	22	5
Source 8	20	22	-31

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10	Crossover	13
Distance (source to receiver)	distance (ft)	63	distance (ft)	63	distance (ft)	854	distance (ft)	979	distance (ft)	979	distance (ft)	613	distance (ft)	613	distance (ft)	311
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30	trains/hour	0.13333
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	371.8	trains/hour	0.06667	trains/hour	0.06667	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	141.727
	locos/train	4	length of cars (ft) / train	60			locos/train	4	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60		
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0	trains/hour	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0	duration of one train (sec)	0
	locos/train	4	length of cars (ft) / train	60			locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0		
Wheel Flats?			% of cars w/ wheel flats						% of cars w/ wheel flats				% of cars w/ wheel flats			
Jointed Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Embedded Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	2	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: E2 @ STA 1491 (65 dBA contour)

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	65	62	58
Source 1	64	61	57
Source 2	48	44	40
Source 3	57	50	50
Source 4	50	52	37
Source 5	30	30	20
Source 6	52	54	35
Source 7	33	34	18
Source 8	24	26	-27

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS

Parameter	Source 1		Source 2		Source 3		Source 4		Source 5		Source 6		Source 7		Source 8	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10	Crossover	13
Distance (source to receiver)	distance (ft)	76	distance (ft)	76	distance (ft)	316	distance (ft)	59	distance (ft)	59	distance (ft)	89	distance (ft)	89	distance (ft)	208
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30	trains/hour	0.13333
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	371.8	trains/hour	0.06667	trains/hour	0.06667	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	141.727
	locos/train	4	length of cars (ft) / train	60			locos/train	4	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60		
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0	trains/hour	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0	duration of one train (sec)	0
	locos/train	4	length of cars (ft) / train	60			locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0		
Wheel Flats?			% of cars w/ wheel flats						% of cars w/ wheel flats				% of cars w/ wheel flats			
Jointed Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Embedded Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST

Source	Number
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: E3 @ STA 1501 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	62	58
Source 1	64	61	57
Source 2	48	44	40
Source 3	59	52	53
Source 4	40	41	27
Source 5	21	21	10
Source 6	52	53	34
Source 7	32	34	17
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10		
Distance (source to receiver)	distance (ft)	77	distance (ft)	77	distance (ft)	226	distance (ft)	306	distance (ft)	306	distance (ft)	95	distance (ft)	95		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30		
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	371.8	trains/hour	0.1	trains/hour	0.1	trains/hour	0.13333	trains/hour	0.13333		
	locos/train	4	length of cars (ft) / train	60			locos/train	3	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60		
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0		
	locos/train	4	length of cars (ft) / train	60			locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0		
Wheel Flats?			% of cars w/ wheel flats						% of cars w/ wheel flats				% of cars w/ wheel flats			
Jointed Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Embedded Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E4 @ STA 1511 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	62	58
Source 1	64	61	57
Source 2	48	45	41
Source 3	58	51	51
Source 4	47	49	33
Source 5	28	29	16
Source 6	52	54	35
Source 7	33	34	18
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10		
Distance (source to receiver)	distance (ft)	75	distance (ft)	68	distance (ft)	279	distance (ft)	117	distance (ft)	117	distance (ft)	87	distance (ft)	87		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30		
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	371.8	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333		
	locos/train	4	length of cars (ft) / train	60			locos/train	3	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60		
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0		
	locos/train	4	length of cars (ft) / train	60			locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0		
Wheel Flats?			% of cars w/ wheel flats						% of cars w/ wheel flats				% of cars w/ wheel flats			
Jointed Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Embedded Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E5 @ STA 1521 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	62	58
Source 1	64	61	57
Source 2	48	44	41
Source 3	51	44	44
Source 4	56	51	50
Source 5	33	35	19
Source 6	14	15	2
Source 7	52	54	35
Source 8	33	34	18

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	73	distance (ft)	73	distance (ft)	789	distance (ft)	526	distance (ft)	1036	distance (ft)	1036	distance (ft)	90	distance (ft)	90
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	371.8	vehicles/hour	944.9	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	3	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	vehicles/hour	827.2	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E6 @ STA 1531 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	61	58
Source 1	63	59	55
Source 2	46	43	39
Source 3	56	48	49
Source 4	61	55	54
Source 5	43	44	28
Source 6	23	24	11
Source 7	50	52	33
Source 8	31	33	16

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	96	distance (ft)	96	distance (ft)	1214	distance (ft)	276	distance (ft)	241	distance (ft)	241	distance (ft)	113	distance (ft)	113
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	944.9	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	3	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	827.2	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E7 @ STA 1541 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	62	58
Source 1	64	60	56
Source 2	48	44	40
Source 3	60	52	53
Source 4	52	46	45
Source 5	43	44	28
Source 6	23	24	11
Source 7	50	52	33
Source 8	31	32	16

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	83	distance (ft)	76	distance (ft)	642	distance (ft)	1070	distance (ft)	248	distance (ft)	248	distance (ft)	120	distance (ft)	120
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	944.9	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	3	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	827.2	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E8 @ STA 1551 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	60	59
Source 1	59	56	52
Source 2	43	39	35
Source 3	64	56	58
Source 4	48	42	41
Source 5	45	46	30
Source 6	25	26	13
Source 7	47	48	29
Source 8	27	29	12

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	162	distance (ft)	162	distance (ft)	328	distance (ft)	1950	distance (ft)	174	distance (ft)	174	distance (ft)	205	distance (ft)	205
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	944.9	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	3	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	827.2	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E9 @ STA 1561 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	59	58
Source 1	58	55	51
Source 2	42	38	34
Source 3	64	56	58
Source 4	46	40	39
Source 5	45	46	29
Source 6	24	25	12
Source 7	43	45	30
Source 8	25	26	13

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	191	distance (ft)	191	distance (ft)	341	distance (ft)	2757	distance (ft)	206	distance (ft)	206	distance (ft)	174	distance (ft)	174
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	944.9	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	827.2	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E10 @ STA 1571 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	60	59
Source 1	59	56	52
Source 2	42	39	35
Source 3	64	57	58
Source 4	43	36	37
Source 5	46	47	30
Source 6	25	26	13
Source 7	44	45	31
Source 8	26	27	14

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	169	distance (ft)	169	distance (ft)	319	distance (ft)	3535	distance (ft)	185	distance (ft)	185	distance (ft)	154	distance (ft)	154
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E11 @ STA 1581 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	60	59
Source 1	59	56	52
Source 2	42	39	35
Source 3	64	56	58
Source 4	42	35	35
Source 5	46	47	30
Source 6	25	26	13
Source 7	44	45	31
Source 8	26	27	14

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	168	distance (ft)	168	distance (ft)	321	distance (ft)	4305	distance (ft)	183	distance (ft)	183	distance (ft)	150	distance (ft)	150
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E12 @ STA 1591 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	60	59
Source 1	59	56	52
Source 2	42	39	35
Source 3	64	56	58
Source 4	47	42	41
Source 5	46	47	30
Source 6	25	26	13
Source 7	44	45	31
Source 8	26	27	14

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	168	distance (ft)	168	distance (ft)	321	distance (ft)	5138	distance (ft)	184	distance (ft)	184	distance (ft)	155	distance (ft)	155
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E13 @ STA 1601 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	60	59
Source 1	59	56	52
Source 2	43	39	36
Source 3	64	56	58
Source 4	48	42	42
Source 5	46	47	30
Source 6	25	26	13
Source 7	10	12	-43
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	160	distance (ft)	160	distance (ft)	326	distance (ft)	4663	distance (ft)	175	distance (ft)	175	distance (ft)	913		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.13333		
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	212.591		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: E14 @ STA 1611 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	60	59
Source 1	59	56	52
Source 2	43	39	36
Source 3	64	56	58
Source 4	50	44	43
Source 5	46	47	30
Source 6	25	26	13
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	161	distance (ft)	161	distance (ft)	327	distance (ft)	3669	distance (ft)	175	distance (ft)	175				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: E15 @ STA 1621 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	60	59
Source 1	59	56	52
Source 2	43	39	36
Source 3	64	56	58
Source 4	52	46	45
Source 5	46	48	30
Source 6	25	26	13
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	159	distance (ft)	159	distance (ft)	334	distance (ft)	2660	distance (ft)	174	distance (ft)	174				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: E16 @ STA 1631 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	60	59
Source 1	59	56	52
Source 2	42	39	35
Source 3	64	56	58
Source 4	55	49	48
Source 5	46	47	30
Source 6	25	26	13
Source 7	4	6	-51
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	168	distance (ft)	168	distance (ft)	341	distance (ft)	1667	distance (ft)	183	distance (ft)	183	distance (ft)	1352		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.13333		
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	1		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: E17 @ STA 1641 (65 dBA contour)

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	59	59
Source 1	57	53	50
Source 2	40	37	33
Source 3	62	55	56
Source 4	61	55	54
Source 5	44	45	28
Source 6	23	24	11
Source 7	21	23	-35
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	231	distance (ft)	231	distance (ft)	418	distance (ft)	641	distance (ft)	246	distance (ft)	246	distance (ft)	446		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.13333		
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

FRA Grade Crossing Noise Model

User Input	
Noise Situation (Pick from List)	1
Horn Lmax (dBA) @ 100 feet	104
Horn Location on Locomotive(Pick from List)	1
Non Train Noise Environment (pick from list)	2
Shielding (Pick from List)	4
Length of Impact Area (pick from list)	1
Existing Train Speed (mph)	60
Future Train Speed (mph)	60
Number of Existing Trains in one Direction	2
Number of Future Trains in one Direction	2.5
Existing Number of Day Trains (7 am to 10 p.m.)	1.25
Future Number of Day Trains (7 am to 10 p.m.)	1.5625
Existing Number of Night Trains (10 p.m. to 7 am)	0.75
Future Number of Night Trains (10 p.m. to 7 am)	0.9375
Existing Average Number of Cars	100
Future Average Number of Cars	123
Existing Average Number of Locomotives	4
Future Average Number of Locomotives	4

Noise Situation	
Horns Existing and Future	1
Horns in Future Only	2
No Horns Existing and Future	3

Horn Location on Locomotive			
National Average (50% front, 50% middle)			1
All Front Mounted			2
All Middle Mounted			3
User Defined	80	% front mounted horns	4

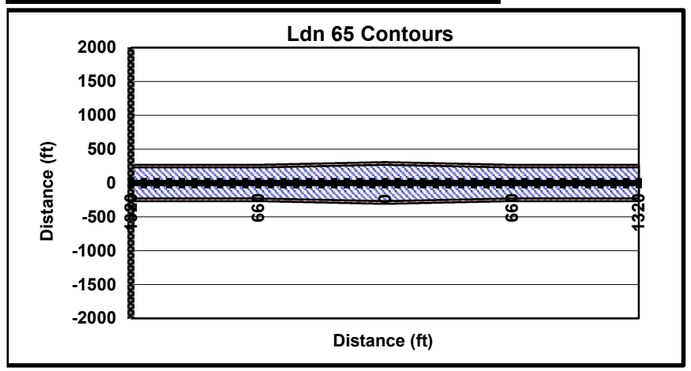
Non Train Noise Environment			
Urban			1
Suburban			2
Rural			3
User Defined Ldn =	50	dBA	4

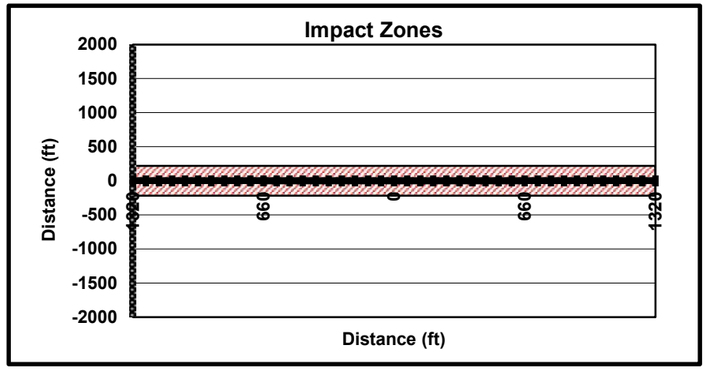
Shielding	
Dense Urban	1
Light Urban	2
Dense Suburban	3
Light Suburban	4
Rural	5
No Shielding	6

Length of Impact Area	
1/4 mile	1
20 seconds	2
15 seconds	3

Ldn 65 Contours Numeric Output (in feet)	
Existing 65 Ldn Contour at X-ing	269
Future 65 Ldn Contour at X-ing	308
Existing 65 Ldn Contour at 1/2 zone length	229
Future 65 Ldn Contour at 1/2 zone length	268
Zone Length	1320
1/2 Zone Length	660

Impact Zones Numeric Output (in feet)	
Impact Distance at X-ing	220
Severe Impact Distance at X-ing	39
Impact Distance at 1/2 zone length	217
Severe Impact Distance at 1/2 zone length	35
Zone Length	1320
1/2 Zone Length	660





Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: UPRR Pirate IL 1 @ Pecos

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	65	55
Source 1	63	65	50
Source 2	43	43	33
Source 3	52	46	45
Source 4	59	48	53
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	8	distance (ft)	8	distance (ft)	1060	distance (ft)	627								
Daytime Hours	speed (mph)	20	speed (mph)	20	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.06667	trains/hour	0.06667	vehicles/hour	944.9	vehicles/hour	614.9								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	0	speed (mph)	0	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0	trains/hour	0	vehicles/hour	827.2	vehicles/hour	1951.4								
	locos/train	0	length of cars (ft) / train	0												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: UPRR Pirate IL 2 Pecos @ Sossaman

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	65	56
Source 1	63	65	50
Source 2	43	43	33
Source 3	56	50	50
Source 4	58	47	52
Source 5	42	38	35
Source 6	24	22	16
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	8	distance (ft)	8	distance (ft)	555	distance (ft)	672	distance (ft)	2312	distance (ft)	2312				
Daytime Hours	speed (mph)	20	speed (mph)	20	speed (mph)	45	speed (mph)	45	speed (mph)	60	speed (mph)	60				
(7 AM - 10 PM)	trains/hour	0.06667	trains/hour	0.06667	vehicles/hour	944.9	vehicles/hour	614.9	trains/hour	0.26667	trains/hour	0.26667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	0	speed (mph)	0	speed (mph)	45	speed (mph)	45	speed (mph)	60	speed (mph)	60				
(10 PM - 7 AM)	trains/hour	0	trains/hour	0	vehicles/hour	827.2	vehicles/hour	1951.4	trains/hour	0.11111	trains/hour	0.11111				
	locos/train	0	length of cars (ft) / train	0					locos/train	4	length of cars (ft) / train	4				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N	N	Y/N	N				
Embedded Track?	Y/N	N	Y/N	N					Y/N	N	Y/N	N				
Aerial Structure?	Y/N	N	Y/N	N					Y/N	N	Y/N	N				
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: UPRR Pirate IL 2 Pecos @ Sossaman

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	65	56
Source 1	63	65	50
Source 2	43	43	33
Source 3	56	50	50
Source 4	58	47	52
Source 5	42	38	35
Source 6	24	22	16
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	8	distance (ft)	8	distance (ft)	555	distance (ft)	672	distance (ft)	2312	distance (ft)	2312				
Daytime Hours	speed (mph)	20	speed (mph)	20	speed (mph)	45	speed (mph)	45	speed (mph)	60	speed (mph)	60				
(7 AM - 10 PM)	trains/hour	0.06667	trains/hour	0.06667	vehicles/hour	944.9	vehicles/hour	614.9	trains/hour	0.26667	trains/hour	0.26667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	0	speed (mph)	0	speed (mph)	45	speed (mph)	45	speed (mph)	60	speed (mph)	60				
(10 PM - 7 AM)	trains/hour	0	trains/hour	0	vehicles/hour	827.2	vehicles/hour	1951.4	trains/hour	0.11111	trains/hour	0.11111				
	locos/train	0	length of cars (ft) / train	0					locos/train	4	length of cars (ft) / train	4				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N	N	Y/N	N				
Embedded Track?	Y/N	N	Y/N	N					Y/N	N	Y/N	N				
Aerial Structure?	Y/N	N	Y/N	N					Y/N	N	Y/N	N				
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
Copyright 2006, HMMH Inc.
Case: UPRR Pirate IL 4 @ Support Yard

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	67	42
Source 1	28	29	15
Source 2	8	8	-2
Source 3	64	66	38
Source 4	45	39	38
Source 5	-4	-2	-58
Source 6	60	62	34
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Layover Tracks	18	Automobiles	14	Crossover	13	Rail Yard or Shop	17				
Distance (source to receiver)	distance (ft)	1908	distance (ft)	1908	distance (ft)	203	distance (ft)	3105	distance (ft)	3637	distance (ft)	203				
Daytime Hours	speed (mph)	20	speed (mph)	20	trains/hour	6	speed (mph)	45	trains/hour	0.26667	trains/hour	6				
(7 AM - 10 PM)	trains/hour	0.06667	trains/hour	0.06667			vehicles/hour	944.9	duration of one train (sec)	141.727						
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	0	speed (mph)	0	trains/hour	0	speed (mph)	45	trains/hour	0	trains/hour	0				
(10 PM - 7 AM)	trains/hour	0	trains/hour	0			vehicles/hour	827.2	duration of one train (sec)	0						
	locos/train	0	length of cars (ft) / train	0												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N					Y/N							
Aerial Structure?	Y/N	N	Y/N	N					Y/N							
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: UPRR Pirate IL 5 @ Ellsworth

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	65	56
Source 1	63	65	50
Source 2	43	43	33
Source 3	26	28	0
Source 4	37	31	31
Source 5	-4	-2	-58
Source 6	61	55	54
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Layover Tracks	18	Automobiles	14	Crossover	13	Automobiles	14				
Distance (source to receiver)	distance (ft)	8	distance (ft)	8	distance (ft)	6931	distance (ft)	9873	distance (ft)	3637	distance (ft)	660				
Daytime Hours	speed (mph)	20	speed (mph)	20	trains/hour	6	speed (mph)	45	trains/hour	0.26667	speed (mph)	45				
(7 AM - 10 PM)	trains/hour	0.06667	trains/hour	0.06667			vehicles/hour	944.9	duration of one train (sec)	141.727	vehicles/hour	3611.3				
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	0	speed (mph)	0	trains/hour	0	speed (mph)	45	trains/hour	0	speed (mph)	45				
(10 PM - 7 AM)	trains/hour	0	trains/hour	0			vehicles/hour	827.2	duration of one train (sec)	0	vehicles/hour	3130.6				
	locos/train	0	length of cars (ft) / train	0												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N					Y/N							
Aerial Structure?	Y/N	N	Y/N	N					Y/N							
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: UPRR Pirate IL 6 @ Crismon

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	67	53
Source 1	65	66	52
Source 2	45	45	35
Source 3	20	22	-6
Source 4	48	42	42
Source 5	-4	-2	-58
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Layover Tracks	18	Automobiles	14	Crossover	13						
Distance (source to receiver)	distance (ft)	6	distance (ft)	6	distance (ft)	12161	distance (ft)	4598	distance (ft)	3637						
Daytime Hours	speed (mph)	20	speed (mph)	20	trains/hour	6	speed (mph)	45	trains/hour	0.26667						
(7 AM - 10 PM)	trains/hour	0.06667	trains/hour	0.06667			vehicles/hour	3611.3	duration of one train (sec)	141.727						
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	0	speed (mph)	0	trains/hour	0	speed (mph)	45	trains/hour	0						
(10 PM - 7 AM)	trains/hour	0	trains/hour	0			vehicles/hour	3130.6	duration of one train (sec)	0						
	locos/train	0	length of cars (ft) / train	0												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N					Y/N							
Aerial Structure?	Y/N	N	Y/N	N					Y/N							
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N						
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0						

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: UPRR Pirate IL 7 @ Signal Butte

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	67	52
Source 1	65	66	52
Source 2	45	45	35
Source 3	50	52	32
Source 4	44	38	38
Source 5	-6	-4	-54
Source 6	32	33	15
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Automobiles	14	Crossover	13	Freight Cars	10				
Distance (source to receiver)	distance (ft)	6	distance (ft)	6	distance (ft)	124	distance (ft)	660	distance (ft)	2666	distance (ft)	124				
Daytime Hours	speed (mph)	20	speed (mph)	20	speed (mph)	20	speed (mph)	25	trains/hour	0.4	speed (mph)	20				
(7 AM - 10 PM)	trains/hour	0.06667	trains/hour	0.06667	trains/hour	0.4	vehicles/hour	220	duration of one train (sec)	28.5682	trains/hour	0.4				
	locos/train	4	length of cars (ft) / train	60	locos/train	2					length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	25	trains/hour	0	speed (mph)	0				
(10 PM - 7 AM)	trains/hour	0	trains/hour	0	trains/hour		vehicles/hour	220	duration of one train (sec)	0	trains/hour					
	locos/train	0	length of cars (ft) / train	0	locos/train						length of cars (ft) / train					
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N	Y/N						Y/N					
Embedded Track?	Y/N	N	Y/N	N	Y/N				Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N	Y/N				Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
Copyright 2006, HMMH Inc.
Case: UPRR Pirate IL 8 @ private drive

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	66	52
Source 1	65	66	52
Source 2	45	45	35
Source 3	34	28	28
Source 4	0	0	0
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14										
Distance (source to receiver)	distance (ft)	6	distance (ft)	6	distance (ft)	660										
Daytime Hours	speed (mph)	20	speed (mph)	20	speed (mph)	25										
(7 AM - 10 PM)	trains/hour	0.06667	trains/hour	0.06667	vehicles/hour	22										
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	0	speed (mph)	0	speed (mph)	25										
(10 PM - 7 AM)	trains/hour	0	trains/hour	0	vehicles/hour	22										
	locos/train	0	length of cars (ft) / train	0												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N										
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0										

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

FRA Grade Crossing Noise Model

User Input	
Noise Situation (Pick from List)	2
Horn Lmax (dBA) @ 100 feet	104
Horn Location on Locomotive(Pick from List)	1
Non Train Noise Environment (pick from list)	1
Shielding (Pick from List)	5
Length of Impact Area (pick from list)	1
Existing Train Speed (mph)	1
Future Train Speed (mph)	20
Number of Existing Trains in one Direction	0
Number of Future Trains in one Direction	1
Existing Number of Day Trains (7 am to 10 p.m.)	0
Future Number of Day Trains (7 am to 10 p.m.)	0.625
Existing Number of Night Trains (10 p.m. to 7 am)	0
Future Number of Night Trains (10 p.m. to 7 am)	0.375
Existing Average Number of Cars	1
Future Average Number of Cars	70
Existing Average Number of Locomotives	1
Future Average Number of Locomotives	4

Noise Situation	
Horns Existing and Future	1
Horns in Future Only	2
No Horns Existing and Future	3

Horn Location on Locomotive			
National Average (50% front, 50% middle)			1
All Front Mounted			2
All Middle Mounted			3
User Defined	80	% front mounted horns	4

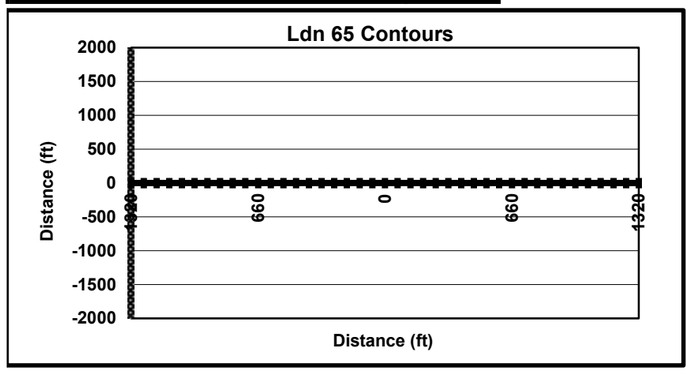
Non Train Noise Environment			
Urban			1
Suburban			2
Rural			3
User Defined Ldn =	50	dBA	4

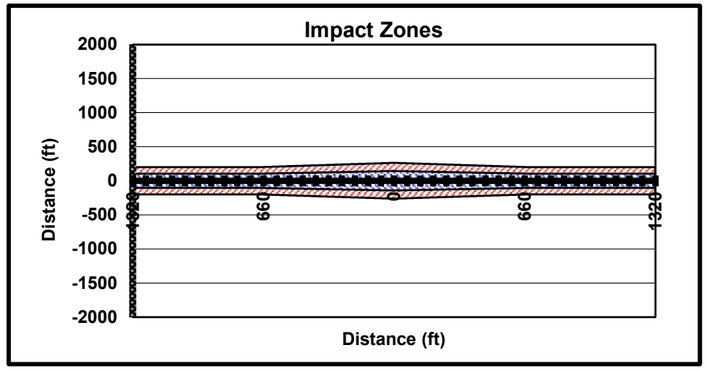
Shielding	
Dense Urban	1
Light Urban	2
Dense Suburban	3
Light Suburban	4
Rural	5
No Shielding	6

Length of Impact Area	
1/4 mile	1
20 seconds	2
15 seconds	3

Ldn 65 Contours Numeric Output (in feet)	
Existing 65 Ldn Contour at X-ing	0
Future 65 Ldn Contour at X-ing	0
Existing 65 Ldn Contour at 1/2 zone length	0
Future 65 Ldn Contour at 1/2 zone length	0
Zone Length	1320
1/2 Zone Length	660

Impact Zones Numeric Output (in feet)	
Impact Distance at X-ing	263
Severe Impact Distance at X-ing	143
Impact Distance at 1/2 zone length	202
Severe Impact Distance at 1/2 zone length	105
Zone Length	1320
1/2 Zone Length	660





FRA Grade Crossing Noise Model

User Input	
Noise Situation (Pick from List)	2
Horn Lmax (dBA) @ 100 feet	104
Horn Location on Locomotive(Pick from List)	1
Non Train Noise Environment (pick from list)	3
Shielding (Pick from List)	5
Length of Impact Area (pick from list)	1
Existing Train Speed (mph)	1
Future Train Speed (mph)	20
Number of Existing Trains in one Direction	0
Number of Future Trains in one Direction	1
Existing Number of Day Trains (7 am to 10 p.m.)	0
Future Number of Day Trains (7 am to 10 p.m.)	0.625
Existing Number of Night Trains (10 p.m. to 7 am)	0
Future Number of Night Trains (10 p.m. to 7 am)	0.375
Existing Average Number of Cars	1
Future Average Number of Cars	70
Existing Average Number of Locomotives	1
Future Average Number of Locomotives	4

Noise Situation	
Horns Existing and Future	1
Horns in Future Only	2
No Horns Existing and Future	3

Horn Location on Locomotive			
National Average (50% front, 50% middle)			1
All Front Mounted			2
All Middle Mounted			3
User Defined	80	% front mounted horns	4

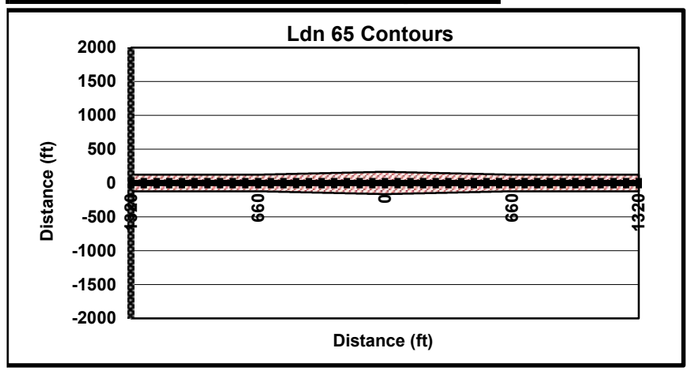
Non Train Noise Environment			
Urban			1
Suburban			2
Rural			3
User Defined Ldn =	50	dBA	4

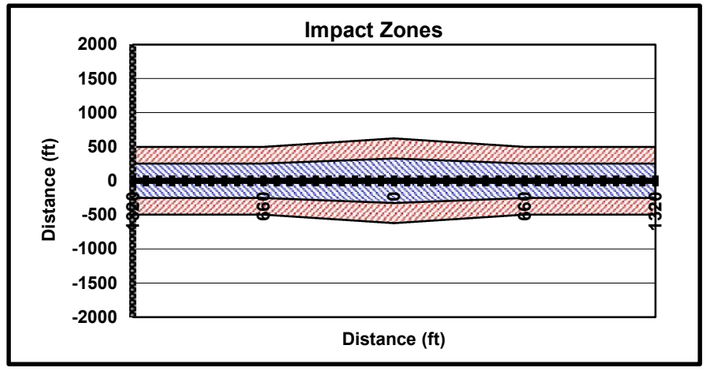
Shielding	
Dense Urban	1
Light Urban	2
Dense Suburban	3
Light Suburban	4
Rural	5
No Shielding	6

Length of Impact Area	
1/4 mile	1
20 seconds	2
15 seconds	3

Ldn 65 Contours Numeric Output (in feet)	
Existing 65 Ldn Contour at X-ing	0
Future 65 Ldn Contour at X-ing	165
Existing 65 Ldn Contour at 1/2 zone length	0
Future 65 Ldn Contour at 1/2 zone length	122
Zone Length	1320
1/2 Zone Length	660

Impact Zones Numeric Output (in feet)	
Impact Distance at X-ing	622
Severe Impact Distance at X-ing	326
Impact Distance at 1/2 zone length	497
Severe Impact Distance at 1/2 zone length	253
Zone Length	1320
1/2 Zone Length	660





Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: R1 existing noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	49		
Source 1	46		
Source 2	29		
Source 3	47		
Source 4	0		
Source 5	0		
Source 6	0		
Source 7	0		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14										
Distance (source to receiver)	distance (ft)	621	distance (ft)	621	distance (ft)	468										
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45										
Activity During	trains/hour	0.2	trains/hour	0.2	vehicles/hour	338										
Sensitive Hours	locos/train	4	length of cars (ft) / train	60												
		60		60		45										
		0.11111		0.11111		384										
		4		60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N										
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0										

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R1a existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	58	53	51
Source 1	43	39	36
Source 2	26	22	20
Source 3	56	51	50
Source 4	53	49	46
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	862	distance (ft)	862	distance (ft)	156	distance (ft)	732								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	559	vehicles/hour	3466								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	384	vehicles/hour	1774								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R1-A existing noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	55		
Source 1	50		
Source 2	33		
Source 3	53		
Source 4	0		
Source 5	0		
Source 6	0		
Source 7	0		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																	
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**		
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14											
Distance (source to receiver)	distance (ft)	334	distance (ft)	334	distance (ft)	182											
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45											
Activity During	trains/hour	0.2	trains/hour	0.2	vehicles/hour	338											
Sensitive Hours	locos/train	4	length of cars (ft) / train	60													
		60		60		45											
		0.11111		0.11111		384											
		4		60													
Wheel Flats?			% of cars w/ wheel flats														
Jointed Track?	Y/N	N	Y/N	N													
Embedded Track?	Y/N	N	Y/N	N													
Aerial Structure?	Y/N	N	Y/N	N													
Barrier Present?	Y/N	N	Y/N	N	Y/N	N											
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0											

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R1b existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	54	50	47
Source 1	43	38	36
Source 2	26	22	19
Source 3	45	40	38
Source 4	53	49	46
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	920	distance (ft)	920	distance (ft)	409	distance (ft)	736								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	559	vehicles/hour	3466								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	384	vehicles/hour	1774								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	5	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R1c existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	54	50	47
Source 1	42	37	35
Source 2	25	21	18
Source 3	41	36	35
Source 4	53	49	46
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	1074	distance (ft)	1074	distance (ft)	721	distance (ft)	728								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	559	vehicles/hour	3466								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	384	vehicles/hour	1774								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	11	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R1d existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	51	47	44
Source 1	41	37	35
Source 2	25	21	18
Source 3	45	40	39
Source 4	49	45	42
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	1081	distance (ft)	1081	distance (ft)	824	distance (ft)	626								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	559	vehicles/hour	3466								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	384	vehicles/hour	1774								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	12								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R1e existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	53	49	46
Source 1	42	38	35
Source 2	26	22	19
Source 3	45	40	39
Source 4	52	48	45
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	951	distance (ft)	951	distance (ft)	831	distance (ft)	419								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	559	vehicles/hour	3466								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	384	vehicles/hour	1774								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	7								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R1f existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	66	62	59
Source 1	43	39	36
Source 2	27	22	20
Source 3	45	40	38
Source 4	66	61	59
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	859	distance (ft)	859	distance (ft)	913	distance (ft)	108								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	559	vehicles/hour	3466								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	384	vehicles/hour	1774								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R1g existing noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	55		
Source 1	40		
Source 2	24		
Source 3	47		
Source 4	54		
Source 5	0		
Source 6	0		
Source 7	0		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS															
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	755	distance (ft)	755	distance (ft)	644	distance (ft)	373								
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
Activity During	trains/hour	0.2	trains/hour	0.2	vehicles/hour	559	vehicles/hour	3466								
Sensitive Hours	locos/train	4	length of cars (ft) / train	60												
		60		60		45		45								
		0.11111		0.11111		384		1774								
		4		60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N								
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	0	number of rows	1								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R2 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	60	54	53
Source 1	49	45	43
Source 2	33	29	26
Source 3	46	38	40
Source 4	59	53	53
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	317	distance (ft)	317	distance (ft)	1050	distance (ft)	153								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	859								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	752								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	6	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R3 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	58	52	52
Source 1	49	45	42
Source 2	32	28	26
Source 3	46	39	40
Source 4	57	51	51
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	346	distance (ft)	346	distance (ft)	1023	distance (ft)	199								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	859								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	752								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	6	number of rows	1								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R4 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	56	51	50
Source 1	48	44	41
Source 2	32	27	25
Source 3	46	39	40
Source 4	55	49	49
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	384	distance (ft)	384	distance (ft)	987	distance (ft)	243								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	859								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	752								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	6	number of rows	2								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R5 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	60	53	54
Source 1	48	43	41
Source 2	31	27	24
Source 3	60	52	54
Source 4	42	35	36
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	423	distance (ft)	423	distance (ft)	271	distance (ft)	1718								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R6 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	63	56	57
Source 1	50	45	43
Source 2	33	29	26
Source 3	63	55	57
Source 4	41	34	35
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	315	distance (ft)	315	distance (ft)	164	distance (ft)	1961								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R7 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	59	52	53
Source 1	47	42	40
Source 2	30	26	23
Source 3	59	51	52
Source 4	42	35	36
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	482	distance (ft)	482	distance (ft)	330	distance (ft)	1710								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	1	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R8 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	60	53	54
Source 1	48	43	41
Source 2	31	27	24
Source 3	60	52	54
Source 4	45	38	39
Source 5	33	34	20
Source 6	13	13	3
Source 7	8	10	-44
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	418	distance (ft)	418	distance (ft)	266	distance (ft)	2313	distance (ft)	403	distance (ft)	403	distance (ft)	658		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.06667		
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y	Y/N	Y		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R9 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	63	56	57
Source 1	51	47	44
Source 2	35	30	28
Source 3	63	55	57
Source 4	45	38	38
Source 5	36	38	23
Source 6	16	16	6
Source 7	9	11	-44
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	522	distance (ft)	522	distance (ft)	372	distance (ft)	2570	distance (ft)	507	distance (ft)	507	distance (ft)	1010		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.06667		
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R10 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	61	54	55
Source 1	50	45	43
Source 2	33	29	26
Source 3	61	53	54
Source 4	45	38	39
Source 5	36	38	23
Source 6	16	16	6
Source 7	10	12	-43
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	671	distance (ft)	671	distance (ft)	524	distance (ft)	2303	distance (ft)	509	distance (ft)	509	distance (ft)	907		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.06667		
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: R11 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	60	53	54
Source 1	48	44	41
Source 2	31	27	24
Source 3	60	52	54
Source 4	33	26	27
Source 5	33	34	20
Source 6	13	13	3
Source 7	-2	0	-55
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	408	distance (ft)	408	distance (ft)	262	distance (ft)	3273	distance (ft)	393	distance (ft)	393	distance (ft)	1740		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.06667		
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	32	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: R12 existing noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	63		
Source 1	51		
Source 2	35		
Source 3	63		
Source 4	26		
Source 5	42		
Source 6	21		
Source 7	5		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	263	distance (ft)	263	distance (ft)	112	distance (ft)	3491	distance (ft)	248	distance (ft)	248	distance (ft)	1786		
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.06667		
Activity During	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667	duration of one train (sec)	425.182		
Sensitive Hours	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
		60		60		45		45		10		10		0		
		0.11111		0.11111		2259		608		0		0		0		
		4		60						0		0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	Y	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	32	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: R13 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	66	58	60
Source 1	51	46	44
Source 2	34	30	27
Source 3	66	58	60
Source 4	32	25	26
Source 5	36	37	23
Source 6	16	16	6
Source 7	-4	-2	-56
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	261	distance (ft)	261	distance (ft)	109	distance (ft)	3572	distance (ft)	246	distance (ft)	246	distance (ft)	2001		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.06667		
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	32	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R14 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	67	59	60
Source 1	51	46	44
Source 2	34	30	27
Source 3	67	59	60
Source 4	30	23	24
Source 5	36	37	23
Source 6	16	16	6
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	261	distance (ft)	261	distance (ft)	97	distance (ft)	4917	distance (ft)	246	distance (ft)	246				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	32	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R15 existing noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	57		
Source 1	46		
Source 2	29		
Source 3	57		
Source 4	41		
Source 5	36		
Source 6	15		
Source 7	0		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	303	distance (ft)	303	distance (ft)	139	distance (ft)	5381	distance (ft)	288	distance (ft)	288				
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
Activity During	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
Sensitive Hours	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
		60		60		45		45		10		10				
		0.11111		0.11111		2259		2846		0		0				
		4		60						0		0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: R16 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	70	62	64
Source 1	52	47	45
Source 2	35	31	28
Source 3	70	62	64
Source 4	42	36	35
Source 5	36	37	23
Source 6	16	16	6
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	223	distance (ft)	223	distance (ft)	58	distance (ft)	5282	distance (ft)	238	distance (ft)	238				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R17 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	67	60	61
Source 1	51	47	44
Source 2	34	30	28
Source 3	67	59	61
Source 4	38	32	32
Source 5	36	37	23
Source 6	16	16	6
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	254	distance (ft)	254	distance (ft)	89	distance (ft)	4180	distance (ft)	239	distance (ft)	239				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	32	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R18 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	66	59	60
Source 1	53	49	46
Source 2	37	32	30
Source 3	66	58	60
Source 4	38	32	32
Source 5	38	39	25
Source 6	18	18	8
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	392	distance (ft)	392	distance (ft)	228	distance (ft)	4203	distance (ft)	377	distance (ft)	377				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	5	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: R19 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	64	57	58
Source 1	51	47	44
Source 2	35	30	28
Source 3	64	56	57
Source 4	38	33	32
Source 5	38	39	25
Source 6	18	18	8
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	523	distance (ft)	523	distance (ft)	328	distance (ft)	4095	distance (ft)	377	distance (ft)	377				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	5	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R20 existing noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	62		
Source 1	51		
Source 2	34		
Source 3	62		
Source 4	35		
Source 5	41		
Source 6	20		
Source 7	0		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	299	distance (ft)	299	distance (ft)	131	distance (ft)	3022	distance (ft)	284	distance (ft)	284				
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
Activity During	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
Sensitive Hours	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
		60		60		45		45		10		10				
		0.11111		0.11111		2259		2846		0		0				
		4		60						0		0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	5	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R21 existing noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	53		
Source 1	44		
Source 2	27		
Source 3	53		
Source 4	37		
Source 5	34		
Source 6	13		
Source 7	0		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	441	distance (ft)	441	distance (ft)	263	distance (ft)	2130	distance (ft)	426	distance (ft)	426				
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
Activity During	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
Sensitive Hours	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
		60		60		45		45		10		10				
		0.11111		0.11111		2259		2846		0		0				
		4		60						0		0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	1	number of rows	5	number of rows	1	number of rows	1				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R22 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	58	51	52
Source 1	49	45	42
Source 2	33	28	26
Source 3	56	48	50
Source 4	52	45	45
Source 5	34	35	21
Source 6	14	14	4
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	329	distance (ft)	329	distance (ft)	504	distance (ft)	2522	distance (ft)	344	distance (ft)	344				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	2846	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R23 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	56	50	50
Source 1	48	44	41
Source 2	32	27	25
Source 3	55	48	49
Source 4	46	40	40
Source 5	33	35	20
Source 6	13	13	3
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	385	distance (ft)	385	distance (ft)	554	distance (ft)	2760	distance (ft)	370	distance (ft)	370				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	2846	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	3273	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	1	number of rows	1	number of rows	1	number of rows	1				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R24 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	53	46	47
Source 1	45	40	38
Source 2	28	24	21
Source 3	52	44	46
Source 4	41	35	35
Source 5	30	31	16
Source 6	9	9	-1
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	442	distance (ft)	442	distance (ft)	607	distance (ft)	3074	distance (ft)	457	distance (ft)	457				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	2846	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	3	number of rows	3	number of rows	3	number of rows	4	number of rows	3	number of rows	3				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R25 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	53	46	46
Source 1	44	40	37
Source 2	28	23	21
Source 3	52	44	45
Source 4	40	34	33
Source 5	29	30	16
Source 6	9	9	-1
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	493	distance (ft)	493	distance (ft)	660	distance (ft)	3314	distance (ft)	508	distance (ft)	508				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	3	number of rows	3	number of rows	3	number of rows	5	number of rows	3	number of rows	3				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R26 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	57	50	51
Source 1	49	45	42
Source 2	33	29	26
Source 3	56	48	50
Source 4	39	33	33
Source 5	34	35	21
Source 6	14	14	4
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	324	distance (ft)	324	distance (ft)	490	distance (ft)	3618	distance (ft)	339	distance (ft)	339				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	7	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: R27 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	57	50	51
Source 1	49	45	42
Source 2	33	29	26
Source 3	56	48	50
Source 4	39	33	33
Source 5	34	35	21
Source 6	14	14	4
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	324	distance (ft)	324	distance (ft)	490	distance (ft)	3618	distance (ft)	339	distance (ft)	339				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	1	number of rows	7	number of rows	1	number of rows	1				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R28 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	56	49	49
Source 1	48	43	41
Source 2	31	27	24
Source 3	55	47	49
Source 4	38	32	32
Source 5	32	33	19
Source 6	12	12	2
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	429	distance (ft)	429	distance (ft)	593	distance (ft)	4145	distance (ft)	444	distance (ft)	444				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	7	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R29 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	55	48	49
Source 1	46	42	39
Source 2	30	25	23
Source 3	55	47	49
Source 4	39	33	32
Source 5	29	30	16
Source 6	9	9	-1
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	535	distance (ft)	535	distance (ft)	593	distance (ft)	3807	distance (ft)	703	distance (ft)	703				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	8	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R30 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	54	47	48
Source 1	45	41	39
Source 2	29	25	22
Source 3	53	46	47
Source 4	38	32	31
Source 5	30	31	17
Source 6	10	10	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	587	distance (ft)	587	distance (ft)	752	distance (ft)	4397	distance (ft)	602	distance (ft)	602				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	1	number of rows	9	number of rows	1	number of rows	1				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R31 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	52	46	46
Source 1	44	39	37
Source 2	27	23	20
Source 3	52	44	45
Source 4	38	32	31
Source 5	29	30	15
Source 6	8	8	-2
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	661	distance (ft)	661	distance (ft)	823	distance (ft)	4397	distance (ft)	676	distance (ft)	676				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	3283	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	2846	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	2	number of rows	2	number of rows	2	number of rows	15	number of rows	2	number of rows	2				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R32 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	56	50	50
Source 1	48	44	41
Source 2	32	27	25
Source 3	55	48	49
Source 4	30	23	24
Source 5	39	40	26
Source 6	19	19	9
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	384	distance (ft)	384	distance (ft)	552	distance (ft)	5268	distance (ft)	164	distance (ft)	164				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	24	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R33 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	55	49	49
Source 1	47	43	41
Source 2	31	27	24
Source 3	55	47	48
Source 4	29	22	22
Source 5	32	33	19
Source 6	12	12	2
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	438	distance (ft)	438	distance (ft)	613	distance (ft)	6355	distance (ft)	453	distance (ft)	453				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	30	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: R34 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	55	48	48
Source 1	46	42	39
Source 2	30	25	23
Source 3	54	46	48
Source 4	32	25	26
Source 5	31	32	18
Source 6	11	11	1
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	526	distance (ft)	526	distance (ft)	676	distance (ft)	3859	distance (ft)	541	distance (ft)	541				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	30	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R35 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	54	47	48
Source 1	45	41	38
Source 2	29	24	22
Source 3	53	45	47
Source 4	28	21	22
Source 5	30	31	17
Source 6	10	10	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	604	distance (ft)	604	distance (ft)	759	distance (ft)	6726	distance (ft)	619	distance (ft)	619				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	30	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R36 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	56	49	50
Source 1	48	44	41
Source 2	31	27	24
Source 3	55	47	49
Source 4	32	25	26
Source 5	33	34	19
Source 6	12	12	2
Source 7	-2	0	-55
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	409	distance (ft)	409	distance (ft)	561	distance (ft)	3788	distance (ft)	424	distance (ft)	424	distance (ft)	1782		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.06667		
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	12	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R37 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	52	45	46
Source 1	43	39	36
Source 2	27	23	20
Source 3	51	44	45
Source 4	35	28	29
Source 5	28	29	15
Source 6	8	8	-2
Source 7	0	2	-53
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	698	distance (ft)	698	distance (ft)	851	distance (ft)	3473	distance (ft)	713	distance (ft)	713	distance (ft)	1323		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.06667		
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y		
Intervening Rows of of Buildings	number of rows	2	number of rows	2	number of rows	2	number of rows	3	number of rows	2	number of rows	2	number of rows	2		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R38 existing noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	55	48	49
Source 1	47	42	40
Source 2	30	26	23
Source 3	54	47	48
Source 4	39	32	33
Source 5	31	33	18
Source 6	11	11	1
Source 7	8	10	-44
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	492	distance (ft)	492	distance (ft)	640	distance (ft)	2824	distance (ft)	507	distance (ft)	507	distance (ft)	677		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.06667		
(7 AM - 10 PM)	trains/hour	0.2	trains/hour	0.2	vehicles/hour	1606	vehicles/hour	517	trains/hour	0.06667	trains/hour	0.06667	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2259	vehicles/hour	608	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R1 no action noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	50		
Source 1	47		
Source 2	31		
Source 3	47		
Source 4	0		
Source 5	0		
Source 6	0		
Source 7	0		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14										
Distance (source to receiver)	distance (ft)	621	distance (ft)	621	distance (ft)	468										
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45										
Activity During	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	371.8										
Sensitive Hours	locos/train	4	length of cars (ft) / train	60												
		60		60		45										
		0.11111		0.11111		422.4										
		4		60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N										
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0										

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R1-A no action noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	55		
Source 1	51		
Source 2	35		
Source 3	53		
Source 4	0		
Source 5	0		
Source 6	0		
Source 7	0		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14										
Distance (source to receiver)	distance (ft)	334	distance (ft)	334	distance (ft)	181										
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45										
Activity During	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	371.8										
Sensitive Hours	locos/train	4	length of cars (ft) / train	60												
		60		60		45										
		0.11111		0.11111		422.4										
		4		60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N										
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0										

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R1a no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	58	54	52
Source 1	43	40	36
Source 2	27	23	20
Source 3	57	52	50
Source 4	54	49	47
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	862	distance (ft)	862	distance (ft)	156	distance (ft)	732								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	614.9	vehicles/hour	3812.6								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	vehicles/hour	1951.4								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R1b no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	54	50	47
Source 1	43	39	36
Source 2	26	23	19
Source 3	45	40	39
Source 4	53	49	46
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	920	distance (ft)	920	distance (ft)	409	distance (ft)	736								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	614.9	vehicles/hour	3812.6								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	vehicles/hour	1951.4								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	5	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R1c no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	54	50	47
Source 1	42	38	35
Source 2	25	22	18
Source 3	42	37	35
Source 4	54	49	47
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	1074	distance (ft)	1074	distance (ft)	721	distance (ft)	728								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	614.9	vehicles/hour	3812.6								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	vehicles/hour	1951.4								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	11	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R1d no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	52	47	45
Source 1	42	38	35
Source 2	25	22	18
Source 3	46	41	39
Source 4	50	45	43
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	1081	distance (ft)	1081	distance (ft)	824	distance (ft)	626								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	614.9	vehicles/hour	3812.6								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	vehicles/hour	1951.4								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	12								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R1e no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	53	49	46
Source 1	43	39	35
Source 2	26	23	19
Source 3	46	41	39
Source 4	52	48	45
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	951	distance (ft)	951	distance (ft)	831	distance (ft)	419								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	614.9	vehicles/hour	3812.6								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	vehicles/hour	1951.4								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	7								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R1f no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	66	62	59
Source 1	43	40	36
Source 2	27	23	20
Source 3	45	40	38
Source 4	66	62	59
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	859	distance (ft)	859	distance (ft)	913	distance (ft)	108								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	614.9	vehicles/hour	3812.6								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	vehicles/hour	1951.4								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R1g no action noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	55		
Source 1	41		
Source 2	25		
Source 3	47		
Source 4	54		
Source 5	0		
Source 6	0		
Source 7	0		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																	
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	755	distance (ft)	755	distance (ft)	644	distance (ft)	373								
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
Activity During	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	614.9	vehicles/hour	3812.6								
Sensitive Hours	locos/train	4	length of cars (ft) / train	60												
		60		60		45		45								
		0.11111		0.11111		422.4		1951.4								
		4		60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N								
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	0	number of rows	1								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R2 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	60	54	54
Source 1	50	46	43
Source 2	33	30	26
Source 3	46	39	40
Source 4	60	54	53
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	317	distance (ft)	317	distance (ft)	1050	distance (ft)	153								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	944.9								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	827.2								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	6	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R3 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	58	53	52
Source 1	49	46	42
Source 2	33	29	26
Source 3	47	39	40
Source 4	57	52	51
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	346	distance (ft)	346	distance (ft)	1023	distance (ft)	199								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	944.9								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	752								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	6	number of rows	1								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R4 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	57	51	50
Source 1	48	44	40
Source 2	31	28	24
Source 3	47	39	41
Source 4	55	50	49
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	385	distance (ft)	385	distance (ft)	987	distance (ft)	243								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	944.9								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	827.2								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	2	number of rows	2	number of rows	6	number of rows	2								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R5 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	61	53	54
Source 1	48	45	41
Source 2	31	28	24
Source 3	60	53	54
Source 4	43	36	36
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	423	distance (ft)	423	distance (ft)	271	distance (ft)	1718								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R6 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	64	56	58
Source 1	50	46	43
Source 2	33	30	26
Source 3	64	56	57
Source 4	42	35	35
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	315	distance (ft)	315	distance (ft)	164	distance (ft)	1961								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R7 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	59	52	53
Source 1	47	44	40
Source 2	31	27	23
Source 3	59	51	53
Source 4	43	36	36
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	482	distance (ft)	482	distance (ft)	330	distance (ft)	1710								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	1	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R8 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	61	54	55
Source 1	48	45	41
Source 2	32	28	24
Source 3	60	53	54
Source 4	45	38	39
Source 5	33	34	20
Source 6	13	13	3
Source 7	8	10	-44
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	418	distance (ft)	418	distance (ft)	266	distance (ft)	2434	distance (ft)	403	distance (ft)	403	distance (ft)	658		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.06667		
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.06667	trains/hour	0.06667	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y	Y/N	Y		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R9 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	64	56	57
Source 1	52	48	44
Source 2	35	32	28
Source 3	63	56	57
Source 4	45	38	39
Source 5	39	41	23
Source 6	18	19	6
Source 7	12	14	-44
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	522	distance (ft)	522	distance (ft)	372	distance (ft)	2570	distance (ft)	507	distance (ft)	507	distance (ft)	1010		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.13333		
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R10 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	61	54	55
Source 1	50	47	43
Source 2	33	30	26
Source 3	61	53	55
Source 4	46	39	39
Source 5	39	41	23
Source 6	18	19	6
Source 7	13	15	-43
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	671	distance (ft)	671	distance (ft)	524	distance (ft)	2303	distance (ft)	509	distance (ft)	509	distance (ft)	907		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.13333		
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R11 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	61	54	54
Source 1	48	45	41
Source 2	32	28	24
Source 3	61	53	54
Source 4	33	26	27
Source 5	36	37	20
Source 6	15	16	3
Source 7	1	3	-55
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	408	distance (ft)	408	distance (ft)	262	distance (ft)	3273	distance (ft)	393	distance (ft)	393	distance (ft)	1740		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.13333		
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	32	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R12 no action noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	64		
Source 1	53		
Source 2	36		
Source 3	63		
Source 4	26		
Source 5	45		
Source 6	24		
Source 7	8		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	263	distance (ft)	263	distance (ft)	112	distance (ft)	3491	distance (ft)	248	distance (ft)	248	distance (ft)	1786		
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.13333		
Activity During	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	425.182		
Sensitive Hours	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
		60		60		45		45		10		10		0		
		0.11111		0.11111		2484.9		668.8		0		0		0		
		4		60						0		0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	Y	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	32	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R13 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	66	59	60
Source 1	51	48	44
Source 2	35	31	27
Source 3	66	59	60
Source 4	33	26	27
Source 5	39	40	23
Source 6	18	19	6
Source 7	-1	1	-56
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	261	distance (ft)	261	distance (ft)	109	distance (ft)	3572	distance (ft)	246	distance (ft)	246	distance (ft)	2001		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.13333		
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	32	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R14 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	67	60	61
Source 1	51	48	44
Source 2	35	31	27
Source 3	67	60	61
Source 4	31	24	24
Source 5	39	40	23
Source 6	18	19	6
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	261	distance (ft)	261	distance (ft)	97	distance (ft)	4917	distance (ft)	246	distance (ft)	246				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1927.2	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	32	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R15 no action noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	57		
Source 1	47		
Source 2	31		
Source 3	57		
Source 4	42		
Source 5	39		
Source 6	18		
Source 7	0		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	304	distance (ft)	304	distance (ft)	141	distance (ft)	5063	distance (ft)	289	distance (ft)	289				
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
Activity During	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
Sensitive Hours	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
		60		60		45		45		10		10				
		0.11111		0.11111		2484.9		3130.6		0		0				
		4		60						0		0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R16 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	70	63	64
Source 1	52	49	45
Source 2	36	32	28
Source 3	70	63	64
Source 4	42	36	36
Source 5	39	40	23
Source 6	18	19	6
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	223	distance (ft)	223	distance (ft)	58	distance (ft)	5282	distance (ft)	238	distance (ft)	238				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R17 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	68	60	61
Source 1	51	48	44
Source 2	35	31	28
Source 3	68	60	61
Source 4	39	33	32
Source 5	39	41	23
Source 6	18	19	6
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	251	distance (ft)	251	distance (ft)	89	distance (ft)	4188	distance (ft)	236	distance (ft)	236				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	32	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R18 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	67	59	60
Source 1	53	50	46
Source 2	37	34	30
Source 3	66	59	60
Source 4	39	33	32
Source 5	41	42	25
Source 6	20	21	8
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	390	distance (ft)	390	distance (ft)	228	distance (ft)	4203	distance (ft)	377	distance (ft)	377				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	5	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R19 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	64	57	57
Source 1	52	48	44
Source 2	35	32	28
Source 3	63	56	57
Source 4	39	33	32
Source 5	39	41	23
Source 6	18	19	6
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	523	distance (ft)	523	distance (ft)	359	distance (ft)	4117	distance (ft)	508	distance (ft)	508				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	5	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: R20 no action noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	63		
Source 1	52		
Source 2	35		
Source 3	62		
Source 4	35		
Source 5	44		
Source 6	23		
Source 7	0		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																		
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	299	distance (ft)	299	distance (ft)	131	distance (ft)	3022	distance (ft)	284	distance (ft)	284				
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
Activity During	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
Sensitive Hours	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
		60		60		45		45		10		10				
		0.11111		0.11111		2484.9		3130.6		0		0				
		4		60						0		0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	5	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R21 no action noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	54		
Source 1	45		
Source 2	28		
Source 3	53		
Source 4	37		
Source 5	37		
Source 6	16		
Source 7	0		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	441	distance (ft)	441	distance (ft)	263	distance (ft)	2130	distance (ft)	426	distance (ft)	426				
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
Activity During	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
Sensitive Hours	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
		60		60		45		45		10		10				
		0.11111		0.11111		2484.9		3130.6		0		0				
		4		60						0		0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	1	number of rows	5	number of rows	1	number of rows	1				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R22 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	58	52	52
Source 1	50	46	42
Source 2	33	30	26
Source 3	56	49	50
Source 4	52	46	46
Source 5	37	38	21
Source 6	16	17	4
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	329	distance (ft)	329	distance (ft)	504	distance (ft)	2511	distance (ft)	344	distance (ft)	344				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3130.6	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R23 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	57	50	51
Source 1	49	45	41
Source 2	32	29	25
Source 3	56	48	49
Source 4	47	40	41
Source 5	36	37	20
Source 6	15	16	3
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	385	distance (ft)	385	distance (ft)	554	distance (ft)	2760	distance (ft)	400	distance (ft)	400				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3130.6	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3600.3	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	1	number of rows	1	number of rows	1	number of rows	1				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R24 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	55	49	49
Source 1	47	43	39
Source 2	30	27	23
Source 3	54	46	48
Source 4	42	35	36
Source 5	34	35	18
Source 6	13	14	1
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	442	distance (ft)	442	distance (ft)	607	distance (ft)	3074	distance (ft)	457	distance (ft)	457				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3130.6	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3600.3	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	2	number of rows	2	number of rows	2	number of rows	4	number of rows	2	number of rows	2				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R25 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	53	46	47
Source 1	44	41	37
Source 2	28	25	21
Source 3	52	44	46
Source 4	40	34	34
Source 5	31	33	16
Source 6	11	12	-1
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	493	distance (ft)	493	distance (ft)	660	distance (ft)	3314	distance (ft)	508	distance (ft)	508				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	3	number of rows	3	number of rows	3	number of rows	5	number of rows	3	number of rows	3				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R26 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	57	51	51
Source 1	50	46	42
Source 2	33	30	26
Source 3	56	49	50
Source 4	40	34	33
Source 5	37	38	21
Source 6	16	17	4
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	324	distance (ft)	324	distance (ft)	490	distance (ft)	3618	distance (ft)	339	distance (ft)	339				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	7	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: R27 no build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	59	52	53
Source 1	49	46	42
Source 2	33	29	25
Source 3	59	51	52
Source 4	40	34	33
Source 5	36	38	20
Source 6	16	16	3
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	352	distance (ft)	352	distance (ft)	354	distance (ft)	3613	distance (ft)	367	distance (ft)	367				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	1	number of rows	7	number of rows	1	number of rows	1				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
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Case: R28 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	56	50	50
Source 1	48	44	41
Source 2	31	28	24
Source 3	55	47	49
Source 4	39	33	32
Source 5	35	36	19
Source 6	14	15	2
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	429	distance (ft)	429	distance (ft)	593	distance (ft)	4145	distance (ft)	444	distance (ft)	444				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	7	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R29 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	55	48	49
Source 1	46	43	39
Source 2	30	27	23
Source 3	54	46	48
Source 4	39	33	33
Source 5	33	35	18
Source 6	13	14	1
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	535	distance (ft)	535	distance (ft)	701	distance (ft)	3807	distance (ft)	550	distance (ft)	550				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	8	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R30 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	54	48	48
Source 1	46	42	39
Source 2	29	26	22
Source 3	54	46	47
Source 4	38	33	32
Source 5	33	34	17
Source 6	12	13	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	587	distance (ft)	587	distance (ft)	752	distance (ft)	4397	distance (ft)	602	distance (ft)	602				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	1	number of rows	9	number of rows	1	number of rows	1				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R31 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	53	46	46
Source 1	44	41	37
Source 2	28	24	20
Source 3	52	44	46
Source 4	38	32	31
Source 5	31	33	15
Source 6	11	11	-2
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	661	distance (ft)	661	distance (ft)	823	distance (ft)	5024	distance (ft)	676	distance (ft)	676				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	2	number of rows	2	number of rows	2	number of rows	15	number of rows	2	number of rows	2				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R32 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	57	50	50
Source 1	49	45	41
Source 2	32	29	25
Source 3	56	48	49
Source 4	30	23	24
Source 5	36	37	20
Source 6	15	16	3
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	384	distance (ft)	384	distance (ft)	550	distance (ft)	5248	distance (ft)	399	distance (ft)	399				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	24	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R33 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	56	49	49
Source 1	48	44	41
Source 2	31	28	24
Source 3	55	47	49
Source 4	29	22	23
Source 5	35	36	19
Source 6	14	15	2
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	438	distance (ft)	438	distance (ft)	613	distance (ft)	6355	distance (ft)	453	distance (ft)	453				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1606	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	30	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R34 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	55	48	49
Source 1	47	43	39
Source 2	30	27	23
Source 3	54	47	48
Source 4	32	25	26
Source 5	34	35	18
Source 6	13	14	1
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	526	distance (ft)	526	distance (ft)	676	distance (ft)	3859	distance (ft)	541	distance (ft)	541				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	30	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R35 no build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	54	48	48
Source 1	46	42	38
Source 2	29	26	22
Source 3	54	46	47
Source 4	29	22	22
Source 5	33	34	17
Source 6	12	13	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	604	distance (ft)	604	distance (ft)	759	distance (ft)	6726	distance (ft)	619	distance (ft)	619				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	30	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R36 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	56	50	50
Source 1	48	45	41
Source 2	32	28	24
Source 3	56	48	49
Source 4	32	25	26
Source 5	35	37	19
Source 6	15	15	2
Source 7	-1	1	-57
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	409	distance (ft)	409	distance (ft)	561	distance (ft)	3788	distance (ft)	424	distance (ft)	424	distance (ft)	2089		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.13333		
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	14	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R37 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	53	46	46
Source 1	44	40	36
Source 2	27	24	20
Source 3	52	44	46
Source 4	35	28	29
Source 5	31	32	15
Source 6	10	11	-2
Source 7	3	5	-53
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	698	distance (ft)	698	distance (ft)	848	distance (ft)	3512	distance (ft)	713	distance (ft)	713	distance (ft)	1323		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.13333		
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y		
Intervening Rows of of Buildings	number of rows	2	number of rows	2	number of rows	2	number of rows	3	number of rows	2	number of rows	2	number of rows	2		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R38 no action noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	56	49	49
Source 1	47	44	40
Source 2	30	27	23
Source 3	55	47	48
Source 4	39	32	33
Source 5	34	36	18
Source 6	13	14	1
Source 7	11	13	-44
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	492	distance (ft)	492	distance (ft)	640	distance (ft)	2824	distance (ft)	507	distance (ft)	507	distance (ft)	677		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.13333		
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	425.182		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R1a build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	58	54	52
Source 1	43	40	36
Source 2	27	23	20
Source 3	57	52	50
Source 4	54	49	47
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	862	distance (ft)	862	distance (ft)	156	distance (ft)	732								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	614.9	vehicles/hour	3812.6								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	vehicles/hour	1951.4								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R1b build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	54	50	47
Source 1	43	39	36
Source 2	26	23	19
Source 3	45	40	39
Source 4	53	49	46
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	920	distance (ft)	920	distance (ft)	409	distance (ft)	736								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	614.9	vehicles/hour	3812.6								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	vehicles/hour	1951.4								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	5	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R1c build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	54	50	47
Source 1	42	38	35
Source 2	25	22	18
Source 3	42	37	35
Source 4	54	49	47
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	1074	distance (ft)	1074	distance (ft)	721	distance (ft)	728								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	614.9	vehicles/hour	3812.6								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	vehicles/hour	1951.4								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	11	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R1d build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	52	47	45
Source 1	42	38	35
Source 2	25	22	18
Source 3	46	41	39
Source 4	50	45	43
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	1081	distance (ft)	1081	distance (ft)	824	distance (ft)	626								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	614.9	vehicles/hour	3812.6								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	vehicles/hour	1951.4								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	12								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R1e build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	53	49	46
Source 1	43	39	35
Source 2	26	23	19
Source 3	46	41	39
Source 4	52	48	45
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	951	distance (ft)	951	distance (ft)	831	distance (ft)	419								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	614.9	vehicles/hour	3812.6								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	vehicles/hour	1951.4								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	7								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R1f build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	66	62	59
Source 1	43	40	36
Source 2	27	23	20
Source 3	45	40	38
Source 4	66	62	59
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	859	distance (ft)	859	distance (ft)	913	distance (ft)	108								
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	614.9	vehicles/hour	3812.6								
	locos/train	4	length of cars (ft) / train	60												
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	422.4	vehicles/hour	1951.4								
	locos/train	4	length of cars (ft) / train	60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y								
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R1g build noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	55		
Source 1	41		
Source 2	25		
Source 3	47		
Source 4	54		
Source 5	0		
Source 6	0		
Source 7	0		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14								
Distance (source to receiver)	distance (ft)	755	distance (ft)	755	distance (ft)	644	distance (ft)	373								
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45								
Activity During	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	614.9	vehicles/hour	3812.6								
Sensitive Hours	locos/train	4	length of cars (ft) / train	60												
		60		60		45		45								
		0.11111		0.11111		422.4		1951.4								
		4		60												
Wheel Flats?			% of cars w/ wheel flats													
Jointed Track?	Y/N	N	Y/N	N												
Embedded Track?	Y/N	N	Y/N	N												
Aerial Structure?	Y/N	N	Y/N	N												
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N								
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	0	number of rows	1								

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R1-A build noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	56		
Source 1	51		
Source 2	35		
Source 3	53		
Source 4	36		
Source 5	16		
Source 6	45		
Source 7	26		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10		
Distance (source to receiver)	distance (ft)	334	distance (ft)	334	distance (ft)	182	distance (ft)	694.5	distance (ft)	651.5	distance (ft)	319	distance (ft)	319		
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30		
Activity During	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	371.8	trains/hour	0.1	trains/hour	0.1	trains/hour	0.13333	trains/hour	0.13333		
Sensitive Hours	locos/train	4	length of cars (ft) / train	60			locos/train	3	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60		
		60		60		45		0		0		0		0		
		0.11111		0.11111		422.4		0		0		0		0		
		4		60				0		0		0		0		
Wheel Flats?			% of cars w/ wheel flats						% of cars w/ wheel flats				% of cars w/ wheel flats			
Jointed Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Embedded Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R1 build noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	51		
Source 1	47		
Source 2	31		
Source 3	47		
Source 4	35		
Source 5	15		
Source 6	41		
Source 7	22		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10		
Distance (source to receiver)	distance (ft)	617	distance (ft)	617	distance (ft)	465	distance (ft)	856.5	distance (ft)	856.5	distance (ft)	605	distance (ft)	605		
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30		
Activity During	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	371.8	trains/hour	0.1	trains/hour	0.1	trains/hour	0.13333	trains/hour	0.13333		
Sensitive Hours	locos/train	4	length of cars (ft) / train	60			locos/train	3	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60		
		60		60		45		0		0		0		0		
		0.11111		0.11111		422.4		0		0		0		0		
		4		60				0		0		0		0		
Wheel Flats?			% of cars w/ wheel flats						% of cars w/ wheel flats				% of cars w/ wheel flats			
Jointed Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Embedded Track?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N			Y/N		Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R2 build noise

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	60	55	54
Source 1	50	46	43
Source 2	33	30	26
Source 3	46	38	40
Source 4	60	54	53
Source 5	30	31	17
Source 6	12	13	0
Source 7	39	41	22
Source 8	20	21	5

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	318	distance (ft)	318	distance (ft)	1109	distance (ft)	153	distance (ft)	607	distance (ft)	607	distance (ft)	303	distance (ft)	303
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	944.9	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	2	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	827.2	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	21	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R3 build noise

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	59	53	52
Source 1	49	46	42
Source 2	33	29	26
Source 3	46	38	40
Source 4	58	52	51
Source 5	30	31	17
Source 6	12	13	0
Source 7	38	40	21
Source 8	19	21	4

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	346	distance (ft)	346	distance (ft)	1109	distance (ft)	199	distance (ft)	602	distance (ft)	602	distance (ft)	331	distance (ft)	331
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	944.9	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	2	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	827.2	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	21	number of rows	1	number of rows	1	number of rows	1	number of rows	1	number of rows	1

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R4 build noise

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	58	52	51
Source 1	48	44	40
Source 2	31	28	24
Source 3	47	39	40
Source 4	57	51	50
Source 5	29	30	16
Source 6	11	12	-1
Source 7	37	38	19
Source 8	17	19	2

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	385	distance (ft)	385	distance (ft)	1024	distance (ft)	199	distance (ft)	655	distance (ft)	655	distance (ft)	370	distance (ft)	370
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	944.9	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	2	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	827.2	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y
Intervening Rows of of Buildings	number of rows	2	number of rows	2	number of rows	20	number of rows	2	number of rows	2	number of rows	2	number of rows	2	number of rows	2

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R5 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	61	54	55
Source 1	48	45	41
Source 2	31	28	24
Source 3	60	53	54
Source 4	48	41	41
Source 5	32	34	19
Source 6	14	15	2
Source 7	37	39	20
Source 8	18	19	3

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	423	distance (ft)	423	distance (ft)	270	distance (ft)	1702	distance (ft)	438	distance (ft)	438	distance (ft)	408	distance (ft)	408
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	2	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R6 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	64	57	58
Source 1	50	46	43
Source 2	33	30	26
Source 3	64	56	57
Source 4	42	35	35
Source 5	34	35	21
Source 6	16	17	4
Source 7	39	41	22
Source 8	20	21	5

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	314	distance (ft)	314	distance (ft)	163	distance (ft)	1957	distance (ft)	329	distance (ft)	329	distance (ft)	299	distance (ft)	299
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	2	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	1	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R7 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	59	52	53
Source 1	47	44	40
Source 2	31	27	23
Source 3	59	51	53
Source 4	42	35	36
Source 5	32	33	18
Source 6	14	14	1
Source 7	36	38	19
Source 8	17	18	2

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	482	distance (ft)	482	distance (ft)	329	distance (ft)	1916	distance (ft)	497	distance (ft)	497	distance (ft)	467	distance (ft)	467
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	20	speed (mph)	20	speed (mph)	30	speed (mph)	30
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	2	length of cars (ft) / train	60	locos/train	4	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	0	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	1	number of rows	0	number of rows	1	number of rows	1	number of rows	1	number of rows	1

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R8 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	61	54	55
Source 1	48	45	41
Source 2	32	28	24
Source 3	60	53	54
Source 4	46	39	39
Source 5	35	37	20
Source 6	15	16	3
Source 7	32	34	19
Source 8	14	15	2

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	418	distance (ft)	418	distance (ft)	266	distance (ft)	2313	distance (ft)	403	distance (ft)	403	distance (ft)	433	distance (ft)	433
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R9 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	64	57	57
Source 1	52	48	44
Source 2	35	32	28
Source 3	63	56	57
Source 4	45	38	39
Source 5	39	41	23
Source 6	18	19	6
Source 7	36	37	23
Source 8	18	19	6

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	521	distance (ft)	521	distance (ft)	371	distance (ft)	2558	distance (ft)	506	distance (ft)	506	distance (ft)	536	distance (ft)	536
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R10 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	62	54	55
Source 1	50	47	43
Source 2	33	30	26
Source 3	61	53	55
Source 4	46	39	39
Source 5	37	39	22
Source 6	17	18	5
Source 7	34	36	21
Source 8	16	17	4

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	671	distance (ft)	671	distance (ft)	520	distance (ft)	2306	distance (ft)	656	distance (ft)	656	distance (ft)	686	distance (ft)	686
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R11 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	61	54	55
Source 1	48	45	41
Source 2	32	28	24
Source 3	61	53	54
Source 4	33	26	27
Source 5	36	37	20
Source 6	15	16	3
Source 7	38	39	24
Source 8	20	20	7

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	410	distance (ft)	410	distance (ft)	261	distance (ft)	3270	distance (ft)	395	distance (ft)	395	distance (ft)	425	distance (ft)	425
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	34	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R12 build noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	64		
Source 1	53		
Source 2	36		
Source 3	63		
Source 4	26		
Source 5	45		
Source 6	24		
Source 7	41		
Source 8	23		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	263	distance (ft)	263	distance (ft)	112	distance (ft)	3487	distance (ft)	248	distance (ft)	248	distance (ft)	278	distance (ft)	278
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
Activity During	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
Sensitive Hours	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
		60		60		45		45		10		10		0		0
		0.11111		0.11111		2484.9		668.8		0		0		0		0
		4		60						0		0		0		0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	34	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R13 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	66	59	60
Source 1	51	48	44
Source 2	35	31	27
Source 3	66	59	60
Source 4	33	26	27
Source 5	39	40	23
Source 6	18	19	6
Source 7	35	37	22
Source 8	17	18	5

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	260	distance (ft)	260	distance (ft)	109	distance (ft)	3557	distance (ft)	244	distance (ft)	244	distance (ft)	274	distance (ft)	274
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	34	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R14 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	67	60	61
Source 1	51	48	44
Source 2	35	31	27
Source 3	67	59	61
Source 4	41	34	35
Source 5	38	40	22
Source 6	17	18	5
Source 7	36	37	23
Source 8	18	19	6

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	260	distance (ft)	260	distance (ft)	96	distance (ft)	4839	distance (ft)	275	distance (ft)	275	distance (ft)	245	distance (ft)	245
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R15 build noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	57		
Source 1	47		
Source 2	30		
Source 3	57		
Source 4	32		
Source 5	39		
Source 6	18		
Source 7	0		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	304	distance (ft)	304	distance (ft)	141	distance (ft)	5063	distance (ft)	289	distance (ft)	289				
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
Activity During	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
Sensitive Hours	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
		60		60		45		45		10		10				
		0.11111		0.11111		2484.9		3130.6		0		0				
		4		60						0		0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	1	number of rows	5	number of rows	1	number of rows	1				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R16 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	70	63	64
Source 1	52	49	45
Source 2	36	32	28
Source 3	70	63	64
Source 4	38	32	31
Source 5	40	41	24
Source 6	19	20	7
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	222	distance (ft)	222	distance (ft)	59	distance (ft)	4868	distance (ft)	207	distance (ft)	207				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	5	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R17 build noise

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	68	60	61
Source 1	51	48	44
Source 2	35	31	28
Source 3	68	60	61
Source 4	39	33	32
Source 5	39	41	23
Source 6	18	19	6
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	251	distance (ft)	251	distance (ft)	89	distance (ft)	4188	distance (ft)	236	distance (ft)	236				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	5	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R18 build noise

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	67	59	60
Source 1	53	50	46
Source 2	37	34	30
Source 3	66	59	60
Source 4	39	33	32
Source 5	41	43	25
Source 6	20	21	8
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	390	distance (ft)	390	distance (ft)	230	distance (ft)	4203	distance (ft)	375	distance (ft)	375				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	5	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R19 build noise

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	64	57	57
Source 1	52	48	44
Source 2	35	32	28
Source 3	63	56	57
Source 4	39	33	32
Source 5	39	41	23
Source 6	18	19	6
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	523	distance (ft)	523	distance (ft)	359	distance (ft)	4117	distance (ft)	508	distance (ft)	508				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	5	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R20 build noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	63		
Source 1	52		
Source 2	35		
Source 3	62		
Source 4	45		
Source 5	44		
Source 6	23		
Source 7	0		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	296	distance (ft)	296	distance (ft)	131	distance (ft)	2826	distance (ft)	281	distance (ft)	281				
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
Activity During	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
Sensitive Hours	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
		60		60		45		45		10		10				
		0.11111		0.11111		2484.9		3130.6		0		0				
		4		60						0		0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R21 build noise level

RESULTS			
Noise Source	**Leq - 1-hr (dB)**		
All Sources	54		
Source 1	45		
Source 2	28		
Source 3	53		
Source 4	37		
Source 5	37		
Source 6	16		
Source 7	3		
Source 8	0		

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	3

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	441	distance (ft)	441	distance (ft)	263	distance (ft)	2130	distance (ft)	426	distance (ft)	426	distance (ft)	1752		
Noisiest Hour of	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.13333		
Activity During	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	425.182		
Sensitive Hours	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
		60		60		45		45		10		10		0		
		0.11111		0.11111		2484.9		3130.6		0		0		0		
		4		60						0		0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N		
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	1	number of rows	5	number of rows	1	number of rows	1	number of rows	1		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R22 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	58	51	51
Source 1	50	46	42
Source 2	33	30	26
Source 3	56	49	50
Source 4	47	41	41
Source 5	37	38	21
Source 6	16	17	4
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	329	distance (ft)	329	distance (ft)	504	distance (ft)	2511	distance (ft)	344	distance (ft)	344				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R23 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	57	50	50
Source 1	49	45	41
Source 2	32	29	25
Source 3	56	48	49
Source 4	45	40	39
Source 5	36	37	20
Source 6	15	16	3
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	385	distance (ft)	385	distance (ft)	554	distance (ft)	2766	distance (ft)	400	distance (ft)	400				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	2	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R24 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	55	49	49
Source 1	47	43	39
Source 2	30	27	23
Source 3	54	46	48
Source 4	42	36	35
Source 5	34	35	18
Source 6	13	14	1
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	442	distance (ft)	442	distance (ft)	607	distance (ft)	3074	distance (ft)	457	distance (ft)	457				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	2	number of rows	2	number of rows	2	number of rows	4	number of rows	2	number of rows	2				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R25 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	53	46	47
Source 1	44	41	37
Source 2	28	25	21
Source 3	52	44	46
Source 4	40	34	34
Source 5	31	33	16
Source 6	11	12	-1
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	493	distance (ft)	493	distance (ft)	659	distance (ft)	3315	distance (ft)	508	distance (ft)	508				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	3	number of rows	3	number of rows	3	number of rows	6	number of rows	3	number of rows	3				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R26 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	57	51	51
Source 1	50	46	42
Source 2	33	30	26
Source 3	56	49	50
Source 4	40	34	33
Source 5	37	38	21
Source 6	16	17	4
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	324	distance (ft)	324	distance (ft)	488	distance (ft)	3628	distance (ft)	339	distance (ft)	339				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	7	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R27 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	59	52	53
Source 1	49	46	42
Source 2	33	29	25
Source 3	59	51	52
Source 4	40	34	33
Source 5	36	38	20
Source 6	16	16	3
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	352	distance (ft)	352	distance (ft)	354	distance (ft)	3613	distance (ft)	367	distance (ft)	367				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	1	number of rows	7	number of rows	1	number of rows	1				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R28 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	56	50	50
Source 1	48	44	41
Source 2	31	28	24
Source 3	55	47	49
Source 4	39	33	32
Source 5	35	36	19
Source 6	14	15	2
Source 7	-11	-9	-63
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	429	distance (ft)	429	distance (ft)	595	distance (ft)	4128	distance (ft)	444	distance (ft)	444	distance (ft)	3909		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.13333		
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	212.591		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y		
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	8	number of rows	0	number of rows	0	number of rows	0		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R27 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	55	48	49
Source 1	46	43	39
Source 2	30	27	23
Source 3	54	46	48
Source 4	39	33	33
Source 5	33	35	18
Source 6	13	14	1
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10				
Distance (source to receiver)	distance (ft)	535	distance (ft)	535	distance (ft)	701	distance (ft)	3802	distance (ft)	550	distance (ft)	550				
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333				
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10				
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0				
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N					
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y				
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	8	number of rows	0	number of rows	0				

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R30 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	55	48	48
Source 1	46	42	39
Source 2	29	26	22
Source 3	54	46	47
Source 4	43	38	37
Source 5	33	34	17
Source 6	12	13	0
Source 7	5	7	-48
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Crossover	13		
Distance (source to receiver)	distance (ft)	587	distance (ft)	587	distance (ft)	752	distance (ft)	4397	distance (ft)	602	distance (ft)	602	distance (ft)	913		
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0.13333		
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333	duration of one train (sec)	212.591		
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60				
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	trains/hour	0		
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0	duration of one train (sec)	0		
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0				
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats					
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N					
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N			
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y		
Intervening Rows of of Buildings	number of rows	1	number of rows	1	number of rows	1	number of rows	0	number of rows	1	number of rows	1	number of rows	1		

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

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Case: R31 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	53	47	46
Source 1	44	41	37
Source 2	28	24	20
Source 3	52	44	46
Source 4	38	32	31
Source 5	31	33	15
Source 6	11	11	-2
Source 7	33	34	20
Source 8	15	16	3

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	661	distance (ft)	661	distance (ft)	823	distance (ft)	5024	distance (ft)	676	distance (ft)	676	distance (ft)	885	distance (ft)	885
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	N	Y/N	N
Intervening Rows of of Buildings	number of rows	2	number of rows	2	number of rows	2	number of rows	15	number of rows	2	number of rows	2	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R32 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	57	50	50
Source 1	49	45	41
Source 2	32	29	25
Source 3	56	48	49
Source 4	42	36	36
Source 5	36	37	20
Source 6	15	16	3
Source 7	31	32	18
Source 8	13	14	1

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	384	distance (ft)	384	distance (ft)	550	distance (ft)	5248	distance (ft)	399	distance (ft)	399	distance (ft)	531	distance (ft)	531
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	3611.3	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	3130.6	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R33 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	56	49	49
Source 1	48	44	41
Source 2	31	28	24
Source 3	55	47	49
Source 4	29	22	23
Source 5	35	36	19
Source 6	14	15	2
Source 7	33	34	19
Source 8	15	15	2

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	438	distance (ft)	438	distance (ft)	613	distance (ft)	6348	distance (ft)	453	distance (ft)	453	distance (ft)	423	distance (ft)	423
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	37	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R34 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	55	49	49
Source 1	47	43	39
Source 2	30	27	23
Source 3	54	47	48
Source 4	31	25	25
Source 5	34	35	18
Source 6	13	14	1
Source 7	31	33	18
Source 8	13	14	1

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	526	distance (ft)	526	distance (ft)	676	distance (ft)	4361	distance (ft)	541	distance (ft)	541	distance (ft)	511	distance (ft)	511
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	668.8	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	568.7	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	37	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R35 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	55	48	49
Source 1	46	42	38
Source 2	29	26	22
Source 3	54	47	48
Source 4	31	25	24
Source 5	33	34	17
Source 6	12	13	0
Source 7	30	32	17
Source 8	12	13	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	604	distance (ft)	604	distance (ft)	676	distance (ft)	4750	distance (ft)	619	distance (ft)	619	distance (ft)	589	distance (ft)	589
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	668.8	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	568.7	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	37	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R36 build noise

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	56	50	50
Source 1	48	45	41
Source 2	32	28	24
Source 3	56	48	49
Source 4	32	25	26
Source 5	35	37	19
Source 6	15	15	2
Source 7	33	34	20
Source 8	15	16	3

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	409	distance (ft)	409	distance (ft)	561	distance (ft)	3788	distance (ft)	424	distance (ft)	424	distance (ft)	394	distance (ft)	394
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	568.7	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	668.8	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	14	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
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Case: R37 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	53	46	46
Source 1	44	40	36
Source 2	27	24	20
Source 3	52	44	46
Source 4	37	31	30
Source 5	31	32	15
Source 6	10	11	-2
Source 7	29	30	15
Source 8	10	11	-2

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	698	distance (ft)	698	distance (ft)	848	distance (ft)	3512	distance (ft)	713	distance (ft)	713	distance (ft)	674	distance (ft)	683
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	944.9	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	827.2	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y
Intervening Rows of of Buildings	number of rows	2	number of rows	2	number of rows	2	number of rows	3	number of rows	2	number of rows	2	number of rows	2	number of rows	2

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
Copyright 2006, HMMH Inc.
Case: R38 build noise level

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	56	49	49
Source 1	47	44	40
Source 2	30	27	23
Source 3	55	47	48
Source 4	41	35	34
Source 5	34	36	18
Source 6	13	14	1
Source 7	32	33	19
Source 8	14	15	2

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	Freight Locomotive	9	Freight Cars	10	Automobiles	14	Automobiles	14	Freight Locomotive	9	Freight Cars	10	Freight Locomotive	9	Freight Cars	10
Distance (source to receiver)	distance (ft)	492	distance (ft)	492	distance (ft)	637	distance (ft)	2783	distance (ft)	507	distance (ft)	507	distance (ft)	477	distance (ft)	477
Daytime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	10	speed (mph)	10	speed (mph)	20	speed (mph)	20
(7 AM - 10 PM)	trains/hour	0.26667	trains/hour	0.26667	vehicles/hour	1766.6	vehicles/hour	944.9	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333	trains/hour	0.13333
	locos/train	4	length of cars (ft) / train	60					locos/train	4	length of cars (ft) / train	60	locos/train	2	length of cars (ft) / train	60
Nighttime Hours	speed (mph)	60	speed (mph)	60	speed (mph)	45	speed (mph)	45	speed (mph)	0	speed (mph)	10	speed (mph)	0	speed (mph)	0
(10 PM - 7 AM)	trains/hour	0.11111	trains/hour	0.11111	vehicles/hour	2484.9	vehicles/hour	827.2	trains/hour	0	trains/hour	0	trains/hour	0	trains/hour	0
	locos/train	4	length of cars (ft) / train	60					locos/train	0	length of cars (ft) / train	0	locos/train	0	length of cars (ft) / train	0
Wheel Flats?			% of cars w/ wheel flats								% of cars w/ wheel flats				% of cars w/ wheel flats	
Jointed Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Embedded Track?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Aerial Structure?	Y/N	N	Y/N	N					Y/N		Y/N		Y/N		Y/N	
Barrier Present?	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y	Y/N	Y
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Appendix D
FTA Construction Vibration Damage and Annoyance Assessment Equations

Construction Vibration Damage Assessment Method[1]

Building damage from construction vibration can be assessed by applying a propagation adjustment to peak particle velocity (PPV) values for each type of equipment used. The assessment should be done for each piece of equipment individually. The equation for adjusting the values is:

$$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$$

where:

PPVequip = the peak particle velocity of the equipment adjusted for distance, in/sec

PPVref = the source reference vibration level at 25 feet, inches/second

D = distance from the equipment to the receptor, feet

Construction Vibration Annoyance Assessment Method[2]

The assessment of annoyance from construction vibration should be done separately for each piece of equipment. The equation for estimating ground-borne vibration related to human annoyance in VdB is:

$$L_{v,distance} = L_{vref} - 30\log(D/25)$$

where:

Lv,distance = the rms velocity level adjusted for distance, VdB

Lvref = the source reference vibration level at 25 feet, VdB

D = distance from the equipment to the receptor, feet

[1] Federal Transit Administration. 2018. *Transit Noise and Vibration Impact Assessment Manual*. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed June 16, 2022.

[2] Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*.

Appendix E
Environmental Data Resources Area/Corridor Report

UPRR PIRATE
Mesa Arizona
Mesa, AZ 85142

Inquiry Number: 6992684.10s
May 25, 2022

EDR Area / Corridor Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

SUBJECT PROPERTY INFORMATION

ADDRESS

MESA ARIZONA
MESA, AZ 85212

TARGET PROPERTY SEARCH RESULTS

The Target Property was identified in the following databases.

Page Numbers and Map Identifcations refer to the EDR Area/Corridor Report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

A review of the NPL list, as provided by EDR, and dated 01/25/2022 has revealed that there is 1 NPL site within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
WILLIAMS AIR FORCE B Cerclis ID:: 900890 EPA Id: AZ7570028582	***WILLIAMS AFB***	***Region / 2,3,1***	***34***

Lists of Federal sites subject to CERCLA removals and CERCLA orders

SEMS: Superfund Enterprise Management System

A review of the SEMS list, as provided by EDR, and dated 01/25/2022 has revealed that there is 1 SEMS site within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
WILLIAMS AIR FORCE B Site ID: 0900890 EPA Id: AZ7570028582	***WILLIAMS AFB***	***Region / 2,3,1***	***34***

EXECUTIVE SUMMARY

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

A review of the CORRACTS list, as provided by EDR, and dated 02/28/2022 has revealed that there is 1 CORRACTS site within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
WILLIAMS AIR FORCE B	***WILLIAMS AFB***	***Region / 2,3,1***	***34***
EPA ID:: AZ7570028582			

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

A review of the RCRA-TSDF list, as provided by EDR, and dated 02/28/2022 has revealed that there is 1 RCRA-TSDF site within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
WILLIAMS AIR FORCE B	***WILLIAMS AFB***	***Region / 2,3,1***	***34***
EPA ID:: AZ7570028582			

Lists of Federal RCRA generators

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

A review of the RCRA-VSQG list, as provided by EDR, and dated 02/28/2022 has revealed that there is 1 RCRA-VSQG site within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
WILLIAMS AIR FORCE B	***WILLIAMS AFB***	***Region / 2,3,1***	***34***
EPA ID:: AZ7570028582			

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A review of the US ENG CONTROLS list, as provided by EDR, and dated 02/21/2022 has revealed that there is 1 US ENG CONTROLS site within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
WILLIAMS AIR FORCE B	***WILLIAMS AFB***	***Region / 2,3,1***	***34***
EPA ID:: AZ7570028582			
EPA ID:: AZ7570028582			

US INST CONTROLS: Institutional Controls Sites List

A review of the US INST CONTROLS list, as provided by EDR, and dated 02/21/2022 has revealed that there is 1 US INST CONTROLS site within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
WILLIAMS AIR FORCE B EPA ID:: AZ7570028582	***WILLIAMS AFB***	***Region / 2,3,1***	***34***

Lists of state- and tribal (Superfund) equivalent sites

AZ NPL: NPL Detail Listing

A review of the AZ NPL list, as provided by EDR, and dated 12/31/2020 has revealed that there is 1 AZ NPL site within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
WILLIAMS AIR FORCE B		***Region / 2,3,1***	***129***

Lists of state- and tribal hazardous waste facilities

SPL: Superfund Program List

A review of the SPL list, as provided by EDR, and dated 08/25/2004 has revealed that there is 1 SPL site within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
WILLIAMS AIR FORCE B Program Status: ON NPL		***Region / 2,3,1***	***129***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

ROD: Records Of Decision

A review of the ROD list, as provided by EDR, and dated 01/25/2022 has revealed that there is 1 ROD site within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
WILLIAMS AIR FORCE B EPA ID:: AZ7570028582	***WILLIAMS AFB***	***Region / 2,3,1***	***34***

EXECUTIVE SUMMARY

PRP: Potentially Responsible Parties

A review of the PRP list, as provided by EDR, and dated 01/25/2022 has revealed that there is 1 PRP site within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
WILLIAMS AIR FORCE B	***WILLIAMS AFB***	***Region / 2,3,1***	***34***

EMAP: All Places of Interest Listing

A review of the EMAP list, as provided by EDR, and dated 11/29/2021 has revealed that there are 3 EMAP sites within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
CMC STEEL ARIZONA AN Facility Status: NOT ACTIVE ID Number: 180286		1 / 5	140
OUTFALL NW CORNER ON Facility Status: ACTIVE ID Number: 198670		2 / 5	141
SIGNAL BUTTE BETWEEN Facility Status: ACTIVE ID Number: 214690		3 / 9	141

MANIFEST: Facility and Manifest Data

A review of the MANIFEST list, as provided by EDR, and dated 12/31/2018 has revealed that there is 1 MANIFEST site within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
WILLIAMS AIR FORCE B EPA Id: AZ7570028582	***WILLIAMS AFB***	***Region / 2,3,1***	***34***

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Page Numbers and Map Identifcations refer to the EDR Area/Corridor Report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

A review of the RCRA-TSDF list, as provided by EDR, and dated 02/28/2022 has revealed that there is 1

RCRA-TSDF site within approximately 0.5 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
TRW AUTOMOTIVE SYSTE EPA ID:: AZD982491649	***11202 E GERMANN RD***	***SE 1/4 - 1/2 (0.346 mi.)***	***E23 / 10***	***201***

Lists of Federal RCRA generators

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

A review of the RCRA-VSQG list, as provided by EDR, and dated 02/28/2022 has revealed that there are 2 RCRA-VSQG sites within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
QUEEN CREEK SMILES EPA ID:: AZR000506204	18550 E RITTENHOUSE	SW 1/8 - 1/4 (0.153 mi.)	9 / 6	147
MGC PURE CHEMICALS A EPA ID:: AZR000002394	***6560 S MOUNTAIN RD***	***N 1/8 - 1/4 (0.215 mi.)***	***D18 / 5***	***164***

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF: Directory of Solid Waste Facilities

A review of the SWF/LF list, as provided by EDR, and dated 12/31/2021 has revealed that there are 2 SWF/LF sites within approximately 0.5 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
MESA TRANSFER STATIO Facility Status: ACTIVE	6711 S MOUNTAIN RD	N 1/8 - 1/4 (0.161 mi.)	10 / 5	150
MARICOPA COUNTY - SO Facility Status: ACTIVE	***11400 E PECOS RD***	***N 1/8 - 1/4 (0.183 mi.)***	***B12 / 5***	***154***

Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Storage Tank Listing

A review of the LUST list, as provided by EDR, and dated 01/04/2022 has revealed that there is 1 LUST site within approximately 0.5 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
PINTO CREEK MANAGEME Date Closed: 09/27/05 Facility Id: 0-007502 Facility Status: CLOSED	***20820 S ELLSWORTH RD***	***ESE 1/8 - 1/4 (0.213 mi.)***	***14 / 13***	***157***

EXECUTIVE SUMMARY

Lists of state and tribal registered storage tanks

UST: Underground Storage Tank Listing

A review of the UST list, as provided by EDR, and dated 01/04/2022 has revealed that there are 2 UST sites within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
ARIZONA BOYS RANCH Closure Type: Removal Facility Id: 0-004074 Date Closed: 11/07/2008 Date Closed: 05/08/1992	20061 E RITTENHOUSE	SW 0 - 1/8 (0.110 mi.)	A8 / 13	146
PINTO CREEK MANAGEME Closure Type: Removal Facility Id: 0-007502 Date Closed: 11/02/1989	***20820 S ELLSWORTH RD***	***ESE 1/8 - 1/4 (0.213 mi.)***	***14 / 13***	***157***

AST: List of Aboveground Storage Tanks

A review of the AST list, as provided by EDR, has revealed that there are 6 AST sites within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
CANYON STATE ACADEMY Database: AST, Date of Government Version: 12/05/2019 Facility Status: Other	20061 EAST RITTENHOU	SW 0 - 1/8 (0.110 mi.)	A7 / 13	145
CRUM RUBBER MANUFACT Database: AST 2, Date of Government Version: 01/21/2022 Cert Status: Open	11400 E PECOS RD	N 1/8 - 1/4 (0.183 mi.)	B13 / 5	156
PINTO CREEK MANAGEME Database: AST 2, Date of Government Version: 01/21/2022 Cert Status: Closed	***20820 S ELLSWORTH RD***	***ESE 1/8 - 1/4 (0.213 mi.)***	***14 / 13***	***157***
QUEEN CREEK SCHOOL M Database: AST, Date of Government Version: 12/05/2019 Facility Status: Permitted	20740 SOUTH ELLSWORT	ESE 1/8 - 1/4 (0.213 mi.)	C15 / 13	159
QUEEN CREEK UNIFIED Database: AST 2, Date of Government Version: 01/21/2022 Cert Status: Open	20740 S ELLSWORTH RD	ESE 1/8 - 1/4 (0.213 mi.)	C16 / 13	159
OLD DOMINION FREIGHT Database: AST 2, Date of Government Version: 01/21/2022 Cert Status: Open	10233 E. PECOS RD SW	N 1/8 - 1/4 (0.243 mi.)	21 / 4	200

State and tribal institutional control / engineering control registries

AZURITE: Remediation and DEUR/VEMUR Tracking System

A review of the AZURITE list, as provided by EDR, and dated 03/01/2022 has revealed that there are 3

AZURITE sites within approximately 0.5 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
FORMER WILLIAMS AIR	***6833 E OLD PECOS ROA***	***N 1/8 - 1/4 (0.230 mi.)***	***20 / 1***	***199***
TRW AUTOMOTIVE SYSTE	***11202 E GERMANN RD***	***SE 1/4 - 1/2 (0.346 mi.)***	***E24 / 10***	***311***
FORMER WILLIAMS AIR	***7722 E VELOCITY WAY***	***N 1/4 - 1/2 (0.498 mi.)***	***26 / 2***	***314***

AUL: DEUR Database

A review of the AUL list, as provided by EDR, and dated 03/01/2022 has revealed that there are 3 AUL sites within approximately 0.5 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
FORMER WILLIAMS AIR Remediation ID: 31388	***6833 E OLD PECOS ROA***	***N 1/8 - 1/4 (0.230 mi.)***	***20 / 1***	***199***
TRW AUTOMOTIVE SYSTE Remediation ID: 28636	***11202 E GERMANN RD***	***SE 1/4 - 1/2 (0.346 mi.)***	***E24 / 10***	***311***
FORMER WILLIAMS AIR Remediation ID: 32335	***7722 E VELOCITY WAY***	***N 1/4 - 1/2 (0.498 mi.)***	***26 / 2***	***314***

Lists of state and tribal voluntary cleanup sites

VCP: Voluntary Remediation Program Sites

A review of the VCP list, as provided by EDR, and dated 10/12/2021 has revealed that there is 1 VCP site within approximately 0.5 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
TRW AUTOMOTIVE SYSTE Date Closed: 3/18/2014 Facility Status: Closed	***11202 E GERMANN RD***	***SE 1/4 - 1/2 (0.346 mi.)***	***E24 / 10***	***311***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

PFAS: PFAS Contamination Site Listing

A review of the PFAS list, as provided by EDR, and dated 02/18/2021 has revealed that there are 2 PFAS sites within approximately 0.5 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
MESA CITY OF		E 0 - 1/8 (0.050 mi.)	4 / 3	142
TOWN OF QUEEN CREEK		S 1/4 - 1/2 (0.444 mi.)	25 / 7	314

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 02/28/2022 has revealed that there are 2 RCRA NonGen / NLR sites within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
ARIZONA BOYS RANCH EPA ID:: AZD074472382	20061 E RITTENHOUSE	SW 0 - 1/8 (0.110 mi.)	A6 / 13	142
CRM OF AMERICA EPA ID:: AZE060911001	11400 E PECOS RD	N 1/8 - 1/4 (0.183 mi.)	B11 / 5	150

FUDS: Formerly Used Defense Sites

A review of the FUDS list, as provided by EDR, and dated 12/01/2021 has revealed that there is 1 FUDS site within approximately1 mile of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
PRISONER OF WAR CAMP		ESE 1/4 - 1/2 (0.303 mi.)	22 / 13	201

UXO: Unexploded Ordnance Sites

A review of the UXO list, as provided by EDR, and dated 12/31/2020 has revealed that there are 2 UXO sites within approximately1 mile of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
FORMER SKEET RANGE		NW 1/2 - 1 (0.732 mi.)	27 / 1	315
MUNITIONS BURIAL SIT		NNW 1/2 - 1 (0.908 mi.)	28 / 3	316

MANIFEST: Facility and Manifest Data

A review of the MANIFEST list, as provided by EDR, and dated 12/31/2018 has revealed that there are 3 MANIFEST sites within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
MGC PURE CHEMICALS A EPA Id: AZR000002394	***6560 S MOUNTAIN RD***	***N 1/8 - 1/4 (0.215 mi.)***	***D17 / 5***	***159***
MGC PURE CHEMICALS A EPA Id: AZR000002394	***6560 S MOUNTAIN RD***	***N 1/8 - 1/4 (0.215 mi.)***	***D18 / 5***	***164***
BED, BATH AND BEYOND EPA Id: CESQG	***21258 S ELLSWORTH LO***	***S 1/8 - 1/4 (0.221 mi.)***	***19 / 13***	***194***

EXECUTIVE SUMMARY

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR Exclusive Historical Auto Stations

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the requested target property.

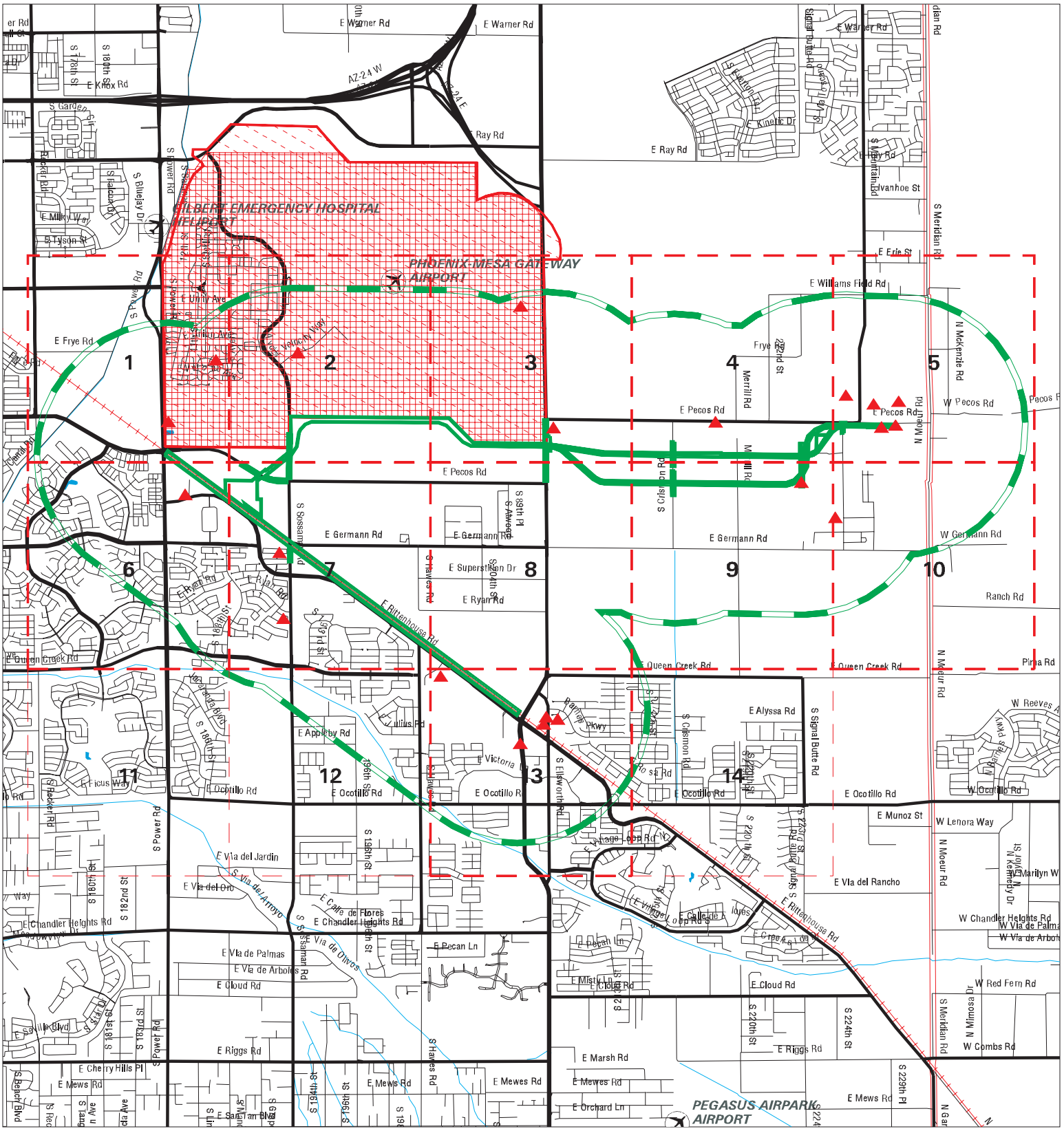
Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
MOBIL3 STUDIO LLC	19122 E SEAGULL DR	W 0 - 1/8 (0.070 mi.)	5 / 7	142

MAPPED SITES SUMMARY

Target Property:
MESA ARIZONA
MESA, AZ 85142

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION		
Reg / Multiple	WILLIAMS AIR FORCE B	WILLIAMS AFB	NPL, SEMS, CORRACTS, RCRA-TSDF, RCRA-VSQ...	TP		
Reg / Multiple	WILLIAMS AIR FORCE B		AZ NPL, SPL	TP		
1 / 5	CMC STEEL ARIZONA AN		EMAP	TP		
2 / 5	OUTFALL NW CORNER ON		EMAP	TP		
3 / 9	SIGNAL BUTTE BETWEEN		EMAP	TP		
4 / 3	MESA CITY OF		PFAS	265	0.050	East
5 / 7	MOBIL3 STUDIO LLC	19122 E SEAGULL DR	EDR Hist Auto	370	0.070	West
A6 / 13	ARIZONA BOYS RANCH	20061 E RITTENHOUSE	RCRA NonGen / NLR	582	0.110	SW
A7 / 13	CANYON STATE ACADEMY	20061 EAST RITTENHOU	AST	582	0.110	SW
A8 / 13	ARIZONA BOYS RANCH	20061 E RITTENHOUSE	UST	582	0.110	SW
9 / 6	QUEEN CREEK SMILES	18550 E RITTENHOUSE	RCRA-VSQG	807	0.153	SW
10 / 5	MESA TRANSFER STATIO	6711 S MOUNTAIN RD	SWF/LF	848	0.161	North
B11 / 5	CRM OF AMERICA	11400 E PECOS RD	RCRA NonGen / NLR	968	0.183	North
B12 / 5	MARICOPA COUNTY - SO	11400 E PECOS RD	SWF/LF, SPILLS, Enforcement	968	0.183	North
B13 / 5	CRUM RUBBER MANUFACT	11400 E PECOS RD	AST	968	0.183	North
14 / 13	PINTO CREEK MANAGEME	20820 S ELLSWORTH RD	LUST, UST, AST, EMAP	1125	0.213	ESE
C15 / 13	QUEEN CREEK SCHOOL M	20740 SOUTH ELLSWORT	AST	1127	0.213	ESE
C16 / 13	QUEEN CREEK UNIFIED	20740 S ELLSWORTH RD	AST	1127	0.213	ESE
D17 / 5	MGC PURE CHEMICALS A	6560 S MOUNTAIN RD	EMAP, MANIFEST	1136	0.215	North
D18 / 5	MGC PURE CHEMICALS A	6560 S MOUNTAIN RD	RCRA-VSQG, TSCA, TRIS, FINDS, ECHO, MANI...	1136	0.215	North
19 / 13	BED, BATH AND BEYOND	21258 S ELLSWORTH LO	EMAP, MANIFEST	1167	0.221	South
20 / 1	FORMER WILLIAMS AIR	6833 E OLD PECOS ROA	AZURITE, AUL, EMAP	1214	0.230	North
21 / 4	OLD DOMINION FREIGHT	10233 E. PECOS RD SW	AST	1283	0.243	North
22 / 13	PRISONER OF WAR CAMP		FUDS	1601	0.303	ESE
E23 / 10	TRW AUTOMOTIVE SYSTE	11202 E GERMANN RD	RCRA-TSDF, RCRA-LQG, SPILLS, MANIFEST	1828	0.346	SE
E24 / 10	TRW AUTOMOTIVE SYSTE	11202 E GERMANN RD	AZURITE, AUL, VCP, EMAP, Enforcement	1828	0.346	SE
25 / 7	TOWN OF QUEEN CREEK		PFAS	2344	0.444	South
26 / 2	FORMER WILLIAMS AIR	7722 E VELOCITY WAY	AZURITE, AUL, EMAP	2632	0.498	North
27 / 1	FORMER SKEET RANGE		UXO	3864	0.732	NW
28 / 3	MUNITIONS BURIAL SIT		UXO	4795	0.908	NNW

Key Map - 6992684.10s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
National Priority List Sites
Dept. Defense Sites
AZ NPL
Water Quality Assurance Revolving
Indian Reservations BIA

0 1 2 Miles

SITE NAME: UPRR PIRATE	CLIENT: Jacobs
ADDRESS: Mesa Arizona	CONTACT: Derek Foehr
CITY/STATE: Mesa AZ	INQUIRY #: 6992684.10s
ZIP: 85212	DATE: 05/25/22 8:41 AM

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000	1	0	0	0	0	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500	1	0	0	0	NR	NR	1
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000	1	0	0	0	0	NR	1
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500	1	0	0	1	NR	NR	2
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250	1	0	2	NR	NR	NR	3
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500	1	0	0	0	NR	NR	1
US INST CONTROLS	0.500	1	0	0	0	NR	NR	1
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
AZ NPL	1.000	1	0	0	0	0	NR	1
AZ WQARF	1.000		0	0	0	0	NR	0
Lists of state- and tribal hazardous waste facilities								
SPL	1.000	1	0	0	0	0	NR	1
SHWS	1.000		0	0	0	0	NR	0
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		0	2	0	NR	NR	2

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
LUST	0.500		0	1	0	NR	NR	1
INDIAN LUST	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		1	1	NR	NR	NR	2
AST	0.250		1	5	NR	NR	NR	6
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
AZURITE	0.500		0	1	2	NR	NR	3
AUL	0.500		0	1	2	NR	NR	3
Lists of state and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	1	NR	NR	1
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
SWTIRE	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		1	0	1	NR	NR	2
AQUEOUS FOAM	0.500		0	0	0	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	1	NR	NR	NR	2
FUDS	1.000		0	0	1	0	NR	1
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000	1	0	0	0	0	NR	1
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP	1	NR	NR	NR	NR	NR	1
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	2	NR	2
ECHO	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
Aquifer	TP		NR	NR	NR	NR	NR	0
AZ DOD	0.500		0	0	0	NR	NR	0
Dry Wells	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMAP	TP	3	NR	NR	NR	NR	NR	3
Enforcement	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
MANIFEST	0.250	1	0	3	NR	NR	NR	4
SPDES	TP		NR	NR	NR	NR	NR	0
VAPOR	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UIC	TP		NR	NR	NR	NR	NR	0
WWFAC	0.500		0	0	0	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		1	NR	NR	NR	NR	1
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA HWS	TP		NR	NR	NR	NR	NR	0
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		15	5	17	8	2	0	47

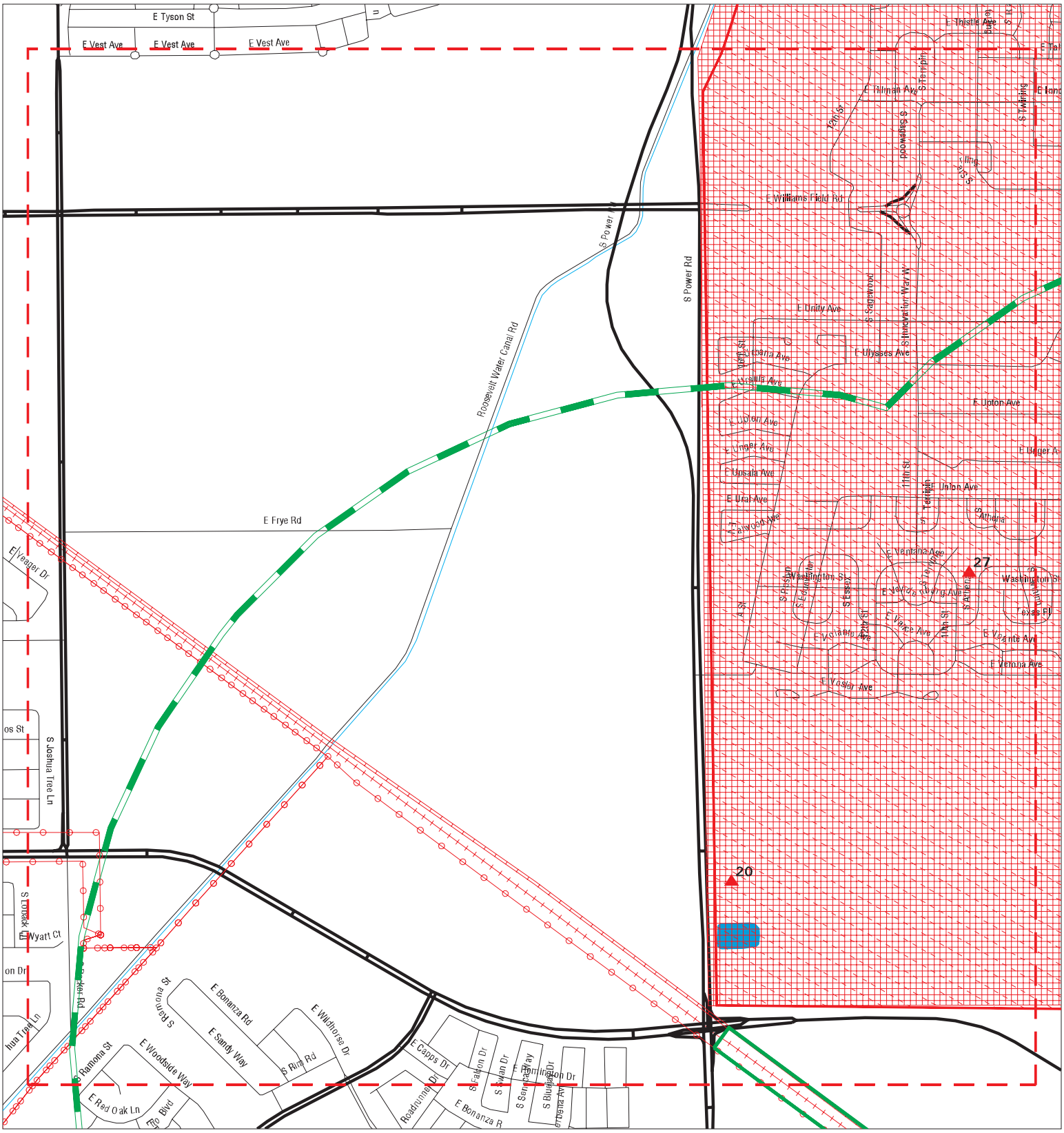
NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Focus Map - 1 - 6992684.10s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Dept. Defense Sites
AZ NPL
Water Quality Assurance Revolving
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: UPRR PIRATE	CLIENT: Jacobs
ADDRESS: Mesa Arizona	CONTACT: Derek Foehr
CITY/STATE: Mesa AZ	INQUIRY #: 6992684.10s
ZIP: 85212	DATE: 05/25/22

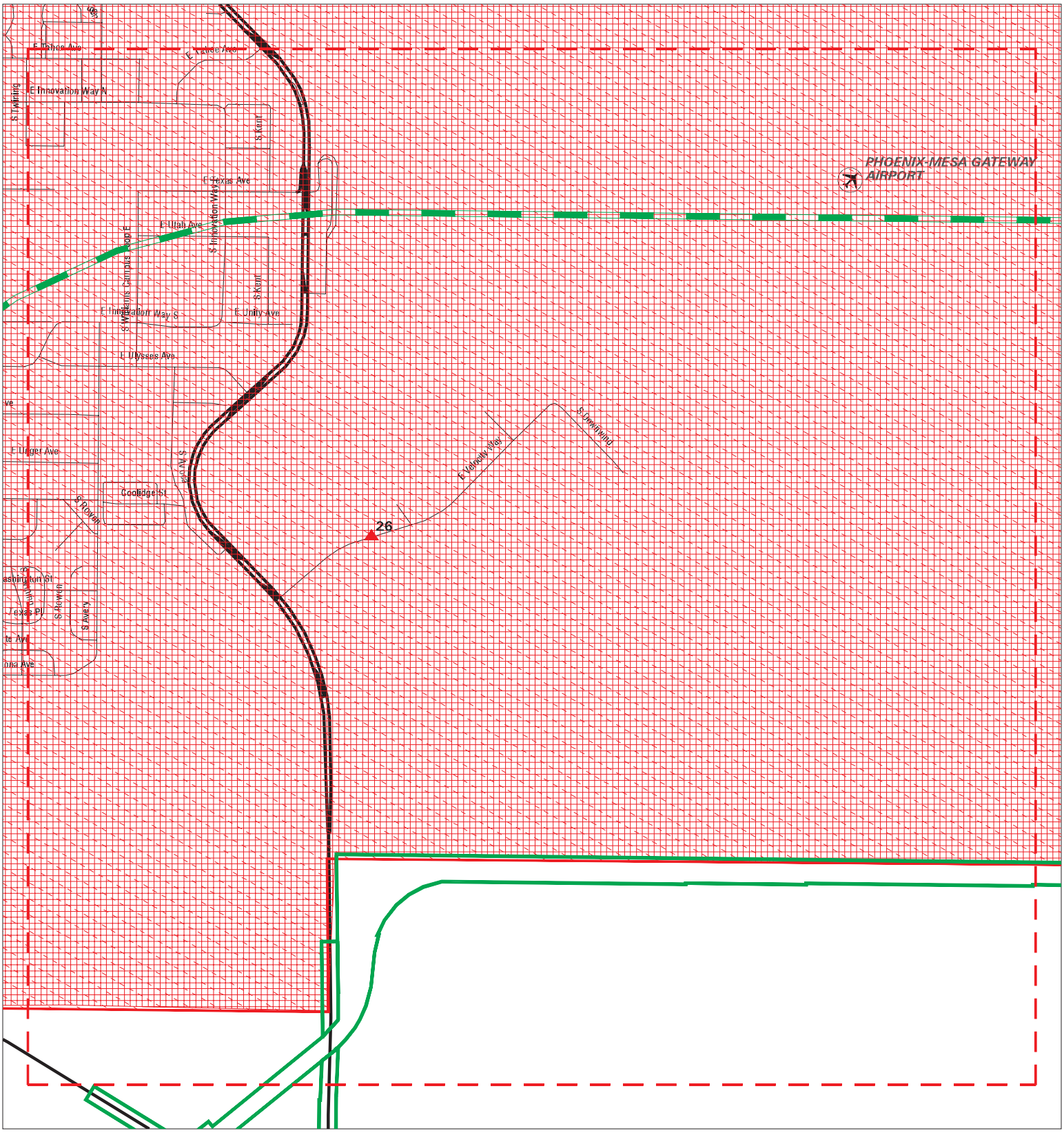
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MAPPED SITES SUMMARY - FOCUS MAP 1

Target Property:
MESA ARIZONA
MESA, AZ 85142

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
Reg / Multiple	WILLIAMS AIR FORCE B	WILLIAMS AFB	NPL, SEMS, CORRACTS, RCRA-TSDF, RCRA-VSQ...	TP
Reg / Multiple	WILLIAMS AIR FORCE B		AZ NPL, SPL	TP
20 / 1	FORMER WILLIAMS AIR	6833 E OLD PECOS ROA	AZURITE, AUL, EMAP	1214 0.230 North
27 / 1	FORMER SKEET RANGE		UXO	3864 0.732 NW

Focus Map - 2 - 6992684.10s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Dept. Defense Sites
AZ NPL
Water Quality Assurance Revolving
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: UPRR PIRATE ADDRESS: Mesa Arizona CITY/STATE: Mesa AZ ZIP: 85212	CLIENT: Jacobs CONTACT: Derek Foehr INQUIRY #: 6992684.10s DATE: 05/25/22

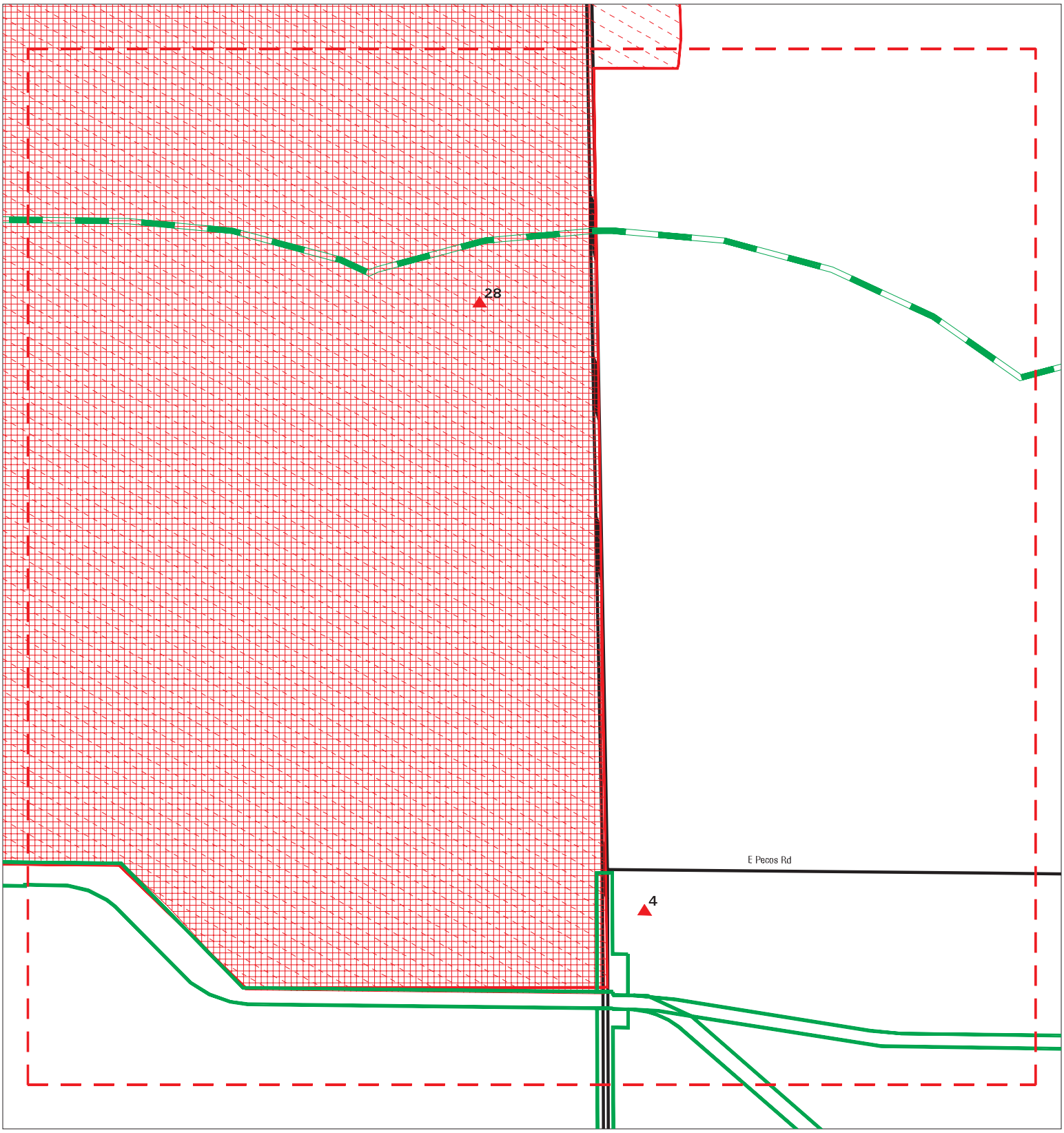
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MAPPED SITES SUMMARY - FOCUS MAP 2

Target Property:
MESA ARIZONA
MESA, AZ 85142

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
Reg / Multiple	WILLIAMS AIR FORCE B	WILLIAMS AFB	NPL, SEMS, CORRACTS, RCRA-TSDF, RCRA-VSQ...	TP
Reg / Multiple	WILLIAMS AIR FORCE B		AZ NPL, SPL	TP
26 / 2	FORMER WILLIAMS AIR	7722 E VELOCITY WAY	AZURITE, AUL, EMAP	2632 0.498 North

Focus Map - 3 - 6992684.10s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Dept. Defense Sites
AZ NPL
Water Quality Assurance Revolving
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: UPRR PIRATE	CLIENT: Jacobs
ADDRESS: Mesa Arizona	CONTACT: Derek Foehr
CITY/STATE: Mesa AZ	INQUIRY #: 6992684.10s
ZIP: 85212	DATE: 05/25/22

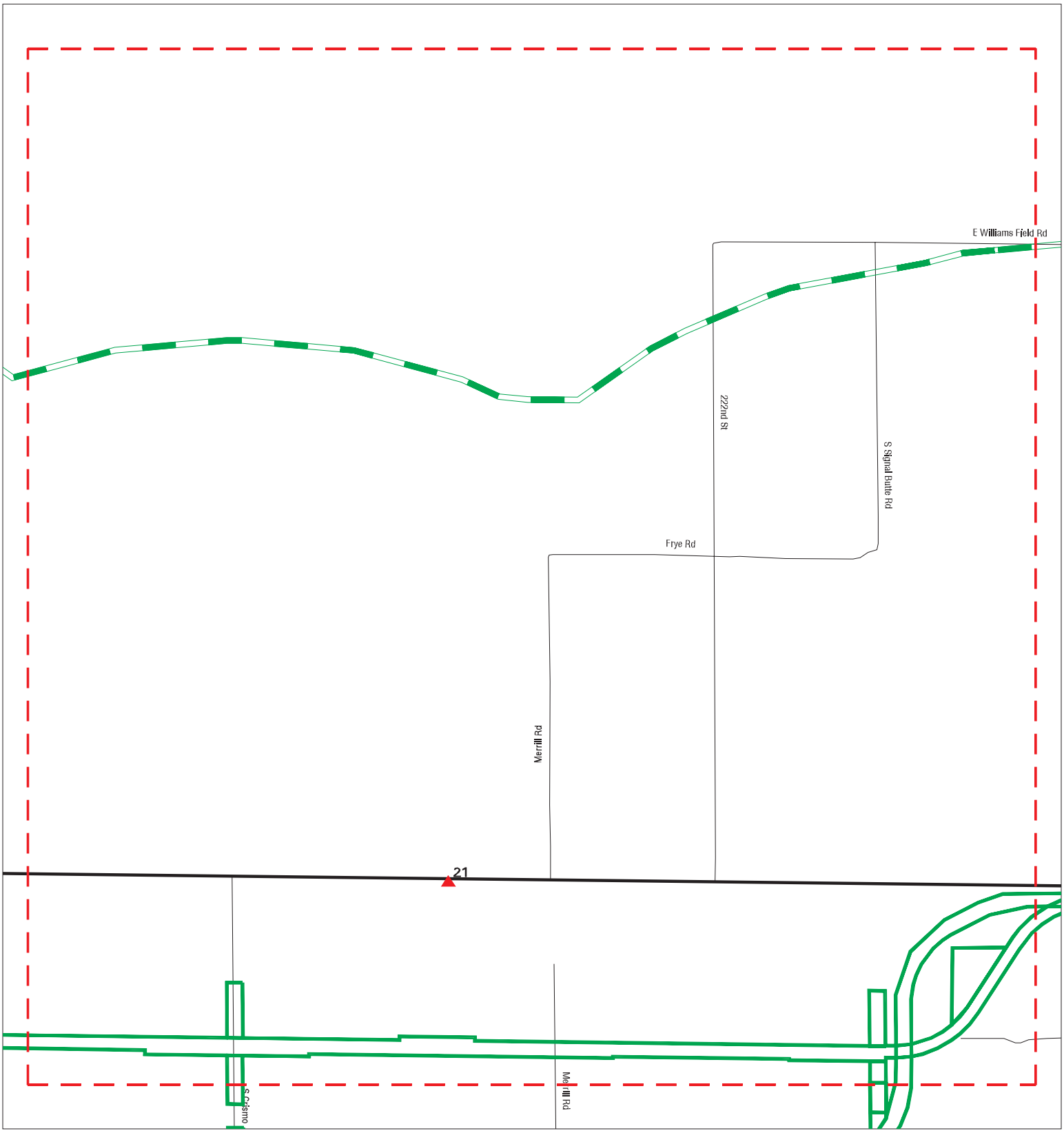
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MAPPED SITES SUMMARY - FOCUS MAP 3

Target Property:
MESA ARIZONA
MESA, AZ 85142

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
Reg / Multiple	WILLIAMS AIR FORCE B	WILLIAMS AFB	NPL, SEMS, CORRACTS, RCRA-TSDF, RCRA-VSQ...	TP
Reg / Multiple	WILLIAMS AIR FORCE B		AZ NPL, SPL	TP
4 / 3	MESA CITY OF		PFAS	265 0.050 East
28 / 3	MUNITIONS BURIAL SIT		UXO	4795 0.908 NNW

Focus Map - 4 - 6992684.10s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Dept. Defense Sites
AZ NPL
Water Quality Assurance Revolving
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: UPRR PIRATE	CLIENT: Jacobs
ADDRESS: Mesa Arizona	CONTACT: Derek Foehr
CITY/STATE: Mesa AZ	INQUIRY #: 6992684.10s
ZIP: 85212	DATE: 05/25/22

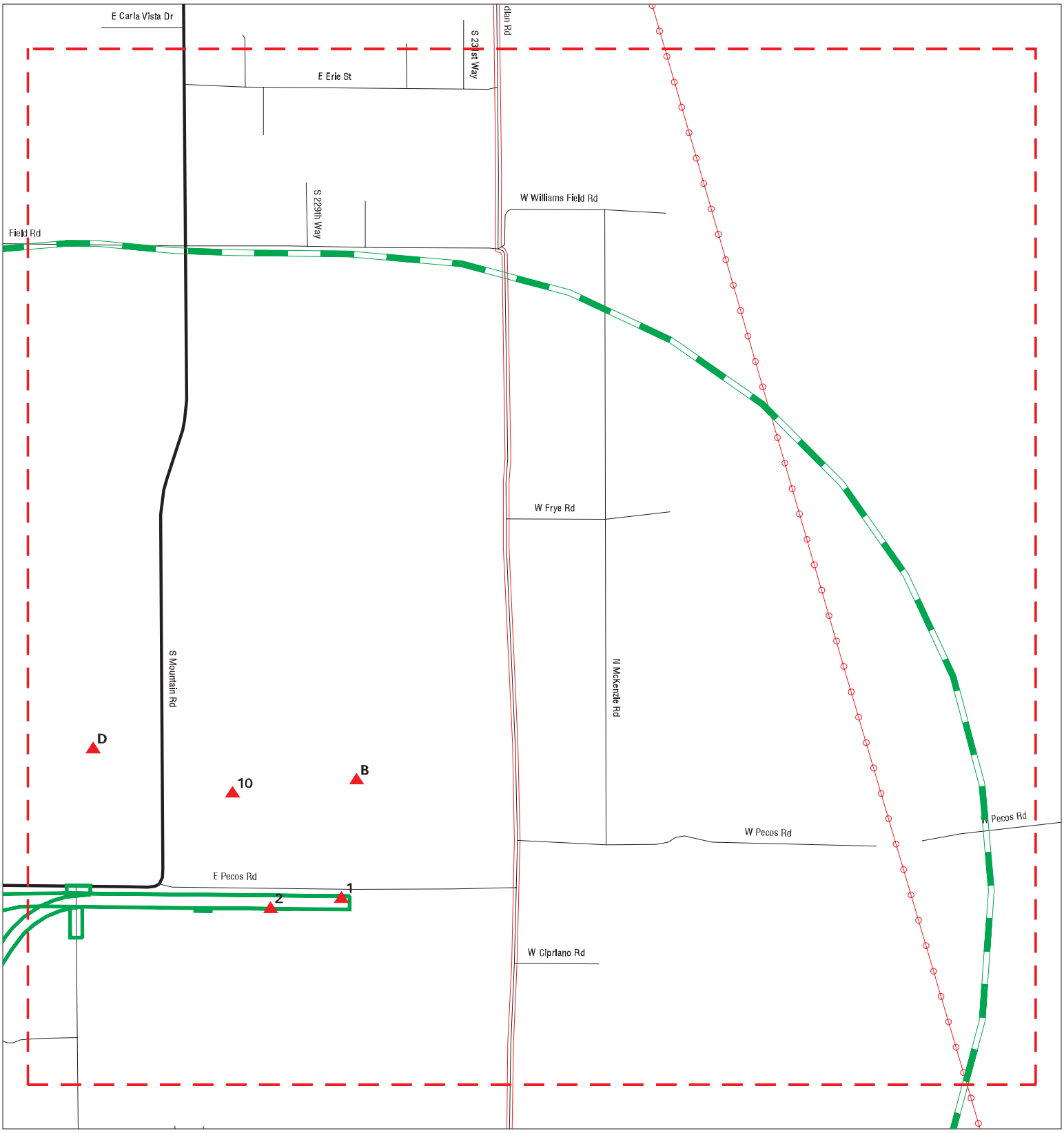
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MAPPED SITES SUMMARY - FOCUS MAP 4

Target Property:
MESA ARIZONA
MESA, AZ 85142

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
21 / 4	OLD DOMINION FREIGHT	10233 E. PECOS RD SW	AST	1283 0.243 North

Focus Map - 5 - 6992684.10s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Dept. Defense Sites
AZ NPL
Water Quality Assurance Revolving
Indian Reservations BIA

SITE NAME: UPRR PIRATE	CLIENT: Jacobs
ADDRESS: Mesa Arizona	CONTACT: Derek Foehr
CITY/STATE: Mesa AZ	INQUIRY #: 6992684.10s
ZIP: 85212	DATE: 05/25/22

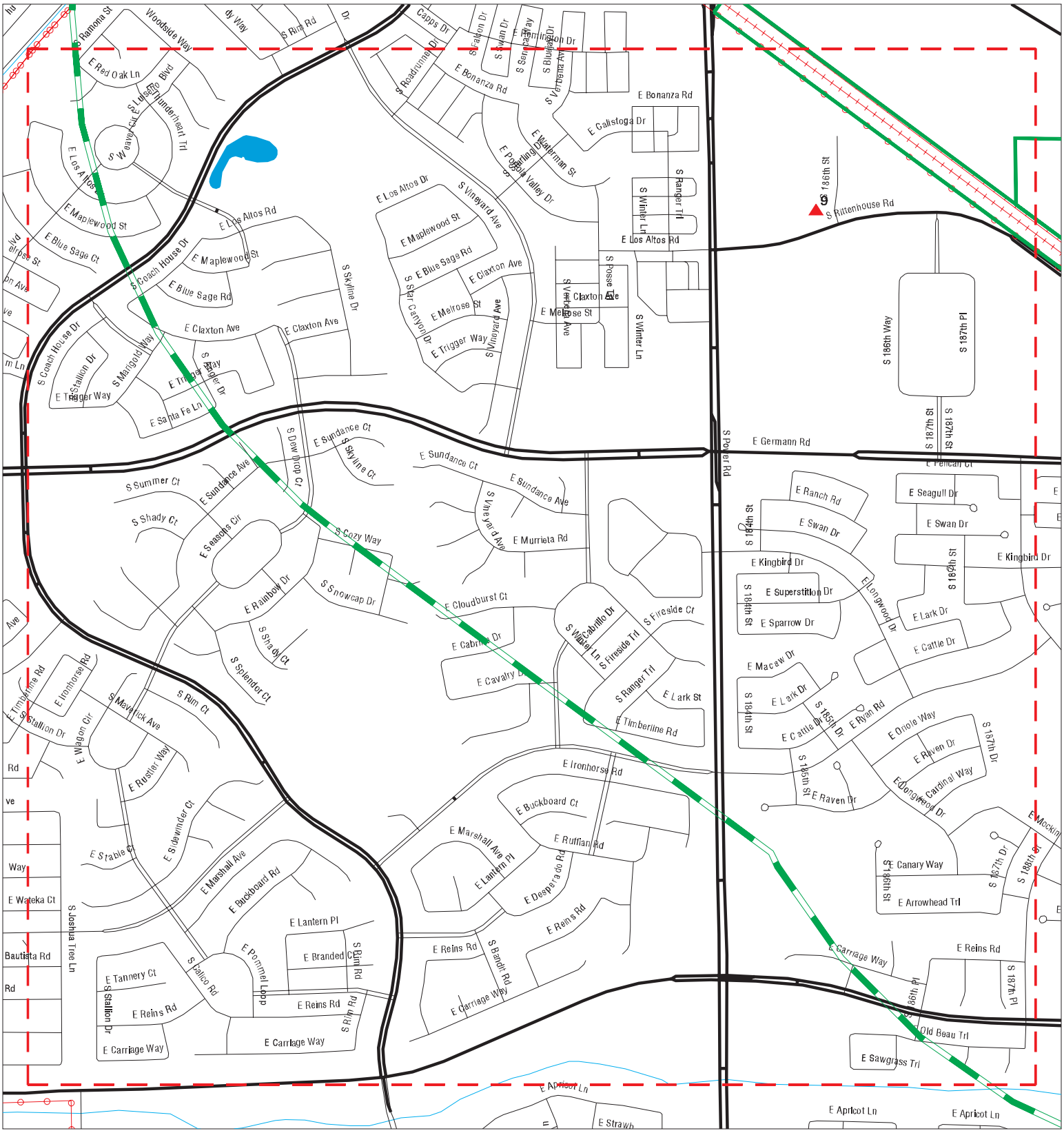
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MAPPED SITES SUMMARY - FOCUS MAP 5

Target Property:
MESA ARIZONA
MESA, AZ 85142

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
1 / 5	CMC STEEL ARIZONA AN		EMAP	TP
2 / 5	OUTFALL NW CORNER ON		EMAP	TP
10 / 5	MESA TRANSFER STATIO	6711 S MOUNTAIN RD	SWF/LF	848 0.161 North
B11 / 5	CRM OF AMERICA	11400 E PECOS RD	RCRA NonGen / NLR	968 0.183 North
B12 / 5	MARICOPA COUNTY - SO	11400 E PECOS RD	SWF/LF, SPILLS, Enforcement	968 0.183 North
B13 / 5	CRUM RUBBER MANUFACT	11400 E PECOS RD	AST	968 0.183 North
D17 / 5	MGC PURE CHEMICALS A	6560 S MOUNTAIN RD	EMAP, MANIFEST	1136 0.215 North
D18 / 5	MGC PURE CHEMICALS A	6560 S MOUNTAIN RD	RCRA-VSQG, TSCA, TRIS, FINDS, ECHO, MANI...	1136 0.215 North

Focus Map - 6 - 6992684.10s



SITE NAME: UPRR PIRATE	CLIENT: Jacobs
ADDRESS: Mesa Arizona	CONTACT: Derek Foehr
CITY/STATE: Mesa AZ	INQUIRY #: 6992684.10s
ZIP: 85212	DATE: 05/25/22

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MAPPED SITES SUMMARY - FOCUS MAP 6

Target Property:
MESA ARIZONA
MESA, AZ 85142

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
9 / 6	QUEEN CREEK SMILES	18550 E RITTENHOUSE	RCRA-VSQG	807 0.153 SW

Focus Map - 7 - 6992684.10s



Sites	Focus Map - Sites	Dept. Defense Sites
Target Property	Power Line	AZ NPL
Search Buffer	Pipe Line	Water Quality Assurance Revolving
Focus Map - No Sites	National Priority List Sites	Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: UPRR PIRATE	CLIENT: Jacobs
ADDRESS: Mesa Arizona	CONTACT: Derek Foehr
CITY/STATE: Mesa AZ	INQUIRY #: 6992684.10s
ZIP: 85212	DATE: 05/25/22

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MAPPED SITES SUMMARY - FOCUS MAP 7

Target Property:
MESA ARIZONA
MESA, AZ 85142

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
5 / 7	MOBIL3 STUDIO LLC	19122 E SEAGULL DR	EDR Hist Auto	370 0.070 West
25 / 7	TOWN OF QUEEN CREEK		PFAS	2344 0.444 South

Focus Map - 8 - 6992684.10s



Sites	Focus Map - Sites	Dept. Defense Sites
Target Property	Power Line	AZ NPL
Search Buffer	Pipe Line	Water Quality Assurance Revolving
Focus Map - No Sites	National Priority List Sites	Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: UPRR PIRATE	CLIENT: Jacobs
ADDRESS: Mesa Arizona	CONTACT: Derek Foehr
CITY/STATE: Mesa AZ	INQUIRY #: 6992684.10s
ZIP: 85212	DATE: 05/25/22

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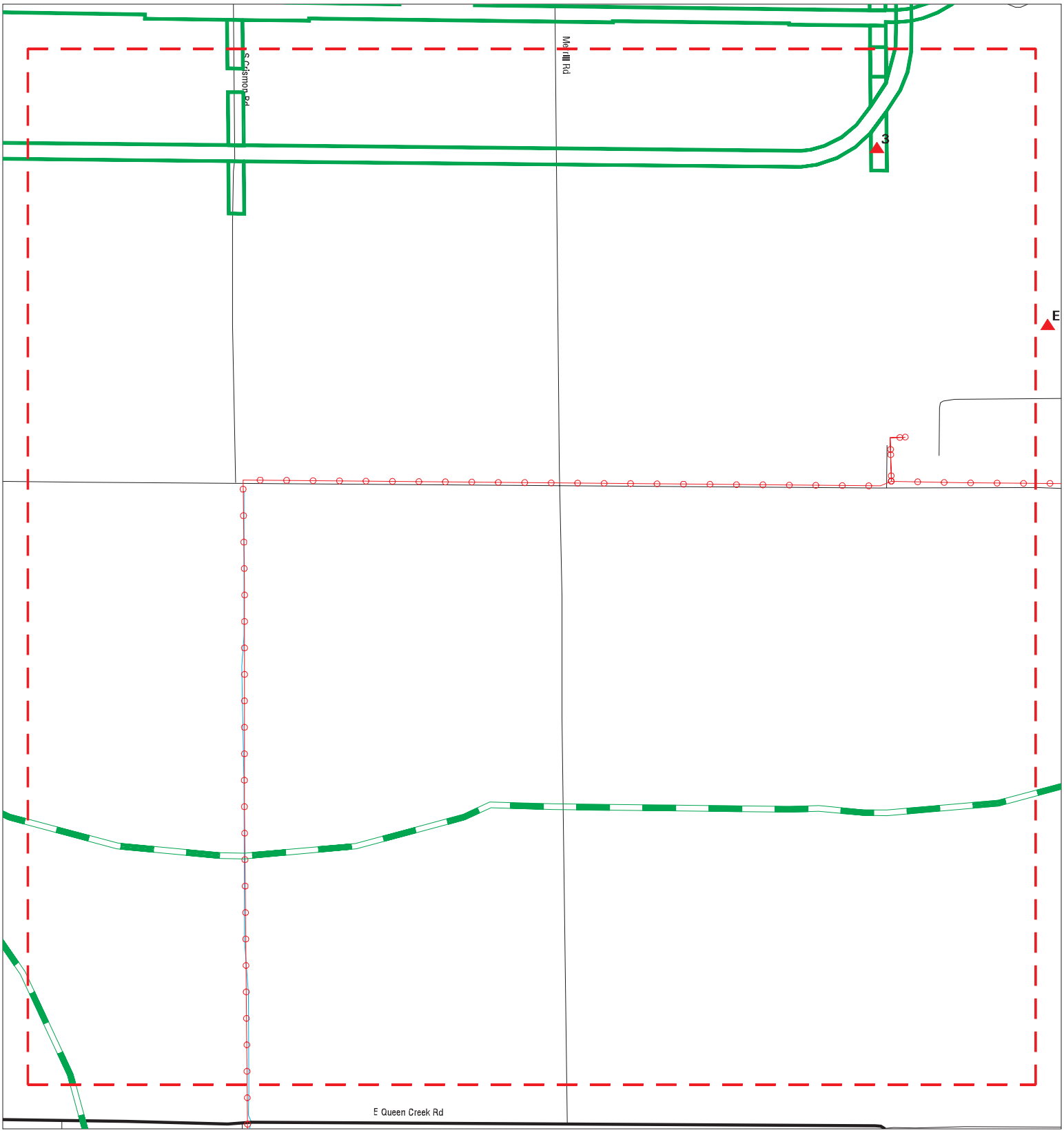
MAPPED SITES SUMMARY - FOCUS MAP 8

Target Property:
MESA ARIZONA
MESA, AZ 85142

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION

NO MAPPED SITES FOUND

Focus Map - 9 - 6992684.10s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Dept. Defense Sites
AZ NPL
Water Quality Assurance Revolving
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: UPRR PIRATE ADDRESS: Mesa Arizona CITY/STATE: Mesa AZ ZIP: 85212	CLIENT: Jacobs CONTACT: Derek Foehr INQUIRY #: 6992684.10s DATE: 05/25/22

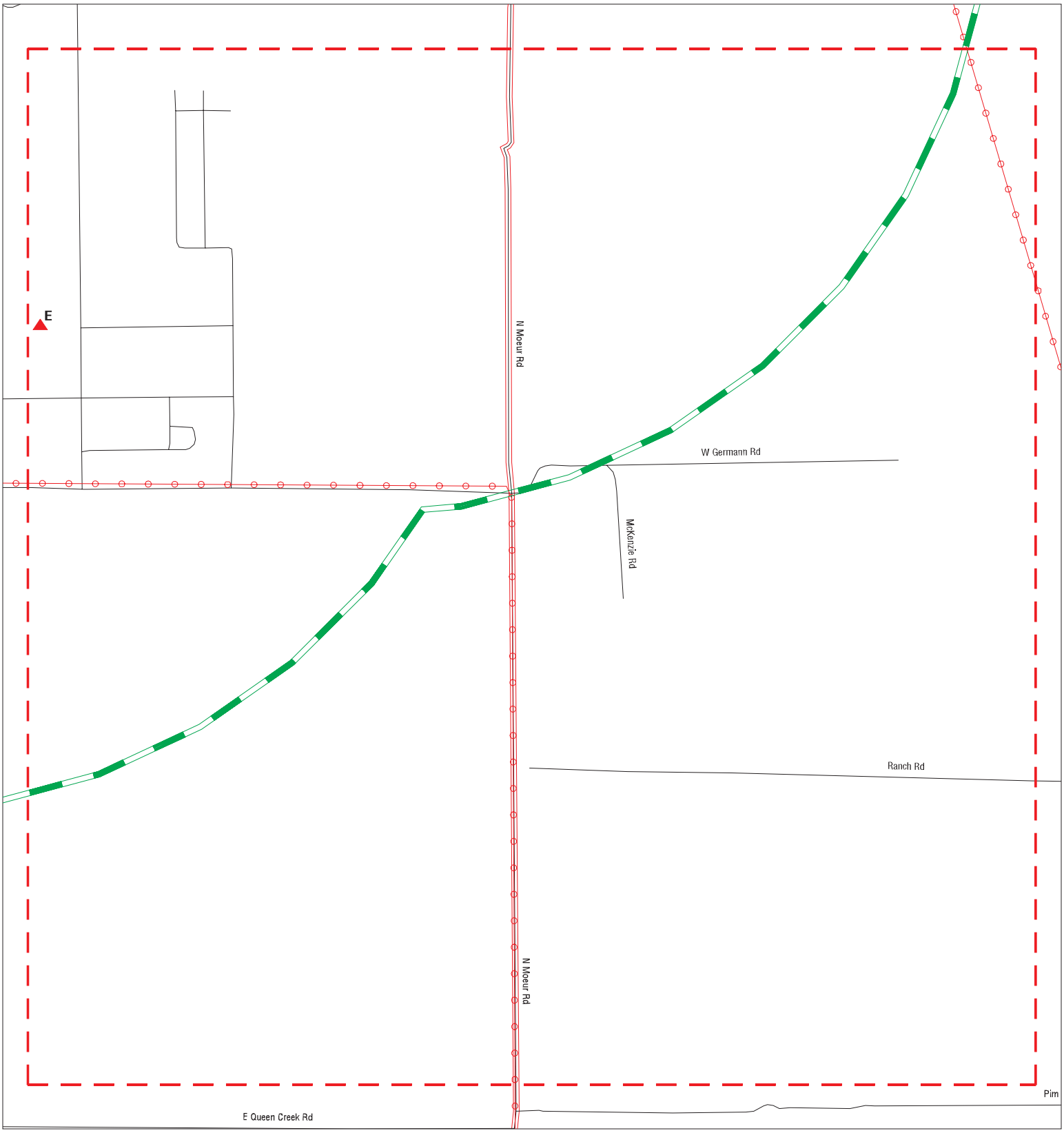
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MAPPED SITES SUMMARY - FOCUS MAP 9

Target Property:
MESA ARIZONA
MESA, AZ 85142

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
3 / 9	SIGNAL BUTTE BETWEEN		EMAP	TP

Focus Map - 10 - 6992684.10s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Dept. Defense Sites
AZ NPL
Water Quality Assurance Revolving
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: UPRR PIRATE	CLIENT: Jacobs
ADDRESS: Mesa Arizona	CONTACT: Derek Foehr
CITY/STATE: Mesa AZ	INQUIRY #: 6992684.10s
ZIP: 85212	DATE: 05/25/22

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MAPPED SITES SUMMARY - FOCUS MAP 10

Target Property:
MESA ARIZONA
MESA, AZ 85142

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
E23 / 10	TRW AUTOMOTIVE SYSTE	11202 E GERMANN RD	RCRA-TSDF, RCRA-LQG, SPILLS, MANIFEST	1828 0.346 SE
E24 / 10	TRW AUTOMOTIVE SYSTE	11202 E GERMANN RD	AZURITE, AUL, VCP, EMAP, Enforcement	1828 0.346 SE

Focus Map - 11 - 6992684.10s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Dept. Defense Sites
AZ NPL
Water Quality Assurance Revolving
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: UPRR PIRATE	CLIENT: Jacobs
ADDRESS: Mesa Arizona	CONTACT: Derek Foehr
CITY/STATE: Mesa AZ	INQUIRY #: 6992684.10s
ZIP: 85212	DATE: 05/25/22

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MAPPED SITES SUMMARY - FOCUS MAP 11

Target Property:
MESA ARIZONA
MESA, AZ 85142

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION

NO MAPPED SITES FOUND

Focus Map - 12 - 6992684.10s



- Sites
- Target Property
- Search Buffer
- Focus Map - No Sites
- Focus Map - Sites
- Power Line
- Pipe Line
- National Priority List Sites
- Dept. Defense Sites
- AZ NPL
- Water Quality Assurance Revolving
- Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: UPRR PIRATE	CLIENT: Jacobs
ADDRESS: Mesa Arizona	CONTACT: Derek Foehr
CITY/STATE: Mesa AZ	INQUIRY #: 6992684.10s
ZIP: 85212	DATE: 05/25/22

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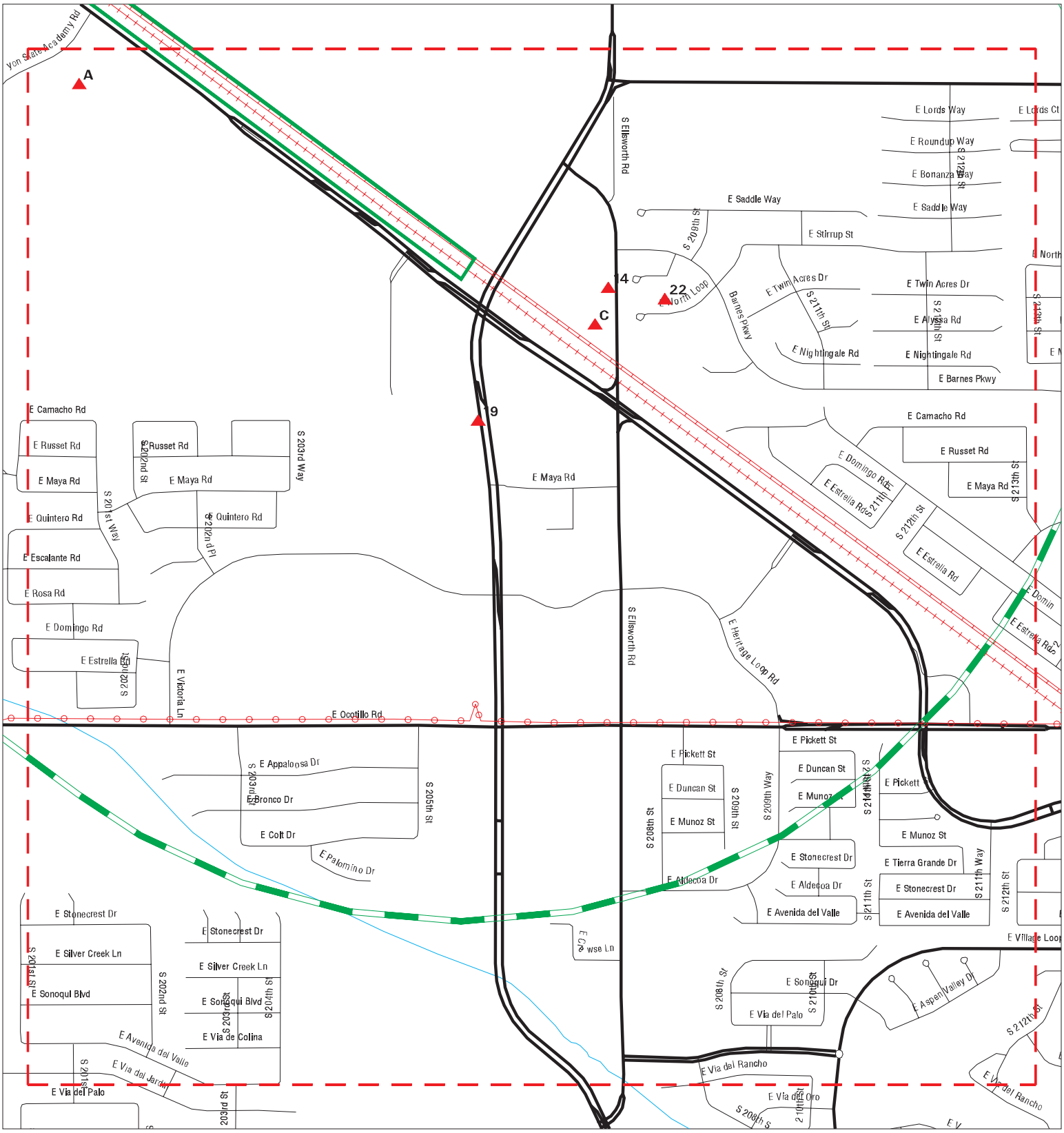
MAPPED SITES SUMMARY - FOCUS MAP 12

Target Property:
MESA ARIZONA
MESA, AZ 85142

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION

NO MAPPED SITES FOUND

Focus Map - 13 - 6992684.10s



SITE NAME: UPRR PIRATE	CLIENT: Jacobs
ADDRESS: Mesa Arizona	CONTACT: Derek Foehr
CITY/STATE: Mesa AZ	INQUIRY #: 6992684.10s
ZIP: 85212	DATE: 05/25/22

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MAPPED SITES SUMMARY - FOCUS MAP 13

Target Property:
MESA ARIZONA
MESA, AZ 85142

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
A6 / 13	ARIZONA BOYS RANCH	20061 E RITTENHOUSE	RCRA NonGen / NLR	582 0.110 SW
A7 / 13	CANYON STATE ACADEMY	20061 EAST RITTENHOU	AST	582 0.110 SW
A8 / 13	ARIZONA BOYS RANCH	20061 E RITTENHOUSE	UST	582 0.110 SW
14 / 13	PINTO CREEK MANAGEME	20820 S ELLSWORTH RD	LUST, UST, AST, EMAP	1125 0.213 ESE
C15 / 13	QUEEN CREEK SCHOOL M	20740 SOUTH ELLSWORT	AST	1127 0.213 ESE
C16 / 13	QUEEN CREEK UNIFIED	20740 S ELLSWORTH RD	AST	1127 0.213 ESE
19 / 13	BED, BATH AND BEYOND	21258 S ELLSWORTH LO	EMAP, MANIFEST	1167 0.221 South
22 / 13	PRISONER OF WAR CAMP		FUDS	1601 0.303 ESE

Focus Map - 14 - 6992684.10s



Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
Power Line
Pipe Line
National Priority List Sites
Dept. Defense Sites
AZ NPL
Water Quality Assurance Revolving
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: UPRR PIRATE	CLIENT: Jacobs
ADDRESS: Mesa Arizona	CONTACT: Derek Foehr
CITY/STATE: Mesa AZ	INQUIRY #: 6992684.10s
ZIP: 85212	DATE: 05/25/22

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MAPPED SITES SUMMARY - FOCUS MAP 14

Target Property:
MESA ARIZONA
MESA, AZ 85142

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION

NO MAPPED SITES FOUND

NPL **WILLIAMS AIR FORCE BASE** **NPL** **1000880901**
Region **WILLIAMS AFB** **SEMS** **AZ7570028582**
Target **CHANDLER, AZ 85224** **CORRACTS**
Property **RCRA-TSDF**
RCRA-VSQG
US ENG CONTROLS
US INST CONTROLS
ROD
Focus Map: **PRP**
2,3,1 **MANIFEST**

NPL:

EPA Region:	9
EPA ID:	AZ7570028582
Site ID:	900890
Name:	WILLIAMS AIR FORCE BASE
Address:	WILLIAMS AFB 6001 SOUTH POWER ROAD
City,State,Zip:	CHANDLER, AZ 85224
Federal:	Y
Final Date:	1989-11-21 00:00:00
Latitude:	33.30695
Longitude:	-111.6519
Site Score:	37.93
NAI:	Not reported
Native American Entity:	Not reported

NPL:

NPL Status:	Currently on the Final NPL
Substance ID:	Not reported
CAS Number:	Not reported
Substance:	Not reported
Pathway:	Not reported
Scoring:	Not reported

NPL Status:	Currently on the Final NPL
Substance ID:	A020
CAS Number:	Not reported
Substance:	CHROMIUM AND COMPOUNDS
Pathway:	GROUND WATER PATHWAY
Scoring:	3

NPL Status:	Currently on the Final NPL
Substance ID:	C049
CAS Number:	100-41-4
Substance:	ETHYLBENZENE
Pathway:	NO PATHWAY INDICATED
Scoring:	1

NPL Status:	Currently on the Final NPL
Substance ID:	C178
CAS Number:	Not reported
Substance:	COPPER AND COMPOUNDS
Pathway:	GROUND WATER PATHWAY
Scoring:	3

NPL Status:	Currently on the Final NPL
Substance ID:	C247
CAS Number:	Not reported
Substance:	ZINC AND COMPOUNDS
Pathway:	NO PATHWAY INDICATED

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Scoring: 1

NPL Status: Currently on the Final NPL
Substance ID: D006
CAS Number: 7440-43-9
Substance: CADMIUM (CD)
Pathway: GROUND WATER PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: D008
CAS Number: 7439-92-1
Substance: LEAD (PB)
Pathway: GROUND WATER PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: U019
CAS Number: 71-43-2
Substance: BENZENE
Pathway: NO PATHWAY INDICATED
Scoring: 1

NPL Status: Currently on the Final NPL
Substance ID: U070
CAS Number: 95-50-1
Substance: DICHLOROBENZENE, 1,2-
Pathway: NO PATHWAY INDICATED
Scoring: 1

NPL Status: Currently on the Final NPL
Substance ID: U071
CAS Number: 541-73-1
Substance: DICHLOROBENZENE, 1,3-
Pathway: NO PATHWAY INDICATED
Scoring: 1

NPL Status: Currently on the Final NPL
Substance ID: U072
CAS Number: 106-46-7
Substance: DICHLOROBENZENE, 1,4-
Pathway: NO PATHWAY INDICATED
Scoring: 1

NPL Status: Currently on the Final NPL
Substance ID: U159
CAS Number: 78-93-3
Substance: METHYL ETHYL KETONE
Pathway: NO PATHWAY INDICATED
Scoring: 1

NPL Status: Currently on the Final NPL
Substance ID: U220
CAS Number: 108-88-3
Substance: TOLUENE
Pathway: NO PATHWAY INDICATED
Scoring: 1

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

NPL Status:	Currently on the Final NPL
Substance ID:	U239
CAS Number:	1330-20-7
Substance:	XYLENE
Pathway:	NO PATHWAY INDICATED
Scoring:	1

Summary Details:

Conditions at proposal July 14, 1989): Williams Air Force Base WAFB) covers 4,127 acres approximately 30 miles southeast of Phoenix, Ari ona, in Maricopa County, near Chandler. The base is surrounded by irrigated farmland or desert. Sincethe base was constructed in 1941, it has served as a training facility, primarily pilot training. Industrial activities at WAFB have included heavy maintenance of aircraft and ground equipment in support of pilot training. WAFB is participating in the Installation Restoration Program IRP), established in 1978. Under this program, the Department of Defense seeks to identify, investigate, and clean up contamination from ha ardous materials. As part of IRP, the Air Force has identified a number of potentially contaminated areas, including Fire Protection Training Area No. 2, which covers approximately 8.5 acres near the southern boundary of the base. Prior to 1948, the area was used as a parking apron. From 1948 until the late 1960s, it was an unlined pit where large quantities of the flammable liquid waste generated at WAFB were burned as part of fire training. Any flammable materials remaining infiltrated the soil or evaporated. These materials included waste fuels, oils, lubricants, cleaning solvents, and some paint stripper. Starting in 1983, a concrete liner was installed under the burn pits; however, overflow is still allowed to seep into the ground. In September 1986, an Air Force contractor found lead in soil, and in March 1987 found lead in monitoring wells on the base. The Southwest Drainage System SWDS) has operated since the base was constructed in 1941. It received plating shop rinse water containing chromium, cadmium, and copper; aircraft washing wastes consisting of methyl ethyl ketone, toluene, polyurethane, paint thinners, and sludges; fuel; lubricants; hydraulic fluid; and spills from flight line and maintenance operations. SWDS soil samplestaken inOctober 1984 contained lead, chromium, and cadmium. SWDS drains into a storm water retention pond in the southwest corner of the base. In 1988, the Air Force installed a concrete lining in part of SWDS. WAFB housing is within 100 feetof SWDS. A 34-acre landfill in the southwest corner of the base operated during 1941-76, accepting primarily trash and garbage. However, unknown quantities of ha ardous waste were dumped along with the household wastes. In April 1987, lead and cadmium were detected in monitoring wells, including one between the landfill and SWDS and adjacent to the pond that received SWDS wastes. WAFB has four wells that supply drinking water to an estimated 3,400 employees. One of thewells is 1,500 feet from the contaminated well at the landfill. The Air Force has completed an initial assessment of the base and is developing a workplan for a remedial investigation/feasibility study RI/FS) to determine the type and extent of contamination and identify alternatives for remedial action. Field investigations are underway. Status November 21, 1989): The Air Force is continuing to develop the RI/FS workplan and has installed a few additional monitoringwells.

NPL:

NPL Status:	Currently on the Final NPL
Category Description:	Depth To Aquifer-<= 10 Feet
Category Value:	10

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

NPL Status: Currently on the Final NPL
Category Description: Distance To Nearest Population-> 0 And <= 1/4 Mile
Category Value: 10

NPL:
NPL Name: WILLIAMS AIR FORCE BASE

NPL:
EPA Region: 09
Site ID: 0900890
Site Status: F
Federal Site: Y
Date Deleted: Not reported
Date Finalized: 11/21/89
Date Proposed: 07/14/89

NPL:
Proposed Date: 07/14/1989
Final Date: 11/21/1989
Deleted Date: Not reported
NPL Status: Final

SEMS:
Site ID: 0900890
EPA ID: AZ7570028582
Name: WILLIAMS AIR FORCE BASE
Address: WILLIAMS AFB
Address 2: 6001 SOUTH POWER ROAD
City,State,Zip: CHANDLER, AZ 85224
Cong District: 06,5
FIPS Code: 04013
Latitude: +33.306950
Longitude: -111.651900
FF: Y
NPL: Currently on the Final NPL
Non NPL Status: Not reported

SEMS Detail:
Region: 09
Site ID: 0900890
EPA ID: AZ7570028582
Site Name: WILLIAMS AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: AR
Action Name: ADMIN REC
SEQ: 1
Start Date: 2000-08-10 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0900890

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

EPA ID: AZ7570028582
Site Name: WILLIAMS AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: NP
Action Name: PROPOSED
SEQ: 1
Start Date: 1989-07-14 04:00:00
Finish Date: 7/14/1989 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0900890
EPA ID: AZ7570028582
Site Name: WILLIAMS AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: NF
Action Name: NPL FINL
SEQ: 1
Start Date: 1989-11-21 05:00:00
Finish Date: 11/21/1989 5:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0900890
EPA ID: AZ7570028582
Site Name: WILLIAMS AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: HR
Action Name: HAZRANK
SEQ: 1
Start Date: 1987-06-01 04:00:00
Finish Date: 6/1/1987 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0900890
EPA ID: AZ7570028582
Site Name: WILLIAMS AIR FORCE BASE
NPL: F
FF: Y
OU: 04
Action Code: OM
Action Name: OM
SEQ: 4
Start Date: 2000-04-14 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: Fed Fac

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	03
Action Code:	LX
Action Name:	FF RD
SEQ:	3
Start Date:	1996-06-18 04:00:00
Finish Date:	9/24/2002 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac

Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	01
Action Code:	LX
Action Name:	FF RD
SEQ:	2
Start Date:	1994-07-25 04:00:00
Finish Date:	2/22/1995 5:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac

Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	01
Action Code:	LV
Action Name:	FF RV
SEQ:	5
Start Date:	1990-09-21 04:00:00
Finish Date:	12/20/1992 5:00:00 AM
Qual:	C
Current Action Lead:	Fed Fac

Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	06
Action Code:	NH
Action Name:	FF RI
SEQ:	1
Start Date:	1998-01-01 05:00:00
Finish Date:	2/16/2018 5:00:00 AM

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	00
Action Code:	LV
Action Name:	FF RV
SEQ:	1
Start Date:	1990-09-21 04:00:00
Finish Date:	5/31/1991 4:00:00 AM
Qual:	C
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	03
Action Code:	RO
Action Name:	ROD
SEQ:	3
Start Date:	1996-06-18 04:00:00
Finish Date:	6/18/1996 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	02
Action Code:	LY
Action Name:	FF RA
SEQ:	1
Start Date:	1992-12-30 05:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	06
Action Code:	LV
Action Name:	FF RV

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

SEQ: 6
Start Date: 2000-11-09 05:00:00
Finish Date: 4/30/2010 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0900890
EPA ID: AZ7570028582
Site Name: WILLIAMS AIR FORCE BASE
NPL: F
FF: Y
OU: 01
Action Code: LY
Action Name: FF RA
SEQ: 2
Start Date: 1995-03-09 05:00:00
Finish Date: 10/6/1995 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0900890
EPA ID: AZ7570028582
Site Name: WILLIAMS AIR FORCE BASE
NPL: F
FF: Y
OU: 04
Action Code: LW
Action Name: FF RI/FS
SEQ: 5
Start Date: 1995-07-31 04:00:00
Finish Date: 4/14/2000 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0900890
EPA ID: AZ7570028582
Site Name: WILLIAMS AIR FORCE BASE
NPL: F
FF: Y
OU: 03
Action Code: LW
Action Name: FF RI/FS
SEQ: 4
Start Date: 1993-01-19 05:00:00
Finish Date: 6/18/1996 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0900890
EPA ID: AZ7570028582
Site Name: WILLIAMS AIR FORCE BASE
NPL: F
FF: Y

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

OU:	01
Action Code:	OM
Action Name:	OM
SEQ:	1
Start Date:	1995-10-06 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	05
Action Code:	RO
Action Name:	ROD
SEQ:	4
Start Date:	1997-10-14 04:00:00
Finish Date:	10/14/1997 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	00
Action Code:	SI
Action Name:	SI
SEQ:	1
Start Date:	1987-06-01 04:00:00
Finish Date:	6/1/1987 4:00:00 AM
Qual:	H
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	02
Action Code:	LX
Action Name:	FF RD
SEQ:	1
Start Date:	1992-12-30 05:00:00
Finish Date:	9/16/1994 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	00
Action Code:	LV
Action Name:	FF RV
SEQ:	2
Start Date:	1990-09-21 04:00:00
Finish Date:	12/20/1992 5:00:00 AM
Qual:	S
Current Action Lead:	Fed Fac

Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	06
Action Code:	RO
Action Name:	ROD
SEQ:	8
Start Date:	2018-02-16 05:00:00
Finish Date:	2/16/2018 5:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac

Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	04
Action Code:	RO
Action Name:	ROD
SEQ:	5
Start Date:	2000-04-14 04:00:00
Finish Date:	4/14/2000 4:00:00 AM
Qual:	R
Current Action Lead:	Fed Fac

Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	01
Action Code:	RO
Action Name:	ROD
SEQ:	2
Start Date:	1994-05-18 04:00:00
Finish Date:	5/18/1994 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	00
Action Code:	MA
Action Name:	ST COOP
SEQ:	1
Start Date:	1990-07-24 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	Fed Fac

Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	01
Action Code:	LV
Action Name:	FF RV
SEQ:	4
Start Date:	1990-09-21 04:00:00
Finish Date:	5/31/1991 4:00:00 AM
Qual:	C
Current Action Lead:	Fed Fac

Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	05
Action Code:	LW
Action Name:	FF RI/FS
SEQ:	1
Start Date:	1993-09-01 04:00:00
Finish Date:	10/14/1997 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac

Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	00
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	1985-04-01 06:00:00
Finish Date:	5/1/1985 5:00:00 AM

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Qual:	L
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	01
Action Code:	LW
Action Name:	FF RI/FS
SEQ:	3
Start Date:	1990-09-21 04:00:00
Finish Date:	5/18/1994 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	02
Action Code:	LW
Action Name:	FF RI/FS
SEQ:	2
Start Date:	1990-09-21 04:00:00
Finish Date:	12/30/1992 5:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	00
Action Code:	LV
Action Name:	FF RV
SEQ:	3
Start Date:	1994-05-10 04:00:00
Finish Date:	7/28/1995 4:00:00 AM
Qual:	C
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	02
Action Code:	RO
Action Name:	ROD

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

SEQ: 1
Start Date: 1992-12-30 05:00:00
Finish Date: 12/30/1992 5:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0900890
EPA ID: AZ7570028582
Site Name: WILLIAMS AIR FORCE BASE
NPL: F
FF: Y
OU: 01
Action Code: LX
Action Name: FF RD
SEQ: 6
Start Date: 2014-03-03 05:00:00
Finish Date: 10/1/2014 5:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0900890
EPA ID: AZ7570028582
Site Name: WILLIAMS AIR FORCE BASE
NPL: F
FF: Y
OU: 01
Action Code: LY
Action Name: FF RA
SEQ: 3
Start Date: 2014-09-09 05:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0900890
EPA ID: AZ7570028582
Site Name: WILLIAMS AIR FORCE BASE
NPL: F
FF: Y
OU: 01
Action Code: NI
Action Name: FF FS
SEQ: 2
Start Date: 2009-10-01 04:00:00
Finish Date: 9/29/2012 5:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0900890
EPA ID: AZ7570028582
Site Name: WILLIAMS AIR FORCE BASE
NPL: F
FF: Y

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

OU:	02
Action Code:	NI
Action Name:	FF FS
SEQ:	3
Start Date:	2012-05-31 05:00:00
Finish Date:	12/28/2012 5:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	02
Action Code:	LX
Action Name:	FF RD
SEQ:	7
Start Date:	2013-06-21 05:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	02
Action Code:	LY
Action Name:	FF RA
SEQ:	4
Start Date:	2014-09-29 05:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582
Site Name:	WILLIAMS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	00
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1980-08-01 04:00:00
Finish Date:	8/1/1980 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0900890
EPA ID:	AZ7570028582

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Site Name: WILLIAMS AIR FORCE BASE
NPL: F
FF: Y
OU: 06
Action Code: NH
Action Name: FF RI
SEQ: 2
Start Date: 1997-04-01 05:00:00
Finish Date: 2/18/1999 5:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

CORRACTS:
Name: WILLIAMS AIR FORCE BASE
Address: 7411 E ULYSSES AVE
Address 2: Not reported
EPA ID: AZ7570028582
Area Name: ENTIRE FACILITY
Corrective Action: LEAD AGENCY DETERMINATION
Actual Date: 19850501
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: WILLIAMS AIR FORCE BASE
Address: 7411 E ULYSSES AVE
Address 2: Not reported
EPA ID: AZ7570028582
Area Name: ENTIRE FACILITY
Corrective Action: RFA COMPLETED-ASSESSMENT WAS A RFA
Actual Date: 19930301
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: WILLIAMS AIR FORCE BASE
Address: 7411 E ULYSSES AVE
Address 2: Not reported
EPA ID: AZ7570028582
Area Name: ENTIRE FACILITY
Corrective Action: PA OR CERCLA INSPECTION
Actual Date: 19850501
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: WILLIAMS AIR FORCE BASE
Address: 7411 E ULYSSES AVE
Address 2: Not reported
EPA ID: AZ7570028582
Area Name: ENTIRE FACILITY
Corrective Action: DETERMINATION OF NEED FOR AN INVESTIGATION-INVESTIGATION IS NECESSARY
Actual Date: 19900101

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: WILLIAMS AIR FORCE BASE
Address: 7411 E ULYSSES AVE
Address 2: Not reported
EPA ID: AZ7570028582
Area Name: ENTIRE FACILITY
Corrective Action: PA OR CERCLA INSPECTION
Actual Date: 19870601
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: WILLIAMS AIR FORCE BASE
Address: 7411 E ULYSSES AVE
Address 2: Not reported
EPA ID: AZ7570028582
Area Name: ENTIRE FACILITY
Corrective Action: INVESTIGATION IMPOSITION
Actual Date: 19900921
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: WILLIAMS AIR FORCE BASE
Address: 7411 E ULYSSES AVE
Address 2: Not reported
EPA ID: AZ7570028582
Area Name: OU5
Corrective Action: INVESTIGATION COMPLETE
Actual Date: 19980220
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Y
Surface Water Release Indicator: Not reported

Name: WILLIAMS AIR FORCE BASE
Address: 7411 E ULYSSES AVE
Address 2: Not reported
EPA ID: AZ7570028582
Area Name: ENTIRE FACILITY
Corrective Action: REFERRED TO A NON-RCRA AUTHORITY-REFERRED TO CERCLA
Actual Date: 19960101
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: WILLIAMS AIR FORCE BASE
Address: 7411 E ULYSSES AVE
Address 2: Not reported
EPA ID: AZ7570028582

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Area Name: ENTIRE FACILITY
Corrective Action: CMS IMPOSITION
Actual Date: 19900921
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: WILLIAMS AIR FORCE BASE
Address: 7411 E ULYSSES AVE
Address 2: Not reported
EPA ID: AZ7570028582
Area Name: ENTIRE FACILITY
Corrective Action: STABILIZATION MEASURES EVALUATION-FURTHER INVESTIGATION NECESSARY
Actual Date: 19930713
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: WILLIAMS AIR FORCE BASE
Address: 7411 E ULYSSES AVE
Address 2: Not reported
EPA ID: AZ7570028582
Area Name: OU5
Corrective Action: REMEDY DECISION
Actual Date: 19980220
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Y
Surface Water Release Indicator: Not reported

Click this hyperlink while viewing on your computer to access
2 additional CORRACTS: record(s) in the EDR Site Report.

RCRA-VSQG:
Date Form Received by Agency: 20190923
Handler Name: WILLIAMS AIR FORCE BASE
Handler Address: 7411 E ULYSSES AVE
Handler City,State,Zip: MESA, AZ 85206
EPA ID: AZ7570028582
Contact Name: MICHELLE LEWIS
Contact Address: Not reported
Contact City,State,Zip: Not reported
Contact Telephone: 210-395-8236
Contact Fax: Not reported
Contact Email: Not reported
Contact Title: Not reported
EPA Region: 09
Land Type: Other
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Handler Activities
State District Owner: Not reported
State District: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Mailing Address:	3411 OLSON ST
Mailing City,State,Zip:	MCCLELLAN, CA 95652
Owner Name:	Not reported
Owner Type:	Not reported
Operator Name:	Not reported
Operator Type:	Not reported
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Storage
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Storage
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	Yes
Non-TSDFs Where RCRA CA has Been Imposed Universe:	Yes
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	High
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190926
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Exporter of Spent Lead Acid Batteries: No
Recycler Activity Without Storage: No
Manifest Broker: No
Sub-Part P Indicator: No

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: MULTIPLE OPS - ALL USAF COMMANDS
Legal Status: Federal
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 822 FTW/DE
Owner/Operator City,State,Zip: CITY NOT REPORTED, AZ 99999
Owner/Operator Telephone: 602-988-2611
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: HQAF BASE DISPOSAL AGENCY
Legal Status: Federal
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1700 N MOORE ST STE 2300
Owner/Operator City,State,Zip: ARLINGTON, VA 22209-2802
Owner/Operator Telephone: 703-696-5501
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: HQAF BASE DISPOSAL AGENCY
Legal Status: Federal
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1700 N MOORE ST STE 2300
Owner/Operator City,State,Zip: ARLINGTON, VA 22209-2802
Owner/Operator Telephone: 703-696-5501
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 19921006
Handler Name: U S A F WILLIAMS AFB AFCEE/ ERB
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Receive Date:	20050114
Handler Name: AFRDA / DC-WILLIAMS	
Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	20060302
Handler Name: AFRDA / DC-WILLIAMS	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	20080324
Handler Name: WILLIAMS AIR FORCE BASE	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	20070327
Handler Name: WILLIAMS AIR FORCE BASE	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	20090223
Handler Name: WILLIAMS AIR FORCE BASE	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20100126
Handler Name: WILLIAMS AIR FORCE BASE
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20190923
Handler Name: WILLIAMS AIR FORCE BASE
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19931104
Handler Name: USAF WILLIAMS AFB AFCEE/ ERB
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19900615
Handler Name: WILLIAMS AIR FORCE BASE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19920301
Handler Name: WILLIAMS AIR FORCE BASE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19940222
Handler Name: WILLIAMS AIR FORCE BASE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56291
NAICS Description: REMEDIATION SERVICES

NAICS Code: 92811
NAICS Description: NATIONAL SECURITY

Facility Has Received Notices of Violation:
Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19880524
Actual Return to Compliance Date: 19880524
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 19871020
Enforcement Identifier: 003
Date of Enforcement Action: 19870905
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19891109
Actual Return to Compliance Date: 19920915
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 006
Date of Enforcement Action: 19920817
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19860312
Actual Return to Compliance Date:	19880524
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19861015
Enforcement Identifier:	001
Date of Enforcement Action:	19860905
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19891109
Actual Return to Compliance Date: 19920915
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 19901226
Enforcement Identifier: 005
Date of Enforcement Action: 19901126
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19931221
Actual Return to Compliance Date:	19940928
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19940321
Enforcement Identifier:	009
Date of Enforcement Action:	19941228
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: LDR - General
Date Violation was Determined: 19870422
Actual Return to Compliance Date: 19880824
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA
Scheduled Compliance Date: 19880824
Enforcement Identifier: 001
Date of Enforcement Action: 19880824
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19950324
Actual Return to Compliance Date: 19950822
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19870623
Actual Return to Compliance Date:	19891109
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19900416
Enforcement Identifier:	004
Date of Enforcement Action:	19900306
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19860515
Actual Return to Compliance Date:	19891109
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19900416
Enforcement Identifier:	004
Date of Enforcement Action:	19900306
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19960220
Actual Return to Compliance Date: 19960702
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 19960520
Enforcement Identifier: 010
Date of Enforcement Action: 19960423
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19870610
Actual Return to Compliance Date:	19880524
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19871020
Enforcement Identifier:	002
Date of Enforcement Action:	19870903
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19891109
Actual Return to Compliance Date:	19920915
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19901226
Enforcement Identifier:	004
Date of Enforcement Action:	19900306
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 19911220
Actual Return to Compliance Date: 19930826
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 007
Date of Enforcement Action: 19921207
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - General
Date Violation was Determined:	19870422
Actual Return to Compliance Date:	19870610
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19910228
Actual Return to Compliance Date:	19920915
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: LDR - General
Date Violation was Determined: 19870422
Actual Return to Compliance Date: 19880824
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA
Scheduled Compliance Date: 19880824
Enforcement Identifier: 001
Date of Enforcement Action: 19880824
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - Closure/Post-Closure
Date Violation was Determined:	19870422
Actual Return to Compliance Date:	19870610
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	19930325
Actual Return to Compliance Date:	19930826
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19930625
Enforcement Identifier:	008
Date of Enforcement Action:	19930621
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Evaluation Action Summary:
Evaluation Date: 19880610
Evaluation Responsible Agency: State
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9STA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 19880524
Scheduled Compliance Date: 19871020
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 19891109
Evaluation Responsible Agency: State
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9STA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 19920915
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 19971230
Evaluation Responsible Agency: State
Found Violation: No
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9STA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: Not reported
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Former Citation:	Not reported
Evaluation Date:	19860312
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19880524
Scheduled Compliance Date:	19861015
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19891109
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19920915
Scheduled Compliance Date:	19901226
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19931221
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19940928
Scheduled Compliance Date:	19940321
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19930713
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19870422
Evaluation Responsible Agency:	EPA
Found Violation:	Yes

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19880824
Scheduled Compliance Date:	19880824
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19880824
Evaluation Responsible Agency:	EPA
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19850515
Evaluation Responsible Agency:	EPA
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19950324
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19950822
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19870623
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19891109
Scheduled Compliance Date:	19900416

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19860515
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19891109
Scheduled Compliance Date:	19900416
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19960220
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19960702
Scheduled Compliance Date:	19960520
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19931221
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19870610
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19880524
Scheduled Compliance Date:	19871020
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Evaluation Date:	19940928
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	NOT A SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19891109
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19920915
Scheduled Compliance Date:	19901226
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19880623
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19911220
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19930826
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19870422
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19870610
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19910228
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19920915
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19870422
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19880824
Scheduled Compliance Date:	19880824
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19870422
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19870610
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19930325
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19930826
Scheduled Compliance Date:	19930625
Date of Request:	Not reported
Date Response Received:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Request Agency: Not reported
Former Citation: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

RCRA-VSQG:

Date Form Received by Agency:		20190923
Handler Name:	WILLIAMS AIR FORCE BASE	
Handler Address:		7411 E ULYSSES AVE
Handler City,State,Zip:		MESA, AZ 85206
EPA ID:		AZ7570028582
Contact Name:		MICHELLE LEWIS
Contact Address:		Not reported
Contact City,State,Zip:		Not reported
Contact Telephone:		210-395-8236
Contact Fax:		Not reported
Contact Email:		Not reported
Contact Title:		Not reported
EPA Region:		09
Land Type:		Other
Federal Waste Generator Description:		Conditionally Exempt Small Quantity Generator
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		3411 OLSON ST
Mailing City,State,Zip:		MCCLELLAN, CA 95652
Owner Name:		Not reported
Owner Type:		Not reported
Operator Name:		Not reported
Operator Type:		Not reported
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Storage
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported
Permit Workload Universe:		Not reported
Permit Progress Universe:		Storage
Post-Closure Workload Universe:		Not reported
Closure Workload Universe:		Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	Yes
Non-TSDFs Where RCRA CA has Been Imposed Universe:	Yes
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	High
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190926
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	MULTIPLE OPS - ALL USAF COMMANDS
Legal Status:	Federal
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	822 FTW/DE
Owner/Operator City,State,Zip:	CITY NOT REPORTED, AZ 99999
Owner/Operator Telephone:	602-988-2611
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	HQAF BASE DISPOSAL AGENCY
Legal Status:	Federal
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1700 N MOORE ST STE 2300
Owner/Operator City,State,Zip:	ARLINGTON, VA 22209-2802
Owner/Operator Telephone:	703-696-5501
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	HQAF BASE DISPOSAL AGENCY
Legal Status:	Federal
Date Became Current:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Date Ended Current:	Not reported
Owner/Operator Address:	1700 N MOORE ST STE 2300
Owner/Operator City,State,Zip:	ARLINGTON, VA 22209-2802
Owner/Operator Telephone:	703-696-5501
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	19921006
Handler Name:	U S A F WILLIAMS AFB AFCEE/ ERB
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	20050114
Handler Name:	AFRDA / DC-WILLIAMS
Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	20060302
Handler Name:	AFRDA / DC-WILLIAMS
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	20080324
Handler Name:	WILLIAMS AIR FORCE BASE
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20070327
Handler Name: WILLIAMS AIR FORCE BASE
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20090223
Handler Name: WILLIAMS AIR FORCE BASE
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20100126
Handler Name: WILLIAMS AIR FORCE BASE
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20190923
Handler Name: WILLIAMS AIR FORCE BASE
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19931104

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Handler Name: USAF WILLIAMS AFB AFCEE/ ERB
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19900615
Handler Name: WILLIAMS AIR FORCE BASE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19920301
Handler Name: WILLIAMS AIR FORCE BASE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19940222
Handler Name: WILLIAMS AIR FORCE BASE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56291
NAICS Description: REMEDIATION SERVICES

NAICS Code: 92811
NAICS Description: NATIONAL SECURITY

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Facility Has Received Notices of Violation:

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19880524
Actual Return to Compliance Date:	19880524
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19871020
Enforcement Identifier:	003
Date of Enforcement Action:	19870905
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19891109
Actual Return to Compliance Date:	19920915
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	006
Date of Enforcement Action:	19920817
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19860312
Actual Return to Compliance Date:	19880524
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19861015
Enforcement Identifier:	001
Date of Enforcement Action:	19860905
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19891109
Actual Return to Compliance Date:	19920915
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19901226
Enforcement Identifier:	005
Date of Enforcement Action:	19901126
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19931221
Actual Return to Compliance Date: 19940928
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 19940321
Enforcement Identifier: 009
Date of Enforcement Action: 19941228
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	19870422
Actual Return to Compliance Date:	19880824
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	19880824
Enforcement Identifier:	001
Date of Enforcement Action:	19880824
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19950324
Actual Return to Compliance Date:	19950822
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19870623
Actual Return to Compliance Date: 19891109
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 19900416
Enforcement Identifier: 004
Date of Enforcement Action: 19900306
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19860515
Actual Return to Compliance Date:	19891109
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19900416
Enforcement Identifier:	004
Date of Enforcement Action:	19900306
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19960220
Actual Return to Compliance Date:	19960702
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19960520
Enforcement Identifier:	010
Date of Enforcement Action:	19960423
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19870610
Actual Return to Compliance Date:	19880524
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19871020
Enforcement Identifier:	002
Date of Enforcement Action:	19870903
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19891109
Actual Return to Compliance Date: 19920915
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 19901226
Enforcement Identifier: 004
Date of Enforcement Action: 19900306
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	19911220
Actual Return to Compliance Date:	19930826
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	007
Date of Enforcement Action:	19921207
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 19870422
Actual Return to Compliance Date: 19870610
Return to Compliance Qualifier: Unverifiable
Violation Responsible Agency: EPA
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19910228
Actual Return to Compliance Date:	19920915
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	19870422
Actual Return to Compliance Date:	19880824
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	19880824
Enforcement Identifier:	001
Date of Enforcement Action:	19880824
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - Closure/Post-Closure
Date Violation was Determined: 19870422
Actual Return to Compliance Date: 19870610
Return to Compliance Qualifier: Unverifiable
Violation Responsible Agency: EPA
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 19930325
Actual Return to Compliance Date: 19930826
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 19930625
Enforcement Identifier: 008
Date of Enforcement Action: 19930621
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Evaluation Action Summary:
Evaluation Date: 19880610
Evaluation Responsible Agency: State
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9STA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 19880524
Scheduled Compliance Date: 19871020
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 19891109
Evaluation Responsible Agency: State
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9STA

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19920915
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19971230
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19860312
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19880524
Scheduled Compliance Date:	19861015
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19891109
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19920915
Scheduled Compliance Date:	19901226
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19931221
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19940928
Scheduled Compliance Date:	19940321
Date of Request:	Not reported
Date Response Received:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19930713
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19870422
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19880824
Scheduled Compliance Date:	19880824
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19880824
Evaluation Responsible Agency:	EPA
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19850515
Evaluation Responsible Agency:	EPA
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19950324
Evaluation Responsible Agency:	State

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19950822
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19870623
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19891109
Scheduled Compliance Date:	19900416
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19860515
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19891109
Scheduled Compliance Date:	19900416
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19960220
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19960702
Scheduled Compliance Date:	19960520
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19931221
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19870610
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19880524
Scheduled Compliance Date:	19871020
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19940928
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	NOT A SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19891109
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19920915
Scheduled Compliance Date:	19901226
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19880623
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Evaluation Date:	19911220
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19930826
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19870422
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19870610
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19910228
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19920915
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19870422
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19880824
Scheduled Compliance Date:	19880824
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19870422
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19870610
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19930325
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19930826
Scheduled Compliance Date:	19930625
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

SIte:

Name:	WILLIAMS AIR FORCE BASE
Address:	WILLIAMS AFB
Address 2:	Not reported
City,State,Zip:	CHANDLER, AZ 85224
Event Code:	Not reported
Action Taken Date:	05/13/2014
EPA ID:	AZ7570028582
Action Name:	ROD Amendment
Action ID:	2
Operable Unit:	01
Contaminated Media:	Groundwater
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2014
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

Media:

EPA ID:	AZ7570028582
Contaminated Media:	Soil
Action ID:	1
Operable Unit:	02
Action Name:	ROD Amendment
Action Taken Date:	08/16/1996
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1996
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Soil
Action ID:	1
Operable Unit:	02
Action Name:	ROD Amendment
Action Taken Date:	08/16/1996
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1996
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

EPA ID: AZ7570028582
Contaminated Media: Soil
Action ID: 1
Operable Unit: 02
Action Name: ROD Amendment
Action Taken Date: 08/16/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1996
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Soil
Action ID: 1
Operable Unit: 02
Action Name: ROD Amendment
Action Taken Date: 08/16/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1996
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Soil
Action ID: 1
Operable Unit: 02
Action Name: ROD Amendment
Action Taken Date: 08/16/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1996
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Soil
Action ID: 1
Operable Unit: 02
Action Name: ROD Amendment
Action Taken Date: 08/16/1996

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1996
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Groundwater
Action ID:	2
Operable Unit:	01
Action Name:	ROD Amendment
Action Taken Date:	05/13/2014
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2014
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Soil
Action ID:	4
Operable Unit:	05
Action Name:	Record of Decision
Action Taken Date:	10/14/1997
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1998
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Soil
Action ID:	5
Operable Unit:	04
Action Name:	Record of Decision
Action Taken Date:	04/14/2000
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2000

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Soil
Action ID: 5
Operable Unit: 04
Action Name: Record of Decision
Action Taken Date: 04/14/2000
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2000
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Soil
Action ID: 5
Operable Unit: 04
Action Name: Record of Decision
Action Taken Date: 04/14/2000
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2000
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Groundwater
Action ID: 2
Operable Unit: 01
Action Name: ROD Amendment
Action Taken Date: 05/13/2014
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2014
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Contaminated Media:	Groundwater
Action ID:	2
Operable Unit:	01
Action Name:	ROD Amendment
Action Taken Date:	05/13/2014
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2014
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Soil
Action ID:	2
Operable Unit:	01
Action Name:	ROD Amendment
Action Taken Date:	05/13/2014
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2014
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Soil Gas
Action ID:	2
Operable Unit:	01
Action Name:	ROD Amendment
Action Taken Date:	05/13/2014
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2014
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Groundwater
Action ID:	2
Operable Unit:	01
Action Name:	ROD Amendment
Action Taken Date:	05/13/2014
Event Code:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2014
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Groundwater
Action ID:	2
Operable Unit:	01
Action Name:	ROD Amendment
Action Taken Date:	05/13/2014
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2014
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Soil Gas
Action ID:	2
Operable Unit:	01
Action Name:	ROD Amendment
Action Taken Date:	05/13/2014
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2014
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Soil
Action ID:	2
Operable Unit:	01
Action Name:	ROD Amendment
Action Taken Date:	05/13/2014
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2014
NPL Status:	Currently on the Final NPL

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Groundwater
Action ID: 3
Operable Unit: 02
Action Name: ROD Amendment
Action Taken Date: 09/28/2013
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2013
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Groundwater
Action ID: 3
Operable Unit: 02
Action Name: ROD Amendment
Action Taken Date: 09/28/2013
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2013
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Groundwater
Action ID: 3
Operable Unit: 02
Action Name: ROD Amendment
Action Taken Date: 09/28/2013
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2013
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Free-phase NAPL

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Action ID:	3
Operable Unit:	02
Action Name:	ROD Amendment
Action Taken Date:	09/28/2013
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2013
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Groundwater
Action ID:	3
Operable Unit:	02
Action Name:	ROD Amendment
Action Taken Date:	09/28/2013
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2013
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Groundwater
Action ID:	3
Operable Unit:	02
Action Name:	ROD Amendment
Action Taken Date:	09/28/2013
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2013
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Free-phase NAPL
Action ID:	3
Operable Unit:	02
Action Name:	ROD Amendment
Action Taken Date:	09/28/2013
Event Code:	Not reported
Contact Name:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2013
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Free-phase NAPL
Action ID: 3
Operable Unit: 02
Action Name: ROD Amendment
Action Taken Date: 09/28/2013
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2013
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Groundwater
Action ID: 1
Operable Unit: 02
Action Name: Record of Decision
Action Taken Date: 12/30/1992
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1993
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Soil
Action ID: 1
Operable Unit: 02
Action Name: Record of Decision
Action Taken Date: 12/30/1992
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1993
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Latitude:	+33.306950
Longitude:	-111.651900
EPA ID:	AZ7570028582
Contaminated Media:	Soil
Action ID:	2
Operable Unit:	01
Action Name:	Record of Decision
Action Taken Date:	05/18/1994
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1994
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900
EPA ID:	AZ7570028582
Contaminated Media:	Soil
Action ID:	2
Operable Unit:	01
Action Name:	Record of Decision
Action Taken Date:	05/18/1994
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1994
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900
EPA ID:	AZ7570028582
Contaminated Media:	Groundwater
Action ID:	3
Operable Unit:	02
Action Name:	ROD Amendment
Action Taken Date:	09/28/2013
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2013
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900
EPA ID:	AZ7570028582
Contaminated Media:	Groundwater
Action ID:	1

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Operable Unit:	02
Action Name:	Record of Decision
Action Taken Date:	12/30/1992
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1993
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Soil
Action ID:	1
Operable Unit:	02
Action Name:	Record of Decision
Action Taken Date:	12/30/1992
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1993
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Groundwater
Action ID:	1
Operable Unit:	02
Action Name:	Record of Decision
Action Taken Date:	12/30/1992
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1993
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Groundwater
Action ID:	1
Operable Unit:	02
Action Name:	Record of Decision
Action Taken Date:	12/30/1992
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Event: Not reported
Federal Facility: Y
Fiscal Year: 1993
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Groundwater
Action ID: 1
Operable Unit: 02
Action Name: Record of Decision
Action Taken Date: 12/30/1992
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1993
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Groundwater
Action ID: 1
Operable Unit: 02
Action Name: Record of Decision
Action Taken Date: 12/30/1992
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1993
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Free-phase NAPL
Action ID: 1
Operable Unit: 02
Action Name: Record of Decision
Action Taken Date: 12/30/1992
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1993
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Groundwater
Action ID: 1
Operable Unit: 02
Action Name: Record of Decision
Action Taken Date: 12/30/1992
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1993
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Groundwater
Action ID: 1
Operable Unit: 02
Action Name: Record of Decision
Action Taken Date: 12/30/1992
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1993
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Groundwater
Action ID: 1
Operable Unit: 02
Action Name: Record of Decision
Action Taken Date: 12/30/1992
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1993
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

EPA ID: AZ7570028582
Contaminated Media: Free-phase NAPL
Action ID: 1
Operable Unit: 02

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Action Name:	Record of Decision
Action Taken Date:	12/30/1992
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1993
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Groundwater
Action ID:	1
Operable Unit:	02
Action Name:	Record of Decision
Action Taken Date:	12/30/1992
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1993
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Soil
Action ID:	1
Operable Unit:	02
Action Name:	Record of Decision
Action Taken Date:	12/30/1992
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1993
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Free-phase NAPL
Action ID:	1
Operable Unit:	02
Action Name:	Record of Decision
Action Taken Date:	12/30/1992
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Federal Facility:	Y
Fiscal Year:	1993
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Soil
Action ID:	3
Operable Unit:	03
Action Name:	Record of Decision
Action Taken Date:	06/18/1996
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1996
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Soil
Action ID:	3
Operable Unit:	03
Action Name:	Record of Decision
Action Taken Date:	06/18/1996
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1996
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Soil
Action ID:	4
Operable Unit:	05
Action Name:	Record of Decision
Action Taken Date:	10/14/1997
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1998
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

EPA ID:	AZ7570028582
Contaminated Media:	Soil
Action ID:	4
Operable Unit:	05
Action Name:	Record of Decision
Action Taken Date:	10/14/1997
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1998
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Groundwater
Action ID:	1
Operable Unit:	02
Action Name:	Record of Decision
Action Taken Date:	12/30/1992
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1993
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Groundwater
Action ID:	1
Operable Unit:	02
Action Name:	Record of Decision
Action Taken Date:	12/30/1992
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1993
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

EPA ID:	AZ7570028582
Contaminated Media:	Soil
Action ID:	1
Operable Unit:	02
Action Name:	Record of Decision
Action Taken Date:	12/30/1992

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1993
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

US INST CONTROLS:

Name:	WILLIAMS AIR FORCE BASE
Address:	WILLIAMS AFB
Address 2:	Not reported
City,State,Zip:	CHANDLER, AZ 85224
EPA ID:	AZ7570028582
Action Name:	ROD Amendment
Action ID:	2
Operable Unit:	01
Actual Date:	05/13/2014
Contaminated Media:	Soil Gas
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2014
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

Name:	WILLIAMS AIR FORCE BASE
Address:	WILLIAMS AFB
Address 2:	Not reported
City,State,Zip:	CHANDLER, AZ 85224
EPA ID:	AZ7570028582
Action Name:	Record of Decision
Action ID:	1
Operable Unit:	02
Actual Date:	12/30/1992
Contaminated Media:	Soil
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1993
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

Name:	WILLIAMS AIR FORCE BASE
Address:	WILLIAMS AFB

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Address 2:	Not reported
City,State,Zip:	CHANDLER, AZ 85224
EPA ID:	AZ7570028582
Action Name:	Record of Decision
Action ID:	2
Operable Unit:	01
Actual Date:	05/18/1994
Contaminated Media:	Soil
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1994
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

Name:	WILLIAMS AIR FORCE BASE
Address:	WILLIAMS AFB
Address 2:	Not reported
City,State,Zip:	CHANDLER, AZ 85224
EPA ID:	AZ7570028582
Action Name:	ROD Amendment
Action ID:	2
Operable Unit:	01
Actual Date:	05/13/2014
Contaminated Media:	Groundwater
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2014
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+33.306950
Longitude:	-111.651900

Name:	WILLIAMS AIR FORCE BASE
Address:	WILLIAMS AFB
Address 2:	Not reported
City,State,Zip:	CHANDLER, AZ 85224
EPA ID:	AZ7570028582
Action Name:	Record of Decision
Action ID:	1
Operable Unit:	02
Actual Date:	12/30/1992
Contaminated Media:	Groundwater
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1993
NPL Status:	Currently on the Final NPL

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

Name: WILLIAMS AIR FORCE BASE
Address: WILLIAMS AFB
Address 2: Not reported
City,State,Zip: CHANDLER, AZ 85224
EPA ID: AZ7570028582
Action Name: Record of Decision
Action ID: 5
Operable Unit: 04
Actual Date: 04/14/2000
Contaminated Media: Soil
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2000
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +33.306950
Longitude: -111.651900

ROD:
Name: WILLIAMS AIR FORCE BASE
Address: WILLIAMS AFB 6001 SOUTH POWER ROAD
City,State,Zip: CHANDLER, AZ 85224
EPA ID: AZ7570028582
RG: 9
Site ID: 900890
Action: FF ROD
Operable Unit Number: OU06
SEQ ID: 8
Action Completion: 2018-02-16 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: WILLIAMS AIR FORCE BASE
Address: WILLIAMS AFB 6001 SOUTH POWER ROAD
City,State,Zip: CHANDLER, AZ 85224
EPA ID: AZ7570028582
RG: 9
Site ID: 900890
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: OU02
SEQ ID: 1
Action Completion: 1992-12-30 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: WILLIAMS AIR FORCE BASE
Address: WILLIAMS AFB 6001 SOUTH POWER ROAD
City,State,Zip: CHANDLER, AZ 85224
EPA ID: AZ7570028582
RG: 9

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Site ID: 900890
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: OVERALL SITE + LAND FILL LF004
SEQ ID: 2
Action Completion: 1994-05-18 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: WILLIAMS AIR FORCE BASE
Address: WILLIAMS AFB 6001 SOUTH POWER ROAD
City,State,Zip: CHANDLER, AZ 85224
EPA ID: AZ7570028582
RG: 9
Site ID: 900890
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: OU03
SEQ ID: 3
Action Completion: 1996-06-18 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: WILLIAMS AIR FORCE BASE
Address: WILLIAMS AFB 6001 SOUTH POWER ROAD
City,State,Zip: CHANDLER, AZ 85224
EPA ID: AZ7570028582
RG: 9
Site ID: 900890
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: OU05
SEQ ID: 4
Action Completion: 1997-10-14 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: WILLIAMS AIR FORCE BASE
Address: WILLIAMS AFB 6001 SOUTH POWER ROAD
City,State,Zip: CHANDLER, AZ 85224
EPA ID: AZ7570028582
RG: 9
Site ID: 900890
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: OU04
SEQ ID: 5
Action Completion: 2000-04-14 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: WILLIAMS AIR FORCE BASE
Address: WILLIAMS AFB 6001 SOUTH POWER ROAD
City,State,Zip: CHANDLER, AZ 85224
EPA ID: AZ7570028582
RG: 9
Site ID: 900890
Action: FF ROD Amendment
Operable Unit Number: OU02
SEQ ID: 1
Action Completion: 1996-08-16 00:00:00

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

NPL Status: Final
Non NPL Status: Not reported

Name: WILLIAMS AIR FORCE BASE
Address: WILLIAMS AFB 6001 SOUTH POWER ROAD
City,State,Zip: CHANDLER, AZ 85224
EPA ID: AZ7570028582
RG: 9
Site ID: 900890
Action: FF ROD Amendment
Operable Unit Number: OVERALL SITE + LAND FILL LF004
SEQ ID: 2
Action Completion: 2014-05-13 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: WILLIAMS AIR FORCE BASE
Address: WILLIAMS AFB 6001 SOUTH POWER ROAD
City,State,Zip: CHANDLER, AZ 85224
EPA ID: AZ7570028582
RG: 9
Site ID: 900890
Action: FF ROD Amendment
Operable Unit Number: OU02
SEQ ID: 3
Action Completion: 2013-09-28 00:00:00
NPL Status: Final
Non NPL Status: Not reported

PRP:
PRP Name: STATE OF ARIZONA/DEPT. OF ENVIRONMENTAL QUALITY
STATE OF ARIZONA/DEPT. OF WATER QUALITY
STATE OF ARIZONA/OFFICE OF THE ATTORNEY GENERAL
U.S. AIR FORCE
U.S. AIR FORCE
U.S. AIR FORCE
U.S. EPA

AZ MANIFEST:
Name: AFRPA/DC - WILLIAMS
Address: 82 ABG DEEV WILLIAMS AFB
City,State,Zip: WILLIAMS AFB, AZ
Report Year: Not reported
EPA Id: AZ7570028582
Business Type: F
Mailing Address: 143 BILLY MITCHELL BLVD #1
Mailing State: TX
Contact Name: ANTHONY MORRISS
Contact Phone: (210) 925-3050
Management Methods: Not reported
Date Generator Signed The Manifest: 11/03/2004
Transporter EPA Id Number: AZ0000303032
Date Transporter Signed The Manifest: 11/05/2004
TSD EPA Id Number: ARD069748192
Volume: P
Date TSD Signed Manifest: / /
DOT Id Number: UN1993

WILLIAMS AIR FORCE BASE (Continued) **1000880901**

Quantity:	32.00
Waste Code 1:	D001
Waste Code 2:	D035
Waste Code 3:	Not reported
Waste Code 4:	D040
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	AIR FORCE REAL PROPERTY AGENCY
Address:	7411 E ULYSSES AVE
City,State,Zip:	MESA, AZ 85206
Report Year:	2011
EPA Id:	AZ7570028582
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN1992
Quantity:	166.6
Waste Code 1:	D001
Waste Code 2:	D007
Waste Code 3:	U031
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

SPL **WILLIAMS AIR FORCE BASE** **AZ NPL** **S111026374**
Region **SPL** **N/A**
Target Property **MESA, AZ**

Focus Map: 2,3,1

AZ NPL:

Name:	FORMER WILLIAMS AIR FORCE BASE
Address:	Not reported
City,State,Zip:	AZ
NPL Status:	National Priorities List Sites
AZ NPL Contaminants:	Groundwater contaminants include light non-aqueous phase liquid (LNAPL) or "free product" related to aviation fuel; volatile organic compounds (VOCs) related to fuels and industrial solvents, and pesticide (dieldrin). Soil contaminants include fuel-related hydrocarbons, VOCs, Poly Chlorinated Biphenyls (PCBs), pesticide (dieldrin), metals, and per- and polyfluorinated chemicals (PFAS). Munition debris (generally empty munition casings) have been found in a relatively small, secured area near the south central border. A few, small, empty chemical agent identification set (CAIS) vials have also been found in the munitions debris area. The few, small, empty vials appeared to contain mustard gas (liquid-state) samples (chemical warfare agent vials).
Contact Name A:	EPA Project Manager
Contact Phone A:	415-972-3150
Contact A:	Not reported
Contact Email A:	dAlmeida.carolyn@epa.gov
Contact Name B:	US Air Force Project Manager
Contact Phone B:	315-356-0810
Contact Fax B:	Not reported
Contact Email B:	catherine.jerrard@us.af.mil
Contact Name C:	ADEQ Project Manager
Contact Phone C:	602-771-4121
Contact Fax C:	Not reported
Contact Email C:	miller.wayne@azdeq.gov
Information Repository:	The complete official site file can be reviewed at: EPA Region IX Records Center Mail Stop SFD-7C 95 Hawthorne Street Room 403 San Francisco, CA 94105 P: 415-536-2000 Local repository: Arizona State University East Library 7001 E. Williams Field Road, Bldg. 20 Mesa, AZ 85212
Site Hydrogeology:	Site hydrogeology includes unconsolidated and intermingled clay, silt, sand and gravel layers associated with stream channel and alluvial fan deposition from the surface to about 260 feet below the ground surface (ft bgs). This is locally designated as the Upper Unit. From about 260 ft bgs to nearly 1,000 ft bgs are weakly consolidated silt, silty sand and gravel layers with locally occurring moderately to well-cemented siltstone associated with former playa, alluvial fan and fluvial deposits. This is locally designated as the Middle Unit. A leaky aquitard (layer of low permeability) separates the Upper Unit and Middle Unit near WAFB. Historically, groundwater levels in the vicinity of the former WAFB have fluctuated as groundwater pumping volumes increased and decreased. Static groundwater, circa 1900, was reported to be approximately 80 ft bgs near the former WAFB. By the 1970s, substantial groundwater drawdown was attributed to agriculture and municipal groundwater withdrawal. Since the late 1970s, however, groundwater levels have recovered (risen) 0.5 to 3 ft per year. In 2019, groundwater was encountered 129 ft bgs at Site SS017, and

WILLIAMS AIR FORCE BASE (Continued) **S111026374**

between 126 and 147 ft bgs at Site LF004 (shallow and deeper water zones, respectively). In 2018, groundwater was encountered between 137 and 160 ft bgs at Site ST012. Groundwater flow direction in the Upper Unit is variable, ranging from west-to-east near LF004 and from west to northeasterly near ST012. Groundwater flow direction has shifted when compared to historic data recorded during high-yield extraction well pumping years.

Public Health Impact: There currently are no known exposures to contaminants of concern (COCs) in excess of applicable health-based levels. This includes groundwater, soil (surface and subsurface) and soil vapor studies conducted to date. The City of Mesa supplies drinking water to the site from an off-site source. Irrigation water is drawn from wells generally upgradient from contaminant impacted areas or from potable water sources. Unintended exposure to contaminated soil and groundwater is a potential health hazard. Some sites include soil contaminants left in place. Land-use controls have been placed at those known sites to minimize exposure potential.

Site History: 1941 - 1948 Williams Air Force Base (WAFB) was constructed in 1941 and served as a training facility, primarily pilot training. At the time the base was constructed, the site was surrounded by irrigated farmland and desert. Industrial activities at WAFB included heavy maintenance of aircraft and ground equipment in support of pilot training. WAFB played a strategic role in America's aviation history. Over a span of 52 years, more than 26,500 men and women earned their wings at Williams. Gearing up for the combat pilot demands of World War II, the Army Air Corps broke ground in southeast Mesa for its Advanced Flying School on July 16, 1941. In February 1942, the growing military base's name was changed to Williams Field to honor Charles Linton Williams, an Arizona-born pilot. The facility was re-designated as WAFB in January 1948. WAFB was the U.S. Army Air Corp s foremost pilot training facility, graduating more student pilots and instructors than any other base in the country and supplying 25 percent of the U.S. Air Force (USAF) pilots annually. Contaminants from base activities included organic solvents and paint strippers, petroleum spills and leaks, metal plating wastes, hydraulic fluids, pesticides, and radiological wastes. Discharges and disposals at WAFB have resulted in soil and groundwater contamination. 1983 Site investigations initiated in 1983 under the auspices of the Department of Defense installation restoration program identified thirteen potentially contaminated areas including: two fire training areas, a fuel storage area, two surface storm drainage areas, a hazardous material storage area, a landfill, a pesticide burial pit, a radiological disposal area, and four underground storage tanks. 1989 WAFB was placed on the U.S. Environmental Protection Agency's (EPA's) National Priority List (NPL) on November 21. Remedial Investigations (RIs) initiated under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) discovered several new areas of contamination that were added to the existing list of sites. 1991 - 1993 WAFB was closed in 1993. After the announcement of closure in 1991, the community immediately began work to redevelop the base. Upon closing, WAFB was transferred to the Air Force Base Conversion Agency (AFBCA). AFBCA assumed responsibilities for the restoration and reuse of the base and worked with the Restoration Advisory Board (RAB) and Williams Redevelopment Partnership to maximize reuse of the land. For cleanup

WILLIAMS AIR FORCE BASE (Continued) **S111026374**

purposes, the former base was divided into six operable units, OU-1 through OU-6. Each OU consists of many sites of potential concern; the following lists only the sites of primary interest for each OU: OU-1 contains the main base landfill (LF004) for which a Record of Decision (ROD) was signed in 1994. The remedy specified a permeable cap (soil) and monitor wells. At the time of the ROD, only low levels of contaminants were present in the wells. In 1997, higher levels of contamination were discovered in the landfill monitor wells and a follow-on RI was conducted in 2000. Concentrations of contaminants in some of the monitor wells installed during the follow-on RI are the highest ever seen at the site and indicate that contamination is migrating off of the former base. OU-2 addresses the groundwater and soil contamination at the ST-12. The results of the RI at ST-12 have confirmed that the primary contaminants are JP-4 (a jet fuel) and aviation gas (AVGAS). There is a groundwater plume at ST-12 which resulted from the leakage of an unknown quantity of JP-4 and AVGAS. It is estimated that the groundwater contains 640,000 to 1.4 million gallons of JP-4 and AVGAS. The EPA believes as much as 12 million gallons may be in the soil and groundwater. Rising groundwater in the area, 40 feet over the last ten years, has covered the fuel and smeared it across many feet of deep soil making access to the plume (for remediation) increasingly difficult. The ROD for OU-2 was signed in December 1992. The USAF has yet to implement a groundwater remedy at the site. OU-3 formerly addressed the vadose zone beginning 25 feet below land surface down to the water table at ST012 which is now a part of OU-2. The primary site of concern at OU-3 now is the FT-02. The 25,000 cubic yards of contaminated deep soils at the site were treated in place by enhancing natural bacterial breakdown of contaminants with bioventing. The ROD for OU-3 was signed in late June 1996. The standards agreed to in the ROD have not been achieved. However, the USAF, in accordance with new state rules has conducted a risk assessment which determined that the cleanup levels attained do not pose a risk to human health or environment. OU-4 includes South Desert Village (SDV) which is currently serving as student housing for Arizona State University (ASU) East. Beneath SDV is a former six-station skeet range which was demolished and graded in 1950, prior to construction of SDV. Contamination in the form of lead pellets in soil associated with the former skeet range underlies 85 housing units in SDV. Since complete removal of contaminated soils would have required demolition of this valuable housing, a compromise solution involved removal of the top six inches of contaminated soil and installation of six inches of clean soil. The replacement soil is considered a protective cap over the remaining contamination, and will be subject to repair and maintenance, as well as land use restrictions in the form of a voluntary environmental mitigation and use restriction (VEMUR). The VEMUR defines the affected area as non-residential, and places deed restrictions to bind occupants to maintain the protective cap. OU-5 was set up to address nine soil sites which were closed out through expedited removal fill actions. No groundwater contamination is known to exist at any of the OU-5 sites. The OU-5 ROD was signed in February 1998 OU-6 was established to address three sites requiring additional investigation. The site of primary concern (site SS-17 Old Pesticide/Paint Shop) at OU-6 revealed soil contamination (dieldrin and volatile organic compounds [VOCs]). A removal action of dieldrin contaminated soil was completed and backfilled with clean soil following verification of clean up goals. The dieldrin contaminated soil was transported to a temporary

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treatment facility constructed near the former base landfill to undergo bioremediation. 1998 - 2004 OU-3 primary concern was the FT-02. Bioventing utilized at the site did not attain residential cleanup levels. The USAF disagreed with the regulatory agencies (ADEQ and EPA) determination that a Declaration of Environmental Use Restrictions (DEUR) was required for the site. Changes (November 2004) in the USAFs policy regarding acceptable risk and reliance on a 1998 USAF receptor evaluation (risk assessment) led to a USAF decision that the site was suitable for unrestricted use. 2004 - 2005 OU-2 addressed groundwater and soil contamination at site ST-12. The USAF and subcontractors completed design of the groundwater and vadose zone remedies. The vadose zone remedy consisted of a full-scale soil vapor extraction (SVE) system. The SVE system began operation in April 2005. The groundwater remedy consisted of a process called Thermal Enhanced Extraction (TEE). As of December 2004 the construction was 90% complete. However, the USAF decided to withdraw the funding for completion of construction and operation of the TEE system. The USAF notified the regulators of the funding withdrawal in February 2005. At that time the USAF had already spent approximately $3,000,000 in the design and construction of the TEE system. EPA and ADEQ issued a formal letter of dispute regarding USAF's failure to implement the remedial action at site ST-12. 2006 OU-1 contains LF-04. Over the past two years numerous monitor wells had shown a marked increase in trichloroethylene (TCE) and tetrachloroethylene (PCE). Contaminants appeared to be moving off-site. 2007 The first phase (soil vapor investigation) of the RI to find the source and extent of VOC's in the groundwater at LF004 was begun. Additionally, three off-site borings were drilled and groundwater samples collected to determine where off-site groundwater monitor wells may be needed. In November, the dieldrin-contaminated soil from the Old Pesticide/Paint Shop (SS-17) was removed northeast of the LF004 following an unsuccessful attempt at bioremediation. A total of approximately 6,000 cubic yards of contaminated soil and amendments were removed from the site and disposed of under an approved work plan. Following removal of the contaminated soil and amendments, confirmation sampling of the underlying soil indicated five hot spots where additional soil removal is required. SVE continued to remove JP-4 from the vadose zone at ST012. Construction continued on the TEE pilot project, which was designed to remove the fuel from the groundwater. The Building 760 site, the site of gasoline releases from the former base service station, was being redeveloped by ASU East. Five groundwater monitor wells were abandoned to make way for building construction. The USAF proposed replacement of the monitor wells, as well as installation of SVE wells and construction of a soil vapor treatment system. [Note: ADEQ s Underground Storage Tank Program (UST) assumed oversight of this project.] DEURs were completed for site SS021, Facility 1013 (a leaking UST [LUST] site). 2008 The schedule for the RI to find the source and extent of VOCs in the groundwater at LF004 was extended. The USAF completed the soil vapor investigation fieldwork. TCE found in soil gas samples and increasing concentrations of TCE in one groundwater monitor well caused the USAF to expand the investigation in the area northeast of the landfill and delay submittal of the RI report. Additional borings to sample deep soil and groundwater were planned. A peer review committee was assembled by the USAF to review the work to date and plans for additional investigation of the site, and to advise the USAF and its contractor regarding data gaps,

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locations for additional groundwater monitor wells, and potential remedial technologies. Four new monitor wells were installed at the site. SVE to remove JP-4 from the vadose zone continued at the ST012. The TEE pilot project, designed to remove the fuel and fuel components from the groundwater, began operation. Steam injection into the lower saturated zone (the deeper of two water bearing units that are to undergo treatment) began on October 28th, (with steam injection into the upper water bearing zone scheduled to occur approximately two weeks later). The project is scheduled to last approximately one year. Six new groundwater monitor wells were installed at the site. The DEURs were completed for sites FT002, ST012, and SS020 to facilitate dispersal of the property to the Gateway Airport. 2009 Base-wide activities included publishing an update to the Base-wide Sampling and Analysis Plan and a Base-wide Waste Management Plan, and recording a DEUR on site SS016 (Bldg 1085) to complete the ROD requirements. The transfer of SS016 to the Phoenix-Mesa Gateway Airport was completed. The USAF performed the following activities: Conducted and reported semi-annual groundwater monitoring in accordance with the ROD Conducted significant landfill maintenance Conducted a final field effort to supplement the RI, where one area was found to have a surface soil to groundwater contamination connection Installed 31 new groundwater monitor wells at Site LF004 Produced a site LF004 Groundwater Monitoring Work Plan Conducted a bench scale ozone sparging test Conducted operations at site ST012 performing Steps 2 through 5 of the TEE Work Plan Collected post TEE application samples following test operations Conducted and reported four quarters of groundwater monitoring Produced a site ST012 Groundwater Monitoring Work Plan Conducted and reported annual groundwater monitoring at site SS017 Produced a site SS017 Groundwater Monitoring Work Plan Finalized a work plan to conduct step-out excavations at the temporary treatment facility and awarded a contract to conduct the step-out excavations Published the Parcel N Debris Area preliminary assessment/site inspection (PA/SI) work plan and initiated work on it Completed installation of a fence around Parcel N Published a final Interim Parcel N PA report Awarded a contract to complete the Parcel N Debris Area PA/SI Conducted and reported four quarters of groundwater monitoring at site ST035 Produced a site ST035 Groundwater Monitoring Work Plan Installed five new groundwater monitor wells Completed installation of an SVE system Discarded military munitions 2010 Efforts at the former WAFB progressed on many fronts: The completion of a Supplemental RI report for LF004 that included a draft Focused Feasibility Study. Parcel N underwent an investigation searching for munitions constituents as well as sampling and testing at selected locations for CERCLA contaminants. A more detailed investigation is planned for a section of Parcel N that has been identified as one of great concern and is scheduled for 2011. A report evaluating the pilot test of the TEE system at ST012 was submitted for review. The SVE system continues to remove contaminants from soils below the former fuel storage area; A pilot SVE system was constructed at the site of the former automobile gas station. The system was designed and constructed to blend into the surrounding ASU campus and its operation to be non obtrusive. The USAF completed a program to replace groundwater monitor wells that have become submerged by rising groundwater. Additional wells to monitor the different groundwater formations at the site were also set in the various hydrographic layers. New wells were also installed to delineate groundwater contamination. Groundwater monitoring at the

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site continues to be conducted to evaluate the remedial effort. 2011 The USAF performed the following activities: Hired AMEC Corporation as their performance-based remediation (PBR) contractor. Performed routine groundwater monitoring, inspections, and operation and maintenance of remedial systems Completed work plans, groundwater monitoring reports, operation and maintenance (performance) reports, and inspection reports, as required Completed installation of groundwater monitor wells at sites ST035 and LF004, and abandonment of wells at site FT002 Finalized the OU-6 removal action completion report Finalized the site ST012 containment study work plan Held a public meeting and completed the OU-6 amended proposed plan 2012 The USAF performed the following activities: Performed routine groundwater monitoring, inspections, and operation and maintenance of remedial systems Completed Work Plans, groundwater monitoring reports, operation and maintenance (performance) reports, and inspection reports, as required Installed five off-base groundwater monitor wells south of the landfill site (LF004) to monitor for possible off-site migration of contamination Completed a Five Year Review (FYR) Began operation of the site ST012 groundwater containment system, an interim remedial action designed to operate until the full scale Steam Enhanced Extraction system is designed and constructed Completed a new base-wide Quality Assurance Project Plan and standard operating procedures Performed and reported on the final site inspection and munitions and explosives of concern clearance (Phase 3) munitions response at the site XU403a Completed a Finding of Suitability to Transfer (FOST) for the Air Force Research Laboratory (AFRL), Mesa Research Site Completed the final in-well air stripping and monitor well installation work plan for site ST035 and installed one remediation well and two groundwater monitor wells 2013 The USAF completed several items during this period: LF004 (OU1) A draft ROD Amendment for Operable Unit 1. Well installation as part of Pre-Design Investigation field activities Annual and period specific groundwater monitoring reports A Technical Memorandum for the April 2013 Cap Maintenance An Annual Landfill Inspection Report dated October 10 2012 An Amended Proposed Plan for Operable Unit 1, Landfill 004 A Focused Feasibility Study for Site LF004. An LF004 Off-site Well Inspection and Sampling Report ST012 (OUs=2) A Focused Feasibility Study for OU-2 remedial alternatives A draft Remedial Design and Remedial Action Work Plan A ROD Amendment 2 for OU-2 groundwater Documents discussing select groundwater well installations/modifications A report detailing amendments added to the ST012 groundwater treatment system Annual and period specific groundwater monitoring reports Annual and period specific groundwater containment system reports Annual and period specific SVE system operation and result reports A memorandum documenting research on potential contamination encountered during previous construction work in Avoca Street near Site ST012 FT02 (OU3) One annual Site FT02 DEUR report was submitted The USAF initiated a program to systematically sample its active and closed bases for perfluorinated compounds (PFC's) at fire training areas as the unregulated chemicals gained increasing regulatory attention for their potential risks to human health and the environment. SDV (OU4) Two semi-annual Protective Cap Inspection Reports were released (dated Sept. 19, 2012 and Jan. 3, 2013). OU6 A Revised OU-6 Removal Action Completion Report (RACR). SS017 (OU6) Continued groundwater monitoring A Groundwater Monitoring Report for the 2012 Annual Event A draft Supplemental Risk Assessment for soil removal action ST035 One groundwater monitoring well (MW-21)

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installation notification Select well modification notifications Annual and period specific groundwater monitoring reports Annual and period specific SVE system operation and result reports Facility 1013 One annual Facility 1013 DEUR report was submitted. Site Wide and Miscellaneous Areas A Site Characterization and Corrective Action Completion report was submitted for UST closure actions completed at the Base s navigation beacon facility A site-wide Groundwater Monitoring Report for August 2012 2014 The USAF completed several items during this period: LF004 (OU1) Initiated a site remedy consisting of SVE, in-well air stripping (IWAS) and chemical oxidation Landfill cover inspections and maintenance Landfill cover drainage pattern maintenance and cover erosion control maintenance Annual and period specific groundwater monitoring reports Final Annual 2013 Groundwater Monitoring Report Remedial Design and Remedial Action Work Plan for Operable Unit 1 Groundwater and Soil Gas Remedies Annual Landfill Cap Inspection and Maintenance Report, September and November 2013 Events Pre-Design Oxidant Test Work Plan (Addendum 1 to the Final Pre-Design Investigation Work Plan, Site LF004) Final ROD Amendment, Operable Unit 1 Technical Memorandum on LF004 Groundwater Monitoring Program Optimization Groundwater Monitoring Report, May 2013 Event Amended Proposed Plan for Operable Unit 1, Landfill 004 An off-site well inspection and sampling report Select well modification notifications Parcel N Debris Area (XU403a) (OU1) Excavation, investigation and removal of: Unexploded ordnance (UXO) Discarded military munitions (DMM) Munitions constituents (MC) Empty chemical weapons (mustard gas oil) training sample vials (ST012 OU2) Installed and initiated a Steam Enhanced Extraction System Remedial Design and Remedial Action Work Plan for Operable Unit 2 Revised Groundwater Remedy SVE System Operation and Maintenance Report, July through September 2013 SVE System Operation and Maintenance Report, April through June 2013 SVE System Operation and Maintenance Report, January through March 2013 Containment System Status and Shutdown Report, July through October 2013 Containment System Status Report, April through June 2013 2012 Annual Containment System Status Report, Containment System Status Report, January through March 2013 Declaration of Environmental Use Restriction (DEUR) for Site ST012 for 2013 Annual 2012 Groundwater Monitoring Report SVE System Operation and Maintenance 2012 Annual Performance Report SVE System Operations and Maintenance, July through September 2012 ROD Amendment 2, Groundwater, Operable Unit 2 Select well modification notifications FT02 (OU3) Installed and re-initiated an SVE system. SDV (OU4) Released Semi-annual Protective Cap Inspection Report conducted July 15, 2014 Released Semi-annual Protective Cap Inspection Report conducted January 21, 2014 Released Semi-annual Protective Cap Inspection Report conducted August 9, 2013 SS17 (and OU6) Continued groundwater monitoring Groundwater Monitoring Report, 2013 Annual Event Groundwater Monitoring Report, 2012 Annual Event A final supplemental risk assessment relating to the Old Pesticide/Paint Shop soil removal action ST035 Annual and period specific groundwater monitoring reports. Annual and period specific SVE system operation and result reports. Groundwater Monitoring Report August 2013 Event Annual 2013 Groundwater Monitoring Report Groundwater Monitoring Report August 2013 Event Groundwater Monitoring Report, May 2013 Event Groundwater Monitoring Report, February 2013 Event Annual 2012 Groundwater Monitoring Report Field Variance Memorandum regarding Monitor Well Installation SVE System Operation and Maintenance Report, July through September 2013 SVE

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System Operation and Maintenance Report, April through June 2013 SVE System Operation and Maintenance January through March 2013 SVE System Operation and Maintenance 2012 Annual Performance Report SVE System Operation and Maintenance, July through September 2012 SVE System Operation and Maintenance, April through June 2012 Site-Wide and Miscellaneous Areas A site-wide Groundwater Monitoring Report for August 2013 2015 The USAF completed several items during this period: LF004 (OU1) Continued a site remedy consisting of SVE, IWAS and chemical oxidation Continued landfill cover inspections and maintenance Continued landfill cover drainage pattern maintenance and cover erosion control maintenance Continued annual and period specific groundwater monitoring reports Construction Completion/Start up Report for Operable Unit 1, Groundwater and Soil Gas Remedies Annual Landfill Inspection and Maintenance Report, September and October 2014 Groundwater Monitoring Report, May 2014 Event Parcel N Debris Area (XU403a) (OU1) Continued evaluating prior findings ST012 (OU2) Continued steam enhanced extraction system SVE System Operation and Maintenance Report, July through September 2014 SVE System Operation and Maintenance Report, April through June 2014 SVE System Operation and Maintenance Report, January through March 2014 Annual 2013 Groundwater Monitoring Report SVE System Operation and Maintenance 2013 Annual Performance Report Construction Completion/Start up Report for Operable Unit 2, Revised Groundwater Remedy Revision No. 2 to SVE Operations Maintenance and Monitoring Manual, Post Steam Enhanced Extraction Installation FT02 (OU3) Remediation Construction Complete and Start Up Report Continued SVE system SDV (OU4) Semi-annual Protective Cap Inspection Reports, conducted July and January SS017 (and OU6) Submission of Responses to Comments and Revised Draft Final Amended Proposed Plan for Operable Unit 6 Continued groundwater monitoring Groundwater Monitoring Report, 2014 Annual Event ST035 Continued groundwater monitoring reports. Groundwater Monitoring Report August 2014 Event, Bldg. 760, UST 0-005338, LUST 0293.09 AND .10 Final Groundwater Monitoring Report, May 2014 Event Facility 1013 Closure Report for Building 1013; UST 0-005338, LUST 293.18 Site wide and Miscellaneous areas A site wide Groundwater Monitoring Report Perfluorinated Compounds Preliminary Assessment, former AFRL, Mesa, AZ 2016 The USAF completed several items during this period: LF004 (OU1) Continued site remedy monitoring Continued landfill cover inspections and maintenance Continued annual and period specific groundwater monitoring reports Remedial Action Quarterly Status Report, July Thru September 2015, for Operable Unit 1, Groundwater and Soil Gas Remedies Remedial Action Quarterly Status Report, April Thru June 2015, for Operable Unit 1, Groundwater and Soil Gas Remedies Remedial Action Quarterly Status Report, Jan. Thru Mar. 2015, for Operable Unit 1, Groundwater and Soil Gas Remedies Remedial Action Quarterly Status Report, Startup Thru Dec. 2014, for Operable Unit 1, Groundwater and Soil Gas Remedies Annual Landfill Cap Inspection and Maintenance Report, September, October, and December 2015 Events Parcel N Debris Area (XU403a) (OU1) Site Inspection Report, Chemical Warfare Materiel, and Munitions and Explosives of Concern, Munitions Response Sites XU403A and XU403B ST012 (OU2) Continued Steam Enhanced Extraction system SVE Systems/Steam Enhanced Extraction System, Operation and Maintenance, 2015 Third Quarter Performance Report SVE Systems/Steam Enhanced Extraction System, Operation and Maintenance, 2015 Second Quarter Performance Report SVE Systems/Steam Enhanced Extraction System, Operation and Maintenance, 2015 First Quarter Performance Report SVE

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System/Steam Enhanced Extraction System, Operation and Maintenance, 2014 Annual Performance Report Annual 2014 Groundwater Monitoring Report Submission of Final Field Variance Memorandum #4 Extraction and Treatment System Construction Submission of Final Field Variance Memorandum #5 Extraction and Treatment System Construction FT02 (OU3) Continued SVE system SVE System, Operation and Maintenance Report, November 2014 Thru June 2015, Fire Protection Training Area SVE System, Operation and Maintenance Report, Aug. Thru Oct. 2014, Fire Protection Training Area SDV (OU4) Semi-annual Protective Cap Inspection Reports, conducted July and January SS017 (and OU6) Continued groundwater monitoring Groundwater Monitoring Report, 2015 Annual Event ST035 Continued groundwater monitoring reports. Groundwater Monitoring Report, February 2015 Event, Bldg. 760, ADEQ LUST File No. 0293-09 AND 0293-10, ADEQ Facility ID # 0-005338, Annual 2014 Groundwater Monitoring Report, UST 0-005338 LUST 0293.09 AND .10 Bldg. 760 Site wide and Miscellaneous areas A site wide groundwater monitoring report Perfluorinated Compounds Preliminary Assessment, Former WAFB, Mesa, AZ 2017 The USAF completed several items during this period: LF004 (OU1) Continued site remedy monitoring Continued landfill cover inspections and maintenance Continued annual and period specific groundwater monitoring reports Operating Properly and Successfully Demonstration, for Operable Unit 1, Groundwater and Soil Gas Remedial Action Remedial Action Quarterly Status Report, April Thru June 2016, for Operable Unit 1, Groundwater and Soil Gas Remedies Remedial Action Quarterly Status Report, January Thru March 2016, for Operable Unit 1, Groundwater and Soil Gas Remedies Remedial Action Quarterly Status Report, Oct. Thru Dec. 2015, And 2015 Annual Summary Report, for Operable Unit 1, Groundwater and Soil Gas Remedies Annual Landfill Cap Inspection and Maintenance Report, September and October 2016 Events Parcel N Debris Area (XU403a) (OU1) Continue evaluation for steps forward ST012 (OU2) Continued extraction, containment, and monitoring Annual 2015 Groundwater Monitoring Report Submission of Final Field Variance Memorandum #5A Extraction and Treatment System Construction FT02 (OU3) Remedial Action Completion Report, Fire Protection Training SDV (OU4) Semi-annual Protective Cap Inspection Reports, conducted July and January SS017 (and OU6) Continued groundwater monitoring Groundwater Monitoring Report, 2016 Annual Event ST035 Continued groundwater monitoring Corrective Action Completion Report Under AAC R18-12- 26, ADEQ LUST File No. 0293-09 and 0293-10, ADEQ Facility ID # 0-005338, (Bldg. 760) Annual 2015 Groundwater Monitoring Report, ADEQ LUST File No. 0293-09 and 0293-10, ADEQ Facility ID # 0-005338, (Bldg. 760) Site wide and Miscellaneous areas A site wide groundwater monitoring report Quality Program Plan For Site Inspection of Potential Perfluorinated Compound Release Areas At Multiple Base Realignment and Closure (BRAC) Installations Fourth Five Year Review Report 2018 The USAF completed several items during this period: LF004 (OU1) Continued site remedy monitoring Continued landfill cover inspections and maintenance Continued annual and period specific groundwater monitoring reports Remedial Action Quarterly Status Report, January Thru March 2017, for Operable Unit 1, Groundwater and Soil Gas Remedies Remedial Action Quarterly Status Report, July Through September 2016, for Operable Unit 1, Groundwater and Soil Gas Remedies Annual Landfill Cap Inspection and Maintenance Report, September and October 2017 Events Parcel N Debris Area (XU403a) (OU1) Continue evaluation for steps forward Site Inspection Addendum Letter Report, Chemical Warfare Materiel, and Munitions and Explosives of

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Concern, Munitions Response Sites XU403A and XU403B ST012 (OU2) Continued extraction, containment, and monitoring Pilot Study Implementation Work Plan For Operable Unit 2, Revised Groundwater Remedy Appendix F & Appendix H - Pilot Study Implementation Work Plan For Operable Unit 2, Revised Groundwater Remedy SVE Systems/Steam Enhanced Extraction System, Operation and Maintenance, 2016 Third Quarter Performance Report SVE Systems/Steam Enhanced Extraction System, Operation and Maintenance, 2016 Second Quarter Performance Report SVE Systems/Steam Enhanced Extraction System, Operation and Maintenance, 2016 First Quarter Performance Report SVE Systems/Steam Enhanced Extraction System, Operation and Maintenance, 2015 Fourth Quarter Performance Report FT02 (OU3) Remedial Action Completion Report, Fire Protection Training Area SDV (OU4) Semi-annual Protective Cap Inspection Reports, conducted July and January SS017 (and OU6) Continued groundwater monitoring ROD For Operable Unit 6 (OU6) Field Variance Memorandum #1 Quarterly Groundwater Monitoring Groundwater Sampling Work Plan for Quarterly Monitoring Groundwater Monitoring Data Summary Report, January 2018 Groundwater Monitoring Data Summary Report, October 2017 ST035 Undergoing post-closure administration Site wide and Miscellaneous areas A site wide groundwater potentiometric surface map Installation Specific Uniform Federal Policy Quality Assurance Project Plan Addendum, Former WAFB, Site Inspection of Potential Perfluorinated Compound Release Areas At Multiple BRAC Installations 2019 The USAF completed several items during this period: LF004 (OU1) Continued site remedy monitoring Continued landfill cover inspections and maintenance Continued annual and period specific groundwater monitoring reports Remedial Action Quarterly Status Report, July Through September 2017, for Operable Unit 1, Groundwater and Soil Gas Remedies Remedial Action Quarterly Status Report, April Through June 2017, for Operable Unit 1, Groundwater and Soil Gas Remedies Remedial Action Quarterly Status Report, January Through March 2017, for Operable Unit 1, Groundwater and Soil Gas Remedies Remedial Action Quarterly Status Report, October Through December 2016, for Operable Unit 1, Groundwater and Soil Gas Remedies Parcel N Debris Area (XU403a) (OU1) Continue evaluation for steps forward Site Inspection Addendum Letter Report, Chemical Warfare Materiel, and Munitions and Explosives of Concern, Munitions Response Sites XU403A and XU403B ST012 (OU2) Continued extraction, containment, and monitoring SVE System and Other Activities, 2017 First and Second Quarter Performance Report SVE System, Operation and Maintenance, 2016 Annual Performance Report, Volume 1 of 2 SVE System, Operation and Maintenance, 2016 Annual Performance Report, Volume 2 of 2 Annual 2016 Groundwater Monitoring Report FT02 (OU3) Revised Final - Remedial Action Completion Report, Fire Protection Training Area SDV (OU4) Semi-annual Protective Cap Inspection Reports, conducted July and January SS017 (and OU6) Continued groundwater monitoring Groundwater Monitoring Data Summary Report, May 2018, Revision 1.0 Revised Final - Groundwater Monitoring Data Summary Report, January 2018 ST035 Post-closure administration Site wide and Miscellaneous areas A site wide groundwater potentiometric surface map 2020 The USAF completed several items during this period: LF004 (OU1) Continued site remedy monitoring Continued landfill cover inspections and maintenance Continued annual and period specific groundwater monitoring reports Annual Landfill Cap Inspection and Maintenance Report, September and October 2018 Events Parcel N Debris Area (XU403a) (OU1) Continue evaluation for steps forward ST012 (OU2) Continued extraction, containment, and

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monitoring FT02 (OU3) Pending Site Closure SDV (OU4) Semi-annual Protective Cap Inspection Reports, conducted July and January SS017 (and OU6) Continued groundwater monitoring SS017 - FINAL Final Field Variance Memorandum #2 Groundwater Monitoring ST035 Technical Memorandum, Post-Closure Activities, ADEQ LUST File No. 0293-09 & 0293-10, ADEQ Facility ID #0-005338 Site wide and Miscellaneous areas A site wide groundwater potentiometric surface map

Community Involvement Activities: The U.S. Air Force (USAF) periodically presents site activity updates via mailed and internet-posted flyers. Please contact USAF representatives to learn about future information updates.

Boundaries: The National Priorities List (NPL) site study area essentially mirrors the former Williams Air Force Base (WAFB) footprint located in Mesa, Maricopa County, Arizona, and encompasses approximately 4,043 acres. The general site boundaries are from Ray Road to the north, Ellsworth Road to the east, Pecos Road to the south, and Power Road to the west. Impacted areas vary, but with one known exception, are contained within the former WAFB footprint. An impacted groundwater plume extends less than one-quarter mile southerly beyond the former base boundary, but is still part of the NPL cleanup action. Not reported

AZ NPL Status: Remedial activities continue at the following sub-sites: LF004 Remedial activities include soil vapor extraction (SVE), In-Well Air Stripping (IWAS) and oxidant injection. SVE has been used to remove potentially harmful vapors (TCE and PCE) from the subsurface in the former above ground storage tank (AST) and Southeast Landfill areas. IWAS employs a combination of technologies to remove contaminants from groundwater and unsaturated soils. Air stripping is used within an IWAS well to aerate the groundwater and transfer contaminants from the dissolved phase into the air, where the contaminants are removed by SVE. Oxidant injection directly into groundwater using permanganate has been used in several areas of the site to supplement SVE and IWAS. At the end of 2019, both SVE and IWAS had removed the vast majority of subsurface contaminants and both systems were shut down pending confirmation soil vapor sampling. Periodic oxidant injections continue to address residual contaminants in groundwater and semi-annual groundwater monitoring will continue until all contaminants are consistently below action levels. ST012 ST012 is the location of the former Liquid Fuel Storage Facility where petroleum fuel storage and distribution options were conducted from 1941 until decommissioning in 1991. SVE, Steam-enhanced Extraction (SEE), and Enhanced Bioremediation (EBR) have been employed to remove fuel contaminants from the soil and groundwater. Cleanup goals for shallow soil above a depth of 25 ft bgs were achieved following implantation of SVE treatment from 1994 to 1996. SVE continues to be operated to remove volatile contaminants from soils deeper than 25 ft bgs. SEE uses multi-phase extraction to remove LNAPL, contaminated groundwater and soil vapor from the aquifer. Steam is generated on site using boilers to provide steam to injection wells. Captured LNAPL is separated and recovered to the extent feasible to power steam generation, while contaminated groundwater is treated using onsite air stripping and granular activated carbon before being discharged to the municipal wastewater treatment plant. Soil vapor extracted during SEE is treated by thermal oxidation. SEE was implemented from September 2014 through April 2016. EBR was initiated in November 2018

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to promote biological activity among bacteria that feed off of contamination present at the site. Continuing EBR activities include injection of sulfate into the groundwater and groundwater extraction to assist in circulating the sulfate throughout the contaminant plume. Periodic monitoring of groundwater will continue until attainment of all cleanup levels has been documented. Parcel N The U.S. Army Corps of Engineers (USACE) conducted a Site Inspection (SI) to investigate the potential occurrence of munitions and explosives of concern (MEC) and chemical warfare material (CWM) at the 17-acre Parcel N Debris Area 1. The munitions response included digital geophysical mapping (DGM) surveys and intrusive investigations. No MEC of CWM items were identified during the investigation of geophysical anomalies, or during a surface sweep using metal detectors. Additional investigation is necessary in a portion of the site currently covered by approximately 3-5 acres of asphalt, concrete and construction debris. Monitoring and inspections continue at other sub-sites, as required (see Action Taken section on Page 2 for a list of these sub-sites). PFAS impact is undergoing USAF evaluation. The next phase is a Remedial Investigation that is tentatively scheduled for 2023.

SPL:

Program:	CERCLA
Program Status:	ON NPL
Program Status 2:	ACTIVE
Status Date:	29-NOV-89
Status Date 2:	29-NOV-89
State Comment:	Not reported
Former Name:	Not reported
Program 2:	DOD
Lat:	33.30852509
Long:	-111.66051483
Comments:	THE SITE IS BEING ADDRESSED AS AN NPL SITE

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1 **CMC STEEL ARIZONA AND CMC REBAR ARIZONA OUTFALL PE** **EMAP** **S122977179**
Target Property **, AZ** **N/A**

Actual: 1441 ft.

Focus Map: 5

EMAP:

Name:	CMC STEEL ARIZONA AND CMC REBAR ARIZONA OUTFALL PECOS ROAD
Address:	Not reported
City,State,Zip:	AZ
ID Number:	180286
Township:	Not reported
Range:	Not reported
Section:	Not reported
Quarter 1:	Not reported
Quarter 2:	Not reported
Quarter 3:	Not reported
Latitude:	33.291631000000002
Longitude:	-111.587799
Collection Method:	PROVIDED BY OWNER/OPERATOR
Place Type:	STORMWATER DISCHARGE POINT
Place Type Code:	STWDP
Place C Code:	RO
Facility Status:	NOT ACTIVE
End Date:	02/28/2020

CMC STEEL ARIZONA AND CMC REBAR ARIZONA OUTFALL PECOS ROAD (Continued) **S122977179**

Verified: Y

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2 **OUTFALL NW CORNER ON PECOS ROAD** **EMAP** **S125989057**
Target Property **, AZ** **N/A**

Actual: 1437 ft.
Focus Map: 5

EMAP:

Name:	OUTFALL NW CORNER ON PECOS ROAD
Address:	Not reported
City,State,Zip:	AZ
ID Number:	198670
Township:	Not reported
Range:	Not reported
Section:	Not reported
Quarter 1:	Not reported
Quarter 2:	Not reported
Quarter 3:	Not reported
Latitude:	33.291397000000003
Longitude:	-111.589708
Collection Method:	PROVIDED BY OWNER/OPERATOR
Place Type:	STORMWATER DISCHARGE POINT
Place Type Code:	STWDP
Place C Code:	RO
Facility Status:	ACTIVE
End Date:	Not reported
Verified:	Y

---

3 **SIGNAL BUTTE BETWEEN PECOS AND GERMANN** **EMAP** **S127765658**
Target Property **MESA, AZ 85212** **N/A**

Actual: 1429 ft.
Focus Map: 9

EMAP:

Name:	SIGNAL BUTTE BETWEEN PECOS AND GERMANN
Address:	Not reported
City,State,Zip:	MESA, AZ 85212
ID Number:	214690
Township:	2S
Range:	7E
Section:	2
Quarter 1:	NE
Quarter 2:	SE
Quarter 3:	SE
Latitude:	33.285164000000002
Longitude:	-111.60050699999999
Collection Method:	PROVIDED BY OWNER/OPERATOR
Place Type:	CONSTRUCTION PROJECT
Place Type Code:	CONST
Place C Code:	PP
Facility Status:	ACTIVE
End Date:	Not reported
Verified:	Y

4
East
< 1/8
0.050 mi.
265 ft.

MESA CITY OF
QUEEN CREEK, AZ

PFAS **S125863072**
N/A

Actual:
1392 ft.

Focus Map:
3

PFAS:

Name:	MESA CITY OF
Address:	Not reported
City,State,Zip:	QUEEN CREEK, AZ
PWS ID:	07095
Well Number:	55-585924
PFOS + PFOA ng/L:	ND
Latitude:	33.29134102400
Longitude:	-111.63388179300

5
West
< 1/8
0.070 mi.
370 ft.

MOBIL3 STUDIO LLC
19122 E SEAGULL DR
QUEEN CREEK, AZ 85142

EDR Hist Auto **1020597696**
N/A

Actual:
1361 ft.

Focus Map:
7

EDR Hist Auto

Year:	Name:	Type:
2011	MOBIL3 STUDIO LLC	Gasoline Service Stations, NEC
2012	MOBIL3 STUDIO LLC	Gasoline Service Stations, NEC
2013	MOBIL3 STUDIO LLC	Gasoline Service Stations, NEC
2014	MOBIL3 STUDIO LLC	Gasoline Service Stations, NEC

A6
SW
< 1/8
0.110 mi.
582 ft.

ARIZONA BOYS RANCH
20061 E RITTENHOUSE RD
QUEEN CREEK, AZ 85142
Site 1 of 3 in cluster A

RCRA NonGen / NLR **1000588522**
AZD074472382

Actual:
1388 ft.

Focus Map:
13

RCRA NonGen / NLR:

Date Form Received by Agency:		20190925
Handler Name:	ARIZONA BOYS RANCH	
Handler Address:		20061 E RITTENHOUSE RD
Handler City,State,Zip:		QUEEN CREEK, AZ 85142
EPA ID:		AZD074472382
Contact Name:		JOHN MOTLEY
Contact Address:		Not reported
Contact City,State,Zip:		Not reported
Contact Telephone:		480-987-9700
Contact Fax:		480-987-9701
Contact Email:		JMOTLEY@REITEOFPASSAGE.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Other
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported

ARIZONA BOYS RANCH (Continued) **1000588522**

Mailing Address:	20061 E RITTENHOUSE RD
Mailing City,State,Zip:	QUEEN CREEK, AZ 85142
Owner Name:	Not reported
Owner Type:	Not reported
Operator Name:	Not reported
Operator Type:	Not reported
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190926
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No

ARIZONA BOYS RANCH (Continued) **1000588522**

Exporter of Spent Lead Acid Batteries: No
Recycler Activity Without Storage: No
Manifest Broker: No
Sub-Part P Indicator: No

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: ARIZONA BOYS RANCH INC
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 20061 E RITTENHOUSE RD
Owner/Operator City,State,Zip: BOYS RANCH, AZ 85525
Owner/Operator Telephone: 602-892-9550
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: ARIZONA BOYS RANCH INC
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 20061 E RITTENHOUSE RD
Owner/Operator City,State,Zip: BOYS RANCH, AZ 85525
Owner/Operator Telephone: 602-892-9550
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20070226
Handler Name: CANYON STATE ACADEMY
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20190925
Handler Name: ARIZONA BOYS RANCH
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported

ARIZONA BOYS RANCH (Continued) **1000588522**

Electronic Manifest Broker: Not reported

Receive Date: 19910613
Handler Name: ARIZONA BOYS RANCH
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 32311
NAICS Description: PRINTING

NAICS Code: 323114
NAICS Description: QUICK PRINTING

NAICS Code: 62399
NAICS Description: OTHER RESIDENTIAL CARE FACILITIES

NAICS Code: 811111
NAICS Description: GENERAL AUTOMOTIVE REPAIR

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

A7 **CANYON STATE ACADEMY** **AST** **A100430140**
SW **20061 EAST RITTENHOUSE ROAD** **N/A**
< 1/8 **QUEEN CREEK, AZ 85142**
0.110 mi.
582 ft. **Site 2 of 3 in cluster A**

Actual:
1388 ft.

Focus Map:
13

AST:
Name: CANYON STATE ACADEMY
Address: 20061 EAST RITTENHOUSE ROAD
City,State,Zip: QUEEN CREEK, AZ 85142
Facility Status: Other
Permit #: 3030
Permit Year: 1992
Submitter: West Star Contracting
Submitter Phone: 602)678-1488
Memo: Not reported
Approval Date: 05/07/1992

A8
SW
< 1/8
0.110 mi.
582 ft.

ARIZONA BOYS RANCH
20061 E RITTENHOUSE RD
QUEEN CREEK, AZ 85142

Site 3 of 3 in cluster A

UST **1012149051**
N/A

Actual:
1388 ft.

Focus Map:
13

UST:

Name:	ARIZONA BOYS RANCH
Address:	20061 E RITTENHOUSE RD
City,State,Zip:	QUEEN CREEK, AZ 85142
Facility ID:	0-004074
Owner:	None
Latitude:	33.265845
Longitude:	111.651263
Tank ID:	1
Date Closed:	05/08/1992
Tank Status:	**Perm Closure**
Closure Type:	**Removal**
Tank Inst Date:	**Not reported**
Capacity:	**550**
Substance:	**Unleaded Gasoline**
Compartment:	**COMPARTMENT A**
Tank Const Type:	**Double Walled**
Tank Mtrl Type:	**Asphalt coated or Bare Steel**
Pipe Type:	**Suction - Check Valve at the Tank Top**
Pipe Mtrl Type:	**Bare or Galvanized Steel**
Pipe const Type:	**Not reported**
Tank ID:	2
Date Closed:	11/07/2008
Tank Status:	**Perm Closure**
Closure Type:	**Removal**
Tank Inst Date:	**01/16/2009**
Capacity:	**10000**
Substance:	**Unidentified**
Compartment:	**COMPARTMENT A**
Tank Const Type:	**Single Walled**
Tank Mtrl Type:	**Fiberglass Reinforced Plastic**
Pipe Type:	**Not reported**
Pipe Mtrl Type:	**Not reported**
Pipe const Type:	**Not reported**
Tank ID:	3
Date Closed:	11/07/2008
Tank Status:	**Perm Closure**
Closure Type:	**Removal**
Tank Inst Date:	**01/16/2009**
Capacity:	**10000**
Substance:	**Unidentified**
Compartment:	**COMPARTMENT A**
Tank Const Type:	**Single Walled**
Tank Mtrl Type:	**Fiberglass Reinforced Plastic**
Pipe Type:	**Not reported**
Pipe Mtrl Type:	**Not reported**
Pipe const Type:	**Not reported**

9
SW
1/8-1/4
0.153 mi.
807 ft.

QUEEN CREEK SMILES
18550 E RITTENHOUSE RD
QUEEN CREEK, AZ 85142

RCRA-VSQG

1010783640
AZR000506204

Actual:
1343 ft.

Focus Map:
6

RCRA-VSQG:

Date Form Received by Agency:		20090108
Handler Name:	QUEEN CREEK SMILES	
Handler Address:		18550 E RITTENHOUSE RD
Handler City,State,Zip:		QUEEN CREEK, AZ 85142-4598
EPA ID:		AZR000506204
Contact Name:		KAMERON ALEXANDER
Contact Address:		2860 MICHELLE
Contact City,State,Zip:		IRVINE, CA 92606-1008
Contact Telephone:		623-302-2857
Contact Fax:		Not reported
Contact Email:		ALEXANDERK@PACDEN.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Other
Federal Waste Generator Description:		Conditionally Exempt Small Quantity Generator
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		2860 MICHELLE
Mailing City,State,Zip:		IRVINE, CA 92606-1008
Owner Name:		Not reported
Owner Type:		Not reported
Operator Name:		Not reported
Operator Type:		Not reported
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

QUEEN CREEK SMILES (Continued) **1010783640**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180105
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	IGNITABLE WASTE
Waste Code:	D007
Waste Description:	CHROMIUM
Waste Code:	D008
Waste Description:	LEAD
Waste Code:	D009
Waste Description:	MERCURY
Waste Code:	D011
Waste Description:	SILVER

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	PACIFIC DENTAL SERVICES INC
Legal Status:	Private
Date Became Current:	20071030
Date Ended Current:	Not reported
Owner/Operator Address:	2860 MICHELLE DR
Owner/Operator City,State,Zip:	IRVINE, CA 92606

QUEEN CREEK SMILES (Continued) **1010783640**

Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: DTD-DEVCO 2 LLC
Legal Status: Private
Date Became Current: 20070101
Date Ended Current: Not reported
Owner/Operator Address: PO BOX 5479
Owner/Operator City,State,Zip: SCOTTSDALE, AZ 85261-5479
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20090108
Handler Name: QUEEN CREEK SMILES
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20080414
Handler Name: QUEEN CREEK SMILES
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 62121
NAICS Description: OFFICES OF DENTISTS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

10
North
1/8-1/4
0.161 mi.
848 ft.

MESA TRANSFER STATION
6711 S MOUNTAIN RD
MESA, AZ 85212

SWF/LF **S117603693**
N/A

Actual:
1436 ft.

Focus Map:
5

SWF/LF:

Name:	MESA TRANSFER STATION
Address:	6711 S MOUNTAIN RD
City,State,Zip:	MESA, AZ 85212
Facility Status:	ACTIVE
Facility Type:	Transfer
Operator:	Not reported
Operator Address:	Not reported
Owner:	Not reported
ID Number:	113,182
Range:	Not reported
Township:	Not reported
Section:	Not reported
Q1:	Not reported
Q2:	Not reported
Q3:	Not reported
Latitude:	33.294103214
Longitude:	-111.591
Collection:	LOCATED FROM COUNTY PARCEL INFORMATION
Place Type:	Not reported
Code:	TS
PLACC Code:	PP
Status:	ACTIVE
End Date:	Not reported
Verified:	Y
Generated:	5/6/2019
PLC ID:	113,182
PLC Name:	MESA TRANSFER STATION
PLC Address:	MESA, AZ 85212
PLC City State Zip:	6711 S MOUNTAIN RD
PLC County:	MARICOPA
CUS ID:	26,875
Contact :	(602) 717-5966

B11
North
1/8-1/4
0.183 mi.
968 ft.

CRM OF AMERICA
11400 E PECOS RD
MESA, AZ 85212

Site 1 of 3 in cluster B

RCRA NonGen / NLR **1010312538**
AZE060911001

Actual:
1441 ft.

Focus Map:
5

RCRA NonGen / NLR:

Date Form Received by Agency:		20211104
Handler Name:	CRM OF AMERICA	
Handler Address:		11400 E PECOS RD
Handler City,State,Zip:		MESA, AZ 85212-7936
EPA ID:		AZE060911001
Contact Name:		Not reported
Contact Address:		Not reported
Contact City,State,Zip:		Not reported
Contact Telephone:		Not reported
Contact Fax:		Not reported
Contact Email:		Not reported
Contact Title:		Not reported
EPA Region:		09

CRM OF AMERICA (Continued) **1010312538**

Land Type:	Other
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	Not reported
Mailing City,State,Zip:	Not reported
Owner Name:	Not reported
Owner Type:	Not reported
Operator Name:	Not reported
Operator Type:	Not reported
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No

CRM OF AMERICA (Continued) **1010312538**

Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20211104
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D002
Waste Description:	CORROSIVE WASTE
Waste Code:	F001
Waste Description:	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Waste Code:	F002
Waste Description:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	CRM OF AMERICA HOLDINGS LLC
Legal Status:	Private
Date Became Current:	20030701
Date Ended Current:	Not reported
Owner/Operator Address:	1520 E MARCO POLO RD
Owner/Operator City,State,Zip:	PHOENIX, AZ 85024-3656
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	CRM OF AMERICA LLC
Legal Status:	Private
Date Became Current:	20030701

CRM OF AMERICA (Continued) **1010312538**

Date Ended Current:	Not reported
Owner/Operator Address:	11400 E PECOS RD
Owner/Operator City,State,Zip:	QUEEN CREEK, AZ 85242-8936
Owner/Operator Telephone:	480-987-3606
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20080423
Handler Name: CRM OF AMERICA	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	20080207
Handler Name: CRM OF AMERICA	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	20061210
Handler Name: CRM OF AMERICA	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	20211104
Handler Name: CRM OF AMERICA	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No

CRM OF AMERICA (Continued) **1010312538**

Current Record:	No
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No
Receive Date:	20211104
Handler Name: CRM OF AMERICA	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No
Receive Date:	20060911
Handler Name: CRM OF AMERICA LLC	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

B12 **MARICOPA COUNTY - SOUTHEAST WASTE TIRE COLLECTION** **SWF/LF** **S101640990**
North **11400 E PECOS RD** **SPILLS** **N/A**
1/8-1/4 **MESA, AZ 85212** **Enforcement**
0.183 mi.
968 ft. **Site 2 of 3 in cluster B**

Actual:
1441 ft.

Focus Map:
5

SWF/LF:

Name:	CRM OF AMERICA
Address:	11400 E PECOS RD
City,State,Zip:	MESA, AZ 85212
Facility Status:	ACTIVE
Facility Type:	Transfer
Operator:	Not reported
Operator Address:	Not reported
Owner:	Not reported
ID Number:	9,770

MARICOPA COUNTY - SOUTHEAST WASTE TIRE COLLECTION SITE (Continued) **S101640990**

Range:	Not reported
Township:	Not reported
Section:	Not reported
Q1:	Not reported
Q2:	Not reported
Q3:	Not reported
Latitude:	33.292980073
Longitude:	-111.587
Collection:	LOCATED FROM COUNTY PARCEL INFORMATION
Place Type:	Not reported
Code:	RCYL
PLACC Code:	PP
Status:	ACTIVE
End Date:	Not reported
Verified:	Y
Generated:	5/6/2019
PLC ID:	9,770
PLC Name:	CRM OF AMERICA
PLC Address:	MESA, AZ 85212
PLC City State Zip:	11400 E PECOS RD
PLC County:	MARICOPA
CUS ID:	24,879
Contact :	(480) 987-3006

SPILLS:

Incident Date:	06/16/95
Property Mngmt:	Private
Chemicals:	Tires
Response Date:	6/16/1995
Type:	Fire
Referred to:	Solid Waste
Fund Amount:	Pvt/Unk
Quantity:	None
Incident Number:	95-011-F
Referral Date:	6/16/1995
Structure:	Tires
Date Report:	06/16/95

ENF:

Facility ID:	9770
Name:	CRM OF AMERICA
Address:	11400 E PECOS RD
City,State,Zip:	MESA, AZ 85212
Case ID:	101876
Facility Type:	RECYCLING CENTER
Notice Type:	Not reported
Notice Issue Date:	11/12/2008
Order Type:	Not reported
Order Issue Date:	Not reported
Closed Date:	03/18/2009
Faciltiy Status:	Case Closed
Env Program:	SOLID WASTE PROGRAM
Notice Type Code:	Not reported

Facility ID:	9770
Name:	CRM OF AMERICA

MARICOPA COUNTY - SOUTHEAST WASTE TIRE COLLECTION SITE (Continued) **S101640990**

Address:	11400 E PECOS RD
City,State,Zip:	MESA, AZ 85212
Case ID:	170580
Facility Type:	RECYCLING CENTER
Notice Type:	Notice Of Opportunity To Correct Deficiencies
Notice Issue Date:	06/14/2017
Order Type:	Not reported
Order Issue Date:	Not reported
Closed Date:	07/05/2017
Faciltiy Status:	Case Closed
Env Program:	AZPDES STORMWATER
Notice Type Code:	NOC

Facility ID:	129120
Name:	MARICOPA COUNTY - SOUTHEAST WASTE TIRE COLLECTION SITE
Address:	11400 E PECOS RD
City,State,Zip:	MESA, AZ 85212
Case ID:	195040
Facility Type:	WASTE TIRE COLLECTION SITE
Notice Type:	Notice Of Opportunity To Correct Deficiencies
Notice Issue Date:	12/17/2020
Order Type:	Not reported
Order Issue Date:	Not reported
Closed Date:	01/07/2021
Faciltiy Status:	Case Closed
Env Program:	SOLID WASTE PROGRAM
Notice Type Code:	NOC

B13 **CRUM RUBBER MANUFACTURING** **AST** **A100433357**
North **11400 E PECOS RD** **N/A**
1/8-1/4 **MESA, AZ 85212**
0.183 mi.
968 ft. **Site 3 of 3 in cluster B**

Actual:
1441 ft.

Focus Map:
5

AST 2:

Name:	CRUM RUBBER MANUFACTURING
Address:	11400 E PECOS RD
City:	MESA
Exemption Num:	0701584-17
Old Exemption Num:	Not reported
Owner Id:	922
Owner Name:	CRUM RUBBER MANUFACTURING
Applicant Mailing Address:	11400 E PECOS RD
Applicant City, State, Zip:	MESA, AZ 85212
Cert Status:	Open
Cert Effective Date:	Not reported
Tank Number:	2
Product Code:	Red Diesel
Tank Type:	Above Ground Storage
Capacity:	1000
Installed Date:	01/01/2015
Cancellation Date:	Not reported
Cert Validation Date:	06/21/2017

Name:	CRUM RUBBER MANUFACTURING
Address:	11400 E PECOS RD
City:	MESA
Exemption Num:	0701584-17

CRUM RUBBER MANUFACTURING (Continued) **A100433357**

Old Exemption Num:	Not reported
Owner Id:	922
Owner Name:	CRUM RUBBER MANUFACTURING
Applicant Mailing Address:	11400 E PECOS RD
Applicant City, State, Zip:	MESA, AZ 85212
Cert Status:	Open
Cert Effective Date:	Not reported
Tank Number:	1
Product Code:	Diesel
Tank Type:	Above Ground Storage
Capacity:	3000
Installed Date:	01/01/2015
Cancellation Date:	Not reported
Cert Validation Date:	06/21/2017

14
ESE
1/8-1/4
0.213 mi.
1125 ft.

PINTO CREEK MANAGEMENT **LUST** **U003052123**
20820 S ELLSWORTH RD **UST** **N/A**
QUEEN CREEK, AZ 85142 **AST**
EMAP

Actual:
1403 ft.

Focus Map:
13

LUST:

Name:	PINTO CREEK MANAGEMENT
Address:	20820 S ELLSWORTH RD
City,State,Zip:	QUEEN CREEK, AZ 85142
Facility ID:	0-007502
Lust Number:	962.009
Facility Status:	CLOSED
Leak Priority:	5R1
Priority Description:	Closed soil-only CoC levels meet RBCA Tier 1 standards
Notification:	11/28/89
Date Closed:	09/27/05

UST:

Name:	PINTO CREEK MANAGEMENT
Address:	20820 S ELLSWORTH RD
City,State,Zip:	QUEEN CREEK, AZ 85142
Facility ID:	0-007502
Owner:	PINTO CREEK MANAGEMENT
Latitude:	33.264372
Longitude:	111.635138
Tank ID:	1
Date Closed:	11/02/1989
Tank Status:	**Perm Closure**
Closure Type:	**Removal**
Tank Inst Date:	**Not reported**
Capacity:	**10000**
Substance:	**Unleaded Gasoline**
Compartment:	**COMPARTMENT A**
Tank Const Type:	**Double Walled**
Tank Mtrl Type:	**Asphalt coated or Bare Steel**
Pipe Type:	**Suction - Check Valve at the Tank Top**
Pipe Mtrl Type:	**Bare or Galvanized Steel**
Pipe const Type:	**Not reported**
Tank ID:	2

PINTO CREEK MANAGEMENT (Continued) **U003052123**

Date Closed:	11/02/1989
Tank Status:	**Perm Closure**
Closure Type:	**Removal**
Tank Inst Date:	**Not reported**
Capacity:	**10000**
Substance:	**Diesel**
Compartment:	**COMPARTMENT A**
Tank Const Type:	**Double Walled**
Tank Mtrl Type:	**Asphalt coated or Bare Steel**
Pipe Type:	**Suction - Check Valve at the Tank Top**
Pipe Mtrl Type:	**Bare or Galvanized Steel**
Pipe const Type:	**Not reported**

AST 2:

Name:	PINTO CREEK MANAGEMENT
Address:	20820 S ELLSWORTH RD
City:	QUEEN CREEK
Exemption Num:	0700169-11
Old Exemption Num:	07-1001060
Owner Id:	316
Owner Name:	Pinto Creek Management Inc
Applicant Mailing Address:	PO Box 650
Applicant City, State, Zip:	Queen Creek, AZ 85242-0650
Cert Status:	Closed
Cert Effective Date:	12/19/1991
Tank Number:	1
Product Code:	Diesel(20)
Tank Type:	Above
Capacity:	2000
Installed Date:	01/01/1991
Cancellation Date:	12/31/2015
Cert Validation Date:	04/01/2011

EMAP:

Name:	PINTO CREEK MANAGEMENT
Address:	20820 S ELLSWORTH RD
City,State,Zip:	QUEEN CREEK, AZ 85142
ID Number:	33349
Township:	Not reported
Range:	Not reported
Section:	Not reported
Quarter 1:	Not reported
Quarter 2:	Not reported
Quarter 3:	Not reported
Latitude:	33.264372254000001
Longitude:	-111.635138848
Collection Method:	CALCULATED BY PROGRAM TECHNICAL STAFF
Place Type:	FARM/RANCH
Place Type Code:	FARM
Place C Code:	PP
Facility Status:	NOT ACTIVE
End Date:	10/05/2011
Verified:	Y

C15 **QUEEN CREEK SCHOOL MAINTENANCE** **AST** **A100430173**
ESE **20740 SOUTH ELLSWORTH** **N/A**
1/8-1/4 **QUEEN CREEK, AZ 85142**
0.213 mi.
1127 ft. **Site 1 of 2 in cluster C**

Actual: AST:
1402 ft.

Name:	QUEEN CREEK SCHOOL MAINTENANCE
Address:	20740 SOUTH ELLSWORTH
City,State,Zip:	QUEEN CREEK, AZ 85142
Facility Status:	Permitted
Permit #:	3058
Permit Year:	2006
Submitter:	Linda Nuetzman, Queen Creek USD
Submitter Phone:	480-987-5986
Memo:	Not reported
Approval Date:	08/21/1906

Focus Map:
13

C16 **QUEEN CREEK UNIFIED SCHOOL DIST #95** **AST** **A100355060**
ESE **20740 S ELLSWORTH RD** **N/A**
1/8-1/4 **QUEEN CREEK, AZ 85242**
0.213 mi.
1127 ft. **Site 2 of 2 in cluster C**

Actual: AST 2:
1402 ft.

Name:	QUEEN CREEK UNIFIED SCHOOL DIST #95
Address:	20740 S ELLSWORTH RD
City:	QUEEN CREEK
Exemption Num:	0700339-15
Old Exemption Num:	07-1008654
Owner Id:	482
Owner Name:	Queen Creek Unified School Dists
Applicant Mailing Address:	20740 S Ellsworth Rd
Applicant City, State, Zip:	Queen Creek, AZ 85242
Cert Status:	Open
Cert Effective Date:	11/06/2006
Tank Number:	1
Product Code:	Compartment Tank
Tank Type:	Above Ground Storage
Capacity:	11000
Installed Date:	Not reported
Cancellation Date:	12/01/2015
Cert Validation Date:	04/01/2011

Focus Map:
13

D17 **MGC PURE CHEMICALS AMERICA INC** **EMAP** **S117603838**
North **6560 S MOUNTAIN RD** **MANIFEST** **N/A**
1/8-1/4 **MESA, AZ 85212**
0.215 mi.
1136 ft. **Site 1 of 2 in cluster D**

Actual: EMAP:
1432 ft.

Name:	MGC PURE CHEMICALS AMERICA INC
Address:	6560 S MOUNTAIN RD
City,State,Zip:	MESA, AZ 85212
ID Number:	22401
Township:	Not reported
Range:	Not reported
Section:	Not reported

Focus Map:
5

MGC PURE CHEMICALS AMERICA INC (Continued) **S117603838**

Quarter 1:	Not reported
Quarter 2:	Not reported
Quarter 3:	Not reported
Latitude:	33.295000000000002
Longitude:	-111.59480000000001
Collection Method:	LOCATED FROM COUNTY PARCEL INFORMATION
Place Type:	CHEMICAL MANUFACTURING OR SALES
Place Type Code:	CHEM
Place C Code:	PP
Facility Status:	ACTIVE
End Date:	Not reported
Verified:	Y

AZ MANIFEST:

Name:	MGC PURE CHEMICALS AMERICA INC
Address:	6560 S MOUNTAIN RD
City,State,Zip:	MESA, AZ 85212
Report Year:	2018
EPA Id:	AZR000002394
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN2810
Quantity:	45
Waste Code 1:	Not reported
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	MGC PURE CHEMICALS AMERICA INC
Address:	6560 S MOUNTAIN RD
City,State,Zip:	MESA, AZ 85212
Report Year:	2018
EPA Id:	AZR000002394
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported

MGC PURE CHEMICALS AMERICA INC (Continued) **S117603838**

Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN3264
Quantity:	5
Waste Code 1:	D002
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	MGC PURE CHEMICALS AMERICA INC
Address:	6560 S MOUNTAIN RD
City,State,Zip:	MESA, AZ 85212
Report Year:	2018
EPA Id:	AZR000002394
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H132
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN3264
Quantity:	16000
Waste Code 1:	D002, U134
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	MGC PURE CHEMICALS AMERICA INC

MGC PURE CHEMICALS AMERICA INC (Continued) **S117603838**

Address:	6560 S MOUNTAIN RD
City,State,Zip:	MESA, AZ 85212
Report Year:	2018
EPA Id:	AZR000002394
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN3266
Quantity:	8
Waste Code 1:	D002
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	MGC PURE CHEMICALS AMERICA INC
Address:	6560 S MOUNTAIN RD
City,State,Zip:	MESA, AZ 85212
Report Year:	2018
EPA Id:	AZR000002394
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H132
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN1824
Quantity:	400
Waste Code 1:	D002
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported

MGC PURE CHEMICALS AMERICA INC (Continued) **S117603838**

Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	MGC PURE CHEMICALS AMERICA INC
Address:	6560 S MOUNTAIN RD
City,State,Zip:	MESA, AZ 85212
Report Year:	2018
EPA Id:	AZR000002394
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN3139
Quantity:	30
Waste Code 1:	D001, D011
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	MGC PURE CHEMICALS AMERICA INC
Address:	6560 S MOUNTAIN RD
City,State,Zip:	MESA, AZ 85212
Report Year:	2018
EPA Id:	AZR000002394
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H132
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported

MGC PURE CHEMICALS AMERICA INC (Continued) **S117603838**

Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN3098
Quantity:	200
Waste Code 1:	D001, D002
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

D18
North
1/8-1/4
0.215 mi.
1136 ft.

Actual:
1432 ft.

Focus Map:
5

MGC PURE CHEMICALS AMERICA INC
6560 S MOUNTAIN RD
MESA, AZ 85212

Site 2 of 2 in cluster D

RCRA-VSQG **1007198506**
TSCA **85242MGCPR6560S**
TRIS
FINDS
ECHO
MANIFEST

RCRA-VSQG:

Date Form Received by Agency:	20211215
Handler Name:	MGC PURE CHEMICALS AMERICA INC
Handler Address:	6560 S MOUNTAIN RD
Handler City,State,Zip:	MESA, AZ 85212
EPA ID:	AZR000002394
Contact Name:	DAVID BLOOMER
Contact Address:	6560 S MOUNTAIN RD
Contact City,State,Zip:	MESA, AZ 85212
Contact Telephone:	480-828-1367
Contact Fax:	Not reported
Contact Email:	DBLOOMER@MGCPURE.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	6560 S MOUNTAIN RD
Mailing City,State,Zip:	MESA, AZ 85212
Owner Name:	MGC PURE CHEMICALS AMERICA INC
Owner Type:	Private
Operator Name:	MGC PURE CHEMICALS AMERICA INC
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20220209
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Biennial: List of Years
Year: 2003

Click Here for Biennial Reporting System Data:
Year: 2001

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	IGNITABLE WASTE
Waste Code:	D002
Waste Description:	CORROSIVE WASTE
Waste Code:	D003
Waste Description:	REACTIVE WASTE
Waste Code:	D004
Waste Description:	ARSENIC
Waste Code:	D007
Waste Description:	CHROMIUM
Waste Code:	F003
Waste Description:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Waste Code:	U134
Waste Description:	HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)
Waste Code:	U154
Waste Description:	METHANOL (I) (OR) METHYL ALCOHOL (I)

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA, INC.
Legal Status:	Private
Date Became Current:	19950103
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA INC
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	6560 S MOUNTAIN RD

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Owner/Operator City,State,Zip:	QUEEN CREEK, AZ 85242-9716
Owner/Operator Telephone:	602-756-2427
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA INC
Legal Status:	Private
Date Became Current:	19950103
Date Ended Current:	Not reported
Owner/Operator Address:	6560 S MOUNTAIN RD
Owner/Operator City,State,Zip:	MESA 85212-9716
Owner/Operator Telephone:	701-261-5153
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA INC
Legal Status:	Private
Date Became Current:	19950103
Date Ended Current:	Not reported
Owner/Operator Address:	6560 S MOUNTAIN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	480-720-1728
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA INC
Legal Status:	Private
Date Became Current:	19950608
Date Ended Current:	Not reported
Owner/Operator Address:	6560 S MOUNTAIN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	480-987-9100
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA, INC;.
Legal Status:	Private
Date Became Current:	19950103
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA INC
Legal Status:	Private

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Date Became Current:	19950103
Date Ended Current:	Not reported
Owner/Operator Address:	6560 S MOUNTAIN RD
Owner/Operator City,State,Zip:	MESA 85212-9716
Owner/Operator Telephone:	701-261-5153
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA INC
Legal Status:	Private
Date Became Current:	19950608
Date Ended Current:	Not reported
Owner/Operator Address:	6560 S MOUNTAIN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	480-987-9100
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA, INC.
Legal Status:	Private
Date Became Current:	19950103
Date Ended Current:	Not reported
Owner/Operator Address:	6560 S. MOUNTAIN RD
Owner/Operator City,State,Zip:	QUEEN CREEK, AZ 85242
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA INC
Legal Status:	Private
Date Became Current:	19950608
Date Ended Current:	Not reported
Owner/Operator Address:	6560 S MOUNTAIN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	480-987-9100
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA INC
Legal Status:	Private
Date Became Current:	19950103
Date Ended Current:	Not reported
Owner/Operator Address:	6560 S MOUNTAIN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Owner/Operator Indicator:	Owner
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA INC
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	6560 S MOUNTAIN RD
Owner/Operator City,State,Zip:	QUEEN CREEK, AZ 85242-9716
Owner/Operator Telephone:	602-756-2427
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA INC
Legal Status:	Private
Date Became Current:	19950103
Date Ended Current:	Not reported
Owner/Operator Address:	6560 S MOUNTAIN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212-9716
Owner/Operator Telephone:	623-326-9640
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA INC
Legal Status:	Private
Date Became Current:	19950103
Date Ended Current:	Not reported
Owner/Operator Address:	6560 S MOUNTAIN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	MGC PURE CHEMICAL AMERICA, INC.
Legal Status:	Private
Date Became Current:	19950103
Date Ended Current:	Not reported
Owner/Operator Address:	6560 S. MOUNTAIN RD
Owner/Operator City,State,Zip:	QUEEN CREEK, AZ 85242
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA INC
Legal Status:	Private
Date Became Current:	19950103
Date Ended Current:	Not reported
Owner/Operator Address:	6560 S MOUNTAIN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA INC
Legal Status:	Private
Date Became Current:	19950103
Date Ended Current:	Not reported
Owner/Operator Address:	6560 S MOUNTAIN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	623-326-9640
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA INC
Legal Status:	Private
Date Became Current:	19950103
Date Ended Current:	Not reported
Owner/Operator Address:	6560 S MOUNTAIN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA INC
Legal Status:	Private
Date Became Current:	19950103
Date Ended Current:	Not reported
Owner/Operator Address:	6560 S MOUNTAIN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212-9716
Owner/Operator Telephone:	480-720-1728
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA INC
Legal Status:	Private
Date Became Current:	19950103
Date Ended Current:	Not reported
Owner/Operator Address:	6560 S MOUNTAIN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	MGC PURE CHEMICALS AMERICA INC
Legal Status:	Private
Date Became Current:	19950608
Date Ended Current:	Not reported
Owner/Operator Address:	6560 S MOUNTAIN RD

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Owner/Operator City,State,Zip: MESA, AZ 85212
Owner/Operator Telephone: 480-987-9100
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 20040227
Handler Name: MGC PURE CHEMICALS AMERICA, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20080221
Handler Name: MGC PURE CHEMICALS AMERICA INC
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20070214
Handler Name: MGC PURE CHEMICALS AMERICA INC
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20150514
Handler Name: MGC PURE CHEMICALS AMERICA INC
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Electronic Manifest Broker: Not reported

Receive Date: 20160418
Handler Name: MGC PURE CHEMICALS AMERICA INC
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20180302
Handler Name: MGC PURE CHEMICALS AMERICA INC
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20200219
Handler Name: MGC PURE CHEMICALS AMERICA INC
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20210226
Handler Name: MGC PURE CHEMICALS AMERICA INC
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 20020910
Handler Name: MGC PURE CHEMICALS AMERICA INC
Federal Waste Generator Description: Large Quantity Generator

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20050301
Handler Name: MGC PURE CHEMICALS AMERICA INC
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20110929
Handler Name: MGC PURE CHEMICALS AMERICA INC
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20180323
Handler Name: MGC PURE CHEMICALS AMERICA INC
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20180326
Handler Name: MGC PURE CHEMICALS AMERICA INC
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 20190628
Handler Name: MGC PURE CHEMICALS AMERICA INC
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20211215
Handler Name: MGC PURE CHEMICALS AMERICA INC
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 20010215
Handler Name: MGC CHEMICALS AMERICA, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20020225
Handler Name: MGC PURE CHEMICALS AMERICA, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

List of NAICS Codes and Descriptions:
NAICS Code: 32518
NAICS Description: OTHER BASIC INORGANIC CHEMICAL MANUFACTURING

NAICS Code: 325180
NAICS Description: OTHER BASIC INORGANIC CHEMICAL MANUFACTURING

NAICS Code: 325998
NAICS Description: ALL OTHER MISCELLANEOUS CHEMICAL PRODUCT AND PREPARATION MANUFACTURING

Facility Has Received Notices of Violation:
Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: Generators - Pre-transport
Date Violation was Determined: 20000712
Actual Return to Compliance Date: 20010220
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Scheduled Compliance Date: Not reported
Enforcement Identifier: 001
Date of Enforcement Action: 20001016
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: CMCDO
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: Generators - General
Date Violation was Determined: 20000712
Actual Return to Compliance Date: 20010220
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA
Scheduled Compliance Date: Not reported
Enforcement Identifier: 001
Date of Enforcement Action: 20001016
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: CMCDO
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	Generators - Pre-transport
Date Violation was Determined:	20000712
Actual Return to Compliance Date:	20010220
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	002
Date of Enforcement Action:	20001106
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	CMCDO
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	Generators - General
Date Violation was Determined:	20000712
Actual Return to Compliance Date:	20010220
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	EPA

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Scheduled Compliance Date: Not reported
Enforcement Identifier: 002
Date of Enforcement Action: 20001106
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number:Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: CMCDO
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Evaluation Action Summary:
Evaluation Date: 20000712
Evaluation Responsible Agency: State
Found Violation: No
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9STA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: Not reported
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 20000712
Evaluation Responsible Agency: EPA
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: CMCDO
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 20010220
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Evaluation Date:	20000712
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	CMCDO
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20010220
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	20000712
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	CMCDO
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20010220
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	20000712
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	CMCDO
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20010220
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Click this hyperlink while viewing on your computer to access additional TSCA detail in the EDR Site Report.

Facility, Chemical, Releases and Other Waste Management Summary Information:

TRI ID:	85242MGCPR6560S
Form Type:	Form R
Reporting year:	2018
Trade secret indicator:	NO
Sanitized indicator:	NO
Title of certifying official:	PLANT MANAGER JAMES ROSE
Certifying officials signature indicator:	ELECTRONIC
Date signed:	2019-06-20
Name:	MGC PURE CHEMICALS AMERICA INC
Address:	6560 S MOUNTAIN RD
City,State,Zip:	MESA, AZ 85212
BIA code:	Not reported
Tribe name:	Not reported

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Mailing name:		MGC PURE CHEMICALS AMERICA INC
Mailing street:		6560 S MOUNTAIN RD
Mailing province:		Not reported
Mailing City,State,Zip:		MESA, AZ 85212
Entire facility ind:		YES
Partial facility ind:		NO
Federal facility ind:		NO
Goco facility ind:		NO
Assigned fed facility flag:		NO
Public contact name:		JIM ROSE
Public contact phone and Ext:		4809879100 106
Public contact email:		JROSE@MGCPURE.COM
Primary sic code:		Not reported
Sic code 2:		Not reported
Sic code 3:		Not reported
Sic code 4:		Not reported
Sic code 5:		Not reported
Sic code 6:		Not reported
Naics origin:		Not reported
Primary naics code:		325180
Naics code 2:		Not reported
Naics code 3:		Not reported
Naics code 4:		Not reported
Naics code 5:		Not reported
Naics code 6:		Not reported
Latitude:		33.29222
Longitude:		-111.59194
D and B number A:		Not reported
D and B number B:		Not reported
RCRA number A:		AZR000002394
RCRA number B:		Not reported
RCRA number C:		Not reported
RCRA number D:		Not reported
RCRA number E:		Not reported
RCRA number F:		Not reported
RCRA number G:		Not reported
RCRA number H:		Not reported
NPDES number A:		AZMS67800
NPDES number B:		AZMS67772
NPDES number C:		Not reported
NPDES number D:		Not reported
NPDES number E:		Not reported
NPDES number F:		Not reported
NPDES number G:		Not reported
Parent company name:		Not reported
Parent company D and B number:		Not reported
Standardized parent company name:		NA
Document control number:		1318216981973
TRI ID:		85242MGCPR6560S
Cas number:		007664417
Chemical name:	AMMONIA	
Classification:		TRI
Unit of measure:		Pounds
Metal ind:		NO
Revision code 1:		Not reported
Revision code 2:		Not reported
Maximum amount on site:		05

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Fugitive air emissions - total release pounds:	NA
Fugitive air emissions - total release range code:	Not reported
Total fugitive air emissions:	0
Fugitive air emissions - basis of estimate:	Not reported
Stack air emissions - release pounds:	NA
Stack air emissions - release range code:	Not reported
Total stack air emissions:	0
Stack air emissions - basis of estimate:	Not reported
Total air emissions:	0
Discharges to stream a - stream name:	NA
Total discharges to stream a:	0
Discharges to stream a - basis of estimate:	Not reported
Discharges to stream a - % from stormwater:	Not reported
Discharges to stream b - stream name:	Not reported
Total discharges to stream b:	Not reported
Discharges to stream b - basis of estimate:	Not reported
Discharges to stream b - % from stormwater:	Not reported
Discharges to stream c - stream name:	Not reported
Total discharges to stream c:	Not reported
Discharges to stream c - basis of estimate:	Not reported
Discharges to stream c - % from stormwater:	Not reported
Discharges to stream d - stream name:	Not reported
Total discharges to stream d:	Not reported
Discharges to stream d - basis of estimate:	Not reported
Discharges to stream d - % from stormwater:	Not reported
Discharges to stream e - stream name:	Not reported
Total discharges to stream e:	Not reported
Discharges to stream e - basis of estimate:	Not reported
Discharges to stream e - % from stormwater:	Not reported
Discharges to stream f - stream name:	Not reported
Total discharges to stream f:	Not reported
Discharges to stream f - basis of estimate:	Not reported
Discharges to stream f - % from stormwater:	Not reported
Discharges to stream g - stream name:	Not reported
Total discharges to stream g:	Not reported
Discharges to stream g - basis of estimate:	Not reported
Discharges to stream g - % from stormwater:	Not reported
Total number of receiving streams:	0
Total surface water discharge:	0
Total on-site underground inj - pounds:	Not reported
On-site underground inj - basis of estimate:	Not reported
Total on-site ugrnd inj to cl i wells - pounds:	0
On-site underground inj to c1 i wells - basis of estimate:	Not reported
Total on-site ugrnd inj to cl ii-v wells - pounds:	0
On-site ungrnd inj to cl ii-v wells - basis of estimate:	Not reported
Total on-site underground injection:	0
Total on-site landfills:	Not reported
On-site landfills - basis of estimate:	Not reported
Total on-site RCRA subtitle c landfills:	0
On-site RCRA subtitle c landfills - basis of estimate:	Not reported
Total other on-site landfills:	0
Other landfills - basis of estimate:	Not reported
Total on-site land treatment:	0
Land trtmt/appl farming - basis of estimate:	Not reported
Total surface impoundments:	Not reported
Surface impoundment - basis of estimate:	Not reported
Total RCRA c surface impoundments:	0

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

RCRA c Surface impoundment - basis of estimate:	Not reported
Total other surface impoundments:	0
Other surface impoundment - basis of estimate:	Not reported
Total other disposal:	0
Other disposal - basis of estimate:	Not reported
Total on-site land releases:	0
Total on-site releases:	0
Off-site - POTW releases:	2979.588
Off-site - storage only:	0
Off-site - solid/stab - metals:	0
Off-site - wastewater treatment release - metals:	0
Off-site - solid/stab - release - metals:	0
Off-site - wastewater treatment - metals:	0
Off-site - underground injection:	0
Off-site - underground injection - class 1 wells:	0
Off-site - underground injection - class ii-v wells:	0
Off-site - landfills/disposal surface impoundments:	0
Off-site - surface impoundment:	0
Off-site - RCRA subtitle c surface impoundments:	0
Off-site - other surface impoundments:	0
Off-site - other landfills:	0
Off-site - RCRA subtitle c landfills:	0
Off-site - disposal - land treatment:	0
Off-site - disposal - other land disposal:	0
Off-site - disposal - other off-site management:	0
Off-site - disposal - transfer to waste broker:	0
Off-site - disposal - unknown:	0
Total transferred off site for disposal:	2979.588
Off-site - recycling - solvents/organics recovery:	0
Off-site - recycling -metals recovery:	0
Off-site - recycling - other reuse or recovery:	0
Off-site - recycling - acid regeneration:	0
Off-site - recycling - transfer to waste broker:	75218
Total transferred off site for recycling:	75218
Off-site - energy recovery:	0
Off-site - transfer to waste broker for energy recovery:	0
Total transferred off site for energy recovery:	0
Off-site - POTW treatment:	4469.382
Off-site - solid/stab treatment - non metals:	0
Off-site -incineration/thermal treatment:	0
Off-site - incineration/insignificant heat value:	0
Off-site - wastewater treatment - non-metals:	0
Off-site - other waste treatment:	0
Off-site - transfer to waste broker - waste treatment:	0
Total transferred off site for treatment:	4469.382
Off-site - transfer to waste broker:	0
Total transferred off site for further waste management:	79687.382
Total POTW transfer:	7448.97
Energy recovery on site current year:	0
Recycled on site current year:	0
Treated on site current year:	0
Total on-site waste management:	0
On-site energy recovery method 1:	Not Applicable
On-site energy recovery method 2:	Not reported
On-site energy recovery method 3:	Not Applicable
On-site energy recovery method 4:	Not reported
On-site recycling processes method 1:	Not Applicable

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

On-site recycling processes method 2:	Not reported
On-site recycling processes method 3:	Not reported
On-site recycling processes method 4:	Not reported
On-site recycling processes method 5:	Not reported
On-site recycling processes method 6:	Not reported
On-site recycling processes method 7:	Not reported
FRS Facility ID:	110000860792
Elemental Metal Included:	NO
Waste Rock Pile managed Indicator:	0
Waste Rock Quantity:	Not reported
Off Site - POTW Releases 81C:	0
Off Site - POTW Releases 81D:	2979.588

Chemical Activities and Uses:

Cas number:	007664417
Document control number:	1318216981973
Chemical name: AMMONIA	
Classification:	TRI
Unit of measure:	Pounds
Produce the chemical:	Yes
Import the chemical:	No
On-site use of the chemical:	No
Sale or distribution of the chemical:	Yes
As a byproduct:	No
As a manufactured impurity:	No
Used as a reactant:	No
P101 feedstocks:	No
P102 raw materials:	No
P103 intermediates:	No
P104 initiators:	No
P199 other:	No
Added as a formulation component:	No
P201 additives:	No
P202 dyes:	No
P203 reaction diluents:	No
P204 initiators:	No
P205 solvents:	No
P206 inhibitors:	No
P207 emulsifiers:	No
P208 surfactants:	No
P209 lubricants:	No
P210 flame retardants:	No
P211 rheological modifiers:	No
P299 other:	No
Used as an article component:	No
Repackaging:	No
As a process impurity:	No
Processed / recycling:	No
Used as a chemical processing aid:	No
Z101 process solvents:	No
Z102 catalysts:	No
Z103 inhibitors:	No
Z104 initiators:	No
Z105 reaction terminators:	No
Z106 solution buffers:	No
Z199 other:	No
Used as a manufacturing aid:	No
Z201 process lubricants:	No

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Z202 metalworking fluids:	No
Z203 coolants:	No
Z204 refrigerants:	No
Z205 hydraulic fluids:	No
Z299 other:	No
Ancillary or other use:	No
Z301 cleaner:	No
Z302 degreaser:	No
Z303 lubricant:	No
Z304 fuel:	No
Z305 flame retardant:	No
Z306 waste treatment:	No
Z307 water treatment:	No
Z308 construction materials:	No
Z399 other:	No

Submitted Facility Name:	MGC PURE CHEMICALS AMERICA INC
Submitted Street:	6560 S MOUNTAIN RD
Submitted City:	MESA
Submitted County:	MARICOPA
Submitted State:	AZ
Submitted Zip Code:	85212
Submitted BIA Code:	Not reported
Submitted Tribe Name:	Not reported
Submitted Parent Company Name:	Not reported
Submitted Parent Company DB Number:	Not reported
Submitted Standardized Parent Company Name:	NA
Submitted Primary NAICS Code:	325180
Submitted Industry Code:	325
Submitted Industry Name:	Chemicals
Industry Code:	325
Industry Name:	Chemicals
Last year the facility reported:	2019
First year the facility reported:	1996
Number of forms submitted:	1
Total number of forms submitted:	17 20200808

Detailed Source Reduction Activities and Methods:

Cas number:	007664417
Document control number:	1318216981973
Chemical name: AMMONIA	
Classification:	TRI
Unit of measure:	Pounds
On-site limited releases - prior year:	0
On-site limited releases - current year:	0
On-site limited releases - following year:	0
On-site limited releases - 2nd-following year:	0
Other on-site releases - prior year:	65
Other on-site releases - current year:	0
Other on-site releases - following year:	0
Other on-site releases - 2nd-following year:	0
Off-site limited releases - prior year:	0
Off-site limited releases - current year:	0
Off-site limited releases - following year:	0
Off-site limited releases - 2nd-following year:	0
Other off-site releases - previous year:	3776.064
Other off-site releases - current year:	2979.588

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Other off-site releases - following year:	5000
Other off-site releases - 2nd-following year:	0
Energy recovery on site prior year:	0
Energy recovery on site current year:	0
Energy recovery on site following year:	0
Energy recovery on site 2nd-following year:	0
Energy recovery off site prior year:	0
Energy recovery off site current year:	0
Energy recovery off site following year:	0
Energy recovery off site 2nd-following year:	0
Quantity recycled on site prior year:	0
Quantity recycled on site current year:	0
Quantity recycled on site following year:	0
Quantity recycled on site 2nd-following year:	0
Quantity recycled off site prior year:	57601.44
Quantity recycled off site current year:	75218
Quantity recycled off site following year:	100000
Quantity recycled off site 2nd-following year:	0
Quantity treated on site prior year:	0
Quantity treated on site current year:	0
Quantity treated on site following year:	0
Quantity treated on site 2nd-following year:	0
Quantity treated off site prior year:	5664.096
Quantity treated off site current year:	4469.382
Quantity treated off site following year:	0
Quantity treated off site 2nd-following year:	0
Catastrophic releases or other one-time events:	Not reported
Prod ratio/activity index:	1
Prod ratio or activity:	PRODUCTION
1st SR reduction activity:	NA-NA
1st SR activity ID meth code and desc 1:	Not reported
1st SR activity ID meth code and desc 2:	Not reported
1st SR activity ID meth code and desc 3:	Not reported
EST Ann REDN 1st source REDN act code and desc:	Not reported
2nd SR activity code and desc:	Not reported
2nd SR activity ID meth code and desc 1:	Not reported
2nd SR activity ID meth code and desc 2:	Not reported
2nd SR activity ID meth code and desc 3:	Not reported
EST Ann REDN 2nd source REDN act code and desc:	Not reported
3rd SR activity code and desc:	Not reported
3rd SR activity ID meth code and desc 1:	Not reported
3rd SR activity ID meth code and desc 2:	Not reported
3rd SR activity ID meth code and desc 3:	Not reported
EST Ann REDN 3rd source REDN act code and desc:	Not reported
4th SR activity code and desc:	Not reported
4th SR activity ID meth code and desc 1:	Not reported
4th SR activity ID meth code and desc 2:	Not reported
4th SR activity ID meth code and desc 3:	Not reported
EST Ann REDN 4th source REDN act code and desc:	Not reported

Detailed On-site Waste Treatment Methods and Efficiency:

Cas number:		007664417
Document control number:		1318216981973
Chemical name:	AMMONIA	
Classification:		TRI
Unit of measure:		Pounds
Stream 1 - waste stream code:		Wastewater (aqueous waste)

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Stream 1 - trtmt method - sequence 1:	Neutralization
Stream 1 - trtmt method - sequence 2:	Not reported
Stream 1 - trtmt method - sequence 3:	Not reported
Stream 1 - trtmt method - sequence 4:	Not reported
Stream 1 - trtmt method - sequence 5:	Not reported
Stream 1 - trtmt method - sequence 6:	Not reported
Stream 1 - trtmt method - sequence 7:	Not reported
Stream 1 - trtmt method - sequence 8:	Not reported
Stream 1 - based on operating data:	NO
Stream 2 - waste stream code:	Not reported
Stream 2 - trtmt method - sequence 1:	Not reported
Stream 2 - trtmt method - sequence 2:	Not reported
Stream 2 - trtmt method - sequence 3:	Not reported
Stream 2 - trtmt method - sequence 4:	Not reported
Stream 2 - trtmt method - sequence 5:	Not reported
Stream 2 - trtmt method - sequence 6:	Not reported
Stream 2 - trtmt method - sequence 7:	Not reported
Stream 2 - trtmt method - sequence 8:	Not reported
Stream 2 - based on operating data:	Not reported
Stream 3 - waste stream code:	Not reported
Stream 3 - trtmt method - sequence 1:	Not reported
Stream 3 - trtmt method - sequence 2:	Not reported
Stream 3 - trtmt method - sequence 3:	Not reported
Stream 3 - trtmt method - sequence 4:	Not reported
Stream 3 - trtmt method - sequence 5:	Not reported
Stream 3 - trtmt method - sequence 6:	Not reported
Stream 3 - trtmt method - sequence 7:	Not reported
Stream 3 - trtmt method - sequence 8:	Not reported
Stream 3 - based on operating data:	Not reported
Stream 4 - waste stream code:	Not reported
Stream 4 - trtmt method - sequence 1:	Not reported
Stream 4 - trtmt method - sequence 2:	Not reported
Stream 4 - trtmt method - sequence 3:	Not reported
Stream 4 - trtmt method - sequence 4:	Not reported
Stream 4 - trtmt method - sequence 5:	Not reported
Stream 4 - trtmt method - sequence 6:	Not reported
Stream 4 - trtmt method - sequence 7:	Not reported
Stream 4 - trtmt method - sequence 8:	Not reported
Stream 4 - based on operating data:	Not reported
Stream 5 - waste stream code:	Not reported
Stream 5 - trtmt method - sequence 1:	Not reported
Stream 5 - trtmt method - sequence 2:	Not reported
Stream 5 - trtmt method - sequence 3:	Not reported
Stream 5 - trtmt method - sequence 4:	Not reported
Stream 5 - trtmt method - sequence 5:	Not reported
Stream 5 - trtmt method - sequence 6:	Not reported
Stream 5 - trtmt method - sequence 7:	Not reported
Stream 5 - trtmt method - sequence 8:	Not reported
Stream 5 - based on operating data:	Not reported

Details of Off-site Transfers:

Cas number:		007664417
Document control number:		1318216981973
Chemical name:	AMMONIA	
Classification:		TRI
Offsite RCRA id nr:		NA
Offsite transfer sequence number:		2

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Offsite name:	FERTIZONA
Offsite street address:	26705 W BASELINE RD
Offsite City,State,Zip:	BUCKEYE, AZ 85326
Offsite county:	MARICOPA
Offsite province:	Not reported
Offsite country id:	Not reported
Offsite control:	NO
Unit of measure:	Pounds
Total amount transferred offsite for disposal:	0
Offsite TRF to WST broker for recycl m93 LBS:	75218
Offsite TRF to WST broker for recycl m93 BOE:	Mass Balance Calculations
Total amount transferred offsite for recycling:	75218
Total amount transferred offsite for energy recovery:	0
Total amount transferred offsite for treatment:	0
FRS ID - Transfer Location:	Not reported

Details of Transfers to Publicly Owned Treatment Works:

Cas number:	007664417
Document control number:	1318216981973
Chemical name: AMMONIA	
Classification:	TRI
Unit of measure:	Pounds
POTW name:	MESA GREENFIELD WRP
POTW address:	E. QUEEN CREEK RD AND GREENFIELD RD.
POTW City,State,Zip:	MESA, AZ 85211
POTW county:	MARICOPA
Quantity transferred:	7448.97
Basis of estimate:	Not reported
Discharges to water streams:	0
Discharges to water streams - basis of estimate:	Not reported
Discharges to other activities:	0
Discharges to other activities - basis of estimate:	Not reported
Released to air:	0
Released to air - basis of estimate:	Not reported
Sludge to disposal:	0
Sludge to disposal - basis of estimate:	Not reported
Sludge to incineration - metals:	0
Sludge to incineration - metals - basis of estimate:	Not reported
Sludge to agricultural applications:	0
Sludge to agricultural applications - basis of estimate:	Not reported
Other or unknown disposal:	2979.588
Other or unknown disposal - basis of estimate:	Published Emission Factors
Other or unknown treatment:	0
Other or unknown treatment - basis of estimate:	Not reported
Sludge to incineration - nonmetals:	0
Sludge to incineration - nonmetals - basis of estimate:	Not reported
Total treated:	4469.382
POTW Registry ID:	110056004149
Off Site - POTW Releases 81C:	0
Off Site - POTW Releases 81D:	2979.588
Off Site - POTW Releases:	2979.588
Experimental and Est. Treatment:	4469.382
Experimental and Est. Treatment - Basis of Est.:	E1

FINDS:

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Registry ID: 110000860792

Click Here:

Environmental Interest/Information System:
TSCA SUBMITTER
US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.
AZURITE (Arizona Unified Repository For Informational Tracking Of The Environment is the Arizona Department of Environmental Quality (ADEQ) database that is used for environmental enforcement and compliance reporting to the Permit and Compliance (PCS) system and to the Air Facility System Universal Interface (AFS-UI).
HAZARDOUS WASTE BIENNIAL REPORTER
AIR MINOR
US EPA Risk Management Plan (RMP) database stores the risk management plans reported by companies that handle, manufacture, use, or store certain flammable or toxic substances, as required under section 112(r) of the Clean Air Act (CAA).

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1007198506
Registry ID:	110000860792
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110000860792
Name:	MGC PURE CHEMICALS AMERICA INC
Address:	6560 S MOUNTAIN RD
City,State,Zip:	MESA, AZ 85212

AZ MANIFEST:

Name:	MGC PURE CHEMICALS AMERICA INC
Address:	6560 S MOUNTAIN RD
City,State,Zip:	QUEEN CREEK, AZ 85242-9716
Report Year:	2017
EPA Id:	AZR000002394
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN3139
Quantity:	5
Waste Code 1:	D001
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	MGC PURE CHEMICALS AMERICA INC
Address:	6560 S MOUNTAIN RD
City,State,Zip:	QUEEN CREEK, AZ 85242-9716
Report Year:	2017
EPA Id:	AZR000002394
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN3264
Quantity:	13
Waste Code 1:	D002
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	MGC PURE CHEMICALS AMERICA INC

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Address:	6560 S MOUNTAIN RD
City,State,Zip:	QUEEN CREEK, AZ 85242-9716
Report Year:	2017
EPA Id:	AZR000002394
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN1993
Quantity:	5
Waste Code 1:	D001
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	MGC PURE CHEMICALS AMERICA INC
Address:	6560 S. MOUNTAIN RD
City,State,Zip:	QUEEN CREEK, AZ 852429716
Report Year:	2016
EPA Id:	AZR000002394
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN2984
Quantity:	8838
Waste Code 1:	D001
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	MGC PURE CHEMICALS AMERICA INC
Address:	6560 S MOUNTAIN RD
City,State,Zip:	QUEEN CREEK, AZ 85242-9716
Report Year:	2017
EPA Id:	AZR000002394
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN3267
Quantity:	28
Waste Code 1:	D002
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	MGC PURE CHEMICALS AMERICA INC
Address:	6560 S MOUNTAIN RD
City,State,Zip:	QUEEN CREEK, AZ 852429716
Report Year:	2015
EPA Id:	AZR000002394
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN1490
Quantity:	900
Waste Code 1:	D001
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	MGC PURE CHEMICALS AMERICA INC
Address:	6560 S MOUNTAIN RD
City,State,Zip:	QUEEN CREEK, AZ 852429716
Report Year:	2015
EPA Id:	AZR000002394
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN3264
Quantity:	25
Waste Code 1:	D002
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	MGC PURE CHEMICALS AMERICA INC
Address:	6560 S. MOUNTAIN RD
City,State,Zip:	QUEEN CREEK, AZ 852429716
Report Year:	2016
EPA Id:	AZR000002394
Business Type:	Not reported
Mailing Address:	Not reported

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN1836
Quantity:	420
Waste Code 1:	D002
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	MGC PURE CHEMICALS AMERICA INC
Address:	6560 S. MOUNTAIN RD
City,State,Zip:	QUEEN CREEK, AZ 852429716
Report Year:	2016
EPA Id:	AZR000002394
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN2984
Quantity:	1200
Waste Code 1:	D001
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported

MGC PURE CHEMICALS AMERICA INC (Continued) **1007198506**

Waste Code 13:	Not reported
Name:	MGC PURE CHEMICALS AMERICA INC
Address:	6560 S MOUNTAIN RD
City,State,Zip:	QUEEN CREEK, AZ 85242-9716
Report Year:	2017
EPA Id:	AZR000002394
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN2922
Quantity:	25
Waste Code 1:	D002,D004,D005,
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Click this hyperlink while viewing on your computer to access
1 additional AZ MANIFEST: record(s) in the EDR Site Report.

19
South
1/8-1/4
0.221 mi.
1167 ft.

BED, BATH AND BEYOND INC
21258 S ELLSWORTH LOOP RD
QUEEN CREEK, AZ 85142

EMAP **S117587645**
MANIFEST **N/A**

Actual:
1401 ft.

Focus Map:
13

EMAP:

Name:	BED, BATH AND BEYOND #1257
Address:	21258 S ELLSWORTH LOOP RD
City,State,Zip:	QUEEN CREEK, AZ 85142
ID Number:	144872
Township:	Not reported
Range:	Not reported
Section:	Not reported
Quarter 1:	Not reported
Quarter 2:	Not reported
Quarter 3:	Not reported
Latitude:	33.253997667
Longitude:	-111.64118897199999
Collection Method:	DIGITAL IMAGERY

BED, BATH AND BEYOND INC (Continued) **S117587645**

Place Type:	RETAIL STORE
Place Type Code:	RETL
Place C Code:	PP
Facility Status:	ACTIVE
End Date:	Not reported
Verified:	Y

AZ MANIFEST:

Name:	BED, BATH AND BEYOND INC
Address:	21258 S ELLSWORTH LOOP RD
City,State,Zip:	QUEEN CREEK, AZ 85142
Report Year:	2018
EPA Id:	CESQG
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H141
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN1011
Quantity:	6
Waste Code 1:	D001
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	BED, BATH AND BEYOND INC
Address:	21258 S ELLSWORTH LOOP RD
City,State,Zip:	QUEEN CREEK, AZ 85142
Report Year:	2018
EPA Id:	CESQG
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H141
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported

BED, BATH AND BEYOND INC (Continued) **S117587645**

Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN3264
Quantity:	8
Waste Code 1:	D002
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	BED, BATH AND BEYOND INC
Address:	21258 S ELLSWORTH LOOP RD
City,State,Zip:	QUEEN CREEK, AZ 85142
Report Year:	2018
EPA Id:	CESQG
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H141
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN2794
Quantity:	7
Waste Code 1:	Not reported
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	BED, BATH AND BEYOND INC
Address:	21258 S ELLSWORTH LOOP RD
City,State,Zip:	QUEEN CREEK, AZ 85142
Report Year:	2018
EPA Id:	CESQG
Business Type:	Not reported
Mailing Address:	Not reported

BED, BATH AND BEYOND INC (Continued) **S117587645**

Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H141
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN3266
Quantity:	9
Waste Code 1:	D002
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	BED, BATH AND BEYOND INC
Address:	21258 S ELLSWORTH LOOP RD
City,State,Zip:	QUEEN CREEK, AZ 85142
Report Year:	2018
EPA Id:	CESQG
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H141
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN1993
Quantity:	6
Waste Code 1:	D001, U002, U06
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported

BED, BATH AND BEYOND INC (Continued) **S117587645**

Waste Code 13:	Not reported
Name:	BED, BATH AND BEYOND INC
Address:	21258 S ELLSWORTH LOOP RD
City,State,Zip:	QUEEN CREEK, AZ 85142
Report Year:	2018
EPA Id:	CESQG
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H141
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN1057
Quantity:	12
Waste Code 1:	D001
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported
Name:	BED, BATH AND BEYOND INC
Address:	21258 S ELLSWORTH LOOP RD
City,State,Zip:	QUEEN CREEK, AZ 85142
Report Year:	2018
EPA Id:	CESQG
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H141
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN1950
Quantity:	15
Waste Code 1:	D001
Waste Code 2:	Not reported
Waste Code 3:	Not reported

BED, BATH AND BEYOND INC (Continued) **S117587645**

Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

20
North
1/8-1/4
0.230 mi.
1214 ft.

Actual:
1337 ft.

Focus Map:
1

FORMER WILLIAMS AIR FORCE BASE SITE SS024 **AZURITE** **S118167568**
6833 E OLD PECOS ROAD **AUL** **N/A**
MESA, AZ 85212 **EMAP**

AZURITE:

Remediation Level Achieved:	SRL Non-residential
Name:	FORMER WILLIAMS AIR FORCE BASE SITE SS024
Address:	6833 E OLD PECOS ROAD
City,State,Zip:	MESA, AZ 85212
Remediation ID:	31388
Program:	CERCLA (FEDERAL SUPERFUND) PROGRAM
Program File Number:	Not reported
Type:	DEUR
Remediation Start Date:	Not reported
Remediation End Date:	Not reported
DEUR Record Date:	04/14/2015
WPD Dirctrs Approval:	Not reported
VEMUR Record Date:	Not reported
DEUR Release Date:	Not reported

AZURITE:

Remediation Id:	31388
Standard Types:	Soil Remediation Level
Contaminants:	CHLORDANE
Concentraction Mg/Kg:	1
Depth Feet:	Not reported

Remediation Id:	31388
Standard Types:	Soil Remediation Level
Contaminants:	CHLORDANE
Concentraction Mg/Kg:	1
Depth Feet:	Not reported

Remediation Id:	31388
Standard Types:	Soil Remediation Level
Contaminants:	DIELDRIN
Concentraction Mg/Kg:	.54
Depth Feet:	Not reported

AUL:

Name:	FORMER WILLIAMS AIR FORCE BASE SITE SS024
Address:	6833 E OLD PECOS ROAD
City:	MESA
Remediation ID:	31388

FORMER WILLIAMS AIR FORCE BASE SITE SS024 (Continued) **S118167568**

Program:	CERCLA (FEDERAL SUPERFUND) PROGRAM
Program File Number:	Not reported
Type:	DEUR
DEUR Record Date:	04/14/2015
WPD Director's Approval Date:	Not reported
VEMUR Record Date:	Not reported

EMAP:

Name:	FORMER WILLIAMS AIR FORCE BASE SITE SS024
Address:	6833 E OLD PECOS ROAD
City,State,Zip:	MESA, AZ 85212
ID Number:	148715
Township:	Not reported
Range:	Not reported
Section:	Not reported
Quarter 1:	Not reported
Quarter 2:	Not reported
Quarter 3:	Not reported
Latitude:	33.292011500000001
Longitude:	-111.685783472
Collection Method:	DIGITAL IMAGERY
Place Type:	MILITARY BASE
Place Type Code:	MIL
Place C Code:	PP
Facility Status:	ACTIVE
End Date:	Not reported
Verified:	Y

21
North
1/8-1/4
0.243 mi.
1283 ft.

Actual:
1412 ft.

Focus Map:
4

OLD DOMINION FREIGHT LINE INC **AST** **A100513756**
10233 E. PECOS RD SW **N/A**
MESA, AZ 82212

AST 2:

Name:	OLD DOMINION FREIGHT LINE INC
Address:	10233 E. PECOS RD SW
City:	MESA
Exemption Num:	0701727-16
Old Exemption Num:	Not reported
Owner Id:	856
Owner Name:	Old Dominion Freight Line, Inc.
Applicant Mailing Address:	500 Old Dominion Way
Applicant City, State, Zip:	Thomasville, NC 27360
Cert Status:	Open
Cert Effective Date:	12/07/2020
Tank Number:	1
Product Code:	Diesel
Tank Type:	Above Ground Storage
Capacity:	15000
Installed Date:	12/04/2020
Cancellation Date:	12/31/2015
Cert Validation Date:	12/07/2020

22 ESE 1/4-1/2 0.303 mi. 1601 ft. **PRISONER OF WAR CAMP (QUEEN CREEK)** **FUDS** **1024903319**
N/A
RITTENHOUSE, AZ

Actual: 1403 ft.
Focus Map: 13

FUDS:

EPA Region:	9
Installation ID:	AZ99799FA42600
Congressional District Number:	5
Name:	PRISONER OF WAR CAMP (QUEEN CREEK)
FUDS Number:	J09AZ1104
City:	RITTENHOUSE
State:	AZ
County:	MARICOPA
Object ID:	8438
USACE Division:	SPD
USACE District:	Los Angeles District (SPL)
Status:	Properties without projects
Current Owner:	Not reported
EMS Map Link:	https://fudsportal.usace.army.mil/ems/ems/inventory/map/map?id=63039
Eligibility:	Eligible
Has Projects:	No
NPL Status:	Not on the NPL
Property History:	N/A
Project Required:	No
Feature Description:	Not reported
Latitude:	33.25833333
Longitude:	-111.63333333

E23 SE 1/4-1/2 0.346 mi. 1828 ft. **TRW AUTOMOTIVE SYSTEMS** **RCRA-TSDF** **1000135907**
11202 E GERMANN RD **RCRA-LQG** **AZD982491649**
MESA, AZ 85212 **SPILLS**
MANIFEST
Site 1 of 2 in cluster E

Actual: 1431 ft.
Focus Map: 10

RCRA-LQG:

Date Form Received by Agency:	20210104
Handler Name:	TRW AUTOMOTIVE SYSTEMS
Handler Address:	11202 E GERMANN RD
Handler City,State,Zip:	MESA, AZ 85212
EPA ID:	AZD982491649
Contact Name:	ALISON FOX
Contact Address:	11202 E GERMANN RD
Contact City,State,Zip:	MESA, AZ 85212
Contact Telephone:	480-216-8955
Contact Fax:	Not reported
Contact Email:	ALISON.FOX@ZF.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Large Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	11202 E GERMANN RD

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Mailing City,State,Zip:	MESA, AZ 85212
Owner Name:	TRW VEHICLE SAFETY SYSTEMS INC
Owner Type:	Private
Operator Name:	TRW AUTOMOTIVE U.S. LLC
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Subpart K - Withdrawal
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	Yes
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20211201
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Recycler Activity Without Storage: No
Manifest Broker: No
Sub-Part P Indicator: No

Biennial: List of Years
Year: 2019

Click Here for Biennial Reporting System Data:
Year: 2017

Click Here for Biennial Reporting System Data:
Year: 2015

Click Here for Biennial Reporting System Data:
Year: 2013

Click Here for Biennial Reporting System Data:
Year: 2011

Click Here for Biennial Reporting System Data:
Year: 2009

Click Here for Biennial Reporting System Data:
Year: 2007

Click Here for Biennial Reporting System Data:
Year: 2005

Click Here for Biennial Reporting System Data:
Year: 2003

Click Here for Biennial Reporting System Data:
Year: 2001

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:
Waste Code: D001
Waste Description: IGNITABLE WASTE

Waste Code: D002
Waste Description: CORROSIVE WASTE

Waste Code: D003
Waste Description: REACTIVE WASTE

Waste Code: D004
Waste Description: ARSENIC

Waste Code: D005
Waste Description: BARIUM

Waste Code: D006
Waste Description: CADMIUM

Waste Code: D007

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Waste Description: CHROMIUM

Waste Code: D008
Waste Description: LEAD

Waste Code: D009
Waste Description: MERCURY

Waste Code: D011
Waste Description: SILVER

Waste Code: D030
Waste Description: 2,4-DINITROTOLUENE

Waste Code: D035
Waste Description: METHYL ETHYL KETONE

Waste Code: F002
Waste Description: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F003
Waste Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F005
Waste Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: K044
Waste Description: WASTEWATER TREATMENT SLUDGES FROM THE MANUFACTURING AND PROCESSING OF EXPLOSIVES.

Waste Code: LABP
Waste Description: LAB PACK

Waste Code: P012

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Waste Description: ARSENIC OXIDE AS2O3 (OR) ARSENIC TRIOXIDE

Waste Code: P105
Waste Description: SODIUM AZIDE

Waste Code: U003
Waste Description: ACETONITRILE (I,T)

Waste Code: U012
Waste Description: ANILINE (I,T) (OR) BENZENAMINE (I,T)

Waste Code: U044
Waste Description: CHLOROFORM (OR) METHANE, TRICHLORO-

Waste Code: U080
Waste Description: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

Waste Code: U116
Waste Description: 2-IMIDAZOLIDINETHIONE (OR) ETHYLENETHIOUREA

Waste Code: U122
Waste Description: FORMALDEHYDE

Waste Code: U154
Waste Description: METHANOL (I) (OR) METHYL ALCOHOL (I)

Waste Code: U162
Waste Description: 2-PROPENOIC ACID, 2-METHYL-, METHYL ESTER (I,T) (OR) METHYL METHACRYLATE (I,T)

Waste Code: U213
Waste Description: FURAN, TETRAHYDRO-(I) (OR) TETRAHYDROFURAN (I)

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: TRW VSSI
Legal Status: Private
Date Became Current: 19900411
Date Ended Current: Not reported
Owner/Operator Address: 11202 EAST GERMANN ROAD
Owner/Operator City,State,Zip: MESA, AZ 85212
Owner/Operator Telephone: 480-722-6215
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: TRW VEHICLE SAFETY SYSTEMS INC
Legal Status: Private
Date Became Current: 19900412
Date Ended Current: Not reported
Owner/Operator Address: 12001 TECH CENTER DR
Owner/Operator City,State,Zip: LIVONIA, MI 48150
Owner/Operator Telephone: 480-722-4139
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: SCOTT.DETWILER@ZF.COM

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW, INC.
Legal Status:	Private
Date Became Current:	19900412
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 EAST GERMANN ROAD
Owner/Operator City,State,Zip:	QUEEN CREEK, AZ 85242
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW VSSI
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 E. GERMANN RD.
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW AUTOMOTIVE U.S. LLC
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 E GERMANN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	480-722-4595
Owner/Operator Telephone Ext:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Owner/Operator Fax:	Not reported
Owner/Operator Email:	JOHN.BISHOPP@ZF.COM
Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS INC
Legal Status:	Private
Date Became Current:	19900412
Date Ended Current:	Not reported
Owner/Operator Address:	12001 TECH CENTER DR
Owner/Operator City,State,Zip:	LIVONIA, MI 48150
Owner/Operator Telephone:	480-722-4139
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS, INC.
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 EAST GERMANN ROAD
Owner/Operator City,State,Zip:	QUEEN CREEK, AZ 85242
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS, INC.
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VSSI
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 EAST GERMANN ROAD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	480-722-6215
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW VSSI
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VSSI
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 EAST GERMANN ROAD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	480-722-6215
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW AUTOMOTIVE U.S. LLC
Legal Status:	Private
Date Became Current:	20190601
Date Ended Current:	Not reported
Owner/Operator Address:	11202 E GERMANN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS INC
Legal Status:	Private

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Date Became Current:	19900412
Date Ended Current:	Not reported
Owner/Operator Address:	12001 TECH CENTER DR
Owner/Operator City,State,Zip:	LIVONIA, MI 48150
Owner/Operator Telephone:	480-722-4139
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW VSSI
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 EAST GERMANN ROAD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS INC
Legal Status:	Private
Date Became Current:	19900412
Date Ended Current:	Not reported
Owner/Operator Address:	12001 TECH CENTER DR
Owner/Operator City,State,Zip:	LIVONIA, MI 48150
Owner/Operator Telephone:	480-722-4139
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYS
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	4505 W 26 MILE RD
Owner/Operator City,State,Zip:	WASHINGTON, MI 48094-9732
Owner/Operator Telephone:	810-786-7978
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS
Legal Status:	Municipal
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 E GERMANN RD
Owner/Operator City,State,Zip:	QUEEN CREEK, AZ 85242
Owner/Operator Telephone:	480-722-4139
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS
Legal Status:	Municipal
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 E GERMANN RD
Owner/Operator City,State,Zip:	QUEEN CREEK, AZ 85242
Owner/Operator Telephone:	480-722-4139
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW AUTOMOTIVE U.S. LLC
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 EAST GERMANN ROAD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	480-722-4000
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	ZF PASSIVE SAFETY SYSTEMS US, INC
Legal Status:	Private
Date Became Current:	20190601
Date Ended Current:	Not reported
Owner/Operator Address:	11202 E GERMANN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	480-722-4595
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	JOHN.BISHOPP@ZF.COM

Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW AUTOMOTIVE U.S. LLC
Legal Status:	Private
Date Became Current:	20190601
Date Ended Current:	Not reported
Owner/Operator Address:	11202 E GERMANN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYS
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	4505 W 26 MILE RD
Owner/Operator City,State,Zip:	WASHINGTON, MI 48094-9732
Owner/Operator Telephone:	810-786-7978
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW AUTOMOTIVE U.S. LLC
Legal Status:	Private
Date Became Current:	20190601
Date Ended Current:	Not reported
Owner/Operator Address:	11202 E GERMANN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW, INC.
Legal Status:	Private
Date Became Current:	19900412
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VSSI
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 E. GERMANN RD.
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	480-722-4000
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW VSSI
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 EAST GERMANN ROAD

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Owner/Operator City,State,Zip: MESA, AZ 85212
Owner/Operator Telephone: 480-722-6215
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: TRW VEHICLE SAFETY SYSTEMS INC
Legal Status: Private
Date Became Current: 19900411
Date Ended Current: Not reported
Owner/Operator Address: 11202 EAST GERMANN ROAD
Owner/Operator City,State,Zip: MESA, AZ 85212
Owner/Operator Telephone: 480-722-4000
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: TRW AUTOMOTIVE U.S. LLC
Legal Status: Private
Date Became Current: 20190601
Date Ended Current: Not reported
Owner/Operator Address: 11202 E GERMANN RD
Owner/Operator City,State,Zip: MESA, AZ 85212
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: TRW VEHICLE SAFETY SYSTEMS MESA II
Legal Status: Municipal
Date Became Current: 19900411
Date Ended Current: Not reported
Owner/Operator Address: 11202 E GERMANN RD
Owner/Operator City,State,Zip: QUEEN CREEK, AZ 85242
Owner/Operator Telephone: 480-722-4139
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: TRW VEHICLE SAFETY SYSTEMS INC
Legal Status: Private
Date Became Current: 19900412
Date Ended Current: Not reported
Owner/Operator Address: 12001 TECH CENTER DR
Owner/Operator City,State,Zip: LIVONIA, MI 48150
Owner/Operator Telephone: 480-722-4139
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20100203
Handler Name: TRW VSSI, MESA OPERATIONS

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20120419
Handler Name: TRW VSSI, MESA OPERATIONS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20140429
Handler Name: TRW VSSI, MESA OPERATIONS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20160401
Handler Name: TRW VSSI, MESA OPERATIONS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20180226
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 20200227
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 19930111
Handler Name: TRW VEHICLE SAFETY SYSTEMS MESA I I
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20080220
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20090213
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Receive Date: 20100225
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20110218
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20120228
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20130214
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20140212
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20150310
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20160511
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20170208
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20180223
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20191007
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20200205
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20210104
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 19951214
Handler Name: TRW VEHICLE SAFETY SYSTEMS MESA I I
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20030415
Handler Name: TRW VEHICLE SAFETY SYSTEMS MESA I I

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20190813
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19920228
Handler Name: TRW V.S.S.I/MESA II
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19940228
Handler Name: TRW SAFETY SYSTEMS MESA II
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19960228
Handler Name: TRW
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	19980227
Handler Name:	TRW
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	20010215
Handler Name:	TRW VSSI MESA II
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	20020222
Handler Name:	TRW VEHICLE SAFETY SYS., INC. MESA II
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	20040226
Handler Name:	TRW VEHICLE SAFETY SYSTEMS, INC.
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Receive Date: 20060227
Handler Name: TRW VEHICLE SAFETY SYSTEMS, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20080227
Handler Name: TRW VEHICLE SAFETY SYSTEMS, INC
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 33639
NAICS Description: OTHER MOTOR VEHICLE PARTS MANUFACTURING

NAICS Code: 336390
NAICS Description: OTHER MOTOR VEHICLE PARTS MANUFACTURING

NAICS Code: 336399
NAICS Description: ALL OTHER MOTOR VEHICLE PARTS MANUFACTURING

NAICS Code: 336999
NAICS Description: ALL OTHER TRANSPORTATION EQUIPMENT MANUFACTURING

Facility Has Received Notices of Violation:
Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - Pre-transport
Date Violation was Determined: 19980313
Actual Return to Compliance Date: 20010118
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 013
Date of Enforcement Action: 20010118
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19970829
Actual Return to Compliance Date: 20010118
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 011
Date of Enforcement Action: 20010118
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19930330
Actual Return to Compliance Date: 19960306
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 001
Date of Enforcement Action: 19940511
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - Pre-transport
Date Violation was Determined: 20160114
Actual Return to Compliance Date: 20160122
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 001
Date of Enforcement Action: 20160114
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	ELEI
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - Financial Requirements
Date Violation was Determined:	19951113
Actual Return to Compliance Date:	19960314
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - Pre-transport
Date Violation was Determined:	19950606
Actual Return to Compliance Date:	19951213
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	20111107
Actual Return to Compliance Date:	20111122
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	18
Date of Enforcement Action:	20120125
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	EDEL
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19930330
Actual Return to Compliance Date: 19960306
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 004
Date of Enforcement Action: 19951113
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	20200817
Actual Return to Compliance Date:	20201009
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	022
Date of Enforcement Action:	20200828
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	BGRE
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 20070124
Actual Return to Compliance Date: 20070413
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 001
Date of Enforcement Action: 20070302
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: JOLM
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - Pre-transport
Date Violation was Determined: 19950606
Actual Return to Compliance Date: 19961018
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	20070124
Actual Return to Compliance Date:	20070413
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	001
Date of Enforcement Action:	20070205
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	JOLM
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 19970829
Actual Return to Compliance Date: 20010118
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 19990305
Enforcement Identifier: 006
Date of Enforcement Action: 19970903
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - Pre-transport
Date Violation was Determined: 19950606
Actual Return to Compliance Date: 19961120
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - Pre-transport
Date Violation was Determined: 19980313
Actual Return to Compliance Date: 20010118
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 013
Date of Enforcement Action: 20010118
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 20111107
Actual Return to Compliance Date: 20111122
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 15
Date of Enforcement Action: 20111122
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	EDEL
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - Pre-transport
Date Violation was Determined:	20160114
Actual Return to Compliance Date:	20160122
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	19
Date of Enforcement Action:	20160114
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	ELEI
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19970829
Actual Return to Compliance Date: 20010118
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 19990305
Enforcement Identifier: 006
Date of Enforcement Action: 19970903
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 20070124
Actual Return to Compliance Date: 20070413
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 001
Date of Enforcement Action: 20070330
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	JOLM
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - Closure/Post-Closure
Date Violation was Determined:	19951113
Actual Return to Compliance Date:	19961120
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 19970829
Actual Return to Compliance Date: 20010118
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 011
Date of Enforcement Action: 20010118
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 20111107
Actual Return to Compliance Date: 20111122
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 16
Date of Enforcement Action: 20111129
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: EDEL
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19970829
Actual Return to Compliance Date: 20010118
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 19990305
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	20111107
Actual Return to Compliance Date:	20111122
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	17
Date of Enforcement Action:	20111214
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	EDEL
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19930330
Actual Return to Compliance Date: 19960306
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 003
Date of Enforcement Action: 19951113
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	79500
Paid Amount:	Not reported
Final Count:	1
Final Amount:	79500

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	19970829
Actual Return to Compliance Date:	20010118
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19990305
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 20200817
Actual Return to Compliance Date: 20201009
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 021
Date of Enforcement Action: 20200824
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: MBAR
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Evaluation Action Summary:
Evaluation Date: 19980313
Evaluation Responsible Agency: State
Found Violation: Yes
Evaluation Type Description: FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier: R9STA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 20010118
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 19970829
Evaluation Responsible Agency: State

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20010118
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19930330
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19960306
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	20160114
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	ELEI
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20160122
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19951113
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19950606
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19960314

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19950606
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19951213
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	20111107
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	EDEL
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20111122
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	20010118
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	NOT A SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	CHIBB
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19930330
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19960306
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Evaluation Date:	19980313
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	20010302
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	FOLLOW-UP INSPECTION
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19961120
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	NOT A SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	20200817
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20201009
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	20070124
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	JOLM

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20070413
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19950606
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19961018
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	20070124
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	JOLM
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20070413
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19970829
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20010118
Scheduled Compliance Date:	19990305
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19950606
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19961120
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19970903
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19980313
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20010118
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	20111107
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	EDEL
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20111122
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	20160114
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	ELEI
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20160122
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19970829
Evaluation Responsible Agency:	State

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20010118
Scheduled Compliance Date:	19990305
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	20070124
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	JOLM
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20070413
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	20020610
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19950606
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19961120
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19950606
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19970829
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20010118
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	20111107
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	EDEL
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20111122
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19970829
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20010118
Scheduled Compliance Date:	19990305
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	20111107
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	EDEL
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20111122
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Evaluation Date:	19970829
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19930330
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19960306
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19970829
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20010118
Scheduled Compliance Date:	19990305
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	20200817
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20201009
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

RCRA-LQG:

Date Form Received by Agency:	20210104
Handler Name:	TRW AUTOMOTIVE SYSTEMS
Handler Address:	11202 E GERMANN RD
Handler City,State,Zip:	MESA, AZ 85212
EPA ID:	AZD982491649
Contact Name:	ALISON FOX
Contact Address:	11202 E GERMANN RD
Contact City,State,Zip:	MESA, AZ 85212
Contact Telephone:	480-216-8955
Contact Fax:	Not reported
Contact Email:	ALISON.FOX@ZF.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Large Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	11202 E GERMANN RD
Mailing City,State,Zip:	MESA, AZ 85212
Owner Name:	TRW VEHICLE SAFETY SYSTEMS INC
Owner Type:	Private
Operator Name:	TRW AUTOMOTIVE U.S. LLC
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Subpart K - Withdrawal
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

202 GPRA Corrective Action Baseline:	Yes
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20211201
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Biennial: List of Years
Year: 2019

Click Here for Biennial Reporting System Data:
Year: 2017

Click Here for Biennial Reporting System Data:
Year: 2015

Click Here for Biennial Reporting System Data:
Year: 2013

Click Here for Biennial Reporting System Data:
Year: 2011

Click Here for Biennial Reporting System Data:
Year: 2009

Click Here for Biennial Reporting System Data:
Year: 2007

Click Here for Biennial Reporting System Data:
Year: 2005

Click Here for Biennial Reporting System Data:
Year: 2003

Click Here for Biennial Reporting System Data:
Year: 2001

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	IGNITABLE WASTE
Waste Code:	D002
Waste Description:	CORROSIVE WASTE
Waste Code:	D003
Waste Description:	REACTIVE WASTE
Waste Code:	D004
Waste Description:	ARSENIC
Waste Code:	D005
Waste Description:	BARIUM
Waste Code:	D006
Waste Description:	CADMIUM
Waste Code:	D007
Waste Description:	CHROMIUM
Waste Code:	D008
Waste Description:	LEAD
Waste Code:	D009
Waste Description:	MERCURY
Waste Code:	D011
Waste Description:	SILVER
Waste Code:	D030
Waste Description:	2,4-DINITROTOLUENE
Waste Code:	D035
Waste Description:	METHYL ETHYL KETONE
Waste Code:	F002
Waste Description:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Waste Code:	F003
Waste Description:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F005
Waste Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: K044
Waste Description: WASTEWATER TREATMENT SLUDGES FROM THE MANUFACTURING AND PROCESSING OF EXPLOSIVES.

Waste Code: LABP
Waste Description: LAB PACK

Waste Code: P012
Waste Description: ARSENIC OXIDE AS2O3 (OR) ARSENIC TRIOXIDE

Waste Code: P105
Waste Description: SODIUM AZIDE

Waste Code: U003
Waste Description: ACETONITRILE (I,T)

Waste Code: U012
Waste Description: ANILINE (I,T) (OR) BENZENAMINE (I,T)

Waste Code: U044
Waste Description: CHLOROFORM (OR) METHANE, TRICHLORO-

Waste Code: U080
Waste Description: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

Waste Code: U116
Waste Description: 2-IMIDAZOLIDINETHIONE (OR) ETHYLENETHIOUREA

Waste Code: U122
Waste Description: FORMALDEHYDE

Waste Code: U154
Waste Description: METHANOL (I) (OR) METHYL ALCOHOL (I)

Waste Code: U162
Waste Description: 2-PROPENOIC ACID, 2-METHYL-, METHYL ESTER (I,T) (OR) METHYL METHACRYLATE (I,T)

Waste Code: U213
Waste Description: FURAN, TETRAHYDRO-(I) (OR) TETRAHYDROFURAN (I)

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VSSI
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 EAST GERMANN ROAD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	480-722-6215
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS INC
Legal Status:	Private
Date Became Current:	19900412
Date Ended Current:	Not reported
Owner/Operator Address:	12001 TECH CENTER DR
Owner/Operator City,State,Zip:	LIVONIA, MI 48150
Owner/Operator Telephone:	480-722-4139
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	SCOTT.DETWILER@ZF.COM

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW, INC.
Legal Status:	Private
Date Became Current:	19900412
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 EAST GERMANN ROAD
Owner/Operator City,State,Zip:	QUEEN CREEK, AZ 85242
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW VSSI
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 E. GERMANN RD.
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW AUTOMOTIVE U.S. LLC
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 E GERMANN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	480-722-4595
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	JOHN.BISHOPP@ZF.COM
Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS INC
Legal Status:	Private
Date Became Current:	19900412
Date Ended Current:	Not reported
Owner/Operator Address:	12001 TECH CENTER DR
Owner/Operator City,State,Zip:	LIVONIA, MI 48150
Owner/Operator Telephone:	480-722-4139
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS, INC.
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Owner/Operator Address:	11202 EAST GERMANN ROAD
Owner/Operator City,State,Zip:	QUEEN CREEK, AZ 85242
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS, INC.
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VSSI
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 EAST GERMANN ROAD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	480-722-6215
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW VSSI
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VSSI

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 EAST GERMANN ROAD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	480-722-6215
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW AUTOMOTIVE U.S. LLC
Legal Status:	Private
Date Became Current:	20190601
Date Ended Current:	Not reported
Owner/Operator Address:	11202 E GERMANN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS INC
Legal Status:	Private
Date Became Current:	19900412
Date Ended Current:	Not reported
Owner/Operator Address:	12001 TECH CENTER DR
Owner/Operator City,State,Zip:	LIVONIA, MI 48150
Owner/Operator Telephone:	480-722-4139
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW VSSI
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 EAST GERMANN ROAD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS INC
Legal Status:	Private
Date Became Current:	19900412
Date Ended Current:	Not reported
Owner/Operator Address:	12001 TECH CENTER DR
Owner/Operator City,State,Zip:	LIVONIA, MI 48150
Owner/Operator Telephone:	480-722-4139
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYS
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	4505 W 26 MILE RD
Owner/Operator City,State,Zip:	WASHINGTON, MI 48094-9732
Owner/Operator Telephone:	810-786-7978
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS
Legal Status:	Municipal
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 E GERMANN RD
Owner/Operator City,State,Zip:	QUEEN CREEK, AZ 85242
Owner/Operator Telephone:	480-722-4139
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS
Legal Status:	Municipal
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 E GERMANN RD
Owner/Operator City,State,Zip:	QUEEN CREEK, AZ 85242
Owner/Operator Telephone:	480-722-4139
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW AUTOMOTIVE U.S. LLC
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 EAST GERMANN ROAD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	480-722-4000
Owner/Operator Telephone Ext:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	ZF PASSIVE SAFETY SYSTEMS US, INC
Legal Status:	Private
Date Became Current:	20190601
Date Ended Current:	Not reported
Owner/Operator Address:	11202 E GERMANN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	480-722-4595
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	JOHN.BISHOPP@ZF.COM
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW AUTOMOTIVE U.S. LLC
Legal Status:	Private
Date Became Current:	20190601
Date Ended Current:	Not reported
Owner/Operator Address:	11202 E GERMANN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYS
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	4505 W 26 MILE RD
Owner/Operator City,State,Zip:	WASHINGTON, MI 48094-9732
Owner/Operator Telephone:	810-786-7978
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW AUTOMOTIVE U.S. LLC
Legal Status:	Private
Date Became Current:	20190601
Date Ended Current:	Not reported
Owner/Operator Address:	11202 E GERMANN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW, INC.
Legal Status:	Private
Date Became Current:	19900412
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VSSI
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 E. GERMANN RD.
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	480-722-4000
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW VSSI
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 EAST GERMANN ROAD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	480-722-6215
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS INC
Legal Status:	Private
Date Became Current:	19900411
Date Ended Current:	Not reported
Owner/Operator Address:	11202 EAST GERMANN ROAD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	480-722-4000
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW AUTOMOTIVE U.S. LLC
Legal Status:	Private
Date Became Current:	20190601
Date Ended Current:	Not reported
Owner/Operator Address:	11202 E GERMANN RD
Owner/Operator City,State,Zip:	MESA, AZ 85212
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	TRW VEHICLE SAFETY SYSTEMS MESA II
Legal Status:	Municipal

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Date Became Current: 19900411
Date Ended Current: Not reported
Owner/Operator Address: 11202 E GERMANN RD
Owner/Operator City,State,Zip: QUEEN CREEK, AZ 85242
Owner/Operator Telephone: 480-722-4139
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: TRW VEHICLE SAFETY SYSTEMS INC
Legal Status: Private
Date Became Current: 19900412
Date Ended Current: Not reported
Owner/Operator Address: 12001 TECH CENTER DR
Owner/Operator City,State,Zip: LIVONIA, MI 48150
Owner/Operator Telephone: 480-722-4139
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20100203
Handler Name: TRW VSSI, MESA OPERATIONS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20120419
Handler Name: TRW VSSI, MESA OPERATIONS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20140429
Handler Name: TRW VSSI, MESA OPERATIONS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20160401
Handler Name: TRW VSSI, MESA OPERATIONS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20180226
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 20200227
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 19930111
Handler Name: TRW VEHICLE SAFETY SYSTEMS MESA I I
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20080220

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20090213
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20100225
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20110218
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20120228
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20130214
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20140212
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20150310
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20160511
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Electronic Manifest Broker: Not reported

Receive Date: 20170208
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20180223
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20191007
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20200205
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20210104
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 19951214
Handler Name: TRW VEHICLE SAFETY SYSTEMS MESA I I
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20030415
Handler Name: TRW VEHICLE SAFETY SYSTEMS MESA I I
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20190813
Handler Name: TRW AUTOMOTIVE SYSTEMS
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19920228
Handler Name: TRW V.S.S.I/MESA II
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19940228
Handler Name: TRW SAFETY SYSTEMS MESA II
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19960228
Handler Name: TRW
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19980227
Handler Name: TRW
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20010215
Handler Name: TRW VSSI MESA II
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Receive Date: 20020222
Handler Name: TRW VEHICLE SAFETY SYS., INC. MESA II
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20040226
Handler Name: TRW VEHICLE SAFETY SYSTEMS, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20060227
Handler Name: TRW VEHICLE SAFETY SYSTEMS, INC.
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20080227
Handler Name: TRW VEHICLE SAFETY SYSTEMS, INC
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 33639
NAICS Description: OTHER MOTOR VEHICLE PARTS MANUFACTURING

NAICS Code: 336390

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

NAICS Description: OTHER MOTOR VEHICLE PARTS MANUFACTURING

NAICS Code: 336399
NAICS Description: ALL OTHER MOTOR VEHICLE PARTS MANUFACTURING

NAICS Code: 336999
NAICS Description: ALL OTHER TRANSPORTATION EQUIPMENT MANUFACTURING

Facility Has Received Notices of Violation:

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - Pre-transport
Date Violation was Determined: 19980313
Actual Return to Compliance Date: 20010118
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 013
Date of Enforcement Action: 20010118
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19970829
Actual Return to Compliance Date: 20010118
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 011
Date of Enforcement Action: 20010118

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19930330
Actual Return to Compliance Date: 19960306
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 001
Date of Enforcement Action: 19940511
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - Pre-transport
Date Violation was Determined:	20160114
Actual Return to Compliance Date:	20160122
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	001
Date of Enforcement Action:	20160114
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	ELEI
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - Financial Requirements
Date Violation was Determined: 19951113
Actual Return to Compliance Date: 19960314
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - Pre-transport
Date Violation was Determined: 19950606
Actual Return to Compliance Date: 19951213
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number:Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 20111107
Actual Return to Compliance Date: 20111122
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 18
Date of Enforcement Action: 20120125

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	EDEL
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19930330
Actual Return to Compliance Date: 19960306
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 004
Date of Enforcement Action: 19951113
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 20200817
Actual Return to Compliance Date: 20201009
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 022
Date of Enforcement Action: 20200828

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	BGRE
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	20070124
Actual Return to Compliance Date:	20070413
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	001
Date of Enforcement Action:	20070302
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	JOLM
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - Pre-transport
Date Violation was Determined: 19950606
Actual Return to Compliance Date: 19961018
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number:Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 20070124
Actual Return to Compliance Date: 20070413
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 001
Date of Enforcement Action: 20070205

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: JOLM
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 19970829
Actual Return to Compliance Date: 20010118
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 19990305
Enforcement Identifier: 006
Date of Enforcement Action: 19970903
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - Pre-transport
Date Violation was Determined: 19950606
Actual Return to Compliance Date: 19961120
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number:Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - Pre-transport
Date Violation was Determined: 19980313
Actual Return to Compliance Date: 20010118
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 013
Date of Enforcement Action: 20010118
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 20111107
Actual Return to Compliance Date: 20111122
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 15
Date of Enforcement Action: 20111122
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: EDEL
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - Pre-transport
Date Violation was Determined: 20160114
Actual Return to Compliance Date: 20160122
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 19
Date of Enforcement Action: 20160114

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: ELEI
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19970829
Actual Return to Compliance Date: 20010118
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 19990305
Enforcement Identifier: 006
Date of Enforcement Action: 19970903
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	20070124
Actual Return to Compliance Date:	20070413
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	001
Date of Enforcement Action:	20070330
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	JOLM
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - Closure/Post-Closure
Date Violation was Determined: 19951113
Actual Return to Compliance Date: 19961120
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 19970829
Actual Return to Compliance Date: 20010118
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 011
Date of Enforcement Action: 20010118

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 20111107
Actual Return to Compliance Date: 20111122
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 16
Date of Enforcement Action: 20111129
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: EDEL
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19970829
Actual Return to Compliance Date: 20010118
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 19990305
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 20111107
Actual Return to Compliance Date: 20111122
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 17
Date of Enforcement Action: 20111214

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: EDEL
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 19930330
Actual Return to Compliance Date: 19960306
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 003
Date of Enforcement Action: 19951113
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: 79500
Paid Amount: Not reported
Final Count: 1
Final Amount: 79500

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 19970829
Actual Return to Compliance Date: 20010118
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 19990305
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 20200817
Actual Return to Compliance Date: 20201009
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 021
Date of Enforcement Action: 20200824
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: MBAR
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Evaluation Action Summary:

Evaluation Date:	19980313
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20010118
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19970829
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20010118
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19930330
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19960306
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	20160114
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	ELEI
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20160122
Scheduled Compliance Date:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19951113
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19950606
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19960314
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19950606
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19951213
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	20111107
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	EDEL
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20111122
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Evaluation Date:	20010118
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	NOT A SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	CHIBB
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19930330
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19960306
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19980313
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	20010302
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	FOLLOW-UP INSPECTION
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19961120
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	NOT A SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	20200817
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20201009
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	20070124
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	JOLM
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20070413
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19950606
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19961018
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	20070124
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	JOLM
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20070413
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19970829
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20010118
Scheduled Compliance Date:	19990305
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19950606
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19961120
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19970903
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19980313
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20010118
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	20111107
Evaluation Responsible Agency:	State

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	EDEL
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20111122
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	20160114
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	ELEI
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20160122
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19970829
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20010118
Scheduled Compliance Date:	19990305
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	20070124
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	JOLM
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20070413
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	20020610
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19950606
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19961120
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19950606
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19970829
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20010118
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	20111107
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	EDEL
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20111122
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Evaluation Date:	19970829
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20010118
Scheduled Compliance Date:	19990305
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	20111107
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	EDEL
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20111122
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19970829
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19930330
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19960306
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	19970829
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9STA

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20010118
Scheduled Compliance Date:	19990305
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	20200817
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20201009
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

SPILLS:

Incident Date:	03/07/98
Property Mngmt:	Private
Chemicals:	Anhydrous Ammonia
Response Date:	N/A
Type:	Release
Referred to:	N/A
Fund Amount:	Pvt/Unk
Quantity:	643 lbs.
Incident Number:	98-115-E
Referral Date:	N/A
Structure:	Tank
Date Report:	03/10/98

Incident Date:	06/18/96
Property Mngmt:	Private
Chemicals:	Sodium Azide
Response Date:	6/18/1996
Type:	Release
Referred to:	N/A
Fund Amount:	Pvt/Unk
Quantity:	1200 lbs.
Incident Number:	96-017-D
Referral Date:	N/A
Structure:	Tote
Date Report:	06/18/96

AZ MANIFEST:

Name:	TRW AUTOMOTIVE U.S. LLC
Address:	11202 E GERMANN RD
City,State,Zip:	MESA, AZ 85212
Report Year:	2018
EPA Id:	AZD982491649
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN0478
Quantity:	335
Waste Code 1:	D003
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported
Name:	TRW AUTOMOTIVE U.S. LLC
Address:	11202 E GERMANN RD
City,State,Zip:	MESA, AZ 85212
Report Year:	2018
EPA Id:	AZD982491649
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN0489
Quantity:	1
Waste Code 1:	D003
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported
Name:	TRW AUTOMOTIVE U.S. LLC
Address:	11202 E GERMANN RD
City,State,Zip:	MESA, AZ 85212
Report Year:	2018
EPA Id:	AZD982491649
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H141
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN1950
Quantity:	15

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Waste Code 1:	D001
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	TRW AUTOMOTIVE U.S. LLC
Address:	11202 E GERMANN RD
City,State,Zip:	MESA, AZ 85212
Report Year:	2018
EPA Id:	AZD982491649
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H141
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	NA3077
Quantity:	6
Waste Code 1:	D005, D008, D00
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	TRW AUTOMOTIVE U.S. LLC
Address:	11202 E GERMANN RD
City,State,Zip:	MESA, AZ 85212
Report Year:	2018
EPA Id:	AZD982491649
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Management Methods:	H141
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN1993
Quantity:	5
Waste Code 1:	D001
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	TRW AUTOMOTIVE U.S. LLC
Address:	11202 E GERMANN RD
City,State,Zip:	MESA, AZ 85212
Report Year:	2018
EPA Id:	AZD982491649
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN0478
Quantity:	51
Waste Code 1:	D001, D003
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name: TRW AUTOMOTIVE U.S. LLC

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Address:	11202 E GERMANN RD
City,State,Zip:	MESA, AZ 85212
Report Year:	2018
EPA Id:	AZD982491649
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H141
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	NA3077
Quantity:	1225
Waste Code 1:	K044
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	TRW AUTOMOTIVE U.S. LLC
Address:	11202 E GERMANN RD
City,State,Zip:	MESA, AZ 85212-8678
Report Year:	2017
EPA Id:	AZD982491649
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN0481
Quantity:	95
Waste Code 1:	D003
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	TRW AUTOMOTIVE U.S. LLC
Address:	11202 E GERMANN RD
City,State,Zip:	MESA, AZ 85212-8678
Report Year:	2017
EPA Id:	AZD982491649
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H040
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported
Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN0478
Quantity:	77
Waste Code 1:	D003
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Name:	TRW AUTOMOTIVE U.S. LLC
Address:	11202 E GERMANN RD
City,State,Zip:	MESA, AZ 85212-8678
Report Year:	2017
EPA Id:	AZD982491649
Business Type:	Not reported
Mailing Address:	Not reported
Mailing State:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Management Methods:	H141
Date Generator Signed The Manifest:	Not reported
Transporter EPA Id Number:	Not reported
Date Transporter Signed The Manifest:	Not reported
TSD EPA Id Number:	Not reported
Volume:	Not reported

TRW AUTOMOTIVE SYSTEMS (Continued) **1000135907**

Date TSD Signed Manifest:	Not reported
DOT Id Number:	UN1950
Quantity:	5
Waste Code 1:	D001
Waste Code 2:	Not reported
Waste Code 3:	Not reported
Waste Code 4:	Not reported
Waste Code 5:	Not reported
Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Click this hyperlink while viewing on your computer to access
113 additional AZ MANIFEST: record(s) in the EDR Site Report.

E24 **TRW AUTOMOTIVE SYSTEMS** **AZURITE** **S107599867**
SE **11202 E GERMANN RD** **AUL** **N/A**
1/4-1/2 **MESA, AZ 85212** **VCP**
0.346 mi. **EMAP**
1828 ft. **Site 2 of 2 in cluster E** **Enforcement**

Actual:
1431 ft.

Focus Map:
10

AZURITE:

Remediation Level Achieved:	SRL Non-residential
Name:	TRW AUTOMOTIVE SYSTEMS
Address:	11202 E GERMANN RD
City,State,Zip:	MESA, AZ 85212
Remediation ID:	28636
Program:	HAZARDOUS WASTE PROGRAM
Program File Number:	AZD982491649
Type:	DEUR
Remediation Start Date:	06/10/2005
Remediation End Date:	06/10/2005
DEUR Record Date:	02/09/2006
WPD Dirctrs Approval:	Not reported
VEMUR Record Date:	Not reported
DEUR Release Date:	Not reported

AZURITE:

Remediation Id:	28636
Standard Types:	Soil Remediation Level
Contaminants:	SODIUM AZIDE
Concentraction Mg/Kg:	5900
Depth Feet:	Not reported

AUL:

Name:	TRW AUTOMOTIVE SYSTEMS
Address:	11202 E GERMANN RD
City:	MESA
Remediation ID:	28636
Program:	HAZARDOUS WASTE PROGRAM
Program File Number:	AZD982491649
Type:	DEUR

TRW AUTOMOTIVE SYSTEMS (Continued) **S107599867**

DEUR Record Date: 02/09/2006
WPD Director's Approval Date: Not reported
VEMUR Record Date: Not reported

VCP:
Name: TRW AUTOMOTIVE SYSTEMS
Address: 11202 E. GERMANN ROAD
City,State,Zip: MESA, AZ 85212
Facility Status: Closed
Status Comments: Not reported
Lat: 33.27752
Long: -111.5944
Site Type: Manufacturing/ Industrial Plant
Site Size(acres): 374.0
Media: Soil
Restricted Land Use: DEUR (IC)
ADEQ File Number: 53212
ADEQ Site Code: 504588-01
Owner: TRW Vehicle Safety Systems, Inc.
Nature Of Contamination: Sodium azide, perchlorate
Recorded Date: 2/9/2006
Date Accepted: 7/17/2012
Date Closed: 3/18/2014
Type of Site: Industrial Soil
App Received: 6/19/2012
Volunteer Contact Name: Not reported
Days to Close: 601
Date of Soil NFA: Not reported
Date of GW NFA: Not reported
Date of SW NFA: Not reported
Date of Waste NFA: Not reported
Nature of Closure: 03/18/14: Administrative closure letter issued following DEUR Modification
Parcel Numbers: Not reported

EMAP:
Name: TRW AUTOMOTIVE SYSTEMS
Address: 11202 E GERMANN RD
City,State,Zip: MESA, AZ 85212
ID Number: 16495
Township: Not reported
Range: Not reported
Section: Not reported
Quarter 1: Not reported
Quarter 2: Not reported
Quarter 3: Not reported
Latitude: 33.279533333000003
Longitude: -111.594822222
Collection Method: GPS WITH CORRECTION < 3 METER ERROR
Place Type: MANUFACTURING/INDUSTRIAL PLANT
Place Type Code: INDUS
Place C Code: PP
Facility Status: ACTIVE
End Date: Not reported
Verified: Y

TRW AUTOMOTIVE SYSTEMS (Continued) **S107599867**

ENF:

Facility ID:	16495
Name:	TRW AUTOMOTIVE SYSTEMS
Address:	11202 E GERMANN RD
City,State,Zip:	MESA, AZ 85212
Case ID:	128526
Facility Type:	MANUFACTURING/INDUSTRIAL PLANT
Notice Type:	Not reported
Notice Issue Date:	01/25/2012
Order Type:	Not reported
Order Issue Date:	Not reported
Closed Date:	02/24/2012
Faciltiy Status:	Case Closed
Env Program:	HAZARDOUS WASTE PROGRAM
Notice Type Code:	Not reported

Facility ID:	16495
Name:	TRW AUTOMOTIVE SYSTEMS
Address:	11202 E GERMANN RD
City,State,Zip:	MESA, AZ 85212
Case ID:	78769
Facility Type:	MANUFACTURING/INDUSTRIAL PLANT
Notice Type:	Not reported
Notice Issue Date:	03/30/2007
Order Type:	Not reported
Order Issue Date:	Not reported
Closed Date:	04/13/2007
Faciltiy Status:	Case Closed
Env Program:	HAZARDOUS WASTE PROGRAM
Notice Type Code:	Not reported

Facility ID:	16495
Name:	TRW AUTOMOTIVE SYSTEMS
Address:	11202 E GERMANN RD
City,State,Zip:	MESA, AZ 85212
Case ID:	192588
Facility Type:	MANUFACTURING/INDUSTRIAL PLANT
Notice Type:	Notice Of Opportunity To Correct Deficiencies
Notice Issue Date:	08/27/2020
Order Type:	Not reported
Order Issue Date:	Not reported
Closed Date:	10/09/2020
Faciltiy Status:	Case Closed
Env Program:	HAZARDOUS WASTE PROGRAM
Notice Type Code:	NOC

Facility ID:	16495
Name:	TRW AUTOMOTIVE SYSTEMS
Address:	11202 E GERMANN RD
City,State,Zip:	MESA, AZ 85212
Case ID:	26550
Facility Type:	MANUFACTURING/INDUSTRIAL PLANT
Notice Type:	Not reported
Notice Issue Date:	09/03/1997
Order Type:	Consent Judgment / Decree
Order Issue Date:	01/18/2001
Closed Date:	05/22/2006

TRW AUTOMOTIVE SYSTEMS (Continued) **S107599867**

Faciltiy Status:	Case Closed
Env Program:	HAZARDOUS WASTE PROGRAM
Notice Type Code:	Not reported
Facility ID:	16495
Name:	TRW AUTOMOTIVE SYSTEMS
Address:	11202 E GERMANN RD
City,State,Zip:	MESA, AZ 85212
Case ID:	160918
Facility Type:	MANUFACTURING/INDUSTRIAL PLANT
Notice Type:	Not reported
Notice Issue Date:	01/14/2016
Order Type:	Not reported
Order Issue Date:	Not reported
Closed Date:	01/22/2016
Faciltiy Status:	Case Closed
Env Program:	HAZARDOUS WASTE PROGRAM
Notice Type Code:	Not reported

25
South
1/4-1/2
0.444 mi.
2344 ft.

TOWN OF QUEEN CREEK **PFAS** **S125863024**
QUEEN CREEK, AZ **N/A**

Actual:
1365 ft.

Focus Map:
7

PFAS:

Name:	TOWN OF QUEEN CREEK
Address:	Not reported
City,State,Zip:	QUEEN CREEK, AZ
PWS ID:	07033
Well Number:	55-209407
PFOS + PFOA ng/L:	ND
Latitude:	33.26974621800
Longitude:	-111.67028635600

26
North
1/4-1/2
0.498 mi.
2632 ft.

FORMER WILLIAMS AIR FORCE BASE FACILITY 1085-2 **AZURITE** **S125151800**
7722 E VELOCITY WAY **AUL** **N/A**
MESA, AZ 85212 **EMAP**

Actual:
1352 ft.

Focus Map:
2

AZURITE:

Remediation Level Achieved:	SRL Non-residential
Name:	FORMER WILLIAMS AIR FORCE BASE FACILITY 1085-2
Address:	7722 E VELOCITY WAY
City,State,Zip:	MESA, AZ 85212
Remediation ID:	32335
Program:	LEAKING UNDERGROUND STORAGE TANK PROGRAM
Program File Number:	Not reported
Type:	VEMUR
Remediation Start Date:	Not reported
Remediation End Date:	Not reported
DEUR Record Date:	Not reported
WPD Dirctrs Approval:	Not reported
VEMUR Record Date:	09/22/1997
DEUR Release Date:	Not reported

FORMER WILLIAMS AIR FORCE BASE FACILITY 1085-2 (Continued) **S125151800**

AZURITE:

Remediation Id:	32335
Standard Types:	Health Based Guidance Level
Contaminants:	TOTAL PETROLEUM HYDROCARBONS (TPH)
Concentraction Mg/Kg:	30000
Depth Feet:	10

AUL:

Name:	FORMER WILLIAMS AIR FORCE BASE FACILITY 1085-2
Address:	7722 E VELOCITY WAY
City:	MESA
Remediation ID:	32335
Program:	LEAKING UNDERGROUND STORAGE TANK PROGRAM
Program File Number:	Not reported
Type:	VEMUR
DEUR Record Date:	Not reported
WPD Director's Approval Date:	Not reported
VEMUR Record Date:	09/22/1997

EMAP:

Name:	FORMER WILLIAMS AIR FORCE BASE FACILITY 1085-2
Address:	7722 E VELOCITY WAY
City,State,Zip:	MESA, AZ 85212
ID Number:	187597
Township:	Not reported
Range:	Not reported
Section:	Not reported
Quarter 1:	Not reported
Quarter 2:	Not reported
Quarter 3:	Not reported
Latitude:	33.302011110999999
Longitude:	-111.6675
Collection Method:	DIGITAL IMAGERY
Place Type:	AIRCRAFT REPAIR/MAINTENANCE FACILITY
Place Type Code:	AIRR
Place C Code:	PP
Facility Status:	ACTIVE
End Date:	Not reported
Verified:	Y

27
NW
1/2-1
0.732 mi.
3864 ft.

Actual:
1338 ft.

Focus Map:
1

FORMER SKEET RANGE **UXO** **1024717553**
N/A

MESA, AZ

UXO:

DoD Component:	Air Force
Installation Name:	WILLIAMS
Name:	FORMER SKEET RANGE
Address:	Not reported
Address 2:	Not reported
City,State,Zip:	MESA, AZ
Site ID:	SR400
Site Type:	Small Arms Range

FORMER SKEET RANGE (Continued) **1024717553**

Latitude: 33.298997
Longitude: -111.679386

28
NNW
1/2-1
0.908 mi.
4795 ft.

MUNITIONS BURIAL SITE **UXO** **1024718685**
N/A

MESA, AZ

Actual:
1381 ft.

Focus Map:
3

UXO:
DoD Component: Air Force
Installation Name: WILLIAMS
Name: MUNITIONS BURIAL SITE
Address: Not reported
Address 2: Not reported
City,State,Zip: MESA, AZ
Site ID: XE402
Site Type: Explosive Ordnance Disposal Area
Latitude: 33.305083
Longitude: -111.638321

Count: 145 records

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
GILBERT	S106196630	SPUR INDUSTRIES	HIGLEY RD ON GERMANN RD.		SPILLS
GILBERT	S110143387	STRATLAND ESTATES	NEC OF HIGLEY RD & GERMANN	85297	Dry Wells
GILBERT	S118482200	SAN TAN RANCH	E. GERMANN RD & HIGLEY	85297	Dry Wells
GILBERT	S108250603	MERCY MEDICAL CENTER ACCESS RD -PHASE 1	NEC VAL VISTA DR & GERMANN		Dry Wells
GILBERT	S121123275	KENSINGTON PHASE 2	LINDSAY RD & GERMANN		Dry Wells
GILBERT	S109588437	HIGLEY ROAD DRAINAGE PLAN	HIGLEY RD BETWEEN QUEEN CREEK & GERMANN		Dry Wells
GILBERT	S110118548	TOWN OF GILBERT IMP DIST NO. 20	NEC VAL VISTA DR & GERMANN		Dry Wells
GILBERT	S112165774	THE VILLAGES AT VAL VISTA-PHASE 2	GERMANN RD & VAL VISTA DR		Dry Wells
GILBERT	S109347767	202 BUSINESS PARK	NWC GERMANN RD & LINDSAY		Dry Wells
GILBERT	S109347768	GILBERT HIGH SCHOOL #5	NWC GERMANN RD & QUARTZ ST		Dry Wells
GILBERT	S109132059	CROSSROADS TOWNE CENTER SEC-PHASE II	SEC GILBERT RD & GERMANN		Dry Wells
GILBERT	S109132255	POWER RANCH-NEIGHBORHOOD 10(PARCELS A-F)	NWC GERMANN RD & RANCH HOUSE PKWY		Dry Wells
GILBERT	S113876170	VILLAGES AT VAL VISTA - PH 3	SWC VAL VISTA RD & GERMANN		Dry Wells
GILBERT	S117038516	KELLY AUTOMOTIVE	15348 E GERMANN RD		Dry Wells
GILBERT	S118872060	KENSINGTON PHASE 1	LINDSAY RD & GERMANN		Dry Wells
GILBERT	S105890699	THE ESTATES AT SPECTRUM	SWC GERMANN ST & QUARTZ ST		Dry Wells
GILBERT	S108932908	WALGREENS #7747	SEC OF GERMANN & HIGLEY RDS		Dry Wells
GILBERT	S111227273	VILLAGES @ VAL VISTA -PH 1	SWC VAL VISTA & GERMANN RD		Dry Wells
GILBERT	S121504829	SERVICE KING	14895 E. PECOS RD	85295	Dry Wells
GILBERT	S119025546	SAN TAN VILLAGE SHOPS A & B	NEC OF PECOS RD & MARKET ST	85295	Dry Wells
GILBERT	S106854343	PECOS RD IMPROVEMENTS	NORTH OF PECOS RD, EAST RWCD CANAL	85297	Dry Wells
GILBERT	S106854391	TOWN OF GILBERT, PECOS RD IMPROVEMENTS	SOUTH PECOS RD , EAST RECKER	85297	Dry Wells
GILBERT	S108932627	SEVILLE, PARCEL 20	WEST OF THE NWC POWER & RIGGS ROAD	85297	Dry Wells
GILBERT	S105762585	VINTAGE RANCH	NWC LINDSAY & PECOS		Dry Wells
GILBERT	S105762760	PECOS PARK	NEC PECOS RD. & HIGLEY RD		Dry Wells
GILBERT	S108250640	POWER RANCH - NEIGHBORHOOD 8	NWC OF GERMANN & POWER RD		Dry Wells
GILBERT	S108250711	THE OFFICES AT POWER RANCH	SWC POWER RD & LOS ALTOS		Dry Wells
GILBERT	S110709805	GILBERT ARIZONA TEMPLE	SEC OF E PECOS RD & S. GREENFIELD		Dry Wells
GILBERT	S112431574	HIGLEY MANOR PHASE II	HIGLEY RD & PECOS		Dry Wells
GILBERT	S109588419	AUTO ZONE	7986 SOUTH POWER RD		Dry Wells
GILBERT	S106718602	FAIRWAYS AT SUPERSTITION SPRINGS III	2420 S. POWER RD		Dry Wells
GILBERT	S106599017	WELLS FARGO BANK	2410 S. POWER RD		Dry Wells
GILBERT	S114529962	AMERICAN FURNITURE WAREHOUSE	4700 SOUTH POWER RD		Dry Wells
GILBERT	S117346575	VAL VISTA SQUARE	SEC OF VAL VISTA DR & PECOS RD		Dry Wells
GILBERT	S121272926	ARCADIA COMMONS	SWC POWER RD & GUADALUPE		Dry Wells
GILBERT	S109347657	POWER RANCH NEIGHBORHOOD 11 A & B	SWC PECOS RD & RANCH HOUSE PKWY		Dry Wells
GILBERT	S109239162	GILBERT & PECOS RETAIL CENTER	NEC GILBERT RD & PECOS RD		Dry Wells
GILBERT	S109239183	LEGACY INN & SUITES HOTEL	NWC POWER RD & RANCH		Dry Wells
GILBERT	S109058611	CHANDLER HEIGHTS VILLAGE	NWC CHANDLER HEIGHTS & POWER RD		Dry Wells
GILBERT	S109058764	SPECTRUM CENTRE - PHASE 1	NEC PECOS RD & VAL VISTA DR		Dry Wells
GILBERT	S119025569	UNISON BANK	SWC PECOS RD & MARKET ST		Dry Wells
GILBERT	S106598888	GILBERT GATEWAY TOWNE CENTER	NWC OF POWER RD & RAY RD		Dry Wells
GILBERT	S108932213	HIGHLANDS AT SPECTRUM	W OF THE NWC PECOS RD & VAL VISTA DR		Dry Wells

Count: 145 records

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
GILBERT	S109132254	POWER RANCH NEIGHBORHOOD 9-PARCELS 1 & 2	SWC PECOS RD & POWER		Dry Wells
GILBERT	S111787224	HIGLEY MANOR	SEC HIGLEY & PECOS RD		Dry Wells
GILBERT	S114530069	SAN PRIVADA	NWC VAL VISTA DR & PECOS		Dry Wells
GILBERT	S118353584	COOLEY STATION PARCELS 10 & 17	WILLIAMSFIELD RD, BTWN RECKER & POWER RD		Dry Wells
GILBERT	S118872051	GRAYSTONE	GREENFIELD RD & PECOS		Dry Wells
GILBERT	S118872076	MERCEDES BENZ OF GILBERT	GILBERT RD & PECOS		Dry Wells
GILBERT	S118710453	RIVULON INFRASTRUCTURE IMPROVEMENT	GILBERT & PECOS ROADS		Dry Wells
GILBERT	S106097918	SPECTRUM @ VAL VISTA PUMP STA	E. OF LINDSAY BETWEEN PECOS & GERMAN		Dry Wells
GILBERT	S105890478	ALLEN RANCH PARCELS 1,2,3, &4	NEC GILBERT & PECOS RD		Dry Wells
GILBERT	S106718644	PECOS MANOR	NWC PECOS & RECKER RD		Dry Wells
GILBERT	S108794552	MERCY GILBERT HOSPITAL	SEC VAL VISTA & PECOS		Dry Wells
GILBERT	S118482197	RIVULON PHASE 1	NEC PECOS & GILBERT RD		Dry Wells
GILBERT	S127309119	ARIZONA GENERAL HOSPITAL ER	NWC OF E GERMANN ROAD & S POWER ROAD	85297	SPDES
GILBERT	S127309137	ARIZONA GENERAL HOSPITAL ER	NWC OF E GERMANN ROAD & S POWER ROAD	85297	SPDES
MARICOPA COUNTY	M300003386	CEMEX, INC.	MESA PLANT		US MINES
MESA	1024089740	PHOENIX MESA GATEWAY AIR TANKER BASE	N CORNER OF S CARGO WAY AND E VELOCITY WAY - MESA	85212	RCRA-VSQG, FINDS
MESA	2019252559		PECOS RD		ERNS
MESA	8875043		INTERSECTION OF HWY 360 MESA DR		ERNS
MESA	2019251122		1925 SOSSAMAN RD		ERNS
MESA	S103809873	WQ-NORTHEAST MESA	UNDEF--NEAR FALCON FIELD		SHWS
MESA	S103931938	USDA FOREST SERVICE LITTLE DAISEY MILL SITE	TONTO NF, MESA (MARICOPA COUNTY)		SHWS
MESA	A100381449	SANTAN FREEWAY EXPANSION	NORTH ELLSWORTH ROAD & EAST UNIVERSITY DRIVE		AST
MESA	S101092733	SRP (94-001-H)	SO AVE BETW CRISMON-SIGNAL BUT		SPILLS
MESA	S104851121	BENNET INTERNATIONAL	SE CORNER ELLSWORTH/MCKELLIPS		SPILLS
MESA	S103773357	UNKNOWN	SOSSAMAN RD. SO. OF ELLIOT		SPILLS
MESA	S100886254	UNKNOWN	SO MESA & LINDSEY RD		SPILLS
MESA	S106202483	PHOENIX, CITY OF	MESA FLUORIDATION FACILITY		SPILLS
MESA	1027006858	SALLY BEAUTY SUPPLY #3215	5052 S POWER RD	85212	FINDS
MESA	1024087513	PHOENIX MESA GATEWAY AIR TANKER BASE	N CORNER OF S CARGO WAY AND E VELOCITY WAY - MESA	85212	ECHO
MESA	S108932076	EASTRIDGE - UNIT 1 & UNIT 3	SE CORNER OF GUADALUPE & HAWES ROADS		Dry Wells
MESA	S117346567	TOKA STICKS HOTEL & GOLF CLUB HOUSE	POWER RD & WILLIAMSFIELD DR		Dry Wells
MESA	S117884920	SRP APACHE SUBSTATION	NWC POWER RDE & ARBOR		Dry Wells
MESA	S120804085	EVO SWIM SCHOOL	3700 BLOCK OF SOUTH POWER RD		Dry Wells
MESA	S108931673	APACHE MANOR	ELLSWORTH RD, N. APACHE TRAIL		Dry Wells
MESA	S108932656	SONORA PARKE	NORTH OF ADOBE ON ELLSWORTH ROAD		Dry Wells
MESA	S114529993	CACTUS AIR SEPERATION PLANT	PECOS RD & MERIDIAN		Dry Wells
MESA	S120804136	STRIKER SOCCER CLUB COMPLEX	NEC SOSSAMAN & WARNER	85212	Dry Wells
MESA	S109588472	AVERY ROAD IMPROVEMENTS	SEC SOSSAMAN RD & AVERY ST		Dry Wells
QUEEN CREEK	97380728		11202 GERMANN RD		ERNS
QUEEN CREEK	A100381002	DEVELOPMENT PROJECT	SWC ELLSWORTH & RITTENHOUSE		AST
QUEEN CREEK	S101314893	MARICOPA CO. SOLID WASTE	ELLSWORTH SO OF QUEEN CREEK AV		SPILLS
QUEEN CREEK	S106202531	UNKNOWN	HUNT HWY, SOSSAMAN & HAWES RD		SPILLS
QUEEN CREEK	1027060256	SALLY BEAUTY SUPPLY #10007	21506 S ELLSWORTH LOOP RD	85142	FINDS
QUEEN CREEK	S108250733	VICTORIA - PHASE 2 PARCEL 1	NWC HAWES RD & OCOTILLO		Dry Wells
QUEEN CREEK	S112165672	AMERICAN LEADERSHIP ACADEMY	SWC HAWES & CHANDLER HEIGHTS		Dry Wells
QUEEN CREEK	S109058709	MONTELENA	NEC CHANDLER HEIGHTS & HAWES		Dry Wells

Count: 145 records

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
QUEEN CREEK	S108931971	CORTINA -PARCELS 12 & 13	SWC GERMANN RD & SOSSMAN RD		Dry Wells
QUEEN CREEK	S108932089	EMPEROR ESTATES	NWC QUEEN CREEK RD & HAWES	'	Dry Wells
QUEEN CREEK	S109132251	POWER MARKETPLACE BUSINESS PARK	GERMANN RD & 187TH STREET		Dry Wells
QUEEN CREEK	S113876169	VICTORIA PAD - PARCELS 11 & 11A - PHASE 2	NEC HAWES RD & OCOTILLO		Dry Wells
QUEEN CREEK	S106097936	THE PECANS	E OF HAWES, S SIDE OF CHANDLER HTS		Dry Wells
QUEEN CREEK	S114529987	BEN FRANKLIN CHARTER SCHOOL	RITTENHOUSE RD & GERMANN	85142	Dry Wells
QUEEN CREEK	S117346471	EMPERIOR ESTATES	RITTENHOUSE RD & 198TH ST.		Dry Wells
QUEEN CREEK	S109347671	PREVENTATIVE PEST CONTROL-EAST	SWC RITTENHOUSE RD & MARKETPLACE WEST		Dry Wells
QUEEN CREEK	S108932570	RITTENHOUSE RANCH ON THE CREEK	SWC RITTENHOUSE RD & CHANDLER HEIGHTS		Dry Wells
QUEEN CREEK	S117038417	BEN FRANKLIN CHARTER SCHOOL 7-12	SEC RITTENHOUSE RD & GERMANN		Dry Wells
QUEEN CREEK	S108932876	VILLAGES AT QUEEN CREEK	SWC RITTENHOUSE RD & VILLAGE LOOP		Dry Wells
QUEEN CREEK	S118167331	POWER MARKETPLACE BUSINESS PARK	GERMANN RD & RITTENHOUSE RD		Dry Wells
QUEEN CREEK	S117884823	CHANDLER 7-12 SCHOOL	2901 S. POWER RD		Dry Wells
QUEEN CREEK	S107503912	SOSSAMAN ESTATES	SEC QUEEN CREEK & POWER RD		Dry Wells
QUEEN CREEK	S109347692	SOSSAMAN ESTATES	SEC POWER RD & QUEEN CREEK\		Dry Wells
QUEEN CREEK	S109058740	RETAIL CENTER	SWC CHANDLER HEIGHTS & POWER RD		Dry Wells
QUEEN CREEK	S106598863	CORTINA 2B-PARCLES 8	SEC OF GERMANN & POWER RD		Dry Wells
QUEEN CREEK	S108932134	FULL CIRCLE CAR WASH	SEC POWER RD & RITTHENHOUSE		Dry Wells
QUEEN CREEK	S109132252	POWER MARKETPLACE-GERMANN RD IMPROVEMEI	NEC GERMANN & POWER RD		Dry Wells
QUEEN CREEK	S118872113	ROSEWOOD GROVE	POWER RD & QUEEN CREEK		Dry Wells
QUEEN CREEK	S106097775	CORTINA	NEC POWER RD & RYAN RD		Dry Wells
QUEEN CREEK	S108519150	NAUVOO STATION	NWC CRISMON RD & OCOTILLO		Dry Wells
QUEEN CREEK	S109347790	CRISMON HEIGHTS	NEC CRISMON & OCOTILLO		Dry Wells
QUEEN CREEK	S117576789	PRESERVE AT HASTINGS FARMS-PARCEL D;PH 2	W. CRISMON RD & CHANDLER HEIGHTS		Dry Wells
QUEEN CREEK	S113390425	CRISMON HEIGHTS	NEC OCOTILLO & CRISMON		Dry Wells
QUEEN CREEK	S117884775	ALDECOA ROAD PROPERTY	E. OF SEC ALDECOA RD & ELLSWORTH	85142	Dry Wells
QUEEN CREEK	S119025533	POPEYE'S LOUISIANA KITCHEN-QUEEN CREEK	SWC OCOTILLO RD & ELLSWORTH LOOP	85142	Dry Wells
QUEEN CREEK	S118872103	POPEYE'S LOUISIANA KITCHEN	SWC OF OCOTILLO RD & ELLSWORTH LOOP	85142	Dry Wells
QUEEN CREEK	S118872132	TOWN OF QUEEN CREEK-HORSE SHOE PARK	NWC RIGGS & ELLSWORTH	85142	Dry Wells
QUEEN CREEK	S118167314	OREGANO'S BISTRO	SEC ELLSWORTH LOOP & MAYA RD	85142	Dry Wells
QUEEN CREEK	S119762274	HERITAGE SQUARE	SWC ELLSWORTH RD & HERITAGE LOOP	85142	Dry Wells
QUEEN CREEK	S108250639	POWER MINI STORAGE, LLC	POWER RD BETWEEN PECOS & GERMANN		Dry Wells
QUEEN CREEK	S110709811	HASTINGS FARM	NEC RIGGS & ELLSWORTH		Dry Wells
QUEEN CREEK	S110487437	HASTINGS FARMS PARCEL H	NE RIGGS & ELLSWORTH		Dry Wells
QUEEN CREEK	S110487438	HASTINGS FARMS PARCEL I	NE RIGGS & ELLSWORTH		Dry Wells
QUEEN CREEK	S110487439	HASTINGS FARMS PARCEL J	NE RIGGS & ELLSWORTH		Dry Wells
QUEEN CREEK	S109588466	QUEEN CREEK CROSSROADS	SEC ELLSWORTH RD & RITTENHOUSE RD		Dry Wells
QUEEN CREEK	S117346514	MORCOM SRP STATION	ELLSWORTH RD & RIGGS		Dry Wells
QUEEN CREEK	S109347794	THE VILLAGE SHOPS AT QUEEN CREEK	NEC ELLSWORTH RD & SIERRA PARK BLVD		Dry Wells
QUEEN CREEK	S109058591	BROADSTONE @ QUEEN CREEK	NEC ELLSWORTH & OCOTILLO RD		Dry Wells
QUEEN CREEK	S109058630	CORNERSTONE @ QUEEN CREEK	NEC OCOTILLO RD & ELLSWORTH		Dry Wells
QUEEN CREEK	S117576750	EXPRESS CARWASH	SWC ELLSWORTH LOOP RD & OCOTILLO		Dry Wells
QUEEN CREEK	S108932206	HASTING FARMS - PARCELS A & B	NEC ELLSWORTH RD & CHANDLER HEIGHTS RD		Dry Wells
QUEEN CREEK	S108932529	QUEENLAND MANOR	SEC QUEEN CREEK & ELLSWORTH		Dry Wells
QUEEN CREEK	S114530060	PRESERVE AT HASTINGS FARMS PARCEL D-PH. 1	CHANDLER HEIGHTS & ELLSWORTH RD		Dry Wells
QUEEN CREEK	S118872133	TRACTOR SUPPLY-QUEEN CREEK	ELLSWORTH RD & RIGGS		Dry Wells
QUEEN CREEK	S118482103	BELLERO	ELLSWORTH RD & SAN TAN BLVD		Dry Wells

Count: 145 records

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
QUEEN CREEK	S118482190	QUEEN CREEK DISTRICT	NEC MAYA RD & ELLSWORTH		Dry Wells
QUEEN CREEK	S114530013	EMPEROR ESTATES	NEC SOSSAMAN RD & QUEEN CREEK	85142	Dry Wells
QUEEN CREEK	S109239222	QUEEN CREEK MIDDLE SCHOOL GMP	NEC RIGGS RD & SOSSAMAN RD		Dry Wells
QUEEN CREEK	S116624590	QUAIL CREEK	SOSSAMAN & TWIN ACRES N.E.C.		Dry Wells
QUEEN CREEK	S108932554	REMINGTON HEIGHTS 1 & 2	NEC SOSSAMAN & QUEEN CREEK		Dry Wells
QUEEN CREEK	S113390500	VILLAGIO	SEC SOSSAMAN & QUEEN CREEK		Dry Wells
QUEEN CREEK	S118872111	RITTENHOUSE RANCH	SOSSAMAN RD & RITTENHOUSE		Dry Wells
QUEEN CREEK	S108415635	LUCIA AT QUEEN CREEK	NEC SOSSAMAN RD & OCOTILLO		Dry Wells
QUEEN CREEK	S120911019	TRW VEHICLE SAFETY SYSTEMS MESA II	11202 E GERMANN RD		MANIFEST

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/25/2021
Date Data Arrived at EDR: 06/24/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/08/2022
Date Data Arrived at EDR: 02/11/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 88

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/21/2022
Date Data Arrived at EDR: 02/23/2022
Date Made Active in Reports: 05/24/2022
Number of Days to Update: 90

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/24/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/21/2022
Date Data Arrived at EDR: 02/23/2022
Date Made Active in Reports: 05/24/2022
Number of Days to Update: 90

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/04/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/01/2022
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 9

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/22/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

AZ NPL: NPL Detail Listing

Detailed site information for NPL sites from the Arizona Department of Environmental Quality.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 03/25/2021
Date Made Active in Reports: 06/10/2021
Number of Days to Update: 77

Source: Department of Environmental Quality
Telephone: 602-771-4609
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

WQARF: Water Quality Assurance Revolving Fund Sites

Sites which may have an actual or potential impact upon the waters of the state, cause by hazardous substances. The WQARF program provides matching funds to political subdivisions and other state agencies for clean-up activities.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 03/25/2021
Date Made Active in Reports: 06/10/2021
Number of Days to Update: 77

Source: Department of Environmental Quality
Telephone: 602-771-4360
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Annually

Lists of state- and tribal hazardous waste facilities

SPL: Superfund Program List

The list is representative of the sites and potential sites within the jurisdiction of the Superfund Program Section. It is comprised of the following elements: 1) Water Quality Assurance Revolving Fund Registry Sites; 2) Potential WQARF Registry sites; 3) NPL sites; and 4) Department of Defense sites requiring SPS oversight.

Date of Government Version: 08/25/2004
Date Data Arrived at EDR: 04/04/2018
Date Made Active in Reports: 05/17/2018
Number of Days to Update: 43

Source: Department of Environmental Quality
Telephone: 602-771-4360
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: No Update Planned

SHWS: ZipAcids List

The ACIDS list consists of more than 750 locations subject to investigation under the State Water Quality Assurance Revolving Fund (WQARF) and Federal CERCLA programs. The list is no longer updated by the state.

Date of Government Version: 01/03/2000
Date Data Arrived at EDR: 04/11/2000
Date Made Active in Reports: 05/16/2000
Number of Days to Update: 35

Source: Department of Environmental Quality
Telephone: 602-771-4360
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: No Update Planned

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF: Directory of Solid Waste Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 04/06/2022
Number of Days to Update: 6

Source: Department of Environmental Quality
Telephone: 602-771-2300
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Storage Tank Listing

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 01/04/2022
Date Data Arrived at EDR: 01/06/2022
Date Made Active in Reports: 03/21/2022
Number of Days to Update: 74

Source: Department of Environmental Quality
Telephone: 602-771-4345
Last EDR Contact: 04/07/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/28/2021
Date Data Arrived at EDR: 06/22/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 90
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 88
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

UST: Underground Storage Tank Listing
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 01/04/2022
Date Data Arrived at EDR: 01/06/2022
Date Made Active in Reports: 03/21/2022
Number of Days to Update: 74
Source: Department of Environmental Quality
Telephone: 602-771-4345
Last EDR Contact: 04/07/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Annually

AST: List of Aboveground Storage Tanks
Aboveground storage tanks that the Dept. of Building & Fire Safety have permitted.

Date of Government Version: 12/05/2019
Date Data Arrived at EDR: 12/06/2019
Date Made Active in Reports: 01/31/2020
Number of Days to Update: 56
Source: Department of Building & Fire Safety
Telephone: 602-364-1003
Last EDR Contact: 03/02/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: No Update Planned

AST 2: Aboveground Storage Tank Listing
A listing of aboveground storage tank site locations.

Date of Government Version: 01/21/2022
Date Data Arrived at EDR: 01/26/2022
Date Made Active in Reports: 04/14/2022
Number of Days to Update: 78

Source: Department of Environmental Quality
Telephone: 602-771-4380
Last EDR Contact: 03/04/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/28/2021
Date Data Arrived at EDR: 06/22/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/06/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

AZURITE: Remediation and DEUR/VEMUR Tracking System

ADEQ maintains a repository listing sites remediated under programs administered by the department.

Date of Government Version: 03/01/2022
Date Data Arrived at EDR: 03/01/2022
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 8

Source: Department of Environmental Quality
Telephone: 602-771-4397
Last EDR Contact: 03/01/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Varies

AUL: DEUR Database

Activity and use limitations include both engineering controls and institutional controls. DEUR and VEMUR sites. DEUR: Declaration of Environmental Use Restriction. A restrictive land use covenant that is required when a property owner elects to use an institutional (i.e., administrative) control or engineering (i.e., physical) control as a means to meet remediation goals. The DEUR runs with and burdens the land, and requires maintenance of any institutional or engineering controls. VEMUR: Voluntary Environmental Mitigation Use Restriction. A restrictive land use covenant that, prior to July 18, 2000, was required when a property owner elected to remediate the property to non-residential uses. Effective July 18, 2000, the DEUR replaced the VEMUR as a restrictive use covenant.

Date of Government Version: 03/01/2022
Date Data Arrived at EDR: 03/01/2022
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 8

Source: Department of Environmental Quality
Telephone: 602-771-4397
Last EDR Contact: 03/01/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

VCP: Voluntary Remediation Program Sites

Sites involved in the Voluntary Remediation Program.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 12/27/2021
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 81

Source: Department of Environmental Quality
Telephone: 602-771-4411
Last EDR Contact: 03/24/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27
Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142
Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS: Brownfields Tracking System
Information relating to Brownfields sites in Arizona.

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 10/26/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 79
Source: Department of Environmental Quality
Telephone: 602-771-4401
Last EDR Contact: 03/24/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 03/10/2022
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 0
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/15/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWTIRE: Solid Waste Tire Facilities
A waste tire "facility" means a solid waste facility at which waste tires are stored outdoors on any day.

Date of Government Version: 05/11/2021
Date Data Arrived at EDR: 05/12/2021
Date Made Active in Reports: 07/28/2021
Number of Days to Update: 77
Source: Department of Environmental Quality
Telephone: 602-771-4132
Last EDR Contact: 05/19/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/22/2022
Date Data Arrived at EDR: 02/23/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 76
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/24/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Labs
A listing of drug lab seizures in Arizona.

Date of Government Version: 10/28/2019
Date Data Arrived at EDR: 10/30/2019
Date Made Active in Reports: 12/12/2019
Number of Days to Update: 43
Source: Board of Technical Registration
Telephone: 602-364-4931
Last EDR Contact: 03/17/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/22/2022
Date Data Arrived at EDR: 02/23/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 76

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/24/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Quarterly

AQUEOUS FOAM: Aqueous Film Forming Foam Listing

When AFFF is used, discharged or released to the environment, containment and cleanup may be required to prevent future adverse health or environmental impacts.

Date of Government Version: 11/14/2020
Date Data Arrived at EDR: 03/22/2022
Date Made Active in Reports: 04/26/2022
Number of Days to Update: 35

Source: Department of Environmenatl Quality
Telephone: 602-771-6145
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Listing

Arizona?s Public Water System Screening for Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) Final Report. The purpose of the grant was to screen Public Water System (PWS) drinking water wells in Arizona potentially impacted by perfluorooctanoic acid (PFOA) and/or perfluorooctane sulfonate (PFOS) contamination.

Date of Government Version: 02/18/2021
Date Data Arrived at EDR: 04/30/2021
Date Made Active in Reports: 07/26/2021
Number of Days to Update: 87

Source: Department of Environmental Quality
Telephone: 602-364-3118
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/15/2021
Date Data Arrived at EDR: 12/16/2021
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 84

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

SPILLS: Hazardous Material Logbook
Chemical spills and incidents referred to the Emergency Response Unit.

Date of Government Version: 11/15/2001
Date Data Arrived at EDR: 06/28/2007
Date Made Active in Reports: 07/24/2007
Number of Days to Update: 26
Source: Department of Environmental Quality
Telephone: 602-771-4153
Last EDR Contact: 05/19/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Varies

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 12/11/2001
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/11/2013
Number of Days to Update: 39
Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15
Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites
The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/01/2021
Date Data Arrived at EDR: 02/15/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 84
Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/17/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

DOD: Department of Defense Sites
This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239
Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/12/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/06/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 12/13/2021
Date Data Arrived at EDR: 12/17/2021
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 90

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/06/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/18/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/20/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 01/19/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 82

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/20/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/27/2022
Date Data Arrived at EDR: 05/04/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 22

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2022
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 64

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/29/2021
Date Data Arrived at EDR: 08/24/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 87
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 84
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/06/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 03/28/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 04/26/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 70

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 23

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/02/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/26/2021
Date Data Arrived at EDR: 07/27/2021
Date Made Active in Reports: 10/22/2021
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/16/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/01/2022
Date Data Arrived at EDR: 02/23/2022
Date Made Active in Reports: 05/24/2022
Number of Days to Update: 90

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 03/21/2022
Date Data Arrived at EDR: 03/22/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 3

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 03/14/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/14/2021
Date Data Arrived at EDR: 12/15/2021
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 85

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/04/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/04/2021
Date Data Arrived at EDR: 11/22/2021
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 95

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 05/18/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/19/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 01/01/2022
Date Data Arrived at EDR: 01/04/2022
Date Made Active in Reports: 01/10/2022
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/11/2022
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 34

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/12/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/17/2022
Date Data Arrived at EDR: 02/17/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 82

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/17/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Quarterly

AIRS: Arizona Airs Database

Arizona major (has the potential to emit over 100 tons of criteria pollutant) and minor (below 100 tons) sources.

Date of Government Version: 12/23/2021
Date Data Arrived at EDR: 12/27/2021
Date Made Active in Reports: 03/23/2022
Number of Days to Update: 86

Source: Department of Environmental Quality
Telephone: 602-771-2344
Last EDR Contact: 03/24/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Semi-Annually

AQUIFER: Aquifer Protection Permits List

Facilities with an Aquifer Protection permit (APP), that discharges either directly to an aquifer or to the land surface or the vadose zone in such a manner that there is a reasonable probability that the pollutant will reach an aquifer.

Date of Government Version: 10/01/2021
Date Data Arrived at EDR: 10/07/2021
Date Made Active in Reports: 11/05/2021
Number of Days to Update: 29

Source: Department of Environmental Quality
Telephone: 602-771-4623
Last EDR Contact: 05/04/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: Semi-Annually

DOD: Department of Defense Sites

These sites are federal facilities that are either being assessed for potential contamination, or have active remediation taking place on them.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 06/10/2021
Number of Days to Update: 79

Source: Department of Environmental Quality
Telephone: 602-771-4360
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Annually

DRY WELLS: Drywell Registration

A drywell is a bored, drilled, or driven shaft or hole whose depth is greater than its width and is designed and constructed specifically for the disposal of storm water.

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/13/2019
Date Made Active in Reports: 08/20/2019
Number of Days to Update: 68

Source: Department of Environmental Quality
Telephone: 602-771-4686
Last EDR Contact: 05/17/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Semi-Annually

DRYCLEANERS: Drycleaner Facility Listing
A listing of drycleaner facilities in Arizona.

Date of Government Version: 06/17/2019
Date Data Arrived at EDR: 07/20/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 79

Source: Department of Environmental Quality
Telephone: 602-771-4335
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: No Update Planned

EMAP: All Places of Interest Listing
A listing of all places of interest to the Department of Environmental Quality, including air, waste and water sites.

Date of Government Version: 11/29/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 77

Source: Department of Environmental Quality
Telephone: 602-771-4380
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

ENF: Enforcement and Violation Listing
A listing of enforcement and violation cases in the state of Arizona.

Date of Government Version: 02/01/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 04/27/2022
Number of Days to Update: 83

Source: Department of Environmental Quality
Telephone: 602-771-4424
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial assurance information for ust sites.

Date of Government Version: 06/17/2021
Date Data Arrived at EDR: 06/22/2021
Date Made Active in Reports: 09/16/2021
Number of Days to Update: 86

Source: Department of Environmental Quality
Telephone: 602-771-4258
Last EDR Contact: 03/17/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

AZ MANIFEST: Manifest Information
Hazardous waste manifest information

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 06/15/2021
Date Made Active in Reports: 09/09/2021
Number of Days to Update: 86

Source: Department of Environmental Quality
Telephone: N/A
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Annually

NPDES: Notice of Intent Construction Stormwater General Permits Database
NPDES permit sites

Date of Government Version: 07/07/2021
Date Data Arrived at EDR: 07/07/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 84

Source: Department of Environmental Quality
Telephone: 602-771-4424
Last EDR Contact: 03/17/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

VAPOR: Vapor Intrusion
A listing of vapor intrusion site locations

Date of Government Version: 04/21/2021
Date Data Arrived at EDR: 04/22/2021
Date Made Active in Reports: 07/09/2021
Number of Days to Update: 78

Source: Department of Environmental Quality
Telephone: 602-771-4197
Last EDR Contact: 03/24/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

UIC: Underground Injection Control Wells
Underground injection control wells.

Date of Government Version: 09/30/2015
Date Data Arrived at EDR: 02/05/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 60

Source: Arizona Geological Survey
Telephone: 520-770-3500
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

WWFAC: Waste Water Treatment Facilities
Statewide list of waste water treatment facilities.

Date of Government Version: 07/09/2012
Date Data Arrived at EDR: 07/23/2012
Date Made Active in Reports: 09/06/2012
Number of Days to Update: 45

Source: Department of Environmental Quality
Telephone: 602-771-4623
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Arizona.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/02/2014
Number of Days to Update: 185

Source: Department of Environmental Quality
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Arizona.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/15/2014
Number of Days to Update: 198

Source: Department of Environmental Quality
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Arizona.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/02/2014
Number of Days to Update: 185

Source: Department of Environmental Quality
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/03/2021
Date Data Arrived at EDR: 02/11/2022
Date Made Active in Reports: 05/06/2022
Number of Days to Update: 84

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/09/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: No Update Planned

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Quarterly

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/16/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/02/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association’s annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics’ primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics’ primary database on private school locations in the United States.

Daycare Centers: Child Care Facilities & Group Homes
Source: Department of Health Services
Telephone: 602-674-4220

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Riparian Vegetation Associated with Perennial Waters

Source: State Land Department
Telephone: 602-542-4094

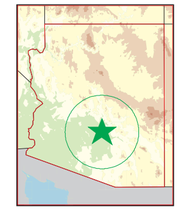
STREET AND ADDRESS INFORMATION

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EDR DataMap® Well Search

UPRR PIRATE

- Listed Water Wells
- Oil & Gas Wells
- Study Boundary
- Roads
- Major Roads
- Waterways
- Railroads
- Contour Lines
- Fault Lines
- Water
- Superfund Sites
- 100-Yr Flood Zones
- Wetlands



N

Mesa, AZ

0 1/2 1

Scale in Miles

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6892684.10w - 25 May 22

UPRR PIRATE
Mesa, AZ 85212

Inquiry Number: 6992684.10w
May 25, 2022

EDR DataMap™ Well Search Report

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Shelton, CT 06484
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GEOCHECK VERSION 2.1
SUMMARY

FEDERAL DATABASE WELL INFORMATION

MAP ID	WELL ID
19	USGS40000052181
19	USGS40000052178
31	USGS40000052150
45	USGS40000052117
50	USGS40000052113
60	USGS40000052086
66	USGS40000052077
67	USGS40000052070
69	USGS40000052071
79	USGS40000052072
80	USGS40000052046
81	USGS40000052042
95	USGS40000052025
96	USGS40000052020
103	USGS40000052003
105	USGS40000052005
102	USGS40000052004
99	USGS40000052007
99	USGS40000052006
106	USGS40000051992
107	USGS40000051982
110	USGS40000051969
110	USGS40000051968
119	USGS40000051947
113	USGS40000051942
121	USGS40000051953
126	USGS40000051913
130	USGS40000051901
130	USGS40000051895
135	USGS40000051857
141	USGS40000051803
141	USGS40000051800
145	USGS40000051796

STATE WATER WELL INFORMATION

MAP ID	WELL ID
1	AZDWR1100215069
1	AZDWR1100214176
1	AZDWR1100215066
1	AZDWR1100213736
1	AZDWR1100214163
1	AZDWR1100215050
1	AZDWR1100214605
1	AZDWR1100213723
1	AZDWR1100213733
1	AZDWR1100213743
1	AZDWR1100192497
1	AZDWR1100213730
1	AZDWR1100215046
1	AZDWR1100214601
1	AZDWR1100215047

GEOCHECK VERSION 2.1
SUMMARY

STATE WATER WELL INFORMATION

MAP ID	WELL ID
1	AZDWR1100219632
1	AZDWR1100215054
1	AZDWR1100214169
1	AZDWR1100214160
1	AZDWR1100214177
1	AZDWR1100214599
1	AZDWR1100214179
2	AZDWR1100213741
2	AZDWR1100214180
2	AZDWR1100213740
2	AZDWR1100214174
2	AZDWR1100214185
2	AZDWR1100214625
2	AZDWR1100214604
2	AZDWR1100214186
2	AZDWR1100215056
2	AZDWR1100215048
2	AZDWR1100214178
2	AZDWR1100215044
2	AZDWR1100213724
2	AZDWR1100215065
2	AZDWR1100215045
2	AZDWR1100213739
1	AZDEQ2000057229
3	AZDEQ2000045125
1	AZDEQ2000057225
1	AZDEQ2000057224
1	AZDEQ2000052296
1	AZDEQ2000057228
1	AZDEQ2000057226
1	AZDEQ2000036242
1	AZDWR1100213742
1	AZDWR1100069471
1	AZDEQ2000052282
4	AZDWR1100210344
1	AZDWR1100215490
1	AZDWR1100215858
1	AZDWR1100218160
1	AZDWR1100218161
1	AZDWR1100077275
1	AZDWR1100215489
1	AZDWR1100218162
1	AZDWR1100219468
1	AZDWR1100215859
1	AZDWR1100068241
1	AZDWR1100072177
1	AZDWR1100215860
1	AZDWR1100054506
1	AZDWR1100077273
1	AZDWR1100072446
1	AZDWR1100066156
1	AZDWR1100077272
1	AZDWR1100020930
1	AZDWR1100072178

GEOCHECK VERSION 2.1
SUMMARY

STATE WATER WELL INFORMATION

MAP ID	WELL ID
1	AZDWR1100213732
1	AZDWR1100214607
1	AZDWR1100077271
1	AZDWR1100077274
1	AZDWR1100072445
3	AZDWR1100086934
3	AZDWR1100098261
1	AZDWR1100210860
1	AZDWR1100209520
1	AZDWR1100209517
1	AZDWR1100213066
1	AZDWR1100213058
1	AZDWR1100210861
1	AZDWR1100063199
1	AZDWR1100062765
1	AZDWR1100054505
1	AZDWR1100209512
1	AZDWR1100202519
1	AZDWR1100066160
1	AZDWR1100215051
1	AZDWR1100215049
1	AZDWR1100214602
1	AZDWR1100221740
1	AZDWR1100215943
1	AZDWR1100215067
1	AZDWR1100214172
1	AZDWR1100214170
1	AZDWR1100214168
1	AZDWR1100214324
1	AZDWR1100214323
1	AZDWR1100214173
1	AZDWR1100215064
1	AZDWR1100216773
1	AZDWR1100214606
1	AZDWR1100214704
1	AZDWR1100215043
1	AZDWR1100220862
1	AZDWR1100220866
1	AZDWR1100222485
1	AZDWR1100219097
1	AZDWR1100219098
1	AZDWR1100220861
1	AZDWR1100209515
1	AZDWR1100209973
1	AZDWR1100213726
1	AZDWR1100114674
1	AZDWR1100207695
1	AZDWR1100209070
1	AZDWR1100214325
1	AZDWR1100214326
1	AZDWR1100214603
1	AZDWR1100213731
1	AZDWR1100214171
1	AZDWR1100214181

GEOCHECK VERSION 2.1
SUMMARY

STATE WATER WELL INFORMATION

MAP ID	WELL ID
1	AZDWR1100215053
1	AZDEQ2000036483
5	AZDWR1100055030
1	AZDEQ2000036485
1	AZDEQ2000036457
1	AZDEQ2000036470
1	AZDEQ2000036473
1	AZDEQ2000052274
1	AZDEQ2000057131
6	AZDEQ2000052362
1	AZDEQ2000057234
1	AZDEQ2000057122
1	AZDEQ2000036472
1	AZDEQ2000057125
1	AZDEQ2000036481
1	AZDEQ2000055541
1	AZDEQ2000057134
1	AZDEQ2000036471
1	AZDEQ2000036486
7	AZDWR1100047983
8	AZDWR1100167500
1	AZDEQ2000036466
1	AZDEQ2000036456
1	AZDEQ2000052285
1	AZDEQ2000057232
1	AZDEQ2000036480
1	AZDEQ2000036467
1	AZDEQ2000036497
1	AZDEQ2000057121
1	AZDEQ2000036495
1	AZDEQ2000052280
1	AZDEQ2000052268
1	AZDEQ2000036496
1	AZDEQ2000052287
1	AZDEQ2000052292
1	AZDEQ2000036498
9	AZDEQ2000052511
1	AZDEQ2000052510
1	AZDEQ2000052245
1	AZDEQ2000057133
1	AZDEQ2000036677
1	AZDEQ2000052291
1	AZDEQ2000052258
1	AZDEQ2000052256
1	AZDEQ2000052257
1	AZDEQ2000052299
1	AZDEQ2000052283
1	AZDEQ2000052246
1	AZDEQ2000052288
1	AZDEQ2000052297
1	AZDEQ2000052335
1	AZDEQ2000052281
1	AZDEQ2000036469
1	AZDEQ2000052269

GEOCHECK VERSION 2.1
SUMMARY

STATE WATER WELL INFORMATION

MAP ID	WELL ID
1	AZDEQ2000052255
1	AZDEQ2000052259
1	AZDEQ2000052260
1	AZDEQ2000052253
1	AZDEQ2000052254
1	AZDEQ2000052261
1	AZDEQ2000057230
1	AZDEQ2000036458
10	AZDEQ2000052404
1	AZDEQ2000057231
1	AZDEQ2000052547
10	AZDEQ2000052403
1	AZDEQ2000052249
1	AZDEQ2000052275
1	AZDEQ2000036478
1	AZDEQ2000052267
1	AZDEQ2000052265
1	AZDEQ2000052266
1	AZDEQ2000052252
1	AZDEQ2000052247
1	AZDEQ2000052250
1	AZDEQ2000052251
1	AZDEQ2000036474
1	AZDEQ2000052264
1	AZDEQ2000052262
1	AZDEQ2000052263
1	AZDEQ2000052336
1	AZDEQ2000052295
1	AZDEQ2000052289
1	AZDEQ2000036492
1	AZDEQ2000052272
1	AZDEQ2000052294
1	AZDEQ2000052298
1	AZDEQ2000036244
1	AZDEQ2000052248
1	AZDEQ2000036475
1	AZDEQ2000036482
1	AZDEQ2000052270
10	AZDEQ2000052402
1	AZDEQ2000052276
9	AZDEQ2000052506
1	AZDEQ2000055549
1	AZDEQ2000055550
1	AZDEQ2000052271
10	AZDEQ2000052405
1	AZDEQ2000036477
1	AZDEQ2000055544
1	AZDEQ2000052293
1	AZDEQ2000055547
1	AZDEQ2000055548
1	AZDEQ2000036476
10	AZDEQ2000036454
1	AZDEQ2000055545
1	AZDEQ2000055546

GEOCHECK VERSION 2.1
SUMMARY

STATE WATER WELL INFORMATION

MAP ID	WELL ID
1	AZDEQ2000052273
1	AZDEQ2000036468
1	AZDEQ2000036484
10	AZDEQ2000052406
1	AZDEQ2000052279
1	AZDEQ2000052277
1	AZDEQ2000057126
1	AZDEQ2000052480
1	AZDEQ2000036382
9	AZDWR1100062513
9	AZDWR1100062770
9	AZDWR1100055227
9	AZDWR1100061575
9	AZDWR1100062512
9	AZDWR1100064454
9	AZDEQ2000036479
1	AZDEQ2000052481
1	AZDWR1100112653
1	AZDWR1100112654
1	AZDWR1100066159
1	AZDWR1100209077
1	AZDWR1100055225
1	AZDWR1100020929
1	AZDWR1100214702
1	AZDWR1100214703
1	AZDWR1100221741
1	AZDWR1100214322
1	AZDWR1100214254
1	AZDWR1100066157
1	AZDWR1100209521
1	AZDWR1100214253
1	AZDWR1100114671
1	AZDWR1100005269
1	AZDWR1100142269
1	AZDWR1100114672
1	AZDWR1100114683
1	AZDWR1100004881
1	AZDWR1100213061
1	AZDWR1100004875
1	AZDWR1100209069
1	AZDWR1100004882
1	AZDWR1100004874
1	AZDWR1100037769
1	AZDWR1100006435
1	AZDWR1100142270
1	AZDWR1100005266
1	AZDWR1100004884
1	AZDWR1100006436
1	AZDWR1100006979
1	AZDWR1100006437
1	AZDWR1100006434
1	AZDWR1100006980
1	AZDWR1100006393
1	AZDWR1100207688

GEOCHECK VERSION 2.1
SUMMARY

STATE WATER WELL INFORMATION

MAP ID	WELL ID
1	AZDWR1100215007
1	AZDWR1100142271
1	AZDWR1100215008
1	AZDWR1100214989
1	AZDWR1100207690
1	AZDWR1100217713
1	AZDWR1100207691
1	AZDWR1100207689
1	AZDWR1100208601
1	AZDWR1100207693
1	AZDWR1100209076
1	AZDWR1100213059
1	AZDWR1100213060
1	AZDWR1100004876
1	AZDWR1100004873
1	AZDWR1100210867
1	AZDWR1100217715
1	AZDWR1100218158
1	AZDWR1100209071
1	AZDWR1100213064
1	AZDWR1100213065
1	AZDWR1100006431
1	AZDWR1100055031
1	AZDWR1100114670
1	AZDWR1100006432
1	AZDWR1100114676
1	AZDWR1100214987
1	AZDWR1100214567
1	AZDWR1100214568
1	AZDWR1100213897
1	AZDWR1100214988
1	AZDWR1100214569
1	AZDWR1100062766
1	AZDWR1100054507
1	AZDWR1100114673
1	AZDWR1100061573
1	AZDWR1100112659
1	AZDWR1100038378
1	AZDWR1100006208
1	AZDWR1100006209
1	AZDWR1100006433
1	AZDWR1100062767
1	AZDWR1100114675
1	AZDWR1100115478
1	AZDWR1100142267
1	AZDWR1100114669
1	AZDWR1100004885
1	AZDWR1100142268
1	AZDWR1100005268
1	AZDWR1100004880
1	AZDWR1100005267
1	AZDWR1100004883
1	AZDWR1100004879
1	AZDWR1100004877

GEOCHECK VERSION 2.1
SUMMARY

STATE WATER WELL INFORMATION

MAP ID	WELL ID
1	AZDWR1100112652
1	AZDWR1100062769
1	AZDWR1100112655
1	AZDWR1100213896
1	AZDWR1100214570
1	AZDWR1100112658
1	AZDWR1100005265
1	AZDWR1100004886
1	AZDWR1100072272
1	AZDWR1100092618
1	AZDWR1100072571
11	AZDWR1100029367
1	AZDWR1100066161
1	AZDWR1100066162
1	AZDWR1100072487
1	AZDWR1100072339
1	AZDWR1100068240
1	AZDWR1100079687
1	AZDWR1100097271
1	AZDWR1100097270
1	AZDWR1100072573
1	AZDWR1100072574
1	AZDWR1100072488
1	AZDWR1100072572
1	AZDWR1100215009
1	AZDWR1100216445
1	AZDWR1100213895
1	AZDWR1100214327
1	AZDWR1100219100
1	AZDWR1100220864
1	AZDWR1100220865
1	AZDWR1100112657
1	AZDWR1100220863
1	AZDWR1100207692
1	AZDWR1100098346
1	AZDWR1100213062
1	AZDWR1100098417
1	AZDWR1100207694
1	AZDWR1100210402
1	AZDWR1100210403
1	AZDWR1100096516
1	AZDWR1100096515
1	AZDWR1100210400
1	AZDWR1100219102
1	AZDWR1100092617
1	AZDWR1100210401
1	AZDWR1100097273
1	AZDWR1100080647
1	AZDWR1100079688
1	AZDWR1100097272
10	AZDWR1100070722
1	AZDEQ2000036491
1	AZDEQ2000057233
1	AZDEQ2000036493

GEOCHECK VERSION 2.1
SUMMARY

STATE WATER WELL INFORMATION

MAP ID	WELL ID
1	AZDEQ2000036504
1	AZDEQ2000052482
1	AZDEQ2000052364
1	AZDEQ2000052479
1	AZDEQ2000036503
10	AZDEQ2000036678
12	AZDWR1100207821
1	AZDEQ2000036369
1	AZDEQ2000052365
1	AZDEQ2000036502
1	AZDEQ2000052366
1	AZDEQ2000052363
1	AZDEQ2000036501
1	AZDEQ2000036487
10	AZDEQ2000052360
1	AZDEQ2000052483
10	AZDEQ2000052359
1	AZDEQ2000052284
1	AZDEQ2000052478
10	AZDEQ2000052422
10	AZDEQ2000052421
10	AZDEQ2000052407
10	AZDEQ2000052424
10	AZDEQ2000052423
10	AZDEQ2000052425
10	AZDEQ2000052426
1	AZDEQ2000052484
13	AZDEQ2000017432
13	AZDWR1100172158
1	AZDEQ2000036243
1	AZDEQ2000052278
1	AZDEQ2000057132
10	AZDEQ2000052286
1	AZDEQ2000036488
10	AZDEQ2000036455
1	AZDEQ2000052439
1	AZDEQ2000052438
1	AZDEQ2000052437
1	AZDEQ2000052440
1	AZDEQ2000052441
14	AZDWR1100216443
15	AZDWR1100123638
1	AZDWR1100213727
16	AZDWR1100008724
1	AZDWR1100066158
1	AZDWR1100112656
1	AZDWR1100216444
1	AZDWR1100020928
1	AZDWR1100220860
17	AZDWR1100124888
10	AZDWR1100069472
18	AZDEQ2000036494
19	AZDWR1100096179
19	AZDWR1100062430

GEOCHECK VERSION 2.1
SUMMARY

STATE WATER WELL INFORMATION

MAP ID	WELL ID
19	AZDWR1100220074
19	AZDWR1100077719
19	AZDWR1100216451
20	AZDWR1100062428
19	AZDEQ2000052332
19	AZDEQ2000052331
19	AZDEQ2000052334
19	AZDEQ2000052333
21	AZDWR1100029632
21	AZDWR1100046675
21	AZDWR1100043772
22	AZDWR1100192500
19	AZDEQ2000017431
19	AZDWR1100061576
19	AZDWR1100184978
19	AZDWR1100062510
19	AZDWR1100062511
19	AZDWR1100184979
19	AZDWR1100184980
19	AZDEQ2000017430
19	AZDWR1100201600
19	AZDWR1100064455
19	AZDEQ2000052434
23	AZDWR1100027430
24	AZDWR1100061574
24	AZDWR1100062768
21	AZDEQ2000036453
21	AZDEQ2000039196
25	AZDWR1100055032
19	AZDEQ2000052435
19	AZDEQ2000052436
19	AZDEQ2000052433
21	AZDEQ2000039195
26	AZDEQ2000017433
19	AZDEQ2000052432
27	AZDWR1100208707
28	AZDWR1100054513
29	AZDEQ2000036452
29	AZDWR1100063305
29	AZDWR1100054512
29	AZDEQ2000036374
30	AZDWR1100055223
29	AZDEQ2000036450
28	AZDEQ2000036375
29	AZDEQ2000036451
31	AZDEQ2000017372
32	AZDWR1100026766
33	AZDWR1100070721
34	AZDWR1100055226
34	AZDWR1100208244
34	AZDWR1100208260
35	AZDWR1100208259
35	AZDWR1100054511
36	AZDWR1100086122

GEOCHECK VERSION 2.1
SUMMARY

STATE WATER WELL INFORMATION

MAP ID	WELL ID
35	AZDEQ2000036373
37	AZDWR1100086120
35	AZDEQ2000052431
35	AZDEQ2000052427
38	AZDEQ2000052358
38	AZDEQ2000052357
38	AZDEQ2000052355
38	AZDEQ2000052356
35	AZDEQ2000052367
38	AZDEQ2000052353
38	AZDEQ2000052354
39	AZDEQ2000052391
39	AZDEQ2000052430
40	AZDWR1100123639
40	AZDWR1100208261
40	AZDWR1100123640
39	AZDEQ2000052392
39	AZDEQ2000052393
41	AZDWR1100017003
40	AZDEQ2000052372
40	AZDEQ2000052371
40	AZDEQ2000052370
40	AZDEQ2000052382
35	AZDEQ2000052396
39	AZDEQ2000052429
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40	AZDEQ2000036380
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40	AZDEQ2000036379
40	AZDEQ2000052323
40	AZDEQ2000052447
40	AZDEQ2000052454
40	AZDEQ2000052444
40	AZDEQ2000052452
40	AZDEQ2000036378
40	AZDEQ2000052453
40	AZDEQ2000052374
40	AZDEQ2000052383
40	AZDEQ2000052387

GEOCHECK VERSION 2.1
SUMMARY

STATE WATER WELL INFORMATION

MAP ID	WELL ID
40	AZDEQ2000052442
40	AZDEQ2000052390
40	AZDEQ2000052389
40	AZDEQ2000052388
40	AZDEQ2000052386
40	AZDEQ2000052443
40	AZDEQ2000052451
40	AZDEQ2000052375
43	AZDEQ2000036381
40	AZDEQ2000052445
40	AZDEQ2000052384
40	AZDEQ2000052385
40	AZDEQ2000052446
40	AZDEQ2000052449
40	AZDEQ2000052450
40	AZDEQ2000052448
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40	AZDWR1100215629
40	AZDWR1100054516
40	AZDWR1100066155
40	AZDWR1100127276
40	AZDWR1100067127
43	AZDWR1100211762
43	AZDWR1100218187
43	AZDWR1100055224
43	AZDWR1100218189
43	AZDWR1100218190
43	AZDWR1100218188
43	AZDWR1100215651
43	AZDWR1100212625
43	AZDWR1100215647
43	AZDWR1100218605
43	AZDWR1100216067
44	AZDWR1100218167
44	AZDWR1100218168
44	AZDWR1100127278
44	AZDWR1100216072
44	AZDWR1100218169
44	AZDWR1100218172
44	AZDWR1100218173
44	AZDWR1100218170
44	AZDWR1100218171
46	AZDWR1100127275
47	AZDWR1100007285
48	AZDWR1100123260
40	AZDEQ2000052320
40	AZDEQ2000036500

GEOCHECK VERSION 2.1
SUMMARY

STATE WATER WELL INFORMATION

MAP ID	WELL ID
40	AZDEQ2000052325
45	AZDEQ2000017954
40	AZDEQ2000052327
49	AZDWR1100127873
50	AZDEQ2000017947
50	AZDWR1100154827
44	AZDEQ2000052324
40	AZDEQ2000036499
51	AZDWR1100102560
40	AZDEQ2000052326
40	AZDEQ2000036240
44	AZDEQ2000036241
40	AZDWR1100054515
53	AZDEQ2000036448
53	AZDWR1100131693
53	AZDWR1100069470
54	AZDWR1100218185
54	AZDWR1100218183
54	AZDWR1100218184
54	AZDWR1100054514
54	AZDWR1100069473
54	AZDWR1100218182
44	AZDWR1100218174
44	AZDWR1100218175
44	AZDWR1100209339
44	AZDWR1100209340
44	AZDWR1100218176
44	AZDWR1100218180
44	AZDWR1100218181
44	AZDWR1100218179
44	AZDWR1100218177
44	AZDWR1100218178
55	AZDWR1100007286
56	AZDWR1100146684
40	AZDEQ2000036459
40	AZDEQ2000036377
54	AZDEQ2000036376
54	AZDEQ2000052322
57	AZDWR1100102561
58	AZDEQ2000052329
59	AZDEQ2000052330
54	AZDEQ2000057235
54	AZDEQ2000057237
60	AZDEQ2000017770
54	AZDEQ2000057236
61	AZDWR1100215204
61	AZDWR1100215205
59	AZDWR1100196752
58	AZDWR1100196753
62	AZDWR1100173630
63	AZDWR1100088234
64	AZDWR1100216251
64	AZDWR1100216250
64	AZDWR1100216249

GEOCHECK VERSION 2.1
SUMMARY

STATE WATER WELL INFORMATION

MAP ID	WELL ID
65	AZDWR1100216253
65	AZDWR1100216252
66	AZDWR1100154820
66	AZDEQ2000017952
67	AZDWR1100096374
67	AZDWR1100098824
67	AZDWR1100133488
68	AZDWR1100192935
68	AZDWR1100198758
68	AZDWR1100216038
67	AZDEQ2000017941
70	AZDWR1100062418
71	AZDEQ2000017771
71	AZDWR1100005855
72	AZDWR1100127274
73	AZDWR1100120505
73	AZDWR1100060963
74	AZDWR1100214152
74	AZDWR1100214154
74	AZDWR1100214153
74	AZDWR1100127279
75	AZDWR1100216069
75	AZDWR1100216068
76	AZDWR1100215201
76	AZDWR1100215202
76	AZDWR1100062417
76	AZDWR1100127277
76	AZDWR1100215203
76	AZDWR1100216070
77	AZDWR1100215644
77	AZDWR1100215639
77	AZDWR1100215638
69	AZDEQ2000017955
69	AZDWR1100154819
78	AZDWR1100003994
79	AZDEQ2000017772
80	AZDWR1100169077
80	AZDEQ2000017957
81	AZDWR1100154826
82	AZDWR1100095999
83	AZDWR1100102562
84	AZDWR1100049808
85	AZDEQ2000017773
86	AZDWR1100215637
86	AZDWR1100215636
87	AZDWR1100215635
87	AZDWR1100215632
88	AZDWR1100214150
88	AZDWR1100214149
88	AZDWR1100214151
88	AZDWR1100215207
88	AZDWR1100215206
89	AZDWR1100215625
89	AZDWR1100215626

GEOCHECK VERSION 2.1
SUMMARY

STATE WATER WELL INFORMATION

MAP ID	WELL ID
90	AZDWR1100215630
90	AZDWR1100215631
91	AZDEQ2000017949
92	AZDWR1100054518
93	AZDWR1100038280
94	AZDWR1100011741
96	AZDEQ2000017956
96	AZDWR1100154467
97	AZDEQ2000017953
97	AZDWR1100049809
97	AZDWR1100157753
98	AZDWR1100163506
95	AZDEQ2000017948
95	AZDWR1100163508
99	AZDEQ2000017951
99	AZDEQ2000017950
99	AZDWR1100154825
100	AZDEQ2000017944
100	AZDWR1100130960
101	AZDWR1100145235
102	AZDEQ2000017946
102	AZDWR1100145236
101	AZDEQ2000017945
103	AZDEQ2000017942
103	AZDWR1100133489
104	AZDWR1100133490
104	AZDWR1100099799
104	AZDEQ2000017943
107	AZDWR1100149977
107	AZDEQ2000017958
108	AZDWR1100194555
106	AZDWR1100018151
109	AZDWR1100089935
110	AZDWR1100173629
110	AZDWR1100037724
110	AZDWR1100175727
110	AZDWR1100116918
110	AZDWR1100131694
110	AZDEQ2000017831
110	AZDEQ2000017830
111	AZDWR1100044698
111	AZDWR1100027311
112	AZDWR1100078153
113	AZDEQ2000001128
113	AZDEQ2000017959
113	AZDWR1100038485
113	AZDWR1100149979
114	AZDWR1100096149
114	AZDWR1100110087
115	AZDWR1100105524
116	AZDWR1100210353
117	AZDEQ2000017962
118	AZDWR1100163509
118	AZDWR1100163510

GEOCHECK VERSION 2.1
SUMMARY

STATE WATER WELL INFORMATION

MAP ID	WELL ID
118	AZDEQ2000017969
118	AZDEQ2000017970
120	AZDWR1100146322
113	AZDWR1100010970
113	AZDWR1100012276
113	AZDWR1100149978
122	AZDWR1100134726
123	AZDEQ2000017960
123	AZDWR1100037373
123	AZDWR1100001595
123	AZDWR1100152153
124	AZDWR1100158083
125	AZDEQ2000017965
127	AZDEQ2000017961
127	AZDWR1100152152
128	AZDWR1100185204
128	AZDEQ2000017963
129	AZDEQ2000017966
126	AZDEQ2000017964
130	AZDEQ2000017968
130	AZDEQ2000017967
130	AZDWR1100134366
130	AZDWR1100134367
131	AZDWR1100185203
132	AZDEQ2000017985
132	AZDWR1100140272
133	AZDEQ2000017995
133	AZDWR1100152151
134	AZDEQ2000017989
136	AZDWR1100208130
135	AZDEQ2000017996
137	AZDWR1100028822
138	AZDWR1100159876
138	AZDEQ2000017988
139	AZDWR1100033517
140	AZDWR1100130890
140	AZDWR1100133551
142	AZDEQ2000017998
142	AZDWR1100185946
143	AZDWR1100149356
143	AZDEQ2000017990
144	AZDEQ2000001129
145	AZDEQ2000017992
144	AZDWR1100161315
141	AZDWR1100038182
141	AZDWR1100161316
141	AZDEQ2000017994
141	AZDEQ2000017993
143	AZDEQ2000017991
147	AZDEQ2000001127
148	AZDWR1100089885
149	AZDEQ2000018015

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID
1	AZOG50000000767

GEOCHECK VERSION 2.1
SUMMARY

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID
2	AZOG50000000762

PUBLIC WATER SUPPLY SYSTEM INFORMATION

Map ID: 52
PWS ID: AZ0407409
PWS Name: CHANDLER HTS CITRUS-IRR
BOX 9038
CHANDLER HEIGHTS, AZ 852279038
PWS currently has or had major violation(s) or enforcement: YES

Map ID: 128
PWS ID: AZ0407102
PWS Name: AZ BOYS RANCH WATER SYST
3431 WEST THUNDERBIRD #13406
PHOENIX, AZ 85023
PWS currently has or had major violation(s) or enforcement: NO

Map ID: 146
PWS ID: AZ0407033
PWS Name: QUEEN CREEK WATER CO
BOX 366
QUEEN CREEK, AZ 85320
PWS currently has or had major violation(s) or enforcement: YES

USGS TOPOGRAPHIC MAP(S)

33111-B6 CHANDLER HEIGHTS, AZ
33111-C5 DESERT WELL, AZ
33111-C6 HIGLEY, AZ

AREA RADON INFORMATION

Federal EPA Radon Zone for MARICOPA County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for MARICOPA COUNTY, AZ

Number of sites tested: 695

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.697 pCi/L	93%	7%	0%
Living Area - 2nd Floor	3.640 pCi/L	80%	20%	0%
Basement	2.242 pCi/L	79%	21%	0%

Federal EPA Radon Zone for PINAL County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

GEOCHECK VERSION 2.1
SUMMARY

AREA RADON INFORMATION

Federal Area Radon Information for PINAL COUNTY, AZ

Number of sites tested: 28

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.471 pCi/L	93%	7%	0%
Living Area - 2nd Floor	3.640 pCi/L	80%	20%	0%
Basement	2.242 pCi/L	79%	21%	0%

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Water Well Information:

Map ID:	19		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-01-07 31DBB	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	800	Well Depth Units:	ft
Well Hole Depth:	800	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1964-01-20
Feet below surface:	258.00	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID:	19		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-01-07 31DBA	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19490101
Well Depth:	800	Well Depth Units:	ft
Well Hole Depth:	800	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	3	Level reading date:	1971-10-01
Feet below surface:	Not Reported	Feet to sea level:	Not Reported
Note:	The well was destroyed (no water level is recorded).		

Level reading date:	1964-01-20	Feet below surface:	258.00
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1949-08-01	Feet below surface:	138.00
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID:	31		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-01-06 36CDA	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported

Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19420217
Well Depth:	604	Well Depth Units:	ft
Well Hole Depth:	604	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1948-12-29
Feet below surface:	137.30	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID:	45		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 05ABB	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1920
Well Depth:	225	Well Depth Units:	ft
Well Hole Depth:	225	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	2	Level reading date:	1971-11
Feet below surface:	Not Reported	Feet to sea level:	Not Reported
Note:	The well was destroyed (no water level is recorded).		
Level reading date:	1949-01-12	Feet below surface:	140.42
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID:	50		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 03AAA	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19750128
Well Depth:	2000	Well Depth Units:	ft
Well Hole Depth:	2000	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	4	Level reading date:	1991-11-12
Feet below surface:	358.50	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1984-12-10	Feet below surface:	341.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-12-03	Feet below surface:	350.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-01-19	Feet below surface:	377.60

Feet to sea level:	Not Reported	Note:	Not Reported

Map ID:	60		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-06 01ADA	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	10454	Well Hole Depth Units:	ft

Map ID:	66		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 04ADD	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19510525
Well Depth:	1524	Well Depth Units:	ft
Well Hole Depth:	1524	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	40	Level reading date:	2001-11-01
Feet below surface:	255.3	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	2000-12-11	Feet below surface:	255.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-11-02	Feet below surface:	263.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-04-09	Feet below surface:	274.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-11-13	Feet below surface:	285.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-11-17	Feet below surface:	279.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-06-24	Feet below surface:	358.3
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1994-12-15	Feet below surface:	288.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-11-17	Feet below surface:	267.2

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-11-19	Feet below surface:	302.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-11-19	Feet below surface:	320.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-01-02	Feet below surface:	318.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-12-01	Feet below surface:	327.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-12-06	Feet below surface:	317.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-06-07	Feet below surface:	471.00
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1987-12-21	Feet below surface:	315.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1987-06-03	Feet below surface:	391.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1986-12-02	Feet below surface:	317.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1986-06-12	Feet below surface:	415.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-12-10	Feet below surface:	315.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-06-20	Feet below surface:	500.20
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1984-12-06	Feet below surface:	311.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-11-29	Feet below surface:	321.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-01-13	Feet below surface:	326.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-01-29	Feet below surface:	309.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-01-26	Feet below surface:	316.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-12-30	Feet below surface:	338.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-12-29	Feet below surface:	333.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-01-07	Feet below surface:	341.3
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1972-01-14	Feet below surface:	347.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-01-26	Feet below surface:	330.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-01-06	Feet below surface:	294.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-02-15	Feet below surface:	313.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962-02-13	Feet below surface:	251.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1960-02-18	Feet below surface:	245.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1959-01-09	Feet below surface:	242.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1957-02-06	Feet below surface:	220.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1953-10-22	Feet below surface:	216.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1952-11-19	Feet below surface:	196.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1952-01-17	Feet below surface:	181.51
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID:	67		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 01ADD	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	916	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	3	Level reading date:	1991-11-12
Feet below surface:	419.30	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1984-12-10	Feet below surface:	386.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-12-03	Feet below surface:	400.2
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID: 69
Organization ID: USGS-AZ
Organization Name: USGS Arizona Water Science Center

Monitor Location:	D-02-07 05DAA	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	1524	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements: 4

Level reading date:	1991-11-07	Feet below surface:	296.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-12-06	Feet below surface:	289.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-12-02	Feet below surface:	294.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-11-06	Feet below surface:	279.10
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID: 79
Organization ID: USGS-AZ
Organization Name: USGS Arizona Water Science Center

Monitor Location:	D-02-06 01DAA	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	9207	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements: 1

Level reading date:	1988-01-11	Feet below surface:	570.00
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID: 80
Organization ID: USGS-AZ
Organization Name: USGS Arizona Water Science Center

Monitor Location:	D-02-07 06DAD	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1909
Well Depth:	145	Well Depth Units:	ft
Well Hole Depth:	145	Well Hole Depth Units:	ft

Map ID:	81		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 03DDA	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	195012
Well Depth:	596	Well Depth Units:	ft
Well Hole Depth:	596	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1951-05-09
Feet below surface:	222.0	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID:	95		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 03CDD	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19260401
Well Depth:	520	Well Depth Units:	ft
Well Hole Depth:	520	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	34	Level reading date:	2001-10-30
Feet below surface:	262.2	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	2000-12-11	Feet below surface:	262.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-11-02	Feet below surface:	270.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-12-10	Feet below surface:	294.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-12-23	Feet below surface:	293.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-11-13	Feet below surface:	293.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-11-17	Feet below surface:	287.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-12-15	Feet below surface:	299.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-11-17	Feet below surface:	297.6
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1992-11-19	Feet below surface:	308.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-11-07	Feet below surface:	327.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-12-03	Feet below surface:	334.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-12-01	Feet below surface:	341.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-12-06	Feet below surface:	329.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-06-07	Feet below surface:	454.10
Feet to sea level:	Not Reported		
Note:	The site had been pumped recently.		
Level reading date:	1987-12-21	Feet below surface:	326.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1987-06-03	Feet below surface:	449.10
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1986-12-02	Feet below surface:	329.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1986-06-12	Feet below surface:	447.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-12-10	Feet below surface:	322.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-06-20	Feet below surface:	510.00
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1984-12-06	Feet below surface:	320.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-11-29	Feet below surface:	328.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-01-19	Feet below surface:	384.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1949-01-18	Feet below surface:	168.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1939-12-30	Feet below surface:	131.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1939-12-20	Feet below surface:	133.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1939-12-01	Feet below surface:	132.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1939-11-16	Feet below surface:	135.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1939-10-31	Feet below surface:	135.19

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1939-10-17	Feet below surface:	135.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1939-10-02	Feet below surface:	147.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1939-09-15	Feet below surface:	161.49
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1929-01-11	Feet below surface:	117.00
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID:	96		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 05DDD	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	4	Level reading date:	1991-11-07
Feet below surface:	304.40	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1984-12-06	Feet below surface:	295.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-01-27	Feet below surface:	282
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1949-01-18	Feet below surface:	165.60
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID:	103		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 01CCD	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19501130
Well Depth:	848	Well Depth Units:	ft
Well Hole Depth:	848	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1951-05-09

Feet below surface:	232.33	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID:	105		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 02DCD	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1974
Well Depth:	1030	Well Depth Units:	ft
Well Hole Depth:	1030	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	3	Level reading date:	1991-11-12
Feet below surface:	390.70	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1984-12-10	Feet below surface:	354.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-12-06	Feet below surface:	358.3
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID:	102		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 02DDD	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	196111
Well Depth:	1010	Well Depth Units:	ft
Well Hole Depth:	1010	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1972-02-11
Feet below surface:	455.30	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID:	99		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 03DDD1	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported

Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	290	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

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Map ID: 99

Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 03DDD2	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	195006
Well Depth:	600	Well Depth Units:	ft
Well Hole Depth:	600	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	4	Level reading date:	1991-11-12
Feet below surface:	358.40	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1984-12-10	Feet below surface:	334.60
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1982-12-03	Feet below surface:	340.2
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1963-01-22	Feet below surface:	296.00
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID: 106

Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 02CDD	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19510723
Well Depth:	1005	Well Depth Units:	ft
Well Hole Depth:	1005	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1963-01-22
Feet below surface:	306.90	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID:	107		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 07AAA	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	5	Level reading date:	1991-11-07
Feet below surface:	289.30	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1989-12-18	Feet below surface:	290.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-06-07	Feet below surface:	479.70
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1984-12-06	Feet below surface:	292.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-12-02	Feet below surface:	299.0
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID:	110		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-06 12ADA1	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	606	Well Depth Units:	ft
Well Hole Depth:	606	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1948-01-01
Feet below surface:	150.00	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID:	110		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-06 12ADA2	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported

Aquifer Type:	Not Reported	Construction Date:	19580701
Well Depth:	680	Well Depth Units:	ft
Well Hole Depth:	680	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	7	Level reading date:	1966-03-08
Feet below surface:	262.9	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1965-02-15	Feet below surface:	262.2
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1963-01-28	Feet below surface:	239.42
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1962-02-12	Feet below surface:	237.97
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1960-02-18	Feet below surface:	232.74
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1959-01-09	Feet below surface:	232.55
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1959-01-01	Feet below surface:	233.00
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID:	119		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-06 12DAA	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19470324
Well Depth:	804	Well Depth Units:	ft
Well Hole Depth:	804	Well Hole Depth Units:	ft

Map ID:	113		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 07ADD	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19580101
Well Depth:	1608	Well Depth Units:	ft
Well Hole Depth:	1608	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1958-11-01

Feet below surface:	260.00	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID:	121		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 11BDD2	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	2	Level reading date:	1966-03-08
Feet below surface:	342.30	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1965-02-18	Feet below surface:	344.40
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID:	126		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 09DDD	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19390906
Well Depth:	1000	Well Depth Units:	ft
Well Hole Depth:	1000	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	45	Level reading date:	1984-12-06
Feet below surface:	344.40	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1982-12-03	Feet below surface:	351.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-01-14	Feet below surface:	383.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-03-08	Feet below surface:	314.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-01-28	Feet below surface:	298.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962-02-13	Feet below surface:	299.70
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1958-01-10	Feet below surface:	261.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1957-02-06	Feet below surface:	262.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1955-03-01	Feet below surface:	254.74
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1954-02-05	Feet below surface:	245.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1953-10-22	Feet below surface:	244.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1953-02-20	Feet below surface:	238.51
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1952-11-14	Feet below surface:	223.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1952-01-15	Feet below surface:	207.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-11-21	Feet below surface:	210.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-12-21	Feet below surface:	195.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-02-15	Feet below surface:	187.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1949-01-18	Feet below surface:	172.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1946-01-25	Feet below surface:	151.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1945-02-12	Feet below surface:	147.56
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1944-06-15	Feet below surface:	149.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1944-02-10	Feet below surface:	145.13
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1943-11-24	Feet below surface:	148.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1942-12-15	Feet below surface:	142.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1942-10-25	Feet below surface:	147.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1942-06-02	Feet below surface:	141.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1942-02-25	Feet below surface:	136.00
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1941-12-23	Feet below surface:	136.86
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1941-11-05	Feet below surface:	139.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1941-04-25	Feet below surface:	133.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1941-03-26	Feet below surface:	133.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1941-02-26	Feet below surface:	134.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1941-01-23	Feet below surface:	135.86
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1940-10-24	Feet below surface:	140.66
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1940-09-05	Feet below surface:	149.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1940-05-08	Feet below surface:	139.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1940-02-20	Feet below surface:	132.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1940-01-15	Feet below surface:	133.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1939-12-20	Feet below surface:	134.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1939-11-16	Feet below surface:	135.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1939-10-31	Feet below surface:	136.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1939-10-17	Feet below surface:	137.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1939-10-02	Feet below surface:	141.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1939-09-14	Feet below surface:	139.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1939-09-06	Feet below surface:	142.70
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID:	130		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 10CDD1	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1917
Well Depth:	440	Well Depth Units:	ft
Well Hole Depth:	440	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	4	Level reading date:	1963-11-06
Feet below surface:	317.20	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1949-01-19	Feet below surface:	177.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1947-02-06	Feet below surface:	139.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1941-02-06	Feet below surface:	139.45
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID:	130		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 10CDD2	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19520101
Well Depth:	802	Well Depth Units:	ft
Well Hole Depth:	802	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	2	Level reading date:	1963-01-22
Feet below surface:	316.40	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1952-01-01	Feet below surface:	288.00
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID:	135		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 17ADA	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported

Aquifer Type:	Not Reported	Construction Date:	1948
Well Depth:	601	Well Depth Units:	ft
Well Hole Depth:	601	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1951-02-01
Feet below surface:	180.00	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID: 141

Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 16DDD2	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19520101
Well Depth:	766	Well Depth Units:	ft
Well Hole Depth:	766	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	5	Level reading date:	1984-12-04
Feet below surface:	326.80	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1982-12-03	Feet below surface:	324.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-01-14	Feet below surface:	336.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-01-22	Feet below surface:	317.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1952-01-01	Feet below surface:	220.00
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID: 141

Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 16DDD1	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	420	Well Depth Units:	ft
Well Hole Depth:	420	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	11	Level reading date:	1982-11-18
Feet below surface:	Not Reported	Feet to sea level:	Not Reported
Note:	The well was destroyed (no water level is recorded).		

Level reading date:	1949-01-17	Feet below surface:	174.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1946-01-25	Feet below surface:	154.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1945-02-12	Feet below surface:	150.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1944-02-10	Feet below surface:	149.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1942-12-16	Feet below surface:	143.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1941-12-22	Feet below surface:	139.43
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1941-01-21	Feet below surface:	137.21
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1940-10-24	Feet below surface:	142.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1939-12-18	Feet below surface:	136.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1939-08-31	Feet below surface:	145.15
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID:	145		
Organization ID:	USGS-AZ		
Organization Name:	USGS Arizona Water Science Center		
Monitor Location:	D-02-07 16DCD	Type:	Well
Description:	Not Reported	HUC:	15050100
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19731007
Well Depth:	1470	Well Depth Units:	ft
Well Hole Depth:	1470	Well Hole Depth Units:	ft

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

State Well Information:

Map ID:	1		
Registry ID:	916147	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	196	Water Level (ft):	150
Casing Depth (ft):	196	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	04-NOV-13	Approved:	04-NOV-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916080	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	161	Water Level (ft):	150
Casing Depth (ft):	161	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	22-OCT-13	Approved:	22-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916144	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	246	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	04-NOV-13	Approved:	04-NOV-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916054	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB - GRIFFISS

Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	196	Water Level (ft):	150
Casing Depth (ft):	196	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	15-OCT-13	Approved:	15-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916066	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB - GREFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	18-OCT-13	Approved:	18-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916127	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	31-OCT-13	Approved:	31-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916098	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	6

Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	25-OCT-13	Approved:	25-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916040	Well Type:	ENV - SOIL VAPOR EXTRACTION / MONITORING
Well Type Group:	OTHER	Owner Name:	AFCEC / CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	161	Water Level (ft):	150
Casing Depth (ft):	161	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	10-OCT-13	Approved:	10-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916051	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC / CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	14-OCT-13	Approved:	14-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916061	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	161	Water Level (ft):	150
Casing Depth (ft):	161	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	16-OCT-13	Approved:	16-OCT-13

Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	908333	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	498	Installed Date:	17-JAN-08
Well Depth (ft):	156	Water Level (ft):	144
Casing Depth (ft):	155	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	11-JAN-08
Approved:	11-JAN-08	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	916048	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC / CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	14-OCT-13	Approved:	14-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916123	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	161	Water Level (ft):	150
Casing Depth (ft):	161	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	31-OCT-13	Approved:	31-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	916094	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	161	Water Level (ft):	150
Casing Depth (ft):	161	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	25-OCT-13	Approved:	25-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916124	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	196	Water Level (ft):	150
Casing Depth (ft):	196	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	31-OCT-13	Approved:	31-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	911434	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	BILL LOPP C/ DEPT OF THE AIR FORCE AFCEE
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	03-DEC-09
Well Depth (ft):	160	Water Level (ft):	140
Casing Depth (ft):	161	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-NOV-09
Approved:	18-NOV-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	916131	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFIS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported

Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	31-OCT-13	Approved:	31-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916073	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	161	Water Level (ft):	150
Casing Depth (ft):	161	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	21-OCT-13	Approved:	21-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916062	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	196	Water Level (ft):	150
Casing Depth (ft):	195	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	16-OCT-13	Approved:	16-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916081	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	196	Water Level (ft):	150
Casing Depth (ft):	195	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0

Tested Rate:	0	Draw Down:	0
Application Date:	22-OCT-13	Approved:	22-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916092	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	161	Water Level (ft):	150
Casing Depth (ft):	161	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	24-OCT-13	Approved:	24-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916083	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	161	Water Level (ft):	150
Casing Depth (ft):	161	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	22-OCT-13	Approved:	22-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	2		
Registry ID:	916059	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	161	Water Level (ft):	150
Casing Depth (ft):	160	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	15-OCT-13	Approved:	15-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID: 2

Registry ID:	916084	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-OCT-13
Approved:	22-OCT-13	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	2		
Registry ID:	916058	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	13-JAN-14
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	15-OCT-13	Approved:	15-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	2		
Registry ID:	916078	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	196	Water Level (ft):	150
Casing Depth (ft):	195	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	21-OCT-13	Approved:	21-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	2		
Registry ID:	916090	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported

Well Depth (ft):	245	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	2
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	24-OCT-13	Approved:	24-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	2		
Registry ID:	916119	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	31-OCT-13
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	2		
Registry ID:	916097	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	196	Water Level (ft):	150
Casing Depth (ft):	196	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	25-OCT-13	Approved:	25-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	2		
Registry ID:	916091	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	245	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	2
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0

Tested Rate:	0	Draw Down:	0
Application Date:	24-OCT-13	Approved:	24-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	2		
Registry ID:	916133	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	31-OCT-13	Approved:	31-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	2		
Registry ID:	916125	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	196	Water Level (ft):	150
Casing Depth (ft):	196	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	31-OCT-13	Approved:	31-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	2		
Registry ID:	916082	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	22-OCT-13	Approved:	22-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID: 2

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	916121	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	161	Water Level (ft):	150
Casing Depth (ft):	161	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	31-OCT-13	Approved:	31-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	2		
Registry ID:	916041	Well Type:	ENV - SOIL VAPOR EXTRACTION / MONITORING
Well Type Group:	OTHER	Owner Name:	AFCEC / CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	161	Water Level (ft):	150
Casing Depth (ft):	161	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	10-OCT-13	Approved:	10-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	2		
Registry ID:	916143	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	140
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	04-NOV-13	Approved:	04-NOV-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	2		
Registry ID:	916122	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported

Well Depth (ft):	161	Water Level (ft):	150
Casing Depth (ft):	161	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	31-OCT-13	Approved:	31-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	2		
Registry ID:	916057	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	161	Water Level (ft):	150
Casing Depth (ft):	161	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	15-OCT-13	Approved:	15-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
DWR #:	55-914801	DEQ Well #:	81601
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	155
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	760-MW19S	Basin:	Not Reported
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	Not Reported
Well Type:	Not Reported		

Map ID:	3		
DWR #:	55-549681	DEQ Well #:	58325
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	SUPERSTITION VIEW RANCHET	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER USED TO SUPPLY HOUSEHOLD NEEDS OF LESS THAN THREE HOMES (DRINKING, COOKING, WASHING, S LAWN WATERING, PET CARE, ONE CLASSROOM SCHOOLS, TURNPIKE GATES AND SIMILAR PURPOSES).		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-915971	DEQ Well #:	81598

Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	175
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	760-MW21D	Basin:	Not Reported
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	Not Reported
Well Type:	Not Reported		

Map ID:	1		
DWR #:	55-915971	DEQ Well #:	81597
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	155
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	760-MW21S	Basin:	Not Reported
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	Not Reported
Well Type:	Not Reported		

Map ID:	1		
DWR #:	55-598578	DEQ Well #:	69146
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	165	Drill Depth (ft):	165
Start Date:	2003/05/19 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-SVE01	Basin:	Phoenix AMA
Notes:	CASING 3" STEEL	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-914802	DEQ Well #:	81600
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	170
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	760-MW20D	Basin:	Not Reported
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	Not Reported
Well Type:	Not Reported		

Map ID:	1		
DWR #:	55-914802	DEQ Well #:	81599
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	154
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	760-MW20S	Basin:	Not Reported
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	Not Reported
Well Type:	Not Reported		

Map ID: 1

DWR #:	55-531690	DEQ Well #:	45970
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	243	Drill Depth (ft):	245
Start Date:	1991/06/12 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W27	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 201 TO 241	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
Registry ID:	916060	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	15-OCT-13	Approved:	15-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	531690	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	2	Installed Date:	12-JUN-91
Well Depth (ft):	245	Water Level (ft):	216
Casing Depth (ft):	243	Casing Diameter (in):	10
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	03-MAY-91
Approved:	Not Reported	Completion:	N
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
DWR #:	55-570657	DEQ Well #:	69115
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	245	Drill Depth (ft):	249
Start Date:	1997/11/05 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	SS-01-N-14	Basin:	Phoenix AMA
Notes:	CASING 4" PVC	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID: 4

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	919230	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	FRED & MARIE MARIN
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	239	Installed Date:	28-APR-16
Well Depth (ft):	500	Water Level (ft):	300
Casing Depth (ft):	500	Casing Diameter (in):	5
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	03-MAR-16	Approved:	03-MAR-16
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916151	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	245	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	2
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	05-NOV-13	Approved:	05-NOV-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	914800	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	498	Installed Date:	19-OCT-12
Well Depth (ft):	220	Water Level (ft):	155
Casing Depth (ft):	172	Casing Diameter (in):	6
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	11-OCT-12
Approved:	11-OCT-12	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	916382	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported

Well Depth (ft):	161	Water Level (ft):	150
Casing Depth (ft):	160	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	08-JAN-14	Approved:	08-JAN-14
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916383	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	196	Water Level (ft):	150
Casing Depth (ft):	195	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	08-JAN-14	Approved:	08-JAN-14
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	540826	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	30-OCT-93
Well Depth (ft):	230	Water Level (ft):	0
Casing Depth (ft):	203	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	28-SEP-93	Approved:	Not Reported
Completion:	N	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916150	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	246	Casing Diameter (in):	2
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0

Tested Rate:	0	Draw Down:	0
Application Date:	05-NOV-13	Approved:	05-NOV-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916384	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	196	Water Level (ft):	150
Casing Depth (ft):	195	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	08-JAN-14	Approved:	08-JAN-14
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	915971	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	498	Installed Date:	21-AUG-13
Well Depth (ft):	175	Water Level (ft):	143
Casing Depth (ft):	175	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	10-SEP-13
Approved:	10-SEP-13	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	914801	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	498	Installed Date:	01-NOV-12
Well Depth (ft):	175	Water Level (ft):	143
Casing Depth (ft):	175	Casing Diameter (in):	6
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	11-OCT-12
Approved:	11-OCT-12	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID: 1

Registry ID:	529475	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	342	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	11-SEP-90
Approved:	Not Reported	Completion:	N
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	533895	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	12-FEB-92
Well Depth (ft):	206	Water Level (ft):	0
Casing Depth (ft):	204	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	12-DEC-91	Approved:	Not Reported
Completion:	N	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	914802	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	498	Installed Date:	30-OCT-12
Well Depth (ft):	170	Water Level (ft):	150
Casing Depth (ft):	170	Casing Diameter (in):	6
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	11-OCT-12
Approved:	11-OCT-12	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	515999	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	06-NOV-86

Well Depth (ft):	373	Water Level (ft):	0
Casing Depth (ft):	310	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	SUBMERSIBLE
Pump Power:	ELECTRIC MOTOR 1 - 5 HP	Pump Rate:	10
Tested Rate:	0	Draw Down:	0
Application Date:	05-NOV-86	Approved:	Not Reported
Completion:	X	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	540824	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	26-OCT-93
Well Depth (ft):	222	Water Level (ft):	0
Casing Depth (ft):	217	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	01-OCT-93
Approved:	Not Reported	Completion:	N
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	533959	Well Type:	NON-EXEMPT - SERVICE
Well Type Group:	NON-EXEMPT	Owner Name:	CDM FEDERAL PROGRAMS,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	17-DEC-91
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	528568	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	24-JUL-90
Well Depth (ft):	257	Water Level (ft):	220
Casing Depth (ft):	255	Casing Diameter (in):	5
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0

Tested Rate:	0	Draw Down:	0
Application Date:	29-JUN-90	Approved:	Not Reported
Completion:	N	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	540823	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AFBDA/OL-S,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	22-OCT-93
Well Depth (ft):	221	Water Level (ft):	0
Casing Depth (ft):	215	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	01-OCT-93
Approved:	Not Reported	Completion:	N
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	219542	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	USAF REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	195	Water Level (ft):	170
Casing Depth (ft):	195	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	03-FEB-10
Approved:	16-FEB-10	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	533896	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	12-DEC-91
Approved:	Not Reported	Completion:	N
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID: 1

Registry ID:	916050	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC / CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	161	Water Level (ft):	148
Casing Depth (ft):	160	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	14-OCT-13	Approved:	14-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916100	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	25-OCT-13	Approved:	25-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	540822	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	19-OCT-93
Well Depth (ft):	233	Water Level (ft):	0
Casing Depth (ft):	227	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	01-OCT-93
Approved:	Not Reported	Completion:	N
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	540825	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	28-OCT-93

Well Depth (ft):	230	Water Level (ft):	0
Casing Depth (ft):	210	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	01-OCT-93	Approved:	Not Reported
Completion:	N	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	533958	Well Type:	NON-EXEMPT - SERVICE
Well Type Group:	NON-EXEMPT	Owner Name:	CDM FEDERAL PROGRAMS,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	17-DEC-91
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	3		
Registry ID:	550187	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	SUPERSTITION VIEW RANCHETTS WATER USE
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	117	Installed Date:	28-JUL-95
Well Depth (ft):	480	Water Level (ft):	340
Casing Depth (ft):	480	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	12-JUL-95	Approved:	Not Reported
Completion:	C	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	3		
Registry ID:	562726	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	REED, KYLE,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	269	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0

Draw Down:	0	Application Date:	27-MAY-97
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	920206	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	04-DEC-16
Well Depth (ft):	231	Water Level (ft):	145
Casing Depth (ft):	230	Casing Diameter (in):	3
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	01-DEC-16
Approved:	01-DEC-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	920126	Well Type:	SPCL - GEOTECHNICAL
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	03-NOV-16
Approved:	03-NOV-16	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	920123	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	18-NOV-16
Well Depth (ft):	232	Water Level (ft):	147
Casing Depth (ft):	230	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	03-NOV-16
Approved:	03-NOV-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	919432	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	226	Water Level (ft):	150
Casing Depth (ft):	225	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	29-APR-16	Approved:	29-APR-16
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	919424	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	225	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	29-APR-16	Approved:	29-APR-16
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	920207	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	01-DEC-16
Approved:	01-DEC-16	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	525135	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	342	Installed Date:	05-AUG-89

Well Depth (ft):	78	Water Level (ft):	0
Casing Depth (ft):	78	Casing Diameter (in):	2
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	05-JUL-89	Approved:	13-NOV-13
Completion:	C	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	525772	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	342	Installed Date:	13-OCT-89
Well Depth (ft):	245	Water Level (ft):	150
Casing Depth (ft):	253	Casing Diameter (in):	2
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	05-SEP-89	Approved:	13-NOV-13
Completion:	C	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	515998	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	314	Installed Date:	05-DEC-86
Well Depth (ft):	353	Water Level (ft):	0
Casing Depth (ft):	290	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	SUBMERSIBLE
Pump Power:	ELECTRIC MOTOR 1 - 5 HP	Pump Rate:	10
Tested Rate:	0	Draw Down:	0
Application Date:	05-NOV-86	Approved:	Not Reported
Completion:	X	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	920118	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0

Draw Down:	0	Application Date:	03-NOV-16
Approved:	03-NOV-16	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	808481	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	AFCEE/ERB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	16-AUG-96
Well Depth (ft):	242	Water Level (ft):	177
Casing Depth (ft):	242	Casing Diameter (in):	9
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	16-APR-03	Approved:	Not Reported
Completion:	A	Well Cancelled:	Y
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	528572	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	14-AUG-90
Well Depth (ft):	254	Water Level (ft):	223
Casing Depth (ft):	252	Casing Diameter (in):	5
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	29-JUN-90	Approved:	Not Reported
Completion:	N	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916128	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	31-OCT-13	Approved:	31-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID: 1

Registry ID:	916126	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	31-OCT-13	Approved:	31-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916095	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	161	Water Level (ft):	150
Casing Depth (ft):	160	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	25-OCT-13	Approved:	25-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	926592	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	US AIR FORCE-AFCEC/CIBW
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	19-JUL-21
Approved:	19-JUL-21	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	916197	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported

Well Depth (ft):	196	Water Level (ft):	150
Casing Depth (ft):	196	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	19-NOV-13	Approved:	19-NOV-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916145	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	245	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	2
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	04-NOV-13	Approved:	04-NOV-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916076	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	196	Water Level (ft):	150
Casing Depth (ft):	195	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	21-OCT-13	Approved:	21-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916074	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0

Tested Rate:	0	Draw Down:	0
Application Date:	21-OCT-13	Approved:	21-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916072	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	161	Water Level (ft):	150
Casing Depth (ft):	161	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	21-OCT-13	Approved:	21-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	911528	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported
Well Depth (ft):	195	Water Level (ft):	0
Casing Depth (ft):	197	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	17-DEC-09
Approved:	17-DEC-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	911527	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	22-JAN-09
Well Depth (ft):	197	Water Level (ft):	151
Casing Depth (ft):	195	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	17-DEC-09
Approved:	17-DEC-09	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		

Registry ID:	916077	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	161	Water Level (ft):	150
Casing Depth (ft):	161	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	21-OCT-13	Approved:	21-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916142	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	25-NOV-13
Well Depth (ft):	245	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	2
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	04-NOV-13	Approved:	04-NOV-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	915330	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	83	Installed Date:	15-MAR-13
Well Depth (ft):	197	Water Level (ft):	150
Casing Depth (ft):	197	Casing Diameter (in):	1
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	11-MAR-13	Approved:	11-MAR-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916099	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	24-JAN-14

Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	246	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	25-OCT-13	Approved:	25-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	910218	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	10-OCT-08
Well Depth (ft):	180	Water Level (ft):	170
Casing Depth (ft):	180	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-DEC-08
Approved:	22-DEC-08	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	916120	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	31-OCT-13
Approved:	31-OCT-13	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	926403	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	US AIR FORCE-AFCEC/CIBW
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0

Draw Down:	0	Application Date:	10-JUN-21
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	926407	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	US AIR FORCE-AFCEC/CIBW
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	10-JUN-21
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	926754	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	US AIR FORCE-AFCEC/CIBW
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	20-AUG-21
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	910043	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	10-DEC-13
Well Depth (ft):	246	Water Level (ft):	168
Casing Depth (ft):	242	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	12-NOV-08
Approved:	04-NOV-13	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	910044	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	19-NOV-08
Well Depth (ft):	196	Water Level (ft):	168
Casing Depth (ft):	195	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	12-NOV-08
Approved:	12-NOV-08	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	926402	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	US AIR FORCE-AFCEC/CIBW
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	10-JUN-21
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	920121	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	03-NOV-16
Approved:	03-NOV-16	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	920162	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	18-NOV-16

Well Depth (ft):	170	Water Level (ft):	145
Casing Depth (ft):	160	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	16-NOV-16
Approved:	16-NOV-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	916043	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC / CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	15-NOV-13
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	10-OCT-13	Approved:	10-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	570656	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	23-JAN-14
Well Depth (ft):	250	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	2
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	04-SEP-98	Approved:	14-NOV-13
Completion:	A	Well Cancelled:	N
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	919549	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	12-MAY-16
Well Depth (ft):	230	Water Level (ft):	148
Casing Depth (ft):	225	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0

Draw Down:	0	Application Date:	24-MAY-16
Approved:	24-MAY-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	920090	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	05-NOV-16
Well Depth (ft):	231	Water Level (ft):	148
Casing Depth (ft):	230	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	25-OCT-16
Approved:	25-OCT-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	911529	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY C/O BILL LOPP		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	08-JAN-10
Well Depth (ft):	196	Water Level (ft):	151
Casing Depth (ft):	196	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	17-DEC-09
Approved:	17-DEC-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	911530	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY C/O BILL LOPP		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	07-JAN-10
Well Depth (ft):	246	Water Level (ft):	152
Casing Depth (ft):	245	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	17-DEC-09
Approved:	17-DEC-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X

Watershed: UPPER GILA RIVER

Map ID:	1		
Registry ID:	916096	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	04-NOV-13
Well Depth (ft):	161	Water Level (ft):	150
Casing Depth (ft):	163	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	25-OCT-13	Approved:	25-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916049	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC / CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	15-NOV-13
Well Depth (ft):	196	Water Level (ft):	150
Casing Depth (ft):	195	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	14-OCT-13	Approved:	14-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916075	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	23-JAN-14
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	246	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	21-OCT-13	Approved:	21-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	916085	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	07-JAN-14
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	246	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	22-OCT-13	Approved:	22-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916130	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	14-JAN-14
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	31-OCT-13	Approved:	31-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
DWR #:	55-526083	DEQ Well #:	46229
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	353
Start Date:	1989/12/18 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W16	Basin:	Phoenix AMA
Notes:	SCREEN INTERVALS 307.9 TO 347.7	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	5		
Registry ID:	516894	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	314	Installed Date:	18-MAR-87
Well Depth (ft):	258	Water Level (ft):	220
Casing Depth (ft):	258	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0

Tested Rate:	0	Draw Down:	0
Application Date:	03-MAR-87	Approved:	Not Reported
Completion:	N	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
DWR #:	55-528572	DEQ Well #:	46232
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	254
Start Date:	1990/08/14 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W22	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 209.6 TO 249.6	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-526211	DEQ Well #:	46203
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	249	Drill Depth (ft):	251
Start Date:	1989/11/16 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W17	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 207 TO 247	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-515998	DEQ Well #:	46216
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	353	Drill Depth (ft):	361
Start Date:	1986/12/05 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB LI-02D	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 290 TO 350	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-516894	DEQ Well #:	46219
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	260	Drill Depth (ft):	260
Start Date:	1987/03/18 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB LI-08	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 215 TO 255	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

DWR #:	55-566964	DEQ Well #:	69107
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	SS-01-N-8	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-nocode	DEQ Well #:	81460
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	2010/01/25 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-W36	Basin:	Not Reported
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	MIDDLE GILA
Well Type:	Not Reported		

Map ID:	6		
DWR #:	Not Reported	DEQ Well #:	69371
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB AH-05	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-911512	DEQ Well #:	81606
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	197
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-U37	Basin:	Not Reported
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	Not Reported
Well Type:	Not Reported		

Map ID:	1		
DWR #:	55-911530	DEQ Well #:	81452
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-W34	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	MIDDLE GILA

Well Type: Not Reported

Map ID: 1
DWR #: 55-516896 DEQ Well #: 46218
Agency: ADEQ Agency Well #: 0
Well Depth (ft): 260 Drill Depth (ft): 260
Start Date: 1987/03/21 08:00:00+00 End Date: 1970/01/01 00:00:00+00
Station Alt Name: WILLIAMS AFB LI-07 Basin: Phoenix AMA
Notes: SCREEN INTERVAL 212 TO 252 Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: MIDDLE GILA
Well Type: WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE

Map ID: 1
DWR #: 55-911529 DEQ Well #: 81455
Agency: Not Reported Agency Well #: 0
Well Depth (ft): 195 Drill Depth (ft): 0
Start Date: 2010/01/08 08:00:00+00 End Date: 1970/01/01 00:00:00+00
Station Alt Name: ST012-U02 Basin: Phoenix AMA
Notes: Not Reported Aquifer Type: Not Reported
Water Use: Not Reported Watershed: MIDDLE GILA
Well Type: Not Reported

Map ID: 1
DWR #: 55-526082 DEQ Well #: 46227
Agency: ADEQ Agency Well #: 0
Well Depth (ft): 249 Drill Depth (ft): 251
Start Date: 1989/11/06 08:00:00+00 End Date: 1970/01/01 00:00:00+00
Station Alt Name: WILLIAMS AFB SS01-W12 Basin: Phoenix AMA
Notes: SCREEN INTERVALS 207 TO 247 CASING 4" PVC
Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: MIDDLE GILA
Well Type: WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE

Map ID: 1
DWR #: 55-540826 DEQ Well #: 77441
Agency: ADEQ Agency Well #: 0
Well Depth (ft): 0 Drill Depth (ft): 0
Start Date: 1993/10/30 07:00:00+00 End Date: 1970/01/01 00:00:00+00
Station Alt Name: WILLIAM AFB WELL PA Basin: Phoenix AMA
Notes: CASING 4" STEEL Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: Not Reported
Well Type: OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO
TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.

Map ID: 1

DWR #:	Not Reported	DEQ Well #:	81463
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-U12	Basin:	Not Reported
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	MIDDLE GILA
Well Type:	Not Reported		

Map ID:	1		
DWR #:	55-515999	DEQ Well #:	46217
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	373	Drill Depth (ft):	382
Start Date:	1986/11/06 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB LI-03D	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 310 TO 370	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-528568	DEQ Well #:	46233
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	255	Drill Depth (ft):	257
Start Date:	1990/07/24 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W18	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 213 TO 253	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	7		
Registry ID:	510504	Well Type:	EXEMPT - DOMESTIC STOCK
Well Type Group:	EXEMPT	Owner Name:	BENGE JR,R E
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	27-OCT-80
Well Depth (ft):	565	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	8
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	13-MAR-85
Approved:	Not Reported	Completion:	N
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	8		
Registry ID:	640386	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	CLB PARTNERS, LLC

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	16-JUL-82
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
DWR #:	55-525776	DEQ Well #:	46212
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	251	Drill Depth (ft):	253
Start Date:	1989/10/19 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W13	Basin:	Phoenix AMA
Notes:	SCREEN FROM 209 TO 249 CASING 4" PVC		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-524329	DEQ Well #:	46202
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	257	Drill Depth (ft):	261
Start Date:	1989/08/15 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB-SS01-W-02	Basin:	Phoenix AMA
Notes:	CASING 4" PVC	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-570654	DEQ Well #:	69118
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	250	Drill Depth (ft):	250
Start Date:	1997/12/05 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	SS-01-N-11	Basin:	Phoenix AMA
Notes:	CASING 4" PVC	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-910046	DEQ Well #:	81604
Agency:	Not Reported	Agency Well #:	0

Well Depth (ft):	0	Drill Depth (ft):	246
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-RB-1C	Basin:	Not Reported
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	Not Reported
Well Type:	Not Reported		

Map ID:	1		
DWR #:	55-525135	DEQ Well #:	46226
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	252	Drill Depth (ft):	257
Start Date:	1989/08/05 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W07	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 210 TO 250 CASING 4" PVC		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-525775	DEQ Well #:	46213
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	363
Start Date:	1989/11/01 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W14D	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 319.3 TO 359.3	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-534724	DEQ Well #:	46245
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	210	Drill Depth (ft):	211
Start Date:	1992/03/16 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB INJ-03	Basin:	Phoenix AMA
Notes:	CASING 4" STEEL	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	MIDDLE GILA
Well Type:	Not Reported		

Map ID:	1		
DWR #:	55-911510	DEQ Well #:	81451
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-U38	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	MIDDLE GILA
Well Type:	Not Reported		

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

DWR #:	55-533895	DEQ Well #:	46243
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	204	Drill Depth (ft):	206
Start Date:	1992/12/12 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-INJ-01	Basin:	Phoenix AMA
Notes:	CASING 4" STEEL	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	MIDDLE GILA
Well Type:	Not Reported		

Map ID:	1		
DWR #:	55-566966	DEQ Well #:	69113
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WAFB N-02	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-204080	DEQ Well #:	69101
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	202	Drill Depth (ft):	200
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-UWB-03	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-533919	DEQ Well #:	46244
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	204	Drill Depth (ft):	207
Start Date:	1992/03/15 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB INJ-02	Basin:	Phoenix AMA
Notes:	CASING 4" STEEL	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	MIDDLE GILA
Well Type:	Not Reported		

Map ID:	1		
DWR #:	55-566965	DEQ Well #:	69120
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WAFB N-01	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		

Well Type: WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE

Map ID:	1		
DWR #:	55-203324	DEQ Well #:	69142
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	165	Drill Depth (ft):	165
Start Date:	2004/05/28 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-SVE04	Basin:	Phoenix AMA
Notes:	CASING 3" STEEL	Aquifer Type:	Not Reported
Water Use:	WELL DESIGNED TO TEST AQUIFER PARAMETERS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-534725	DEQ Well #:	46246
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	200	Drill Depth (ft):	202
Start Date:	1992/03/18 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB INJ-04	Basin:	Phoenix AMA
Notes:	CASING 4" STEEL	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	MIDDLE GILA
Well Type:	Not Reported		

Map ID:	9		
DWR #:	Not Reported	DEQ Well #:	69593
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS29-TCH1	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	Not Reported	DEQ Well #:	69592
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS29-TCH2	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

DWR #:	55-204130	DEQ Well #:	69078
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	247	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-LSZ-03	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-219541	DEQ Well #:	81462
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	2010/03/03 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-U13	Basin:	Not Reported
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	MIDDLE GILA
Well Type:	Not Reported		

Map ID:	1		
DWR #:	55-524555	DEQ Well #:	46449
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	85	Drill Depth (ft):	0
Start Date:	1989/05/17 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB 766 HW 1	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-203323	DEQ Well #:	69141
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	165	Drill Depth (ft):	165
Start Date:	2004/06/03 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-SVE03	Basin:	Phoenix AMA
Notes:	CASING 3" STEEL	Aquifer Type:	Not Reported
Water Use:	WELL DESIGNED TO TEST AQUIFER PARAMETERS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-204127	DEQ Well #:	69091
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	245	Drill Depth (ft):	242
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-MWN-03C	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		

Watershed: Not Reported
Well Type: WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE

Map ID: 1
DWR #: 55-204209 DEQ Well #: 69089
Agency: ADEQ Agency Well #: 0
Well Depth (ft): 195 Drill Depth (ft): 194
Start Date: 1970/01/01 00:00:00+00 End Date: 1970/01/01 00:00:00+00
Station Alt Name: STO12-MWN-03A Basin: Phoenix AMA
Notes: ONE OF TWO WELLS INSIDE COVER OTHER #69090
Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: Not Reported
Well Type: WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE

Map ID: 1
DWR #: 55-204209 DEQ Well #: 69090
Agency: ADEQ Agency Well #: 0
Well Depth (ft): 225 Drill Depth (ft): 220
Start Date: 1970/01/01 00:00:00+00 End Date: 1970/01/01 00:00:00+00
Station Alt Name: STO12-MWN-03B Basin: Phoenix AMA
Notes: SECOND OF TWO WELLS INSIDE COVER OTHER #69089
Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: Not Reported
Well Type: WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE

Map ID: 1
DWR #: 55-557375 DEQ Well #: 69149
Agency: ADEQ Agency Well #: 0
Well Depth (ft): 0 Drill Depth (ft): 245
Start Date: 1994/03/17 08:00:00+00 End Date: 1970/01/01 00:00:00+00
Station Alt Name: WILLIAMS AFB SS01-W33 Basin: Phoenix AMA
Notes: CASING 4" PVC Aquifer Type: Not Reported
Water Use: WELL DESIGNED TO TEST AQUIFER PARAMETERS.
Watershed: Not Reported
Well Type: WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE

Map ID: 1
DWR #: 55-570656 DEQ Well #: 69116
Agency: ADEQ Agency Well #: 0
Well Depth (ft): 250 Drill Depth (ft): 250
Start Date: 1997/12/15 08:00:00+00 End Date: 1970/01/01 00:00:00+00
Station Alt Name: SS-01-N13 Basin: Phoenix AMA
Notes: CASING 4" PVC Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: Not Reported
Well Type: WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

DWR #:	55-204131	DEQ Well #:	69079
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	247	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-LSZ-04	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-568868	DEQ Well #:	69138
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	242	Drill Depth (ft):	0
Start Date:	1996/09/17 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-DPE01	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WELL DESIGNED TO TEST AQUIFER PARAMETERS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-598581	DEQ Well #:	69147
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	201	Drill Depth (ft):	201
Start Date:	2003/05/23 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-UWB02	Basin:	Phoenix AMA
Notes:	CASING 7" STEEL	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	Not Reported	DEQ Well #:	69318
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-LSZ02	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-570658	DEQ Well #:	69114
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	250	Drill Depth (ft):	240
Start Date:	1997/11/18 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WAFB N-15	Basin:	Phoenix AMA

Notes:	CASING 4" PVC	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-524331	DEQ Well #:	46215
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	255	Drill Depth (ft):	260
Start Date:	1989/08/18 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS-01-W-04	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 215 TO 255	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-204081	DEQ Well #:	69102
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	202	Drill Depth (ft):	200
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-UWB-04	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-204121	DEQ Well #:	69088
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	245	Drill Depth (ft):	242
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-MWN-02C	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-204128	DEQ Well #:	69092
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	195	Drill Depth (ft):	194
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-MWN-04A	Basin:	Phoenix AMA
Notes:	ONE OF TWO WELLS INSIDE COVER OTHER #69093		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID: 1

DWR #:	55-204128	DEQ Well #:	69093
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	225	Drill Depth (ft):	220
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-MWN-04B	Basin:	Phoenix AMA
Notes:	SECOND OF TWO WELLS INSIDE COVER OTHER #69092		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-204122	DEQ Well #:	69086
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	195	Drill Depth (ft):	194
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-MWN-02A	Basin:	Phoenix AMA
Notes:	ONE OF TWO WELLS INSIDE COVER OTHER #69087		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-204122	DEQ Well #:	69087
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	225	Drill Depth (ft):	220
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-MWN-02B	Basin:	Phoenix AMA
Notes:	SECOND OF TWO WELLS INSIDE COVER OTHER #69086		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-204129	DEQ Well #:	69094
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	245	Drill Depth (ft):	242
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-MWN-04C	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-914801	DEQ Well #:	81602
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	246

Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	760-MW19D	Basin:	Not Reported
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	Not Reported
Well Type:	Not Reported		

Map ID:	1		
DWR #:	55-528569	DEQ Well #:	46204
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	246	Drill Depth (ft):	248
Start Date:	1990/08/31 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W19	Basin:	Phoenix AMA
Notes:	CASING 4" PVC	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	10		
DWR #:	Not Reported	DEQ Well #:	69442
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS16-BH03	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-910044	DEQ Well #:	81603
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	196
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-RB-2A	Basin:	Not Reported
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	Not Reported
Well Type:	Not Reported		

Map ID:	1		
DWR #:	55-557374	DEQ Well #:	69648
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	240	Drill Depth (ft):	255
Start Date:	1994/03/22 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W32	Basin:	Phoenix AMA
Notes:	CASING 4" PVC	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	10

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

DWR #:	Not Reported	DEQ Well #:	69441
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS16-BH04	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-204134	DEQ Well #:	69082
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	247	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-LSZ-07	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-566971	DEQ Well #:	69108
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	242	Drill Depth (ft):	242
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WAFB N-07	Basin:	Phoenix AMA
Notes:	CASING 7" PVC	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-524330	DEQ Well #:	46224
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	257	Drill Depth (ft):	261
Start Date:	1989/08/07 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS-01-W03	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 215 TO 255	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-204079	DEQ Well #:	69100
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	245	Drill Depth (ft):	242
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-MWN-06C	Basin:	Phoenix AMA

Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-204078	DEQ Well #:	69098
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	195	Drill Depth (ft):	194
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-MWN-06A	Basin:	Phoenix AMA
Notes:	ONE OF TWO WELLS INSIDE COVER OTHER #69099		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-204078	DEQ Well #:	69099
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	225	Drill Depth (ft):	220
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-MWN-06B	Basin:	Phoenix AMA
Notes:	SECOND OF TWO WELLS INSIDE COVER OTHER #69098		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-204123	DEQ Well #:	69085
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	245	Drill Depth (ft):	242
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-MW-01C	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-204132	DEQ Well #:	69080
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	247	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-LSZ-05	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID: 1

DWR #:	55-204124	DEQ Well #:	69083
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	195	Drill Depth (ft):	194
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-MW-01A	Basin:	Phoenix AMA
Notes:	ONE OF TWO WELLS INSIDE COVER OTHER # 69084		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-204124	DEQ Well #:	69084
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	225	Drill Depth (ft):	220
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-MW-01B	Basin:	Phoenix AMA
Notes:	SECOND OF TWO WELLS INSIDE COVER OTHER #69083		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-516895	DEQ Well #:	46220
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	260	Drill Depth (ft):	260
Start Date:	1987/03/08 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB LI-06	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 217 TO 257	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-204125	DEQ Well #:	69097
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	245	Drill Depth (ft):	242
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-MWN-05C	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-204208	DEQ Well #:	69095
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	195	Drill Depth (ft):	194
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Station Alt Name:	STO12-MWN-05A	Basin:	Phoenix AMA
Notes:	ONE OF TWO WELLS INSIDE COVER OTHER #69096		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-204208	DEQ Well #:	69096
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	225	Drill Depth (ft):	220
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-MWN-05B	Basin:	Phoenix AMA
Notes:	SECOND OF TWO WELLS INSIDE COVER OTHER #69095		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	Not Reported	DEQ Well #:	69319
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-LSZ01	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-203609	DEQ Well #:	69145
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	165	Drill Depth (ft):	165
Start Date:	2004/06/08 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-SVE07	Basin:	Phoenix AMA
Notes:	CASING 3" STEEL	Aquifer Type:	Not Reported
Water Use:	WELL DESIGNED TO TEST AQUIFER PARAMETERS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-570651	DEQ Well #:	69139
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	230	Drill Depth (ft):	225
Start Date:	1997/12/18 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-DPE02	Basin:	Phoenix AMA
Notes:	CASING 2" PVC	Aquifer Type:	Not Reported
Water Use:	WELL DESIGNED TO TEST AQUIFER PARAMETERS.		

Watershed: Not Reported
Well Type: WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE

Map ID: 1
DWR #: 55-528574 DEQ Well #: 46239
Agency: ADEQ Agency Well #: 0
Well Depth (ft): 251 Drill Depth (ft): 253
Start Date: 1990/08/26 07:00:00+00 End Date: 1970/01/01 00:00:00+00
Station Alt Name: WILLIAMS AFB SS01-W24 Basin: Phoenix AMA
Notes: SCREEN INTERVAL 209 TO 249 Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: MIDDLE GILA
Well Type: WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE

Map ID: 1
DWR #: 55-204084 DEQ Well #: 69105
Agency: ADEQ Agency Well #: 0
Well Depth (ft): 202 Drill Depth (ft): 200
Start Date: 1970/01/01 00:00:00+00 End Date: 1970/01/01 00:00:00+00
Station Alt Name: STO12-UWB-07 Basin: Phoenix AMA
Notes: Not Reported Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: Not Reported
Well Type: WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE

Map ID: 1
DWR #: 55-203326 DEQ Well #: 69144
Agency: ADEQ Agency Well #: 0
Well Depth (ft): 165 Drill Depth (ft): 79
Start Date: 2004/06/21 07:00:00+00 End Date: 1970/01/01 00:00:00+00
Station Alt Name: ST012-SVE06 Basin: Phoenix AMA
Notes: CASING 3" STEEL Aquifer Type: Not Reported
Water Use: WELL DESIGNED TO TEST AQUIFER PARAMETERS.
Watershed: Not Reported
Well Type: WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE

Map ID: 1
DWR #: 55-598579 DEQ Well #: 69148
Agency: ADEQ Agency Well #: 0
Well Depth (ft): 200 Drill Depth (ft): 200
Start Date: 2003/05/28 07:00:00+00 End Date: 1970/01/01 00:00:00+00
Station Alt Name: ST012-UWB01 Basin: Phoenix AMA
Notes: CASING 7" STEEL Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: Not Reported
Well Type: WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

DWR #:	55-529474	DEQ Well #:	45972
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	250	Drill Depth (ft):	252
Start Date:	1990/09/22 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W25	Basin:	Phoenix AMA
Notes:	CASING 4" PVC	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-204133	DEQ Well #:	69081
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	246	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-LSZ-06	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-524328	DEQ Well #:	46221
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	249	Drill Depth (ft):	251
Start Date:	1989/08/02 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS-01-W-01B	Basin:	Phoenix AMA
Notes:	SCREEN INTERVALS 209 TO 249	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-525773	DEQ Well #:	46228
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	255	Drill Depth (ft):	257
Start Date:	1989/10/03 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W08	Basin:	Phoenix AMA
Notes:	SCREEN INTERVALS 213 TO 253 CASING 4" PVC		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-204082	DEQ Well #:	69103
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	244	Drill Depth (ft):	242
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-UWB-05	Basin:	Phoenix AMA

Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	10		
DWR #:	Not Reported	DEQ Well #:	69440
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS16-BH05	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-566970	DEQ Well #:	69109
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WAFB N-06	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	9		
DWR #:	Not Reported	DEQ Well #:	69588
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB WP27-TP	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-540822	DEQ Well #:	77466
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	233
Start Date:	1993/10/19 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB WELL PE-S	Basin:	Phoenix AMA
Notes:	CASING 2" PVC SHALLOW WELL OF TWO (77467)		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		

Well Type: OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO
TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.

Map ID:	1		
DWR #:	55-540822	DEQ Well #:	77467
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	233
Start Date:	1993/10/19 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB WELL PE-D	Basin:	Phoenix AMA
Notes:	CASING 2" PVC DEEP WELL OF TWO (77466)		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-204083	DEQ Well #:	69104
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	202	Drill Depth (ft):	200
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	STO12-UWB-06	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	10		
DWR #:	Not Reported	DEQ Well #:	69443
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS16-BH02	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-525774	DEQ Well #:	46223
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	253	Drill Depth (ft):	256
Start Date:	1990/08/17 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W09B	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 211 TO 251	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID: 1

DWR #:	55-540825	DEQ Well #:	77461
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	230	Drill Depth (ft):	230
Start Date:	1993/10/28 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB WELL PB	Basin:	Phoenix AMA
Notes:	CASING 4" STEEL	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-203325	DEQ Well #:	69143
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	165	Drill Depth (ft):	79
Start Date:	2004/06/16 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-SVE05	Basin:	Phoenix AMA
Notes:	CASING 3" STEEL	Aquifer Type:	Not Reported
Water Use:	WELL DESIGNED TO TEST AQUIFER PARAMETERS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-540823	DEQ Well #:	77464
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	233
Start Date:	1993/10/22 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB WELL PD-S	Basin:	Phoenix AMA
Notes:	CASING 2" PVC SHALLOW WELL OF TWO (77465)		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-540823	DEQ Well #:	77465
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	233
Start Date:	1993/10/22 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB WELL PD-D	Basin:	Phoenix AMA
Notes:	CASING 2" PVC DEEP WELL OF TWO (77464)		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-525772	DEQ Well #:	46222

Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	252	Drill Depth (ft):	255
Start Date:	1989/10/08 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS-01-W05B	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 211 TO 251	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	10		
DWR #:	55-532752	DEQ Well #:	46200
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	252	Drill Depth (ft):	0
Start Date:	1991/09/14 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W29	Basin:	Phoenix AMA
Notes:	SCREENED INTERVAL 210 - 250 FT.	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-540824	DEQ Well #:	77462
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	222	Drill Depth (ft):	231
Start Date:	1993/10/26 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB WELL PC-S	Basin:	Phoenix AMA
Notes:	CASING 2" PVC SHALLOW WELL OF TWO (77463)		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-540824	DEQ Well #:	77463
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	231
Start Date:	1993/10/26 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB WELL PC-D	Basin:	Phoenix AMA
Notes:	CASING 2" PVC DEEP WELL OF TWO (77462)		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-570652	DEQ Well #:	69106
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	230	Drill Depth (ft):	225

Start Date:	1997/10/24 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WAFB N-09	Basin:	Phoenix AMA
Notes:	CASING 4" PVC	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-525777	DEQ Well #:	46214
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	255	Drill Depth (ft):	257
Start Date:	1989/10/11 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W15	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 213 TO 253	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-516949	DEQ Well #:	46230
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	247	Drill Depth (ft):	250
Start Date:	1987/06/13 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB LI-04	Basin:	Phoenix AMA
Notes:	SCREEN INTERVALS 207 TO 247	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	10		
DWR #:	Not Reported	DEQ Well #:	69444
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS16-BH01	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-566967	DEQ Well #:	69112
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST-12 N-03	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		

Well Type: WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE

Map ID:	1		
DWR #:	55-566969	DEQ Well #:	69110
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WAFB N-05	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-911526	DEQ Well #:	81456
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	195	Drill Depth (ft):	0
Start Date:	2010/01/20 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-U11	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	MIDDLE GILA
Well Type:	Not Reported		

Map ID:	1		
DWR #:	Not Reported	DEQ Well #:	69544
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB ST22-BH05	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-526084	DEQ Well #:	46127
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	250	Drill Depth (ft):	252
Start Date:	1989/11/18 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W11	Basin:	Phoenix AMA
Notes:	CASING 4" PVC	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID: 9

Registry ID:	526085	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	20-NOV-89
Well Depth (ft):	256	Water Level (ft):	214
Casing Depth (ft):	253	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	11-OCT-89
Approved:	Not Reported	Completion:	C
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	9		
Registry ID:	525777	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	11-OCT-89
Well Depth (ft):	257	Water Level (ft):	227
Casing Depth (ft):	255	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	05-SEP-89
Approved:	Not Reported	Completion:	C
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	9		
Registry ID:	516951	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	314	Installed Date:	19-FEB-87
Well Depth (ft):	245	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	19-FEB-87
Approved:	Not Reported	Completion:	N
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	9		
Registry ID:	524330	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	342	Installed Date:	07-AUG-89

Well Depth (ft):	261	Water Level (ft):	226
Casing Depth (ft):	220	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-APR-89
Approved:	Not Reported	Completion:	C
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	9		
Registry ID:	526084	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	342	Installed Date:	18-NOV-89
Well Depth (ft):	252	Water Level (ft):	221
Casing Depth (ft):	250	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	11-OCT-89
Approved:	Not Reported	Completion:	C
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	9		
Registry ID:	526210	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	08-NOV-89
Well Depth (ft):	253	Water Level (ft):	229
Casing Depth (ft):	251	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-OCT-89
Approved:	Not Reported	Completion:	C
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	9		
DWR #:	55-516951	DEQ Well #:	46225
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	245	Drill Depth (ft):	245
Start Date:	1987/02/19 08:00:00+00	End Date:	1993/04/01 08:00:00+00
Station Alt Name:	WILLIAMS AFB LI-05	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

DWR #:	Not Reported	DEQ Well #:	69545
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB ST22-BH04	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
Registry ID:	566965	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	473	Installed Date:	14-AUG-96
Well Depth (ft):	241	Water Level (ft):	200
Casing Depth (ft):	241	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	29-AUG-97
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	566966	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	473	Installed Date:	28-AUG-96
Well Depth (ft):	242	Water Level (ft):	200
Casing Depth (ft):	241	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	29-AUG-97
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	528571	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	21-AUG-90
Well Depth (ft):	246	Water Level (ft):	217
Casing Depth (ft):	192	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED

Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	29-JUN-90	Approved:	Not Reported
Completion:	N	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	920097	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	10-NOV-16
Well Depth (ft):	256	Water Level (ft):	144
Casing Depth (ft):	230	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	26-OCT-16
Approved:	26-OCT-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	516949	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	314	Installed Date:	13-JUN-87
Well Depth (ft):	250	Water Level (ft):	0
Casing Depth (ft):	250	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	19-FEB-87	Approved:	Not Reported
Completion:	C	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	219541	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	03-MAR-10
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	03-FEB-10	Approved:	14-NOV-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID: 1

Registry ID:	910216	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	17-OCT-08
Well Depth (ft):	170	Water Level (ft):	159
Casing Depth (ft):	170	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-DEC-08
Approved:	22-DEC-08	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	910217	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-DEC-08
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	926593	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	US AIR FORCE-AFCEC/CIBW
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	19-JUL-21
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	911526	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported

Well Depth (ft):	195	Water Level (ft):	151
Casing Depth (ft):	196	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	17-DEC-09
Approved:	17-DEC-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	910182	Well Type:	ENV - SOIL VAPOR EXTRACTION / MONITORING
Well Type Group:	OTHER	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	11-DEC-08
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	528569	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	31-AUG-90
Well Depth (ft):	251	Water Level (ft):	219
Casing Depth (ft):	199	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	29-JUN-90	Approved:	Not Reported
Completion:	N	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	920127	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	09-NOV-16
Well Depth (ft):	245	Water Level (ft):	145
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0

Draw Down:	0	Application Date:	03-NOV-16
Approved:	03-NOV-16	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	910181	Well Type:	ENV - SOIL VAPOR EXTRACTION / MONITORING
Well Type Group:	OTHER	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	11-DEC-08
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	570653	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	30-OCT-97
Well Depth (ft):	250	Water Level (ft):	214
Casing Depth (ft):	250	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	04-SEP-98
Approved:	04-JAN-98	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	203326	Well Type:	ENV - SOIL VAPOR EXTRACTION / MONITORING
Well Type Group:	OTHER	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	21-JUN-04
Well Depth (ft):	165	Water Level (ft):	170
Casing Depth (ft):	79	Casing Diameter (in):	3
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	20-MAY-04	Approved:	28-MAY-04
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	598579	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEE/ERB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	28-MAY-03
Well Depth (ft):	200	Water Level (ft):	180
Casing Depth (ft):	200	Casing Diameter (in):	7
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	19-MAY-03	Approved:	19-MAY-03
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	570654	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	05-DEC-97
Well Depth (ft):	250	Water Level (ft):	213
Casing Depth (ft):	250	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	04-SEP-98
Approved:	04-JAN-98	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	570665	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	JAMES G LIONBERGER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	25	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	04-SEP-98
Approved:	25-SEP-98	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	204129	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported

Well Depth (ft):	245	Water Level (ft):	0
Casing Depth (ft):	245	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-JUN-04
Approved:	28-JUN-04	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	919427	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	19-MAY-16
Well Depth (ft):	246	Water Level (ft):	146
Casing Depth (ft):	230	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	29-APR-16
Approved:	29-APR-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	204123	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	0
Casing Depth (ft):	246	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-JUN-04
Approved:	28-JUN-04	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	920089	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	26-OCT-16
Well Depth (ft):	161	Water Level (ft):	143
Casing Depth (ft):	160	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0

Draw Down:	0	Application Date:	25-OCT-16
Approved:	25-OCT-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	204130	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	14-JUL-04
Well Depth (ft):	247	Water Level (ft):	170
Casing Depth (ft):	246	Casing Diameter (in):	1
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	24-JUN-04	Approved:	28-JUN-04
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	204122	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	221	Water Level (ft):	0
Casing Depth (ft):	221	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-JUN-04
Approved:	28-JUN-04	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	482546	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	200	Water Level (ft):	0
Casing Depth (ft):	200	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	04-DEC-13
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID: 1

Registry ID:	204082	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	05-AUG-04
Well Depth (ft):	202	Water Level (ft):	170
Casing Depth (ft):	200	Casing Diameter (in):	1
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	24-JUN-04	Approved:	30-JUN-04
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	598580	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEE/ERB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	685	Installed Date:	24-MAY-03
Well Depth (ft):	242	Water Level (ft):	210
Casing Depth (ft):	202	Casing Diameter (in):	5
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	19-MAY-03	Approved:	19-MAY-03
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	203323	Well Type:	ENV - SOIL VAPOR EXTRACTION / MONITORING
Well Type Group:	OTHER	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	03-JUN-04
Well Depth (ft):	165	Water Level (ft):	170
Casing Depth (ft):	165	Casing Diameter (in):	3
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	20-MAY-04	Approved:	28-MAY-04
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	204132	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	26-JUL-04

Well Depth (ft):	247	Water Level (ft):	170
Casing Depth (ft):	246	Casing Diameter (in):	1
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	24-JUN-04	Approved:	28-JUN-04
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	204083	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	09-AUG-04
Well Depth (ft):	202	Water Level (ft):	170
Casing Depth (ft):	200	Casing Diameter (in):	1
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	24-JUN-04	Approved:	30-JUN-04
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	204208	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	220	Water Level (ft):	0
Casing Depth (ft):	220	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-JUN-04
Approved:	30-JUN-04	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	204084	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	11-AUG-04
Well Depth (ft):	200	Water Level (ft):	170
Casing Depth (ft):	198	Casing Diameter (in):	1
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0

Tested Rate:	0	Draw Down:	0
Application Date:	24-JUN-04	Approved:	30-JUN-04
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	204081	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	30-JUL-04
Well Depth (ft):	202	Water Level (ft):	170
Casing Depth (ft):	200	Casing Diameter (in):	1
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	24-JUN-04	Approved:	30-JUN-04
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	204209	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	220	Water Level (ft):	0
Casing Depth (ft):	220	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-JUN-04
Approved:	30-JUN-04	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	203609	Well Type:	ENV - SOIL VAPOR EXTRACTION / MONITORING
Well Type Group:	OTHER	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	08-JUN-04
Well Depth (ft):	165	Water Level (ft):	170
Casing Depth (ft):	165	Casing Diameter (in):	3
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	20-MAY-04	Approved:	28-MAY-04
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	919540	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	14-JUN-16
Well Depth (ft):	191	Water Level (ft):	147
Casing Depth (ft):	190	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	24-MAY-16	Approved:	24-MAY-16
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	915223	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	83	Installed Date:	09-FEB-13
Well Depth (ft):	246	Water Level (ft):	151
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	08-FEB-13	Approved:	08-FEB-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	598581	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEE/ERB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	22-MAY-03
Well Depth (ft):	201	Water Level (ft):	180
Casing Depth (ft):	201	Casing Diameter (in):	7
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	19-MAY-03	Approved:	19-MAY-03
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	915224	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	83	Installed Date:	10-FEB-13

Well Depth (ft):	246	Water Level (ft):	151
Casing Depth (ft):	241	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	08-FEB-13	Approved:	08-FEB-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	915205	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCECCZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	83	Installed Date:	22-FEB-13
Well Depth (ft):	244	Water Level (ft):	156
Casing Depth (ft):	240	Casing Diameter (in):	1
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	06-FEB-13	Approved:	06-FEB-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	919542	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	08-JUN-16
Well Depth (ft):	194	Water Level (ft):	145
Casing Depth (ft):	190	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	24-MAY-16	Approved:	24-MAY-16
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916343	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	09-JAN-14
Well Depth (ft):	245	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	2
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0

Tested Rate:	0	Draw Down:	0
Application Date:	23-DEC-13	Approved:	23-DEC-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	919543	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	16-JUN-16
Well Depth (ft):	186	Water Level (ft):	149
Casing Depth (ft):	183	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-MAY-16
Approved:	24-MAY-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	919541	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	17-JUN-16
Well Depth (ft):	187	Water Level (ft):	149
Casing Depth (ft):	185	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-MAY-16
Approved:	24-MAY-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	919614	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	19-JUN-16
Well Depth (ft):	230	Water Level (ft):	148
Casing Depth (ft):	230	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	16-JUN-16
Approved:	16-JUN-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	919547	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	03-JUL-16
Well Depth (ft):	183	Water Level (ft):	147
Casing Depth (ft):	182	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-MAY-16
Approved:	24-MAY-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	920096	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	02-NOV-16
Well Depth (ft):	236	Water Level (ft):	144
Casing Depth (ft):	230	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	26-OCT-16
Approved:	26-OCT-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	919425	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	05-JUN-16
Well Depth (ft):	231	Water Level (ft):	150
Casing Depth (ft):	230	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	29-APR-16
Approved:	29-APR-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	919426	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	09-MAY-16

Well Depth (ft):	236	Water Level (ft):	149
Casing Depth (ft):	230	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	29-APR-16	Approved:	29-APR-16
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	204124	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	220	Water Level (ft):	0
Casing Depth (ft):	220	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-JUN-04
Approved:	28-JUN-04	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	204121	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	0
Casing Depth (ft):	246	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-JUN-04
Approved:	28-JUN-04	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	920213	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	06-DEC-16
Well Depth (ft):	230	Water Level (ft):	145
Casing Depth (ft):	230	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0

Draw Down:	0	Application Date:	05-DEC-16
Approved:	05-DEC-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	916345	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	18-APR-14
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	2
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	23-DEC-13	Approved:	23-DEC-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	916380	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	14-JAN-14
Well Depth (ft):	245	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	2
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	08-JAN-14	Approved:	08-JAN-14
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	920091	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	27-OCT-16
Well Depth (ft):	196	Water Level (ft):	144
Casing Depth (ft):	195	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	25-OCT-16
Approved:	25-OCT-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	919430	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	06-MAY-16
Well Depth (ft):	236	Water Level (ft):	148
Casing Depth (ft):	230	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	29-APR-16
Approved:	29-APR-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	919431	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	03-JUN-16
Well Depth (ft):	231	Water Level (ft):	147
Casing Depth (ft):	230	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	29-APR-16
Approved:	29-APR-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	204078	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	220	Water Level (ft):	0
Casing Depth (ft):	220	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-JUN-04
Approved:	30-JUN-04	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	516895	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	08-MAR-87

Well Depth (ft):	258	Water Level (ft):	223
Casing Depth (ft):	258	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	03-MAR-87	Approved:	Not Reported
Completion:	N	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	570652	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	611	Installed Date:	24-OCT-97
Well Depth (ft):	230	Water Level (ft):	214
Casing Depth (ft):	225	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	04-SEP-98
Approved:	04-JAN-99	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	204079	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	245	Water Level (ft):	0
Casing Depth (ft):	245	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-JUN-04
Approved:	30-JUN-04	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	570658	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	611	Installed Date:	18-NOV-97
Well Depth (ft):	250	Water Level (ft):	216
Casing Depth (ft):	240	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0

Draw Down:	0	Application Date:	04-SEP-98
Approved:	04-JAN-98	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	915203	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	83	Installed Date:	02-MAR-13
Well Depth (ft):	245	Water Level (ft):	155
Casing Depth (ft):	245	Casing Diameter (in):	1
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	06-FEB-13	Approved:	06-FEB-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	915199	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	83	Installed Date:	15-FEB-13
Well Depth (ft):	242	Water Level (ft):	151
Casing Depth (ft):	241	Casing Diameter (in):	1
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	06-FEB-13	Approved:	06-FEB-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	915200	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	83	Installed Date:	15-FEB-13
Well Depth (ft):	242	Water Level (ft):	151
Casing Depth (ft):	241	Casing Diameter (in):	1
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	06-FEB-13	Approved:	06-FEB-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	911512	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	U.S. AIR FORCE REAL PROPERTY C/O BILL LOOP		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	18-DEC-09
Well Depth (ft):	197	Water Level (ft):	150
Casing Depth (ft):	195	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	11-DEC-09
Approved:	11-DEC-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	915204	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	83	Installed Date:	16-MAR-13
Well Depth (ft):	244	Water Level (ft):	154
Casing Depth (ft):	244	Casing Diameter (in):	1
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	06-FEB-13	Approved:	06-FEB-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	915201	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	83	Installed Date:	22-FEB-13
Well Depth (ft):	242	Water Level (ft):	152
Casing Depth (ft):	240	Casing Diameter (in):	1
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	06-FEB-13	Approved:	06-FEB-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	525773	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55

Driller License #:	342	Installed Date:	07-JAN-14
Well Depth (ft):	196	Water Level (ft):	150
Casing Depth (ft):	195	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	05-SEP-89	Approved:	13-NOV-13
Completion:	C	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	516000	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	06-DEC-86
Well Depth (ft):	373	Water Level (ft):	0
Casing Depth (ft):	310	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	SUBMERSIBLE
Pump Power:	ELECTRIC MOTOR 1 - 5 HP	Pump Rate:	10
Tested Rate:	0	Draw Down:	0
Application Date:	05-NOV-86	Approved:	Not Reported
Completion:	X	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	570655	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	13-NOV-97
Well Depth (ft):	250	Water Level (ft):	218
Casing Depth (ft):	250	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	04-SEP-98
Approved:	04-JAN-98	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	524328	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	342	Installed Date:	02-AUG-89
Well Depth (ft):	251	Water Level (ft):	233
Casing Depth (ft):	249	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED

Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-APR-89
Approved:	13-NOV-13	Completion:	C
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	566971	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	473	Installed Date:	Not Reported
Well Depth (ft):	242	Water Level (ft):	0
Casing Depth (ft):	242	Casing Diameter (in):	7
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	29-AUG-97
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	481786	Well Type:	ENV - SOIL VAPOR EXTRACTION / MONITORING
Well Type Group:	OTHER	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-JUN-04
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	204020	Well Type:	ENV - SOIL VAPOR EXTRACTION / MONITORING
Well Type Group:	OTHER	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	21-JUN-04
Approved:	23-JUN-04	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	204021	Well Type:	ENV - SOIL VAPOR EXTRACTION / MONITORING
Well Type Group:	OTHER	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	21-JUN-04
Approved:	23-JUN-04	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	204080	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	03-AUG-04
Well Depth (ft):	203	Water Level (ft):	170
Casing Depth (ft):	200	Casing Diameter (in):	5
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	24-JUN-04	Approved:	30-JUN-04
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	525774	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	342	Installed Date:	15-NOV-13
Well Depth (ft):	150	Water Level (ft):	150
Casing Depth (ft):	196	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	05-SEP-89	Approved:	13-NOV-13
Completion:	C	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	570657	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	611	Installed Date:	05-NOV-97

Well Depth (ft):	249	Water Level (ft):	216
Casing Depth (ft):	245	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	04-SEP-98
Approved:	04-JAN-98	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	568868	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	473	Installed Date:	09-JAN-14
Well Depth (ft):	248	Water Level (ft):	150
Casing Depth (ft):	248	Casing Diameter (in):	2
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	01-JUN-98	Approved:	13-NOV-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	598577	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEE/ERB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	685	Installed Date:	26-MAY-03
Well Depth (ft):	244	Water Level (ft):	210
Casing Depth (ft):	244	Casing Diameter (in):	5
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	19-MAY-03	Approved:	19-MAY-03
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	570651	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	611	Installed Date:	24-JAN-14
Well Depth (ft):	230	Water Level (ft):	216
Casing Depth (ft):	225	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0

Draw Down:	0	Application Date:	04-SEP-98
Approved:	13-NOV-13	Completion:	Not Reported
Well Cancelled:	N	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	204133	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	28-JUL-04
Well Depth (ft):	246	Water Level (ft):	170
Casing Depth (ft):	246	Casing Diameter (in):	1
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	24-JUN-04	Approved:	28-JUN-04
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	598578	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEE/ERB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	19-MAY-03
Well Depth (ft):	165	Water Level (ft):	0
Casing Depth (ft):	165	Casing Diameter (in):	3
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	19-MAY-03	Approved:	06-MAY-03
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	203325	Well Type:	ENV - SOIL VAPOR EXTRACTION / MONITORING
Well Type Group:	OTHER	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	16-JUN-04
Well Depth (ft):	165	Water Level (ft):	170
Casing Depth (ft):	79	Casing Diameter (in):	3
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	20-MAY-04	Approved:	28-MAY-04
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	204128	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	221	Water Level (ft):	0
Casing Depth (ft):	221	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-JUN-04
Approved:	28-JUN-04	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	203324	Well Type:	ENV - SOIL VAPOR EXTRACTION / MONITORING
Well Type Group:	OTHER	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	28-MAY-04
Well Depth (ft):	165	Water Level (ft):	170
Casing Depth (ft):	165	Casing Diameter (in):	3
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	20-MAY-04	Approved:	28-MAY-04
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	204131	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	19-JUL-04
Well Depth (ft):	247	Water Level (ft):	170
Casing Depth (ft):	246	Casing Diameter (in):	1
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	24-JUN-04	Approved:	28-JUN-04
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	204127	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported

Well Depth (ft):	246	Water Level (ft):	0
Casing Depth (ft):	246	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-JUN-04
Approved:	28-JUN-04	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	204125	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	250	Water Level (ft):	0
Casing Depth (ft):	250	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-JUN-04
Approved:	28-JUN-04	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	566964	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	473	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	29-AUG-97
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	525776	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	342	Installed Date:	19-OCT-89
Well Depth (ft):	253	Water Level (ft):	223
Casing Depth (ft):	251	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0

Draw Down:	0	Application Date:	05-SEP-88
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	566967	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	473	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	29-AUG-97
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	911511	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	U.S. AIR FORCE REAL PROPERTY C/O BILL LOOP		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	17-DEC-09
Well Depth (ft):	247	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	11-DEC-09
Approved:	11-DEC-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	915202	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	83	Installed Date:	01-MAR-13
Well Depth (ft):	243	Water Level (ft):	152
Casing Depth (ft):	243	Casing Diameter (in):	1
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	06-FEB-13	Approved:	06-FEB-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	566970	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	473	Installed Date:	10-SEP-96
Well Depth (ft):	242	Water Level (ft):	0
Casing Depth (ft):	242	Casing Diameter (in):	6
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	29-AUG-97
Approved:	13-NOV-13	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	203322	Well Type:	ENV - SOIL VAPOR EXTRACTION / MONITORING
Well Type Group:	OTHER	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	11-JUN-04
Well Depth (ft):	165	Water Level (ft):	170
Casing Depth (ft):	165	Casing Diameter (in):	3
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	20-MAY-04	Approved:	28-MAY-04
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	204134	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	21-JUL-04
Well Depth (ft):	247	Water Level (ft):	170
Casing Depth (ft):	246	Casing Diameter (in):	1
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	24-JUN-04	Approved:	28-JUN-04
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	533919	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	15-MAR-92

Well Depth (ft):	207	Water Level (ft):	0
Casing Depth (ft):	204	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	12-DEC-91	Approved:	Not Reported
Completion:	N	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	557375	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	17-MAR-94
Well Depth (ft):	245	Water Level (ft):	205
Casing Depth (ft):	180	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	08-MAR-96
Approved:	03-MAY-96	Completion:	Not Reported
Well Cancelled:	N	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	534382	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	22-JAN-92
Well Depth (ft):	255	Water Level (ft):	214
Casing Depth (ft):	205	Casing Diameter (in):	10
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	07-FEB-92
Approved:	Not Reported	Completion:	N
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	11		
Registry ID:	227089	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	SHAWN PETTY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	780	Installed Date:	Not Reported
Well Depth (ft):	400	Water Level (ft):	276
Casing Depth (ft):	400	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0

Draw Down:	0	Application Date:	22-MAR-17
Approved:	24-MAR-17	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	528573	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	648	Installed Date:	23-AUG-90
Well Depth (ft):	251	Water Level (ft):	201
Casing Depth (ft):	199	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	29-JUN-90	Approved:	Not Reported
Completion:	N	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	528574	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	342	Installed Date:	26-AUG-90
Well Depth (ft):	252	Water Level (ft):	212
Casing Depth (ft):	202	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	29-JUN-90	Approved:	Not Reported
Completion:	N	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	534724	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	16-MAR-92
Well Depth (ft):	211	Water Level (ft):	0
Casing Depth (ft):	210	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	16-MAR-92	Approved:	Not Reported
Completion:	A	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	535075	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	844	Installed Date:	22-JUL-92
Well Depth (ft):	1333	Water Level (ft):	220
Casing Depth (ft):	1333	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	28-APR-92	Approved:	Not Reported
Completion:	A	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	529474	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	22-SEP-90
Well Depth (ft):	252	Water Level (ft):	203
Casing Depth (ft):	198	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	11-SEP-90	Approved:	Not Reported
Completion:	N	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	542593	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AFB CONVERSION AGCY,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	215	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	07-MAR-94
Approved:	Not Reported	Completion:	N
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	561684	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	05-MAR-97

Well Depth (ft):	179	Water Level (ft):	167
Casing Depth (ft):	178	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	10-MAR-97
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	561683	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	11-MAR-97
Well Depth (ft):	179	Water Level (ft):	167
Casing Depth (ft):	178	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	10-MAR-97
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	534384	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	14-JAN-92
Well Depth (ft):	260	Water Level (ft):	214
Casing Depth (ft):	254	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	07-FEB-92	Approved:	Not Reported
Completion:	N	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	534385	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	29-JAN-92
Well Depth (ft):	252	Water Level (ft):	214
Casing Depth (ft):	251	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0

Tested Rate:	0	Draw Down:	0
Application Date:	07-FEB-92	Approved:	Not Reported
Completion:	N	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	534725	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	18-MAR-92
Well Depth (ft):	202	Water Level (ft):	0
Casing Depth (ft):	200	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	16-MAR-92	Approved:	Not Reported
Completion:	N	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	534383	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	21-JAN-92
Well Depth (ft):	256	Water Level (ft):	214
Casing Depth (ft):	205	Casing Diameter (in):	10
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	07-FEB-92
Approved:	Not Reported	Completion:	N
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	915225	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC-CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	83	Installed Date:	Not Reported
Well Depth (ft):	242	Water Level (ft):	154
Casing Depth (ft):	242	Casing Diameter (in):	1
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	08-FEB-13	Approved:	08-FEB-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	909878	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	DEPARTMENT OF THE AIR FORCE
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	15-AUG-08
Well Depth (ft):	197	Water Level (ft):	165
Casing Depth (ft):	197	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	08-OCT-08
Approved:	08-OCT-08	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	911510	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	U.S. AIR FORCE REAL PROPERTY C/O BILL LOOP		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	30-DEC-09
Well Depth (ft):	196	Water Level (ft):	152
Casing Depth (ft):	195	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	11-DEC-09
Approved:	11-DEC-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	911531	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	U. S. AIRE FORCE REAL PROPERTY AGENCY C/O BILL LOPP		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	29-DEC-09
Well Depth (ft):	246	Water Level (ft):	151
Casing Depth (ft):	245	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	17-DEC-09
Approved:	17-DEC-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	910046	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY

AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	24-NOV-08
Well Depth (ft):	193	Water Level (ft):	150
Casing Depth (ft):	193	Casing Diameter (in):	2
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	12-NOV-08	Approved:	13-NOV-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	926405	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	US AIR FORCE-AFCEC/CIBW
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	10-JUN-21
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	926406	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	US AIR FORCE-AFCEC/CIBW
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	10-JUN-21
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	566969	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	473	Installed Date:	20-AUG-96
Well Depth (ft):	242	Water Level (ft):	200
Casing Depth (ft):	244	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO

Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	29-AUG-98
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	926404	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	US AIR FORCE-AFCEC/CIBW
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	10-JUN-21
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	919546	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	200	Water Level (ft):	149
Casing Depth (ft):	191	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	24-MAY-16	Approved:	24-MAY-16
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	562367	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	DEPARTMENT OF THE AIR FORCE
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported
Well Depth (ft):	181	Water Level (ft):	170
Casing Depth (ft):	181	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	25-APR-97
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	X

Watershed: UPPER GILA RIVER

Map ID:	1		
Registry ID:	919428	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	230	Water Level (ft):	148
Casing Depth (ft):	220	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	29-APR-16
Approved:	29-APR-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	562368	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	DEPARTMENT OF THE AIR FORCE
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported
Well Depth (ft):	181	Water Level (ft):	170
Casing Depth (ft):	181	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	25-APR-97
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	919548	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	160	Water Level (ft):	146
Casing Depth (ft):	150	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	24-MAY-16	Approved:	24-MAY-16
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	920172	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-NOV-16
Approved:	18-NOV-16	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	920173	Well Type:	SPCL - GEOTECHNICAL
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	05-JAN-17
Well Depth (ft):	236	Water Level (ft):	147
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-NOV-16
Approved:	18-NOV-16	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	561496	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	01-MAR-97
Well Depth (ft):	179	Water Level (ft):	168
Casing Depth (ft):	177	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	02-APR-97
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	561495	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	27-FEB-97

Well Depth (ft):	179	Water Level (ft):	168
Casing Depth (ft):	175	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	02-APR-97
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	920170	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	22-NOV-16
Well Depth (ft):	231	Water Level (ft):	149
Casing Depth (ft):	230	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-NOV-16
Approved:	18-NOV-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	910048	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	26-NOV-08
Well Depth (ft):	196	Water Level (ft):	150
Casing Depth (ft):	196	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	12-NOV-08	Approved:	13-NOV-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	557374	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	22-MAR-94
Well Depth (ft):	250	Water Level (ft):	150
Casing Depth (ft):	250	Casing Diameter (in):	2
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0

Tested Rate:	0	Draw Down:	0
Application Date:	08-MAR-96	Approved:	13-NOV-13
Completion:	Not Reported	Well Cancelled:	N
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	920171	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	22-NOV-16
Well Depth (ft):	196	Water Level (ft):	146
Casing Depth (ft):	195	Casing Diameter (in):	3
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-NOV-16
Approved:	18-NOV-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	561686	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	DEPARTMENT OF THE AIR FORCE
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	14-APR-97
Well Depth (ft):	181	Water Level (ft):	170
Casing Depth (ft):	181	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	10-MAR-97
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	542854	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	844	Installed Date:	15-APR-94
Well Depth (ft):	1175	Water Level (ft):	210
Casing Depth (ft):	1175	Casing Diameter (in):	8
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	30-MAR-94	Approved:	Not Reported
Completion:	A	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	542594	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AFB CONVERSION AGCY,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	215	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	07-MAR-94
Approved:	Not Reported	Completion:	N
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	561685	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	15-APR-97
Well Depth (ft):	181	Water Level (ft):	170
Casing Depth (ft):	181	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	10-MAR-97
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	10		
Registry ID:	532752	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	14-SEP-91
Well Depth (ft):	250	Water Level (ft):	216
Casing Depth (ft):	250	Casing Diameter (in):	10
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	20-AUG-91
Approved:	Not Reported	Completion:	N
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
DWR #:	55-526210	DEQ Well #:	46238
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	251	Drill Depth (ft):	253
Start Date:	1989/11/08 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W10	Basin:	Phoenix AMA

Notes:	SCREEN INTERVAL 209 TO 249	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-910048	DEQ Well #:	81605
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	247
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-RB-1A	Basin:	Not Reported
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	Not Reported
Well Type:	Not Reported		

Map ID:	1		
DWR #:	55-528573	DEQ Well #:	46240
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	251	Drill Depth (ft):	253
Start Date:	1990/08/23 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W23	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 209 TO 249	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-534385	DEQ Well #:	46252
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	251	Drill Depth (ft):	252
Start Date:	1992/01/29 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB- EX-02	Basin:	Phoenix AMA
Notes:	VAPOR EXTRACTION WELL.	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	Not Reported	DEQ Well #:	69546
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB ST22-BH03	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID: 1

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

DWR #:	Not Reported	DEQ Well #:	69373
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB AH-03	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	Not Reported	DEQ Well #:	69543
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB ST22-BH06	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-534383	DEQ Well #:	46251
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	253	Drill Depth (ft):	256
Start Date:	1992/01/21 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W30	Basin:	Phoenix AMA
Notes:	CASING 4" PVC	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	10		
DWR #:	55-524553	DEQ Well #:	46451
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB 766 HW 2	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	12		
Registry ID:	921401	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFIS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55

Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	200	Water Level (ft):	160
Casing Depth (ft):	175	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	01-MAR-18
Approved:	01-MAR-18	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
DWR #:	55-516000	DEQ Well #:	46114
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	373	Drill Depth (ft):	381
Start Date:	1986/12/06 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB- LI-01D	Basin:	Phoenix AMA
Notes:	CASING 10" STEEL	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	Not Reported	DEQ Well #:	69374
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB AH-02	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-534384	DEQ Well #:	46250
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	254	Drill Depth (ft):	260
Start Date:	1992/01/14 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB- EX-01	Basin:	Phoenix AMA
Notes:	VAPOR EXTRACTION WELL.	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	Not Reported	DEQ Well #:	69375
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00

Station Alt Name:	WILLIAM AFB AH-01	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	Not Reported	DEQ Well #:	69372
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB AH-04	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-534382	DEQ Well #:	46249
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	253	Drill Depth (ft):	255
Start Date:	1992/01/22 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W31	Basin:	Phoenix AMA
Notes:	CASING 4" PVC	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-528571	DEQ Well #:	46234
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	244	Drill Depth (ft):	246
Start Date:	1990/08/21 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W20	Basin:	Phoenix AMA
Notes:	SCREEN INTERVALS 202 TO 242	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	10		
DWR #:	Not Reported	DEQ Well #:	69369
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB AH-07	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		

Well Type: OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO
TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.

Map ID:	1		
DWR #:	Not Reported	DEQ Well #:	69547
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB ST22-BH02	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	10		
DWR #:	Not Reported	DEQ Well #:	69368
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB AH-08	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	55-570655	DEQ Well #:	69117
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	250	Drill Depth (ft):	250
Start Date:	1997/11/13 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WAFB N-12	Basin:	Phoenix AMA
Notes:	CASING 4" PVC	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	Not Reported	DEQ Well #:	69542
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB ST22-BH07	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID: 10

DWR #:	Not Reported	DEQ Well #:	69460
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS16-BH10	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	10		
DWR #:	Not Reported	DEQ Well #:	69459
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS16-BH11	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	10		
DWR #:	Not Reported	DEQ Well #:	69445
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB CBH-1	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	10		
DWR #:	Not Reported	DEQ Well #:	69462
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS16-BH08	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	10		
DWR #:	Not Reported	DEQ Well #:	69461
Agency:	ADEQ	Agency Well #:	0

Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS16-BH09	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	10		
DWR #:	Not Reported	DEQ Well #:	69463
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS16-BH07	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	10		
DWR #:	Not Reported	DEQ Well #:	69464
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS16-BH06	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	Not Reported	DEQ Well #:	69548
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB ST22-BH01	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	13		
DWR #:	55-640304	DEQ Well #:	26187
Agency:	ADEQ	Agency Well #:	26187
Well Depth (ft):	440	Drill Depth (ft):	440
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00

Station Alt Name:	D-01-07 35ADA	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	13		
Registry ID:	640304	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	LIBBEY, ARETTA,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	Not Reported
Well Depth (ft):	440	Water Level (ft):	212
Casing Depth (ft):	440	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	24
Tested Rate:	24	Draw Down:	0
Application Date:	24-JUN-82	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	1		
DWR #:	55-526085	DEQ Well #:	45971
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	253	Drill Depth (ft):	256
Start Date:	1989/11/20 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB-SS01-W06	Basin:	Phoenix AMA
Notes:	CASING 4" PVC	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-566968	DEQ Well #:	69111
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST-12 N-04	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-nocode	DEQ Well #:	81461
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	2010/03/10 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	ST012-W35	Basin:	Not Reported
Notes:	Not Reported	Aquifer Type:	Not Reported

Water Use:	Not Reported	Watershed:	MIDDLE GILA
Well Type:	Not Reported		

Map ID:	10		
DWR #:	55-570653	DEQ Well #:	69119
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	250	Drill Depth (ft):	250
Start Date:	1997/10/30 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WAFB N-10	Basin:	Phoenix AMA
Notes:	CASING 4" PVC	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	55-528570	DEQ Well #:	46235
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	254
Start Date:	1990/07/27 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W21	Basin:	Phoenix AMA
Notes:	SCREEN INTERVALS 209.5 TO 249.5	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	10		
DWR #:	55-531691	DEQ Well #:	46201
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	251	Drill Depth (ft):	253
Start Date:	1991/05/31 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W26	Basin:	Phoenix AMA
Notes:	SCREENED INTERVAL 209 - 249 FT.	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
DWR #:	Not Reported	DEQ Well #:	69485
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SD18-BH03	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID: 1

DWR #:	Not Reported	DEQ Well #:	69484
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SD18-BH04	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	Not Reported	DEQ Well #:	69483
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SD18-BH05	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	Not Reported	DEQ Well #:	69486
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SD18-BH02	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	1		
DWR #:	Not Reported	DEQ Well #:	69487
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SD18-BH01	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	14		
Registry ID:	909876	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	DEPARTMENT OF THE AIR FORCE

Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	15-OCT-08
Well Depth (ft):	180	Water Level (ft):	169
Casing Depth (ft):	180	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	08-OCT-08
Approved:	08-OCT-08	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	15		
Registry ID:	583784	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEE/ERB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	161	Installed Date:	Not Reported
Well Depth (ft):	171	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	10-OCT-00
Approved:	06-NOV-00	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	916044	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC / CZRB - GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	246	Water Level (ft):	150
Casing Depth (ft):	245	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	10-OCT-13	Approved:	10-OCT-13
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	16		
Registry ID:	207413	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	GRADY & KERRY MOSLEY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	Not Reported
Well Depth (ft):	560	Water Level (ft):	304
Casing Depth (ft):	560	Casing Diameter (in):	6

Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	13-APR-05
Approved:	15-APR-05	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	528570	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	27-JUL-90
Well Depth (ft):	254	Water Level (ft):	225
Casing Depth (ft):	252	Casing Diameter (in):	5
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	29-JUN-90	Approved:	Not Reported
Completion:	N	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	1		
Registry ID:	566968	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	473	Installed Date:	23-AUG-96
Well Depth (ft):	242	Water Level (ft):	244
Casing Depth (ft):	242	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	29-AUG-97
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	909877	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	DEPARTMENT OF THE AIR FORCE
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	14-OCT-08
Well Depth (ft):	170	Water Level (ft):	160
Casing Depth (ft):	170	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	08-OCT-08
Approved:	08-OCT-08	Completion:	Not Reported

Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	219540	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	USAF REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	10-MAR-10
Well Depth (ft):	248	Water Level (ft):	170
Casing Depth (ft):	240	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	03-FEB-10
Approved:	16-FEB-10	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	1		
Registry ID:	926401	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	US AIR FORCE-AFCEC/CIBW
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	10-JUN-21
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	17		
Registry ID:	581556	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	JEFF WHITING
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	223	Installed Date:	Not Reported
Well Depth (ft):	700	Water Level (ft):	400
Casing Depth (ft):	700	Casing Diameter (in):	7
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	05-JUN-00
Approved:	08-JUN-00	Completion:	Not Reported
Well Cancelled:	N	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID: 10

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	531691	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	UNITED STATES AIR FORCE
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	498	Installed Date:	31-MAY-91
Well Depth (ft):	253	Water Level (ft):	225
Casing Depth (ft):	253	Casing Diameter (in):	10
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	03-MAY-91
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	18		
DWR #:	55-532751	DEQ Well #:	46241
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	255	Drill Depth (ft):	260
Start Date:	1991/09/10 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB SS01-W28	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 213 TO 253	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	19		
Registry ID:	560622	Well Type:	SPCL - EXPLORATION
Well Type Group:	OTHER	Owner Name:	MESA, CITY OF,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	269	Installed Date:	20-DEC-96
Well Depth (ft):	170	Water Level (ft):	170
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	10-DEC-96
Approved:	Not Reported	Completion:	N
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	19		
Registry ID:	524555	Well Type:	SPCL - EXPLORATION
Well Type Group:	OTHER	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	269	Installed Date:	17-MAY-89
Well Depth (ft):	85	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0

Draw Down:	0	Application Date:	11-MAY-89
Approved:	Not Reported	Completion:	N
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	19		
Registry ID:	911461	Well Type:	SPCL - MINERAL EXPLORATION
Well Type Group:	OTHER		
Owner Name:	BILL LOPP C/O U.S. AIR FORCE REAL PROPERTY AGENCY		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	14-DEC-09
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	23-NOV-09
Approved:	23-NOV-09	Completion:	X
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	19		
Registry ID:	540560	Well Type:	SPCL - EXPLORATION
Well Type Group:	OTHER	Owner Name:	AIR FORCE BASE,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	269	Installed Date:	17-NOV-93
Well Depth (ft):	215	Water Level (ft):	210
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	02-SEP-93
Approved:	Not Reported	Completion:	N
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	19		
Registry ID:	910310	Well Type:	SPCL - GEOTECHNICAL
Well Type Group:	OTHER	Owner Name:	AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	15-JAN-09
Approved:	15-JAN-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID: 20

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	524553	Well Type:	SPCL - EXPLORATION
Well Type Group:	OTHER	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	269	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	11-MAY-89
Approved:	Not Reported	Completion:	N
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	19		
DWR #:	Not Reported	DEQ Well #:	69310
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	PAOC-WC-NW	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	19		
DWR #:	Not Reported	DEQ Well #:	69309
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	PAOC-WC-NE	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	19		
DWR #:	Not Reported	DEQ Well #:	69312
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	PAOC-WC-SW	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID: 19

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

DWR #:	Not Reported	DEQ Well #:	69311
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	PAOC-WC-SE	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	21		
Registry ID:	229417	Well Type:	NON-EXEMPT - SERVICE
Well Type Group:	NON-EXEMPT	Owner Name:	TOWN OF GILBERT
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	18-DEC-18
Well Depth (ft):	800	Water Level (ft):	171
Casing Depth (ft):	700	Casing Diameter (in):	19
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	SUBMERSIBLE
Pump Power:	ELECTRIC MOTOR > 100 HP	Pump Rate:	1100
Tested Rate:	1100	Draw Down:	87
Application Date:	19-SEP-18	Approved:	22-OCT-18
Completion:	X	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	21		
Registry ID:	508689	Well Type:	NON-EXEMPT - SERVICE
Well Type Group:	NON-EXEMPT	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	22	Installed Date:	21-FEB-85
Well Depth (ft):	1509	Water Level (ft):	271
Casing Depth (ft):	960	Casing Diameter (in):	20
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	TURBINE
Pump Power:	DIESEL ENGINE 151 - 400 HP	Pump Rate:	2000
Tested Rate:	2000	Draw Down:	60
Application Date:	25-JUL-84	Approved:	Not Reported
Completion:	X	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	21		
Registry ID:	505694		
Well Type:	NON-EXEMPT - REPLACEMENT WELL IN NEW LOCATION		
Well Type Group:	NON-EXEMPT	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO

Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	01-AUG-83
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	22		
Registry ID:	908336	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	498	Installed Date:	21-JAN-08
Well Depth (ft):	156	Water Level (ft):	144
Casing Depth (ft):	155	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	11-JAN-08
Approved:	11-JAN-08	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	19		
DWR #:	Not Reported	DEQ Well #:	26186
Agency:	ADEQ	Agency Well #:	26186
Well Depth (ft):	800	Drill Depth (ft):	800
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-01-07 31DBB	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	19		
Registry ID:	524331	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	18-AUG-89
Well Depth (ft):	260	Water Level (ft):	226
Casing Depth (ft):	215	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-APR-89
Approved:	Not Reported	Completion:	C
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID: 19

Registry ID:	701493	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	Not Reported
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	Not Reported	Installed Date:	30-DEC-99
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	29-JUN-05
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	19		
Registry ID:	526082	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	342	Installed Date:	06-NOV-89
Well Depth (ft):	251	Water Level (ft):	229
Casing Depth (ft):	249	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	11-OCT-89
Approved:	Not Reported	Completion:	C
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	19		
Registry ID:	526083	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	18-DEC-89
Well Depth (ft):	353	Water Level (ft):	224
Casing Depth (ft):	347	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	11-OCT-89
Approved:	Not Reported	Completion:	C
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	19		
Registry ID:	701494	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	Not Reported
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	Not Reported	Installed Date:	30-DEC-99

Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	29-JUN-05
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	19		
Registry ID:	701495	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	Not Reported
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	Not Reported	Installed Date:	30-DEC-99
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	29-JUN-05
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	19		
DWR #:	Not Reported	DEQ Well #:	26185
Agency:	ADEQ	Agency Well #:	26185
Well Depth (ft):	800	Drill Depth (ft):	800
Start Date:	1949/01/01 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-01-07 31DBA	Basin:	Phoenix AMA
Notes:	DESTROYED.	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	19		
Registry ID:	807446	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	US AIR FORCE,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	307	Installed Date:	Not Reported
Well Depth (ft):	800	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	16
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	19-FEB-97	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	19

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	526211	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	16-NOV-89
Well Depth (ft):	251	Water Level (ft):	218
Casing Depth (ft):	249	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-OCT-89
Approved:	Not Reported	Completion:	C
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	19		
DWR #:	Not Reported	DEQ Well #:	69480
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS19-BH3	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	23		
Registry ID:	226144	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	BLUCOR TIERRA HOLDINGS LLC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	701	Installed Date:	Not Reported
Well Depth (ft):	500	Water Level (ft):	300
Casing Depth (ft):	500	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	20-JUN-16
Approved:	28-JUN-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	24		
Registry ID:	524329	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	15-AUG-89
Well Depth (ft):	261	Water Level (ft):	227
Casing Depth (ft):	215	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED

Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-APR-89
Approved:	Not Reported	Completion:	C
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	24		
Registry ID:	525775	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	01-NOV-89
Well Depth (ft):	363	Water Level (ft):	229
Casing Depth (ft):	361	Casing Diameter (in):	4
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	05-SEP-89	Approved:	Not Reported
Completion:	C	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	21		
DWR #:	55-508689	DEQ Well #:	46199
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	960	Drill Depth (ft):	1509
Start Date:	1985/02/21 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB- PROD WELL 8	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	21		
DWR #:	Not Reported	DEQ Well #:	48989
Agency:	ADEQ	Agency Well #:	48989
Well Depth (ft):	1509	Drill Depth (ft):	1509
Start Date:	1985/02/21 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-01-07 31CBB	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	25		
Registry ID:	516896	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	314	Installed Date:	21-MAR-87
Well Depth (ft):	258	Water Level (ft):	220
Casing Depth (ft):	210	Casing Diameter (in):	10

Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	03-MAR-87	Approved:	Not Reported
Completion:	N	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	19		
DWR #:	Not Reported	DEQ Well #:	69481
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS19-BH2	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	19		
DWR #:	Not Reported	DEQ Well #:	69482
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS19-BH1	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	19		
DWR #:	Not Reported	DEQ Well #:	69479
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS19-BH4	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	21		
DWR #:	Not Reported	DEQ Well #:	48988
Agency:	ADEQ	Agency Well #:	48988
Well Depth (ft):	1509	Drill Depth (ft):	1509
Start Date:	1985/02/21 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-01-07 31CBB	Basin:	Phoenix AMA

Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	26		
DWR #:	Not Reported	DEQ Well #:	26188
Agency:	ADEQ	Agency Well #:	26188
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-01-07 35DBA	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	19		
DWR #:	Not Reported	DEQ Well #:	69478
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS19-BH5	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	27		
Registry ID:	921443	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFIS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	186	Water Level (ft):	160
Casing Depth (ft):	170	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	08-MAR-18
Approved:	08-MAR-18	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	28		
Registry ID:	516006	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	314	Installed Date:	24-NOV-86
Well Depth (ft):	353	Water Level (ft):	0
Casing Depth (ft):	290	Casing Diameter (in):	10

Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	SUBMERSIBLE
Pump Power:	ELECTRIC MOTOR 1 - 5 HP	Pump Rate:	10
Tested Rate:	0	Draw Down:	0
Application Date:	05-NOV-86	Approved:	Not Reported
Completion:	X	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	29		
DWR #:	55-525539	DEQ Well #:	46198
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	223	Drill Depth (ft):	226
Start Date:	1989/09/26 07:00:00+00	End Date:	1993/07/01 07:00:00+00
Station Alt Name:	WILLIAMS AFB- F2-06	Basin:	Phoenix AMA
Notes:	SCREENED INTERVAL 183 - 223 FT.	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	29		
Registry ID:	525539	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	342	Installed Date:	27-SEP-89
Well Depth (ft):	265	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	16-AUG-89
Approved:	Not Reported	Completion:	N
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	29		
Registry ID:	516005	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	314	Installed Date:	25-NOV-86
Well Depth (ft):	353	Water Level (ft):	0
Casing Depth (ft):	290	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	SUBMERSIBLE
Pump Power:	ELECTRIC MOTOR 1 - 5 HP	Pump Rate:	10
Tested Rate:	0	Draw Down:	0
Application Date:	05-NOV-86	Approved:	Not Reported
Completion:	X	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID: 29

DWR #:	55-516005	DEQ Well #:	46119
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	352	Drill Depth (ft):	355
Start Date:	1986/11/25 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB- F2-02	Basin:	Phoenix AMA
Notes:	CASING 4" STEEL	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	30		
Registry ID:	516947	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	314	Installed Date:	06-MAR-87
Well Depth (ft):	298	Water Level (ft):	244
Casing Depth (ft):	225	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	SUBMERSIBLE
Pump Power:	ELECTRIC MOTOR 1 - 5 HP	Pump Rate:	10
Tested Rate:	0	Draw Down:	0
Application Date:	19-FEB-87	Approved:	Not Reported
Completion:	X	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	29		
DWR #:	55-516947	DEQ Well #:	46196
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	298	Drill Depth (ft):	300
Start Date:	1987/03/06 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB- F2-04	Basin:	Phoenix AMA
Notes:	SCREENED INTERVAL 235 - 295 FT. CASING 4" STEEL		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	28		
DWR #:	55-516006	DEQ Well #:	46120
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	358	Drill Depth (ft):	361
Start Date:	1986/11/23 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB- F2-03	Basin:	Phoenix AMA
Notes:	CASING 4" STEEL	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID: 29

DWR #:	55-516950	DEQ Well #:	46197
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	298	Drill Depth (ft):	300
Start Date:	1987/03/10 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB- F2-05	Basin:	Phoenix AMA
Notes:	SCREENED INTERVAL 235 - 295 FT. CASING 4" STEEL		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	31		
DWR #:	Not Reported	DEQ Well #:	26127
Agency:	ADEQ	Agency Well #:	26127
Well Depth (ft):	604	Drill Depth (ft):	604
Start Date:	1942/02/17 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-01-06 36CDA	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	32		
Registry ID:	225978	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	REECE BAWDEN
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	701	Installed Date:	30-JUN-16
Well Depth (ft):	540	Water Level (ft):	260
Casing Depth (ft):	540	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	29-APR-16
Approved:	03-MAY-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	33		
Registry ID:	532751	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	U S AIR FORCE - WILLIAMS AFB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	10-SEP-91
Well Depth (ft):	255	Water Level (ft):	216
Casing Depth (ft):	255	Casing Diameter (in):	10
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	20-AUG-91
Approved:	Not Reported	Completion:	N
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID: 34

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	516950	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	314	Installed Date:	10-MAR-87
Well Depth (ft):	298	Water Level (ft):	0
Casing Depth (ft):	298	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	SUBMERSIBLE
Pump Power:	ELECTRIC MOTOR 1 - 5 HP	Pump Rate:	10
Tested Rate:	0	Draw Down:	0
Application Date:	19-FEB-87	Approved:	Not Reported
Completion:	A	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	34		
Registry ID:	921404	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFECE/CZRB-GRIFFIS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	171	Water Level (ft):	160
Casing Depth (ft):	170	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	01-MAR-18
Approved:	01-MAR-18	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	34		
Registry ID:	921421	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	199	Water Level (ft):	160
Casing Depth (ft):	197	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	05-MAR-18
Approved:	05-MAR-18	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	35		
Registry ID:	921420	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported

Well Depth (ft):	196	Water Level (ft):	160
Casing Depth (ft):	196	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	05-MAR-18
Approved:	05-MAR-18	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	35		
Registry ID:	516004	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	314	Installed Date:	03-DEC-86
Well Depth (ft):	343	Water Level (ft):	0
Casing Depth (ft):	280	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	SUBMERSIBLE
Pump Power:	ELECTRIC MOTOR 1 - 5 HP	Pump Rate:	10
Tested Rate:	0	Draw Down:	0
Application Date:	05-NOV-86	Approved:	Not Reported
Completion:	X	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	36		
Registry ID:	550369	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	OLIN CHEMICALS CORP,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	14-JUL-95
Well Depth (ft):	400	Water Level (ft):	300
Casing Depth (ft):	400	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	27-JUN-95
Approved:	Not Reported	Completion:	N
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	35		
DWR #:	55-516004	DEQ Well #:	46118
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	347	Drill Depth (ft):	350
Start Date:	1986/12/03 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB- F2-01	Basin:	Phoenix AMA
Notes:	CASING 4" STEEL	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA	Well Type:	PIEZOMETER

Map ID:	37		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	550367	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	OLIN CHEMICALS CORP,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	12-JUL-95
Well Depth (ft):	415	Water Level (ft):	300
Casing Depth (ft):	415	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	27-JUN-95
Approved:	Not Reported	Completion:	N
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	35		
DWR #:	Not Reported	DEQ Well #:	69469
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS21-BH-1	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	35		
DWR #:	Not Reported	DEQ Well #:	69465
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS21-BH-2	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	38		
DWR #:	Not Reported	DEQ Well #:	69367
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB AH-09	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID: 38

DWR #:	Not Reported	DEQ Well #:	69366
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB AH-10	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	38		
DWR #:	Not Reported	DEQ Well #:	69364
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB AH-12	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	38		
DWR #:	Not Reported	DEQ Well #:	69365
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB AH-11	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	35		
DWR #:	Not Reported	DEQ Well #:	69378
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS21-BH-3	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	38		
DWR #:	Not Reported	DEQ Well #:	69362
Agency:	ADEQ	Agency Well #:	0

Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB AH-14	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	38		
DWR #:	Not Reported	DEQ Well #:	69363
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB AH-13	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	39		
DWR #:	Not Reported	DEQ Well #:	69416
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS21-BH-9	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	39		
DWR #:	Not Reported	DEQ Well #:	69468
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS21-BH-10	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
Registry ID:	583785	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEE/ERB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55

Driller License #:	161	Installed Date:	Not Reported
Well Depth (ft):	169	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	10-OCT-00
Approved:	06-NOV-00	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	40		
Registry ID:	921422	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEC/CZRB-GRIFFS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	160	Water Level (ft):	120
Casing Depth (ft):	147	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	05-MAR-18
Approved:	05-MAR-18	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	40		
Registry ID:	583786	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	ARIZONA STATE UNIVERSITY EAST
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	Not Reported	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	10-OCT-00
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	39		
DWR #:	Not Reported	DEQ Well #:	69417
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS21-BH-8	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	39

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

DWR #:	Not Reported	DEQ Well #:	69418
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS21-BH-7	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	41		
Registry ID:	214719	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	BRIAN & C. J. KAPP
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	701	Installed Date:	04-JUN-07
Well Depth (ft):	560	Water Level (ft):	310
Casing Depth (ft):	560	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	08-FEB-07
Approved:	12-FEB-07	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69383
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB A-14BL-1	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69382
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB A-14BL-2	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID: 40

DWR #:	Not Reported	DEQ Well #:	69381
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB A-14BL-3	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69407
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB A-14BL-4	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	35		
DWR #:	Not Reported	DEQ Well #:	69421
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS21-BH-4	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	39		
DWR #:	Not Reported	DEQ Well #:	69467
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS21-BH-11	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	39		
DWR #:	Not Reported	DEQ Well #:	69466
Agency:	ADEQ	Agency Well #:	0

Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS21-BH-12	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	35		
DWR #:	Not Reported	DEQ Well #:	69420
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS21-BH-5	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69540
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS23-BH02	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69541
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS23-BH01	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69519
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00

Station Alt Name:	WILLIAM AFB SS23-BH04	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69518
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS23-BH05	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69539
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS23-BH03	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69516
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS23-BH06	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69515
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS23-BH07	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported

Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: Not Reported
Well Type: OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO
TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.

Map ID: 35
DWR #: Not Reported
DEQ Well #: 69419
Agency: ADEQ
Agency Well #: 0
Well Depth (ft): 0
Drill Depth (ft): 0
Start Date: 1970/01/01 00:00:00+00
End Date: 1970/01/01 00:00:00+00
Station Alt Name: WILLIAM AFB SS21-BH-6
Basin: Phoenix AMA
Notes: Not Reported
Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: Not Reported
Well Type: OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO
TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.

Map ID: 40
DWR #: Not Reported
DEQ Well #: 69380
Agency: ADEQ
Agency Well #: 0
Well Depth (ft): 0
Drill Depth (ft): 0
Start Date: 1970/01/01 00:00:00+00
End Date: 1970/01/01 00:00:00+00
Station Alt Name: WILLIAM AFB SS23-TCH
Basin: Phoenix AMA
Notes: Not Reported
Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: Not Reported
Well Type: OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO
TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.

Map ID: 40
DWR #: Not Reported
DEQ Well #: 69511
Agency: ADEQ
Agency Well #: 0
Well Depth (ft): 0
Drill Depth (ft): 0
Start Date: 1970/01/01 00:00:00+00
End Date: 1970/01/01 00:00:00+00
Station Alt Name: WILLIAM AFB SS23-BH11
Basin: Phoenix AMA
Notes: Not Reported
Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: Not Reported
Well Type: OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO
TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.

Map ID: 40
DWR #: Not Reported
DEQ Well #: 69512
Agency: ADEQ
Agency Well #: 0
Well Depth (ft): 0
Drill Depth (ft): 0
Start Date: 1970/01/01 00:00:00+00
End Date: 1970/01/01 00:00:00+00
Station Alt Name: WILLIAM AFB SS23-BH10
Basin: Phoenix AMA
Notes: Not Reported
Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: Not Reported

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Well Type: OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO
TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.

Map ID:	40		
DWR #:	55-516011	DEQ Well #:	46125
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	338	Drill Depth (ft):	346
Start Date:	1986/12/18 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB- LA-05	Basin:	Phoenix AMA
Notes:	CASING 4" STEEL	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69513
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS23-BH09	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	42		
Registry ID:	575995	Well Type:	NON-EXEMPT - SERVICE
Well Type Group:	NON-EXEMPT	Owner Name:	CITY OF MESA
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	215	Installed Date:	20-SEP-00
Well Depth (ft):	1490	Water Level (ft):	382
Casing Depth (ft):	1350	Casing Diameter (in):	20
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	TURBINE
Pump Power:	ELECTRIC MOTOR > 100 HP	Pump Rate:	1200
Tested Rate:	0	Draw Down:	0
Application Date:	30-SEP-99	Approved:	11-MAY-00
Completion:	X	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	42		
Registry ID:	550368	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	OLIN CHEMICALS CORP,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	10-JUL-95
Well Depth (ft):	395	Water Level (ft):	300
Casing Depth (ft):	395	Casing Diameter (in):	5

Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	27-JUN-95
Approved:	Not Reported	Completion:	N
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69514
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS23-BH08	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	55-516010	DEQ Well #:	46124
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	343	Drill Depth (ft):	346
Start Date:	1986/12/17 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB- LA-04	Basin:	Phoenix AMA
Notes:	CASING 4" STEEL	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	40		
DWR #:	55-583786	DEQ Well #:	69301
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	LF01-W18	Basin:	Phoenix AMA
Notes:	DWR LIST CADASTRAL WRONG	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69503
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS24-BH08	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported

Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: Not Reported
Well Type: OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO
TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.

Map ID: 40
DWR #: Not Reported
DEQ Well #: 69510
Agency: ADEQ
Agency Well #: 0
Well Depth (ft): 0
Drill Depth (ft): 0
Start Date: 1970/01/01 00:00:00+00
End Date: 1970/01/01 00:00:00+00
Station Alt Name: WILLIAM AFB SS24-BH01
Basin: Phoenix AMA
Notes: Not Reported
Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: Not Reported
Well Type: OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO
TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.

Map ID: 40
DWR #: Not Reported
DEQ Well #: 69500
Agency: ADEQ
Agency Well #: 0
Well Depth (ft): 0
Drill Depth (ft): 0
Start Date: 1970/01/01 00:00:00+00
End Date: 1970/01/01 00:00:00+00
Station Alt Name: WILLIAM AFB SS24-BH11
Basin: Phoenix AMA
Notes: Not Reported
Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: Not Reported
Well Type: OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO
TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.

Map ID: 40
DWR #: Not Reported
DEQ Well #: 69508
Agency: ADEQ
Agency Well #: 0
Well Depth (ft): 0
Drill Depth (ft): 0
Start Date: 1970/01/01 00:00:00+00
End Date: 1970/01/01 00:00:00+00
Station Alt Name: WILLIAM AFB SS24-BH03
Basin: Phoenix AMA
Notes: Not Reported
Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: Not Reported
Well Type: OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO
TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.

Map ID: 40
DWR #: 55-516009
DEQ Well #: 46123
Agency: ADEQ
Agency Well #: 0
Well Depth (ft): 335
Drill Depth (ft): 351
Start Date: 1986/11/16 08:00:00+00
End Date: 1970/01/01 00:00:00+00
Station Alt Name: WMS AFB-LA-03
Basin: Phoenix AMA
Notes: CASING 4" STEEL
Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: MIDDLE GILA

Well Type: WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69509
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS24-BH02	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69399
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS24-W-9	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69408
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS24-W-7	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69412
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS24-W-3	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID: 40

DWR #:	Not Reported	DEQ Well #:	69498
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS24-W-10	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69415
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS24-W-11	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69414
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS24-W-12	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69413
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS24-W-2	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69411
Agency:	ADEQ	Agency Well #:	0

Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS24-W-4	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69499
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS24-W-1	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69507
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS24-BH04	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69400
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS24-W-8	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	43		
DWR #:	55-516948	DEQ Well #:	46126
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	263	Drill Depth (ft):	263
Start Date:	1987/03/12 08:00:00+00	End Date:	1970/01/01 00:00:00+00

Station Alt Name:	WILLIAMS AFB- LA-06	Basin:	Phoenix AMA
Notes:	CASING 4" STEEL	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69501
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS24-BH10	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69409
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS24-W-6	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69410
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS24-W-5	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	Not Reported	DEQ Well #:	69502
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAM AFB SS24-BH09	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		

Watershed: Not Reported
Well Type: OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO
TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.

Map ID: 40
DWR #: Not Reported
DEQ Well #: 69505
Agency: ADEQ
Agency Well #: 0
Well Depth (ft): 0
Drill Depth (ft): 0
Start Date: 1970/01/01 00:00:00+00
End Date: 1970/01/01 00:00:00+00
Station Alt Name: WILLIAM AFB SS24-BH06
Basin: Phoenix AMA
Notes: Not Reported
Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: Not Reported
Well Type: OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO
TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.

Map ID: 40
DWR #: Not Reported
DEQ Well #: 69506
Agency: ADEQ
Agency Well #: 0
Well Depth (ft): 0
Drill Depth (ft): 0
Start Date: 1970/01/01 00:00:00+00
End Date: 1970/01/01 00:00:00+00
Station Alt Name: WILLIAM AFB SS24-BH05
Basin: Phoenix AMA
Notes: Not Reported
Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: Not Reported
Well Type: OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO
TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.

Map ID: 40
DWR #: Not Reported
DEQ Well #: 69504
Agency: ADEQ
Agency Well #: 0
Well Depth (ft): 0
Drill Depth (ft): 0
Start Date: 1970/01/01 00:00:00+00
End Date: 1970/01/01 00:00:00+00
Station Alt Name: WILLIAM AFB SS24-BH07
Basin: Phoenix AMA
Notes: Not Reported
Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: Not Reported
Well Type: OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO
TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.

Map ID: 40
DWR #: 55-562371
DEQ Well #: 69306
Agency: ADEQ
Agency Well #: 0
Well Depth (ft): 204
Drill Depth (ft): 210
Start Date: 1997/05/06 07:00:00+00
End Date: 1970/01/01 00:00:00+00
Station Alt Name: LF01-W13
Basin: Phoenix AMA
Notes: CASING 4" PVC / DWR LIST WRONG CADASTRAL
Aquifer Type: Not Reported
Water Use: WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.
Watershed: Not Reported

Well Type: OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO
TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.

Map ID:	44		
DWR #:	Not Reported	DEQ Well #:	69299
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	LF01-W20	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
Registry ID:	917790	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	TOWN OF GILBERT
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	20-FEB-15
Well Depth (ft):	162	Water Level (ft):	136
Casing Depth (ft):	160	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	02-FEB-15
Approved:	02-FEB-15	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	40		
Registry ID:	911186	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	29-SEP-09
Well Depth (ft):	191	Water Level (ft):	140
Casing Depth (ft):	190	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-SEP-09
Approved:	24-SEP-09	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	40		
Registry ID:	911362	Well Type:	ENV - MONITOR

Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported
Well Depth (ft):	190	Water Level (ft):	140
Casing Depth (ft):	190	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	03-NOV-09
Approved:	03-NOV-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	40		
Registry ID:	911157	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	13-OCT-09
Well Depth (ft):	231	Water Level (ft):	140
Casing Depth (ft):	230	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-SEP-09
Approved:	22-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	40		
Registry ID:	516010	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	314	Installed Date:	17-DEC-86
Well Depth (ft):	338	Water Level (ft):	0
Casing Depth (ft):	275	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	SUBMERSIBLE
Pump Power:	ELECTRIC MOTOR 1 - 5 HP	Pump Rate:	10
Tested Rate:	0	Draw Down:	0
Application Date:	05-NOV-86	Approved:	Not Reported
Completion:	X	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	40		
Registry ID:	531688	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55

Driller License #:	2	Installed Date:	07-JUN-91
Well Depth (ft):	226	Water Level (ft):	197
Casing Depth (ft):	226	Casing Diameter (in):	10
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	03-MAY-91
Approved:	Not Reported	Completion:	N
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	40		
Registry ID:	911159	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	09-OCT-09
Well Depth (ft):	159	Water Level (ft):	139
Casing Depth (ft):	155	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-SEP-09
Approved:	22-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	40		
Registry ID:	516009	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	314	Installed Date:	16-NOV-86
Well Depth (ft):	343	Water Level (ft):	0
Casing Depth (ft):	280	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	SUBMERSIBLE
Pump Power:	ELECTRIC MOTOR 1 - 5 HP	Pump Rate:	10
Tested Rate:	0	Draw Down:	0
Application Date:	05-NOV-86	Approved:	Not Reported
Completion:	X	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	40		
Registry ID:	528567	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	342	Installed Date:	03-AUG-90
Well Depth (ft):	239	Water Level (ft):	0
Casing Depth (ft):	237	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		

RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	29-JUN-90	Approved:	Not Reported
Completion:	N	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	40		
Registry ID:	583568	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEE/ERB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	161	Installed Date:	05-JAN-01
Well Depth (ft):	172	Water Level (ft):	0
Casing Depth (ft):	142	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	26-SEP-00
Approved:	06-NOV-00	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	40		
Registry ID:	529194	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	342	Installed Date:	17-AUG-90
Well Depth (ft):	239	Water Level (ft):	217
Casing Depth (ft):	237	Casing Diameter (in):	5
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	14-AUG-90	Approved:	Not Reported
Completion:	N	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	43		
Registry ID:	920267	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEERING CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	07-JAN-17
Well Depth (ft):	156	Water Level (ft):	135
Casing Depth (ft):	155	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	05-JAN-17
Approved:	05-JAN-17	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X

Watershed: UPPER GILA RIVER

Map ID: 43
Registry ID: 916815
Well Type Group: OTHER
Basin: PHOENIX AMA
AMA or INA: PHOENIX
Driller License #: 226
Well Depth (ft): 133
Casing Depth (ft): 133
Casing Type: PLASTIC OR PVC
Pump Type: Not Reported
Pump Rate: 0
Draw Down: 0
Approved: 18-APR-14
Well Cancelled: Not Reported
Watershed: UPPER GILA RIVER
Well Type: ENV - VADOSE ZONE
Owner Name: AIR FORCE CIVIL ENGINEER CENTER
Subbasin: EAST SALT RIVER VALLEY
Program: 55
Installed Date: Not Reported
Water Level (ft): 0
Casing Diameter (in): 3
RGR Pump Data: NO
Pump Power: Not Reported
Tested Rate: 0
Application Date: 18-APR-14
Completion: Not Reported
Drill Log: X

Map ID: 43
Registry ID: 516948
Well Type Group: MONITOR
Basin: PHOENIX AMA
AMA or INA: PHOENIX
Driller License #: 314
Well Depth (ft): 263
Casing Depth (ft): 263
Casing Type: STEEL - PERFORATED OR SLOTTED CASING
RGR Pump Data: NO
Pump Power: ELECTRIC MOTOR 1 - 5 HP
Tested Rate: 0
Application Date: 19-FEB-87
Completion: X
Drill Log: X
Well Type: ENV - MONITOR OR PIEZOMETER
Owner Name: WILLIAMS AFB,
Subbasin: EAST SALT RIVER VALLEY
Program: 55
Installed Date: 12-MAR-87
Water Level (ft): 205
Casing Diameter (in): 10
Pump Type: SUBMERSIBLE
Pump Rate: 10
Draw Down: 0
Approved: Not Reported
Well Cancelled: Not Reported
Watershed: UPPER GILA RIVER

Map ID: 43
Registry ID: 916817
Well Type Group: OTHER
Basin: PHOENIX AMA
AMA or INA: PHOENIX
Driller License #: 226
Well Depth (ft): 132
Casing Depth (ft): 132
Casing Type: PLASTIC OR PVC
Pump Type: Not Reported
Pump Rate: 0
Draw Down: 0
Approved: 18-APR-14
Well Cancelled: Not Reported
Watershed: UPPER GILA RIVER
Well Type: ENV - SOIL VAPOR EXTRACTION / MONITORING
Owner Name: AIR FORCE CIVIL ENGINEER CENTER
Subbasin: EAST SALT RIVER VALLEY
Program: 55
Installed Date: Not Reported
Water Level (ft): 0
Casing Diameter (in): 3
RGR Pump Data: NO
Pump Power: Not Reported
Tested Rate: 0
Application Date: 18-APR-14
Completion: Not Reported
Drill Log: X

Map ID: 43

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	916818	Well Type:	ENV - SOIL VAPOR EXTRACTION / MONITORING
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	133	Water Level (ft):	0
Casing Depth (ft):	133	Casing Diameter (in):	3
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	43		
Registry ID:	916816	Well Type:	ENV - VADOSE ZONE
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	132	Water Level (ft):	0
Casing Depth (ft):	132	Casing Diameter (in):	3
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	43		
Registry ID:	911181	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	20-OCT-09
Well Depth (ft):	206	Water Level (ft):	139
Casing Depth (ft):	200	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-SEP-09
Approved:	24-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	43		
Registry ID:	919855	Well Type:	ENV - SOIL VAPOR EXTRACTION / MONITORING
Well Type Group:	OTHER	Owner Name:	AFCEC/CZRB-GRIFFISS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55

Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	146	Water Level (ft):	140
Casing Depth (ft):	133	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	25-AUG-16
Approved:	25-AUG-16	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	43		
Registry ID:	911177	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported
Well Depth (ft):	260	Water Level (ft):	139
Casing Depth (ft):	260	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-SEP-09
Approved:	24-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	43		
Registry ID:	916819	Well Type:	ENV - SOIL VAPOR EXTRACTION / MONITORING
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	133	Water Level (ft):	0
Casing Depth (ft):	133	Casing Diameter (in):	3
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	43		
Registry ID:	911182	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	15-OCT-09
Well Depth (ft):	161	Water Level (ft):	138
Casing Depth (ft):	160	Casing Diameter (in):	5

Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-SEP-09
Approved:	24-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	44		
Registry ID:	916791	Well Type:	ENV - VADOSE ZONE
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	133	Water Level (ft):	0
Casing Depth (ft):	133	Casing Diameter (in):	3
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	44		
Registry ID:	916792	Well Type:	ENV - VADOSE ZONE
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	161	Water Level (ft):	141
Casing Depth (ft):	161	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	44		
Registry ID:	583570	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEE/ERB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	161	Installed Date:	05-JAN-01
Well Depth (ft):	181	Water Level (ft):	0
Casing Depth (ft):	161	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	26-SEP-00
Approved:	06-NOV-00	Completion:	Not Reported

Well Cancelled:	N	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	44		
Registry ID:	911187	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	29-SEP-09
Well Depth (ft):	173	Water Level (ft):	136
Casing Depth (ft):	172	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-SEP-09
Approved:	24-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	44		
Registry ID:	916793	Well Type:	ENV - VADOSE ZONE
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	253	Water Level (ft):	141
Casing Depth (ft):	253	Casing Diameter (in):	6
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	44		
Registry ID:	916796	Well Type:	ENV - VADOSE ZONE
Well Type Group:	OTHER	Owner Name:	AIRFORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	251	Water Level (ft):	141
Casing Depth (ft):	251	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	44

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	916797	Well Type:	ENV - VADOSE ZONE
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	247	Water Level (ft):	141
Casing Depth (ft):	247	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	44		
Registry ID:	916794	Well Type:	ENV - VADOSE ZONE
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	255	Water Level (ft):	141
Casing Depth (ft):	255	Casing Diameter (in):	6
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	44		
Registry ID:	916795	Well Type:	ENV - VADOSE ZONE
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	252	Water Level (ft):	139
Casing Depth (ft):	525	Casing Diameter (in):	6
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	46		
Registry ID:	583567	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEE/ERB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	161	Installed Date:	05-JAN-01

Well Depth (ft):	196	Water Level (ft):	0
Casing Depth (ft):	156	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	26-SEP-00
Approved:	06-NOV-00	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	47		
Registry ID:	205657	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	ANTON MAICHL
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	619	Installed Date:	20-DEC-04
Well Depth (ft):	560	Water Level (ft):	310
Casing Depth (ft):	560	Casing Diameter (in):	7
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	10-NOV-04	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	48		
Registry ID:	584702	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFRPA/DCK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	161	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	05-DEC-00
Approved:	18-DEC-00	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	40		
DWR #:	55-583785	DEQ Well #:	69298
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	169
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	LF01-W21	Basin:	Phoenix AMA
Notes:	CASING 4" PVC DWR LIST CADASTRAL WRONG		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

DWR #:	55-531688	DEQ Well #:	46248
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	224	Drill Depth (ft):	226
Start Date:	1991/06/07 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB LF01-W10	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 182 TO 222 / CASING 4.5" PVC		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	55-562369	DEQ Well #:	69303
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	213	Drill Depth (ft):	213
Start Date:	1997/04/30 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	LF01-W16	Basin:	Phoenix AMA
Notes:	CASING 4" PVC DWR LIST WRONG CADASTRAL		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	45		
DWR #:	Not Reported	DEQ Well #:	26709
Agency:	ADEQ	Agency Well #:	26709
Well Depth (ft):	225	Drill Depth (ft):	225
Start Date:	1920/01/01 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 05ABB	Basin:	Phoenix AMA
Notes:	DESTROYED.	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	40		
DWR #:	55-562370	DEQ Well #:	69305
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	199	Drill Depth (ft):	200
Start Date:	1997/05/07 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	LF01-W14	Basin:	Phoenix AMA
Notes:	CASING 4" PVC / DWR LIST WRONG CADASTRAL		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	49		
Registry ID:	585924	Well Type:	NON-EXEMPT - SERVICE

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Well Type Group:	NON-EXEMPT	Owner Name:	CITY OF MESA
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	185	Installed Date:	02-JUL-05
Well Depth (ft):	1510	Water Level (ft):	296
Casing Depth (ft):	990	Casing Diameter (in):	21
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	TURBINE
Pump Power:	ELECTRIC MOTOR > 100 HP	Pump Rate:	700
Tested Rate:	695	Draw Down:	178
Application Date:	25-OCT-01	Approved:	30-APR-02
Completion:	X	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	50		
DWR #:	55-613588	DEQ Well #:	26702
Agency:	ADEQ	Agency Well #:	26702
Well Depth (ft):	2000	Drill Depth (ft):	2000
Start Date:	1975/01/28 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 03AAA	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	50		
Registry ID:	613588	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	SUNBELT LAND HOLDINGS, L.P.
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	28-JAN-75
Well Depth (ft):	2000	Water Level (ft):	0
Casing Depth (ft):	1383	Casing Diameter (in):	20
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	30-APR-82	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	44		
DWR #:	55-562365	DEQ Well #:	69302
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	238	Drill Depth (ft):	250
Start Date:	1997/04/29 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	LF01-W17	Basin:	Phoenix AMA
Notes:	CASING 4" PVC / DWR LIST CADASTRAL WRONG		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

DWR #:	55-529194	DEQ Well #:	46247
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	237	Drill Depth (ft):	239
Start Date:	1990/08/17 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS ABF LF01-W09A	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 195 TO 235 CASING 4.5" PVC		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	51		
Registry ID:	579638	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	TRW VEHICLE SAFETY SYSTEMS INC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	15-FEB-00
Approved:	18-FEB-00	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	40		
DWR #:	55-562366	DEQ Well #:	69304
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	208	Drill Depth (ft):	210
Start Date:	1997/05/02 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	LF01-W15	Basin:	Phoenix AMA
Notes:	CASING 4" PVC / DWR LIST WRONG CADASTRAL		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	40		
DWR #:	55-524541	DEQ Well #:	45968
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	240
Start Date:	1989/07/06 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB LF01-W07	Basin:	Phoenix AMA
Notes:	CASING 4.5" PVC DWR LIST CADASTRAL BACKWARDS		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID: 44

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

DWR #:	55-531692	DEQ Well #:	45969
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	237	Drill Depth (ft):	239
Start Date:	1990/08/03 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB LF01-W11	Basin:	Phoenix AMA
Notes:	CASING 4.5" PVC	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	40		
Registry ID:	516008	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	314	Installed Date:	19-NOV-86
Well Depth (ft):	335	Water Level (ft):	0
Casing Depth (ft):	275	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	SUBMERSIBLE
Pump Power:	ELECTRIC MOTOR 1 - 5 HP	Pump Rate:	10
Tested Rate:	0	Draw Down:	0
Application Date:	05-NOV-86	Approved:	Not Reported
Completion:	X	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	53		
DWR #:	55-531689	DEQ Well #:	46194
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	215	Drill Depth (ft):	218
Start Date:	1991/05/23 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB- LF01-W12	Basin:	Phoenix AMA
Notes:	SCREENED: 173' - 213' CASING 4.5 PVC		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	53		
Registry ID:	607295	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	SUN POWER PROPERTIES/POWER NORTH LLC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported
Well Depth (ft):	800	Water Level (ft):	0
Casing Depth (ft):	800	Casing Diameter (in):	20
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	YES
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	1445	Tested Rate:	1445
Draw Down:	0	Application Date:	30-APR-82
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	53

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	531689	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	632	Installed Date:	23-MAY-91
Well Depth (ft):	218	Water Level (ft):	181
Casing Depth (ft):	215	Casing Diameter (in):	10
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	03-MAY-91
Approved:	Not Reported	Completion:	N
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	54		
Registry ID:	916813	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	54		
Registry ID:	916810	Well Type:	ENV - SOIL VAPOR EXTRACTION / MONITORING
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	12-MAY-14
Well Depth (ft):	137	Water Level (ft):	0
Casing Depth (ft):	137	Casing Diameter (in):	3
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	54		
Registry ID:	916812	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	03-APR-14

Well Depth (ft):	187	Water Level (ft):	191
Casing Depth (ft):	187	Casing Diameter (in):	6
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	54		
Registry ID:	516007	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	314	Installed Date:	23-NOV-86
Well Depth (ft):	338	Water Level (ft):	0
Casing Depth (ft):	275	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	SUBMERSIBLE
Pump Power:	ELECTRIC MOTOR 1 - 5 HP	Pump Rate:	10
Tested Rate:	0	Draw Down:	0
Application Date:	05-NOV-86	Approved:	Not Reported
Completion:	X	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	54		
Registry ID:	531692	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	U.S. AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	04-JUN-91
Well Depth (ft):	239	Water Level (ft):	210
Casing Depth (ft):	239	Casing Diameter (in):	10
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	03-MAY-91
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	54		
Registry ID:	916809	Well Type:	ENV - VADOSE ZONE
Well Type Group:	OTHER	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	15-MAY-14
Well Depth (ft):	137	Water Level (ft):	0
Casing Depth (ft):	137	Casing Diameter (in):	3
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0

Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	44		
Registry ID:	916798	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	14-APR-14
Well Depth (ft):	250	Water Level (ft):	141
Casing Depth (ft):	250	Casing Diameter (in):	6
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	44		
Registry ID:	916799	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	05-MAY-14
Well Depth (ft):	257	Water Level (ft):	141
Casing Depth (ft):	257	Casing Diameter (in):	6
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	44		
Registry ID:	917198	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	13-AUG-14
Well Depth (ft):	220	Water Level (ft):	150
Casing Depth (ft):	220	Casing Diameter (in):	0
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	05-AUG-14
Approved:	05-AUG-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID: 44

Registry ID:	917199	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	15-AUG-14
Well Depth (ft):	180	Water Level (ft):	149
Casing Depth (ft):	171	Casing Diameter (in):	0
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	05-AUG-14
Approved:	05-AUG-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	44		
Registry ID:	916803	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	28-JUL-14
Well Depth (ft):	218	Water Level (ft):	141
Casing Depth (ft):	218	Casing Diameter (in):	6
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	44		
Registry ID:	916807	Well Type:	ENV - PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	29-APR-14
Well Depth (ft):	217	Water Level (ft):	0
Casing Depth (ft):	217	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	44		
Registry ID:	916808	Well Type:	ENV - PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	23-APR-14

Well Depth (ft):	197	Water Level (ft):	141
Casing Depth (ft):	197	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	44		
Registry ID:	916806	Well Type:	ENV - PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	29-APR-14
Well Depth (ft):	204	Water Level (ft):	141
Casing Depth (ft):	204	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	44		
Registry ID:	916804	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	17-APR-14
Well Depth (ft):	220	Water Level (ft):	141
Casing Depth (ft):	220	Casing Diameter (in):	6
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	44		
Registry ID:	916805	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	226	Installed Date:	23-APR-14
Well Depth (ft):	217	Water Level (ft):	141
Casing Depth (ft):	217	Casing Diameter (in):	6
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0

Draw Down:	0	Application Date:	18-APR-14
Approved:	18-APR-14	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	55		
Registry ID:	205658	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	MICHAEL THOMPSON
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	619	Installed Date:	Not Reported
Well Depth (ft):	410	Water Level (ft):	300
Casing Depth (ft):	410	Casing Diameter (in):	7
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	10-NOV-04	Approved:	10-NOV-04
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	56		
Registry ID:	620547	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	ROOSEVELT WTR DIST,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	05-MAR-69
Well Depth (ft):	900	Water Level (ft):	365
Casing Depth (ft):	900	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	35
Tested Rate:	35	Draw Down:	0
Application Date:	14-JUN-82	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	40		
DWR #:	55-524542	DEQ Well #:	46205
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	224	Drill Depth (ft):	253
Start Date:	1989/07/18 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB LF01-W08	Basin:	Phoenix AMA
Notes:	SCREEN INTERVAL 182 TO 222 / CASING 4.5" PVC		
Aquifer Type:	Not Reported		
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	40

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

DWR #:	55-516008	DEQ Well #:	46122
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	335	Drill Depth (ft):	335
Start Date:	1986/11/19 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB- LA-02D	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	54		
DWR #:	55-516007	DEQ Well #:	46121
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	338	Drill Depth (ft):	350
Start Date:	1986/11/23 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	WILLIAMS AFB- LA-01	Basin:	Phoenix AMA
Notes:	CASING 10" STEEL	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	54		
DWR #:	55-583571	DEQ Well #:	69300
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	190	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	LF01-W19	Basin:	Phoenix AMA
Notes:	CASING 4" PVC	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	57		
Registry ID:	579639	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	TRW VEHICLE SAFETY SYSTEMS INC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	15-FEB-00
Approved:	18-FEB-00	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID: 58

DWR #:	55-583569	DEQ Well #:	69307
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	LF01-W24	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	59		
DWR #:	Not Reported	DEQ Well #:	69308
Agency:	ADEQ	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	LF01-W28	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS EXTRACTED FOR ANALYSE OF WATER QUALITY AND/OR WATER LEVELS.		
Watershed:	Not Reported		
Well Type:	OBSERVATION WELL IS A CASED WELL DRILLED FOR WATER LEVEL OR WATER QUALITY OBSERVATIONS. DO NO TEST HOLE, OR WATER SUPPLY WELL USED ONLY INCIDENTALLY AS AN OBSERVATION WELL.		

Map ID:	54		
DWR #:	55-913915	DEQ Well #:	81607
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	152
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	LF01-W35S	Basin:	Not Reported
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	Not Reported
Well Type:	Not Reported		

Map ID:	54		
DWR #:	55-913916	DEQ Well #:	81609
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	192
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	LF01-W35M	Basin:	Not Reported
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	Not Reported
Well Type:	Not Reported		

Map ID:	60		
DWR #:	Not Reported	DEQ Well #:	26525
Agency:	ADEQ	Agency Well #:	26525
Well Depth (ft):	0	Drill Depth (ft):	10454
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-06 01ADA	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported

Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	54		
DWR #:	55-913917	DEQ Well #:	81608
Agency:	Not Reported	Agency Well #:	0
Well Depth (ft):	0	Drill Depth (ft):	232
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	LF01-W35D	Basin:	Not Reported
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	Not Reported	Watershed:	Not Reported
Well Type:	Not Reported		

Map ID:	61		
Registry ID:	911151	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	03-OCT-09
Well Depth (ft):	261	Water Level (ft):	140
Casing Depth (ft):	260	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-SEP-09
Approved:	22-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	61		
Registry ID:	911152	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	06-OCT-09
Well Depth (ft):	211	Water Level (ft):	140
Casing Depth (ft):	210	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-SEP-09
Approved:	22-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	59		
Registry ID:	904433	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AIR FORCE REAL PROPERTY AGENCY

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	15-MAR-06
Well Depth (ft):	178	Water Level (ft):	168
Casing Depth (ft):	178	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	13-MAR-06
Approved:	13-MAR-06	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	58		
Registry ID:	904434	Well Type:	SPCL - OTHER
Well Type Group:	OTHER	Owner Name:	AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	16-MAR-06
Well Depth (ft):	155	Water Level (ft):	154
Casing Depth (ft):	155	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	13-MAR-06
Approved:	13-MAR-06	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	62		
Registry ID:	633248	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	POWER RANCHES, INC.
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	01-JAN-67
Well Depth (ft):	780	Water Level (ft):	390
Casing Depth (ft):	0	Casing Diameter (in):	10
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	25	Tested Rate:	25
Draw Down:	0	Application Date:	07-MAY-82
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	63		
Registry ID:	551657	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	JAMES & GWETHLYN SABATINOS
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	369	Installed Date:	21-FEB-96
Well Depth (ft):	600	Water Level (ft):	350
Casing Depth (ft):	600	Casing Diameter (in):	6

Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	31-AUG-95	Approved:	31-AUG-95
Completion:	C	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	64		
Registry ID:	913917	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	UNITED STATES AIR FORCE
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	24-JAN-12
Well Depth (ft):	232	Water Level (ft):	142
Casing Depth (ft):	252	Casing Diameter (in):	0
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-DEC-11
Approved:	22-DEC-11	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	64		
Registry ID:	913916	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	UNITED STATES AIR FORCE
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	25-JAN-12
Well Depth (ft):	192	Water Level (ft):	142
Casing Depth (ft):	192	Casing Diameter (in):	0
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-DEC-11
Approved:	22-DEC-11	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	64		
Registry ID:	913915	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	UNITED STATES AIR FORCE
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	23-JAN-12
Well Depth (ft):	152	Water Level (ft):	140
Casing Depth (ft):	152	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-DEC-11
Approved:	22-DEC-11	Completion:	Not Reported

Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	65		
Registry ID:	913919	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	UNITED STATES AIR FORCE
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	25-JAN-12
Well Depth (ft):	198	Water Level (ft):	149
Casing Depth (ft):	198	Casing Diameter (in):	0
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-DEC-11
Approved:	22-DEC-11	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	65		
Registry ID:	913918	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	UNITED STATES AIR FORCE
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	24-JAN-12
Well Depth (ft):	159	Water Level (ft):	149
Casing Depth (ft):	159	Casing Diameter (in):	0
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-DEC-11
Approved:	22-DEC-11	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	66		
Registry ID:	613581	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	BUCKEYE-CASA GRAND LP
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	25-MAY-51
Well Depth (ft):	1524	Water Level (ft):	0
Casing Depth (ft):	1514	Casing Diameter (in):	20
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	30-APR-82	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	66

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STATE DATABASE WELL INFORMATION

DWR #:	55-613581	DEQ Well #:	26707
Agency:	ADEQ	Agency Well #:	26707
Well Depth (ft):	1524	Drill Depth (ft):	1524
Start Date:	1951/05/25 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 04ADD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	67		
Registry ID:	559493	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	CITY OF MESA
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	Not Reported	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	05-SEP-97
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	67		
Registry ID:	562864	Well Type:	NON-EXEMPT - SERVICE
Well Type Group:	NON-EXEMPT	Owner Name:	MESA, CITY OF
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	28-MAY-98
Well Depth (ft):	1470	Water Level (ft):	352
Casing Depth (ft):	1456	Casing Diameter (in):	20
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	MULTIPLE TURBINE
Pump Power:	ELECTRIC MOTOR > 100 HP	Pump Rate:	1500
Tested Rate:	1500	Draw Down:	15
Application Date:	04-SEP-97	Approved:	12-FEB-98
Completion:	X	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	67		
Registry ID:	606285	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	CITY OF MESA
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	19-JUN-68
Well Depth (ft):	1200	Water Level (ft):	400
Casing Depth (ft):	1180	Casing Diameter (in):	20
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	YES
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	1450	Tested Rate:	0
Draw Down:	0	Application Date:	12-AUG-82

Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	68		
Registry ID:	907913	Well Type:	SPCL - GEOTECHNICAL
Well Type Group:	OTHER	Owner Name:	AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	19-OCT-07
Well Depth (ft):	175	Water Level (ft):	152
Casing Depth (ft):	0	Casing Diameter (in):	10
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	03-OCT-07
Approved:	03-OCT-07	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	68		
Registry ID:	907399	Well Type:	SPCL - GEOTECHNICAL
Well Type Group:	OTHER	Owner Name:	AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	03-AUG-07
Well Depth (ft):	160	Water Level (ft):	155
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	12-JUL-07
Approved:	12-JUL-07	Completion:	A
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	68		
Registry ID:	910309	Well Type:	SPCL - GEOTECHNICAL
Well Type Group:	OTHER	Owner Name:	AIR FORCE REAL PROPERTY AGENCY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	15-JAN-09
Approved:	15-JAN-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID: 67

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

DWR #:	55-606285	DEQ Well #:	26696
Agency:	ADEQ	Agency Well #:	26696
Well Depth (ft):	916	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	DESERT WELLS #14	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	70		
Registry ID:	524542	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	342	Installed Date:	18-JUL-89
Well Depth (ft):	253	Water Level (ft):	223
Casing Depth (ft):	182	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	11-MAY-89
Approved:	Not Reported	Completion:	C
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	71		
DWR #:	Not Reported	DEQ Well #:	26526
Agency:	ADEQ	Agency Well #:	26526
Well Depth (ft):	0	Drill Depth (ft):	9207
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-06 01DAA	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	71		
Registry ID:	203923	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT		
Owner Name:	REBECCA HILL POWER RANCH COMMUNITY ASSOC. INC.		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	04-AUG-04
Well Depth (ft):	880	Water Level (ft):	190
Casing Depth (ft):	880	Casing Diameter (in):	16
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	TURBINE
Pump Power:	ELECTRIC MOTOR > 100 HP	Pump Rate:	1000
Tested Rate:	1000	Draw Down:	118
Application Date:	15-JUL-04	Approved:	19-JUL-04
Completion:	X	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID: 72

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	583566	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEE/ERB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	161	Installed Date:	05-JAN-01
Well Depth (ft):	202	Water Level (ft):	0
Casing Depth (ft):	162	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	26-SEP-00
Approved:	06-NOV-00	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	73		
Registry ID:	591038	Well Type:	SPCL - GEOTECHNICAL
Well Type Group:	OTHER	Owner Name:	TRW VEHICLE SAFETY SYSTEMS INC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	611	Installed Date:	07-JAN-03
Well Depth (ft):	200	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	19-FEB-02
Approved:	26-FEB-02	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	73		
Registry ID:	521841	Well Type:	SPCL - EXPLORATION
Well Type Group:	OTHER	Owner Name:	HOLSUM BAKERY INC,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	319	Installed Date:	02-AUG-88
Well Depth (ft):	125	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	21-JUL-88
Approved:	Not Reported	Completion:	N
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	74		
Registry ID:	915617	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	83	Installed Date:	13-JUN-13

Well Depth (ft):	212	Water Level (ft):	143
Casing Depth (ft):	210	Casing Diameter (in):	6
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	03-JUN-13
Approved:	03-JUN-13	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	74		
Registry ID:	915619	Well Type:	ENV - PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	83	Installed Date:	21-JUN-13
Well Depth (ft):	210	Water Level (ft):	144
Casing Depth (ft):	204	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	03-JUN-13
Approved:	03-JUN-13	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	74		
Registry ID:	915618	Well Type:	ENV - PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	83	Installed Date:	07-JUN-13
Well Depth (ft):	210	Water Level (ft):	144
Casing Depth (ft):	204	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	03-JUN-13
Approved:	03-JUN-13	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	74		
Registry ID:	583571	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEE/ERB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	161	Installed Date:	Not Reported
Well Depth (ft):	190	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0

Draw Down:	0	Application Date:	26-SEP-00
Approved:	06-NOV-00	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	75		
Registry ID:	911184	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	22-OCT-09
Well Depth (ft):	177	Water Level (ft):	139
Casing Depth (ft):	175	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-SEP-09
Approved:	24-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	75		
Registry ID:	911183	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	24-OCT-09
Well Depth (ft):	217	Water Level (ft):	139
Casing Depth (ft):	215	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-SEP-09
Approved:	24-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	76		
Registry ID:	911148	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	01-NOV-09
Well Depth (ft):	207	Water Level (ft):	140
Casing Depth (ft):	200	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-SEP-09
Approved:	22-SEP-09	Completion:	Not Reported

Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	76		
Registry ID:	911149	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	05-OCT-09
Well Depth (ft):	267	Water Level (ft):	140
Casing Depth (ft):	260	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-SEP-09
Approved:	22-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	76		
Registry ID:	524541	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	342	Installed Date:	06-JUL-89
Well Depth (ft):	240	Water Level (ft):	218
Casing Depth (ft):	0	Casing Diameter (in):	4
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	11-MAY-89
Approved:	Not Reported	Completion:	C
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	76		
Registry ID:	583569	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AFCEE/ERB
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	161	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	26-SEP-00
Approved:	06-NOV-00	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	I
Watershed:	UPPER GILA RIVER		

Map ID:	76		

Registry ID:	911150	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	07-OCT-09
Well Depth (ft):	197	Water Level (ft):	140
Casing Depth (ft):	195	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-SEP-09
Approved:	22-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	76		
Registry ID:	911185	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	01-OCT-09
Well Depth (ft):	238	Water Level (ft):	138
Casing Depth (ft):	235	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-SEP-09
Approved:	24-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	77		
Registry ID:	911174	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported
Well Depth (ft):	171	Water Level (ft):	140
Casing Depth (ft):	171	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-SEP-09
Approved:	24-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	77		
Registry ID:	911169	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported
Well Depth (ft):	211	Water Level (ft):	140
Casing Depth (ft):	211	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-SEP-09
Approved:	24-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	77		
Registry ID:	911168	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	06-NOV-09
Well Depth (ft):	216	Water Level (ft):	140
Casing Depth (ft):	260	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-SEP-09
Approved:	24-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	69		
DWR #:	55-613580	DEQ Well #:	26710
Agency:	ADEQ	Agency Well #:	26710
Well Depth (ft):	1524	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 05DAA	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	69		
Registry ID:	613580	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	PECOS SOSSAMAN PARTNERSHIP, LLP
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	Not Reported
Well Depth (ft):	533	Water Level (ft):	382
Casing Depth (ft):	0	Casing Diameter (in):	20
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0

Application Date:	30-APR-82	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	78		
Registry ID:	202095	Well Type:	NON-EXEMPT - SERVICE
Well Type Group:	NON-EXEMPT	Owner Name:	CITY OF MESA
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	06-AUG-04
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	79		
DWR #:	55-610422	DEQ Well #:	26527
Agency:	ADEQ	Agency Well #:	26527
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-06 01DAD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	80		
Registry ID:	640506	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	PAULINE T. TUFFLY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	01-JAN-18
Well Depth (ft):	325	Water Level (ft):	0
Casing Depth (ft):	325	Casing Diameter (in):	12
Casing Type:	OTHER - BLACK STEEL - IRON - SEAMLESS		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	30
Tested Rate:	30	Draw Down:	0
Application Date:	12-JUL-82	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	80		
DWR #:	Not Reported	DEQ Well #:	26712
Agency:	ADEQ	Agency Well #:	26712
Well Depth (ft):	145	Drill Depth (ft):	145

Start Date:	1909/01/01 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 06DAD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	81		
Registry ID:	613587	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	HARRIS CATTLE CO
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	28-DEC-50
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	30-APR-82	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	82		
Registry ID:	559402	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	TRW VEHICLE SAFETY,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	473	Installed Date:	04-OCT-96
Well Depth (ft):	85	Water Level (ft):	75
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	08-AUG-96
Approved:	Not Reported	Completion:	N
Well Cancelled:	Y	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	83		
Registry ID:	579640	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	TRW VEHICLE SAFETY SYSTEMS INC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	15-FEB-00
Approved:	18-FEB-00	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID: 84

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	511366	Well Type:	NON-EXEMPT - WITHDRAWAL PERMIT
Well Type Group:	NON-EXEMPT	Owner Name:	CIRCLE G RANCHES,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	05-JUN-85
Approved:	Not Reported	Completion:	N
Well Cancelled:	Y	Drill Log:	N
Watershed:	UPPER GILA RIVER		

Map ID:	85		
DWR #:	Not Reported	DEQ Well #:	26528
Agency:	ADEQ	Agency Well #:	26528
Well Depth (ft):	802	Drill Depth (ft):	802
Start Date:	1955/04/30 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-06 01DDA	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS NOT BEING REMOVED FOR ONE OF THE OTHER DESCRIBED PURPOSES. EX: TEST HOLE, OIL OR GAS V DRAINAGE, OBSERVATION, OR WASTE DISPOSAL WELLS ARE IN THIS CATEGORY.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	86		
Registry ID:	911167	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	30-OCT-09
Well Depth (ft):	171	Water Level (ft):	138
Casing Depth (ft):	170	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-SEP-09
Approved:	24-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	86		
Registry ID:	911166	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported
Well Depth (ft):	211	Water Level (ft):	139
Casing Depth (ft):	211	Casing Diameter (in):	5

Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-SEP-09
Approved:	24-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	87		
Registry ID:	911165	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	06-OCT-09
Well Depth (ft):	198	Water Level (ft):	140
Casing Depth (ft):	195	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-SEP-09
Approved:	24-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	87		
Registry ID:	911162	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	27-OCT-09
Well Depth (ft):	238	Water Level (ft):	140
Casing Depth (ft):	234	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-SEP-09
Approved:	22-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	88		
Registry ID:	915615	Well Type:	ENV - PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	83	Installed Date:	06-JUN-13
Well Depth (ft):	250	Water Level (ft):	144
Casing Depth (ft):	248	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0

Draw Down:	0	Application Date:	03-JUN-13
Approved:	03-JUN-13	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	88		
Registry ID:	915614	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	83	Installed Date:	13-JUN-13
Well Depth (ft):	250	Water Level (ft):	143
Casing Depth (ft):	248	Casing Diameter (in):	6
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	03-JUN-13
Approved:	03-JUN-13	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	88		
Registry ID:	915616	Well Type:	ENV - PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	AIR FORCE CIVIL ENGINEER CENTER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	83	Installed Date:	20-JUN-13
Well Depth (ft):	250	Water Level (ft):	144
Casing Depth (ft):	248	Casing Diameter (in):	2
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	03-JUN-13
Approved:	03-JUN-13	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	88		
Registry ID:	911154	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	09-OCT-09
Well Depth (ft):	157	Water Level (ft):	137
Casing Depth (ft):	155	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-SEP-09
Approved:	22-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID: 88

Registry ID:	911153	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	13-OCT-09
Well Depth (ft):	261	Water Level (ft):	140
Casing Depth (ft):	260	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-SEP-09
Approved:	22-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	89		
Registry ID:	911155	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	15-OCT-09
Well Depth (ft):	238	Water Level (ft):	140
Casing Depth (ft):	235	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-SEP-09
Approved:	22-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	89		
Registry ID:	911156	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	23-OCT-09
Well Depth (ft):	158	Water Level (ft):	139
Casing Depth (ft):	155	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-SEP-09
Approved:	22-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	90		
Registry ID:	911160	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		

Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	28-OCT-09
Well Depth (ft):	231	Water Level (ft):	139
Casing Depth (ft):	230	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-SEP-09
Approved:	22-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	90		
Registry ID:	911161	Well Type:	ENV - MONITOR
Well Type Group:	MONITOR		
Owner Name:	BILL LOPP C/O DEPT. OF THE AIR FORCE AFCEE		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	03-NOV-09
Well Depth (ft):	218	Water Level (ft):	140
Casing Depth (ft):	216	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	22-SEP-09
Approved:	22-SEP-09	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	91		
DWR #:	55-613587	DEQ Well #:	26704
Agency:	ADEQ	Agency Well #:	26704
Well Depth (ft):	596	Drill Depth (ft):	596
Start Date:	1950/12/01 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 03DDA	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	92		
Registry ID:	516011	Well Type:	ENV - MONITOR OR PIEZOMETER
Well Type Group:	MONITOR	Owner Name:	WILLIAMS AFB,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	314	Installed Date:	18-DEC-86
Well Depth (ft):	338	Water Level (ft):	0
Casing Depth (ft):	275	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	SUBMERSIBLE
Pump Power:	ELECTRIC MOTOR 1 - 5 HP	Pump Rate:	10
Tested Rate:	0	Draw Down:	0

Application Date:	05-NOV-86	Approved:	Not Reported
Completion:	X	Well Cancelled:	Y
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	93		
Registry ID:	481767	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	DBS PROPERTIES PARTNERSHIP LLP
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	15-APR-04
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	94		
Registry ID:	209138	Well Type:	SPCL - GEOTECHNICAL
Well Type Group:	OTHER	Owner Name:	SCHWANS FOOD COMPANY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	23-SEP-05
Well Depth (ft):	195	Water Level (ft):	186
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	24-AUG-05
Approved:	16-SEP-05	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	96		
DWR #:	55-613579	DEQ Well #:	26711
Agency:	ADEQ	Agency Well #:	26711
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 05DDD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	96		
Registry ID:	613579	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	PECOS SOSSAMAN PARTNERSHIP
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY

AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	14-MAR-12
Well Depth (ft):	445	Water Level (ft):	194
Casing Depth (ft):	445	Casing Diameter (in):	16
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	30-APR-82	Approved:	22-FEB-12
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	97		
DWR #:	Not Reported	DEQ Well #:	26708
Agency:	ADEQ	Agency Well #:	26708
Well Depth (ft):	500	Drill Depth (ft):	500
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 04CDD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	97		
Registry ID:	511367	Well Type:	NON-EXEMPT - NON-SERVICE
Well Type Group:	NON-EXEMPT	Owner Name:	CIRCLE G RANCHES,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	05-JUN-85
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	97		
Registry ID:	629594	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	VIP CONSTRUCTION, INC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	01-JAN-63
Well Depth (ft):	1000	Water Level (ft):	450
Casing Depth (ft):	0	Casing Diameter (in):	16
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	1500
Tested Rate:	0	Draw Down:	0
Application Date:	14-JUN-82	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	98

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	625008	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	BUCKEYE-CASA GRAND LP
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	YES
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	14-JUN-82
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	95		
DWR #:	55-625010	DEQ Well #:	26703
Agency:	ADEQ	Agency Well #:	26703
Well Depth (ft):	520	Drill Depth (ft):	520
Start Date:	1926/04/01 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 03CDD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	95		
Registry ID:	625010	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	ELLSWORTH ROAD 160 LLC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	16-MAR-53
Well Depth (ft):	690	Water Level (ft):	0
Casing Depth (ft):	690	Casing Diameter (in):	20
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	14-JUN-82	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	99		
DWR #:	55-613586	DEQ Well #:	26706
Agency:	ADEQ	Agency Well #:	26706
Well Depth (ft):	600	Drill Depth (ft):	600
Start Date:	1950/06/01 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 03DDD2	Basin:	Phoenix AMA
Notes:	HBOP, N HAS WIRE TIED OFF	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID: 99

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

DWR #:	Not Reported	DEQ Well #:	26705
Agency:	ADEQ	Agency Well #:	26705
Well Depth (ft):	290	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 03DDD1	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS NOT BEING REMOVED FOR ONE OF THE OTHER DESCRIBED PURPOSES. EX: TEST HOLE, OIL OR GAS V DRAINAGE, OBSERVATION, OR WASTE DISPOSAL WELLS ARE IN THIS CATEGORY.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	99		
Registry ID:	613586	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	HARRIS CATTLE CO
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	27-JUN-50
Well Depth (ft):	0	Water Level (ft):	470
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	30-APR-82	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	100		
DWR #:	55-607983	DEQ Well #:	26699
Agency:	ADEQ	Agency Well #:	26699
Well Depth (ft):	1005	Drill Depth (ft):	1005
Start Date:	1951/07/23 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 02CDD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	100		
Registry ID:	607983	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	BARNEY FARMS,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	01-JAN-50
Well Depth (ft):	1005	Water Level (ft):	440
Casing Depth (ft):	1005	Casing Diameter (in):	20
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	1400
Tested Rate:	1400	Draw Down:	0
Application Date:	14-MAY-82	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID: 101

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	615226	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	AZ STATE LAND DEPT,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	01-JAN-73
Well Depth (ft):	1300	Water Level (ft):	650
Casing Depth (ft):	1200	Casing Diameter (in):	16
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	1000
Tested Rate:	1000	Draw Down:	0
Application Date:	14-JUN-82	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	102		
DWR #:	55-615227	DEQ Well #:	26701
Agency:	ADEQ	Agency Well #:	26701
Well Depth (ft):	1010	Drill Depth (ft):	1010
Start Date:	1961/11/01 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 02DDD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	102		
Registry ID:	615227	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	AZ STATE LAND DEPT,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	01-JAN-61
Well Depth (ft):	1010	Water Level (ft):	650
Casing Depth (ft):	990	Casing Diameter (in):	20
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	1530
Tested Rate:	1530	Draw Down:	0
Application Date:	14-JUN-82	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	101		
DWR #:	Not Reported	DEQ Well #:	26700
Agency:	ADEQ	Agency Well #:	26700
Well Depth (ft):	1030	Drill Depth (ft):	1030
Start Date:	1974/01/01 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 02DCD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID: 103

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

DWR #:	55-606286	DEQ Well #:	26697
Agency:	ADEQ	Agency Well #:	26697
Well Depth (ft):	848	Drill Depth (ft):	848
Start Date:	1950/11/30 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 01CCD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	103		
Registry ID:	606286	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	HOLSUM BAKERY INC,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	30-NOV-50
Well Depth (ft):	848	Water Level (ft):	460
Casing Depth (ft):	833	Casing Diameter (in):	20
Casing Type:	WALLED OR SHORED	RGR Pump Data:	YES
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	1300	Tested Rate:	1300
Draw Down:	0	Application Date:	29-APR-82
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	104		
Registry ID:	606287	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	MESA, CITY OF
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	185	Installed Date:	02-DEC-50
Well Depth (ft):	782	Water Level (ft):	408
Casing Depth (ft):	782	Casing Diameter (in):	20
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	1400
Tested Rate:	1400	Draw Down:	0
Application Date:	29-APR-82	Approved:	Not Reported
Completion:	A	Well Cancelled:	Y
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	104		
Registry ID:	564333	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	CITY OF MESA
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	185	Installed Date:	29-MAR-98
Well Depth (ft):	1245	Water Level (ft):	178
Casing Depth (ft):	1225	Casing Diameter (in):	34
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	MULTIPLE TURBINE
Pump Power:	ELECTRIC MOTOR > 100 HP	Pump Rate:	1400
Tested Rate:	1780	Draw Down:	21

Application Date:	17-NOV-97	Approved:	18-NOV-97
Completion:	X	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	104		
DWR #:	55-606287	DEQ Well #:	26698
Agency:	ADEQ	Agency Well #:	26698
Well Depth (ft):	782	Drill Depth (ft):	782
Start Date:	1950/12/02 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 01DDD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	107		
Registry ID:	613292	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	FULTON HOMES
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	215	Installed Date:	01-NOV-58
Well Depth (ft):	1300	Water Level (ft):	420
Casing Depth (ft):	1300	Casing Diameter (in):	20
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	1200
Tested Rate:	1200	Draw Down:	0
Application Date:	10-JUN-82	Approved:	Not Reported
Completion:	A	Well Cancelled:	Y
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	107		
DWR #:	Not Reported	DEQ Well #:	26713
Agency:	ADEQ	Agency Well #:	26713
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 07AAA	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	108		
Registry ID:	905241	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	VLACHOS ENTERPRISES LLC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	05-MAR-07
Well Depth (ft):	520	Water Level (ft):	0
Casing Depth (ft):	500	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported

Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	20-JUL-06
Approved:	20-JUL-06	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	106		
Registry ID:	215459	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	VLACHOS ENTERPRISES LLC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	Not Reported	Installed Date:	19-MAY-08
Well Depth (ft):	520	Water Level (ft):	0
Casing Depth (ft):	517	Casing Diameter (in):	18
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	21-MAY-07	Approved:	27-JUN-07
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	109		
Registry ID:	552107	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	KLOTZ, RICHARD,D
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	14-SEP-95
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	110		
Registry ID:	633247	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	POWER ENTERPRISES,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	Not Reported
Well Depth (ft):	20	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	25	Tested Rate:	25
Draw Down:	0	Application Date:	07-MAY-82
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID: 110

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	481383	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT		
Owner Name:	Sun Power Properties/LLC Power North/ LLC		
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	06-JAN-03
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	110		
Registry ID:	635348	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	SUNPOWER PROPERTIES LLC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	336
Casing Depth (ft):	0	Casing Diameter (in):	6
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	10
Tested Rate:	10	Draw Down:	0
Application Date:	07-JUN-82	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	110		
Registry ID:	592223	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	POWER NORTH LLC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	7	Installed Date:	Not Reported
Well Depth (ft):	850	Water Level (ft):	199
Casing Depth (ft):	850	Casing Diameter (in):	16
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	24-MAY-02	Approved:	24-MAY-02
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	110		
Registry ID:	607296	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	POWER RANCH COMMUNITY ASSOCIATION
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55

Driller License #:	215	Installed Date:	Not Reported
Well Depth (ft):	800	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	20
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	YES
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	830	Tested Rate:	0
Draw Down:	0	Application Date:	30-APR-82
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	110		
DWR #:	55-607296	DEQ Well #:	26586
Agency:	ADEQ	Agency Well #:	26586
Well Depth (ft):	680	Drill Depth (ft):	680
Start Date:	1958/07/01 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-06 12ADA2	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	110		
DWR #:	Not Reported	DEQ Well #:	26585
Agency:	ADEQ	Agency Well #:	26585
Well Depth (ft):	606	Drill Depth (ft):	606
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-06 12ADA1	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	111		
Registry ID:	507059	Well Type:	EXEMPT - DOMESTIC STOCK
Well Type Group:	EXEMPT	Owner Name:	NARCISO & DONNA MACIA
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	344	Installed Date:	26-JAN-84
Well Depth (ft):	320	Water Level (ft):	255
Casing Depth (ft):	310	Casing Diameter (in):	6
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	SUBMERSIBLE	Pump Power:	ELECTRIC MOTOR 1 - 5 HP
Pump Rate:	12	Tested Rate:	12
Draw Down:	15	Application Date:	25-JAN-84
Approved:	Not Reported	Completion:	X
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	111		
Registry ID:	226106	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	METZGER FAMILY TRUST

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	643	Installed Date:	16-JUN-16
Well Depth (ft):	445	Water Level (ft):	150
Casing Depth (ft):	445	Casing Diameter (in):	5
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	SUBMERSIBLE
Pump Power:	ELECTRIC MOTOR 1 - 5 HP	Pump Rate:	15
Tested Rate:	15	Draw Down:	0
Application Date:	03-JUN-16	Approved:	06-JUN-16
Completion:	X	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	112		
Registry ID:	539935	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	VLACHOS ENTERPRISES LLC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	113	Installed Date:	30-OCT-93
Well Depth (ft):	703	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	SUBMERSIBLE
Pump Power:	ELECTRIC MOTOR 6 - 15 HP	Pump Rate:	30
Tested Rate:	200	Draw Down:	2
Application Date:	03-OCT-96	Approved:	Not Reported
Completion:	X	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	113		
DWR #:	Not Reported	DEQ Well #:	6085
Agency:	ADEQ	Agency Well #:	6085
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	IVAN CLUFF	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	113		
DWR #:	55-613293	DEQ Well #:	26714
Agency:	ADEQ	Agency Well #:	26714
Well Depth (ft):	1608	Drill Depth (ft):	1608
Start Date:	1958/01/01 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 07ADD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID: 113

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	481812	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	FULTON HOMES
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	215	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	01-SEP-04
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	113		
Registry ID:	613294	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	FULTON HOMES
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	215	Installed Date:	Not Reported
Well Depth (ft):	550	Water Level (ft):	285
Casing Depth (ft):	550	Casing Diameter (in):	20
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	35
Tested Rate:	35	Draw Down:	0
Application Date:	10-JUN-82	Approved:	Not Reported
Completion:	A	Well Cancelled:	Y
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	114		
Registry ID:	560215	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	ASHER D. FISHGOLD
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	03-JAN-96
Well Depth (ft):	470	Water Level (ft):	230
Casing Depth (ft):	470	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	08-NOV-96	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	114		
Registry ID:	569911	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	CARLOS HERNANDEZ
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	19-OCT-98

Well Depth (ft):	400	Water Level (ft):	140
Casing Depth (ft):	400	Casing Diameter (in):	10
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	24-JUL-98	Approved:	31-JUL-98
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	115		
Registry ID:	576148	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	SALT RIVER PROJECT
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	18-SEP-99
Well Depth (ft):	440	Water Level (ft):	0
Casing Depth (ft):	440	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	09-JUL-99
Approved:	20-JUL-99	Completion:	X
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	116		
Registry ID:	919239	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	CRAIG TANNER
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	619	Installed Date:	Not Reported
Well Depth (ft):	600	Water Level (ft):	214
Casing Depth (ft):	600	Casing Diameter (in):	9
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	05-MAR-16	Approved:	05-MAR-16
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	117		
DWR #:	55-620865	DEQ Well #:	26717
Agency:	ADEQ	Agency Well #:	26717
Well Depth (ft):	900	Drill Depth (ft):	900
Start Date:	1937/01/01 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 09ADD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	118

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	625011	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	VLACHOS ENTERPRISES LLC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	01-SEP-51
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	YES
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	14-JUN-82
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	118		
Registry ID:	625012	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	VLACHOS ENTERPRISES LLC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	14-JUN-82
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	118		
DWR #:	Not Reported	DEQ Well #:	26724
Agency:	ADEQ	Agency Well #:	26724
Well Depth (ft):	760	Drill Depth (ft):	760
Start Date:	1951/12/07 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 11BDD1	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS NOT BEING REMOVED FOR ONE OF THE OTHER DESCRIBED PURPOSES. EX: TEST HOLE, OIL OR GAS V DRAINAGE, OBSERVATION, OR WASTE DISPOSAL WELLS ARE IN THIS CATEGORY.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	118		
DWR #:	55-625011	DEQ Well #:	26725
Agency:	ADEQ	Agency Well #:	26725
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 11BDD2	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID: 120

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	620865	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	RAYBURN, LEO,G
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	01-JAN-35
Well Depth (ft):	860	Water Level (ft):	535
Casing Depth (ft):	860	Casing Diameter (in):	12
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	YES
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	1150	Tested Rate:	1150
Draw Down:	0	Application Date:	14-JUN-82
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	113		
Registry ID:	209407	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	TOWN OF QUEEN CREEK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	215	Installed Date:	25-SEP-06
Well Depth (ft):	1122	Water Level (ft):	283
Casing Depth (ft):	1112	Casing Diameter (in):	12
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	19-OCT-05	Approved:	03-NOV-05
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	113		
Registry ID:	210681	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	QUEEN CREEK WATER COMPANY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	215	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	11-JAN-06
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	113		
Registry ID:	613293	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	QUEEN CREEK WATER COMPANY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	215	Installed Date:	01-JAN-61

Well Depth (ft):	1608	Water Level (ft):	436
Casing Depth (ft):	1498	Casing Diameter (in):	20
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	TURBINE
Pump Power:	ELECTRIC MOTOR > 100 HP	Pump Rate:	2000
Tested Rate:	2000	Draw Down:	33
Application Date:	10-JUN-82	Approved:	14-MAY-58
Completion:	X	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	122		
Registry ID:	607840	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	QCEL160 LLC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	01-JAN-78
Well Depth (ft):	1583	Water Level (ft):	584
Casing Depth (ft):	1583	Casing Diameter (in):	18
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	1400
Tested Rate:	1400	Draw Down:	0
Application Date:	14-MAY-82	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	123		
DWR #:	55-612286	DEQ Well #:	26715
Agency:	ADEQ	Agency Well #:	26715
Well Depth (ft):	1208	Drill Depth (ft):	1208
Start Date:	1981/04/23 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 08DDA	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	123		
Registry ID:	481985	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	PULTE HOME CORP
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	572	Installed Date:	Not Reported
Well Depth (ft):	20	Water Level (ft):	0
Casing Depth (ft):	16	Casing Diameter (in):	16
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	02-SEP-05	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID: 123

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	86644		
Well Type:	NON-EXEMPT - REPLACEMENT WELL IN NEW LOCATION		
Well Type Group:	NON-EXEMPT	Owner Name:	PULTE HOME CORP
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	572	Installed Date:	01-JAN-81
Well Depth (ft):	1208	Water Level (ft):	450
Casing Depth (ft):	1195	Casing Diameter (in):	16
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	0
Tested Rate:	1641	Draw Down:	162
Application Date:	13-JAN-81	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	123		
Registry ID:	612286	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	ALBA FOUNDATION INC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	23-APR-81
Well Depth (ft):	1208	Water Level (ft):	450
Casing Depth (ft):	1208	Casing Diameter (in):	16
Casing Type:	SANDPOINT	RGR Pump Data:	YES
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	1400	Tested Rate:	0
Draw Down:	0	Application Date:	24-MAY-82
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	124		
Registry ID:	628854	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	TOWN OF QUEEN CREEK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	360	Installed Date:	Not Reported
Well Depth (ft):	1000	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	20
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	YES
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	15-JUN-82
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	125		
DWR #:	Not Reported	DEQ Well #:	26720
Agency:	ADEQ	Agency Well #:	26720
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00

Station Alt Name:	D-02-07 10CDA	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	127		
DWR #:	55-612285	DEQ Well #:	26716
Agency:	ADEQ	Agency Well #:	26716
Well Depth (ft):	928	Drill Depth (ft):	928
Start Date:	1957/06/18 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 08DDD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	127		
Registry ID:	612285	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	ALBA FOUNDATION INC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	215	Installed Date:	01-JAN-57
Well Depth (ft):	928	Water Level (ft):	450
Casing Depth (ft):	928	Casing Diameter (in):	20
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	1400
Tested Rate:	0	Draw Down:	0
Application Date:	24-MAY-82	Approved:	Not Reported
Completion:	A	Well Cancelled:	Y
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	128		
Registry ID:	803070	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	RITE OF PASSAGE INC.
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	01-JAN-63
Well Depth (ft):	1025	Water Level (ft):	440
Casing Depth (ft):	650	Casing Diameter (in):	12
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	140
Tested Rate:	0	Draw Down:	0
Application Date:	02-OCT-85	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	128		
DWR #:	Not Reported	DEQ Well #:	26718
Agency:	ADEQ	Agency Well #:	26718

Well Depth (ft):	1200	Drill Depth (ft):	1200
Start Date:	1972/01/18 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 09CDC	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	129		
DWR #:	Not Reported	DEQ Well #:	26721
Agency:	ADEQ	Agency Well #:	26721
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 10CDC	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	126		
DWR #:	Not Reported	DEQ Well #:	26719
Agency:	ADEQ	Agency Well #:	26719
Well Depth (ft):	1000	Drill Depth (ft):	1000
Start Date:	1939/09/06 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 09DDD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	130		
DWR #:	Not Reported	DEQ Well #:	26723
Agency:	ADEQ	Agency Well #:	26723
Well Depth (ft):	802	Drill Depth (ft):	802
Start Date:	1952/01/01 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 10CDD2	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	130		
DWR #:	Not Reported	DEQ Well #:	26722
Agency:	ADEQ	Agency Well #:	26722
Well Depth (ft):	440	Drill Depth (ft):	440
Start Date:	1917/01/01 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 10CDD1	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	WATER IS NOT BEING REMOVED FOR ONE OF THE OTHER DESCRIBED PURPOSES. EX: TEST HOLE, OIL OR GAS W DRAINAGE, OBSERVATION, OR WASTE DISPOSAL WELLS ARE IN THIS CATEGORY.		
Watershed:	MIDDLE GILA		
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID: 130

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Registry ID:	607838	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	QCEL160 LLC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	20
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	900
Tested Rate:	900	Draw Down:	0
Application Date:	14-MAY-82	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	130		
Registry ID:	607839	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	QCEL160 LLC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	Not Reported
Well Depth (ft):	912	Water Level (ft):	690
Casing Depth (ft):	912	Casing Diameter (in):	20
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	YES
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	900	Tested Rate:	0
Draw Down:	0	Application Date:	14-MAY-82
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	131		
Registry ID:	803069	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	RITE OF PASSAGE INC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	01-JAN-57
Well Depth (ft):	875	Water Level (ft):	310
Casing Depth (ft):	875	Casing Diameter (in):	20
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	900
Tested Rate:	0	Draw Down:	0
Application Date:	02-OCT-85	Approved:	Not Reported
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	132		
DWR #:	55-600236	DEQ Well #:	26740
Agency:	ADEQ	Agency Well #:	26740
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 15BBA	Basin:	Phoenix AMA

Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	132		
Registry ID:	600236	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	QUEEN CREEK SCHOOL DISTRICT
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	239	Installed Date:	26-JUL-48
Well Depth (ft):	728	Water Level (ft):	0
Casing Depth (ft):	540	Casing Diameter (in):	16
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	YES
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	26-OCT-81
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	N
Watershed:	UPPER GILA RIVER		

Map ID:	133		
DWR #:	55-612284	DEQ Well #:	26750
Agency:	ADEQ	Agency Well #:	26750
Well Depth (ft):	1205	Drill Depth (ft):	1205
Start Date:	1965/01/01 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 17AAD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	133		
Registry ID:	612284	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	ALBA FOUNDATION INC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	215	Installed Date:	01-JAN-48
Well Depth (ft):	1205	Water Level (ft):	450
Casing Depth (ft):	1205	Casing Diameter (in):	16
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	1300
Tested Rate:	0	Draw Down:	0
Application Date:	24-MAY-82	Approved:	Not Reported
Completion:	A	Well Cancelled:	Y
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	134		
DWR #:	Not Reported	DEQ Well #:	26744
Agency:	ADEQ	Agency Well #:	26744
Well Depth (ft):	0	Drill Depth (ft):	0

Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 16BAD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	136		
Registry ID:	919109	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	RUSDON RAY
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	643	Installed Date:	Not Reported
Well Depth (ft):	540	Water Level (ft):	170
Casing Depth (ft):	540	Casing Diameter (in):	5
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	03-FEB-16	Approved:	03-FEB-16
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	135		
DWR #:	Not Reported	DEQ Well #:	26751
Agency:	ADEQ	Agency Well #:	26751
Well Depth (ft):	601	Drill Depth (ft):	601
Start Date:	1948/01/01 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 17ADA	Basin:	Phoenix AMA
Notes:	DESTROYED.	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	137		
Registry ID:	227393	Well Type:	NON-EXEMPT - SERVICE
Well Type Group:	NON-EXEMPT	Owner Name:	TOWN OF QUEEN CREEK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	08-FEB-18
Well Depth (ft):	1200	Water Level (ft):	249
Casing Depth (ft):	1020	Casing Diameter (in):	16
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	NO	Pump Type:	Not Reported
Pump Power:	Not Reported	Pump Rate:	0
Tested Rate:	0	Draw Down:	0
Application Date:	30-MAY-17	Approved:	05-MAY-17
Completion:	Not Reported	Well Cancelled:	Not Reported
Drill Log:	X	Watershed:	UPPER GILA RIVER

Map ID:	138		
Registry ID:	627083	Well Type:	NON-EXEMPT

Well Type Group:	NON-EXEMPT	Owner Name:	KEVIN P LLC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	215	Installed Date:	25-MAR-53
Well Depth (ft):	700	Water Level (ft):	450
Casing Depth (ft):	700	Casing Diameter (in):	20
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	1400
Tested Rate:	1400	Draw Down:	0
Application Date:	14-JUN-82	Approved:	Not Reported
Completion:	A	Well Cancelled:	Y
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	138		
DWR #:	55-627083	DEQ Well #:	26743
Agency:	ADEQ	Agency Well #:	26743
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 16ADD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	139		
Registry ID:	232676	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	2015 BAWDEN LIVING TRUST
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	701	Installed Date:	03-MAR-21
Well Depth (ft):	520	Water Level (ft):	189
Casing Depth (ft):	520	Casing Diameter (in):	5
Casing Type:	PLASTIC OR PVC	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	25-JUL-20
Approved:	03-SEP-20	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	X
Watershed:	UPPER GILA RIVER		

Map ID:	140		
Registry ID:	606874	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	TEN FORTIES WT USERS,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	07-MAY-82
Approved:	Not Reported	Completion:	Not Reported

Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	140		
Registry ID:	607060	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	BAHA PROPERTIES, L.L.C.
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	07-MAY-82
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	142		
DWR #:	55-801577	DEQ Well #:	26753
Agency:	ADEQ	Agency Well #:	26753
Well Depth (ft):	610	Drill Depth (ft):	0
Start Date:	1945/10/11 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 17DDD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	142		
Registry ID:	801578	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	LANGLEY HAWES LLC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	01-JAN-65
Well Depth (ft):	660	Water Level (ft):	376
Casing Depth (ft):	660	Casing Diameter (in):	20
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	1520
Tested Rate:	1520	Draw Down:	0
Application Date:	11-JUN-84	Approved:	Not Reported
Completion:	X	Well Cancelled:	Not Reported
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	143		
Registry ID:	609474	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	TAYLOR MORRISON / ARIZONA INC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55

Driller License #:	215	Installed Date:	01-JUL-58
Well Depth (ft):	750	Water Level (ft):	510
Casing Depth (ft):	742	Casing Diameter (in):	12
Casing Type:	OTHER - BLACK STEEL - IRON - SEAMLESS		
RGR Pump Data:	YES	Pump Type:	NO PUMP CODE LISTED
Pump Power:	NO POWER CODE LISTED	Pump Rate:	450
Tested Rate:	450	Draw Down:	0
Application Date:	12-MAY-82	Approved:	Not Reported
Completion:	A	Well Cancelled:	Y
Drill Log:	Not Reported	Watershed:	UPPER GILA RIVER

Map ID:	143		
DWR #:	Not Reported	DEQ Well #:	26745
Agency:	ADEQ	Agency Well #:	26745
Well Depth (ft):	300	Drill Depth (ft):	300
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 16CDD1	Basin:	Phoenix AMA
Notes:	DESTROYED.	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	144		
DWR #:	Not Reported	DEQ Well #:	6086
Agency:	ADEQ	Agency Well #:	6086
Well Depth (ft):	890	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	QUEEN CREEK WATER	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	145		
DWR #:	55-626051	DEQ Well #:	26747
Agency:	ADEQ	Agency Well #:	26747
Well Depth (ft):	1470	Drill Depth (ft):	1470
Start Date:	1973/10/07 07:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 16DCD	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	144		
Registry ID:	626051	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	TOWN OF QUEEN CREEK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	Not Reported
Well Depth (ft):	1000	Water Level (ft):	700
Casing Depth (ft):	1000	Casing Diameter (in):	18
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	YES

Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	1200	Tested Rate:	1200
Draw Down:	0	Application Date:	14-JUN-82
Approved:	Not Reported	Completion:	Not Reported
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	141		
Registry ID:	482191	Well Type:	EXEMPT
Well Type Group:	EXEMPT	Owner Name:	TOWN OF QUEEN CREEK
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	78	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	Not Reported	RGR Pump Data:	NO
Pump Type:	Not Reported	Pump Power:	Not Reported
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	01-JAN-80
Approved:	Not Reported	Completion:	A
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	141		
Registry ID:	626052	Well Type:	NON-EXEMPT
Well Type Group:	NON-EXEMPT	Owner Name:	VICTORIA LUND INVESTMENT GROUP LLC
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	0	Installed Date:	Not Reported
Well Depth (ft):	1000	Water Level (ft):	700
Casing Depth (ft):	1000	Casing Diameter (in):	18
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	YES
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	1000	Tested Rate:	1000
Draw Down:	0	Application Date:	14-JUN-82
Approved:	Not Reported	Completion:	X
Well Cancelled:	Not Reported	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	141		
DWR #:	55-626052	DEQ Well #:	26749
Agency:	ADEQ	Agency Well #:	26749
Well Depth (ft):	766	Drill Depth (ft):	766
Start Date:	1952/01/01 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 16DDD2	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID: 141

DWR #:	Not Reported	DEQ Well #:	26748
Agency:	ADEQ	Agency Well #:	26748
Well Depth (ft):	420	Drill Depth (ft):	420
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	D-02-07 16DDD1	Basin:	Phoenix AMA
Notes:	DESTROYED.	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	143		
DWR #:	55-609474	DEQ Well #:	26746
Agency:	ADEQ	Agency Well #:	26746
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1958/01/01 08:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	QUEEN CREEK #16	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	147		
DWR #:	Not Reported	DEQ Well #:	6084
Agency:	ADEQ	Agency Well #:	6084
Well Depth (ft):	0	Drill Depth (ft):	0
Start Date:	1970/01/01 00:00:00+00	End Date:	1970/01/01 00:00:00+00
Station Alt Name:	QUEEN CREEK WATER	Basin:	Phoenix AMA
Notes:	Not Reported	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	148		
Registry ID:	552854	Well Type:	SPCL - EXPLORATION
Well Type Group:	OTHER	Owner Name:	PHOENIX FUEL CO,
Basin:	PHOENIX AMA	Subbasin:	EAST SALT RIVER VALLEY
AMA or INA:	PHOENIX	Program:	55
Driller License #:	269	Installed Date:	Not Reported
Well Depth (ft):	0	Water Level (ft):	0
Casing Depth (ft):	0	Casing Diameter (in):	0
Casing Type:	NO CASING CODE LISTED	RGR Pump Data:	NO
Pump Type:	NO PUMP CODE LISTED	Pump Power:	NO POWER CODE LISTED
Pump Rate:	0	Tested Rate:	0
Draw Down:	0	Application Date:	30-OCT-95
Approved:	Not Reported	Completion:	N
Well Cancelled:	Y	Drill Log:	Not Reported
Watershed:	UPPER GILA RIVER		

Map ID:	149		
DWR #:	55-609473	DEQ Well #:	26770
Agency:	ADEQ	Agency Well #:	26770
Well Depth (ft):	606	Drill Depth (ft):	606
Start Date:	1946/10/22 07:00:00+00	End Date:	1970/01/01 00:00:00+00

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Station Alt Name:	D-02-07 22BBC	Basin:	Phoenix AMA
Notes:	NO PUMP AS OF 11191991	Aquifer Type:	Not Reported
Water Use:	SITE WATER USE IS UNKNOWN	Watershed:	MIDDLE GILA
Well Type:	WELL, FOR SINGLE WELLS OTHER THAN WELLS OF THE COLLECTOR OR RANNEY TYPE		

Map ID:	1		
Permit #:	AZOGCC:0611	API #:	02-013-90010
Well Status:	Abandoned plugged	Status Date:	01-NOV-10
Well Type:	O&Gexplor	Well Name:	Cam-Roy R and D 2 Power Ranches
Lease Name:	Power Ranches	Alternate Name:	Not Reported
Commodity:	GeothermalEnergy	Operator:	Cam-Roy R and D (Geothermal Kinetics)
Mineral Owner:	Power Ranches	Borehole Name:	Not Reported
Spud Date:	13-MAY-73	Drill Complete:	23-AUG-73
Drilling Method:	Not Reported	Well Field:	inapplicable
Well Function:	exploration	Depth Reference:	KB
Length Unit:	ft	Bit Diameter:	8.5
Related Records:	| Well Folder 0611, 0611.pdf | Graphic Lithologic Log, 0611AMST.tif | Borehole Compensated Acoustilog (2in to 100ft), 0611BHCS.tif | Borehole Compensated Acoustilog (5in to 100ft), 0611BHCS1.tif | Gamma Ray-Neutron Log (2in to 100ft), 0611GRN.tif | Gamm		
URL:	http://ogviewer.azdeq.gov/resources/links/AZOGCC_0611.html		

Map ID:	2		
Permit #:	AZOGCC:0605	API #:	02-013-90009
Well Status:	Abandoned plugged	Status Date:	01-NOV-10
Well Type:	O&Gexplor	Well Name:	Cam-Roy R and D 1 Power Ranches
Lease Name:	Power Ranches	Alternate Name:	Not Reported
Commodity:	GeothermalEnergy	Operator:	Cam-Roy R and D (Geothermal Kinetics)
Mineral Owner:	Power Ranches	Borehole Name:	Not Reported
Spud Date:	31-JAN-73	Drill Complete:	08-APR-73
Drilling Method:	Not Reported	Well Field:	Wildcat
Well Function:	exploration	Depth Reference:	KB
Length Unit:	ft	Bit Diameter:	8.75
Related Records:	| Well Folder 0605, 0605.pdf | Graphic Lithologic Log, 0605AMST.tif | Caliper Log (2in to 100ft), 0605CAL.tif | Compensated Formation Density Log, 0605CDL.tif | Gamma Ray-Neutron Log, 0605GRN.tif | Induction Electrical Log, 0605IEL.tif | Acoustilog (2in		
URL:	http://ogviewer.azdeq.gov/resources/links/AZOGCC_0605.html		

GEOCHECK VERSION 2.1
PUBLIC WATER SUPPLY SYSTEM INFORMATION

PWS SUMMARY:

Map ID:	52		
Epa region:	09	State:	AZ
Pwsid:	AZ0407409		
Pwsname:	CHANDLER HEIGHTS CITRUS IRRIGATION DIST		
Cityserved:	Not Reported	Stateserved:	AZ
Zipserved:	Not Reported	Fipscounty:	04013
Status:	Active	Retpopsrvd:	3020
Pwssvcconn:	888	Psource longname:	Groundwater
Pwstype:	CWS	Owner:	Private
Contact:	LOPEZ, NANCY	Contactorgname:	LOPEZ, NANCY
Contactphone:	480-988-2731	Contactaddress1:	Not Reported
Contactaddress2:	26651 S VALENCIA	Contactcity:	CHANDLER HEIGHTS
Contactstate:	AZ	Contactzip:	85227
Pwsactivitycode:	A		

Pwsid:	AZ0407409	Facid:	1374
Facname:	TP001 - CL2	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	disinfection
Trtprocess:	hypochlorination, post	Factypecode:	TP

PWS ID:	AZ0407409	PWS name:	CHANDLER HTS CITRUS-IRR
Address:	BOX 9038	Care of:	Not Reported
City:	CHANDLER HEIGHTS	State:	AZ
Zip:	852279038	Owner:	CHANDLER HTS CITRUS-IRR
Source code:	Ground water	Population:	700

PWS ID:	AZ0407409	PWS type:	System Owner/Responsible Party
PWS name:	CHANDLER HTS CITRUS IRRIG DIST		
PWS address:	PO BOX 9038	PWS city:	CHANDLER HEIGHTS
PWS state:	AZ	PWS zip:	852279038
PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
PWS type code:	C	Retail population served:	3300
Contact:	LOPEZ, NANCY	Contact address:	26651 S VALENCIA
Contact address:	CHANDLER HEIGHTS	Contact city:	AZ
Contact state:	85	Contact zip:	480-988-27
Contact telephone:	Not Reported		

PWS ID:	AZ0407409	Activity status:	Active
Date system activated:	7706	Date system deactivated:	Not Reported
Retail population:	00000600	System name:	CHANDLER HTS CITRUS-IRR
System address:	Not Reported	System address:	BOX 9038
System city:	CHANDLER HEIGHTS	System state:	AZ
System zip:	852279038		

County FIPS:	04	City served:	CHANDLER

Population served:	501 - 1,000 Persons	Treatment:	Untreated

Latitude:	331727	Longitude:	1113555

Latitude:	331356	Longitude:	1114118

Violation id:	1604	Orig code:	S
State:	AZ	Violation Year:	2004
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23		
Violation name:	Monitoring, Routine Major (TCR)		
Rule code:	110	Rule name:	TCR

Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	05/01/2004
Cmp edt:	05/31/2004		

Violation id:	1704	Orig code:	S
State:	AZ	Violation Year:	2004
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23		
Violation name:	Monitoring, Routine Major (TCR)		
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2004
Cmp edt:	07/31/2004		

Violation id:	1805	Orig code:	S
State:	AZ	Violation Year:	2005
Contamination code:	0999	Contamination Name:	Chlorine
Violation code:	27	Violation name:	Monitoring and Reporting (DBP)
Rule code:	210	Rule name:	St1 DBP
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2005
Cmp edt:	03/31/2005		

Violation id:	202	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	22	Violation name:	MCL, Monthly (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	12/01/2001
Cmp edt:	12/31/2001		

Violation id:	2105	Orig code:	S
State:	AZ	Violation Year:	2004
Contamination code:	2950	Contamination Name:	TTHM
Violation code:	27	Violation name:	Monitoring and Reporting (DBP)
Rule code:	210	Rule name:	St1 DBP
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2004
Cmp edt:	12/31/2004		

Violation id:	2205	Orig code:	S
State:	AZ	Violation Year:	2004
Contamination code:	2456	Contamination Name:	Total Haloacetic Acids (HAA5)
Violation code:	27	Violation name:	Monitoring and Reporting (DBP)
Rule code:	210	Rule name:	St1 DBP
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2004
Cmp edt:	12/31/2004		

Violation id:	2305	Orig code:	S
State:	AZ	Violation Year:	2003
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2003
Cmp edt:	Not Reported		

Violation id:	2405	Orig code:	S
State:	AZ	Violation Year:	2005
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule

Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2005
Cmp edt:	Not Reported		

Violation id:	2705	Orig code:	S
State:	AZ	Violation Year:	2005
Contamination code:	0999	Contamination Name:	Chlorine
Violation code:	27	Violation name:	Monitoring and Reporting (DBP)
Rule code:	210	Rule name:	St1 DBP
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	04/01/2005
Cmp edt:	06/30/2005		

Violation id:	2905	Orig code:	S
State:	AZ	Violation Year:	2005
Contamination code:	0999	Contamination Name:	Chlorine
Violation code:	27	Violation name:	Monitoring and Reporting (DBP)
Rule code:	210	Rule name:	St1 DBP
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2005
Cmp edt:	09/30/2005		

Violation id:	302	Orig code:	S
State:	AZ	Violation Year:	2002
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	22	Violation name:	MCL, Monthly (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2002
Cmp edt:	01/31/2002		

Violation id:	3106	Orig code:	S
State:	AZ	Violation Year:	2005
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23		
Violation name:	Monitoring, Routine Major (TCR)		
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2005
Cmp edt:	07/31/2005		

Violation id:	3206	Orig code:	S
State:	AZ	Violation Year:	2005
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23		
Violation name:	Monitoring, Routine Major (TCR)		
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	08/01/2005
Cmp edt:	08/31/2005		

Violation id:	3406	Orig code:	S
State:	AZ	Violation Year:	2005
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23		
Violation name:	Monitoring, Routine Major (TCR)		
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	11/01/2005
Cmp edt:	11/30/2005		

Violation id:	3506	Orig code:	S
State:	AZ	Violation Year:	2005
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23		
Violation name:	Monitoring, Routine Major (TCR)		
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	12/01/2005
Cmp edt:	12/31/2005		

Violation id:	3606	Orig code:	S
State:	AZ	Violation Year:	2005
Contamination code:	0999	Contamination Name:	Chlorine
Violation code:	27	Violation name:	Monitoring and Reporting (DBP)
Rule code:	210	Rule name:	St1 DBP
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	10/01/2005
Cmp edt:	12/31/2005		

Violation id:	3906	Orig code:	S
State:	AZ	Violation Year:	2006
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23		
Violation name:	Monitoring, Routine Major (TCR)		
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2006
Cmp edt:	01/31/2006		

Violation id:	402	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23		
Violation name:	Monitoring, Routine Major (TCR)		
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	12/01/2001
Cmp edt:	12/31/2001		

Violation id:	4206	Orig code:	S
State:	AZ	Violation Year:	2006
Contamination code:	0999	Contamination Name:	Chlorine
Violation code:	27	Violation name:	Monitoring and Reporting (DBP)
Rule code:	210	Rule name:	St1 DBP
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2006
Cmp edt:	03/31/2006		

Violation id:	4706	Orig code:	S
State:	AZ	Violation Year:	2006
Contamination code:	0999	Contamination Name:	Chlorine
Violation code:	27	Violation name:	Monitoring and Reporting (DBP)
Rule code:	210	Rule name:	St1 DBP
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	04/01/2006
Cmp edt:	06/30/2006		

Violation id:	4907	Orig code:	S
State:	AZ	Violation Year:	2006
Contamination code:	0999	Contamination Name:	Chlorine
Violation code:	27	Violation name:	Monitoring and Reporting (DBP)
Rule code:	210	Rule name:	St1 DBP

Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2006
Cmp edt:	09/30/2006		

Violation id:	4910	Orig code:	S
State:	AZ	Violation Year:	2006
Contamination code:	7000	Contamination Name:	Consumer Confidence Rule
Violation code:	71	Violation name:	CCR Complete Failure to Report
Rule code:	420	Rule name:	CCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2006
Cmp edt:	Not Reported		

Violation id:	4911	Orig code:	S
State:	AZ	Violation Year:	2006
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23		
Violation name:	Monitoring, Routine Major (TCR)		
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	09/01/2006
Cmp edt:	09/30/2006		

Violation id:	4912	Orig code:	S
State:	AZ	Violation Year:	2006
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23		
Violation name:	Monitoring, Routine Major (TCR)		
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	12/01/2006
Cmp edt:	12/31/2006		

Violation id:	4913	Orig code:	S
State:	AZ	Violation Year:	2007
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23		
Violation name:	Monitoring, Routine Major (TCR)		
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	02/01/2007
Cmp edt:	02/28/2007		

Violation id:	4914	Orig code:	S
State:	AZ	Violation Year:	2007
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23		
Violation name:	Monitoring, Routine Major (TCR)		
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	03/01/2007
Cmp edt:	03/31/2007		

Violation id:	4917	Orig code:	S
State:	AZ	Violation Year:	2006
Contamination code:	0999	Contamination Name:	Chlorine
Violation code:	27	Violation name:	Monitoring and Reporting (DBP)
Rule code:	210	Rule name:	St1 DBP
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	10/01/2006
Cmp edt:	12/31/2006		

Violation id:	4919	Orig code:	S
State:	AZ	Violation Year:	2007
Contamination code:	0999	Contamination Name:	Chlorine
Violation code:	27	Violation name:	Monitoring and Reporting (DBP)
Rule code:	210	Rule name:	St1 DBP
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2007
Cmp edt:	03/31/2007		

Violation id:	4920	Orig code:	S
State:	AZ	Violation Year:	2006
Contamination code:	1040	Contamination Name:	Nitrate
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	331	Rule name:	Nitrates
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2006
Cmp edt:	12/31/2006		

Violation id:	4921	Orig code:	S
State:	AZ	Violation Year:	2007
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23		
Violation name:	Monitoring, Routine Major (TCR)		
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	04/01/2007
Cmp edt:	04/30/2007		

Violation id:	4922	Orig code:	S
State:	AZ	Violation Year:	2005
Contamination code:	2950	Contamination Name:	TTHM
Violation code:	27	Violation name:	Monitoring and Reporting (DBP)
Rule code:	210	Rule name:	St1 DBP
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2005
Cmp edt:	12/31/2005		

Violation id:	4923	Orig code:	S
State:	AZ	Violation Year:	2005
Contamination code:	2456	Contamination Name:	Total Haloacetic Acids (HAA5)
Violation code:	27	Violation name:	Monitoring and Reporting (DBP)
Rule code:	210	Rule name:	St1 DBP
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2005
Cmp edt:	12/31/2005		

Violation id:	4924	Orig code:	S
State:	AZ	Violation Year:	2006
Contamination code:	2950	Contamination Name:	TTHM
Violation code:	27	Violation name:	Monitoring and Reporting (DBP)
Rule code:	210	Rule name:	St1 DBP
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2006
Cmp edt:	12/31/2006		

Violation id:	4925	Orig code:	S
State:	AZ	Violation Year:	2006
Contamination code:	2456	Contamination Name:	Total Haloacetic Acids (HAA5)
Violation code:	27	Violation name:	Monitoring and Reporting (DBP)
Rule code:	210	Rule name:	St1 DBP
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2006

Cmp edt: 12/31/2006

Violation id: 4927
State: AZ
Contamination code: 0999
Violation code: 27
Rule code: 210
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 06/30/2007
Orig code: S
Violation Year: 2007
Contamination Name: Chlorine
Violation name: Monitoring and Reporting (DBP)
Rule name: St1 DBP
Unit of measure: Not Reported
Cmp bdt: 04/01/2007

Violation id: 4935
State: AZ
Contamination code: 3100
Violation code: 24
Violation name: Monitoring, Routine Minor (TCR)
Rule code: 110
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 02/28/2007
Orig code: S
Violation Year: 2007
Contamination Name: Coliform (TCR)
Rule name: TCR
Unit of measure: Not Reported
Cmp bdt: 02/01/2007

Violation id: 4936
State: AZ
Contamination code: 3100
Violation code: 24
Violation name: Monitoring, Routine Minor (TCR)
Rule code: 110
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 03/31/2007
Orig code: S
Violation Year: 2007
Contamination Name: Coliform (TCR)
Rule name: TCR
Unit of measure: Not Reported
Cmp bdt: 03/01/2007

Violation id: 4938
State: AZ
Contamination code: 5000
Violation code: 52
Violation name: Follow-up Or Routine LCR Tap M/R
Rule code: 350
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: Not Reported
Orig code: S
Violation Year: 2010
Contamination Name: Lead and Copper Rule
Rule name: LCR
Unit of measure: Not Reported
Cmp bdt: 10/01/2010

Violation id: 4939
State: AZ
Contamination code: 3100
Violation code: 24
Violation name: Monitoring, Routine Minor (TCR)
Rule code: 110
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 01/31/2013
Orig code: S
Violation Year: 2013
Contamination Name: Coliform (TCR)
Rule name: TCR
Unit of measure: Not Reported
Cmp bdt: 01/01/2013

Violation id: 4940
State: AZ
Contamination code: 7000
Violation code: 71
Rule code: 420
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: Not Reported
Orig code: S
Violation Year: 2002
Contamination Name: Consumer Confidence Rule
Violation name: CCR Complete Failure to Report
Rule name: CCR
Unit of measure: Not Reported
Cmp bdt: 07/01/2002

Violation id: 4941
State: AZ
Orig code: S
Violation Year: 2004

Contamination code: 7000
Contamination Name: Consumer Confidence Rule
Violation code: 71
Violation name: CCR Complete Failure to Report
Rule code: 420
Rule name: CCR
Violation measur: Not Reported
Unit of measure: Not Reported
State mcl: Not Reported
Cmp bdt: 07/01/2004
Cmp edt: Not Reported

Violation id: 4942
Orig code: S
State: AZ
Violation Year: 2007
Contamination code: 7000
Contamination Name: Consumer Confidence Rule
Violation code: 71
Violation name: CCR Complete Failure to Report
Rule code: 420
Rule name: CCR
Violation measur: Not Reported
Unit of measure: Not Reported
State mcl: Not Reported
Cmp bdt: 07/01/2007
Cmp edt: Not Reported

Violation id: 4946
Orig code: S
State: AZ
Violation Year: 2004
Contamination code: 0999
Contamination Name: Chlorine
Violation code: 27
Violation name: Monitoring and Reporting (DBP)
Rule code: 210
Rule name: St1 DBP
Violation measur: Not Reported
Unit of measure: Not Reported
State mcl: Not Reported
Cmp bdt: 01/01/2004
Cmp edt: 03/31/2004

Violation id: 4949
Orig code: S
State: AZ
Violation Year: 2004
Contamination code: 0999
Contamination Name: Chlorine
Violation code: 27
Violation name: Monitoring and Reporting (DBP)
Rule code: 210
Rule name: St1 DBP
Violation measur: Not Reported
Unit of measure: Not Reported
State mcl: Not Reported
Cmp bdt: 04/01/2004
Cmp edt: 06/30/2004

Violation id: 4955
Orig code: S
State: AZ
Violation Year: 2004
Contamination code: 0999
Contamination Name: Chlorine
Violation code: 27
Violation name: Monitoring and Reporting (DBP)
Rule code: 210
Rule name: St1 DBP
Violation measur: Not Reported
Unit of measure: Not Reported
State mcl: Not Reported
Cmp bdt: 07/01/2004
Cmp edt: 09/30/2004

Violation id: 504
Orig code: S
State: AZ
Violation Year: 2004
Contamination code: 3100
Contamination Name: Coliform (TCR)
Violation code: 23
Violation name: Monitoring, Routine Major (TCR)
Rule code: 110
Rule name: TCR
Violation measur: Not Reported
Unit of measure: Not Reported
State mcl: Not Reported
Cmp bdt: 03/01/2004
Cmp edt: 03/31/2004

Violation id: 604
Orig code: S
State: AZ
Violation Year: 2004
Contamination code: 3100
Contamination Name: Coliform (TCR)
Violation code: 23
Violation name: Monitoring, Routine Major (TCR)
Rule code: 110
Rule name: TCR
Violation measur: Not Reported
Unit of measure: Not Reported
State mcl: Not Reported
Cmp bdt: 04/01/2004
Cmp edt: 04/30/2004

Violation id:	702	Orig code:	S
State:	AZ	Violation Year:	2002
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	25	Violation name:	Monitoring, Repeat Major (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2002
Cmp edt:	01/31/2002		

Violation id:	802	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	25	Violation name:	Monitoring, Repeat Major (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	11/01/2001
Cmp edt:	11/30/2001		

Violation ID:	1099	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	09/02/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	1199	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	09/02/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	1299	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	09/02/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	1604	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	03/21/2005
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	1704	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	03/21/2005
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	1805	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	05/26/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	202	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	09/02/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	2105	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	08/30/2005
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		

Violation ID:	2105	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	07/29/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	2205	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	07/29/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	2205	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	08/30/2005
Enforcement Detail:	St Violation/Reminder Notice		

Enforcement Category: Informal

Violation ID:	2305	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	03/03/2005
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	2405	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	2405	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	01/09/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	2705	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	05/26/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	2905	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	05/26/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	302	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	09/02/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	3106	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/19/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	3206	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/19/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	3406	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/19/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	3506	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/19/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	3606	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	05/26/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	3906	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/19/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	402	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	09/02/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4206	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	05/26/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4706	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	07/17/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	4907	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	07/17/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4910	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	01/09/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4911	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/19/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4912	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	01/23/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4914	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	05/21/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4917	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	07/17/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4919	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	07/17/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4919	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	06/26/2007
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	4920	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	09/04/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4920	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	06/19/2007
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	4921	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	10/02/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4922	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	07/29/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4922	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	10/24/2007
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	4923	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	10/24/2007
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	4923	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	07/29/2007

Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4924	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	10/24/2007
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	4924	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	07/29/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4925	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	10/24/2007
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	4925	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	07/29/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4927	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	10/02/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4927	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	10/24/2007
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	4935	Orig Code:	S
Enforcemnt FY:	2011	Enforcement Action:	03/14/2011
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4936	Orig Code:	S
Enforcemnt FY:	2011	Enforcement Action:	03/14/2011
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4938	Orig Code:	S
Enforcemnt FY:	2013	Enforcement Action:	02/21/2013
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4939	Orig Code:	S
Enforcemnt FY:	2013	Enforcement Action:	05/01/2013
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4939	Orig Code:	S
Enforcemnt FY:	2013	Enforcement Action:	02/25/2013
Enforcement Detail:	St Violation/Reminder Notice		
Enforcement Category:	Informal		
Violation ID:	4940	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	03/03/2005
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4941	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	03/03/2005
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4942	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	07/16/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	4946	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	01/11/2005
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4949	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	01/14/2005
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4955	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	01/14/2005
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	504	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	03/21/2005
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	604	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	03/21/2005
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	702	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	09/02/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	802	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	09/02/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	999	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	09/02/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	Not Reported	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	04/02/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Not Reported
Violation ID:	Not Reported	Orig Code:	F
Enforcemnt FY:	2000	Enforcement Action:	05/23/2000
Enforcement Detail:	Fed FAO issued	Enforcement Category:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	1604	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Compliance start date:	5/1/2004 0:00:00	Compliance end date:	5/31/2004 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	1704	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Compliance start date:	7/1/2004 0:00:00	Compliance end date:	7/31/2004 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	1805	Contaminant:	0999
Violation type:	27	Compliance start date:	1/1/2005 0:00:00
Compliance end date:	3/31/2005 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	1805	Contaminant:	0999
Violation type:	27	Compliance start date:	1/1/2005 0:00:00
Compliance end date:	3/31/2005 0:00:00	Enforcement date:	7/6/2007 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	202	Contaminant:	COLIFORM (TCR)
Violation type:	Max Contaminant Level, Monthly (TCR)		
Compliance start date:	12/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	2105	Contaminant:	TTHM
Violation type:	27	Compliance start date:	1/1/2004 0:00:00
Compliance end date:	12/31/2004 0:00:00	Enforcement date:	10/29/2007 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	2105	Contaminant:	TTHM
Violation type:	27	Compliance start date:	1/1/2004 0:00:00
Compliance end date:	12/31/2004 0:00:00	Enforcement date:	8/30/2005 0:00:00
Enforcement action:	State Violation/Reminder Notice		
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	2205	Contaminant:	2456
Violation type:	27	Compliance start date:	1/1/2004 0:00:00
Compliance end date:	12/31/2004 0:00:00	Enforcement date:	10/29/2007 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	2205	Contaminant:	2456
Violation type:	27	Compliance start date:	1/1/2004 0:00:00
Compliance end date:	12/31/2004 0:00:00	Enforcement date:	8/30/2005 0:00:00
Enforcement action:	State Violation/Reminder Notice		
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	2305	Contaminant:	7000
Violation type:	71	Compliance start date:	7/1/2003 0:00:00
Compliance end date:	12/6/2006 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	2405	Contaminant:	7000
Violation type:	71	Compliance start date:	7/1/2005 0:00:00
Compliance end date:	12/6/2006 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	2705	Contaminant:	0999

Violation type:	27	Compliance start date:	4/1/2005 0:00:00
Compliance end date:	6/30/2005 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	2705	Contaminant:	0999
Violation type:	27	Compliance start date:	4/1/2005 0:00:00
Compliance end date:	6/30/2005 0:00:00	Enforcement date:	7/6/2007 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	2805	Contaminant:	0999
Violation type:	27	Compliance start date:	7/1/2005 0:00:00
Compliance end date:	9/30/2005 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	2805	Contaminant:	0999
Violation type:	27	Compliance start date:	7/1/2005 0:00:00
Compliance end date:	9/30/2005 0:00:00	Enforcement date:	7/6/2007 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	302	Contaminant:	COLIFORM (TCR)
Violation type:	Max Contaminant Level, Monthly (TCR)		
Compliance start date:	1/1/2002 0:00:00	Compliance end date:	1/31/2002 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	3106	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Compliance start date:	7/1/2005 0:00:00	Compliance end date:	7/31/2005 0:00:00
Enforcement date:	No Enf Action as of	Enforcement action:	7/8/2009 0:00:00
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	3206	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Compliance start date:	8/1/2005 0:00:00	Compliance end date:	8/31/2005 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	3305	Contaminant:	LEAD & COPPER RULE
Violation type:	Follow-up and Routine Tap Sampling		
Compliance start date:	10/1/2005 0:00:00	Compliance end date:	12/6/2006 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	3406	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Compliance start date:	11/1/2005 0:00:00	Compliance end date:	11/30/2005 0:00:00

Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	3506	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Compliance start date:	12/1/2005 0:00:00	Compliance end date:	12/31/2005 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	3606	Contaminant:	0999
Violation type:	27	Compliance start date:	10/1/2005 0:00:00
Compliance end date:	12/31/2005 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	3606	Contaminant:	0999
Violation type:	27	Compliance start date:	10/1/2005 0:00:00
Compliance end date:	12/31/2005 0:00:00	Enforcement date:	7/6/2007 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	3906	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Compliance start date:	1/1/2006 0:00:00	Compliance end date:	1/31/2006 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	402	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Compliance start date:	12/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4206	Contaminant:	0999
Violation type:	27	Compliance start date:	1/1/2006 0:00:00
Compliance end date:	3/31/2006 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4206	Contaminant:	0999
Violation type:	27	Compliance start date:	1/1/2006 0:00:00
Compliance end date:	3/31/2006 0:00:00	Enforcement date:	7/6/2007 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4706	Contaminant:	0999
Violation type:	27	Compliance start date:	4/1/2006 0:00:00
Compliance end date:	6/30/2006 0:00:00	Enforcement date:	7/6/2007 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4907	Contaminant:	0999
Violation type:	27	Compliance start date:	7/1/2006 0:00:00
Compliance end date:	9/30/2006 0:00:00	Enforcement date:	7/6/2007 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4910	Contaminant:	7000
Violation type:	71	Compliance start date:	7/1/2006 0:00:00
Compliance end date:	1/9/2007 0:00:00	Enforcement date:	1/9/2007 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4911	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Compliance start date:	9/1/2006 0:00:00	Compliance end date:	9/30/2006 0:00:00
Enforcement date:	1/23/2007 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4911	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Compliance start date:	9/1/2006 0:00:00	Compliance end date:	9/30/2006 0:00:00
Enforcement date:	1/29/2007 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4911	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Compliance start date:	9/1/2006 0:00:00	Compliance end date:	9/30/2006 0:00:00
Enforcement date:	12/19/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4912	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Compliance start date:	12/1/2006 0:00:00	Compliance end date:	12/31/2006 0:00:00
Enforcement date:	1/23/2007 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4912	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Compliance start date:	12/1/2006 0:00:00	Compliance end date:	12/31/2006 0:00:00
Enforcement date:	1/29/2007 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4913	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Compliance start date:	2/1/2007 0:00:00	Compliance end date:	2/28/2007 0:00:00
Enforcement date:	4/2/2007 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4914	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Compliance start date:	3/1/2007 0:00:00	Compliance end date:	3/31/2007 0:00:00
Enforcement date:	5/21/2007 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4915	Contaminant:	0999
Violation type:	27	Compliance start date:	10/1/2006 0:00:00
Compliance end date:	12/31/2006 0:00:00	Enforcement date:	7/6/2007 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4918	Contaminant:	0999
Violation type:	27	Compliance start date:	1/1/2007 0:00:00
Compliance end date:	3/31/2007 0:00:00	Enforcement date:	6/26/2007 0:00:00
Enforcement action:	State Violation/Reminder Notice		
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4918	Contaminant:	0999
Violation type:	27	Compliance start date:	1/1/2007 0:00:00
Compliance end date:	3/31/2007 0:00:00	Enforcement date:	7/6/2007 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4920	Contaminant:	NITRATE
Violation type:	3	Compliance start date:	1/1/2006 0:00:00
Compliance end date:	12/31/2006 0:00:00	Enforcement date:	6/19/2007 0:00:00
Enforcement action:	State Violation/Reminder Notice		
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4920	Contaminant:	NITRATE
Violation type:	3	Compliance start date:	1/1/2006 0:00:00
Compliance end date:	12/31/2006 0:00:00	Enforcement date:	9/4/2007 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4921	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Compliance start date:	4/1/2007 0:00:00	Compliance end date:	4/30/2007 0:00:00
Enforcement date:	10/2/2007 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4922	Contaminant:	TTHM
Violation type:	27	Compliance start date:	1/1/2005 0:00:00
Compliance end date:	12/31/2005 0:00:00	Enforcement date:	10/24/2007 0:00:00
Enforcement action:	State Violation/Reminder Notice		
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT

Population served:	3300	PWS type code:	C
Violation ID:	4922	Contaminant:	TTHM
Violation type:	27	Compliance start date:	1/1/2005 0:00:00
Compliance end date:	12/31/2005 0:00:00	Enforcement date:	10/29/2007 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4923	Contaminant:	2456
Violation type:	27	Compliance start date:	1/1/2005 0:00:00
Compliance end date:	12/31/2005 0:00:00	Enforcement date:	10/24/2007 0:00:00
Enforcement action:	State Violation/Reminder Notice		
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4923	Contaminant:	2456
Violation type:	27	Compliance start date:	1/1/2005 0:00:00
Compliance end date:	12/31/2005 0:00:00	Enforcement date:	10/29/2007 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4924	Contaminant:	TTHM
Violation type:	27	Compliance start date:	1/1/2006 0:00:00
Compliance end date:	12/31/2006 0:00:00	Enforcement date:	10/24/2007 0:00:00
Enforcement action:	State Violation/Reminder Notice		
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4924	Contaminant:	TTHM
Violation type:	27	Compliance start date:	1/1/2006 0:00:00
Compliance end date:	12/31/2006 0:00:00	Enforcement date:	10/29/2007 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4925	Contaminant:	2456
Violation type:	27	Compliance start date:	1/1/2006 0:00:00
Compliance end date:	12/31/2006 0:00:00	Enforcement date:	10/24/2007 0:00:00
Enforcement action:	State Violation/Reminder Notice		
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4925	Contaminant:	2456
Violation type:	27	Compliance start date:	1/1/2006 0:00:00
Compliance end date:	12/31/2006 0:00:00	Enforcement date:	10/29/2007 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4927	Contaminant:	0999
Violation type:	27	Compliance start date:	4/1/2007 0:00:00
Compliance end date:	6/30/2007 0:00:00	Enforcement date:	1/4/2008 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	4927	Contaminant:	0999
Violation type:	27	Compliance start date:	4/1/2007 0:00:00

Compliance end date:	6/30/2007 0:00:00	Enforcement date:	10/24/2007 0:00:00
Enforcement action:	State Violation/Reminder Notice		
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	504	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Compliance start date:	3/1/2004 0:00:00	Compliance end date:	3/31/2004 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	604	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Routine Major (TCR)		
Compliance start date:	4/1/2004 0:00:00	Compliance end date:	4/30/2004 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	702	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Repeat Major (TCR)		
Compliance start date:	1/1/2002 0:00:00	Compliance end date:	1/31/2002 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	CHANDLER HTS CITRUS IRRIGATION DISTRICT		
Population served:	3300	PWS type code:	C
Violation ID:	802	Contaminant:	COLIFORM (TCR)
Violation type:	Monitoring, Repeat Major (TCR)		
Compliance start date:	11/1/2001 0:00:00	Compliance end date:	11/30/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

Map ID:	128		
Epa region:	09	State:	AZ
Pwsid:	AZ0407102	Pwsname:	AZ BOYS RANCH WATER SYST
Cityserved:	Not Reported	Stateserved:	AZ
Zipserved:	Not Reported	Fipscounty:	13
Status:	Closed	Retpopsrvd:	125
Pwssvcconn:	28	Psource longname:	Groundwater
Pwstype:	CWS	Owner:	Private
Contact:	Not Reported	Contactorgname:	Not Reported
Contactphone:	Not Reported	Contactaddress1:	Not Reported
Contactaddress2:	AZ BOYS RANCH	Contactcity:	BOYS RANCH
Contactstate:	AZ	Contactzip:	85224
Pwsactivitycode:	I		

PWS ID:	AZ0407102	PWS type:	System Owner/Responsible Party
PWS name:	MARSHALL CHANCE	PWS address:	AZ BOYS RANCH
PWS city:	BOYS RANCH	PWS state:	AZ
PWS zip:	85224	PWS ID:	AZ0407102
Activity status:	Active	Date system activated:	7706
Date system deactivated:	Not Reported	Retail population:	00000125
System name:	AZ BOYS RANCH WATER SYST	System address:	Not Reported
System address:	3431 WEST THUNDERBIRD #13406		
System city:	PHOENIX	System state:	AZ
System zip:	85023		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

County FIPS:	04	City served:	CHANDLER
Population served:	101 - 500 Persons	Treatment:	Untreated
Latitude:	331548	Longitude:	1113848
Latitude:	331400	Longitude:	1114058
Latitude:	331821	Longitude:	1115026

Map ID: 146

Epa region:	09	State:	AZ
Pwsid:	AZ0407033	Pwsname:	QUEEN CREEK TOWN OF
Cityserved:	Not Reported	Stateserved:	AZ
Zipserved:	Not Reported	Fipscounty:	04013
Status:	Active	Retpopsrvd:	32597
Pwssvcconn:	9937	Psource longname:	Groundwater
Pwstype:	CWS	Owner:	Private
Contact:	QUEEN CREEK WATER TOWN OF	Contactorgname:	QUEEN CREEK WATER TOWN OF
Contactphone:	480-797-2991	Contactaddress1:	ATTN GREG HOMOL
Contactaddress2:	22350 S ELLSWORTH RD	Contactcity:	QUEEN CREEK
Contactstate:	AZ	Contactzip:	85242
Pwsactivitycode:	A		

Pwsid:	AZ0407033	Facid:	1349
Facname:	TP001 - CL2	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	disinfection
Trtprocess:	hypochlorination, pre	Factypecode:	TP

Pwsid:	AZ0407033	Facid:	15605
Facname:	TP002 - CL2	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	disinfection
Trtprocess:	hypochlorination, pre	Factypecode:	TP

Pwsid:	AZ0407033	Facid:	20340
Facname:	TP003 - CL2	Factype:	Treatment_plant
Facactivitycode:	A	Trtobjective:	disinfection
Trtprocess:	innovative	Factypecode:	TP

PWS ID:	AZ0407033	PWS name:	QUEEN CREEK WATER CO
Address:	BOX 366	Care of:	Not Reported
City:	QUEEN CREEK	State:	AZ
Zip:	85320	Owner:	QUEEN CREEK WATER CO
Source code:	Ground water	Population:	3500

PWS ID:	AZ0407033	PWS type:	System Owner/Responsible Party
PWS name:	QUEEN CREEK WATER CO	PWS address:	PO BOX 366
PWS city:	QUEEN CREEK	PWS state:	AZ
PWS zip:	85242	PWS name:	QUEEN CREEK WATER COMPANY
PWS type code:	C	Retail population served:	27853
Contact:	HOMOL, GREG	Contact address:	22350 S ELLSWORTH RD
Contact address:	QUEEN CREEK	Contact city:	AZ
Contact state:	85	Contact zip:	480-797-29
Contact telephone:	Not Reported		

PWS ID:	AZ0407033	Activity status:	Active
Date system activated:	7706	Date system deactivated:	Not Reported
Retail population:	00003100	System name:	QUEEN CREEK WATER CO
System address:	Not Reported	System address:	BOX 366
System city:	QUEEN CREEK	System state:	AZ
System zip:	85320		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

County FIPS:	04	City served:	QUEEN CREEK
Population served:	2,501 - 3,300 Persons	Treatment:	Untreated
Latitude:	331432	Longitude:	1113757
Latitude:	331416	Longitude:	1114107
Latitude:	331416	Longitude:	1114107
Latitude:	331458	Longitude:	1113859

Violation id:	10099	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2985	Contamination Name:	1,1,2-Trichloroethane
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	10199	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2987	Contamination Name:	Tetrachloroethylene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	10299	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2989	Contamination Name:	CHLOROBENZENE
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	10399	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2990	Contamination Name:	Benzene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	10499	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2991	Contamination Name:	Toluene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	10599	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2992	Contamination Name:	Ethylbenzene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC

Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	10699	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2996	Contamination Name:	Styrene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	10899	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2380	Contamination Name:	cis-1,2-Dichloroethylene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	10999	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2955	Contamination Name:	Xylenes, Total
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	11099	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2964	Contamination Name:	DICHLOROMETHANE
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	11199	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2968	Contamination Name:	o-Dichlorobenzene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	11299	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2969	Contamination Name:	p-Dichlorobenzene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	11399	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2977	Contamination Name:	1,1-Dichloroethylene
Violation code:	03	Violation name:	Monitoring, Regular

Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	11499	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2979	Contamination Name:	trans-1,2-Dichloroethylene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	11599	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2980	Contamination Name:	1,2-Dichloroethane
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	11699	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2981	Contamination Name:	1,1,1-Trichloroethane
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	11799	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2982	Contamination Name:	Carbon tetrachloride
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	11899	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2983	Contamination Name:	1,2-Dichloropropane
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	11999	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2984	Contamination Name:	Trichloroethylene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	12099	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2985	Contamination Name:	1,1,2-Trichloroethane

Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	12199	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2987	Contamination Name:	Tetrachloroethylene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	12299	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2989	Contamination Name:	CHLOROBENZENE
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	12399	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2990	Contamination Name:	Benzene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	12499	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2991	Contamination Name:	Toluene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	12599	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2992	Contamination Name:	Ethylbenzene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	12699	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2996	Contamination Name:	Styrene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	12702	Orig code:	S
State:	AZ	Violation Year:	2001

Contamination code:	2005	Contamination Name:	Endrin
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	12802	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2005	Contamination Name:	Endrin
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	12902	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2005	Contamination Name:	Endrin
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	13002	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2010	Contamination Name:	BHC-GAMMA
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	13102	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2010	Contamination Name:	BHC-GAMMA
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	13202	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2010	Contamination Name:	BHC-GAMMA
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	13302	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2015	Contamination Name:	Methoxychlor
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	13402	Orig code:	S

State: AZ
Contamination code: 2015
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Violation Year: 2001
Contamination Name: Methoxychlor
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 13502
State: AZ
Contamination code: 2015
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Methoxychlor
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 13602
State: AZ
Contamination code: 2020
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Toxaphene
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 13702
State: AZ
Contamination code: 2020
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Toxaphene
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 13802
State: AZ
Contamination code: 2020
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Toxaphene
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 13902
State: AZ
Contamination code: 2031
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Dalapon
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 14002
State: AZ
Contamination code: 2031
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Dalapon
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id:	14102	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2031	Contamination Name:	Dalapon
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	14202	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2031	Contamination Name:	Dalapon
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	14302	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2032	Contamination Name:	Diquat
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	14402	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2032	Contamination Name:	Diquat
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	14502	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2032	Contamination Name:	Diquat
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	14602	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2032	Contamination Name:	Diquat
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	14702	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2033	Contamination Name:	Endothall
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	14802	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2033	Contamination Name:	Endothall
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	14902	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2033	Contamination Name:	Endothall
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	15002	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2033	Contamination Name:	Endothall
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	15102	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2034	Contamination Name:	Glyphosate
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	15202	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2034	Contamination Name:	Glyphosate
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	15302	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2034	Contamination Name:	Glyphosate
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	15402	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2034	Contamination Name:	Glyphosate
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id: 15502
State: AZ
Contamination code: 2035
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Di(2-ethylhexyl) adipate
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 15602
State: AZ
Contamination code: 2035
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Di(2-ethylhexyl) adipate
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 15702
State: AZ
Contamination code: 2035
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Di(2-ethylhexyl) adipate
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 15802
State: AZ
Contamination code: 2035
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Di(2-ethylhexyl) adipate
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 15902
State: AZ
Contamination code: 2036
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: OXAMYL
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 16002
State: AZ
Contamination code: 2036
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: OXAMYL
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 16102
State: AZ
Contamination code: 2036
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: OXAMYL
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 16202
State: AZ
Contamination code: 2036
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: OXAMYL
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 16302
State: AZ
Contamination code: 2037
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Simazine
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 16402
State: AZ
Contamination code: 2037
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Simazine
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 16502
State: AZ
Contamination code: 2037
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Simazine
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 16602
State: AZ
Contamination code: 2037
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Simazine
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 16702
State: AZ
Contamination code: 2039
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Di(2-ethylhexyl) phthalate
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 16802
State: AZ
Contamination code: 2039
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Di(2-ethylhexyl) phthalate
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 16902
State: AZ
Contamination code: 2039
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Di(2-ethylhexyl) phthalate
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 17002
State: AZ
Contamination code: 2039
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Di(2-ethylhexyl) phthalate
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 17102
State: AZ
Contamination code: 2040
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Picloram
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 17202
State: AZ
Contamination code: 2040
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Picloram
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 17302
State: AZ
Contamination code: 2040
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Picloram
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 17402
State: AZ
Contamination code: 2040
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Picloram
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 17502
State: AZ
Contamination code: 2041
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Dinoseb
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 17602
State: AZ
Contamination code: 2041
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Dinoseb
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 17702
State: AZ
Contamination code: 2041
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Dinoseb
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 17802
State: AZ
Contamination code: 2041
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Dinoseb
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 17902
State: AZ
Contamination code: 2042
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Hexachlorocyclopentadiene
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 18002
State: AZ
Contamination code: 2042
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Hexachlorocyclopentadiene
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 18102
State: AZ
Contamination code: 2042
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Hexachlorocyclopentadiene
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 18202
State: AZ
Contamination code: 2042
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Hexachlorocyclopentadiene
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id:	18302	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2046	Contamination Name:	Carbofuran
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	18402	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2046	Contamination Name:	Carbofuran
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	18502	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2046	Contamination Name:	Carbofuran
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	18602	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2046	Contamination Name:	Carbofuran
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	18702	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2050	Contamination Name:	Atrazine
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	18802	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2050	Contamination Name:	Atrazine
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	18902	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2050	Contamination Name:	Atrazine
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id: 19002
State: AZ
Contamination code: 2050
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Atrazine
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 19102
State: AZ
Contamination code: 2051
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: LASSO
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 19202
State: AZ
Contamination code: 2051
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: LASSO
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 19302
State: AZ
Contamination code: 2051
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: LASSO
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 19402
State: AZ
Contamination code: 2051
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: LASSO
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 19502
State: AZ
Contamination code: 2065
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Heptachlor
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 19602
State: AZ
Contamination code: 2065
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Heptachlor
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 19702
State: AZ
Contamination code: 2065
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Heptachlor
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 19802
State: AZ
Contamination code: 2067
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Heptachlor epoxide
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 19902
State: AZ
Contamination code: 2067
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Heptachlor epoxide
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 20002
State: AZ
Contamination code: 2067
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Heptachlor epoxide
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 20102
State: AZ
Contamination code: 2105
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: 2,4-D
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 20202
State: AZ
Contamination code: 2105
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: 2,4-D
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 20302
State: AZ
Contamination code: 2105
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: 2,4-D
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 204
State: AZ
Contamination code: 3100
Violation code: 23
Rule code: 110
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 09/30/2003
Orig code: S
Violation Year: 2003
Contamination Name: Coliform (TCR)
Violation name: Monitoring, Routine Major (TCR)
Rule name: TCR
Unit of measure: Not Reported
Cmp bdt: 09/01/2003

Violation id: 20402
State: AZ
Contamination code: 2105
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: 2,4-D
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 20502
State: AZ
Contamination code: 2110
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: 2,4,5-TP
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 20602
State: AZ
Contamination code: 2110
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: 2,4,5-TP
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 20702
State: AZ
Contamination code: 2110
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: 2,4,5-TP
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 20802
State: AZ
Contamination code: 2110
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: 2,4,5-TP
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 20902
State: AZ
Contamination code: 2274
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: HEXACHLOROBENZENE
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 21002
State: AZ
Contamination code: 2274
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: HEXACHLOROBENZENE
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 21102
State: AZ
Contamination code: 2274
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: HEXACHLOROBENZENE
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 21202
State: AZ
Contamination code: 2274
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: HEXACHLOROBENZENE
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 21302
State: AZ
Contamination code: 2306
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Benzo(a)pyrene
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 21402
State: AZ
Contamination code: 2306
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Benzo(a)pyrene
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 21502
State: AZ
Contamination code: 2306
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Benzo(a)pyrene
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 21602
State: AZ
Contamination code: 2306
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Benzo(a)pyrene
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 21702
State: AZ
Contamination code: 2326
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Pentachlorophenol
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 21802
State: AZ
Contamination code: 2326
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Pentachlorophenol
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 21902
State: AZ
Contamination code: 2326
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Pentachlorophenol
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 22002
State: AZ
Contamination code: 2326
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Pentachlorophenol
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 22102
State: AZ
Contamination code: 2931
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: 1,2-DIBROMO-3-CHLOROPROPANE
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 22202
State: AZ
Contamination code: 2931
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: 1,2-DIBROMO-3-CHLOROPROPANE
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 22302
State: AZ
Contamination code: 2931
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: 1,2-DIBROMO-3-CHLOROPROPANE
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id:	22402	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2931	Contamination Name:	1,2-DIBROMO-3-CHLOROPROPANE
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	22502	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2946	Contamination Name:	ETHYLENE DIBROMIDE
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	22602	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2946	Contamination Name:	ETHYLENE DIBROMIDE
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	22702	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2946	Contamination Name:	ETHYLENE DIBROMIDE
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	22802	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2946	Contamination Name:	ETHYLENE DIBROMIDE
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	22902	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2959	Contamination Name:	Chlordane
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	23002	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2959	Contamination Name:	Chlordane
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	23102	Orig code:	S
State:	AZ	Violation Year:	2001
Contamination code:	2959	Contamination Name:	Chlordane
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2001
Cmp edt:	12/31/2001		

Violation id:	23299	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2005	Contamination Name:	Endrin
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	23399	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2005	Contamination Name:	Endrin
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	23499	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2005	Contamination Name:	Endrin
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	23599	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2005	Contamination Name:	Endrin
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	23699	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2010	Contamination Name:	BHC-GAMMA
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	23799	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2010	Contamination Name:	BHC-GAMMA
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	23899	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2010	Contamination Name:	BHC-GAMMA
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	23999	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2010	Contamination Name:	BHC-GAMMA
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	24099	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2015	Contamination Name:	Methoxychlor
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	24199	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2015	Contamination Name:	Methoxychlor
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	24299	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2015	Contamination Name:	Methoxychlor
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	24399	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2015	Contamination Name:	Methoxychlor
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	24499	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2020	Contamination Name:	Toxaphene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	24599	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2020	Contamination Name:	Toxaphene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	24699	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2020	Contamination Name:	Toxaphene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	24799	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2020	Contamination Name:	Toxaphene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	24899	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2031	Contamination Name:	Dalapon
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	24999	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2031	Contamination Name:	Dalapon
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	25099	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2031	Contamination Name:	Dalapon
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	25199	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2031	Contamination Name:	Dalapon
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	25299	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2032	Contamination Name:	Diquat
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	25399	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2032	Contamination Name:	Diquat
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	25499	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2032	Contamination Name:	Diquat
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	25599	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2032	Contamination Name:	Diquat
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	25699	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2033	Contamination Name:	Endothall
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	25799	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2033	Contamination Name:	Endothall
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	25899	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2033	Contamination Name:	Endothall
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id: 25999
State: AZ
Contamination code: 2033
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Endothall
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 26099
State: AZ
Contamination code: 2034
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Glyphosate
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 26199
State: AZ
Contamination code: 2034
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Glyphosate
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 26299
State: AZ
Contamination code: 2034
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Glyphosate
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 26399
State: AZ
Contamination code: 2034
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Glyphosate
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 26499
State: AZ
Contamination code: 2035
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Di(2-ethylhexyl) adipate
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 26599
State: AZ
Contamination code: 2035
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Di(2-ethylhexyl) adipate
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id:	26699	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2035	Contamination Name:	Di(2-ethylhexyl) adipate
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	26799	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2035	Contamination Name:	Di(2-ethylhexyl) adipate
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	26899	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2036	Contamination Name:	OXAMYL
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	26999	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2036	Contamination Name:	OXAMYL
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	27099	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2036	Contamination Name:	OXAMYL
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	27199	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2036	Contamination Name:	OXAMYL
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	27299	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2037	Contamination Name:	Simazine
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	320	Rule name:	SOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id: 27399
State: AZ
Contamination code: 2037
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Simazine
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 27499
State: AZ
Contamination code: 2037
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Simazine
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 27599
State: AZ
Contamination code: 2037
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Simazine
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 27699
State: AZ
Contamination code: 2039
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Di(2-ethylhexyl) phthalate
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 27799
State: AZ
Contamination code: 2039
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Di(2-ethylhexyl) phthalate
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 27899
State: AZ
Contamination code: 2039
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Di(2-ethylhexyl) phthalate
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 27999
State: AZ
Contamination code: 2039
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Di(2-ethylhexyl) phthalate
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 28099
State: AZ
Contamination code: 2040
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Picloram
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 28199
State: AZ
Contamination code: 2040
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Picloram
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 28299
State: AZ
Contamination code: 2040
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Picloram
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 28399
State: AZ
Contamination code: 2040
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Picloram
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 28499
State: AZ
Contamination code: 2041
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Dinoseb
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 28599
State: AZ
Contamination code: 2041
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Dinoseb
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 28699
State: AZ
Contamination code: 2041
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Dinoseb
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 28799
State: AZ
Contamination code: 2041
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Dinoseb
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 28899
State: AZ
Contamination code: 2042
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Hexachlorocyclopentadiene
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 28999
State: AZ
Contamination code: 2042
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Hexachlorocyclopentadiene
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 29099
State: AZ
Contamination code: 2042
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Hexachlorocyclopentadiene
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 29199
State: AZ
Contamination code: 2042
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Hexachlorocyclopentadiene
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 29299
State: AZ
Contamination code: 2046
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Carbofuran
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 29399
State: AZ
Contamination code: 2046
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Carbofuran
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 29499
State: AZ
Contamination code: 2046
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Carbofuran
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 29599
State: AZ
Contamination code: 2046
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Carbofuran
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 29699
State: AZ
Contamination code: 2050
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Atrazine
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 29799
State: AZ
Contamination code: 2050
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Atrazine
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 29899
State: AZ
Contamination code: 2050
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Atrazine
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 29999
State: AZ
Contamination code: 2050
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Atrazine
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 30099
State: AZ
Contamination code: 2051
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: LASSO
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 30199
State: AZ
Contamination code: 2051
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: LASSO
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 30299
State: AZ
Contamination code: 2051
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: LASSO
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 30399
State: AZ
Contamination code: 2051
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: LASSO
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 30499
State: AZ
Contamination code: 2065
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Heptachlor
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 30599
State: AZ
Contamination code: 2065
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Heptachlor
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 30699
State: AZ
Contamination code: 2065
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Heptachlor
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 30799
State: AZ
Contamination code: 2065
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Heptachlor
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 30899
State: AZ
Contamination code: 2067
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Heptachlor epoxide
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 30999
State: AZ
Contamination code: 2067
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Heptachlor epoxide
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 31099
State: AZ
Contamination code: 2067
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Heptachlor epoxide
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 31199
State: AZ
Contamination code: 2067
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Heptachlor epoxide
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 31299
State: AZ
Contamination code: 2105
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: 2,4-D
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 31399
State: AZ
Contamination code: 2105
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: 2,4-D
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 31499
State: AZ
Contamination code: 2105
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: 2,4-D
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 31599
State: AZ
Contamination code: 2105
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: 2,4-D
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 31699
State: AZ
Contamination code: 2110
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: 2,4,5-TP
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 31799
State: AZ
Contamination code: 2110
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: 2,4,5-TP
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 31899
State: AZ
Contamination code: 2110
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: 2,4,5-TP
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 31999
State: AZ
Contamination code: 2110
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: 2,4,5-TP
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 32099
State: AZ
Contamination code: 2274
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: HEXACHLOROBENZENE
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 32199
State: AZ
Contamination code: 2274
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: HEXACHLOROBENZENE
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 32299
State: AZ
Contamination code: 2274
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: HEXACHLOROBENZENE
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 32399
State: AZ
Contamination code: 2274
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: HEXACHLOROBENZENE
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 32499
State: AZ
Contamination code: 2306
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Benzo(a)pyrene
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 32599
State: AZ
Contamination code: 2306
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Benzo(a)pyrene
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 32699
State: AZ
Contamination code: 2306
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Benzo(a)pyrene
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 32799
State: AZ
Contamination code: 2306
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Benzo(a)pyrene
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 32899
State: AZ
Contamination code: 2326
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Pentachlorophenol
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 32999
State: AZ
Contamination code: 2326
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Pentachlorophenol
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 33099
State: AZ
Contamination code: 2326
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Pentachlorophenol
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 33199
State: AZ
Contamination code: 2326
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Pentachlorophenol
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 33299
State: AZ
Contamination code: 2383
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Total Polychlorinated Biphenyls (PCB)
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 33399
State: AZ
Contamination code: 2383
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Total Polychlorinated Biphenyls (PCB)
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 33499
State: AZ
Contamination code: 2383
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Total Polychlorinated Biphenyls (PCB)
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 33599
State: AZ
Contamination code: 2383
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Total Polychlorinated Biphenyls (PCB)
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 33699
State: AZ
Contamination code: 2931
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: 1,2-DIBROMO-3-CHLOROPROPANE
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 33799
State: AZ
Contamination code: 2931
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: 1,2-DIBROMO-3-CHLOROPROPANE
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 33899
State: AZ
Contamination code: 2931
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: 1,2-DIBROMO-3-CHLOROPROPANE
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 33999
State: AZ
Contamination code: 2931
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: 1,2-DIBROMO-3-CHLOROPROPANE
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 34099
State: AZ
Contamination code: 2946
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: ETHYLENE DIBROMIDE
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 34199
State: AZ
Contamination code: 2946
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: ETHYLENE DIBROMIDE
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 34299
State: AZ
Contamination code: 2946
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: ETHYLENE DIBROMIDE
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 34399
State: AZ
Contamination code: 2946
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: ETHYLENE DIBROMIDE
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 34499
State: AZ
Contamination code: 2959
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Chlordane
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 34599
State: AZ
Contamination code: 2959
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Chlordane
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 34699
State: AZ
Contamination code: 2959
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Chlordane
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 34799
State: AZ
Contamination code: 2959
Violation code: 03
Rule code: 320
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Chlordane
Violation name: Monitoring, Regular
Rule name: SOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 34805
State: AZ
Contamination code: 3100
Violation code: 24
Rule code: 110
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 09/30/2004
Orig code: S
Violation Year: 2004
Contamination Name: Coliform (TCR)
Violation name: Monitoring, Routine Minor (TCR)
Rule name: TCR
Unit of measure: Not Reported
Cmp bdt: 09/01/2004

Violation id: 34905
State: AZ
Contamination code: 0999
Violation code: 27
Rule code: 210
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 09/30/2005
Orig code: S
Violation Year: 2005
Contamination Name: Chlorine
Violation name: Monitoring and Reporting (DBP)
Rule name: St1 DBP
Unit of measure: Not Reported
Cmp bdt: 07/01/2005

Violation id: 35206
State: AZ
Contamination code: 3100
Violation code: 24
Rule code: 110
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 09/30/2005
Orig code: S
Violation Year: 2005
Contamination Name: Coliform (TCR)
Violation name: Monitoring, Routine Minor (TCR)
Rule name: TCR
Unit of measure: Not Reported
Cmp bdt: 09/01/2005

Violation id: 35207
State: AZ
Contamination code: 3100
Violation code: 24
Rule code: 110
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 08/31/2006
Orig code: S
Violation Year: 2006
Contamination Name: Coliform (TCR)
Violation name: Monitoring, Routine Minor (TCR)
Rule name: TCR
Unit of measure: Not Reported
Cmp bdt: 08/01/2006

Violation id: 35212
State: AZ
Contamination code: 5000
Violation code: 52
Rule code: 350
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: Not Reported
Orig code: S
Violation Year: 2006
Contamination Name: Lead and Copper Rule
Violation name: Follow-up Or Routine LCR Tap M/R
Rule name: LCR
Unit of measure: Not Reported
Cmp bdt: 10/01/2006

Violation id: 35214
State: AZ
Contamination code: 3100
Violation code: 24
Rule code: 110
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 11/30/2007
Orig code: S
Violation Year: 2007
Contamination Name: Coliform (TCR)
Violation name: Monitoring, Routine Minor (TCR)
Rule name: TCR
Unit of measure: Not Reported
Cmp bdt: 11/01/2007

Violation id: 35258
State: AZ
Contamination code: 4000
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Gross Alpha, Excl. Radon and U
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35259
State: AZ
Contamination code: 4006
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Combined Uranium
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35260
State: AZ
Contamination code: 4010
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Combined Radium (-226 and -228)
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35261
State: AZ
Contamination code: 4020
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Radium-226
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35262
State: AZ
Contamination code: 4030
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Radium-228
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35263
State: AZ
Contamination code: 4000
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Gross Alpha, Excl. Radon and U
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35264
State: AZ
Contamination code: 4006
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Combined Uranium
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35265
State: AZ
Contamination code: 4010
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Combined Radium (-226 and -228)
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35266
State: AZ
Contamination code: 4020
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Radium-226
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35267
State: AZ
Contamination code: 4030
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Radium-228
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35268
State: AZ
Contamination code: 4000
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Gross Alpha, Excl. Radon and U
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35269
State: AZ
Contamination code: 4006
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Combined Uranium
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35270
State: AZ
Contamination code: 4010
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Combined Radium (-226 and -228)
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35271
State: AZ
Contamination code: 4020
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Radium-226
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35272
State: AZ
Contamination code: 4030
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Radium-228
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35273
State: AZ
Contamination code: 4000
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Gross Alpha, Excl. Radon and U
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35274
State: AZ
Contamination code: 4006
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Combined Uranium
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35275
State: AZ
Contamination code: 4010
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Combined Radium (-226 and -228)
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35276
State: AZ
Contamination code: 4020
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Radium-226
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35277
State: AZ
Contamination code: 4030
Violation code: 03
Rule code: 340
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2007
Orig code: S
Violation Year: 2004
Contamination Name: Radium-228
Violation name: Monitoring, Regular
Rule name: Rads
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35320
State: AZ
Contamination code: 7000
Violation code: 71
Rule code: 420
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: Not Reported
Orig code: S
Violation Year: 2002
Contamination Name: Consumer Confidence Rule
Violation name: CCR Complete Failure to Report
Rule name: CCR
Unit of measure: Not Reported
Cmp bdt: 07/01/2002

Violation id: 35330
State: AZ
Contamination code: 0999
Violation code: 27
Rule code: 210
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 03/31/2004
Orig code: S
Violation Year: 2004
Contamination Name: Chlorine
Violation name: Monitoring and Reporting (DBP)
Rule name: St1 DBP
Unit of measure: Not Reported
Cmp bdt: 01/01/2004

Violation id: 35332
State: AZ
Contamination code: 0999
Violation code: 27
Rule code: 210
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 06/30/2004
Orig code: S
Violation Year: 2004
Contamination Name: Chlorine
Violation name: Monitoring and Reporting (DBP)
Rule name: St1 DBP
Unit of measure: Not Reported
Cmp bdt: 04/01/2004

Violation id: 4000
State: AZ
Contamination code: 1074
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 03/31/2000
Orig code: S
Violation Year: 2000
Contamination Name: Antimony, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2000

Violation id: 4100
State: AZ
Contamination code: 1075
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 03/31/2000
Orig code: S
Violation Year: 2000
Contamination Name: Beryllium, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2000

Violation id: 4200
State: AZ
Contamination code: 1085
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 03/31/2000
Orig code: S
Violation Year: 2000
Contamination Name: Thallium, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2000

Violation id: 4300
State: AZ
Contamination code: 1074
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 06/30/2000
Orig code: S
Violation Year: 2000
Contamination Name: Antimony, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 04/01/2000

Violation id: 4400
State: AZ
Contamination code: 1075
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 06/30/2000
Orig code: S
Violation Year: 2000
Contamination Name: Beryllium, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 04/01/2000

Violation id: 4500
State: AZ
Contamination code: 1085
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 06/30/2000
Orig code: S
Violation Year: 2000
Contamination Name: Thallium, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 04/01/2000

Violation id: 4601
State: AZ
Contamination code: 1074
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 09/30/2000
Orig code: S
Violation Year: 2000
Contamination Name: Antimony, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 07/01/2000

Violation id: 4701
State: AZ
Contamination code: 1075
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 09/30/2000
Orig code: S
Violation Year: 2000
Contamination Name: Beryllium, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 07/01/2000

Violation id: 4801
State: AZ
Contamination code: 1085
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 09/30/2000
Orig code: S
Violation Year: 2000
Contamination Name: Thallium, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 07/01/2000

Violation id: 4901
State: AZ
Contamination code: 1074
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 2000
Contamination Name: Antimony, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 10/01/2000

Violation id: 5001
State: AZ
Contamination code: 1075
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 2000
Contamination Name: Beryllium, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 10/01/2000

Violation id: 5101
State: AZ
Contamination code: 1085
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 2000
Contamination Name: Thallium, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 10/01/2000

Violation id: 5201
State: AZ
Contamination code: 1074
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 03/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Antimony, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 5301
State: AZ
Contamination code: 1075
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 03/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Beryllium, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 5401
State: AZ
Contamination code: 1085
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 03/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Thallium, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2001

Violation id: 5502
State: AZ
Contamination code: 1074
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 09/30/2001
Orig code: S
Violation Year: 2001
Contamination Name: Antimony, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 07/01/2001

Violation id: 5602
State: AZ
Contamination code: 1075
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 09/30/2001
Orig code: S
Violation Year: 2001
Contamination Name: Beryllium, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 07/01/2001

Violation id: 5702
State: AZ
Contamination code: 1085
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 09/30/2001
Orig code: S
Violation Year: 2001
Contamination Name: Thallium, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 07/01/2001

Violation id: 5802
State: AZ
Contamination code: 1074
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Antimony, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 10/01/2001

Violation id: 5902
State: AZ
Contamination code: 1075
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Beryllium, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 10/01/2001

Violation id: 6002
State: AZ
Contamination code: 1085
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2001
Orig code: S
Violation Year: 2001
Contamination Name: Thallium, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 10/01/2001

Violation id: 6102
State: AZ
Contamination code: 1074
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 03/31/2002
Orig code: S
Violation Year: 2002
Contamination Name: Antimony, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2002

Violation id: 6202
State: AZ
Contamination code: 1075
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 03/31/2002
Orig code: S
Violation Year: 2002
Contamination Name: Beryllium, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2002

Violation id: 6302
State: AZ
Contamination code: 1085
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 03/31/2002
Orig code: S
Violation Year: 2002
Contamination Name: Thallium, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 01/01/2002

Violation id: 6402
State: AZ
Contamination code: 1074
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 06/30/2002
Orig code: S
Violation Year: 2002
Contamination Name: Antimony, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 04/01/2002

Violation id: 6502
State: AZ
Contamination code: 1075
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 06/30/2002
Orig code: S
Violation Year: 2002
Contamination Name: Beryllium, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 04/01/2002

Violation id: 6602
State: AZ
Contamination code: 1085
Violation code: 03
Rule code: 333
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 06/30/2002
Orig code: S
Violation Year: 2002
Contamination Name: Thallium, Total
Violation name: Monitoring, Regular
Rule name: Other IOC
Unit of measure: Not Reported
Cmp bdt: 04/01/2002

Violation id: 6899
State: AZ
Contamination code: 2380
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: cis-1,2-Dichloroethylene
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 6999
State: AZ
Contamination code: 2955
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Xylenes, Total
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 7099
State: AZ
Contamination code: 2964
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: DICHLOROMETHANE
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 7199
State: AZ
Contamination code: 2968
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: o-Dichlorobenzene
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 7299
State: AZ
Contamination code: 2969
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: p-Dichlorobenzene
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 7399
State: AZ
Contamination code: 2977
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: 1,1-Dichloroethylene
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 7499
State: AZ
Contamination code: 2979
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: trans-1,2-Dichloroethylene
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 7599
State: AZ
Contamination code: 2980
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: 1,2-Dichloroethane
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 7699
State: AZ
Contamination code: 2981
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: 1,1,1-Trichloroethane
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id:	7799	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2982	Contamination Name:	Carbon tetrachloride
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	7899	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2983	Contamination Name:	1,2-Dichloropropane
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	7999	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2984	Contamination Name:	Trichloroethylene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	8099	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2985	Contamination Name:	1,1,2-Trichloroethane
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	8199	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2987	Contamination Name:	Tetrachloroethylene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	8299	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2989	Contamination Name:	CHLOROBENZENE
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id:	8399	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2990	Contamination Name:	Benzene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation id: 8499
State: AZ
Contamination code: 2991
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Toluene
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 8599
State: AZ
Contamination code: 2992
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Ethylbenzene
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 8699
State: AZ
Contamination code: 2996
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Styrene
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 8899
State: AZ
Contamination code: 2380
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: cis-1,2-Dichloroethylene
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 8999
State: AZ
Contamination code: 2955
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Xylenes, Total
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 9099
State: AZ
Contamination code: 2964
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: DICHLOROMETHANE
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 9199
State: AZ
Contamination code: 2968
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: o-Dichlorobenzene
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 9299
State: AZ
Contamination code: 2969
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: p-Dichlorobenzene
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 9399
State: AZ
Contamination code: 2977
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: 1,1-Dichloroethylene
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 9499
State: AZ
Contamination code: 2979
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: trans-1,2-Dichloroethylene
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 9599
State: AZ
Contamination code: 2980
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: 1,2-Dichloroethane
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 9699
State: AZ
Contamination code: 2981
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: 1,1,1-Trichloroethane
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 9799
State: AZ
Contamination code: 2982
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: Carbon tetrachloride
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id: 9899
State: AZ
Contamination code: 2983
Violation code: 03
Rule code: 310
Violation measur: Not Reported
State mcl: Not Reported
Cmp edt: 12/31/2000
Orig code: S
Violation Year: 1998
Contamination Name: 1,2-Dichloropropane
Violation name: Monitoring, Regular
Rule name: VOC
Unit of measure: Not Reported
Cmp bdt: 01/01/1998

Violation id:	9999	Orig code:	S
State:	AZ	Violation Year:	1998
Contamination code:	2984	Contamination Name:	Trichloroethylene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/1998
Cmp edt:	12/31/2000		

Violation ID:	10099	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	10199	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	10299	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	10399	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	10499	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	10599	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	10699	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	10899	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	1099	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	10999	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	11099	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	11199	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	11299	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	11399	Orig Code:	S

Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	11499	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	11599	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	11699	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	11799	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	11899	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	1199	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	11999	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	12099	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	12199	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	12299	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	12399	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	12499	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	12599	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	12699	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	12702	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	12802	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	12902	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	1299	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	13002	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	13102	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	13202	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	13302	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	13402	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	13502	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	13602	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	13702	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	13802	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	13902	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	1399	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	14002	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	14102	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001

Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	14102	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	14202	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	14302	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	14402	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	14502	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	14502	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	14602	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	14702	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	14802	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	14902	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	14902	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	1499	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	15002	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	15102	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	15202	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	15302	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	15302	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	15402	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	15502	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	15602	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	15702	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	15702	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	15802	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	15902	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	1599	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	16002	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	16102	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	16102	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	16202	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	16302	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	16402	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006

Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 16502 Orig Code: S
Enforcemnt FY: 2007 Enforcement Action: 12/06/2006
Enforcement Detail: St Compliance achieved Enforcement Category: Resolving

Violation ID: 16502 Orig Code: S
Enforcemnt FY: 2001 Enforcement Action: 04/11/2001
Enforcement Detail: St Compliance achieved Enforcement Category: Resolving

Violation ID: 16602 Orig Code: S
Enforcemnt FY: 2007 Enforcement Action: 12/06/2006
Enforcement Detail: St Compliance achieved Enforcement Category: Resolving

Violation ID: 16702 Orig Code: S
Enforcemnt FY: 2007 Enforcement Action: 12/06/2006
Enforcement Detail: St Compliance achieved Enforcement Category: Resolving

Violation ID: 16802 Orig Code: S
Enforcemnt FY: 2007 Enforcement Action: 12/06/2006
Enforcement Detail: St Compliance achieved Enforcement Category: Resolving

Violation ID: 16902 Orig Code: S
Enforcemnt FY: 2001 Enforcement Action: 04/11/2001
Enforcement Detail: St Compliance achieved Enforcement Category: Resolving

Violation ID: 16902 Orig Code: S
Enforcemnt FY: 2007 Enforcement Action: 12/06/2006
Enforcement Detail: St Compliance achieved Enforcement Category: Resolving

Violation ID: 1699 Orig Code: S
Enforcemnt FY: 2004 Enforcement Action: 12/31/2003
Enforcement Detail: St Compliance achieved Enforcement Category: Resolving

Violation ID: 17002 Orig Code: S
Enforcemnt FY: 2007 Enforcement Action: 12/06/2006
Enforcement Detail: St Compliance achieved Enforcement Category: Resolving

Violation ID: 17102 Orig Code: S
Enforcemnt FY: 2007 Enforcement Action: 12/06/2006
Enforcement Detail: St Compliance achieved Enforcement Category: Resolving

Violation ID: 17202 Orig Code: S
Enforcemnt FY: 2007 Enforcement Action: 12/06/2006
Enforcement Detail: St Compliance achieved Enforcement Category: Resolving

Violation ID: 17302 Orig Code: S
Enforcemnt FY: 2001 Enforcement Action: 04/11/2001
Enforcement Detail: St Compliance achieved Enforcement Category: Resolving

Violation ID: 17302 Orig Code: S
Enforcemnt FY: 2007 Enforcement Action: 12/06/2006
Enforcement Detail: St Compliance achieved Enforcement Category: Resolving

Violation ID: 17402 Orig Code: S
Enforcemnt FY: 2007 Enforcement Action: 12/06/2006
Enforcement Detail: St Compliance achieved Enforcement Category: Resolving

Violation ID: 17502 Orig Code: S
Enforcemnt FY: 2007 Enforcement Action: 12/06/2006
Enforcement Detail: St Compliance achieved Enforcement Category: Resolving

Violation ID:	17602	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	17702	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	17702	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	17802	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	17902	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	1799	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	18002	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	18102	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	18102	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	18202	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	18302	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	18402	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	18502	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	18502	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	18602	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	18702	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006

Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	18802	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	18902	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	18902	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	1899	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	19002	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	19102	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	19202	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	19302	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	19302	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	19402	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	19502	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	19602	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	19702	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	19802	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	19902	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	1999	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	20002	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	20102	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	20202	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	20302	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	20302	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	204	Orig Code:	S
Enforcemnt FY:	2004	Enforcement Action:	04/13/2004
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	20402	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	20502	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	20602	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	20702	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	20702	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	20802	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	20902	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	2099	Orig Code:	S
Enforcemnt FY:	2004	Enforcement Action:	12/31/2003
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	21002	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006

Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	21102	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	21102	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	21202	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	21302	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	21402	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	21502	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	21502	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	21602	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	21702	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	21802	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	21902	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	21902	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	2199	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	22002	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	22102	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	22202	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	22302	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	22302	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	22402	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	22502	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	22602	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	22702	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	22702	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	22802	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	22902	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	2299	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	23002	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	23102	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	23299	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	23299	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	23399	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001

Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	23399	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	23499	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	23499	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	23599	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	23599	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	23699	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	23699	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	23799	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	23799	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	23899	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	23899	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	2399	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	23999	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	23999	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	24099	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	24099	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	24199	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	24199	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	24299	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	24299	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	24399	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	24399	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	24499	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	24499	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	24599	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	24599	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	24699	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	24699	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	24799	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	24799	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	24899	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006

Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	24899	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	2499	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	24999	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	24999	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	25099	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	25099	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	25199	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	25199	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	25299	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	25299	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	25399	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	25399	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	25499	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	25499	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	25599	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	25599	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	25699	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	25699	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	25799	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	25799	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	25899	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	25899	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	2599	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	25999	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	25999	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26099	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26099	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26199	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26199	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26299	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26299	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001

Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26399	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26399	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26499	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26499	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26599	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26599	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26699	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26699	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26799	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26799	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26899	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26899	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	2699	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26999	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	26999	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	27099	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	27099	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	27199	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	27199	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	27299	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	27299	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	27399	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	27399	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	27499	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	27499	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	27599	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	27599	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	27699	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	27699	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	27799	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	27799	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001

Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	27899	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	27899	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	2799	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	27999	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	27999	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	28099	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	28099	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	28199	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	28199	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	28299	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	28299	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	28399	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	28399	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	28499	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	28499	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	28599	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	28599	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	28699	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	28699	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	28799	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	28799	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	28899	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	28899	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	2899	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	28999	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	28999	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	29099	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	29099	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	29199	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	29199	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	29299	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001

Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	29299	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	29399	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	29399	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	29499	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	29499	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	29599	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	29599	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	29699	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	29699	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	29799	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	29799	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	29899	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	29899	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	2999	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	29999	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	29999	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30099	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30099	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30199	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30199	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30299	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30299	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30399	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30399	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30499	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30499	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30599	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30599	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30699	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30699	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30799	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001

Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30799	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30899	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30899	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	3099	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30999	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	30999	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	31099	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	31099	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	31199	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	31199	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	31299	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	31299	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	31399	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	31399	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	31499	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	31499	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	31599	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	31599	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	31699	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	31699	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	31799	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	31799	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	31899	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	31899	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	3199	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	31999	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	31999	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	32099	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	32099	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	32199	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	32199	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001

Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 32299
Enforcemnt FY: 2001
Orig Code: S
Enforcement Action: 04/11/2001
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 32299
Enforcemnt FY: 2002
Orig Code: S
Enforcement Action: 11/27/2001
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 32399
Enforcemnt FY: 2001
Orig Code: S
Enforcement Action: 04/11/2001
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 32399
Enforcemnt FY: 2002
Orig Code: S
Enforcement Action: 11/27/2001
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 32499
Enforcemnt FY: 2001
Orig Code: S
Enforcement Action: 04/11/2001
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 32499
Enforcemnt FY: 2002
Orig Code: S
Enforcement Action: 11/27/2001
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 32599
Enforcemnt FY: 2002
Orig Code: S
Enforcement Action: 11/27/2001
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 32599
Enforcemnt FY: 2001
Orig Code: S
Enforcement Action: 04/11/2001
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 32699
Enforcemnt FY: 2001
Orig Code: S
Enforcement Action: 04/11/2001
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 32699
Enforcemnt FY: 2002
Orig Code: S
Enforcement Action: 11/27/2001
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 32799
Enforcemnt FY: 2002
Orig Code: S
Enforcement Action: 11/27/2001
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 32799
Enforcemnt FY: 2001
Orig Code: S
Enforcement Action: 04/11/2001
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 32899
Enforcemnt FY: 2001
Orig Code: S
Enforcement Action: 04/11/2001
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 32899
Enforcemnt FY: 2002
Orig Code: S
Enforcement Action: 11/27/2001
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID: 3299
Enforcemnt FY: 2007
Orig Code: S
Enforcement Action: 12/06/2006
Enforcement Detail: St Compliance achieved
Enforcement Category: Resolving

Violation ID:	32999	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	32999	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33099	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33099	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33199	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33199	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33299	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33299	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33399	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33399	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33499	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	11/19/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33499	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33599	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33599	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33699	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33699	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001

Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33799	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33799	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33899	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33899	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	3399	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33999	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	33999	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	3400	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	10/08/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	34099	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	34099	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	34199	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	34199	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	34299	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	34299	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	34399	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	34399	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	34499	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	34499	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	34599	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	34599	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	34699	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	34699	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	34799	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	11/27/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	34799	Orig Code:	S
Enforcemnt FY:	2001	Enforcement Action:	04/11/2001
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	34805	Orig Code:	S
Enforcemnt FY:	2005	Enforcement Action:	04/27/2005
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	34905	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	11/17/2005
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	3500	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	10/08/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35206	Orig Code:	S
Enforcemnt FY:	2006	Enforcement Action:	06/16/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35207	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	04/11/2007
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35212	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	01/10/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35214	Orig Code:	S
Enforcemnt FY:	2009	Enforcement Action:	03/12/2009

Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35258	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35259	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35260	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35261	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35262	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35263	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35264	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35265	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35266	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35267	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35268	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35269	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35270	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35271	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35272	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	35273	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35274	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35275	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35276	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35277	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	03/13/2008
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35320	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	06/23/2003
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35330	Orig Code:	S
Enforcemnt FY:	2004	Enforcement Action:	08/25/2004
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	35332	Orig Code:	S
Enforcemnt FY:	2004	Enforcement Action:	08/25/2004
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	3600	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	10/08/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	3700	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	10/08/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	3800	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	10/08/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	3900	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	10/08/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	399	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4000	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	10/08/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4100	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	10/08/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4200	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	10/08/2002

Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4300	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	10/08/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4400	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	10/08/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4500	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	10/08/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4601	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	10/08/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4701	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	10/08/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4801	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	10/08/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	4901	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	10/08/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	499	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	5001	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	10/08/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	5101	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	10/08/2002
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	5201	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	5301	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	5401	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	5502	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	5602	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	5702	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	5802	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	5902	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	599	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	6002	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	6102	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	6202	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	6302	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	6402	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	6502	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	6602	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	6899	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	699	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	6999	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	7099	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	7199	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006

Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	7299	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	7399	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	7499	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	7599	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	7699	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	7799	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	7899	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	799	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	7999	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	8099	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	8199	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	8299	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	8399	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	8499	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	8599	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving

Violation ID:	8699	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	8899	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	899	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	8999	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	9099	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	9199	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	9299	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	9399	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	9499	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	9599	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	9699	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	9799	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	9899	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	999	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	9999	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006
Enforcement Detail:	St Compliance achieved	Enforcement Category:	Resolving
Violation ID:	Not Reported	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	12/06/2006

Enforcement Detail:	St Compliance achieved	Enforcement Category:	Not Reported
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	11399
Contaminant:	1,1-DICHLOROETHYLENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	11499
Contaminant:	TRANS-1,2-DICHLOROETHYLENE		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	11599
Contaminant:	1,2-DICHLOROETHANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	11699
Contaminant:	1,1,1-TRICHLOROETHANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	11799
Contaminant:	CARBON TETRACHLORIDE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	11899
Contaminant:	1,2-DICHLOROPROPANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	11999
Contaminant:	TRICHLOROETHYLENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	12099
Contaminant:	1,1,2-TRICHLOROETHANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	12199
Contaminant:	TETRACHLOROETHYLENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00

Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	12299
Contaminant:	MONOCHLOROBENZENE (CHLOROBENZENE)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	12399
Contaminant:	BENZENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	12499
Contaminant:	TOLUENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	12599
Contaminant:	ETHYLBENZENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	12699
Contaminant:	STYRENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	12702
Contaminant:	ENDRIN	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	12802
Contaminant:	ENDRIN	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	12902
Contaminant:	ENDRIN	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	13002
Contaminant:	BHC-GAMMA (LINDANE)	Violation type:	3

Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	13102
Contaminant:	BHC-GAMMA (LINDANE)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	13202
Contaminant:	BHC-GAMMA (LINDANE)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	13302
Contaminant:	METHOXYCHLOR	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	13402
Contaminant:	METHOXYCHLOR	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	13502
Contaminant:	METHOXYCHLOR	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	13602
Contaminant:	TOXAPHENE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	13702
Contaminant:	TOXAPHENE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	13802
Contaminant:	TOXAPHENE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	13902

Contaminant:	DALAPON	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	14002
Contaminant:	DALAPON	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	14102
Contaminant:	DALAPON	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	14202
Contaminant:	DALAPON	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	14302
Contaminant:	DIQUAT	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	14402
Contaminant:	DIQUAT	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	14502
Contaminant:	DIQUAT	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	14602
Contaminant:	DIQUAT	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	14702
Contaminant:	ENDOTHALL	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853

PWS type code:	C	Violation ID:	14802
Contaminant:	ENDOTHALL	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	14902
Contaminant:	ENDOTHALL	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	15002
Contaminant:	ENDOTHALL	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	15102
Contaminant:	GLYPHOSATE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	15202
Contaminant:	GLYPHOSATE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	15302
Contaminant:	GLYPHOSATE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	15402
Contaminant:	GLYPHOSATE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	15502
Contaminant:	DI (2-ETHYLHEXYL) ADIPATE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	15602
Contaminant:	DI (2-ETHYLHEXYL) ADIPATE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	15702
Contaminant:	DI (2-ETHYLHEXYL) ADIPATE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	15802
Contaminant:	DI (2-ETHYLHEXYL) ADIPATE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	15902
Contaminant:	OXAMYL (VYDATE)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	16002
Contaminant:	OXAMYL (VYDATE)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	16102
Contaminant:	OXAMYL (VYDATE)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	16202
Contaminant:	OXAMYL (VYDATE)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	16302
Contaminant:	SIMAZINE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	16402
Contaminant:	SIMAZINE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	16502
Contaminant:	SIMAZINE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	16602
Contaminant:	SIMAZINE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	16702
Contaminant:	DI (2-ETHYLHEXYL) PHTHALATE		
Violation type:	3	Compliance start date:	1/1/2001 0:00:00
Compliance end date:	12/31/2001 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	10099
Contaminant:	1,1,2-TRICHLOROETHANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	10199
Contaminant:	TETRACHLOROETHYLENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	10299
Contaminant:	MONOCHLOROBENZENE (CHLOROBENZENE)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	10399
Contaminant:	BENZENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	10499
Contaminant:	TOLUENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	10599
Contaminant:	ETHYLBENZENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	10699
Contaminant:	STYRENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	10799
Contaminant:	1,2,4-TRICHLOROBENZENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	10899
Contaminant:	CIS-1,2-DICHLOROETHYLENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	10999
Contaminant:	XYLENES, TOTAL	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	11099
Contaminant:	METHYLENE CHLORIDE (DICHLOROMETHANE)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	11199
Contaminant:	O-DICHLOROBENZENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	11299
Contaminant:	P-DICHLOROBENZENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	16802
Contaminant:	DI (2-ETHYLHEXYL) PHTHALATE		
Violation type:	3	Compliance start date:	1/1/2001 0:00:00
Compliance end date:	12/31/2001 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	16902
Contaminant:	DI (2-ETHYLHEXYL) PHTHALATE		
Violation type:	3	Compliance start date:	1/1/2001 0:00:00
Compliance end date:	12/31/2001 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	17002
Contaminant:	DI (2-ETHYLHEXYL) PHTHALATE		
Violation type:	3	Compliance start date:	1/1/2001 0:00:00
Compliance end date:	12/31/2001 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	17102
Contaminant:	PICLORAM	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	17202
Contaminant:	PICLORAM	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	17302
Contaminant:	PICLORAM	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	17402
Contaminant:	PICLORAM	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	17502
Contaminant:	DINOSEB	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	17602
Contaminant:	DINOSEB	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	17702
Contaminant:	DINOSEB	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	17802
Contaminant:	DINOSEB	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	17902
Contaminant:	HEXACHLOROCYCLOPENTADIENE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	18002
Contaminant:	HEXACHLOROCYCLOPENTADIENE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	18102
Contaminant:	HEXACHLOROCYCLOPENTADIENE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	18202
Contaminant:	HEXACHLOROCYCLOPENTADIENE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	18302
Contaminant:	CARBOFURAN	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	18402
Contaminant:	CARBOFURAN	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	18502
Contaminant:	CARBOFURAN	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	18602
Contaminant:	CARBOFURAN	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	18702
Contaminant:	ATRAZINE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	18802
Contaminant:	ATRAZINE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	18902
Contaminant:	ATRAZINE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	19002
Contaminant:	ATRAZINE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	19102
Contaminant:	ALACHLOR (LASSO)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	19202
Contaminant:	ALACHLOR (LASSO)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	19302
Contaminant:	ALACHLOR (LASSO)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	19402
Contaminant:	ALACHLOR (LASSO)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	19502
Contaminant:	HEPTACHLOR	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	19602
Contaminant:	HEPTACHLOR	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	19702
Contaminant:	HEPTACHLOR	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	19802
Contaminant:	HEPTACHLOR EPOXIDE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	19902
Contaminant:	HEPTACHLOR EPOXIDE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	20002
Contaminant:	HEPTACHLOR EPOXIDE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	20102
Contaminant:	2,4-D	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	20202
Contaminant:	2,4-D	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	20302
Contaminant:	2,4-D	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	204
Contaminant:	COLIFORM (TCR)		
Violation type:	Monitoring, Routine Major (TCR)		
Compliance start date:	9/1/2003 0:00:00	Compliance end date:	9/30/2003 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	20402
Contaminant:	2,4-D	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	20502
Contaminant:	2,4,5-TP (SILVEX)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved

Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	20602
Contaminant:	2,4,5-TP (SILVEX)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	20702
Contaminant:	2,4,5-TP (SILVEX)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	20802
Contaminant:	2,4,5-TP (SILVEX)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	20902
Contaminant:	HEXACHLOROBENZENE (HCB)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	21002
Contaminant:	HEXACHLOROBENZENE (HCB)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	21102
Contaminant:	HEXACHLOROBENZENE (HCB)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	21202
Contaminant:	HEXACHLOROBENZENE (HCB)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	21302
Contaminant:	BENZO (A) PYRENE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	21402
Contaminant:	BENZO (A) PYRENE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00

Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	21502
Contaminant:	BENZO (A) PYRENE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	21602
Contaminant:	BENZO (A) PYRENE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	21702
Contaminant:	PENTACHLOROPHENOL	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	21802
Contaminant:	PENTACHLOROPHENOL	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	21902
Contaminant:	PENTACHLOROPHENOL	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	22002
Contaminant:	PENTACHLOROPHENOL	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	22102
Contaminant:	1,2 DIBROMO-3-CHLOROPROPANE (DBCP)		
Violation type:	3	Compliance start date:	1/1/2001 0:00:00
Compliance end date:	12/31/2001 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	22202
Contaminant:	1,2 DIBROMO-3-CHLOROPROPANE (DBCP)		
Violation type:	3	Compliance start date:	1/1/2001 0:00:00
Compliance end date:	12/31/2001 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	22302
Contaminant:	1,2 DIBROMO-3-CHLOROPROPANE (DBCP)		

Violation type:	3	Compliance start date:	1/1/2001 0:00:00
Compliance end date:	12/31/2001 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	22402
Contaminant:	1,2 DIBROMO-3-CHLOROPROPANE (DBCP)		
Violation type:	3	Compliance start date:	1/1/2001 0:00:00
Compliance end date:	12/31/2001 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	22502
Contaminant:	ETHYLENE DIBROMIDE (EDB)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	22602
Contaminant:	ETHYLENE DIBROMIDE (EDB)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	22702
Contaminant:	ETHYLENE DIBROMIDE (EDB)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	22802
Contaminant:	ETHYLENE DIBROMIDE (EDB)	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	22902
Contaminant:	CHLORDANE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	23002
Contaminant:	CHLORDANE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	23102
Contaminant:	CHLORDANE	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	23299

Contaminant:	ENDRIN	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	23399
Contaminant:	ENDRIN	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	23499
Contaminant:	ENDRIN	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	23599
Contaminant:	ENDRIN	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	23699
Contaminant:	BHC-GAMMA (LINDANE)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	23799
Contaminant:	BHC-GAMMA (LINDANE)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	23899
Contaminant:	BHC-GAMMA (LINDANE)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	23999
Contaminant:	BHC-GAMMA (LINDANE)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	24099
Contaminant:	METHOXYCHLOR	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853

PWS type code:	C	Violation ID:	24199
Contaminant:	METHOXYCHLOR	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	24299
Contaminant:	METHOXYCHLOR	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	24399
Contaminant:	METHOXYCHLOR	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	24499
Contaminant:	TOXAPHENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	24599
Contaminant:	TOXAPHENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	24699
Contaminant:	TOXAPHENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	24799
Contaminant:	TOXAPHENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	24899
Contaminant:	DALAPON	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	24999
Contaminant:	DALAPON	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	25099
Contaminant:	DALAPON	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	25199
Contaminant:	DALAPON	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	25299
Contaminant:	DIQUAT	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	25399
Contaminant:	DIQUAT	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	25499
Contaminant:	DIQUAT	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	25599
Contaminant:	DIQUAT	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	25699
Contaminant:	ENDOTHALL	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	25799
Contaminant:	ENDOTHALL	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	25899
Contaminant:	ENDOTHALL	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	25999
Contaminant:	ENDOTHALL	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	26099
Contaminant:	GLYPHOSATE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	26199
Contaminant:	GLYPHOSATE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	26199
Contaminant:	GLYPHOSATE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	26299
Contaminant:	GLYPHOSATE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	26299
Contaminant:	GLYPHOSATE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	26399
Contaminant:	GLYPHOSATE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	26399
Contaminant:	GLYPHOSATE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	26499
Contaminant:	DI (2-ETHYLHEXYL) ADIPATE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	26499
Contaminant:	DI (2-ETHYLHEXYL) ADIPATE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	26599
Contaminant:	DI (2-ETHYLHEXYL) ADIPATE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	26599
Contaminant:	DI (2-ETHYLHEXYL) ADIPATE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	26699
Contaminant:	DI (2-ETHYLHEXYL) ADIPATE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	26699
Contaminant:	DI (2-ETHYLHEXYL) ADIPATE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	26799
Contaminant:	DI (2-ETHYLHEXYL) ADIPATE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	26799
Contaminant:	DI (2-ETHYLHEXYL) ADIPATE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	26899
Contaminant:	OXAMYL (VYDATE)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	26899
Contaminant:	OXAMYL (VYDATE)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	29799
Contaminant:	ATRAZINE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	29799
Contaminant:	ATRAZINE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	29899
Contaminant:	ATRAZINE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	29899
Contaminant:	ATRAZINE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	29999
Contaminant:	ATRAZINE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	29999
Contaminant:	ATRAZINE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30099
Contaminant:	ALACHLOR (LASSO)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30099
Contaminant:	ALACHLOR (LASSO)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30199
Contaminant:	ALACHLOR (LASSO)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30199
Contaminant:	ALACHLOR (LASSO)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30299
Contaminant:	ALACHLOR (LASSO)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30299
Contaminant:	ALACHLOR (LASSO)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30399
Contaminant:	ALACHLOR (LASSO)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30399
Contaminant:	ALACHLOR (LASSO)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30499
Contaminant:	HEPTACHLOR	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30499
Contaminant:	HEPTACHLOR	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30599
Contaminant:	HEPTACHLOR	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30599
Contaminant:	HEPTACHLOR	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30699
Contaminant:	HEPTACHLOR	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30699
Contaminant:	HEPTACHLOR	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30799
Contaminant:	HEPTACHLOR	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30799
Contaminant:	HEPTACHLOR	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30899
Contaminant:	HEPTACHLOR EPOXIDE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30899
Contaminant:	HEPTACHLOR EPOXIDE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30999
Contaminant:	HEPTACHLOR EPOXIDE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	30999
Contaminant:	HEPTACHLOR EPOXIDE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31099
Contaminant:	HEPTACHLOR EPOXIDE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31099
Contaminant:	HEPTACHLOR EPOXIDE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31199
Contaminant:	HEPTACHLOR EPOXIDE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31199
Contaminant:	HEPTACHLOR EPOXIDE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31299
Contaminant:	2,4-D	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31299
Contaminant:	2,4-D	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31399
Contaminant:	2,4-D	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31399
Contaminant:	2,4-D	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31499
Contaminant:	2,4-D	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31499
Contaminant:	2,4-D	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31599
Contaminant:	2,4-D	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31599
Contaminant:	2,4-D	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31699
Contaminant:	2,4,5-TP (SILVEX)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31699
Contaminant:	2,4,5-TP (SILVEX)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31799
Contaminant:	2,4,5-TP (SILVEX)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31799
Contaminant:	2,4,5-TP (SILVEX)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31899
Contaminant:	2,4,5-TP (SILVEX)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31899
Contaminant:	2,4,5-TP (SILVEX)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31999
Contaminant:	2,4,5-TP (SILVEX)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	31999
Contaminant:	2,4,5-TP (SILVEX)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32099
Contaminant:	HEXACHLOROBENZENE (HCB)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32099
Contaminant:	HEXACHLOROBENZENE (HCB)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32199
Contaminant:	HEXACHLOROBENZENE (HCB)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32199
Contaminant:	HEXACHLOROBENZENE (HCB)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32299
Contaminant:	HEXACHLOROBENZENE (HCB)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32299
Contaminant:	HEXACHLOROBENZENE (HCB)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32399
Contaminant:	HEXACHLOROBENZENE (HCB)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32399
Contaminant:	HEXACHLOROBENZENE (HCB)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32499
Contaminant:	BENZO (A) PYRENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	26999
Contaminant:	OXAMYL (VYDATE)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	26999
Contaminant:	OXAMYL (VYDATE)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	27099
Contaminant:	OXAMYL (VYDATE)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	27199
Contaminant:	OXAMYL (VYDATE)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	27199
Contaminant:	OXAMYL (VYDATE)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	27299
Contaminant:	SIMAZINE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	27299
Contaminant:	SIMAZINE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	27399
Contaminant:	SIMAZINE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	27399
Contaminant:	SIMAZINE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	27499
Contaminant:	SIMAZINE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	27499
Contaminant:	SIMAZINE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	27599
Contaminant:	SIMAZINE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	27599
Contaminant:	SIMAZINE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	27699
Contaminant:	DI (2-ETHYLHEXYL) PHTHALATE		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00		
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	27699
Contaminant:	DI (2-ETHYLHEXYL) PHTHALATE		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	27799
Contaminant:	DI (2-ETHYLHEXYL) PHTHALATE		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	11/27/2001 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	27799
Contaminant:	DI (2-ETHYLHEXYL) PHTHALATE		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00

Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	27899
Contaminant:	DI (2-ETHYLHEXYL) PHTHALATE		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	11/27/2001 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	27899
Contaminant:	DI (2-ETHYLHEXYL) PHTHALATE		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	27999
Contaminant:	DI (2-ETHYLHEXYL) PHTHALATE		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	11/27/2001 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	27999
Contaminant:	DI (2-ETHYLHEXYL) PHTHALATE		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28099
Contaminant:	PICLORAM	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28099
Contaminant:	PICLORAM	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28199
Contaminant:	PICLORAM	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28199
Contaminant:	PICLORAM	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		
PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28299
Contaminant:	PICLORAM	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00

Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28299
Contaminant:	PICLORAM	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28399
Contaminant:	PICLORAM	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28399
Contaminant:	PICLORAM	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28499
Contaminant:	DINOSEB	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28499
Contaminant:	DINOSEB	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28599
Contaminant:	DINOSEB	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28599
Contaminant:	DINOSEB	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28699
Contaminant:	DINOSEB	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28699
Contaminant:	DINOSEB	Violation type:	3

Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28799
Contaminant:	DINOSEB	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28799
Contaminant:	DINOSEB	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28899
Contaminant:	HEXACHLOROCYCLOPENTADIENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28899
Contaminant:	HEXACHLOROCYCLOPENTADIENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28999
Contaminant:	HEXACHLOROCYCLOPENTADIENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	28999
Contaminant:	HEXACHLOROCYCLOPENTADIENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	29099
Contaminant:	HEXACHLOROCYCLOPENTADIENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	29099
Contaminant:	HEXACHLOROCYCLOPENTADIENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	29199

Contaminant:	HEXACHLOROCYCLOPENTADIENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	29199
Contaminant:	HEXACHLOROCYCLOPENTADIENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	29299
Contaminant:	CARBOFURAN	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	29299
Contaminant:	CARBOFURAN	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	29399
Contaminant:	CARBOFURAN	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	29399
Contaminant:	CARBOFURAN	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	29499
Contaminant:	CARBOFURAN	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	29499
Contaminant:	CARBOFURAN	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	29599
Contaminant:	CARBOFURAN	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853

PWS type code:	C	Violation ID:	29599
Contaminant:	CARBOFURAN	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	29699
Contaminant:	ATRAZINE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	29699
Contaminant:	ATRAZINE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32499
Contaminant:	BENZO (A) PYRENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32599
Contaminant:	BENZO (A) PYRENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32599
Contaminant:	BENZO (A) PYRENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32699
Contaminant:	BENZO (A) PYRENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32699
Contaminant:	BENZO (A) PYRENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32799
Contaminant:	BENZO (A) PYRENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32799
Contaminant:	BENZO (A) PYRENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32899
Contaminant:	PENTACHLOROPHENOL	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32899
Contaminant:	PENTACHLOROPHENOL	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32999
Contaminant:	PENTACHLOROPHENOL	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	32999
Contaminant:	PENTACHLOROPHENOL	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33099
Contaminant:	PENTACHLOROPHENOL	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33099
Contaminant:	PENTACHLOROPHENOL	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33199
Contaminant:	PENTACHLOROPHENOL	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33199
Contaminant:	PENTACHLOROPHENOL	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33299
Contaminant:	TOTAL POLYCHLORINATED BIPHENYLS (PCB)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	11/27/2001 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33299
Contaminant:	TOTAL POLYCHLORINATED BIPHENYLS (PCB)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33399
Contaminant:	TOTAL POLYCHLORINATED BIPHENYLS (PCB)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	11/27/2001 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33399
Contaminant:	TOTAL POLYCHLORINATED BIPHENYLS (PCB)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33499
Contaminant:	TOTAL POLYCHLORINATED BIPHENYLS (PCB)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	11/19/2002 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33499
Contaminant:	TOTAL POLYCHLORINATED BIPHENYLS (PCB)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33599
Contaminant:	TOTAL POLYCHLORINATED BIPHENYLS (PCB)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	11/27/2001 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33599
Contaminant:	TOTAL POLYCHLORINATED BIPHENYLS (PCB)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33699
Contaminant:	1,2 DIBROMO-3-CHLOROPROPANE (DBCP)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	11/27/2001 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33699
Contaminant:	1,2 DIBROMO-3-CHLOROPROPANE (DBCP)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33799
Contaminant:	1,2 DIBROMO-3-CHLOROPROPANE (DBCP)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	11/27/2001 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33799
Contaminant:	1,2 DIBROMO-3-CHLOROPROPANE (DBCP)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33899
Contaminant:	1,2 DIBROMO-3-CHLOROPROPANE (DBCP)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	11/27/2001 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33899
Contaminant:	1,2 DIBROMO-3-CHLOROPROPANE (DBCP)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33999
Contaminant:	1,2 DIBROMO-3-CHLOROPROPANE (DBCP)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	11/27/2001 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	33999
Contaminant:	1,2 DIBROMO-3-CHLOROPROPANE (DBCP)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	34099
Contaminant:	ETHYLENE DIBROMIDE (EDB)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	34099
Contaminant:	ETHYLENE DIBROMIDE (EDB)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	34199
Contaminant:	ETHYLENE DIBROMIDE (EDB)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	34199
Contaminant:	ETHYLENE DIBROMIDE (EDB)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	34299
Contaminant:	ETHYLENE DIBROMIDE (EDB)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	34299
Contaminant:	ETHYLENE DIBROMIDE (EDB)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	34399
Contaminant:	ETHYLENE DIBROMIDE (EDB)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	34399
Contaminant:	ETHYLENE DIBROMIDE (EDB)	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	34499
Contaminant:	CHLORDANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	34499
Contaminant:	CHLORDANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	34599
Contaminant:	CHLORDANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	34599
Contaminant:	CHLORDANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	34699
Contaminant:	CHLORDANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	34699
Contaminant:	CHLORDANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	34799
Contaminant:	CHLORDANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	11/27/2001 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	34799
Contaminant:	CHLORDANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	34805
Contaminant:	COLIFORM (TCR)		
Violation type:	Monitoring, Routine Minor (TCR)		
Compliance start date:	9/1/2004 0:00:00	Compliance end date:	9/30/2004 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	34905
Contaminant:	0999	Violation type:	27
Compliance start date:	7/1/2005 0:00:00	Compliance end date:	9/30/2005 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35206
Contaminant:	COLIFORM (TCR)		
Violation type:	Monitoring, Routine Minor (TCR)		
Compliance start date:	9/1/2005 0:00:00	Compliance end date:	9/30/2005 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35207
Contaminant:	COLIFORM (TCR)		
Violation type:	Monitoring, Routine Minor (TCR)		

Compliance start date:	8/1/2006 0:00:00	Compliance end date:	8/31/2006 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35212
Contaminant:	LEAD & COPPER RULE		
Violation type:	Follow-up and Routine Tap Sampling		
Compliance start date:	10/1/2006 0:00:00	Compliance end date:	1/10/2008 0:00:00
Enforcement date:	1/10/2008 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35214
Contaminant:	COLIFORM (TCR)		
Violation type:	Monitoring, Routine Minor (TCR)		
Compliance start date:	11/1/2007 0:00:00	Compliance end date:	11/30/2007 0:00:00
Enforcement date:	No Enf Action as of	Enforcement action:	7/8/2009 0:00:00
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35258
Contaminant:	GROSS ALPHA, EXCL. RADON & U		
Violation type:	3	Compliance start date:	1/1/2004 0:00:00
Compliance end date:	12/31/2007 0:00:00	Enforcement date:	3/13/2008 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35259
Contaminant:	COMBINED URANIUM	Violation type:	3
Compliance start date:	1/1/2004 0:00:00	Compliance end date:	12/31/2007 0:00:00
Enforcement date:	3/13/2008 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35260
Contaminant:	COMBINED RADIUM (-226 & -228)		
Violation type:	3	Compliance start date:	1/1/2004 0:00:00
Compliance end date:	12/31/2007 0:00:00	Enforcement date:	3/13/2008 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35261
Contaminant:	RADIUM-226	Violation type:	3
Compliance start date:	1/1/2004 0:00:00	Compliance end date:	12/31/2007 0:00:00
Enforcement date:	3/13/2008 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35262
Contaminant:	RADIUM-228	Violation type:	3
Compliance start date:	1/1/2004 0:00:00	Compliance end date:	12/31/2007 0:00:00
Enforcement date:	3/13/2008 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35263
Contaminant:	GROSS ALPHA, EXCL. RADON & U		
Violation type:	3	Compliance start date:	1/1/2004 0:00:00
Compliance end date:	12/31/2007 0:00:00	Enforcement date:	3/13/2008 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35264
Contaminant:	COMBINED URANIUM	Violation type:	3
Compliance start date:	1/1/2004 0:00:00	Compliance end date:	12/31/2007 0:00:00
Enforcement date:	3/13/2008 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35265
Contaminant:	COMBINED RADIUM (-226 & -228)		
Violation type:	3	Compliance start date:	1/1/2004 0:00:00
Compliance end date:	12/31/2007 0:00:00	Enforcement date:	3/13/2008 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35266
Contaminant:	RADIUM-226	Violation type:	3
Compliance start date:	1/1/2004 0:00:00	Compliance end date:	12/31/2007 0:00:00
Enforcement date:	3/13/2008 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35267
Contaminant:	RADIUM-228	Violation type:	3
Compliance start date:	1/1/2004 0:00:00	Compliance end date:	12/31/2007 0:00:00
Enforcement date:	3/13/2008 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35268
Contaminant:	GROSS ALPHA, EXCL. RADON & U		
Violation type:	3	Compliance start date:	1/1/2004 0:00:00
Compliance end date:	12/31/2007 0:00:00	Enforcement date:	3/13/2008 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35269
Contaminant:	COMBINED URANIUM	Violation type:	3
Compliance start date:	1/1/2004 0:00:00	Compliance end date:	12/31/2007 0:00:00
Enforcement date:	3/13/2008 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35270
Contaminant:	COMBINED RADIUM (-226 & -228)		
Violation type:	3	Compliance start date:	1/1/2004 0:00:00
Compliance end date:	12/31/2007 0:00:00	Enforcement date:	3/13/2008 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35271
Contaminant:	RADIUM-226	Violation type:	3
Compliance start date:	1/1/2004 0:00:00	Compliance end date:	12/31/2007 0:00:00
Enforcement date:	3/13/2008 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35272
Contaminant:	RADIUM-228	Violation type:	3
Compliance start date:	1/1/2004 0:00:00	Compliance end date:	12/31/2007 0:00:00
Enforcement date:	3/13/2008 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35273
Contaminant:	GROSS ALPHA, EXCL. RADON & U		
Violation type:	3	Compliance start date:	1/1/2004 0:00:00
Compliance end date:	12/31/2007 0:00:00	Enforcement date:	3/13/2008 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35274
Contaminant:	COMBINED URANIUM	Violation type:	3
Compliance start date:	1/1/2004 0:00:00	Compliance end date:	12/31/2007 0:00:00
Enforcement date:	3/13/2008 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35275
Contaminant:	COMBINED RADIUM (-226 & -228)		
Violation type:	3	Compliance start date:	1/1/2004 0:00:00
Compliance end date:	12/31/2007 0:00:00	Enforcement date:	3/13/2008 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35276
Contaminant:	RADIUM-226	Violation type:	3
Compliance start date:	1/1/2004 0:00:00	Compliance end date:	12/31/2007 0:00:00
Enforcement date:	3/13/2008 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	35277
Contaminant:	RADIUM-228	Violation type:	3
Compliance start date:	1/1/2004 0:00:00	Compliance end date:	12/31/2007 0:00:00
Enforcement date:	3/13/2008 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4000
Contaminant:	ANTIMONY, TOTAL	Violation type:	3
Compliance start date:	1/1/2000 0:00:00	Compliance end date:	3/31/2000 0:00:00
Enforcement date:	10/8/2002 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4000
Contaminant:	ANTIMONY, TOTAL	Violation type:	3
Compliance start date:	1/1/2000 0:00:00	Compliance end date:	3/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4100
Contaminant:	BERYLLIUM, TOTAL	Violation type:	3
Compliance start date:	1/1/2000 0:00:00	Compliance end date:	3/31/2000 0:00:00
Enforcement date:	10/8/2002 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4100
Contaminant:	BERYLLIUM, TOTAL	Violation type:	3
Compliance start date:	1/1/2000 0:00:00	Compliance end date:	3/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4200
Contaminant:	THALLIUM, TOTAL	Violation type:	3
Compliance start date:	1/1/2000 0:00:00	Compliance end date:	3/31/2000 0:00:00
Enforcement date:	10/8/2002 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4200
Contaminant:	THALLIUM, TOTAL	Violation type:	3
Compliance start date:	1/1/2000 0:00:00	Compliance end date:	3/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4300
Contaminant:	ANTIMONY, TOTAL	Violation type:	3
Compliance start date:	4/1/2000 0:00:00	Compliance end date:	6/30/2000 0:00:00
Enforcement date:	10/8/2002 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4300
Contaminant:	ANTIMONY, TOTAL	Violation type:	3
Compliance start date:	4/1/2000 0:00:00	Compliance end date:	6/30/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4400
Contaminant:	BERYLLIUM, TOTAL	Violation type:	3
Compliance start date:	4/1/2000 0:00:00	Compliance end date:	6/30/2000 0:00:00
Enforcement date:	10/8/2002 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4400
Contaminant:	BERYLLIUM, TOTAL	Violation type:	3
Compliance start date:	4/1/2000 0:00:00	Compliance end date:	6/30/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4500
Contaminant:	THALLIUM, TOTAL	Violation type:	3
Compliance start date:	4/1/2000 0:00:00	Compliance end date:	6/30/2000 0:00:00
Enforcement date:	10/8/2002 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4500
Contaminant:	THALLIUM, TOTAL	Violation type:	3
Compliance start date:	4/1/2000 0:00:00	Compliance end date:	6/30/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4601
Contaminant:	ANTIMONY, TOTAL	Violation type:	3
Compliance start date:	7/1/2000 0:00:00	Compliance end date:	9/30/2000 0:00:00
Enforcement date:	10/8/2002 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4601
Contaminant:	ANTIMONY, TOTAL	Violation type:	3
Compliance start date:	7/1/2000 0:00:00	Compliance end date:	9/30/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4701
Contaminant:	BERYLLIUM, TOTAL	Violation type:	3
Compliance start date:	7/1/2000 0:00:00	Compliance end date:	9/30/2000 0:00:00
Enforcement date:	10/8/2002 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4701
Contaminant:	BERYLLIUM, TOTAL	Violation type:	3
Compliance start date:	7/1/2000 0:00:00	Compliance end date:	9/30/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4801
Contaminant:	THALLIUM, TOTAL	Violation type:	3
Compliance start date:	7/1/2000 0:00:00	Compliance end date:	9/30/2000 0:00:00
Enforcement date:	10/8/2002 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4801
Contaminant:	THALLIUM, TOTAL	Violation type:	3
Compliance start date:	7/1/2000 0:00:00	Compliance end date:	9/30/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4901
Contaminant:	ANTIMONY, TOTAL	Violation type:	3
Compliance start date:	10/1/2000 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	10/8/2002 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	4901
Contaminant:	ANTIMONY, TOTAL	Violation type:	3
Compliance start date:	10/1/2000 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	5001
Contaminant:	BERYLLIUM, TOTAL	Violation type:	3
Compliance start date:	10/1/2000 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	10/8/2002 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	5001
Contaminant:	BERYLLIUM, TOTAL	Violation type:	3
Compliance start date:	10/1/2000 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	5101
Contaminant:	THALLIUM, TOTAL	Violation type:	3
Compliance start date:	10/1/2000 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	10/8/2002 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	5101
Contaminant:	THALLIUM, TOTAL	Violation type:	3
Compliance start date:	10/1/2000 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	5201
Contaminant:	ANTIMONY, TOTAL	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	3/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	5301
Contaminant:	BERYLLIUM, TOTAL	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	3/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	5401
Contaminant:	THALLIUM, TOTAL	Violation type:	3
Compliance start date:	1/1/2001 0:00:00	Compliance end date:	3/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	5502
Contaminant:	ANTIMONY, TOTAL	Violation type:	3
Compliance start date:	7/1/2001 0:00:00	Compliance end date:	9/30/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	5602
Contaminant:	BERYLLIUM, TOTAL	Violation type:	3
Compliance start date:	7/1/2001 0:00:00	Compliance end date:	9/30/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	5702
Contaminant:	THALLIUM, TOTAL	Violation type:	3
Compliance start date:	7/1/2001 0:00:00	Compliance end date:	9/30/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	5802
Contaminant:	ANTIMONY, TOTAL	Violation type:	3
Compliance start date:	10/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	5902
Contaminant:	BERYLLIUM, TOTAL	Violation type:	3
Compliance start date:	10/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	6002
Contaminant:	THALLIUM, TOTAL	Violation type:	3
Compliance start date:	10/1/2001 0:00:00	Compliance end date:	12/31/2001 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	6102
Contaminant:	ANTIMONY, TOTAL	Violation type:	3
Compliance start date:	1/1/2002 0:00:00	Compliance end date:	3/31/2002 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	6202
Contaminant:	BERYLLIUM, TOTAL	Violation type:	3
Compliance start date:	1/1/2002 0:00:00	Compliance end date:	3/31/2002 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	6302
Contaminant:	THALLIUM, TOTAL	Violation type:	3
Compliance start date:	1/1/2002 0:00:00	Compliance end date:	3/31/2002 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	6402
Contaminant:	ANTIMONY, TOTAL	Violation type:	3
Compliance start date:	4/1/2002 0:00:00	Compliance end date:	6/30/2002 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	6502
Contaminant:	BERYLLIUM, TOTAL	Violation type:	3
Compliance start date:	4/1/2002 0:00:00	Compliance end date:	6/30/2002 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	6602
Contaminant:	THALLIUM, TOTAL	Violation type:	3
Compliance start date:	4/1/2002 0:00:00	Compliance end date:	6/30/2002 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	6799
Contaminant:	1,2,4-TRICHLOROBENZENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	6899
Contaminant:	CIS-1,2-DICHLOROETHYLENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	6999
Contaminant:	XYLENES, TOTAL	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	7099
Contaminant:	METHYLENE CHLORIDE (DICHLOROMETHANE)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	7199
Contaminant:	O-DICHLOROBENZENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	7299
Contaminant:	P-DICHLOROBENZENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	7399
Contaminant:	1,1-DICHLOROETHYLENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	7499
Contaminant:	TRANS-1,2-DICHLOROETHYLENE		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	7599
Contaminant:	1,2-DICHLOROETHANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	7699
Contaminant:	1,1,1-TRICHLOROETHANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	7799
Contaminant:	CARBON TETRACHLORIDE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	7899
Contaminant:	1,2-DICHLOROPROPANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	7999
Contaminant:	TRICHLOROETHYLENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	8099
Contaminant:	1,1,2-TRICHLOROETHANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	8199
Contaminant:	TETRACHLOROETHYLENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	8299
Contaminant:	MONOCHLOROBENZENE (CHLOROBENZENE)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	8399
Contaminant:	BENZENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	8499
Contaminant:	TOLUENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	8599
Contaminant:	ETHYLBENZENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	8699
Contaminant:	STYRENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	8799
Contaminant:	1,2,4-TRICHLOROBENZENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	8899
Contaminant:	CIS-1,2-DICHLOROETHYLENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	8999
Contaminant:	XYLENES, TOTAL	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	9099
Contaminant:	METHYLENE CHLORIDE (DICHLOROMETHANE)		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	9199
Contaminant:	O-DICHLOROBENZENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	9299
Contaminant:	P-DICHLOROBENZENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	9399
Contaminant:	1,1-DICHLOROETHYLENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	9499
Contaminant:	TRANS-1,2-DICHLOROETHYLENE		
Violation type:	3	Compliance start date:	1/1/1998 0:00:00
Compliance end date:	12/31/2000 0:00:00	Enforcement date:	12/6/2006 0:00:00
Enforcement action:	State Compliance Achieved	Violation measurement:	Not Reported

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	9599
Contaminant:	1,2-DICHLOROETHANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	9699
Contaminant:	1,1,1-TRICHLOROETHANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	9799
Contaminant:	CARBON TETRACHLORIDE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	9899
Contaminant:	1,2-DICHLOROPROPANE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

PWS name:	QUEEN CREEK WATER COMPANY	Population served:	27853
PWS type code:	C	Violation ID:	9999
Contaminant:	TRICHLOROETHYLENE	Violation type:	3
Compliance start date:	1/1/1998 0:00:00	Compliance end date:	12/31/2000 0:00:00
Enforcement date:	12/6/2006 0:00:00	Enforcement action:	State Compliance Achieved
Violation measurement:	Not Reported		

ARIZONA GOVERNMENT WELL RECORDS SEARCHED

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

State Wetlands Data: Riparian Vegetation Associated with Perennial Waters
Source: State Land Department
Telephone: 602-542-4094

Arizona Well Registration Database
Source: Department of Water Resources
Telephone: 602-771-8535
The Wells database contains all wells registered in the state.

Water Well Information
Agency: Department of Environmental Quality
Telephone: 602-771-2300

Oil and Gas Well Database
Source: Arizona Geological Survey
Telephone: 520-770-3500
This database contains Oil and Gas wells in the State of Arizona. Includes all wells that have been permitted by the State Oil and Gas Conservation Commission (OGCC). Gas wells include natural gas, helium, and carbon dioxide wells.

STREET AND ADDRESS INFORMATION

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UPRR PIRATE

Mesa Arizona

Mesa, AZ 85212

Inquiry Number: 6992684.8

May 26, 2022

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Date EDR Searched Historical Sources:

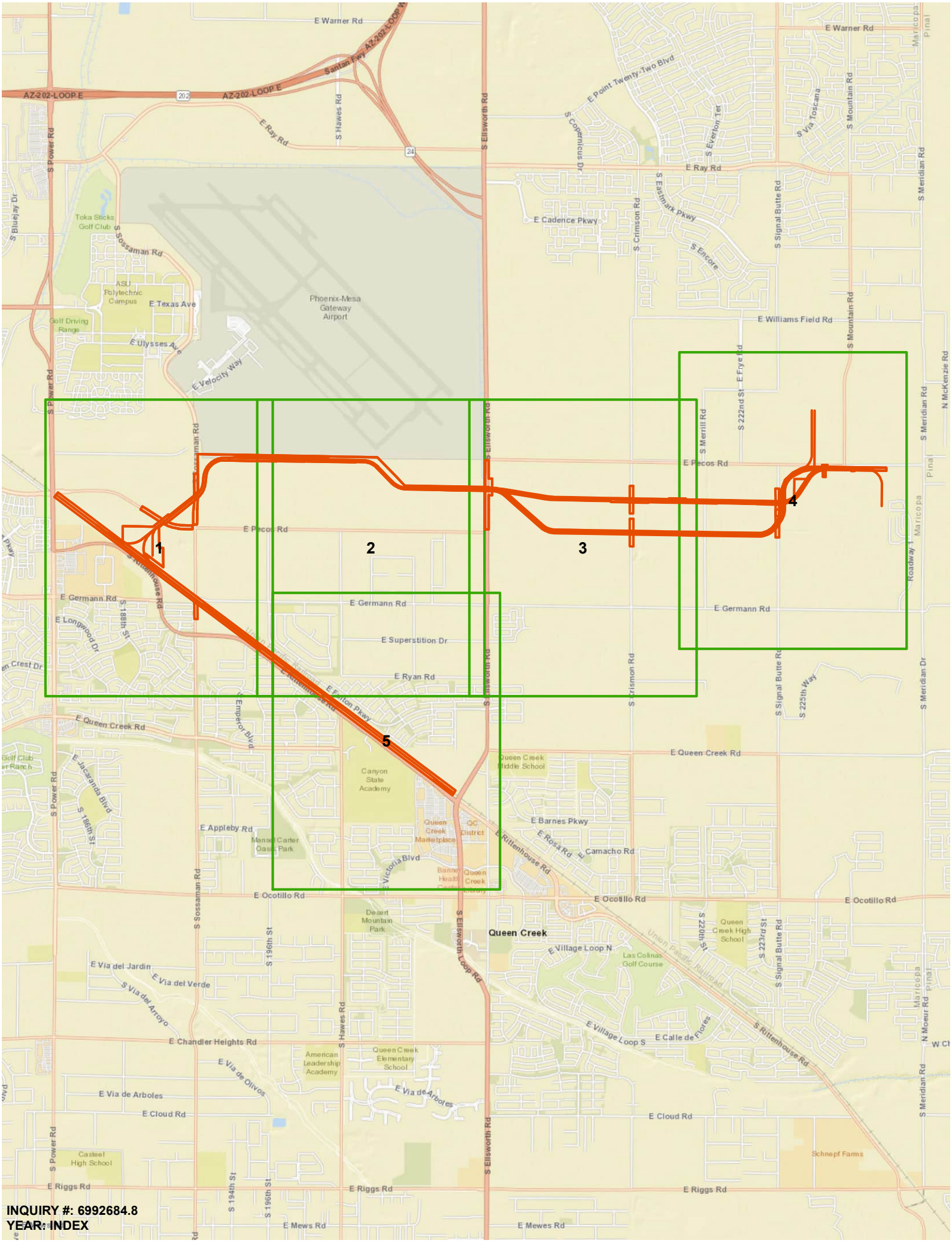
Aerial Photography May 26, 2022

Target Property:

Mesa Arizona

Mesa, AZ 85212

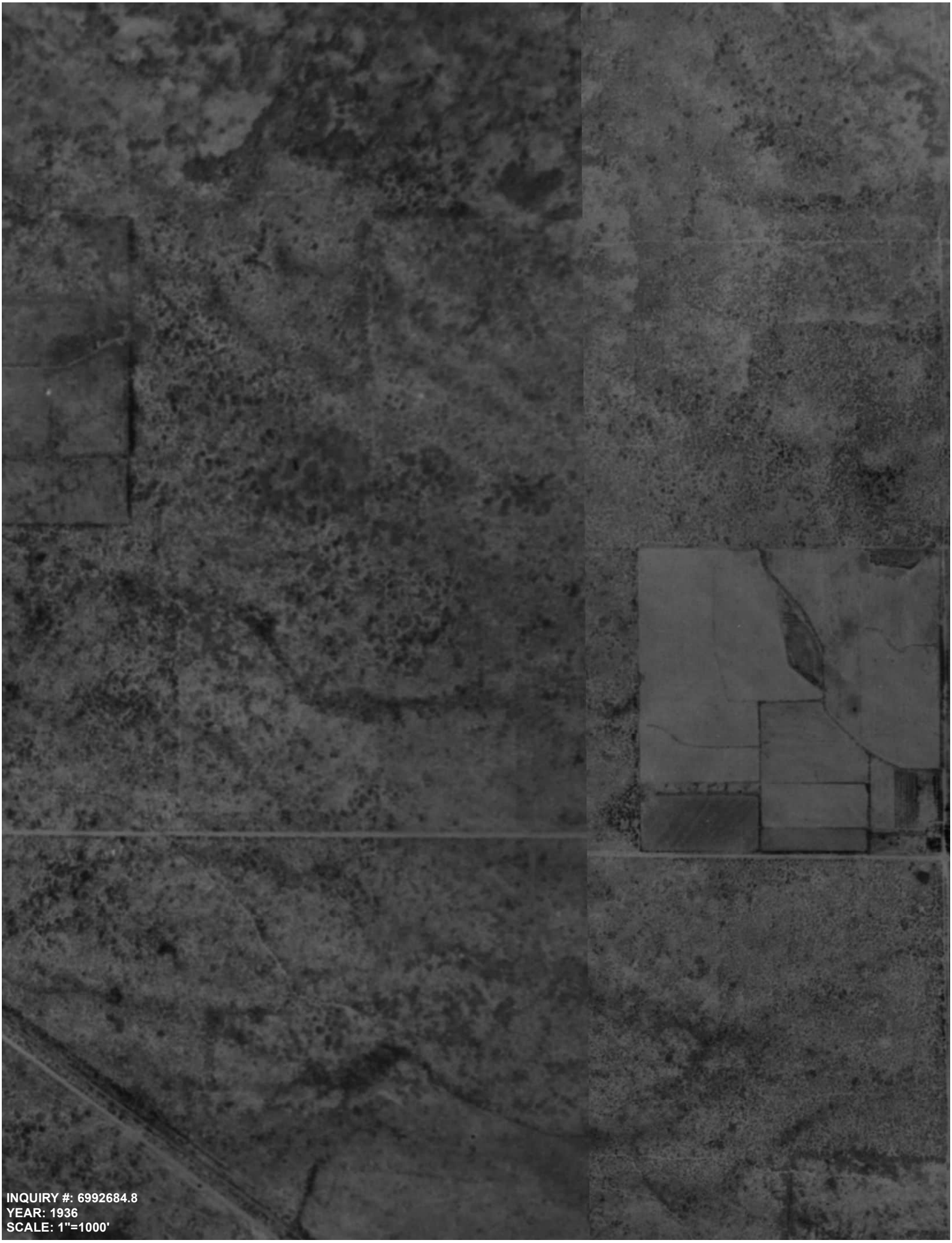
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1938	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1938	SCS
1949	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1949	USDA
1953	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1953	USGS
1957	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1957	USDA
1964	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1964	USDA
1973	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1973	USGS
1979	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1979	USDA
1980-1981	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1980-1981	USDA
1992	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1992	USGS/DOQQ
1997	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1997	USGS/DOQQ
2007	Aerial Photograph. Scale: 1"=1000'	Flight Year: 2007	USDA/NAIP
2010	Aerial Photograph. Scale: 1"=1000'	Flight Year: 2010	USDA/NAIP
2013	Aerial Photograph. Scale: 1"=1000'	Flight Year: 2013	USDA/NAIP
2017	Aerial Photograph. Scale: 1"=1000'	Flight Year: 2017	USDA/NAIP



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YEAR: INDEX



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SCALE: 1"=1000'



INQUIRY #: 6992684.8
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SCALE: 1"=1000'



INQUIRY #: 6992684.8
YEAR: 1936
SCALE: 1"=1000'



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SCALE: 1"=1000'



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YEAR: 1938
SCALE: 1"=1000'



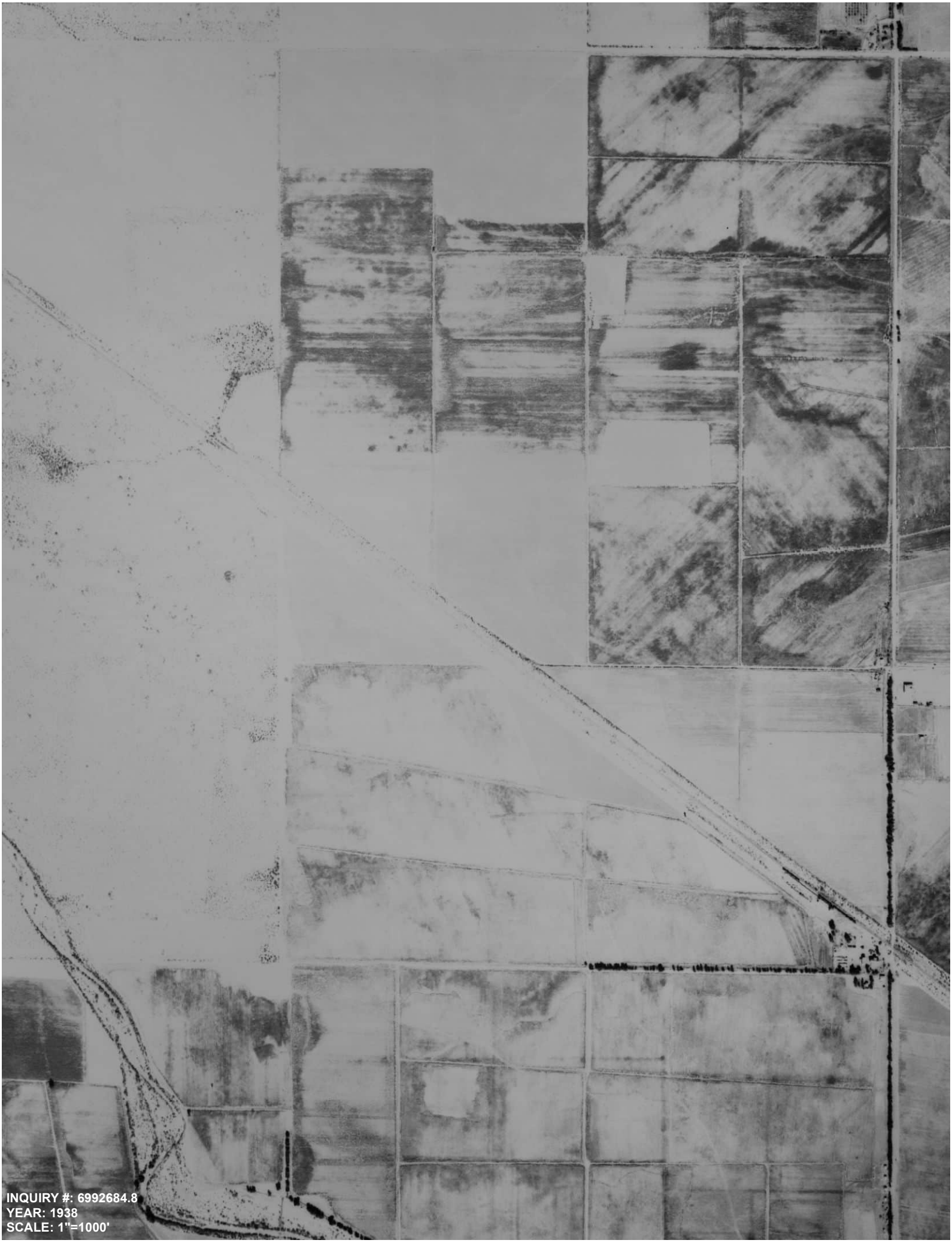
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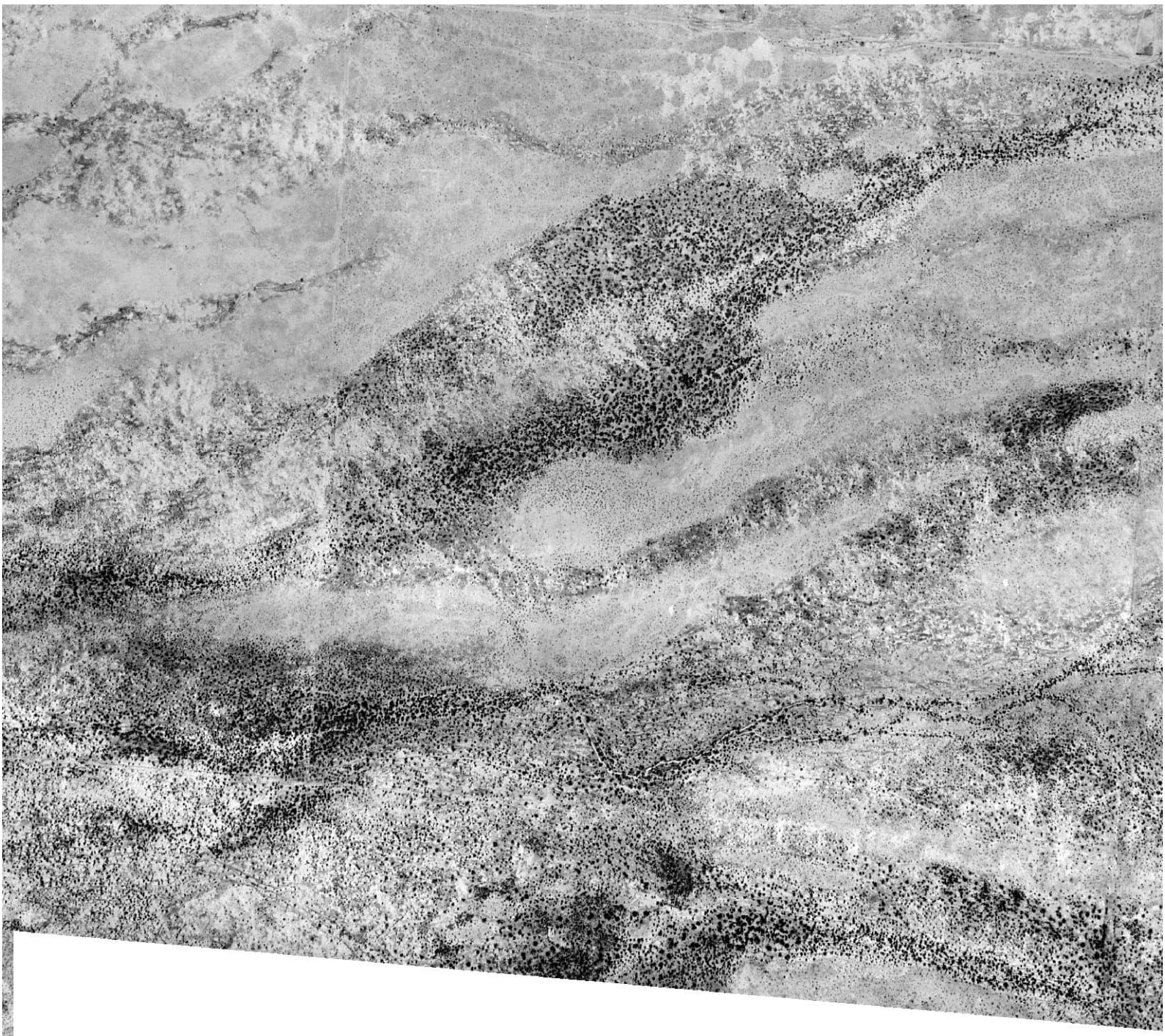
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YEAR: 1953
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YEAR: 1957
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YEAR: 1964
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YEAR: 1964
SCALE: 1"=1000'


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YEAR: 1973
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YEAR: 1980-1981
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YEAR: 1980-1981
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YEAR: 1980-1981
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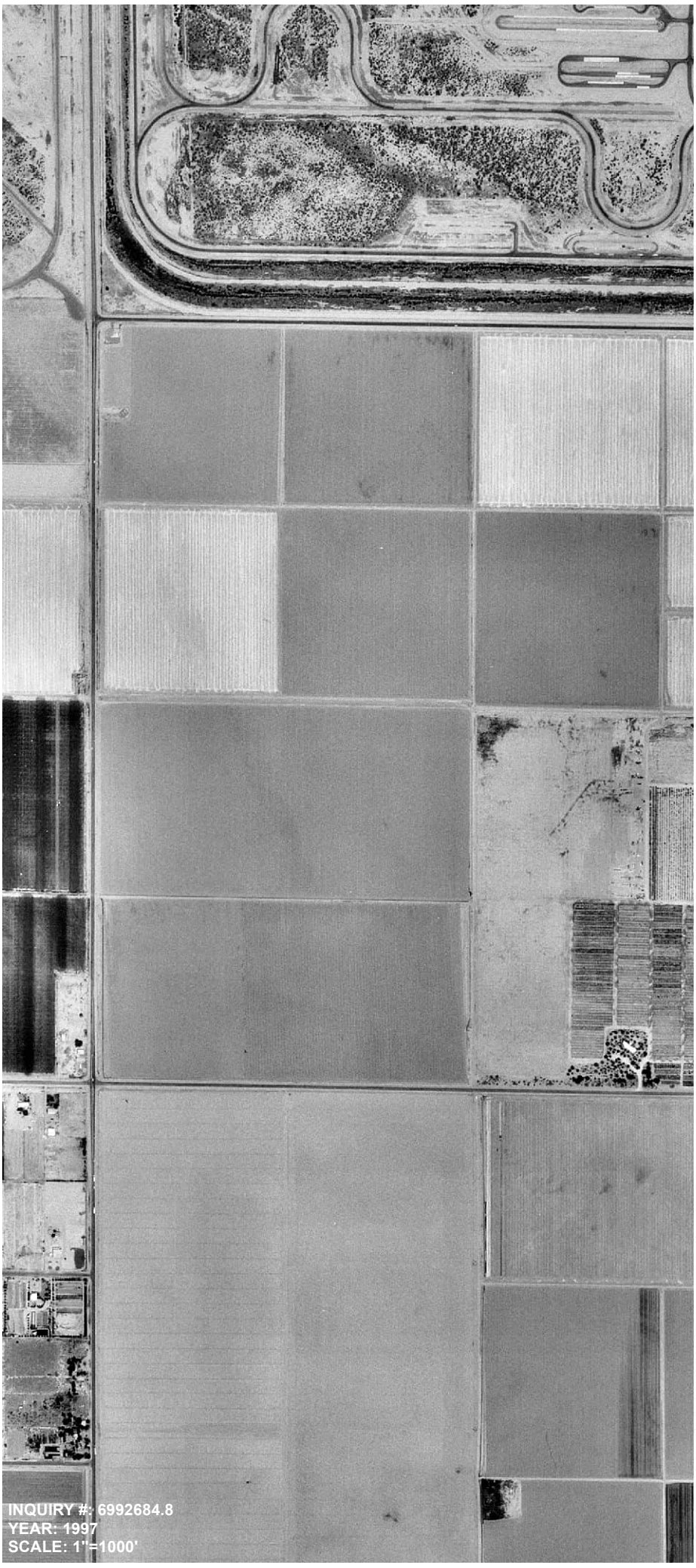


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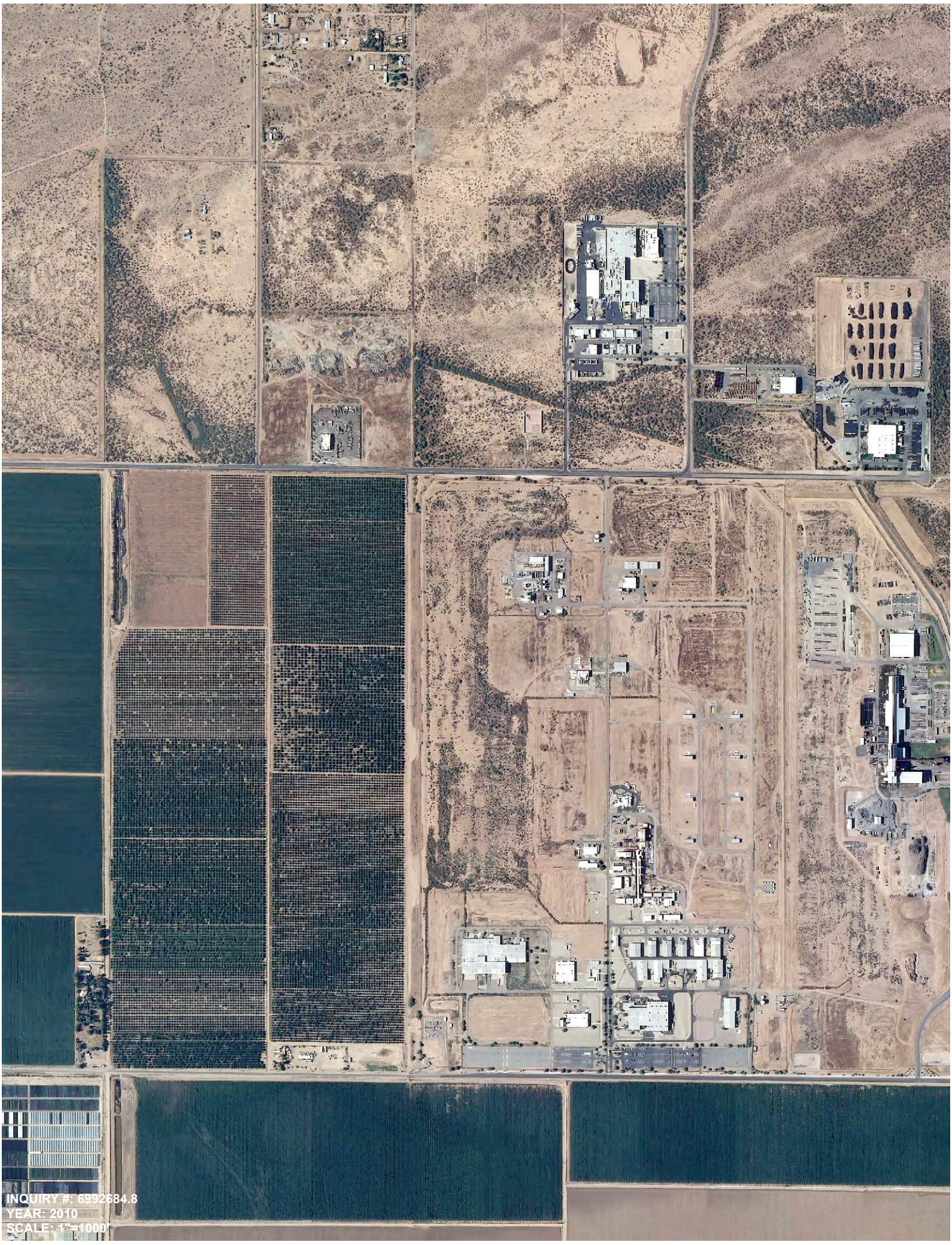

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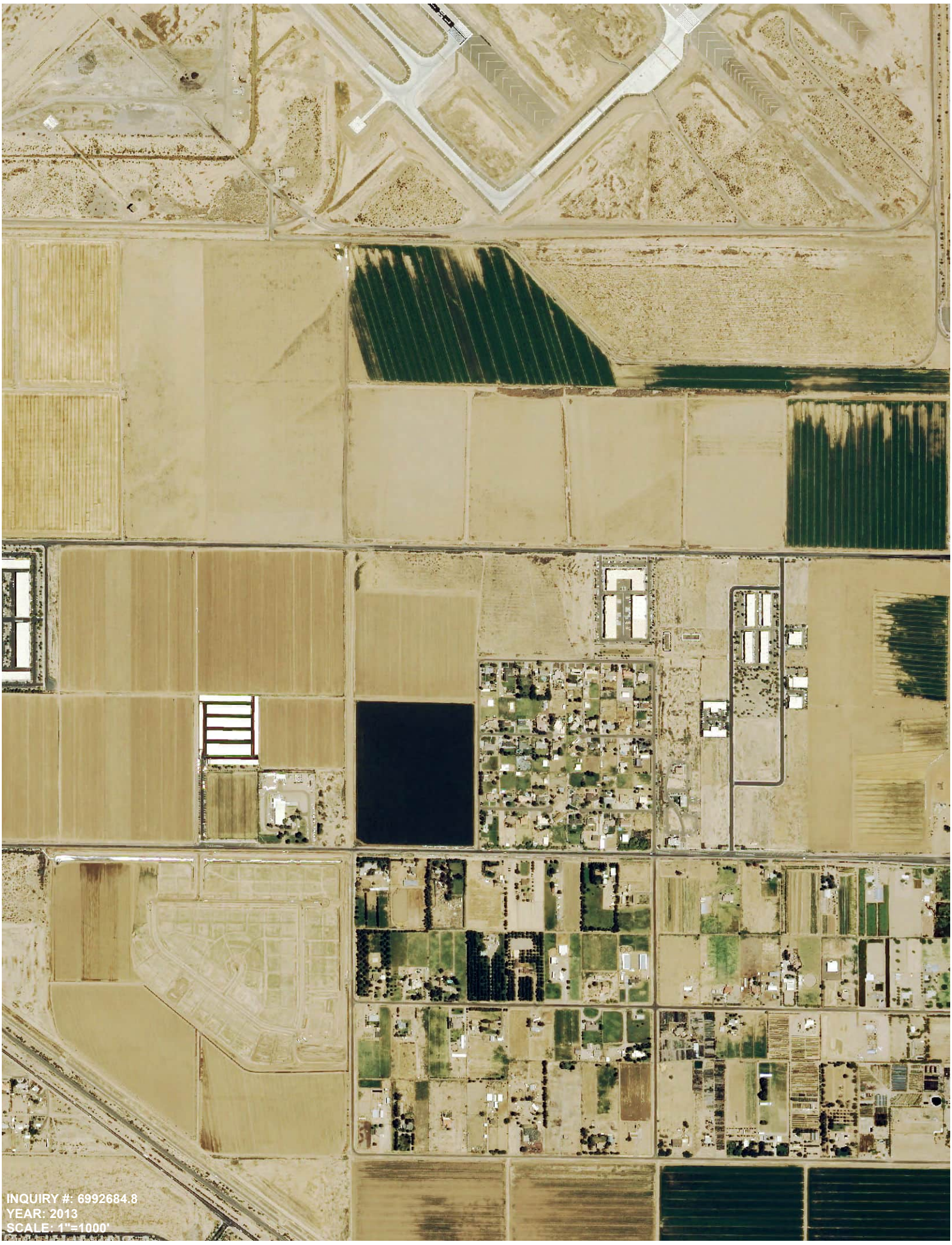

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YEAR: 2010
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YEAR: 2017
SCALE: 1"=1000'

UPRR PIRATE
Mesa Arizona
Mesa, AZ 85212

Inquiry Number: 6992684.9
May 24, 2022

The EDR-City Directory Abstract

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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Executive Summary

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City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1920 through 2017. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2017	Cole Information Services	-	-	-	-
2014	Cole Information Services	-	-	-	-
2009	Cole Information Services	-	-	-	-
2006	Hill-Donnelly Information Services	-	-	-	-
2004	Cole Information Services	-	-	-	-
2001	Hill-Donnelly Information Services	-	-	-	-
1999	Cole Information Services	-	-	-	-
1994	Cole Information Services	-	-	-	-
1993	U S West Direct	-	-	-	-
1987	Mountain Bell AU S West Co.	-	-	-	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1985	US WEST DIRECT	-	-	-	-
1982	R. L. Polk Co.	-	-	-	-
1979	R. L. Polk & Co.	-	-	-	-
1977	R. L. Polk & Co.	-	-	-	-
1970	The Mountain States Telephone and Telegraph Co.	-	-	-	-
1968	R. L. Polk & Co.	-	-	-	-
1965	R. L. Polk & Co.	-	-	-	-
1964	R. L. Polk & Co.	-	-	-	-
1960	Mullin-Kille Co.	-	-	-	-
1955	Mullin-Kille Co.	-	-	-	-
1952	Mullin - Kille Company and Baldwin Con Survey	-	-	-	-
1950	The Baldwin and Mullin-Kille Co.	-	-	-	-
1947	Southside Directory Company	-	-	-	-
1945	Phoenix Directory Co	-	-	-	-
1940	Arizona Directory Co.	-	-	-	-
1935	Arizona Directory Co.	-	-	-	-
1930	Arizona Directory Co	-	-	-	-
1925	Arizona Directory	-	-	-	-
1920	Arizona Directory	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

Mesa Arizona
Mesa, AZ 85212

FINDINGS DETAIL

Target Property research detail.

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

No Addresses Found

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
Mesa Arizona	2017, 2014, 2009, 2006, 2004, 2001, 1999, 1994, 1993, 1987, 1985, 1982, 1979, 1977, 1970, 1968, 1965, 1964, 1960, 1955, 1952, 1950, 1947, 1945, 1940, 1935, 1930, 1925, 1920

UPRR PIRATE

Mesa Arizona

Mesa, AZ 85212

Inquiry Number: 6992684.5

May 25, 2022

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

05/25/22

Site Name:	Client Name:
UPRR PIRATE	Jacobs
Mesa Arizona	1501 W. Fountainhead Parkway, Suite 40
Mesa, AZ 85212	Tempe, AZ 85282
EDR Inquiry # 6992684.5	Contact: Derek Foehr

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Jacobs were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:		*Coordinates:*	
P.O.#	NA	**Latitude:**	33.2893 33° 17' 21" North
Project:	UPPRCP73.B.CS.ODC.30.03-(	**Longitude:**	-111.6358 -111° 38' 9" West
		UTM Zone:	Zone 12 North
		UTM X Meters:	440800.32
		UTM Y Meters:	3683539.80
		Elevation:	1392.00' above sea level

Maps Provided:

2018	1904
2014	
1981	
1980	
1973	
1971	
1956	
1906	

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2018 Source Sheets



Higley
2018
7.5-minute, 24000



Desert Well
2018
7.5-minute, 24000

2014 Source Sheets



Desert Well
2014
7.5-minute, 24000



Higley
2014
7.5-minute, 24000

1981 Source Sheets

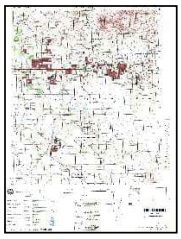


Desert Well
1981
7.5-minute, 24000
Aerial Photo Revised 1978



Higley
1981
7.5-minute, 24000
Aerial Photo Revised 1978

1980 Source Sheets



DESERT WELL
1980
15-minute, 62500

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1973 Source Sheets



Desert Well
1973
7.5-minute, 24000
Aerial Photo Revised 1973



Higley
1973
7.5-minute, 24000
Aerial Photo Revised 1973

1971 Source Sheets



Desert Well
1971
7.5-minute, 24000
Aerial Photo Revised 1971



Higley
1971
7.5-minute, 24000
Aerial Photo Revised 1971

1956 Source Sheets



Desert Well
1956
7.5-minute, 24000
Aerial Photo Revised 1955



Higley
1956
7.5-minute, 24000
Aerial Photo Revised 1955

1906 Source Sheets



Desert Well
1906
15-minute, 62500

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

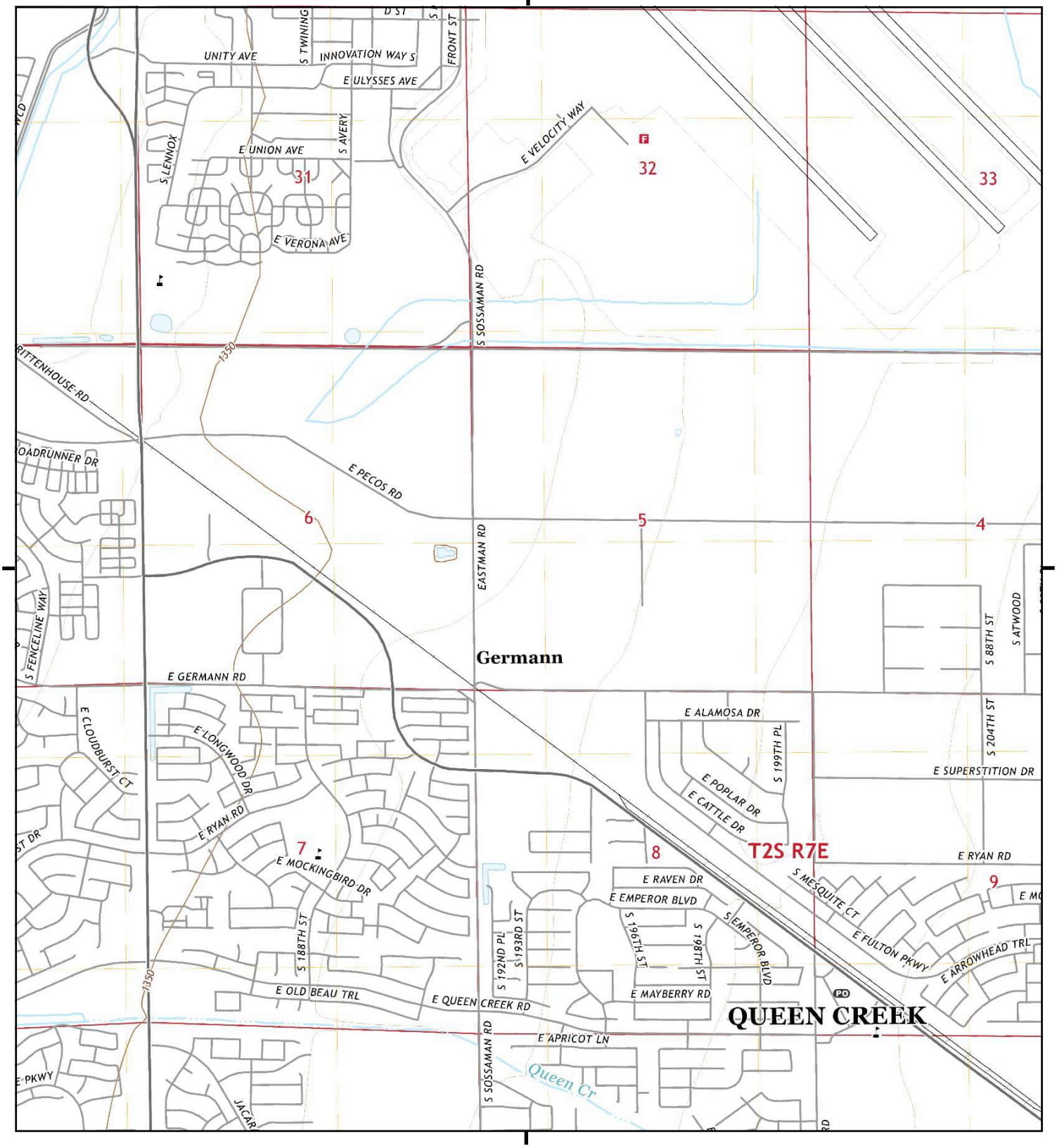
1904 Source Sheets



Desert Well
1904
15-minute, 62500

Historical Topo Map

2018



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

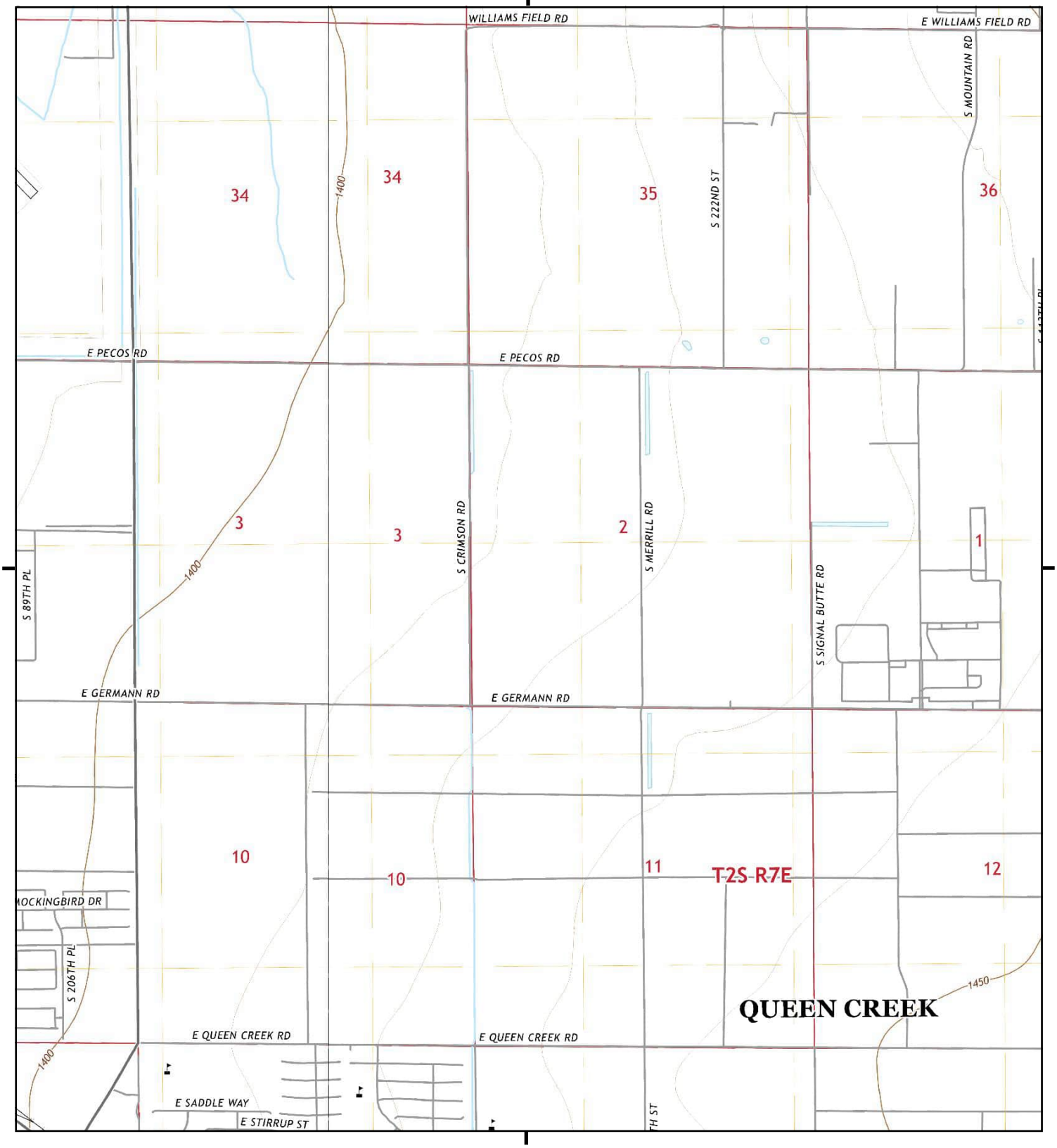
TP, Higley, 2018, 7.5-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N

Historical Topo Map

2018



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

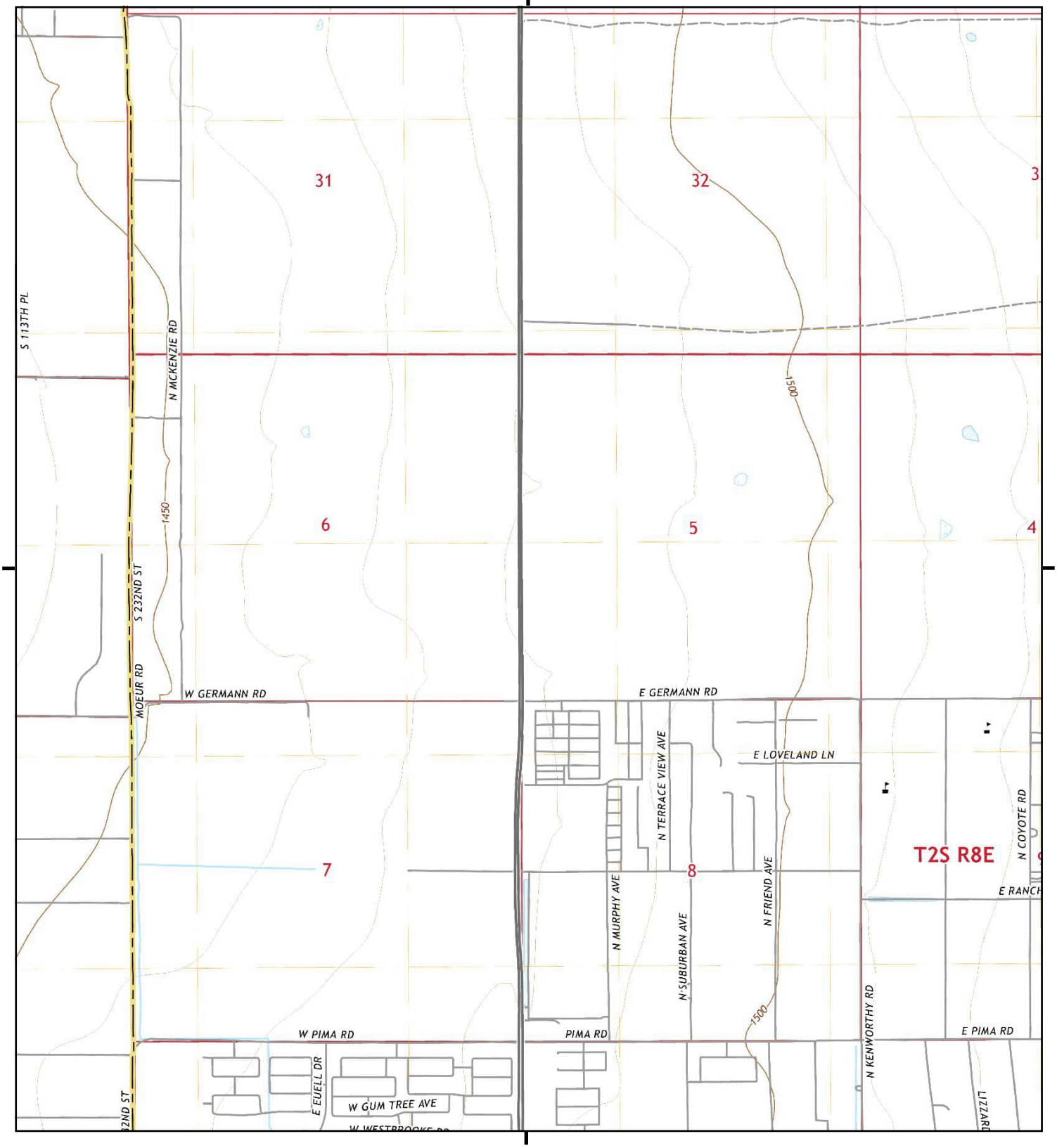
TP, Desert Well, 2018, 7.5-minute
NW, Higley, 2018, 7.5-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N

Historical Topo Map

2018



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

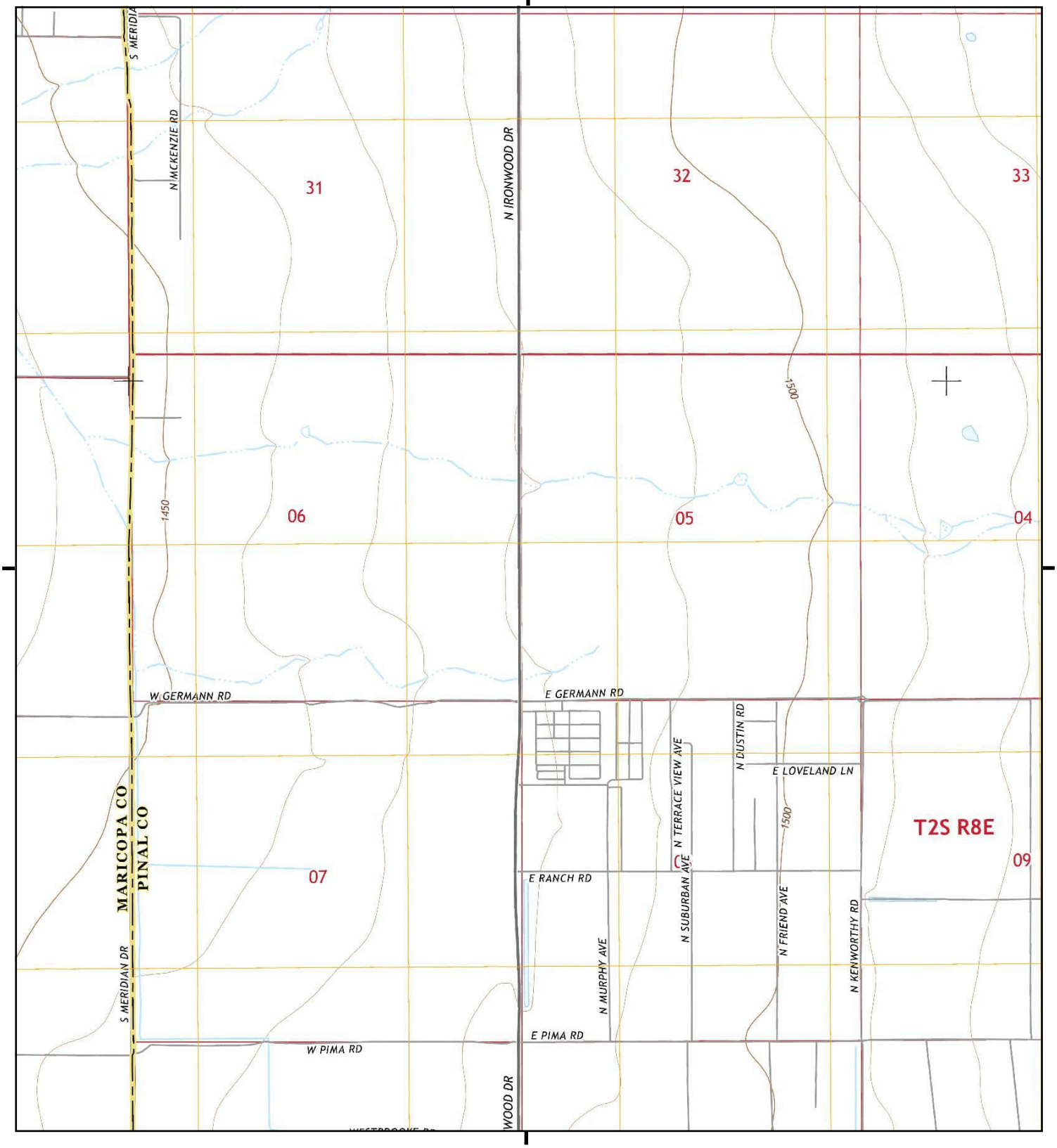
TP, Desert Well, 2018, 7.5-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N

Historical Topo Map

2014



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

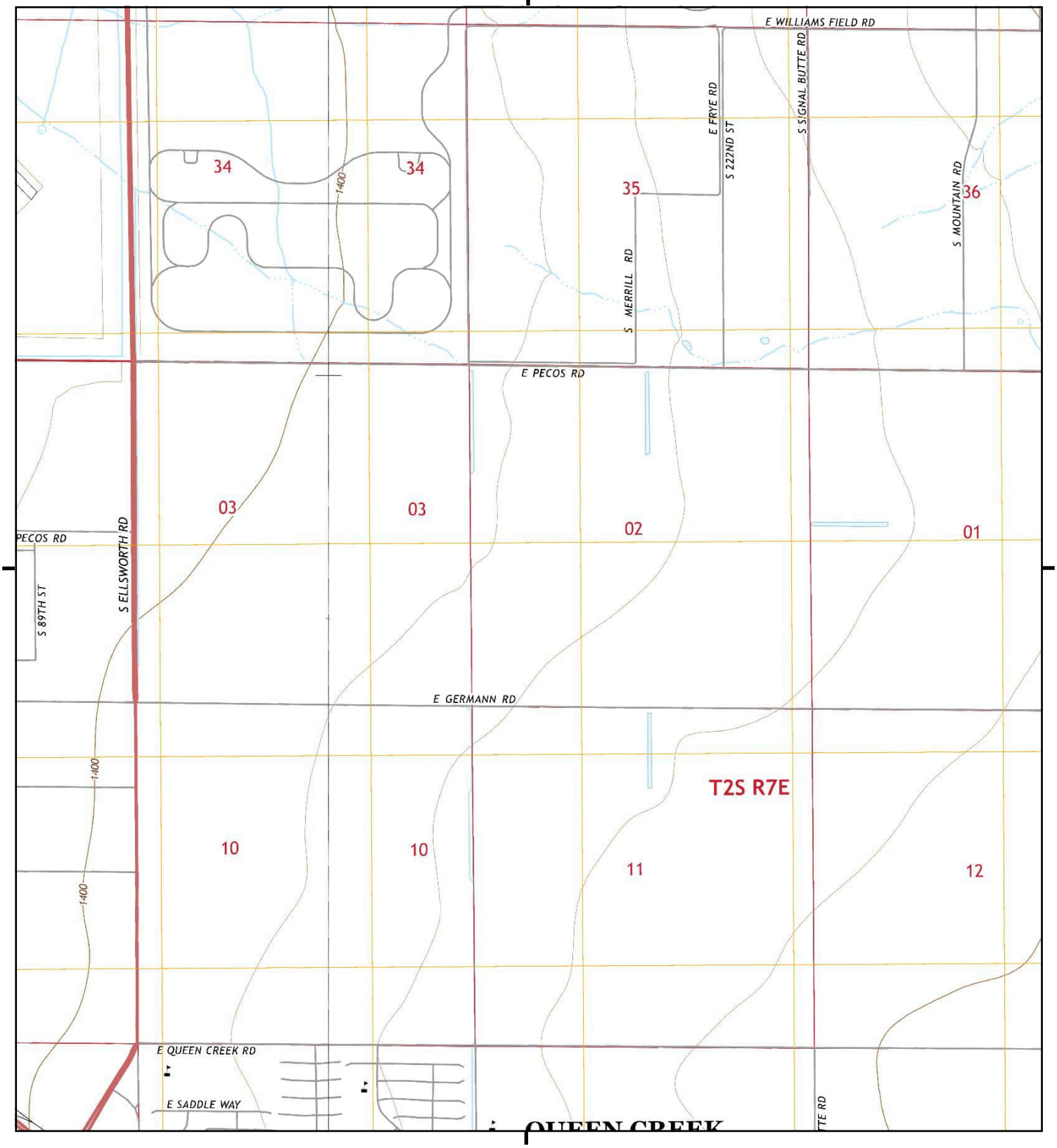
TP, Desert Well, 2014, 7.5-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N

Historical Topo Map

2014



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

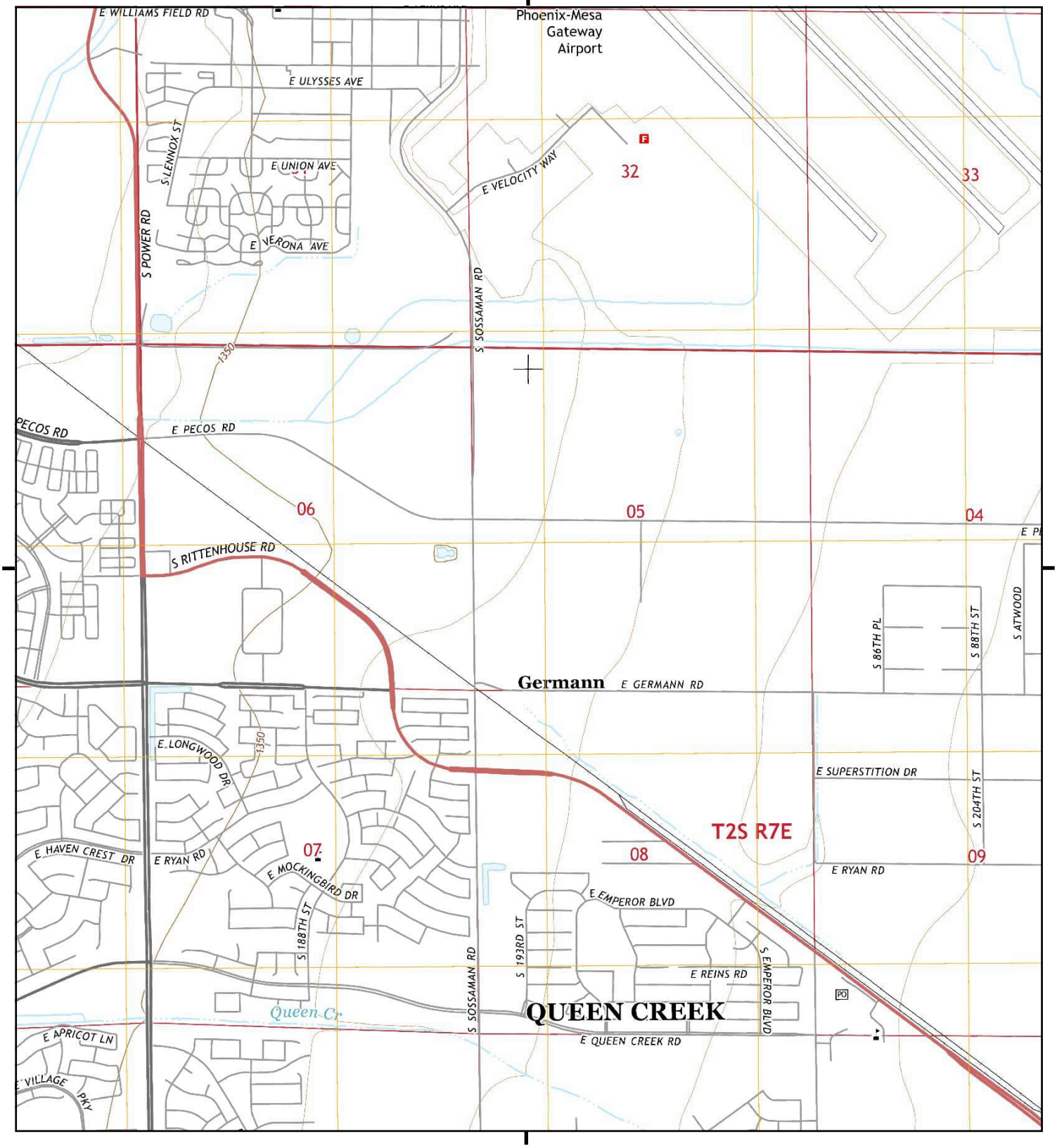
TP, Desert Well, 2014, 7.5-minute
NW, Higley, 2014, 7.5-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N

Historical Topo Map

2014



This report includes information from the following map sheet(s).

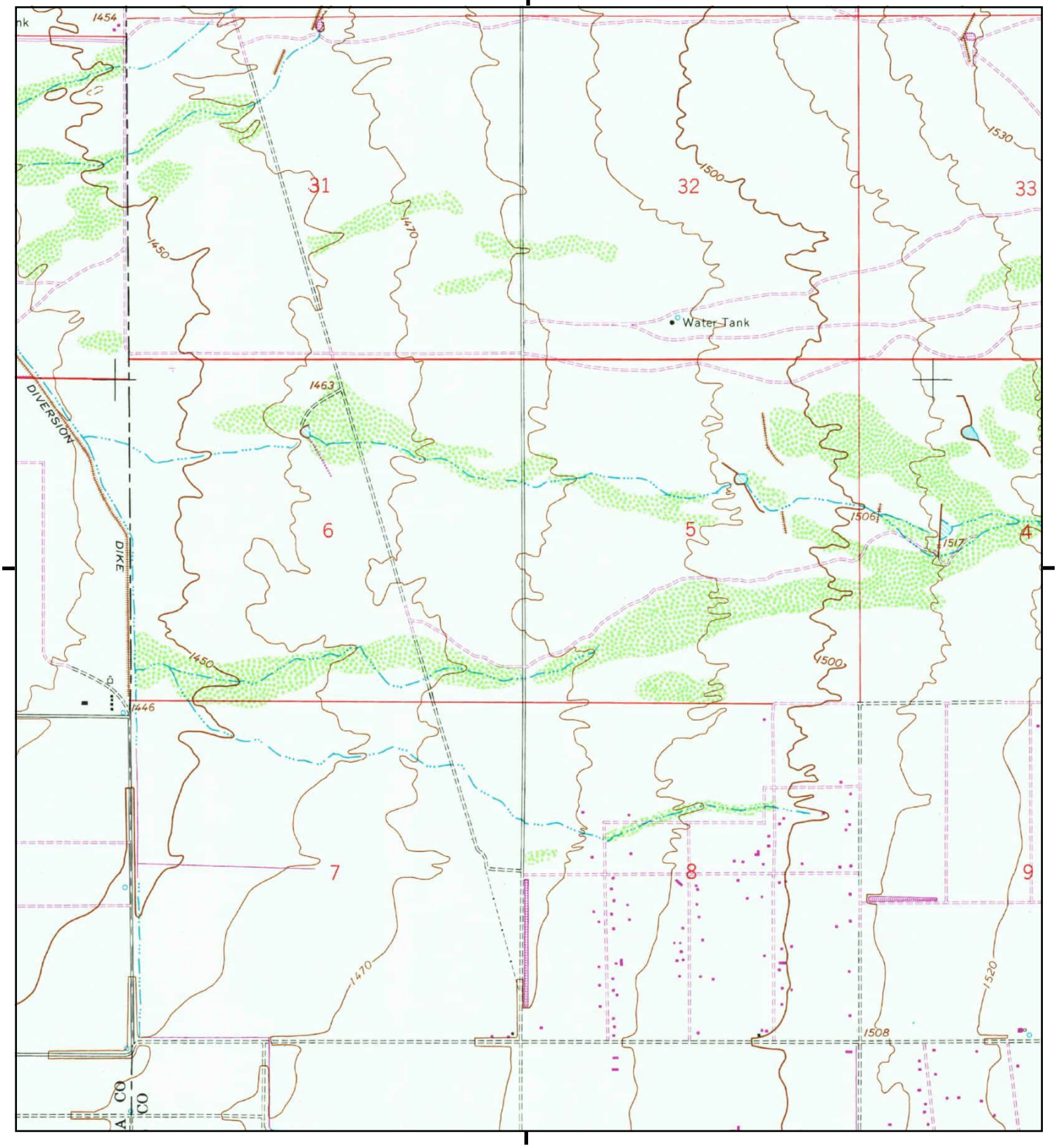
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Higley, 2014, 7.5-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N



This report includes information from the following map sheet(s).

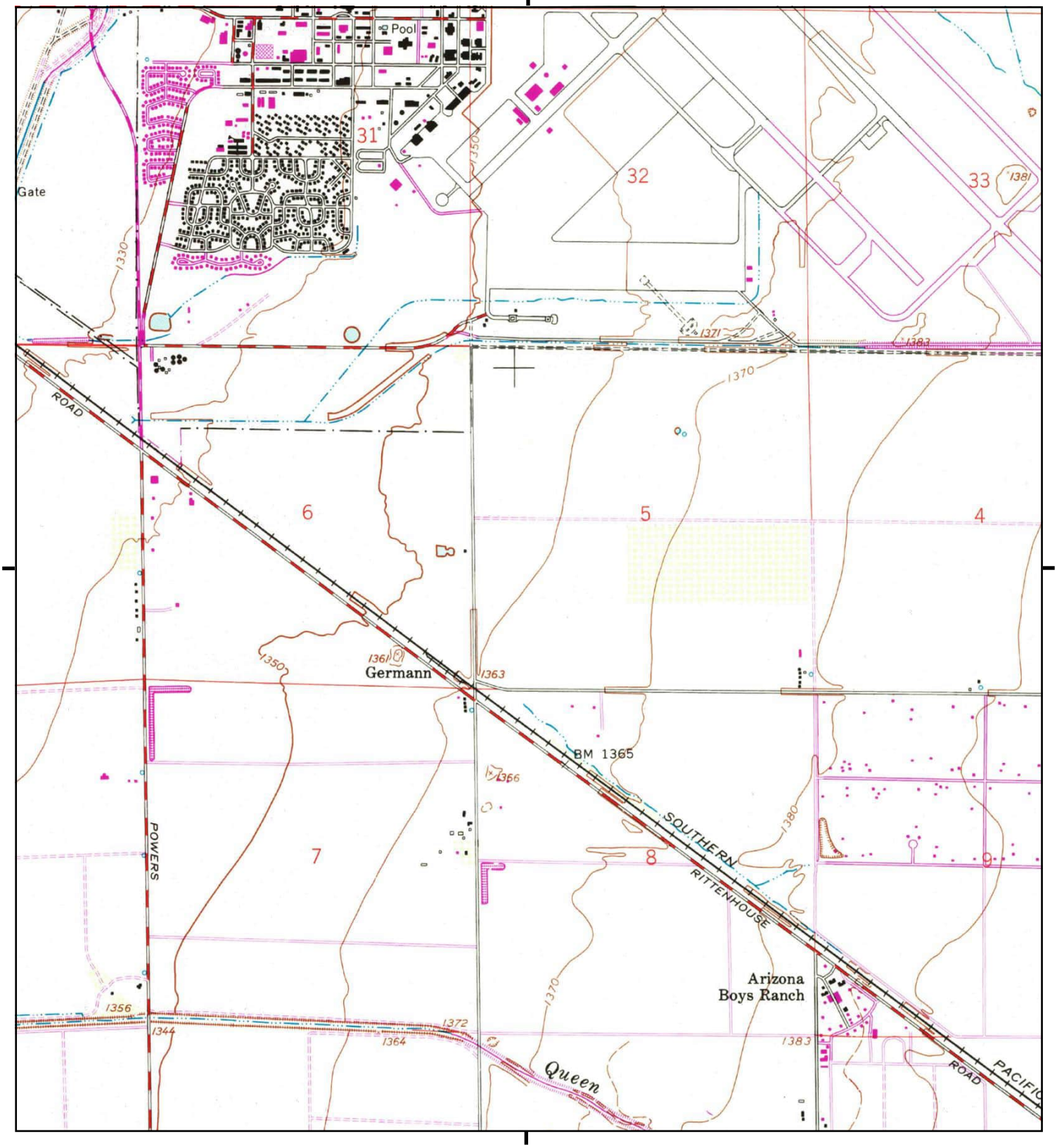
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Desert Well, 1981, 7.5-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

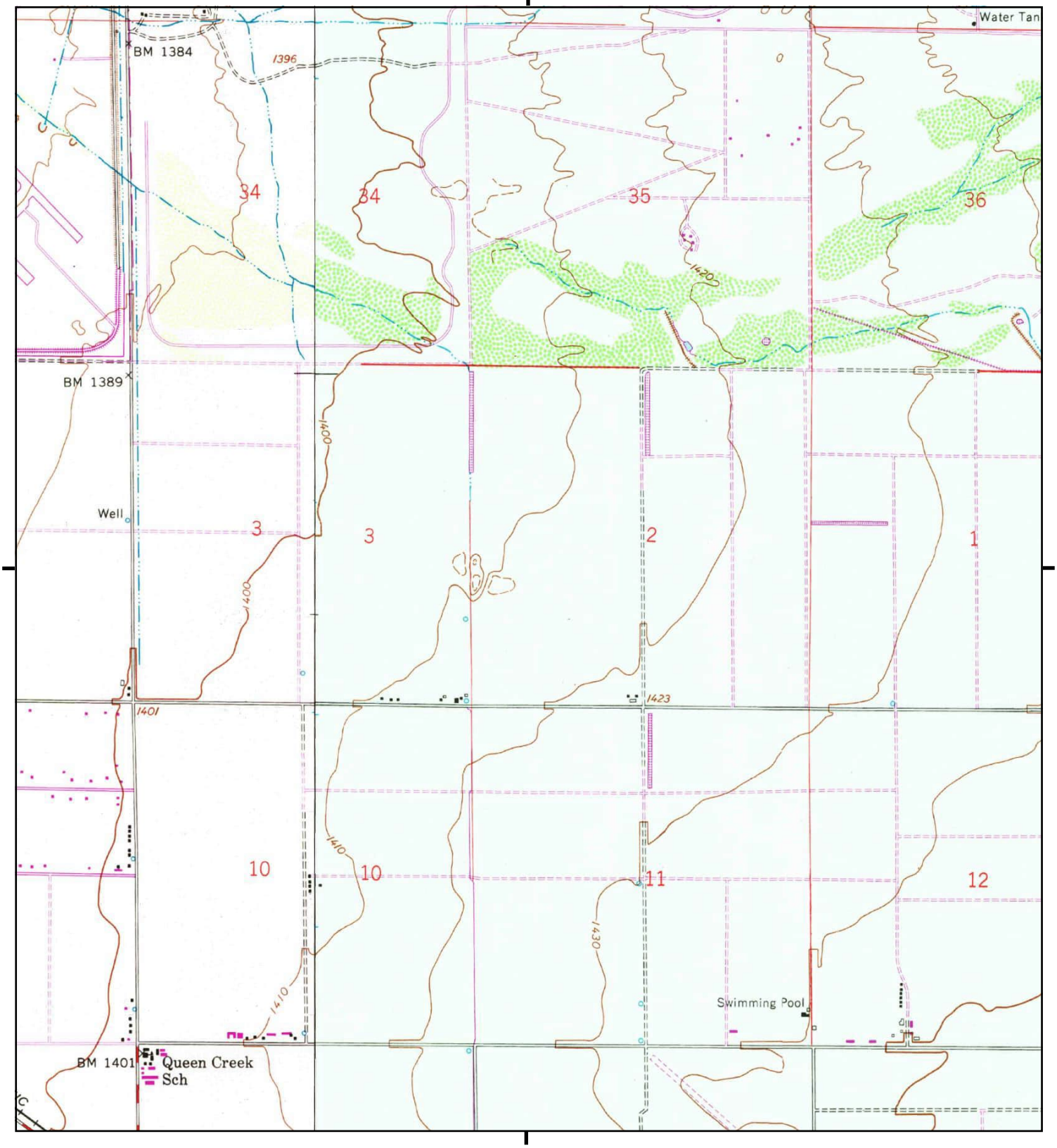
TP, Higley, 1981, 7.5-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N

Historical Topo Map

1981



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

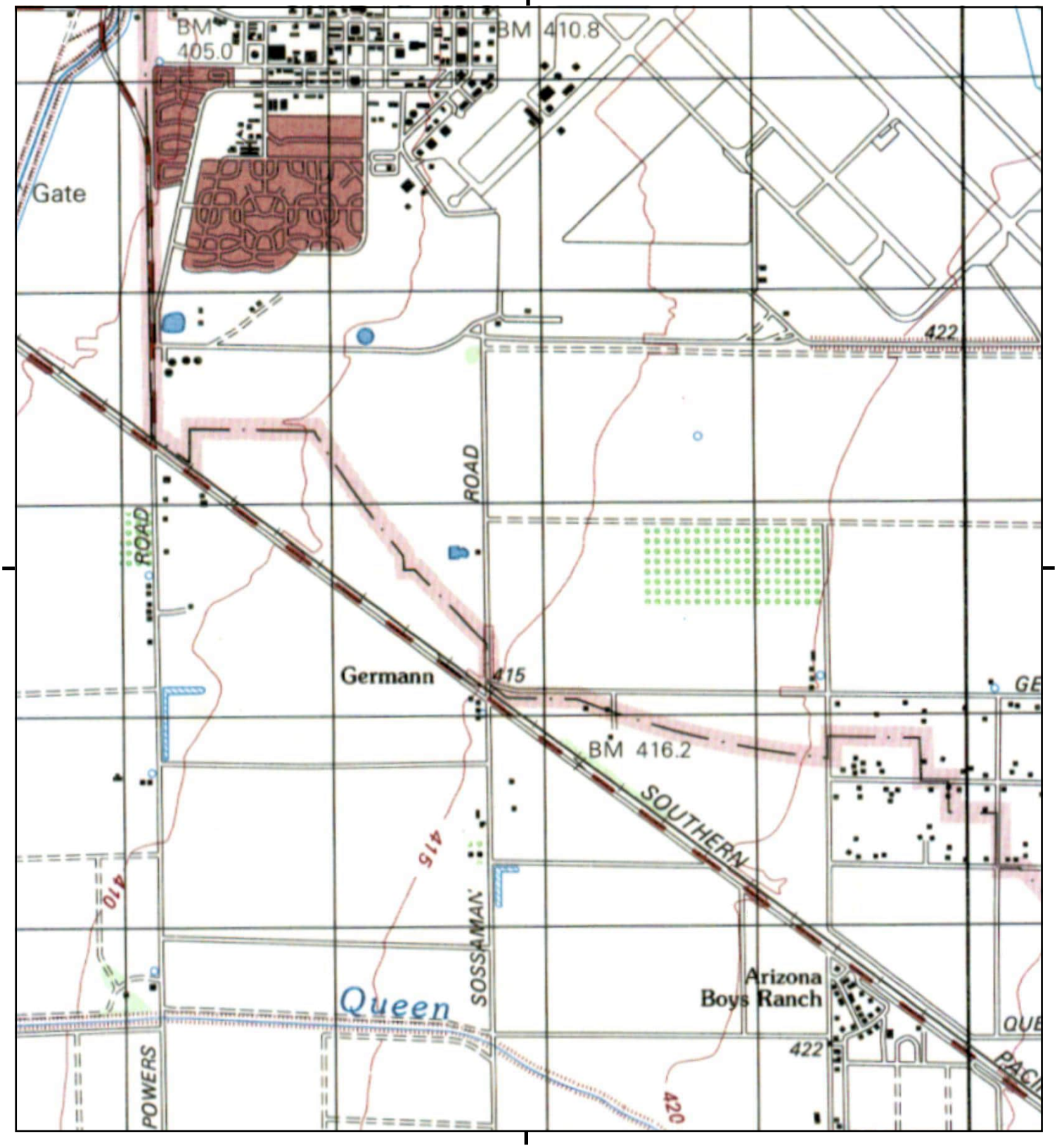
TP, Desert Well, 1981, 7.5-minute
NW, Higley, 1981, 7.5-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N

Historical Topo Map

1980



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

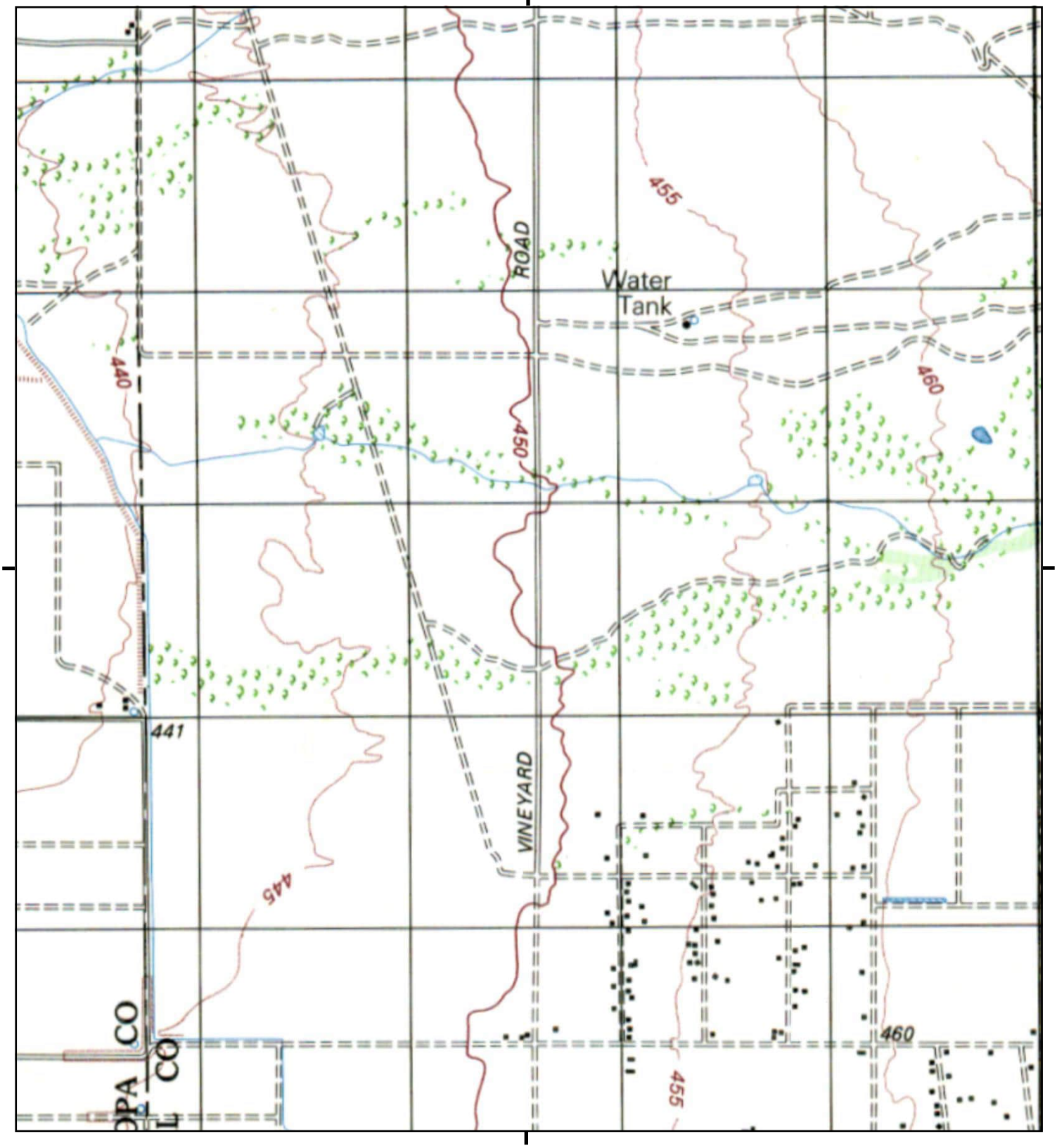
TP, DESERT WELL, 1980, 15-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N

Historical Topo Map

1980



This report includes information from the following map sheet(s).

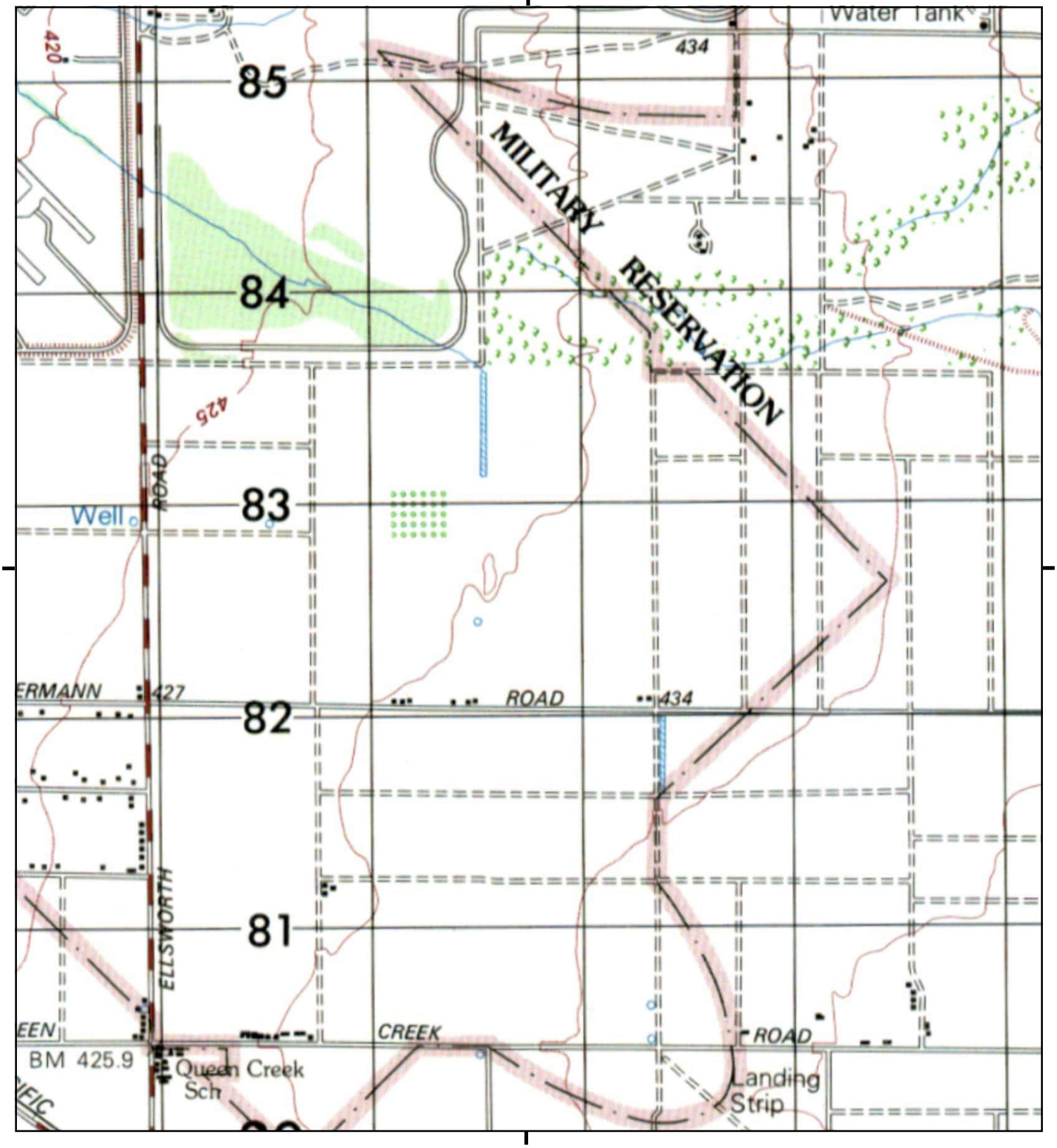
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, DESERT WELL, 1980, 15-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N



This report includes information from the following map sheet(s).

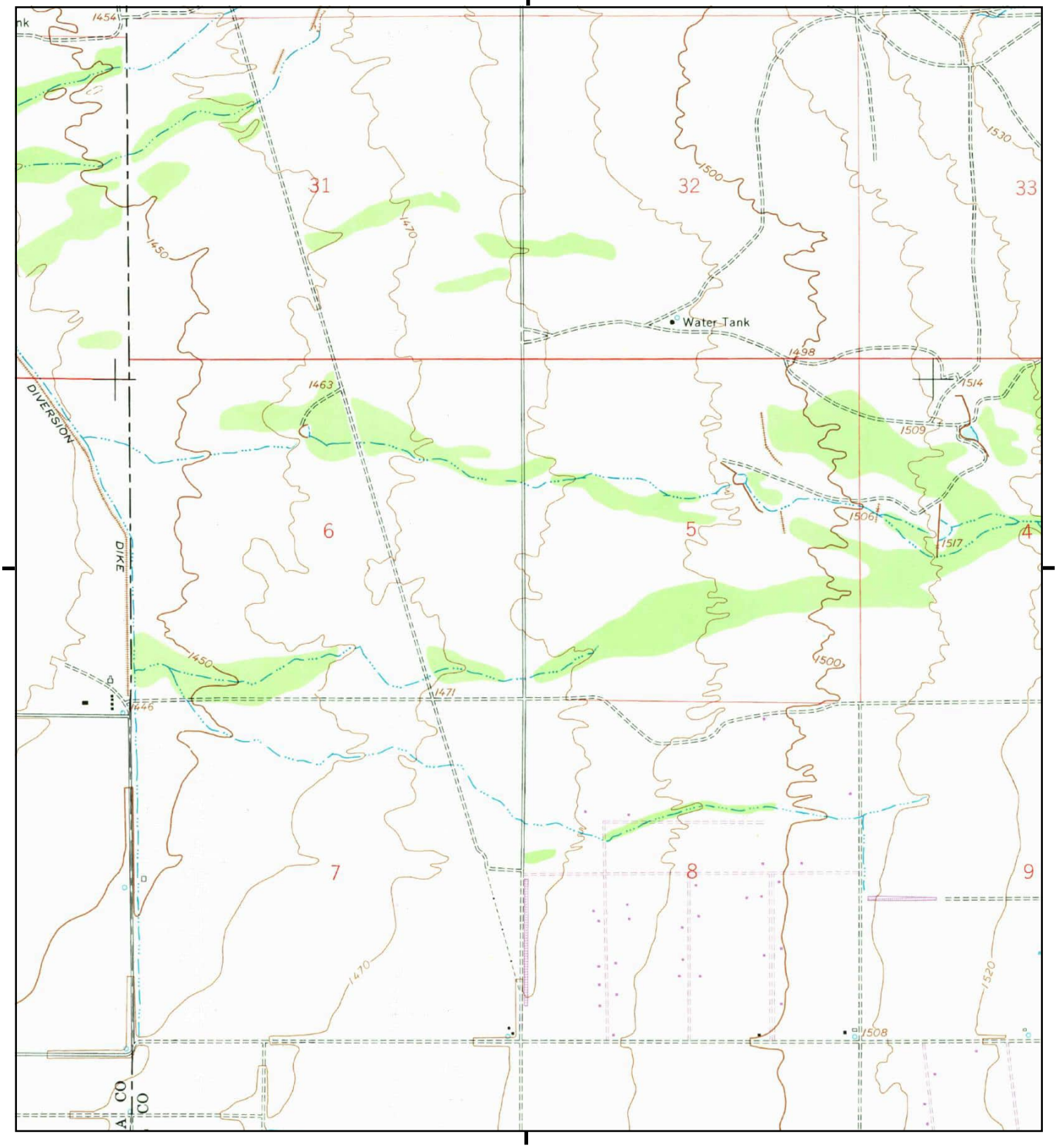
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, DESERT WELL, 1980, 15-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

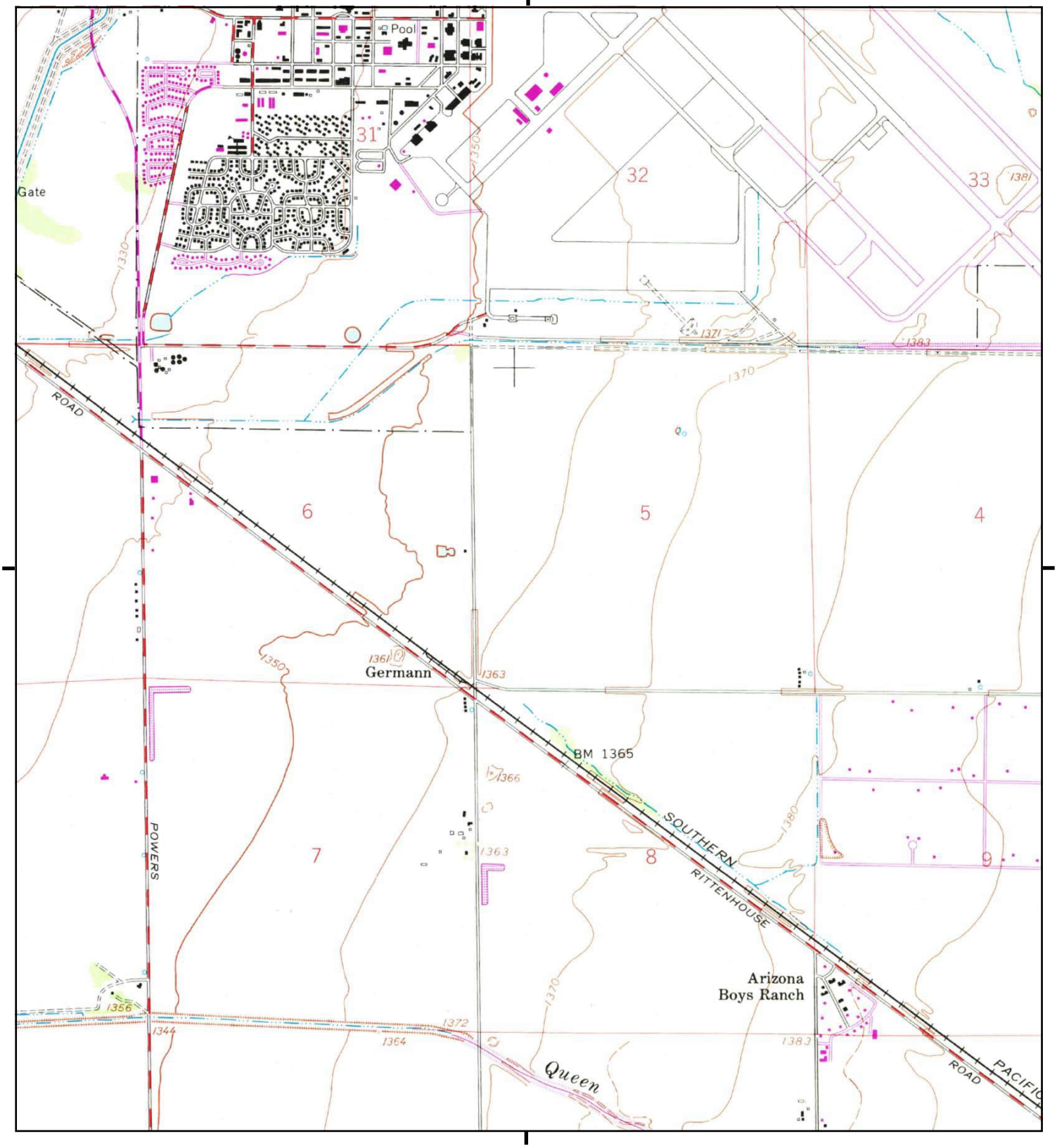
TP, Desert Well, 1973, 7.5-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N

Historical Topo Map

1973



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

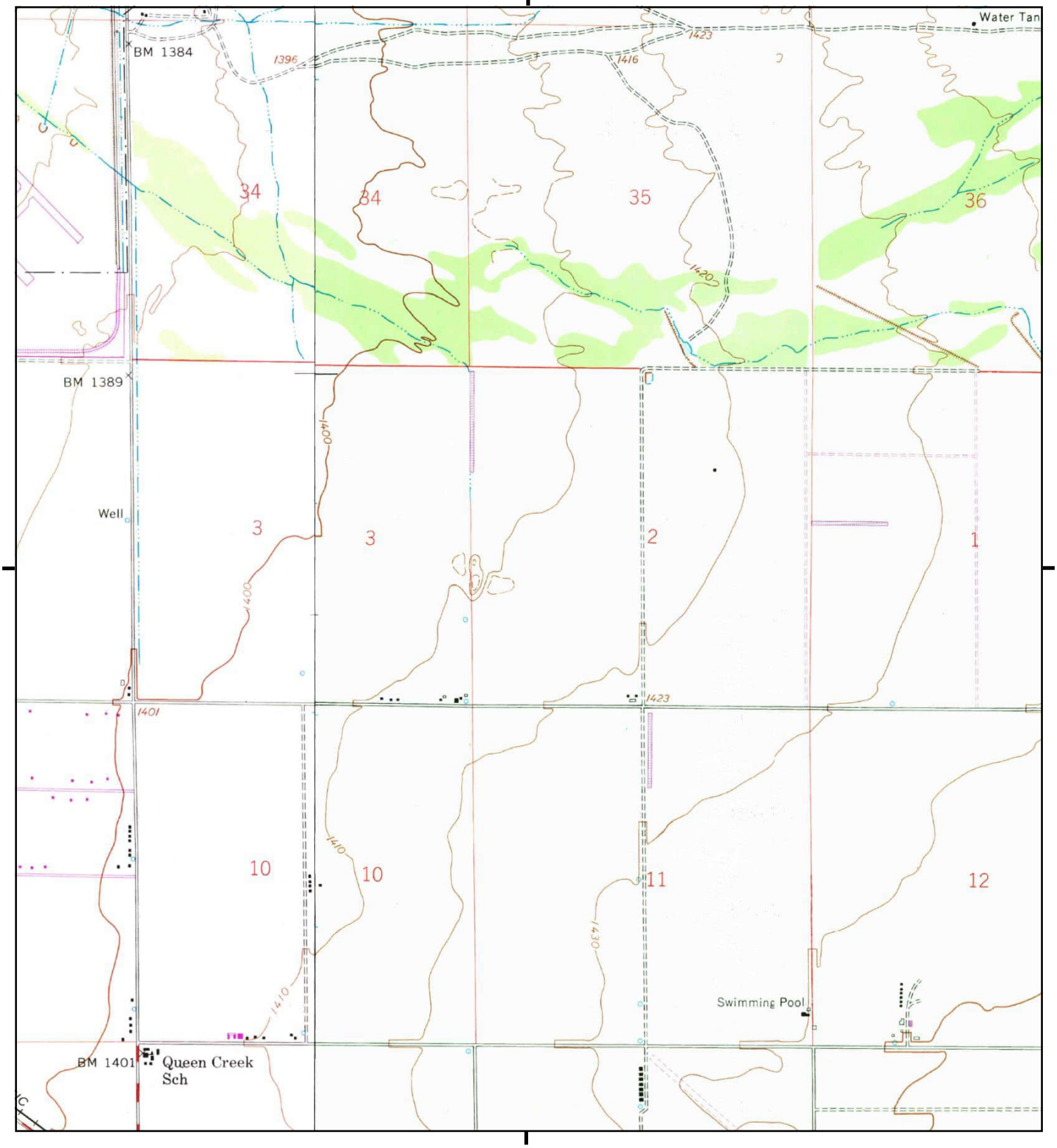
TP, Higley, 1973, 7.5-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N

Historical Topo Map

1973



This report includes information from the following map sheet(s).

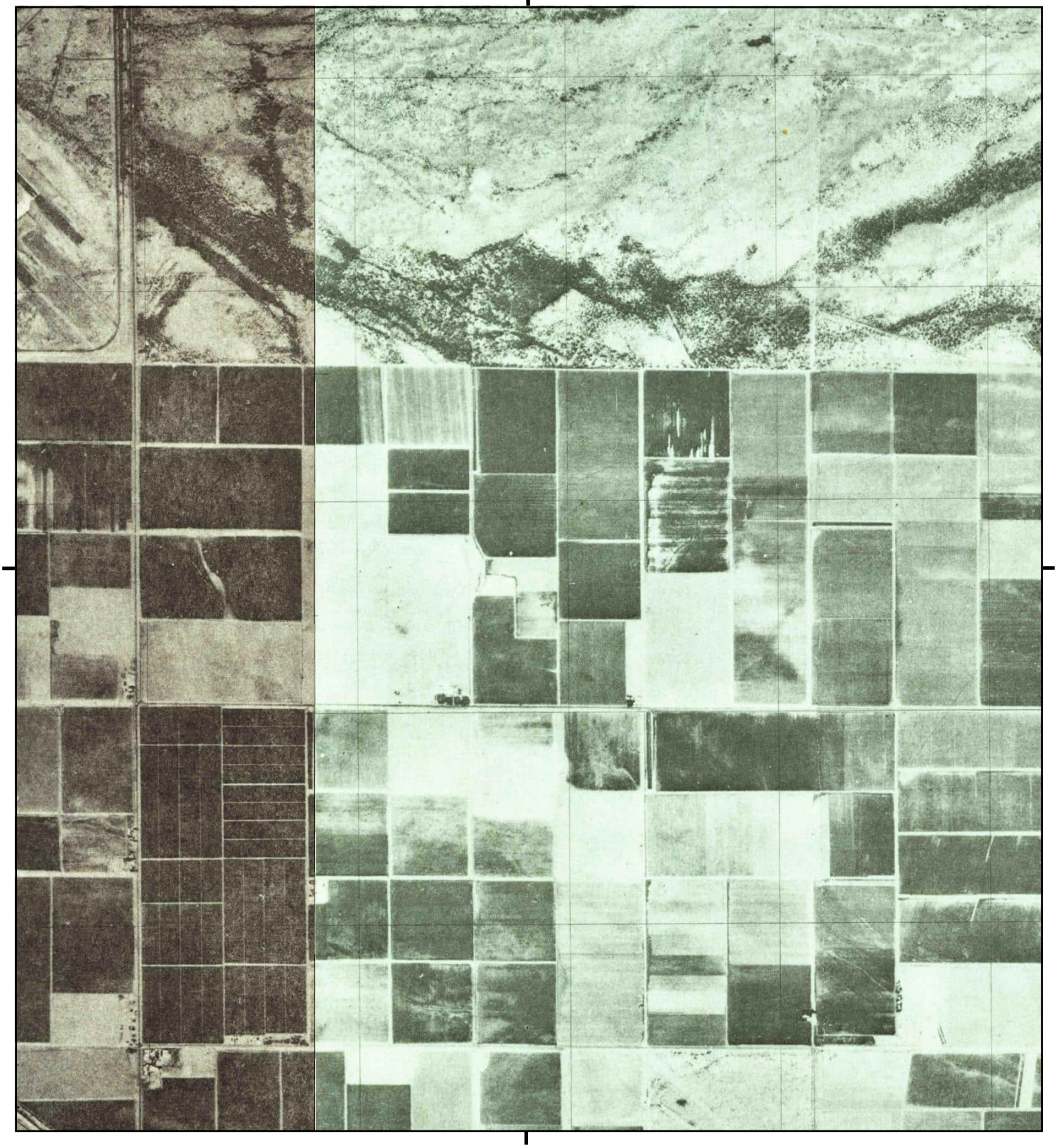
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Desert Well, 1973, 7.5-minute
NW, Higley, 1973, 7.5-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N



This report includes information from the following map sheet(s).

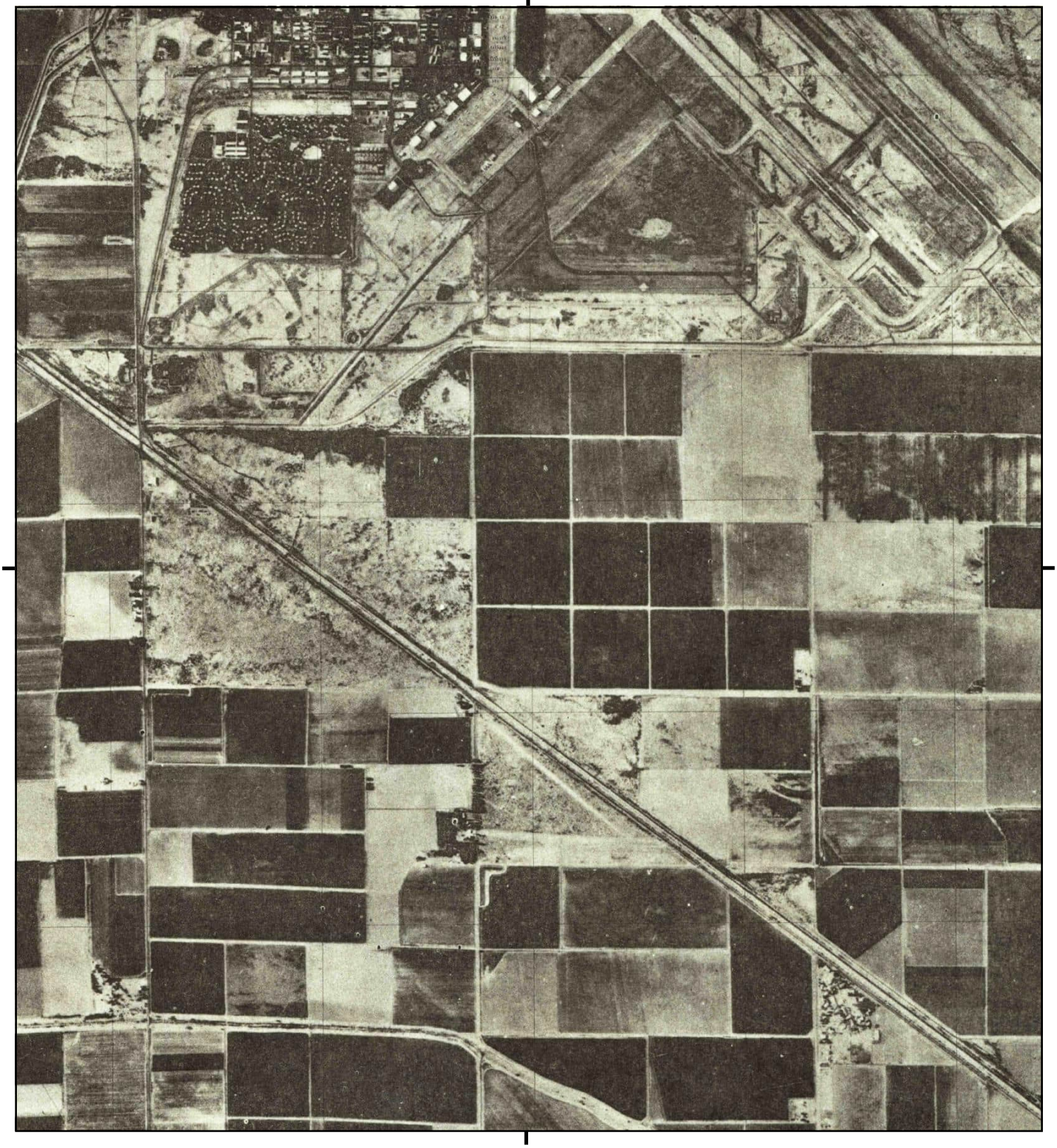
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Desert Well, 1971, 7.5-minute
NW, Higley, 1971, 7.5-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N



This report includes information from the following map sheet(s).

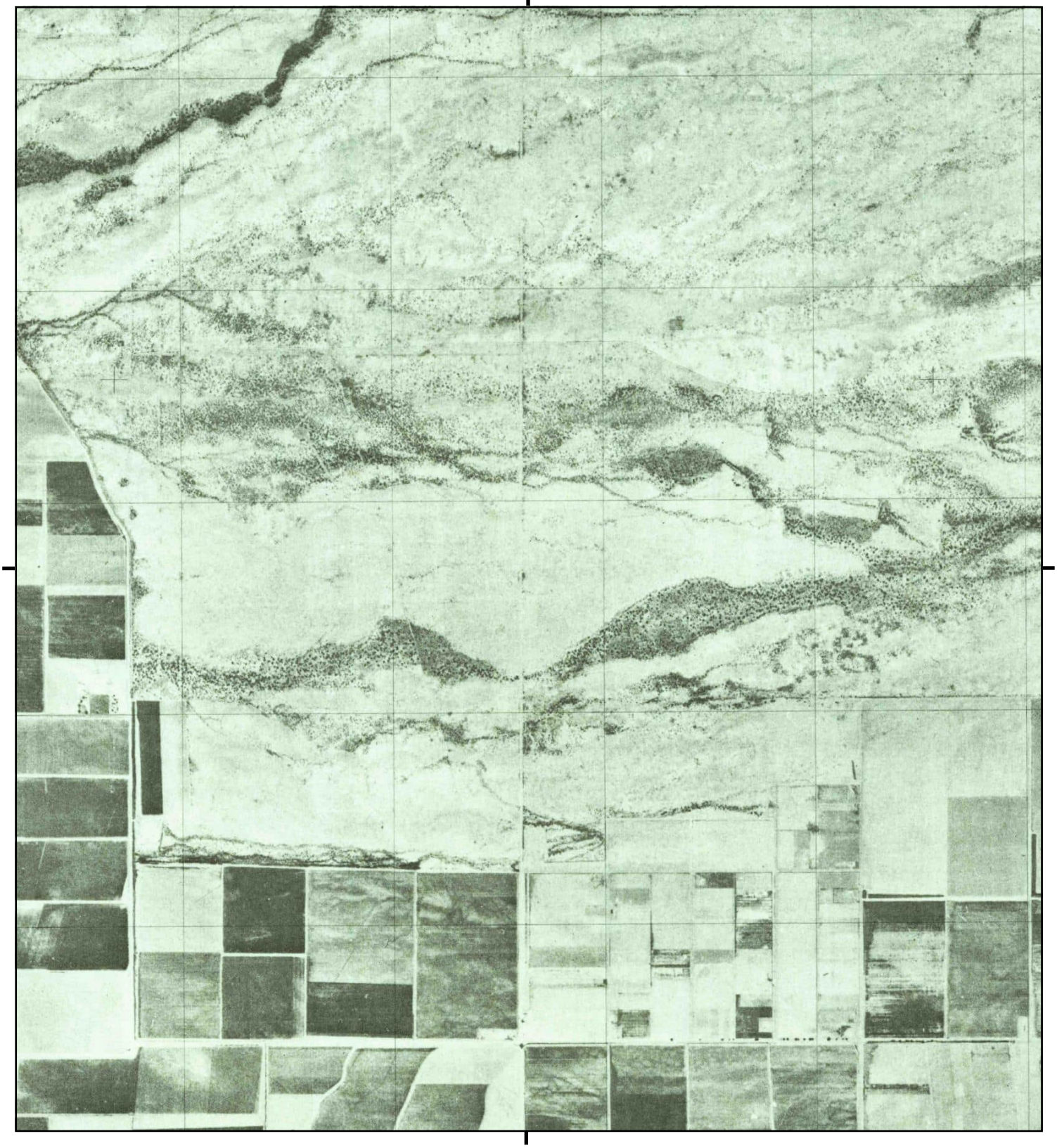
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Higley, 1971, 7.5-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N



This report includes information from the following map sheet(s).

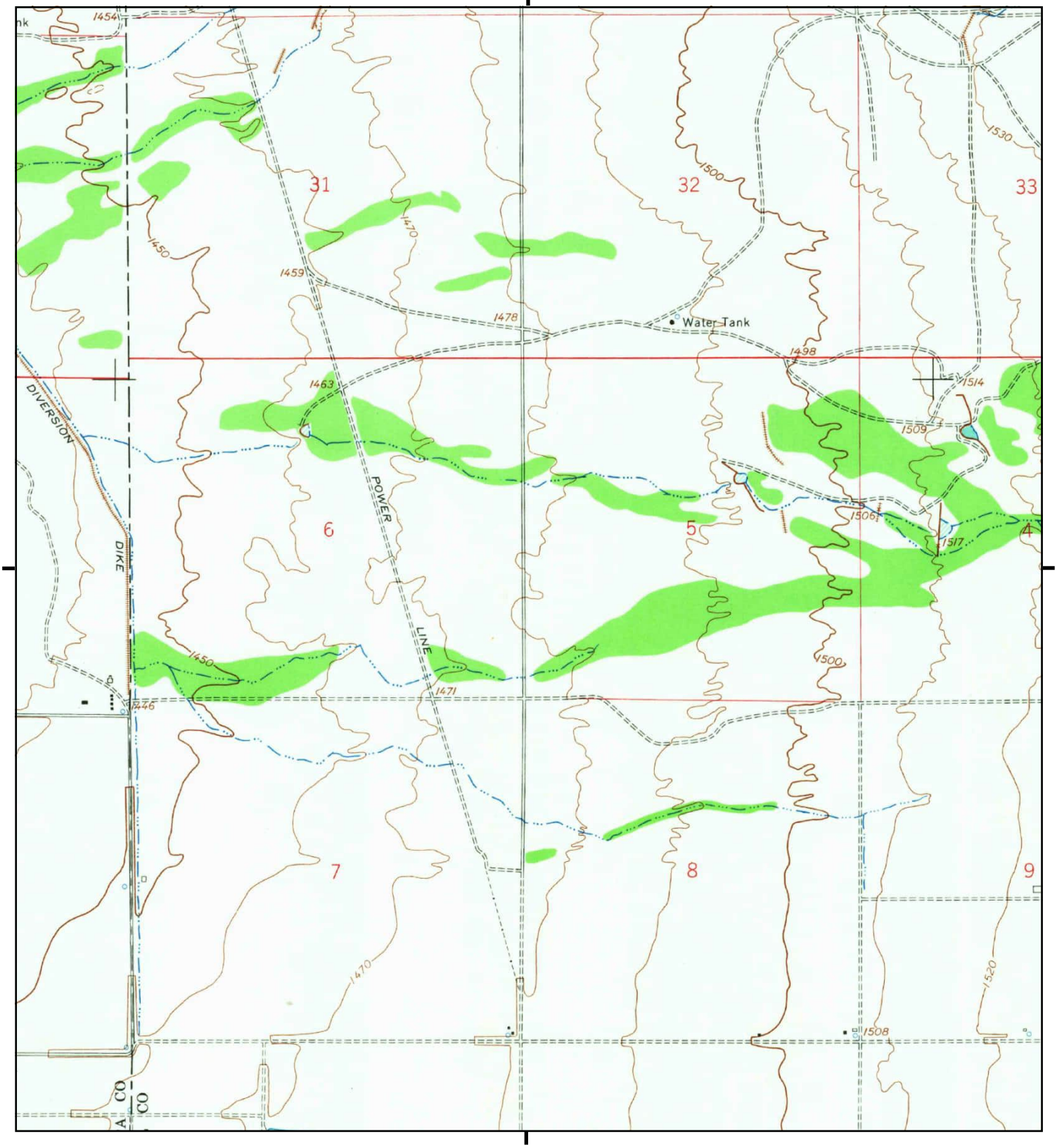
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Desert Well, 1971, 7.5-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

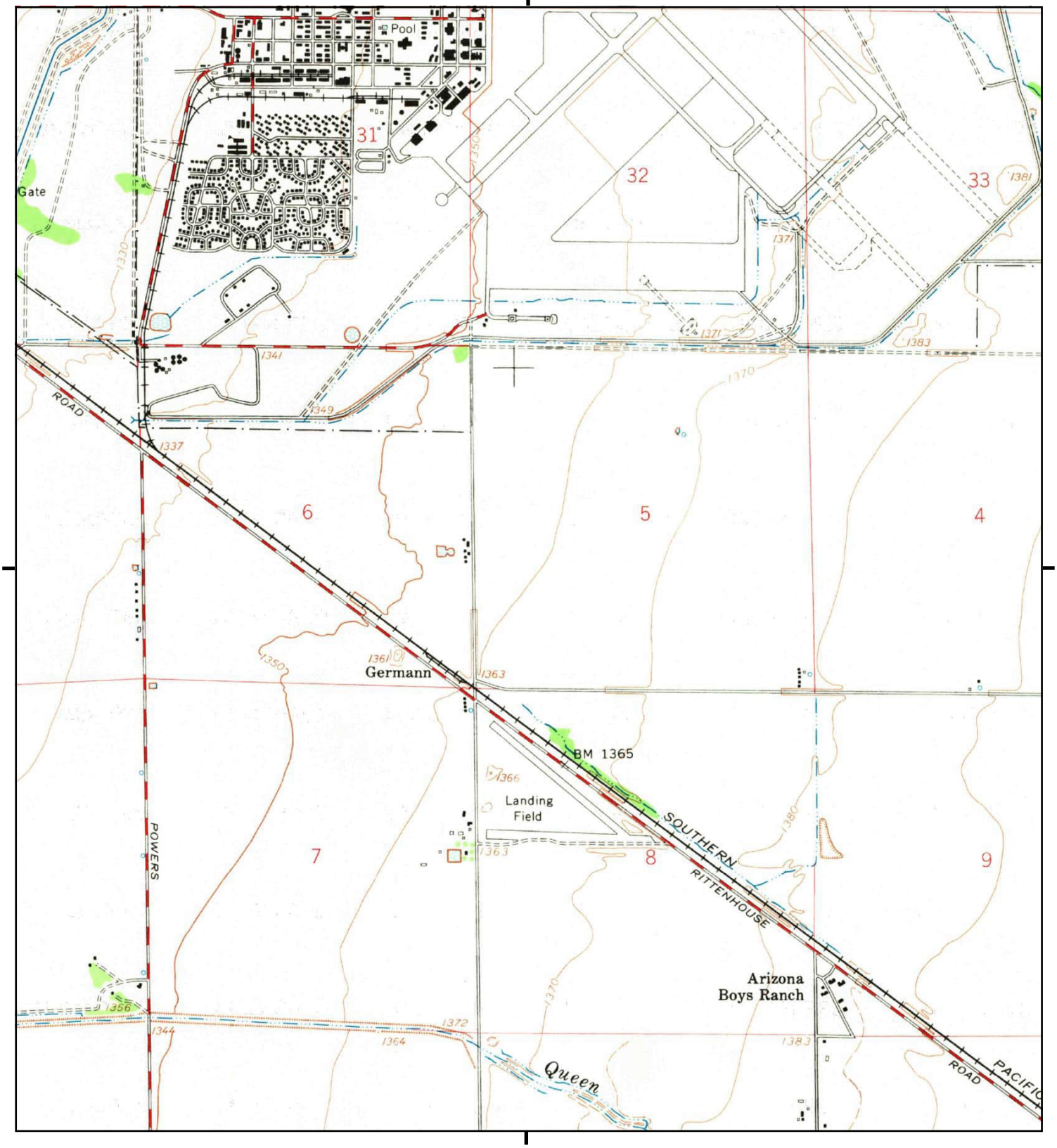
TP, Desert Well, 1956, 7.5-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N

Historical Topo Map

1956



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

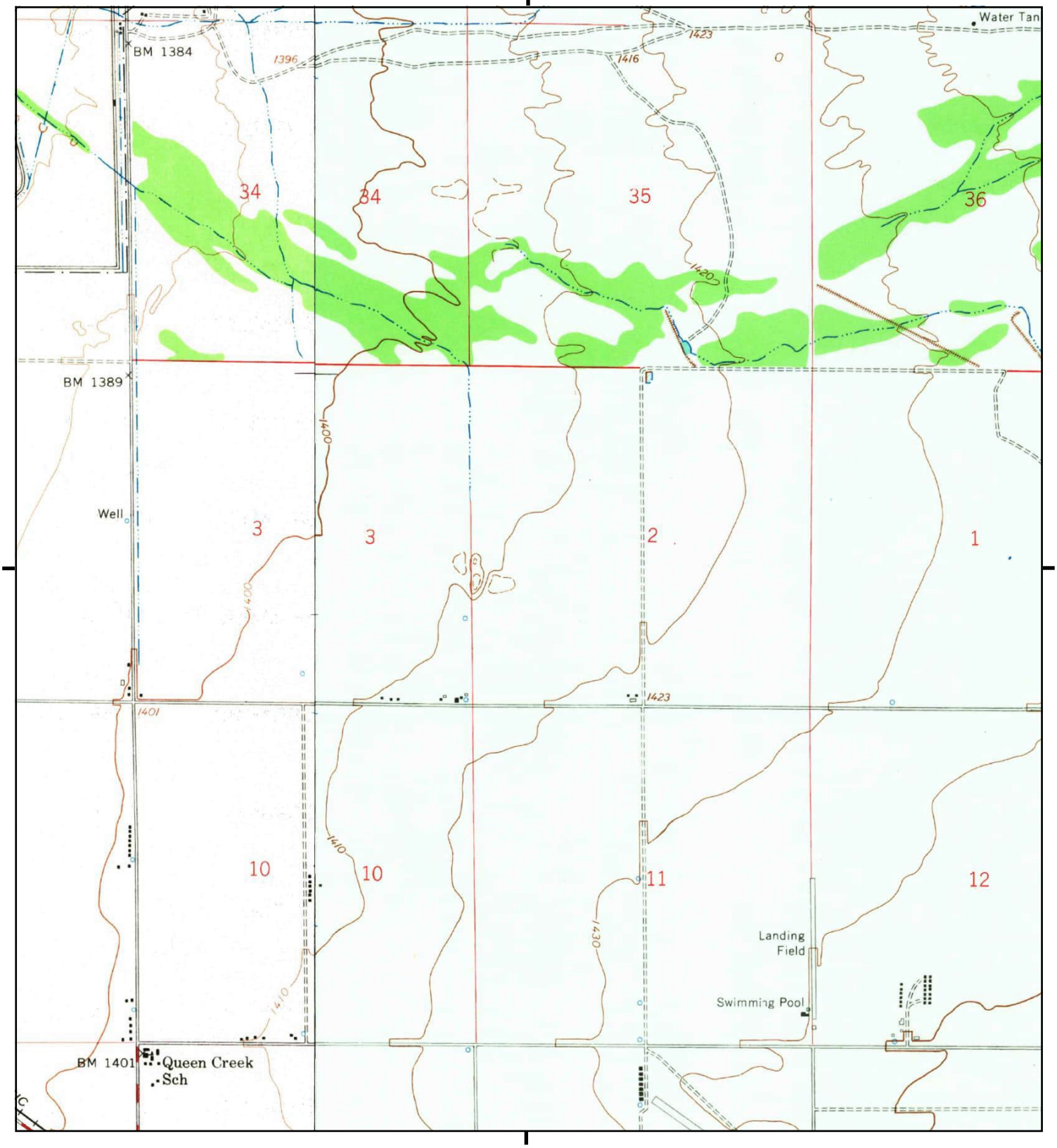
TP, Higley, 1956, 7.5-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N

Historical Topo Map

1956



This report includes information from the following map sheet(s).

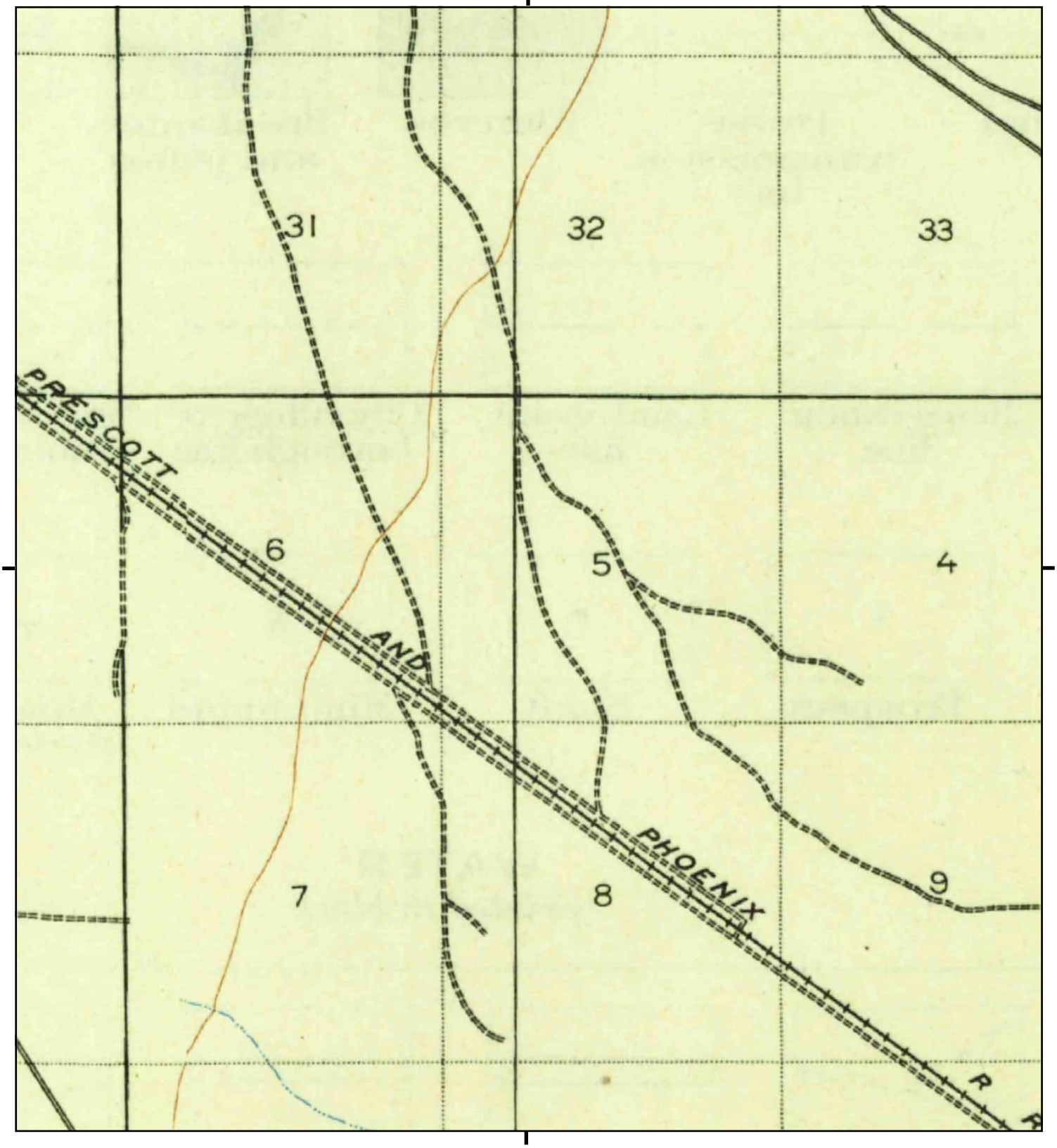
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Desert Well, 1956, 7.5-minute
NW, Higley, 1956, 7.5-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N



This report includes information from the following map sheet(s).

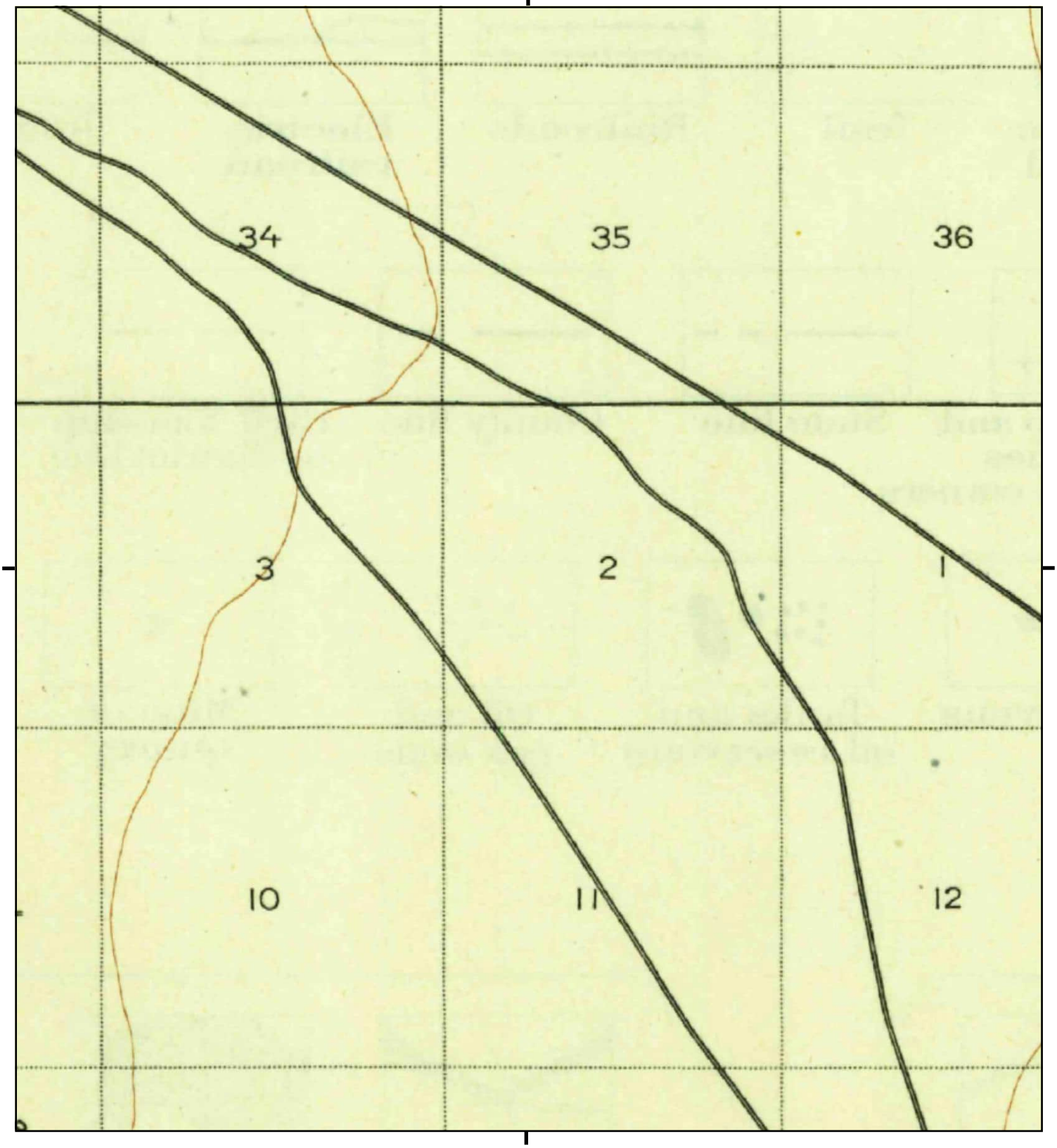
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Desert Well, 1906, 15-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N



This report includes information from the following map sheet(s).

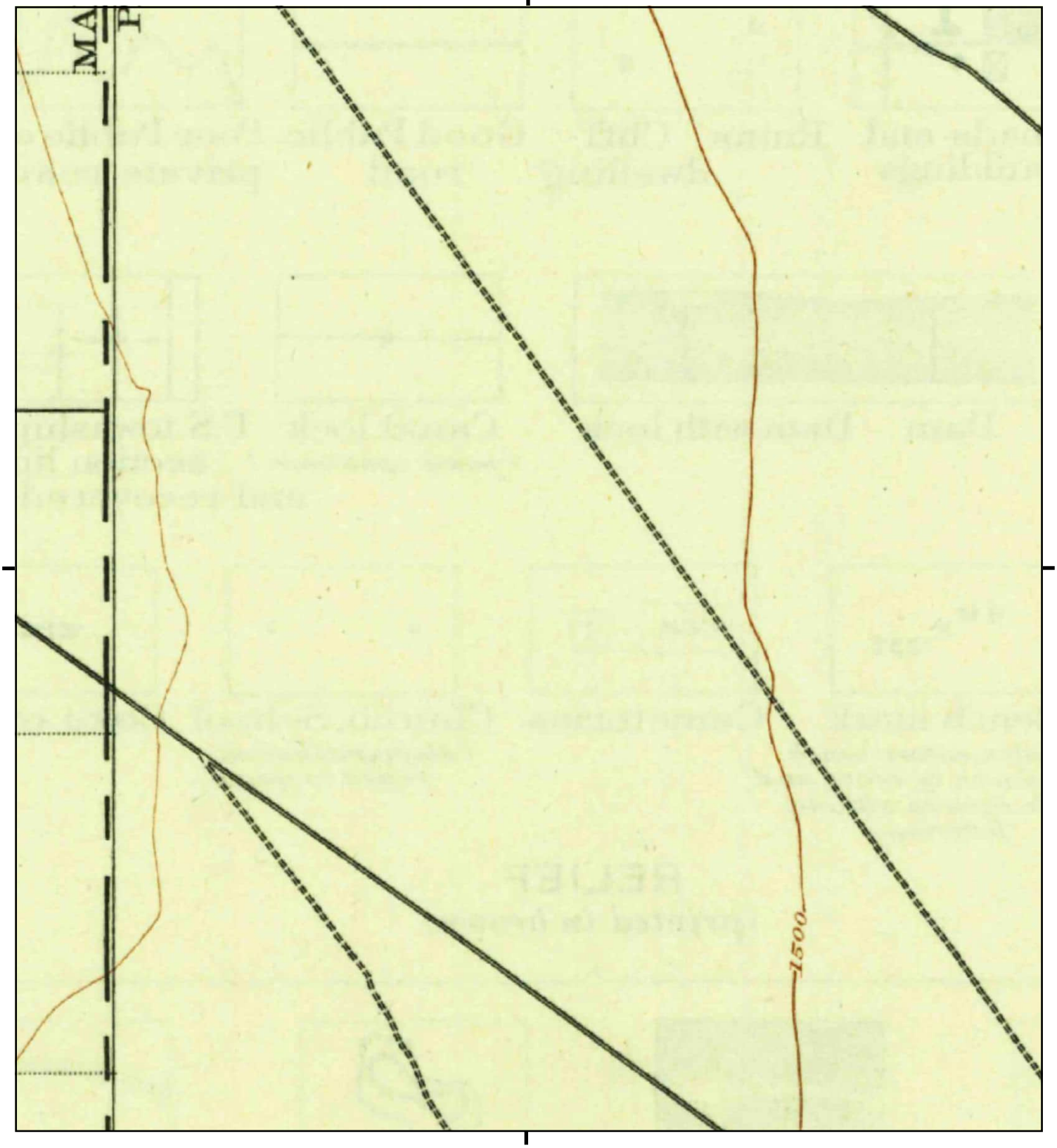
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Desert Well, 1906, 15-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N



This report includes information from the following map sheet(s).

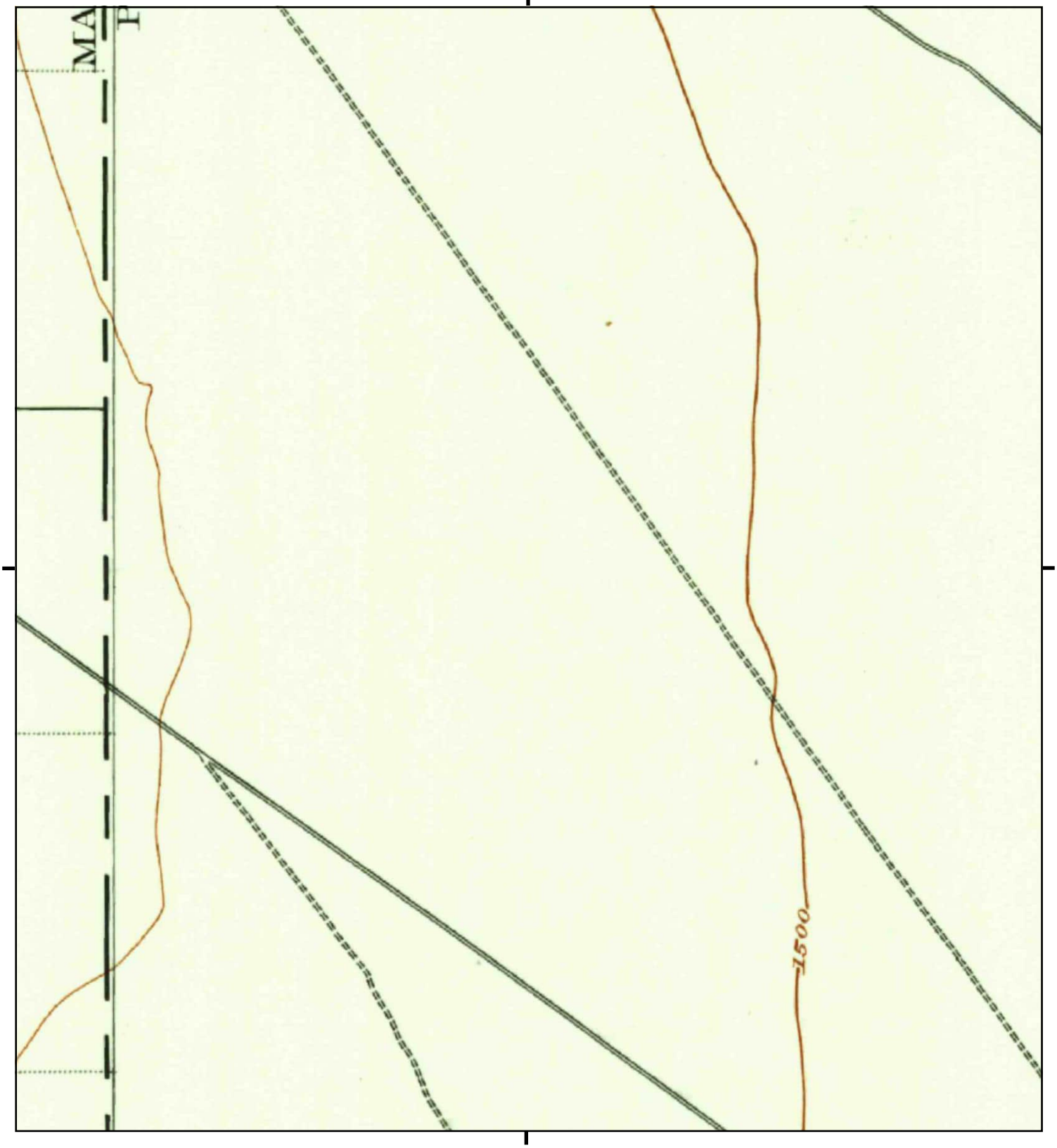
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Desert Well, 1906, 15-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N



This report includes information from the following map sheet(s).

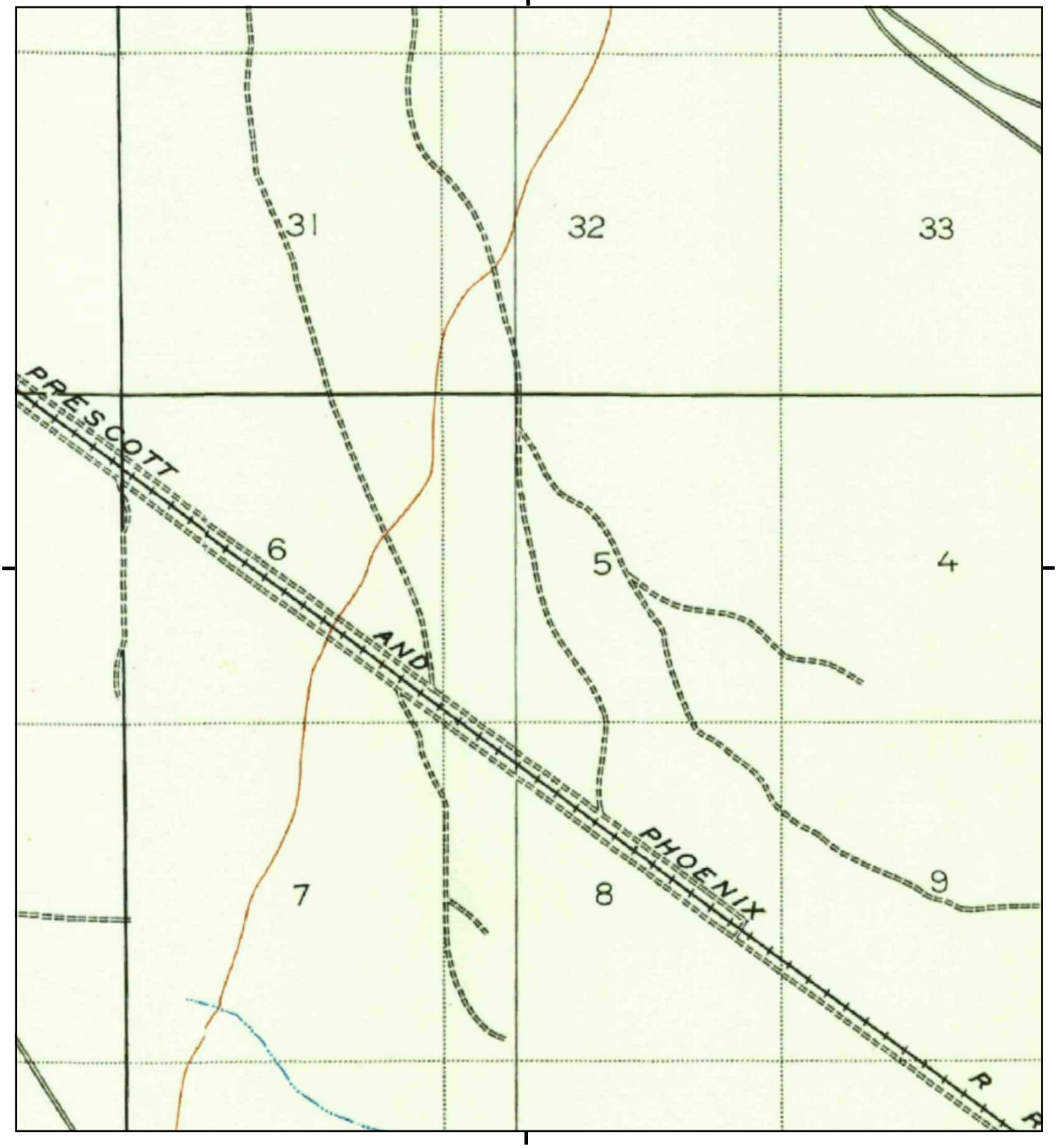
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Desert Well, 1904, 15-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N



This report includes information from the following map sheet(s).

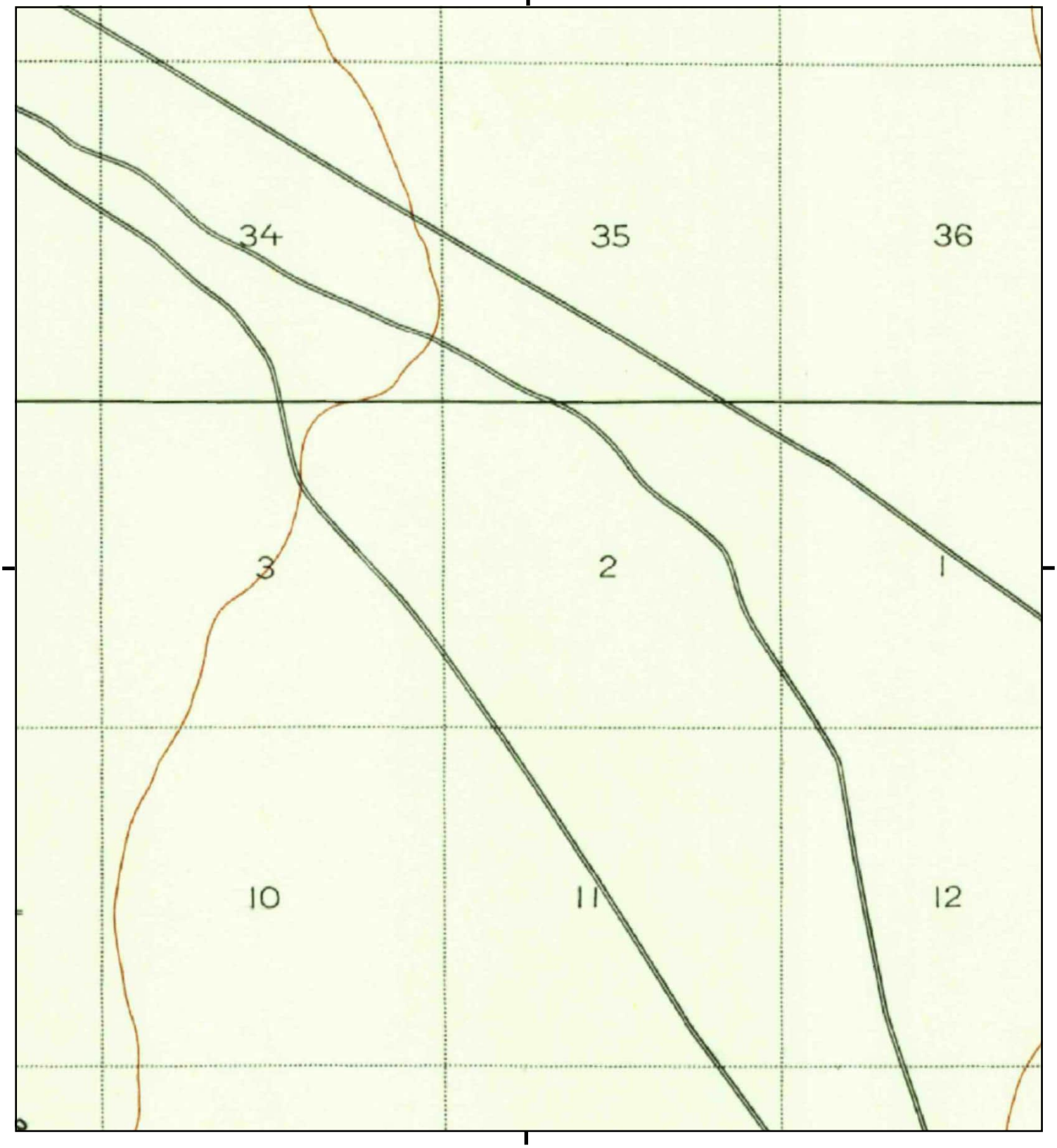
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Desert Well, 1904, 15-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Desert Well, 1904, 15-minute

SITE NAME: UPRR PIRATE
ADDRESS: Mesa Arizona
Mesa, AZ 85212
CLIENT: Jacobs

N

UPRR PIRATE
Mesa Arizona
Mesa, AZ 85212

Inquiry Number: 6992684.9
May 24, 2022

The EDR-City Directory Abstract

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1920 through 2017. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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Data by
infoUSA®
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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2017	Cole Information Services	-	-	-	-
2014	Cole Information Services	-	-	-	-
2009	Cole Information Services	-	-	-	-
2006	Hill-Donnelly Information Services	-	-	-	-
2004	Cole Information Services	-	-	-	-
2001	Hill-Donnelly Information Services	-	-	-	-
1999	Cole Information Services	-	-	-	-
1994	Cole Information Services	-	-	-	-
1993	U S West Direct	-	-	-	-
1987	Mountain Bell AU S West Co.	-	-	-	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1985	US WEST DIRECT	-	-	-	-
1982	R. L. Polk Co.	-	-	-	-
1979	R. L. Polk & Co.	-	-	-	-
1977	R. L. Polk & Co.	-	-	-	-
1970	The Mountain States Telephone and Telegraph Co.	-	-	-	-
1968	R. L. Polk & Co.	-	-	-	-
1965	R. L. Polk & Co.	-	-	-	-
1964	R. L. Polk & Co.	-	-	-	-
1960	Mullin-Kille Co.	-	-	-	-
1955	Mullin-Kille Co.	-	-	-	-
1952	Mullin - Kille Company and Baldwin Con Survey	-	-	-	-
1950	The Baldwin and Mullin-Kille Co.	-	-	-	-
1947	Southside Directory Company	-	-	-	-
1945	Phoenix Directory Co	-	-	-	-
1940	Arizona Directory Co.	-	-	-	-
1935	Arizona Directory Co.	-	-	-	-
1930	Arizona Directory Co	-	-	-	-
1925	Arizona Directory	-	-	-	-
1920	Arizona Directory	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

Mesa Arizona
Mesa, AZ 85212

FINDINGS DETAIL

Target Property research detail.

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

No Addresses Found

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
Mesa Arizona	2017, 2014, 2009, 2006, 2004, 2001, 1999, 1994, 1993, 1987, 1985, 1982, 1979, 1977, 1970, 1968, 1965, 1964, 1960, 1955, 1952, 1950, 1947, 1945, 1940, 1935, 1930, 1925, 1920

Appendix F
Biological Evaluation

BIOLOGICAL EVALUATION

PECOS INDUSTRIAL RAIL ACCESS AND TRAIN EXTENSION (PIRATE) PROJECT

Docket No. FD 36501 – Union Pacific Railroad Company
Construction and Operation Exemption in Maricopa County, Ariz.

May 2023

Summary

The Union Pacific Railroad Company (UP) is seeking authority from the Surface Transportation Board to construct and operate approximately 6.0 miles of new rail line in Maricopa County, Arizona (Docket No. FD 36501) to transport raw materials and commercial freight. The proposed rail line, referred to as the Pecos Industrial Rail Access and Train Extension (PIRATE), would connect UP's Phoenix Subdivision main line (Phoenix Subdivision) to industrial properties south of the Phoenix-Mesa Gateway Airport via a single-track rail line. UP also proposes to construct and operate approximately 2.5 miles of planned support tracks along the Phoenix Subdivision between Power Road and Ellsworth Road. The Surface Transportation Board's Office of Environmental Analysis identified two reasonable alternatives that meet the purpose and need for PIRATE: Alternative 1 and Alternative 2.

No species listed, proposed, or candidates for listing under the Endangered Species Act are expected to be affected by Alternative 1, Alternative 2, or the planned Phoenix Subdivision support tracks. Because the Surface Transportation Board has concluded that no listed species or critical habitats are present in the action area, Section 7 consultation with the U.S. Fish and Wildlife Service is not required for this project.

Ground disturbance and vegetation removal could result in impacts to migratory birds, protected native plants, and invasive species. Mitigation measures are included to avoid or minimize those impacts. Because protected native plants would be affected, a native plant permit from the Arizona Department of Agriculture would be required. The identified impacts to biological resources from either action alternative and the planned Phoenix Subdivision support tracks are similar, though Alternative 2 is longer and would have a slightly larger impact. The No-Action Alternative is expected to have similar effects as Alternative 1 or Alternative 2 and the planned Phoenix Subdivision support tracks due to rapid urban development in the area. Table S-1 summarizes the types of impacts to biological resources that are expected for each alternative and the planned Phoenix Subdivision support tracks.

Table S-1. Comparison of Impacts by Alternative

Impact Type	No-Action Alternative	Alternative 1 and the Planned Phoenix Subdivision Support Tracks	Alternative 2 and the Planned Phoenix Subdivision Support Tracks
Impact to federally listed species or suitable habitat	None	None	None
Impacts to native vegetation providing habitat for migratory birds	Minimal associated with ongoing development	172 acres (minor impacts with mitigation)	174 acres (minor impacts with mitigation)
Impacts to burrowing owl habitat	Minimal associated with ongoing development	115 acres (minor impacts with mitigation)	122 acres (minor impacts with mitigation)
Impact to suitable habitat for eagles	None	None	None
Impacts to protected native plants	Minimal associated with ongoing development	Portions of 172 acres (minor impacts with mitigation)	Portions of 174 acres (minor impacts with mitigation)
Area of disturbance creating potential to spread invasive species	Minor to moderate effect associated with ongoing development	254 acres (minor impacts with mitigation)	260 acres (minor impacts with mitigation)

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Acronyms and Abbreviations

AGFD	Arizona Game and Fish Department
AZDA	Arizona Department of Agriculture
Board	Surface Transportation Board
C.F.R.	Code of Federal Regulations
EO	Executive Order
ESA	Endangered Species Act
IPaC	Information for Planning and Consultation
MBTA	Migratory Bird Treaty Act
OEA	Office of Environmental Analysis
Phoenix Subdivision	Phoenix Subdivision main line
PIRATE	Pecos Industrial Rail Access and Train Extension
UP	Union Pacific Railroad Company
U.S.C.	United States Code
USFWS	U.S. Fish and Wildlife Service

Chapter 1
Introduction

The Union Pacific Railroad Company (UP) is seeking authority from the Surface Transportation Board (Board) to construct and operate approximately 6.0 miles of new rail line in Maricopa County, Arizona (Docket No. FD 36501) for purposes of transporting raw materials and commercial freight. The proposed rail line, referred to as the Pecos Industrial Rail Access and Train Extension (PIRATE), would connect UP's Phoenix Subdivision main line (Phoenix Subdivision) to industrial properties south of the Phoenix-Mesa Gateway Airport via a single-track rail line. UP also proposes to construct and operate approximately 2.5 miles of planned support tracks along the Phoenix Subdivision between Power Road and Ellsworth Road.

The purpose of PIRATE is to meet the transportation and logistics needs of existing and future manufacturing businesses within the Pecos Advanced Manufacturing Zone and adjacent areas. The Board's Office of Environmental Analysis (OEA) identified two reasonable alternatives that meet the purpose and need for PIRATE. The two Action Alternatives (Alternative 1 and Alternative 2), the No-Action Alternative, and the planned Phoenix Subdivision support tracks are described in detail in Chapter 2 of the Draft Environmental Assessment being prepared for this project.

Throughout this Biological Evaluation, the term "project limits" is used to represent the project footprint, which includes UP's proposed new right-of-way and temporary construction easements for each alternative and UP's existing right-of-way along the Phoenix Subdivision. The term "action area" is defined as all areas to that would be affected directly or indirectly by the project and is not merely the immediate area involved in the action. The term "project vicinity" is used to denote a more expansive landscape context.

Chapter 2
Studies and Coordination

2.1 Study Methods

Federal and state special status species lists were obtained for the action area and are included in Section 3.2. A Jacobs Engineering Group Inc. (Jacobs) senior biologist conducted a reconnaissance-level biological resources survey of the action area on May 24, 2022. The survey was conducted mostly by car, stopping periodically to walk around and identify biological resources. The biologist recorded the dominant vegetation observed and determined whether suitable habitat was present for special status species and migratory birds.

2.2 Agency Coordination

OEA notified the U.S. Fish and Wildlife Service (USFWS) through the online Information for Planning and Consultation (IPaC) system, which is considered by USFWS as sufficient notification for the scoping process. Jacobs accessed the IPaC system on February 25, 2022, and obtained an Official Species List. An updated species list was obtained on September 15, 2022 (USFWS 2022; Consultation Code: 2022-0013010; Appendix A).

Jacobs accessed the Arizona Game and Fish Department (AGFD) Online Environmental Review Tool on July 19, 2022, to obtain a list of special status species potentially present in the project vicinity (AGFD 2022b; HGIS-16838; Appendix B). The online tool receipt included a standard statement with guidelines to minimize ground disturbance, address invasive species, comply with the Arizona Native Plant Law (Arizona Revised Statute R3-3-1102), and protect burrowing owls and other nesting birds under the Migratory Bird Treaty Act (MBTA).

During the agency scoping process, Jacobs contacted AGFD to obtain information or provide comments on the project. AGFD responded with a letter that reiterated the recommendations in the online tool's standard statement and expressed additional considerations, including minimizing impacts to the burrowing owl population and native plant species (AGFD 2022a). AGFD also provided recommendations in case the project extends into native desert habitat in Pinal County; however, construction and operation of this project would occur entirely within Maricopa County.

2.3 Regulatory Context

2.3.1 Endangered Species Act

The Endangered Species Act of 1973 (ESA; 16 U.S.C. §§ 1531–1544) was enacted to protect critically rare animal and plant species and their habitats. The ESA provides for the protection of species that are at risk of extinction throughout all, or a significant portion of, their range and for the protection of ecosystems on which they depend. Section 9 of the ESA prohibits the "import, export, or take of fish and wildlife and plants that are listed as threatened or endangered species." Generally, USFWS coordinates ESA activities for terrestrial and freshwater species, and the

National Marine Fisheries Service coordinates ESA activities for marine and anadromous species. No marine or anadromous species are present in Maricopa County; therefore, the National Marine Fisheries Service will not be involved with this project.

Section 7 of the ESA requires all federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any species listed under the ESA or to result in the destruction or adverse modification of critical habitat. Federal agencies must consider the direct, indirect, and cumulative effects of a project on federally listed species and designated critical habitat. If the project may affect listed species or critical habitat, the federal agency must initiate consultation with USFWS, and USFWS determines whether the project will jeopardize the continued existence of listed species or adversely modify critical habitat. If the federal agency determines the project will have no effect to listed species or critical habitat, consultation with USFWS is not required.

2.3.2 Migratory Bird Treaty Act

The MBTA (16 U.S.C. §§ 703-712) was enacted in 1918 to assist the United States in fulfilling its obligations in the 1916 "Convention between the United States and Great Britain for the protection of Migratory Birds" 39 Stat. 1702 (Aug. 16, 1916). The goal of the MBTA was to stop the unregulated killing of migratory birds. Under the MBTA, "taking" of listed migratory birds is subject to authorization from the USFWS. "Take" is defined in USFWS's general wildlife regulations as "to pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to hunt, shoot, wound, kill, trap, capture, or collect" (50 C.F.R. § 10.12).

2.3.3 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 U.S.C. §§ 668-668d), enacted in 1940, prohibits anyone, without a permit issued by the Secretary of the Interior, from taking bald or golden eagles, including their parts, nests, or eggs. The Bald and Golden Eagle Protection Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle … [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Bald and Golden Eagle Protection Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb" (16 U.S.C. § 668c).

2.3.4 Arizona Native Plant Law

The Arizona Native Plant Law (Arizona Revised Statutes Title 3, Chapter 3, Article 11) was enacted to protect native desert plants. Many native plants fall into one of four categories specially protected from theft, vandalism, or unnecessary destruction: highly safeguarded native plants, salvage restricted native plants, salvage assessed native plants, and harvest restricted native plants. A protected native plant may not be legally possessed, taken, or transported from the growing site without a native plant permit from the Arizona Department of Agriculture (AZDA).

The type of protected native plant permit and associated fee required to salvage or destroy a plant depends on how that plant is categorized. Salvage assessed and harvest restricted native plant permits are $35.00 each on an annual basis and permits for all other protected native plants are $7.00 each for a one-time use. Exemptions from permit fees are allowed under certain

circumstances, such as when the protected native plants are relocated on the private landowner's property; collected for scientific purposes; or donated to a scientific, educational, or charitable institution. In addition to permit fees, the permittee must conduct a native plant inventory and pay a per-plant fee to AZDA that ranges from $0.50 to $8.00 per plant, depending on the type of plant.

Private landowners must submit a notice of intent to AZDA prior to destroying or salvaging protected native plants to allow others to salvage the native plants. The form required to file the notice of intent to clear land is available on AZDA's website (https://agriculture.az.gov/plantsproduce/native-plants).

The notice must be submitted no more than 1 year prior to salvaging or destroying plants, and the minimum time frame required for the notice of intent depends on the acreage to be cleared, as follows:

- Less than 1 acre of land requires notification at least 20 days prior to clearing the land
- 1 acre to less than 40 acres requires notification at least 30 days prior to clearing the land
- 40 acres or more requires notification at least 60 days prior to clearing the land

2.3.5 Invasive Species

Executive Order (EO) 13112 (February 3, 1999), as amended by EO 13751 (December 8, 2016), directs federal agencies to take steps to prevent the introduction and spread of invasive species, and to support efforts to eradicate and control invasive species that are already established. An invasive species is defined under EO 13751 as a non-native organism whose introduction to a particular ecosystem causes or is likely to cause economic or environmental harm or harm to human, animal, or plant health.

Arizona State Law R3-4-245 categorizes noxious weed species as Class A, B, and C noxious weeds and provides definitions for each category based on known distribution within the state and priority for control. A species list is provided for each noxious weed category. Class A, B, and C noxious weeds are restricted from entering the state without appropriate authorization, and AZDA is empowered to quarantine and abate an area infested with a Class A or B noxious weed if it poses an imminent threat to agriculture or horticulture.

Chapter 3
Affected Environment

3.1 Project Location

The action area is located within the Lower Colorado River Valley subdivision of the Sonoran Desertscrub biotic community (Turner and Brown 1994) at an elevation range of 1,330 to 1,340 feet. Habitat within the project limits southeast from South Power Road to South Ellsworth Road and northeast from East Rittenhouse Road to South Sossaman Road is disturbed native vegetation. Dominant plants in this area includes native species, such as foothills palo verde (*Parkinsonia microphylla*), velvet mesquite (*Prosopis velutina*), creosotebush (*Larrea tridentata*), desert broom (*Baccharis sarothroides*), fourwing saltbush (*Atriplex canescens*), brittlebush (*Encelia farinosa*), triangle-leaf bursage (*Ambrosia deltoidea*), snakeweed (*Gutierrezia sarothrae*), and Indian rushpea (*Hoffmannseggia glauca*). The area east of South Sossaman Road contains mostly highly disturbed agricultural fields. Industrial properties are present east of South Signal Butte Road where vegetation is similar to the native vegetation described previously. While some are still active fields, including a citrus orchard, most of the fields were fallow at the time of the site survey on May 24, 2022. Dominant vegetation in these fallow fields is mostly non-native species, such as Russian thistle (*Kali tragus*), common sunflower (*Helianthus annuus*), salt cedar (*Tamarix* spp.) and alfalfa (*Medicago sativa*). Other species found scattered throughout the action area include wolfberry (*Lycium brevipes*), alkali sacaton (*Sporobolus airoides*), and jimmyweed (*Isocoma* spp.). Representative images of habitat types present throughout the project limits are included in Appendix C.

The action area is located within and adjacent to commercial, industrial, residential, and agricultural developments. See the Draft Environmental Assessment for a complete project description and figures of the project limits and surrounding area.

3.2 Special Status Species Evaluation

3.2.1 Federally Listed Species

Jacobs reviewed the IPaC and AGFD species lists to determine the potential for any special status species and/or critical habitat to be present within the action area. Table 1-1 includes the species listed or proposed for listing under the ESA that are potentially present in the project vicinity and provides the potential for each species to be present in the action area.

Table 1-1. ESA-Listed Species Potentially Present in the Action Area

Species Type	Species Common Name (Scientific Name)	ESA Status	Habitat Requirements	Potential to Occur in the Action Area
Bird	California least tern (*Sterna antillarum browni*)	Listed Endangered	Open, bare or sparsely vegetated sand, sandbars, gravel pits, or exposed flats along shorelines of inland rivers, lakes, reservoirs, or drainage systems below 2,000 feet.	None. No suitable habitat within the action area. Lack of sandy beaches or dunes to support individual or breeding terns.
Bird	Yellow-billed cuckoo (*Coccyzus americanus*)	Listed Threatened	Uses large, contiguous patches of multilayered riparian habitat, such as cottonwood-willow gallery forests, along rivers and streams below 6,600 feet in elevation.	None. No suitable riparian habitat in the action area. Lack of large trees for foraging and nesting.
Reptile	Northern Mexican gartersnake (*Thamnophis eques megalops*)	Listed Threatened	Ponds, ciénegas, stock tanks, large-river riparian woodlands and forests, streamside gallery forests. Most abundant in densely vegetated habitat below 8,500 feet.	None. No suitable aquatic habitat in the action area. No wetlands with dense emergent vegetation present.
Insect	Monarch butterfly (*Danaus plexippus*)	Candidate for listing	Obligate to milkweed during breeding season and blooming nectar plants during migration. Ranges from Canada to United States and Mexico through Central and South America up to 9,000 feet.	None. No suitable habitat within the action area. Lack of extensive blooming nectar plants or milkweed to support individual or breeding monarchs.

Source: USFWS 2022.

3.2.2 Migratory Birds

The Jacobs biologist observed multiple species protected under the MBTA in the action area during the site visit. Species observed include burrowing owl (*Athene cunicularia hypugaea*), greater roadrunner (*Geococcyx californianus*), common night hawk (*Chordeiles minor*), and red-tailed hawk (*Buteo jamaicensis*).

Jacobs observed two burrowing owl nests with juveniles during the site visit. Suitable habitat for the burrowing owl is present throughout most of the action area where agricultural fields are present. The Arizona Burrowing Owl Working Group's *Burrowing Owl Project Clearance Guidance for Landowners* (2009) suggests that burrowing owls may be affected within a 100-foot buffer around projects. Figures 1-1 through 1-3 identify burrowing owl habitat locations in the action area, including a 100-foot buffer from the edge of the project limits that represents the extent of potential effects to burrowing owls.

3.2.3 Bald and Golden Eagles

Jacobs did not observe any eagles during the site visit. According to the AGFD Online Environmental Review Tool (2022b), no bald eagles (*Haliaeetus leucocephalus*) or golden eagles (*Aguila chrysaetos*) have been documented within 3 miles of the project limits. No suitable nesting habitat, such as large trees or cliffs, is present in the action area, and there is not a significant body of water nearby. Eagles may be seen passing through the area while foraging or migrating, but nesting is not expected to occur within the action area.

3.2.4 Native Plants

Native plants are present in the action area outside the agricultural lands. Jacobs observed protected native plants sparsely scattered within the patches of native vegetation in the action area during the site visit, including foothills paloverde and velvet mesquite.

3.2.5 Invasive Species

Jacobs observed invasive plant species in the project limits during the site visit. Invasive species observed include Russian thistle and salt cedar.

Figure 1-1. Burrowing Owl Habitat in the Action Area (1 of 3)

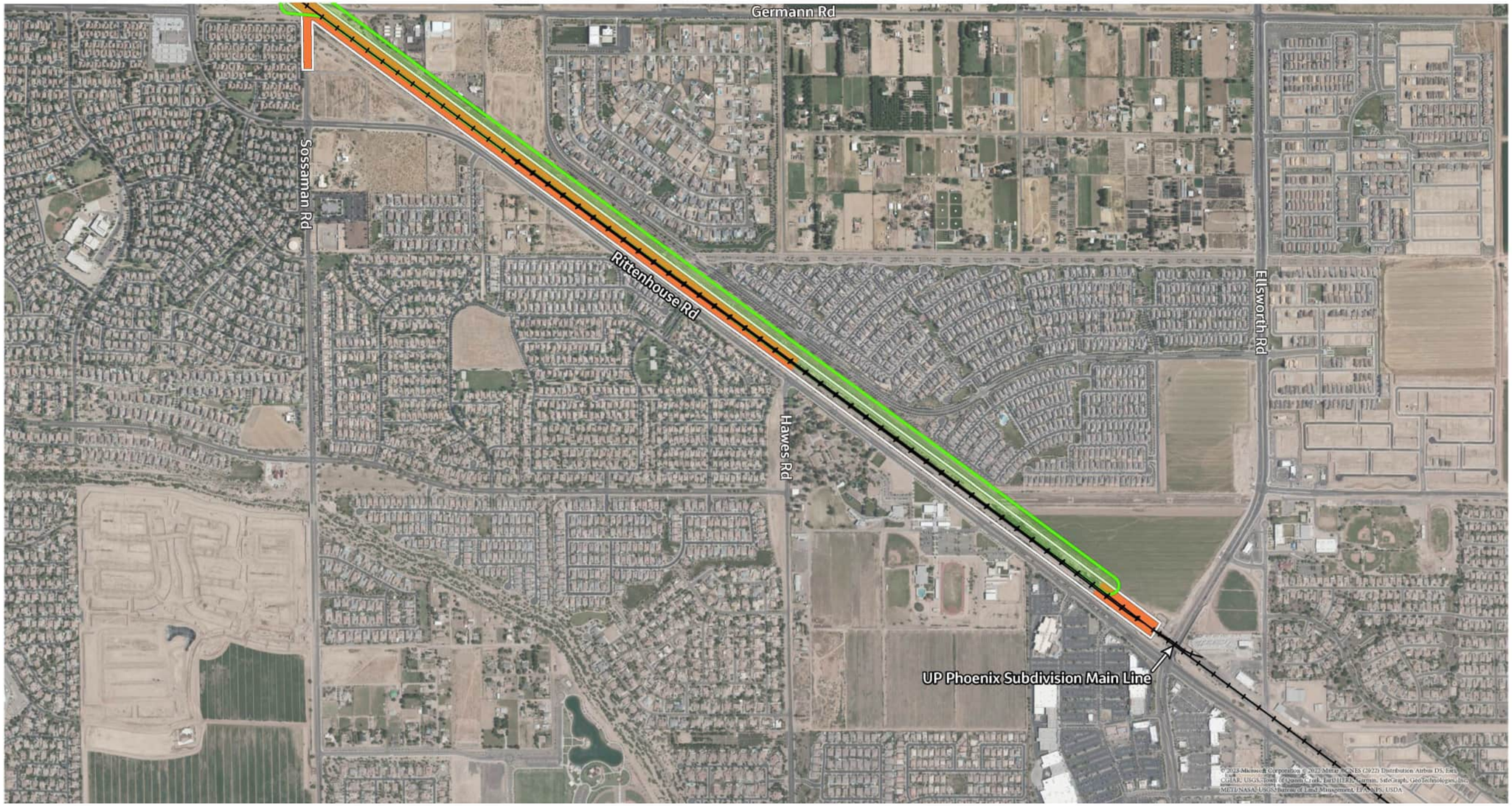


Figure 1-2. Burrowing Owl Habitat in the Action Area (2 of 3)

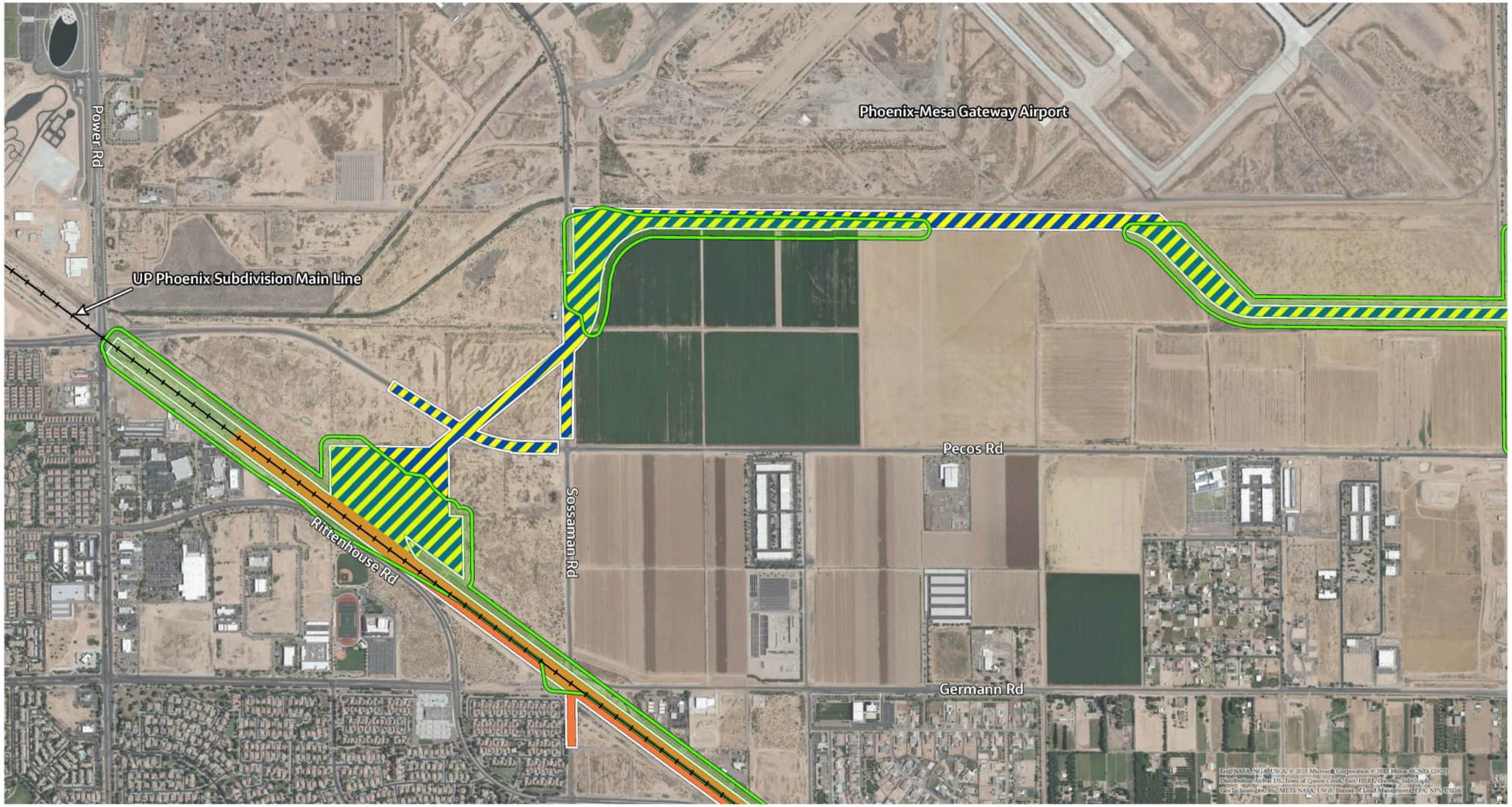
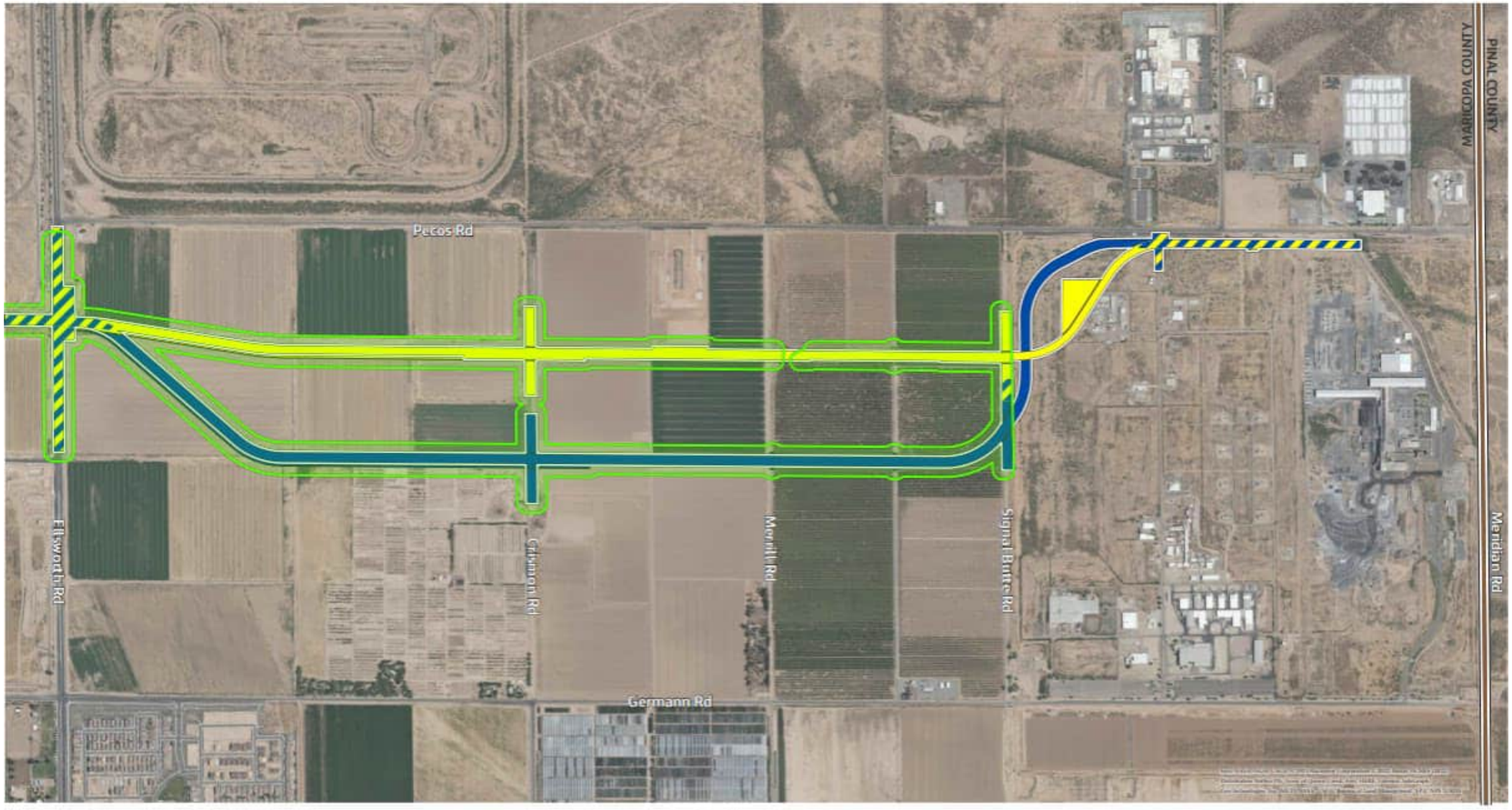


Figure 1-3. Burrowing Owl Habitat in the Action Area (3 of 3)



Chapter 4
Environmental Effect Assessment

This chapter analyzes potential project-related effects to biological resources, including federally listed species, migratory birds, bald and golden eagles, native plants, and invasive species.

4.1 Federally Listed Species

4.1.1 No-Action Alternative

Under the No-Action Alternative, UP would not construct or operate PIRATE or the planned Phoenix Subdivision support tracks. In addition, no federally listed or candidate species are known to occur within the action area and suitable habitat is not present. Therefore, the No-Action Alternative would have no effect to any ESA-listed, proposed, or candidate species.

4.1.2 Alternative 1

No federally listed or candidate species are known to occur within the action area and suitable habitat is not present; therefore, Alternative 1 and the planned Phoenix Subdivision support tracks would have no effect to any ESA-listed, proposed, or candidate species.

4.1.3 Alternative 2

The impacts from Alternative 2 and the planned Phoenix Subdivision support tracks would be the same as described for Alternative 1; therefore, Alternative 2 and the planned Phoenix Subdivision support tracks would have no effect to any ESA-listed, proposed, or candidate species.

4.2 Migratory Birds

4.2.1 No-Action Alternative

Under the No-Action Alternative, UP would not construct or operate PIRATE or the Phoenix Subdivision support tracks. Current land uses may continue in some areas, though this region is rapidly developing and agricultural lands are likely to be converted into a built urban environment. Construction activities for new developments would be required to comply with the MBTA, including avoiding impacts to nesting birds; therefore, the No-Action Alternative would have a minor effect on migratory birds.

4.2.2 Alternative 1

Alternative 1 and the planned Phoenix Subdivision support tracks include approximately 172 acres of habitat classified as native vegetation. Trees and shrubs in these areas provide nesting habitat for migratory birds. Alternative 1 and the planned Phoenix Subdivision support tracks may result in impacts to nesting birds if vegetation is cleared during the breeding season (February 1 to September 30). Young that are unable to fly could be injured or killed. Chapter 5 provides mitigation measures to avoid or minimize potential impacts to migratory birds from vegetation removal (i.e., seasonal restrictions or conducting surveys to avoid active nests).

Approximately 115 acres of burrowing owl habitat are in the agricultural lands within the project limits for Alternative 1 and the planned Phoenix Subdivision support tracks, as identified by AGFD's Online Environmental Review Tool (2022b). Burrowing owls are known to be present in the action area and could be affected by ground-disturbing activities. Chapter 5 provides specific mitigation measures that, if implemented, would avoid or minimize potential impacts to burrowing owls from ground-disturbing, project-related activities, including conducting surveys according to the species-specific survey protocol identified in the *Burrowing Owl Project Clearance Guidance for Landowners* (Arizona Burrowing Owl Working Group 2009). With the implementation of mitigation measures, Alternative 1 and the planned Phoenix Subdivision support tracks would have a minor effect on migratory birds.

4.2.3 Alternative 2

The impacts to migratory birds from Alternative 2 and the planned Phoenix Subdivision support tracks would be similar to those described for Alternative 1. However, Alternative 2 and the planned Phoenix Subdivision support tracks would affect approximately 174 acres of native habitat, which is approximately 2 acres more migratory bird habitat than Alternative 1. Approximately 122 acres of agricultural lands providing burrowing owl habitat would be cleared for Alternative 2 and the planned Phoenix Subdivision support tracks, which is approximately 7 acres more burrowing owl habitat than Alternative 1. Therefore, if mitigation measures identified for migratory birds in Chapter 5 are implemented, Alternative 2 and the planned Phoenix Subdivision support tracks would have a minor effect on migratory birds.

4.3 Bald and Golden Eagles

4.3.1 No-Action Alternative

Under the No-Action Alternative, UP would not construct or operate PIRATE or the planned Phoenix Subdivision support tracks. In addition, no suitable nesting habitat for eagles is present in the project vicinity. Any eagles incidentally flying over the action area are not likely to stop and use habitat in this area; therefore, the No-Action Alternative would have no effect to bald and golden eagles.

4.3.2 Alternative 1

No suitable nesting habitat for eagles is present in the project vicinity. Any eagles incidentally flying over the action area are not likely to stop and use habitat in this area; therefore, Alternative 1 and the planned Phoenix Subdivision support tracks would have no effect on bald or golden eagles.

4.3.3 Alternative 2

The impacts from Alternative 2 and the planned Phoenix Subdivision support tracks would be the same as described for Alternative 1; therefore, Alternative 2 and the planned Phoenix Subdivision support tracks would have no effect on bald or golden eagles.

4.4 Native Plants

4.4.1 No-Action Alternative

Under the No-Action Alternative, UP would not construct or operate PIRATE or the planned Phoenix Subdivision support tracks. Current land uses may continue in some areas, though this region is rapidly developing and agricultural lands are likely to be converted into a built urban environment. Construction activities for new developments would be required to comply with the Native Plant Law; therefore, the No-Action Alternative would have a minor effect on native plants.

4.4.2 Alternative 1

Alternative 1 and the planned Phoenix Subdivision support tracks would require vegetation removal and heavy equipment use. Most of the vegetation removed would consist of native plants from previously disturbed areas. Alternative 1 and the planned Phoenix Subdivision support tracks would result in the removal of approximately 172 acres of native vegetation. Protected native plants are sparsely scattered within the patches of native vegetation; therefore, only a minor amount of protected native plants would be removed. As identified in Chapter 5, AZDA requires UP to obtain a permit and submit a notice of intent to clear land prior to destroying or removing protected native plants. Therefore, Alternative 1 and the planned Phoenix Subdivision support tracks would have a minor effect on native plants.

4.4.3 Alternative 2

The impacts from Alternative 2 and the planned Phoenix Subdivision support tracks would be similar as described for Alternative 1. However, Alternative 2 and the planned Phoenix Subdivision support tracks would affect 174 acres of native habitat, which is approximately 2 acres more native plant habitat than Alternative 1. Therefore, Alternative 2 and the planned Phoenix Subdivision support tracks would have a minor effect on native plants.

4.5 Invasive Species

4.5.1 No-Action Alternative

Under the No-Action Alternative, UP would not construct or operate PIRATE or the planned Phoenix Subdivision support tracks. Current land uses may continue in some areas, though this region is rapidly developing and agricultural lands are likely to be converted into a built urban environment. Construction activities for new developments could contribute to the introduction or spread of invasive species if measures to prevent this from happening are not established and enforced; therefore, the No-Action Alternative could have a minor to moderate potential to spread invasive species.

4.5.2 Alternative 1

Alternative 1 and the planned Phoenix Subdivision support tracks would result in approximately 254 acres being disturbed. Equipment used during construction would have the potential to track in or carry invasive species out of the action area, or exacerbate existing infestations. Mitigation measures outlined in Chapter 5, if implemented, would minimize the potential risk. Therefore, by implementing the mitigation measures included in Chapter 5, Alternative 1 and the planned Phoenix Subdivision support tracks would have a minor potential to spread invasive species.

4.5.3 Alternative 2

The impacts from Alternative 2 and the planned Phoenix Subdivision support tracks would be similar to those described for Alternative 1. However, approximately 260 acres would be disturbed under Alternative 2 and the planned Phoenix Subdivision support tracks, affecting 6 acres more than Alternative 1. Therefore, if mitigation measures identified for invasive species in Chapter 5 are implemented, Alternative 2 and the planned Phoenix Subdivision support tracks would have a minor potential to spread invasive species.

Chapter 5
Recommended Mitigation

This section describes OEA's recommended mitigation measures that, if implemented, would avoid or minimize the project's construction-related effects on biological resources. This section also includes voluntary measures proposed by UP. Operational mitigation is not recommended because OEA does not anticipate impacts to biological resources from project operations.

5.1 Federally Listed Species

- UP shall review updated USFWS and AGFD species lists within 3 months of the start of project-related construction to see if any special status species were added after issuance of the Final EA. If new species are identified, UP shall notify OEA so that an appropriate action can be taken if warranted.

5.2 Migratory Birds

- UP shall not remove any trees or large tree limbs or conduct vegetation removal activities, such as grubbing or shrub clearing, between February 1 and September 30 until a biologist has conducted a bird nest search of grasses, shrubs, trees, and tree limbs and has determined that no active bird nests are present. Vegetation may be mowed or removed if it has been surveyed within 7 calendar days prior to removal as long as only inactive bird nests, if any, are present. Between October 1 and January 31, grubbing, shrub clearing, and tree/limb removal activities are not subject to restriction.

- Where practical, any ground-disturbing, ground-clearing activities or vegetation treatments will be performed before migratory birds begin nesting or after all young have fledged.

- If such activities must be scheduled to start during the migratory bird breeding season, UP will not take steps to prevent migratory birds from establishing nests in the potential impact area. UP or its agents will not haze or exclude nest access for migratory birds and other sensitive avian species.

- If such activities must be scheduled during the migratory bird breeding season, a qualified biologist will perform a site-specific survey for nesting birds starting no more than 7 days prior to ground-disturbing activities or vegetation treatments. Birds with eggs or young will not be hazed, and nests with eggs or young will not be moved until the young are no longer dependent on the nest.

- If nesting birds are found during the survey, UP will establish appropriate seasonal or spatial buffers around nests. Vegetation treatments or ground-disturbing activities within the buffer areas will be postponed, where feasible, until the birds have left the nest. A qualified biologist will confirm that all young have fledged.

- Within 30 days prior to project-related construction, qualified biologists will survey for the federal- and state-protected burrowing owl (*Athene cunicularia*) following guidelines provided by AGFD. UP shall provide the results of this survey to AGFD within 30 days

of survey completion, in accordance with the *AGFD Burrowing Owl Project Clearance Guidance for Landowners* (Arizona Burrowing Owl Working Group 2009).

- If burrowing owls are observed at burrows in the project limits, a 100-foot buffer of no activity will be established around the burrow for the duration of the project.
- If an active burrowing owl burrow is in an area that requires impact, a local, qualified biologist will be contacted to remove the owls from the project limits with the appropriate state and federal permits. The burrows will be collapsed by the biologist to prevent further nesting activities.

5.3 Protected Native Plants

- Prior to project-related construction, UP shall conduct a native plant inventory throughout the project limits to determine if protected native plants will be affected by project-related construction and consult with the AZDA to determine if a permit is required. If native plants will be affected and an AZDA native plant permit is required, UP shall comply with the reasonable requirements of AZDA prior to project-related construction.

5.4 Invasive Species

- UP shall ensure that all disturbed soils are landscaped, seeded with a native seed mix, or otherwise permanently stabilized following project-related construction.
- Prior to any project-related construction, UP shall develop and implement a mitigation plan to address the spread and control of non-native invasive plants during project-related construction. This plan shall address and designate the following elements: (1) planned seed mixes, (2) weed prevention and eradication procedures, (3) equipment cleaning protocols, (4) revegetation methods, and (5) protocols for monitoring revegetation. For any project-related construction on lands managed by state agencies, UP shall seek input on the plan from the appropriate land management agency.

5.5 General

- UP will comply with any conditions and mitigation commitments contained in the Draft Environmental Assessment, recommended by the Arizona Game and Fish Department and/or the U.S. Fish and Wildlife Service, for sensitive species, including plants, that could potentially be impacted by the project.

Chapter 6
References

Arizona Burrowing Owl Working Group. 2009. *Burrowing Owl Project Clearance Guidance for Landowners.* https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/nongame/eagles/BurrowingOwlClearanceProtocol_2009.pdf.

Arizona Game and Fish Department. 2022a. Scoping letter response to Jacobs Engineering Group Inc. regarding project-related biological resources impacts. January 31.

Arizona Game and Fish Department. 2022b. Online Environmental Review Tool, Heritage Geographic Information System (HGIS)-16838. https://ert.azgfd.gov/content/home. Accessed July 19, 2022.

Turner, R. M., and D. E. Brown. 1994. "Sonoran Desertscrub." In *Biotic Communities: Southwestern United States and Northwestern Mexico* (edited by D. E. Brown). University of Utah Press, Salt Lake City, Utah. pp. 181–192.

U.S. Fish and Wildlife Service. 2022. Information for Planning and Conservation (IPaC) Species list, Consultation Code: 2022-0013010. https://ipac.ecosphere.fws.gov/. Accessed February 25, 2022, and September 15, 2022.

Appendix A
U.S. Fish and Wildlife Service Species List

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Arizona Ecological Services Field Office
9828 North 31st Ave
#c3
Phoenix, AZ 85051-2517
Phone: (602) 242-0210 Fax: (602) 242-2513

In Reply Refer To: September 15, 2022
Project Code: 2022-0013010
Project Name: UPRR Pirate Industrial Lead

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The Fish and Wildlife Service (Service) is providing this list under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). The list you have generated identifies threatened, endangered, proposed, and candidate species, and designated and proposed critical habitat, that *may* occur within the One-Range that has been delineated for the species (candidate, proposed, or listed) and it's critical habitat (designated or proposed) with which your project polygon intersects. These range delineations are based on biological metrics, and do not necessarily represent exactly where the species is located. Please refer to the species information found on ECOS to determine if suitable habitat for the species on your list occurs in your project area.

The purpose of the Act is to provide a means whereby threatened and endangered species and the habitats upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of Federal trust resources and to determine whether projects may affect federally listed species and/or designated critical habitat. A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.
If the Federal action agency determines that listed species or critical habitat *may be affected* by a federally funded, permitted or authorized activity, the agency must consult with us pursuant to 50 CFR 402. Note that a "may affect" determination includes effects that may not be adverse and that may be beneficial, insignificant, or discountable. An effect exists even if only one individual

or habitat segment may be affected. The effects analysis should include the entire action area, which often extends well outside the project boundary or "footprint." For example, projects that involve streams and river systems should consider downstream affects. If the Federal action agency determines that the action may jeopardize a *proposed* species or may adversely modify *proposed* critical habitat, the agency must enter into a section 7 conference. The agency may choose to confer with us on an action that may affect proposed species or critical habitat.

Candidate species are those for which there is sufficient information to support a proposal for listing. Although candidate species have no legal protection under the Act, we recommend that they be considered in the planning process in the event they become proposed or listed prior to project completion. More information on the regulations (50 CFR 402) and procedures for section 7 consultation, including the role of permit or license applicants, can be found in our Endangered Species Consultation Handbook at: http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF.

We also advise you to consider species protected under the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712) and the Bald and Golden Eagle Protection Act (Eagle Act) (16 U.S.C. 668 *et seq.*). The MBTA prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when authorized by the Service. The Eagle Act prohibits anyone, without a permit, from taking (including disturbing) eagles, and their parts, nests, or eggs. Currently 1,026 species of birds are protected by the MBTA, including the western burrowing owl (*Athene cunicularia hypugaea*). Protected western burrowing owls can be found in urban areas and may use their nest/burrows year-round; destruction of the burrow may result in the unpermitted take of the owl or their eggs.

If a bald eagle or golden eagle nest occurs in or near the proposed project area, our office should be contacted for Technical Assistance. An evaluation must be performed to determine whether the project is likely to disturb or harm eagles. The National Bald Eagle Management Guidelines provide recommendations to minimize potential project impacts to bald eagles (see https://www.fws.gov/birds/management/project-assessment-tools-and-guidance/guidance-documents/eagles.php and https://www.fws.gov/birds/management/managed-species/eagle-management.php).

The Division of Migratory Birds (505/248-7882) administers and issues permits under the MBTA and Eagle Act, while our office can provide guidance and Technical Assistance. For more information regarding the MBTA, BGEPA, and permitting processes, please visit the following web site: https://www.fws.gov/birds/management.php. Guidance for minimizing impacts to migratory birds for communication tower projects (e.g. cellular, digital television, radio, and emergency broadcast) can be found at https://www.fws.gov/migratorybirds/pdf/management/usfwscommtowerguidance2016update.pdf.

The U.S. Army Corps of Engineers (Corps) may regulate activities that involve streams (including some intermittent streams) and/or wetlands. We recommend that you contact the Corps to determine their interest in proposed projects in these areas. For activities within a National Wildlife Refuge, we recommend that you contact refuge staff for specific information

about refuge resources, please visit https://www.fws.gov/southwest/refuges/ to locate the refuge you would be working in or around.

If your action is on tribal land or has implications for off-reservation tribal interests, we encourage you to contact the tribe(s) and the Bureau of Indian Affairs (BIA) to discuss potential tribal concerns, and to invite any affected tribe and the BIA to participate in the section 7 consultation. In keeping with our tribal trust responsibility, we will notify tribes that may be affected by proposed actions when section 7 consultation is initiated. For more information, please contact our Tribal Coordinator, John Nystedt, at 928/556-2160 or John_Nystedt@fws.gov.

We also recommend you seek additional information and coordinate your project with the Arizona Game and Fish Department. Information on known species detections, special status species, and Arizona species of greatest conservation need, such as the western burrowing owl and the Sonoran desert tortoise (*Gopherus morafkai*) can be found by using their Online Environmental Review Tool, administered through the Heritage Data Management System and Project Evaluation Program (https://www.azgfd.com/wildlife/planning/projevalprogram/).

We appreciate your concern for threatened and endangered species. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office. If we may be of further assistance, please contact our Flagstaff office at 928/556-2157 for projects in northern Arizona, our general Phoenix number 602/242-0210 for central Arizona, or 520/670-6144 for projects in southern Arizona.

Sincerely,
/s/

Mark A. Lamb
Acting Field Supervisor
Attachment

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Arizona Ecological Services Field Office
9828 North 31st Ave
#c3
Phoenix, AZ 85051-2517
(602) 242-0210

Project Summary

Project Code: 2022-0013010
Project Name: UPRR Pirate Industrial Lead
Project Type: Railroad - New Construction
Project Description: The proposed project is a new industrial lead railroad track that would connect Union Pacific Railroad Company's Phoenix Sub main line track in Maricopa County,
Arizona, to industrial properties southeast of the Phoenix-Mesa Gateway Airport. The proposed track would serve the transportation and logistics needs of existing manufacturing and industrial businesses, as well as prospective businesses looking to relocate to the area.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@33.27562535,-111.6654066683497,14z



Counties: Maricopa County, Arizona

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
California Least Tern *Sterna antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Bendire's Thrasher *Toxostoma bendirei* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9435	Breeds Mar 15 to Jul 31

NAME	BREEDING SEASON
Costa's Hummingbird *Calypte costae* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9470	Breeds Jan 15 to Jun 10
Gila Woodpecker *Melanerpes uropygialis* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/5960	Breeds Apr 1 to Aug 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31
Lawrence's Goldfinch *Carduelis lawrencei* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12

(0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

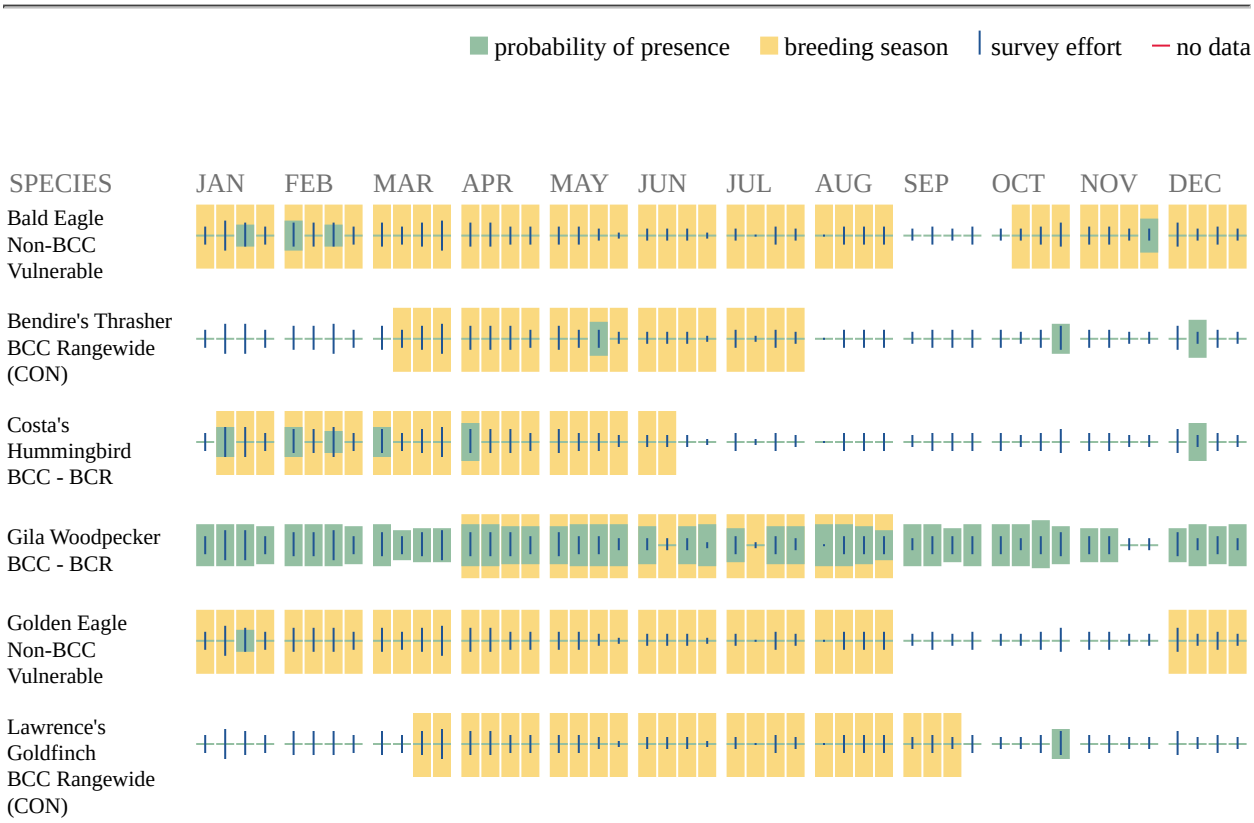
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and

how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?
To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?
Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects
For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?
If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

IPaC User Contact Information

Agency: Jacobs Engineering
Name: Kay Nicholson
Address: 1501 West Fountainhead Parkway, Suite 401
City: Tempe
State: AZ
Zip: 85282
Email kay.e.nicholson@jacobs.com
Phone: 6025301605

Lead Agency Contact Information

Lead Agency: Surface Transportation Board
Name: Adam Assenza
Email: Adam.Assenza@stb.gov
Phone: 2022450301

Appendix B
Arizona Game and Fish Department
Special Status Species List

Arizona Environmental Online Review Tool Report

Arizona Game and Fish Department Mission
To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

UPRR Pirate Industrial Lead

Project Description:

The proposed project is a new industrial lead railroad track that would connect Union Pacific Railroad Company's Phoenix Sub main line track in Maricopa County, Arizona, to industrial properties southeast of the Phoenix-Mesa Gateway Airport. The proposed track would serve the transportation and logistics needs of existing manufacturing and industrial businesses, as well as prospective businesses looking to relocate to the area.

Project Type:

Transportation & Infrastructure, Railroads (Freight and Passenger), New tracks, bridges, roadway crossing for freight or passenger lines,

Contact Person:

Kay Nicholson

Organization:

Jacobs Engineering Group

On Behalf Of:

OTHER_FED

Project ID:

HGIS-16838

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. HabiMap Arizona data, specifically Species of Greatest Conservation Need (SGCN) under our State Wildlife Action Plan (SWAP) and Species of Economic and Recreational Importance (SERI), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

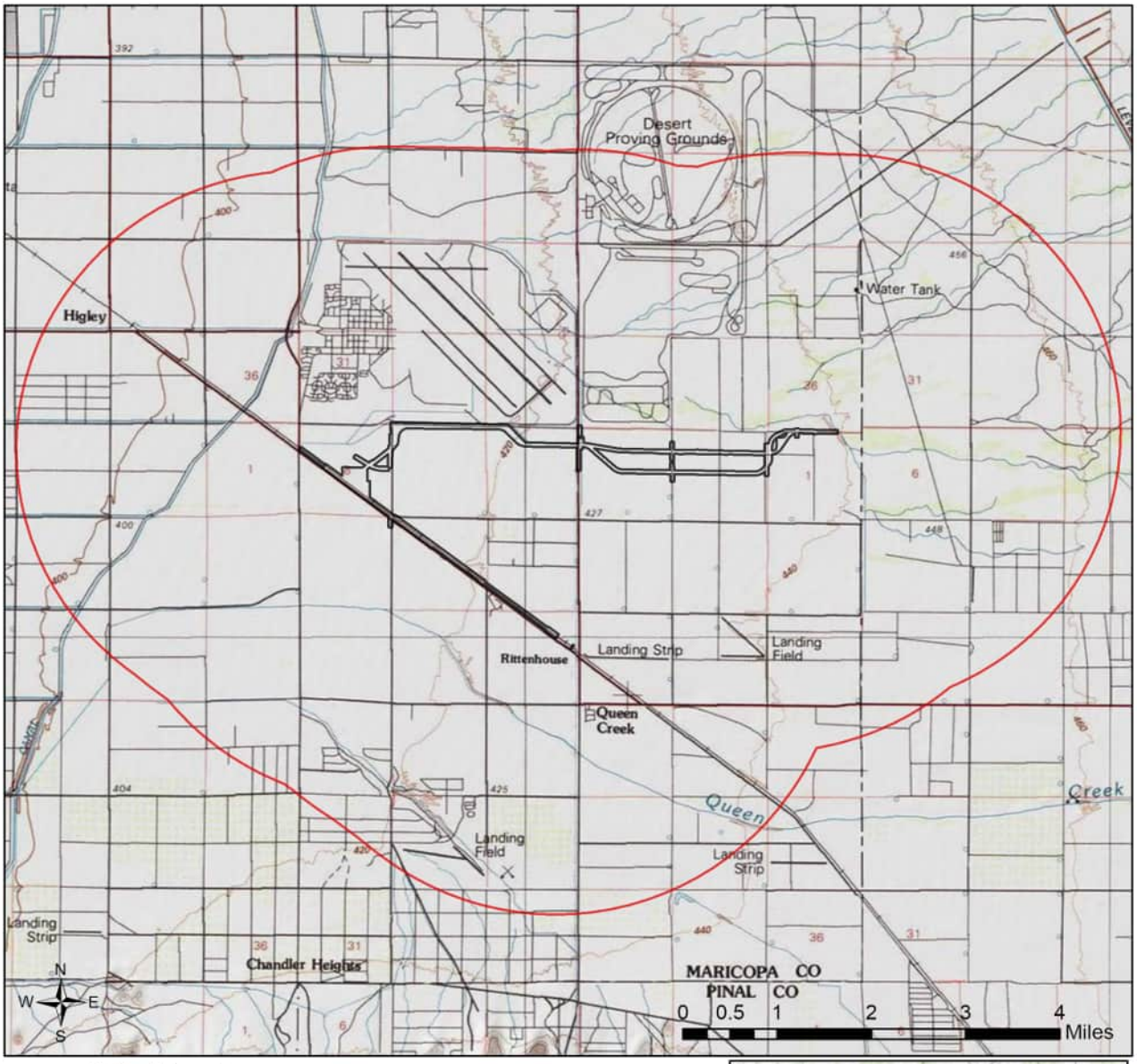
Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
   Project Evaluation Program, Habitat Branch
   Arizona Game and Fish Department
   5000 West Carefree Highway
   Phoenix, Arizona 85086-5000
   Phone Number: (623) 236-7600
   Fax Number: (623) 236-7366
   Or
   PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies

UPRR Pirate Industrial Lead

USA Topo Basemap With Locator Map



Buffered Project Boundary

Project Boundary

Project Size (acres): 436.85

Lat/Long (DD): 33.2892 / -111.6368

County(s): Maricopa

AGFD Region(s): Mesa

Township/Range(s): T1S, R7E; T2S, R7E

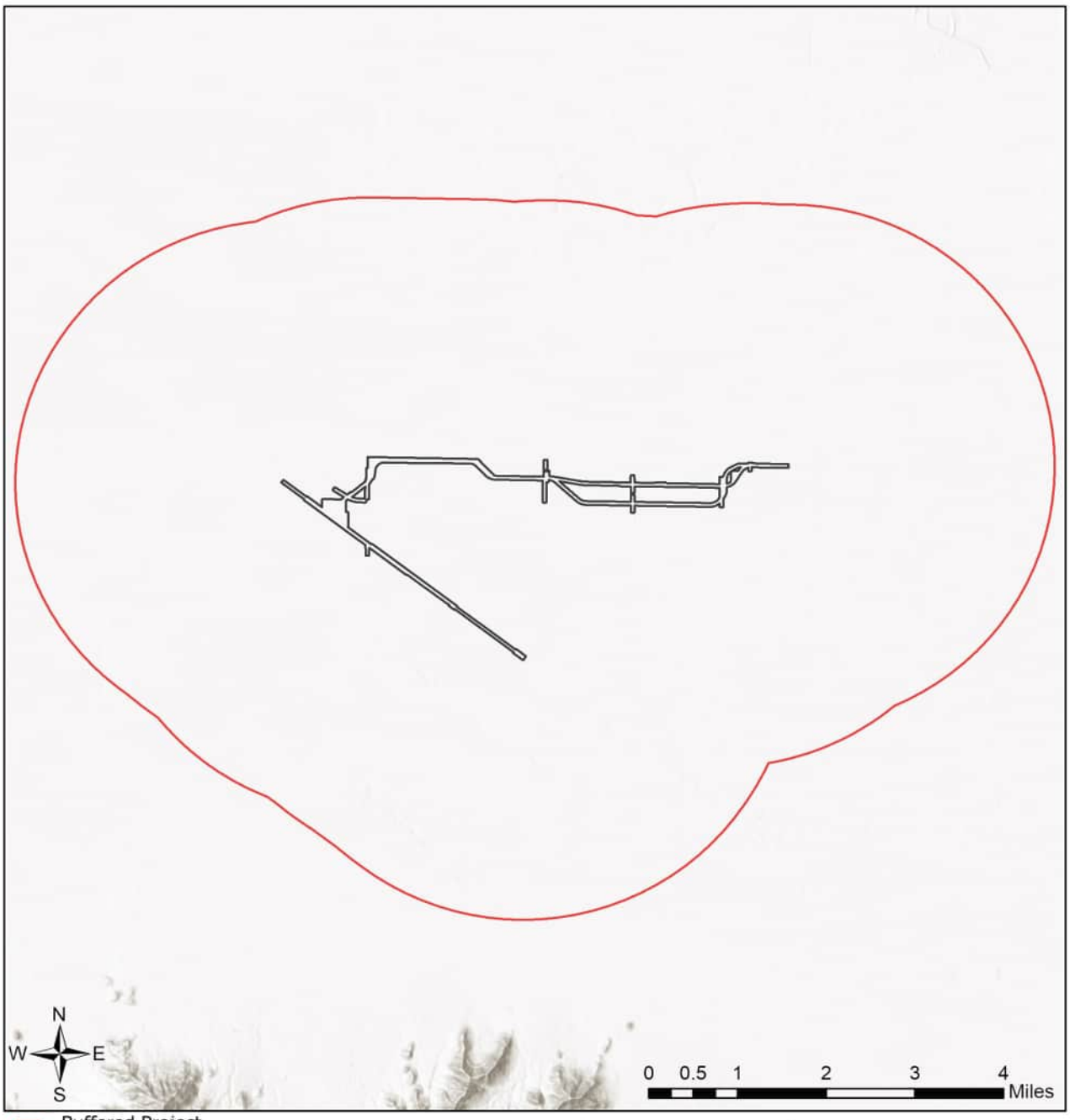
USGS Quad(s): DESERT WELL; HIGLEY



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

UPRR Pirate Industrial Lead

Web Map As Submitted By User



Buffered Project Boundary

Project Boundary

Project Size (acres): 436.85

Lat/Long (DD): 33.2892 / -111.6368

County(s): Maricopa

AGFD Region(s): Mesa

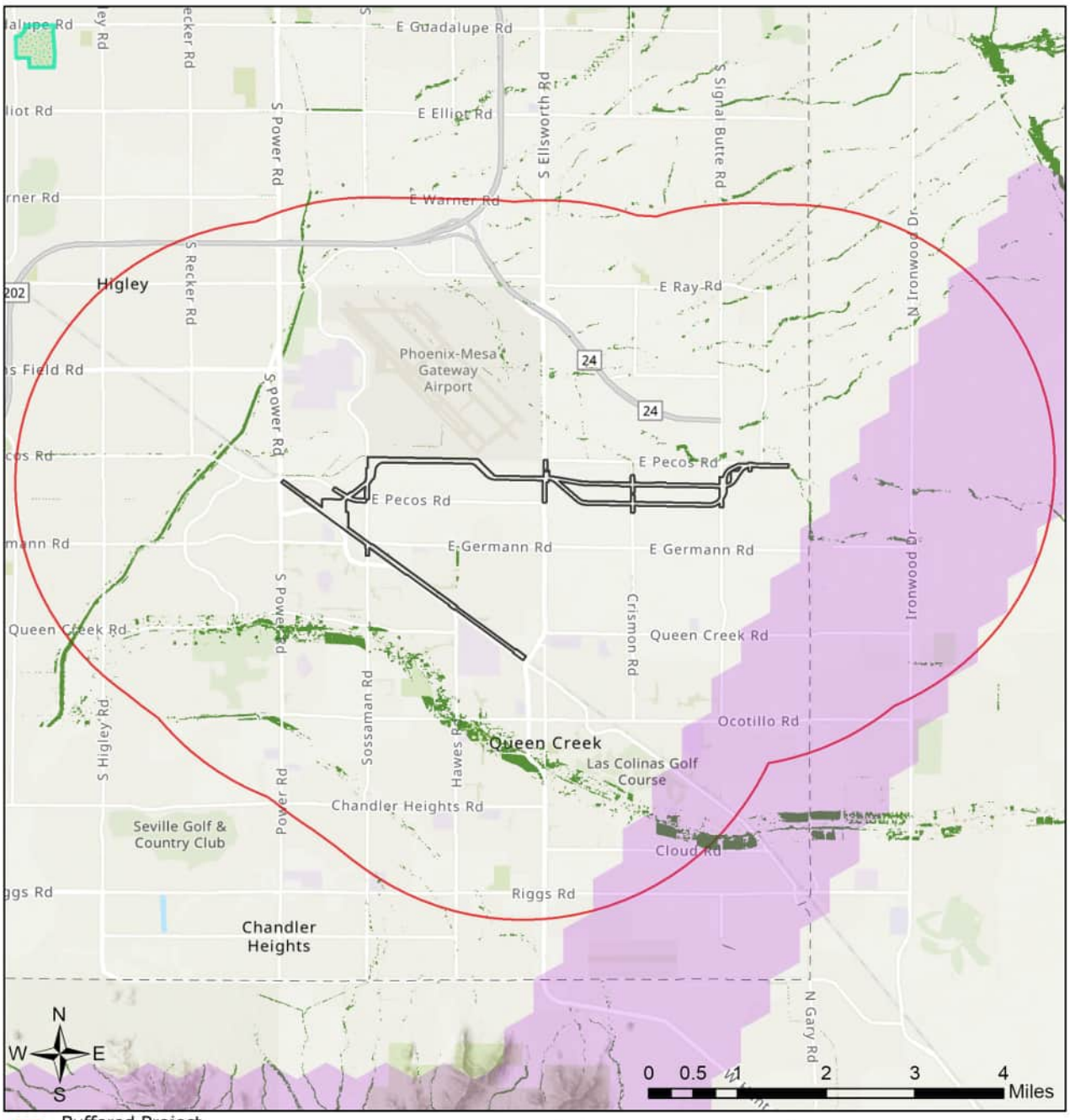
Township/Range(s): T1S, R7E; T2S, R7E

USGS Quad(s): DESERT WELL; HIGLEY

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

UPRR Pirate Industrial Lead

Important Areas



- Buffered Project Boundary
- Project Boundary
- Important Bird Areas
- Critical Habitat
- Pinal County Riparian
- Important Connectivity Zones
- Wildlife Connectivity

Project Size (acres): 436.85

Lat/Long (DD): 33.2892 / -111.6368

County(s): Maricopa

AGFD Region(s): Mesa

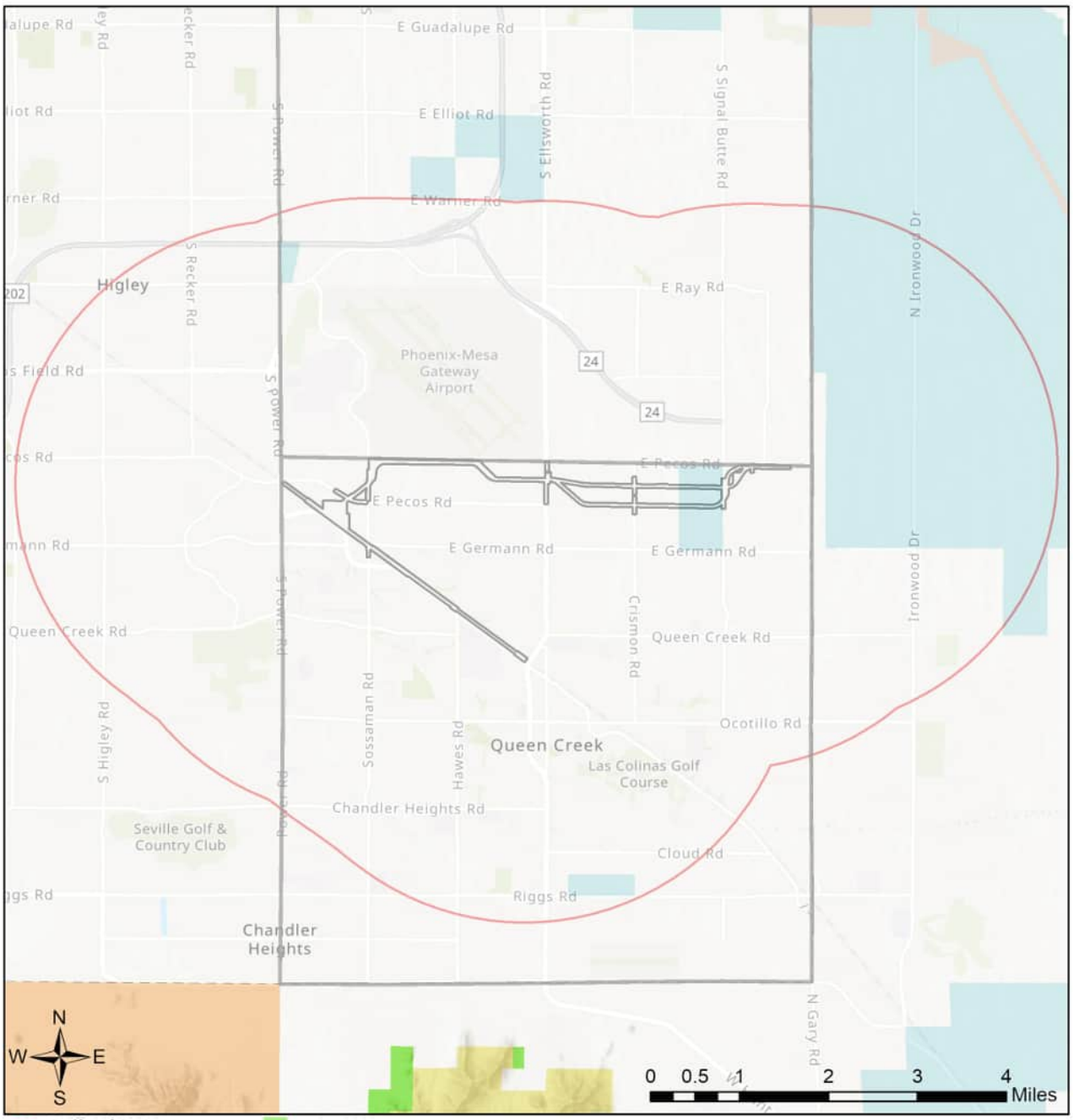
Township/Range(s): T1S, R7E; T2S, R7E

USGS Quad(s): DESERT WELL; HIGLEY

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community
Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

UPRR Pirate Industrial Lead

Township/Ranges and Land Ownership



- Buffered Project Boundary
- Project Boundary
- AZ Game & Fish Dept.
- BLM
- BOR
- Indian Res.
- Military
- Mixed/Other
- National Park/Mon.
- Private
- State & Regional Parks
- State Trust
- US Forest Service
- Wildlife Area/Refuge
- Township/Ranges

Project Size (acres): 436.85

Lat/Long (DD): 33.2892 / -111.6368

County(s): Maricopa

AGFD Region(s): Mesa

Township/Range(s): T1S, R7E; T2S, R7E

USGS Quad(s): DESERT WELL; HIGLEY

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community
Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Special Status Species Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		1B
Danaus plexippus	Monarch	C		S		
Lepus alleni	Antelope Jackrabbit					1B

Note: Status code definitions can be found at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/
.

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Riparian Area	Riparian Area					

Note: Status code definitions can be found at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/
.

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Aix sponsa	Wood Duck					1B
Ammospermophilus harrisii	Harris' Antelope Squirrel					1B
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		1B
Botaurus lentiginosus	American Bittern					1B
Buteo regalis	Ferruginous Hawk	SC		S		1B
Calypte costae	Costa's Hummingbird					1C
Chilomeniscus stramineus	Variable Sandsnake					1B
Chionactis annulata	Resplendent Shovel-nosed Snake	SC				1C
Cistothorus palustris	Marsh Wren					1C
Colaptes chrysoides	Gilded Flicker			S		1B
Coluber bilineatus	Sonoran Whipsnake					1B
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC	S	S		1B
Crotalus tigris	Tiger Rattlesnake					1B
Empidonax wrightii	Gray Flycatcher					1C
Euderma maculatum	Spotted Bat	SC	S	S		1B
Eumops perotis californicus	Greater Western Bonneted Bat	SC		S		1B
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S		1A
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1A
Haliaeetus leucocephalus	Bald Eagle	SC, BGA	S	S		1A
Heloderma suspectum	Gila Monster					1A
Incilius alvarius	Sonoran Desert Toad					1B
Kinosternon sonoriense sonoriense	Desert Mud Turtle			S		1B
Lasiurus blossevillii	Western Red Bat		S			1B

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Lasiurus xanthinus	Western Yellow Bat		S			1B
Leopardus pardalis	Ocelot	LE				1A
Leptonycteris yerbabuenae	Lesser Long-nosed Bat	SC				1A
Lepus alleni	Antelope Jackrabbit					1B
Macrotus californicus	California Leaf-nosed Bat	SC		S		1B
Melanerpes uropygialis	Gila Woodpecker					1B
Melospiza lincolnii	Lincoln's Sparrow					1B
Melozone aberti	Abert's Towhee		S			1B
Micrathene whitneyi	Elf Owl					1C
Micruroides euryxanthus	Sonoran Coralsnake					1B
Myiarchus tyrannulus	Brown-crested Flycatcher					1C
Myotis occultus	Arizona Myotis	SC		S		1B
Myotis velifer	Cave Myotis	SC		S		1B
Myotis yumanensis	Yuma Myotis	SC				1B
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					1B
Oreoscoptes montanus	Sage Thrasher					1C
Oreothlypis luciae	Lucy's Warbler					1C
Panthera onca	Jaguar	LE				1A
Passerculus sandwichensis	Savannah Sparrow					1B
Phrynosoma goodei	Goode's Horned Lizard					1B
Phrynosoma solare	Regal Horned Lizard					1B
Phyllorhynchus browni	Saddled Leaf-nosed Snake					1B
Progne subis hesperia	Desert Purple Martin			S		1B
Setophaga petechia	Yellow Warbler					1B
Sphyrapicus nuchalis	Red-naped Sapsucker					1C
Spizella breweri	Brewer's Sparrow					1C
Tadarida brasiliensis	Brazilian Free-tailed Bat					1B
Toxostoma lecontei	LeConte's Thrasher			S		1B
Troglodytes pacificus	Pacific Wren					1B
Vireo bellii arizonae	Arizona Bell's Vireo					1B
Vulpes macrotis	Kit Fox	No Status				1B

Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Callipepla gambelii	Gambel's Quail					
Zenaida asiatica	White-winged Dove					
Zenaida macroura	Mourning Dove					

Project Type: Transportation & Infrastructure, Railroads (Freight and Passenger), New tracks, bridges, roadway crossing for freight or passenger lines,

Project Type Recommendations:
Bridge Maintenance/Construction
Identify whether wildlife species use the structure for roosting or nesting during anticipated maintenance/construction period. Plan the timing of maintenance/construction to minimize impacts to wildlife species. In addition to the species list generated by the Arizona's On-line Environmental Review Tool, the Department recommends that surveys be conducted at the bridge and in the vicinity of the bridge to identify additional or currently undocumented bat, bird, or aquatic species in the project area. To minimize impacts to birds and bats, as well as aquatic species, consider conducting maintenance and construction activities outside the breeding/maternity season (breeding seasons for birds and bats usually occur spring - summer). Examining the crevices for the presence of bats prior to pouring new paving materials or that the top of those crevices be sealed to prevent material from dripping or falling through the cracks and potentially onto bats. If bats are present, maintenance and construction (including paving and milling) activities should be conducted during nighttime hours, if possible, when the fewest number of bats will be roosting. Minimize impacts to the vegetation community. Unavoidable impacts to vegetation should be mitigated on-site whenever possible. A revegetation plan should be developed to replace impacted communities.
Consider design structures and construction plans that minimize impacts to channel geometry (i.e., width/depth ratio, sinuosity, allow overflow channels), to avoid alteration of hydrological function. Consider incorporating roosting sites for bats into bridge designs. During construction, erosion control structures and drainage features should be used to prevent introduction of sediment laden runoff into the waterway. Minimize instream construction activity. If culverts are planned, use wildlife friendly designs to mitigate impacts to wildlife and fish movement. Guidelines for bridge designs to facilitate wildlife passage can be found on our Wildlife Friendly Guidelines web page under the Widilfe Planning button, at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Fence recommendations will be dependant upon the goals of the fence project and the wildlife species expected to be impacted by the project. General guidelines for ensuring wildlife-friendly fences include: barbless wire on the top and bottom with the maximum fence height 42", minimum height for bottom 16". Modifications to this design may be considered for fencing anticipated to be routinely encountered by elk, bighorn sheep or pronghorn (e.g., Pronghorn fencing would require 18" minimum height on the bottom). Please refer to the Department's Fencing Guidelines located on Wildlife Friendly Guidelines page, which is part of the WIldlife Planning button at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and should be contained within important wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife. Guidelines for many of these can be found at: https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Conduct wildlife surveys to determine species within project area, and evaluate proposed activities based on species biology and natural history to determine if artificial lighting may disrupt behavior patterns or habitat use. Use only the minimum amount of light needed for safety. Narrow spectrum bulbs should be used as often as possible to lower the range of species affected by lighting. All lighting should be shielded, canted, or cut to ensure that light reaches only areas needing illumination.

Minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects and pathogens. Precautions should be taken to wash and/or decontaminate all equipment utilized in the project activities before entering and leaving the site. See the Arizona Department of Agriculture website for a list of prohibited and restricted noxious weeds at https://www.invasivespeciesinfo.gov/unitedstates/az.shtml and the Arizona Native Plant Society https://aznps.com/invas for recommendations on how to control. To view a list of documented invasive species or to report invasive species in or near your project area visit iMapInvasives - a national cloud-based application for tracking and managing invasive species at https://imap.natureserve.org/imap/services/page/map.html.

- To build a list: zoom to your area of interest, use the identify/measure tool to draw a polygon around your area of interest, and select “See What’s Here” for a list of reported species. To export the list, you must have an account and be logged in. You can then use the export tool to draw a boundary and export the records in a csv file.

Follow manufacturer's recommended application guidelines for all chemical treatments. The U.S. Fish and Wildlife Service, Region 2, Environmental Contaminants Program has a reference document that serves as their regional pesticide recommendations for protecting wildlife and fisheries resources, titled "Recommended Protection Measures for Pesticide Applications in Region 2 of the USFWS", http://www.fws.gov/southwest/es/arizona/Documents/ECReports/RPMPA_2007.pdf. The Department recommends that direct or indirect impacts to sensitive species and their forage base from the application of chemical pesticides or herbicides be considered carefully.

Minimization and mitigation of impacts to wildlife and fish species due to changes in water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods) should be evaluated. Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing of the project in order to minimize impacts to spawning fish and other aquatic species (include spawning seasons), and to reduce spread of exotic invasive species. We recommend early direct coordination with Project Evaluation Program for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

Based on the project type entered, coordination with State Historic Preservation Office may be required (http://azstateparks.com/SHPO/index.html).

Design culverts to minimize impacts to channel geometry, or design channel geometry (low flow, overbank, floodplains) and substrates to carry expected discharge using local drainages of appropriate size as templates. Reduce/minimize barriers to allow movement of amphibians or fish (e.g., eliminate falls). Also for terrestrial wildlife, washes and stream corridors often provide important corridors for movement. Overall culvert width, height, and length should be optimized for movement of the greatest number and diversity of species expected to utilize the passage. Culvert designs should consider moisture, light, and noise, while providing clear views at both ends to maximize utilization. For many species, fencing is an important design feature that can be utilized with culverts to funnel wildlife into these areas and minimize the potential for roadway collisions. Guidelines for culvert designs to facilitate wildlife passage can be found on the home page of this application at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Based on the project type entered, coordination with Arizona Department of Environmental Quality may be required (http://www.azdeq.gov/).

Based on the project type entered, coordination with U.S. Army Corps of Engineers may be required (http://www.usace.army.mil/)

Based on the project type entered, coordination with County Flood Control district(s) may be required.

The Department requests further coordination to provide project/species specific recommendations, please contact Project Evaluation Program directly at PEP@azgfd.gov.

Project Location and/or Species Recommendations:
This review has identified **riparian areas** within the vicinity of your project. During the planning stage of your project, avoid, minimize, or mitigate any potential impacts to riparian areas identified in this report. Riparian areas play an important role in maintaining the functional integrity of the landscape, primarily by acting as natural drainages that convey water through an area, thereby reducing flood events. In addition, riparian areas provide important movement corridors and habitat for fish and wildlife. Riparian areas are channels that contain water year-round or at least part of the year. Riparian areas also include those channels which are dry most of the year, but may contain or convey water following rain events. All types of riparian areas offer vital habitats, resources, and movement corridors for wildlife. The Pinal County Comprehensive Plan (i.e. policies *6.1.2.1* and *7.1.2.4*), Open Space and Trails Master Plan, Drainage Ordinance, and Drainage Design Manual all identify riparian area considerations, guidance, and policies. Guidelines to avoid, minimize, or mitigate impacts to riparian habitat can be found at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/. Based on the project type entered, further consultation with the Arizona Game and Fish Department and Pinal County may be warranted.

HDMS records indicate that **Western Burrowing Owls** have been documented within the vicinity of your project area. Please review the western burrowing owl resource page at: https://www.azgfd.com/wildlife/speciesofgreatestconservneed/burrowingowlmanagement/.

Appendix C
Images of Habitat in the Project Limits

Image 1. Representative photograph of habitat dominated by fourwing saltbush along the Phoenix Subdivision.



Image 2. Representative photograph of creosotebush-dominated habitat north of Rittenhouse Road and west of Sossaman Road.



Image 3. Representative photograph of fallow agricultural fields dominated by weedy species on the east side of Sossaman Road.



Image 4. Representative photograph of fallow agricultural fields dominated by bare ground on the west side of Sossaman Road.



Image 5. View of dense xeroriparian vegetation along an ephemeral wash (in the background) at the eastern end of the project limits.



Image 6. Habitat dominated by mesquite trees in the southeastern corner of Pecos and Signal Butte Roads where Alternatives 1 and 2 converge.



Image 7. Burrowing owls observed by a Jacobs biologist during project surveys.



Appendix G
Jurisdictional Delineation Report Including Wetlands

Surface Transportation Board

Jurisdictional Delineation Report Including Wetlands

For

Pecos Industrial Rail Access and Train Extension (PIRATE) Project

Corps File No. SPL-2021-00653
Docket No. FD 36501 – Union Pacific Railroad Company
Construction Exemption in Mesa, Arizona

October 2022
Submittal No. 1

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APPENDIX E. Ground Photographs of Wetland Delineation Data Plots (May 25, 2022)
APPENDIX F. U.S. Fish and Wildlife Service National Wetlands Inventory Wetland Maps

1. Location

The jurisdictional delineation (JD), including the wetlands survey area, is located generally between Rittenhouse, Pecos, Meridian, and Germann Roads in the city of Mesa (Mesa), Maricopa County, Arizona (Figures 1, 2a, and 2b). The cadastral location of the Pecos Industrial Rail Access and Train Extension (PIRATE) project, as shown on the U.S. Geological Survey (USGS) Higley, AZ (1956b) and Desert Well, AZ (1956a) 7.5-minute topographic quadrangles, is listed below:

- Township 1 South, Range 7 East, Section 36
- Township 2 South, Range 7 East, Sections 1 through 9 and 16

The PIRATE project would occur within existing Union Pacific Railroad Company (UP) right-of-way, within future UP right-of-way to be purchased from Mesa and private landowners, and within future UP easements to be obtained from the Arizona State Land Department and the Flood Control District of Maricopa County (FCDMC). Three ephemeral washes, including the Rittenhouse and Ellsworth flood control channels (Wash No. 1 and Wash No. 2, respectively), and an unnamed wash (Wash No. 3) cross the proposed PIRATE alignment. The project midpoint is located at 33.289238N, -111.634987W, North American Datum of 1983 decimal degrees. Portions of the project occur within the Rittenhouse Channel 100-year floodplain (Figure 3a).

2. Purpose

This report documents the JD (including presence/absence of wetlands) conducted May 24–26, 2022, to determine the presence of potential jurisdictional waters of the United States (U.S.) within the limits of the proposed PIRATE project between the Phoenix Subdivision main line track at Rittenhouse Road and the eastern edge of the Pecos Advanced Manufacturing Zone (PAMZ) at Meridian Road. UP proposes to construct 6.0 miles of new industrial lead track between Rittenhouse and Meridian Roads and about 4.0 miles of new support tracks parallel to the existing Phoenix Subdivision main line track between Power and Ellsworth Roads. According to UP, the purpose of the proposed rail line is to meet the transportation and logistics needs of existing and future manufacturing businesses within the PAMZ and adjacent areas.

3. Location Description

The JD survey area occurs within the Basin and Range Physiographic Province, which is characterized by a series of northwest to southeast trending mountain ranges separated by alluvial valleys. The terrain is flat with elevations ranging about 10 feet, from 1,330 to 1,340 feet above mean sea level, within the Lower Colorado River subdivision of the Sonoran Desertscrub biotic community (Brown 1994).

The survey area, in a rapidly developing section of southeastern Mesa, is highly disturbed by agriculture (both active and fallow) and industrial development, as well as flood control, transportation, and freight infrastructure. Aviation, residential, commercial, and institutional land uses surround the survey area. Land to the east in Pinal County is still largely undeveloped desertscrub.

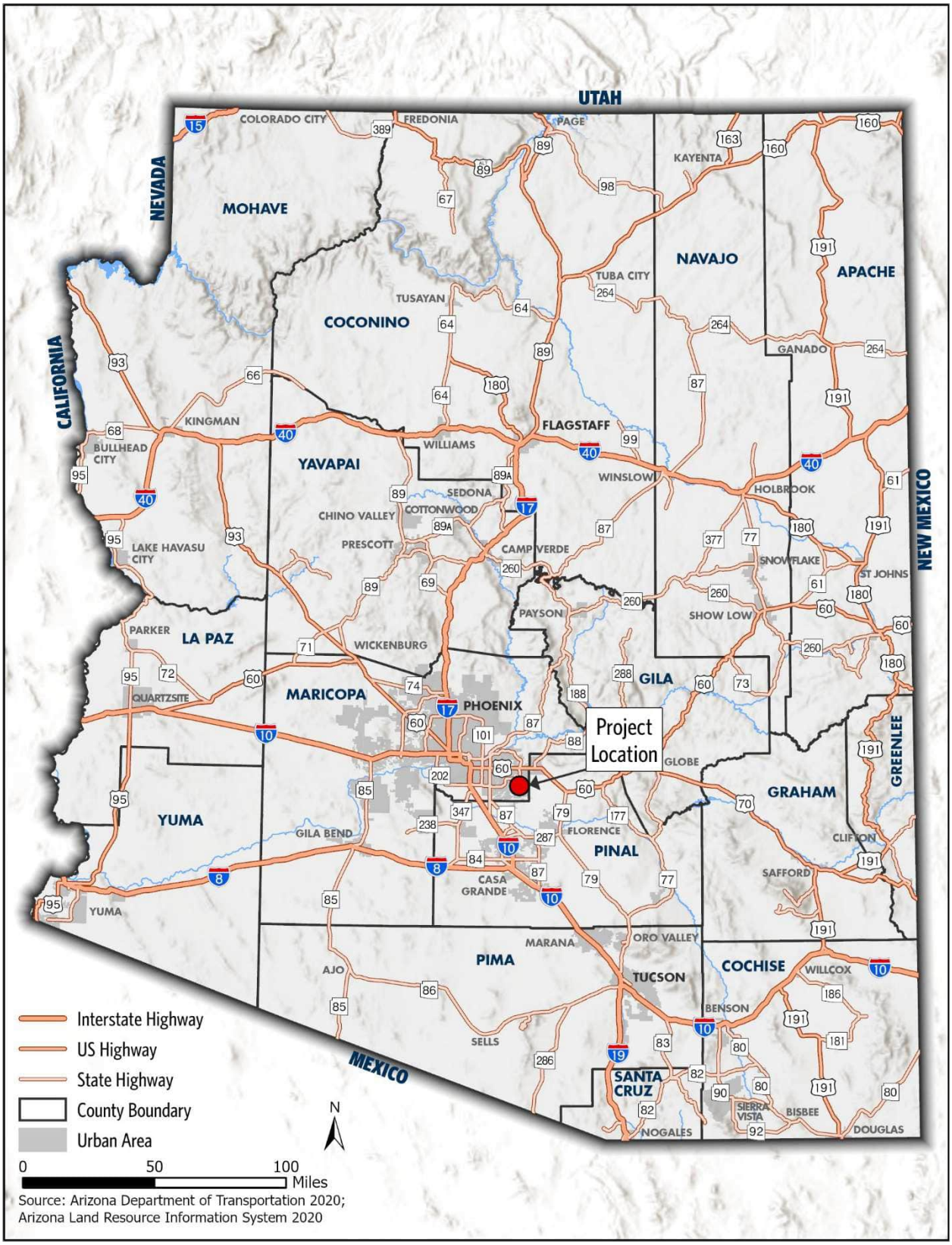


Figure 1. State Location Map
PIRATE Project / Docket No. FD 36501

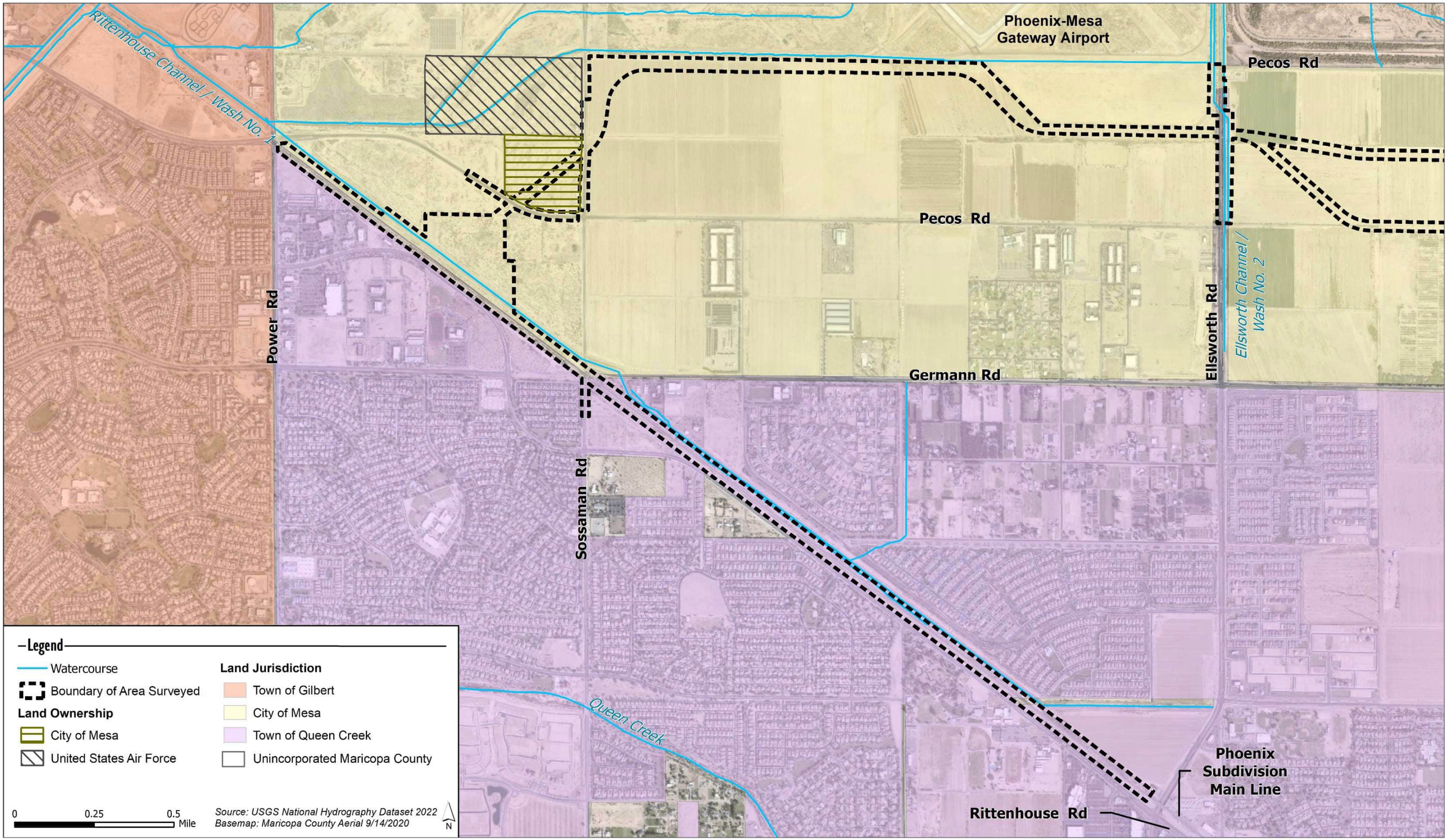


Figure 2a. Vicinity Map – Western Project Vicinity
PIRATE Project / Docket No. FD 36501

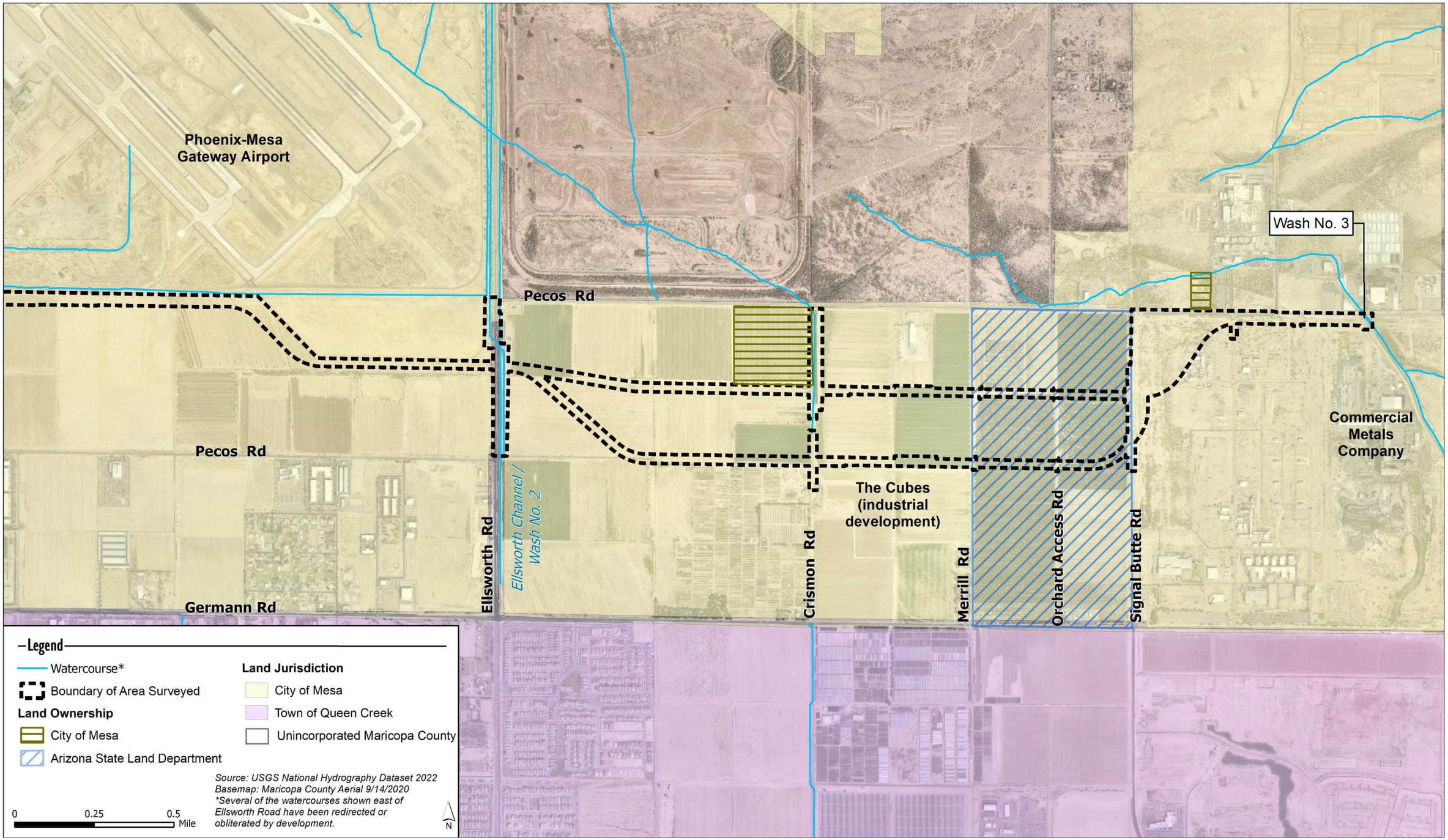


Figure 2b. Vicinity Map – Eastern Project Vicinity
PIRATE Project / Docket No. FD 36501

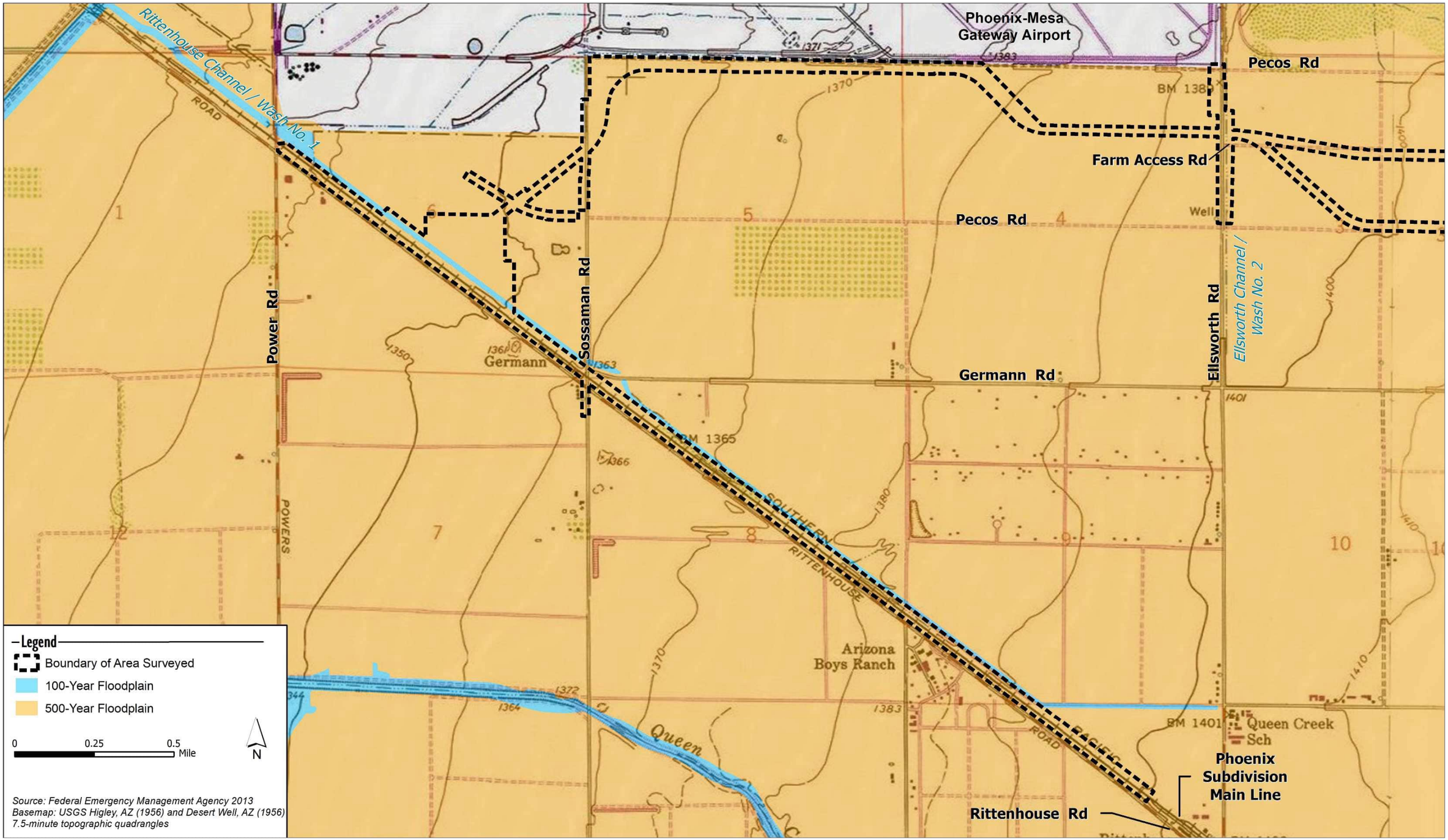


Figure 3a. JD Survey Area, Topographic, and Floodplain Map – Western Project Limits
PIRATE Project / Docket No. FD 36501

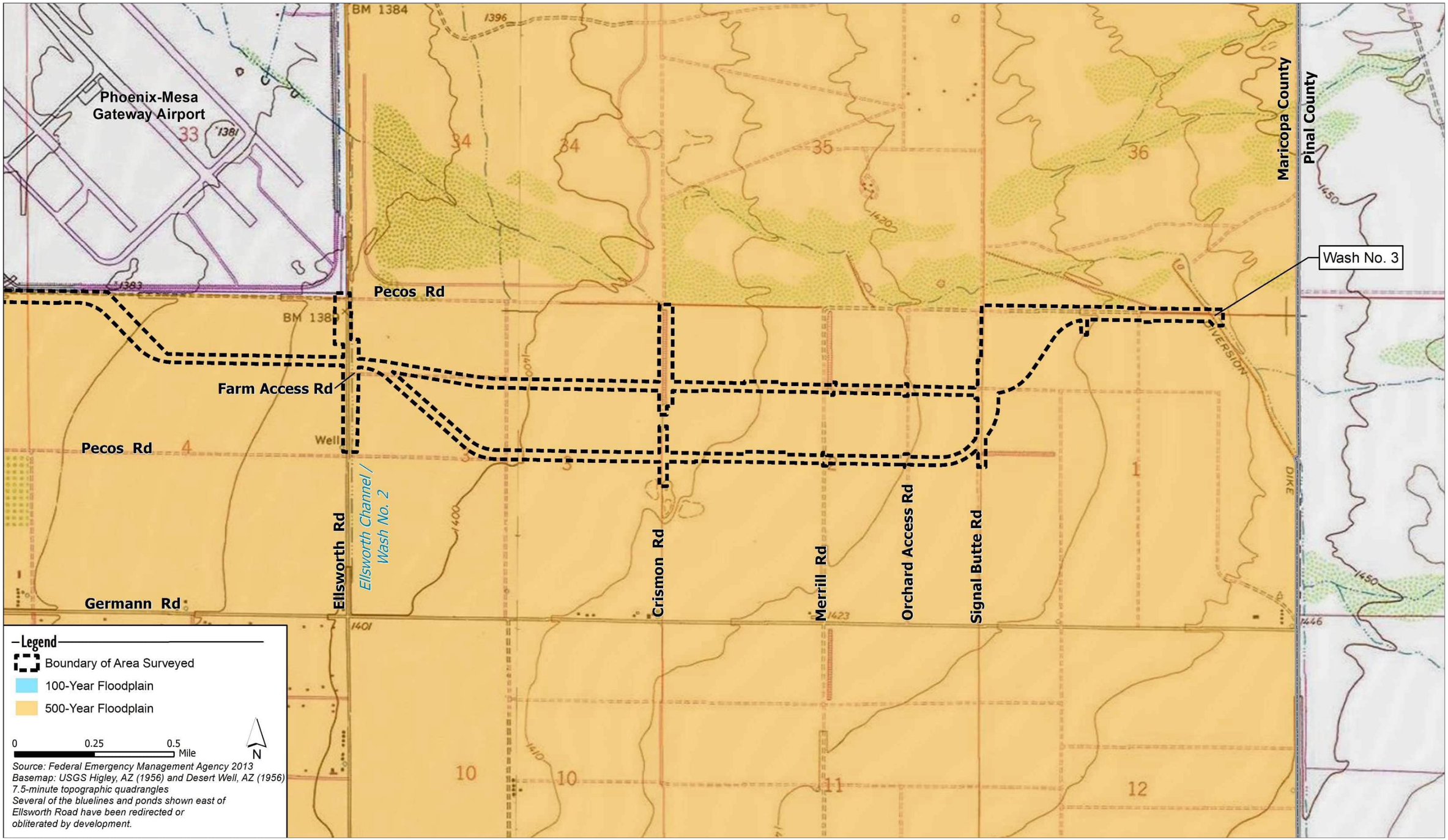


Figure 3b. JD Survey Area, Topographic, and Floodplain Map – Eastern Project Limits
PIRATE Project / Docket No. FD 36501

Some native species remain in the survey area west of Sossaman Road and east of Signal Butte Road. Dominant native plants include foothills palo verde (*Parkinsonia microphylla*), velvet mesquite (*Prosopis velutina*), creosotebush (*Larrea tridentata*), desert broom (*Baccharis sarothroides*), fourwing saltbush (*Atriplex canescens*), brittlebush (*Encelia farinosa*), triangle-leaf bursage (*Ambrosia deltoidea*), snakeweed (*Gutierrezia sarothrae*), and Indian rushpea (*Hoffmannseggia glauca*). Dominant vegetation in the agricultural fields consists of orange (*Citrus sinensis)* and lemon (*Citrus limon)* trees in the active orchards and non-native species in the fallow fields, such as Russian thistle (*Kali tragus*), common sunflower (*Helianthus annuus*), and alfalfa (*Medicago sativa*). One stand of cattail (*Typha* sp.) and salt cedar (*Tamarix* spp.) approximately 200 feet long by 30 feet wide was present on May 25, 2022, in an abandoned tailwater basin at the southeast corner of Pecos and Crismon Roads, but has since been removed as part of site preparation for The Cubes industrial warehouse development. Isolated areas of remnant xeroriparian habitat, including desert broom and foothills palo verde, are present along ephemeral washes near the eastern end of the survey area.

Soils in the survey area are loamy, with about 20 percent tending toward sandy loams or loamy sand. A band of clay loams (about 9 percent) traverses the survey area near Signal Butte Road. These soils developed on floodplains, alluvial fans, and fan terraces created by runoff and drainage from the surrounding mountains. Soil depth is greater than 6 feet, but drainage is constrained by bedrock, caliche, or other restrictive layers. Soils in the survey area are classified as well drained or somewhat excessively drained and none of the soils are considered hydric (Natural Resources Conservation Service [NRCS] 2022).

As mentioned above, terrain in the survey area is flat with only a 10-foot increase in elevation between the western and eastern termini. However, several mountain ranges about 15 to 20 miles away are visible because of the slight grade between the survey area and these geologic features. Terrain in the greater project vicinity is dominated by the Goldfield and Superstition Mountains to the northeast and east, most notably the craggy outline of Four Peaks and the angular form of The Flatiron. The Usery and McDowell Mountains are visible to the north and northwest.

Previous development has obliterated nearly all of the natural drainages in the survey area. Historical aerials indicate that agriculture was taking hold in the area by 1930; by 1949, most of the survey area, including watercourses, had been converted from natural desert to agriculture (Mesa 2022). To manage drainage and runoff in the greater project vicinity that historically flowed west and southwest through ephemeral washes, FCDMC and other entities constructed multiple flood control channels (FCDMC 2012). Two of these channels, both owned and maintained by FCDMC, intersect the survey area. The Rittenhouse Channel, which parallels UP's Phoenix Subdivision main line, and the Ellsworth Channel, along Ellsworth Road, gather regional and local drainage and runoff. Flows in both channels reach the East Maricopa Floodway, which flows south to the Gila River. The unnamed wash at the eastern end of the survey area has been heavily modified by industrial development. Appendix B contains photographs that support the evaluation of the Rittenhouse Channel (Wash No. 1), the Ellsworth Channel (Wash No. 2), and the unnamed wash (Wash No. 3).

The Rittenhouse Channel, an earthen, trapezoidal channel with intermittent concrete weirs, was designed for a peak flow (Q_{100}) of 3,887 cubic feet per second where it meets the East Maricopa Floodway (Wood, Patel & Associates, Inc. 2021). Flows pond in receiving areas about 50 feet long by 30 feet wide at the base of each weir. The Ellsworth Channel, also an earthen, trapezoidal

channel, was designed (Q_{100}) to convey up to 1,422 cubic feet per second (Dibble & Associates 1998). Within the survey area, portions of the Rittenhouse Channel are shown as bluelines and all of the Ellsworth Channel is shown as a blueline on the Higley, AZ (1956b) USGS 7.5-minute topographic quadrangle. Neither channel has any USGS stream gauges.

Wash No. 3 developed along the upstream side of a diversion dike constructed in the early 1950s to prevent the flooding of agricultural fields (currently Commercial Metals Company). This wash, while shown as a blueline on the Desert Well, AZ (1956a) USGS 7.5-minute topographical quadrangle, has been substantially modified by industrial development north and south of Pecos Road. The National Hydrography Dataset indicates Wash No. 3 flows to the northwest (USGS 2022). However, within the survey area, Wash No. 3 flows toward the southeast. Permission to access adjacent properties was not allowed; therefore, a fuller characterization of the changed conditions in Wash No. 3 outside the survey area cannot be provided herein. Flow data are not available for Wash No. 3.

Agricultural fields and associated infrastructure span the survey area between Sossaman and Signal Butte Roads. These areas include extensive irrigation ditch systems typically characterized by open, concrete-lined or unlined, 2- to 3-foot-wide laterals in various states of repair (see example photographs 17 to 20 in Appendix B). Many of the ditches and irrigation appurtenances have been abandoned as fields are left fallow or in anticipation of current and future development. Based on field reconnaissance and a review of aerials, the irrigation ditches appear to function only as part of water delivery systems for agricultural irrigation and do not serve flood protection or drainage functions. None of the ditches are shown as bluelines on the Higley, AZ (1956b) or Desert Well, AZ (1956a) USGS 7.5-minute topographical quadrangles. Therefore, the ditches and irrigation systems in the survey area are not evaluated in detail herein.

The remaining drainage features in the survey area are swales adjacent to the UP's Phoenix Subdivision main line (see example photographs 13 to 16 in Appendix B). UP constructed these intermittent swales as part of the railroad infrastructure to manage track-side runoff. These drainage swales generally dissipate into sheetflow or are self-contained, do not exhibit indicators of an ordinary high water mark, and do not have surface connections to the Rittenhouse Channel. Therefore, they are not evaluated in detail herein.

4. Methods

Delineation of "Other" Waters of the U.S.

Aerial photography (Maricopa County 2020); the USGS Higley, AZ (1956b) and Desert Well, AZ (1956a) 7.5-minute topographic quadrangles; the Federal Emergency Management Agency's Flood Insurance Rate Maps (2013a, 2013b); the National Hydrography Dataset (USGS 2022); the U.S. Fish and Wildlife Service's (USFWS) National Wetlands Inventory (NWI; USFWS 2022); and soil maps (NRCS 2022) were reviewed prior to conducting the JD field survey. A site visit was then conducted on May 24 through 26, 2022, where the width and depth of all potentially jurisdictional non-wetland watercourses in the JD survey area were measured, indicators of surface flow (physical characteristics) were identified, and ground photographs were taken. Additional ground photographs were taken on August 19, 2022 to document changed conditions in and adjacent to the survey area that no longer match NWI data. Approximately 345 acres were surveyed for waters of the U.S.

The site visit to determine the presence and extent of wetlands within the project limits was conducted outside of the growing season because the required rights-of-entry to access the survey area were not obtained until mid-May 2022. However, wetland vegetation was present during the May 26, 2022 wetland field survey within the Rittenhouse Channel. The wetland delineation survey was only conducted in a subset of the JD survey area in the Rittenhouse Channel due to the presence of riparian vegetation that was observed in the channel. Approximately 5 acres were surveyed for wetlands.

The NWI indicates possible wetlands in the following locations within the survey area, listed from west to east (Appendix F, Figures F-1 and F-2).

- Freshwater pond (PUBHx) in the southeastern corner of Pecos and Crismon Roads
- Riverine wetland (R4SBJ) in Wash No. 3 at the eastern terminus of the survey area

Outside of the Rittenhouse Channel and the abandoned tailwater pond at the southeastern corner of Pecos and Crismon Roads, the vegetation in the survey area as of late May 2022 was characteristic of upland species not indicative of a wetland, such as creosote bush, velvet mesquite, desert broom, and foothills palo verde. However, as mentioned above, the abandoned tailwater pond (which USFWS identified as a freshwater pond, but functioned as part of an irrigation water delivery system) and associated wetland vegetation have since been removed as part of site preparation for the Cubes industrial warehouse development (see photographs 32 through 34 in Appendix B). In addition, NRCS soil data indicate that soils in the survey area are not considered hydric (NRCS 2022). Because conditions in and around these two areas are not indicative of wetlands, the tailwater pond and Wash No. 3 were not included in the wetland delineation.

Another NWI-identified wetland, this one adjacent to the industrial portion of the survey area, has also been substantially modified by recent development. The possible freshwater forested/shrub (PSS1Ah) wetland in the northeastern corner of the Signal Butte Road/Pecos Road intersection has been obliterated as part of the site preparation for future industrial land use (see photographs 35 through 37 in Appendix B).

Wetland Determination

A wetland delineation per the *Corps of Engineers 1987 Wetland Delineation Manual* (1987 Manual; Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0) (Supplement; U.S. Army Corps of Engineering [Corps] 2008) was conducted in the Rittenhouse Channel on May 25, 2022. The Supplement was selected for this survey because the project would occur in the Interior Deserts Land Resource Region of the Arid West Region.

Per the 1987 Manual, the method selected was a Routine Determination with onsite inspection. Transects were not required because the survey area did not exceed 5 acres and contains a relatively small number of distinct plant communities with little overlap. Therefore, a single sample plot (SP) was sufficient to document each vegetation community. The vegetation communities were contained in the width of the channel bed (about 30 feet wide) and generally between 25 and 50 feet long. In SP1 through SP5, all vegetation in the width of the channel was evaluated. In SP6 and SP7, 10- by 10-foot plots were used because the vegetation in the center of the channel was too tall and dense to access. In addition to the 1987 Manual (Environmental Laboratory 1987) and the Supplement (Corps 2008), aerial photography (Maricopa County 2020),

topographical maps (USGS 1956a, 1956b), NWI maps (USFWS 2022), and the National Wetland Plant List (Corps 2020) were used to assess potential wetlands. The NWI map is included in Appendix F.

During the delineation, plant communities were either evaluated as a whole (SP2 through SP5) or assigned a representative sample plot (SP1, SP6, and SP7). SP1 represents the non-wetland vegetation in the channel outside of the weir receiving areas (Figure 4a). At SP2 through SP5, each vegetation community was small enough to evaluate as a whole and could be accessed for plant identification (Figures 4a and 4b). The vegetation communities at SP6 and SP7 were not fully accessible, so smaller sample plots were used to represent the two communities at Rittenhouse Channel Station 90+43 (Figure 4b) where wetland vegetation was present. Plot dimensions varied across plant communities because of differences in (1) community spatial arrangement (the communities in SP1, SP2, and SP3 stretched across the width of the channel and the communities in SP4 through SP7 grew lengthwise along the channel) and (2) the mix and dominance of various species in different areas. The sample plot dimensions are listed below:

- 30 feet wide by 25 feet long (SP1, SP2, and SP3)
- 15 feet wide by 50 feet long (SP 4 and SP5)
- 10 feet by 10 feet (SP 6 and SP7)

At least four photographs were taken at each sample plot (Appendix E), but were not taken from cardinal directions because the Rittenhouse Channel flows from southeast to northwest. Instead, the four photographs were taken looking:

- Southeast and upstream along the channel
- Southwest toward the southwestern bank
- Northwest and downstream along the channel
- Northeast toward the northeastern bank

The section of the Rittenhouse Channel in the survey area was constructed in a drainage that developed northeast of the UP Phoenix Subdivision main line and has functioned as a regional flood control channel for over 25 years, with maintenance including periodic mowing of the bed and banks. Therefore, conditions in May 2022 were considered normal circumstances, which resulted in the "human-induced wetlands" atypical situation. Per the 1987 Manual, “application of the multiparameter approach in making wetland determinations in [human]-induced wetlands must be based on the presence of hydrophytic vegetation and wetland hydrology” (Environmental Laboratory 1987).

The Supplement also addresses wetland conditions affected by human influence (Corps 2008). The Rittenhouse Channel conforms to problematic hydric soils found in recently developed wetlands, where soils have not been in place long enough to develop hydric soil indicators. The Supplement directs that soils in problematic situations—like recently developed wetlands—can be considered hydric if indicators of hydrophytic vegetation and wetland hydrology are present. Based on the directions in the 1987 Manual and the Supplement, and because FCDMC’s permission to access the Rittenhouse Channel was a "non-intrusive" right-of-entry, soil pits were not dug as part of the wetland delineation survey.

Field data regarding vegetation and hydrology for each sample plot was recorded on a wetland determination data form (Appendix D), and then, if needed, extrapolated to represent the entire

surrounding plant community. The presence/absence of wetland indicators associated with vegetation, soil, and hydrology were used to determine the wetland status of the plant community. Three characteristics, consisting of hydrophytic vegetation, hydric soils, and wetland hydrology, are required for a plant community to be considered a wetland. Five plant communities were identified during the delineation and mapped using Collector, a global positioning system (GPS) capable of submeter accuracy.

Because soil pits were not dug, soils were assumed to be hydric if both hydrophytic vegetation and wetland hydrology were observed, per the 1987 Manual (Environmental Laboratory 1987) and the Supplement (Corps 2008). To determine the presence of hydrophytic vegetation, the absolute cover of vegetation within each sample plot was inventoried across four separate strata: tree, sapling/shrub, herb, and woody vine. All vegetation identified was in the herb stratum. Per the Supplement, the indicator status of vegetation in the Corps' National Wetland Plant List (2020) was then used to calculate the dominance test. Vegetation was considered hydrophytic if it passed the dominance test. Per the Supplement, the prevalence test was not conducted for wetland sample plots SP2, SP3, SP5, and SP7 because they passed the dominance test.

Lastly, each sample plot was surveyed for the presence of wetland hydrology indicators. The size of SP2 through SP5 covered their respective plant communities and the data collected therein did not need to be extrapolated. However, the data collected from SP1, SP6, and SP7 were extrapolated across those respective plant communities. Refer to Figures 4a and 4b, Wetland Plant Communities Maps for the northwestern and southeastern portions of the wetland survey area.

No problematic hydrology or problematic hydrophytic vegetation was identified in any of the SPs. However, problematic hydric soils were assumed in SP2, SP3, SP5, and SP7, where the other two wetland parameters—hydrophytic vegetation and wetland hydrology—were present. First, hydrophytic vegetation and wetland hydrology were evaluated to determine if they are present under normal conditions. A lack of indicators was interpreted based on field observations and known wetland ecological processes to determine whether any of these wetland factors may be disturbed or problematic. Because soil pits were not dug as part of the wetland survey protocol, hydric soil indicators could not be identified from non-intrusive, surface observations. Soils at SP1, SP4, and SP6 were not assumed to be hydric because hydrophytic vegetation was not present. Only the soils at SP2, SP3, SP5, and SP7 were identified as problematic per the Supplement (Corps 2008) and atypical per the 1987 Manual (Environmental Laboratory 1987) because of the presence of hydrophytic vegetation and wetland hydrology within these sample plots.

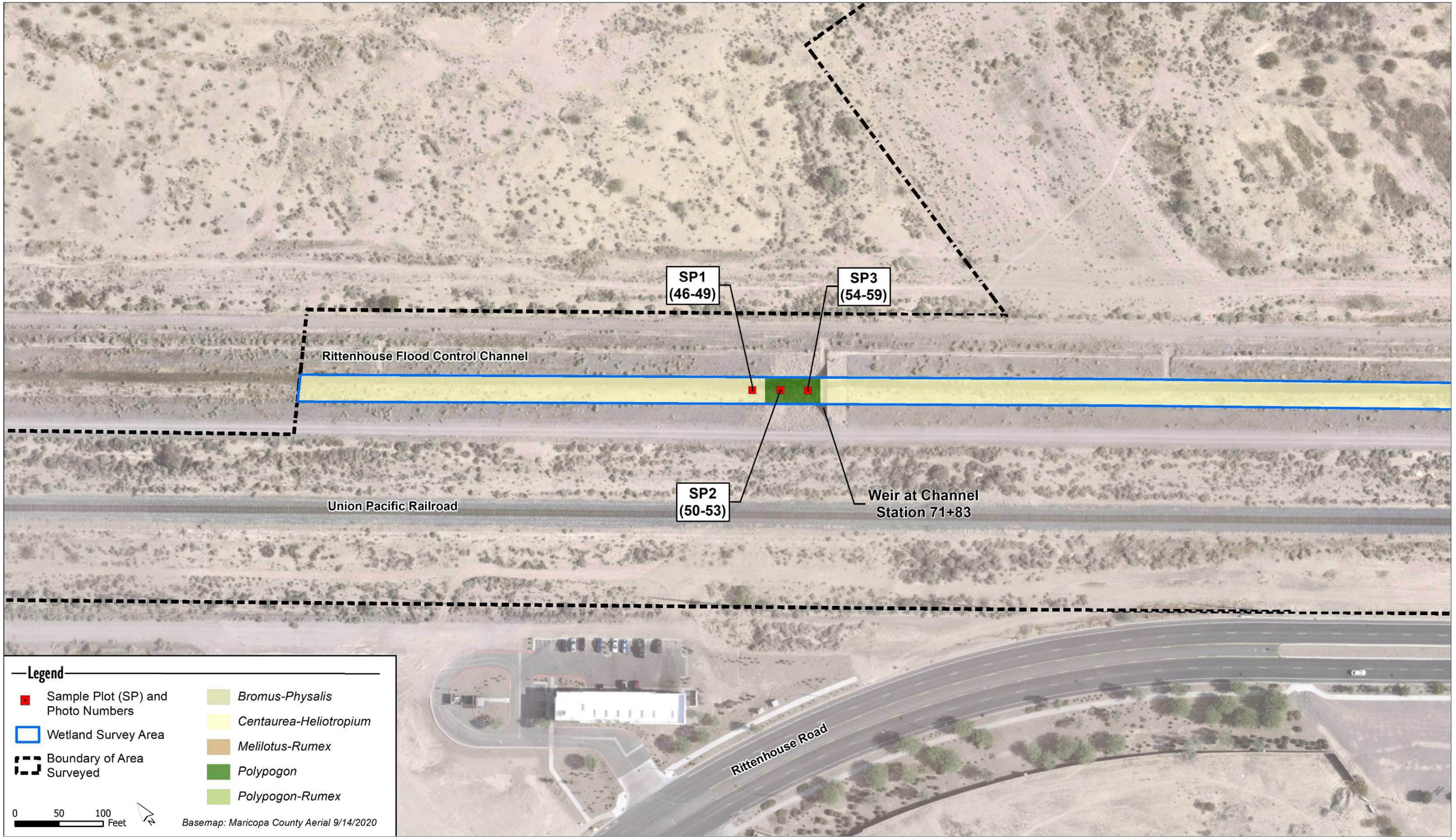


Figure 4a. Wetland Plant Communities Map – Northwest
PIRATE Project / Docket No. FD 36501

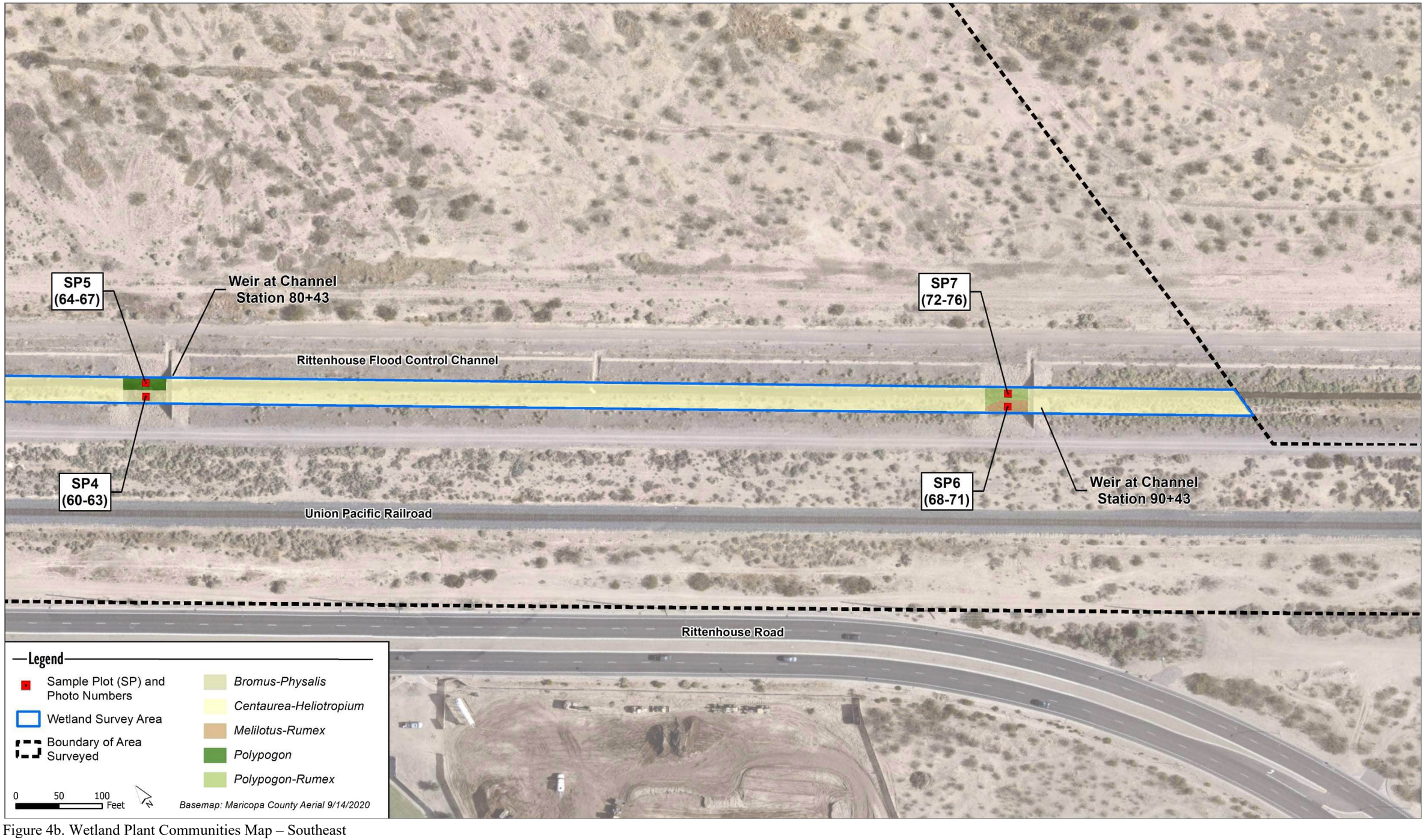


Figure 4b. Wetland Plant Communities Map – Southeast
PIRATE Project / Docket No. FD 36501

Field observations used to identify problematic wetland situations included landscape characteristics, signs of natural and human disturbance, and the possibility of seasonal changes in relevant factors, such as water availability and plant community composition. Soils were only assessed as potential problematic soils if hydrophytic vegetation and wetland hydrology were present. Therefore, SP2, SP3, SP5, and SP7 were determined to meet the conditions associated with the "human-induced wetlands" atypical situation (1987 Manual) and the “recently developed wetlands” problematic hydric soil situation (Supplement).

5. Results

Delineation of “Other” Waters of the U.S.

See Appendix A for the proposed JD with ground photograph points for drainages, Appendix B for a photograph log of documented drainages, Appendix C for the physical characteristics table, and Appendices D and E for JD Appendices 1 and 2. A total of three drainages within the JD survey area are proposed as jurisdictional waters of the U.S., including one unnamed ephemeral drainage (Wash No. 3), Rittenhouse Channel (Wash No. 1), and Ellsworth Channel (Wash No. 2), all of which exhibit the physical characteristics of waters of the U.S. (refer to Appendix C). A total of 0.0 acre of open waters of the U.S. is proposed within the survey area. A total of 2.959 acres of “other” waters (intermittent or ephemeral) is proposed within the JD survey area (Table 1).

Table 1. Summary of Open Water and Other Waters of the U.S.

Drainage	Waters Type	Waters of the U.S.	Amount (Acre)
Rittenhouse Channel (Wash No. 1)	Other Water	Yes	1.870
Ellsworth Channel (Wash No. 2)	Other Water	Yes	0.947
Wash No. 3	Other Water	Yes	0.142
			Total = 2.959

Wetland Determination

Refer to Appendix A for the proposed wetland delineation. Ground photographs occur at the center of each sample plot and are not depicted in Appendix A (Sheets 2 to 4) due to the quantity of photographs taken at each plot. The general location of each set of sample plot photographs is depicted on Figures 4a and 4b. See Appendix D for the wetland determination data sheets and Appendix E for the photograph log of the sample plots.

Vegetation Information: A total of five plant communities were observed in the wetland survey area. One sample data plot was established in each plant community to evaluate the presence of hydrophytic vegetation. Hydrophytic vegetation was determined in SP2, SP3, SP5, and SP7 due to the vegetation passing the dominance test. Table 2 identifies the plant communities observed in the survey area and summarizes the presence of hydrophytic vegetation. See the wetland determination data sheets in Appendix D for details of each sample plot.

Table 2. Plant Communities and Presence of Hydrophytic Vegetation in the Wetland Survey Area			
Sample Data Plot	**Plant Community**	**Dominance Test***	**Hydrophytic Vegetation Present**
1	*Centaurea-Heliotropium*	Failed	No
2, 3, and 5	*Polypogon*	Passed	Yes
4	*Bromus-Physalis*	Failed	No
6	*Melilotus-Rumex*	Failed	No
7	*Polypogon-Rumex*	Passed	Yes
*Dominance test from the Supplement (Corps 2008).			

Soils: Soil observations were visual and superficial because FCDMC's permission to access the Rittenhouse Channel was a "non-intrusive" right-of-entry. Soils generally seemed to be loamy to loamy sand, and odors were not detected.

No hydric soil indicators were identified in any of the sample plots due to the lack of soil pits and the "non-intrusive" wetland delineation. However, SP2, SP3, SP5, and SP7 contained hydrophytic vegetation and wetland hydrology and therefore met the conditions of problematic soils as identified in the Supplement (Corps 2008). Soils in these locations were representative of "recently developed wetlands" problematic soils, resulting from channel construction with ponding in the receiving area at the base of each weir. The Supplement describes this type of problematic soil as wetlands intentionally or unintentionally produced by human activities and naturally occurring wetlands that have not been in place long enough to develop hydric soil indicators. The surface layer appeared to be sediment deposited by flows in the channel. Because these soils have not been in place long enough for hydric soil indicators to develop, soils within the *Polypogon* and *Polypogon-Rumex* vegetation communities were determined to be hydric. Table 3 identifies the hydric soil indicators and indicates whether hydric soil was present in the survey area. See the wetland determination data sheets in Appendix D for details of each sample plot.

Table 3. Indicators of Hydric Soils in the Wetland Survey Area			
Sample Data Plot	**Plant Community**	**Hydric Soil Indicators***	**Hydric Soils**
1	*Centaurea-Heliotropium*	Not observed	No
2, 3, and 5	*Polypogon*	Not observed	Yes**
4	*Bromus-Physalis*	Not observed	No
6	*Melilotus-Rumex*	Not observed	No
7	*Polypogon-Rumex*	Not observed	Yes**
*Codes defined in the Supplement (Corps 2008). **Per the 1987 Manual (Environmental Laboratory), soils are assumed to be hydric due to presence of hydrophytic vegetation and wetland hydrology in an atypical situation..			

Hydrology Information: While no perennial streams flow through the survey area, the Rittenhouse Channel and other constructed channels convey drainage and runoff that historically flowed through ephemeral washes. Both primary and secondary wetland hydrology indicators were present. The secondary riverine indicators also helped to identify the ordinary high water mark of the Rittenhouse Channel. Wetland hydrology indicators were observed in all seven sample plots. Table 4 identifies the wetland hydrology indicators observed in the survey area and indicates whether wetland hydrology was present. See the wetland determination data sheets in Appendix D for details of each sample plot.

Table 4. Indicators of Wetland Hydrology in the Wetland Survey Area

Sample Data Plot	Plant Community	Wetland Hydrology Indicators*	Wetland Hydrology Present
1	*Centaurea-Heliotropium*	B6, B7, B2 (riverine), B10, C9	Yes
2 and 3	*Polypogon*	B6, B7, B2 (riverine), B10, C9	Yes
4	*Bromus-Physalis*	B6, B7, B1 (riverine), B2 (riverine), B10, C9	Yes
5	*Polypogon*	B6, B7, B1 (riverine), B2 (riverine), B10, C9	Yes
6	*Melilotus-Rumex*	A3, B6, B7, B13, B1 (riverine), B2 (riverine), B10, C9	Yes
7	*Polypogon-Rumex*	A3, B6, B7, B13, B1 (riverine), B2 (riverine), B10, C9	Yes

*Codes defined in the Supplement (Corps 2008).

Existing Wetland Mapping: The wetland survey area has not been subject to a previous wetland delineation. USFWS did not identify any potential wetlands in Rittenhouse Channel as part of the NWI mapping data (USFWS 2022). NWI-identified wetlands in the survey area are addressed in Section 4.

Table 5 identifies the classification for wetlands in the survey area to provide supplemental information regarding the survey area. Refer to Appendix F for the USFWS NWI wetlands mapping data for the project area.

Table 5. Cowardin Classification of Wetlands in the Wetland Survey Area

Sample Data Plot	Plant Community	Cowardin Class*
1	*Centaurea-Heliotropium*	Not Applicable
2, 3, and 5	*Polypogon*	Not Applicable
4	*Bromus-Physalis*	Not Applicable
6	*Melilotus-Rumex*	Not Applicable
7	*Polypogon-Rumex*	Not Applicable

*Cowardin et al. 1979 and USFWS 2022.

Proposed Wetland: A total of two plant communities within the wetland survey area were determined to have all three characteristics of wetlands, including hydrophytic vegetation, hydric soils, and wetland hydrology. The first is dominated by a single plant in the herb stratum, rabbitsfoot (*Polypogon monspeliensis*). The second is dominated by rabbitsfoot and bitter dock (*Rumex obtusifolius*). Both plant communities are associated with more concave areas at the base of each weir in the Rittenhouse Channel.

A total of 0.068 acre is proposed as wetland within the survey area, all within Rittenhouse Channel (refer to Appendix A). Table 6 summarizes the presence of wetland characteristics observed in each plant community. See the wetland determination data sheets in Appendix D for details of each sample plot.

Table 6. Summary of Characteristics and Presence of Wetlands in the Wetland Survey Area

Sample Data Plot	Plant Community	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Wetland
1	*Centaurea-Heliotropium*	No	No	Yes	No
2, 3, and 5	*Polypogon*	Yes	Yes*	Yes	Yes
4	*Bromus-Physalis*	No	No	Yes	No
6	*Melilotus-Rumex*	No	No	Yes	No
7	*Polypogon-Rumex*	Yes	Yes*	Yes	Yes

*Per the 1987 Manual (Environmental Laboratory), soils are assumed to be hydric due to the presence of hydrophytic vegetation and wetland hydrology.

6. Summary

In total, three drainages within the survey area exhibit the physical characteristics of waters of the U.S., including Rittenhouse Channel (Wash No. 1), Ellsworth Channel (Wash No.2), and one unnamed drainage (Wash No.3). Table 7 summarizes the type and amount of proposed waters of the U.S. within the survey area.

Table 7. Summary of Waters Type and Amount of Proposed Waters of the U.S.

Waters Type	Amount (Acre)
Other Waters	2.959
Open Water	0.000
Wetland	0.068
Total	**3.027**

7. Coordination

U.S. Army Corps of Engineers
Sallie Diebolt, Chief, Arizona Branch

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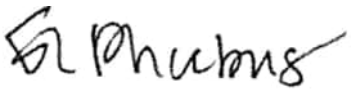
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9. Signatures

Prepared by:  Date: 10.26.2022

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APPENDIX A

PROPOSED JURISDICTIONAL DELINEATION
WITH WETLANDS


Ellsworth Channel flows into the Powerline Floodway
~2 miles north, which flows into the
East Maricopa Floodway ~2 miles west.
Phoenix-Mesa
Gateway Airport
East Maricopa Floodway
Rittenhouse Channel / Wash No. 1
Ellsworth Channel / Wash No. 2
Wash No. 3
Pecos Rd
Pecos Rd
Pecos Rd
Germann Rd
Power Rd
Sossaman Rd
Ellsworth Rd
Crismon Rd
Merrill Rd
Orchard Access Rd
Signal Butte Rd
Mountain Rd
Phoenix Subdivision Main Line
Rittenhouse Rd
Queen Creek
1
2
13
3
4
5
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41
42
43
44
PJD Sheet
Survey Area
0
0.25
0.5
Mile
N

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

*** * * * PRELIMINARY (RGL 16-01) * * * ***

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

33.287201
-111.681472

Dirt Road

Rittenhouse Flood Control Channel

Pecos Rd

Dirt Road

Union Pacific Railroad Phoenix Subdivision

2-Track

Dirt Road

Intermittent drainage swales adjacent to the Phoenix Subdivision throughout this portion of the survey area.

Power Rd

33.28765
-111.687169

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

******PRELIMINARY (RGL 16-01)******

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

33.284799
-111.677169

2-Track

Rittenhouse Channel / Wash No. 1 (30)

Weir at Channel Station 71+83

Dirt Road

Rittenhouse Flood Control Channel

Dirt Road

1 2

3 4

Union Pacific Railroad

13 14

2-Track

Dirt Road

33.285263
-111.682821

Rittenhouse Road

Flow Direction

Photo Point, Number and Direction

Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
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******PRELIMINARY (RGL 16-01)******

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

33.28239
-111.673095

2-Track

Rittenhouse Channel / Wash No. 1 (30)

Weir at Channel Station 80+43

2-Track

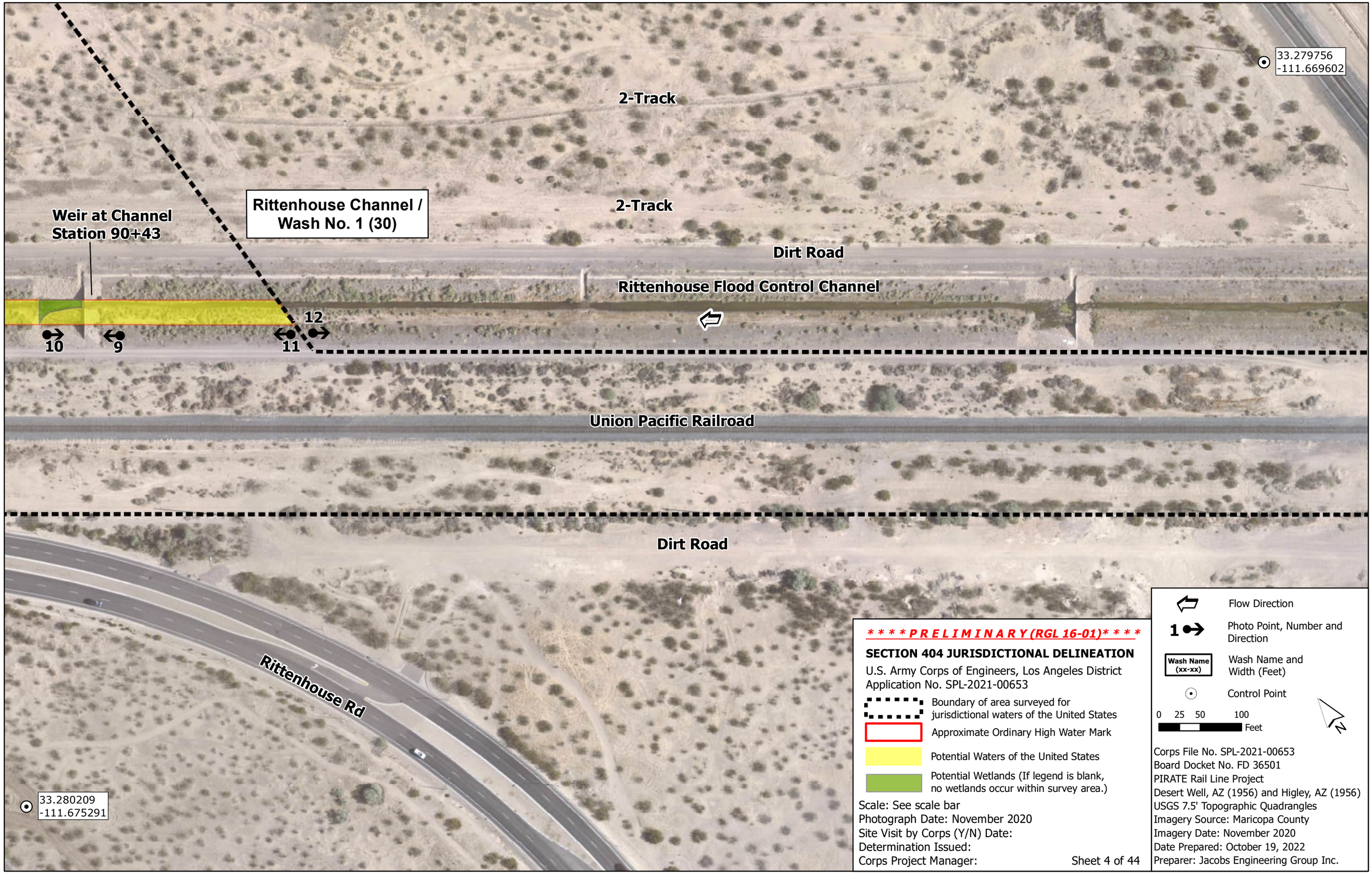
Weir at Channel Station 90+43

5 6 7 8 10 9

Union Pacific Railroad

Rittenhouse Rd

33.282842
-111.678785



*** * * * P R E L I M I N A R Y (RGL 16-01) * * * ***

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

- Boundary of area surveyed for jurisdictional waters of the United States
- Approximate Ordinary High Water Mark
- Potential Waters of the United States
- Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

- Flow Direction
- 1 → Photo Point, Number and Direction
- Wash Name (xx-xx) — Wash Name and Width (Feet)
- Control Point

0 25 50 100 Feet

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

33.277635
-111.671865

Rittenhouse Flood Control Channel

Germann Rd

Dirt Road

2-Track

Union Pacific Railroad

Right-of-entry not granted to privately owned parcel. Parcel was surveyed from public roadway and confirmed via aerial photography.

Dirt Road

Dirt Road

Dirt Road

Sossaman Rd

Dirt Road

No JD waters recommended on this sheet.

33.277184
-111.666169

Flow Direction

Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
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Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

*** * * * P R E L I M I N A R Y (RGL 16-01) * * * ***

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
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******PRELIMINARY (RGL 16-01)******

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

33.275548
-111.663029

Dirt Road

Dirt Road

Rittenhouse Flood Control Channel

Union Pacific Railroad

Dirt Road

Dirt Road

Rittenhouse Rd

33.27601
-111.668748

Flow Direction

Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
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SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

33.273021
-111.658965

Fulton Pkwy

Dirt Road

Rittenhouse Flood Control Channel

Dirt Road

Union Pacific Railroad

Rittenhouse Rd

33.273453
-111.66465

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

*** * * * PRELIMINARY (RGL 16-01) * * * ***

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

33.270446
-111.65466

Fulton Pkwy

Dirt Road

Rittenhouse Flood Control Channel

Dirt Road

Union Pacific Railroad

Rittenhouse Rd

33.270903
-111.660331

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

******PRELIMINARY (RGL 16-01)******

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

33.267894
-111.650264

Fulton Pkwy

Dirt Road

Rittenhouse Flood Control Channel

Dirt Road

Union Pacific Railroad

Rittenhouse Rd

33.268354
-111.655955

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

******PRELIMINARY (RGL 16-01)******

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

Sheet 10 of 44

No JD waters recommended on this sheet.

33.265194
-111.645984

Fulton Pkwy

Dirt Road

Rittenhouse Flood Control Channel

Dirt Road

Union Pacific Railroad

Rittenhouse Rd

33.265641
-111.651681

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

******PRELIMINARY (RGL 16-01)******

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

Sheet 11 of 44

No JD waters recommended on this sheet.

33.26258
-111.641827

Mesquite Dr

Dirt Road

Rittenhouse Flood Control Channel

Union Pacific Railroad

Rittenhouse Rd

33.263021
-111.647511

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

******PRELIMINARY (RGL 16-01)******

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

Sheet 12 of 44

No JD waters recommended on this sheet.

33.259872
-111.637852

Isolated Detention Pond

15 16

Union Pacific Railroad Phoenix Subdivision

Intermittent drainage swales adjacent to the Phoenix Subdivision throughout this portion of the survey area.

Rittenhouse Rd

33.260336
-111.643566

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

******PRELIMINARY (RGL 16-01)******

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

33.285407
-111.673666

Right-of-entry not granted to privately owned parcel. Parcel was surveyed from public roadway and adjacent parcels and confirmed via aerial photography.

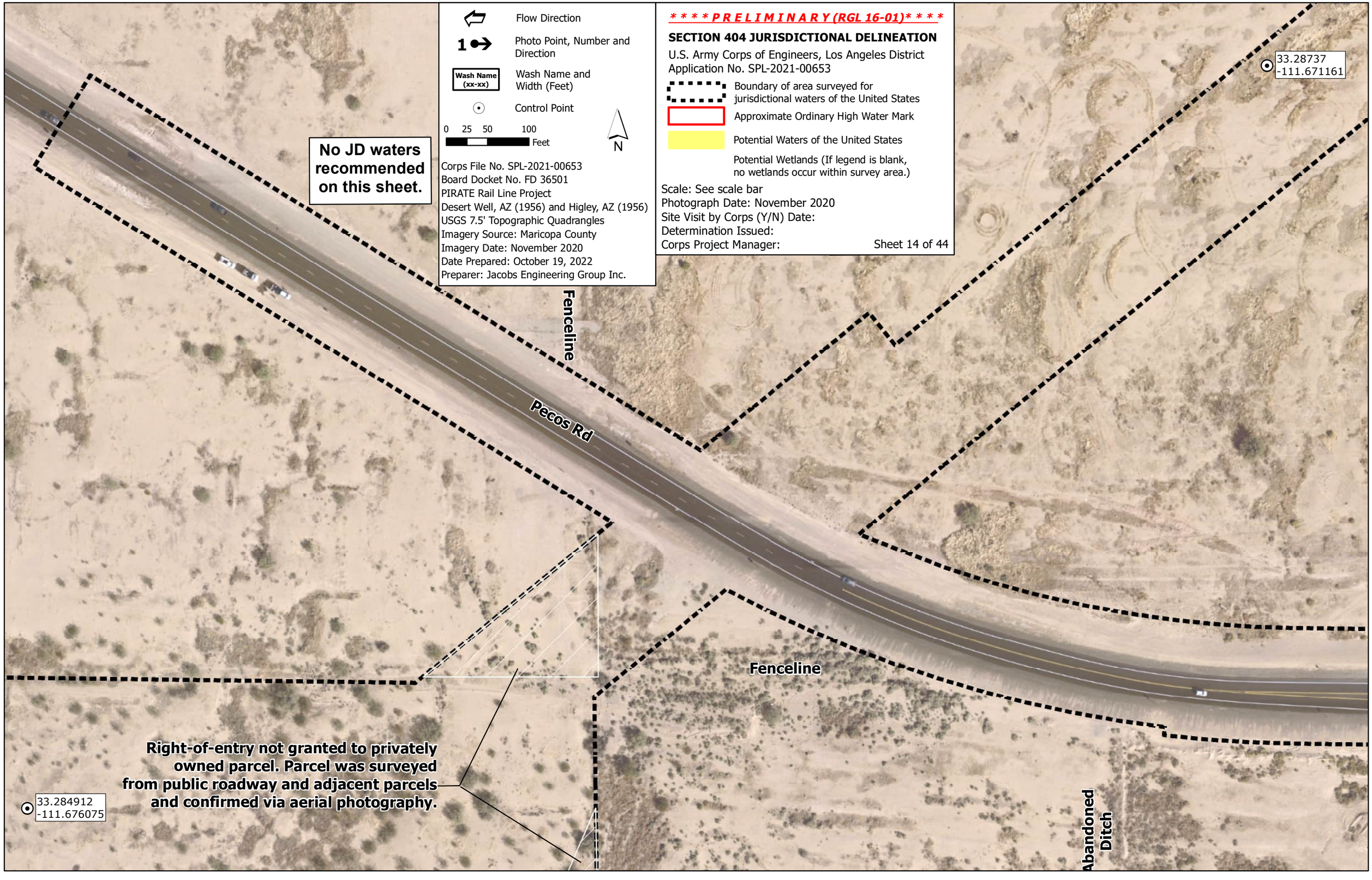
2-Track

Rittenhouse Channel / Wash No. 1 (30)

Weir at Channel Station 80+43

5 6 7 8

33.282943
-111.678574


No JD waters recommended on this sheet.
Flow Direction
1
Photo Point, Number and Direction
Wash Name (xx-xx)
Wash Name and Width (Feet)
Control Point
0 25 50 100
Feet
N
Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.
* * * * PRELIMINARY (RGL 16-01) * * * *
SECTION 404 JURISDICTIONAL DELINEATION
U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653
Boundary of area surveyed for jurisdictional waters of the United States
Approximate Ordinary High Water Mark
Potential Waters of the United States
Potential Wetlands (If legend is blank, no wetlands occur within survey area.)
Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:
Sheet 14 of 44
33.28737
-111.671161
Fenceline
Pecos Rd
Fenceline
Right-of-entry not granted to privately owned parcel. Parcel was surveyed from public roadway and adjacent parcels and confirmed via aerial photography.
33.284912
-111.676075
Abandoned Ditch

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

******PRELIMINARY (RGL 16-01)******

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

33.287602
-111.668782

Sossaman Rd

Unlined Irrigation Ditch

Lined Irrigation Ditch

Pecos Rd

Fenceline

33.285149
-111.673683

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

*** * * * P R E L I M I N A R Y (RGL 16-01) * * * ***

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

Unlined Irrigation Ditch

17

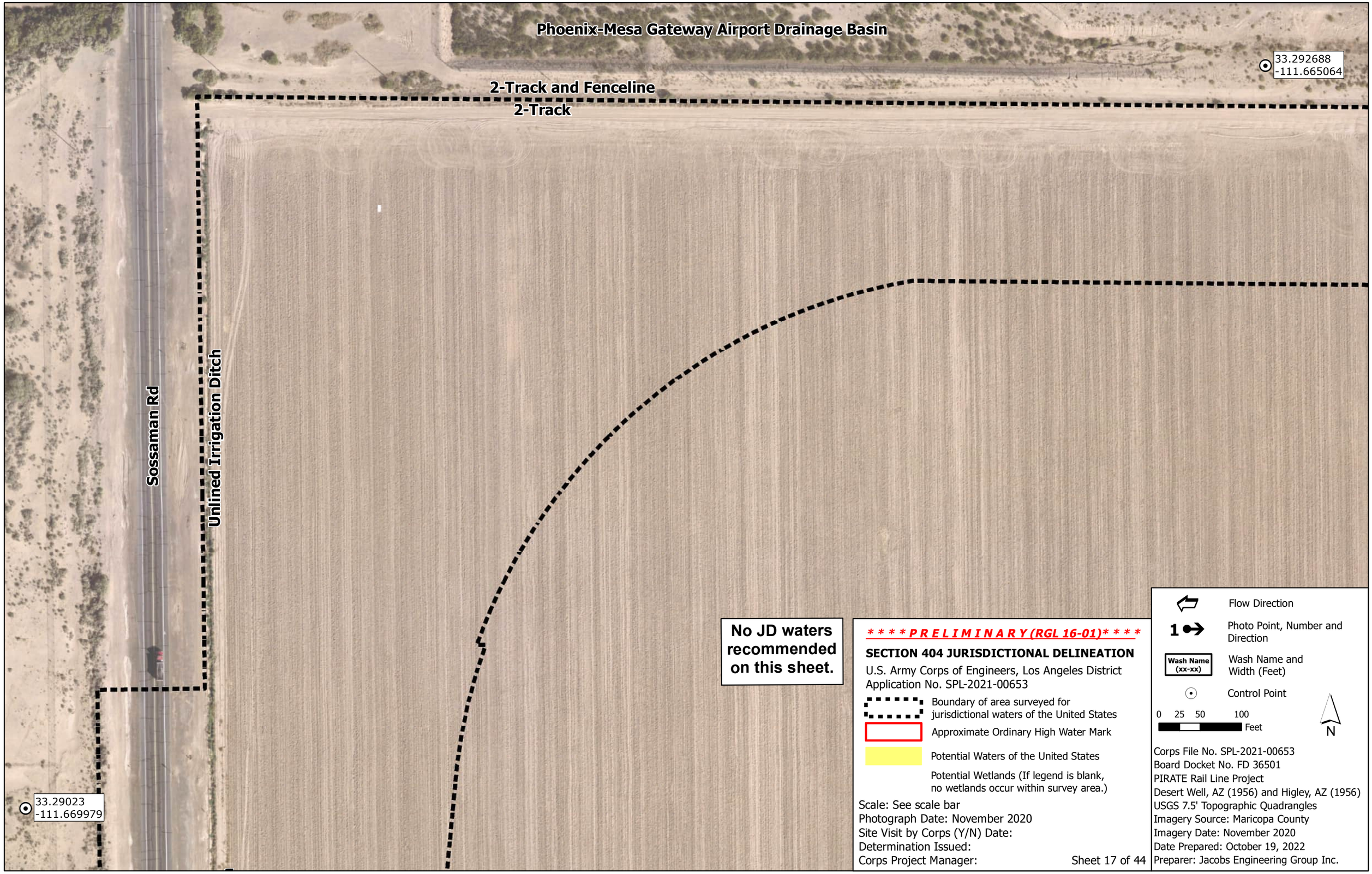
18

Sossaman Rd

Llined Irrigation Ditch

33.290113
-111.667235

33.287654
-111.672149



No JD waters recommended on this sheet.

*** * * * P R E L I M I N A R Y (RGL 16-01)* * * ***

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

- Boundary of area surveyed for jurisdictional waters of the United States
- Approximate Ordinary High Water Mark
- Potential Waters of the United States
- Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

- Flow Direction
- 1 → Photo Point, Number and Direction
- Wash Name (xx-xx) — Wash Name and Width (Feet)
- Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

******PRELIMINARY (RGL 16-01)******

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

33.293473
-111.659918

Airport internal access road (not public)

2-Track

Lined Irrigation Ditch

Lined Irrigation Ditch

33.291015
-111.664826

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

******PRELIMINARY (RGL 16-01)******

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

33.293468
-111.654749

Dirt Road

Airport internal access road (not public)

2-Track

33.291015
-111.659657

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
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Preparer: Jacobs Engineering Group Inc.

******PRELIMINARY (RGL 16-01)******

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

33.293468
-111.649567

Dirt Road

Airport internal access road (not public)

2-Track

33.291015
-111.654489

33.292592
-111.64927

Airport internal access road (not public)
2-Track

33.290107
-111.64437

No JD waters recommended on this sheet.

****PRELIMINARY (RGL 16-01)****

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

33.288083
-111.646409

Airport internal access road (not public)

2-Track

Lined Irrigation Ditch

2-Track

Lined Irrigation Ditch

33.290541
-111.641507

No JD waters recommended on this sheet.

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

*** * * * PRELIMINARY (RGL 16-01)* * * ***

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

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Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
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Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

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Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

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Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

33.290541
-111.63626

2-Track

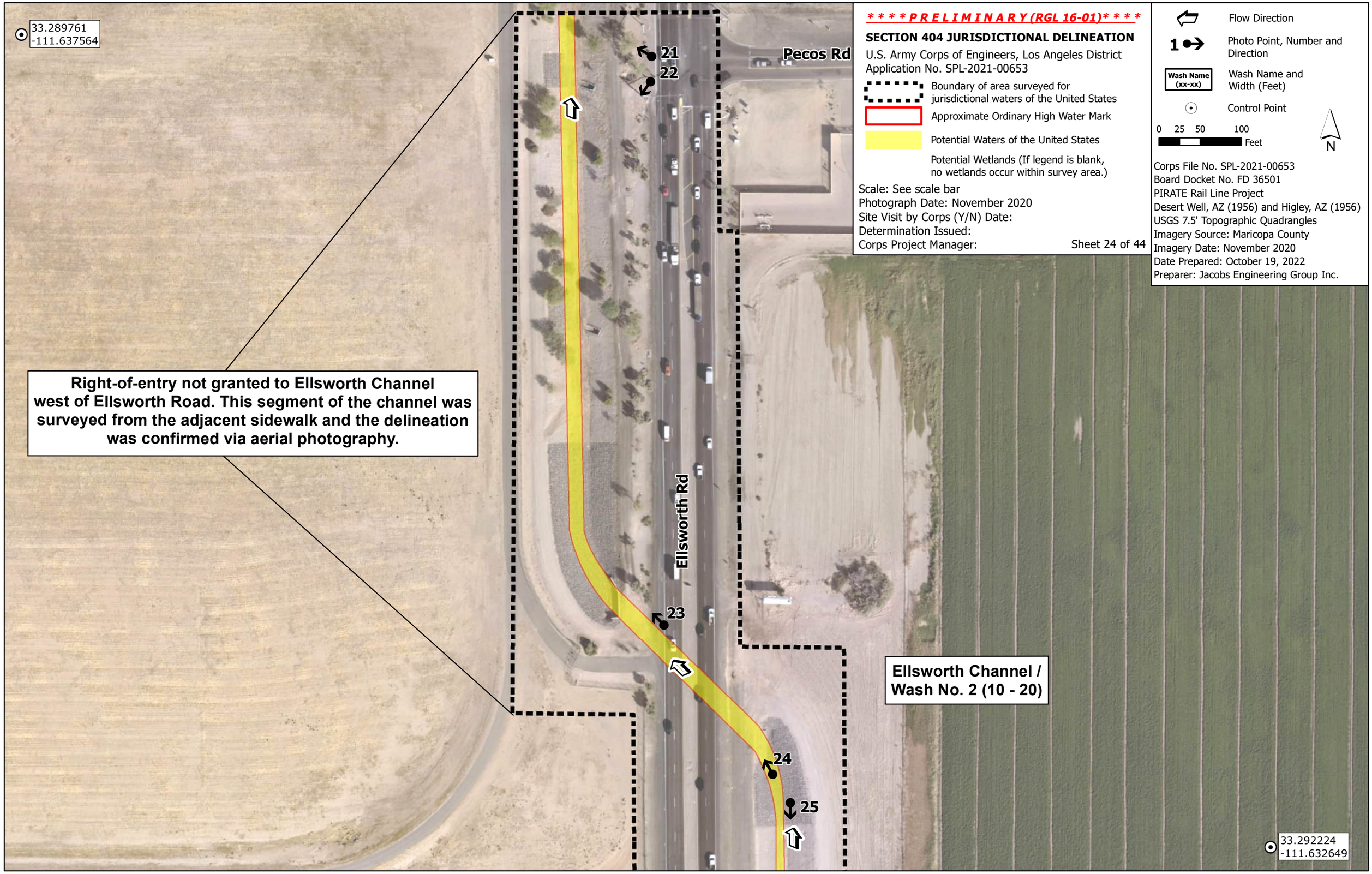
Airport internal access road (not public)

Lined Irrigation Ditch

Lined Irrigation Ditch

2-Track

33.288083
-111.641169



* * * * PRELIMINARY (RGL 16-01) * * * *

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

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Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

Sheet 24 of 44

Flow Direction

1 Photo Point, Number and Direction

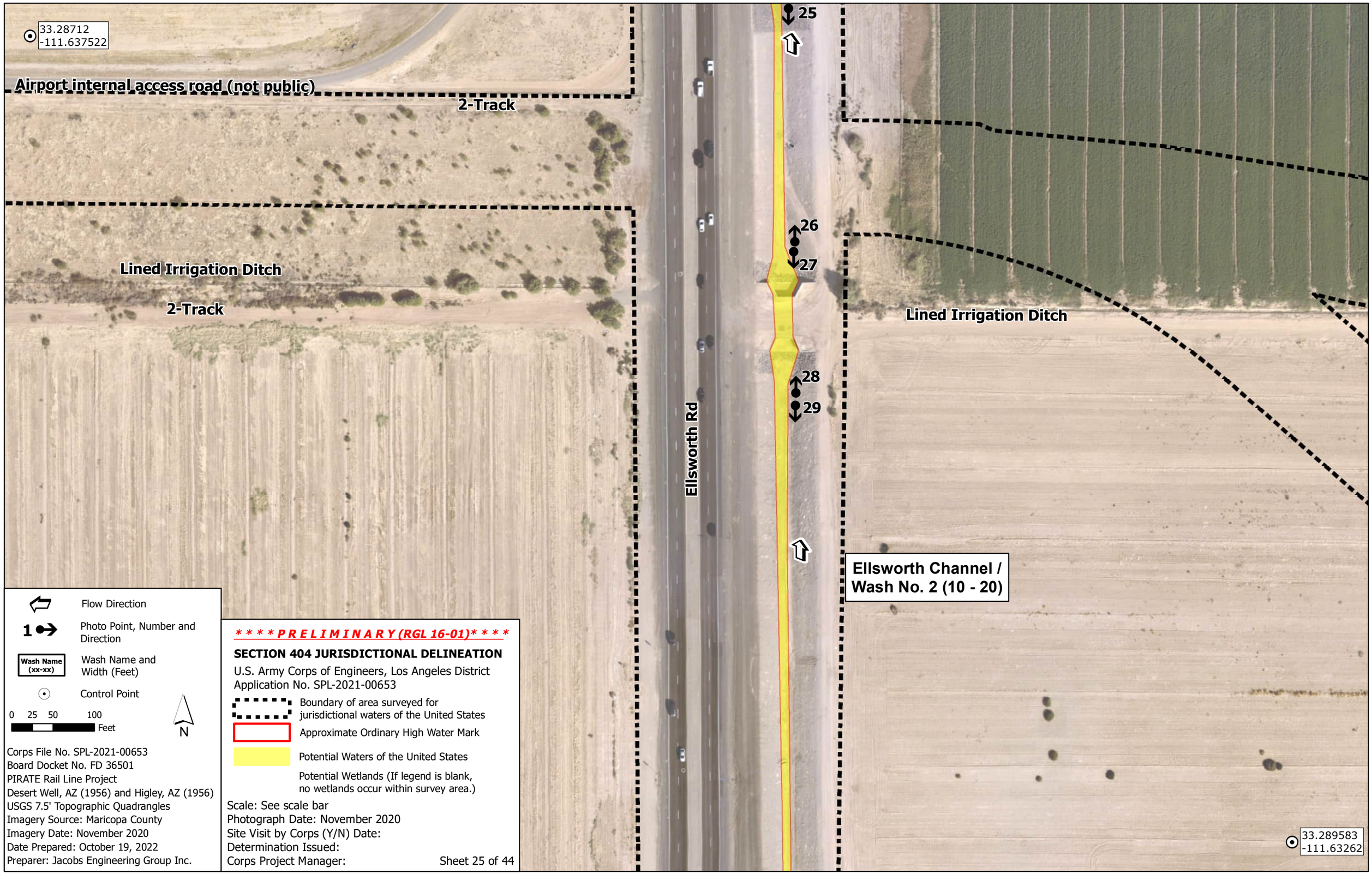
Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.



Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
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Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
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Desert Well, AZ (1956) and Higley, AZ (1956)
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Imagery Source: Maricopa County
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******PRELIMINARY (RGL 16-01)******

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
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Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

33.287078
-111.632685

Ellsworth Rd

Ellsworth Channel / Wash No. 2 (10 - 20)

30

31

Lined Irrigation Ditch

Pecos Rd

Lined Irrigation Ditch

Willis Rd (future)

33.284621
-111.637593

33.289915
-111.63231

No JD waters recommended on this sheet.

******PRELIMINARY (RGL 16-01)******

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
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Corps Project Manager:

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
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Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

Lined Irrigation Ditch

Sheet 27
Sheet 34

33.287435
-111.627417

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
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SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

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Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

Sheet 28 of 44

No JD waters recommended on this sheet.

33.289654
-111.622233

Lined Irrigation Channel

2-Track

Lined Irrigation Channel

33.287191
-111.627136

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
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******PRELIMINARY (RGL 16-01)******

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Application No. SPL-2021-00653

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Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

33.289572
-111.616878

Future Crismon Road Alignment

Dirt Road

Abandoned Tailwater Pond (obliterated Summer 2022)

Right-of-entry not granted to privately owned parcel. Parcel was surveyed from public roadway and adjacent parcels and confirmed via aerial photography.

2-Track

Lined Irrigation Ditch

Vegetated Berm

Lined Irrigation Channel

33.287121
-111.621793

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
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Desert Well, AZ (1956) and Higley, AZ (1956)
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Date Prepared: October 19, 2022
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******PRELIMINARY (RGL 16-01)******

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

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Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

Pecos Rd

32

34

33.292217
-111.61688

Abandoned Tailwater Pond (obliterated Summer 2022)

Future Crismon Road Alignment

Vegetated Berm

33

Dirt Road

Lined Irrigation Ditch

Right-of-entry not granted to privately owned parcel. Parcel was surveyed from public roadway and adjacent parcels and confirmed via aerial photography.

33.289707
-111.621705

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
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Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
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Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

Lined Irrigation Channel

Dirt Road

33.289536
-111.611559

Dirt Road

33.287074
-111.616462

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
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Desert Well, AZ (1956) and Higley, AZ (1956)
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SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

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Scale: See scale bar
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Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

Unlined Irrigation Ditch

Merrill Rd

Dirt Road

Dirt Road

33.289542
-111.606284

Lined Irrigation Ditch

33.287085
-111.611193

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
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SECTION 404 JURISDICTIONAL DELINEATION

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Application No. SPL-2021-00653

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Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

Sheet 33 of 44

No JD waters recommended on this sheet.

33.289429
-111.601001

33.286978
-111.605917

Lined Irrigation Ditch

Unlined Irrigation Ditch

Orchard Access Rd

Dirt Road

Sheet 33

Sheet 41

33.287436
-111.632053

Sheet 27

Sheet 34

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
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Desert Well, AZ (1956) and Higley, AZ (1956)
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Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

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SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
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Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

Lined Irrigation Ditch

Future Willis Rd Alignment

33.284956
-111.627167

Flow Direction

Photo Point, Number and Direction

Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
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Desert Well, AZ (1956) and Higley, AZ (1956) USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
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Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

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Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

33.286324
-111.62206

Dirt Road

Lined Irrigation Ditch

Future Willis Rd Alignment

Lined Irrigation Ditch

Dirt Road

Unlined Irrigation Ditch

Dirt Road

Dirt Road

Dirt Road

33.283873
-111.626969

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
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Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

33.286276
-111.616777

Future Crismon Road Alignment

Lined Irrigation Ditch

Future Willis Rd Alignment

Lined Irrigation Ditch

Dirt Road

Dirt Road

Dirt Road

Dirt Road

33.283825
-111.621693

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
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Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

33.286229
-111.611475

Dirt Road

Dirt Road

Lined Irrigation Ditch

33.283772
-111.616404

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
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Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

Unlined Irrigation Ditch

Merrill Rd

Dirt Road

Lined Irrigation Ditch

33.286234
-111.606206

33.283778
-111.611122

Flow Direction

Photo Point, Number and Direction

Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
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Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

33.286311
-111.601001

Future Signal Butte Road Alignment

Lined Irrigation Ditch

19

20

Lined Irrigation Ditch

Unlined Irrigation Ditch

Dirt Road

33.283772
-111.605846

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
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Imagery Source: Maricopa County
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******PRELIMINARY (RGL 16-01)******

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Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

33.287138
-111.59821

Fenceline

Right-of-entry not granted to privately owned parcel in May 2022. Parcel was surveyed from public roadway and confirmed via aerial photography.

No JD waters recommended on this sheet.

Future Signal Butte Road Alignment

Lined Irrigation Ditch

33.284677
-111.60312

Future Signal Butte Road Alignment

Fenceline

Lined Irrigation Ditch

Sheet 33

Sheet 41

33.2873
-111.602365

33.28975
-111.597449

Erosional Features

Right-of-entry not granted to privately owned parcel in May 2022. Parcel was surveyed from public roadway and confirmed via aerial photography.

No JD waters recommended on this sheet.

*** * * * PRELIMINARY (RGL 16-01) * * * ***

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

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Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

Sheet 41 of 44

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
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Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

Flow Direction

Photo Point, Number and Direction

Wash Name (xx-xx) — Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

*** * * * PRELIMINARY (RGL 16-01) * * * ***

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

35 36 37

Pecos Rd

33.292692
-111.59569

No JD waters recommended on this sheet.

2-Track

Isolated low-lying depression currently used as a detention basin. Right-of-entry not granted to privately owned parcel. Parcel was surveyed from public roadway and confirmed via aerial photography.

Lined Irrigation Ditch

Future Signal Butte Road Alignment

Fenceline

Erosional Features

Erosional Features

Right-of-entry not granted to privately owned parcel in May 2022. Parcel was surveyed from public roadway and confirmed via aerial photography.

33.290014
-111.600214

Flow Direction

1 Photo Point, Number and Direction

Wash Name (xx-xx) Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

******PRELIMINARY (RGL 16-01)******

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

No JD waters recommended on this sheet.

33.29281
-111.590618

Mountain Rd

Pecos Rd

2-Track

Right-of-entry not granted to privately owned parcel in May 2022. Parcel was surveyed from public roadway and confirmed via aerial photography.

Driveway

33.290142
-111.595571

Flow Direction

Photo Point, Number and Direction

Wash Name and Width (Feet)

Control Point

0 25 50 100 Feet

N

Corps File No. SPL-2021-00653
Board Docket No. FD 36501
PIRATE Rail Line Project
Desert Well, AZ (1956) and Higley, AZ (1956)
USGS 7.5' Topographic Quadrangles
Imagery Source: Maricopa County
Imagery Date: November 2020
Date Prepared: October 19, 2022
Preparer: Jacobs Engineering Group Inc.

******PRELIMINARY (RGL 16-01)******

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL-2021-00653

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank, no wetlands occur within survey area.)

Scale: See scale bar
Photograph Date: November 2020
Site Visit by Corps (Y/N) Date:
Determination Issued:
Corps Project Manager:

33.292783
-111.585483

Wash No. 3
(4-30)

Pecos Rd

39
38
43
42
41
45
40
44

2-Track

Dirt Road

Fenceline

2-Track

Dirt Road on Diversion Dike

33.290136
-111.590419

APPENDIX B

GROUND PHOTOGRAPHS OF PROJECT DRAINAGES

(MAY 24–26 AND AUGUST 19, 2022)



Photo 1. Looking northwest/downstream at Rittenhouse Channel/ Wash No. 1 toward the northwestern boundary of the JD survey.



Photo 2. Looking southeast/upstream at Rittenhouse Channel/Wash No. 1 toward the base of the weir at Station 71+83 (station painted on each weir).



Photo 3. Looking northwest/downstream at Rittenhouse Channel/ Wash No. 1 toward the weir at Station 71+83.



Photo 4. Looking southeast/upstream at Rittenhouse Channel/ Wash No. 1 away from the weir at Station 71+83.



Photo 5. Looking northwest/downstream at Rittenhouse Channel/ Wash No. 1.



Photo 6. Looking southeast/upstream at Rittenhouse Channel/ Wash No. 1 toward the base of the weir at Station 80+43.



Photo 7. Looking northwest/downstream at Rittenhouse Channel/ Wash No. 1 toward the weir at Station 80+43.



Photo 8. Looking southeast/upstream at Rittenhouse Channel/ Wash No. 1 away from the weir at Station 80+43.



Photo 9. Looking northwest/downstream at Rittenhouse Channel/ Wash No. 1 from the weir at Station 90+43.



Photo 10. Looking southeast/upstream at Rittenhouse Channel/ Wash No. 1 toward the base of the weir at Station 90+43.



Photo 11. Looking northwest/downstream at Rittenhouse Channel/ Wash No. 1 from the southeastern extent of the survey area.



Photo 12. Looking southeast/upstream at Rittenhouse Channel/ Wash No. 1 from the southeastern extent of the survey area.



Photo 13. Looking northwest at typical drainage swale adjacent to UP's Phoenix Subdivision near Power Road.



Photo 14. Looking southeast at a typical UP drainage swale near Power Road; the swales do not connect to the Rittenhouse Channel.



Photo 15. Looking northwest at a typical UP drainage swale near Ellsworth Road. This swale dissipates into sheet flow.



Photo 16. Looking southeast at a typical UP drainage swale near Ellsworth Road.



Photo 17. Typical unlined irrigation ditch, looking north along Sossaman Road. This ditch is abandoned, and the field left fallow.



Photo 18. Typical unlined irrigation ditch, looking south along Sossaman Road.



Photo 19. Typical concrete-lined irrigation ditch, looking north along the orchard access road on ASLD-managed land.



Photo 20. Typical concrete-lined irrigation ditch, looking south along the orchard access road on ASLD-managed land.



Photo 21. Looking northwest/downstream at the western bank of Ellsworth Channel/Wash No. 2 near the northern boundary of the survey area. Right-of-entry to Ellsworth Channel west of Ellsworth Road was not granted. Therefore, photos 21–23 were taken from the closest publicly accessible points to this segment of the channel. Ellsworth Channel/ Wash No. 2 flows into Powerline Floodway about 2 miles north/downstream of the survey area, which in turn flows into the East Maricopa Floodway another 2 miles west/downstream.



Photo 22. Looking southwest/upstream at a gabion section stabilizing the western bank of the Ellsworth Channel/Wash No. 2.



Photo 23. Looking northwest/downstream at gabion outlet protection in Ellsworth Channel/Wash No. 2 downstream of Ellsworth Road.



Photo 24. Looking northwest/downstream at Ellsworth Channel/Wash No. 2 where it flows beneath Ellsworth Road in a two-barrel, 6’ by 10’ concrete box culvert (CBC).



Photo 25. Looking south/upstream at Ellsworth Channel/Wash No. 2 immediately upstream of the Ellsworth Road CBCs.



Photo 26. Looking north/downstream at Ellsworth Channel/Wash No. 2 from the outlet of the CBCs under a farm access road.



Photo 27. Looking south/upstream at Ellsworth Channel/Wash No. 2 where it flows beneath a farm access road in a two-barrel, 6’ by 10’ CBC.



Photo 28. Looking north/downstream at Ellsworth Channel/Wash No. 2 where it flows beneath a farm access road in a two-barrel, 6’ by 10’ CBC.



Photo 29. Looking south/upstream at Ellsworth Channel/Wash No. 2 from the inlet of the CBCs under a farm access road.



Photo 30. Looking north/downstream at Ellsworth Channel/Wash No. 2 from the outlet of the culvert where surface flows begin.



Photo 31. Looking south/upstream at Ellsworth Channel/Wash No. 2 at the southern boundary of the survey area. Surface flows enter the survey area from a drainage system that collects and conveys runoff and other ephemeral flows into the Ellsworth Channel for regional flood protection.



Photo 32. Looking south at a stand of *Typha* spp. and *Tamarix* spp. growing in an abandoned tailwater pond on May 24, 2022.



Photo 33. Looking north at the stand of *Typha* spp. growing in the abandoned tailwater pond on May 24, 2022.



Photo 34. Looking southwest on August 19, 2022, where the abandoned tailwater pond has been obliterated during site preparation for the Cubes industrial development. The large tree and vegetated berm are still visible in the center of the photo. This area is identified as a freshwater pond in the USFWS NWI data.



Photo 35. Looking north along the future alignment of Signal Butte Road where vegetation has been removed during site preparation.



Photo 37. Looking east-northeast at the staging and laydown area.



Photo 36. Looking north-northeast from the intersection of Pecos Road and the future Signal Butte Road alignment. Vegetation was cleared and grubbed to use the area as a staging and laydown area for the Pecos Road storm drain installation project. This area is identified as a freshwater forested shrub wetland in the USFWS NWI data. Photos 35–37 were taken on August 19, 2022, but conditions were similar in late May 2022.



Photo 38. Looking northwest/upstream at Wash No. 3 where it flows beneath Pecos Road through three 24" CMPs.



Photo 39. Looking southeast/downstream at Wash No. 3 south of the Pecos Road crossing. The diversion dike is to the right in the photo.



Photo 40. Looking northwest/upstream at Wash No. 3 where it ponds in a xeroriparian bosque at the base of the diversion dike.



Photo 41. Looking southeast/downstream at ponding in Wash No. 3 at the base of the diversion dike.



Photo 42. Looking northwest/upstream at the eastern side of the ponding in Wash No. 3.



Photo 43. Looking southeast/downstream at the eastern side of the ponding in Wash No. 3.



Photo 44. Looking northwest/upstream at Wash No. 3 where it flows out of the ponding area.



Photo 45. Looking southeast/downstream at Wash No. 3 toward the eastern edge of the survey area. Wash No. 3 crosses a 2-track outside of the survey area and appears to continue southeast.

APPENDIX C

JURISDICTIONAL DELINEATION PHYSICAL CHARACTERISTICS &
OTHER INFORMATION TABLE

Table C-1. Jurisdictional Delineation Physical Characteristics & Other Information
PIRATE Project
Corps File No. SPL-2021-00653
Survey: May 2022

		YES / NO												YES/NO
Wash No. or Name	**Road MP**	**Vegetation Difference Between Wash & Upland**	**Change in Soil Characteristics**	**Waterline Mark on Bank**	**Water Stains**	**Shelving or Cut Banks**	**Exposed Roots**	**Sediments Deposits**	**Presence of Litter or Debris**	**Wash Width (ft)**	**Wash Depth (ft or in)**	**Ground Photo Numbers**	**Existing Drainage Structure Type***	**WOUS**
Rittenhouse Channel/ Wash No. 1	Parallel to Rittenhouse Road generally between Power and Sossaman Roads (MP N/A)	x	x	x	x	x		x		30'	<1'	1-12	3 - ~12' x 70' concrete weirs	Y
Ellsworth Channel/ Wash No. 2	Parallel to Ellsworth Road between the two Pecos Road alignments (MP N/A)	x	x			x		x	x	10' - 20'	<1'	21-31	2 - 6' x 10' CBCs with wingwalls and gabion inlet/outlet; 2 - 6' x 10' CBCs with wingwalls and concrete apron inlet/outlet; 30" CPC with wingwalls	Y
Wash No. 3	Crosses Pecos Road east of Commercial Metals Company (MP N/A)	x	x	x			x	x	x	4' - 30'	<1'	38-45	3 - 24" CMPs	Y

CBC = concrete box culvert
CMP = concrete metal pipe
CPC = concrete pipe culvert
MP = milepost
N/A = not applicable

APPENDIX D

WETLAND DETERMINATION DATA FORMS

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: PIRATE Project City/County: Maricopa Sampling Date: 5.25.22

Applicant/Owner: Union Pacific Railroad Company State: AZ Sampling Point: SP1

Investigator(s): Betsi Phoebus, Sabra Bushey Section, Township, Range: S6, T2S, R7E

Landform (hillslope, terrace, etc.): Channel/floodplain Local relief (concave, convex, none): Slightly convex Slope (%): < 1%

Subregion (LRR): Interior Deserts - LRR D Lat: 33.284539° Long: -111.679033° Datum: NAD83

Soil Map Unit Name: Gilman loam (Gm) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation ✔, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

The section of the Rittenhouse Channel in the survey area was constructed in a drainage swale that developed along the UP Phoenix Subdivision and has functioned as a regional flood control channel for over 25 years. Maintenance includes periodic mowing of the banks and channel. Therefore, conditions in May 2022 are considered normal circumstances, which result in the "human-induced wetlands" atypical situation. SP1 represents portions of the channel outside of the receiving areas at the base of each weir.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. N/A			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 30' x 25')			
1. Centaurea melitensis (Malta star thistle)	40	Y	UPL
2. Heliotropium curassavicum (salt heliotrope)	15	Y	FACU
3. Isocoma acradenia (jimmyweed)	10	N	FACU
4. Echium vulgare (viper's bugloss)	5	N	UPL
5. Polypogon monspeliensis (rabbitsfoot)	3	N	FACW
6. Bromus madritensis (compact brome)	3	N	UPL
7. Phalaris aquatica (bulbous canarygrass)	2	N	FACU
8. Sphaeralcea munroana (globe mallow)	2	N	UPL
	80 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1. N/A			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	3	x 2 =	6
FAC species	0	x 3 =	0
FACU species	27	x 4 =	108
UPL species	50	x 5 =	250
Column Totals:	80 (A)		365 (B)

Prevalence Index = B/A = 4.6

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

FCDMC mows the majority of the Rittenhouse Channel banks and bed. In May 2022, only the vegetation growing in the receiving area of each weir was still present. A layer of dried plant fragments (leftover from mowing) covered the remainder of the bed and banks and indicate the last mowing occurred close to the time of the site visit. Vegetation in the channel (altered area) occupies a different topographic position with different hydrology from adjacent areas, so vegetation outside the channel was not used to determine typical vegetation in the channel. A ninth species in the herb stratum was also present with about 2% of the total cover, but this species could not be identified because in late May it was already too dry to recognize.

SOIL

Sampling Point: SP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

Permission to access the Rittenhouse Channel was a "non-intrusive" ROE; therefore, soil pits could not be dug and a soil profile could not be completed. Soils are not assumed to be hydric because hydrophytic vegetation is not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ✔ Surface Soil Cracks (B6)
- ✔ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ✔ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✔ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✔ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ✔ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Channel appears to be saturated and possibly inundated in an aerial photo from fall 2016 (City of Mesa 2022).

Remarks:

Hydrologic indicators present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: PIRATE Project City/County: Maricopa Sampling Date: 5.25.22

Applicant/Owner: Union Pacific Railroad Company State: AZ Sampling Point: SP2

Investigator(s): Betsi Phoebus, Sabra Bushey Section, Township, Range: S6, T2S, R7E

Landform (hillslope, terrace, etc.): Channel/floodplain Local relief (concave, convex, none): Slightly convex Slope (%): < 1%

Subregion (LRR): Interior Deserts - LRR D Lat: 33.284504° Long: -111.678968° Datum: NAD83

Soil Map Unit Name: Gilman loam (Gm) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil ✔, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes ✔ No _____
Hydric Soil Present?	Yes ✔	No _____	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

The section of the Rittenhouse Channel in the survey area was constructed in a drainage swale that developed along the UP Phoenix Subdivision and has functioned as a regional flood control channel for over 25 years. Maintenance includes periodic mowing of the banks and channel. Therefore, conditions in May 2022 are considered normal circumstances, which result in the "human-induced wetlands" atypical situation. SP2 covers part of the receiving area at the base of the Station 71+83 weir.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. N/A			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 30' x 25')			
1. Polypogon monspeliensis (rabbitsfoot)	60	Y	FACW
2. Unidentified plant	20	N	UNK
3. Phalaris aquatica (bulbous canarygrass)	15	N	FACU
4. Laennecia coulteri (Coulter's horseweed)	5	N	FAC
5. Melilotus officinalis (yellow sweet clover)	5	N	FACU
6. Centaurea melitensis (Malta star thistle)	5	N	UPL
7. Bromus madritensis (compact brome)	5	N	UPL
8. Oncosiphon pilulifer (globe chamomile)	2	N	FACU
	117 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1. N/A			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

FCDMC mows the majority of the Rittenhouse Channel banks and bed. In May 2022, only the vegetation growing in the receiving area of each weir was still present. Vegetation in the channel (altered area) occupies a different topographic position with different hydrology from adjacent areas, so vegetation outside the channel was not used to determine typical vegetation in the channel. Species No. 2 in the herb stratum could not be identified because in late May it was already too dry to recognize. Other plants in SP2 included 1% Echium vulgare (viper's bugloss), 1% Heliotropium curassavicum (salt heliotrope), and 1% Physalis angulata (cutleaf groundcherry). Total cover exceeds 100% because of overlapping plants.

SOIL

Sampling Point: SP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ No ___

Remarks:

Permission to access the Rittenhouse Channel was a "non-intrusive" ROE; therefore, soil pits could not be dug and a soil profile could not be completed. Soils are assumed to be hydric because of the presence of hydrophytic vegetation and wetland hydrology.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ✔ Surface Soil Cracks (B6)
- ✔ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ✔ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✔ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✔ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ✔ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Channel appears to be saturated and possibly inundated in an aerial photo from fall 2016 (City of Mesa 2022).

Remarks:

Hydrologic indicators present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: PIRATE Project City/County: Maricopa Sampling Date: 5.25.22

Applicant/Owner: Union Pacific Railroad Company State: AZ Sampling Point: SP3

Investigator(s): Betsi Phoebus, Sabra Bushey Section, Township, Range: S6, T2S, R7E

Landform (hillslope, terrace, etc.): Channel/floodplain Local relief (concave, convex, none): Slightly convex Slope (%): < 1%

Subregion (LRR): Interior Deserts - LRR D Lat: 33.284461° Long: -111.678896° Datum: NAD83

Soil Map Unit Name: Gilman loam (Gm) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil ✔, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes ✔ No _____
Hydric Soil Present?	Yes ✔	No _____	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

The section of the Rittenhouse Channel in the survey area was constructed in a drainage swale that developed along the UP Phoenix Subdivision and has functioned as a regional flood control channel for over 25 years. Maintenance includes periodic mowing of the banks and channel. Therefore, conditions in May 2022 are considered normal circumstances, which result in the "human-induced wetlands" atypical situation. SP3 covers part of the receiving area at the base of the Station 71+83 weir.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. N/A			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 30' x 25')			
1. Polypogon monspeliensis (rabbitsfoot)	90	Y	FACW
2. Unidentified plant	30	N	UNK
3. Bromus madritensis (compact brome)	15	N	UPL
4. Melilotus officinalis (yellow sweet clover)	10	N	FACU
5. Centaurea melitensis (Malta star thistle)	10	N	UPL
6. Bromus rubens (red brome)	5	N	UPL
7. Chenopodium album (white goosefoot)	5	N	FACU
8. Physalis angulata (cutleaf groundcherry)	5	N	UPL
	170 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1. N/A			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 5 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

FCDMC mows the majority of the Rittenhouse Channel banks and bed. In May 2022, only the vegetation growing in the receiving area of each weir was still present. Vegetation in the channel (altered area) occupies a different topographic position with different hydrology from adjacent areas, so vegetation outside the channel was not used to determine typical vegetation in the channel. Species No. 2 in the herb stratum could not be identified because in late May it was already too dry to recognize. Other plants in SP3 included 2% Heliotropium curassavicum (salt heliotrope), 1% Phalaris aquatica (bulbous canarygrass), and 1% Oncosiphon pilulifer (globe chamomile). Total cover exceeds 100% because of overlapping plants.

SOIL

Sampling Point: SP3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ No ___

Remarks:

Permission to access the Rittenhouse Channel was a "non-intrusive" ROE; therefore, soil pits could not be dug and a soil profile could not be completed. Soils are assumed to be hydric because of the presence of hydrophytic vegetation and wetland hydrology.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ✔ Surface Soil Cracks (B6)
- ✔ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ✔ Water Marks (B1) (**Riverine**)
- ✔ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✔ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✔ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ✔ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Channel appears to be saturated and possibly inundated in an aerial photo from fall 2016 (City of Mesa 2022).

Remarks:

Hydrologic indicators present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: PIRATE Project City/County: Maricopa Sampling Date: 5.25.22

Applicant/Owner: Union Pacific Railroad Company State: AZ Sampling Point: SP4

Investigator(s): Betsi Phoebus, Sabra Bushey Section, Township, Range: S6, T2S, R7E

Landform (hillslope, terrace, etc.): Channel/floodplain Local relief (concave, convex, none): Slightly convex Slope (%): < 1%

Subregion (LRR): Interior Deserts - LRR D Lat: 33.283064° Long: -111.676686° Datum: NAD83

Soil Map Unit Name: Gilman loam (Gm) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

The section of the Rittenhouse Channel in the survey area was constructed in a drainage swale that developed along the UP Phoenix Subdivision and has functioned as a regional flood control channel for over 25 years. Maintenance includes periodic mowing of the banks and channel. Therefore, conditions in May 2022 are considered normal circumstances, which result in the "human-induced wetlands" atypical situation. SP4 covers part of the receiving area at the base of the Station 80+43 weir.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. N/A			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 15' x 50')			
1. Bromus madritensis (compact brome)	70	Y	UPL
2. Physalis angulata (cutleaf groundcherry)	70	Y	UPL
3. Unidentified plant	40	N	UNK
4. Melilotus officinalis (yellow sweet clover)	25	N	FACU
5. Bromus catharticus (rescue brome)	15	N	UPL
6. Polypogon monspeliensis (rabbitsfoot)	15	N	FACW
7. Centaurea melitensis (Malta star thistle)	5	N	UPL
8. Dicoria canescens (desert twinbugs)	5	N	UPL
	245 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1. N/A			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	40	x 3 =	120
FACU species	25	x 4 =	100
UPL species	165	x 5 =	825
Column Totals:	245 (A)		1,075 (B)

Prevalence Index = B/A = 4.39

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

FCDMC mows the majority of the Rittenhouse Channel banks and bed. In May 2022, only the vegetation growing in the receiving area of each weir was still present. Vegetation in the channel (altered area) occupies a different topographic position with different hydrology from adjacent areas, so vegetation outside the channel was not used to determine typical vegetation in the channel. Species No. 3 in the herb stratum could not be identified because in late May it was already too dry to recognize. Other plants in SP4 included 5% Echium vulgare (viper's bugloss), 3% Oncosiphon pilulifer (globe chamomile), and 1% Phalaris aquatica (bulbous canarygrass). Total cover exceeds 100% because of overlapping plants.

SOIL

Sampling Point: SP4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

Permission to access the Rittenhouse Channel was a "non-intrusive" ROE; therefore, soil pits could not be dug and a soil profile could not be completed. Soils are not assumed to be hydric because hydrophytic vegetation is not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ✔ Surface Soil Cracks (B6)
- ✔ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ✔ Water Marks (B1) (**Riverine**)
- ✔ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✔ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✔ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ✔ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Channel appears to be saturated and possibly inundated in an aerial photo from fall 2016 (City of Mesa 2022).

Remarks:

Hydrologic indicators present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: PIRATE Project City/County: Maricopa Sampling Date: 5.25.22

Applicant/Owner: Union Pacific Railroad Company State: AZ Sampling Point: SP5

Investigator(s): Betsi Phoebus, Sabra Bushey Section, Township, Range: S6, T2S, R7E

Landform (hillslope, terrace, etc.): Channel/floodplain Local relief (concave, convex, none): Concave Slope (%): < 1%

Subregion (LRR): Interior Deserts - LRR D Lat: 33.283086° Long: -111.676662° Datum: NAD83

Soil Map Unit Name: Gilman loam (Gm) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil ✔, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes ✔ No _____
Hydric Soil Present?	Yes ✔	No _____	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

The section of the Rittenhouse Channel in the survey area was constructed in a drainage swale that developed along the UP Phoenix Subdivision and has functioned as a regional flood control channel for over 25 years. Maintenance includes periodic mowing of the banks and channel. Therefore, conditions in May 2022 are considered normal circumstances, which result in the "human-induced wetlands" atypical situation. SP5 covers part of the receiving area at the base of the Station 80+43 weir.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. N/A			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 15' x 50')			
1. Polypogon monspeliensis (rabbitsfoot)	60	Y	FACW
2. Bromus madritensis (compact brome)	25	N	UPL
3. Rumex obtusifolius (bitter dock)	20	N	FAC
4. Oncosiphon pilulifer (globe chamomile)	15	N	FACU
5. Melilotus officinalis (yellow sweet clover)	5	N	FACU
6. Heliotropium curassavicum (salt heliotrope)	5	N	FACU
7. Physalis angulata (cutleaf groundcherry)	5	N	UPL
8. Centaurea melitensis (Malta star thistle)	3	N	UPL
	133 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1. N/A			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 30 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

FCDMC mows the majority of the Rittenhouse Channel banks and bed. In May 2022, only the vegetation growing in the receiving area of each weir was still present. Vegetation in the channel (altered area) occupies a different topographic position with different hydrology from adjacent areas, so vegetation outside the channel was not used to determine typical vegetation in the channel. Total cover exceeds 100% because of overlapping plants.

SOIL

Sampling Point: SP5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ No ___

Remarks:

Permission to access the Rittenhouse Channel was a "non-intrusive" ROE; therefore, soil pits could not be dug and a soil profile could not be completed. Soils are assumed to be hydric because of the presence of hydrophytic vegetation and wetland hydrology.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ✔ Surface Soil Cracks (B6)
- ✔ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ✔ Water Marks (B1) (**Riverine**)
- ✔ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✔ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✔ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ✔ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Channel appears to be saturated and possibly inundated in an aerial photo from fall 2016 (City of Mesa 2022).

Remarks:

Hydrologic indicators present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: PIRATE Project City/County: Maricopa Sampling Date: 5.25.22

Applicant/Owner: Union Pacific Railroad Company State: AZ Sampling Point: SP6

Investigator(s): Betsi Phoebus, Sabra Bushey Section, Township, Range: S6, T2S, R7E

Landform (hillslope, terrace, etc.): Channel/floodplain Local relief (concave, convex, none): Slightly convex Slope (%): < 1%

Subregion (LRR): Interior Deserts - LRR D Lat: 33.281439° Long: -111.674059° Datum: NAD83

Soil Map Unit Name: Gilman loam (Gm) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

The section of the Rittenhouse Channel in the survey area was constructed in a drainage swale that developed along the UP Phoenix Subdivision and has functioned as a regional flood control channel for over 25 years. Maintenance includes periodic mowing of the banks and channel. Therefore, conditions in May 2022 are considered normal circumstances, which result in the "human-induced wetlands" atypical situation. SP6 covers part of the receiving area at the base of the Station 90+43 weir.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. N/A			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 10' x 10')			
1. Melilotus officinalis (yellow sweet clover)	85	Y	FACU
2. Rumex obtusifolius (bitter dock)	30	Y	FAC
3. Polypogon monspeliensis (rabbitsfoot)	5	N	FACW
4. Centaurea melitensis (Malta star thistle)	5	N	UPL
5. Heliotropium curassavicum (salt heliotrope)	2	N	FACU
6.			
7.			
8.			
	127 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1. N/A			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	30	x 3 =	90
FACU species	87	x 4 =	348
UPL species	5	x 5 =	20
Column Totals:	127 (A)		468 (B)

Prevalence Index = B/A = 3.69

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

FCDMC mows the majority of the Rittenhouse Channel banks and bed. In May 2022, only the vegetation growing in the receiving area of each weir was still present. Vegetation in the channel (altered area) occupies a different topographic position with different hydrology from adjacent areas, so vegetation outside the channel was not used to determine typical vegetation in the channel. Total cover exceeds 100% because of overlapping plants.

SOIL

Sampling Point: SP6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

Permission to access the Rittenhouse Channel was a "non-intrusive" ROE; therefore, soil pits could not be dug and a soil profile could not be completed. Soils are not assumed to be hydric because hydrophytic vegetation is not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ✔ Surface Soil Cracks (B6)
- ✔ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ✔ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ✔ Water Marks (B1) (**Riverine**)
- ✔ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✔ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✔ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ✔ No _____ Depth (inches): Not available

Wetland Hydrology Present? Yes ✔ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Channel appears to be saturated and possibly inundated in an aerial photo from fall 2016 (City of Mesa 2022).

Remarks:

Hydrologic indicators present. Because permission to access the Rittenhouse Channel was a "non-intrusive" ROE, soil pits could not be dug and saturation depth could not be determined.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: PIRATE Project City/County: Maricopa Sampling Date: 5.25.22

Applicant/Owner: Union Pacific Railroad Company State: AZ Sampling Point: SP7

Investigator(s): Betsi Phoebus, Sabra Bushey Section, Township, Range: S6, T2S, R7E

Landform (hillslope, terrace, etc.): Channel/floodplain Local relief (concave, convex, none): Concave Slope (%): < 1%

Subregion (LRR): Interior Deserts - LRR D Lat: 33.281480° Long: -111.674017° Datum: NAD83

Soil Map Unit Name: Gilman loam (Gm) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil ✔, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔ No _____	**Is the Sampled Area within a Wetland?** Yes ✔ No _____
Hydric Soil Present?	Yes ✔ No _____	
Wetland Hydrology Present?	Yes ✔ No _____	

Remarks:

The section of the Rittenhouse Channel in the survey area was constructed in a drainage swale that developed along the UP Phoenix Subdivision and has functioned as a regional flood control channel for over 25 years. Maintenance includes periodic mowing of the banks and channel. Therefore, conditions in May 2022 are considered normal circumstances, which result in the "human-induced wetlands" atypical situation. SP7 covers part of the receiving area at the base of the Station 90+43 weir.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. N/A			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 10' x 10')			
1. Polypogon monspeliensis (rabbitsfoot)	70	Y	FACW
2. Rumex obtusifolius (bitter dock)	40	Y	FAC
3. Heliotropium curassavicum (salt heliotrope)	25	N	FACU
4. Oncosiphon pilulifer (globe chamomile)	10	N	FACU
5. Centaurea melitensis (Malta star thistle)	10	N	UPL
6. Physalis angulata (cutleaf groundcherry)	5	N	UPL
7.			
8.			
	160 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1. N/A			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 5 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

FCDMC mows the majority of the Rittenhouse Channel banks and bed. In May 2022, only the vegetation growing in the receiving area of each weir was still present. Vegetation in the channel (altered area) occupies a different topographic position with different hydrology from adjacent areas, so vegetation outside the channel was not used to determine typical vegetation in the channel. Total cover exceeds 100% because of overlapping plants.

SOIL

Sampling Point: SP7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✔ **No** _____

Remarks:

Permission to access the Rittenhouse Channel was a "non-intrusive" ROE; therefore, soil pits could not be dug and a soil profile could not be completed. Soils are assumed to be hydric because of the presence of hydrophytic vegetation and wetland hydrology.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ✔ Surface Soil Cracks (B6)
- ✔ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ✔ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ✔ Water Marks (B1) (**Riverine**)
- ✔ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ✔ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✔ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✔ Depth (inches): _____

Water Table Present? Yes _____ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ✔ No _____ Depth (inches): Not available

Wetland Hydrology Present? Yes ✔ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Channel appears to be saturated and possibly inundated in an aerial photo from fall 2016 (City of Mesa 2022).

Remarks:

Hydrologic indicators present. Because permission to access the Rittenhouse Channel was a "non-intrusive" ROE, soil pits could not be dug and saturation depth could not be determined.

APPENDIX E

GROUND PHOTOGRAPHS OF WETLAND DELINEATION DATA PLOTS
(MAY 25, 2022)



Photo 46. Looking southeast/upstream into sample plot 1 (SP1) at Rittenhouse Channel Station 71+83 (station painted on each weir).



Photo 47. Looking southwest into SP1.



Photo 48. Looking northwest/downstream into SP1.



Photo 49. Looking northeast into SP1.



Photo 50. Looking southeast/upstream into SP2 at Rittenhouse Channel Station 71+83 (station painted on each weir).



Photo 51. Looking southwest into SP2.



Photo 52. Looking northwest/downstream into SP2.



Photo 53. Looking northeast into SP2.



Photo 54. Looking southeast/upstream into SP3 at Rittenhouse Channel Station 71+83 (station painted on each weir).



Photo 55. Looking southwest into SP3.



Photo 56. Looking northwest/downstream into SP3.



Photo 57. Looking northeast into SP3.



Photo 58. Unidentified plant in the herb stratum growing among rabbitsfoot and compact brome at SP3. This plant was found in varying densities at SP1, SP2, and SP3.



Photo 59. Close-up of unidentified plant in the herb stratum at SP3.



Photo 60. Looking southeast/upstream into SP4 at Rittenhouse Channel Station 80+43 (station painted on each weir).



Photo 61. Looking southwest into SP4.



Photo 62. Looking northwest/downstream into SP4.



Photo 63. Looking northeast into SP4.



Photo 64. Looking southeast/upstream into SP5 at Rittenhouse Channel Station 80+43 (station painted on each weir).



Photo 65. Looking southwest into SP5.



Photo 66. Looking northwest/downstream into SP5.

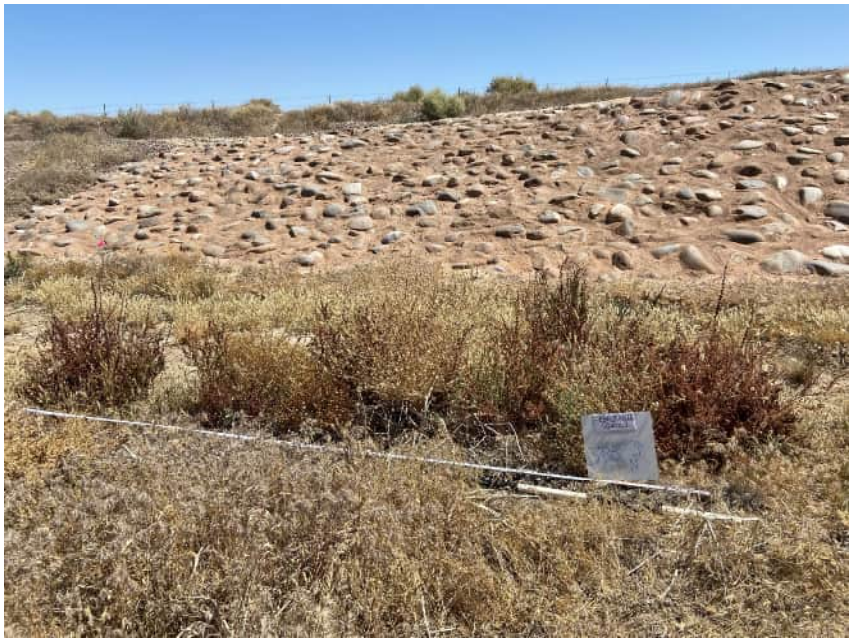


Photo 67. Looking northeast into SP5.



Photo 68. Looking southeast/upstream into SP6 at Rittenhouse Channel Station 90+43.



Photo 69. Looking southwest into SP6 at Rittenhouse Channel Station 90+43 (station painted on each weir).



Photo 70. Looking northwest/downstream into SP6.

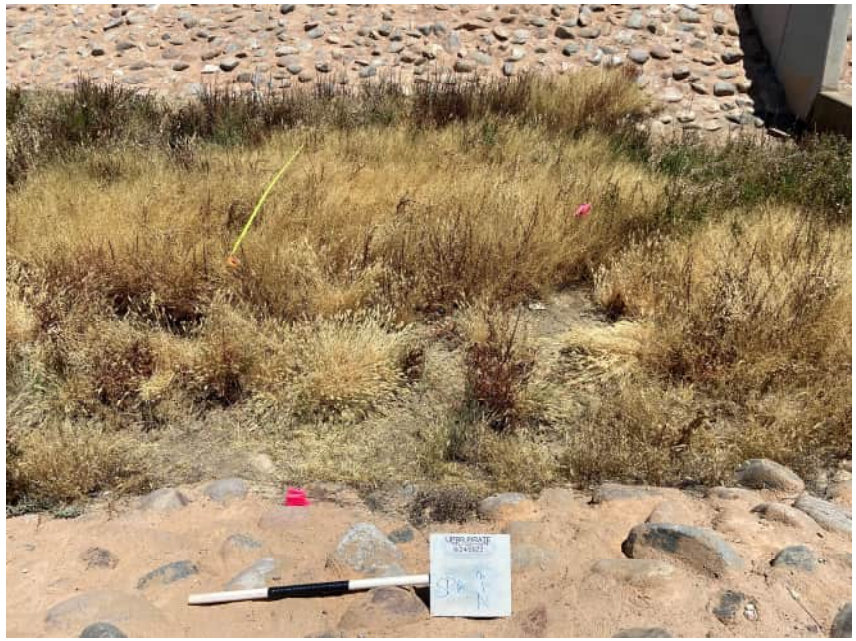


Photo 71. Looking northeast into SP6.



Photo 72. Looking southeast/upstream into SP7 at Rittenhouse Channel Station 90+43 (station painted on each weir).



Photo 73. Looking southwest into SP7.



Photo 74. Looking northwest/downstream into SP7.



Photo 75. Looking northeast into SP7.



Photo 76. Shell of an aquatic snail found on the surface of saturated soil at the base of the weir at Rittenhouse Channel Station 90+43. SP6 and SP7 were in the receiving area at the base of this weir.

APPENDIX F

U.S. FISH AND WILDLIFE SERVICE
NATIONAL WETLANDS INVENTORY WETLAND MAPS

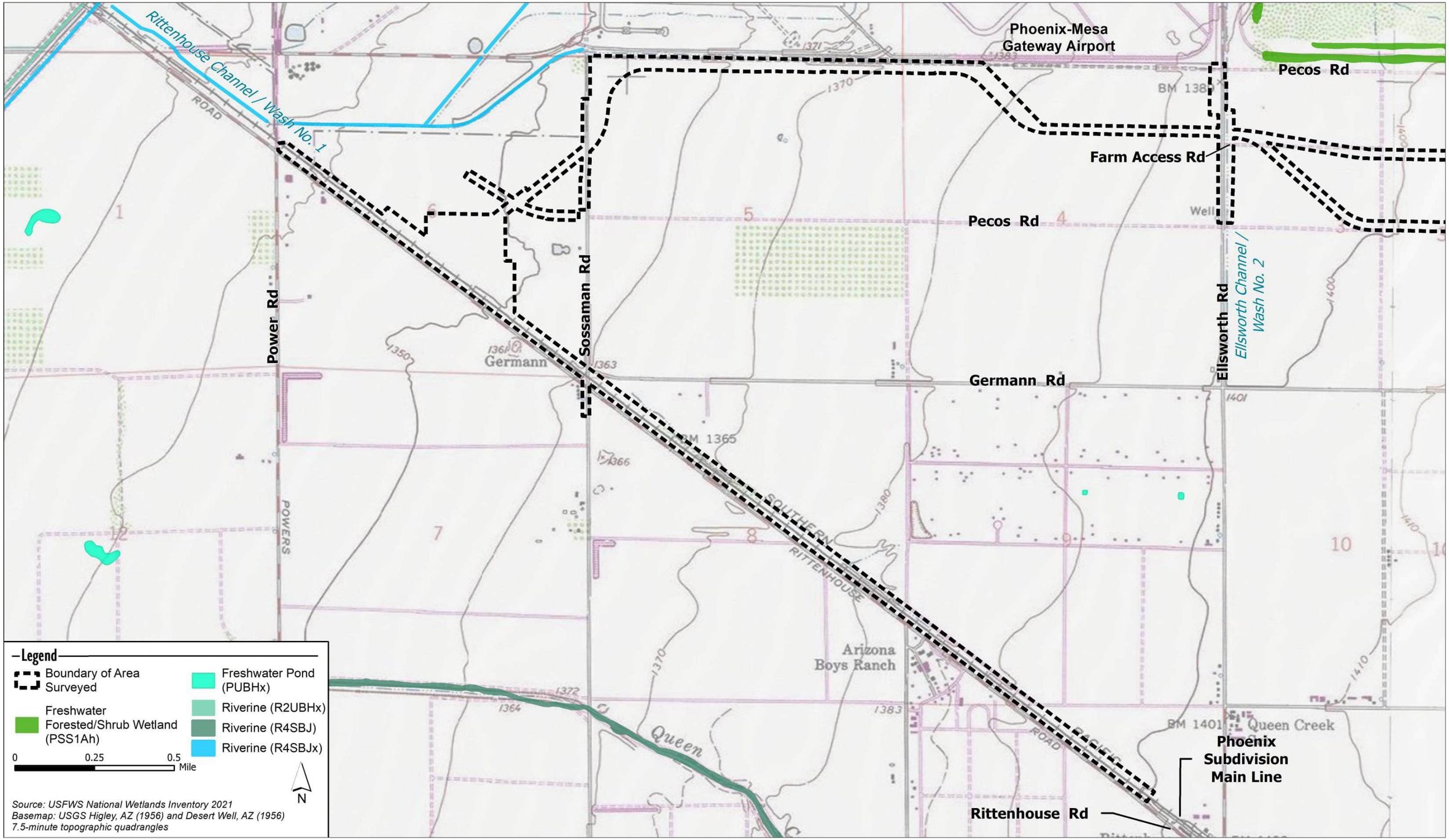


Figure F-1. NWI – Western Project Limits
PIRATE Project / Docket No. FD 36501

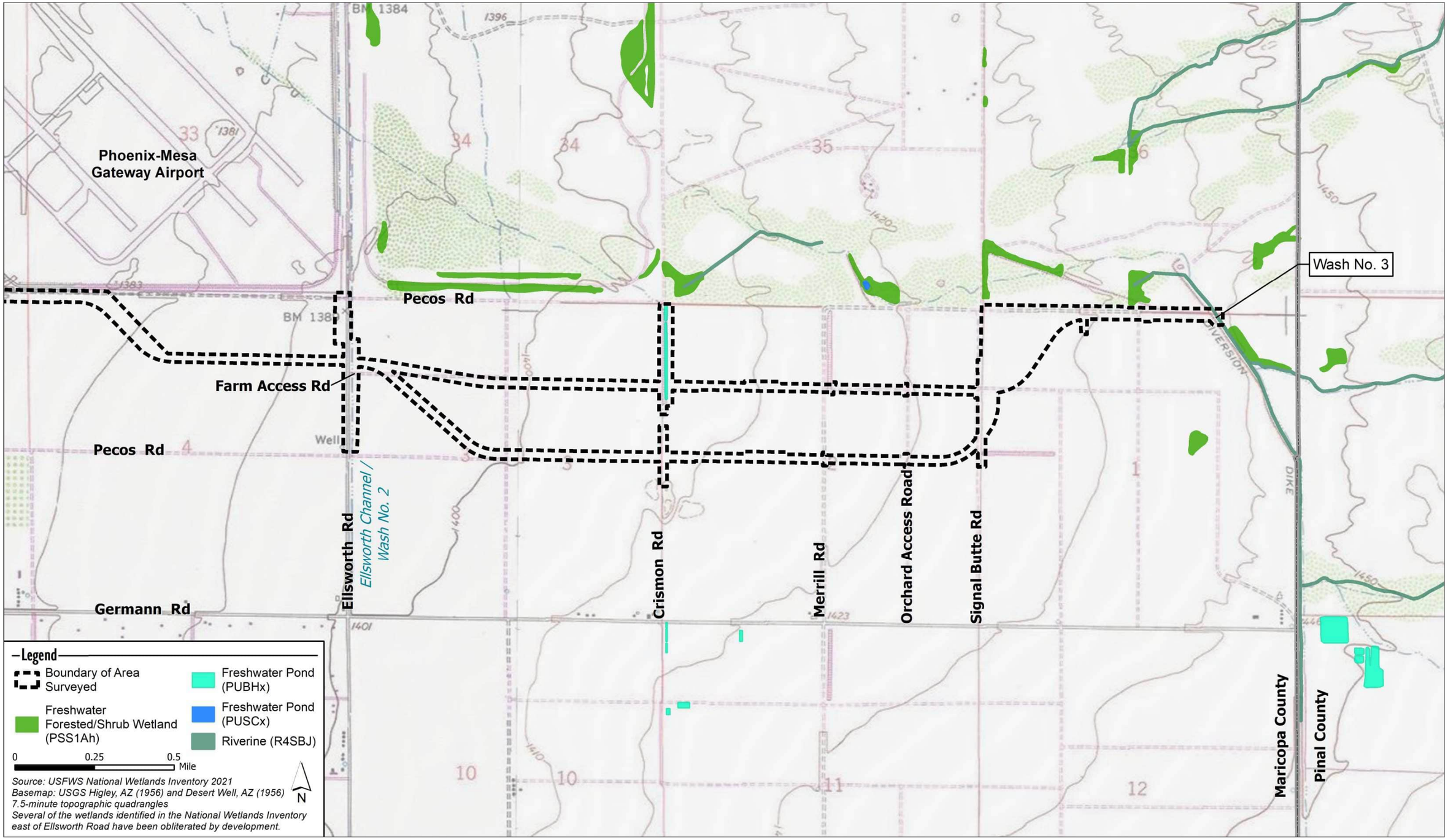


Figure F-2. NWI – Eastern Project Limits
PIRATE Project / Docket No. FD 36501

Appendix H
Farmland Conversion Form CPA-106

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request **6/22/22**	4. Sheet 1 of _____
1. Name of Project **Pecos Industrial Rail Access and Train Extens**	5. Federal Agency Involved **Surface Transportation Board**	
2. Type of Project **Rail transportation construction**	6. County and State **Maricopa, AZ**	

PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS **6/22/22**	2. Person Completing Form **Emily Yulga**
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☑ NO ☐		4. Acres Irrigated **910,883** / Average Farm Size **1369**
5. Major Crop(s) **Cotton, forage, wheat.**	6. Farmable Land in Government Jurisdiction **Acres:** **%**	7. Amount of Farmland As Defined in FPPA **Acres:** 5,379,361 **%**
8. Name Of Land Evaluation System Used **NCCPI Overall Average**	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS **6/22/22**

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment _____			
	Corridor A	**Corridor B**	**Corridor C**	**Corridor D**
A. Total Acres To Be Converted Directly	**50**	**53**		
B. Total Acres To Be Converted Indirectly, Or To Receive Services	**0**	**0**		
C. Total Acres In Corridor	**50**	**53**		
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland	**291.8**			
B. Total Acres Statewide And Local Important Farmland	**3.2**			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*	4.61			

PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))*	**Maximum Points**	**Corridor A**	**Corridor B**	**Corridor C**	**Corridor D**
1. Area in Nonurban Use	15	**8**	**8**		
2. Perimeter in Nonurban Use	10	**4**	**4**		
3. Percent Of Corridor Being Farmed	20	**6**	**6**		
4. Protection Provided By State And Local Government	20	**0**	**0**		
5. Size of Present Farm Unit Compared To Average	10	**10**	**10**		
6. Creation Of Nonfarmable Farmland	25	**0**	**0**		
7. Availablility Of Farm Support Services	5	**5**	**5**		
8. On-Farm Investments	20	**6**	**6**		
9. Effects Of Conversion On Farm Support Services	25	**0**	**0**		
10. Compatibility With Existing Agricultural Use	10	**0**	**0**		
TOTAL CORRIDOR ASSESSMENT POINTS	**160**	**39**	**39**	**0**	**0**
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland (From Part V)	**100**	**4.61**	**0**	**0**	**0**
Total Corridor Assessment (From Part VI above or a local site assessment)	**160**	**39**	**39**	**0**	**0**
TOTAL POINTS *(Total of above 2 lines)*	**260**	**43.61**	**39**	**0**	**0**

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used?
A	**50**	**11/1/22**	YES ☑ NO ☐

5. Reason For Selection:

Both alternatives would have the same impact on farmland, which is well below the 160 point threshold. Both alternatives are being carried forward in the NEPA analysis. In its upcoming draft environmental assessment, STB's Office of Environmental Analysis (OEA) is selecting corridor A as its preferred alignment after reviewing potential impacts across resource areas, including potential for farmland conversion.

Signature of Person Completing this Part: Adam Assenza — DATE **11/4/22**

NOTE: Complete a form for each segment with more than one Alternate Corridor

Clear Form

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?
More than 90 percent - 15 points
90 to 20 percent - 14 to 1 point(s)
Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?
More than 90 percent - 10 points
90 to 20 percent - 9 to 1 point(s)
Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?
More than 90 percent - 20 points
90 to 20 percent - 19 to 1 point(s)
Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?
Site is protected - 20 points
Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ? (Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with $1,000 or more in sales.)
As large or larger - 10 points
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?
Acreage equal to more than 25 percent of acres directly converted by the project - 25 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?
All required services are available - 5 points
Some required services are available - 4 to 1 point(s)
No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?
High amount of on-farm investment - 20 points
Moderate amount of on-farm investment - 19 to 1 point(s)
No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?
Substantial reduction in demand for support services if the site is converted - 25 points
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)
No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?
Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

Appendix I
EJScreen Report

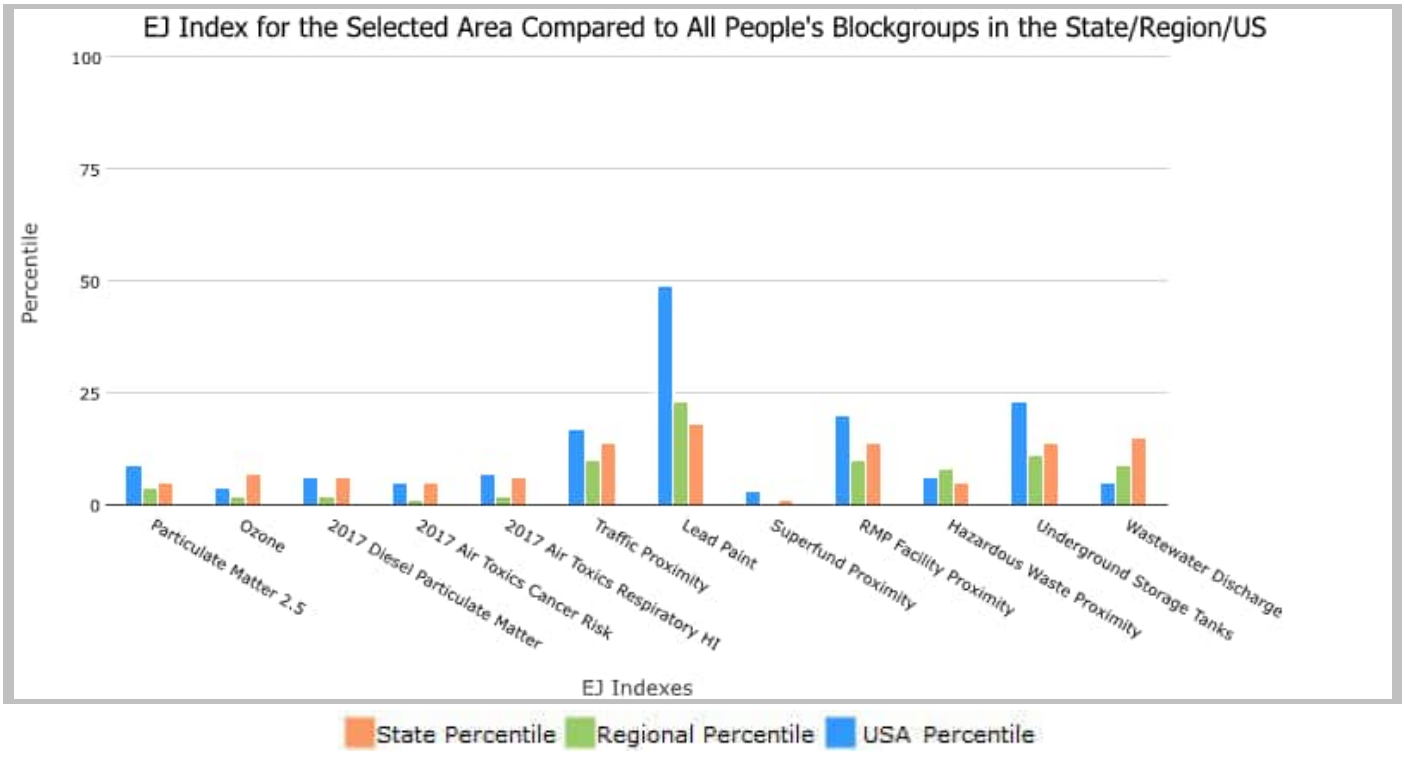
EJScreen Report (Version 2.0)

.5 miles Ring around the Area, ARIZONA, EPA Region 9

Approximate Population: 41,341

Input Area (sq. miles): 36.49

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
Environmental Justice Indexes			
EJ Index for Particulate Matter 2.5	5	4	9
EJ Index for Ozone	7	2	4
EJ Index for 2017 Diesel Particulate Matter*	6	2	6
EJ Index for 2017 Air Toxics Cancer Risk*	5	1	5
EJ Index for 2017 Air Toxics Respiratory HI*	6	2	7
EJ Index for Traffic Proximity	14	10	17
EJ Index for Lead Paint	18	23	49
EJ Index for Superfund Proximity	1	0	3
EJ Index for RMP Facility Proximity	14	10	20
EJ Index for Hazardous Waste Proximity	5	8	6
EJ Index for Underground Storage Tanks	14	11	23
EJ Index for Wastewater Discharge	15	9	5



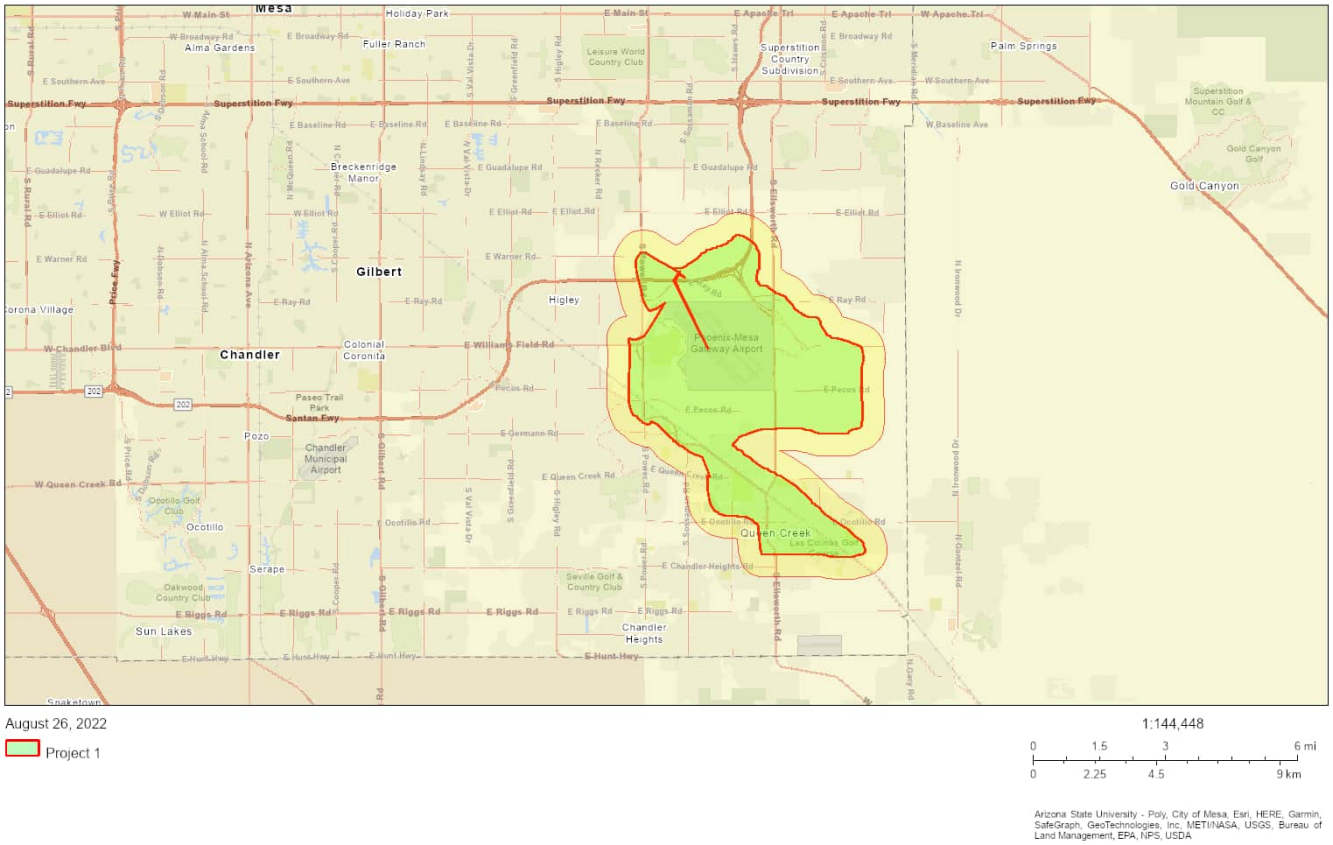
This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

EJScreen Report (Version 2.0)

.5 miles Ring around the Area, ARIZONA, EPA Region 9

Approximate Population: 41,341

Input Area (sq. miles): 36.49



Sites reporting to EPA	
Superfund NPL	1
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	6

EJScreen Report (Version 2.0)

.5 miles Ring around the Area, ARIZONA, EPA Region 9

Approximate Population: 41,341

Input Area (sq. miles): 36.49

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Pollution and Sources							
Particulate Matter 2.5 (µg/m^3)	8.01	7.35	58	10.8	18	8.74	33
Ozone (ppb)	54.6	54.3	49	49.6	63	42.6	91
2017 Diesel Particulate Matter* (µg/m^3)	0.276	0.327	38	0.33	<50th	0.295	50-60th
2017 Air Toxics Cancer Risk* (lifetime risk per million)	34	32	70	30	80-90th	29	80-90th
2017 Air Toxics Respiratory HI*	0.37	0.37	59	0.41	50-60th	0.36	70-80th
Traffic Proximity (daily traffic count/distance to road)	200	550	44	1300	41	710	47
Lead Paint (% Pre-1960 Housing)	0.017	0.084	52	0.23	25	0.28	17
Superfund Proximity (site count/km distance)	0.18	0.08	94	0.15	83	0.13	84
RMP Facility Proximity (facility count/km distance)	0.18	0.65	40	1	24	0.75	33
Hazardous Waste Proximity (facility count/km distance)	1.4	1.5	62	4.4	29	2.2	63
Underground Storage Tanks (count/km^2)	0.57	1.7	45	3.3	33	3.9	38
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.17	6.1	65	59	63	12	87
Socioeconomic Indicators							
Demographic Index	21%	40%	23	46%	12	36%	33
People of Color	28%	45%	31	60%	15	40%	45
Low Income	14%	35%	20	31%	24	31%	24
Unemployment Rate	4%	6%	41	6%	38	5%	47
Linguistically Isolated	1%	4%	41	8%	22	5%	47
Less Than High School Education	3%	13%	22	16%	17	12%	20
Under Age 5	8%	6%	70	6%	72	6%	74
Over Age 64	8%	17%	29	15%	26	16%	19

*Diesel particular matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 2017 Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

For additional information, see: www.epa.gov/environmentaljustice

EJScreen is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJScreen outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

Appendix J
Abbreviated Visual Impact Assessment

ABBREVIATED VISUAL IMPACT ASSESSMENT

PECOS INDUSTRIAL RAIL ACCESS AND TRAIN EXTENSION (PIRATE) PROJECT

Docket No. FD 36501 – Union Pacific Railroad Company
Construction and Operation Exemption in Maricopa County, Ariz.

May 2023

Summary

The Union Pacific Railroad Company (UP) is seeking authority from the Surface Transportation Board to construct and operate approximately 6.0 miles of new rail line in Maricopa County, Arizona (Docket No. FD 36501) to transport raw materials and commercial freight. The proposed rail line, referred to as the Pecos Industrial Rail Access and Train Extension (PIRATE), would connect UP's Phoenix Subdivision main line (Phoenix Subdivision) to industrial properties south of the Phoenix-Mesa Gateway Airport via a single-track rail line. UP also proposes to construct and operate approximately 2.5 miles of new support track along the Phoenix Subdivision between Power Road and Ellsworth Road. The Surface Transportation Board's Office of Environmental Analysis identified two reasonable alternatives that meet the purpose and need for PIRATE: Alternative 1 and Alternative 2.

Under the No-Action Alternative, approximately 73,200 trucks per year (City of Mesa 2021) would continue to use local streets to transport industrial materials to and from the Pecos Advanced Manufacturing Zone and would continue to temporarily block farther views and increase the industrial nature of the landscape.

Under Alternative 1 or Alternative 2, visual changes would primarily be consistent with the existing visual character in scale and extent, as the proposed rail line and rail cars would maintain a similar east-west alignment as existing truck routes. Visual changes from the planned Phoenix Subdivision support tracks would be consistent with the existing visual character of the Phoenix Subdivision, as the planned support tracks would remain within UP's existing right-of-way and in close proximity to the existing tracks. In addition, some viewers may associate rail lines and rail cars with airports and industrial and agricultural land uses for transporting goods. However, given the expanding residential developments within the area of visual effect, the public may view visual changes as incongruent with their desires for a residential or agricultural setting. In particular, residential developments along the Phoenix Subdivision, some of which are densely arranged, depart from the overall agricultural landscape character. Therefore, these residents may view the potential changes as negative and contrasting with their expectations, despite the existing presence of the Phoenix Subdivision.

Most viewers are expected to experience low to moderate sensitivity to the potential changes depending on viewer type (e.g., residential or industrial), activity (e.g., driving local roads or working in fields), proximity to the view, and duration of impact (e.g., moving or parked trains). Viewers whose expectations, activities, proximity, and duration of impact are compatible with the visual changes would experience minimal long-term or temporary adverse visual impacts. Other viewers, particularly residents in close proximity to the potential changes, may experience increased adverse impacts. Overall, the project is expected to have moderate to mostly high compatibility with the existing visual character. Visual quality is not expected to appreciably change.

Impacts would be similar for both alternatives and for the planned Phoenix Subdivision support tracks, with the exception of viewpoints generally between Ellsworth Road and Signal Butte Road, where Alternative 2 would be approximately 0.25 mile south of Alternative 1. This impact would be experienced at Key Observation Point 2 (KOP 2) and KOP 5, and to varying degrees at KOP 3, where PIRATE would begin its southward curve. Because the majority of the land uses south of Alternative 2 and north of Germann Road are agricultural, impacts to sensitive viewers are expected to be minimal compared to Alternative 1.

Table S-1. Comparison of Impacts by Alternative

Impact Type	No-Action Alternative	Alternative 1 and the Planned Phoenix Subdivision Support Tracks	Alternative 2 and the Planned Phoenix Subdivision Support Tracks
Visual character	Similar to existing conditions with a slight increase in the industrial nature of the landscape due to increased truck traffic.	Moderate to mostly high compatibility with the existing visual character.	Same as Alternative 1; visual character not expected to change based on alignment location.
Visual quality	Similar to existing conditions.	No appreciable change to the components of visual quality: vividness, intactness, and unity.	Same as Alternative 1; visual quality not expected to change based on alignment location.
Sensitive viewers	Similar to existing conditions.	Low to moderate sensitivity to changes depending on viewer type, activity, proximity to the view, and duration of impact.	Similar to Alternative 1 but more pronounced for north-facing viewers on Germann Road between Ellsworth Road and Signal Butte Road, where the alignment would be approximately 0.25 mile farther south. However, few sensitive viewers are located in this predominantly agricultural area.

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Appendices

Appendix A. Viewpoints Considered for Analysis

Acronyms and Abbreviations

AVE	area of visual effect
EA	Environmental Assessment
FHWA	Federal Highway Administration
Fujifilm	Fujifilm Electronic Materials
KOP	key observation point
Mesa	City of Mesa
OEA	Office of Environmental Analysis
PAMZ	Pecos Advanced Manufacturing Zone
Phoenix Subdivision	Phoenix Subdivision main line
PIRATE	Pecos Industrial Rail Access and Train Extension
TCE	temporary construction easement
UP	Union Pacific Railroad Company
U.S.C.	United States Code
VIA	visual impact assessment

Chapter 1
Introduction

The Union Pacific Railroad Company (UP) is seeking authority from the Surface Transportation Board to construct and operate approximately 6.0 miles of new rail line in Maricopa County, Arizona (Docket No. FD 36501) for purposes of transporting raw materials and commercial freight. The proposed rail line, referred to as the Pecos Industrial Rail Access and Train Extension (PIRATE), would connect UP's Phoenix Subdivision main line (Phoenix Subdivision) to industrial properties south of the Phoenix-Mesa Gateway Airport via a single-track rail line. UP also proposes to construct and operate approximately 2.5 miles of new support track along the Phoenix Subdivision between Power Road and Ellsworth Road.

The purpose of PIRATE is to meet the transportation and logistics needs of existing and future manufacturing businesses within the Pecos Advanced Manufacturing Zone (PAMZ) and adjacent areas. The Surface Transportation Board's Office of Environmental Analysis (OEA) identified two reasonable alternatives that meet the purpose and need for PIRATE. The two Action Alternatives (Alternative 1 and Alternative 2), the No-Action Alternative, and the planned Phoenix Subdivision support tracks are described in detail in Chapter 2 of the Draft Environmental Assessment (EA) being prepared for this project.

Chapter 2
Studies and Coordination

2.1 Study Methods

In this abbreviated visual impact assessment (VIA), OEA's analysis of the visual impacts of PIRATE and the planned Phoenix Subdivision support tracks is guided by the Federal Highway Administration's (FHWA) *Guidelines for the Visual Impact Assessment of Highway Projects* (2015). OEA considered these guidelines during this analysis because of the similar linear nature of rail and highway projects. In addition, the FHWA guidelines incorporate decades of VIA expertise dating from 1988, and they have become a standard methodology for linear projects. Regarding the FHWA process, the National Academy of Sciences notes, "Of the processes now in use, none has been shown to be more effective, more scientific, more legal, more publicly accepted, or more efficiently delivered than any other method" (National Academy of Sciences 2013).

Prior to preparing this document, OEA completed an FHWA Visual Quality Scoping Questionnaire to determine the level of VIA documentation most appropriate for this analysis. The results indicated that an Abbreviated VIA would best serve the project's needs. FHWA defines an Abbreviated VIA as follows:

> A document that succinctly reports the findings of a VIA. It includes a brief project description and a report of the findings of the VIA's establishment, inventory, analysis, and mitigation phases. Maps, aerial photography, and photographs are used sparingly and only when such illustrations reduce the need for text. An Abbreviated VIA is typically used for an EA or EIS-level project when it has been identified during scoping that there are minimal visual concerns (FHWA 2015).

The FHWA guidelines identify four stages of a VIA: establishment, inventory, analysis, and mitigation. An Abbreviated VIA applies these phases as follows (FHWA 2015):

- Establishment Phase (Chapter 3, Section 3.1 and 3.2): Provide a brief description of project elements. Identify the location and extent of the project corridor on a map, along with the area of visual effect (AVE). Typically, it is not necessary to delineate viewsheds.
- Inventory Phase (Chapter 3, Sections 3.3 and 3.4): Briefly identify visual resources of the natural, cultural, and project environments as a description of the visual character of the project corridor; briefly identify the viewing experience of sensitive viewers; and identify existing visual quality. This phase is analogous with the affected environment description.
- Analysis Phase (Chapter 44): Define how the visual character of the corridor would change as a result of the project. Describe impacts to visual resources and the experience of viewers. Consider the compatibility of, sensitivity to, and degree of the impact to visual quality:
  - Compatibility: The ability of environment to absorb the proposed project as a result of the project and the environment having compatible visual characters.

  - Sensitivity: The ability of viewers to see and care about a project's impacts based on viewer sensitivity to changes in the visual character of visual resources.
  - Degree: Defined as either a beneficial, adverse, or neutral change to visual quality. A proposed project may benefit visual quality by enhancing visual resources or creating better views of those resources and improving the experience of visual quality by viewers. A project may adversely affect visual quality by degrading visual resources or obstructing or altering desired views.

- Mitigation Phase (Chapter 5): Describe how mitigation strategies avoid, minimize, or compensate for adverse visual impacts and how beneficial visual impacts will be incorporated in the project.

2.2 Agency Coordination

OEA did not conduct agency coordination for visual impacts because no land-managing agencies that have agency-specific VIA methods or requirements would be affected. In addition, concerns specific to visual resources or visual quality were not mentioned in response to the December 2021 agency consultation letter, during the March 2022 agency coordination meetings, or during the Section 106 process and associated tribal coordination to date.

2.3 Regulatory Context

2.3.1 Federal

Under the National Environmental Policy Act of 1969 (42 U.S.C. §§ 4321–4370m-11), OEA is required to examine the potential environmental impacts of actions subject to its jurisdiction. Title 1 of the National Environmental Policy Act states that the federal government should "use all practicable means" to "assure for all Americans … aesthetically and culturally pleasing surroundings" (Subchapter 01 [42 U.S.C. § 4331(b)(2)]).

2.3.2 Local

Local planning documents do not identify visually distinctive areas or protected views in the project AVE. The *Mesa 2040 General Plan*, *Maricopa County Vision 2030 Comprehensive Plan*, and *Pinal County Comprehensive Plan* do not identify goals, objectives, or guidelines related to visual, aesthetic, or scenic qualities that would be affected by Alternative 1, Alternative 2, or the planned Phoenix Subdivision support tracks (City of Mesa [Mesa] 2014; Maricopa County 2016; Pinal County 2021). OEA identified no other laws, ordinances, regulations, policies, or standards that would apply to visual or aesthetic resources.

2.3.3 Other

No designated scenic byways or rivers are within the project AVE (America's Scenic Byways n.d., National Wild and Scenic Rivers System n.d.). In addition, no national scenic trails, national historic trails, national recreation trails, or units of the National Park Service are within the project AVE (American Trails n.d.; National Park Service n.d.-a; U.S. Geological Survey n.d.; National Park Service n.d.-b).

Chapter 3
Affected Environment

3.1 Visually Prominent Project Elements

OEA is proposing two action alternatives to meet PIRATE's purpose and need. The alternatives differ only in the route the proposed rail line would follow, generally between Ellsworth Road and Signal Butte Road. In this segment, Alternative 1 would travel east–west along an alignment approximately 0.25 mile south of Pecos Road; Alternative 2 would follow an alignment approximately 0.50 mile south of Pecos Road. From a visual perspective, the proposed rail line is defined by cut and fill limits to accommodate single-track, double-track, triple-track, and access road configurations, with an option to construct up to three additional yard tracks at the PIRATE yard in the future. The planned Phoenix Subdivision support tracks are visually defined by cut and fill limits to accommodate double-track, triple-track, and access road configurations. Currently, neither the alternatives nor the planned Phoenix Subdivision support tracks include grade-separated structures.

The PIRATE railbeds and tracks would be up to 15 feet above the existing ground surface, and the trains would be approximately 15 feet tall. The proposed rail line would appear relatively flat (gently sloping upward as it heads east). UP estimates up to two trains per day (one in each direction) at an approximate maximum length of 4,500 feet would travel on PIRATE, with 30 to 35 cars per train during initial service and 70 cars per train at full PAMZ build-out. Trains would travel at 20 miles per hour on the proposed rail line. Two to five rows of rail cars could be parked at the PIRATE yard directly south of the Phoenix-Mesa Gateway Airport, where two yard tracks, in addition to PIRATE, are currently proposed with three more in the future. One row of rail cars could be parked along a second run-around track generally between Crismon and Signal Butte Roads. Rail cars would also be visible at Commercial Metals Company and Fujifilm Electronic Materials (Fujifilm) at the eastern end of the project limits when parked during delivery of raw materials and pick up of finished product.

The project EA includes representational cross-sectional diagrams of single-track segments. Tracks would be approximately 30 feet wide between the subgrade, including fill to raise the tracks. In most areas, a ditch or access road would parallel the tracks. Shoulder and ditch widths would vary.

Road crossing devices would include lighted, moving gates; alternating flashing red lights mounted on a crossbuck sign; pavement markings; and advanced warning signs. Vertical elements planned along PIRATE and the Phoenix Subdivision would match existing elements in height and form and would not exceed 32 feet tall (the fully extended mast arm of crossing gates).

UP would also construct support tracks along the Phoenix Subdivision, which would require use of a temporary construction easement (TCE) at the existing Sossaman Road crossing. The location and number of new tracks would vary, as described in the project EA. No other TCEs are expected to be visible from sensitive viewing locations. Existing rail traffic on the Phoenix Subdivision consists of four trains per day: two trains traveling southeast and two trains traveling northwest. UP estimates that the Phoenix Subdivision rail traffic will increase by one train per

day (to a total of five per day) by 2027. This increase on the Phoenix Subdivision is independent of PIRATE.

UP would excavate and grade three (Alternative 1) or two (Alternative 2) detention basins up to 10 feet deep. These basins, at the wye,[1] PIRATE yard, and TRW Safety Systems, would temporarily hold stormwater and slowly convey runoff via culverts to the Rittenhouse Channel and/or the railbed-adjacent drainage ditches.

3.2 Area of Visual Effect

FHWA defines the area of project visibility as the AVE, which is determined by the physical constraints of the environment and the physiological limits of human sight (FHWA 2015). Jacobs' visual specialists consulted aerial photography and street views using commercial internet satellite mapping and imaging sites to determine locations from which project elements were expected to be visible. Based on this review, OEA selected seven potential viewpoints to represent sensitive views. These viewpoints extended no farther than 3.5 miles from project elements due to the relative flatness of the surrounding landscape and curvature of the earth, which restricts the extent of human vision to distances far short of the horizon. Viewed from a flat surface with eyes about 5 feet above ground, the farthest visible edge is approximately 3 miles away. Therefore, if a viewer is driving past a relatively flat agricultural area (or other area with few structures), the farthest visible part of the horizon would be about 3 miles from the viewpoint (Krisciunas and Carona 2015; Healthline Media 2019).

The visual specialist conducted a field visit in June 2022 to photograph the landscape character and views from the selected viewpoints. Based on information confirmed in the field, OEA retained only those seven viewpoints expected to provide views of the project as key observation points (KOPs) for analysis of impacts (Chapter 4 and Appendix A).

The AVE is within the Phoenix-Mesa Gateway Growth Area identified in the *Mesa 2040 General Plan*. The plan states that "this area is expected to grow by approximately 70,000 residents and 40,000 employees over the next 30 years" (Mesa 2014). Consequently, crews conducting fieldwork in June 2022 to photograph the KOPs noted a rapid pace of development within the AVE, with many areas under construction. Therefore, OEA expects that views from some of the KOPs selected for analysis will have changed prior to release of the EA being prepared for this project. In such cases, development would further obscure views of the project from the selected KOPs, minimizing potential visual impacts in areas adjacent to current construction activities. The cumulative impacts section of the EA discusses the impacts of reasonably foreseeable future actions, such as development, on visual resources.

[1] "Wye" refers to the Y-like formation created where two sets of tracks branch off of one line to connect to another line in different directions. The wye creates a triangle that can be used for turning locomotives or trains.

3.3 Overall Visual Character and Quality

This section briefly identifies the visual resources of the natural, cultural, and project environments as a description of the visual character of the AVE. This section also assesses existing visual quality based on the degree to which the landscape possesses the following characteristics (FHWA 1988):

- Vividness: The memorability of a landscape based on how contrasting landscape components (landcover, vegetation, and built elements) combine in striking and distinctive visual patterns.
- Intactness: The integrity of visual patterns and the degree to which the landscape is free from visual encroachment.
- Unity: The degree to which landscape elements join together to form a coherent, harmonious visual pattern, and to which the landscape is free of visual chaos.

In addition, this section identifies sensitive viewers within the affected population and existing visual quality for each KOP.

The physical attributes of existing visual resources determine the AVE's visual character. These attributes include elements such as atmospheric conditions, land, water, vegetation, animal life, buildings, structures, transportation infrastructure, and public art (FHWA 2015).

The AVE's topography is mostly flat, limiting views to no more than approximately 3.5 miles (see Section 3.2). However, the McDowell Mountains are visible in the distance to the northwest. The Usery Mountains are visible to the north, the Goldfield Mountains to the northeast, and the Superstition Mountains to the east of the AVE. The presence of these mountain ranges varies based on distance (Figure 3-1). The San Tan Mountains are similarly visible to the south. The landscape is primarily vacant west of Sossaman Road and north of Germann Road (Figure 3-2). This broad area consists of flat dirt and randomly scattered, weedy vegetation of various colors, textures, and sizes that form a chaotic visual pattern. Tall, broad citrus trees occupy some of these farmlands, obscuring farther views from immediately adjacent viewpoints (Figure 3-3). These trees interject vivid green color and texture into the landscape. However, in other areas, farmlands lay fallow or may be in various stages of crop growth depending on the season. In such instances, views are generally open and unobstructed, and vegetation adds little visual interest (Figure 3-4).

Small areas of residential and commercial development exist between 85th Place and Ellsworth Road north of Germann Road. Industrial land uses occupy the eastern side of the AVE between Germann Road and Pecos Road. These areas are typically surrounded by chain-link fence that encloses broad, low, windowless, neutral-colored utilitarian buildings and expansive asphalt parking lots (Figure 3-5). Although generally limited to two stories tall, these buildings block farther views. Vegetation in these areas primarily consists of a few relatively small landscaped deciduous trees and shrubs or remnants of desertscrub.

Figure 3-1. View looking northeast toward Superstition Mountains from Germann Road east of Ellsworth Road



Figure 3-2. View looking south toward Benjamin Franklin High School from general location of proposed wye



Figure 3-3. Citrus Trees between Merrill Road and Signal Butte Road, looking south



Figure 3-4. Barren field looking east toward Old Dominion Freight Line from the southeast intersection of Crismon Road and Pecos Road



Figure 3-5. Looking southeast from Fujifilm entrance at existing industrial area



The Phoenix-Mesa Gateway Airport is located directly northwest of the intersection of Ellsworth Road with the northern Pecos Road segment. The runways follow a diagonal northwest to southeast direction, with planes flying over the AVE during landings and takeoffs. The terminal is west of the runways and out of view of the project elements. The airport currently has three 10,000-foot runways and 1,000 acres of developable land (BEX Events 2019). The airport and industrial land uses introduce highly visually contrasting elements into the agricultural setting.

Although agricultural land uses occur south of Germann Road, tightly spaced residential and some commercial developments have changed the open nature of the farming landscape. Dense residential areas are concentrated east of Ellsworth Road and between Hawes Road and Rittenhouse Road. A broad area of low-density residential development, much of which consists of horse property, exists between these two high-density areas.

West of Rittenhouse Road, the AVE is fully developed with densely spaced residential areas. A few commercial and educational facilities are scattered within the residences. Solid, approximately 6-foot-tall walls surround most of these residential areas, although some are shorter and topped with railings (Figure 3-6). Landscaping consisting of various types of trees and shrubs lines the streets. Houses are typically two stories tall. Some residences are immediately adjacent to the Phoenix Subdivision; its slightly elevated railbed is sporadically visible beyond landscaped vegetation (Figure 3-7). In these areas, landscaping adds visual interest, particularly the texture of trees, manicured shrub formations, and contrasting colors of flowering vegetation, resulting in moderately high visual quality. Figure 3-8 shows an example of train traffic along the Phoenix Subdivision and Figure 3-9 shows the existing Phoenix Subdivision main line track.

Figure 3-6. Looking east from residential area on Pelican Drive



Figure 3-7. Looking northeast from eastern end of Oriole Way



Figure 3-8. Typical rail cars traveling on the Phoenix Subdivision



Figure 3-9. Phoenix Subdivision main line track, looking northwest from Sossaman Road



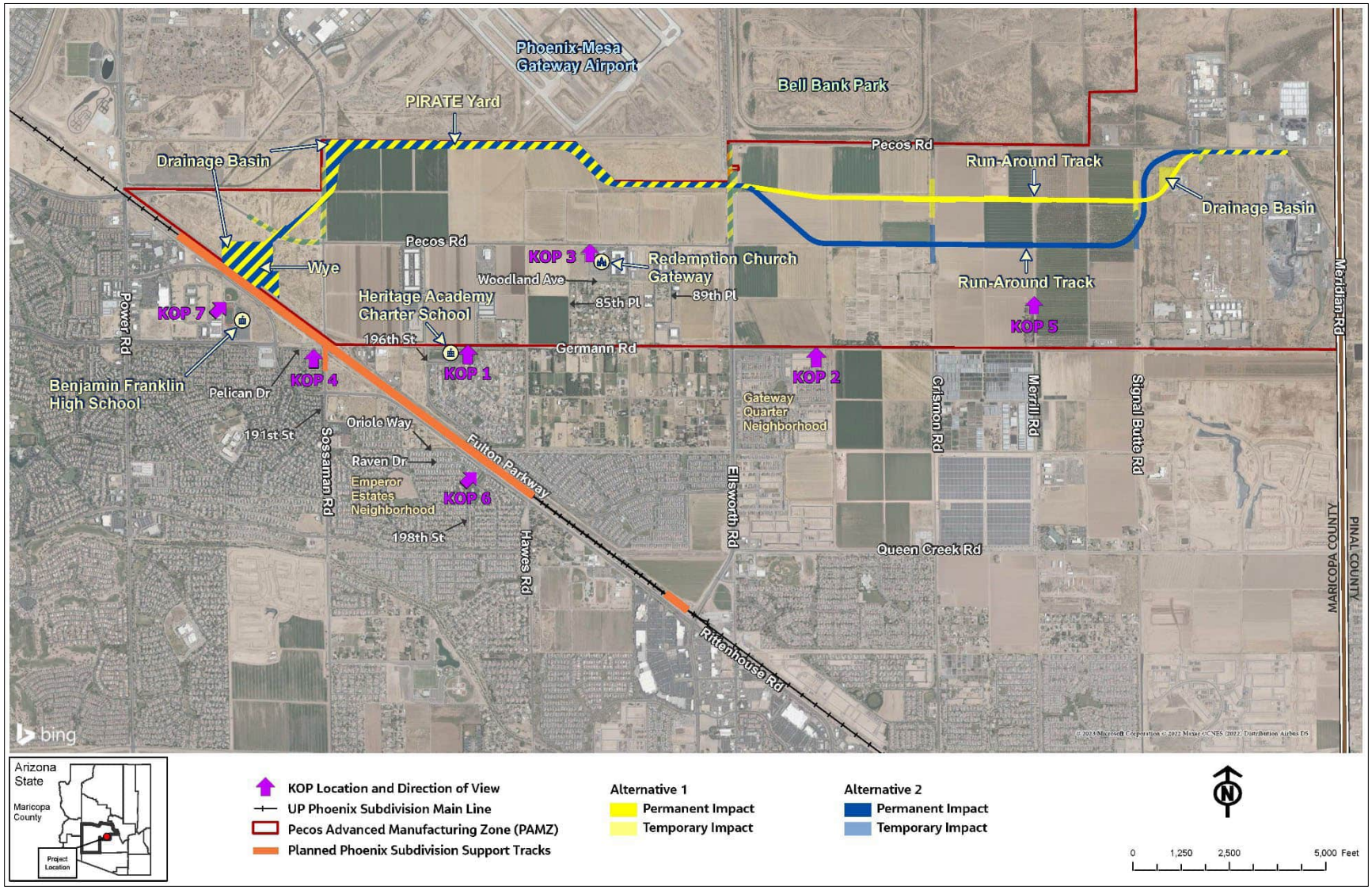
More than 6,100 trucks use local streets, particularly Pecos and Germann Roads, each month (approximately 73,200 per year; Mesa 2021) to transport industrial materials (including hazardous materials and manufactured products) to and from the PAMZ. These trucks temporarily block farther views for viewers in the immediate foreground and increase the industrial nature of the landscape as the trucks travel through it.

Overall, the AVE lacks memorable visual elements. The background mountains add some visual interest, but are subordinate to the surrounding landscape due to distance. The agricultural landscape is primarily intact on the west side of Sossaman Road, but it is being encroached upon primarily by industrial developments. The broad, weedy expanse of vacant land west of Sossaman Road and east of the Phoenix Subdivision is visually chaotic. These disparate land uses lack unity, or overall coherence and visual harmony, due to their contrasting visual elements. However, landscaping in residential areas west of Rittenhouse Road enhances visual quality. Therefore, visual quality within the AVE ranges from low to moderately high.

3.4 KOP Existing Visual Character and Quality

As mentioned in Section 3.2, OEA selected seven KOPs (KOP 1 through KOP 7) to represent sensitive viewing locations for the impacts analysis (Figure 3-10). VIA practitioners usually select such views because they are either critical or representative of the visual character of either the environment or the project (FHWA 2015). The following text describes these seven KOPs. Multiple photographs present panoramic views where the visual setting was notably different at the perimeter of the view or to best capture project elements. Otherwise, this analysis includes single photographs where the view did not, or would not, noticeably change to either side.

Figure 3-10. KOP Locations



3.4.1 KOP 1

KOP 1 represents views for north-facing residents on Germann Road between 196th Street and Hawes Road. KOP 1 also captures northern views for attendees at Heritage Academy Charter School, a distinctive, 4-story, red brick school building that faces north. Residential viewers are defined as those who "live within viewing distance" of expected visual changes and include residents of single-family homes, condominiums, or apartments and others who occupy permanent shelter (FHWA 2015). Residents' "visual preferences tend toward a desire to maintain the existing landscape as it is—they settled where they are for a reason, including how their neighborhood looks. They are not very interested in change, even change that purports to improve the quality of their lives, unless they participated in defining the changes" (FHWA 2015). Schools are defined as institutional project neighbors. Viewers include employees, who can be permanent, and visitors, who receive the institution's services and are transitory. Institutions often want to express a public face and prefer to extend the duration of views of their buildings and grounds (FHWA 2015). KOP 1 also represents views of drivers and passengers traveling on Germann Road primarily as commuters, tourists, or shipping travelers. However, drivers would be more focused east or west along the road and may only fleetingly glimpse views to the north.

The visual specialist photographed KOP 1 from the sidewalk paralleling the south side of Germann Road, which is separated from the residential area by a solid, approximately 6-foot-tall wall and a row of landscaped deciduous trees. The trees' leaves form dense clusters above the height of the wall, adding to its screening effect.

Germann Road occupies a large horizontal swath of gray asphalt in the immediate foreground, beyond which commercial construction is currently underway to the northwest. Figure 3-11 depicts gray, one- to two-story buildings in various stages of construction, as well as scaffolding, fencing, orange-and-white striped roadway cones, and a bulldozer. Sporadic tall weeds and grasses adjacent to the road add slight visual interest in the form of color and texture. Boxy, gray, windowless commercial buildings appear small in the distance but effectively block farther views of the outlying mountains, which appear low due to distance. An undeveloped fallow field is directly north of this KOP. Figure 3-12 provides a somewhat open view across this field of the distant Superstition Mountains; however, short, blocky commercial buildings obscure this view to the east and west, providing only a narrow view of the mountains. A vehicle storage facility and associated landscaping set back approximately 730 feet from Germann Road to the northeast completely blocks farther views in that direction (Figure 3-13). The length of this building creates the effect of a solid brown wall beyond the grassy field. Bright blue sky, which is mostly uninterrupted, occupies the upper half of the view from KOP 1.

Figure 3-11. KOP 1 looking northwest toward new construction



Figure 3-12. KOP 1 looking north



Figure 3-13. KOP 1 looking northeast toward vehicle storage facility



No visually memorable elements are visible. Commercial and industrial development in the foreground encroaches upon the background mountains, which are visible only through a narrow opening and are diminished by distance. Some of the buildings to the east and west share similar mass and height, but are not otherwise visually unified. Therefore, visual quality at KOP 1 is considered low.

3.4.2 KOP 2

KOP 2 represents views for north-facing residents on Germann Road approximately 0.4 mile east of Ellsworth Road (see Section 3.4.1 for a description of residential viewers). The visual specialist photographed this view from the sidewalk paralleling the south side of Germann Road, which is separated from the residential area by a solid, approximately 6-foot-tall wall and a row of young, landscaped deciduous trees and shrubs. KOP 2 also represents views of drivers and passengers traveling on Germann Road, as described for KOP 1.

Germann Road occupies a large horizontal swath of gray asphalt in the immediate foreground (Figure 3-14). A circular maintenance hole is a prominent feature in the asphalt beside bright white road striping. Views beyond the road to the north are mostly uninterrupted. A horizontal band of untended grasses in shades of yellow and green form rows of rounded clumps in the foreground. Large clusters of spikey, pale brown tumbleweeds mounded together interrupt the row of grasses. The low, linear roofs of Bell Bank Park, which opened in February 2022 just north of Pecos Road (Visit Mesa 2022), are visible as white horizontal lines just above the grassy swath. Tall lights associated with the park protrude in random vertical arrangements but are mostly indiscernible due to distance. Mountains rise in the distance as a low, irregular, purple-hued mass and are more distinctive in closer proximity (right side of view). The northwest and northeast views are similar. Bright blue sky occupies the upper half of the view.

Figure 3-14. KOP 2 looking north from Germann Road approximately 0.4 mile east of Ellsworth Road



The background mountains are distinctive but not particularly memorable because their irregular shapes, patterns, and colors are diminished by distance. Other than the road in the immediate foreground, the view is primarily intact, as development does not overly encroach upon the view, also due to distance. The various textures and colors in the foreground grasses and large weeds are discordant and not unified, creating a somewhat chaotic appearance. For these reasons, visual quality at KOP 2 is considered moderate.

3.4.3 KOP 3

KOP 3 represents views from the Redemption Church Gateway on Pecos Road approximately 0.4 mile west of 89th Place. Churches are considered institutional neighbors (see Section 3.4.1 for a description of institutional viewers). KOP 3 also represents views of drivers and passengers traveling on Pecos Road.

The visual specialist photographed this view from the sidewalk paralleling the south side of Pecos Road at the church's west parking entrance. Arranged on an angle, the church is set back between 100 and 200 feet from Pecos Road behind several rows of young, landscaped deciduous trees and shrubs that block most views from a row of low, north-facing, first-floor windows. This KOP also represents views for north-facing commercial establishments directly east of the church that are also separated from Pecos Road by a parking lot and landscaping.

Pecos Road occupies a large horizontal swath of gray asphalt in the immediate foreground (Figures 3-15 through Figure 3-17). A bright orange, temporary roadwork sign is an impermanent focal point adjacent to the road. Views beyond the road to the north are mostly uninterrupted except to the west. A horizontal band of green weedy grasses in a fallow field forms rows of rounded clumps behind a tan-colored dirt road shoulder in the foreground. A few

patches of yellow grasses interject the green swath. A row of low, windowless, gray, rectangular buildings and airport facilities, including an air traffic control tower, are beyond the grasses to the west (left). Mountains rise in the distance as a low, irregular, purple-hued mass, which is more distinctive in closer proximity, particularly where the jagged Four Peaks are visible (right side of view). The northwest and northeast views are similar. Bright blue sky occupies the upper half of the view.

Figure 3-15. KOP 3 looking northwest from Pecos Road approximately 0.4 mile west of 89th Place



Figure 3-16. KOP 3 looking north from Pecos Road approximately 0.4 mile west of 89th Place



Figure 3-17. KOP 3 looking northeast from Pecos Road approximately 0.4 mile west of 89th Place, with Four Peaks in the background



The background mountains add visual interest, particularly to the east where they are closer, but are not striking due to distance. Other than the road and sign in the immediate foreground, the view is only slightly encroached upon by development, which is mostly visible to the west (left) in the background. For the most part, the foreground grasses share similar colors and textures that help unify the foreground, with small interruptions. For these reasons, visual quality at KOP 3 is considered moderate.

3.4.4 KOP 4

KOP 4 represents views to the northeast from a residential area at the intersection of Pelican Drive and 191st Drive, directly west of Sossaman Road and approximately 250 feet from the Phoenix Subdivision (see Section 3.4.1 for a description of residential viewers). The visual specialist photographed this view from the sidewalk paralleling the south side of Pelican Drive. The houses in this neighborhood are two-story structures with second-floor windows.

Figure 3-18 shows the horizontal forms made by the gray asphalt of Pelican Drive, a tan sidewalk set within red-hued gravel, and an approximately 6-foot-tall, reddish-beige, solid wall in the immediate foreground. The wall contains a brick-like pattern that further accentuates its horizontal line. However, the wall is an imposing feature given its close proximity. A red-flowering bougainvillea in front of the wall to the left adds visual interest and helps soften the wall's encroachment. The wall blocks farther views except for conspicuous vertical elements directly behind it, including a tall evergreen tree and telephone poles, with heights that vary with distance. The tree occupies a large portion of the view and adds color and texture. A few short, spindly branches right of center indicate the tops of a shrub or tree behind the wall. Telephone lines cut draping horizontal lines across a vivid blue sky. Views to either side of Figure 3-18 are similar.

Figure 3-18. KOP 4 looking northeast from the intersection of Pelican Drive and 191st Drive



The wall is distinctive due to its mass, but not memorable, and encroaches upon farther views. The vertical poles also encroach upon the view as they interrupt the blue sky. The tree and shrub to the left add visual interest but are not memorable as they are not particularly unique in a landscaped residential area. The repeating pattern of the wall unifies the immediate foreground, but the view is unbalanced to the left and right. For these reasons, visual quality at KOP 4 is considered moderately low.

3.4.5 KOP 5

KOP 5 represents views to the north from the north end of a small, elongated (north-south) former residential area at the northwest intersection of Germann Road and Merrill Road; it also captures views of northbound drivers on Merrill Road (see Section 3.4.1 for a description of residential viewers). Fieldwork conducted in June 2022 indicates that the residences are currently abandoned. Just south of this viewpoint, several mature, deciduous trees contrast with the agricultural land uses that surround the few abandoned residences, blocking farther views to the north.

Figure 3-19 shows a north-facing view from Merrill Road approximately 0.25 mile north of Germann Road. Merrill Road occupies the majority of this view, particularly in the immediate foreground. The edges of this flat, tan-colored dirt road converge at a vanishing point in the distance to the east (right) side of the view, drawing the eye into the scene. A row of telephone poles parallels the east side of the road, creating a repeating, diminishing vertical pattern that also disappears at the vanishing point. Rounded clumps of green, weedy grasses line the east side of the road, beyond which clusters of dark green citrus trees block farther views to the north.

A beige cement canal, littered with dried vegetation, parallels the west side of Merrill Road, also diminishing toward the vanishing point. Another dirt road enters Merrill Road from the west (left), crossing the canal and creating a horizontal form that echoes the rows of green grasses or crops of varying heights, tone, and texture beyond it. A low, pale-hued industrial building surrounded by parked semitrucks associated with the Old Dominion Freight Line trucking company is visible on the horizon, as are a yellow piece of construction or farming equipment and a yellow cylindrical tank. Although small, these elements interrupt otherwise unbroken views of the mountains in the distance. The mountains' prominence varies by proximity, being more visible to the center and right side of the view.

Figure 3-19. KOP 5 looking north from Merrill Road approximately 0.25 mile north of Germann Road



The background mountains add visual interest, but are not particularly striking due to distance. Although the dirt roads and row of telephone poles encroach upon the view, they are consistent with the open agricultural setting. The distant industrial buildings slightly encroach upon the agricultural scene. The landscape elements form a coherent, harmonious visual pattern that is mostly free of visual chaos. For these reasons, visual quality at KOP 5 is considered moderate.

3.4.6 KOP 6

KOP 6 represents views from a pocket park at a cul-de-sac in a residential area at the end of Raven Drive directly west of the intersection of Rittenhouse Road and 198th Street. Viewers include recreational users and adjacent residents. The FHWA notes, "The visual preferences of recreational neighbors tend to be focused on, and associated with, their recreational activity. In general, they tend to prefer the status quo and are leery of visual encroachments that may cause adverse effects on the setting of their activity. They may also show willingness to entertain

improvements to visual resources that enhance their recreational experience" (FHWA 2015). See Section 3.4.1 for a description of residential viewers.

Figures 3-20 and 3-21 show highly manicured, landscaped elements in the immediate foreground beyond the paved asphalt cul-de-sac and pale cement sidewalk. The landscaped elements gradually rise in height from front to back, starting with three rows of low shrubs that are all trimmed to form boxy, flat-topped horizontal shapes that function like a solid wall. Medium-height, highly textured deciduous trees, including one with contrasting red seeds or flowers, add visual interest, as do the vivid fuchsia flowers that protrude above the shrubs. The trees cast dark shadows in the immediate foreground, as well as within their branches, increasing the perception of textural depth and varying shades of green. A thin area of mowed grass is visible behind the trees, and a white picket fence delineates the park from Rittenhouse Road behind it. Motor vehicles are the only indication of the road's presence. The Phoenix Subdivision railbed and two elevated tracks are sporadically and barely visible behind the motor vehicles, indicated by a pale-colored gravel bank topped by dark brown rails that form a single thin, horizontal line. The closest track is approximately 350 feet from the viewpoint. Low trees of varying shapes and tones occupy the horizon line. A few light posts and telephone poles and lines protrude into the bright blue sky.

Figure 3-20. KOP 6 looking northeast from Raven Drive cul-de-sac



Figure 3-21. KOP 6 looking east from Raven Drive cul-de-sac



The foreground landscaping adds visual interest, particularly the contrasting colors in the flowering shrubs. While such verdant vegetation is uncommon in a desert environment, it is not unique in the residential settings of the area. Therefore, the view is somewhat memorable. The park elements are free from encroachment, maintaining the integrity of the visual patterns created by the landscaping. These elements join together to form a coherent, harmonious visual pattern that is free of visual chaos, resulting in a high degree of unity. Therefore, visual quality at KOP 6 is considered moderately high.

3.4.7 KOP 7

KOP 7 represents views from the Benjamin Franklin High School running track that surrounds a football field directly south of the school's baseball diamond. The school is north of Germann Road and southwest of Rittenhouse Road. This KOP also represents views of spectators in the bleachers on the south side of the baseball diamond (see Section 3.4.1 for a description of institutional viewers and 3.4.6 for a description of recreational viewers).

Figure 3-22 is a slightly elevated view that looks somewhat down on the baseball field. Green grass, a cement sidewalk, and a covered chain-link fence that surrounds the ball field create strong horizontal lines in the foreground. The fence is a dominant visual feature. Most of the fence cover is tan in the immediate foreground and cobalt blue on the opposite side of the field. The Phoenix Subdivision is barely visible as a dark gray, thin, horizontal line atop a bed of light gray fill and would be more detectable when trains are traveling along the track. The Phoenix Subdivision roughly parallels the line formed by the farther fence. A short, narrow strip of vegetation is behind and parallels the Phoenix Subdivision in the middle ground. The mountains created a low, slightly undulating, purple-hued form on the distant horizon. Lights and a telephone pole protrude vertically into the bright blue sky that occupies half of the view.

Figure 3-22. KOP 7 looking northeast from Benjamin Franklin High School running track



The background mountains add visual interest by breaking up the flat horizon line but are not particularly striking due to distance. The fence surrounding the ball field encroaches upon the view, and its alternating colors diminish visual integrity. Tall poles also encroach upon, and interrupt, the expanse of blue sky. The uniform color and height of the grass creates a broad, uninterrupted swath. However, the dissimilar patterns and colors in the fence do not form a harmonious visual pattern, resulting in low unity. For these reasons, visual quality at KOP 7 is considered low.

Chapter 4
Environmental Effect Assessment

This chapter defines how the visual character and quality of the AVE overall, as well for each KOP, would change under the No-Action and Action Alternatives. The impact analysis for Alternatives 1 and 2 also considers visual effects from the planned Phoenix Subdivision support tracks. This chapter also analyzes impacts to the experience of viewers. This analysis defines the degree of impacts as beneficial, adverse, or neutral.

4.1 No-Action Alternative

Under the No-Action Alternative, the Board would not authorize PIRATE, and UP would not construct and operate the proposed rail line or the planned Phoenix Subdivision support tracks. Accordingly, UP would not construct the wye, elevated tracks, crossing gates, support tracks, or other associated features. Therefore, no changes would occur to visual resources from construction and operation of the proposed rail line or the planned Phoenix Subdivision support tracks. Approximately 73,200 trucks per year would continue to use local streets to transport industrial materials to and from the PAMZ (Mesa 2021). These trucks would continue to temporarily block farther views for viewers in the immediate foreground and increase the industrial nature of the landscape, which also would become increasingly industrial with planned future development.

4.2 Alternative 1

Overall, impacts under Alternative 1 and the planned Phoenix Subdivision support tracks would include long-term views of the railbeds, tracks, and trains. The tracks would be elevated no higher than approximately 15 feet above the existing ground, resulting in minimal visual impact from most viewpoints. Short-term impacts would occur from views of rail cars as they move through the AVE and temporarily block views beyond the tracks. Viewers would see 30 to 35 cars per train during initial service and 70 cars per train at full PAMZ build-out, approximately 4,500 feet long and 15 feet high. Potential adverse impacts could result from long-term views of parked rail cars, such as at the PIRATE yard, and from views of the new wye. Impacts would result from the following project elements depending on viewing location:

- Two to five rows of parked rail cars at the PIRATE yard directly south of the Phoenix-Mesa Gateway Airport where three tracks are currently proposed, with three more in the future.
- One row of parked rail cars along a second run-around track generally between Crismon and Signal Butte Roads.
- Parked rail cars at the Commercial Metals Company and Fujifilm at the eastern end of the AVE.
- Long-term views of the wye and trains traveling through it where PIRATE would connect to the existing Phoenix Subdivision adjacent to Rittenhouse Road.

- Long-term views of road-crossing devices, such as lighted moving gates, alternating flashing red lights mounted on a crossbuck sign, pavement markings, and advanced warning signs. Vertical elements planned along the proposed rail line and the existing Phoenix Subdivision would match existing elements in height and form and would not exceed 32 feet (the fully extended mast arm of crossing gates).
- Long-term views of detention basins up to 10 feet deep at the wye, PIRATE yard, and TRW Safety Systems. Some viewers may see these basins as a beneficial impact, as water features are uncommon in the AVE.

Additional visual changes would result from a decrease in heavy truck traffic that currently transports cargo, much of which would be handled by train. As noted in Section 3.3, Pecos Road and to Germann Road are used monthly by more than 6,100 trucks (approximately 73,200 per year) carrying industrial materials and manufactured products to and from the PAMZ. Forty-one percent of this heavy truck traffic, or approximately 30,000 truck trips, would be removed from local roads the first year of operation.

The PIRATE footprint generally would vary depending on the need for parallel ditches and/or access roads. The proposed rail line would be about 30 feet wide, but the typical width of the alignment would expand up to about 90 feet to include adjacent shoulders and drainage ditches. At the PIRATE yard, the initial width would be about 100 feet to accommodate three tracks and an adjacent access road. Along the Phoenix Subdivision, the tracks would be widened from the existing 30 feet up to about 80 feet to accommodate two new tracks and a turnout pad. Where connecting to the wye, widths would reach up to about 110 feet where tracks are separated.

The proposed rail line east of, and including, the wye would mostly affect vacant and agricultural land, as well as smaller industrial areas that are visible to few sensitive viewers. Overall, the AVE would continue to transition to a primarily industrial landscape due to future planned developments, which can be compatible with railroad infrastructure, such as tracks and rail cars. The approximate total acres of vegetation removal include the following:

- Agricultural: 152 acres
- Developed: 2 acres
- Desert scrub: 275 acres

Approximately 7.3 acres of mature citrus trees west of Signal Butte Road would be removed from the agricultural areas. However, no visually distinctive native vegetation, such as tall cacti, would be affected.

Construction activities would create temporary visual impacts from views of staging areas, heavy equipment, and personnel.

4.2.1 KOP 1

Located approximately 1.0 mile north of KOP 1, PIRATE would be barely visible as a horizontal line above the tall grasses in the immediate foreground and beyond the gray, blocky buildings in the middle ground. Distance and interference caused by the vegetation and buildings would make the railbed and track nearly imperceptible. Two to five rows of parked rail cars at the PIRATE yard directly south of the Phoenix-Mesa Gateway Airport are not expected to be noticeable for the same reasons. Although movement of trains along the track would call attention to PIRATE and the rail cars themselves, they would be visible for a short, but recurring, time between the buildings to the east and west. The rail cars would appear no taller than the buildings in the middle ground, which would continue to dominate much of this view. In addition, the background elements, such as distant airport structures and mountains, would help visually absorb the presence of the trains. For these reasons, the environment would be able to visually absorb the potential changes, resulting in a primarily high degree of compatibility from this view. Therefore, the visual character and visual quality of KOP 1 are not expected to noticeably change and would remain low.

A solid, approximately 6-foot-tall wall and a row of landscaped deciduous trees, which adds to the wall's screening effect, would hinder views in this direction and minimize impacts for residents along Germann Road.

Temporary construction impacts would include views of construction equipment and dust in the vicinity of the proposed rail line. These impacts would be short term and end when construction is complete.

4.2.2 KOP 2

Located approximately 0.75 mile north of KOP 2, PIRATE would be visible as a horizontal line above the grasses and clumps of vegetation in the immediate foreground. The railbed would be consistent with, and would repeat, the horizontal line created by the middle ground horizon line. The railbed would likely obscure views of the Bell Bank Park buildings that are somewhat visible to the north, resulting in a slight beneficial impact, as the view would appear to have fewer human-made intrusions given the mostly unobtrusive nature of the railbed. The track, which would be raised up to 15 feet above the existing ground surface, would interfere with views of the distant mountains to a minor degree. Passing trains, at approximately 15 feet high, would further obscure views of the mountains. This effect would be temporary, but recurring, and would have less impact to the west side of the view where the track would be slightly farther away. For these reasons, the environment would be able to visually absorb the potential changes, resulting in a moderately high degree of compatibility from this view. Therefore, the visual character and visual quality of this KOP are not expected to noticeably change and would remain moderate.

A solid, approximately 6-foot-tall wall blocks lower views of the mostly one-story houses that face this view. Rows of young shrubs and deciduous trees add to the wall's screening effect, which would increase as the vegetation matures, minimizing impacts to residents along Germann Road in this area.

Construction impacts would be similar to KOP 1 but slightly more visible due to closer proximity (0.75 mile compared to 1.0 mile).

4.2.3 KOP 3

PIRATE would curve toward the viewer in this view, trending diagonally from the northwest to southeast, thereby appearing closer on the east side of the view. The distance of the track from the viewer would range from approximately 0.5 to 0.3 mile northwest to northeast.

Similar to KOP 2, the railbed would appear as a horizontal line along the horizon. However, the railbed would appear wider and occupy slightly more space on the east side of the view where the track would be closer. Also similar to KOP 2, the railbed would obscure the row of low buildings to the west (left), resulting in a slight beneficial impact. The track would interfere with views of the distant mountains in the center and east side of the view to a slight degree. Passing trains would further obscure views of the mountains on a temporary, but recurring, basis. The trains would be most visible from this KOP given their proximity. The PIRATE yard, where trains may be parked on two to five yard tracks for indefinite periods of time, is not expected to be visible as these yard tracks would be farther south and east of the airport buildings, which are only minimally perceptible. For these reasons, the environment would be able to visually absorb the potential changes, resulting in a moderately high degree of compatibility from this view. Therefore, the visual character and moderate visual quality of this view would remain unchanged.

Views from the Redemption Church Gateway would be somewhat blocked as it is set back between 100 and 200 feet from Pecos Road behind several rows of young, landscaped deciduous trees and shrubs. As the vegetation matures over time, this effect would increase. Views of PIRATE from KOP 3 for people attending church services and activities, as well as employees and patrons of the adjacent commercial enterprises, would be of short duration because their attention would be focused indoors. These factors would reduce impacts to sensitive viewers at this KOP.

Construction impacts would be similar to KOP 1 but more visible due to closer proximity (0.3 mile compared to 1.0 mile).

4.2.4 KOP 4

Ground-level views from KOP 4 would be obscured by the solid brick wall shown in Figure 3-18. However, viewers at second-floor windows in the adjacent houses would be able to see beyond the wall. These viewers would see the Germann siding extension parallel to the west side of the Phoenix Subdivision main line track, which would be approximately 230 feet from the closest viewer and slightly closer than the existing main line track. Impacts of the additional track would be minimal because it would be visually consistent in form, shape, and line with the existing main line track, resulting in a high degree of compatibility. These viewers may also be able to see the drainage ditches adjacent to the Germann siding extension, as well as portions of the wye. However, a row of landscaped evergreen trees opposite the wall paralleling the north side of Pelican Drive would help obscure any second-story views of the wye.

Second-story viewers would see more trains due to the addition of a new track. The trains would be a similar type (freight) to the trains that currently use the line. Because viewers would be limited to those from the second story, and the additional track would be consistent and compatible with the existing main line track, long-term visual impacts would be minor. Therefore, the visual character and visual quality of this view are not expected to change and would remain moderately low.

Construction impacts along the Phoenix Subdivision would be similar to KOP 1 but noticeably more visible from second-floor windows due to closer proximity, as the TCE would be directly behind the brick wall. In addition, a TCE would be located along Sossaman Road immediately adjacent to this KOP. The existing brick wall would mostly obscure construction activities as described for KOP 1, but construction would be noticeably more visible from the second-story windows of approximately six houses facing east in this area.

4.2.5 KOP 5

Located approximately 0.5 mile north of KOP 5, both the proposed rail line and run-around track would likely be visible as a single horizontal line in front of the parked freight trucks and Old Dominion Line building. The railbed would block some views of the parked trucks, although not likely the building itself, creating a more unbroken, uniform horizontal line delineating the base of, but not obscuring, the distant mountains. Although movement of trains along the tracks would call attention to PIRATE and the rail cars themselves, they would be visible for a short, but recurring, time. However, trains may be parked for indefinite time periods along the run-around tracks, which would be visible from this KOP. The rail cars would likely appear no taller than the freight trucks. The mountains in the background would help visually absorb the presence of the trains, resulting in a moderate degree of compatibility from this view. Therefore, a minor change to visual character is expected, primarily due to views of parked trains. This change is not expected to modify the existing moderate visual quality at this KOP.

Because the residential area adjacent to Merrill Road appears to be abandoned and dense vegetation surrounds the houses, only northbound drivers are expected to experience this specific view, minimizing impacts to sensitive viewers.

Construction impacts would be similar to KOP 1 but slightly more visible due to closer proximity.

4.2.6 KOP 6

A new working track would be constructed east of the main line track and Germann siding that form the Phoenix Subdivision approximately 360 feet from this viewpoint. The height of the gravel railbed would not change, and the new support track would not be visible, as all three tracks would continue to appear as a single, thin, dark brown horizontal line. As under existing conditions, the movement of trains along the tracks would call attention to PIRATE and the rail cars themselves, and would be visible more often due to the additional support track. However, the trains would be visible for a short, but recurring, time between the landscaping and cars along Rittenhouse Road. For these reasons, the environment would be able to visually absorb the potential changes, resulting in a high degree of compatibility from this view. Therefore, no change to visual character or quality, and no perceptible impact to sensitive viewers, would occur. Visual quality would remain moderately high.

Construction impacts along the Phoenix Subdivision would be similar to KOP 1 but noticeably more visible due to closer proximity (360 feet compared to 1.0 mile).

4.2.7 KOP 7

This view faces the proposed wye, where two new tracks would connect to the Phoenix Subdivision. The wye would split approximately 0.3 mile northeast of the Phoenix Subdivision, with two tracks diverging toward the existing main line track in the form of opposing curves. The wye would meet the Phoenix Subdivision in two places approximately 0.2 mile east and north of this KOP and would be level with the main line track, diminishing their visibility. With the exception of a few landscaped trees along Rittenhouse Road, all vegetation would be removed from within the wye to accommodate these tracks, an adjacent detention basin, and contractor staging. The lack of vegetation and the presence of moving trains would call attention to the tracks. However, the wye would be only minimally visible, even from this elevated viewpoint. In addition, despite the elevated viewpoint, the detention basin planned adjacent to the wye is not expected to be visible because it would be depressed and below the line of sight.

As under existing conditions, the trains would be visible for a short, but recurring, time just above the Benjamin Franklin High School baseball diamond outfield fence, and more trains would be visible with the addition of the wye. Trains traveling northeast from the Phoenix Subdivision along PIRATE would appear smaller with distance. For these reasons, the environment would be able to visually absorb the potential changes, resulting in a primarily high degree of compatibility from this view. Because the wye would be slightly perceptible and trains currently travel on the Phoenix Subdivision, no change to visual character or low visual quality is expected.

People with this view include students and athletes using the high school track and spectators watching ball games. Runners would move through the area quickly and would be focused straight ahead, minimizing their exposure to the view. Spectators would be focused primarily on ball games. Both viewer types would also be exposed to this view sporadically (e.g., only when games are in process) and for short periods of time. Views from the ball field would be further reduced during any night games, when the ball field would be brightly lit and the Phoenix Subdivision and wye would be dark. Lights on passing trains may call further attention to them, as under existing conditions. For these reasons, impacts to sensitive viewers would be negligible.

Temporary construction impacts would include views of construction equipment and personnel, as well as dust, approximately 0.2 mile from this KOP. These impacts would be short term and end when construction is complete.

4.3 Alternative 2

Under Alternative 2, impacts would be the same as Alternative 1 except at KOP 2 and KOP 5. In both cases, PIRATE would be approximately 0.25 mile closer to the viewpoints. Impacts would be similar to Alternative 1 but more heightened at KOP 2 and KOP 5 due to the closer presence of the tracks and trains. At KOP 2, views of the track and trains would decrease to the west, where the tracks would curve to the northwest toward the rail crossing of Ellsworth Road. As described for Alternative 1, the tracks would appear as a horizontal line on the horizon at both KOPs. Trains would appear slightly larger, resulting in no change to visual character or quality and no noticeable change to sensitive viewers, whose views would continue to be obscured, as described for Alternative 1.

Construction impacts would be the same as Alternative 1 but would be slightly more prominent due to closer proximity.

Chapter 5
Recommended Mitigation

During agency coordination in March 2022, Phoenix-Mesa Gateway Airport staff indicated that restrictions apply to off-airport lighting installed in close proximity to the runways. For example, all lighting shall be directed downward to avoid glare due to the potential safety issues for planes landing at Phoenix-Mesa Gateway Airport. All lighting installed as part of PIRATE and the planned Phoenix Subdivision support tracks shall comply with regulations to preserve visibility around airports, such as 14 Code of Federal Regulations 77 (Safe, Efficient Use, and Preservation of the Navigable Airspace), Arizona Revised Statute 28-8462 (Airport hazard; public nuisance; prevention and elimination), and Arizona Revised Statute 49-1102 (Shielding of outdoor light fixtures; exemptions). Project lighting shall also comply with the zoning provisions of Mesa's Airfield Overlay District, which prohibit land uses that "impair visibility in the vicinity" of the Phoenix-Mesa Gateway Airport. Therefore, OEA is recommending mitigation that prior to project-related construction, UP shall provide Phoenix-Mesa Gateway Airport an opportunity to review and approve the final project lighting design plans.

As demonstrated in this VIA, no substantial changes to visual character or visual quality are expected under Alternative 1, Alternative 2, or the planned Phoenix Subdivision support tracks. Impacts to viewers are expected to be minimal because many sensitive viewpoints are obscured by landscaping and/or retaining walls, as well as by development, which is ongoing and expected to increase in the future (see Cumulative Impacts section in the EA prepared for this project). In addition, viewer activity, such as attending indoor church services or watching a baseball game, would focus attention away from views of the alternatives or the planned Phoenix Subdivision support tracks at many locations. For these reasons, no additional mitigation measures are recommended for visual resources.

Chapter 6
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Appendix A
Viewpoints Considered for Analysis

Tables A-1 and A-2 identify the rationale for retaining or dismissing viewpoints (VPs) from analysis as key observation points (KOP). Figure A-1 depicts the viewpoint locations. The shaded rows in Table A-1 indicate VPs selected for analysis as KOPs.

Table A-1. Viewpoints Considered for Analysis

VP No.	Location	Description	Retain?	Rationale	KOP No.
1	Heritage Gateway Academy	Large, 4-story school on Germann Road facing north. Views may be possible from the third and fourth floors. Views from the first and possibly second floors would be blocked by another school and industrial building currently under construction to the north.	N	Viewer activity would focus attention elsewhere; views likely only from third and fourth floors.	N/A
1a	Neighborhood east of Heritage Gateway Academy	Residences face north along Germann Road, east of the academy. At 0.50 to 0.75 mile south of PIRATE, views would likely be indistinct, obscured, or blocked by new construction to the north.	Y	Views may be obscured or indistinct, especially in the future, but represent sensitive viewers (residences and academy).	1
2	Gateway Quarter neighborhood	New residential area on Germann Road, east of Ellsworth Road. View of PIRATE may be obscured by distance or future construction to the north; however, viewers may be able to see trains.	N	VP 2a better represents these viewers.	N/A
2a	Gateway Quarter neighborhood	Same as VP 2 but slightly farther east.	Y	Residential area is most sensitive viewer type; views of trains would be more noticeable compared to views of the track.	2
3	Redemption Gateway Church	Church set back from and facing Pecos Road with views to the north. View of PIRATE may be obscured by distance, but viewers may be able to see trains.	Y	Viewer activity would focus attention elsewhere, but viewers would be in closest proximity to PIRATE.	3

VP No.	Location	Description	Retain?	Rationale	KOP No.
3a	Neighborhood south of church	Residential area south of Woodland Avenue. Views from the west end of the neighborhood are currently open to the north.	N	View of PIRATE would be obscured by the church and new construction to the north of this neighborhood. Used VP 3 to represent this view.	N/A
3b	Neighborhood south of church	Same as VP 3 but slightly farther east.	N	Same as VP 3a.	N/A
4	Pelican Drive	Dense residential area along Pelican Drive adjacent to 191st Drive, just west of Sossaman Road. Views from the ground are blocked by a solid wall around this part of the neighborhood. Viewers on the second floor could see the Phoenix Subdivision.	N	VP 4b better captures this view.	N/A
4a	Pelican Drive	Views from the ground are partially blocked by a shorter wall around this part of the neighborhood. Viewers on the second floor could see the Phoenix Subdivision.	N	Same as VP 4.	N/A
4b	Pelican Drive	Same as VP 4a.	Y	Viewers on the second floor could see the Phoenix Subdivision. Represents views of changes on Phoenix Subdivision.	4
5	ASU campus	Campus buildings east of Powers Road and north of Pecos Road. The housing at the original VP 5 is uninhabited and not accessible. A berm to the south makes it unlikely that viewers would see PIRATE.	N	No sensitive viewers and/or views.	N/A

VP No.	Location	Description	Retain?	Rationale	KOP No.
6	Merrill Road, north of Germann Road	Small, narrow row of residences at northwest corner of Germann Road and Merrill Road. Residents along the north side of Germann Road are unlikely to see PIRATE because of vegetation that screens views from the houses. PIRATE would be visible from the north end of this area, adjacent to an abandoned and house. In the future, views are expected to be blocked by The Cubes project that will cover the farmland west of/adjacent to the orchard in light industrial and warehouse buildings.	Y	Views blocked by vegetation that surrounds houses, but retained due to high viewer sensitivity of residents.	5
7	Emperor Estates	Small park at the end of a cul-de-sac on Raven Drive, directly northwest of 198th Street where it intersects Rittenhouse Road. Direct views of the Phoenix Subdivision from a private, neighborhood park.	N	VP 7a better captures this view.	N/A
7a	Emperor Estates	Same as VP 7.	Y	Same as VP 7; deciduous landscaping blocks most views. Retained due to sensitive nature of park users and adjacent residents.	6
7b	Emperor Estates	Same as VP 7.	N	VP 7a better captures this view.	N/A
8	Ben Franklin High School ball field – outfield	Views of the Phoenix Subdivision and the wye from the ground blocked by a blue outfield fence.	N	No views of the Phoenix Subdivision or the wye.	N/A

VP No.	Location	Description	Retain?	Rationale	KOP No.
8a	Benjamin Franklin High School baseball field	High school north of Germann Road and west of Rittenhouse Road with running track and baseball field. Game spectators in bleachers would directly face the Phoenix Subdivision and the proposed wye.	N	Partial screening of views of the wye; attention focused on games and only when games are occurring. VP 8b captures this view.	N/A
8b	Benjamin Franklin High School running track	The running track is elevated above the ball field. Therefore, the view toward the Phoenix Subdivision and the wye is much clearer because the track provides views across the ball field and surrounding fence toward the wye.	Y	Viewers would be limited in number, frequency, and duration, but the VP was retained due to proximity to proposed wye.	7
9	Williams Field Road	Houses on Texas Avenue are fully built out and yards fenced in with solid block walls that would preclude views. Alternate VP 09 from Williams Field Road is outside/south of the block walls. The neighborhood is too distant from PIRATE for a clear view. Also, views are likely blocked by SR 24.	N	Views obscured by distance and development.	N/A
10	222nd Street, north of PAMZ	Small, low-density residential area just north of new SR 24 route. Views of PIRATE would be blocked by SR 24.	N	Views obscured by SR 24 currently under construction.	N/A
10a	Signal Butte Road, north of PAMZ	Same as VP 10.	N	Same as VP 10	N/A
11	Desert Sky Park	Outdoor public park at northwest corner of Power Road and Desert Sky Park Road. The park is in a depression and would not have views of PIRATE. At the park entrance, existing development and vegetation would block views of PIRATE.	N	Views obscured by topography (depression), development, and vegetation.	N/A

VP No.	Location	Description	Retain?	Rationale	KOP No.
12a	Superstition Vistas – northern viewpoint	Ironwood Road is approximately 2.3 miles north of the SR 24 future terminus. The eastern end of PAMZ is barely visible; PIRATE would be obscured by terrain and existing development.	N	Views obscured by terrain and existing development and distance.	N/A
12b	Superstition Vistas – eastern VP	Intersection of Germann Road and Schnepf Road. The eastern end of PAMZ is slightly more visible than from VP 12a, but PIRATE would be obscured by terrain and existing development. Several residences on the south side of Germann Road, east of the PAMZ; the view of PIRATE from these residences would also be obscured by terrain and existing development in the PAMZ.	N	Same as VP 12b	N/A

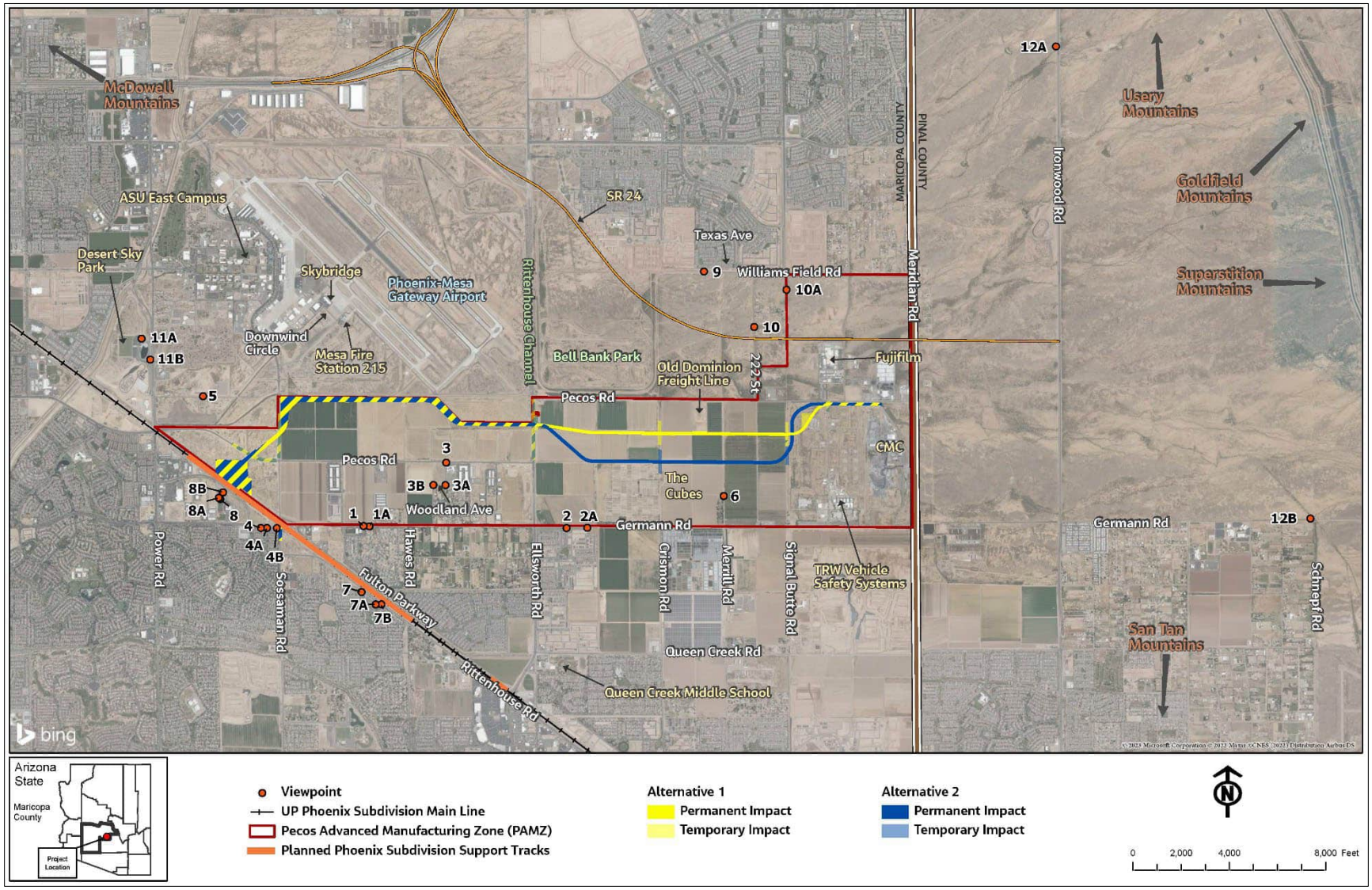
N/A = Not applicable
PAMZ = Pecos Advanced Manufacturing Zone
SR 24 = State Route 24

Table A-2. Additional Areas Considered but Dismissed

Area	Description	Rationale
Residential area south of Queen Creek Road and east of Queen Creek Middle School	High-density residential area with several houses facing north toward PIRATE along Queen Creek Road.	Dismissed due to distance (approximately 1.5 miles to Alternative 2) and use of VP 2 as better option.
Residences south of Germann Road between Hawes Road and Ellsworth Road	Low-density residential area with north-facing views along Germann Road.	Many houses are set back from the road and fronted with mature vegetation or buildings on north side of road. Views are better captured with VP 2 and/or VP 3/3a.
Residential area east of Fulton Parkway, adjacent to the existing Phoenix Subdivision	High-density residential are with several houses facing southwest toward Phoenix Subdivision.	Views toward the Phoenix Subdivision are blocked by a solid stone wall and landscaping. Existing tracks are not visible, but train cars are. Slight impact from short-term views of additional trains.
Park south of intersection of Emperor Boulevard and 198th Street	Park is sunken below grade near two high-density residential areas. Grassy area includes two basketball courts and landscaped trees. Views to the north are blocked by a solid brick wall elevated above grade.	The park's inferior (below-grade) view and solid brick walls surrounding the nearby residences block views toward the project.
Phoenix-Mesa Gateway Airport, north/northwest of PIRATE	No eastern-facing windows in the publicly accessible portions of the terminal. Also, the terminal does not face southeast toward the project.	No views of the project.
Skybridge (northwest of PIRATE), South Downwind Circle	Skybridge is a private hangar for corporate jets. The entrance faces southwest (toward PIRATE); however, people would not be able to see PIRATE because of a bermed area that would block views. The "plane side" of the hangar faces northeast, away from PIRATE. Also, Skybridge is a transportation land use based at an airport. Users' sensitivity to seeing railroad infrastructure is likely low.	Limited views, which are not facing the project. Transitory viewers.

Area	Description	Rationale
Mesa Fire Department Station 215 (north of PIRATE), South Downwind Circle	Adjacent to Skybridge. Views on the ground would likely be blocked by the same bermed area referenced above. This building has a second floor that may have windows facing south or southeast. The fire department is a municipal land use based on the runway at an airport. Users' sensitivity to seeing railroad infrastructure is likely low.	No views of the project. Transitory viewers and not a public view.

Figure A-1. Viewpoint Locations



Appendix K
Section 106 Consultation Documentation

PIRATE Section 106 Consultation Distribution List

Agency/Tribe	Contact Name	Position	APE Consultation (April 6, 2022)	Field Survey Memo (May 19, 2022)	Survey Results, NRHP Eligibility, Finding of Project Effect, Need for MOA (September 1, 2022)	MOA Meetings (October 18, 2022)	Final Survey Report, Revised NRHP Eligibility (November 22, 2022)	Draft MOA (December 8, 2022)	Revised Draft MOA (February 8, 2023)	Second Revised Draft MOA (March 10, 2023)	Addendum Survey (May 19, 2023)
Ak-Chin Indian Community	Robert Miguel	Chairman	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ak-Chin Indian Community	Elaine Peters	Him-Dak Museum Director	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Arizona Museum of Natural History	Emily Early	Archaeology, Ethnology, and Art Collections	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Arizona Museum of Natural History	Alison Stoltman	Director	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Arizona State Land Department	Mark Edelman	Director, Planning and Engineering	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Arizona State Land Department	David Schroeder	Archaeological Project Specialist	No	Yes	Yes	Yes	Yes	Yes	No	No	No
Arizona State Land Department	Michael Romero	Right of Way Project Leader	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Arizona State Land Department	Tiffany Grew	Archaeological Compliance Specialist	No	No	No	No	No	Yes	Yes	Yes	Yes
Arizona State Museum	Shannon Plummer	Arizona Antiquities Act Administrator	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Arizona State Museum	Patrick Lyons	Director	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bureau of Indian Affairs	Tamera Dawes	Realty Specialist	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No
Bureau of Indian Affairs	Garry Cantley	Archaeologist	No	Yes	Yes	Yes	Yes	No	No	Yes	No
U.S. Army Corps of Engineers	Sallie Diebolt	Arizona Branch Chief	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
U.S. Army Corps of Engineers	Lisa Robinson	Regulatory Assistant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
U.S. Army Corps of Engineers	Alexandra Ryan	Project Manager	No	No	No	No	No	No	No	No	Yes
Cox Communications	Percy Kirk	Southwest Region Manager	Yes	No	No	No	No	No	No	No	No
Federal Aviation Administration	Mike Williams	Manager	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Flood Control District of Maricopa County	Michael Fulton	Director	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Agency/Tribe	Contact Name	Position	APE Consultation (April 6, 2022)	Field Survey Memo (May 19, 2022)	Survey Results, NRHP Eligibility, Finding of Project Effect, Need for MOA (September 1, 2022)	MOA Meetings (October 18, 2022)	Final Survey Report, Revised NRHP Eligibility (November 22, 2022)	Draft MOA (December 8, 2022)	Revised Draft MOA (February 8, 2023)	Second Revised Draft MOA (March 10, 2023)	Addendum Survey (May 19, 2023)
Flood Control District of Maricopa County	Ed Raleigh	Senior Engineering Advisor	No	No	No	No	No	No	No	No	Yes
Gila River Indian Community	Stephen Roe Lewis	Governor	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gila River Indian Community	Barnaby Lewis	THPO	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gila River Indian Community	Larry Benallie, Jr.	Archaeological Compliance Specialist	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gila River Indian Community	Reylynne Williams	Cultural Resources Specialist	No	No	No	No	No	No	Yes	No	Yes
Gila River Indian Community	Darius Enos	Cultural Resources Specialist	No	No	No	No	No	No	Yes	No	Yes
Hopi Tribe	Timothy L. Nuvangyaoma	Chairman	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hopi Tribe	Stewart B. Koyiyumptewa	THPO	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
City of Mesa	J.D. Beatty	Senior Economic Development Project Manager	Yes	Yes	Yes	Yes	No	No	No	No	No
City of Mesa	William Jabjiniak	Economic Development Director	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Mesa Historical Museum	Susan Ricci	Executive Director	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mesa Historic Preservation Office	Michelle Dahlke	Historic Preservation Supervisor	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mesa Historic Preservation Office	Mary Kopaskie-Brown	Historic Preservation Officer	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Mesa Historic Preservation Office	Maura Jackson	Historic Preservation Advisor	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Mescalero Apache Tribe	Gabe Aguilar	President	Yes	Yes	Yes	Yes	No	No	No	No	No
Mescalero Apache Tribe	Eddie Martinez	President	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Mescalero Apache Tribe	Holly Houghten	THPO	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Queen Creek Irrigation District	Maaike Hough	George Cairo Engineering, Inc.	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No
Pascua Yaqui Tribe	Peter Yucupicio	Chairman	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Agency/Tribe	Contact Name	Position	APE Consultation (April 6, 2022)	Field Survey Memo (May 19, 2022)	Survey Results, NRHP Eligibility, Finding of Project Effect, Need for MOA (September 1, 2022)	MOA Meetings (October 18, 2022)	Final Survey Report, Revised NRHP Eligibility (November 22, 2022)	Draft MOA (December 8, 2022)	Revised Draft MOA (February 8, 2023)	Second Revised Draft MOA (March 10, 2023)	Addendum Survey (May 19, 2023)
Pascua Yaqui Tribe	Dr. Karl Hoerig	THPO	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Phoenix-Mesa Gateway Airport	Tony Bianchi	Airport Planner	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Phoenix-Mesa Gateway Airport	Carl D'Agosta	Environmental Coordinator	No	No	No	No	No	Yes	Yes	No	Yes
Town of Queen Creek	Heather Wilkey	Intergovernmental Relations Director	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Town of Queen Creek	David Lipinski	Capital Improvements Director	No	No	No	No	No	No	No	No	Yes
Salt River Pima Maricopa Indian Community	Martin Harvier	President	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Salt River Pima Maricopa Indian Community	Shane Anton	THPO	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Salt River Pima Maricopa Indian Community	Martha Martinez	NAGPRA Coordinator	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Salt River Pima Maricopa Indian Community	Angela D. Garcia-Lewis	Cultural Preservation Supervisor	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Salt River Pima Maricopa Indian Community	Sunday Eiselt	THPO Archaeologist	No	No	No	Yes	Yes	Yes	Yes	No	Yes
San Tan Historical Society	Keith Johanson	President	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SHPO	Caroline Klebacha	Archaeological Compliance Specialist	No	No	No	No	No	No	No	No	Yes
SHPO	Kathryn Leonard	SHPO	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SHPO	Mary-Ellen Walsh	Cultural Resources Compliance Manager	No	No	No	No	No	No	No	No	No
SRP	David Rousseau	President	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SRP	Dan Garcia	Senior Cultural Resources Specialist	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tohono O'odham Nation	Jefford Francisco	Cultural Resources Specialist	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tohono O'odham Nation	Peter Steere	THPO	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tohono O'odham Nation	Ned Norris, Jr.	Chairman	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Agency/Tribe	Contact Name	Position	APE Consultation (April 6, 2022)	Field Survey Memo (May 19, 2022)	Survey Results, NRHP Eligibility, Finding of Project Effect, Need for MOA (September 1, 2022)	MOA Meetings (October 18, 2022)	Final Survey Report, Revised NRHP Eligibility (November 22, 2022)	Draft MOA (December 8, 2022)	Revised Draft MOA (February 8, 2023)	Second Revised Draft MOA (March 10, 2023)	Addendum Survey (May 19, 2023)
Tonto Apache Tribe	Calvin Johnson	Chairman	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tonto Apache Tribe	Jeri DeCola	Cultural and NAGPRA Representative	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Union Pacific Railroad	Kevin Rice	Senior Manager, E/W Environmental	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Desert Archaeology. Inc.	Sarah Herr	President	No	No	No	No	No	No	No	No	Yes
Yavapai-Apache Nation	Jon Huey	Chairman	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Yavapai-Apache Nation	Tanya Lewis	Chairwoman	No	No	No	No	No	No	No	No	Yes
Yavapai-Apache Nation	Chris Coder	Tribal Archaeologist	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pueblo of Zuni	Val R Panteah	Chairman	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Pueblo of Zuni	Arden Kucate	Chairman	No	No	No	No	No	No	Yes	Yes	Yes
Pueblo of Zuni	Kurt Dongoske	THPO	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

April 6, 2022

Ms. Kathryn Leonard
State Historic Preservation Officer
Arizona State Parks, State Historic Preservation Office
1110 West Washington Street, Suite 100
Phoenix, AZ 85007

Re: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – in Maricopa County, Ariz.; Initiation of National Historic Preservation Act Section 106 Consultation and Proposed Area of Potential Effects

Dear Ms. Leonard:

Pursuant to 49 U.S.C. § 10901, the Union Pacific Railroad Company (UP) intends to request authority from the Surface Transportation Board (Board) to construct and operate approximately six miles of new rail line in Maricopa County, Arizona. Before making its decision on whether to grant such authority, the Board must consider the potential environmental impacts of the construction and operation of UP's proposed rail line, pursuant to the National Environmental Policy Act (42 U.S.C. §§ 4321-4370m-12), Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), the Board's environmental rules at 49 C.F.R. Part 1105, and related environmental laws. With this letter, the Board's Office of Environmental Analysis (OEA) is formally initiating consultation with your office pursuant to Section 106 of the National Historic Preservation Act and to solicit your comments regarding the proposed Area of Potential Effects (APE) for cultural resources for the proposed Pecos Industrial Rail Access and Train Extension (PIRATE) rail line referenced above. The general project area of the proposed rail line is depicted on Attachment 1.

Description of the Proposed Rail Line

UP is seeking authority from the Board to construct and operate approximately six miles of new common carrier rail line that would connect UP's Phoenix Subdivision main line track in Maricopa County, Arizona, to industrial properties southeast of the Phoenix-Mesa Gateway Airport. The Phoenix Subdivision main line track borders Mesa's Pecos Advanced Manufacturing Zone (PAMZ), which incentivizes industrial development and manufacturing operations through streamlined approvals and permits. Several large industrial companies are within the PAMZ, where rail line service is currently unavailable. According to UP, the closest rail transloading facility is approximately 40 miles away in downtown Phoenix. Therefore, existing manufacturing companies rely solely on trucking for transporting manufacturing

materials and shipping final products. The purpose of the proposed rail line is to meet the transportation and logistics needs of existing and future manufacturing businesses within the PAMZ and adjacent areas. UP believes that eliminating the need to truck cargo to the downtown Phoenix transload facility would allow and encourage businesses within the area to increase their current operations because of reduced shipping costs and potential increased shipping capacity.

Proposed Area of Potential Effects

In accordance with 36 C.F.R. § 800.4 (a)(1), OEA developed a proposed APE, depicted on Attachment 2. Potential effects of construction and operation of the proposed rail line to historic resources include direct physical impacts, vibration impacts, and indirect visual, auditory (i.e., noise), and atmospheric effects (e.g., fugitive dust). The APE is approximately 12.9 miles long and includes:

- 3.4 miles along the existing UP Phoenix Subdivision rail line between Power and Ellsworth roads for the wye that would connect the Phoenix Subdivision to the proposed rail line;
- 7.1 miles of proposed new rail line alternatives that begin at a wye connection to the UP Phoenix Subdivision main line and extend to the northeast and east; and
- 2.4 miles along roadway connections and grading extensions.

The APE averages between 200 and 300 feet wide but is variable depending upon the proposed construction footprint and any construction-related activities (e.g., staging, drainage structures, and crossings).

The APE includes a buffer of 100 feet (approximately 50 feet on either side of the construction footprint) around the proposed rail line and associated road crossing designs. In areas where known constraints exist, the buffer extends 100 feet on one side of the construction footprint to account for potential refinements to the alignment and staging areas that could occur beyond the current design.

Within the APE, the proposed rail line is defined by cut and fill limits to accommodate single track, triple track, and access road configurations, with an option to construct up to three additional future support tracks in select locations. The vertical elements of the proposed rail line consist of fill (including sub-ballast and ballast), wayside signs, and crossing gates and lighting for at-grade road crossings. Vertical elements planned along the existing Phoenix Subdivision main line track would match existing elements in height and form and would not exceed 32 feet (the fully extended mast arm of crossing gates). For the proposed rail line, the maximum height of fill and ballast would not likely exceed 15 feet. Wayside signs, crossing gates, and lighting would not exceed 32 feet (the fully extended mast arm of crossing gates).

The proposed APE, including the entirety of the proposed rail line where ground disturbance is expected to occur along with the buffer, totals 457.2 acres in area. The APE consists of a portion of the existing Phoenix Subdivision main line, two alternatives that would provide new industrial lead track, and grading extensions that would connect the new industrial lead track to eastern portions of the PAMZ. The alternatives were developed to avoid future

Bureau of Indian Affairs trust land located on a portion of the former Williams Air Force Base, Superfund sites within the former Williams Air Force Base, the Phoenix-Mesa Gateway Airport, and to minimize impacts to the agricultural lands and private properties that the alignment would cross.

Alternative 1 consists of UP's proposed action/preferred alignment and is based on the 30 percent design alignment provided by UP. East of Ellsworth Road, Alternative 1 considers landowner requests that the proposed rail line follow parcel lines to the north to avoid bisecting their properties. Alternative 2 is the same as Alternative 1 west of Ellsworth Road. East of Ellsworth Road, Alternative 2 consists of an independent alignment. Both alternatives include one or two support tracks in addition to the industrial lead track to support rail operations and a staging track adjacent to the wye.

Request for Input

OEA requests that you share your initial comments regarding any known architectural, archaeological, tribal, or other historic properties that may be located in the project area and your comments regarding the proposed APE, by **Friday, May 6, 2022**. Please send your written comments electronically to Adam Assenza, OEA's project manager for the environmental review, at Adam.Assenza@stb.gov. If you have any questions or would like to discuss the proposed rail line in more detail, please contact Adam Assenza at 202-245-0301.

Sincerely,

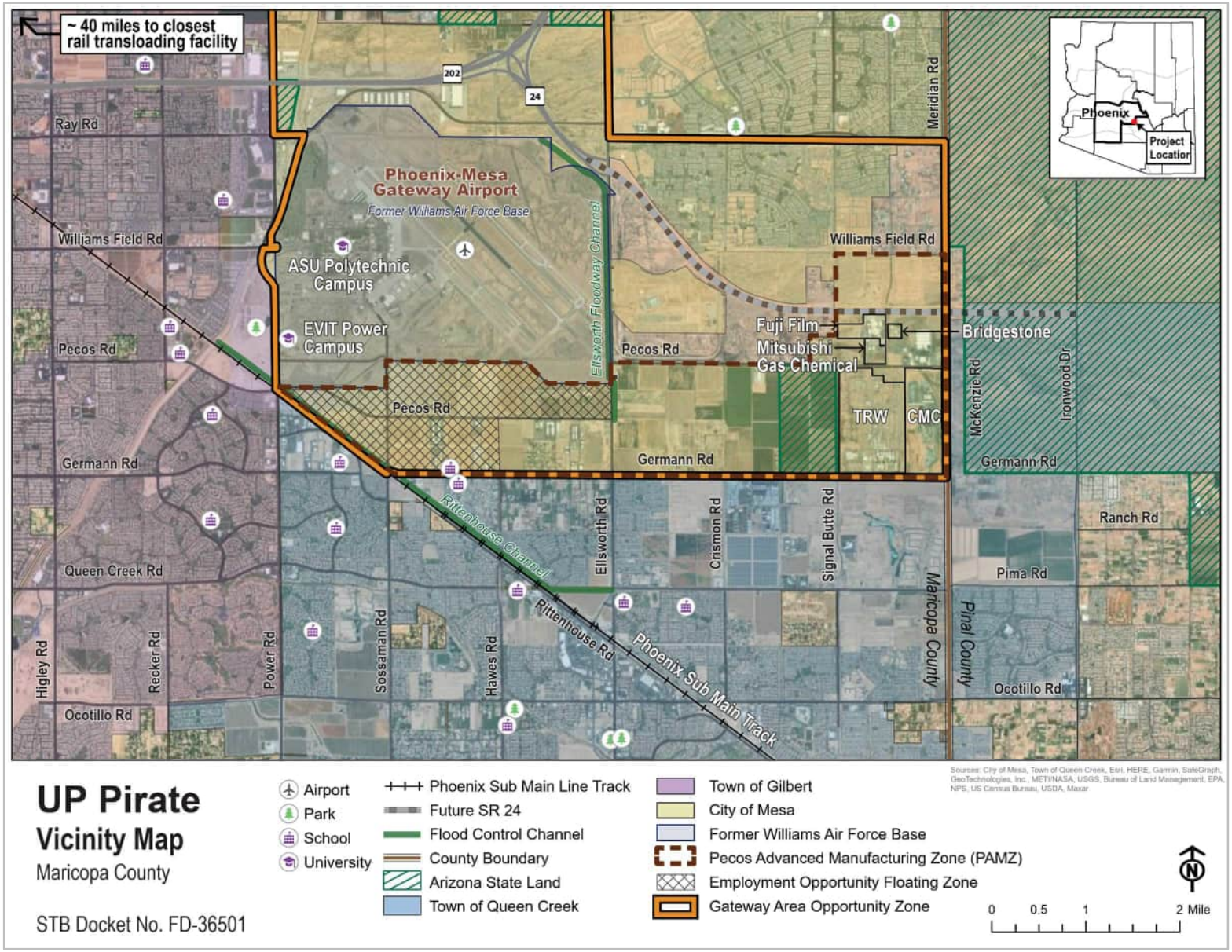


Danielle Gosselin
Director
Office of Environmental Analysis

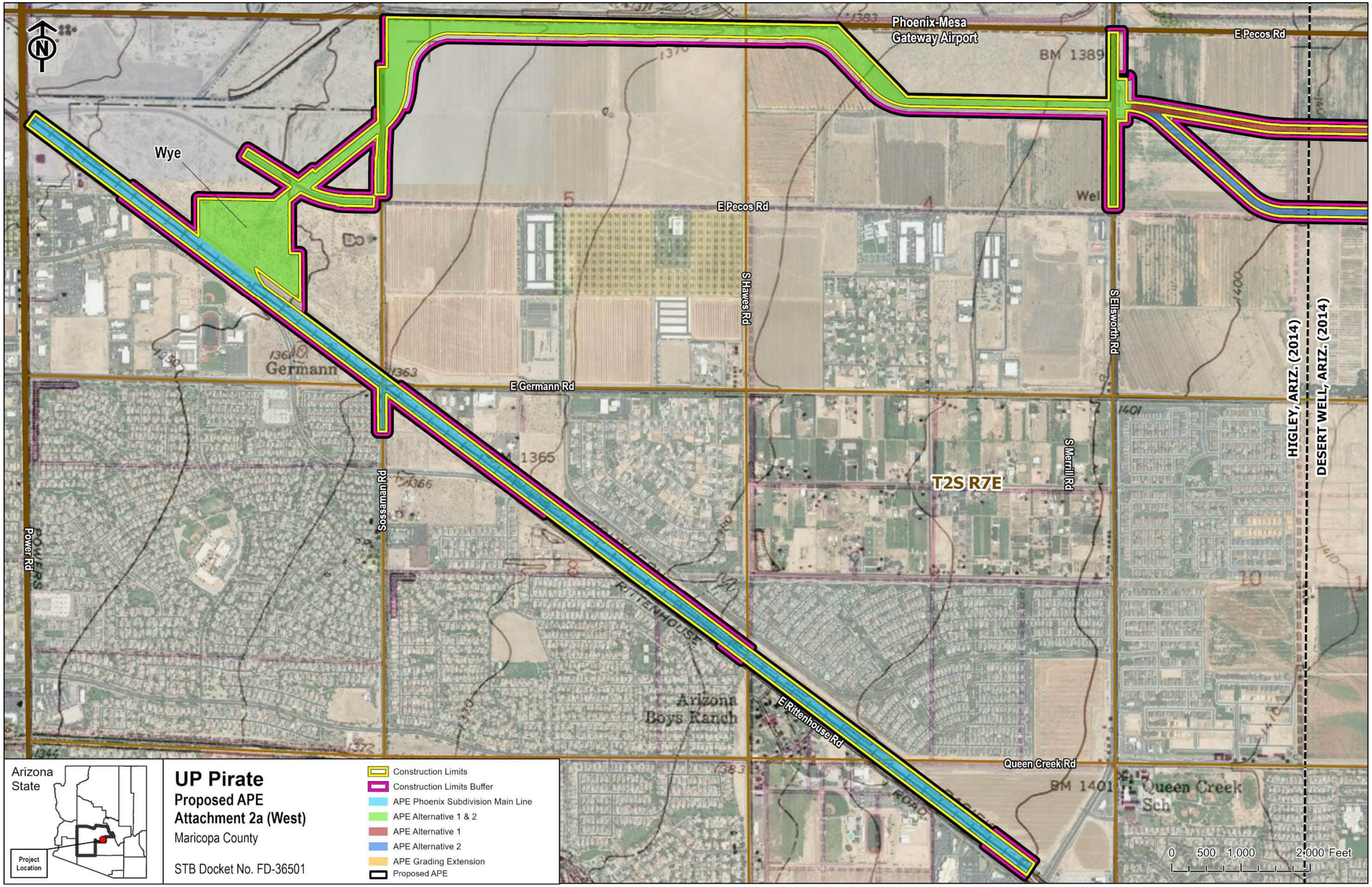
Enclosures:
Attachment 1 – Vicinity Map
Attachment 2 – Proposed APE Map (two sheets)

Cc: Adam Assenza, OEA Environmental Protection Specialist, Adam.Assenza@stb.gov
Alan Tabachnick, OEA Historic Preservation Specialist, alan.tabachnick@stb.gov
Maggie Buckley, Jacobs Project Manager, Maggie.buckley@jacobs.com

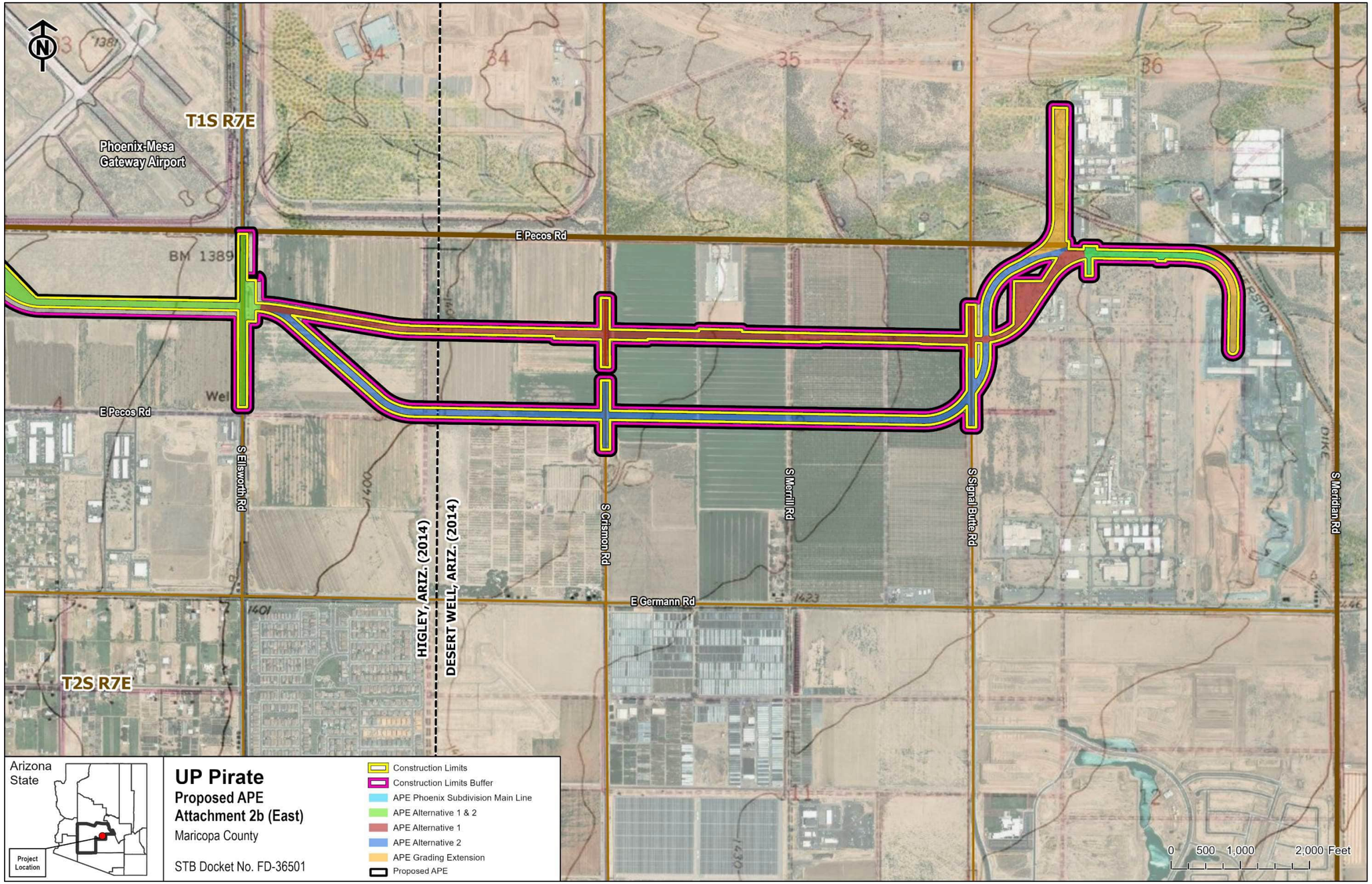
ATTACHMENT 1 – VICINITY MAP



ATTACHMENT 2 – PROPOSED APE MAP



ATTACHMENT 2 – PROPOSED APE MAP



Douglas A. Ducey
Governor

Lisa A. Atkins
Commissioner

Arizona State Land Department

1616 West Adams, Phoenix, Arizona 85007
(602) 542-4631

April 12, 2022

Michael Romero
Land Disp. Project Leader
Arizona State Land Department
1616 W. Adams
Phoenix, Arizona 85007

RE: Cultural Review for Application 16-123021-00-100 (Union Pacific Railroad Company)

Dear Mr. Romero:

Union Pacific Railroad Company filed a Right of Way (ROW) application (16-123021-00-100) with the Arizona State Land Department (ASLD) for the installation and maintenance of Pecos Industrial Rail Access and Train Extension (PIRATE) on State Trust Land in Maricopa County (T2S, R7E, Section 2), encompassing 6.072 acres. Therefore, per the 2016 Interagency Service Agreement (ISA) between the ASLD, the State Historic Preservation Office (SHPO), and the Arizona State Museum (ASM), the area cited in the above-captioned application has been reviewed in comparison to ASLD's cultural resource records. This review is undertaken to make a recommendation to ASLD's ROW Section regarding any properties which may be eligible for the Arizona Register of Historic Places that are known to be located within or nearby the requested ROW. In addition, to make a recommendation to ROW Section regarding of any efforts ASLD should ask the applicant to undertake to identify currently unknown Register eligible properties potentially affected by ASLD granting the ROW application (16-123021-00-100).

The results of this research revealed that two cultural resources inspections (2006-430.ASM, 2020-115.ASM) have been completed within but did not inventory the entire area cited in the application. No archaeological sites are currently recorded within the proposed ROW. Per SHPO Guidance Point No. 5 about relying on survey data from projects conducted more than 10 years earlier, ASLD Cultural Resources Section reviewed documentation for the outdated records and found that the methods used meet current standards for the previous projects and the surveys will not need to be updated. Therefore, the ASLD Cultural Resources Section recommends that the applicant arrange for an archaeologist permitted by the Arizona State Museum (ASM) to inspect and evaluate areas of State Trust land not previously subject to cultural resource inspection prior to ASLD granting ROW application 16-123021-00-100.

By copy of this letter to Union Pacific Railroad Company, the Arizona State Museum (ASM) has a list of permitted contract companies with the qualifications to complete standard scientific field work in Arizona. ASM can be contacted at 520-621-2096 or a list of permitted consultants can be downloaded at https://statemuseum.arizona.edu/crm/document/aaa-qualified-consultants. Once the inspection has been completed, reports submitted to the ASLD Cultural Resources Section must conform to SHPO Standards (https://azstateparks.com//shpo-survey-report-standards) for review in compliance with ASLD's statutory obligations under the State Historic Preservation Act (SHPA) (A.R.S. § 41-861 et al). The cultural resources inspection will provide a document to assist the ASLD Cultural Resources Section in determining if any cultural resources eligible for nomination to the State and Federal Registers of Historic Places are present. If register-eligible properties are present, and avoidance is not feasible, then additional fieldwork may be required.

Your continued cooperation with this office in considering the potential for impacts to Arizona's cultural resources is appreciated. If you have any comments or concerns, please contact the ASLD Cultural Resources Section at arch@azland.gov.

Sincerely,



David Schroeder
Archaeological Compliance Specialist
As agent for Arizona State Land Department

CC: Erin Davis, SHPO
Kris Anderson, Union Pacific Railroad Company

Enclosure: Tribal Consultation List
ASLD Cultural Resources Report Submittal Requirements

Arizona State Land Department Cultural Resources Section
Tribal Consultation List

If you have any comments or concerns, please provide them at this time. If there are none, this document may be retained for your records. Should you require additional documentation, i.e. maps or reports, please request via email for digital copies.

Application No.: 16-123021-00-100

Date: 4/12/2022

Tribes:

- ☐ Ak-Chin Indian Community
- ☐ Chemehuevi Indian Tribe
- ☐ Cocopah Indian Tribe
- ☐ Colorado River Indian Tribes
- ☐ Fort McDowell Yavapai Nation
- ☐ Fort Mojave Indian Tribe
- ☐ Fort Sill Apache Tribe
- ☐ Fort Yuma-Quechan Tribe
- ☒ Gila River Indian Community
- ☐ Havasupai Tribe
- ☒ Hopi Tribe
- ☐ Hualapai Tribe
- ☐ Kaibab Band of Paiute Indians
- ☒ Mescalero Apache Tribe
- ☐ Moapa Band of Paiute Indians
- ☐ Navajo Nation
- ☐ Paiute Indian Tribe of Utah
- ☒ Pascua Yaqui Tribe
- ☒ Pueblo of Zuni
- ☒ Salt River Pima-Maricopa Indian Community
- ☐ San Carlos Apache Tribe
- ☐ San Juan Southern Paiute
- ☐ Tohono O'odham Nation
- ☒ Tonto Apache Tribe
- ☐ Ute Mountain Ute
- ☒ White Mountain Apache Tribe
- ☒ Yavapai-Apache Nation
- ☐ Yavapai-Prescott Indian Tribe
- ☐ Pueblo of Acoma

Arizona State Land Department
Cultural Resources Section
Cultural Resources Report Submittal Requirements

If cultural resources work has been requested by ASLD, reports are subject to review and consultation with the State Historic Preservation Office (SHPO), under the State Historic Preservation Act, A.R.S. 41-861 *et* seq. As such, reports submitted for compliance review should be in conformance to the current reporting standards.

PLEASE NOTE: The AZSITE resource database is not reliable as a source of recent projects. Class I background records checks must include an inquiry to the Arizona State Museum's Archaeological Records Office (ASM ARO).

- For reports, please refer to the Standards for Inventory Documents Submitted for SHPO Review in Compliance with Historic Preservation Laws: https://d2umhuunwbec1r.cloudfront.net/gallery/asp-archive/SHPO/downloads/SHPO-Survey_Report_Standards-2016.pdf

- For Survey Report Summary Forms (SRSF), refer to SHPO Guidance Point No. 10: https://d2umhuunwbec1r.cloudfront.net/gallery/asp-archive/SHPO/downloads/SHPO-Guidance_Point10-2016.pdf

In addition to conformance to reporting standards, the ASLD Cultural Resources Section requests document submittals as follows:

  - Two bound original reports;
  - A pdf of the report, emailed or mailed as a disc.

In all cases, all submittals should come from the consultant that has prepared the report to ensure the document is in its original form.

All mailed documents should be sent directly to the Cultural Resources Section; not the ASLD Administrator.

If emailed, documents should be emailed directly to ARCH@azland.gov. If known, Administrator should be copied on the email.

Mail all physical documents to:

Arizona State Land Department
Cultural Resources Section
1616 West Adams Street
Phoenix, Arizona 85007

White Mountain Apache Tribe

Office of Historic Preservation
PO Box 1032
Fort Apache, AZ 85926
Ph: (928) 338-3033 Fax: (928) 338-6055

To: Danielle Gosselin, Acting Director Office of Environmental Analysis

Date: December 30, 2021

Re: *Docket No. FD 36501, Union Pacific Railroad Company Construction/Operation Exemption*

……

The White Mountain Apache Tribe Historic Preservation Office appreciates receiving information on the project dated; December 10, 2021. In regards to this, please attend to the following statement below.

Thank you for allowing the White Mountain Apache tribe the opportunity to review and respond to the above proposed construction and operation of approximately six miles of new rail line that would connect UP's Phoenix Sub main line track in Maricopa County, to industrial properties southeast of Phoenix-Mesa Gateway, Phoenix, Arizona.

Please be advised, we reviewed the consultation letter and the information provided, and we've determined the project plans will have ***"No Adverse Effected"*** to the tribe's cultural heritage resources and/or traditional cultural properties, and concur with the recommendations.

Thank you for your continued collaborations in protecting and preserving places of cultural and historical importance.

Sincerely,

Mark T. Altaha

White Mountain Apache Tribe – THPO
Historic Preservation Office

THE HOPI TRIBE

Timothy L. Nuvangyaoma
CHAIRMAN

Craig Andrews
VICE-CHAIRMAN

FEB 07 2022

January 10, 2022

Danielle Gosselin, Acting Director
Attention: Adam Assenza
Surface Transportation Board, Office of Environmental Analysis
Washington, DC 20423

Subject: Docket No. FD 36501 – Union Pacific Railroad Company –
Construction and Operation Exemption – In Maricopa County, Arizona

Dear Director Gosselin,

This letter is in response to your correspondence dated December 10, 2021, regarding Docket No. FD 36501, the Union Pacific Railroad Company proposed Pecos industrial Rail Access and Train Extension Project, to construct and operate approximately six miles of new rail line in Maricopa County, Arizona. The Hopi Cultural Preservation Office appreciates the Surface Transportation Board's solicitation of our input and your efforts to address our concerns.

The Hopi Tribe claims cultural affiliation to the earlier identifiable cultural groups in Arizona. The Hopi Cultural Preservation Office supports the identification and avoidance of our ancestral sites, and we consider the prehistoric archaeological sites of our ancestors to be Traditional Cultural Properties. We request consultation on any proposal that has the potential to adversely affect prehistoric cultural resources in Arizona.

So if the cultural resources survey of the area of potential effect identifies prehistoric sites that cannot be avoided by project activities, we request continuing consultation on this proposal including being provided with copies of the draft environmental assessment and any proposed treatment plans for review and comment.

In addition, we support project design features that if any cultural features or deposits are encountered during project activities, these activities will be discontinued in the immediate area of the remains, and the State Historic Preservation Office will be consulted to evaluate their nature and significance, and if any Native American human remains or funerary objects are discovered during construction they shall be immediately reported as required by law. Thank you for your consideration.

Respectfully,

Stewart B. Koyiyumptewa, Project Manager/THPO
Hopi Cultural Preservation Office

xc: Arizona State Historic Preservation Office

From: Assenza, Adam <Adam.Assenza@stb.gov>
Sent: Wednesday, March 23, 2022 6:07 AM
To: Buckley, Maggie <Maggie.Buckley@jacobs.com>; Michael Fulton (FCD) <Michael.Fulton@maricopa.gov>
Cc: Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>
Subject: [EXTERNAL] RE: UPRR Pecos Industrial Rail Access and Train Extension (PIRATE) Preliminary Environmental Consultation

Hello Michael,

I have received your comment:

"The Flood Control District (District) has no environmental comment or objection to the proposed Pecos Industrial Rail Access and Train Extension Project (Surface Transportation Board Docket No. FD 36501). It appears that the alignment may be adjacent to and/or impact the existing Rittenhouse Channel that is owned and maintained by the District. If so, a right of way use permit and a land right must be obtained from our office prior to any construction that impacts our project. Our right of way permit review will be conducted to ensure that the channel function remains fully intact, our ability to access and maintain the channel remains fully intact and to ensure there is a clear understanding of future maintenance responsibilities. An engineering firm on behalf of Union Pacific Railroad submitted a general concept plan to the District and applied for a right of way use permit from our office in late September 2021. More detailed plans will be required before permitting decisions can be made. In addition to a right of way use permit and land right, a floodplain use permit from our office may also be necessary as the existing channel contains a delineated floodplain that may be impacted, and the District is responsible for floodplain reviews in the City of Mesa."

It was not pushed through on our website, but was received. Did you have any additional comments since then?

Thank you,

ADAM ASSENZA
Environmental Protection Specialist (he/him)
Office of Environmental Analysis
Surface Transportation Board
P: 202-245-0301
E: Adam.Assenza@STB.gov

From: Assenza, Adam <Adam.Assenza@stb.gov>
Sent: Thursday, April 14, 2022 11:04 AM
To: Buckley, Maggie <Maggie.Buckley@jacobs.com>
Cc: Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>
Subject: [EXTERNAL] FW: QCI-XX Union Pacific Railroad Company - Surface Transportation Board

From: Maaike Hough <mhough@gcairoinc.com>
Sent: Tuesday, April 12, 2022 7:27 PM
To: Assenza, Adam <Adam.Assenza@stb.gov>
Subject: FW: QCI-XX Union Pacific Railroad Company - Surface Transportation Board

Adam,
I am not aware of any environmental, cultural or other issues in the area. We are the engineering firm for Queen Creek Irrigation District as well as New Magma Irrigation and Drainage District. I am attaching the district maps for both Irrigation Districts in this area for your reference. It does not look like your proposed alignments will impact either of the districts. If you find that there are crossings, then you will need to contact me so that we can work to do a formal submittal to the USBR and the District for approval.

If if there are any improvements along Germann between Hawes & Signal Butte then you may impact QCID'sPipeline II and we will need to conduct a further review.

Please let me know if you have any questions. Thank you.

Maaike M. Hough, P.E.

GEORGE CAIRO ENGINEERING, INC.
1630 S. Stapley Dr., Suite 117
Mesa, AZ 85204
480.921.4080, fax: 480.921.4087
www.gcairoinc.com

From: Melissa Moore <mmoore@gcairoinc.com>
Sent: Monday, April 11, 2022 11:46 AM
To: Maaike Hough <mhough@gcairoinc.com>
Subject: QCI-XX Union Pacific Railroad Company - Surface Transportation Board

Good morning Maaike,

The attached documents were mailed by Jacobs Engineering to your attention. I accidentally scanned the 2nd attachment to you directly in a different email.

Thanks,

Melissa Moore

GCE inc
GEORGE CAIRO ENGINEERING, INC.
1630 S. Stapley Dr., Suite 117
Mesa, Arizona 85204
480.921.4080 ● 480.921.4087 Fax
www.gcairoinc.com

From: Assenza, Adam <Adam.Assenza@stb.gov>
Sent: Friday, April 22, 2022 2:24 PM
To: Tabachnick, Alan <alan.tabachnick@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>
Subject: [EXTERNAL] FW: Docket No. FD 36501, Union Pacific rail line expansion, Mesa, AZ

From: Karl Hoerig <khoerig@pascuayaqui-nsn.gov>
Sent: Friday, April 22, 2022 4:51 PM
To: Assenza, Adam <Adam.Assenza@stb.gov>
Subject: Docket No. FD 36501, Union Pacific rail line expansion, Mesa, AZ

Dear Mr. Assenza,

Thank you for Danielle Gosselin's 4/6/2022 letter advising Pascua Yaqui Tribe of Union Pacific's proposal to install new rail line to manufacturing facilities south and east of Phoenix-Mesa Gateway Airport. We would like to participate in continuing consultation regarding this project. Before we can fully respond regarding potential impacts, it will be necessary for you to provide Class I and Class III historic properties survey reports that identify the historic properties that exist within the APE. We know the general vicinity of the project to be rich in ancestral sites, and expect that the APE will intersect one or more of these.

With best regards,
Karl Hoerig

Karl A. Hoerig, Ph.D.
Tribal Historic Preservation Officer
Pascua Yaqui Tribe
7777 S. Camino Huivisim, Building C
Tucson, AZ 85757
(520) 883-5116
karl.hoerig@pascuayaqui-nsn.gov

SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

SHPO-2022-0395 (163371) **Rec: 04-06-22**

April 6, 2022

Ms. Kathryn Leonard
State Historic Preservation Officer
Arizona State Parks, State Historic Preservation Office
1110 West Washington Street, Suite 100
Phoenix, AZ 85007

Re: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – in Maricopa County, Ariz.; Initiation of National Historic Preservation Act Section 106 Consultation and Proposed Area of Potential Effects

Dear Ms. Leonard:

Pursuant to 49 U.S.C. § 10901, the Union Pacific Railroad Company (UP) intends to request authority from the Surface Transportation Board (Board) to construct and operate approximately six miles of new rail line in Maricopa County, Arizona. Before making its decision on whether to grant such authority, the Board must consider the potential environmental impacts of the construction and operation of UP's proposed rail line, pursuant to the National Environmental Policy Act (42 U.S.C. §§ 4321-4370m-12), Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), the Board's environmental rules at 49 C.F.R. Part 1105, and related environmental laws. With this letter, the Board's Office of Environmental Analysis (OEA) is formally initiating consultation with your office pursuant to Section 106 of the National Historic Preservation Act and to solicit your comments regarding the proposed Area of Potential Effects (APE) for cultural resources for the proposed Pecos Industrial Rail Access and Train Extension (PIRATE) rail line referenced above. The general project area of the proposed rail line is depicted on Attachment 1.

Description of the Proposed Rail Line

UP is seeking authority from the Board to construct and operate approximately six miles of new common carrier rail line that would connect UP's Phoenix Subdivision main line track in Maricopa County, Arizona, to industrial properties southeast of the Phoenix-Mesa Gateway Airport. The Phoenix Subdivision main line track borders Mesa's Pecos Advanced Manufacturing Zone (PAMZ), which incentivizes industrial development and manufacturing operations through streamlined approvals and permits. Several large industrial companies are within the PAMZ, where rail line service is currently unavailable. According to UP, the closest rail transloading facility is approximately 40 miles away in downtown Phoenix. Therefore, existing manufacturing companies rely solely on trucking for transporting manufacturing

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Bureau of Indian Affairs trust land located on a portion of the former Williams Air Force Base, Superfund sites within the former Williams Air Force Base, the Phoenix-Mesa Gateway Airport, and to minimize impacts to the agricultural lands and private properties that the alignment would cross.

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Request for Input

OEA requests that you share your initial comments regarding any known architectural, archaeological, tribal, or other historic properties that may be located in the project area and your comments regarding the proposed APE, by **Friday, May 6, 2022**. Please send your written comments electronically to Adam Assenza, OEA's project manager for the environmental review, at Adam.Assenza@stb.gov. If you have any questions or would like to discuss the proposed rail line in more detail, please contact Adam Assenza at 202-245-0301.

Sincerely,

Danielle Gosselin
Director
Office of Environmental Analysis

Enclosures:
Attachment 1 – Vicinity Map
Attachment 2 – Proposed APE Map (two sheets)

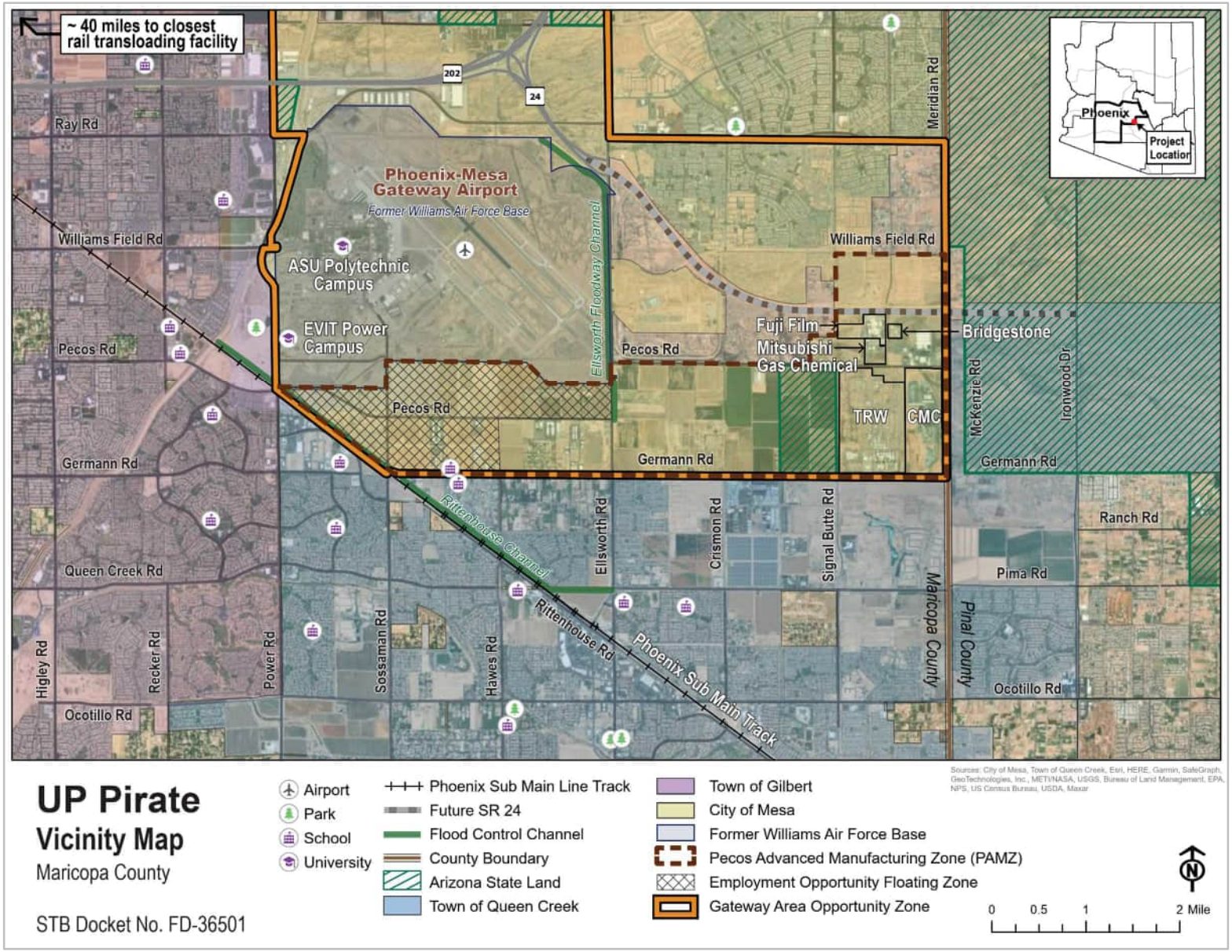
Cc: Adam Assenza, OEA Environmental Protection Specialist, Adam.Assenza@stb.gov
Alan Tabachnick, OEA Historic Preservation Specialist, alan.tabachnick@stb.gov
Maggie Buckley, Jacobs Project Manager, Maggie.buckley@jacobs.com

SHPO concurs with the definition of the area of potential effects. Please refer to our email for additional comments. Thank you!

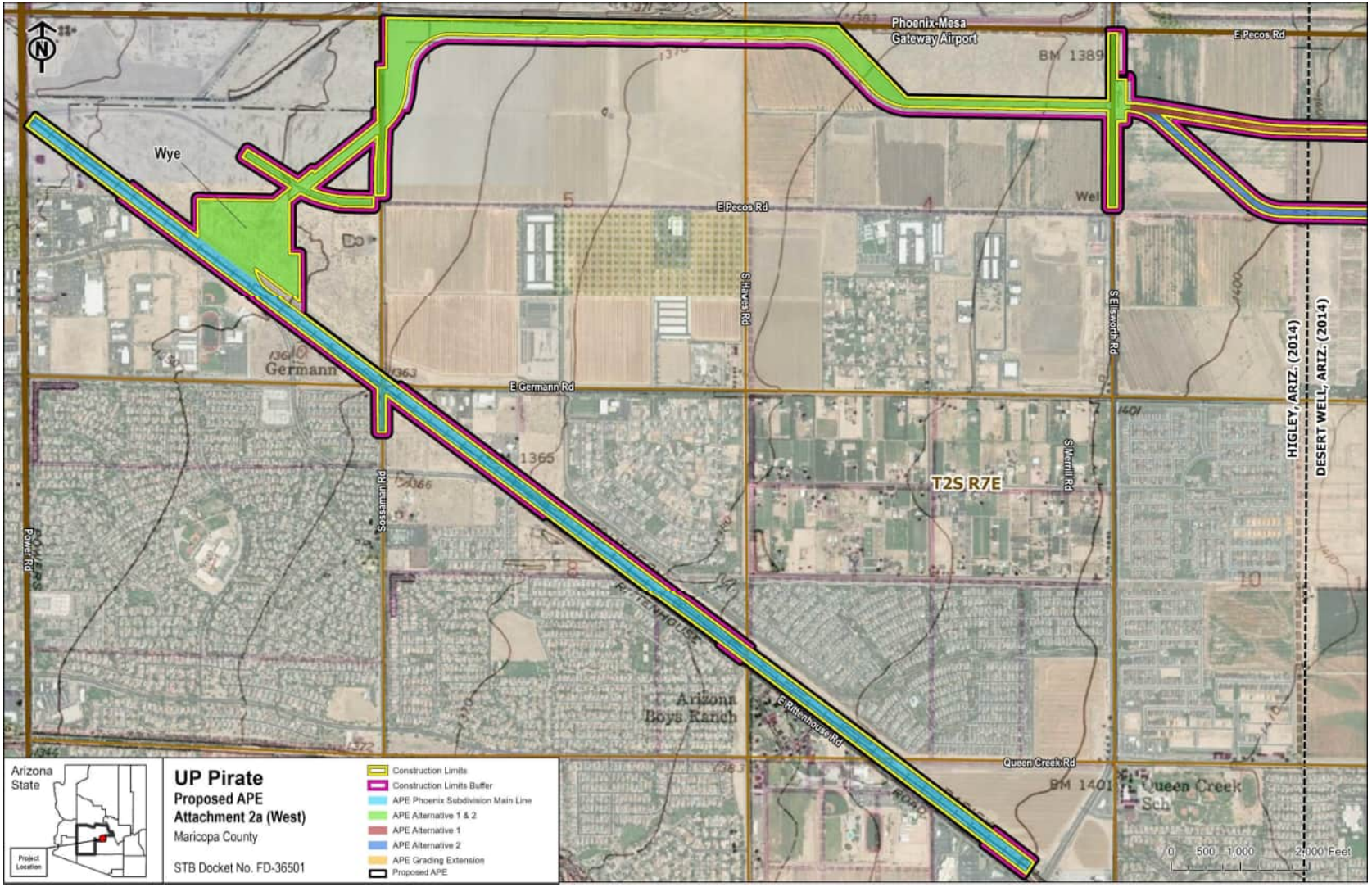
Mary Ellen Wabl **5/2/22**

Arizona State Historic Preservation Office

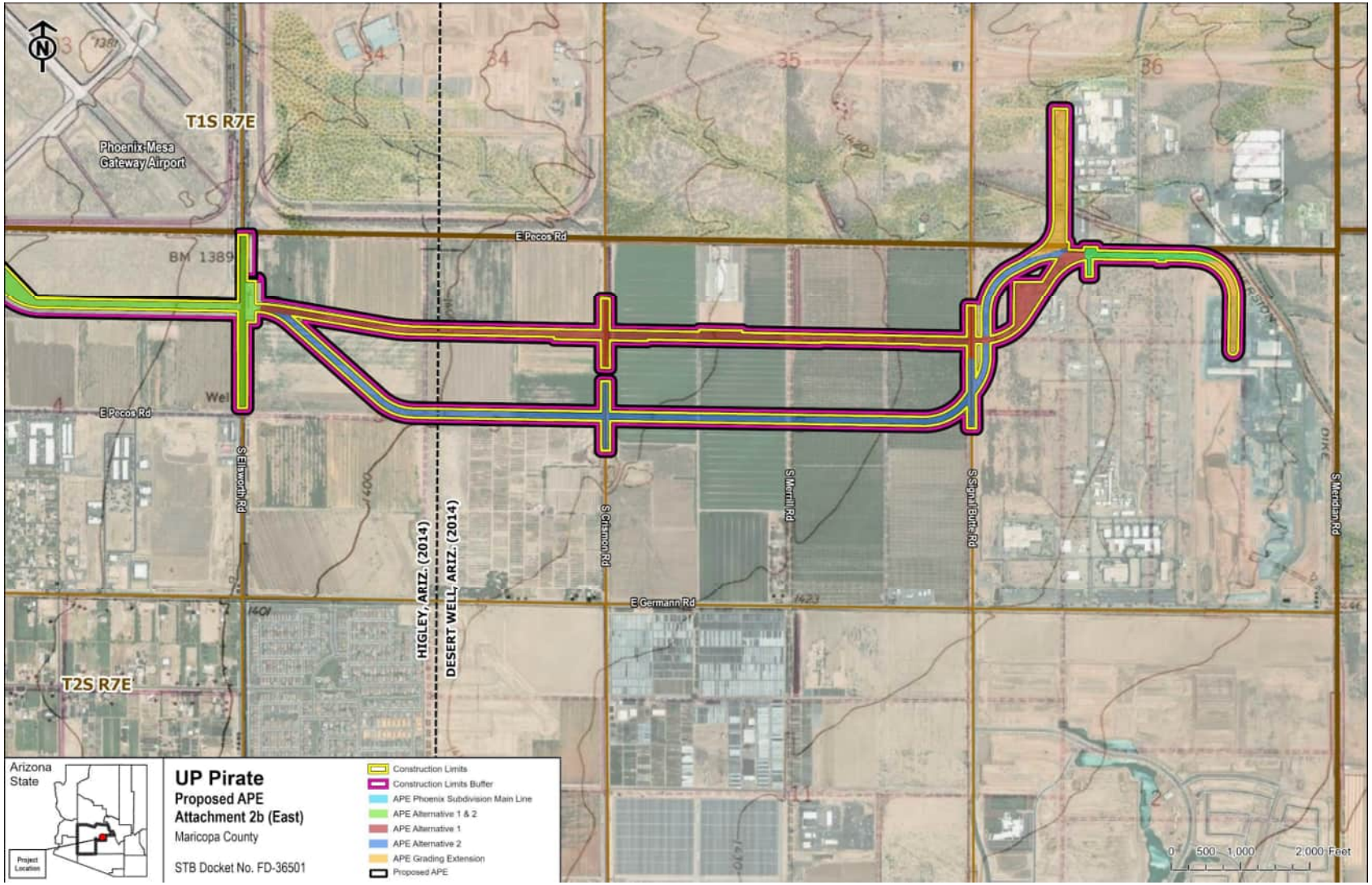
ATTACHMENT 1 – VICINITY MAP



ATTACHMENT 2 – PROPOSED APE MAP



ATTACHMENT 2 – PROPOSED APE MAP



Powell, Kris

From: Alison Stoltman <Alison.Stoltman@MesaAZ.gov>
Sent: Monday, May 2, 2022 3:14 PM
To: Buckley, Maggie; Assenza, Adam
Cc: Phoebus, Elizabeth (Betsi); Tabachnick, Alan
Subject: [EXTERNAL] RE: Docket No. FD 36501, Union Pacific Railroad Company- Construction and Operation Exemption – in Maricopa County, Ariz.; Initiation of NHPA, Section 106

Thank you Maggie, I appreciate you confirming and I hope that I didn't cause offense. I can be a worrier, but you clearly have it all in hand :)
Best wishes,

Alison Stoltman

She/her/hers
Acting Director, Arizona Museum of Natural History
53 North Macdonald, Mesa, AZ 85201
Office: 480 644 4040
Alison.Stoltman@MesaAZ.gov

From: Buckley, Maggie <Maggie.Buckley@jacobs.com>
Sent: Monday, May 02, 2022 1:35 PM
To: Assenza, Adam <adam.assenza@stb.gov>; Alison Stoltman <Alison.Stoltman@MesaAZ.gov>
Cc: Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>; Tabachnick, Alan <alan.tabachnick@stb.gov>
Subject: RE: Docket No. FD 36501, Union Pacific Railroad Company- Construction and Operation Exemption – in Maricopa County, Ariz.; Initiation of NHPA, Section 106

Hello Alison,

I just wanted to follow up and confirm that our team is following the communication protocols on the Government to Government Toolkit website. I emailed the consultation letter and proposed APE map to Shane Anton, Martha Martinez, and Angela Garcia-Lewis from the SRP-MIC on 4/6/22. We are also consulting with the Zuni Tribe and mailed a hard copy of the consultation letter and proposed APE map to their Chairman and THPO on 4/6/22.

Please don't hesitate to reach out with additional questions or concerns. Thank you,

Maggie Buckley
O: 425.233.3117
M: 206.949.5955

From: Assenza, Adam <Adam.Assenza@stb.gov>
Sent: Friday, April 29, 2022 10:20 AM
To: Alison Stoltman <Alison.Stoltman@MesaAZ.gov>
Cc: Buckley, Maggie <Maggie.Buckley@jacobs.com>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>; Tabachnick, Alan <alan.tabachnick@stb.gov>
Subject: [EXTERNAL] RE: Docket No. FD 36501, Union Pacific Railroad Company- Construction and Operation Exemption – in Maricopa County, Ariz.; Initiation of NHPA, Section 106

Hi Alison,

Thank you for the information. I've forwarded it to Alan Tabachnick, our historic preservation specialist at OEA, as well as the Jacobs team supporting us for incorporation into their outreach planning.

In case we already had this resource, I would rather be given the same information from multiple sources than miss anything, so I appreciate your thoroughness. If we have any questions about navigating the tool or related topics, we will reach out.

Thank you,

ADAM ASSENZA
Environmental Protection Specialist (he/him)
Office of Environmental Analysis
Surface Transportation Board
P: 202-245-0301
E: Adam.Assenza@STB.gov

From: Alison Stoltman <Alison.Stoltman@MesaAZ.gov>
Sent: Friday, April 29, 2022 12:28 PM
To: Assenza, Adam <Adam.Assenza@stb.gov>
Subject: Docket No. FD 36501, Union Pacific Railroad Company- Construction and Operation Exemption – in Maricopa County, Ariz.; Initiation of NHPA, Section 106

Hi Adam,
Thank you for your correspondence to review the Union Pacific project. The City of Mesa will be filling their review jointly, in the meantime, I wanted to make sure you have the resource, Government to Government Toolkit website. It lists the Tribes with affiliation to the area. https://sites.google.com/view/az-consultation-toolkit/home . Each has a slightly different protocol for who to contact for Section 106 review and many require notification of multiple contacts in the organization. I was sent your contact list but it only has one contact per tribal entity and so I wanted to make sure you were aware that there are others who should be informed. For example Shane Anton from SRP-MIC usually works on Section 106 but he had not received notification yet last week. According to the map, the Pueblo of Zuni is also affiliated with the proposed area.
If you are new to the website, I am happy to walk you through to where you can find the information but it's pretty intuitive. Just click on map and select the area of review and it will be obvious from there. Apologize if this is all information you have. I was simply looking to be thorough.
Best wishes on this project. You will have our joint City review next week.

Alison Stoltman
She/her/hers
Acting Director, Arizona Museum of Natural History
53 North Macdonald, Mesa, AZ 85201
Office: 480 644 4040
Alison.Stoltman@MesaAZ.gov

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[redacted]

From: Plummer, Shannon D - (splummer) <splummer@arizona.edu>
Sent: Wednesday, May 4, 2022 12:15 PM
To: Assenza, Adam <Adam.Assenza@stb.gov>
Cc: Buckley, Maggie <Maggie.Buckley@jacobs.com>
Subject: RE: UP PIRATE Project Initiation of Section 106 Consultation

Hello Adam,
Thank you for the opportunity to review the proposed Area of Potential Effects (APE) for this project. There are multiple archaeological sites that will be crossed by the proposed APE, several of which are recommended or determined eligible to the National Register of Historic Places (NRHP). I cannot provide further recommendations at this point without knowing more specific details about the project (particularly land ownership) and being provided larger-scale maps, preferably with a USGS quadrangle maps at 1:24,000 scale (neither reduced nor enlarged).

Please let me know if you have any questions.

Thanks,
Shannon

Shannon Plummer, M.A., R.P.A.
Arizona Antiquities Act Administrator

Arizona State Museum | The University of Arizona
1013 E. University Blvd | PO Box 210026
Tucson, Arizona 85721-0026
(520) 621-4795 | (520) 621-2976 FAX
splummer@arizona.edu
www.statemuseum.arizona.edu



From: Buckley, Maggie <Maggie.Buckley@jacobs.com>
Sent: Wednesday, April 6, 2022 12:05 PM
To: Lyons, Patrick D - (plyons) <plyons@arizona.edu>
Cc: Plummer, Shannon D - (splummer) <splummer@arizona.edu>; Assenza, Adam <adam.assenza@stb.gov>; Tabachnick, Alan <alan.tabachnick@stb.gov>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>; Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Subject: [EXT]UP PIRATE Project Initiation of Section 106 Consultation

External Email

Hello Dr. Lyons,

The Union Pacific Railroad Company intends to request authority from the Surface Transportation Board (Board) to construct and operate approximately six miles of new rail line in Maricopa County, Arizona. With the attached letter, the Board's Office of Environmental Analysis (OEA) is formally initiating consultation with your office pursuant to Section 106 of the National Historic Preservation Act and soliciting comments regarding the proposed Area of Potential Effects for cultural resources for the proposed Pecos Industrial Rail Access and Train Extension (PIRATE) rail line.

The OEA requests your input regarding any known architectural, archaeological, tribal, or other historic properties that may be located in the project area and your comments regarding the proposed Area of Potential Effects by **Friday, May 6, 2022**. Please send your written comments electronically to Adam Assenza, the Board's OEA Project Manager, at Adam.Assenza@stb.gov. If you have any questions or would like to discuss the proposed rail line in more detail, please contact Adam Assenza at (202) 245-0301.

Thank you,

Maggie Buckley | Jacobs | Environmental Project Manager (she/her)
O: 425.233.3117 | M: 206.949.5955 | maggie.buckley@jacobs.com
999 W Riverside Avenue, Suite 500 | Spokane, WA 99201 | USA

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U.S. Department of Transportation
Federal Aviation Administration

Western-Pacific Region
Airports Division
Phoenix Airport District Office

3800 N. Central Avenue
Suite 1025, 10th Floor
Phoenix, AZ 85012

May 5, 2022

VIA EMAIL - adam.assenza@stb.gov

Ms. Adam Assenza
Project Manager
Office of Environmental Analysis
Surface Transportation Board
395 East Street SW
Washington, D.C. 20423

Subject: Proposed Area of Potential Effects (APE) for cultural resources for the proposed Pecos Industrial Rail Access and Train Extension (PIRATE) rail line.

Dear Ms. Gosselin:

The Federal Aviation Administration (FAA) has reviewed the April 6, 2022 correspondence from Ms. Danielle Gosselin on the above referenced project regarding the Area of Potential Effects (APE) for cultural and historic resources.

The direct APE is not located on airport property; therefore, the FAA does not have any information regarding any known architectural, archaeological, tribal, or other historic properties that may be located in the project APE and cannot make any determinations. The FAA recommends coordination with the Phoenix-Mesa Gateway Airport Authority (PMGAA) to discuss any visual or direct impacts regarding any existing airport historical buildings/properties and any other known/unknown resources.

The FAA recommends the STB be aware of FAA regulations and/or requirements regarding any airport protected surfaces, including, but not limited to, Runway Safety Areas, Runway Protection Zones, etc., and lighting components, including potential light glare that may have a negative impact on the airport(s), aircrafts, or the National Airspace System (NAS). Additionally, the FAA recommends the STB be aware of FAA airspace notification and filing requirements regarding proposed temporary and permanent structures that may be a hazard to air navigation.

If you have any environmental questions, please contact Denise Taylor-Sands, Environmental Protection Specialist at (602) 792-1067 or ann-denise.taylor-sands@faa.gov.

Sincerely,

MICHAEL N WILLIAMS

Digitally signed by MICHAEL N WILLIAMS
Date: 2022.05.05 09:53:12 -07'00'

Mike N. Williams, A.A.E.
Manager

cc: Adam Assenza, OEA Environmental Protection Specialist (Adam.Assenza@stb.gov)
Alan Tabachnick, OEA Historic Preservation Specialist (alan.tabachnick@stb.gov)
Maggie Buckley, Jacobs Project Manager (maggie.buckley@jacobs.com)

From: Luhnow, Glennda
Sent: Friday, May 6, 2022 10:17 AM
To: Bushey, Sabra <Sabra.Bushey@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>
Cc: Buckley, Maggie <Maggie.Buckley@jacobs.com>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>
Subject: FW: Initial Section 106 Consultation-UP PIRATE Rail Line, Mesa, Maricopa County, Arizona (Docket No. FD 36501)

An update from YAN for the consultation tracking spreadsheet. 😊

Glennda Luhnow, M.A., RPA | **JACOBS** | **Manager/Archaeology and Cultural Resources** |
C: 480-510-0830 | glennda.luhnow@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

From: Chris Coder <ccoder@yan-tribe.org>
Sent: Friday, May 6, 2022 9:27 AM
To: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Cc: Tabachnick, Alan <alan.tabachnick@stb.gov>; Assenza, Adam <Adam.Assenza@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; Vincent Randall <vrandall@yan-tribe.org>; Yavapai Culture <YavapaiCulture@yan-tribe.org>
Subject: [EXTERNAL] RE: Initial Section 106 Consultation-UP PIRATE Rail Line, Mesa, Maricopa County, Arizona (Docket No. FD 36501)

Hi Glennda,

Ditto that. AND YES the mailing address below is correct.
Thanks for the information.
Please be informed the Yavapai-Apache Nation (YAN) of Camp Verde has NO comments to make or concerns regarding the PIRATE RAIL LINE PROJECT IN MESA.
If you require further clarification do not hesitate to contact us.

No prisoners,

Chris/Archaeologist/YAN/Camp Verde

From: Luhnow, Glennda [mailto:Glennda.Luhnow@jacobs.com]
Sent: Thursday, May 5, 2022 1:53 PM
To: Chris Coder <ccoder@yan-tribe.org>
Cc: Tabachnick, Alan <alan.tabachnick@stb.gov>; Assenza, Adam <Adam.Assenza@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>
Subject: Initial Section 106 Consultation-UP PIRATE Rail Line, Mesa, Maricopa County, Arizona (Docket No. FD 36501)

Hi Chris,

Thanks so much for your time this morning! As always, it was a pleasure to talk with you.

To follow up with our conversation, and on behalf of the Surface Transportation Board, I am attaching the Initial Section 106 consultation letter for the proposed Union Pacific Railroad (UP) PIRATE Rail Line, located in Mesa, Maricopa County, Arizona. The Board appreciates your review of the project and the letter contents, and any comments, question, or concerns you may have.

I am copying Adam Assenza, the Board's Project Manager, and Alan Tabachnick, the Board's Historic Preservation Specialist, on this email. Please feel free to reach out to them directly. The Board is very interested in any input that the Yavapai-Apache Nation may wish to share.

I'd also like to double-check the consultation address we have on file. The letter was mailed to 2400 West Datsi Street, Camp Verde, AZ 86322. Can you please confirm that is the correct address?

Thanks very much for your time. We look forward to hearing from you.

Glennda

Glennda Luhnow, M.A., RPA | **JACOBS** | **Manager/Archaeology and Cultural Resources** |
C: 480-510-0830 | glennda.luhnow@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

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Glennda Luhnow, M.A., RPA | **JACOBS** | **Manager/Archaeology and Cultural Resources** |
C: 480-510-0830 | glennda.luhnow@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

From: Luhnow, Glennda
Sent: Tuesday, May 10, 2022 9:14 AM
To: 'Altaha, Mark' <MarkAltaha@wmat.us>
Cc: Assenza, Adam <Adam.Assenza@stb.gov>; Tabachnick, Alan <alan.tabachnick@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>
Subject: RE: Initial Section 106 Consultation-UPRR PIRATE Rail Line, Mesa, Maricopa County, Arizona (Docket No. FD 36501)

Hi Mark,

Good morning! Thank you for the quick response.

To confirm, would you still like to be copied on the ongoing Section 106 consultation for the project, or would you prefer to be removed from future outreach? We appreciate the clarification.

Have a great day, and thanks again for your response,
Glennda

Glennda Luhnow, M.A., RPA | **JACOBS** | **Manager/Archaeology and Cultural Resources** |
C: 480-510-0830 | glennda.luhnow@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

From: Altaha, Mark <MarkAltaha@wmat.us>
Sent: Tuesday, May 10, 2022 5:58 AM
To: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Cc: Assenza, Adam <Adam.Assenza@stb.gov>; Tabachnick, Alan <alan.tabachnick@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>
Subject: [EXTERNAL] Re: Initial Section 106 Consultation-UPRR PIRATE Rail Line, Mesa, Maricopa County, Arizona (Docket No. FD 36501)

Please be advised, the proposed undertaking will not have an impact on the tribe's cultural heritage resources and/or traditional cultural properties. No further consultation is necessary and/or required. Our apologies for this bad connections with the phone system as we've been having problems with the phone lines lately...but the office number is correct.

Mark Altaha - THPO
White Mountain Apache Tribe
Historic Preservation Office

Fort Apache, Arizona

From: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Sent: Thursday, May 5, 2022 2:06:37 PM
To: Altaha, Mark
Cc: Assenza, Adam; Tabachnick, Alan; Buckley, Maggie
Subject: Initial Section 106 Consultation-UPRR PIRATE Rail Line, Mesa, Maricopa County, Arizona (Docket No. FD 36501)

Dear Mark,

Good afternoon. I hope this correspondence finds you well.

On behalf of the Surface Transportation Board, I am contacting you in regards to recent Initial Section 106 consultation for the proposed Union Pacific Railroad (UP) PIRATE Rail Line, in Mesa, Maricopa County, Arizona. You previously responded to an agency scoping letter, and stated that the White Mountain Apache Tribe had no known traditional cultural properties or tribal cultural heritage resources in the project area (12/20/2021). We thank you for that response.

The purpose of this correspondence is to inquire whether your office received the Initial Section 106 consultation materials, and if you had any comments, questions or concern relating to the contents. I would also like to double-check to see if the phone number we have for your office is correct. We attempted to contact you directly by phone earlier today at (928) 338-3033, and received an error message, which is why we are following up with email.

The Board's Project Manager, Adam Assenza, and Historic Preservation Specialist, Alan Tabachnick, are copied on this email. Please feel free to contact them directly. The Board is committed to collaborative communication through the Section 106 process, and welcomes any input from the White Mountain Apache Tribe.

Thank you very much for your time. We look forward to hearing from you.

Best Regards,
Glennda

Glennda Luhnow, M.A., RPA | **JACOBS** | **Manager/Archaeology and Cultural Resources** |
C: 480-510-0830 | glennda.luhnow@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

EI-32031

5/18/2022

Ms. Danielle Gosselin
Director
Office of Environmental Analysis
Surface Transportation Board

s

Re: Docket No. FD 36501, Union Pacific Railroad Company- Construction and Operation Exemption – in Maricopa County, Ariz.; Initiation of National Historic Preservation Act Section 106 Consultation and Proposed Area of Potential Effects

Review of cultural resources from the Arizona archaeological database AZSITE show more than 20 documented archaeological sites assigned within 0.5 miles either side of the APE central line. A Phase 2 archaeological review is warranted by a cultural resource management company. This entails a physical survey of the project area and results will determine whether testing and recovery are recommended. Consultation with associated descendants is necessary and through the Government to Government Toolkit website, the list of the Tribes with affiliation to the area can be found along with their contact details: https://sites.google.com/view/az-consultation-toolkit/home.

Further considerations and review of cultural resource compliance are deferred to the State Historic Preservation Office, attention Kathryn Leonard at kleonard@azstateparks.gov or (602) 542 4009.

Sincerely,

Maura Jackson

Maura Jackson
Historic Preservation Advisor/Planner
(480) 644-2021
historicpreservation@mesaaz.gov

Alison Stoltman
Acting Director, Arizona Museum of Natural History
(480) 644-4040
Alison.Stoltman@MesaAZ.gov

cc: Nana Appiah, Development Services Director/Historic Preservation Officer
Michelle Dahlke, Principal Planner
JD Beatty, Senior Economic Development Project Manager
Marc Ahlstrom, Assistant City Engineer

From: Diebolt, Sarah (Sallie) CIV USARMY CESPL (USA) <Sallie.Diebolt@usace.army.mil>
Sent on: Tuesday, September 6, 2022 8:32:05 PM
To: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
CC: Assenza, Adam <Adam.Assenza@stb.gov>; alan.tabachnick@stb.gov; Buckley, Maggie <Maggie.Buckley@jacobs.com>; Bushey, Sabra <Sabra.Bushey@jacobs.com>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>; Robinson, Lisa E CIV USARMY CESPL (USA) <Lisa.E.Robinson@usace.army.mil>
Subject: [EXTERNAL] RE: SPL-2022-00250 (UPRR Pirate) UPRR PIRATE Continuing Section 106 Consultation and Survey Report Distribution

Hello, we have received your correspondence regarding the APE for the subject project. At this point, the Arizona Regulatory Branch is unable to concur with the APE determination, however we usually defer such decisions to the lead federal agency.

The Regulatory process would involve determining any aquatic features that would be subject to the Corps' jurisdiction under Section 404 of the Clean Water Act and any permits that may be needed for discharges of fill material into those areas. In the absence of this information, we are not able to evaluate the APE for our agency action.

Please contact me with any questions or if you would like to discuss further.

Thank you.

Sallie Diebolt Branch Chief
Regulatory Division, Arizona Branch
Phoenix, AZ
Los Angeles District, U.S. Army Corps of Engineers
sallie.diebolt@usace.army.mil

Office: 602-230-6950
Government Mobile: 602-300-1761

Please do not mail hard copy documents to any Regulatory staff or office. For further details on corresponding with us, please view our special public notice at:

https://www.spl.usace.army.mil/Portals/17/docs/publicnotices/COVID19%20Regulatory_SPN.pdf?ver=2020-03-19-134532-833

Assist us in better serving you! Please complete our brief customer survey, located at the following link:
https://regulatory.ops.usace.army.mil/customer-service-survey/

From: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Sent: Thursday, September 1, 2022 1:48 PM
To: Robinson, Lisa E CIV USARMY CESPL (USA) <Lisa.E.Robinson@usace.army.mil>
Cc: Assenza, Adam <adam.assenza@stb.gov>; Tabachnick, Alan <alan.tabachnick@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; Bushey, Sabra <Sabra.Bushey@jacobs.com>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>
Subject: [Non-DoD Source] UPRR PIRATE Continuing Section 106 Consultation and Survey Report Distribution

Dear Ms. Diebolt,

As stated in previous Section 106 consultation conducted under the National Historic Preservation Act, the Union Pacific Railroad Company intends to request authority from the Surface Transportation Board (Board) to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

With the attached letter, the Board's Office of Environmental Analysis (OEA) is continuing Section 106 consultation with your office and soliciting comments regarding revisions to the Area of Potential Effects for cultural resources, adequacy of a Class III survey report, National Register of Historic Places site eligibility, treatment recommendations, finding of adverse effect, and a Section 106 agreement document.

The Class III cultural resources survey report has been transmitted to you via File Transfer on behalf of OEA by Jacobs Engineering Group Inc, OEA's third-party contractor. The File Transfer document will be available for 15 days and will expire on September 15, 2022. If you are not able to access the document, or the link expires, please contact Glennda Luhnow, Jacobs' cultural resources manager, at Glennda.Luhnow@jacobs.com.

OEA requests your review and comment regarding the content of this letter by **Tuesday, October 4, 2022**. Please send your written comments electronically to Alan Tabachnick, OEA's Historic Preservation Specialist, at Alan.Tabachnick@stb.gov. If you have any questions or would like to discuss the proposed project in more detail, please contact Alan Tabachnick.

Thank you,
Glennda Luhnow

Glennda Luhnow, M.A., RPA | **JACOBS** | **Manager/Archaeology and Cultural Resources** |
C: 480-510-0830 | glennda.luhnow@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

May 19, 2022

Ms. Kathryn Leonard
State Historic Preservation Officer
Arizona State Parks
1110 West Washington St., Suite 100
Phoenix, Arizona 85007

Re: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – in Maricopa County, Ariz.; Informational Letter Regarding Class III Cultural Resources Survey Methods

Dear Ms. Leonard:

The Surface Transportation Board's Office of Environmental Analysis (OEA) recently initiated formal consultation with you pursuant to Section 106 of the National Historic Preservation Act on the proposed Pecos Industrial Rail Access and Train Extension (PIRATE) project, located in Maricopa County, Arizona. Initial Section 106 consultation provided an overview of the project and solicited comments on the proposed Area of Potential Effects (APE) for potential direct and indirect effects of the project on historic properties. A Class III cultural resources survey of the project APE is now being planned, and OEA is providing this short informational letter to the project's consulting parties to outline the field and reporting methods that the Class III survey will employ.

Survey Methods and Recording Standards

Jacobs Engineering Group Inc. (Jacobs) archaeologists will conduct the Class III cultural resources survey. The survey will be under the general supervision and oversight of a qualified principal investigator and a qualified project director, both listed on Jacobs' current Arizona Antiquities Act (AAA) permit (No. 2022-018bl) issued by the Arizona State Museum (ASM). The APE contains private, state, county, and municipal land. Therefore, the survey will be conducted under the provisions of Jacobs' AAA blanket permit, and ASM will issue a project-specific accession number.

A crew of four archaeologists will conduct the Class III cultural resources survey of the APE. The survey will utilize systematic, parallel pedestrian transects spaced no more than 20 meters (66 feet) apart, constituting complete (100 percent) coverage of the APE.

The Jacobs field crew will employ tablets (Samsung Galaxy TAB A) paired with Trimble R1 global navigation survey system receivers via Bluetooth, allowing for submeter

accuracy. Tablet software utilizes the Environmental Systems Research Institute Field Maps application for geospatial data collection and integrated Samsung tablet photographic capabilities. All Universal Transverse Mercator coordinates will be collected in Zone 12 North, North American Datum of 1983, Continental United States.

Prior to the field survey, Jacobs staff will upload the APE boundary and the location of previously recorded cultural resources site locations onto the Field Maps application, allowing the field crew to accurately identify the survey limits and previously recorded resources. The field crew will maintain photologs and field notes using Samsung Notes transferred to Microsoft Word documents and uploaded to the Jacobs server. The collected spatial data will be uploaded to secure cloud facilities and used to generate project and site maps.

During a field reconnaissance conducted on May 2, 2022, Jacobs confirmed that portions of the APE are completely paved and developed, and no native ground surface remains. These areas are primarily located along Rittenhouse Road (see enclosed APE map). Jacobs will photodocument, map, and discuss these areas in the project's technical report. Additional areas are located within agricultural fields and may be inaccessible at the time of the survey due to crop coverage. The field crew will revisit these areas when the crops have been harvested and incorporate the results into the project's technical report at that time.

Jacobs will define and record cultural resources sites within the APE to the standards outlined in the ASM *Archaeological Site Recording Manual*[1] and recent ASM guidance on "Historical-Period Waste Piles."[2] Any cultural resources not meeting site criteria will be recorded as an isolated occurrence or isolated feature. In-use historic structures (such as roads, canals, and railroads) will be recorded using Historic In-Use Structure Forms, as approved by the State Historic Preservation Office (SHPO)[3] and ASM.

Reporting Standards and Project Curation

Jacobs will prepare a technical report detailing the results of the Class III survey according to SHPO Survey Report Standards.[4] OEA will distribute the draft report through Section 106 consultation to the project's consulting parties for review and comment. Jacobs will address any requested revisions in a final report, which OEA will redistribute through Section 106 consultation. Following acceptance of the final report, Jacobs will curate all project documentation with ASM, as per the requirements of the AAA blanket permit.

Field Schedule

The Class III fieldwork is scheduled to begin the week of May 23, 2022. The survey and site recording are anticipated to take between 8 and 10 days to complete. If additional survey is required based on right-of-entry or agricultural crop coverage, it will be scheduled as needed.

---

[1] Fish, Paul R. 1995. *Archaeological Site Recording Manual*. Arizona State Museum, University of Arizona, Tucson.

[2] ASM. 2021. *Policy and Procedures Regarding Historical-Period Waste Piles*. Arizona State Museum, University of Arizona, Tucson.

[3] SHPO. *A Guide to Documenting Historical In-Use Structures*. Phoenix, Arizona.

[4] SHPO. *Survey Report Standards*. Phoenix, Arizona.

Contact Information

If you have any questions or comments regarding the content of this informational letter or the PIRATE project, please contact Adam Assenza, OEA's project manager for the environmental review, at Adam.Assenza@stb.gov (202-245-0301), or Alan Tabachnick, OEA's historic preservation specialist, at Alan.Tabachnick@stb.gov (202-245-0367).

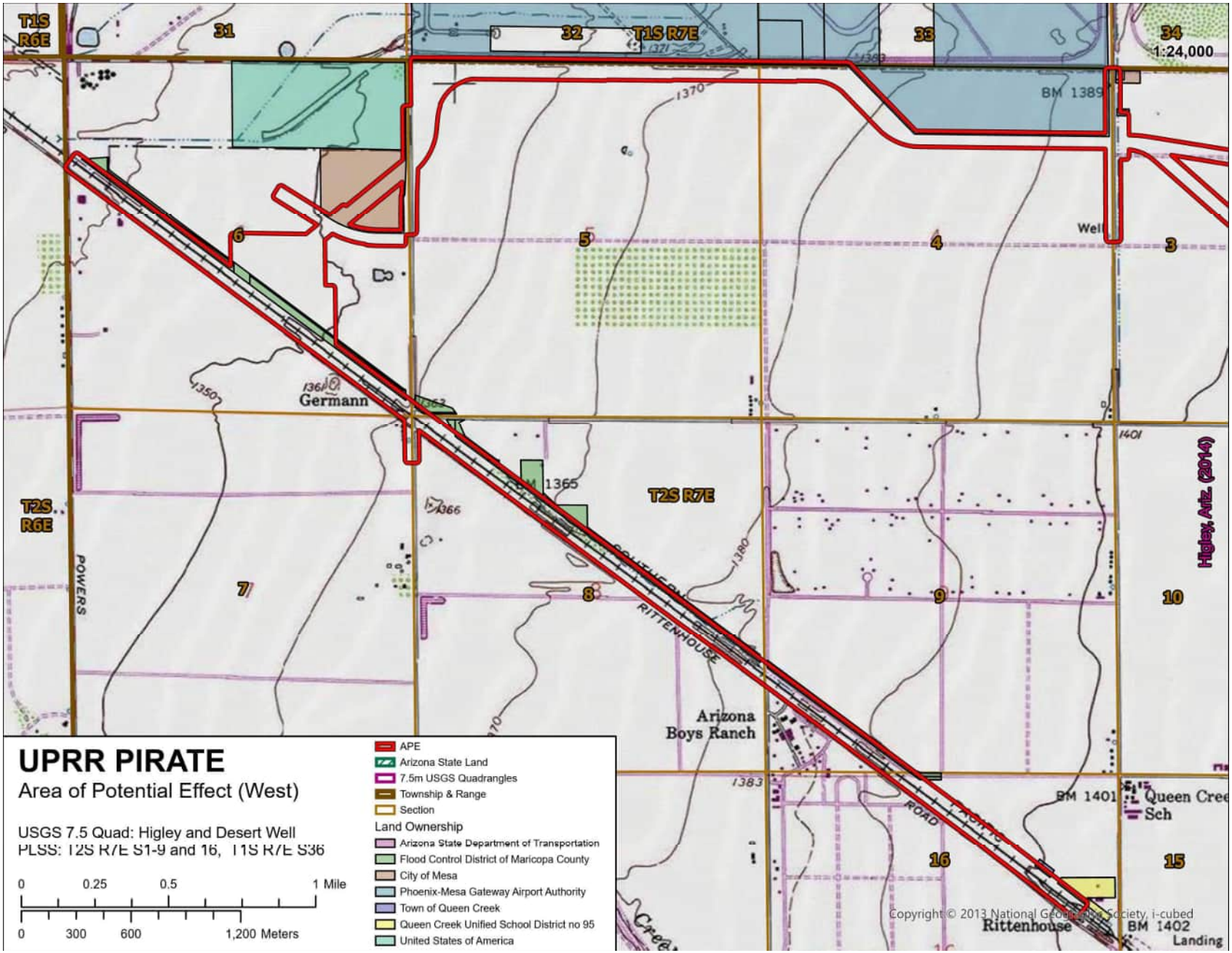
Sincerely,

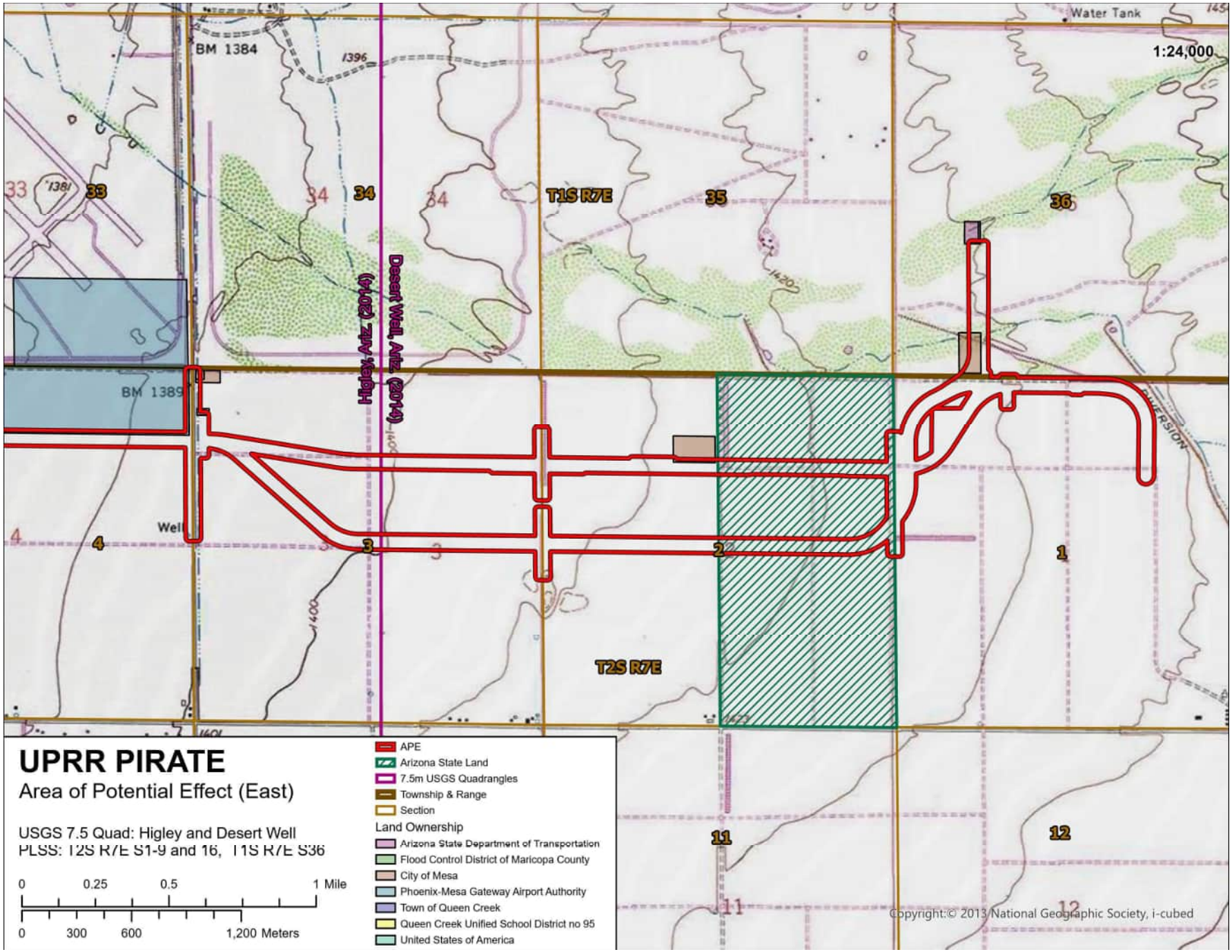


Danielle Gosselin
Director
Office of Environmental Analysis

Enclosure: APE Map (two sheets)

cc: Adam Assenza, OEA Environmental Protection Specialist, Adam.Assenza@stb.gov
Alan Tabachnick, OEA Historic Preservation Specialist, alan.tabachnick@stb.gov
Maggie Buckley, Jacobs Project Manager, Maggie.Buckley@jacobs.com


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Arizona Boys Ranch
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Rittenhouse
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Landing
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UPRR PIRATE
Area of Potential Effect (West)
USGS 7.5 Quad: Higley and Desert Well
PLSS: T2S R7E S1-9 and 16, T1S R7E S36
0 0.25 0.5 1 Mile
0 300 600 1,200 Meters
APE
Arizona State Land
7.5m USGS Quadrangles
Township & Range
Section
Land Ownership
Arizona State Department of Transportation
Flood Control District of Maricopa County
City of Mesa
Phoenix-Mesa Gateway Airport Authority
Town of Queen Creek
Queen Creek Unified School District no 95
United States of America


Water Tank
BM 1384
1396
1:24,000
33
34
T1S R7E
35
36
Higley, Ariz. (2014)
Desert Well, Ariz. (2014)
BM 1389
1420
1400
4
3
2
1
T2S R7E
11
12
UPRR PIRATE
Area of Potential Effect (East)
USGS 7.5 Quad: Higley and Desert Well
PLSS: T2S R7E S1-9 and 16, T1S R7E S36
0 0.25 0.5 1 Mile
0 300 600 1,200 Meters
APE
Arizona State Land
7.5m USGS Quadrangles
Township & Range
Section
Land Ownership
Arizona State Department of Transportation
Flood Control District of Maricopa County
City of Mesa
Phoenix-Mesa Gateway Airport Authority
Town of Queen Creek
Queen Creek Unified School District no 95
United States of America
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From: Luhnow, Glennda
Sent: Thursday, July 7, 2022 7:45 AM
To: Rainey, Pamela <Pamela.Rainey@jacobs.com>
Cc: Bushey, Sabra <Sabra.Bushey@jacobs.com>; Buckley, Maggie <Maggie.Buckley@jacobs.com>
Subject: FW: Section 106 Consultation for UPRR Pirate Project, Mesa, AZ (STB Docket FD 36501)

Hi Pam,

Can you please update the tribal tracking spreadsheet? Thanks!

Glennda Luhnow, M.A., RPA | **JACOBS** | **Manager/Archaeology and Cultural Resources** |
C: 480-510-0830 | glennda.luhnow@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

From: Karl Hoerig <khoerig@pascuayaqui-nsn.gov>
Sent: Tuesday, July 5, 2022 4:27 PM
To: Tabachnick, Alan <alan.tabachnick@stb.gov>
Cc: Assenza, Adam <Adam.Assenza@stb.gov>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Subject: [EXTERNAL] Re: Section 106 Consultation for UPRR Pirate Project, Mesa, AZ (STB Docket FD 36501)

Dear Mr. Tabachnick,

Following receipt of a letter from Danielle Gosselin, on April 22 I wrote to Mr. Adam Assenza requesting that any Class I and Class III survey reports that had been completed for the proposed UPRR Pirate Project be provided so that we could evaluate whether the Pascua Yaqui Tribe should consult on the project. I do not have records indicating that I received a response, though it is certainly possible that I missed it. If there is the potential for the proposed project to affect heritage resources, including ancestral sites, Pascua Yaqui Tribe would like to be included in the Section 106 and NEPA consultation.

With best regards,
Karl Hoerig

Karl A. Hoerig, Ph.D.

Tribal Historic Preservation Officer
Pascua Yaqui Tribe
7777 S. Camino Huivisim, Building C
Tucson, AZ 85757
(520) 883-5116
karl.hoerig@pascuayaqui-nsn.gov

From: Tabachnick, Alan <alan.tabachnick@stb.gov>
Sent: Friday, June 24, 2022 8:07 AM
Cc: Assenza, Adam <Adam.Assenza@stb.gov>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Subject: Section 106 Consultation for UPRR Pirate Project, Mesa, AZ (STB Docket FD 36501)

CAUTION: This email originated from outside of the PYT Organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

CAUTION: This email originated from outside of the PYT Organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning. I am reaching out to you to follow up on our Section 106 outreach letters and emails that were sent to you in early April, 2022. We have not received a formal response from you and want to make sure that you are given the opportunity to participate in the Section 106 process if you so desire. We are preparing an Environmental Assessment for the proposed new freight line, and undertaking cultural resource investigations as part of the Section 106 process. If you would like to be a formal consulting party on the project, please let me know as soon as possible.

If you have any questions about the project, the NEPA process, or the Section 106 process, please let me know. We would be happy to schedule a meeting if that would be helpful and are always available to answer any questions you may have. Thank you very much and feel free to reach out any time.

Sincerely,

Alan Tabachnick
(he/him/his)

Historic Preservation Specialist

Office of Environmental Analysis
Surface Transportation Board
395 E Street SW
Washington, DC 20423
Office: 202-245-0367

SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

September 1, 2022

Ms. Kathryn Leonard
State Historic Preservation Officer
Arizona State Parks, State Historic Preservation Office
1110 West Washington Street, Suite 100
Phoenix, AZ 85007

Re: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – in Maricopa County, AZ; Continuation of National Historic Preservation Act Section 106 Consultation on Area of Potential Effects Revision, Class III Survey Report Adequacy, National Register of Historic Places Eligibility, Treatment Recommendations, Finding of Adverse Effect, and Section 106 Agreement Document

Dear Ms. Leonard:

On June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Surface Transportation Board (Board) pursuant to 49 U.S.C. § 10502 requesting authority to construct and operate approximately 6.0 miles of new rail line in Maricopa County, Arizona (the Pecos Industrial Rail Access and Train Extension [PIRATE] rail line) (Attachment 1). Before making its decision on whether to grant such authority, the Board must consider the potential environmental impacts of the construction and operation of UP's proposed rail line, pursuant to the National Environmental Policy Act (42 U.S.C. §§ 4321-4370m-12), Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), the Board's environmental rules at 49 C.F.R. Part 1105, and related environmental laws. Previous consultation pursuant to Section 106 of the National Historic Preservation Act (dated April 6, 2022) initiated the Section 106 process, outlined the project scope, notified potential consulting parties of the project's alternatives analysis, and requested concurrence on the project Area of Potential Effects (APE).

The Board's Office of Environmental Analysis (OEA) is continuing Section 106 consultation with your office to solicit your comments regarding revisions to the APE since our last letter, the cultural resources Class III Survey Report, OEA's National Register of Historic Places (NRHP) eligibility determinations, treatment recommendations, finding of adverse effect, and development of a Section 106 agreement document for the project.

Revised Area of Potential Effects

The project APE has been slightly revised since our initial Section 106 consultation letter dated April 6, 2022. Proposed grading extensions located in a portion of Township 1 South, Range 7 East, Section 36 (Gila and Salt River Baseline and Meridian [GSRB&M]) would not be constructed as part of this project and have been removed from the APE. These extensions may be constructed by others in the future depending on market conditions and the owners' needs. The removal of the grading extensions reduces the APE by 0.75 mile. Additionally, the northeastern terminus of the APE south of Pecos Road has been slightly adjusted and extended by approximately 500 feet at the approach to the Commercial Metals Company, located in a portion of Township 2 South, Range 7 East, Section 1 (GSRB&M). The revised APE is depicted on Attachments 2a and 2b and was included in the Class III survey discussed below.

Completion of Class III Survey and Draft Technical Report

Jacobs Engineering Group Inc., OEA's third-party contractor, conducted the Class III survey between May 24 and 31, 2022, and on June 14, 2022. The results are reported in *A Class III Cultural Resources Survey for the Union Pacific Railroad Company, Pecos Industrial Rail Access and Train Extension (PIRATE) Project, Mesa and Queen Creek, Maricopa County, Arizona* by Pamela J. Rainey and Michael Stubing, dated August 2022 (Class III Survey Report). A copy of the Class III Survey Report is attached for your review and comment. As explained in the Class III Survey Report and also depicted on Attachments 2a and 2b, small portions of the APE remain unsurveyed due to extensive crop coverage and limitations on right of entry.

The Class III survey identified portions of 3 previously recorded cultural resources sites (AZ U:10:2[Arizona State Museum (ASM)], AZ U:10:69[ASM], and AZ U:10:275[ASM]), 2 in-use historic structures, and 56 isolated occurrences (IOs) and isolated features (IFs) within the APE. A portion of 1 previously recorded cultural resources site (AZ U:10:152[ASM]) is plotted directly adjacent to the APE.

The IOs and IFs consist of prehistoric artifacts and historic artifacts and features (utility lines, irrigation canals/ditches, and unimproved roads). The IOs and IFs are not considered significant. They do not meet the ASM site definition, and mapping and recording have exhausted their data potential. No further cultural resources work is recommended for the 56 IOs and IFs.

Eligibility Determinations and Treatment Recommendations

Cultural Resources Sites

AZ U:10:2(ASM) is an extensive Hohokam habitation site located in the APE in the wye, along the Phoenix Subdivision main line and along the shared Alternative 1 and Alternative 2 alignment. The Arizona State Historic Preservation Office (SHPO) previously determined the site eligible for inclusion in the NRHP under Criterion D (information potential). Sites such as AZ U:10:2(ASM) have the potential to contain data that can inform research questions related to Hohokam settlement pattern, land use, trade and interaction, intrasite patterning, subsistence

strategies, and social organization, among other topics. Based on current fieldwork results, OEA agrees with SHPO's previous determination that AZ U:10:2(ASM) is eligible for the NRHP under Criterion D. AZ U:10:2(ASM) measures 3.7 by 2.5 kilometers (1,513 acres) in total size and encompasses a large portion of the APE, thus eliminating options for avoidance. Therefore, OEA recommends developing a Section 106 agreement document and a Historic Properties Treatment Plan (HPTP) to outline an appropriate level of treatment.

AZ U:10:69(ASM) is located in the APE in the shared Alternative 1 and Alternative 2 alignment. SHPO previously determined the site eligible for the NRHP under Criterion D. The portion of the site within the APE is represented by newly recorded Locus 1, a small cluster of artifacts. The boundary of AZ U:10:69(ASM) was expanded to incorporate Locus 1. The presence of multiple artifact classes in Locus 1 suggests that this area represents some degree of habitation during the Hohokam Preclassic period. The area has been subject to extensive agricultural disturbance. However, there may be potential for intact subsurface deposits, although the Class III survey results could not confirm this. Therefore, OEA is unable to evaluate the portion of AZ U:10:69(ASM) within the APE for NRHP eligibility. A determination of "unevaluated" is appropriate. Avoidance of AZ U:10:69(ASM) may be feasible based on the configuration of the final design. If avoidance is not feasible, OEA recommends developing a Section 106 agreement document and an HPTP to outline an appropriate level of treatment.

AZ U:10:152(ASM) is a large Hohokam artifact scatter that is located within the Phoenix-Mesa Gateway Airport, immediately north and adjacent to the Alternative 1 and Alternative 2 alignment of the APE. The original site recorders previously recommended the site eligible for the NRHP under Criterion D (Greenwald et al. 1994). While a sparse number of dispersed ceramics were identified to the south of the site boundary, their number and the diffuse nature of their distribution did not justify expanding the site boundary. OEA recommends cultural resources construction monitoring in the site vicinity under the provisions of a monitoring and discovery plan to be included in a Section 106 agreement document.

AZ U:10:275(ASM) is located in the APE in the Alternative 1 alignment. SHPO previously determined the site eligible for the NRHP. No criterion is cited. Within the APE, OEA expanded the previously documented site boundary to encompass a newly recorded ceramic scatter. However, the boundary of this site could not be confidently drawn due to 0 percent ground visibility within the APE to the immediate south. The types of wares in the newly recorded ceramic scatter suggest that this portion of the site represents use during the Hohokam Preclassic period. The area has been subject to extensive agricultural disturbance. However, there may be potential for intact subsurface deposits, although the Class III survey results did not confirm this. Therefore, OEA is unable to evaluate the newly recorded portion of AZ U:10:275(ASM) within the APE for NRHP eligibility. A determination of "unevaluated" is appropriate. Avoidance of AZ U:10:275(ASM) may be feasible if Alternative 1 is not authorized for construction or if Alternative 1 final design is configured to avoid the site. If avoidance is not feasible, OEA recommends developing a Section 106 agreement document and an HPTP outlining an appropriate level of treatment.

In-Use Historic Structures

Old Rittenhouse Road, formerly AZ U:10:154(ASM), is within the Phoenix Subdivision main line portion of the APE. The road runs alongside the southwest side of the railroad and can be seen intermittently between Power Road and southeast of Sossaman Road. It is currently in use as an access road to local businesses. No pavement is present, and portions of the road have been obliterated. The road terminates approximately 0.38 mile southeast of Sossaman Road, where the current alignment of Rittenhouse Road joins it. Within the APE, the road lacks integrity, and OEA agrees with SHPO's previous determination that the road is ineligible for the NRHP. OEA does not recommend any further cultural resources work for Old Rittenhouse Road.

The Mesa to Winkelman Spur of the Southern Pacific Railroad, formerly AZ U:16:299(ASM), is an in-use historic structure that is currently owned and operated by UP as the Phoenix Subdivision main line. SHPO previously determined that the rail corridor was eligible for listing on the NRHP under Criterion A for its association with early development of rail transportation within Arizona. Within the APE, the alignment retains integrity of location, workmanship, and design. While its integrity of setting, feeling, and association have been diminished slightly by adjacent modern development, it is not significant. The railroad's integrity of materials has also been slightly diminished by regular maintenance. However, it is in-kind and does not constitute a significant change. As a result, OEA has determined that the portion of the railroad in the APE contributes to the eligibility of the alignment under Criterion A. While modifications to the existing track would occur, they would not affect the railroad's integrity of location, setting, feeling, and association, so there would be no adverse effect to the railroad's eligibility under Criterion A. Further, this segment does not exhibit any unique qualities of design or construction that would be adversely affected. Therefore, OEA does not recommend any further cultural resources work for the Mesa to Winkelman Spur of the Southern Pacific Railroad.

Finding of Project Effect

If the Board grants UP's petition, UP would have approval to construct the alternative authorized by the Board in its final decision. However, based on the results of the background research and Class III cultural resources survey, a finding of adverse effect to historic properties is appropriate for any Board decision granting construction and operating authority, regardless of which alternative is authorized.

Based on the finding of adverse effect to historic properties, OEA recommends development and distribution of a Section 106 agreement document to all consulting parties for review and comment. The agreement document will contain measures to mitigate any adverse effects to historic properties, including the format and content of an HPTP. OEA requests concurrence that a Memorandum of Agreement is the appropriate Section 106 agreement document.

Request for Input

Finally, OEA requests your comments regarding the APE revisions, the adequacy of the Class III Survey Report, OEA's NRHP eligibility determinations, treatment recommendations, finding of adverse effect, and development of a Memorandum of Agreement as an appropriate Section 106 agreement document for the project by **Tuesday**, **October 4**, **2022**. If you have any questions or would like additional information, please reach out to Alan Tabachnick, at 202-245-0367.

Sincerely,



Danielle Gosselin
Director
Office of Environmental Analysis

Enclosures:

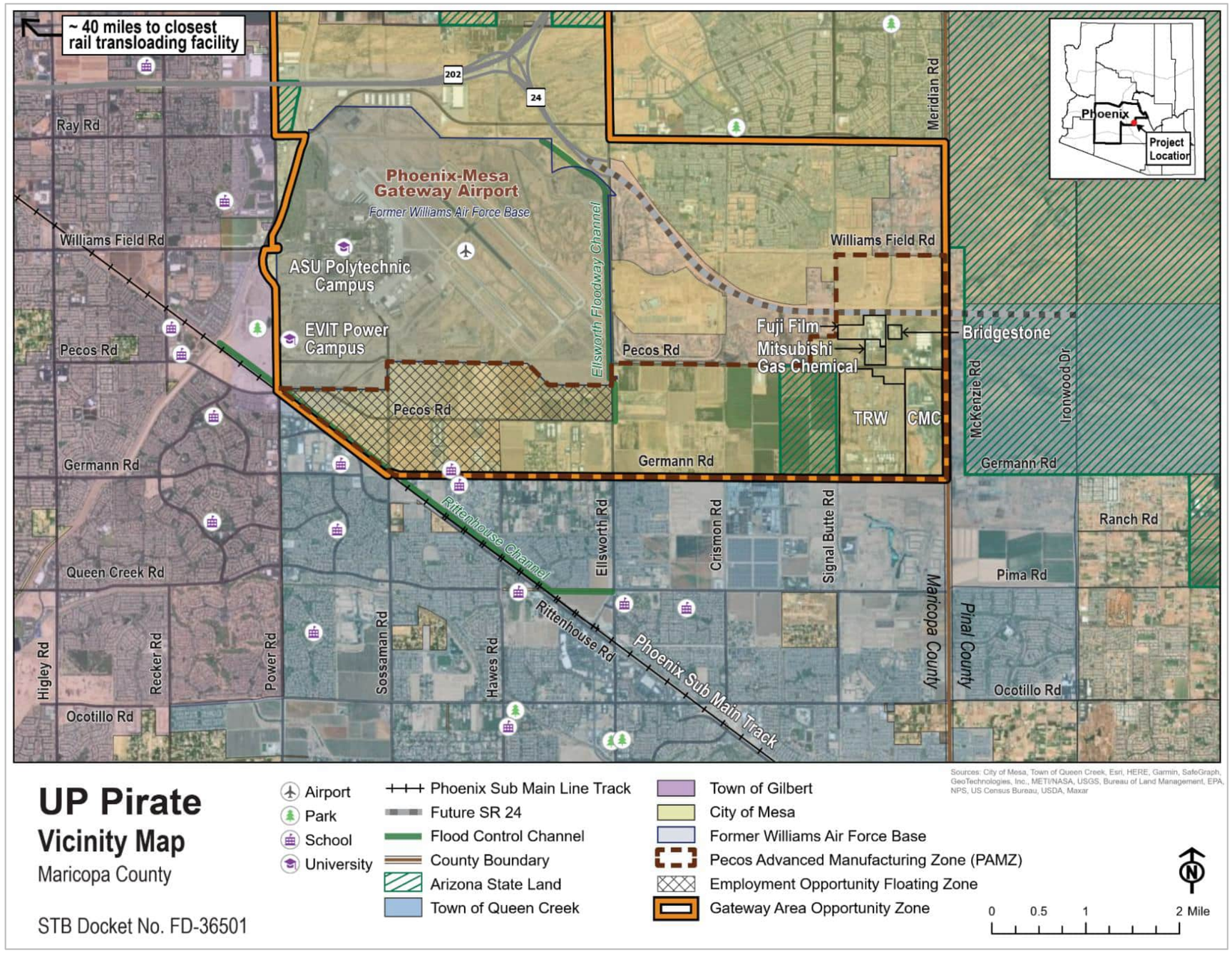
Attachment 1 – Vicinity Map
Attachment 2 – Revised APE Map (two sheets)
Attachment 3 – Cultural Resources Report

Cc: Adam Assenza, OEA Environmental Protection Specialist, Adam.Assenza@stb.gov
Alan Tabachnick, OEA Historic Preservation Specialist, Alan.Tabachnick@stb.gov
Maggie Buckley, Jacobs Project Manager, Maggie.Buckley@jacobs.com

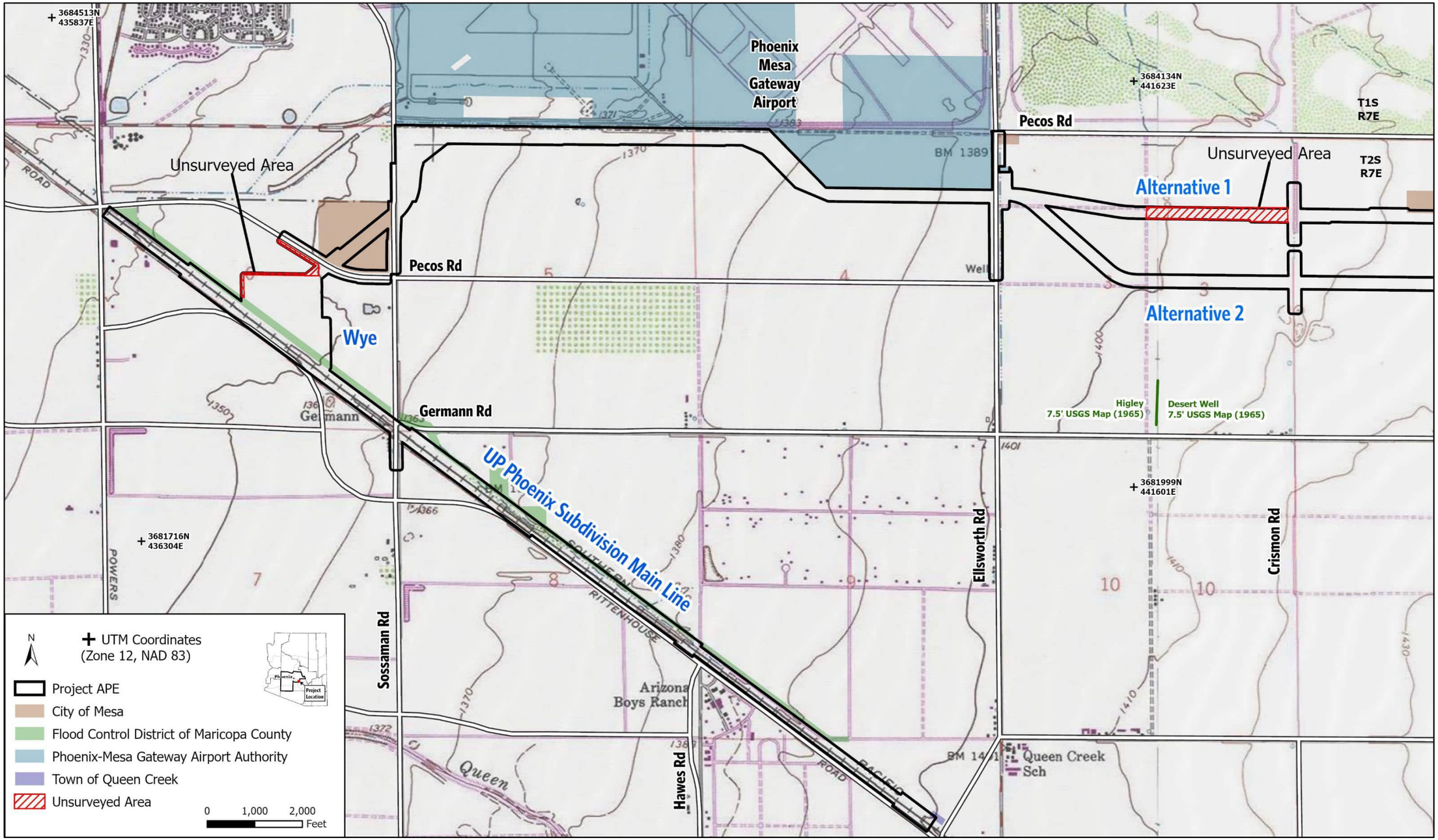
Reference Cited:

Greenwald, David H., Richard A. Anduze, and Mary-Ellen Walsh-Anduze
1994 *Archaeological Survey and Test Excavations at Williams Air Force Base, Arizona.* SWCA Archaeological Report 93-12b. SWCA Environmental Consultants, Inc., Scottsdale, Arizona.

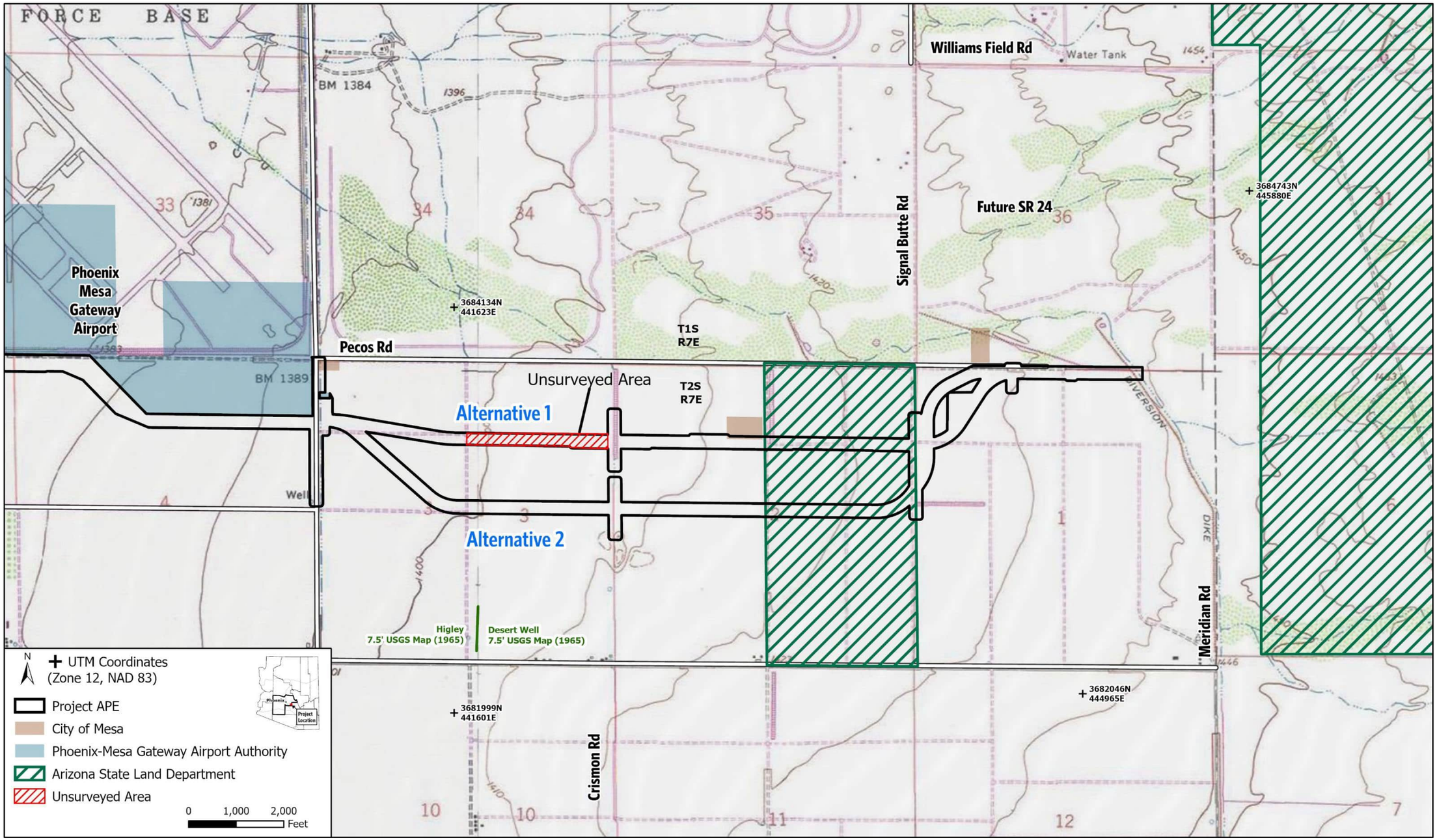
ATTACHMENT 1 – VICINITY MAP



ATTACHMENT 2a– REVISED APE MAP



ATTACHMENT 2b – REVISED APE MAP



Douglas A. Ducey
Governor

Lisa A. Atkins
Commissioner

Arizona State Land Department

1616 West Adams, Phoenix, Arizona 85007
(602) 542-4631

October 18, 2022

Michael Romero
Land Disp. Project Leader
Arizona State Land Department
1616 W. Adams
Phoenix, Arizona 85007

RE: Cultural Review for Application 16-123021-00-100 (Union Pacific Railroad Company)

Dear Mr. Romero:

Union Pacific Railroad Company filed a Right of Way (ROW) application (16-123021-00-100) with the Arizona State Land Department (ASLD) for the installation and maintenance of Pecos Industrial Rail Access and Train Extension (PIRATE) on State Trust Land (STL) in Maricopa County (T2S, R7E, Section 2), encompassing 7.257 acres. The project is seeking authority from the Surface Transportation Board (Board). Therefore, this review is solely for ASLD's compliance with the Arizona State Historic Preservation Act (A.R.S. § 41-861 et seq.) in the issuance of the requested ROW and does not fulfill either other agency's potential responsibilities under Section 106 of the National Historic Preservation Act (36 CFR Part 800).

The Boards Office of Environmental Analysis (OEA) on behalf of Union Pacific Railroad Company arranged for Jacobs Engineering Group, Inc. (Jacobs) to inspect the subject area for cultural resources. That inspection was conducted under Arizona Antiquities Act Permit No. 2022-018bl and is documented in the report titled *A Class III Cultural Resources Survey for the Union Pacific Railroad Company Pecos Industrial Rail Access and Train Extension (PIRATE) Project, Mesa and Queen Creek, Maricopa County, Arizona.* (2022). Therefore, per the 2016 Interagency Service Agreement (ISA) between the ASLD, the State Historic Preservation Office (SHPO), and the Arizona State Museum (ASM), ASLD has reviewed the report and has the following comments and recommendations.

The report indicates that Jacobs inspected 31.45 acres of State Trust land and identified six isolated features (IF) consisting of a historic utility line, two in-use dirt roads, and three canal/irrigation ditches on State Trust land. The Class III survey inspected two alternative areas. The Ifs are not considered significant. They do not meet ASM site definition, and mapping and recording have exhausted their data potential. No further cultural resource work is recommended for the IOs. Therefore, the ASLD Cultural Resources Section recommends that ASLD ROW Section grant ROW application 16-123021-00-100 with the following conditions:

Prior to any ground disturbance in areas not previously subject to a cultural resources survey, Grantee shall arrange for a permittee of the Arizona State Museum to inspect the area for cultural, historical, and paleontological remains and submit two copies and a PDF copy of the inspection report to the Arizona State Land Department Cultural Resources Section for review and approval.

If, following receipt of ASLD Cultural Resources Section approval to proceed, any additional archaeological, paleontological, or historical site or object, or Human remains or funerary object that is at least fifty years old is discovered during the course of ground disturbing activities, all work shall cease and the grantee shall notify the Director of the Arizona State Museum pursuant to A.R.S. §41-844, and Arizona State Land Department Cultural Resources Section Manager.

By copy of this letter to Jacobs Engineering Group, Inc., I have the following technical comments:

- Abstract: Project Locator UTM – only use one project UTM locator as the official project UTM locator (used by SHPO and ASM to track projects with AZSITE).

Your continued cooperation with this office in considering the potential for impacts to Arizona's cultural resources is appreciated. If you have any comments or concerns, please contact the ASLD Cultural Resources Section at arch@azland.gov.

Sincerely,

Tiffany L. Grew
Archaeological Compliance Specialist
As agent of Arizona State Land Department

CC: Erin Davis, SHPO
Adam Assenza, OEA
Alan Tabachnick, OEA
Kris Anderson, Union Pacific Railroad Company
Glennda Gene Luhnow, Jacobs Engineering Group, Inc.
Shannon Plummer, ASM

Enclosure: Tribal Consultation List

Arizona State Land Department Cultural Resources Section
Tribal Consultation List

If you have any comments or concerns, please provide them at this time. If there are none, this document may be retained for your records. Should you require additional documentation, i.e. maps or reports, please request via email for digital copies.

Application No.: 16-123021-00-100
Date: October 18, 2022

Tribes:

- ☐ Ak-Chin Indian Community
- ☐ Chemehuevi Indian Tribe
- ☐ Cocopah Indian Tribe
- ☐ Colorado River Indian Tribes
- ☐ Fort McDowell Yavapai Nation
- ☐ Fort Mojave Indian Tribe
- ☐ Fort Sill Apache Tribe
- ☐ Fort Yuma-Quechan Tribe
- ☒ Gila River Indian Community
- ☐ Havasupai Tribe
- ☒ Hopi Tribe
- ☐ Hualapai Tribe
- ☐ Kaibab Band of Paiute Indians
- ☒ Mescalero Apache Tribe
- ☐ Moapa Band of Paiute Indians
- ☐ Navajo Nation
- ☐ Paiute Indian Tribe of Utah
- ☒ Pascua Yaqui Tribe
- ☒ Pueblo of Zuni
- ☒ Salt River Pima-Maricopa Indian Community
- ☐ San Carlos Apache Tribe
- ☐ San Juan Southern Paiute
- ☐ Tohono O'odham Nation
- ☒ Tonto Apache Tribe
- ☐ Ute Mountain Ute
- ☒ White Mountain Apache Tribe
- ☒ Yavapai-Apache Nation
- ☐ Yavapai-Prescott Indian Tribe
- ☐ Pueblo of Acoma

GILA RIVER INDIAN COMMUNITY
POST OFFICE BOX 2193, SACATON, AZ 85147

TRIBAL HISTORIC PRESERVATION OFFICE

(520) 562-7162
Fax: (520) 562-5083

September 7, 2022

Danielle Gosselin, Director
Surface Transportation Board
Office of Environmental Analysis
RE: Docket No. FD 36501
395 E Street SW
Washington, DC 20423

RE: Docket No. FD 36501, Union Pacific Railroad Company, Construction and Operation Exemption, Mesa, Maricopa County, Arizona, Section 106 Consultation Area of Potential Effects (APE), Class III Survey Report, Determinations of Register Eligibility, Treatment Recommendations, Memorandum of Agreement (MOA), Adverse Effect

Dear Director Gosselin,

The Gila River Indian Community Tribal Historic Preservation Office (GRIC-THPO) has received your consultation documents dated September 1, 2022. The Union Pacific Railroad Company (UPRC) has filed a petition with the Surface Transportation Board (Board) requesting to construct and operate a 6 mile long rail line, the Pecos Industrial Rail Access and Train Extension (PIRATE), east and south of the Phoenix-Mesa Gateway Airport, Mesa, Maricopa County, Arizona. Two alternatives (Alternative 1 and 2) for construction have been archaeologically surveyed. Which alternative will be used for rail line construction has yet to be determined. Nonetheless, the Board advises that the APE has been has been modified by removing proposed grading extensions the project area.

The project area has been archaeologically surveyed. Four previously recorded sites and two in-use structures have been identified within the project area: 1) AZ U:10:2(ASM) is identified as the Germann Site, an extensive Hohokam habitation which extends across both proposed construction alternatives. The site is considered a Register eligible property which cannot be avoided. The OEA is recommending the development of an MOA and a Historic Property Treatment Plan (HPTP) to address the adverse effects of this undertaking; 2) AZ U:10:69(ASM) is identified as a large Hohokam habitation site which is considered Register eligible. The portion of the site that is located within the build alternatives has been disturbed by agricultural activities. The OEA advises that this disturbed portion of the site will be considered as unevaluated regarding Register eligibility. If the site cannot be avoided through project redesign, the OEA is recommending the development of an MOA and a HPTP to address the adverse effects of this undertaking; 3) AZ U:10:152(ASM) is identified as a large Hohokam artifact scatter that is located adjacent to the PIRATE project area and within the Phoenix-Mesa Gateway property. The site is considered a Register eligible property. Due to the sparse scatter of artifacts located within

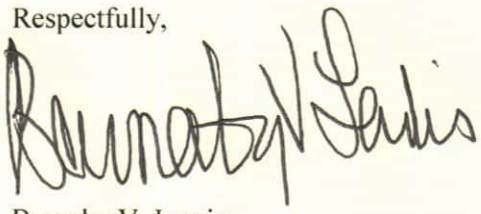
the PIRATE project area (newly identified and documented), the OEA is advising that the site boundary of AZ U:10:152(ASM) will not be expanded and that archaeological site monitoring during ground disturbing activities is recommended; 4) AZ U:10:275(ASM) is identified as the Sand Dune Site, an extensive Hohokam artifact scatter which is located within the Alternative 1 project alignment. The site is considered a Register eligible property. The portion of the site that is located within the Alternative 1 project area has been disturbed by agricultural activities. The OEA advises that this disturbed portion of the site will be considered as unevaluated regarding Register eligibility. If the site cannot be avoided through project redesign, the OEA is recommending the development of an MOA and a HPTP to address the adverse effects of this undertaking: 5) AZ U:10:154(ASM) is identified as the Old Rittenhouse Road. The road is currently in-use and is not considered a Register eligible property; and 6) AZ U:16:299(ASM) is identified as the Mesa to Winkelman Spur of the Southern Pacific Railroad. The rail road is considered a Register eligible property which will not be affected by this undertaking. The Board and the OEA are seeking concurrence with recommendations for determinations of site Register eligibility, the preparation of a MOA, and with the preparation of a HPTP to address the adverse effects of this undertaking. The Board has made a project finding of adverse effect.

The GRIC-THPO does not agree with determinations of site Register eligibility. Sites AZ U:10:69(ASM) AZ U:10:152(ASM), and AZ U:10:275(ASM) have previously been determined to be Register eligible properties. The portions of these sites that are located within the project area are therefore considered Register eligible too. A determination of "unevaluated" is not acceptable The GRIC-THPO does not support the splitting up of sites to determine which parts of the sites are Register eligible and which parts of the sites are not Register eligible. The entire site is Register eligible. We also recommend that the site boundary be expanded to include the newly documented portion of site AZ U:10:152(ASM). The Board and the OEA have also included language regarding site disturbance from agricultural activities at sites AZ U:10:69(ASM) and AZ U:10:275(ASM). Experience has demonstrated to us all that discoveries can still occur, regardless of the extent of disturbance. Assuming or underestimating the possibilities of discoveries is misguided and wrong. The agencies and archaeologists need to conduct this undertaking expecting discoveries in the disturbed areas. The changes to the APE are understood, but it is unclear from the report, maps, and consultation letter just what parts of the APE have been modified. Please clarify. There are also parts of the project area that have been marked as unsurveyed. Will those portions of the project area be archaeologically surveyed?

The GRIC-THPO concurs with a finding adverse effect for this undertaking. We also agree with recommendations for preparation of a Section 106 MOA, a HPTP, and with recommendations for archaeological site monitoring (if necessary). We look forward to reviewing and commenting on the MOA and HPTP, which include are suggested changes, when they become available. The GRIC-THPO will continue to participate in the Section 106 process of this undertaking. The proposed project area is within the ancestral lands of the Four Southern Tribes (Gila River Indian Community; Salt River Pima-Maricopa Indian Community; Ak-Chin Indian Community and the Tohono O'Odham Nation).

Thank you for consulting with the GRIC-THPO about this undertaking. If you have any questions please do not hesitate to contact our office at 520-562-7162.

Respectfully,



Barnaby V. Lewis
Tribal Historic Preservation Officer
Gila River Indian Community

ATTACHMENT 3

CONSULTATION QUESTIONNAIRE

Pascua Yaqui Tribe

Re: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – in Maricopa County, AZ.; Section 106 Government-to-Government Consultation and NEPA Coordination

Please check all the appropriate response(s) that apply from the list below and please feel free to use the back of this form or additional sheets if you wish to make comments.

_____ We have no interests regarding UP's proposed construction and operation exemption and further consultation with our Tribe is not required.

_____ We want to continue to receive project information by mail or email and participate in the NEPA public involvement process. Please specify email and/or mailing address.

_____

_____

_____

✓ We have an interest in UP's proposed construction and operation exemption and want to participate in government-to-government consultation.

Name of the Pascua Yaqui Tribe designated contact for the UP construction and operation exemption:

Name: Karl Hoerig Phone: (520) 883-5116

Please print email: karl.hoerig@pascuayaqui-nsn.gov

Signed: [signature] Date: 9/16/2022

Please mail to:

Alan Tabachnick, Surface Transportation Board
Re: Docket No. FD 36501
395 E Street SW
Washington, DC 20423

Or email to: Alan.Tabachnick@stb.gov

From: Bushey, Sabra <Sabra.Bushey@jacobs.com>
Sent: Monday, September 19, 2022 7:23 PM
To: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>
Subject: FCDMC - 106 Response

In regards to the letter requesting comments that our office received from Danielle Gosselin, Director, Office of Environmental Analysis, dated September 1, 2022, the Flood Control District of Maricopa County (District) has no comment on the Area of Potential Effects revisions, the adequacy of the Class III Cultural Resources Survey, OEA's NRHP eligibility determinations, treatment recommendations, finding of adverse effect, or development of a Memorandum of Agreement as an appropriate Section 106 agreement document for the Union Pacific Railroad Company Pecos Industrial Rail Access and Train Extension Project (Surface Transportation Board Docket No. FD 36501). It appears that the rail alignment may impact the existing Rittenhouse Channel that is owned and maintained by the District. If so, a right of way use permit and a land right must be obtained from our office prior to any construction that impacts our project. Our right of way permit review will be conducted to ensure that the channel function remains fully intact and there is a clear understanding of future responsibilities for operation and maintenance of any facilities that may impact our channel. An engineering firm on behalf of Union Pacific Railroad submitted a general concept plan to the District and applied for a right of way use permit from our office in late September 2021. More detailed plans will be required before permitting decisions can be made. In addition to a right of way use permit and land right, a floodplain use permit from our office may also be necessary as the existing flood channel contains a delineated floodplain that may be impacted, and the District is responsible for floodplain reviews in the City of Mesa. Ed Raleigh Senior Engineering Advisor Flood Control District of Maricopa County (602)506-1501

From: Plummer, Shannon D - (splummer) <splummer@arizona.edu>
Sent: Monday, October 3, 2022 10:41 AM
To: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Cc: Leone, Karen L - (kleone) <kleone@arizona.edu>
Subject: [EXTERNAL] RE: UPRR PIRATE Continuing Section 106 Consultation and Survey Report Distribution

Hello, Glennda,

Arizona State Museum (ASM) has reviewed *A Class III Cultural Resources Survey for the Union Pacific Railroad Company Pecos Industrial Rail Access and Train Extension (PIRATE) Project, Mesa and Queen Creek, Maricopa County, Arizona*, by P.J. Rainey and M. Stubing of Jacobs Engineering Group, Inc., dated August 2022.

ASM concurs with the Surface Transportation Board's (STB) finding of "adverse effect".
ASM has no comments on the report draft (ASM Accession 2022-0231).

Shannon Plummer, M.A.
Arizona Antiquities Act Administrator
AAA Permits Office Manager
Arizona State Museum | The University of Arizona 1013 E University Blvd | PO Box 210026
Tucson, AZ 85721-0026
(520) 621-4795 | 621-2976 FAX www.statemuseum.arizona.edu

THE UNIVERSITY OF ARIZONA
ARIZONA STATE MUSEUM

From: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Sent: Thursday, September 1, 2022 1:27 PM
To: Lyons, Patrick D - (plyons) <plyons@arizona.edu>
Cc: Plummer, Shannon D - (splummer) <splummer@arizona.edu>; Assenza, Adam <adam.assenza@stb.gov>; Tabachnick, Alan <alan.tabachnick@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; Bushey, Sabra <Sabra.Bushey@jacobs.com>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>
Subject: [EXT]UPRR PIRATE Continuing Section 106 Consultation and Survey Report Distribution

External Email

Dear Dr. Lyons,

As stated in previous Section 106 consultation conducted under the National Historic Preservation Act, the Union Pacific Railroad Company intends to request authority from the Surface Transportation Board (Board) to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

With the attached letter, the Board's Office of Environmental Analysis (OEA) is continuing Section 106 consultation with your office and soliciting comments regarding revisions to the Area of Potential Effects for cultural resources, adequacy of a Class III survey report, National Register of Historic Places site eligibility, treatment recommendations, finding of adverse effect, and a Section 106 agreement document.

The Class III cultural resources survey report has been transmitted to you via File Transfer on behalf of OEA by Jacobs Engineering Group Inc, OEA's third-party contractor. The File Transfer document will be available for 15 days and will expire on September 15, 2022. If you are not able to access the document, or the link expires, please contact Glennda Luhnow, Jacobs' cultural resources manager, at Glennda.Luhnow@jacobs.com.

OEA requests your review and comment regarding the content of this letter by **Tuesday, October 4, 2022**. Please send your written comments electronically to Alan Tabachnick, OEA's Historic Preservation Specialist, at Alan.Tabachnick@stb.gov. If you have any questions or would like to discuss the proposed project in more detail, please contact Alan Tabachnick.

Thank you,
Glennda Luhnow

Glennda Luhnow, M.A., RPA | **JACOBS** | **Manager/Archaeology and Cultural Resources** |
C: 480-510-0830 | glennda.luhnow@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

mesa·az
HISTORIC PRESERVATION OFFICE

10/12/2022

Glennda Luhnow
Jacobs Engineering Inc.
Glennda.Luhnow@jacobs.com
(480) 510-0830

Re: Section 106 Consultation – Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – in Maricopa County, AZ; Continuation of National Historic Preservation Act Section 106 Consultation

Dear Applicant,

This letter is intended to respond to the need for Section 106 consultation on Area of Potential Effects Revision, Class III Survey Report Adequacy, National Register of Historic Places Eligibility, Treatment Recommendations, Finding of Adverse Effect, and Section 106 Agreement Document. Pursuant to 36 CFR 800 § 106 of the National Historic Preservation Act, the city of Mesa Historic Preservation Office has reviewed the project, which includes a request by the Union Pacific Railroad Company to the Surface Transportation Board to construct and operate approximately 6.0 miles of new rail line in Maricopa County, AZ.

The City of Mesa Historic Preservation Office concurs with the findings on the NRHP eligibility determinations on the In-Use Historic Structures. This office also concurs that a Memorandum of Agreement is appropriate for the Section 106 agreement document. This office defers concurrence on the Area of Potential Effect revisions, adequacy of the Class III Survey Report, OEA's NRHP eligibility determinations for the Cultural Resources sites, treatment recommendations, and finding of adverse effect to the State Historic Preservation Office.

Please feel free to contact me at maura.jackson@mesaaz.gov or (480) 644-2021 if there are any questions.

Sincerely,

Maura Jackson

Maura Jackson
Historic Preservation Advisor/Planner

cc: Nana Appiah, Development Services Director
Michelle Dahlke, Principal Planner
Bill Jabjiniak, Economic Development Director
Scott Butler, Assistant City Manager

SHPO-2022-0395 (165595) Rec: 09-01-22

SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

September 1, 2022

Ms. Kathryn Leonard
State Historic Preservation Officer
Arizona State Parks, State Historic Preservation Office
1110 West Washington Street, Suite 100
Phoenix, AZ 85007

Re: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – in Maricopa County, AZ; Continuation of National Historic Preservation Act Section 106 Consultation on Area of Potential Effects Revision, Class III Survey Report Adequacy, National Register of Historic Places Eligibility, Treatment Recommendations, Finding of Adverse Effect, and Section 106 Agreement Document

Dear Ms. Leonard:

On June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Surface Transportation Board (Board) pursuant to 49 U.S.C. § 10502 requesting authority to construct and operate approximately 6.0 miles of new rail line in Maricopa County, Arizona (the Pecos Industrial Rail Access and Train Extension [PIRATE] rail line) (Attachment 1). Before making its decision on whether to grant such authority, the Board must consider the potential environmental impacts of the construction and operation of UP's proposed rail line, pursuant to the National Environmental Policy Act (42 U.S.C. §§ 4321-4370m-12), Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), the Board's environmental rules at 49 C.F.R. Part 1105, and related environmental laws. Previous consultation pursuant to Section 106 of the National Historic Preservation Act (dated April 6, 2022) initiated the Section 106 process, outlined the project scope, notified potential consulting parties of the project's alternatives analysis, and requested concurrence on the project Area of Potential Effects (APE).

The Board's Office of Environmental Analysis (OEA) is continuing Section 106 consultation with your office to solicit your comments regarding revisions to the APE since our last letter, the cultural resources Class III Survey Report, OEA's National Register of Historic Places (NRHP) eligibility determinations, treatment recommendations, finding of adverse effect, and development of a Section 106 agreement document for the project.

Revised Area of Potential Effects

The project APE has been slightly revised since our initial Section 106 consultation letter dated April 6, 2022. Proposed grading extensions located in a portion of Township 1 South, Range 7 East, Section 36 (Gila and Salt River Baseline and Meridian [GSRB&M]) would not be constructed as part of this project and have been removed from the APE. These extensions may be constructed by others in the future depending on market conditions and the owners' needs. The removal of the grading extensions reduces the APE by 0.75 mile. Additionally, the northeastern terminus of the APE south of Pecos Road has been slightly adjusted and extended by approximately 500 feet at the approach to the Commercial Metals Company, located in a portion of Township 2 South, Range 7 East, Section 1 (GSRB&M). The revised APE is depicted on Attachments 2a and 2b and was included in the Class III survey discussed below.

Completion of Class III Survey and Draft Technical Report

Jacobs Engineering Group Inc., OEA's third-party contractor, conducted the Class III survey between May 24 and 31, 2022, and on June 14, 2022. The results are reported in *A Class III Cultural Resources Survey for the Union Pacific Railroad Company, Pecos Industrial Rail Access and Train Extension (PIRATE) Project, Mesa and Queen Creek, Maricopa County, Arizona* by Pamela J. Rainey and Michael Stubing, dated August 2022 (Class III Survey Report). A copy of the Class III Survey Report is attached for your review and comment. As explained in the Class III Survey Report and also depicted on Attachments 2a and 2b, small portions of the APE remain unsurveyed due to extensive crop coverage and limitations on right of entry.

The Class III survey identified portions of 3 previously recorded cultural resources sites (AZ U:10:2[Arizona State Museum (ASM)], AZ U:10:69[ASM], and AZ U:10:275[ASM]), 2 in-use historic structures, and 56 isolated occurrences (IOs) and isolated features (IFs) within the APE. A portion of 1 previously recorded cultural resources site (AZ U:10:152[ASM]) is plotted directly adjacent to the APE.

The IOs and IFs consist of prehistoric artifacts and historic artifacts and features (utility lines, irrigation canals/ditches, and unimproved roads). The IOs and IFs are not considered significant. They do not meet the ASM site definition, and mapping and recording have exhausted their data potential. No further cultural resources work is recommended for the 56 IOs and IFs.

Eligibility Determinations and Treatment Recommendations

Cultural Resources Sites

AZ U:10:2(ASM) is an extensive Hohokam habitation site located in the APE [redacted] The Arizona State Historic Preservation Office (SHPO) previously determined the site eligible for inclusion in the NRHP under Criterion D (information potential). Sites such as AZ U:10:2(ASM) have the potential to contain data that can inform research questions related to Hohokam settlement pattern, land use, trade and interaction, intrasite patterning, subsistence

strategies, and social organization, among other topics. Based on current fieldwork results, OEA agrees with SHPO's previous determination that AZ U:10:2(ASM) is eligible for the NRHP under Criterion D. AZ U:10:2(ASM) measures 3.7 by 2.5 kilometers (1,513 acres) in total size and encompasses a large portion of the APE, thus eliminating options for avoidance. Therefore, OEA recommends developing a Section 106 agreement document and a Historic Properties Treatment Plan (HPTP) to outline an appropriate level of treatment.

AZ U:10:69(ASM) is located in the APE [redacted]. SHPO previously determined the site eligible for the NRHP under Criterion D. The portion of the site within the APE is represented by newly recorded Locus 1, a small cluster of artifacts. The boundary of AZ U:10:69(ASM) was expanded to incorporate Locus 1. The presence of multiple artifact classes in Locus 1 suggests that this area represents some degree of habitation during the Hohokam Preclassic period. The area has been subject to extensive agricultural disturbance. However, there may be potential for intact subsurface deposits, although the Class III survey results could not confirm this. Therefore, OEA is unable to evaluate the portion of AZ U:10:69(ASM) within the APE for NRHP eligibility. A determination of "unevaluated" is appropriate. Avoidance of AZ U:10:69(ASM) may be feasible based on the configuration of the final design. If avoidance is not feasible, OEA recommends developing a Section 106 agreement document and an HPTP to outline an appropriate level of treatment.

AZ U:10:152(ASM) is a large Hohokam artifact scatter that is located within the [redacted] APE. The original site recorders previously recommended the site eligible for the NRHP under Criterion D (Greenwald et al. 1994). While a sparse number of dispersed ceramics were identified to the south of the site boundary, their number and the diffuse nature of their distribution did not justify expanding the site boundary. OEA recommends cultural resources construction monitoring in the site vicinity under the provisions of a monitoring and discovery plan to be included in a Section 106 agreement document.

AZ U:10:275(ASM) is located in the APE [redacted]. SHPO previously determined the site eligible for the NRHP. No criterion is cited. Within the APE, OEA expanded the previously documented site boundary to encompass a newly recorded ceramic scatter. However, the boundary of this site could not be confidently drawn due to 0 percent ground visibility within the APE to the immediate south. The types of wares in the newly recorded ceramic scatter suggest that this portion of the site represents use during the Hohokam Preclassic period. The area has been subject to extensive agricultural disturbance. However, there may be potential for intact subsurface deposits, although the Class III survey results did not confirm this. Therefore, OEA is unable to evaluate the newly recorded portion of AZ U:10:275(ASM) within the APE for NRHP eligibility. A determination of "unevaluated" is appropriate. Avoidance of AZ U:10:275(ASM) may be feasible [redacted]. If avoidance is not feasible, OEA recommends developing a Section 106 agreement document and an HPTP outlining an appropriate level of treatment.

In-Use Historic Structures

Old Rittenhouse Road, formerly AZ U:10:154(ASM), is within the Phoenix Subdivision main line portion of the APE. The road runs alongside the southwest side of the railroad and can be seen intermittently between Power Road and southeast of Sossaman Road. It is currently in use as an access road to local businesses. No pavement is present, and portions of the road have been obliterated. The road terminates approximately 0.38 mile southeast of Sossaman Road, where the current alignment of Rittenhouse Road joins it. Within the APE, the road lacks integrity, and OEA agrees with SHPO's previous determination that the road is ineligible for the NRHP. OEA does not recommend any further cultural resources work for Old Rittenhouse Road.

The Mesa to Winkelman Spur of the Southern Pacific Railroad, formerly AZ U:16:299(ASM), is an in-use historic structure that is currently owned and operated by UP as the Phoenix Subdivision main line. SHPO previously determined that the rail corridor was eligible for listing on the NRHP under Criterion A for its association with early development of rail transportation within Arizona. Within the APE, the alignment retains integrity of location, workmanship, and design. While its integrity of setting, feeling, and association have been diminished slightly by adjacent modern development, it is not significant. The railroad's integrity of materials has also been slightly diminished by regular maintenance. However, it is in-kind and does not constitute a significant change. As a result, OEA has determined that the portion of the railroad in the APE contributes to the eligibility of the alignment under Criterion A. While modifications to the existing track would occur, they would not affect the railroad's integrity of location, setting, feeling, and association, so there would be no adverse effect to the railroad's eligibility under Criterion A. Further, this segment does not exhibit any unique qualities of design or construction that would be adversely affected. Therefore, OEA does not recommend any further cultural resources work for the Mesa to Winkelman Spur of the Southern Pacific Railroad.

Finding of Project Effect

If the Board grants UP's petition, UP would have approval to construct the alternative authorized by the Board in its final decision. However, based on the results of the background research and Class III cultural resources survey, a finding of adverse effect to historic properties is appropriate for any Board decision granting construction and operating authority, regardless of which alternative is authorized.

Based on the finding of adverse effect to historic properties, OEA recommends development and distribution of a Section 106 agreement document to all consulting parties for review and comment. The agreement document will contain measures to mitigate any adverse effects to historic properties, including the format and content of an HPTP. OEA requests concurrence that a Memorandum of Agreement is the appropriate Section 106 agreement document.

Request for Input

Finally, OEA requests your comments regarding the APE revisions, the adequacy of the Class III Survey Report, OEA's NRHP eligibility determinations, treatment recommendations, finding of adverse effect, and development of a Memorandum of Agreement as an appropriate Section 106 agreement document for the project by **Tuesday**, **October 4**, **2022**. If you have any questions or would like additional information, please reach out to Alan Tabachnick, at 202-245-0367.

Sincerely,

Danielle Gosselin
Director
Office of Environmental Analysis

Enclosures:

Attachment 1 – Vicinity Map
Attachment 2 – Revised APE Map (two sheets)
Attachment 3 – Cultural Resources Report

Cc: Adam Assenza, OEA Environmental Protection Specialist, Adam.Assenza@stb.gov
Alan Tabachnick, OEA Historic Preservation Specialist, Alan.Tabachnick@stb.gov
Maggie Buckley, Jacobs Project Manager, Maggie.Buckley@jacobs.com

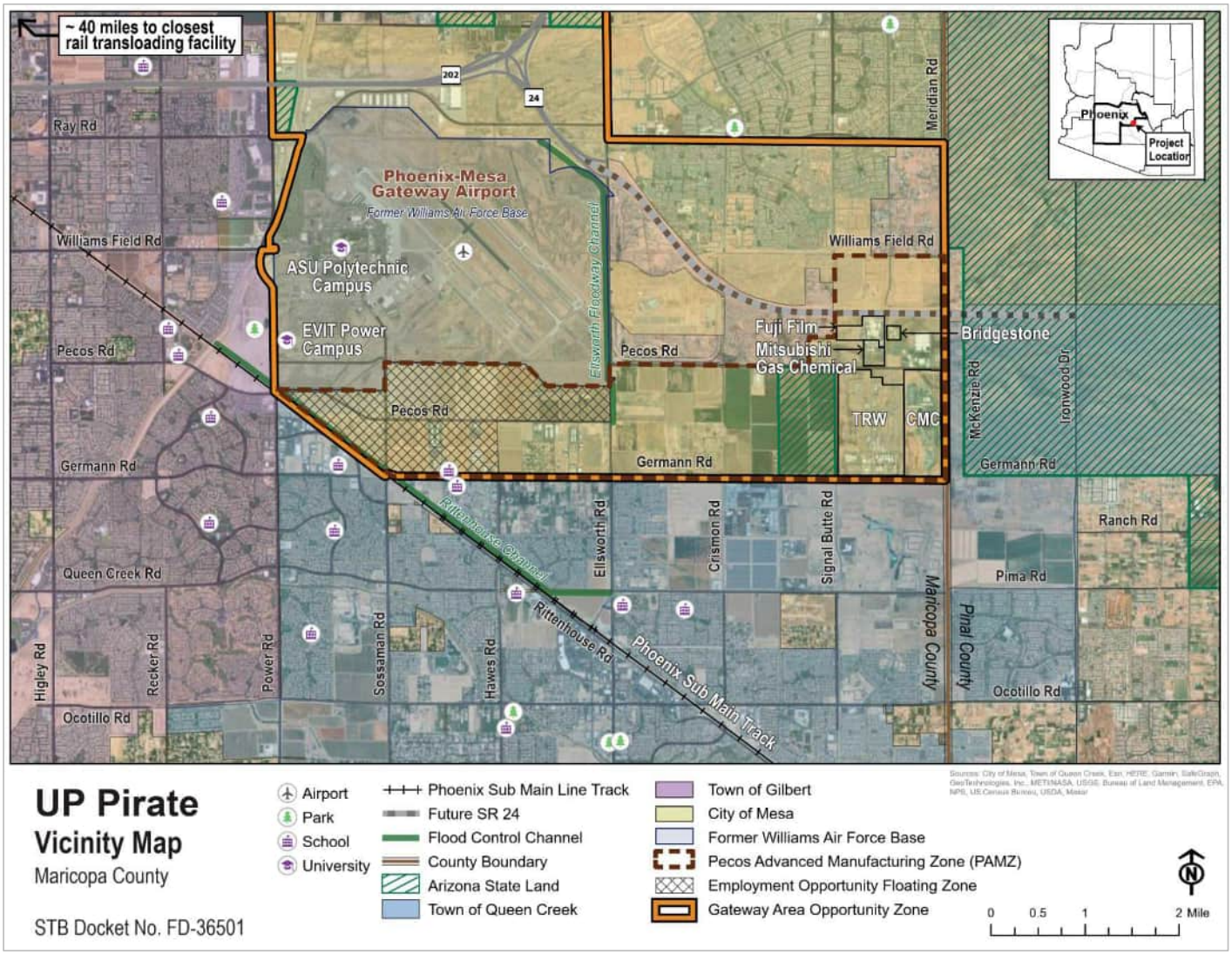
Reference Cited:

Greenwald, David H., Richard A. Anduze, and Mary-Ellen Walsh-Anduze
1994 *Archaeological Survey and Test Excavations at Williams Air Force Base, Arizona.* SWCA Archaeological Report 93-12b. SWCA Environmental Consultants, Inc., Scottsdale, Arizona.

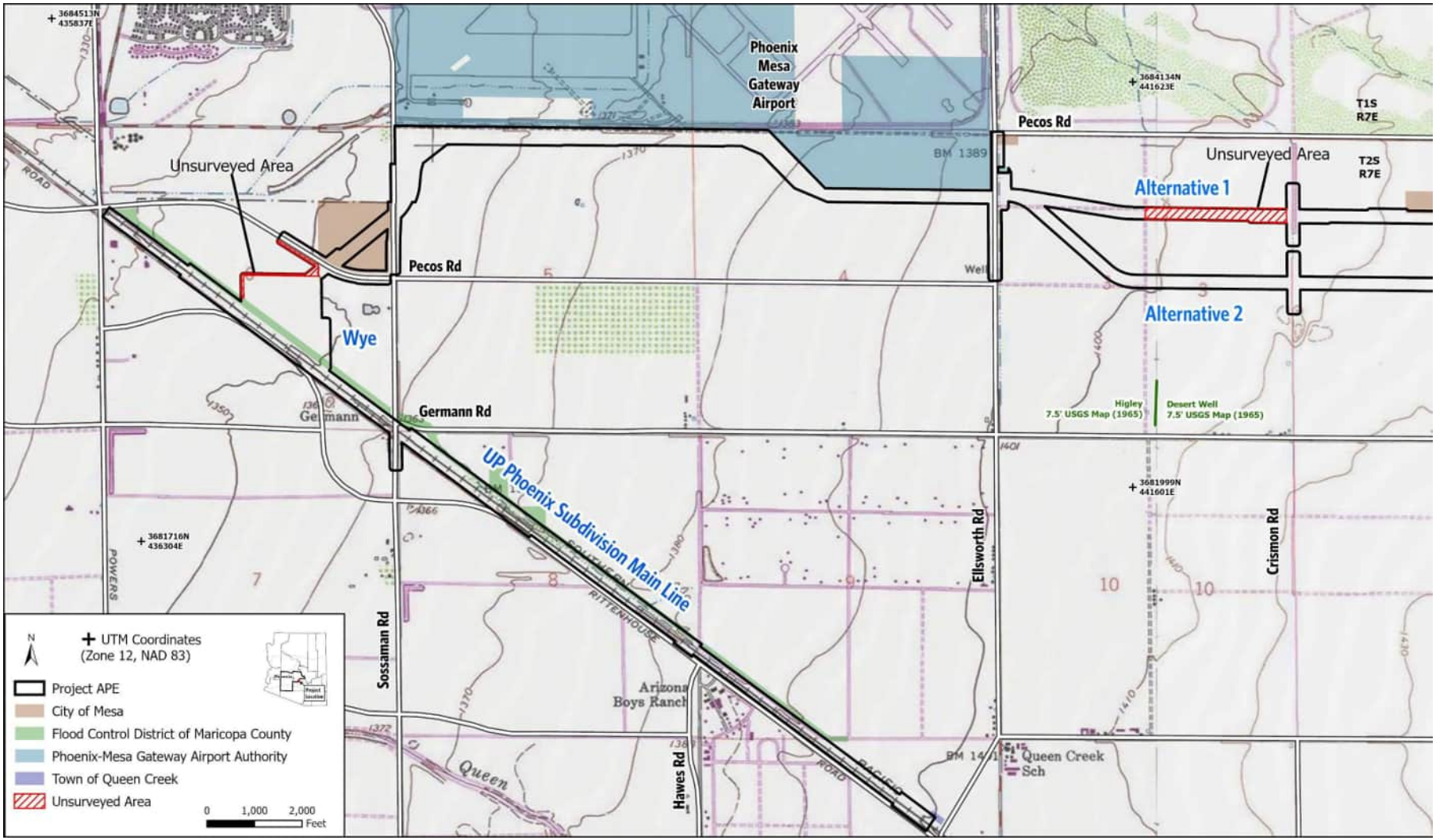
Concur.

Caroline Klebacha, M.A.
State Historic Preservation Office
September 26, 2022

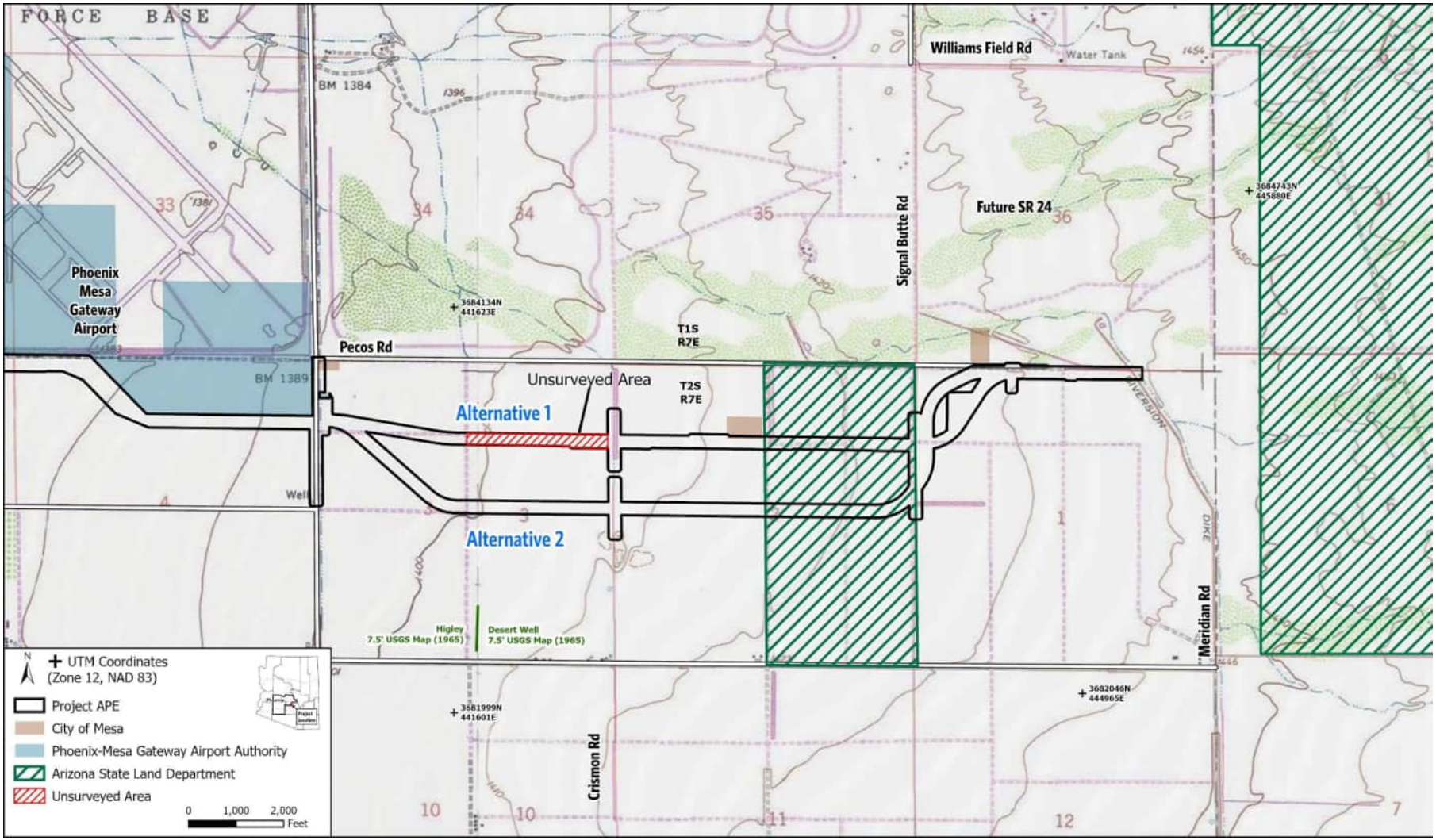
ATTACHMENT 1 – VICINITY MAP



ATTACHMENT 2a– REVISED APE MAP



ATTACHMENT 2b – REVISED APE MAP



Salt River
PIMA-MARICOPA INDIAN COMMUNITY
10,005 EAST OSBORN ROAD/SCOTTSDALE, ARIZONA 85256/ PHONE (480) 362-6325

Tribal Historic Preservation Office

TO: Danielle Gosselin, Director
Surface Transportation Board
Office of Environmental Analysis
RE: Docket No. FD 36501
395 E Street SW
Washington, DC 20423

DATE: 9/19/22

FROM: Shane Anton, Tribal Historic Preservation Officer

RE: Docket No. FD 36501, Union Pacific Railroad Company, Construction and Operation Exemption, Mesa, Maricopa County, Arizona, Section 106 Consultation Area of Potential Effects (APE), Class III Survey Report, Determinations of Register Eligibility, Treatment Recommendations, Memorandum of Agreement (MOA), Adverse Effect

Dear Director Gosselin,

The Salt River Pima Maricopa Indian Community Tribal Historic Preservation Office (SRPMIC-THPO) received your consultation documents dated September 1, 2022. The Union Pacific Railroad Company (UPRC) has filed a petition with the Surface Transportation Board (Board) requesting to construct and operate a 6 mile long rail line, the Pecos Industrial Rail Access and Train Extension (PIRATE), east and south of the Phoenix-Mesa Gateway Airport, Mesa, Maricopa County, Arizona.

Four previously recorded sites and two in-use structures have been identified within the project area:

1. AZ U:10:2(ASM), the Germann Site is an extensive Hohokam habitation that is Register eligible and that extends across both proposed construction alternatives. The OAE is recommending the development of an MOA and a Historic Property Treatment Plan (HPTP) to address the adverse effects of this undertaking.
2. AZ U:10:69(ASM) is a large Register eligible Hohokam habitation site. The OAE advises that this disturbed portion of the site will be considered as unevaluated regarding Register

eligibility. If the site cannot be avoided through project redesign, the OAE is recommending the development of an MOA and a HPTP to address the adverse effects of this undertaking.

3. 3) AZ U:10:152(ASM) is identified as a large Hohokam artifact scatter that is located adjacent to the PIRATE project area and within the Phoenix-Mesa Gateway property. The site is considered a Register eligible property. The OAE is advising that the site boundary of AZ U:10:152(ASM) will not be expanded and that archaeological site monitoring during ground disturbing activities is recommended.
4. AZ U:10:275(ASM) is identified as the Sand Dune Site, an extensive Hohokam artifact scatter. The site is considered a Register eligible property. The OAE advises that this disturbed portion of the site will be considered as unevaluated regarding Register eligibility. If the site cannot be avoided through project redesign, the OAE is recommending the development of an MOA and a HPTP to address the adverse effects of this undertaking.
5. AZ U:10:154(ASM) is identified as the Old Rittenhouse Road. The road is currently in-use and is not considered a Register eligible property.
6. AZ U:16:299(ASM) is identified as the Mesa to Winkelman Spur of the Southern Pacific Railroad. The rail road is considered a Register eligible property which will not be affected by this undertaking. The Board and the OAE are seeking concurrence with recommendations for determinations of site Register eligibility, the preparation of a MOA, and with the preparation of a HPTP to address the adverse effects of this undertaking. The Board has made a project finding of adverse effect.

The Gila River Indian Community Tribal Historic Preservation Office (GRIC-THPO) provided the following comments on September 7, 2022.

- The GRIC-THPO does not agree with determinations of site Register eligibility. Sites AZ U:10:69(ASM) AZ U:10:152(ASM), and AZ U:10:275(ASM) have previously been determined to be Register eligible properties. The portions of these sites that are located within the project area are therefore considered Register eligible…We also recommend that the site boundary be expanded to include the newly documented portion of site AZ U:10:152(ASM).
- The GRIC-THPO concurs with a finding adverse effect for this undertaking. We also agree with recommendations for preparation of a Section 106 MOA, a HPTP, and with recommendations for archaeological site monitoring (if necessary).

The SRPMIC-THPO concurs with the comments of the GRIC-THPO. We look forward to reviewing and commenting on the MOA and HPTP, which include are suggested changes, when they become available.

The proposed project area is within the ancestral lands of the Four Southern Tribes (Gila River Indian Community; Salt River Pima-Maricopa Indian Community; *Ak-Chin* Indian Community and the *Tohono O'Odham* Nation). The SRPMIC-THPO will continue to participate in the Section 106 process of this undertaking.

Thank you for consulting with the SRPMIC-THPO. Should you have questions and/or concerns about this project, please contact me directly at (480) 362-6331.

Thank you.



Shane Anton, Tribal Historic Preservation Officer
Cultural Resources Department, SRPMIC
10,005 E. Osborn Rd.
Scottsdale, Arizona 85256
Email: Shane.Anton@SRPMIC-nsn.gov
Office Tele: (480) 362-6331

From: Diebolt, Sarah (Sallie) CIV USARMY CESPL (USA) <Sallie.Diebolt@usace.army.mil>
Sent: Wednesday, October 19, 2022 9:26 AM
To: Luhnow, Glennda; alan.tabachnick@stb.gov
Cc: Assenza, Adam; Buckley, Maggie; Bushey, Sabra; Phoebus, Elizabeth (Betsi); Robinson, Lisa E CIV USARMY CESPL (USA)
Subject: [EXTERNAL] RE: SPL-2022-00250 (UPRR Pirate) UPRR PIRATE Continuing Section 106 Consultation and Survey Report Distribution

We have received Danielle Gosselin's letter dated October 18, 2022.

The Corps of Engineers Regulatory Branch does not have enough information to determine if we need to participate in 106 consultation for this project. The first step would be a jurisdictional determination to identify any waters of the United States within the project area.

If there are no jurisdictional waters present, then no Clean Water Act 404 permit would be required.

If a permit is required, the Corps would defer to the lead federal agency for the 106 consultation.

Until we are able to determine our involvement in the project, we will not be able to participate in the 106 MOA discussion.

Thank you.

Sallie Diebolt Branch Chief
Regulatory Division, Arizona Branch
Phoenix, AZ
Los Angeles District, U.S. Army Corps of Engineers
sallie.diebolt@usace.army.mil

Office: 602-230-6950
Government Mobile: 602-300-1761

Please do not mail hard copy documents to any Regulatory staff or office. For further details on corresponding with us, please view our special public notice at:

https://www.spl.usace.army.mil/Portals/17/docs/publicnotices/COVID19%20Regulatory_SPN.pdf?ver=2020-03-19-134532-833

Assist us in better serving you! Please complete our brief customer survey, located at the following link: https://regulatory.ops.usace.army.mil/customer-service-survey/

From: Diebolt, Sarah (Sallie) CIV USARMY CESPL (USA)
Sent: Tuesday, September 6, 2022 1:32 PM
To: 'Glennda.Luhnow@jacobs.com' <Glennda.Luhnow@jacobs.com>
Cc: Assenza, Adam <Adam.Assenza@stb.gov>; 'alan.tabachnick@stb.gov' <alan.tabachnick@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; 'Sabra.Bushey@jacobs.com' <Sabra.Bushey@jacobs.com>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>; Robinson, Lisa E CIV USARMY CESPL (USA) <Lisa.E.Robinson@usace.army.mil>
Subject: RE: SPL-2022-00250 (UPRR Pirate) UPRR PIRATE Continuing Section 106 Consultation and Survey Report Distribution

Hello, we have received your correspondence regarding the APE for the subject project. At this point, the Arizona Regulatory Branch is unable to concur with the APE determination, however we usually defer such decisions to the lead federal agency.

The Regulatory process would involve determining any aquatic features that would be subject to the Corps' jurisdiction under Section 404 of the Clean Water Act and any permits that may be needed for discharges of fill material into those areas. In the absence of this information, we are not able to evaluate the APE for our agency action.

Please contact me with any questions or if you would like to discuss further.

Thank you.

Sallie Diebolt Branch Chief
Regulatory Division, Arizona Branch
Phoenix, AZ
Los Angeles District, U.S. Army Corps of Engineers
sallie.diebolt@usace.army.mil

Office: 602-230-6950
Government Mobile: 602-300-1761

Please do not mail hard copy documents to any Regulatory staff or office. For further details on corresponding with us, please view our special public notice at:

https://www.spl.usace.army.mil/Portals/17/docs/publicnotices/COVID19%20Regulatory_SPN.pdf?ver=2020-03-19-134532-833

Assist us in better serving you! Please complete our brief customer survey, located at the following link: https://regulatory.ops.usace.army.mil/customer-service-survey/

From: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Sent: Thursday, September 1, 2022 1:48 PM
To: Robinson, Lisa E CIV USARMY CESPL (USA) <Lisa.E.Robinson@usace.army.mil>
Cc: Assenza, Adam <adam.assenza@stb.gov>; Tabachnick, Alan <alan.tabachnick@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; Bushey, Sabra <Sabra.Bushey@jacobs.com>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>
Subject: [Non-DoD Source] UPRR PIRATE Continuing Section 106 Consultation and Survey Report Distribution

Dear Ms. Diebolt,

As stated in previous Section 106 consultation conducted under the National Historic Preservation Act, the Union Pacific Railroad Company intends to request authority from the Surface Transportation Board (Board) to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

With the attached letter, the Board's Office of Environmental Analysis (OEA) is continuing Section 106 consultation with your office and soliciting comments regarding revisions to the Area of Potential Effects for cultural resources, adequacy of a Class III survey report, National Register of Historic Places site eligibility, treatment recommendations, finding of adverse effect, and a Section 106 agreement document.

The Class III cultural resources survey report has been transmitted to you via File Transfer on behalf of OEA by Jacobs Engineering Group Inc, OEA's third-party contractor. The File Transfer document will be available for 15 days and will expire on September 15, 2022. If you are not able to access the document, or the link expires, please contact Glennda Luhnow, Jacobs' cultural resources manager, at Glennda.Luhnow@jacobs.com.

OEA requests your review and comment regarding the content of this letter by **Tuesday, October 4, 2022**. Please send your written comments electronically to Alan Tabachnick, OEA's Historic Preservation Specialist, at Alan.Tabachnick@stb.gov. If you have any questions or would like to discuss the proposed project in more detail, please contact Alan Tabachnick.

Thank you,
Glennda Luhnow

Glennda Luhnow, M.A., RPA | **JACOBS** | **Manager/Archaeology and Cultural Resources** |
C: 480-510-0830 | glennda.luhnow@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

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SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

October 18, 2022

Ms. Kathryn Leonard
State Historic Preservation Officer
Arizona State Parks, State Historic Preservation Office
1110 West Washington Street, Suite 100
Phoenix, AZ 85007

Re: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – in Maricopa County, Ariz.; Informational Letter Regarding Memorandum of Agreement (MOA) Development, Meetings, and Schedule

Dear Ms. Leonard:

The purpose of this letter is to provide you with information on the historic review process for the proposed construction and operation of approximately 6.0 miles of new rail line in Maricopa County, Arizona (the Pecos Industrial Rail Access and Train Extension [PIRATE] rail line). On June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Surface Transportation Board (Board) pursuant to 49 U.S.C. § 10502 requesting authority to construct and operate the PIRATE rail line (See attached map). Before deciding whether to approve the proposed rail line, deny it, or approve it with conditions, the Board must consider the potential environmental impacts of the construction and operation of UP's proposed rail line, pursuant to the National Environmental Policy Act (42 U.S.C. §§ 4321-4370m-12), Section 106 of the National Historic Preservation Act (NHPA) (54 U.S.C. § 306108), the Board's environmental rules at 49 C.F.R. Part 1105, and related environmental laws. Accordingly, the Board's Office of Environmental Analysis (OEA) is preparing an Environmental Assessment (EA) to assess the potential environmental and historic impacts of the proposed PIRATE rail line.

Section 106 Process to Date

On April 6, 2022, OEA initiated the Section 106 process through consultation pursuant to Section 106 of the NHPA. OEA outlined the project scope, notified potential consulting parties of the project's alternatives analysis, and requested concurrence on the Area of Potential Effects (APE). On September 1, 2022, OEA distributed a draft Class III survey report, disclosed changes to the APE, and requested concurrence from consulting parties on OEA's National Register of Historic Places (NRHP) eligibility determinations, treatment recommendations, finding of adverse effect, and development of a Section 106 Memorandum of Agreement (MOA) for the project. OEA is revising the Class III survey report based on

comments received from consulting parties and will distribute the revised report shortly. However, the Arizona State Historic Preservation Office and many of the consulting parties have already concurred on the adverse effect finding, necessitating the development of an MOA.

The next step in the Section 106 process will be to develop the MOA as well as a Historic Properties Treatment Plan (HPTP), in consultation with the consulting parties. OEA will be scheduling regular consultation meetings to discuss the MOA and the HPTP, and we hope to use these regular meetings to work together towards a successful resolution of the proposed project's adverse effect. Your input and participation are critically important to this process.

Proposed MOA Meeting Format

OEA proposes to conduct the consultation meetings virtually via Microsoft Teams to accommodate non-local consulting parties. All consulting parties will be invited to attend and encouraged to participate in the development of the MOA. At the initial meeting, we will outline the MOA schedule and document format, discuss review timelines, establish a schedule for future meetings, discuss the roles of Signatories, Invited Signatories, and Concurring Parties, and introduce the initial clauses and stipulations that will be included in the draft MOA.

OEA anticipates that the format of the MOA will generally follow the guidelines outlined in the State Historic Preservation Office's Guidance Point 12, *Drafting Section 106 Agreement Documents for Undertakings in the State of Arizona* (Arizona State Parks, 2018). A copy of this document is available online at https://azstateparks.com/shpo-guidance-points.

Proposed Dates and Times for the Initial MOA Meeting

OEA proposes three possible dates and times for the initial MOA meeting. Please review the dates and times listed below and rank them in order of convenience. Every effort will be made to accommodate all parties, but the date and time selected will be based on the preference of the majority of attendees.

____ Tuesday, November 1, 2022, between 9:00–11:00 am
____ Wednesday, November 2, 2022, between 10:30 am–12:30 pm
____ Thursday, November 3, 2022, between 1:00–3:00 pm

Please email your ranked dates to Alan.Tabachnick@stb.gov. If email is not convenient or feasible, you can also call 202-245-0367 with your preferences.

Proposed Meeting Schedule for Subsequent MOA Meetings

OEA proposes subsequent monthly Microsoft Teams meetings to outline and discuss the MOA comments and responses. Within two weeks of the initial MOA meeting, OEA will provide a draft MOA to the consulting parties for initial review and comment. OEA will circulate review copies of subsequent revisions every two weeks.

Schedule for the Development and Execution of the MOA

The target timing for MOA execution is late February 2023. The executed MOA will be appended to the Final EA when it is issued.

Contact Information

If you have any questions or comments about the proposed meeting schedule or format, or the proposed schedule for MOA development and execution, please reach out to Alan Tabachnick either via email (Alan.Tabachnick@stb.gov) or by phone (202-245-0367). We look forward to continuing consultation with you on the historic review of this project.

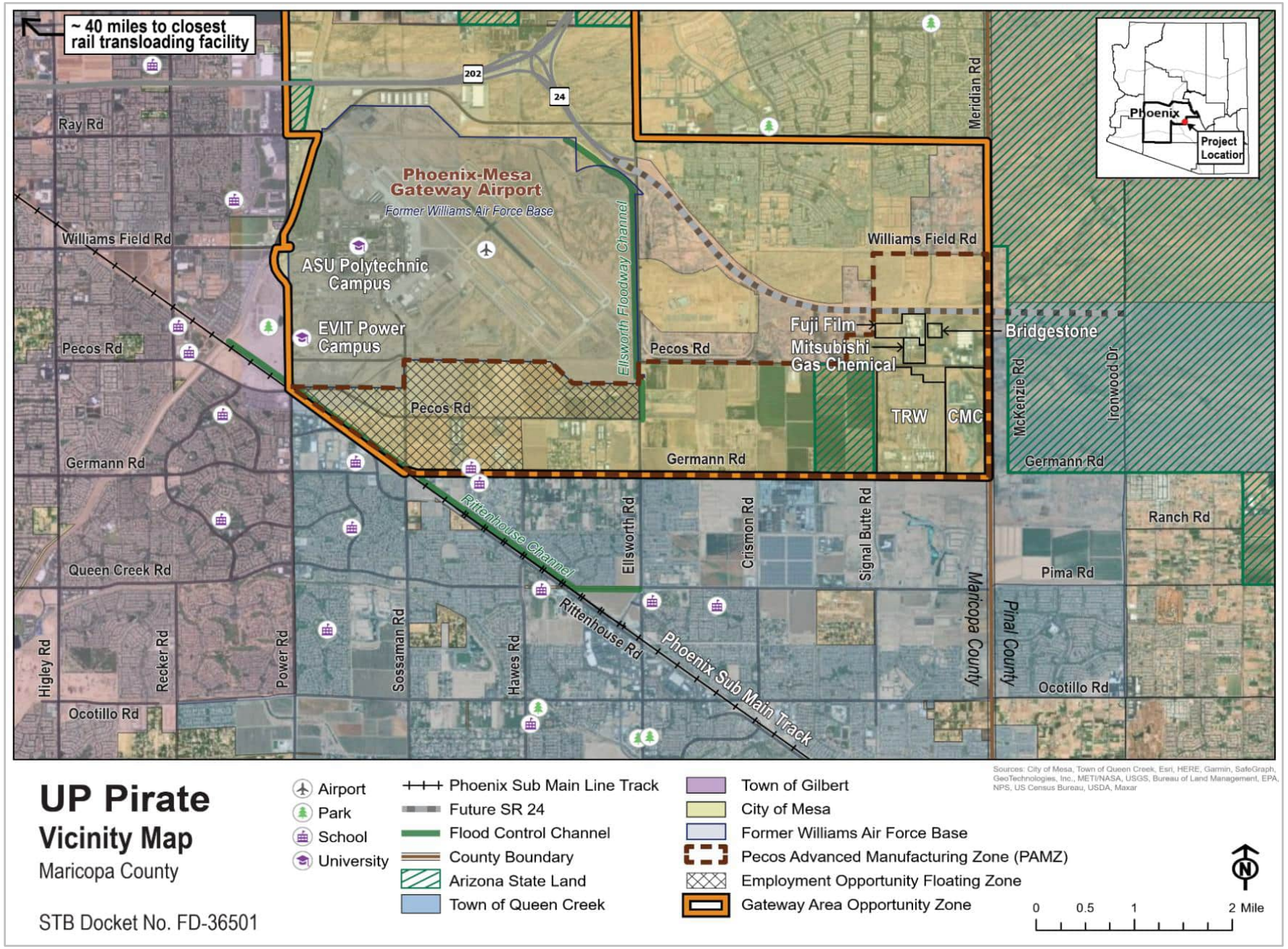
Sincerely,

Danielle Gosselin
Director
Office of Environmental Analysis

Enclosure: Vicinity Map

cc: Adam Assenza, OEA Environmental Protection Specialist, Adam.Assenza@stb.gov
Alan Tabachnick, OEA Historic Preservation Specialist, alan.tabachnick@stb.gov
Maggie Buckley, Jacobs Project Manager, Maggie.Buckley@jacobs.com

ATTACHMENT 1 – VICINITY MAP



Meeting Minutes

Subject	**Initial Section 106 MOA Meeting**		
Project	Union Pacific Railroad PIRATE Project		
Reference No.	Surface Transportation Board Docket No. FD 36501		
Date	Thursday, November 3, 2022	**Time**	1 – 3 p.m. PDT 4 – 6 p.m. EDT
Location	MS Teams		

The following notes summarize the topics discussed during the November 3, 2022 Section 106 continuing consultation meeting between the Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) and representatives from several consulting agencies and Tribes. The meeting objectives were to:

1. Review information OEA previously provided about Union Pacific Railroad's (UP) proposed Pecos Industrial Rail Access and Train Extension (PIRATE) project, as well as project and schedule updates;
2. Review Section 106 consultation thus far;
3. Discuss the results of the Class III survey and project finding of adverse effect; and
4. Outline the steps for developing a memorandum of agreement (MOA) and moving forward with the Section 106 consultation process.

Welcome and Introductions

Alan Tabachnick, the Board's Deputy Federal Preservation Officer, began the introductions based on the agency roll call. The attendees then introduced themselves with their name and agency (see attached sign-in sheet for attendance).

Project Overview and Survey Results

- OEA reviewed the project's purpose and need, project description, project alternatives, and area of potential effects (APE) (refer to slides 5-10 in the attached presentation).
- OEA summarized the project's Section 106 timeline to date including: Section 106 initiation, Class III survey, continuing consultation on the draft Class III survey report, and comments from consulting parties and Tribes (slide 11).
- Jacobs summarized the results of the Class III survey, including the four historic properties that would be adversely affected if the Board decides to approve PIRATE or approve it with conditions. Jacobs also reviewed the location of the resources relative to various project components (slides 12-13).
- OEA discussed the recommended project finding of adverse effect. Based on consultation with SHPO/THPOs and consulting parties, OEA determined that an MOA is the appropriate agreement document for resolving adverse effects to the historic properties (slide 14).

Q&A: Project Overview and Survey Results

Q1: Will the PowerPoint presentation be made available to the participants?

A1: The PowerPoint presentation will be provided with the draft meeting minutes.

Q2: Are the ASLD orchards considered historic?

A2: OEA will confirm the status of the orchards on ASLD land and respond to SHPO.

Section 106 Overview and MOA Format

- OEA reviewed the history of the Section 106 consultation and discussed next steps for Section 106 and NEPA (slide 17).
- OEA introduced the SHPO Guidance Point No. 12 that directs how MOAs should be developed (slide 18).
- SHPO indicated that Guidance Point No. 12 has been internally updated to reflect current ACHP views and the updated version is not yet available to the public.
- OEA will also incorporate ACHP's agreement document guidance as they and Jacobs draft the project MOA (slide 18).
- OEA displayed the proposed outline of the MOA. For the curation stipulation, OEA would like to use the Huhugam Heritage Center as the repository (slide 19).
- OEA introduced the roles and responsibilities of the consulting parties and requested that consulting parties provide OEA with their agency's preferred role in developing the MOA (slide 20).
- The Gila River Indian Community (GRIC) indicated that the Tribes do not regularly participate as signatories unless the project directly affects Tribal lands. Tribes that do not have a direct responsibility under the project would be concurring parties.
- OEA outlined the consulting parties' comments thus far on the project and reiterated their desire to have a collaborative process. OEA extended a formal invitation to Tribes that may prefer to communicate directly through government-to-government consultation (slide 21).
- GRIC responded that these types of meetings are fine but are not considered formal consultation. GRIC reminded everyone that the Tribal relationship with the Board is government-to-government consultation. GRIC is not an interested party, but rather a Sovereign Nation, and protocol needs to be maintained. Formal consultation should be completed separately with each Tribe. The Four Southern Tribes (Ak-Chin Indian Community, GRIC, Salt River Pima-Maricopa Indian Community [SRPMIC], and Tohono O'odham Nation) would like to be consulted together.
- OEA acknowledged GRIC's preference for formal consultation and will set up additional meetings. OEA indicated that those meetings will include a senior member of OEA to show respect for Tribal participation in the process.

Q&A: Section 106 Overview and MOA Format

Q1: What types of mitigation have been discussed? SHPO wants to ensure that OEA considers other types of mitigation for public benefit.

A1: Data recovery is one type of mitigation, but many other types are available for consideration as well, such as education and public information.

Q2: Is it possible to get a hard copy of the revised survey report as well as a PDF?

A2: Yes, OEA will add the Arizona Museum of Natural History Museum to the list of consulting parties that receive a hard copy of the survey report.

Q3: Would the Tribes have a role in the MOA if the project curates at the Huhugam Heritage Center?

A3: The topic of curation is something that should be discussed further. GRIC has a repository at the Huhugam Heritage Center.

Q4: What is the land jurisdiction for the project as that can affect which type of burial agreement is developed?

A4: The land jurisdiction is mixed: privately owned, municipal, county, and state land. PIRATE would avoid the nearby federal lands.

The Board, City of Mesa, and Jacobs discussed the ongoing development in the project vicinity, especially north of Germann Road. OEA requested that the City of Mesa keep them appraised of any future development projects so the EA can accurately reflect the project area.

GRIC cautioned that activities occurring adjacent to, but not in the APE, could potentially affect historic properties. GRIC requested that communication lines be open so sites would not be inadvertently damaged prior to project commencement, as has happened on other projects in this area.

OEA stated that the other developments may not have any federal jurisdiction and would not have to comply with Section 106. OEA reiterated their role in this project and their lack of jurisdiction on adjacent areas, and confirmed that UP has not conducted ground disturbing activities.

Q5: Are any federal permits required? Does Section 4(f) apply?

A5: Yes, UP will need to obtain a Clean Water Section 404 permit. The Board is not part of the U.S. Department of Transportation; therefore, Section 4(f) does not apply.

MOA Communication Format and Meeting Schedule

- OEA provided options for communicating with consulting parties and Tribes.
- OEA discussed preferred methods for receiving comments on the draft MOA involving a draft of the document with a comment tracking matrix. Using a comment tracking matrix ensures that all comments will be documented (slide 24).
- OEA shared the estimated project milestones (slide 25).
- SHPO and SRP-MIC indicated that the schedule is very aggressive.
- SHPO indicated that agreement documents do not have a mandated timeframe.
- OEA stated that there is a close association between the completion of the EA and the MOA document.
- OEA requested more information regarding the schedule challenges for the consulting parties. How will this affect SHPO?
- SHPO noted that they are short-staffed and have a high workload, so they would need a minimum of 3 to 4 weeks to review the draft MOA. It may be possible to do it in a shorter time frame, but it would just be a cursory review.

- OEA will modify the project schedule to provide a 1 month timeframe for the first review of the draft MOA, with shorter timeframes thereafter.
- OEA reaffirmed that the first draft of the MOA will be provided to the consulting parties November 21 or sooner. OEA adjusted the due date for the first review from December 8 to around December 22. Based on this discussion, OEA cancelled the December 8, 2022 "second" MOA meeting. The next meeting is scheduled for Thursday, January 12, 2023 (see revised slides 25 and 28).

Q&A: MOA Communication Format and Meeting Schedule

Q1: SHPO inquired whether they could obtain a Microsoft Word version of the document to provide revisions and confirmed that they would also use the comment tracking matrix.

A1: OEA indicated that would be acceptable and reiterated that other agencies or Tribes should let them know if they have specific preferences for comment resolution.

Q2: The first draft of the MOA will be ready on November 21 and when is the first review deadline?

A2: OEA's intent was to provide the draft MOA for review on November 21, with 2 weeks for review, followed by a meeting on December 8 to discuss any comments. This approach allowed for ongoing revisions in shorter steps to refine the drafts and a middle ground between a 30-day review. This approach has been revised as discussed at the meeting to provide a 30-day review of the draft MOA followed by the next meeting on January 12, 2023.

Q3: Are any Tribal holidays coming up in the next few months?

A3: November 25 and December 10 are Tribal holidays for GRIC.

Action Items

The following action items were assigned during the meeting.

- OEA will confirm the status of the orchards on ASLD land and respond to SHPO.
- OEA will ensure the Arizona Museum of Natural History receives a hard copy of the revised survey report when it is distributed for consulting party review (in November 2022).
- OEA will prepare and distribute the draft MOA and comment form for consulting party review by November 21, 2022, and will confirm the comment due date when the draft MOA is distributed.
- The consulting parties will respond with any comments, using OEA's provided comment form, by the due date around December 22, 2022.

Attachments Sign-in sheet
Agenda
Meeting presentation

Distribution Meeting invitees

Attendees

Subject	**Initial Section 106 MOA Meeting**		
Project	Union Pacific Railroad PIRATE Project		
Reference No.	Surface Transportation Board Docket No. FD 36501		
Date	Thursday, November 3, 2022	**Time**	1 – 3 p.m. PDT 4 – 6 p.m. EDT
Location	MS Teams		

Groups in Attendance	Representatives
Surface Transportation Board (Board), Office of Environmental Analysis (OEA)	Adam Assenza, Environmental Protection Specialist Alan Tabachnick, Deputy Federal Preservation Officer Josh Wayland, OEA Acting Deputy Director
Jacobs (supporting the Board's OEA)	Maggie Buckley, Environmental Project Manager Betsi Phoebus, NEPA Lead Glennda Luhnow, Manager/Archaeology and Cultural Resources Pamela Rainey, Senior Archaeologist Kris Powell, Senior Archaeologist Sabra Bushey, Environmental Planner
Gila River Indian Community	Larry Benallie, Jr., Archaeological Compliance Specialist
Salt River Pima-Maricopa Indian Community	Shane Anton, Tribal Historic Preservation Officer
Arizona Museum of Natural History	Alison Stoltman, Acting Director
Arizona State Land Department	Tiffany Grew, Cultural Resources Section Michael Romero, Right-of-Way Project Leader
City of Mesa Historic Preservation Office	Maura Jackson, Historic Preservation Advisor/Planner
City of Mesa Office of Economic Development	Robert Apodaca, Deputy Director – Civil Plan Review Erik Gunderian, Deputy Transportation Director - Engineering William Jabjiniak, Economic Development Director RJ Zeder, Transportation Department Director
Flood Control District of Maricopa County	Tom Hanson, Right-of-Way Use Permitting Branch Manager
State Historic Preservation Office	Mary-Ellen Walsh, Cultural Resources Compliance Manager
Union Pacific Railroad	Kevin Rice, Sr. Manager M/W Environmental

Attendees

Initial Section 106 MOA Meeting

Invited but unable to attend:

Ak-Chin Indian Community
Hopi Tribe
Mescalero Apache Tribe
Pascua Yaqui Tribe
Pueblo of Zuni
Tohono O'odham Nation
Tonto Apache Tribe
Yavapai-Apache Nation
Arizona State Museum
Bureau of Indian Affairs
Federal Aviation Administration
Queen Creek Irrigation District
Salt River Project
San Tan Historical Society

MOA Meeting Agenda

Subject	Initial MOA Meeting		
Project	Union Pacific Railroad PIRATE Rail Line		
Reference No.	Surface Transportation Board Docket No. FD 36501		
Date	Thursday, November 3, 2022	**Time**	1 p.m. – 3 p.m. PDT 4 – 6 p.m. EDT
Location	MS Teams	**Conference Call**	+1 469-214-8538,,758285399#

Item	
1	**Welcome and Introductions**
2	**Topic 1: How Did We Get Here?** • Project Overview • Survey Results • Finding of Effect and Need for MOA • **Topic 1 Open Discussion**
3	**Topic 2: Where Are We Now?** • Section 106 History • MOA Structure • Anticipated Roles and Responsibilities • Identified Concerns • **Topic 2 Open Discussion**
4	**Topic 3: Where Are We Going?** • Communication format • Proposed schedule and timelines • **Topic 3 Open Discussion**
5	**Meeting wrap-up and final questions**

SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

November 22, 2022

Ms. Kathryn Leonard
State Historic Preservation Officer
Arizona State Parks, State Historic Preservation Office
1110 West Washington Street, Suite 100
Phoenix, AZ 85007

Re: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – in Maricopa County, AZ
Continuation of National Historic Preservation Act Section 106 Consultation

Dear Ms. Leonard:

On June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Surface Transportation Board (Board), pursuant to 49 U.S.C. § 10502, requesting authority to construct and operate approximately 6.0 miles of new rail line in Maricopa County, Arizona (the Pecos Industrial Rail Access and Train Extension [PIRATE]) (see Attachment 1). Before making its decision on whether to grant such authority, the Board must consider the potential environmental impacts of the construction and operation of UP's proposed rail line, pursuant to the National Environmental Policy Act (42 U.S.C. §§ 4321−4370m-12), Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), the Board's environmental rules (49 C.F.R. Part 1105), and related environmental laws.

The Board's Office of Environmental Analysis (OEA) initiated consultation pursuant to Section 106 of the National Historic Preservation Act (dated April 6, 2022) with a letter that outlined the project scope, notified potential consulting parties of the project's alternatives analysis, and requested concurrence on the project's Area of Potential Effects (APE). OEA continued Section 106 consultation with a letter to all consulting parties dated September 1, 2022. The September 1, 2022 letter addressed revisions to the APE, the adequacy of the project's cultural resources Class III survey report, OEA's National Register of Historic Places (NRHP) eligibility determinations and treatment recommendations, finding of adverse effect, and development of a Section 106 agreement document for the project.

OEA is continuing Section 106 consultation with your office to solicit comments regarding a project scope change, the adequacy of the final Class III survey report, the NRHP eligibility reevaluation of AZ U:10:69(ASM) and AZ U:10:275(ASM), a boundary change to and NRHP revaluation of AZ U:10:152(ASM), and the treatment of unsurveyed areas.

Project Scope Change

Initial build-out of the project now includes a 5,100-foot-long run-around track that would be constructed within the APE between Crismon Road and Signal Butte Road, south of the PIRATE industrial lead track. The run-around track would allow UP to change directions by shifting a train off the PIRATE industrial lead track and moving the locomotive from one end of the train to the other. UP previously proposed to construct the run-around track in the future but now plans to construct the run-around track as part of its initial build-out with the industrial lead track. This project scope change is entirely contained within the APE and would not change the potential impacts to NRHP-eligible cultural resources.

Concurrence on Final Class III Survey Report

Comments on the draft Class III survey report (Rainey and Stubing 2022) were received from the Gila River Indian Community (GRIC) Tribal Historic Preservation Office (THPO), the Salt River Pima-Maricopa Indian Community (SRPMIC) THPO, and the Arizona State Land Department. These comments and OEA's responses are included in the comment matrix (Attachment 2). All comments have been completely addressed in the final report, and OEA requests concurrence on the adequacy of the Class III survey report (Attachment 3) as a final document.

Reevaluation of NRHP Eligibility Determinations for AZ U:10:69(ASM) and AZ U:10:275(ASM)

The GRIC and SRPMIC THPOs disagreed with OEA's previous determinations of the portions of AZ U:10:69(ASM) and AZ U:10:275(ASM) within the APE as unevaluated for NRHP eligibility. GRIC and SRPMIC THPOs believe these two sites are eligible for NRHP under Criterion D in their entirety.

OEA agrees with the GRIC and SRPMIC THPOs that these two sites are eligible for the NRHP under Criterion D. The reevaluated NRHP eligibility determinations for both sites are reflected in the attached final Class III survey report. OEA requests your concurrence that AZ U:10:69(ASM) and AZ U:10:275(ASM) are eligible for the NRHP under Criterion D in their entirety for their potential to provide information on important themes relative to the Hohokam occupation of the Queen Creek Delta area.

Boundary Change and Reevaluation of NRHP Eligibility for AZ U:10:152(ASM)

The GRIC and SRPMIC THPOs also disagreed with the boundary delineation of AZ U:10:152(ASM) as outside of, but adjacent to, the APE. GRIC and SRPMIC THPOs believe that artifacts identified within the APE by the Class III survey are associated with the site and should be incorporated into an expanded site boundary. In keeping with their position that cultural resources sites should reflect NRHP eligibility in their entirety, the GRIC and SRPMIC THPOs consider AZ U:10:152(ASM), including the expanded boundary of the site within the APE, eligible for the NRHP under Criterion D.

OEA agrees with the GRIC and SRPMIC THPOs that the boundary of this site should be expanded. The revised site boundary and the reevaluation of NRHP eligibility for AZ U:10:152(ASM) is reflected in the enclosed final Class III survey report. The site boundary is now within the APE. OEA requests your concurrence with the revised site boundary of AZ U:10:152(ASM), the finding that the site is now within the APE, and the determination of AZ U:10:152(AS) as eligible for the NRHP under Criterion D for its potential to provide information on important themes relative to the Hohokam occupation of the Queen Creek Delta area.

Treatment of Unsurveyed Areas

Two areas in the APE were unsurveyed by the Class III fieldwork due to a lack of right of entry and a lack of surface visibility. OEA will require an additional cultural resources investigation of the unsurveyed areas prior to construction in the project's memorandum of agreement, which will be developed in consultation with the Section 106 consulting parties.

Maps Depicting APE Revisions

As described in the continuing Section 106 consultation letter dated September 1, 2022, slight revisions were made to the project APE. These revisions consist of the following items:

- The removal of grading extensions located in a portion of Township 1 South, Range 7 East, Section 36 (Gila and Salt River Baseline and Meridian).
- A 500-foot extension to the northeastern terminus of the APE south of Pecos Road and east of the approach to the Commercial Metals Company, located in a portion of Township 2 South, Range 7 East, Section 1 (Gila and Salt River Baseline and Meridian).

The GRIC and SRPMIC THPOS requested maps depicting the locations of the APE changes during Section 106 consultation. OEA is including these maps for your review as attachments to this letter (Attachment 4).

Request for Input

Thank you for your continued cooperation during the Section 106 historic review process for this project. OEA requests your concurrence regarding the above topics by **Tuesday, December 21**, **2022**. If you have any additional questions, please reach out to Alan Tabachnick, at 202-245-0367.

Sincerely,



Danielle Gosselin
Director
Office of Environmental Analysis

Enclosures:

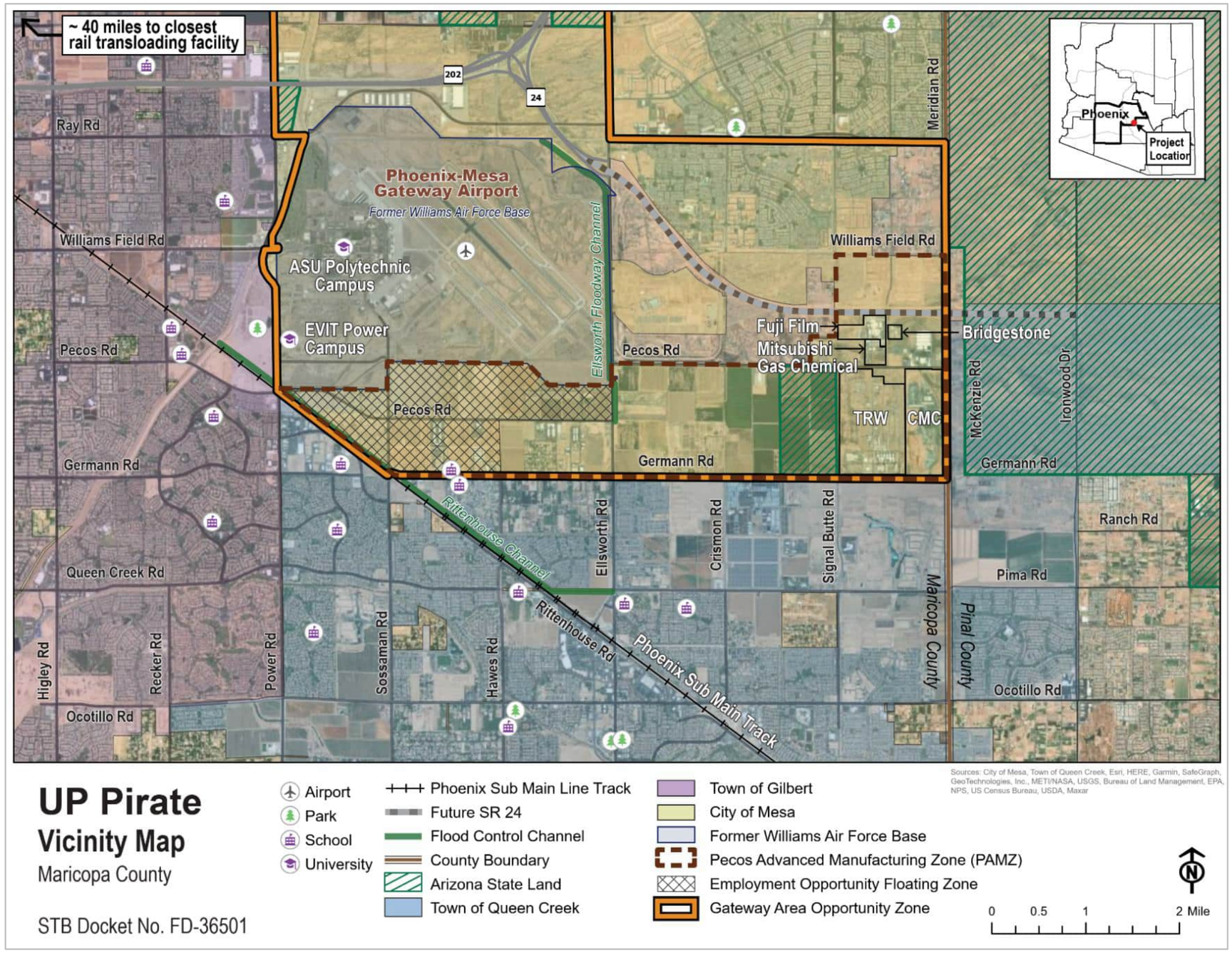
Attachment 1 - Vicinity Map
Attachment 2 - Comment Matrix
Attachment 3 - Final Class III Survey Report
Attachment 4 - Revised APE Maps (two sheets)

Cc: Adam Assenza, OEA Environmental Protection Specialist, Adam.Assenza@stb.gov
Alan Tabachnick, OEA Historic Preservation Specialist, Alan.Tabachnick@stb.gov
Maggie Buckley, Jacobs Project Manager, Maggie.Buckley@jacobs.com

References Cited:

Rainey, Pamela J., and Michael Stubing
2022 *A Class III Cultural Resources Survey for the Union Pacific Railroad Company Pecos Industrial Rail Access and Train Extensions (PIRATE) Project, Mesa and Queen Creek, Maricopa County, Arizona*. Jacobs Project Report No. 2022-006. Jacobs Engineering Group Inc., Tempe, Arizona.

ATTACHMENT 1 - VICINITY MAP

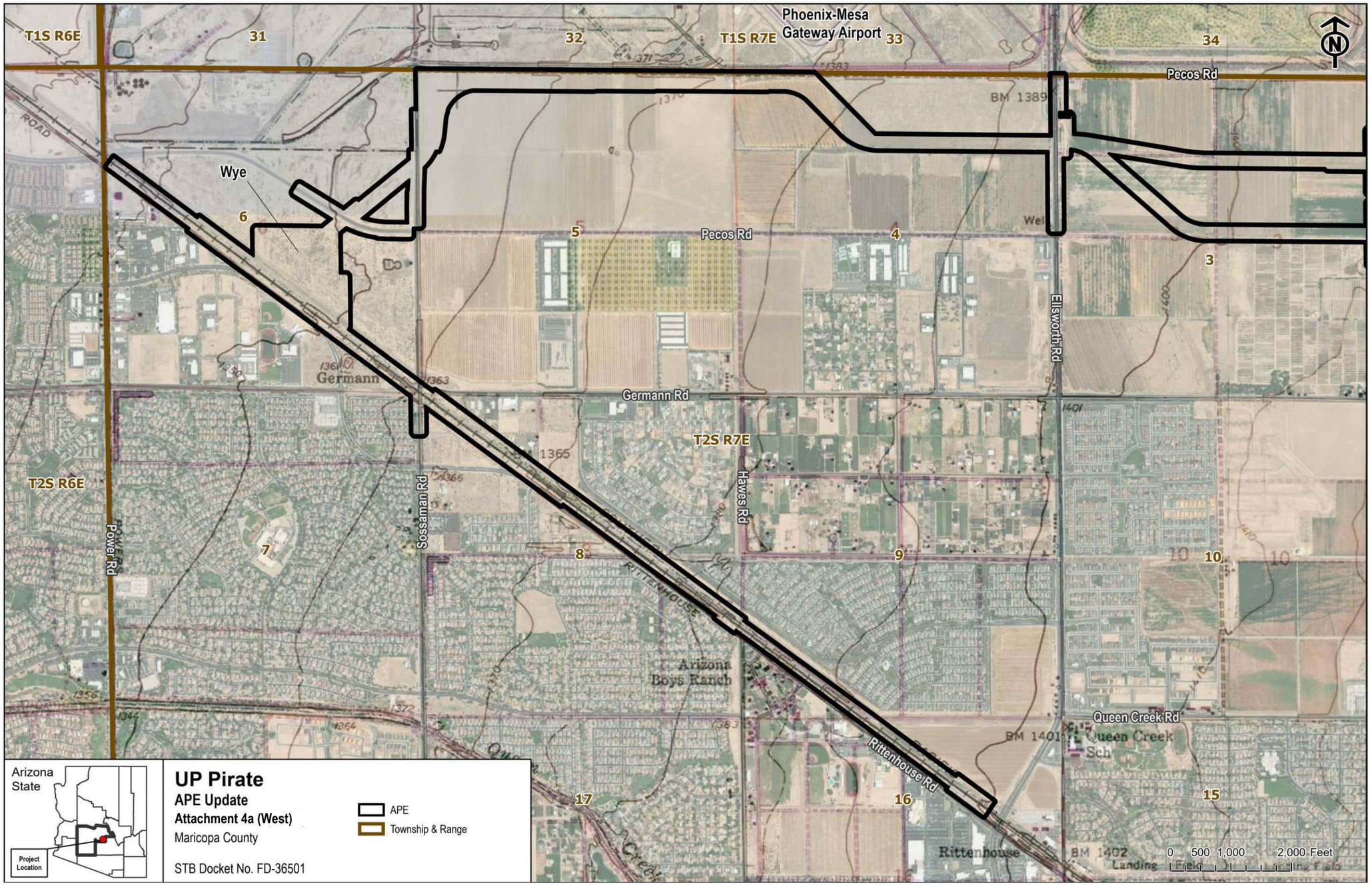


ATTACHMENT 2 - COMMENT MATRIX

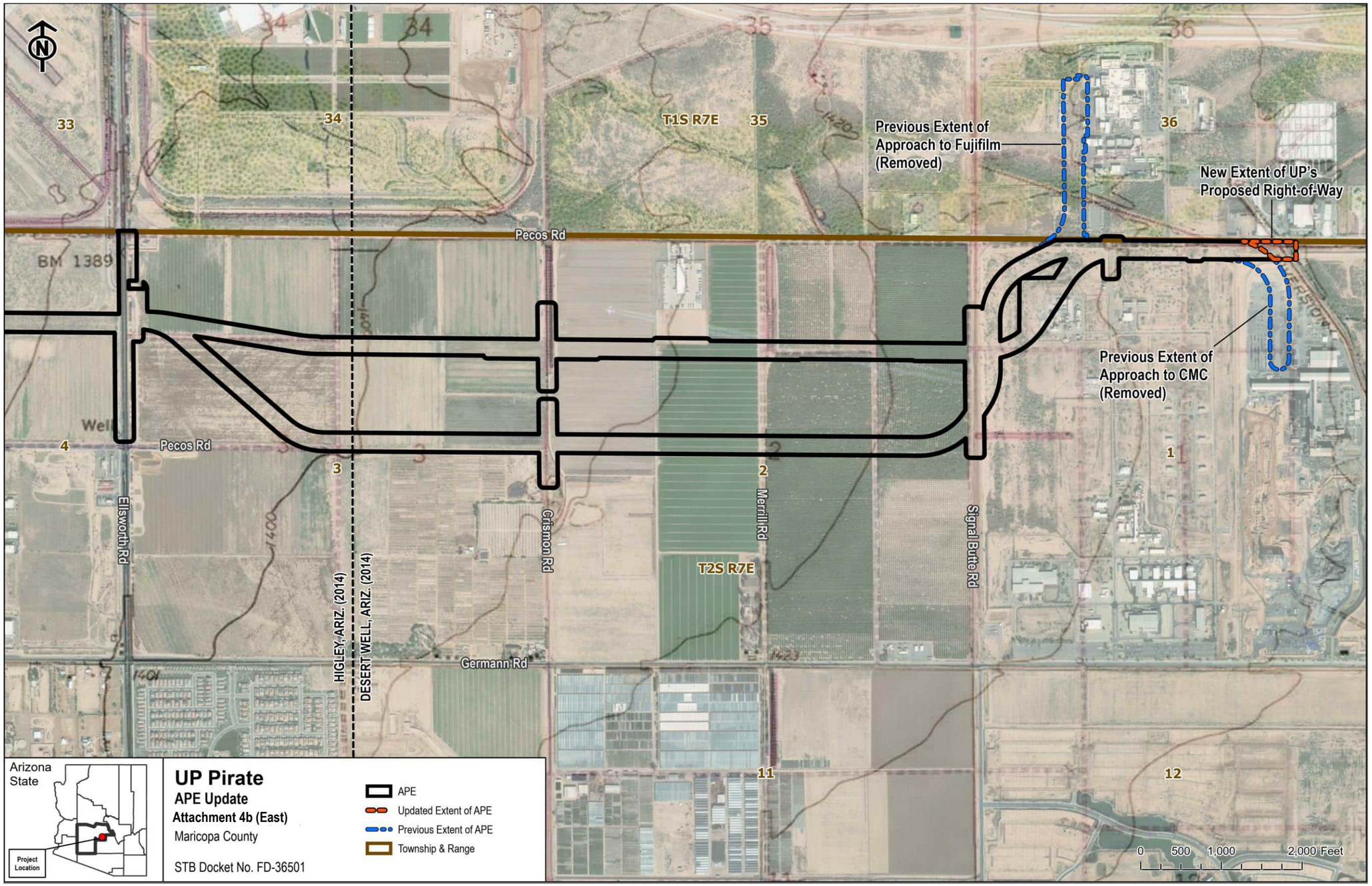
Comment Originator(s)	Comments	OEA's Proposed Resolution
Gila River Indian Community with Salt River Pima-Maricopa Indian Community concurrence	Sites AZ U:10:69, 152, and 275(ASM) – the newly recorded portions of these sites should be considered eligible for the NRHP.	Eligibility has been changed from unevaluated to eligible under Criterion D.
Gila River Indian Community with Salt River Pima-Maricopa Indian Community concurrence	Boundary for AZ U:10:152(ASM) should be expanded to include the new artifacts.	Boundary has been extended to include the new artifacts.
Gila River Indian Community with Salt River Pima-Maricopa Indian Community concurrence	Language concerning agricultural disturbance at site AZ U:10:69 and 275(ASM).	OEA did not intend to imply that no cultural resources would be present under areas with agricultural disturbance, only that it was not possible to confirm based on the survey results alone. OEA acknowledged that despite the disturbances, potential for intact subsurface deposits may exist. For clarification, the language has thus been changed from: *The area has been subject to extensive agricultural disturbance; however, there may be potential for intact subsurface deposits to exist, although this could not be confidently assessed based on the Class III survey results. Therefore, OEA recommends that the newly recorded portion of AZ U:10:69(ASM within the APE is unevaluated for NRHP eligibility.* – TO – *The area has been subject to extensive agricultural disturbance; however, there is potential for intact subsurface deposits to exist. Therefore, OEA recommends that the newly recorded portion of AZ U:10:69(ASM) within the APE is eligible for the NRHP under Criterion D.* This statement will apply to AZ U:10:69(ASM) and AZ U:10:275(ASM) as well as AZ U:10:152(ASM).

Comment Originator(s)	Comments	OEA's Proposed Resolution
Gila River Indian Community with Salt River Pima-Maricopa Indian Community concurrence	APE changes are unclear.	The APE changes were described in the previous consultation letter (dated 9/1/2022) and a figure showing the new APE. A revised figure of the APE is included with this continuing Section 106 consultation letter that depicts the changes.
Gila River Indian Community with Salt River Pima-Maricopa Indian Community concurrence	Will unsurveyed portions be surveyed in the future?	Provisions for conducting additional survey of unsurveyed areas will be contained in the memorandum of agreement.
ASLD	Include only one project UTM in Abstract	Revised as requested.

ATTACHMENT 4a - REVISED APE MAP (1 of 2)



ATTACHMENT 4b - REVISED APE MAP (2 of 2)



SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

November 22, 2022

Ms. Kathryn Leonard
State Historic Preservation Officer
Arizona State Parks, State Historic Preservation Office
1110 West Washington Street, Suite 100
Phoenix, AZ 85007

Re: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – in Maricopa County, AZ
Continuation of National Historic Preservation Act Section 106 Consultation

Dear Ms. Leonard:

On June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Surface Transportation Board (Board), pursuant to 49 U.S.C. § 10502, requesting authority to construct and operate approximately 6.0 miles of new rail line in Maricopa County, Arizona (the Pecos Industrial Rail Access and Train Extension [PIRATE]) (see Attachment 1). Before making its decision on whether to grant such authority, the Board must consider the potential environmental impacts of the construction and operation of UP's proposed rail line, pursuant to the National Environmental Policy Act (42 U.S.C. §§ 4321−4370m-12), Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), the Board's environmental rules (49 C.F.R. Part 1105), and related environmental laws.

The Board's Office of Environmental Analysis (OEA) initiated consultation pursuant to Section 106 of the National Historic Preservation Act (dated April 6, 2022) with a letter that outlined the project scope, notified potential consulting parties of the project's alternatives analysis, and requested concurrence on the project's Area of Potential Effects (APE). OEA continued Section 106 consultation with a letter to all consulting parties dated September 1, 2022. The September 1, 2022 letter addressed revisions to the APE, the adequacy of the project's cultural resources Class III survey report, OEA's National Register of Historic Places (NRHP) eligibility determinations and treatment recommendations, finding of adverse effect, and development of a Section 106 agreement document for the project.

OEA is continuing Section 106 consultation with your office to solicit comments regarding a project scope change, the adequacy of the final Class III survey report, the NRHP eligibility reevaluation of AZ U:10:69(ASM) and AZ U:10:275(ASM), a boundary change to and NRHP revaluation of AZ U:10:152(ASM), and the treatment of unsurveyed areas.

Project Scope Change

Initial build-out of the project now includes a 5,100-foot-long run-around track that would be constructed within the APE between Crismon Road and Signal Butte Road, south of the PIRATE industrial lead track. The run-around track would allow UP to change directions by shifting a train off the PIRATE industrial lead track and moving the locomotive from one end of the train to the other. UP previously proposed to construct the run-around track in the future but now plans to construct the run-around track as part of its initial build-out with the industrial lead track. This project scope change is entirely contained within the APE and would not change the potential impacts to NRHP-eligible cultural resources.

Concur

Concurrence on Final Class III Survey Report

Comments on the draft Class III survey report (Rainey and Stubing 2022) were received from the Gila River Indian Community (GRIC) Tribal Historic Preservation Office (THPO), the Salt River Pima-Maricopa Indian Community (SRPMIC) THPO, and the Arizona State Land Department. These comments and OEA's responses are included in the comment matrix (Attachment 2). All comments have been completely addressed in the final report, and OEA requests concurrence on the adequacy of the Class III survey report (Attachment 3) as a final document.

Concur

Reevaluation of NRHP Eligibility Determinations for AZ U:10:69(ASM) and AZ U:10:275(ASM)

The GRIC and SRPMIC THPOs disagreed with OEA's previous determinations of the portions of AZ U:10:69(ASM) and AZ U:10:275(ASM) within the APE as unevaluated for NRHP eligibility. GRIC and SRPMIC THPOs believe these two sites are eligible for NRHP under Criterion D in their entirety.

OEA agrees with the GRIC and SRPMIC THPOs that these two sites are eligible for the NRHP under Criterion D. The reevaluated NRHP eligibility determinations for both sites are reflected in the attached final Class III survey report. OEA requests your concurrence that AZ U:10:69(ASM) and AZ U:10:275(ASM) are eligible for the NRHP under Criterion D in their entirety for their potential to provide information on important themes relative to the Hohokam occupation of the Queen Creek Delta area.

Concur

Boundary Change and Reevaluation of NRHP Eligibility for AZ U:10:152(ASM)

The GRIC and SRPMIC THPOs also disagreed with the boundary delineation of AZ U:10:152(ASM) as outside of, but adjacent to, the APE. GRIC and SRPMIC THPOs believe that artifacts identified within the APE by the Class III survey are associated with the site and should be incorporated into an expanded site boundary. In keeping with their position that cultural resources sites should reflect NRHP eligibility in their entirety, the GRIC and SRPMIC THPOs consider AZ U:10:152(ASM), including the expanded boundary of the site within the APE, eligible for the NRHP under Criterion D.

OEA agrees with the GRIC and SRPMIC THPOs that the boundary of this site should be expanded. The revised site boundary and the reevaluation of NRHP eligibility for AZ U:10:152(ASM) is reflected in the enclosed final Class III survey report. The site boundary is now within the APE. OEA requests your concurrence with the revised site boundary of AZ U:10:152(ASM), the finding that the site is now within the APE, and the determination of AZ U:10:152(AS) as eligible for the NRHP under Criterion D for its potential to provide information on important themes relative to the Hohokam occupation of the Queen Creek Delta area.

Concur

Treatment of Unsurveyed Areas

Two areas in the APE were unsurveyed by the Class III fieldwork due to a lack of right of entry and a lack of surface visibility. OEA will require an additional cultural resources investigation of the unsurveyed areas prior to construction in the project's memorandum of agreement, which will be developed in consultation with the Section 106 consulting parties.

Concur

Maps Depicting APE Revisions

As described in the continuing Section 106 consultation letter dated September 1, 2022, slight revisions were made to the project APE. These revisions consist of the following items:

- The removal of grading extensions located in a portion of Township 1 South, Range 7 East, Section 36 (Gila and Salt River Baseline and Meridian).
- A 500-foot extension to the northeastern terminus of the APE south of Pecos Road and east of the approach to the Commercial Metals Company, located in a portion of Township 2 South, Range 7 East, Section 1 (Gila and Salt River Baseline and Meridian).

We also note the removal of grading extensions located in T2S, R7E, Sec. 1

The GRIC and SRPMIC THPOS requested maps depicting the locations of the APE changes during Section 106 consultation. OEA is including these maps for your review as attachments to this letter (Attachment 4).

Request for Input

Thank you for your continued cooperation during the Section 106 historic review process for this project. OEA requests your concurrence regarding the above topics by **Tuesday, December 21**, **2022**. If you have any additional questions, please reach out to Alan Tabachnick, at 202-245-0367.

Sincerely,

Danielle Gosselin
Director
Office of Environmental Analysis

Enclosures:

Attachment 1 - Vicinity Map
Attachment 2 - Comment Matrix
Attachment 3 - Final Class III Survey Report
Attachment 4 - Revised APE Maps (two sheets)

Cc: Adam Assenza, OEA Environmental Protection Specialist, Adam.Assenza@stb.gov
Alan Tabachnick, OEA Historic Preservation Specialist, Alan.Tabachnick@stb.gov
Maggie Buckley, Jacobs Project Manager, Maggie.Buckley@jacobs.com

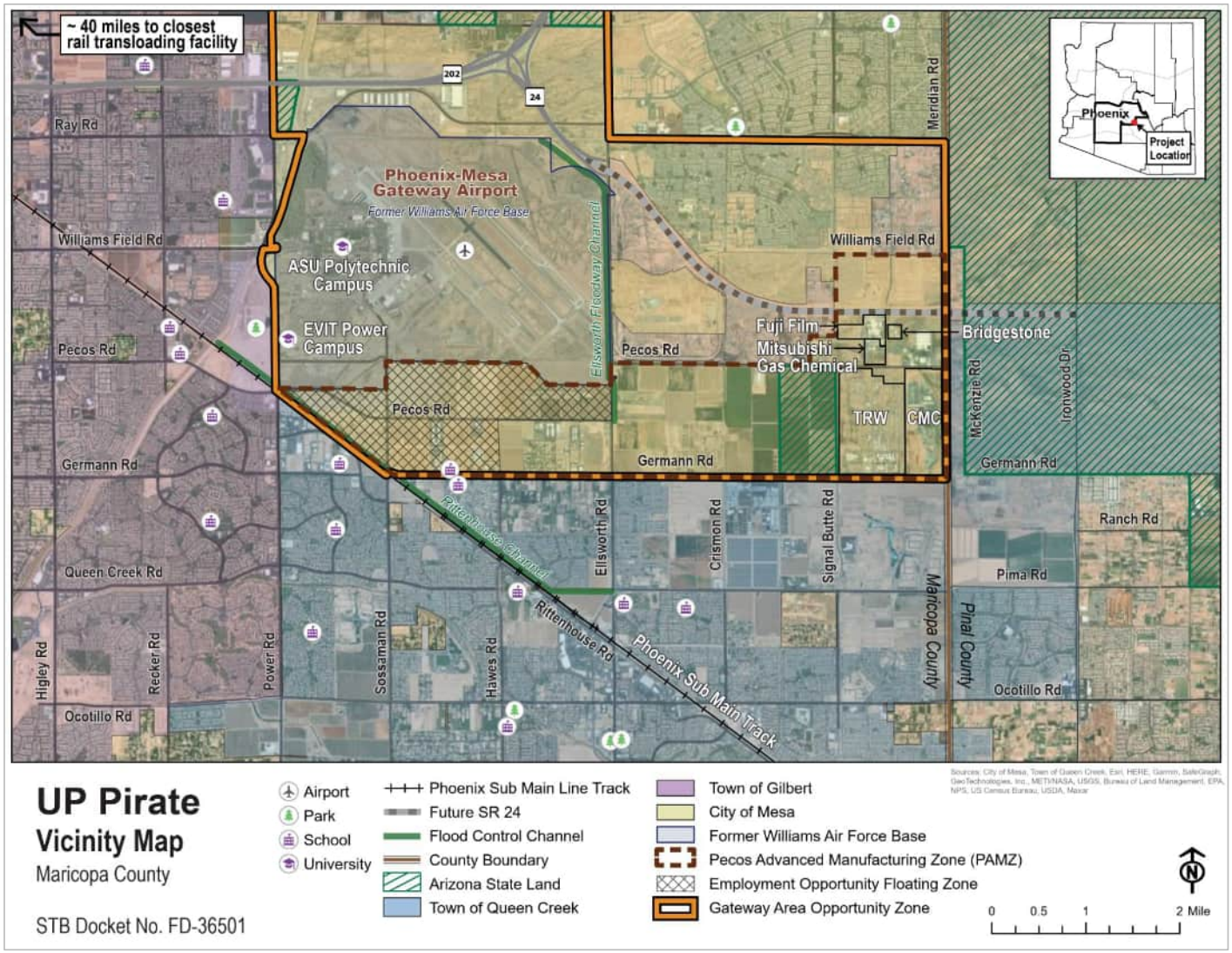
References Cited:

Rainey, Pamela J., and Michael Stubing
2022 *A Class III Cultural Resources Survey for the Union Pacific Railroad Company Pecos Industrial Rail Access and Train Extensions (PIRATE) Project, Mesa and Queen Creek, Maricopa County, Arizona*. Jacobs Project Report No. 2022-006. Jacobs Engineering Group Inc., Tempe, Arizona.

Concur.

Caroline Klebacha, M.A.
State Historic Preservation Office
12/20/2022

ATTACHMENT 1 - VICINITY MAP

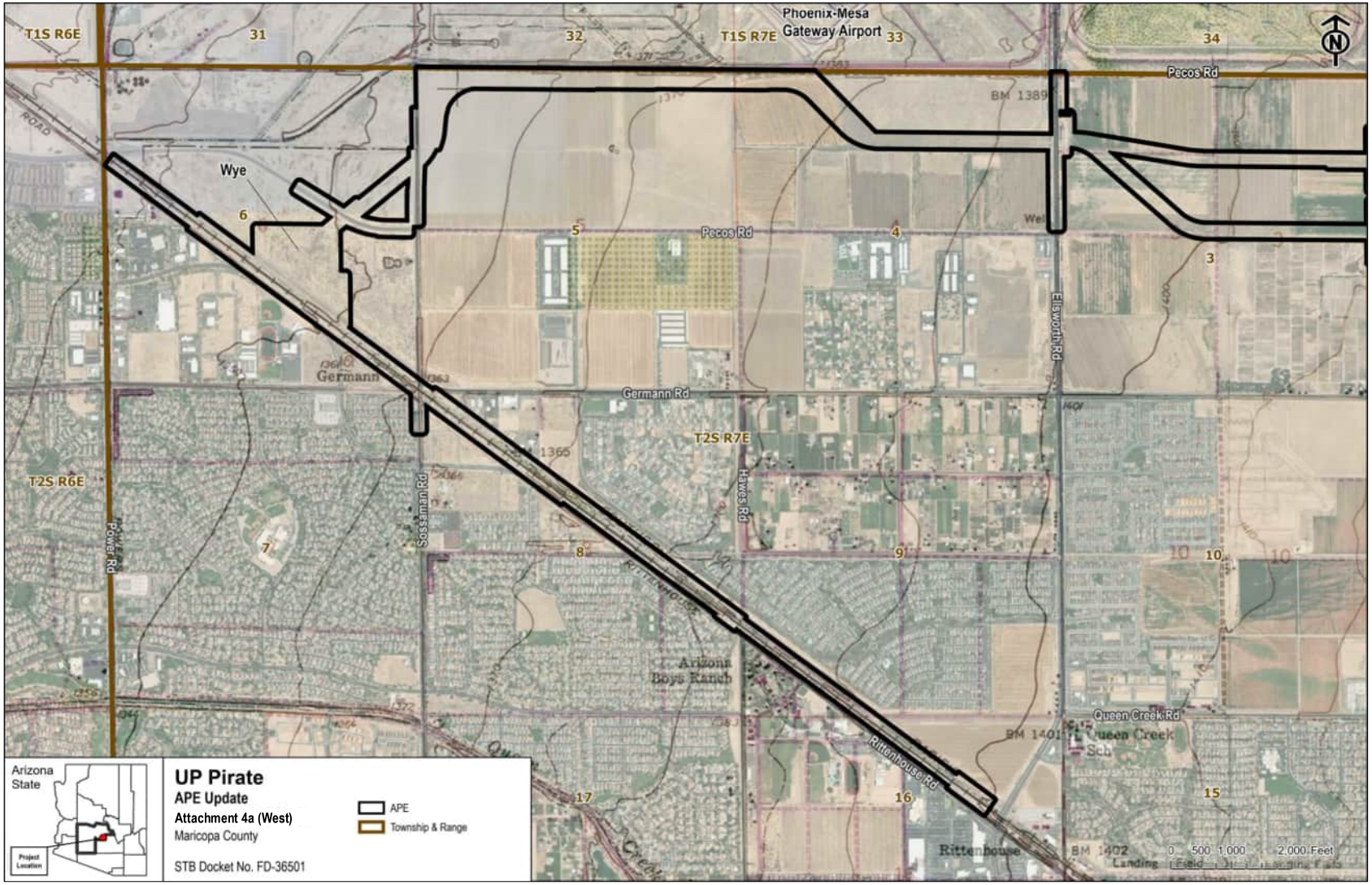


ATTACHMENT 2 - COMMENT MATRIX

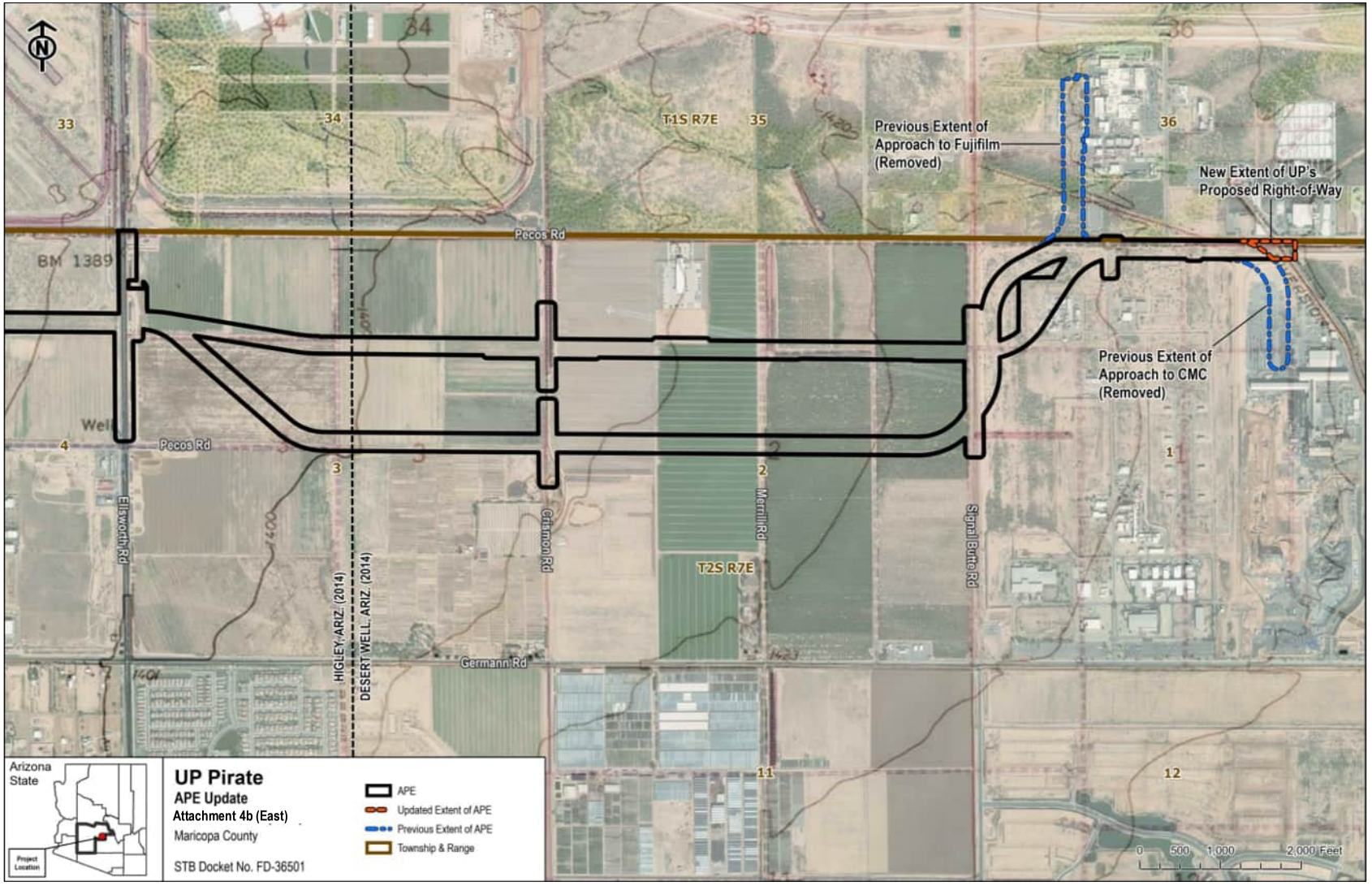
Comment Originator(s)	Comments	OEA's Proposed Resolution
Gila River Indian Community with Salt River Pima-Maricopa Indian Community concurrence	Sites AZ U:10:69, 152, and 275(ASM) – the newly recorded portions of these sites should be considered eligible for the NRHP.	Eligibility has been changed from unevaluated to eligible under Criterion D.
Gila River Indian Community with Salt River Pima-Maricopa Indian Community concurrence	Boundary for AZ U:10:152(ASM) should be expanded to include the new artifacts.	Boundary has been extended to include the new artifacts.
Gila River Indian Community with Salt River Pima-Maricopa Indian Community concurrence	Language concerning agricultural disturbance at site AZ U:10:69 and 275(ASM).	OEA did not intend to imply that no cultural resources would be present under areas with agricultural disturbance, only that it was not possible to confirm based on the survey results alone. OEA acknowledged that despite the disturbances, potential for intact subsurface deposits may exist. For clarification, the language has thus been changed from: *The area has been subject to extensive agricultural disturbance; however, there may be potential for intact subsurface deposits to exist, although this could not be confidently assessed based on the Class III survey results. Therefore, OEA recommends that the newly recorded portion of AZ U:10:69(ASM within the APE is unevaluated for NRHP eligibility.* – TO – *The area has been subject to extensive agricultural disturbance; however, there is potential for intact subsurface deposits to exist. Therefore, OEA recommends that the newly recorded portion of AZ U:10:69(ASM) within the APE is eligible for the NRHP under Criterion D.* This statement will apply to AZ U:10:69(ASM) and AZ U:10:275(ASM) as well as AZ U:10:152(ASM).

Comment Originator(s)	Comments	OEA's Proposed Resolution
Gila River Indian Community with Salt River Pima-Maricopa Indian Community concurrence	APE changes are unclear.	The APE changes were described in the previous consultation letter (dated 9/1/2022) and a figure showing the new APE. A revised figure of the APE is included with this continuing Section 106 consultation letter that depicts the changes.
Gila River Indian Community with Salt River Pima-Maricopa Indian Community concurrence	Will unsurveyed portions be surveyed in the future?	Provisions for conducting additional survey of unsurveyed areas will be contained in the memorandum of agreement.
ASLD	Include only one project UTM in Abstract	Revised as requested.

ATTACHMENT 4a - REVISED APE MAP (1 of 2)



ATTACHMENT 4b - REVISED APE MAP (2 of 2)





World leaders in creating a safe and efficient system of airports
We value Integrity, Collaboration and Innovation!

From: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Sent: Tuesday, November 22, 2022 15:24
To: Williams, Mike N (FAA) <Mike.N.Williams@faa.gov>
Cc: Tabachnick, Alan <alan.tabachnick@stb.gov>; Assenza, Adam <adam.assenza@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; McNeish, Sabra <Sabra.McNeish@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>; Powell, Kris <Kris.Powell@jacobs.com>
Subject: UPRR PIRATE Continuing Section 106 Consultation: Final Class III Report, Scope Change, NRHP Re-evaluation, Boundary Change

Dear Mr. Williams,

As stated in previous Section 106 consultation conducted under the National Historic Preservation Act, the Union Pacific Railroad Company intends to request authority from the Surface Transportation Board (Board) to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

With the attached letter, the Board's Office of Environmental Analysis (OEA) is continuing Section 106 consultation with your office and soliciting concurrence on the final Class III survey report, National Register of Historic Places (NRHP) site re-evaluation, a scope change, and a boundary change for AZ U:16:152(ASM).

The final Class III cultural resources survey report has been transmitted to you via File Transfer on behalf of OEA by Jacobs Engineering Group Inc, OEA's third-party contractor. The File Transfer document will be available for 15 days and will expire on December 6, 2022. If you are not able to access the document, or the link expires, please contact Glennda Luhnow, Jacobs' cultural resources manager, at Glennda.Luhnow@jacobs.com.

OEA requests your review and concurrence regarding the content of this letter by **Tuesday, December 21, 2022**. Please address any questions electronically to Alan Tabachnick, OEA's Deputy Federal Preservation Officer, at Alan.Tabachnick@stb.gov.

Thank you,
Glennda Luhnow

Glennda Luhnow, M.A., RPA | **JACOBS** | **Manager/Archaeology and Cultural Resources** |
C: 480-510-0830 | glennda.luhnow@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

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From: Plummer, Shannon D - (splummer) <splummer@arizona.edu>
Sent: Tuesday, November 29, 2022 10:58 AM
To: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Cc: Leone, Karen L - (kleone) <kleone@arizona.edu>
Subject: [EXTERNAL] RE: UPRR PIRATE Continuing Section 106 Consultation: Final Class III Report, Scope Change, NRHP Re-evaluation, Boundary Change

Good morning, Glennda,
Arizona State Museum (ASM) has reviewed the revised version of *A Class III Cultural Resources Survey for the Union Pacific Railroad Company Pecos Industrial Rail Access and Train Extension (PIRATE) Project, Mesa and Queen Creek, Maricopa County, Arizona* by P.J. Rainey and M. Stubing of Jacobs Engineering Group, Inc., dated August (Revised November 2022).

ASM has no comments on the revised report (ASM Accession 2022-0231).

Thanks!
Shannon

Shannon Plummer, M.A., R.P.A.
Arizona Antiquities Act Administrator

Arizona State Museum | The University of Arizona
1013 E. University Blvd | PO Box 210026
Tucson, Arizona 85721-0026
(520) 621-4795
www.statemuseum.arizona.edu

From: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Sent: Tuesday, November 22, 2022 3:20 PM
To: Lyons, Patrick D - (plyons) <plyons@arizona.edu>
Cc: Plummer, Shannon D - (splummer) <splummer@arizona.edu>; Tabachnick, Alan <alan.tabachnick@stb.gov>; Assenza, Adam <adam.assenza@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>; Powell, Kris <Kris.Powell@jacobs.com>; McNeish, Sabra <Sabra.McNeish@jacobs.com>
Subject: [EXT]UPRR PIRATE Continuing Section 106 Consultation: Final Class III Report, Scope Change, NRHP Re-evaluation, Boundary Change

External Email

Dear Dr. Lyons,

As stated in previous Section 106 consultation conducted under the National Historic Preservation Act, the Union Pacific Railroad Company intends to request authority from the Surface Transportation Board (Board) to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

With the attached letter, the Board's Office of Environmental Analysis (OEA) is continuing Section 106 consultation with your office and soliciting concurrence on the final Class III survey report, National Register of Historic Places (NRHP) site re-evaluation, a scope change, and a boundary change for AZ U:16:152(ASM).

The final Class III cultural resources survey report has been transmitted to you via File Transfer on behalf of OEA by Jacobs Engineering Group Inc, OEA's third-party contractor. The File Transfer document will be available for 15 days and will expire on December 6, 2022. If you are not able to access the document, or the link expires, please contact Glennda Luhnow, Jacobs' cultural resources manager, at Glennda.Luhnow@jacobs.com.

OEA requests your review and concurrence regarding the content of this letter by **Tuesday, December 21, 2022**. Please address any questions electronically to Alan Tabachnick, OEA's Deputy Federal Preservation Officer, at Alan.Tabachnick@stb.gov.

Thank you,
Glennda Luhnow

Glennda Luhnow, M.A., RPA | **JACOBS** | **Manager/Archaeology and Cultural Resources** |
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From: Cantley, Garry <Garry.Cantley@bia.gov>
Sent: Tuesday, November 29, 2022 1:40 PM
To: Tabachnick, Alan <alan.tabachnick@stb.gov>
Cc: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>; Assenza, Adam <adam.assenza@stb.gov>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>; Buckley, Maggie <Maggie.Buckley@jacobs.com>
Subject: Re: [EXTERNAL] UP PIRATE Section 106 Informational Memo-MOA Meeting Schedule

Alan,
Thanks for the message.
I don't think it's necessary for you to keep me on the distribution list.
But I stand by to assist in any manner you may wish.

Garry J. Cantley
Regional Archeologist
BIA Western Regional Office
2600 North Central Avenue, Suite 400
Phoenix, Arizona 85004-3008
(602) 379-6750
(602) 240-8447 direct
(602) 418-8503 cell
Regular day off is 2nd Friday of each pay period.

From: Tabachnick, Alan <alan.tabachnick@stb.gov>
Sent: Tuesday, November 29, 2022 11:28 AM
To: Cantley, Garry <Garry.Cantley@bia.gov>
Cc: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>; Assenza, Adam <Adam.Assenza@stb.gov>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>; Buckley, Maggie <Maggie.Buckley@jacobs.com>
Subject: RE: [EXTERNAL] UP PIRATE Section 106 Informational Memo-MOA Meeting Schedule

Garry, thanks for the continued support and your availability for any questions or concerns that may come up. Things seem to be progressing well and we will continue to work on developing the MOA with all of the tribes and the other consulting parties. We will reach out to you if anything comes up. Would you still like to be included on distributions, updates, and meeting invitations? If you don't feel the need for that, just let me know. As I noted before, we will of

course reach out if anything develops that is potentially challenging or problematic. Hope you had a nice holiday break and things are well.

From: Cantley, Garry <Garry.Cantley@bia.gov>
Sent: Saturday, October 22, 2022 3:06 PM
To: Tabachnick, Alan <alan.tabachnick@stb.gov>
Cc: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Subject: Re: [EXTERNAL] UP PIRATE Section 106 Informational Memo-MOA Meeting Schedule

Alan,
Thanks for the message.
Since there is no action before BIA, I don't think there is any need for us to formally participate in the 106 consultation process.
Regardless, I stand by to assist and address any questions you might have.
Best of luck with the project, sir.

Garry J. Cantley
Regional Archeologist
BIA Western Regional Office
2600 North Central Avenue, Suite 400
Phoenix, Arizona 85004-3008
(602) 379-6750
(602) 240-8447 direct
(602) 418-8503 cell
Regular day off is 2nd Friday of each pay period.

From: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Sent: Tuesday, October 18, 2022 2:27 PM
To: Cantley, Garry <Garry.Cantley@bia.gov>
Cc: Dawes, Tamera <Tamera.Dawes@bia.gov>; Assenza, Adam <adam.assenza@stb.gov>; Tabachnick, Alan <alan.tabachnick@stb.gov>; Bushey, Sabra <Sabra.Bushey@jacobs.com>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>
Subject: [EXTERNAL] UP PIRATE Section 106 Informational Memo-MOA Meeting Schedule

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Dear Mr. Cantley,

As stated in previous Section 106 consultation conducted under the National Historic Preservation Act, the Union Pacific Railroad Company intends to request authority from the Surface Transportation Board (Board) to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

From: Luhnow, Glennda
Sent: Monday, December 5, 2022 7:08 AM
To: Williams, Mike N (FAA)
Cc: Tabachnick, Alan; Assenza, Adam; Buckley, Maggie; McNeish, Sabra; Rainey, Pamela; Powell, Kris
Subject: RE: UPRR PIRATE Continuing Section 106 Consultation: Final Class III Report, Scope Change, NRHP Re-evaluation, Boundary Change

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Mike,

Good morning! Thank you for your response.

Have a great day,
Glennda

Glennda Luhnow, M.A., RPA | **JACOBS** | **Manager/Archaeology and Cultural Resources** |
C: 480-510-0830 | glennda.luhnow@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

From: Williams, Mike N (FAA) <Mike.N.Williams@faa.gov>
Sent: Monday, December 5, 2022 7:03 AM
To: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Cc: Tabachnick, Alan <alan.tabachnick@stb.gov>; Assenza, Adam <adam.assenza@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; McNeish, Sabra <Sabra.McNeish@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>; Powell, Kris <Kris.Powell@jacobs.com>
Subject: [EXTERNAL] RE: UPRR PIRATE Continuing Section 106 Consultation: Final Class III Report, Scope Change, NRHP Re-evaluation, Boundary Change

Glenda, Thank you for sending this.

The FAA Phoenix Airports District Office has no comments.

Mike N Williams
Manager, PHX-600
Phoenix Airports District Office
Office of Airports
Western-Pacific Region
3800 N Central Avenue
Suite 1025, 10th Floor
Phoenix, AZ 85012
602-792-1064
FAX 602-792-1061
mike.n.williams@faa.gov

From: Luhnow, Glennda
Sent: Thursday, December 8, 2022 11:44 AM
To: Dan M Garcia <Dan.Garcia@srpnet.com>; Tabachnick, Alan <alan.tabachnick@stb.gov>
Cc: Assenza, Adam <adam.assenza@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; Powell, Kris <Kris.Powell@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>
Subject: RE: RE: UPRR PIRATE Continuing S106 Consultation Dated 11/22/22

Hi Dan,

Good morning! Hope you are doing well.

The shapefiles for the sites investigated by the PIRATE Class III survey are attached. Please let me know if you have any difficulties opening the data.

Have a great Thursday!
g

Glennda Luhnow, M.A., RPA | **JACOBS** | **Manager/Archaeology and Cultural Resources** |
C: 480-510-0830 | glennda.luhnow@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

From: Dan M Garcia <Dan.Garcia@srpnet.com>
Sent: Friday, December 2, 2022 4:12 PM
To: Tabachnick, Alan <alan.tabachnick@stb.gov>
Cc: Assenza, Adam <adam.assenza@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Subject: [EXTERNAL] RE: UPRR PIRATE Continuing S106 Consultation Dated 11/22/22

Dear Mr. Tabachnick,

Salt River Project is in receipt of STB's Section 106 consultation package dated 11/22/22. I have reviewed the revised report and attachments and SRP concurs with the finding of adverse effect, NRHP eligibility determinations, need for additional surveys, and expansions of archaeological site boundaries described. We would appreciate a copy of the GIS shapefile/geodatabase of the revised site locations, as SRP has a number of ongoing power projects in this area. Also, please note that a number of SRP transmission and distribution facilities are described as Isolated Occurrences of Cultural Materials on page 85 of the report. Specifically, Isolated Features 28, 29, 30, and 31 are in-use modern maintained SRP Critical Energy Infrastructure and need not be recorded as cultural resources or evaluated for NRHP eligibility. Please let me know if you have any questions.

Dan Garcia
Archaeologist - Senior Cultural Resource Management Specialist
SRP | Biological and Cultural Resource Services | PAB359
P.O. Box 52025, Phoenix, AZ 85072-2025
P: (602) 236-2336 | **M**: (480) 213-1177

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Jacobs Engineering Group Inc. (Jacobs) will send you a Microsoft Teams meeting invitation in the coming days. If you have any technical questions about the Teams platform or how to participate, please contact Glennda Luhnow at Glennda.luhnow@jacobs.com.

Please feel free to contact Alan Tabachnick, OEA's Deputy Federal Preservation Officer, at Alan.Tabachnick@stb.gov with any questions about the draft MOA and the upcoming meeting.

Sincerely,
Glennda Luhnow

Glennda Luhnow, M.A., RPA | **JACOBS** | **Manager/Archaeology and Cultural Resources** |
C: 480-510-0830 | glennda.luhnow@jacobs.com
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Luhnow, Glennda

From: Luhnow, Glennda
Sent: Thursday, December 8, 2022 5:00 PM
To: AZSHPO - AZPARKS
Cc: Tabachnick, Alan; Assenza, Adam; Buckley, Maggie; McNeish, Sabra; Powell, Kris; Rainey, Pamela
Subject: UPRR PIRATE Draft MOA Submittal 1 for Review
Attachments: UPRR PIRATE MOA Draft Submittal 1_12082022.pdf; UPRR PIRATE Draft MOA Comment Form.docx; UPRR PIRATE MOA Draft Submittal 1_12082022.docx

Dear Ms. Leonard,

As the Surface Transportation Board (Board) Office of Environmental Analysis (OEA) stated in previous Section 106 consultation conducted under the National Historic Preservation Act, on June 30, 2022, the Union Pacific Railroad Company filed a petition with the Board requesting authority to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

OEA conducted a virtual meeting with the Section 106 consulting parties on November 3, 2022, to discuss the development of a project Memorandum of Agreement (MOA). The initial draft MOA is attached for your review, along with a Comment Form for your use as you review the document.

A virtual meeting to discuss the comments will be held on **Thursday, January 12, 2023, at 1-3 pm (Arizona time)/3–5 pm (Eastern time).** To facilitate the meeting discussion, OEA requests that you provide your comments on the attached Comment Form by COB on **Monday, January 9, 2023**.

Jacobs Engineering Group Inc. (Jacobs) will send you a Microsoft Teams meeting invitation in the coming days. If you have any technical questions about the Teams platform or how to participate, please contact Glennda Luhnow at Glennda.luhnow@jacobs.com.

Please feel free to contact Alan Tabachnick, OEA's Deputy Federal Preservation Officer, at Alan.Tabachnick@stb.gov with any questions about the draft MOA and the upcoming meeting.

Sincerely,
Glennda Luhnow

Glennda Luhnow, M.A., RPA | **JACOBS** | **Manager/Archaeology and Cultural Resources** |
C: 480-510-0830 | glennda.luhnow@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

From: Edward Raleigh (FCD) <Edward.Raleigh@Maricopa.Gov>
Sent: Wednesday, December 28, 2022 9:37 AM
To: Luhnow, Glennda
Cc: Tabachnick, Alan; Assenza, Adam; Buckley, Maggie; McNeish, Sabra; Powell, Kris; Rainey, Pamela
Subject: [EXTERNAL] FW: UPRR PIRATE Draft MOA Submittal 1 for Review
Attachments: UPRR PIRATE MOA Draft Submittal 1_12082022.pdf; UPRR PIRATE Draft MOA Comment Form.docx

Follow Up Flag: Follow up
Flag Status: Flagged

The Flood Control District of Maricopa County has no comments on the UPRR PIRATE MOA Draft Submittal. As described in lines 72 to 74 of the draft MOA, any impact to Flood Control District projects or land will require that a permit be obtained from our office. We do not see a need for the Flood Control District to sign the MOA as a concurring party unless there is a requirement that we must do so to allow the process to proceed.

Ed Raleigh
Senior Engineering Advisor
Flood Control District of Maricopa County
(602)506-4704
Cell: (602)526-6018

From: Michael Fulton (FCD) <Michael.Fulton@maricopa.gov>
Sent: Friday, December 9, 2022 1:30 PM
To: Edward Raleigh (FCD) <Edward.Raleigh@Maricopa.Gov>
Subject: FW: UPRR PIRATE Draft MOA Submittal 1 for Review

Would you please review and prepare draft comments (if any) on behalf of the District? I see mention of FCD beginning at line 72.

Mike

From: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Sent: Thursday, December 8, 2022 4:34 PM
To: Michael Fulton (FCD) <Michael.Fulton@maricopa.gov>
Cc: Tabachnick, Alan <alan.tabachnick@stb.gov>; Assenza, Adam <adam.assenza@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; McNeish, Sabra <Sabra.McNeish@jacobs.com>; Powell, Kris <Kris.Powell@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>
Subject: UPRR PIRATE Draft MOA Submittal 1 for Review

Dear Mr. Fulton,

As the Surface Transportation Board (Board) Office of Environmental Analysis (OEA) stated in previous Section 106 consultation conducted under the National Historic Preservation Act, on June 30, 2022, the Union Pacific Railroad Company filed a petition with the Board requesting authority to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

Salt River
PIMA-MARICOPA INDIAN COMMUNITY
10,005 EAST OSBORN ROAD/SCOTTSDALE, ARIZONA 85256/ PHONE (480) 362-6325

Tribal Historic Preservation Office

TO: Danielle Gosselin, Director
Surface Transportation Board
Office of Environmental Analysis
RE: Docket No. FD 36501
395 E Street SW
Washington, DC 20423

DATE: 1/6/2023

FROM: Shane Anton, Tribal Historic Preservation Officer

RE: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – in Maricopa County, AZ
Continuation of National Historic Preservation Act Section 106 Consultation

Dear Director Gosselin,

The Salt River Pima Maricopa Indian Community Tribal Historic Preservation Office (SRPMIC-THPO) received your consultation documents dated November 22, 2022. OEA is continuing Section 106 consultation to solicit comments regarding a project scope change, the adequacy of the final Class III survey report, the NRHP eligibility reevaluation of AZ U:10:69(ASM) and AZ U:10:275(ASM), a boundary change to and NRHP revaluation of AZ U:10:152(ASM), and the treatment of unsurveyed areas.

Project Scope Change: Initial build-out of the project now includes a 5,100-foot-long run-around track that would be constructed within the APE between Crismon Road and Signal Butte Road, south of the PIRATE industrial lead track. This project scope change is entirely contained within the APE and would not change the potential impacts to NRHP-eligible cultural resources.

> SRPMIC THPO concurs that the scope change is entirely contained within the APE and would not change the potential impacts to NRHP-eligible cultural resources.

Concurrence on Final Class III Survey Report: Comments on the draft Class III survey report (Rainey and Stubing 2022) and OEA's responses are included in the comment matrix (Attachment 2 of your letter dated November 22, 2022). OEA therefore requests concurrence on the adequacy

of the Class III survey report (Attachment 3 of your letter dated November 22, 2022) as a final document.

> SRPMIC THPO has reviewed the comment matrix and the corresponding changes in the Class III survey report and concurs that the report is adequate.

Reevaluation of NRHP Eligibility Determinations for AZ U:10:69(ASM) and AZ U:10:275(ASM): OEA agrees with the GRIC and SRPMIC THPOs that these two sites are eligible for the NRHP under Criterion D. The reevaluated NRHP eligibility determinations for both sites are reflected in the attached final Class III survey report.

> SRPMIC THPO concurs with the reevaluation of AZ U:10:69(ASM) and AZ U:10:275(ASM) as eligible for the NRHP under Criterion D and acknowledges that the eligibility determinations for both sites are reflected in the attached final Class III survey report.

Boundary Change and Reevaluation of NRHP Eligibility for AZ U:10:152(ASM): OEA agrees with the GRIC and SRPMIC THPOs that the boundary of this site should be expanded. The revised site boundary and the reevaluation of NRHP eligibility for AZ U:10:152(ASM) is reflected in the enclosed final Class III survey report. The site boundary is now within the APE.

> SRPMIC THPO concurs with the revised site boundary of AZ U:10:52 (ASM) within the APE and agrees that the site in its entirety is eligible for the NRHP under Criterion D.

Treatment of Unsurveyed Areas: OEA will require an additional cultural resources investigation of the unsurveyed areas prior to construction in the project's memorandum of agreement

> SRPMIC THPO concurs that additional cultural resources investigations of the unsurveyed areas should be completed prior to construction in the memorandum of agreement.

Maps Depicting APE Revisions: As described in the continuing Section 106 consultation letter dated September 1, 2022, slight revisions were made to the project APE.

> SRPMIC THPO has reviewed and acknowledges the revisions to the project APE

The proposed project area is within the ancestral lands of the Four Southern Tribes (Gila River Indian Community; Salt River Pima-Maricopa Indian Community; *Ak-Chin* Indian Community and the *Tohono O'Odham* Nation). The SRPMIC THPO will continue to participate in the Section 106 process of this undertaking, but defers to the GRIC THPO as the consultation lead for this project.

Thank you for consulting with the SRPMIC-THPO. Should you have questions and/or concerns about this project, please contact me directly at (480) 362-6331.

Thank you.



Shane Anton, Tribal Historic Preservation Officer
Cultural Resources Department, SRPMIC
10,005 E. Osborn Rd.
Scottsdale, Arizona 85256
Email: Shane.Anton@SRPMIC-nsn.gov
Office Tele: (480) 362-6331

mesa·az
OFFICE OF ECONOMIC DEVELOPMENT
selectmesa.com

120 N. Center St.
PO Box 1466
Mesa, Arizona 85211-1466

January 17, 2023

Ms. Danielle Gosselin
Director, Office of Environmental Analysis
Surface Transportation Board

Re: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – in Maricopa County, AZ
Continuation of National Historic Preservation Act Section 106 Consultation

Dear Ms. Gosselin,

This letter is intended to respond to the request for input on the proposed PIRATE rail project per Section 106 consultation. Input from the city of Mesa Historic Preservation Office is requested on the following items:

- Project scope change.
- Adequacy of the Class III survey report as a final document.
- AZ U:10:69(ASM) and AZ U:10:275(ASM) as eligible for the NRHP under Criterion D in their entirety for their potential to provide information on important themes relative to the Hohokam occupation of the Queen Creek Delta area.
- AZ U:10:152(ASM) as eligible for the NRHP under Criterion D for its potential to provide information on important themes relative to the Hohokam occupation of the Queen Creek Delta area; associated boundary change.
- Treatment of un-surveyed areas.

Pursuant to 36 CFR 800 § 106 of the National Historic Preservation Act, this office has reviewed the project in consultation with the City of Mesa Archaeologist, Alison Stoltman. We have no additional comments on the above items.

Sincerely,

William J. Jabjiniak
Economic Development Director

cc: Adam Assenza, OEA Environmental Protection Specialist
Alan Tabachnick, OEA Historic Preservation Specialist
Maggie Buckley, Jacobs Project Manager
Mary Kopaskie-Brown, Planning Director/Historic Preservation Officer
Robert Apodaca, Deputy Director, Development Services Department – Civil Plan Review
Alison Stoltman, Museum Education Curator
Maura Jackson, Planner II

480.644.2398 (tel)
480.644.3458 (fax)

Luhnow, Glennda

From: Luhnow, Glennda
Sent: Thursday, December 8, 2022 5:00 PM
To: AZSHPO - AZPARKS
Cc: Tabachnick, Alan; Assenza, Adam; Buckley, Maggie; McNeish, Sabra; Powell, Kris; Rainey, Pamela
Subject: UPRR PIRATE Draft MOA Submittal 1 for Review
Attachments: UPRR PIRATE MOA Draft Submittal 1_12082022.pdf; UPRR PIRATE Draft MOA Comment Form.docx; UPRR PIRATE MOA Draft Submittal 1_12082022.docx

Dear Ms. Leonard,

As the Surface Transportation Board (Board) Office of Environmental Analysis (OEA) stated in previous Section 106 consultation conducted under the National Historic Preservation Act, on June 30, 2022, the Union Pacific Railroad Company filed a petition with the Board requesting authority to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

OEA conducted a virtual meeting with the Section 106 consulting parties on November 3, 2022, to discuss the development of a project Memorandum of Agreement (MOA). The initial draft MOA is attached for your review, along with a Comment Form for your use as you review the document.

A virtual meeting to discuss the comments will be held on **Thursday, January 12, 2023, at 1-3 pm (Arizona time)/3–5 pm (Eastern time).** To facilitate the meeting discussion, OEA requests that you provide your comments on the attached Comment Form by COB on **Monday, January 9, 2023**.

Jacobs Engineering Group Inc. (Jacobs) will send you a Microsoft Teams meeting invitation in the coming days. If you have any technical questions about the Teams platform or how to participate, please contact Glennda Luhnow at Glennda.luhnow@jacobs.com.

Please feel free to contact Alan Tabachnick, OEA's Deputy Federal Preservation Officer, at Alan.Tabachnick@stb.gov with any questions about the draft MOA and the upcoming meeting.

Sincerely,
Glennda Luhnow

Glennda Luhnow, M.A., RPA | **JACOBS** | **Manager/Archaeology and Cultural Resources** |
C: 480-510-0830 | glennda.luhnow@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

STB Docket Number FD 36501

Union Pacific Railroad Company – Construction and Operation Exemption – In Maricopa County, Ariz.

Section 106 Consulting Parties Review: Draft Memorandum of Agreement (MOA)
Please return to Office of Environmental Analysis (OEA): OEA by January 9, 2023

Tribe or Agency: Arizona State Museum

Contact Person: Shannon Plummer splummer@arizona.edu

#	Section	Line(s)	Comment
1	Page 1	38	Unnecessary quotation marks after "Arizona"
2	VIII.A	240	Add "Rules Implementing the" before "Arizona Antiquities Act"
3	VIII.B	275	Change "41-847" to "41-844"
4	VIII.B	276-277	Remove "State Burial Law for Private Land" and just list ARS §41-865. ("State Burial Law" is a colloquial, not formal name for the statute)
5	VIII.B	283-284	Specify that the protocol for documenting ancestral remains will include human remains, funerary objects, sacred ceremonial objects, and objects of national or tribal patrimony to be consistent with the language used in ARS 41-844.
6	VIII.B	287	Please change "Burial Agreement" to "Burial Discovery Agreement"
7	VIII.B	300	Specify that the protocol for documenting ancestral remains will include human remains, funerary objects, sacred ceremonial objects, and objects of national or tribal patrimony to be consistent with the language used in ARS 41-844.
8	XV	443	Change "standard" to "standards".
9	XVII.A	479	Please change "Burial Agreement" to "Burial Discovery Agreement"
10	XVII.B	487	Please add that ASM will also be contacted in the event of unanticipated discovery of cultural resources during construction.
11	Attachment D	785-787	Please add ASM's Repatriation Coordinator to the list of ASM contacts: Cristin Lucas / 520-626-0320 / asm-repatriation@email.arizona.edu
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#	Section	Line(s)	Comment
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STB Docket Number FD 36501

Union Pacific Railroad Company – Construction and Operation Exemption – In Maricopa County, Ariz.

Section 106 Consulting Parties Review: Draft Memorandum of Agreement (MOA)
Please return to Office of Environmental Analysis (OEA): OEA by January 9, 2023

Tribe or Agency: City of Mesa

Contact Person: Maura Jackson and Alison Stoltman

#	Section	Line(s)	Comment
1	Stipulations III Professional Qualifications	154	Question for ASM- Does the Secretary of Interiors standards for a Principal Investigator reach the standards required for the Arizona Antiquities Act. One archaeological site affected is U:10:2 on county, municipal as well as private land.
2	Stipulations III Professional Qualifications	160	Replace “Indian Tribes” with “Native American Tribes” On line 108 the term “Native American Tribes” was used.
3	Stipulations IV Area of Potential Effect	165	Take out “historic” and replace with “cultural” That includes historic and archaeological resources.
4	Stipulations VI Finding of Effect	223	UP shall hire a cultural resource management company / qualified archaeologists to monitor.
5	Stipulations VIII B Historic Properties Treatment Plan	243	A qualified archaeologist or with the aid of a cultural resource management company.
6	Stipulations VIII B Historic Properties Treatment Plan	255	And repatriation.
7	Stipulations VIII B Historic Properties Treatment Plan	287	And process for repatriation.
8	Stipulations XII Confidentiality	402	Replace “Indian Tribes” with “Native American Tribes”.
9	Stipulations Curation	439	Replace “Indian Tribes” with “Native American Tribes”.
10	Attachment D Consulting Party Contact Information	781	Remove Emily Early from the list.
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STB Docket Number FD 36501

Union Pacific Railroad Company – Construction and Operation Exemption – In Maricopa County, Ariz.

Section 106 Consulting Parties Review: Draft Memorandum of Agreement (MOA)
Please return to Office of Environmental Analysis (OEA): OEA by January 9, 2023

Tribe or Agency: State Historic Preservation Office

Contact Person: Caroline Klebacha, Archaeological Compliance Specialist

#	Section	Line(s)	Comment
1	Recitals	19-20	This is a S106 document; do not address other environmental regulations
2	Recitals	21-28	Combine into one recital; limit it to S106
3	Recitals	29-31	APE is insufficiently defined; need some details here
4	Recitals	39	“and which” – delete “which”
5	Recitals	40	Should this be Office, not Officer?
6	Recitals	40	Concurrence for the revised report is December 20, 2022.
7	Recitals	55-56	Recital is not necessary, but you do need a statement that federal agencies (Corps and FAA) have agreed STB takes the lead on all S106 for the undertaking (except perhaps government-to-government consultation with Tribes)
8	Recitals	57-62	Combine into one recital
9	Recitals	63-67	Combine into one recital
10	Recitals	66	Add “the” before FAA
11	Recitals	68-71	Combine into one recital
12	Recitals	72-77	Combine into one recital
13	Recitals	78-82	Combine into one recital
14	Recitals	83-88	Combine into one recital
15	Recitals	89-93	Combine into one recital
16	Recitals	94-100	Combine into one recital
17	Recitals	101-104	Combine into one recital
18	Recitals	121	Not sure if this recital is necessary. Would be included if it was a NEPA substitution
19	Recitals	122-123	Delete “, as shown in the attached letter (Attachment B)”
20	I	138-141	Why include definitions if they follow regs?
21	II	145	“The Board’s” – Not OEA on behalf of the Board?

#	Section	Line(s)	Comment
22	III	156	Insert Paragraph A.
23	III	161	Insert Paragraph B., starting at, “OEA acknowledges that Indian Tribes…”
24	V(B)	196	SHPO cannot agree to a reduced consultation period at this time. We recommend a 14-30 day review depending on the results of the survey.
25	V(C)	203	SHPO cannot agree to a reduced consultation period at this time. We recommend a 14-30 day review.
26	VII	221	Insert Paragraph B.
27	VII	222	Re: development of an HPTP- Was any other mitigation proposed? Does this satisfy the Tribes? Need to think out of the box – Also, Where’s the public benefit?
28	VIII(B)	263	Include expectations of findings
29	VIII(C)	303	Not necessary. Delete.
30	VIII(D)(1)	309	May versus Shall regarding follow up with consulting parties
31	VIII(D)(1)	309	Include methods for follow up
32	VIII(D)(2)	315	SHPO cannot agree to a reduced consultation period at this time. We recommend a 14-30 day review.
33	VIII(D)(2)	317	May versus Shall regarding follow up with consulting parties
34	X(D)	371	Timeline for drafting the data recovery report?
35	X(F)	385	Insert “; substantive comments may require further review following Stipulation X.E.”
36	XX	559	Counterpart Signatures: Renumber “XXII”
37	(XXII)	566-568	Remove intent, this is not part of the Stipulations.
38	Attachment A	639	Delete extra period
39	Attachment D	773	Does not include contact information for SHPO, UP, or ACHP

STB Docket Number FD 36501

Union Pacific Railroad Company – Construction and Operation Exemption – In Maricopa County, Ariz.

Section 106 Consulting Parties Review: Draft Memorandum of Agreement (MOA)
Please return to Office of Environmental Analysis (OEA): OEA by January 9, 2023

Tribe or Agency: Salt River Project (SRP)

Contact Person: Dan Garcia

#	Section	Line(s)	Comment
1	Recitals	88-89	Replace text with "WHEREAS, Salt River Project (SRP) collectively refers to the Salt River Project Agricultural Improvement District, an agricultural improvement district organized under the laws of the State of Arizona and the Salt River Valley Water Users' Association, a corporation organized under the laws of the Territory (now State) of Arizona; and"
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STB Docket Number FD 36501

Union Pacific Railroad Company – Construction and Operation Exemption – In Maricopa County, Ariz.

Section 106 Consulting Parties Review: Draft Memorandum of Agreement (MOA)
Please return to Office of Environmental Analysis (OEA): OEA by January 9, 2023

Tribe or Agency:

Contact Person:

#	Section	Line(s)	Comment
1	X	341-387	UPRR requests that the data recovery efforts be completed in 'zones' so that priority areas to be completed first are the wye and any portion on the new industrial lead. The secondary 'zone' would be any areas of proposed work along the mainline track including the Germann Siding extension and the Working Track. UPRR requests that the priority zone (as identified above) be completed first and approved for construction prior to the secondary zone due to the priority zone being critical path for the overall project schedule.
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#	Section	Line(s)	Comment
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Meeting Minutes

Subject	**Section 106 MOA Comment Resolution Meeting**		
Project	Union Pacific Railroad PIRATE Project		
Reference No.	Surface Transportation Board Docket No. FD 36501		
Date	Thursday, January 26, 2023	**Time**	1 – 3 p.m. MST 3 – 5 p.m. EST
Location	MS Teams		

The following notes summarize the topics discussed during the January 26, 2023 Section 106 continuing consultation meeting between the Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) and representatives from several consulting agencies and Tribes. The meeting objectives were to:

1. Review information OEA previously provided about Union Pacific Railroad's (UP) proposed Pecos Industrial Rail Access and Train Extension (PIRATE) project, schedule updates, and the Section 106 consultation thus far;
2. Review and resolve comments submitted on the initial draft memorandum of agreement (MOA); and
3. Discuss the next steps in the Section 106 consultation process.

Welcome and Introductions

Adam Assenza, the Board's Environmental Protection Specialist, began the introductions based on the agency roll call. The attendees then introduced themselves with their name and agency or Tribe (see attached sign-in sheet for attendance).

Project Snapshot

- OEA reviewed the Section 106 undertaking, project description, project alternatives, area of potential effects (APE), and culturally sensitive areas (refer to slides 5-8 in the attached presentation).
- OEA reviewed the results of the Class III survey, including the four historic properties that would be adversely affected if the Board decides to approve PIRATE with conditions (slide 9).
- OEA reviewed the recommended project finding of adverse effect (slide 10). Based on consultation with SHPO/THPOs and consulting parties, OEA has been developing an MOA for resolving adverse effects to the historic properties.

Reviewing the MOA – Comments and Review Process

- Jacobs explained that they would review each comment received thus far, make real-time revisions to the MOA as needed, and accept and address additional MOA comments during this portion of the meeting. Jacobs also explained how the MOA and comment resolution matrix would be distributed to the consulting parties when ready (slides 11 and 12).
- Jacobs summarized comments received on the draft MOA prior to the meeting (see slide 13).

Jacobs then led a real-time review of the MOA comments and suggested edits, focusing on text modified per comments received thus far. OEA indicated that new comments will also be accepted and addressed during the meeting.

- The Board's General Counsel has not yet reviewed the MOA. The General Counsel will review the revised MOA when it is distributed to the consulting parties and may have additional comments.
- The attached comment resolution form provides a summary of the revisions made and accepted in response to comments received from the consulting parties. The following bullets summarize comments and edits that were discussed at the meeting.
    - SHPO requested that acreage be added to the APE description (page 1).
    - SHPO agreed that NEPA references on page 4 can be retained. SHPO will send language to clarify that the NEPA reference is for public involvement purposes (page 4).
    - SHPO requested that signatories be reviewed and identified correctly. Concurring parties can request through OEA to have their status changed to invited signatory (page 4).
    - SRP-MIC, GRIC, and Pascua Yaqui indicated they prefer the term "Native American Tribes" instead of "Indian Tribes" (page 5).
    - SRP-MIC asked about the reference to Bulletins 15 and 38 in Stipulation VI(A). Assessing the sites as potential TCPs as per guidance in Bulletin 38 is important because several TCPs are within several 100 feet of the project. OEA revised Stipulation VI(A) to reflect the current status of the TCP evaluation by adding the verbiage "and will continue to evaluate" to this stipulation. The consulting parties agreed this verbiage is appropriate. SRP-MIC stated that the HPTP should emphasize continuous Native American/O'odham occupation of the area from prehistory through the current times in the research design and culture history. The HPTP research themes and culture history should further emphasize the cultural continuity of the O'odham people in the interpretation of the archaeological record in the Queen Creek basin (page 6).
    - SHPO agreed with GRIC and suggested a historic context study for the Queen Creek valley to be developed in collaboration with the Tribes. SHPO noted the potential for an ethnographic study in addition to standard mitigation (i.e., data recovery) already proposed. This study could have some public benefit through interpretive applications. SHPO noted that the MOA is the binding document and should have statements about this study, but that the MOA does not need to have details (page 6).
    - OEA added repatriation language and also a stipulation for a TCP evaluation and cultural landscape study (page 8).
    - Jacobs asked GRIC, SRP-MIC, and Pascua Yaqui specifically about Section IX (Tribal Consultation) to make sure the THPOs concur with that stipulation. GRIC concurred, SRP-MIC deferred to GRIC, and Pascua Yaqui said Section IX "looks adequate" (page 10).
    - SHPO clarified that statement in Line 601 does not belong in the stipulation section but should be reformatted to be outside of the last stipulation (page 6).
    - GRIC inquired about the intent of Counterpart Signatures. It was clarified that each signatory gets their own page to sign and send back, and SHPO signs last. GRIC was satisfied with this clarification.
    - Retain Heather Wilke as the Town of Queen Creek contact (page 28 or Appendix C).

- Add Reylynne Williams and Darius Enos to the GRIC contacts (page 28 or Appendix C).
- Add Carl D'Acosta to the Phoenix-Mesa Gateway Airport contacts (page 27 or Appendix C).
- Add Michael Romero to the ASLD contacts (page 27 or Appendix C) and add ASLD to Attachment B.
- OEA will add TCP to the acronyms and to the definitions section.

Consideration of UP's General Implementation Request

OEA thanked the group for working through the MOA comment resolution process, and then introduced UP's implementation request and asked for feedback (slide 14).

- SHPO asked if the phases would have a lot of time between them. If so, a programmatic agreement would be more appropriate for this project. OEA said probably not much delay, but OEA has some concerns that phasing the data recovery in this way will prevent the data recovery and analysis from focusing on the holistic landscape approach.
- OEA requested that UP provide additional details about the implementation request. UP explained the request a little more with respect to differences between constructing the new track versus constructing along existing track. UP discussed concerns about safety and risk of schedule delays when working around existing "live" track. UP would like to construct the wye and the rest of the industrial lead first as the critical path.
- GRIC indicated that UP's proposal would not be in the best interest of the Tribes and GRIC does not agree that this is reasonable request. In the project area, you never know what will happen or what will be found during a data recovery effort until after it starts. It's not a reasonable request for construction to come in right after data recovery is complete. SRP-MIC concurred with GRIC. SHPO asked for more information to be provided with the revised MOA so they can review the request.
- OEA welcomed other comments on UP's request after the consulting parties have more time to consider it.
- The City of Mesa Economic Development Department mentioned concerns over safety and traffic; they would like UP's request to be considered because of the multiple roadway crossings that would be constructed as part of the new rail line.
- OEA indicated that the data recovery effort will require extensive planning, consultation, and coordination, and needs to consider safety and traffic impacts. UP's request adds to the complexity of the undertaking and likely increases the logistical challenges.

Open Discussion / Questions

Jacobs opened up the floor for discussion (slides 15-17).

Q1: What concerns do consulting parties have with respect to the use of the term "Indian Tribes"?

A1: Consulting parties would like consistent language and terms throughout the MOA. They would like to use the THPOs preferred language and terminology.

Q2: GRIC asked when the HPTP will be ready for review/comment.

A2: Jacobs reviewed the upcoming Section 106 milestones. The Board's General Counsel will review the revised MOA concurrently with the consulting parties. OEA anticipates the HPTP (and the final MOA) will be ready for consulting party review in March 2023. This schedule is proposed and may change.

Q3: OEA asked if the consulting parties would like a similar comment resolution session for the HPTP.

A3: No answer from the attendees. OEA added that these real-time reviews work well, save time, and they would like to do something similar for the HPTP. The HPTP is key to resolving the project's adverse effects and it's important to have a good document developed with consulting party input. OEA concluded by stressing that it's important to hear people's points of view and where everyone is coming from.

Action Items

The following action items were assigned during the meeting.

- OEA will revise the MOA to capture statements of mitigation such as a historic context study in the revised MOA since it is the legally binding document.
- OEA will prepare and distribute the revised MOA and comment form for consulting party review in February 2023, with a 30-day review period.
- The consulting parties will respond with any comments, using OEA's provided comment form, by the due date in March 2023.

Attachments List of attendees
Agenda
Meeting presentation
Draft MOA comment resolution matrix

Distribution Meeting invitees

Attendees

Subject	**Section 106 MOA Comment Resolution Meeting**		
Project	Union Pacific Railroad PIRATE Project		
Reference No.	Surface Transportation Board Docket No. FD 36501		
Date	Thursday, January 26, 2023	**Time**	1 – 3 p.m. MST 3 – 5 p.m. EST
Location	MS Teams		

Groups in Attendance	Representatives
Surface Transportation Board (Board), Office of Environmental Analysis (OEA)	Adam Assenza, Environmental Protection Specialist Alan Tabachnick, Deputy Federal Preservation Officer
Jacobs (supporting the Board's OEA)	Maggie Buckley, Environmental Project Manager Glennda Luhnow, Manager/Archaeology and Cultural Resources (Phoenix) Betsi Phoebus, NEPA Lead Kris Powell, Senior Archaeologist
Gila River Indian Community	Larry Benallie, Jr., Archaeological Compliance Specialist
Pascua Yaqui Tribe	Karl Hoerig, Tribal Historic Preservation Officer
Salt River Pima-Maricopa Indian Community	Shane Anton, Tribal Historic Preservation Officer Sunday Eiselt, Tribal Historic Preservation Office Archaeologist
Arizona Museum of Natural History	Alison Stoltman, Acting Deputy Director
Arizona State Land Department	Tiffany Grew, Archaeological Compliance Specialist Michael Romero, Right-of-Way Project Leader
Arizona State Museum	Shannon Plummer, Arizona Antiquities Act Administrator
City of Mesa Historic Preservation Office	Maura Jackson, Historic Preservation Advisor/Planner Mary Kopaskie-Brown, Planning Director and Historic Preservation Officer
City of Mesa Office of Economic Development	William Jabjiniak, Economic Development Director
Phoenix-Mesa Gateway Airport	Carl D'Acosta, Environmental & Safety Coordinator
State Historic Preservation Office	Caroline Klebacha, Archaeological Compliance Specialist Mary-Ellen Walsh, Cultural Resources Compliance Manager
Town of Queen Creek	Dave Lipinski, Capital Improvements Director
Union Pacific Railroad	Kevin Rice, Sr., Manager M/W Environmental

Attendees

Section 106 MOA Comment Resolution Meeting

Invited but unable to attend:

Ak-Chin Indian Community
Hopi Tribe
Mescalero Apache Tribe
Pueblo of Zuni
Tohono O'odham Nation
Tonto Apache Tribe
Yavapai-Apache Nation
Federal Aviation Administration
Flood Control District of Maricopa County
Salt River Project
San Tan Historical Society
U.S. Army Corps of Engineers

MOA Meeting 2 Agenda

Subject	Second MOA Meeting – Comment Resolution		
Project	Union Pacific Railroad PIRATE Rail Line		
Reference No.	Surface Transportation Board Docket No. FD 36501		
Date	Thursday, January 12, 2023	**Time**	1 – 3 p.m. MST 3 – 5 p.m. EST
Location	**MS Teams**	**Conference**	**Call: 1 (602) 609-7361** **Code: 638 547 530#**

Item	Topic
1	**Welcome and Introductions**
2	**Project Snapshot** • Section 106 undertaking • Description of project and area of potential effects • Identification and evaluation of historic properties • Adverse effect determination
3	**Reviewing the MOA–Comment Resolution Process** • General housekeeping • Electronic version of MOA will be shared on screen • Review will follow the MOA content (WHEREAS clauses, Stipulations, and Attachments)
4	**Open Discussion and Meeting Summary** • Section 106 timeline • Project milestones • Contacts
5	**Adjourn**

Luhnow, Glennda

From: Luhnow, Glennda
Sent: Friday, February 10, 2023 10:03 AM
To: AZSHPO - AZPARKS
Cc: Tabachnick, Alan; Assenza, Adam; Buckley, Maggie; McNeish, Sabra; Powell, Kris; Rainey, Pamela
Subject: UPRR PIRATE Revised Draft MOA and Meeting Materials
Attachments: 2023 0126 UP PIRATE S106 MOA Mtg Minutes, PowerPoint, Comment Resolution Matrix.pdf; PIRATE_Revised Draft MOA_230902.pdf; UPRR PIRATE Revised Draft MOA Comment Form.docx

Dear Ms. Leonard,

As the Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) stated in previous Section 106 consultation conducted under the National Historic Preservation Act, on June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Board requesting authority to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

OEA conducted a virtual meeting with the Section 106 consulting parties on January 26, 2023, to resolve comments on the project's draft Memorandum of Agreement (MOA). At that meeting, an implementation request from UP specific to data recovery and construction sequencing was discussed. In further consideration of the implementation request, OEA determined that such sequencing is not feasible and will not be utilized.

The revised draft MOA, meeting minutes from the January 26th meeting, and a comment resolution form summarizing changes in the revised draft MOA, are attached for your information and review. A blank Comment Form is also attached for your use as you review the revised draft MOA. Please provide us with any last comments by March 3rd. We appreciate everyone's thorough review of the first draft of the MOA and that when you look over the revised MOA you will see that we addressed all of the Consulting Parties comments and requests. We look forward to any additional input you wish to provide and hope to circulate a final version of the MOA in the near future.

Please feel free to contact Alan Tabachnick, OEA's Deputy Federal Preservation Officer, at Alan.Tabachnick@stb.gov with any questions about the Section 106 process or the revised MOA. And thanks again for all of your input on this project – we appreciate it.

Thank you,
Glennda Luhnow

Glennda Luhnow, M.A., RPA | **JACOBS** | **Manager/Archaeology and Cultural Resources** |
C: 480-510-0830 | glennda.luhnow@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

Powell, Kris

From: Eiselt, Sunday <Sunday.Eiselt@srpmic-nsn.gov>
Sent: Monday, February 27, 2023 3:01 PM
To: Luhnow, Glennda; Powell, Kris
Cc: Anton, Shane; Garcia-Lewis, Angela; Martinez, Martha; Tabachnick, Alan
Subject: [EXTERNAL] RE: UPRR PIRATE Revised Draft MOA and Meeting Materials

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Glenna and Kris.

SRPMIC-THPO has reviewed the revised draft MOA for the PIRATE project and have no comments at this time. The edits reflect our understanding of the Changes that SRPMIC and GRIC THPOs requested.

Thank you

B. Sunday Eiselt Ph.D
THPO Archaeologist
Salt River Pima-Maricopa Indian Community
10,005 E. Osborn Road
Scottsdale, AZ 85256
Sunday.Eiselt@srpmic-nsn.gov
Office: (480) 362 3347

From: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Sent: Friday, February 10, 2023 10:45 AM
To: Bohnee, Gary <Gary.Bohnee@SRPMIC-nsn.gov>
Cc: Anton, Shane <Shane.Anton@SRPMIC-nsn.gov>; Garcia-Lewis, Angela <Angela.Garcia-Lewis@SRPMIC-nsn.gov>; Eiselt, Sunday <Sunday.Eiselt@srpmic-nsn.gov>; Martinez, Martha <Martha.Martinez@SRPMIC-nsn.gov>; Tabachnick, Alan <alan.tabachnick@stb.gov>; Assenza, Adam <adam.assenza@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; McNeish, Sabra <Sabra.McNeish@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>; Powell, Kris <Kris.Powell@jacobs.com>
Subject: UPRR PIRATE Revised Draft MOA and Meeting Materials

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Dear President Harvier,

As the Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) stated in previous Section 106 consultation conducted under the National Historic Preservation Act, on June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Board requesting authority to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

OEA conducted a virtual meeting with the Section 106 consulting parties on January 26, 2023, to resolve comments on the project's draft Memorandum of Agreement (MOA). At that meeting, an implementation request from UP specific to data recovery and construction sequencing was discussed. In further consideration of the implementation request, OEA determined that such sequencing is not feasible and will not be utilized.

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Please feel free to contact Alan Tabachnick, OEA's Deputy Federal Preservation Officer, at Alan.Tabachnick@stb.gov with any questions about the Section 106 process or the revised MOA. And thanks again for all of your input on this project – we appreciate it.

Thank you,
Glennda Luhnow

Glennda Luhnow, M.A., RPA | **JACOBS** | **Manager/Archaeology and Cultural Resources** |
C: 480-510-0830 | glennda.luhnow@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

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Powell, Kris

From: Alison Stoltman <alison.stoltman@MesaAZ.gov>
Sent: Thursday, March 2, 2023 12:58 PM
To: Luhnow, Glennda
Cc: Tabachnick, Alan; Assenza, Adam; Buckley, Maggie; McNeish, Sabra; Powell, Kris; Rainey, Pamela
Subject: [EXTERNAL] RE: UPRR PIRATE Revised Draft MOA and Meeting Materials

Thank you Glenda. I do not have any comments. The MOA looks thorough and accurate. There will be a formal response from the City of Mesa staff involved coming.
I understand that there is no meeting today. Is that correct?

Alison Stoltman
She/her/hers
Acting Deputy Director
Arizona Museum of Natural History
53 North Macdonald, Mesa, AZ 85201
Office: 480 644 4040
Alison.Stoltman@MesaAZ.gov

From: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Sent: Friday, February 10, 2023 9:26 AM
To: Alison Stoltman <alison.stoltman@MesaAZ.gov>
Cc: Tabachnick, Alan <alan.tabachnick@stb.gov>; Assenza, Adam <adam.assenza@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; McNeish, Sabra <Sabra.McNeish@jacobs.com>; Powell, Kris <Kris.Powell@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>
Subject: UPRR PIRATE Revised Draft MOA and Meeting Materials

Dear Ms. Stoltman,

As the Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) stated in previous Section 106 consultation conducted under the National Historic Preservation Act, on June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Board requesting authority to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

OEA conducted a virtual meeting with the Section 106 consulting parties on January 26, 2023, to resolve comments on the project's draft Memorandum of Agreement (MOA). At that meeting, an implementation request from UP specific to data recovery and construction sequencing was discussed. In further consideration of the implementation request, OEA determined that such sequencing is not feasible and will not be utilized.

The revised draft MOA, meeting minutes from the January 26th meeting, and a comment resolution form summarizing changes in the revised draft MOA, are attached for your information and review. A blank Comment Form is also attached for your use as you review the revised draft MOA. Please provide us with any last comments by March 3rd. We appreciate everyone's thorough review of the first draft of the MOA and that when you look over the revised MOA you will see that we addressed all of the Consulting Parties comments and requests. We look forward to any additional input you wish to provide and hope to circulate a final version of the MOA in the near future.

Please feel free to contact Alan Tabachnick, OEA's Deputy Federal Preservation Officer, at Alan.Tabachnick@stb.gov with any questions about the Section 106 process or the revised MOA. And thanks again for all of your input on this project – we appreciate it.

Thank you,
Glennda Luhnow

Glennda Luhnow, M.A., RPA | **JACOBS** | **Manager/Archaeology and Cultural Resources** |
C: 480-510-0830 | glennda.luhnow@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

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STB Docket Number FD 36501

Union Pacific Railroad Company – Construction and Operation Exemption – In Maricopa County, Ariz.

Section 106 Consulting Parties Review: Revised Draft Memorandum of Agreement (MOA)
Please return to Office of Environmental Analysis (OEA): OEA by March 3, 2023

Tribe or Agency: Arizona State Museum

Contact Person: Shannon Plummer / splummer@arizona.edu

#	Section	Line(s)	Comment
1	Page 8	Lines 296 and 297	Please change "…documenting, interpretating [sic], reporting, and curating ancestral remains and associated sacred materials…" to "…documenting, reporting, securely housing, and repatriating human remains, funerary belongings, sacred ceremonial objects, and objects of national or tribal patrimony…"
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Phoebus, Elizabeth (Betsi)

From: Powell, Kris
Sent: Tuesday, March 7, 2023 2:00 PM
To: Tabachnick, Alan; Assenza, Adam
Cc: Buckley, Maggie; Luhnow, Glennda; Phoebus, Elizabeth (Betsi)
Subject: FW: UPRR PIRATE Revised Draft MOA and Meeting Materials

See below. GRIC has no comments on the MOA.

Kris Powell, M.A., RPA (she/her) | JACOBS | **Senior Archaeologist**
C: 602-463-5843 | kris.powell@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

From: Larry Benallie Jr <Larry.BenallieJr@gric.nsn.us>
Sent: Tuesday, March 7, 2023 1:57 PM
To: Powell, Kris <Kris.Powell@jacobs.com>
Subject: [EXTERNAL] RE: UPRR PIRATE Revised Draft MOA and Meeting Materials

We don't have any additional comments at this time. Thank you for contacting us.

Larry Benallie, Jr.
Archaeological Compliance Specialist
Tribal Historic Preservation Office
Gila River Indian Community
P.O. Box 2193
Sacaton, Arizona 85147
(520) 562-7153
Larry.BenallieJr@gric.nsn.us

Government to Government Consultation Toolkit

From: Powell, Kris <Kris.Powell@jacobs.com>
Sent: Friday, March 3, 2023 1:29 PM
To: Larry Benallie Jr <Larry.BenallieJr@gric.nsn.us>
Subject: FW: UPRR PIRATE Revised Draft MOA and Meeting Materials

CAUTION: The sender prvs=7426338883=kris.powell@jacobs.com is from outside of GRIC. Do not open attachments or click on any links if you do not recognize the sender.

Hi Larry:

Always nice chatting with you. Here is the MOA email that was sent a couple of weeks ago.

Let me know if you have any questions or need anything…

Best,

Kris Powell, M.A., RPA (she/her) | JACOBS | **Senior Archaeologist**
C: 602-463-5843 | kris.powell@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

From: Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Sent: Friday, February 10, 2023 10:24 AM
To: executivemail@gric.nsn.us
Cc: barnaby.lewis@gric.nsn.us; Larry Benallie Jr <Larry.BenallieJr@gric.nsn.us>; Reylynne Williams <Reylynne.Williams@gric.nsn.us>; darius.enos@gric.nsn.us; Tabachnick, Alan <alan.tabachnick@stb.gov>; Assenza, Adam <adam.assenza@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; McNeish, Sabra <Sabra.McNeish@jacobs.com>; Powell, Kris <Kris.Powell@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>
Subject: UPRR PIRATE Revised Draft MOA and Meeting Materials

Dear Governor Lewis,

As the Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) stated in previous Section 106 consultation conducted under the National Historic Preservation Act, on June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Board requesting authority to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

OEA conducted a virtual meeting with the Section 106 consulting parties on January 26, 2023, to resolve comments on the project's draft Memorandum of Agreement (MOA). At that meeting, an implementation request from UP specific to data recovery and construction sequencing was discussed. In further consideration of the implementation request, OEA determined that such sequencing is not feasible and will not be utilized.

The revised draft MOA, meeting minutes from the January 26th meeting, and a comment resolution form summarizing changes in the revised draft MOA, are attached for your information and review. A blank Comment Form is also attached for your use as you review the revised draft MOA. Please provide us with any last comments by March 3rd. We appreciate everyone's thorough review of the first draft of the MOA and that when you look over the revised MOA you will see that we addressed all of the Consulting Parties comments and requests. We look forward to any additional input you wish to provide and hope to circulate a final version of the MOA in the near future.

Please feel free to contact Alan Tabachnick, OEA's Deputy Federal Preservation Officer, at Alan.Tabachnick@stb.gov with any questions about the Section 106 process or the revised MOA. And thanks again for all of your input on this project – we appreciate it.

Thank you,
Glennda Luhnow

Glennda Luhnow, M.A., RPA | JACOBS | **Manager/Archaeology and Cultural Resources |**
C: 480-510-0830 | glennda.luhnow@jacobs.com
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SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

March 10, 2022

Ms. Kathryn Leonard
State Historic Preservation Officer
Arizona State Parks, State Historic Preservation Office
1110 West Washington Street, Suite 100
Phoenix, AZ 85007

Re: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – in Maricopa County, AZ
Continuation of National Historic Preservation Act Section 106 Consultation

Dear Ms. Leonard:

On June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Surface Transportation Board (Board), pursuant to 49 U.S.C. § 10502, requesting authority to construct and operate approximately 6.0 miles of new rail line in Maricopa County, Arizona (the Pecos Industrial Rail Access and Train Extension [PIRATE]). Before making its decision on whether to grant such authority, the Board must consider the potential environmental impacts of the construction and operation of UP's proposed rail line, pursuant to the National Environmental Policy Act (42 U.S.C. §§ 4321−4370m-12), Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), the Board's environmental rules (49 C.F.R. Part 1105), and related environmental laws.

The Board's Office of Environmental Analysis (OEA) initiated consultation pursuant to Section 106 of the National Historic Preservation Act (dated April 6, 2022) with a letter that outlined the project scope, notified potential consulting parties of the project's alternatives analysis, and requested concurrence on the project's Area of Potential Effects (APE). OEA continued Section 106 consultation with letters to all consulting parties dated September 1 and November 22, 2022. The September 1, 2022 letter addressed revisions to the APE, the adequacy of the project's cultural resources Class III survey report (Rainey and Stubing 2022), OEA's National Register of Historic Places (NRHP) eligibility determinations and treatment recommendations, the finding of adverse effect, and development of a Section 106 agreement document for the project. The November 22, 2022 letter addressed a project scope change, future treatment of unsurveyed areas, and changes to the Class III survey report. In this letter, OEA also requested concurrence on the adequacy of the revised Class III survey report as a final document.

On January 26, 2023, OEA conducted a virtual meeting with the Section 106 consulting parties to resolve comments on the project's draft Memorandum of Agreement (MOA). At that

meeting, OEA presented an implementation request UP made as part of their comments on the draft MOA related to the completion of data recovery in zones to accommodate construction sequencing. Based on the discussion with the meeting participants and further consideration by OEA, OEA determined that such sequencing is not feasible and will not be implemented.

OEA is continuing Section 106 consultation with your office to solicit comments regarding revisions to the draft MOA as described below.

Revisions to the Draft MOA

On February 10, 2023, the revised draft MOA (Draft 2), minutes from the January 26 meeting, and comment resolution form summarizing changes were provided to the consulting parties with a response date of March 3, 2023. Comments received during the consulting party review of the revised draft MOA were largely minor and have been addressed as shown in the attached comment resolution form (Attachment 1). As part of this consulting party review, UP provided a substantive comment requesting the ability to begin construction in non-site areas that have been previously surveyed with negative results prior to completion of the data recovery program. Refer to comment 18 in the attached comment matrix. Facilitating this request would require editing an existing stipulation and adding a new stipulation to the revised draft MOA. These revisions would consist of:

1. Revising Stipulation X(C) to include the words "within site boundaries". The revised stipulation would read as follows (the additional text is emphasized):

   > Following fulfilment of Stipulation X(B), resolution of the comments from the Consulting Parties in the preliminary data recovery report, and concurrence from SHPO on the completion of the data recovery program, OEA, at its discretion and pending compliance with all other applicable laws and regulations, may authorize UP to begin construction <u>within site boundaries</u> on lands under any ownership or jurisdiction, subject to the appropriate jurisdiction's right-of-entry and right-of-way requirements, where provisions of the final HPTP have been implemented.

2. Adding a new stipulation (Stipulation XI) titled "Authorization of Construction in Non-Site Areas". The proposed language is derived from SHPO's agreement document template and would read as follows:

   > Following acceptance of the final HPTP, the OEA, at its discretion and pending compliance with all other applicable laws and regulations and approval of the Undertaking by the Board, may authorize UP to begin construction in non-site areas that have been subjected to Class III survey (Rainey and Stubing 2022) with negative findings on lands under any ownership or jurisdiction, subject to the jurisdiction's right-of-entry and right-of-way requirements, where all effects to historic properties and unevaluated cultural resources will be avoided and a cultural resource monitor will be present during ground disturbing activities as per agreed upon- measures described in the approved HPTP.

Request for Input

Please review this language and let us know if you have any concerns with or comments on the proposed Stipulation XI and proposed revision to Stipulation X(C). As noted above, all ground disturbing activities will be monitored by a qualified archaeological monitor.

Thank you for your continued cooperation during the Section 106 historic review process for this project. OEA requests your feedback regarding the revisions to the draft MOA described above by **Friday, March 17, 2023**. Given the minor nature of the comments provided on Draft 2 of the MOA, OEA anticipates providing the final MOA for signature in late March. If you have any additional questions, please reach out to Alan Tabachnick, at 202-245-0367.

Sincerely,

Danielle Gosselin
Director
Office of Environmental Analysis

Enclosures:

Attachment 1 - Comment Matrix

Cc: Adam Assenza, OEA Environmental Protection Specialist, Adam.Assenza@stb.gov
Alan Tabachnick, OEA Federal Preservation Officer, Alan.Tabachnick@stb.gov
Maggie Buckley, Jacobs Project Manager, Maggie.Buckley@jacobs.com

References Cited:

Rainey, Pamela J., and Michael Stubing
2022 *A Class III Cultural Resources Survey for the Union Pacific Railroad Company Pecos Industrial Rail Access and Train Extensions (PIRATE) Project, Mesa and Queen Creek, Maricopa County, Arizona*. Jacobs Project Report No. 2022-006. Jacobs Engineering Group Inc., Tempe, Arizona.

ATTACHMENT 1 - COMMENT MATRIX

#	Section	Line(s)	Comment	Comment Resolution
Reviewer: Mary Ellen Walsh, State Historic Preservation Office				
1	Title	2-3	Remove UP from the title – only signatories are in the title.	Removed.
2	Recitals	30	Replace prepared with "conducted".	Replaced.
3	Recitals	37-38	Move SHPO concurrence date to the determination of eligibility clause (line 42 in the first clause on page 2).	Moved.
4	Recitals	48	Remove "as a Signatory".	Removed.
5	Recitals	53	Change "all federal agencies have agreed" to "all consulting federal agencies (Federal Aviation Administration [FAA] and the U.S. Army Corps of Engineers [Corps]) have agreed".	Changed.
6	Recitals	85-86	Delete "collectively refers to the Salt River Project" and move (SRP) to after District.	Revised.
7	Recitals	126-128	Delete "and that" and move "[A]ll work shall meet…" to the beginning of Stipulation III.	Revised; text moved to an introductory paragraph prior to Stipulation III(A).
8	Stipulation IV	156	Not really needed; referenced in Attachment A.	No change. Per discussion with SHPO on 3.6.23, Stipulation IV will remain.
9	Stipulation VII(A)	207	Change "the effect of the Undertaking" to "the physical, auditory, visual, and vibration effects of the Undertaking".	Changed.
10	Stipulation VII(A)	210-212	Delete the last two sentences of Stipulation VII(A).	No change. SHPO maintains that these sentences are redundant. Per discussion with SHPO on 3.6.23, these sentences will remain.

#	Section	Line(s)	Comment	Comment Resolution
11	Stipulation VIII(B)	286	Change “interpretative signage at the property” to “interpretive signage at the PMGA”.	Changed.
12	Stipulation IX(F)	345	Remove “tribal” before identification and evaluation efforts.	Removed.
13	Stipulation X(B)	361	Add timeframe when preliminary data recovery report will be completed.	Added.
14	Stipulation X(D)	380-381	Increase review period for draft data recovery report from 30 days to 60 days.	Revised.
15	Stipulation XIII	422	Redundant stipulation in recital. What is the public education benefit?	No change. Per discussion with SHPO on 3.6.23, stipulation is retained. Public education benefits are discussed in HPTP. See comment 11 above.
16	Stipulation XX	542	Add “and its filing with ACHP” to the end of the first sentence.	Added (now Stipulation XXI).
Reviewer: Shannon Plummer, Arizona State Museum				
17	Stipulation VIII(B)	295-296	Change “…documenting, interpretating, report, and curating ancestral remains and associated sacred materials…” to “…documenting, reporting, securely housing, and repatriating human remains, funerary belongings, sacred ceremonial objects, and objects of national or tribal patrimony…”.	Changed.

#	Section	Line(s)	Comment	Comment Resolution
Reviewer: Kevin Rice, Union Pacific Railroad				
18	Stipulation X	347	UPRR requests that the stipulations be adjusted in the MOA allowing construction to commence in areas considered to be clear of culturally sensitive artifacts per the Class III Survey Report dated August 2022 (revised November 2022) if final STB Board approval of the project is received.	• Added new Stipulation XI to govern construction in non-site areas. • Added "within site boundaries" to Stipulation X(C) to differentiate between work in sites vs. non-site areas.
Reviewer: Larry Benallie, Jr., Gila River Indian Community				
19	--	--	No additional comments at this time.	Thank you.
Reviewer: Sunday Eiselt, Salt River Pima-Maricopa Indian Community				
20	--	--	No comments at this time. The edits reflect our understanding of the changes that the Salt River Pima-Maricopa Indian Community and Gila River Indian Community THPOs requested.	Thank you.
Reviewer: Alison Stoltman, Arizona Museum of Natural History				
21	--	--	No comments. The MOA looks thorough and accurate. The City of Mesa will provide a formal response.	Thank you.

From: Plummer, Shannon D - (splummer) <splummer@arizona.edu>
Sent: Monday, March 13, 2023 8:42 AM
To: Powell, Kris
Subject: [EXTERNAL] RE: UPRR Pirate Continuing Section 106 Consultation Revised MOA

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Kris,
ASM has no problem with the proposed revision to Stipulation X(C) and the newly proposed Stipulation XI. Thank you for the opportunity to review.

Thanks,
Shannon

Shannon Plummer, M.A., R.P.A.
Arizona Antiquities Act Administrator

Arizona State Museum | The University of Arizona
1013 E. University Blvd | PO Box 210026
Tucson, Arizona 85721-0026
(520) 621-4795
www.statemuseum.arizona.edu

From: Powell, Kris <Kris.Powell@jacobs.com>
Sent: Friday, March 10, 2023 1:33 PM
To: Lyons, Patrick D - (plyons) <plyons@arizona.edu>
Cc: Plummer, Shannon D - (splummer) <splummer@arizona.edu>; Tabachnick, Alan <alan.tabachnick@stb.gov>; Assenza, Adam <adam.assenza@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; McNeish, Sabra <Sabra.McNeish@jacobs.com>; Luhnow, Glennda <Glennda.Luhnow@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>
Subject: [EXT]UPRR Pirate Continuing Section 106 Consultation Revised MOA

External Email

Dear Dr. Lyons:

As the Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) stated in previous Section 106 consultation conducted under the National Historic Preservation Act, on June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Board requesting authority to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

With the attached letter, OEA is continuing Section 106 consultation with your office and soliciting feedback regarding revisions to the draft Memorandum of Agreement (MOA) based upon comments provided during consulting party review. OEA requests your feedback regarding the revisions described in the attached letter by **Friday, March 17, 2023**. Please feel free to contact Alan Tabachnick, OEA's Federal Preservation Officer, at Alan.Tabachnick@stb.gov with any questions about the Section 106 process or the revised MOA.

From: Eiselt, Sunday <Sunday.Eiselt@srpmic-nsn.gov>
Sent: Tuesday, March 14, 2023 9:40 AM
To: Powell, Kris; Bohnee, Gary
Cc: Anton, Shane; Garcia-Lewis, Angela; Martinez, Martha; Tabachnick, Alan; Assenza, Adam; Buckley, Maggie; McNeish, Sabra; Rainey, Pamela; Luhnow, Glennda
Subject: [EXTERNAL] RE: UPRR Pirate Continuing Section 106 Consultation Revised MOA

Follow Up Flag: Follow up
Flag Status: Flagged

Good morning Kris. We have reviewed the contents of your March 10, 2023 notification of final changes to the MOA for the PIRATE Project (Docket No. FD 36501). The changes are minor. SRPMIC THPO Has no further comment.

Thank you

B. Sunday Eiselt Ph.D
THPO Archaeologist
Salt River Pima-Maricopa Indian Community
10,005 E. Osborn Road
Scottsdale, AZ 85256
Sunday.Eiselt@srpmic-nsn.gov
Office: (480) 362 3347

From: Powell, Kris <Kris.Powell@jacobs.com>
Sent: Friday, March 10, 2023 3:10 PM
To: Bohnee, Gary <Gary.Bohnee@SRPMIC-nsn.gov>
Cc: Anton, Shane <Shane.Anton@SRPMIC-nsn.gov>; Eiselt, Sunday <Sunday.Eiselt@srpmic-nsn.gov>; Garcia-Lewis, Angela <Angela.Garcia-Lewis@SRPMIC-nsn.gov>; Martinez, Martha <Martha.Martinez@SRPMIC-nsn.gov>; Tabachnick, Alan <alan.tabachnick@stb.gov>; Assenza, Adam <adam.assenza@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; McNeish, Sabra <Sabra.McNeish@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>; Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Subject: UPRR Pirate Continuing Section 106 Consultation Revised MOA

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Good Afternoon President Harvier:

From: Tiffany Grew <tgrew@azland.gov>
Sent: Wednesday, March 15, 2023 10:09 AM
To: Powell, Kris
Cc: Michael Romero; Tabachnick, Alan; Assenza, Adam; Buckley, Maggie; McNeish, Sabra; Luhnow, Glennda; Rainey, Pamela
Subject: [EXTERNAL] RE: UPRR Pirate Continuing Section 106 Consultation Revised MOA

Good morning, Kris.

ASLD would like to opt out of being a signatory to the Section 106 MOA since there are no significant cultural resources on the STL involved in this project. Therefore, the ASLD Cultural Resource Section has no comments on the draft of the MOA.

Thank you,

Tiffany L. Grew | Archaeological Compliance Specialist
As agent for Arizona State Land Department
P: 602-542-2679
1110 W. Washington Street | Phoenix, AZ 85007 | tgrew@azland.gov



Funding Arizona Public Schools and Institutions since 1915

From: Powell, Kris <Kris.Powell@jacobs.com>
Sent: Friday, March 10, 2023 1:36 PM
To: Mark Edelman <medelman@azland.gov>
Cc: Tiffany Grew <tgrew@azland.gov>; Michael Romero <mromero@azland.gov>; Tabachnick, Alan <alan.tabachnick@stb.gov>; Assenza, Adam <adam.assenza@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; McNeish, Sabra <Sabra.McNeish@jacobs.com>; Luhnow, Glennda <Glennda.Luhnow@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>
Subject: UPRR Pirate Continuing Section 106 Consultation Revised MOA

Good Afternoon Mr. Edelman:

As the Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) stated in previous Section 106 consultation conducted under the National Historic Preservation Act, on June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Board requesting authority to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

With the attached letter, OEA is continuing Section 106 consultation with your office and soliciting feedback regarding revisions to the draft Memorandum of Agreement (MOA) based upon comments provided during consulting party review. OEA requests your feedback regarding the revisions described in the attached letter by **Friday, March 17, 2023**. Please feel free to contact Alan Tabachnick, OEA's Federal Preservation Officer, at Alan.Tabachnick@stb.gov with any questions about the Section 106 process or the revised MOA.

From: Maribeth Smith <Maribeth.Smith@MesaAZ.gov> on behalf of William Jabjiniak <William.Jabjiniak@mesaaz.gov>
Sent: Wednesday, March 15, 2023 5:17 PM
To: Powell, Kris
Cc: Tabachnick, Alan; Assenza, Adam; Buckley, Maggie; Luhnow, Glennda; Rainey, Pamela; McNeish, Sabra; William Jabjiniak
Subject: [EXTERNAL] RE: UPRR Pirate Continuing Section 106 Consultation Revised MOA
Attachments: PIRATE Contg 106 #4__City of Mesa.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Good afternoon Ms. Powell,

City of Mesa representatives have reviewed the attached letter dated March 10, 2023, regarding revisions to the draft Memorandum of Agreement (MOA) based upon comments provided during consulting party review. The City of Mesa does not have any comments or concerns with the proposed Stipulation XI and proposed revision to Stipulation X(C).

We look forward to receiving the final MOA.

Sincerely,

William J. Jabjiniak
Economic Development Director
City of Mesa Office of Economic Development
120 N Center St | Mesa, AZ 85201
480.644.3561 | www.selectmesa.com | Sign up for Mesa's E-Newsletter
Office hours are Monday - Thursday, 7 a.m. to 6 p.m.; closed on Fridays, holidays, and weekends.

From: Powell, Kris <Kris.Powell@jacobs.com>
Sent: Friday, March 10, 2023 1:45 PM
To: William Jabjiniak <William.Jabjiniak@mesaaz.gov>
Cc: Tabachnick, Alan <alan.tabachnick@stb.gov>; Assenza, Adam <adam.assenza@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; Luhnow, Glennda <Glennda.Luhnow@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>; McNeish, Sabra <Sabra.McNeish@jacobs.com>
Subject: UPRR Pirate Continuing Section 106 Consultation Revised MOA

Good Afternoon Mr. Jabjiniak:

As the Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) stated in previous Section 106 consultation conducted under the National Historic Preservation Act, on June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Board requesting authority to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

From: Mary Kopaskie-Brown <Mary.Kopaskie-Brown@mesaaz.gov>
Sent: Wednesday, March 15, 2023 1:10 PM
To: Powell, Kris
Cc: Michelle Dahlke; Maura Jackson; Alison Stoltman; Tabachnick, Alan; Assenza, Adam; Buckley, Maggie; Luhnow, Glennda; Rainey, Pamela; McNeish, Sabra
Subject: [EXTERNAL] RE: UPRR Pirate Continuing Section 106 Consultation

Follow Up Flag: Follow up
Flag Status: Flagged

Good afternoon Kris

The City of Mesa reviewed the document and has no further comments.

Thank you for reaching out to us!

Mary Kopaskie-Brown, AICP, OPPI, CIP
Planning Director
City of Mesa
480-644-3850
mary.kopaskie-brown@mesaaz.gov
M-Th (7am to 6pm) – Closed Holidays and Fridays

mesa·az

From: Powell, Kris <Kris.Powell@jacobs.com>
Sent: Friday, March 10, 2023 2:20 PM
To: Mary Kopaskie-Brown <Mary.Kopaskie-Brown@mesaaz.gov>
Cc: Maura Jackson <Maura.Jackson@mesaaz.gov>; Michelle Dahlke <Michelle.Dahlke@mesaaz.gov>; Tabachnick, Alan <alan.tabachnick@stb.gov>; Assenza, Adam <adam.assenza@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; Luhnow, Glennda <Glennda.Luhnow@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>; McNeish, Sabra <Sabra.McNeish@jacobs.com>
Subject: UPRR Pirate Continuing Section 106 Consultation

Good Afternoon Ms. Kopaskie-Brown:

As the Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) stated in previous Section 106 consultation conducted under the National Historic Preservation Act, on June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Board requesting authority to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

With the attached letter, OEA is continuing Section 106 consultation with your office and soliciting feedback regarding revisions to the draft Memorandum of Agreement (MOA) based upon comments provided during consulting party review. OEA requests your feedback regarding the revisions described in the attached letter by **Friday, March 17, 2023**. Please feel free to contact Alan Tabachnick, OEA's Federal Preservation Officer, at Alan.Tabachnick@stb.gov with any questions about the Section 106 process or the revised MOA.

From: Edward Raleigh (FCD) <Edward.Raleigh@Maricopa.Gov>
Sent: Thursday, March 16, 2023 2:30 PM
To: Powell, Kris
Cc: Tabachnick, Alan; Assenza, Adam; Buckley, Maggie; Luhnow, Glennda; McNeish, Sabra; Rainey, Pamela; Michael Fulton (FCD); Tom Hanson (FCD)
Subject: [EXTERNAL] [WARNING: ATTACHMENT UNSCANNED]FW: UPRR Pirate Continuing Section 106 Consultation Revised MOA
Attachments: PIRATE Contg 106 #4__MCFCD.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Kris,

The Flood Control District has no comments on the proposed revisions to the draft MOA.

Edward Raleigh
Sr. Engineering Advisor
Flood Control District
2801 W Durango St Phoenix, AZ 85009
O: 602-506-4704 **C:** 602-526-6018
E: Edward.Raleigh@Maricopa.Gov
[Maricopa.Gov]
Facebook | Instagram | Twitter | YouTube | LinkedIn

From: Powell, Kris <Kris.Powell@jacobs.com>
Sent: Friday, March 10, 2023 2:10 PM
To: Michael Fulton (FCD) <Michael.Fulton@maricopa.gov>
Cc: Tabachnick, Alan <alan.tabachnick@stb.gov>; Assenza, Adam <adam.assenza@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; Luhnow, Glennda <Glennda.Luhnow@jacobs.com>; McNeish, Sabra <Sabra.McNeish@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>
Subject: [WARNING: ATTACHMENT UNSCANNED]UPRR Pirate Continuing Section 106 Consultation Revised MOA

Good Afternoon Mr. Fulton:

As the Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) stated in previous Section 106 consultation conducted under the National Historic Preservation Act, on June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Board requesting authority to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

With the attached letter, OEA is continuing Section 106 consultation with your office and soliciting feedback regarding revisions to the draft Memorandum of Agreement (MOA) based upon comments provided during consulting party review. OEA requests your feedback regarding the revisions described in the attached letter by **Friday, March 17, 2023**. Please feel free to contact Alan Tabachnick, OEA's Federal Preservation Officer, at Alan.Tabachnick@stb.gov with any questions about the Section 106 process or the revised MOA.

From: Carl D'Acosta <CD'Acosta@gatewayairport.com>
Sent: Thursday, March 16, 2023 12:21 PM
To: Powell, Kris
Cc: Tony Bianchi
Subject: [EXTERNAL] RE: UPRR Pirate Continuing Section 106 Consultation Revised MOA

Follow Up Flag: Follow up
Flag Status: Flagged

Thank you Kris,
The Phoenix Mesa Gateway Airport Authority does not have any comments or feedback regarding the revisions to the draft MOA.
Thank you for the opportunity to review.
Thanks
Carl

Carl J. D'Acosta, M.S., C.M.
Environmental & Safety Coordinator
Phoenix-Mesa Gateway Airport Authority
5835 S Sossaman Rd
Mesa, AZ 85212-6014
Office: 480-988-7612
cdacosta@gatewayairport.com
www.gatewayairport.com

Phoenix-Mesa Gateway Airport | 2019 Arizona Airport of the Year

Please be advised that our office hours are Monday - Thursday 7 a.m. to 6 p.m. We are closed Fridays.

From: Powell, Kris <Kris.Powell@jacobs.com>
Sent: Friday, March 10, 2023 2:55 PM
To: Tony Bianchi <TBianchi@gatewayairport.com>
Cc: Carl D'Acosta <CD'Acosta@gatewayairport.com>; Tabachnick, Alan <alan.tabachnick@stb.gov>; Assenza, Adam <adam.assenza@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; McNeish, Sabra <Sabra.McNeish@jacobs.com>; Luhnow, Glennda <Glennda.Luhnow@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>
Subject: UPRR Pirate Continuing Section 106 Consultation Revised MOA

CAUTION: External mail. Be careful with links and attachments

Good Afternoon Mr. Bianchi:

As the Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) stated in previous Section 106 consultation conducted under the National Historic Preservation Act, on June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Board requesting authority to construct and operate approximately six miles of

From: Alison Stoltman <alison.stoltman@MesaAZ.gov>
Sent: Friday, March 17, 2023 12:28 PM
To: Powell, Kris
Cc: Assenza, Adam; Tabachnick, Alan; Buckley, Maggie; McNeish, Sabra; Luhnow, Glennda; Rainey, Pamela
Subject: [EXTERNAL] RE: UPRR Pirate Continuing Section 106 Consultation Revised MOA

I do not have any additional comments.
Thank you.

Alison Stoltman
She/her/hers
Acting Deputy Director
Arizona Museum of Natural History
53 North Macdonald, Mesa, AZ 85201
Office: 480 644 4040
Alison.Stoltman@MesaAZ.gov

From: Powell, Kris <Kris.Powell@jacobs.com>
Sent: Friday, March 10, 2023 1:41 PM
To: Alison Stoltman <alison.stoltman@MesaAZ.gov>
Cc: Assenza, Adam <adam.assenza@stb.gov>; Tabachnick, Alan <alan.tabachnick@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; McNeish, Sabra <Sabra.McNeish@jacobs.com>; Luhnow, Glennda <Glennda.Luhnow@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>
Subject: UPRR Pirate Continuing Section 106 Consultation Revised MOA

Good Afternoon Ms. Stolsman:

As the Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) stated in previous Section 106 consultation conducted under the National Historic Preservation Act, on June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Board requesting authority to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

With the attached letter, OEA is continuing Section 106 consultation with your office and soliciting feedback regarding revisions to the draft Memorandum of Agreement (MOA) based upon comments provided during consulting party review. OEA requests your feedback regarding the revisions described in the attached letter by **Friday, March 17, 2023**. Please feel free to contact Alan Tabachnick, OEA's Federal Preservation Officer, at Alan.Tabachnick@stb.gov with any questions about the Section 106 process or the revised MOA.

We appreciate everyone's thorough review of the second draft of the MOA and hope to provide the final MOA for signature in late March.

Sincerely,

Kris Powell, M.A., RPA (she/her) | **JACOBS** | **Senior Archaeologist**
C: 602-463-5843 | kris.powell@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

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From: Kevin Rice <kprice@up.com>
Sent: Tuesday, March 21, 2023 11:42 AM
To: Powell, Kris
Cc: Tabachnick, Alan; Assenza, Adam; Buckley, Maggie; McNeish, Sabra; Rainey, Pamela; Luhnow, Glennda
Subject: [EXTERNAL] RE: UPRR Pirate Continuing Section 106 Consultation Revised MOA

Follow Up Flag: Follow up
Flag Status: Flagged

Alan and Glennda,

Thank you for the opportunity to comment on the revisions to the draft EA.

Union Pacific concurs with the changes and has no additional comments on the draft MOA.

Kevin Rice, PE
Sr. Manager M/W Environmental
Union Pacific Railroad
(402) 544-2213

From: Powell, Kris <Kris.Powell@jacobs.com>
Sent: Friday, March 10, 2023 4:19 PM
To: Kevin Rice <kprice@up.com>
Cc: Tabachnick, Alan <alan.tabachnick@stb.gov>; Assenza, Adam <adam.assenza@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; McNeish, Sabra <Sabra.McNeish@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>; Luhnow, Glennda <Glennda.Luhnow@jacobs.com>
Subject: UPRR Pirate Continuing Section 106 Consultation Revised MOA

*** PROCEED WITH CAUTION - This email was sent from outside the Company ***

Good Afternoon Mr. Rice:

As the Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) stated in previous Section 106 consultation conducted under the National Historic Preservation Act, on June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Board requesting authority to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

With the attached letter, OEA is continuing Section 106 consultation with your office and soliciting feedback regarding revisions to the draft Memorandum of Agreement (MOA) based upon comments provided during consulting party review. OEA requests your feedback regarding the revisions described in the attached letter by **Friday, March 17, 2023**. Please feel free to contact Alan Tabachnick, OEA's Federal Preservation Officer, at Alan.Tabachnick@stb.gov with any questions about the Section 106 process or the revised MOA.

BUILDING AMERICA®

May 17, 2023

Mr. Adam Assenza
Environmental Protection Specialist
Office of Environmental Analysis
Surface Transportation Board
395 E Street, S.W.
Washington, D.C. 20423

Re: STB Docket No. FD 36501, Union Pacific Railroad –Two Un-surveyed Portions of APE

Dear Mr. Assenza:

As it relates to the PIRATE Industrial Lead project, with regards to the two un-surveyed areas depicted in the enclosed documents (titled Unsurveyed Not Acquired East v5.jpg & Unsurveyed Not Acquired West v5.jpg), “buffer areas”, shown as highlighted in yellow and are not currently owned by Union Pacific Railroad (UPRR), UPRR will not:

- Acquire or attempt to acquire the buffer areas
- Acquire temporary construction easements on the buffer areas
- Perform any work in the buffer areas

If there is any additional information or clarification needed with regards to the buffer areas, please don’t hesitate to contact me.

Sincerely,

Kevin Rice

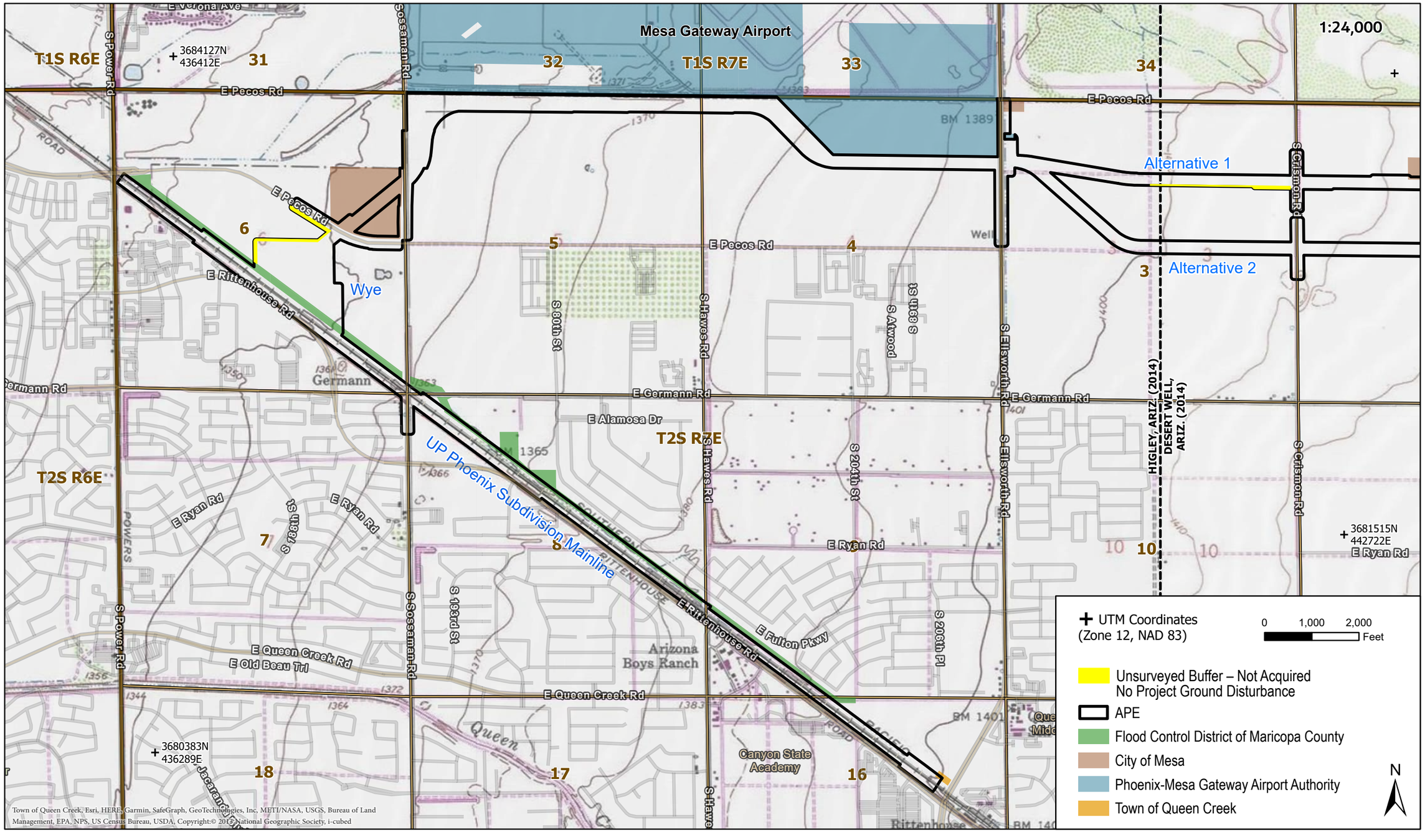
Senior Manager M/W Environmental

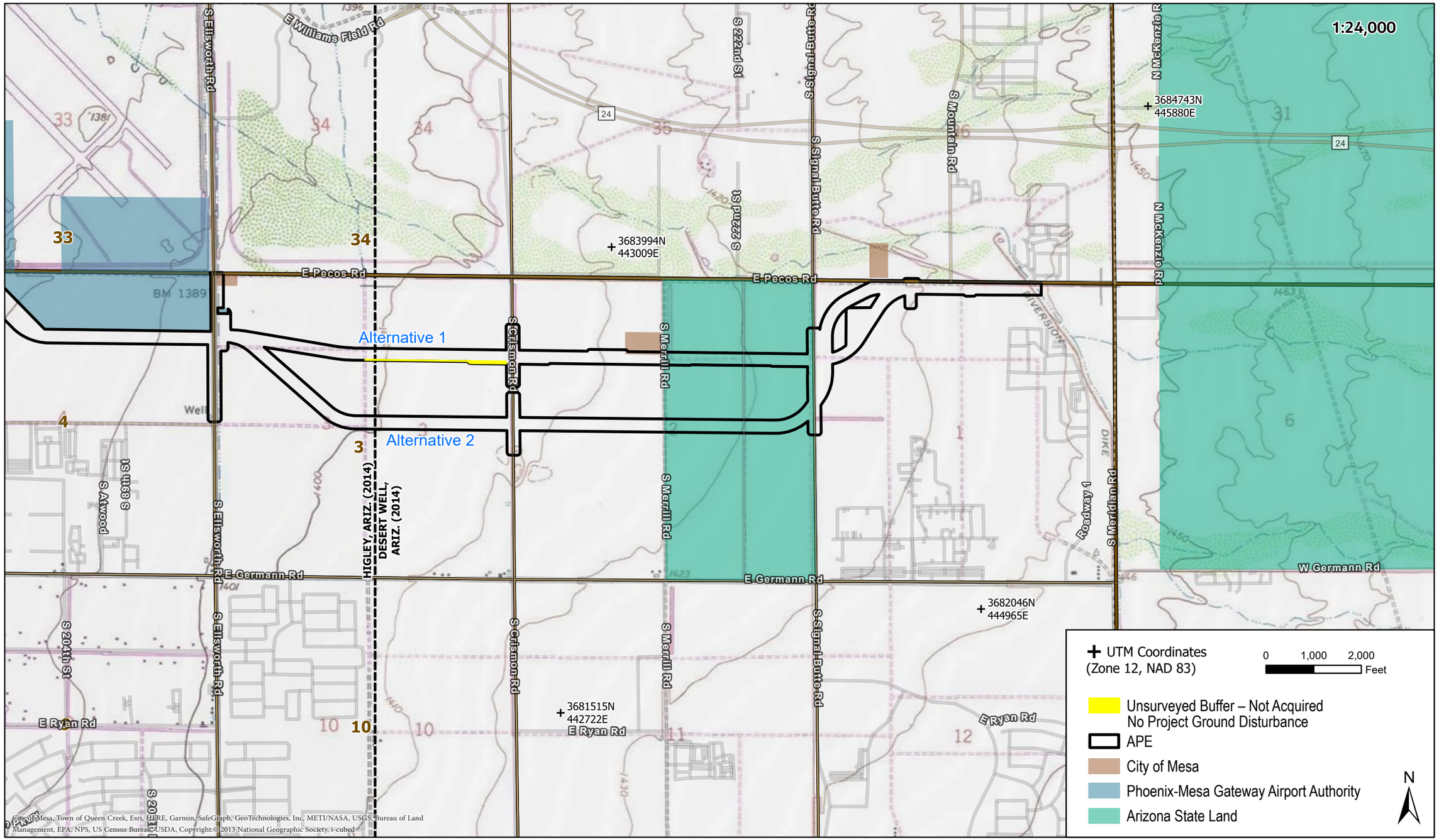
Union Pacific Railroad

UNION PACIFIC RAILROAD
1400 Douglas Street, 9th Floor
Omaha, Nebraska 68179

Kevin Rice
Senior Manager M/W Environmental
Engineering

P 402-544-2213
E kprice@up.com


1:24,000
Mesa Gateway Airport
T1S R6E
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3684127N
436412E
3681515N
442722E
3680383N
436289E
Alternative 1
Alternative 2
Wye
UP Phoenix Subdivision Mainline
E Pecos Rd
E Rittenhouse Rd
E Germann Rd
E Alamosa Dr
E Ryan Rd
E Queen Creek Rd
E Old Beau Trl
E Fulton Pkwy
S Power Rd
S Sossaman Rd
S Hawes Rd
S Ellsworth Rd
S Crismon Rd
S 80th St
S 88th St
S 188th St
S 193rd St
S 204th St
S 206th Pl
Germann
Arizona Boys Ranch
Canyon State Academy
BM 1389
BM 1401
UTM Coordinates
(Zone 12, NAD 83)
0 1,000 2,000
Feet
Unsurveyed Buffer – Not Acquired
No Project Ground Disturbance
APE
Flood Control District of Maricopa County
City of Mesa
Phoenix-Mesa Gateway Airport Authority
Town of Queen Creek
N
Town of Queen Creek, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, Copyright© 2013 National Geographic Society, i-cubed



City of Mesa, Town of Queen Creek, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, Copyright © 2013 National Geographic Society, i-cubed

From: Caroline Klebacha <cklebacha@azstateparks.gov>
Sent: Thursday, March 23, 2023 7:49 AM
To: Powell, Kris
Cc: Luhnow, Glennda; Buckley, Maggie; Rainey, Pamela; McNeish, Sabra; Assenza, Adam; Tabachnick, Alan
Subject: [EXTERNAL] Re: UPRR Pirate Continuing Section 106 Consultation Revised MOA

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Kris,

We have reviewed and discussed the new language and have no comments at this time.

Please note that Kathrine has not reviewed this MOA yet due to time constraints, so please provide the full 30 days for her to adequately review the agreement document.

Thank you,

Caroline

Caroline Klebacha, M.A.
Archaeological Compliance Specialist
State Historic Preservation Office
A Division of Arizona State Parks & Trails
Please use azshpo@azstateparks.gov for all consultation!

1110 West Washington Street, Suite 100
Phoenix, AZ 85007-2957
Phone: 602-542-7140
Email: cklebacha@azstateparks.gov
Web: http://AZStateParks.com/SHPO



On Mon, Mar 13, 2023 at 1:24 PM AZSHPO - AZPARKS <azshpo@azstateparks.gov> wrote:

> SHPO-2021-1360 (168234)
>
> ---------- Forwarded message ---------
> From: **Powell, Kris** <Kris.Powell@jacobs.com>
> Date: Fri, Mar 10, 2023 at 3:05 PM
> Subject: UPRR Pirate Continuing Section 106 Consultation Revised MOA
> To: AZSHPO@azstateparks.gov <AZSHPO@azstateparks.gov>
> Cc: Tabachnick, Alan <alan.tabachnick@stb.gov>, Assenza, Adam <adam.assenza@stb.gov>, Buckley, Maggie

<Maggie.Buckley@jacobs.com>, McNeish, Sabra <Sabra.McNeish@jacobs.com>, Rainey, Pamela <Pamela.Rainey@jacobs.com>, Luhnow, Glennda <Glennda.Luhnow@jacobs.com>

Good Afternoon Ms. Leonard:

As the Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) stated in previous Section 106 consultation conducted under the National Historic Preservation Act, on June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Board requesting authority to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

With the attached letter, OEA is continuing Section 106 consultation with your office and soliciting feedback regarding revisions to the draft Memorandum of Agreement (MOA) based upon comments provided during consulting party review. OEA requests your feedback regarding the revisions described in the attached letter by **Friday, March 17, 2023**. Please feel free to contact Alan Tabachnick, OEA's Federal Preservation Officer, at Alan.Tabachnick@stb.gov with any questions about the Section 106 process or the revised MOA.

We appreciate everyone's thorough review of the second draft of the MOA and hope to provide the final MOA for signature in late March.

Sincerely,

Kris Powell, M.A., RPA (she/her) | **JACOBS** | **Senior Archaeologist**

C: 602-463-5843 | kris.powell@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

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SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

May 19, 2023

Ms. Kathryn Leonard
Arizona State Parks, State Historic Preservation Office
1110 West Washington Street, Suite 100
Phoenix, AZ 85007

Re: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption – in Maricopa County, AZ, Continuation of National Historic Preservation Act Section 106 Consultation on Unsurveyed Areas within the Area of Potential Effects, Class III Addendum Survey Report Adequacy, and Continued Project Finding of Adverse Effect

Dear Ms. Leonard:

On June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Surface Transportation Board (Board) pursuant to 49 U.S.C. § 10502 requesting authority to construct and operate approximately 6.0 miles of new rail line in Maricopa County, Arizona (the Pecos Industrial Rail Access and Train Extension [PIRATE] project) (Attachment A). Before making its decision on whether to grant such authority, the Board must consider the potential environmental impacts of the construction and operation of UP's proposed rail line, pursuant to the National Environmental Policy Act (42 U.S.C. §§ 4321-4370m-12), Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), the Board's environmental rules at 49 C.F.R. Part 1105, and related environmental laws.

The Board's Office of Environmental Analysis (OEA) initiated consultation pursuant to Section 106 of the National Historic Preservation Act on April 6, 2022. OEA continued Section 106 consultation through the fall of 2022 addressing the project Area of Potential Effects (APE), the Class III survey report, unsurveyed areas in the APE, National Register of Historic Places (NRHP) eligibility determinations, and treatment recommendations. Beginning in January and continuing through the spring of 2023, OEA completed a series of consultation letters and virtual meetings for developing a Memorandum of Agreement (MOA).

OEA is continuing Section 106 consultation with your office and soliciting comments regarding unsurveyed areas within the project APE that will not be acquired for project construction, the adequacy of a Class III addendum survey report, and a continued project finding of "adverse effect."

Unsurveyed Areas Within the APE

On behalf of the OEA, Jacobs Engineering Group Inc. (Jacobs), OEA's third-party contractor, conducted a Class III cultural resources survey of the project's APE in May and June of 2022 (Rainey and Stubing 2022). The APE averages between 200 and 300 feet wide but is variable depending upon the proposed construction footprint and any construction-related activities (staging, drainage structures, and crossings). As defined, the APE includes a buffer of 100 feet (approximately 50 feet on either side of the

construction footprint) around the proposed rail line and associated road crossing designs. In areas where known constraints exist, the buffer extends 100 feet on a single side of the construction footprint.

The Class III survey identified 4 previously recorded cultural resources sites (AZ U:10:2[ASM], AZ U:10:69[ASM], AZ U:10:152[ASM] and AZ U:10:275[ASM]), 2 in-use historic structures, and 53 isolated occurrences (IOs) and isolated features (IFs) within the APE (Rainey and Stubing 2022). At the time of the Class III survey, two discontinuous areas totaling 15.39 acres in the project APE could not be investigated due to access issues and poor ground visibility.

A total of 4.91 acres of the previously surveyed areas are within the APE buffer and will not be acquired by UP or be subject to project ground disturbance. Given that these areas will not be acquired for project construction, access to these areas has not been granted to conduct a Class III survey. These areas are depicted on Attachment B. UP has provided a letter confirming that these areas will not be acquired, nor would they be subject to any temporary or permanent project ground disturbance (Attachment C). OEA requests your concurrence that no further cultural resources investigations are required for the areas depicted on Attachment B.

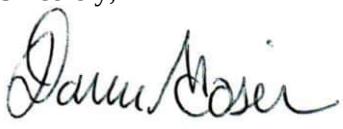
Class III Addendum Survey

On behalf of OEA, Jacobs recently conducted a Class III addendum survey of previously unsurveyed areas within the APE that have been acquired by UP and will be subject to project ground disturbance if the project is approved by the Board. This Class III survey investigated a total of 10.48 additional acres within the project APE. The Class III addendum survey resulted in the new recording of portions of previously documented sites AZ U:10:2(ASM) and AZ U:10:275(ASM). Based on the results of the Class III addendum survey, previously defined adverse effects to these sites will remain the same. The treatment of the adverse effect is addressed in the MOA and the upcoming Historic Properties Treatment Plan (HPTP). A copy of the Class III addendum survey report (Powell 2023) is attached for your review and comment (Attachment D).

Request for Input

Please review the information contained in this letter and the Class III addendum survey report and provide OEA with any comments by June 19, 2023. Thank you very much for your continued involvement and input on this project. Please feel free to contact Alan Tabachnick, OEA's Federal Preservation Officer, Alan.Tabachnick@stb.gov with any questions about the APE or the Class III addendum survey report.

Sincerely,



Danielle Gosselin
Director
Office of Environmental Analysis

Enclosures:

Attachment A – Vicinity Map
Attachment B – Project Location Maps depicting Previously Unsurveyed Areas and Class III Addendum Survey Areas

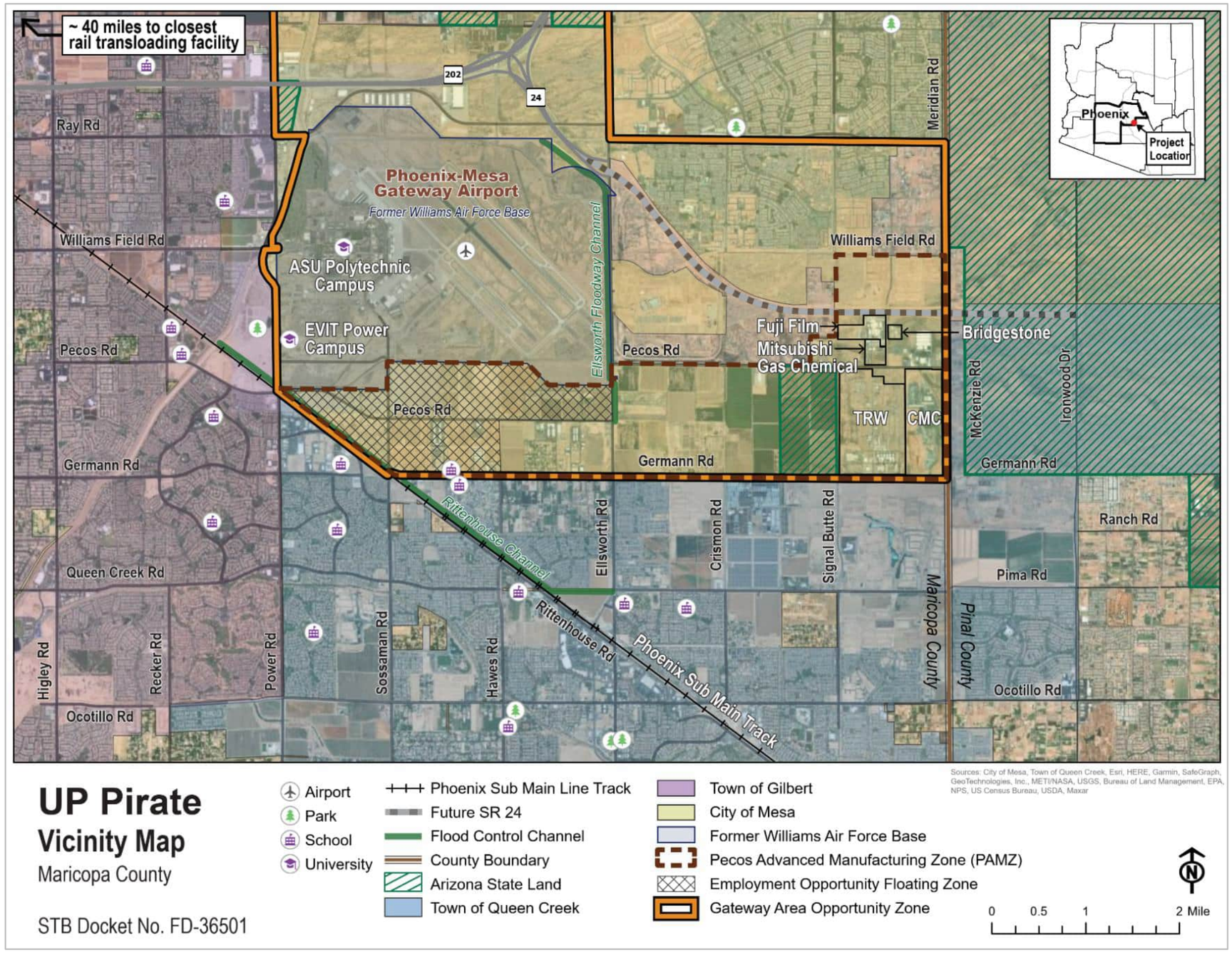
Attachment C – Letter from UP Regarding Unsurveyed Areas within the Project Buffer
Attachment D – *A Class III Addendum Cultural Resources Survey for the Union Pacific Railroad Company Pecos Industrial Rail Access and Train Extension (PIRATE) Project, Mesa and Queen Creek, Maricopa County, Arizona.* (Powell 2023)

Cc: Adam Assenza, OEA Environmental Protection Specialist, Adam.Assenza@stb.gov
Alan Tabachnick, OEA Federal Preservation Officer, Alan.Tabachnick@stb.gov
Maggie Buckley, Jacobs Project Manager, Maggie.Buckley@jacobs.com
Caroline Klebacha, Archaeological Compliance Specialist, cklebacha@azstateparks.gov

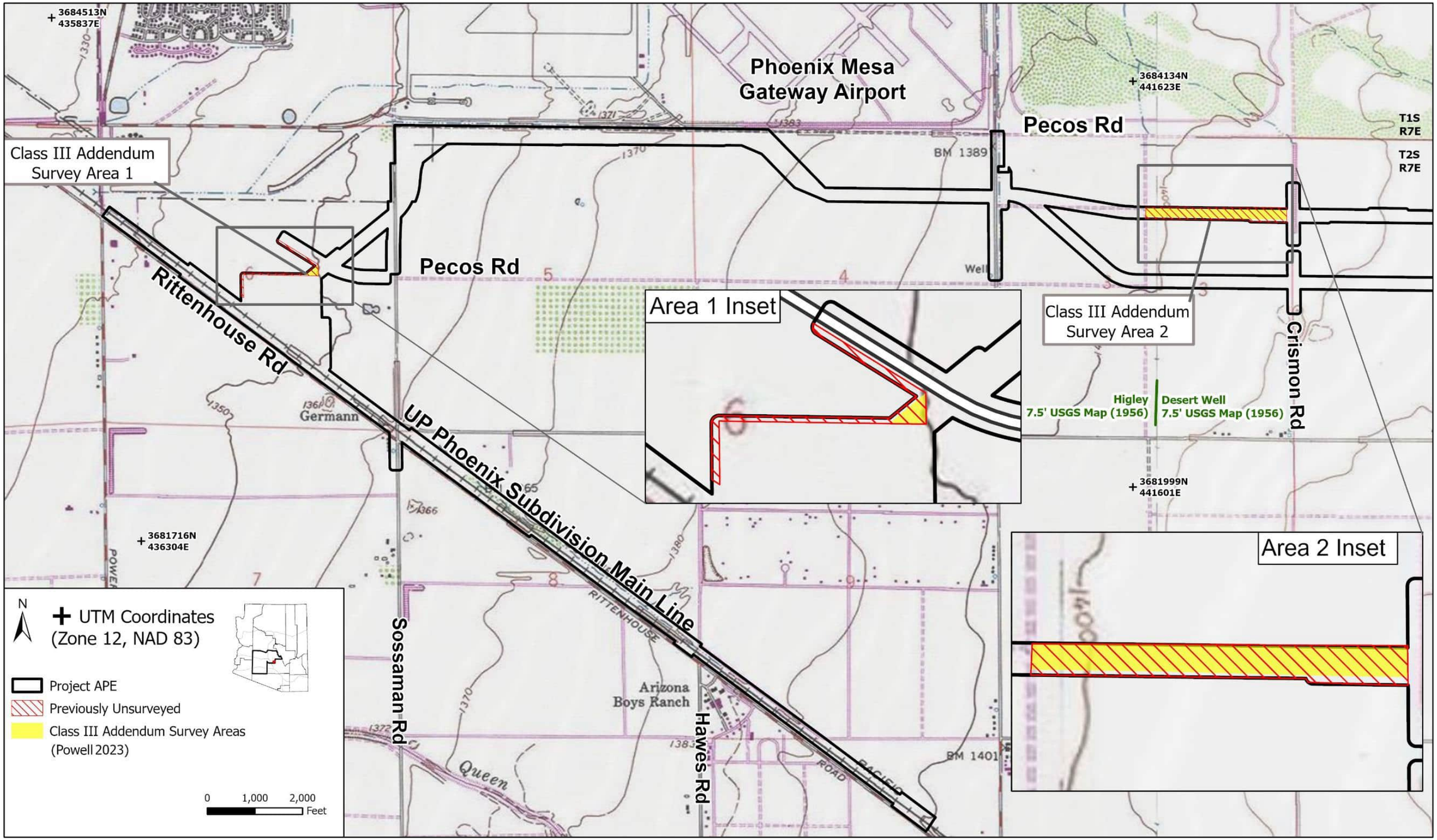
References Cited:

Rainey, Pamela J., and Michael Stubing
2022 *A Class III Cultural Resources Survey for the Union Pacific Railroad Company Pecos Industrial Rail Access and Train Extensions (PIRATE) Project, Mesa and Queen Creek, Maricopa County, Arizona*. Jacobs Project Report No. 2022-006. Jacobs Engineering Group Inc., Tempe, Arizona.

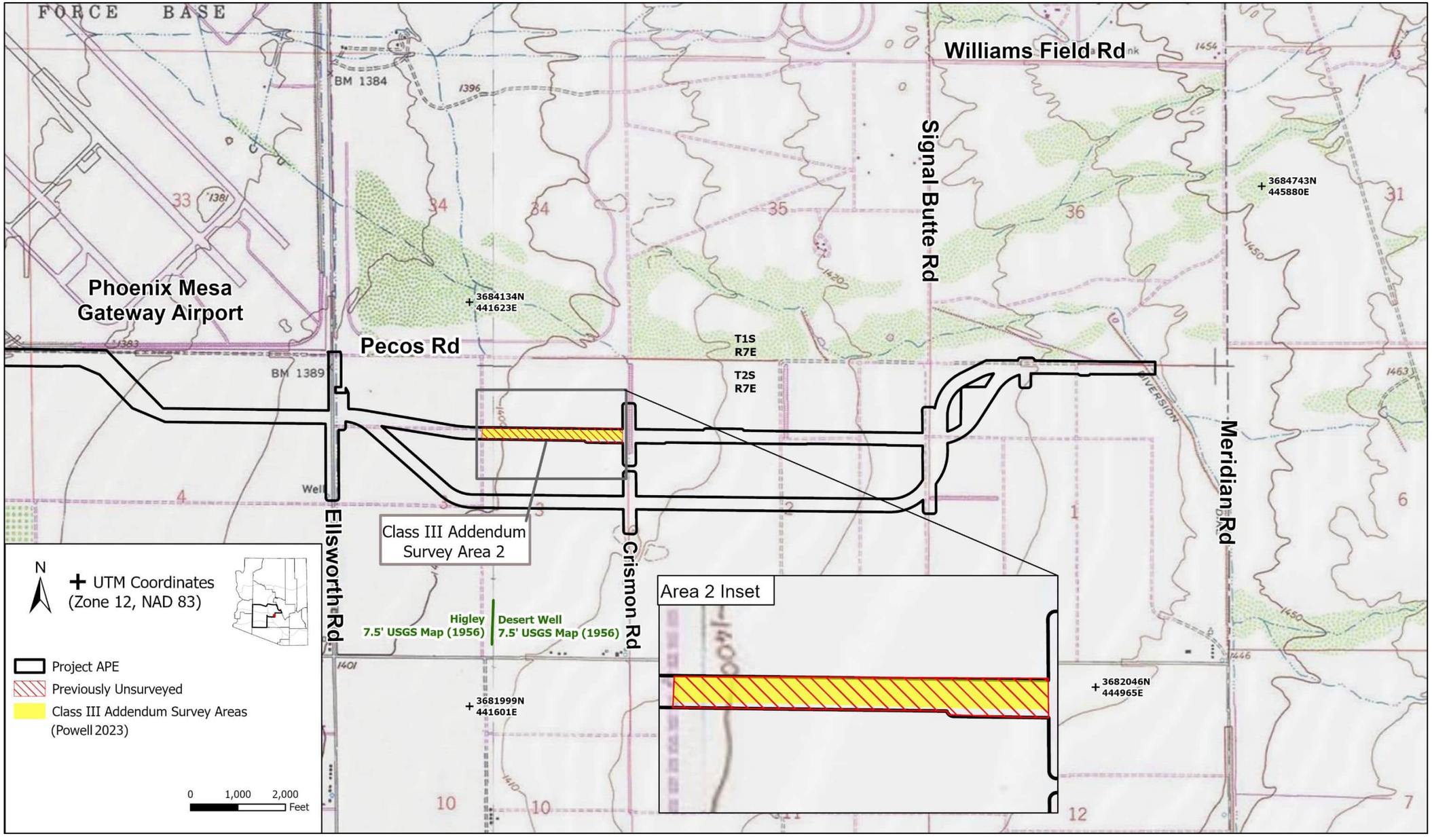
ATTACHMENT A – VICINITY MAP



ATTACHMENT B1– PROJECT LOCATION MAPS DEPICTING PREVIOUSLY UNSURVEYED AREAS AND CLASS III ADDENDUM SURVEY AREAS



ATTACHMENT B2– PROJECT LOCATION MAPS DEPICTING PREVIOUSLY UNSURVEYED AREAS AND THE CLASS III ADDENDUM SURVEY AREA



ATTACHMENT C - LETTER FROM UP REGARDING UNSURVEYED AREAS WITHIN THE PROJECT BUFFER

BUILDING AMERICA®

May 17, 2023

Mr. Adam Assenza
Environmental Protection Specialist
Office of Environmental Analysis
Surface Transportation Board
395 E Street, S.W.
Washington, D.C. 20423

Re: STB Docket No. FD 36501, Union Pacific Railroad –Two Un-surveyed Portions of APE

Dear Mr. Assenza:

As it relates to the PIRATE Industrial Lead project, with regards to the two un-surveyed areas depicted in the enclosed documents (titled Unsurveyed Not Acquired East v5.jpg & Unsurveyed Not Acquired West v5.jpg), “buffer areas”, shown as highlighted in yellow and are not currently owned by Union Pacific Railroad (UPRR), UPRR will not:

- Acquire or attempt to acquire the buffer areas
- Acquire temporary construction easements on the buffer areas
- Perform any work in the buffer areas

If there is any additional information or clarification needed with regards to the buffer areas, please don’t hesitate to contact me.

Sincerely,

Kevin Rice

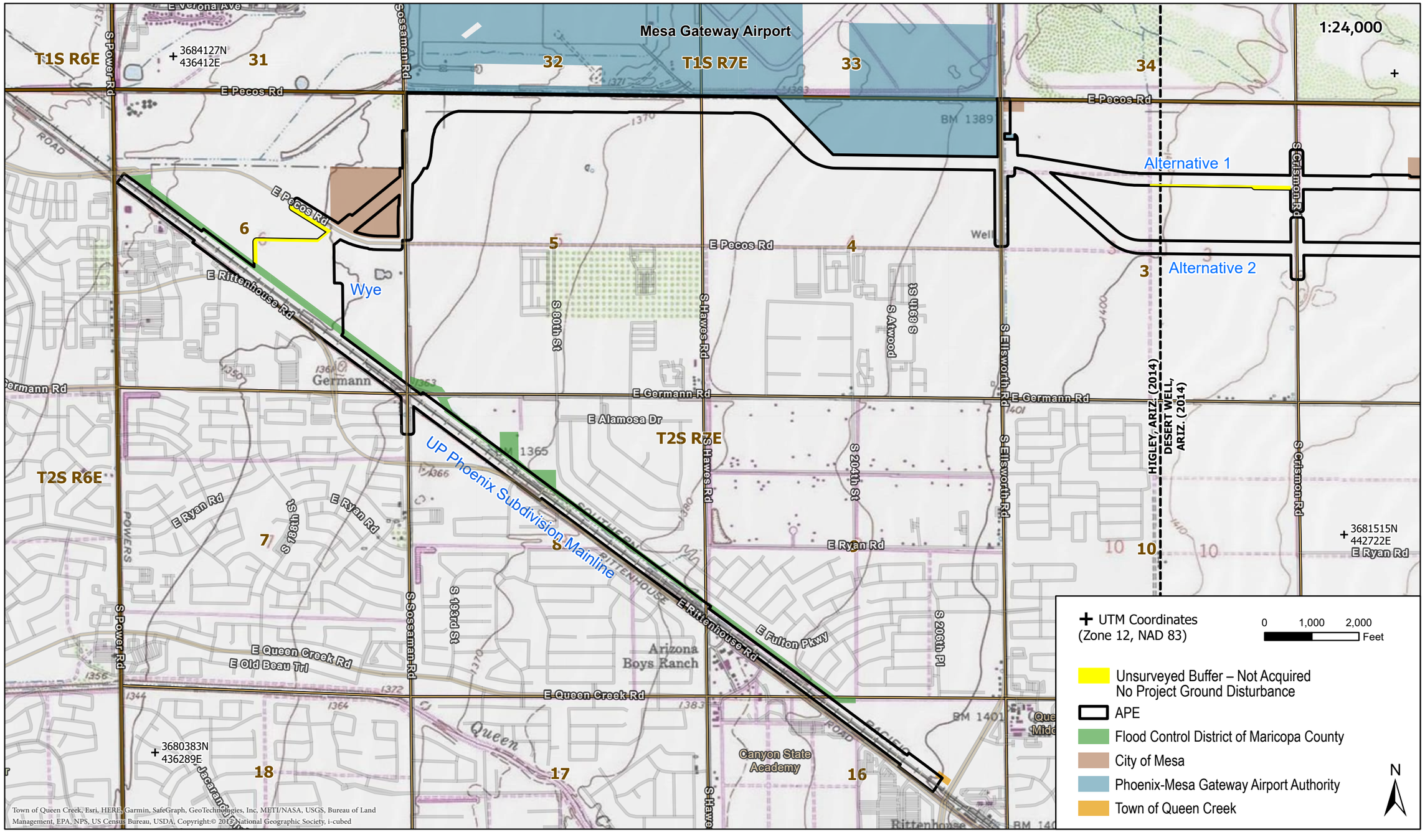
Senior Manager M/W Environmental

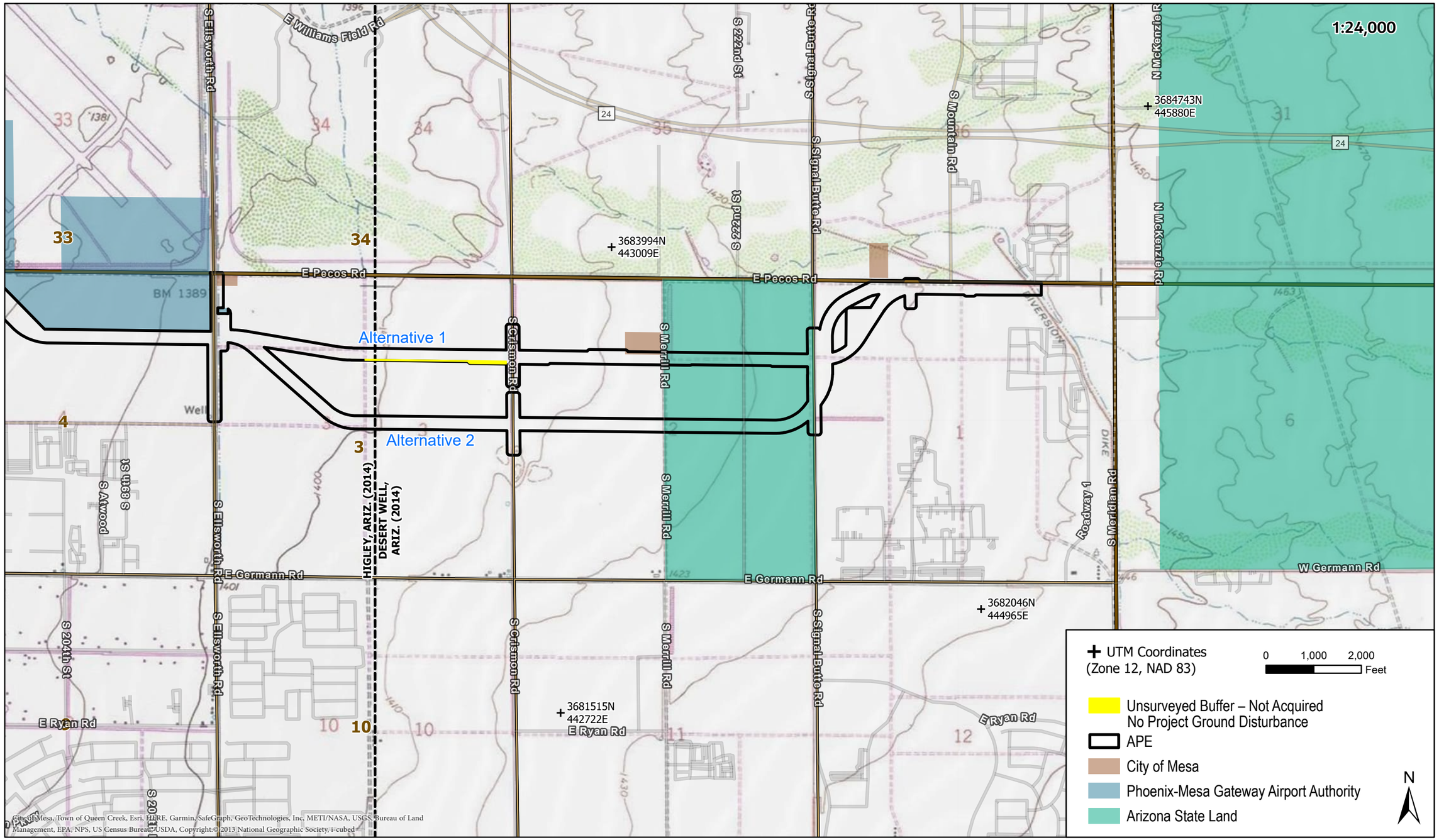
Union Pacific Railroad

UNION PACIFIC RAILROAD
1400 Douglas Street, 9th Floor
Omaha, Nebraska 68179

Kevin Rice
Senior Manager M/W Environmental
Engineering

P 402-544-2213
E kprice@up.com


1:24,000
Mesa Gateway Airport
T1S R6E
T1S R7E
T2S R6E
T2S R7E
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436412E
3681515N
442722E
3680383N
436289E
Alternative 1
Alternative 2
Wye
UP Phoenix Subdivision Mainline
E Pecos Rd
E Rittenhouse Rd
E Germann Rd
E Alamosa Dr
E Ryan Rd
E Queen Creek Rd
E Old Beau Trl
E Fulton Pkwy
S Power Rd
S Sossaman Rd
S Hawes Rd
S Ellsworth Rd
S Crismon Rd
S 80th St
S 88th St
S 188th St
S 193rd St
S 204th St
S 206th Pl
Germann
Arizona Boys Ranch
Canyon State Academy
BM 1389
BM 1401
UTM Coordinates
(Zone 12, NAD 83)
0 1,000 2,000
Feet
Unsurveyed Buffer – Not Acquired
No Project Ground Disturbance
APE
Flood Control District of Maricopa County
City of Mesa
Phoenix-Mesa Gateway Airport Authority
Town of Queen Creek
N
Town of Queen Creek, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, Copyright© 2013 National Geographic Society, i-cubed



City of Mesa, Town of Queen Creek, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, Copyright © 2013 National Geographic Society, i-cubed

Salt River
PIMA-MARICOPA INDIAN COMMUNITY
10,005 EAST OSBORN ROAD/SCOTTSDALE, ARIZONA 85256/ PHONE (480) 362-6325

Tribal Historic Preservation Office

TO: Danielle Gosselin, Director
Surface Transportation Board
Office of Environmental Analysis
RE: Docket No. FD 36501
395 E Street SW
Washington, DC 20423

DATE: 5/25/2023

FROM: Shane Anton, Tribal Historic Preservation Officer

RE: Docket No. FD 36501, Union Pacific Railroad Company –Class III Addendum

Dear Director Gosselin,

The Salt River Pima Maricopa Indian Community (SRP-MIC) Tribal Historic Preservation Office (THPO) received your consultation documents via email on May 19, 2023. On June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Board requesting authority to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

A Class III survey of the Area of Potential Effects (APE) was previously conducted in May/June 2022 (Rainey and Stubing 2022). At the time of that survey, two discontinuous areas totaling 15.39 acres in the project APE and APE buffer could not be investigated due to access issues and poor ground visibility. A total of 4.91 acres of these areas are within the APE buffer and will not be acquired by UP or be subject to project ground disturbance. UP has committed in writing to avoidance of these locations. The remaining 10.48 acres in the APE and buffer have now been subject to Class III survey. The results of the survey are presented in a Class III addendum report entitled *A Class III Addendum Cultural Resources Survey for the Union Pacific Railroad Company Pecos Industrial Rail Access and Train Extension (PIRATE) Project, Mesa and Queen Creek, Maricopa County, Arizona* (Powell 2023).

SRP-MIC THPO has reviewed the report and concurs on its adequacy. SRP-MIC THPO also agrees with the summary and management recommendations for AZ U:10:2(ASM) (the Germann Site) and AZ U:10:275(ASM) (The Sand Dune Site). These sites will be adversely impacted by

the project. A Memorandum of Agreement to address the resolution of adverse effects is being developed and specific mitigation procedures will be outlined in a Historic Properties Treatment Plan (HPTP). Given the extensive agricultural disturbance in the immediate vicinity of AZ U:10:275(ASM), boundary testing within 50 feet of the surface site boundary is recommended for inclusion in the HPTP.

The SRPMIC THPO will continue to participate in the Section 106 process of this undertaking, but defers to the GRIC THPO as the consultation lead for this project.

Thank you for consulting with the SRPMIC-THPO. Should you have questions and/or concerns about this project, please contact me directly at (480) 362-6331.

Thank you.



Shane Anton, Tribal Historic Preservation Officer
Cultural Resources Department, SRPMIC
10,005 E. Osborn Rd.
Scottsdale, Arizona 85256
Email: Shane.Anton@SRPMIC-nsn.gov
Office Tele: (480) 362-6331

From:	Ryan, Alexandra R (Alex) CIV USARMY CESPL (USA)
To:	Powell, Kris
Cc:	Assenza, Adam; Tabachnick, Alan; Buckley, Maggie; McNeish, Sabra; Phoebus, Elizabeth (Betsi); Luhnow, Glennda; Rainey, Pamela
Subject:	[EXTERNAL] RE: UPPR Pirate - Addendum Survey Report
Date:	Thursday, May 25, 2023 12:32:26 PM

Good morning,

Thank you for providing the Class III Addendum Survey Report and continued consultation. The Corps has no comments at this time as the addendum and un-surveyed buffer areas are outside the Corps' limited permit area.

Thank you,
Alex

Alexandra Ryan
Project Manager
Regulatory Division, Arizona Branch
Los Angeles District, U.S. Army Corps of Engineers

Office: 602-230-6954
Mobile: 602-284-2642

Please do not mail hard copy documents to any Regulatory staff or office. For further details on corresponding with us, please view our special public notice at: https://www.spl.usace.army.mil/Portals/17/docs/publicnotices/COVID19%20Regulatory_SPN.pdf?ver=2020-03-19-134532-833

From: Powell, Kris <Kris.Powell@jacobs.com>
Sent: Friday, May 19, 2023 11:08 AM
To: Regulatory, SPL AZ <splregulatoryaz@usace.army.mil>
Cc: Ryan, Alexandra R (Alex) CIV USARMY CESPL (USA) <Alexandra.Ryan@usace.army.mil>; Assenza, Adam <adam.assenza@stb.gov>; Tabachnick, Alan <alan.tabachnick@stb.gov>; Buckley, Maggie <Maggie.Buckley@jacobs.com>; McNeish, Sabra <Sabra.McNeish@jacobs.com>; Phoebus, Elizabeth (Betsi) <Betsi.Phoebus@jacobs.com>; Luhnow, Glennda <Glennda.Luhnow@jacobs.com>; Rainey, Pamela <Pamela.Rainey@jacobs.com>
Subject: [Non-DoD Source] UPPR Pirate - Addendum Survey Report

Good Morning Ms. Diebolt:

As the Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) stated in previous Section 106 consultation conducted under the National Historic Preservation Act, on June 30, 2022, the Union Pacific Railroad Company (UP) filed a petition with the Board requesting authority to construct and operate approximately six miles of new rail line in Maricopa County, Arizona (the proposed Pecos Industrial Rail Access and Train Extension [PIRATE] rail line).

A Class III survey of the area of potential effects (APE) was previously conducted in May/June 2022

(Rainey and Stubing 2022). At the time of that survey, two discontinuous areas totaling 15.39 acres in the project APE and APE buffer could not be investigated due to access issues and poor ground visibility. A total of 4.91 acres of these areas are within the APE buffer and will not be acquired by UP or be subject to project ground disturbance. UP has committed to avoidance of these locations (UP Letter to OEA, May 17, 2023, attached).

The remaining 10.48 acres in the APE and buffer have now been subject to Class III survey. The results of the survey are presented in a Class III addendum report entitled "*A Class III Addendum Cultural Resources Survey for the Union Pacific Railroad Company Pecos Industrial Rail Access and Train Extension (PIRATE) Project, Mesa and Queen Creek, Maricopa County, Arizona"* (Powell 2023).

The Class III addendum survey report has been transmitted to you via File Transfer on behalf of OEA by Jacobs Engineering Group Inc, OEA's third-party contractor. The File Transfer document will be available for 15 days and will expire on June 3, 2023. If you are not able to access the document, or the link expires, please contact Glennda Luhnow, Jacobs' cultural resources manager, at Glennda.Luhnow@jacobs.com. A hard copy of the report can be furnished to you at your request.

With the attached letter, OEA is continuing Section 106 consultation with your office and requesting concurrence on the adequacy of the Class III addendum survey report and agreement that the 4.91 acres in the APE and buffer do not require any further cultural resources work. OEA requests your response to this letter by June 19, 2023. Please address any questions electronically to Alan Tabachnick, OEA's Federal Preservation Officer, at Alan.Tabachnick@stb.gov.

Thank you.

Kris Powell, M.A., RPA (she/her) | **JACOBS** | **Senior Archaeologist**
C: 602-463-5843 | kris.powell@jacobs.com
1501 West Fountainhead Parkway, Suite 401 | Tempe, Arizona 85282 | USA

PTO May 12, 2023 and June 19 thru June 26, 2023

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Appendix L
List of Preparers

Surface Transportation Board, Office of Environmental Analysis

Name	Title
Danielle Gosselin	Director, Office of Environmental Analysis
Adam Assenza	Environmental Protection Specialist/Project Manager
Alan Tabachnick	Federal Preservation Officer

Contractors and Consultants

Jacobs Engineering Group Inc. supported the Surface Transportation Board's Office of Environmental Analysis with completing the environmental analyses and preparing this Draft Environmental Assessment.

Name	Project Role
Maggie Buckley	Project Manager
Betsi Phoebus	NEPA Lead, Jurisdictional Delineation Report Including Wetlands
Jordan Rae Aguirre	Traffic Report
Ravi Ambadipudi	Traffic Report
Peter Barney	Geographic Information Systems
Jennifer Cyr	Technical Editor
Joe D'Onofrio	Noise and Vibration Analysis
Susan Haupt	Air Quality and Climate Change, Noise and Vibration, Transportation and Safety
Sara Hoeber	Graphics
Jessica Jones	Geographic Information Systems
Glennda Luhnow	Class III Cultural Resources Survey Report
Sabra McNeish	Proposed Action and Alternatives, Geology and Soils, Water Resources, Coordination and Compliance, Jurisdictional Delineation Report Including Wetlands
Anil Mudigonda	Traffic Report, Transportation and Safety
Kay Nicholson	Biological Evaluation
Julie Philippon	Archaeological and Historic Resources, Biological Resources
Kris Powell	Archaeological and Historic Resources, Memorandum of Agreement
Pamela Rainey	Class III Cultural Resources Survey Report
Leanne Rutland	Community Engagement Plan, Public Involvement

Name	Project Role
Nancy Shelton	Land Use and Farmland
Patricia Steinholtz	Abbreviated Visual Impact Assessment, Visual Quality, Cumulative Impacts
Samantha Vaughan	Biological Evaluation
Brenda Weith	Hazardous Materials and Waste Sites
Kim Wetzel	Environmental Justice, Socioeconomics
Hong Zhuang	Air Quality Report