CONVERSE CONSULTANTS

Phase I Environmental Site Assessment Report

Parcel 015-010-12
T28 R33 SEC 9
Pershing County, Nevada

August 3, 2021
Converse Project No. 19-23216-01

Prepared For:

Western Nevada Development District
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Converse Consultants
Geotechnical Engineering, Environmental & Groundwater Science, Inspection & Testing Services

August 3, 2021

Western Nevada Development District
1000 North Division Street, Ste. 102 B
Carson City, Nevada 89703

Attn: Ms. Sheryl Gonzales
Executive Director

Subject: **PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT**
Parcel 015-010-12
T28 R33 SEC 9
Pershing County, Nevada
Converse Project No. 19-23216-01

Dear Ms. Gonzales:

Converse Consultants is pleased to submit the attached report that summarizes the activities and the results of a Phase I Environmental Site Assessment that was conducted at the referenced property.

A summary of the assessment is presented in the Executive Summary, as well as in Sections 7.0 and 8.0 of the report.

We appreciate the opportunity to be of service. Should you have any questions or comments regarding this report, please contact the undersigned at 775-856-3833.

CONVERSE CONSULTANTS

Connor Welsh, CEM
Project Manager

Philip Childers, CEM
Senior Environmental Manger

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Executive Summary

The following is an Executive Summary of the Phase I Environmental Site Assessment (Phase I ESA) that was conducted by Converse Consultants (Converse). Please refer to the appropriate sections of the report for a complete discussion of these issues. In the event of a conflict between this Executive Summary and the report, or an omission in the Executive Summary, the report shall take precedence.

This report presents the results of the Converse Phase I ESA performed at the Vacant Parcel located in Section 9 of Township 28, Range 33 in Pershing County, Nevada, referred to as the "Property" in this report (see section 2.0 for a detailed description of Property). Converse was retained by the Western Nevada Development District (WNDD) to conduct this Phase I ESA. Our study has been conducted to identify, to the extent practical within the scope of an ESA, Recognized Environmental Conditions (RECs) in connection with the Property.

Converse has compiled and reviewed information that was obtained from interviews, document research, and on-site and area reconnaissance to identify potential environmental conditions at the Property, in conformance with the ASTM Standard E: 1527-13 Environmental Site Assessment Standard Practice (ASTM Standard: E1527-13). This Phase I ESA was conducted during the period of April 13, 2021, to July 20, 2021.

Property Description

The Property comprises one (1) parcel, totaling 21,413-acres. The Property is located 14 miles east of Lovelock, Nevada or 58 miles west of Winnemucca, Nevada on Interstate Highway 80 off exit #119. The Property is owned by John M. Heizer Jr. and is currently undeveloped, vacant land.

According to historical sources, interviews with the Property owner representative, and site reconnaissance, the Property appears to have existed primarily as vacant undeveloped land with small gold prospecting pits that operated on the Property from the late 19th to early 20th century.

Site Reconnaissance

At the time of this assessment, the Property consisted of primarily undeveloped, vacant land with a small, abandoned mining operation. Above ground storage tanks (ASTs), drums, and a lined pond were observed during the site reconnaissance. The ASTs, drums, and pond were empty with no staining observed. The historical contents of these vessels are unknown.

Environmental Database Review

The Property was not listed in any Federal or State/Tribal databases.

Three sites were listed in the Mineral Resource Data System (MRDS) within 1 mile of the Property. The MRDS is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. These sites were found to have the following occurrence:

limestone, clay, and gold. No active mines were found in relation to these sites. Based on the type of listing, the presence of these off-site properties in the environmental databases is considered unlikely to present an environmental concern to the Property.

Conclusions and Recommendations

The Property was previously an unpermitted placer mining operation. Placer mining operations have been known to use toxic substances that can impact the environment. Cyanide is a possible contaminant that may be released from these activities. Gold is first dissolved using cyanide in the extraction stage and the dissolved gold is then recovered from the cyanide solution by cementing with zinc or adsorption onto activated carbon. The cyanide extraction processes could be heap leach or vat/tank leach depending on the quality of the ores. In ores of higher gold content, the vat/tank leaching is employed, which involves leaching of the crushed and ground ore in large, enclosed tanks equipped with agitators to dissolve the gold which then adheres to pieces of the activated carbon. The activated carbon and the gold are then stripped of the solution and the barren solution together with the leached ore are discarded. The heap leach is used for low-grade ore and involves extraction of crushed oxide gold ore piled onto plastic-lined pads with leaching solvents such as acids or cyanide to dissolve the gold which is collected at the bottom of the pad.

Heavy metals such as mercury may also be found in the wastes (tailings) of mining operations. To separate the gold from the mineral bearing rock, mercury is mixed with the ores dug from the ground or from stream beds to form an amalgam. The burning of the amalgam leads to vaporization of the mercury into a toxic plume leaving the gold behind. Mercury amalgamation was used for centuries to process gold and is still in use today by small-scale gold mining.

Based on the past use of the Property, and site observations, this assessment has revealed the following evidence of *recognized environmental conditions* (RECs) in connection with the Property:

- Potential that toxic chemicals (e.g. cyanide) used during ore processing operations may have been released to the environment and/or resulted in leaching of metals from process material to the environment;

- Uncapped mining reject/waste material and mine tailing observed throughout the Property. This material may contain metals and/or other pollutants that potentially could leach into the environment;

- A small plastic-lined pond/containment was observed on the Property. No liquid was present in the pond at the time of the inspection. The past use of the pond is not known and potential exists that pollutants in the liquid that was contained in the pond during previous mining activities may have been released to the environment;

Additionally, the following significant observations/concerns were identified:

- Several empty drums, some of which are labeled “hazardous waste, are present throughout the site along with various debris that is scattered throughout the site.

- Several pieces of out of use mining equipment (e.g. hoppers, rotary-screw trommels, screens, wash plant, aboveground storage tanks, etc.) and appurtenances were observed at the Property;

- Open mining trenches, pits and small horizontal shafts were observed. These must be closed in accordance with Nevada Division of Environmental Protection (NDEP) regulations.

- The Property has a current water pollution control permit (WPCP NEV2004101) approved for mining facilities. This permit must be maintained until permanent closure and post-closure monitoring are completed and the Nevada Division of Environmental Protection (NDEP) has formally terminated the WPCP. All closure-related activities must be reviewed and approved by the Closure Branch. Branch staff will evaluate plans, reports, studies, and monitoring data to confirm chemical stabilization of all pollutant sources included in the mining operation.

Converse recommends a Phase II ESA for the Property to address the identified RECs and evaluate the above significant observations/concerns.

No significant data gaps were identified that affect the ability of the Environmental Professional (EP) to identify RECs.

There are no unusual circumstances where greater certainty is required regarding RECs.

1.0 Introduction

1.1 Purpose and Scope of Services

This report presents the results of the Converse Consultants (Converse) Phase I Environmental Site Assessment (ESA) performed at the Pershing County Parcel 015-010-12, referred to as the "Property" in this report. Converse was retained by the Western Nevada Development District (WNDD) to conduct this Phase I ESA. Our study has been conducted to identify, to the extent practical, Recognized Environmental Conditions (RECs) in connection with the Property. The term Recognized Environmental Conditions is defined in Section 1.1.1 of the American Society of Testing and Materials (ASTM) Standard Practice as *the presence or likely presence of any hazardous substances or petroleum products in, at or on a property due to any release to the environment; under conditions indicative of a release to the environment; under conditions that pose a material threat of a future release to the environment.*

This Phase I ESA was completed in accordance with Converse's Brownfields Grant Contract with the WNDD. Our work consisted of the following and was completed in general conformance with the scope and limitations of the ASTM Practice E1527-13 and complies with standards and practices set forth in 40 Code of Federal Regulations (CFR) Part 312 for AAI.

- Interviews with the Property owner representatives
- Property and vicinity reconnaissance
- Review of regulatory agency records
- Description of physical setting
- Historical review
- Interviews with public agency personnel
- Preparation of this report

1.2 Non-Scope Considerations

There are a number of non-scope issues which are sometimes assessed concurrently with a Phase I ESA. Unless specifically agreed in the contract proposal documents, these non-scope considerations are not included as part of the Phase I assessment. Examples of non-scope issues include:

- Asbestos-containing building material
- Lead-based Paint
- Wetlands
- Radon
- Lead in Drinking Water
- Regulatory Compliance

- Cultural & Historic Resources
- Industrial Hygiene
- Health & Safety
- Mold
- Diffuse Anthropogenic Pollution
- Ecological Resources
- Endangered Species
- Indoor Air Quality
- Biological Agents
- Non-liquid Polychlorinated Biphenyls

There were no non-scope items included in this assessment.

1.3 Significant Assumptions

Converse made the following assumptions for this assessment:

- The Property boundaries were not marked. At the time of the site reconnaissance, the property boundaries were estimated using available resources and visual indicators. Converse presumed these boundaries to be correct.

- A number of parties such as third party vendors, government agencies, and the Property owner may have provided information for this investigation. The ASTM standard allows the consultant to rely on the information gathered without independent verification, unless it is obvious that certain information is incorrect. Unless noted in the report, Converse assumed the information supplied by third parties to be correct.

- The groundwater depth and flow direction beneath the Property cannot be verified without site specific monitoring wells.

1.4 Limitations and Exceptions

Observations made are limited to the time during which the Property reconnaissance was conducted on May 12, 2021.

1.5 Special Terms and Conditions

No special terms or conditions were provided by the client.

1.6 Reliance

This report is for the sole benefit and exclusive use of the WNDD in accordance with the Brownfields Contract under which these services have been provided. Its preparation has been in accordance with generally accepted environmental practices. No other warranty, either express or implied, is made. The Scope of Services associated with the report was designed solely in accordance with the objectives, schedule, budget, and risk-management preferences of the WNDD.

This report should not be regarded as a guarantee that no further contamination, beyond that which could be detected within the scope of this assessment, is present at the Property. Converse makes no warranties or guarantees as to the accuracy or completeness of information provided or compiled by others. It is possible that information exists beyond the scope of this assessment. It is not possible to absolutely confirm that no hazardous materials and/or substances exist at the Property. If none are identified as part of a limited scope of work, such a conclusion should not be construed as a guaranteed absence of such materials, but merely the results of the evaluation of the property at the time of the assessment. Also, events may occur after the Property visit, which may result in contamination of the Property. Additional information, which was not found or available to Converse at the time of report preparation, may result in a modification of the conclusions and recommendations presented.

Any reliance on this report by Third Parties shall be at the Third Party's sole risk. Should the WNDD wish to identify any additional relying parties not previously identified, they must contact Converse.

2.0 Property Description

2.1 Current Use(s) of the Property

The Property is currently vacant, with no identified use or occupants, and is owned by John M. Heizwer Jr. The Property consists of largely undeveloped, vacant land with a small portion of the Property being historically used for gold mining. Abandoned mining equipment, tailings, and mine tunnels are located on the Property. Mining operations at the site date back to the 1800s.

A Topographic Map and Site Vicinity Map are provided in Appendix A. Pertinent Property photographs are provided in Appendix B.

2.2 Location and Legal Description

The Property comprises one (1) asymmetrical-shaped parcel, totaling 21,413 acres. The Property is located on 1.24 miles south of the intersection of Lovelock Unionville Road and Limerick Canyon Road. The Property is located in the NW1/4; NE1/4; W1/2 NE1/4 SE1/4; NW1/4 SE1/4; S1/2 SE1/4 of Section 9, Township 28, and Range 33.

2.3 Zoning Information

According to the Pershing County Tax Assessor, the zoning for the Property, Agricultural-Mining-Recreation is indicated as “AMR”. The land use listed for the Property is 100 – Vacant – Unknown/Other.

2.4 Property Characteristics & Structures

The Property comprises one (1) asymmetrical-shaped parcel, totaling 21,413 acres. The Property currently has no structures.

3.0 User/Owner Provided Information & Responsibilities

3.1 Requested Documents and Information

The ASTM E1527-13 specifies that the Property owner, key site manager and the User provide any helpful documents that may be available. Converse requested this information from the Client/User.

The following documents and information were requested from the Property owners:

- Environmental site assessment or environmental compliance audit reports
- Environmental permits or hazardous waste generator notices/reports
- Registrations for aboveground and underground storage tanks
- Septic systems, oil wells, or water wells
- Registrations for underground injection systems
- Material Safety Data Sheets; Community Right to Know Plans; Safety, Preparedness and Prevention Plans; or, Spill Protection Countermeasures and Control Plans
- Reports regarding hydrologic conditions on the Property or surrounding area
- Notices or other correspondence from any government agency relating to past or current violations of environmental laws with respect to the Property or relating to environmental liens encumbering the Property.
- Hazardous waste generator notices or reports
- Geotechnical studies
- Risk assessments
- Recorded Activity Use Limitations (AULs)
- Proceedings regarding hazardous substances and petroleum products including any pending, threatened or past: litigation; administrative proceedings; or notices from any governmental entity regarding possible violations of environmental laws or other possible liability related to hazardous substances or petroleum products.

No documents were provided to Converse for review.

3.2 User Provided Information

Section 6 of ASTM E1527-13 outlines specific User's responsibilities. This information will help identify the possibility of RECs in connection with the Property. The ASTM Standard provides a questionnaire to help the User to comply with the statutory requirements to perform tasks which would help identify RECs. In general, any Users should make Converse aware of information they have regarding the following:

- Environmental Cleanup Liens filed or recorded against the Property
- Activity and land use limitations that are in place on the Property or have been filed or recorded in a registry
- Specialized knowledge or experience of the person seeking to qualify for the Legal Liability Protections (LLP)
- Relationship of the purchase price to fair market value of the Property if it were not contaminated
- Commonly known or reasonably ascertainable information about the Property
- The degree or obviousness of the presence or likely presence of contamination at the Property, and the ability to detect this contamination by appropriate investigation.

The following information was requested from the User(s):

3.2.1 Environmental Cleanup Liens

No Environmental liens were identified for the Property.

3.2.2 Activity and Use Limitations

No Activity Use Limitations (AULs) were identified for the Property.

3.2.3 Specialized Knowledge or Experience

The User indicated that they had no specialized knowledge or experience with the Property.

3.2.4 Reason for Significantly Lower Purchase Price

Converse has no information regarding the purchase price of the Property or comparable properties. The User has not indicated to Converse that there is any conclusion that there was a lower purchase price because of known or suspected contamination at the Property.

3.2.5 Commonly Known or Reasonably Ascertainable Information

The User did not provide any information about specific chemicals at the Property, past spills, environmental cleanup, or other reasonably ascertainable information regarding the Property.

3.2.6 Obviousness of Contamination

The User did not provide any information based on their knowledge or experience that would be obvious indicators of contamination on the Property.

Unless specifically stated otherwise in the Scope of Services, the purpose of this Phase I ESA was to qualify for the landowner liability protections (LLP) to CERCLA Liability as described in ASTM E1527-13.

Business risk unrelated to the CERCLA innocent landowners defense are only assessed as specifically agreed in the Scope of Services and discussed in Section 11.0, Additional Non-Scope Services, of this report.

Converse was not provided with any previous reports for the Property.

3.3 Continuing Obligations

In order to assert an LLP, the User must satisfy a number of statutory requirements that are generally referred to as Continuing Obligations, which are outside the Scope of Services of the Phase I ESA. Examples of Continuing Obligations include providing legally required notices, stopping continuing releases, and complying with land use restrictions. Failure to comply with these and other statutory post-acquisition requirements will jeopardize liability protection.

It is the responsibility of the User to comply with the Continuing Obligations requirements of ASTM E1527-13 and AAI. Anyone seeking LLP protections should take independent action beyond this Phase I ESA to perfect their position.

4.0 Records Review

4.1 Physical Setting

4.1.1 Physical Setting

The topography of the Property slopes towards the northwest. The Property is situated at an elevation of approximately 4,655 feet above mean sea level (ERIS Physical Setting Report, May 8, 2021).

4.1.2 Geology

Lovelock, Nevada lies in the western portion of the Basin and Range Geologic Province in an area that is surrounded for the most part by a series of smaller mountain chains and associated valleys. These ranges and basins were the result of parallel normal faults which produced a series of horsts and grabens in the western portion of the United States. Lovelock is situated west of the Humboldt Range. The project area is comprised mostly of Quaternary Lake deposits derived from both Humboldt and Toulon Lakes. These deposits are mainly fine-grained silts and clays. Near surface soils are classified as elastic silts (Tatlock, D. B., et al., 1961-1973).

According to the US Department of Agriculture (USDA) Soil Conservation Service (SCS), the Property contains Slawha silt loam. Slawha silt loam has a moderately high runoff potential when thoroughly wet.

4.1.3 Groundwater

Converse reviewed well logs available on the Nevada Division of Water Resources' Nevada Hydrology Data Mapper. The well log for a domestic well installed approximately 4,748 feet northeast of the Property in 1938 indicated groundwater was first encountered at approximately 218-feet below ground surface (bgs). According to the Lovelock Meadows Water District Water Conservation Plan, groundwater in the Lovelock area is not suitable for potable consumption due to high concentrations of sulfate, nitrate, fluoride and dissolved salts.

4.1.4 Potable Water Supplier

Potable water for the surrounding areas is provided by Lovelock Meadows Water District. The City of Lovelock obtains its municipal water supply from three groundwater wells located approximately fifteen miles northeast at

Oreana, Nevada (Lovelock Meadows Water District Water Conservation Plan).

4.2 Historical Review

4.2.1 Aerial Photograph, Fire Insurance Maps, and Topographic Map Review

Available historical aerial photographs, fire insurance maps, and USGS topographic maps, as described in Table 1, were reviewed by Converse (provided by ERIS). The historical aerial photographs, fire insurance maps, and topographic maps are included in Appendix C.

Table 1 – Aerial Photograph and Map Review

Date	Reference	Observations
1941	Aerial Photograph	No structures or significant features are depicted on the Property or surrounding properties.
1954, 1956	Aerial Photograph and Topographic Maps	No structures or significant features are depicted on the Property or surrounding properties.
1975, 1980, 1987	Aerial Photographs and Topographic Maps	No structures or significant features are depicted on the Property or surrounding properties. Prospector mines/pits are visible along the unimproved roads on the 1987 topographic map.
1994, 2013, 2014, 2015, 2017, 2019	Aerial Photographs and Topographic Maps	No structures or significant features are depicted on the Property or surrounding properties.

4.2.2 Permit Review

Converse contacted the Pershing County Planning and Building Department to request information regarding environmental concerns, underground storage tanks, or any information regarding hazardous materials or petroleum products used, stored, generated, or released at the Property. The Pershing County Planning and Building Department responded to the record request on May 25, 2021 and indicated that no files existed for the Property.

Converse was provided with a copy of a water pollution control permit. After review, this permit (WPCP NEV2004101) was for the authorization to construct, operate, and close a gold mine facility that would utilize physical separation methods to extract gold from ore (up to 5,000 tons per year).

Chemicals were not authorized for use in this process. This permit was approved and issued by the NDEP.

4.2.3 Data Failure

Historical information and interviews regarding the Property, dated as early as 1941, indicated that the Property was undeveloped land; therefore, a data failure has occurred during this assessment. However, this data failure did not impact Converse's ability to identify RECs.

4.2.4 Summary of Historical Property Use

According to historical sources, interviews with the Property owner representative, and site reconnaissance, the Property appears to have existed primarily as a vacant undeveloped land with small gold prospecting pits that operated on the Property from the late 19th to early 20th century.

4.2.5 Summary of Past Uses of Adjoining Properties

The adjoining properties appear to have consisted of undeveloped land from at least 1941 until present.

4.2.6 Summary of Past Uses of the Surrounding Area

The surrounding area appears to have existed as undeveloped land from at least 1941 to present.

4.3 Results of Environmental Records Sources Review

An ERIS report of Standard Environmental Record Sources was prepared specifically for the Property. The search included, at a minimum, query of the databases identified in the ASTM Standard within the specified ASTM search distances. The ERIS Report is included as Appendix D.

4.3.1 Property Listings

The Property was not listed in any Federal or State/Tribal databases.

4.3.2 Adjoining Property Locations of Concern

Three sites were listed in the Mineral Resource Data System (MRDS) within 1 mile of the Property. The MRDS is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. These

sites were found to have the following occurrence: limestone, clay, and gold. No active mines were found in relation to these sites. Based on the type of listing, the presence of these off-site properties in the environmental databases is considered unlikely to present an environmental concern to the Property.

4.3.3 Other Off-site Locations of Concern

No additional off-site properties were identified in the environmental databases and reviewed.

4.3.4 Orphan Listings

No unplottable sites were listed on the Unplottable Summary section of the ERIS report.

4.4 Additional Environmental Record Sources

4.4.1 Federal Agencies

4.4.1.1 U.S. Department of Transportation, Pipeline and Hazardous Material Safety Administration (PHMSA)

PHMSA online mapping system for gas transmission pipelines or hazardous liquid pipelines in Pershing County, Nevada was reviewed. A natural gas pipeline owned by the Paiute Pipeline Co is located approximately 6.0 miles west of the Property.

4.4.2 State Agencies

Converse reviewed the NDEP eMap database, which contains corrective action sites. The Property was not identified in the eMap database.

Converse contacted Amanda Tate at the NDEP's Bureau of Mining Regulation and Reclamation Closure Branch to inquire about the requirements for closing a registered mine. Since the Property has a valid water pollution control permit (WPCP NEV2004101) approved for mining facilities, this permit must be maintained until permanent closure and post-closure monitoring are completed and the Division has formally terminated the WPCP. All closure-related activities must be reviewed and approved by the Closure Branch. Branch staff will evaluate plans, reports, studies, and monitoring data to confirm chemical stabilization of all pollutant sources included in the mining operation. A closure guidance document is provided in Appendix E of this report.

4.4.3 Local Agencies

Converse contacted and the Pershing County Planning and Building Department to request information regarding environmental concerns, underground storage tanks, or any information regarding hazardous materials or petroleum products used, stored, generated, or released at the Property. The Pershing County Planning and Building Department responded to the record request on July 13, 2021 and indicated that no files existed for the Property.

4.5 Vapor Encroachment

Converse did not conduct a vapor migration screening survey of the Property to assess the risk of “vapor encroachment conditions” (VECs) on the Property.

5.0 Property Reconnaissance

5.1 Methodology

On May 12, 2021, Converse visited the Property to evaluate present use and to identify observable environmental conditions at the Property. Our methodology involved walking the perimeters, center lines, and accessible interior areas/roads while noting observed evidence of present and potential environmental concerns.

5.2 Limiting Conditions

Converse's findings are based on the Property conditions observed on May 12, 2021.

5.3 Interior Observations of Property

During Converse's Property visit, the Property consisted of undeveloped vegetated land.

5.4 Exterior Observations of Property

During Converse's Property visit, Converse made the following observations of the exterior of the Property:

Table 3 – Exterior Observations of Property

Item or Condition	Observed Evidence	No Evidence Observed	Comments
Hazardous Substances & Petroleum Products:	☐	☒	None observed
Storage Tanks & Related Equipment:	☒	☐	Four ASTs of unknown contents were observed. A large poly tank was observed.
Mills	☐	☒	
Reject material/waste rock dumps	☒	☐	Piles of reject material observed throughout the site.
Mine tailings	☒	☐	Process tailings observed throughout the site.
Abandoned mine shafts	☒	☐	Several small horizontal mine shaft/exploration pits were observed. The entrance to the largest shaft was sealed with boards. The mine shafts appeared to be less than 20 feet in length.
Odors:	☐	☒	None observed

Table 3 – Exterior Observations of Property

Item or Condition	Observed Evidence	No Evidence Observed	Comments
Standing Surface Water or Other Pools of Liquid:	☐	☒	None observed
Drums & Other Containers of Hazardous Substances, Petroleum Products, or Other Unidentified Contents:	☒	☐	Several empty drums with labels for hazardous materials, metal, and plastic were observed. Miscellaneous debris observed throughout the site.
Transformers or Equipment containing Polychlorinated Biphenyls (PCBs):	☐	☒	None observed
Pits, Ponds, or Lagoons:	☒	☐	A small plastic-lined pond was observed. No liquid present in the pond at the time of the site inspection.
Stained Soil or Pavement:	☐	☒	None observed
Stressed Vegetation (other than from insufficient water):	☐	☒	None observed
Evidence of Mounds, Depressions or Filled or Graded Areas Suggesting Trash or Other Solid Waste Disposal:	☐	☒	None observed; however, miscellaneous debris was observed throughout the site.
Wastewater or any discharge (including storm water) int a Drain, Ditch, or Stream on or Adjacent to the Property:	☐	☒	None observed
Wells (active, inactive, or abandoned)	☐	☒	None observed
Septic Systems of Cesspools:	☐	☒	None observed
Prior Structures	☒	☐	Various pieces of mining equipment and a mobile trailer were observed at the site.
Roads, Tracks, Railroad Tracks or Spurs	☐	☒	None observed

5.5 Current Uses of Adjoining Properties

Based on our research and observations during our Property visit, the Property is bordered by the following:

Table 5 – Adjoining Property Use

Direction	Current Development
North:	Vacant undeveloped land.
South:	Vacant undeveloped land.
East:	Vacant undeveloped land.
West:	Vacant undeveloped land.

5.6 Current Uses of Surrounding Area

Based on our research and observations during our property visit, the surrounding area consists of vacant undeveloped land.

6.0 Interviews

During the interviews, the owners were asked if they had any available documents that would be helpful. No documents were available to review.

6.1 Property Owner

Mr. John M. Heizer, Jr., the Property owner, was interviewed regarding the history and current uses of the Property. Mr. Heizer stated that the Property currently exists as vacant land that historically had gold prospecting pits. Mr. Heizer provided documentation of a water pollution control permit obtained through the NDEP to operate a gold mining facility on the Property (Rose Gulch Project).

6.2 Tenant/Occupant

See above.

6.3 State or Local Government Officials

Converse requested records from the Pershing County Planning and Building Department. Responses from the local officials are discussed in Section 4.

6.4 Previous Owner Interview

The previous owner(s) of the Property were not interviewed during this assessment.

7.0 Findings & Opinions

A cursory summary of findings is provided below. However, details were not included or fully developed in this section and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

Property Description
The Property comprises one (1) parcel, totaling 21,413-acres. The Property is located 14 miles east of Lovelock, Nevada or 58 miles west of Winnemucca, Nevada on Interstate Highway 80 off exit #119. The Property is owned by John M. Heizer Jr. and is currently undeveloped, vacant land.

According to historical sources, interviews with the Property owner representative, and site reconnaissance, the Property appears to have existed primarily as a vacant undeveloped land with small gold prospecting pits that operated on the Property from the late 19th to early 20th century.

Site Reconnaissance
At the time of this assessment, the Property consisted of primarily undeveloped, vacant land with a small, abandoned mining operation. Above ground storage tanks (ASTs), drums, and a lined pond were observed during the site reconnaissance. The ASTs, drums, and pond were empty with no staining observed. The historical contents of these vessels are unknown.

Environmental Database Review
The Property was not listed in any Federal or State/Tribal databases.

Three sites were listed in the Mineral Resource Data System (MRDS) within 1 mile of the Property. The MRDS is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. These sites were found to have the following occurrence: limestone, clay, and gold. No active mines were found in relation to these sites. Based on the type of listing, the presence of these off-site properties in the environmental databases is considered unlikely to present an environmental concern to the Property.

8.0 Conclusions and Recommendations

The Property was previously an unpermitted placer mining operation. Placer mining operations have been known to use toxic substances that can impact the environment. Cyanide is a possible contaminant that may be released from these activities. Gold is first dissolved using cyanide in the extraction stage and the dissolved gold is then recovered from the cyanide solution by cementing with zinc or adsorption onto activated carbon. The cyanide extraction processes could be heap leach or vat/tank leach depending on the quality of the ores. In ores of higher gold content, the vat/tank leaching is employed, which

involves leaching of the crushed and ground ore in large, enclosed tanks equipped with agitators to dissolve the gold which then adheres to pieces of the activated carbon. The activated carbon and the gold are then stripped of the solution and the barren solution together with the leached ore are discarded. The heap leach is used for low-grade ore and involves extraction of crushed oxide gold ore piled onto plastic-lined pads with leaching solvents such as acids or cyanide to dissolve the gold which is collected at the bottom of the pad.

Heavy metals such as mercury may also be found in the wastes (tailings) of mining operations. To separate the gold from the mineral bearing rock, mercury is mixed with the ores dug from the ground or from stream beds to form an amalgam. The burning of the amalgam leads to vaporization of the mercury into a toxic plume leaving the gold behind. Mercury amalgamation was used for centuries to process gold and is still in use today by small-scale gold mining.

Based on the past use of the Property, and site observations, this assessment has revealed the following evidence of *recognized environmental conditions* (RECs) in connection with the Property:

- Potential that toxic chemicals (e.g. cyanide) used during ore processing operations may have been released to the environment and/or resulted in leaching of metals from process material to the environment;

- Uncapped mining reject/waste material and mine tailing observed throughout the Property. This material may contain metals and/or other pollutants that potentially could leach into the environment;

- A small plastic-lined pond/containment was observed on the Property. No liquid was present in the pond at the time of the inspection. The past use of the pond is not known and potential exists that pollutants in the liquid that was contained in the pond during previous mining activities may have been released to the environment;

Additionally, the following significant observations/concerns were identified:

- Several empty drums, some of which are labeled “hazardous waste, are present throughout the site along with various debris that is scattered throughout the site.

- Several pieces of out of use mining equipment (e.g. hoppers, rotary-screw trommels, screens, wash plant, aboveground storage tanks, etc.) and appurtenances were observed at the Property;

- Open mining trenches, pits and small horizontal shafts were observed. These must be closed in accordance with Nevada Division of Environmental Protection (NDEP) regulations.

- The Property has a current water pollution control permit (WPCP NEV2004101) approved for mining facilities. This permit must be maintained until permanent closure and post-closure monitoring are completed and the Nevada Division of Environmental Protection (NDEP) has formally terminated the WPCP. All closure-related activities must be reviewed and approved by the Closure Branch. Branch staff will evaluate plans, reports, studies, and monitoring data to confirm chemical stabilization of all pollutant sources included in the mining operation.

Converse recommends a Phase II ESA for the Property to address the identified RECs and evaluate the above significant observations/concerns.

No significant data gaps were identified that affect the ability of the Environmental Professional (EP) to identify RECs.

There are no unusual circumstances where greater certainty is required regarding RECs.

9.0 Deviations

No deviation(s) from the ASTM Standard Practice were encountered during this assessment.

10.0 Additional Non-Scope Services

There are environmental issues outside the scope of the ASTM E1527-13 that can be assessed in connection with a commercial real estate transaction. These are dealt with as non-scope considerations since they do not typically present a Superfund Liability. The specific level of inquiry (if any) is defined in the Proposal which contains a Scope of Work. These non-scope services are very client specific and not covered by the ASTM standard. They are frequently related to the business environmental risk which is defined in the standard as “risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate.

Non-scope items were not addressed in this report.

11.0 Signature of Environmental Professional

I declare that, to the best of my professional knowledge and belief, I meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR 312.

I have the specific qualifications based on education, training and experience to assess a *property* of the nature, history, and setting of the *subject property*. I have developed and performed the all appropriate inquiries in conformance with the standard and practices set forth in 40 CFR Part 312.

Philip Childers, CEM
Senior Environmental Manager
Nevada CEM 1952

This Phase I ESA was completed [by or under the supervision] of the above Environmental Professional. A complete list of preparers, and their responsibilities for this assessment, is provided in the following section (Section 13.0, List of Preparers).

Nevada Certified Environmental Manager Jurat

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all Federal, State, and local statutes, regulations, and ordinances.

12.0 List of Preparers

Philip S. Childers, CEM
Senior Environmental Manager

B.S., Environmental Studies (Cum Laude), University of Las Vegas.
Nevada Certified Environmental Manager
Nevada Licensed Asbestos Consultant
Nevada Certified Lead Based Paint Risk Assessor
California Licensed Asbestos Consultant
New York Asbestos Inspector, Project Designer and Project Monitor
Oklahoma Asbestos Inspector and Project Designer
Oklahoma Lead Based Paint Risk Assessor
Certified Safeland/Safegulf Instructor

Mr. Childers has been working in environmental consulting since 2003. He has conducted Phase I Environmental Site Assessments (ESA's), Phase II ESA's and supervised remediation and hazardous building material abatement projects on commercial and industrial properties in the States of Nevada, California, Illinois, Oklahoma and New York. In addition, he has completed Hazardous Building Materials Surveys (HBMS) for municipal clients and has conducted a large scale (4,000+ sample) asbestos survey for a NV energy sector client to facilitate client goals of strategic demolition and component removal. Philip has recently returned to Converse Consultants to lead the Reno office as Office Manager at this exciting time of growth in the Reno-Carson area.

Principal area of responsibility for this ESA report: Quality Assurance/Quality Control and Technical Review.

Connor Welsh
Environmental Project Manager/Environmental Scientist

B.S., Environmental Science, University of West Georgia, 2013
Nevada Licensed Asbestos Consultant

Mr. Welsh is currently responsible for the project management operations of the Reno, Nevada office. Mr. Welsh has over 6 years of experience with Phase I and II ESAs, asbestos surveys, lead-based paint surveys, abatement monitoring, as well as hazardous material audits, soil and groundwater remediation, regulator consulting, and business development. Current duties at Converse include project management, business development and client maintenance, conducting/managing ESAs.

Principal area of responsibility for this ESA report: Project Management, Report Generation, and Historical Research.

13.0 References

ASTM International, 2013, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E-1527-13

ERIS Radius Map Report, May 2021

ERIS Sanborn Map Report, May 2021

ERIS Historical Topo Map Report, May 2021

ERIS Historical Aerial Photos, May 2021

ERIS City Directory Report, May 2021

Pershing County Building Development, Request for Records, July 2021

Websites

- Google Earth, www.google.com/earth/
- Pershing County Assessment Records,

  http://www.pershingcounty.net/government/assessor/property_records_info.php

- Nevada Hydrology Data, http://webgis.water.nv.gov/Html5Viewer/

  United States Department of Transportation, Pipeline and Hazardous Material Safety *Administration (PHMSA), Pipeline Location Website (https://www.npms.phmsa.dot.gov/default.htm)*
- Heavy Metal Pollution from Gold Mines: Environmental Effects and Bacterial Strategies for Resistance, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5129257/

- Gold Mining and the Environment, https://www.brilliantearth.com/gold-mining-environment/#:~:text=Dirty%20gold%20mining%20has%20ravaged,due%20to%20dirty%20gold%20mining.

All additional referenced sources are appended to this report.

Appendix A

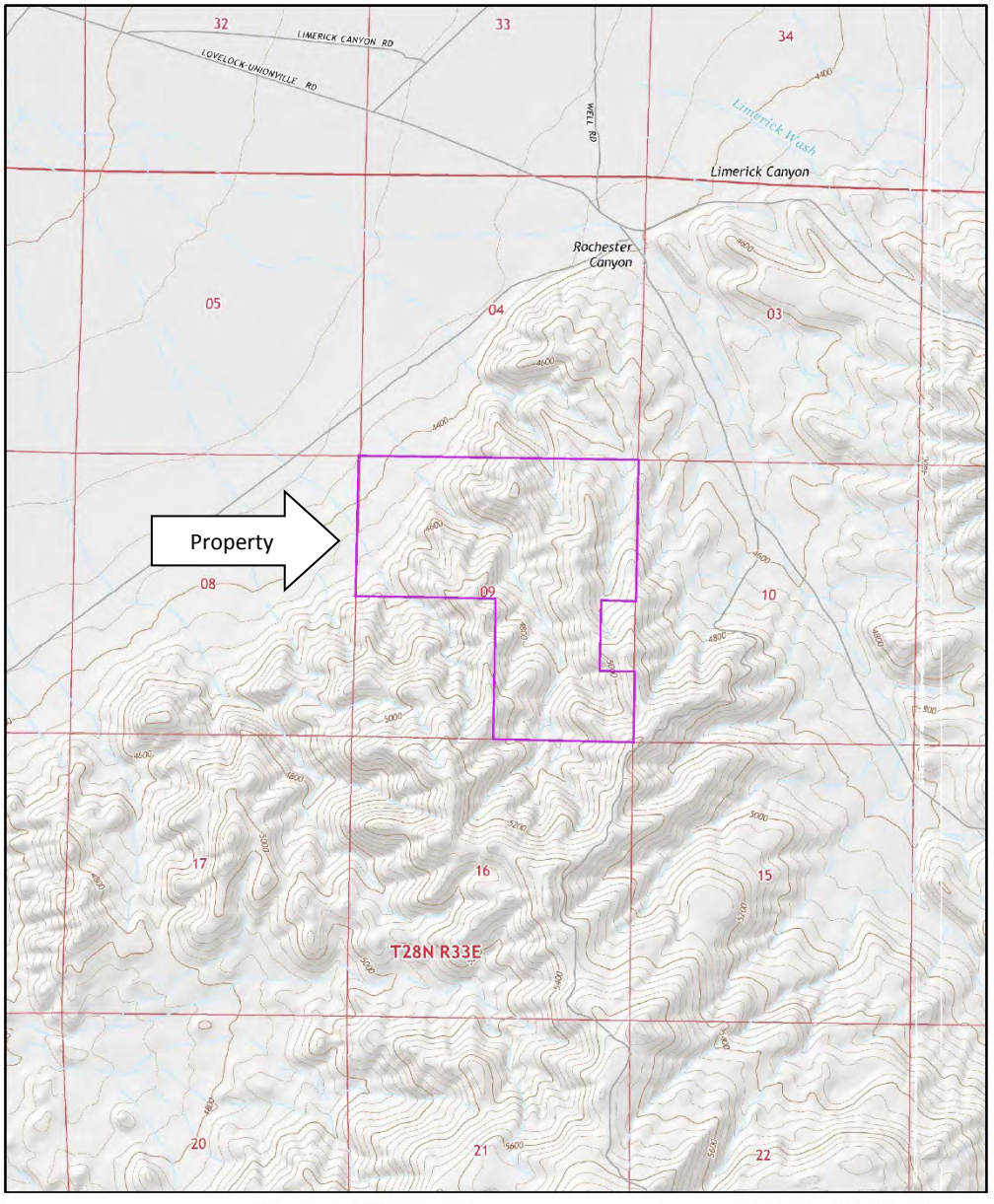


FIGURE 1
Site Location Map
SOURCE: Eris Report
Lovelock, NV
SCALE: as shown

Converse Consultants
Geotechnical Engineering
Environmental & Groundwater Science
Inspection & Testing Services

VACANT LAND
21,413-Acres Parcel
Lovelock, Pershing County, Nevada
Converse Project Number 19-23216-01

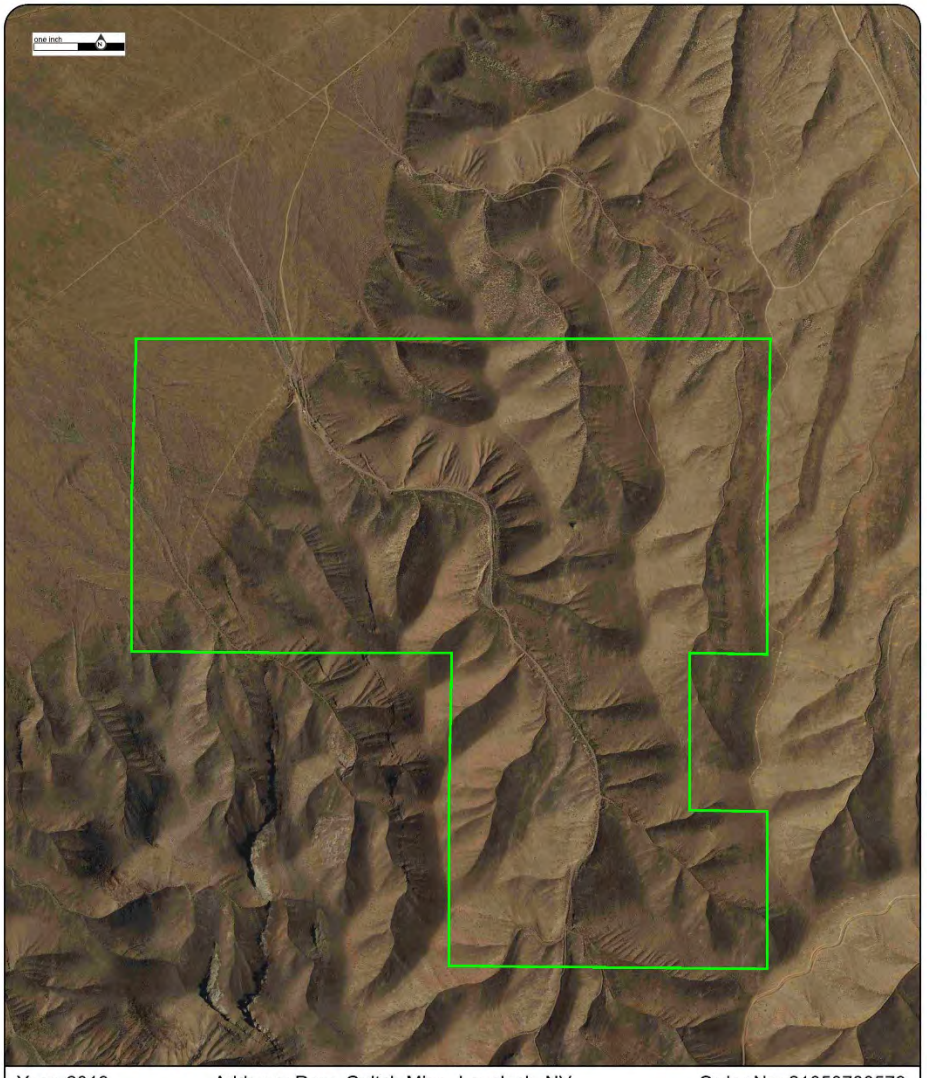


FIGURE 2
Site Location Map
SOURCE: Eris Report
Lovelock, NV
SCALE: As Shown

Converse Consultants
Geotechnical Engineering
Environmental & Groundwater Science
Inspection & Testing Services

VACANT LAND
21,413-Acres Parcel
Lovelock, Pershing County, Nevada
Converse Project Number 19-23216-01

Pertinent Property Photographs

Appendix B

Photograph 1: General conditions of the Property around old mining site.

Photograph 2: General Conditions of Property.

Photograph 3: Northern portion of the Property, facing south.

Photograph 4: View of ASTs found on the Property.

Photograph 5: View of trailer found on the Property.

Photograph 6: View of mobile home and box container found on the Property.

Photograph 7: View of mine tailings and pipes found on the Property.

Photograph 8: A closer view of mobile home.

Photograph 9: A closer view of box container.

Photograph 10: View of water tank found on the Property.

Photograph 11: View of abandoned mining equipment. Note lined pond.

Photograph 12: View of Hazmat labeled drum found on the Property.

Photograph 13: View inside of Hazmat labeled drum.

Photograph 14: View of abandoned mining equipment found on the Property.

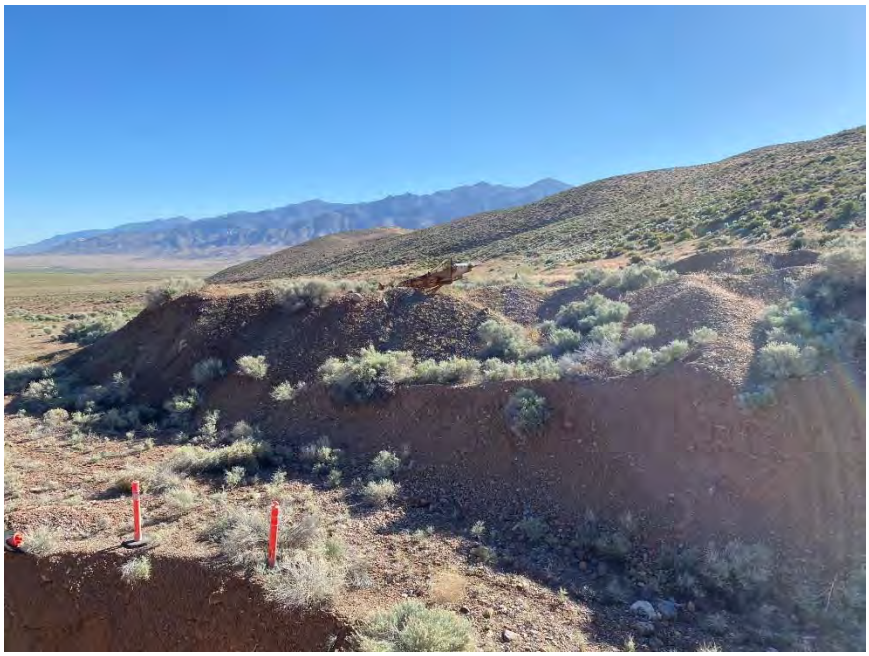
Photograph 15: View of trash and debris found on the Property. Note metal 55-gallon drums.

Photograph 16: A closer view of drums found on the Property.

Photograph 17: View open mining trenching.

Photograph 18: View of open mining pit.

Photograph 19: View of waste/reject material.



Photograph 20: View of waste/reject material.

Photograph 21: View of waste/reject material.

Photograph 22: Abandoned mine shaft.

Photograph 23: Abandoned mine shaft.

Photograph 24: Wash plant.

Photograph 25: Hopper and rotary screw.

Photograph 26: View of miscellaneous debris.

Appendix C

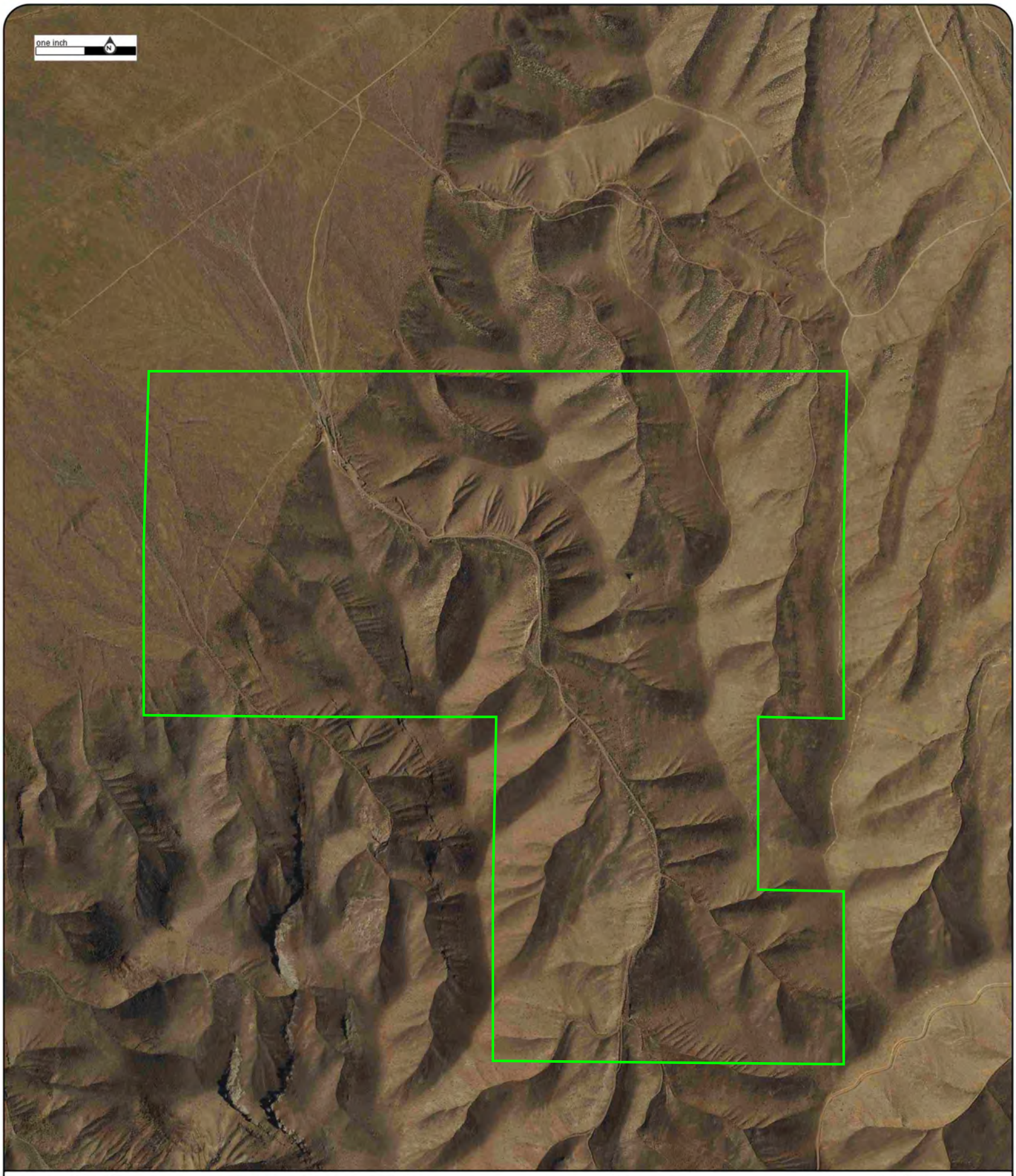
ERIS

HISTORICAL AERIALS

Project Property:	Rose Gultch Mine Rose Gultch Mine Lovelock NV
Requested By:	Converse Consultants
Order No:	21050700579
Data Completed:	May 14,2021

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

Date	Source	Scale	Comments
2019	National Agriculture Information Program	1" to 900'	
2017	National Agriculture Information Program	1" to 900'	
2015	National Agriculture Information Program	1" to 900'	
2013	National Agriculture Information Program	1" to 900'	
1994	US Geological Survey	1" to 900'	
1980	National High Altitude Photography	1" to 900'	
1975	US Geological Survey	1" to 900'	
1954	US Geological Survey	1" to 900'	
1941	Agriculture and Soil Conservation Service	1" to 900'	Best Copy Available

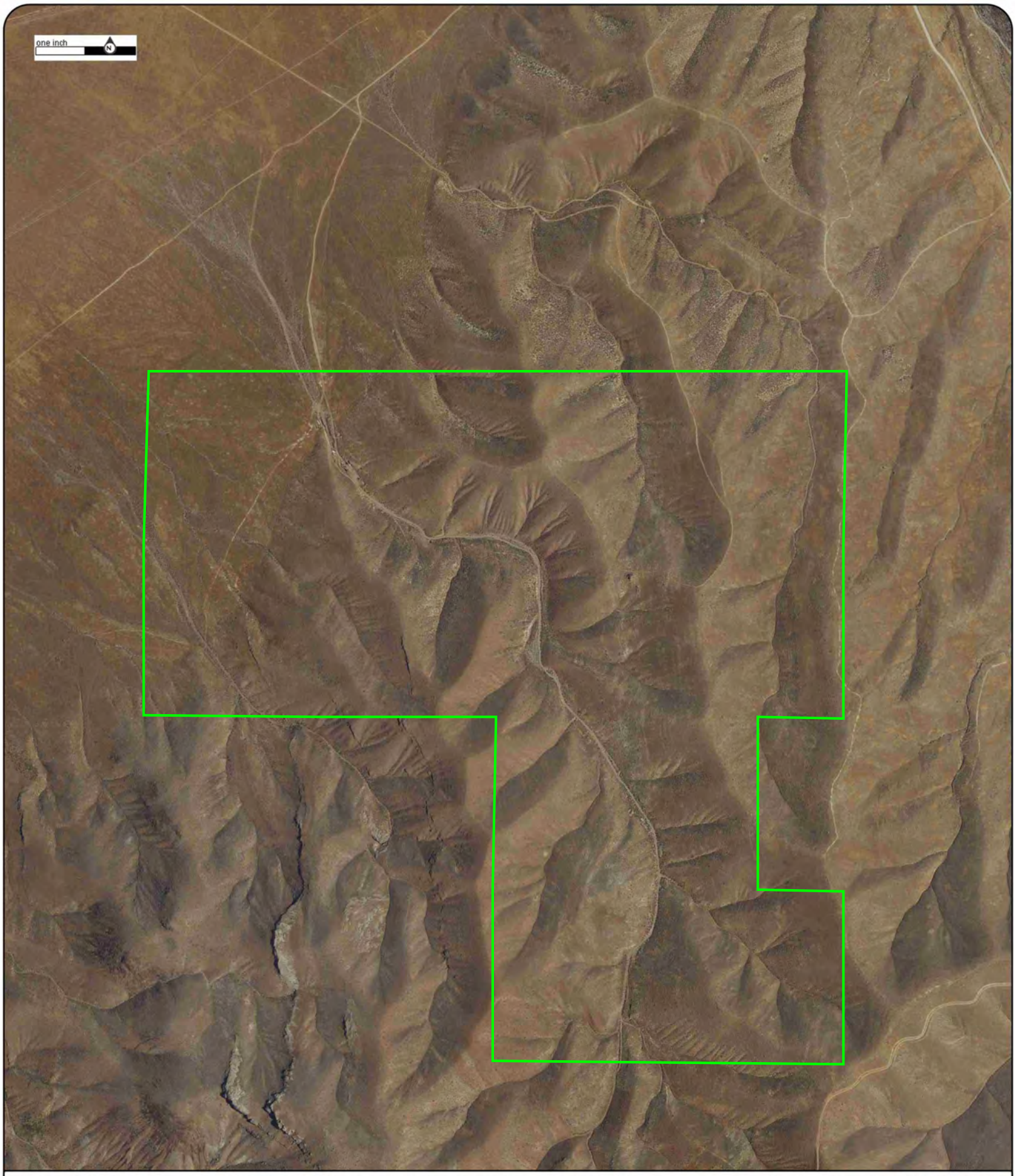


Year: 2019
Source: NAIP
Scale: 1" to 900'
Comment:

Address: Rose Gultch Mine, Lovelock, NV
Approx Center: 40.30602/-118.2778

Order No: 21050700579

ERIS

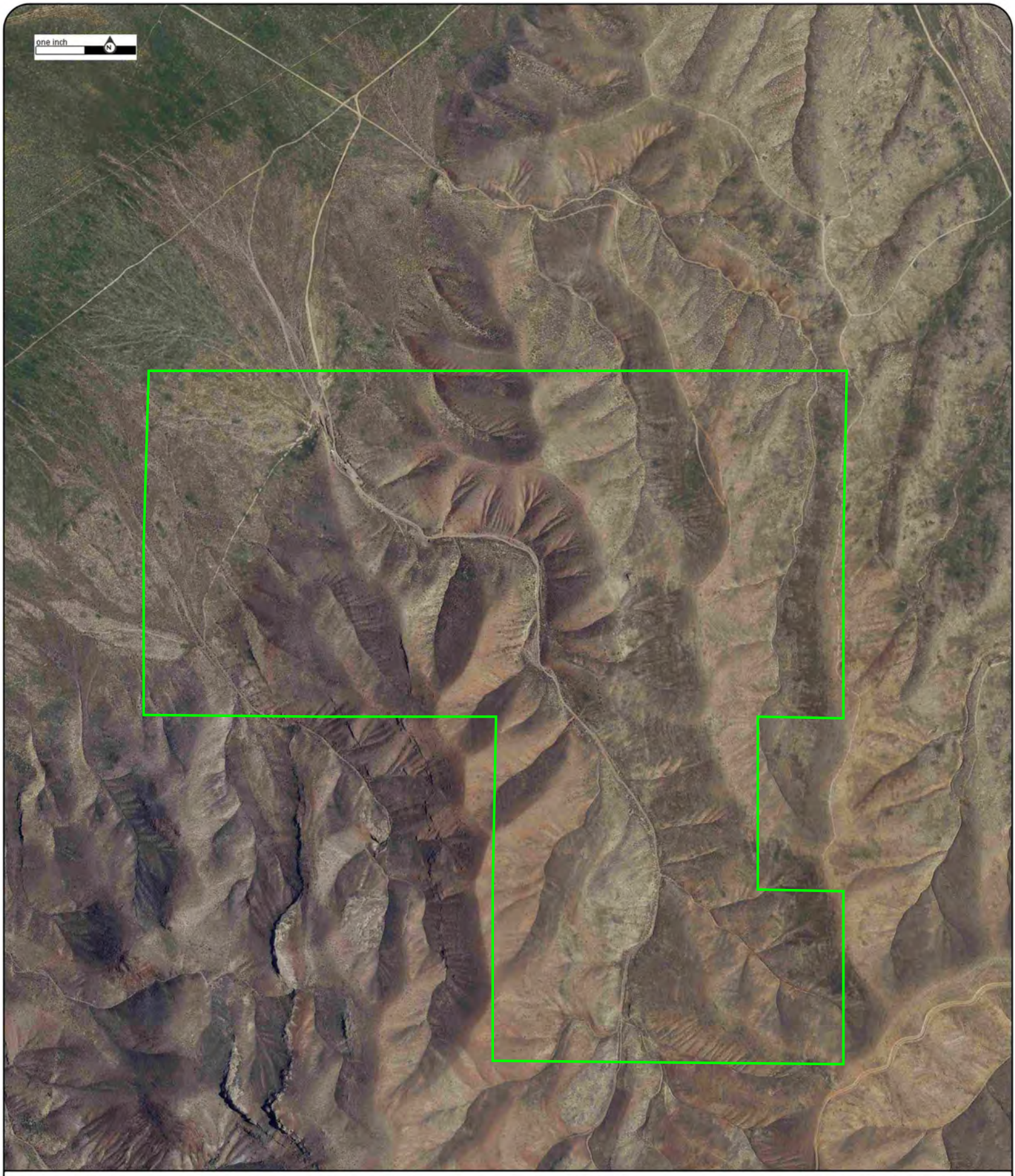


Year: 2017
Source: NAIP
Scale: 1" to 900'
Comment:

Address: Rose Gultch Mine, Lovelock, NV
Approx Center: 40.30602/-118.2778

Order No: 21050700579

ERIS



Year: 2015
Source: NAIP
Scale: 1" to 900'
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Approx Center: 40.30602/-118.2778

Order No: 21050700579

ERIS

Year: 2013
Source: NAIP
Scale: 1" to 900'
Comment:

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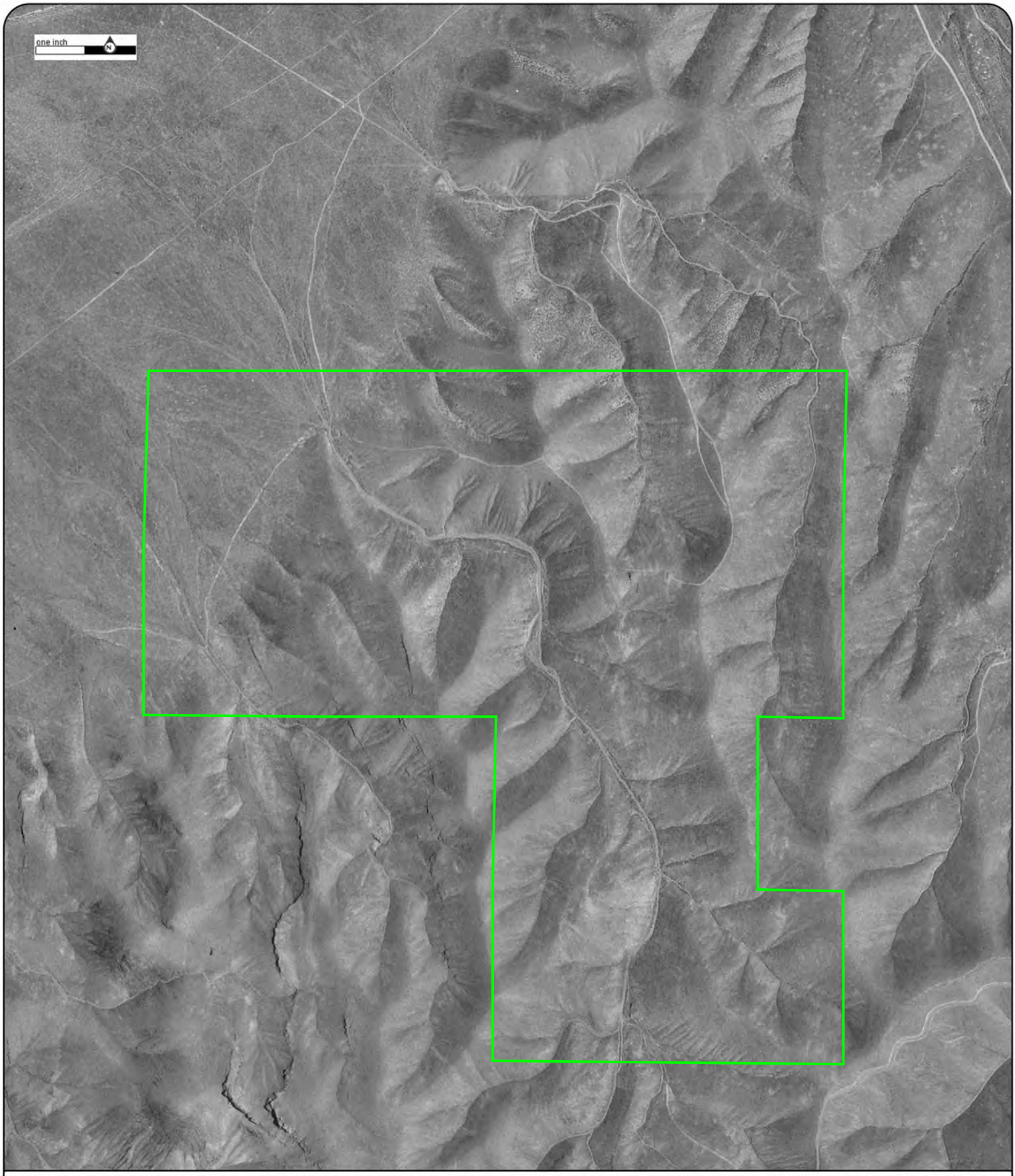
Approx Center: 40.30602/-118.2778

Order No: 21050700579

ERIS

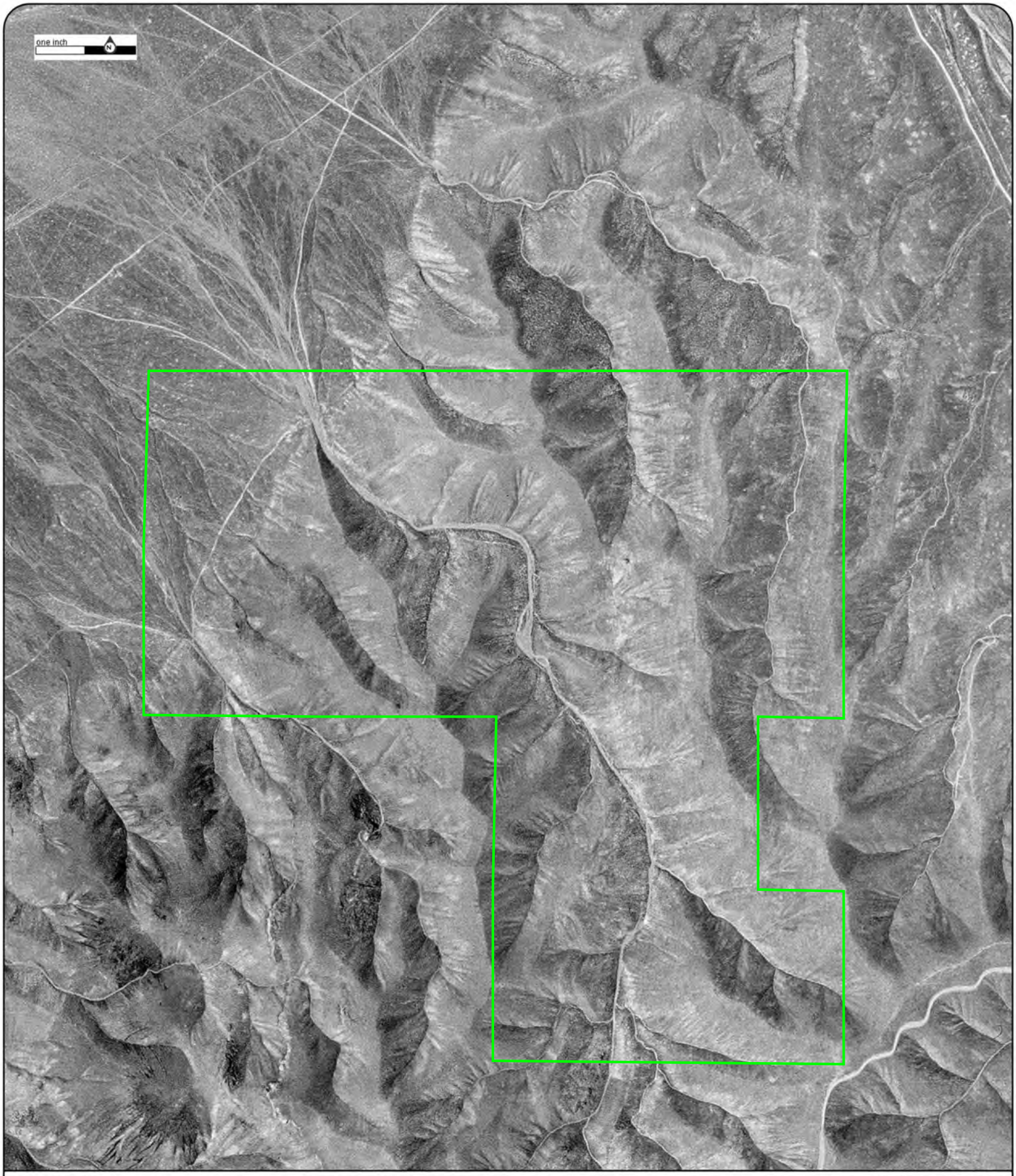


Year: 1994
Source: USGS
Scale: 1" to 900'
Comment:

Address: Rose Gultch Mine, Lovelock, NV
Approx Center: 40.30602/-118.2778

Order No: 21050700579

ERIS



Year: 1980
Source: NHAP
Scale: 1" to 900'
Comment:

Address: Rose Gultch Mine, Lovelock, NV
Approx Center: 40.30602/-118.2778

Order No: 21050700579

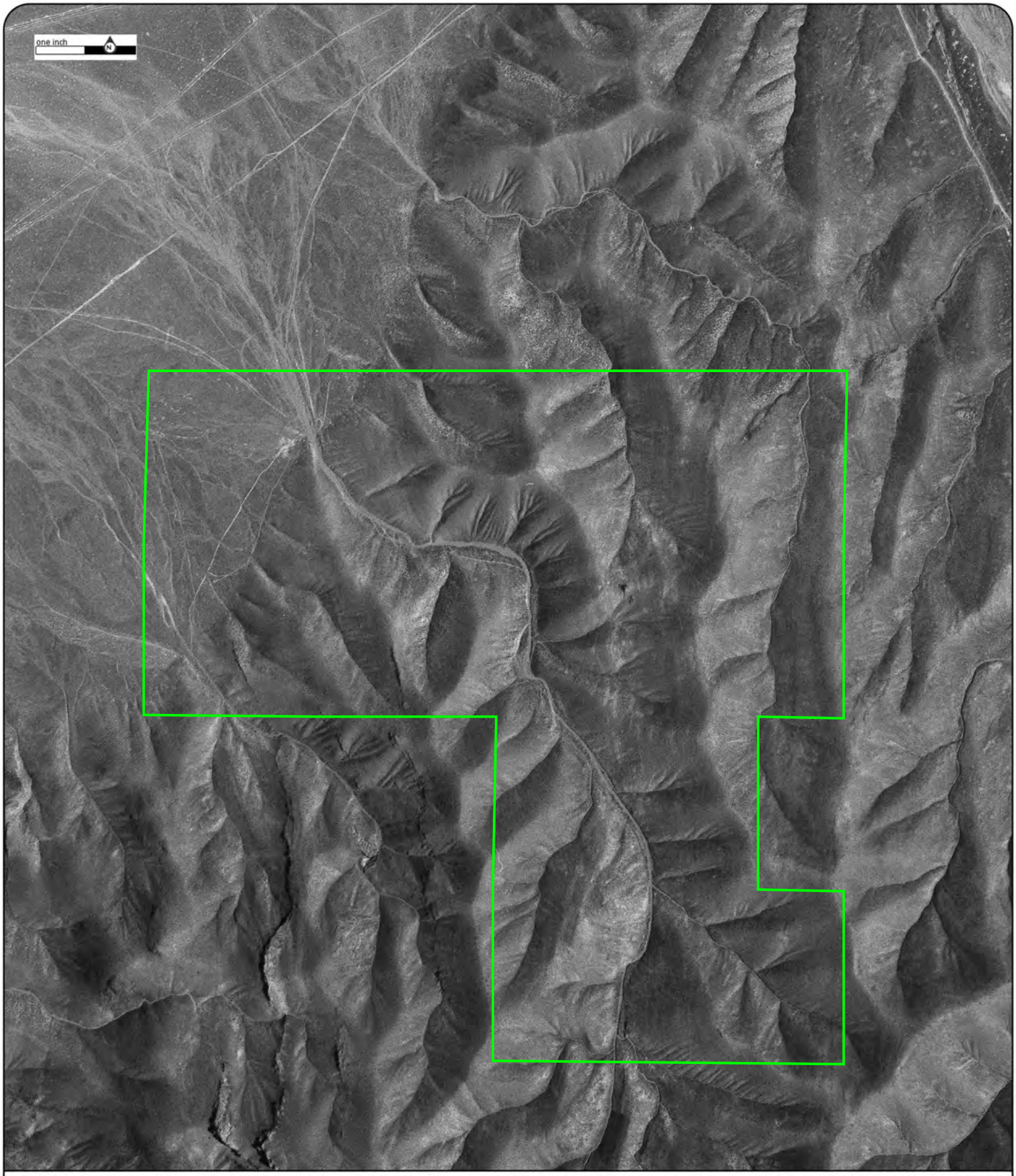
ERIS

Year: 1975
Source: USGS
Scale: 1" to 900'
Comment:

Address: Rose Gultch Mine, Lovelock, NV
Approx Center: 40.30602/-118.2778

Order No: 21050700579

ERIS

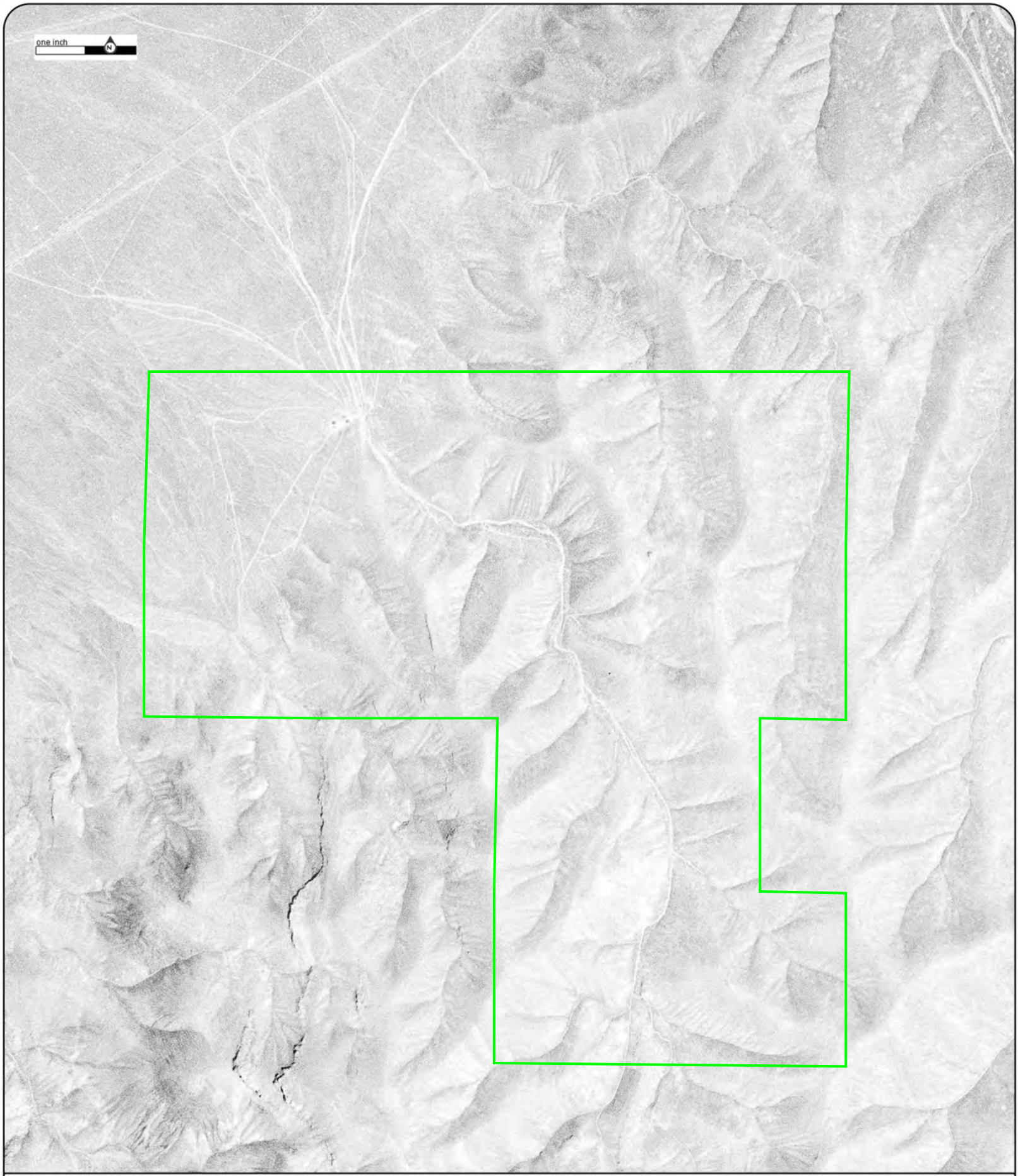


Year: 1954
Source: USGS
Scale: 1" to 900'
Comment:

Address: Rose Gultch Mine, Lovelock, NV
Approx Center: 40.30602/-118.2778

Order No: 21050700579

ERIS



Year: 1941
Source: ASCS
Scale: 1" to 900'
Comment: Best Copy Available

Address: Rose Gultch Mine, Lovelock, NV
Approx Center: 40.30602/-118.2778

Order No: 21050700579

ERIS

TOPOGRAPHIC MAPS

Project Property:	Rose Gultch Mine Rose Gultch Mine Lovelock NV
Project No:	19-23216-01-00004
Requested By:	Converse Consultants
Order No:	21050700579
Date Completed:	May 09, 2021

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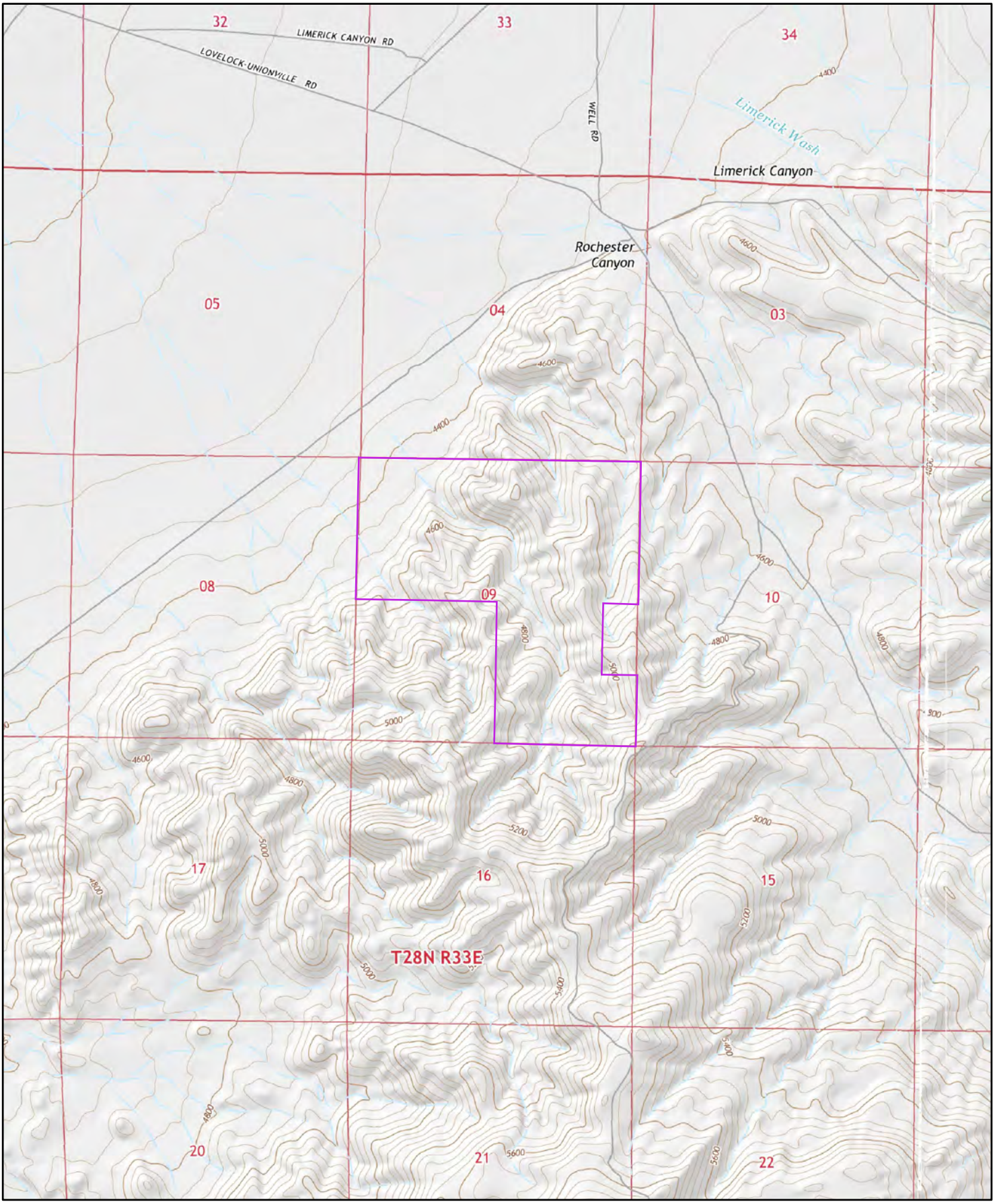
We have searched USGS collections of current topographic maps and historical topographic maps for the project property. Below is a list of maps found for the project property and adjacent area. Maps are from 7.5 and 15 minute topographic map series, if available.

Year	Map Series
2014	7.5
1987	7.5
1956	15



2014

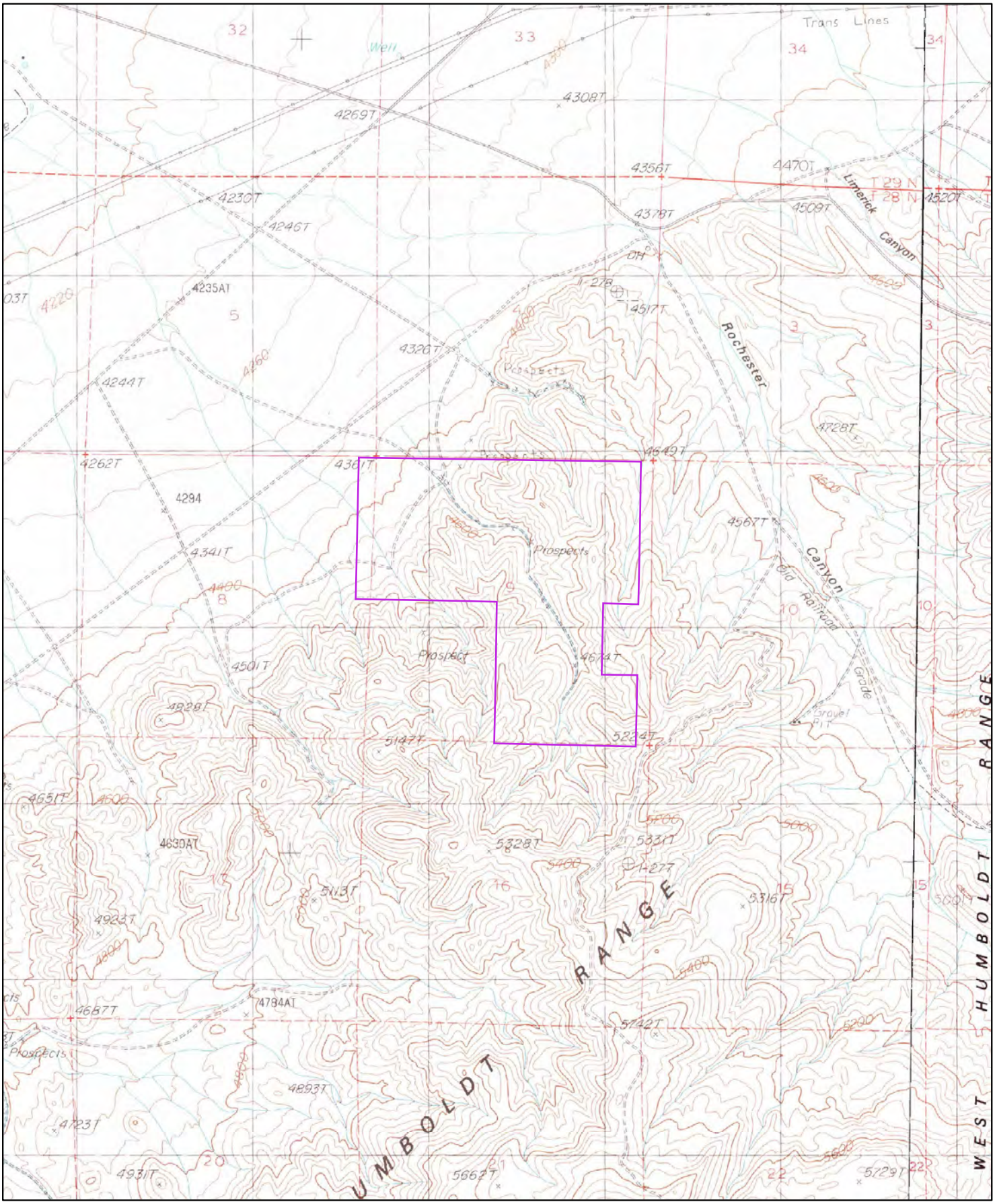
0 0.2 0.4 0.8 Miles

Order No. 21050700579

Quadrangle(s): Oreana,NV

Source: USGS 7.5 Minute Topographic Map

ERIS



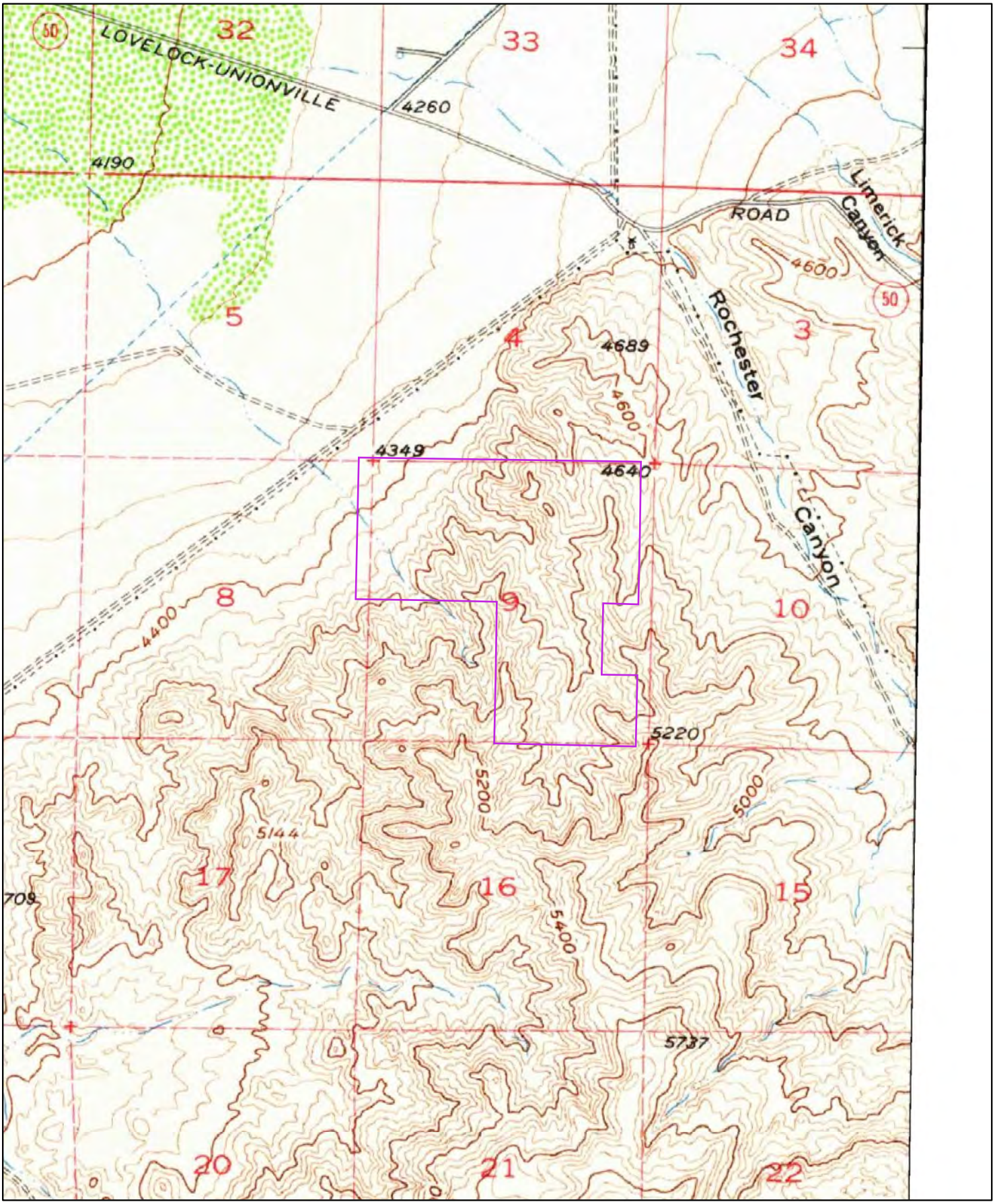
1987

0 0.2 0.4 0.8 Miles

Order No. 21050700579

Quadrangle(s): Oreana,NV

Source: USGS 7.5 Minute Topographic Map



1956

0 0.2 0.4 0.8 Miles

Order No. 21050700579

Quadrangle(s): Oreana,NV

Source: USGS 15 Minute Topographic Map

FIRE INSURANCE MAPS

Project Property:	Rose Gultch Mine Rose Gultch Mine Lovelock NV
Project No:	19-23216-01-00004
Requested By:	Converse Consultants
Order No:	21050700579
Date Completed:	May 09, 2021

Please note that no information was found for your site or adjacent properties.

Environmental Risk Information Services
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PSR
PHYSICAL SETTING REPORT

Property Information

Order Number:		21050700579p
Date Completed:		May 8, 2021
Project Number:		19-23216-01-00004
Project Property:		Rose Gultch Mine Rose Gultch Mine Lovelock NV
Coordinates:		
	Latitude:	40.30602937
	Longitude:	-118.27682396
	UTM Northing:	4462506.50896 Meters
	UTM Easting:	391497.309861 Meters
	UTM Zone:	UTM Zone 11T
	Elevation:	4,655.34 ft
	Slope Direction:	NW

Topographic Information....2
Hydrologic Information....12
Geologic Information....22
Soil Information....28
Wells and Additional Sources....37
Summary....42
Detail Report....43
Radon Information....46
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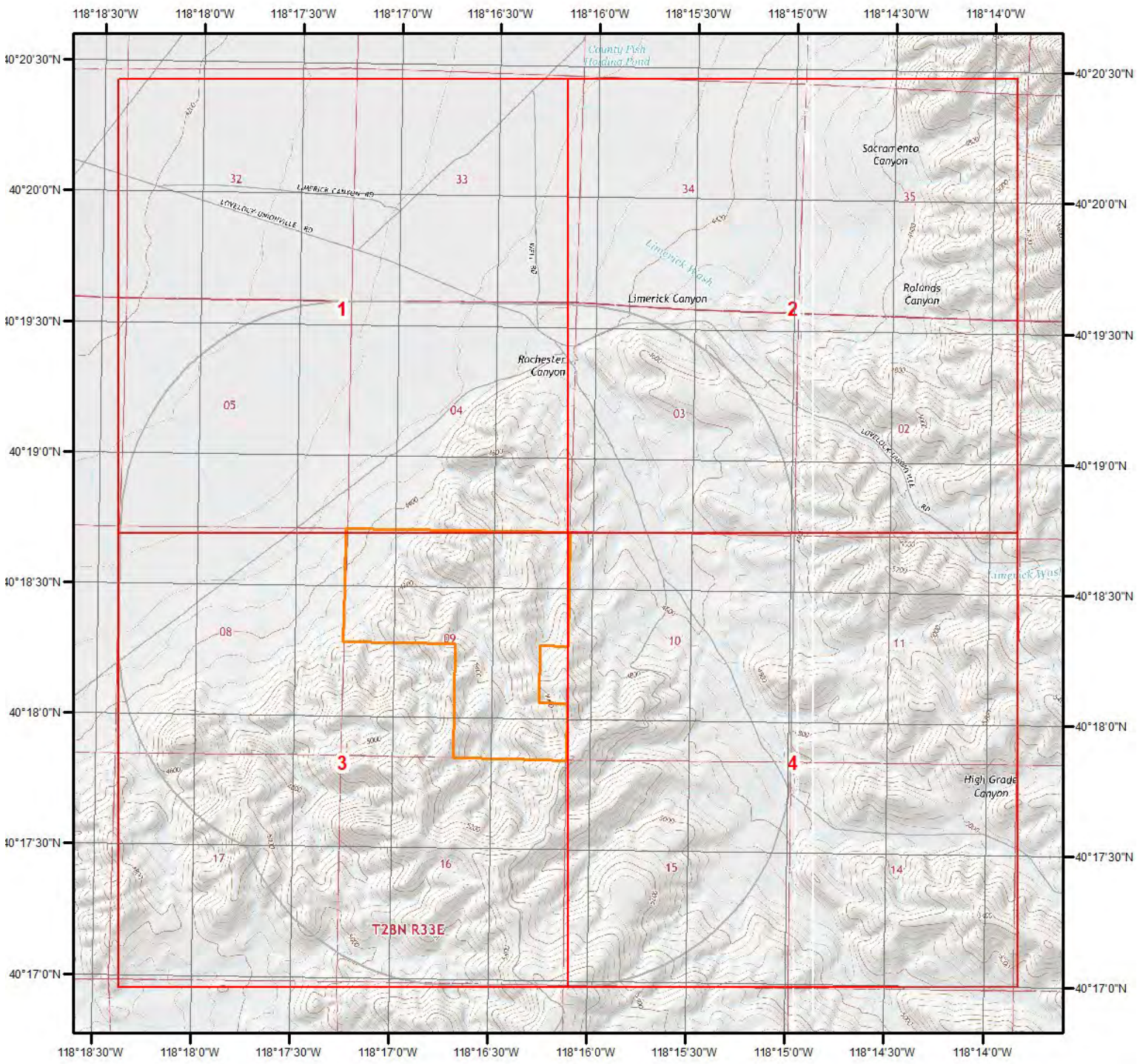
The ERIS ***Physical Setting Report - PSR*** provides comprehensive information about the physical setting around a site and includes a complete overview of topography and surface topology, in addition to hydrologic, geologic and soil characteristics. The location and detailed attributes of oil and gas wells, water wells, public water systems and radon are also included for review.

The compilation of both physical characteristics of a site and additional attribute data is useful in assessing the impact of migration of contaminants and subsequent impact on soils and groundwater.

Disclaimer

This Report does not provide a full environmental evaluation for the site or adjacent properties. Please see the terms and disclaimer at the end of the Report for greater detail.

Topographic Information



Current USGS Topo (2014)

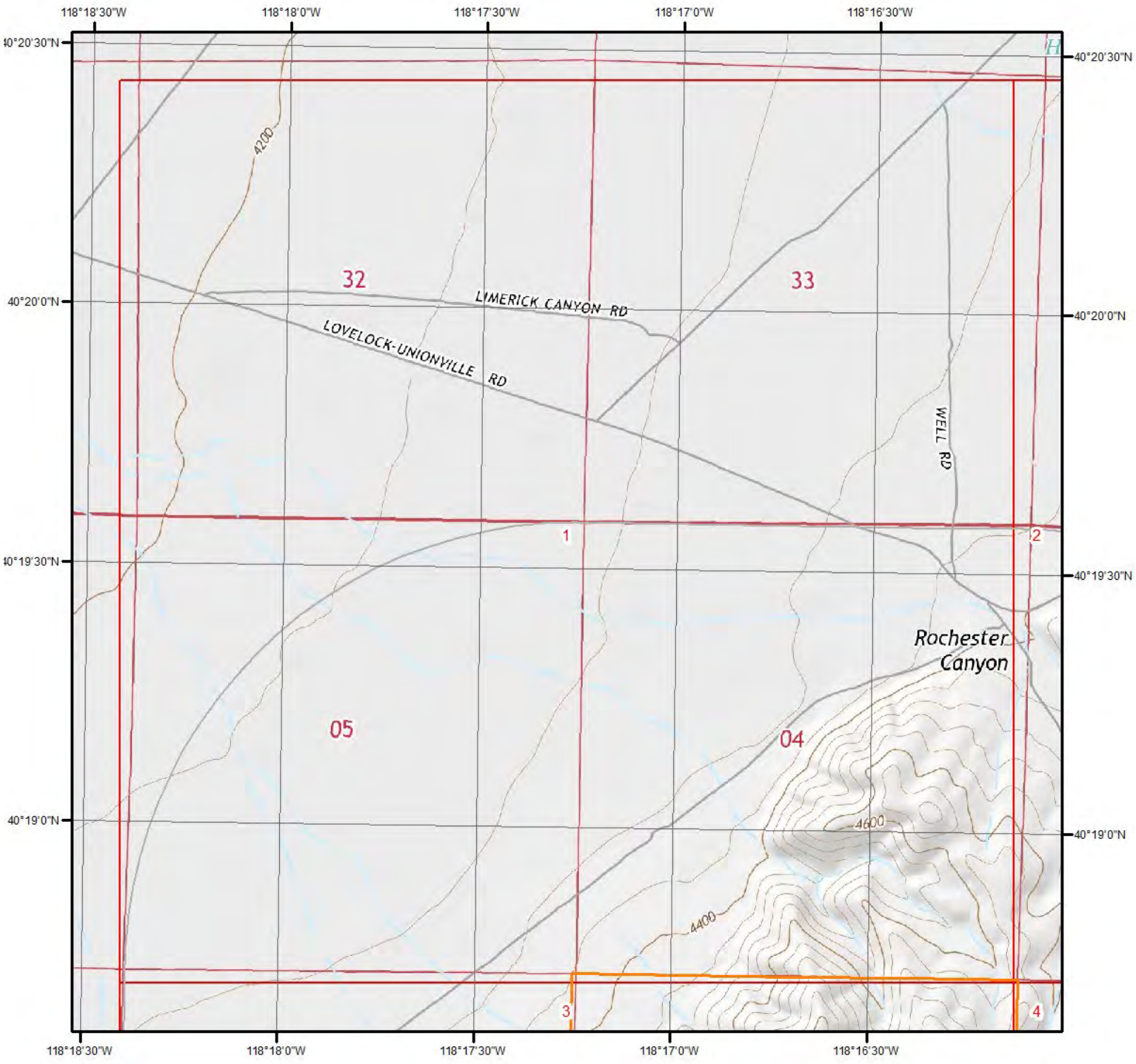
0 0.2 0.4 0.8 1.2 1.6 Miles

N

Quadrangle(s): Arabia,NV; Buffalo Mountain,NV; Coal Canyon,NV; Congress Canyon,NV; Lovelock,NV; Oreana,NV; Oreana NW,NV; Rochester,NV

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 1

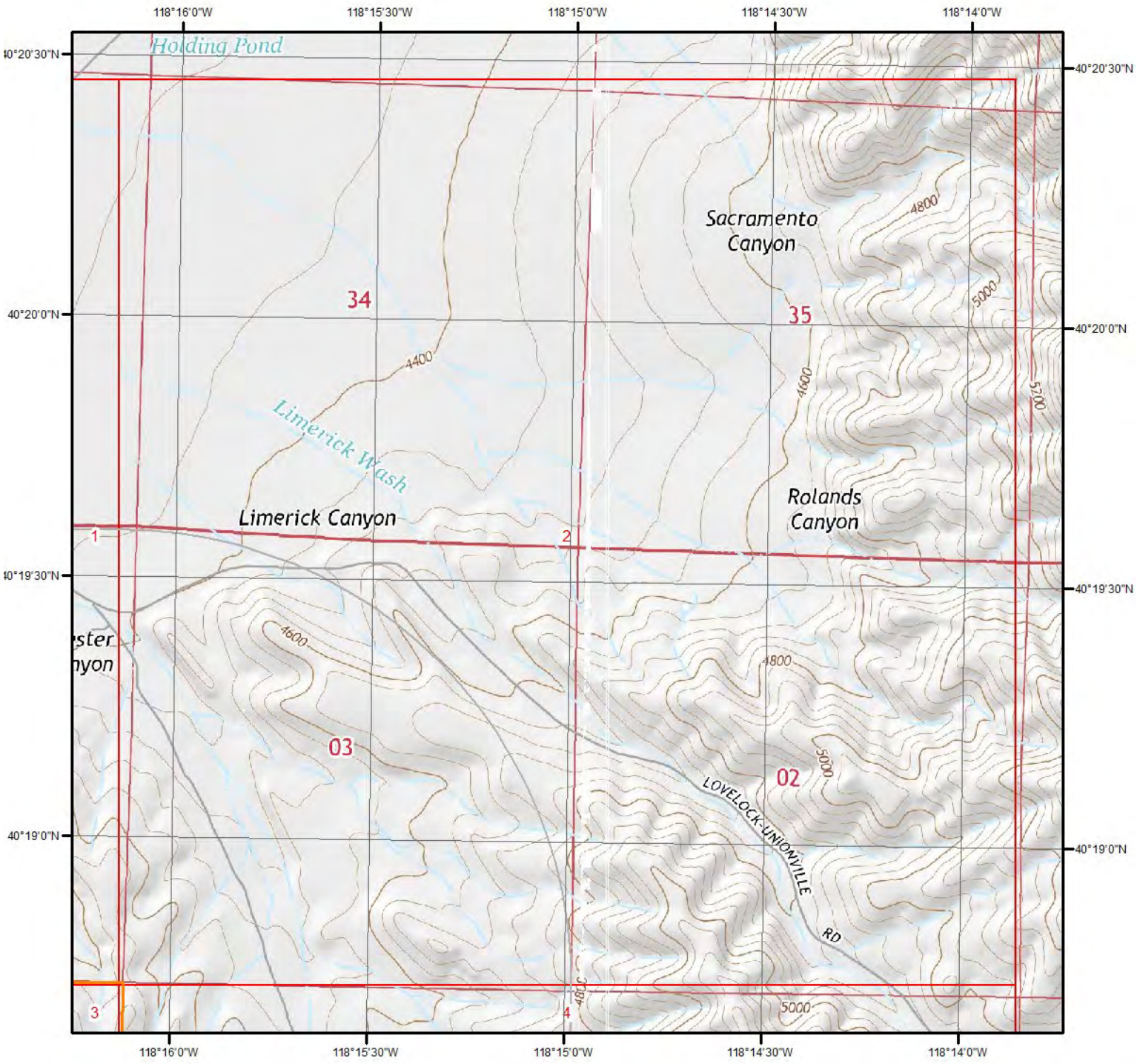
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Oreana,NV

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 2

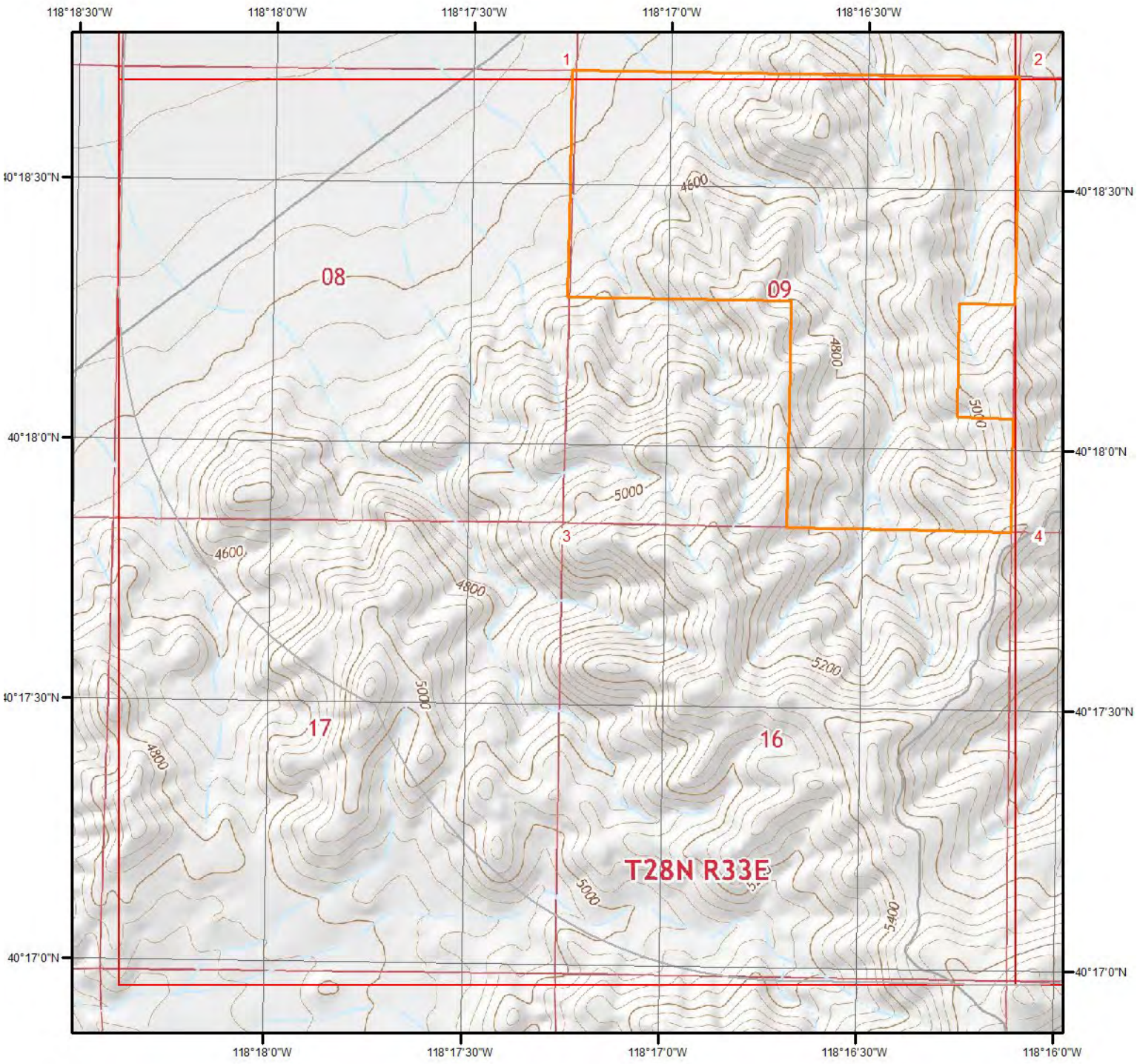
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Oreana,NV; Rochester,NV

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 3

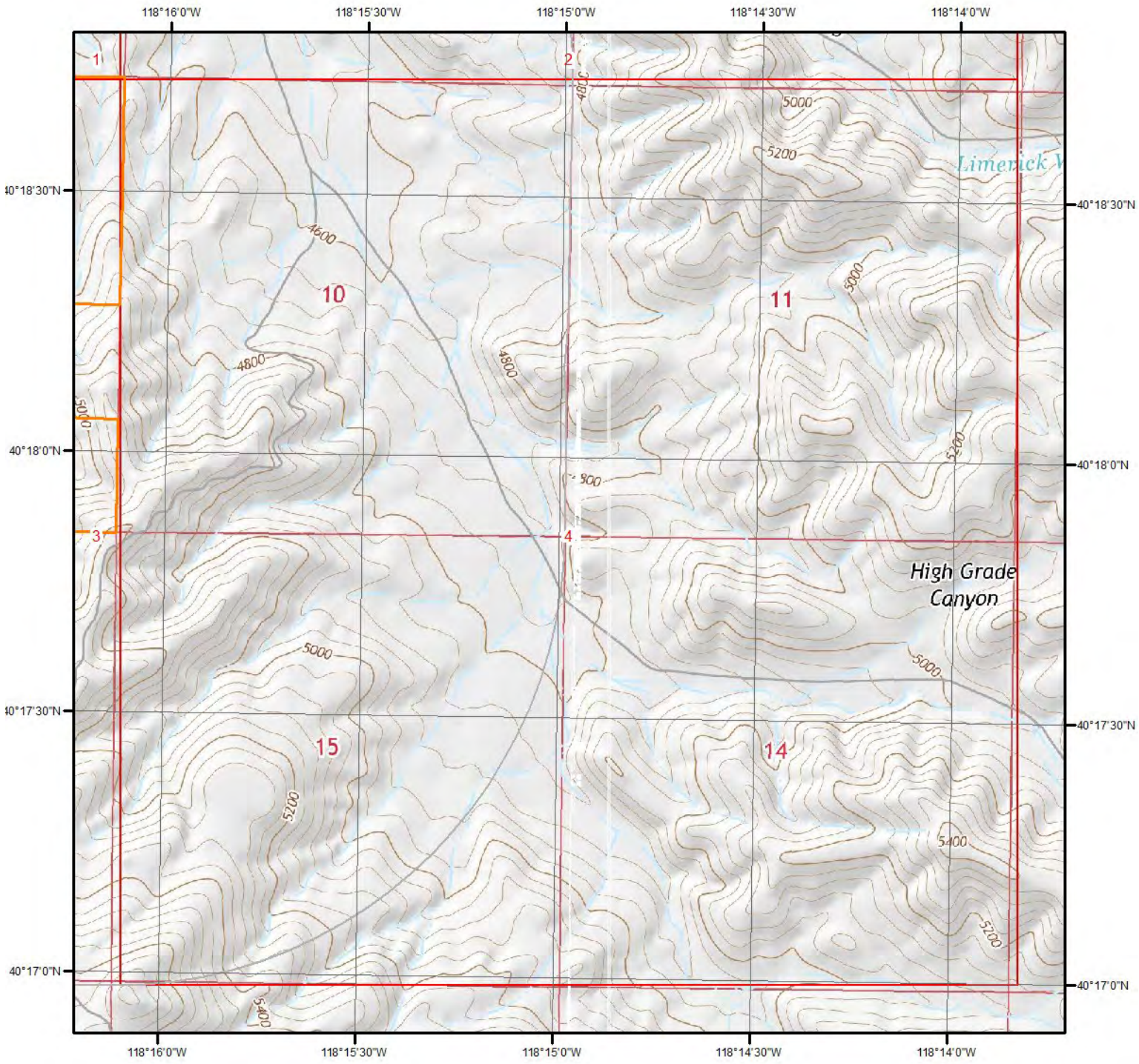
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Oreana,NV

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 4

0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Oreana,NV; Rochester,NV

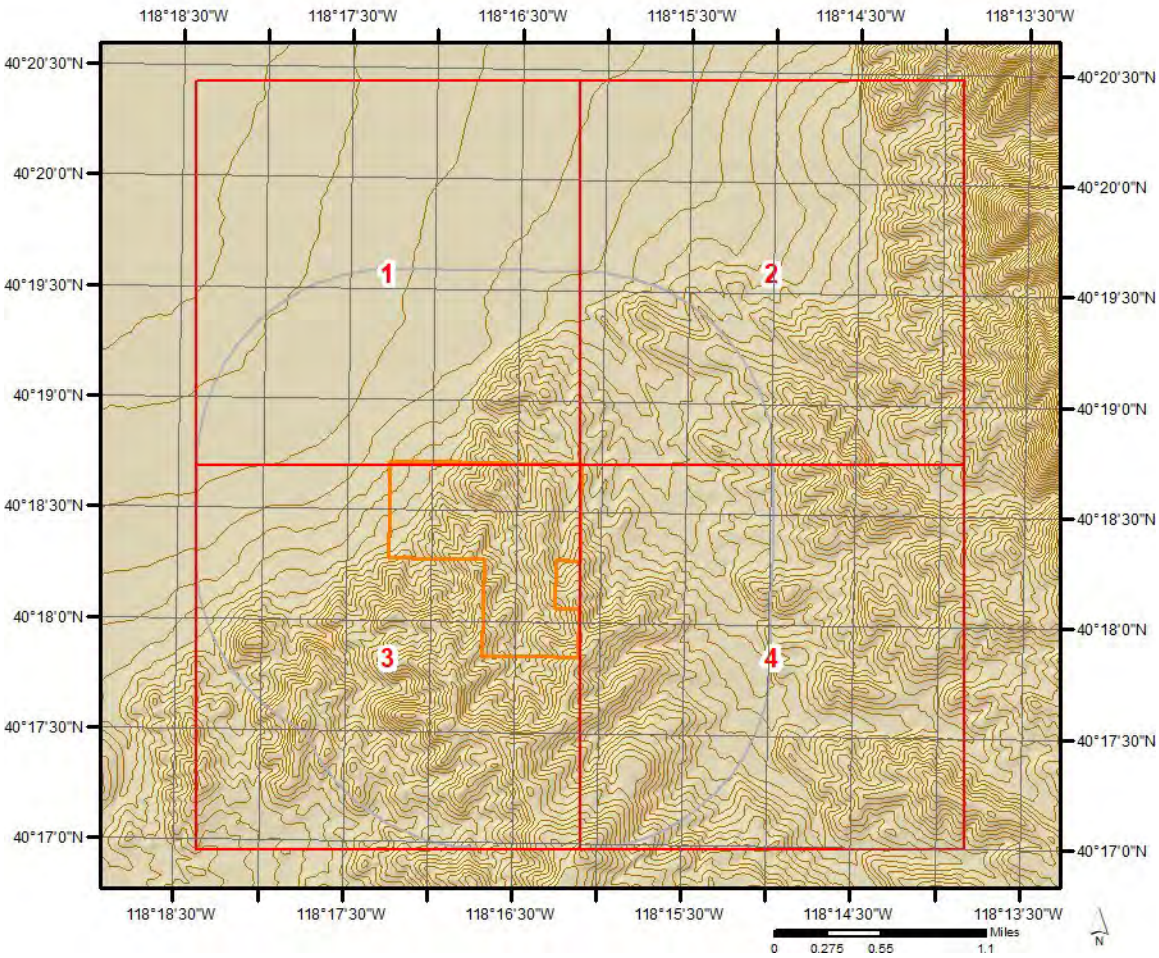
Source: USGS 7.5 Minute Topographic Map

Topographic Information

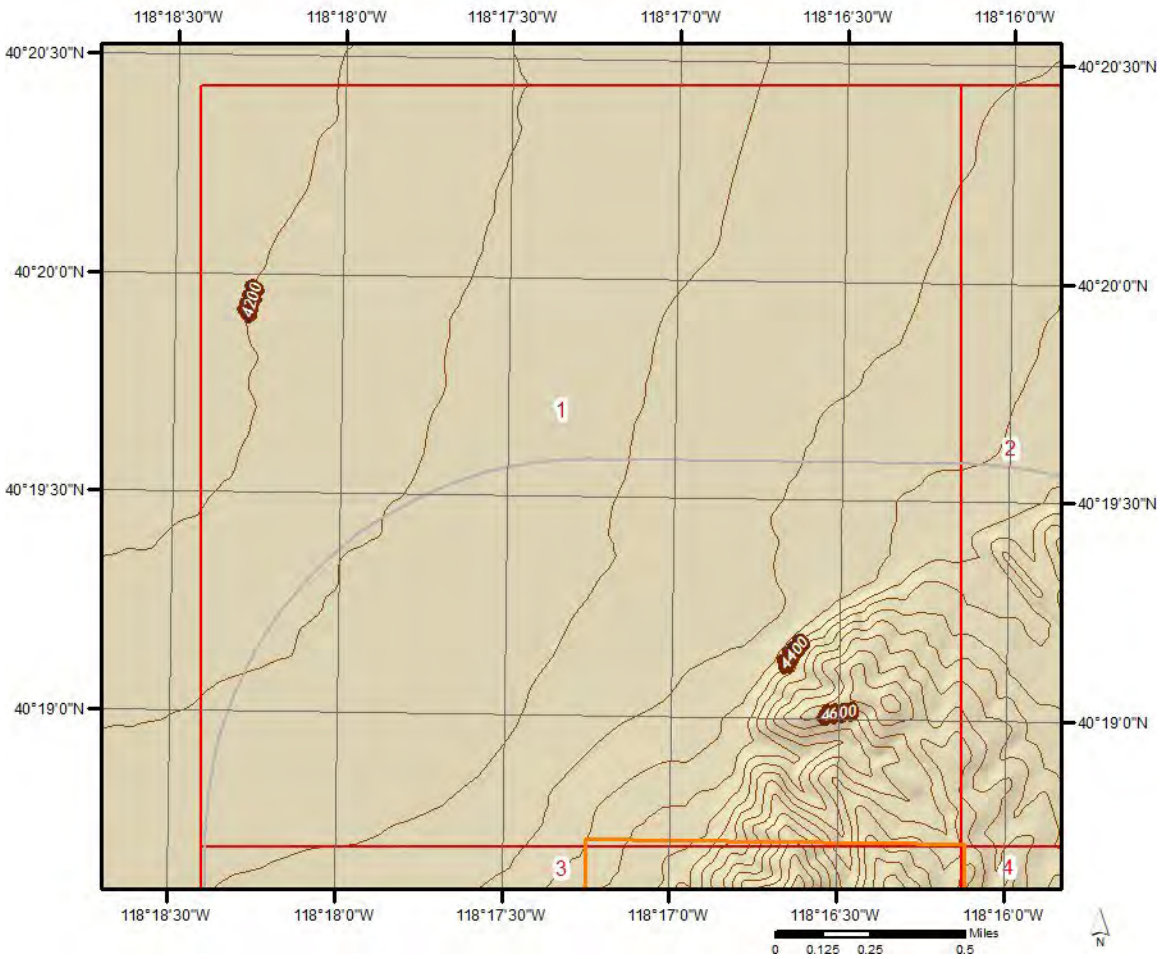
The previous topographic map(s) are created by seamlessly merging and cutting current USGS topographic data. Below are shaded relief map(s), derived from USGS elevation data to show surrounding topography in further detail.

Topographic information at project property:

Elevation:	4,655.34 ft
Slope Direction:	NW



Topographic Information



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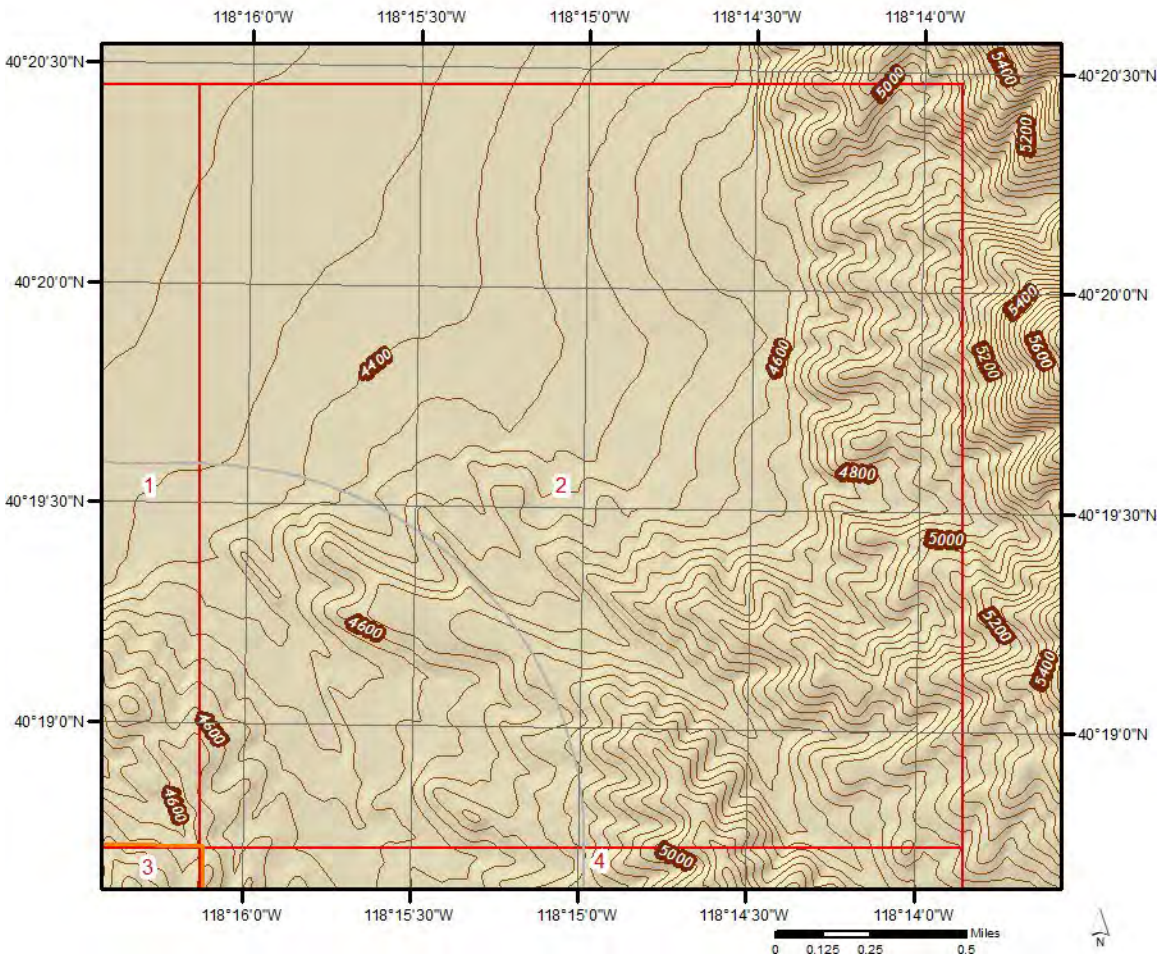
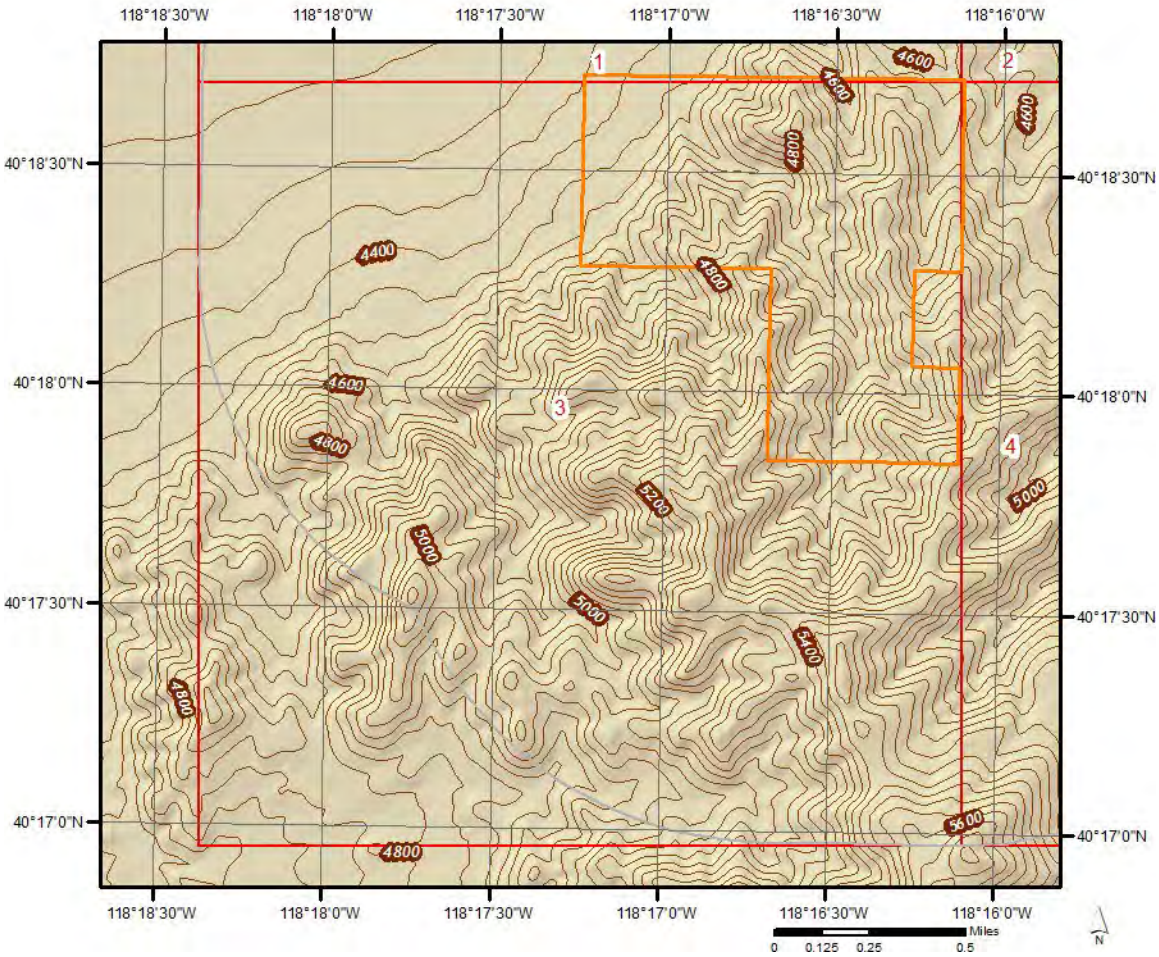
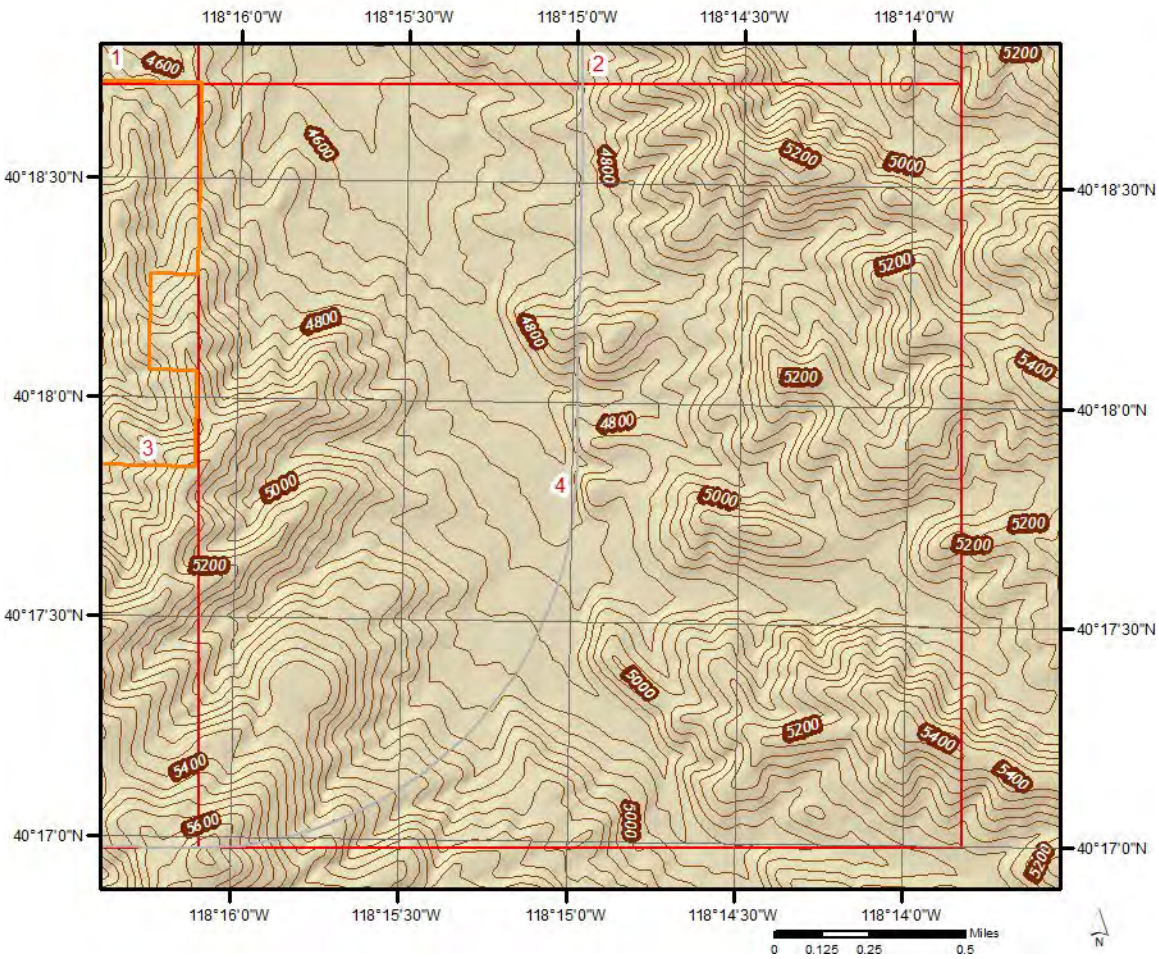


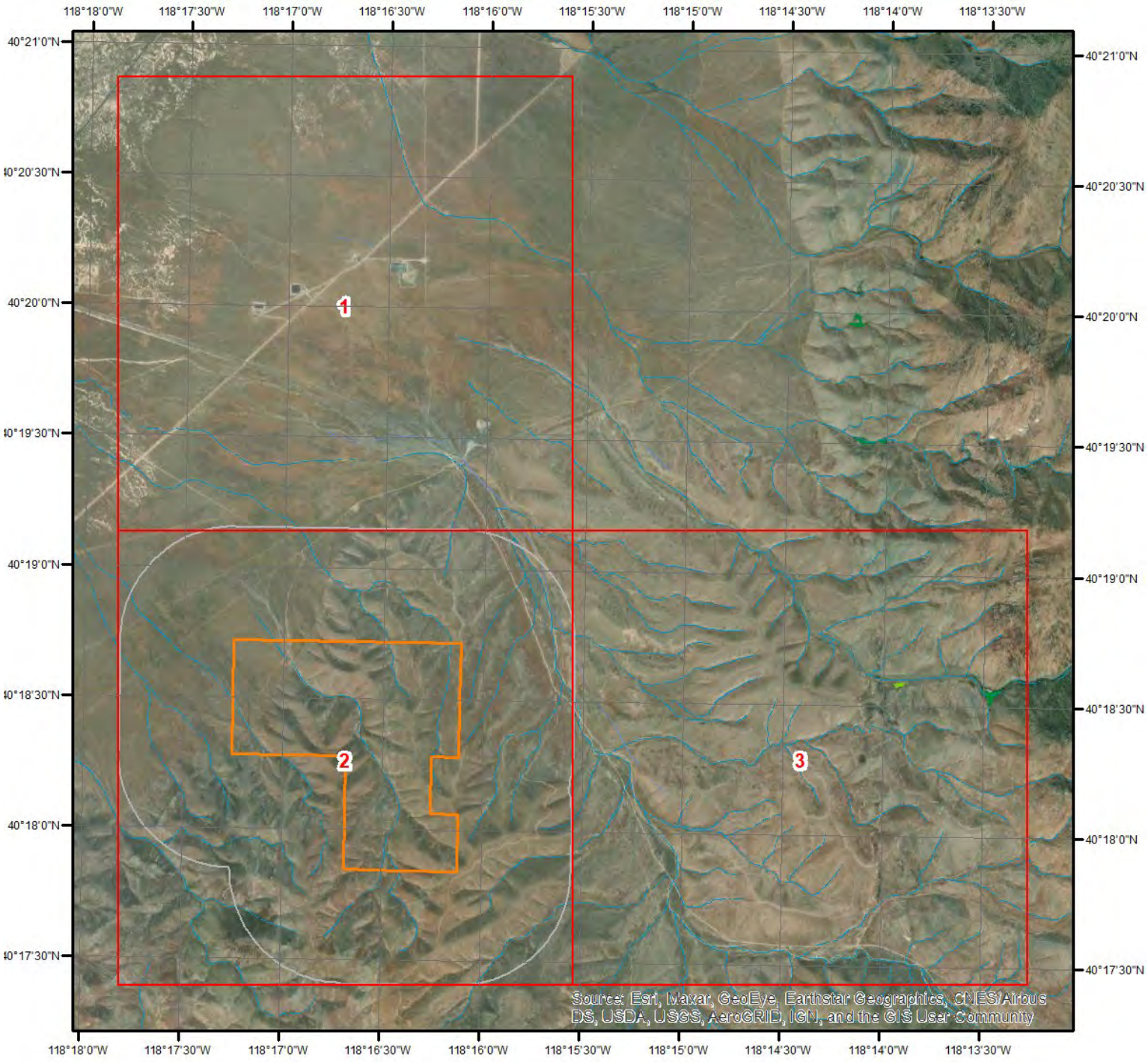
Topographic Information



Topographic Information



Hydrologic Information



Wetland

0 0.275 0.55 1.1 Miles

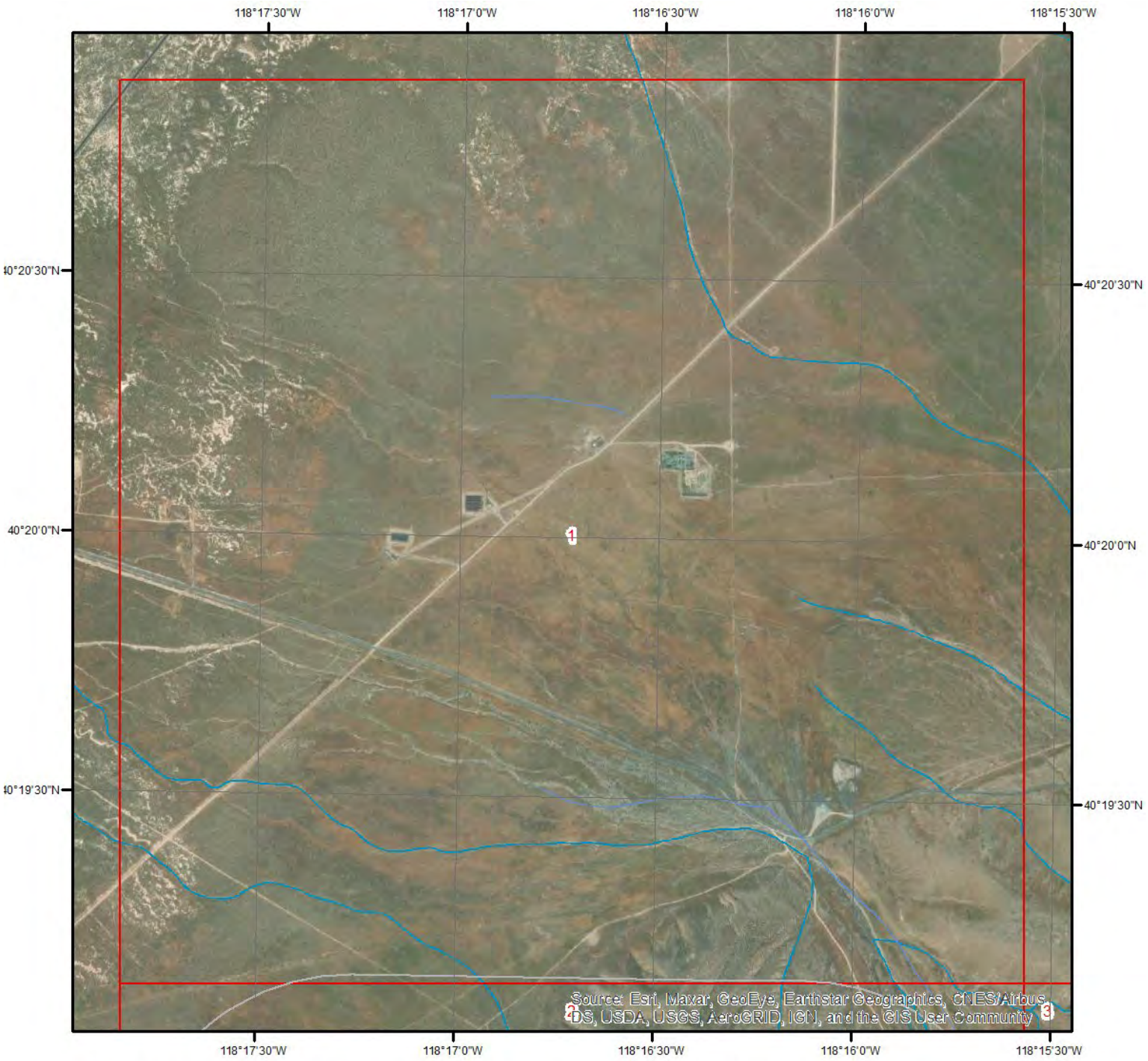
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 1

0 0.125 0.25 0.5 Miles

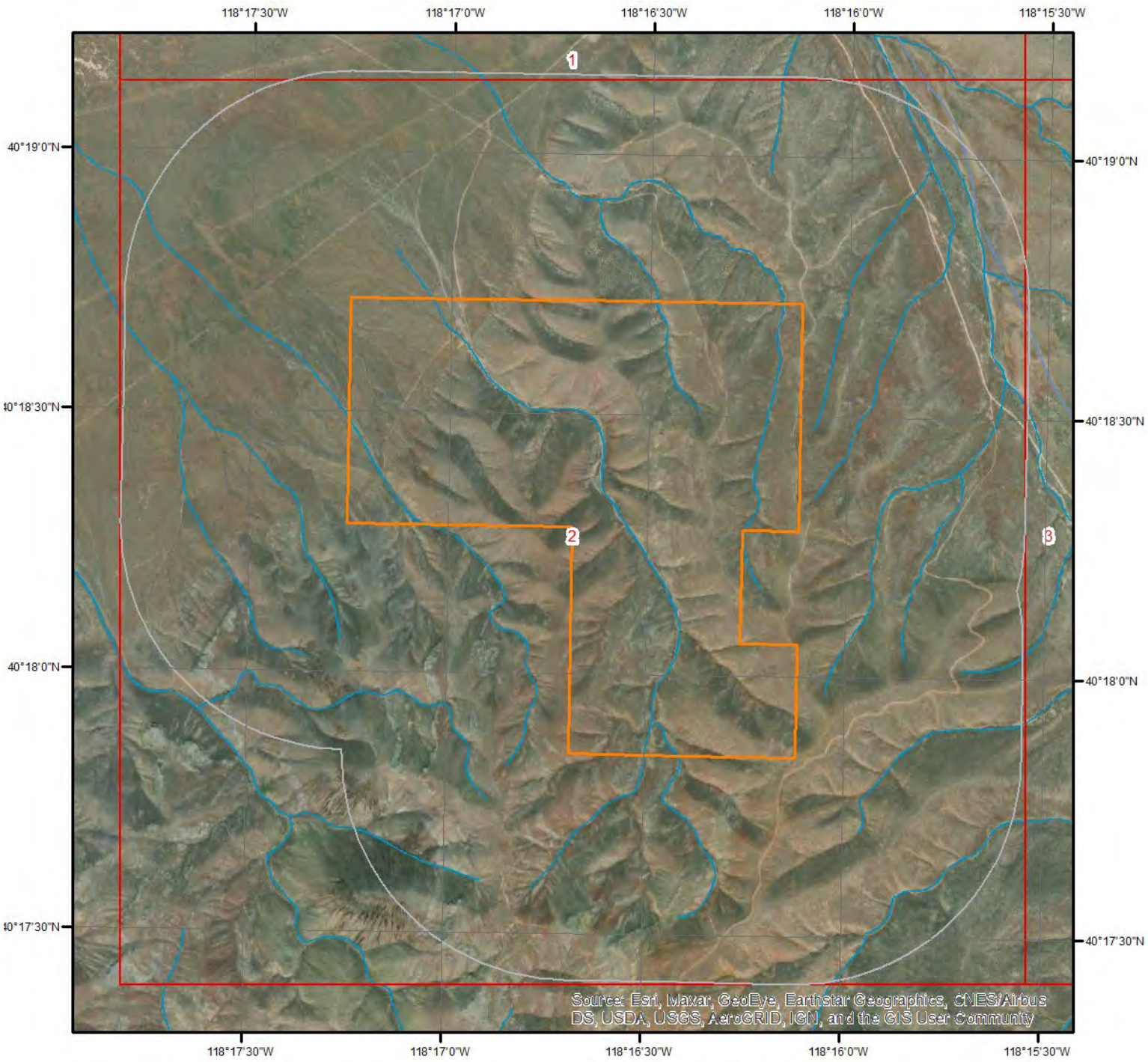
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 2

0 0.125 0.25 0.5 Miles

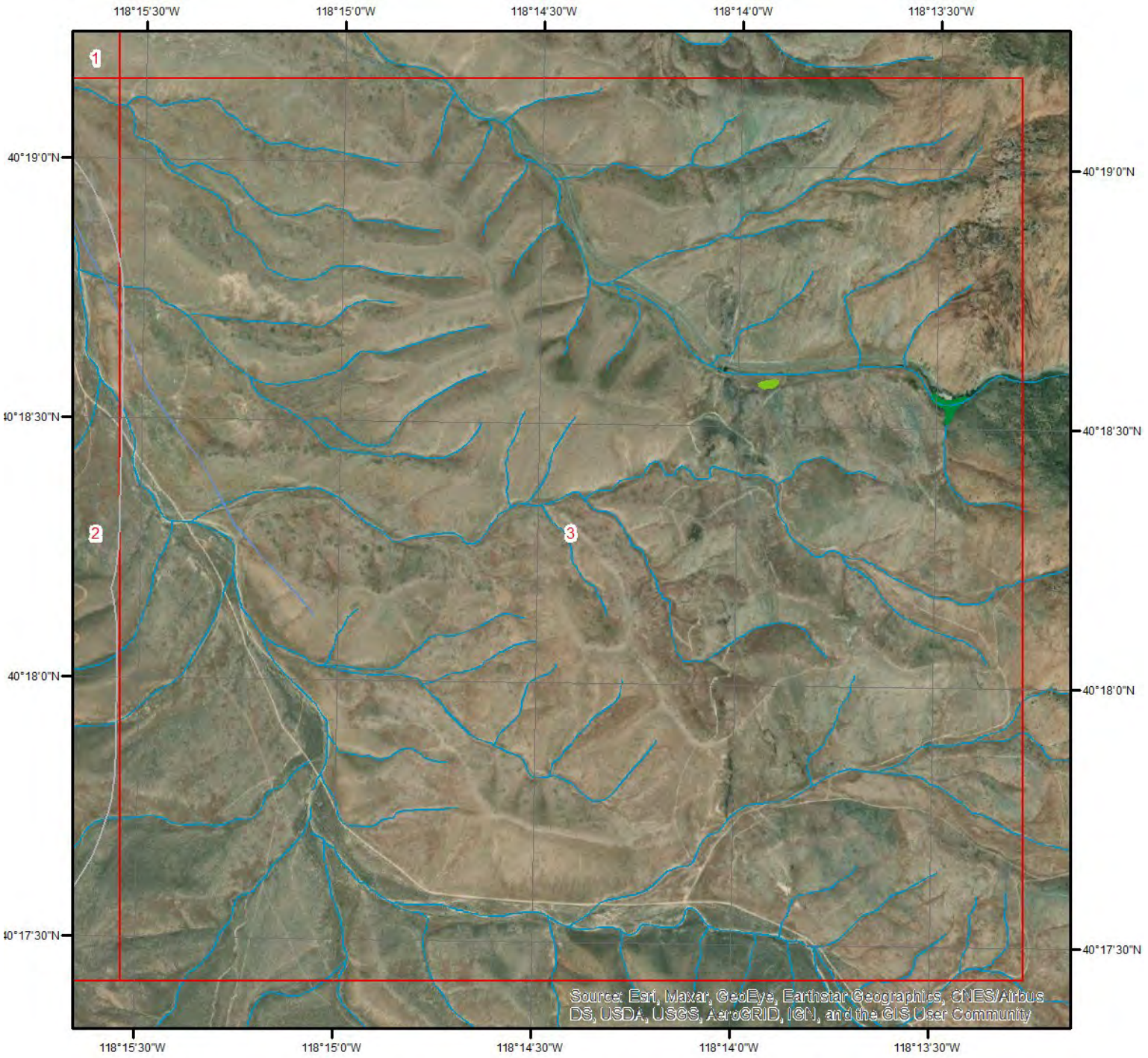
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 3

0 0.125 0.25 0.5 Miles

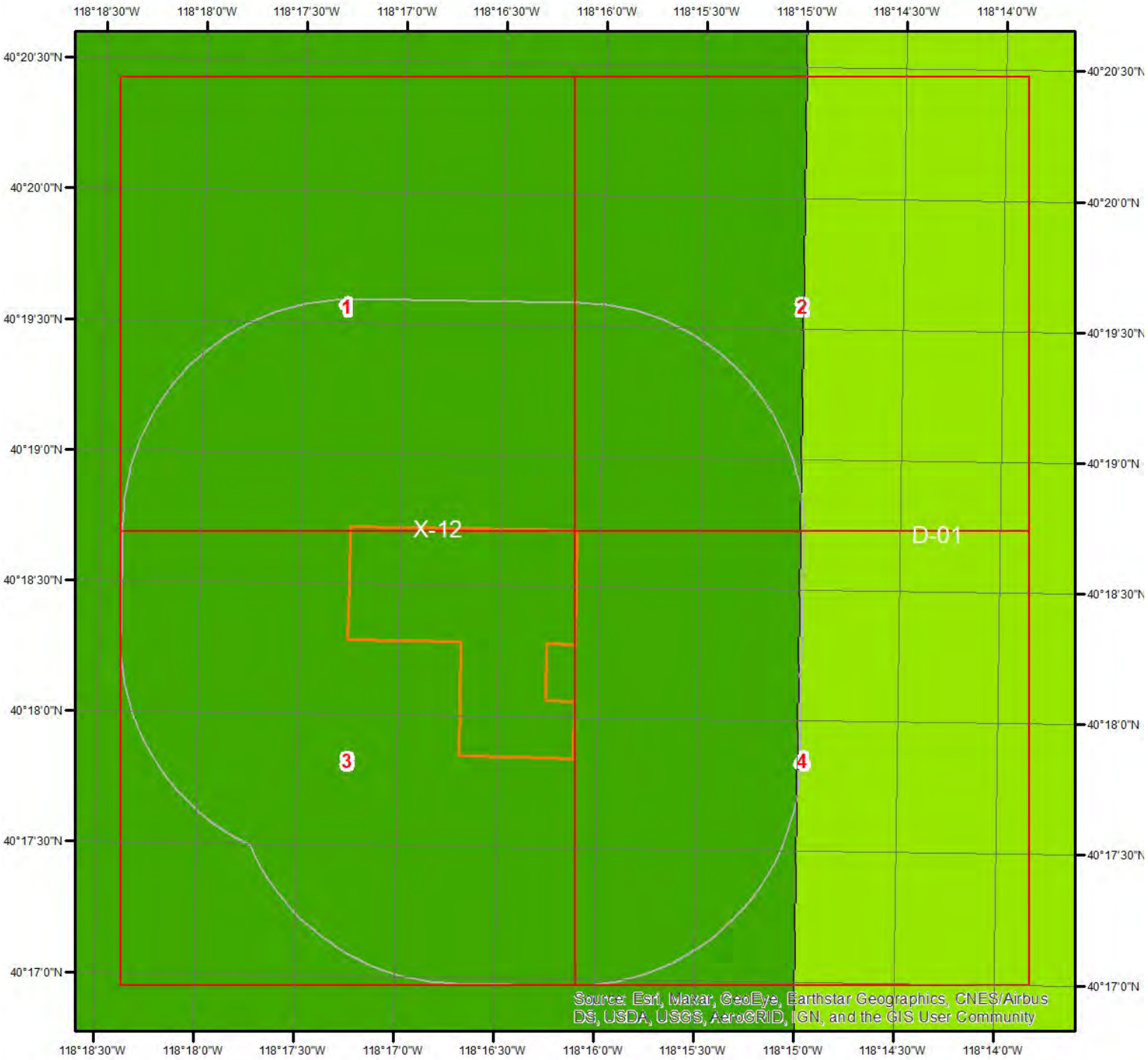
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



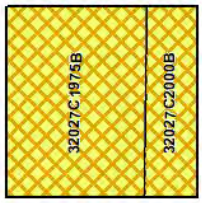
Flood Hazard Zones

Miles
0 0.2 0.4 0.8

This map shows FEMA flood hazard zones. FIRM panels are shown to the right, and blank indicates no data is available.

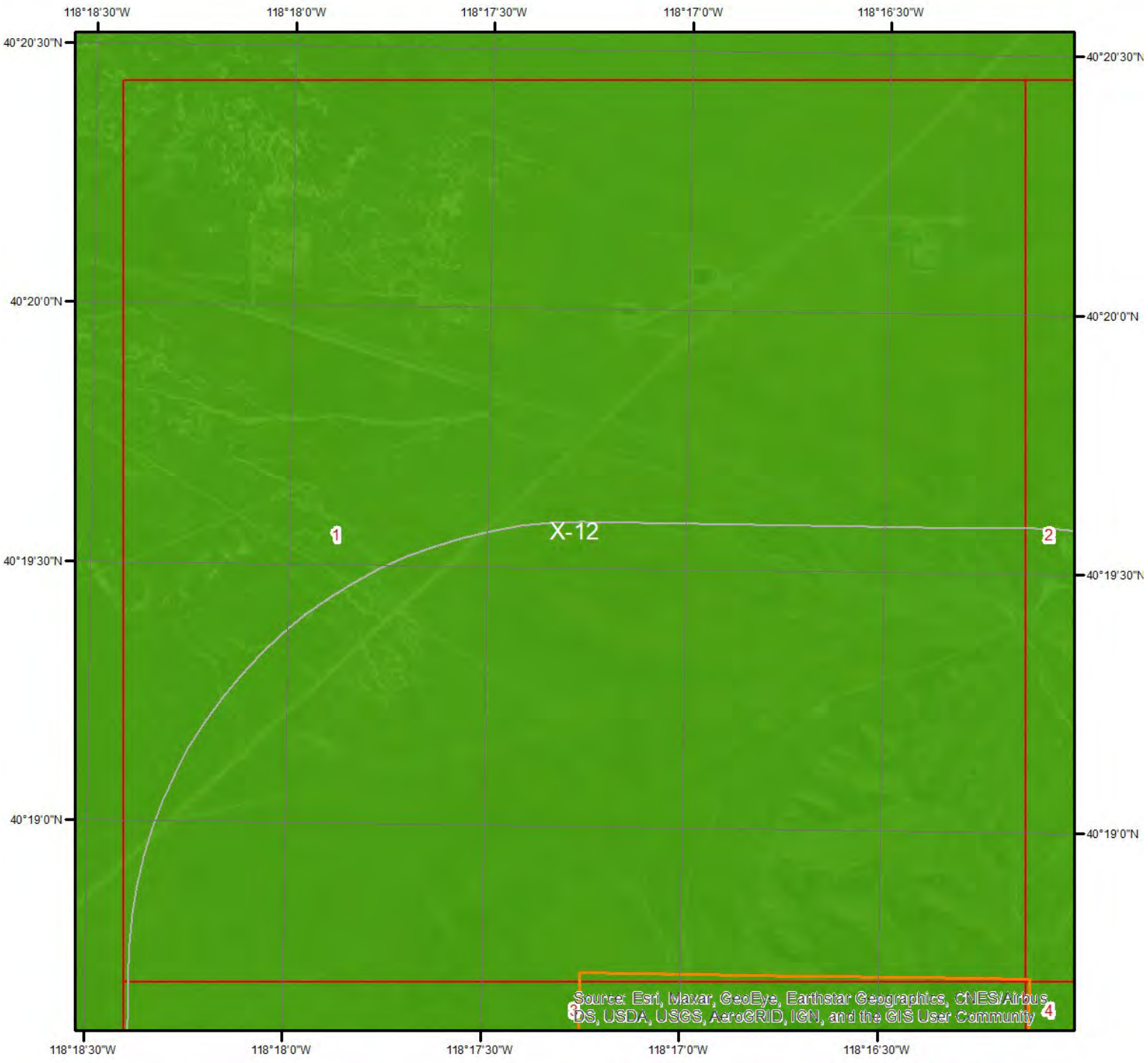
A	AO	X
A99	V	OPEN WATER
AE	VE	NOT POPULATED
AH	D	AREA NOT INCLUDED

N



ERIS

Hydrologic Information



Flood Hazard Zones - Page 1

This map shows FEMA flood hazard zones. FIRM panels are shown to the right, and blank indicates no data is available.

Miles
0 0.2 0.4

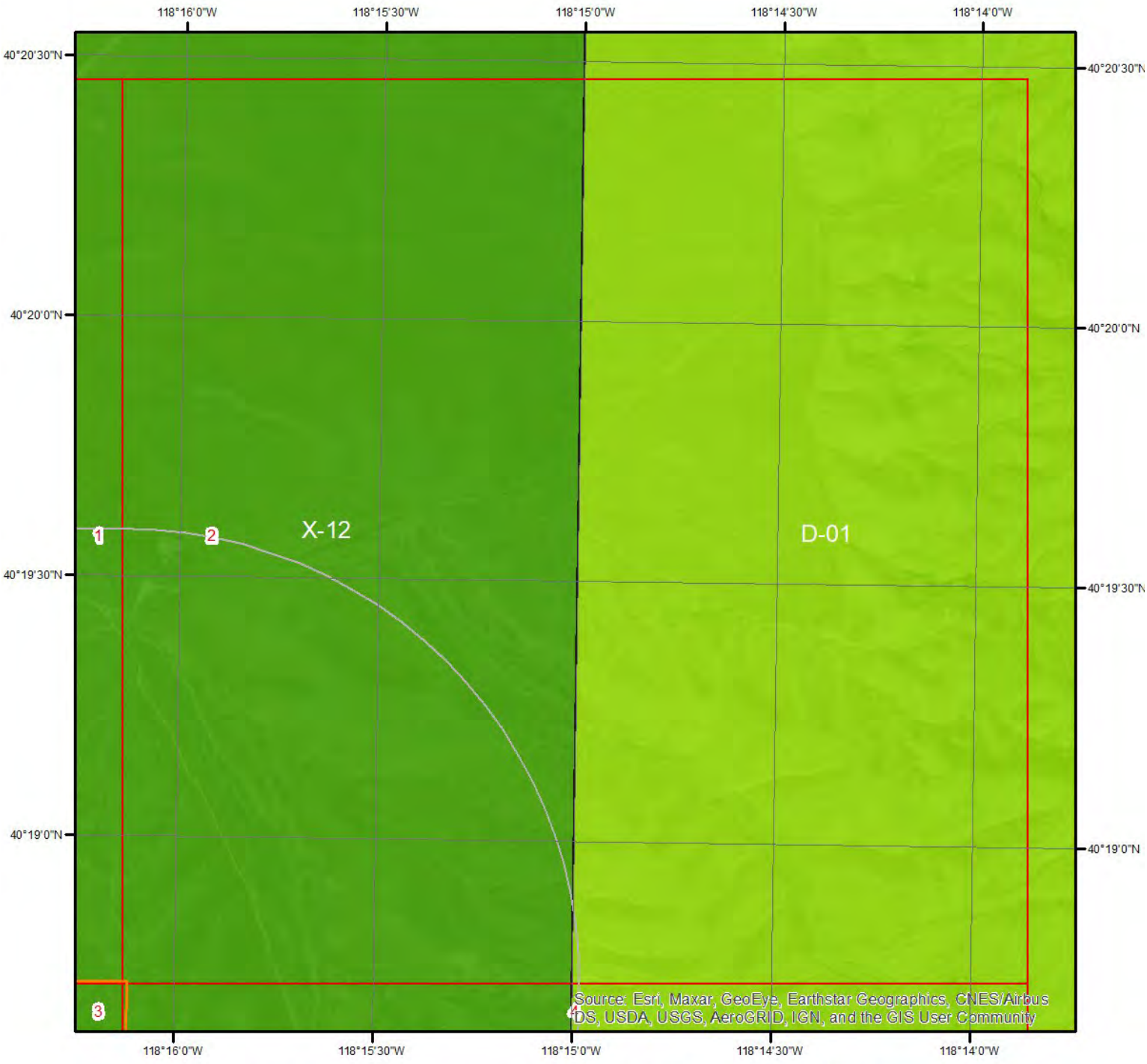
N

32027C1975B

A	AO	X
A99	V	OPEN WATER
AE	VE	NOT POPULATED
AH	D	AREA NOT INCLUDED

ERIS

Hydrologic Information



Flood Hazard Zones - Page 2

This map shows FEMA flood hazard zones. FIRM panels are shown to the right, and blank indicates no data is available.

Miles
0 0.2 0.4

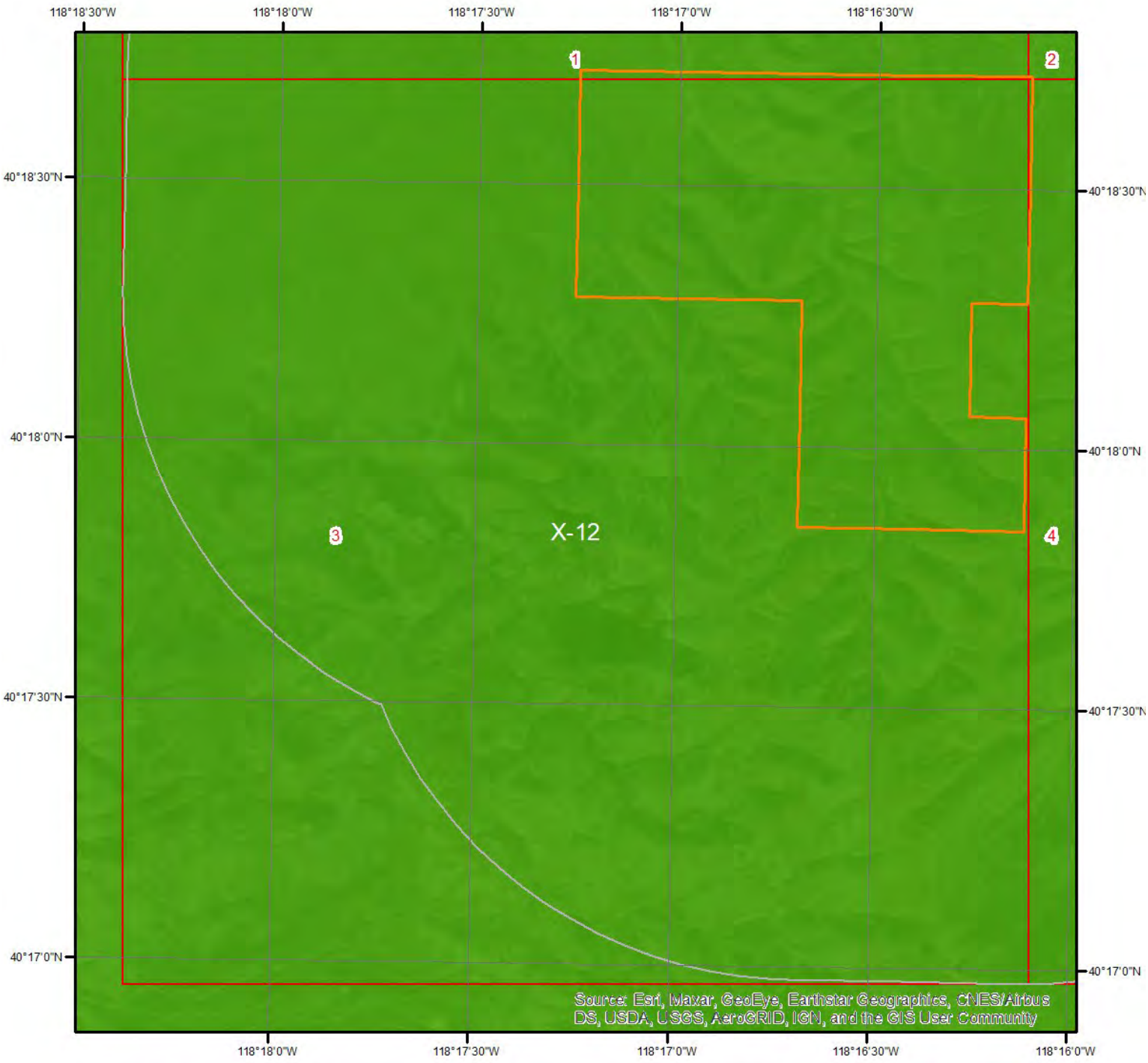
N

32027C1975B
32027C2000B

A	AO	X
A99	V	OPEN WATER
AE	VE	NOT POPULATED
AH	D	AREA NOT INCLUDED

ERIS

Hydrologic Information



Flood Hazard Zones - Page 3

This map shows FEMA flood hazard zones. FIRM panels are shown to the right, and blank indicates no data is available.

Miles
0 0.2 0.4

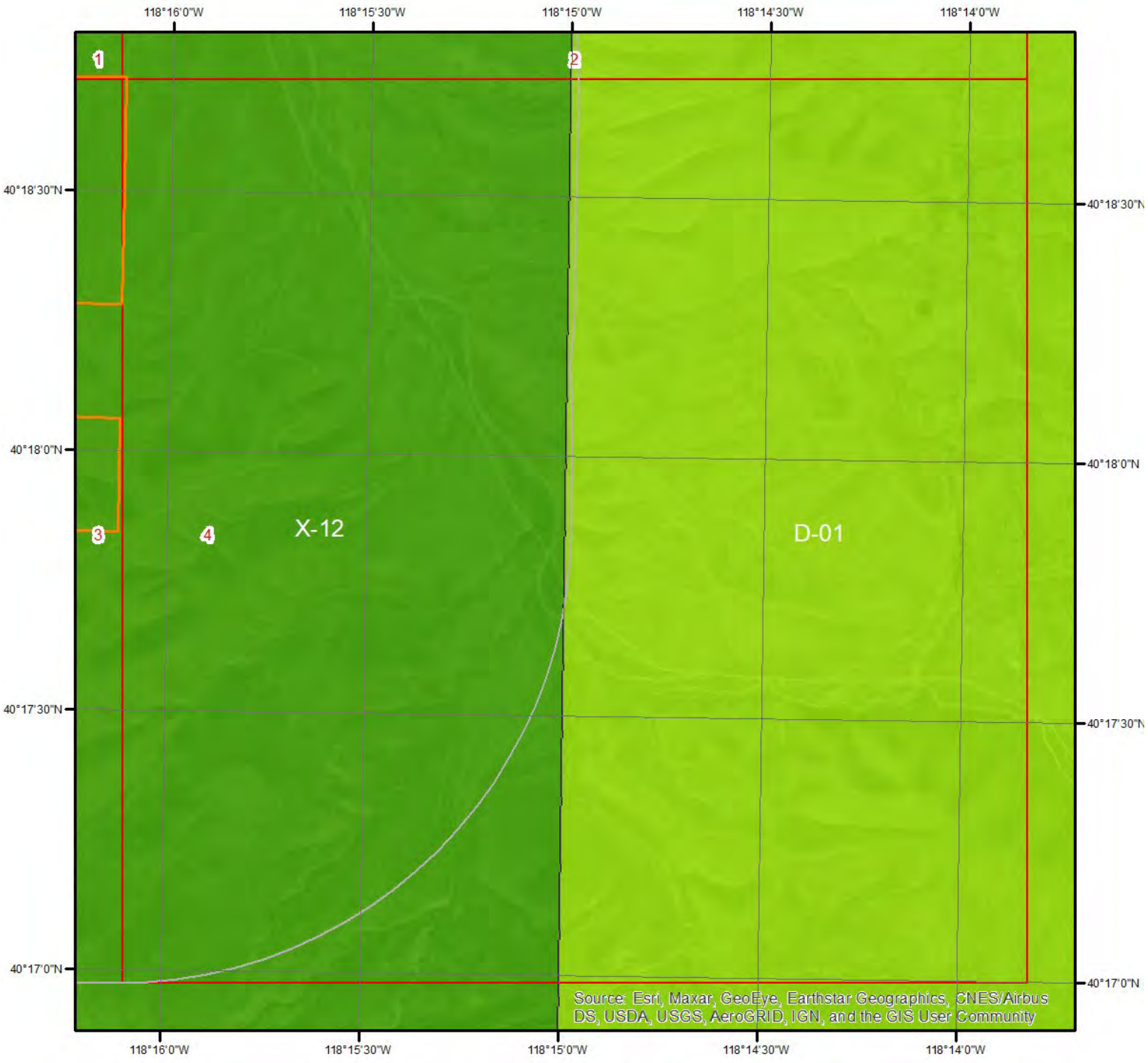
N

32027C1975B

A	AO	X
A99	V	OPEN WATER
AE	VE	NOT POPULATED
AH	D	AREA NOT INCLUDED

ERIS

Hydrologic Information



Flood Hazard Zones - Page 4

This map shows FEMA flood hazard zones. FIRM panels are shown to the right, and blank indicates no data is available.

Miles
0 0.2 0.4

N

32027C1975B
32027C2000B

A	AO	X
A99	V	OPEN WATER
AE	VE	NOT POPULATED
AH	D	AREA NOT INCLUDED

ERIS

Hydrologic Information

The Wetland Type map shows wetland existence overlaid on an aerial imagery. The Flood Hazard Zones map shows FEMA flood hazard zones overlaid on an aerial imagery. Relevant FIRM panels and detailed zone information is provided below.

Available FIRM Panels in area:	32027C2000B(effective:2009-09-25) 32027C1975B(effective:2009-09-25)

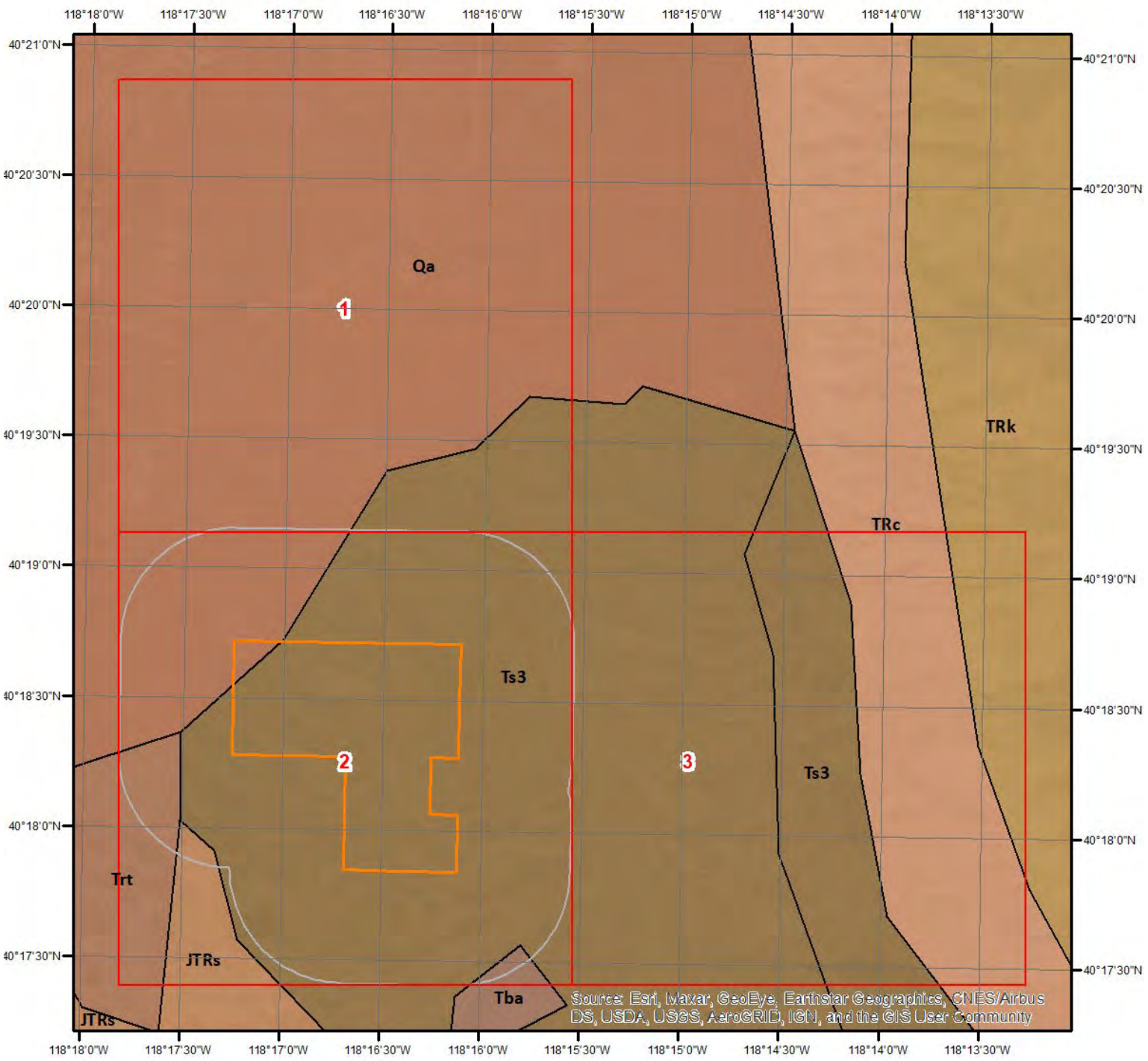
Flood Zone D-01

Zone:	D
Zone subtype:	

Flood Zone X-12

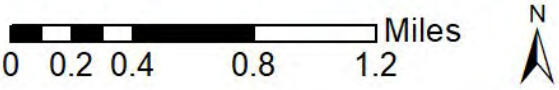
Zone:	X
Zone subtype:	AREA OF MINIMAL FLOOD HAZARD

Geologic Information



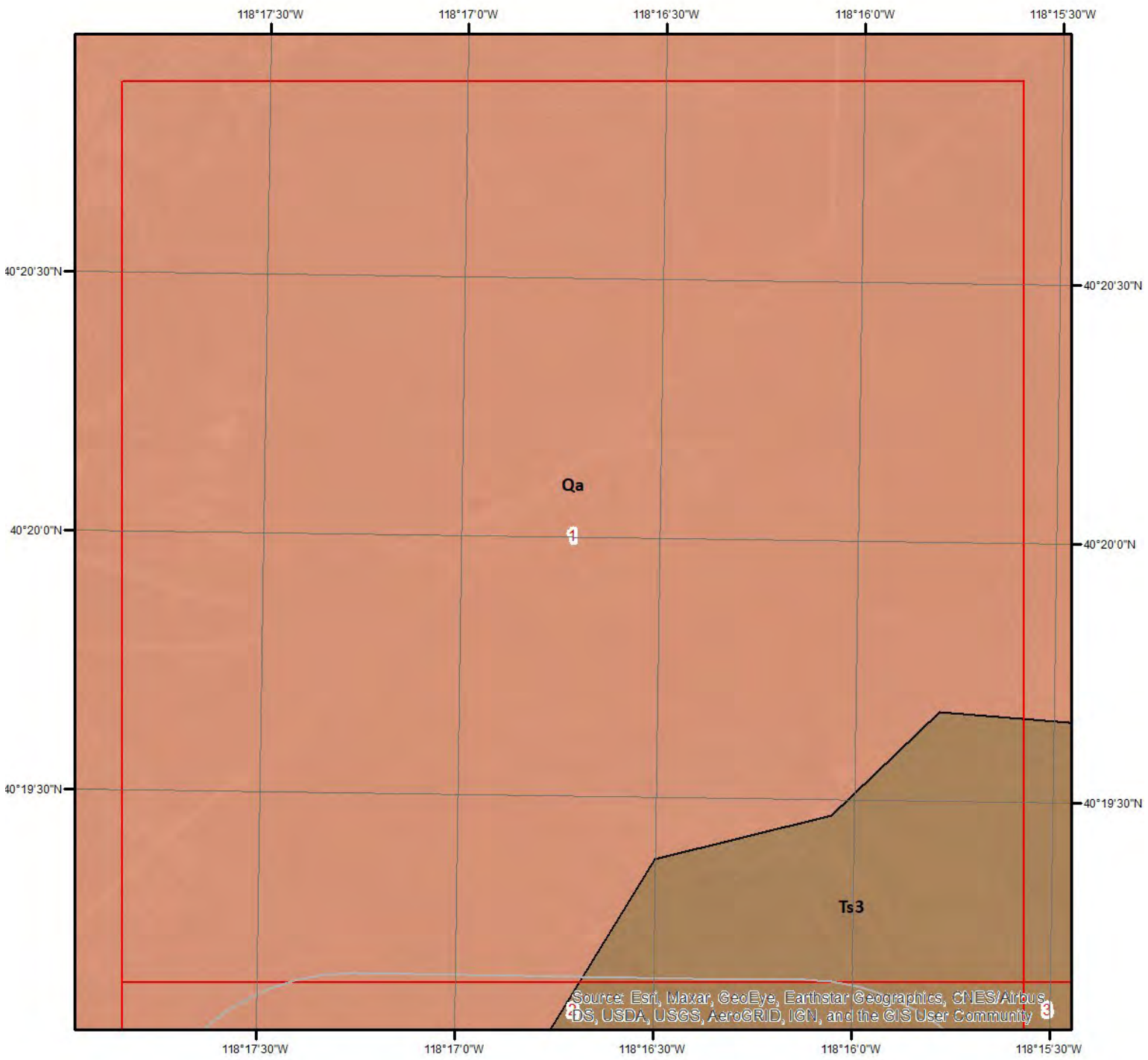
Geologic Units

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.



ERIS

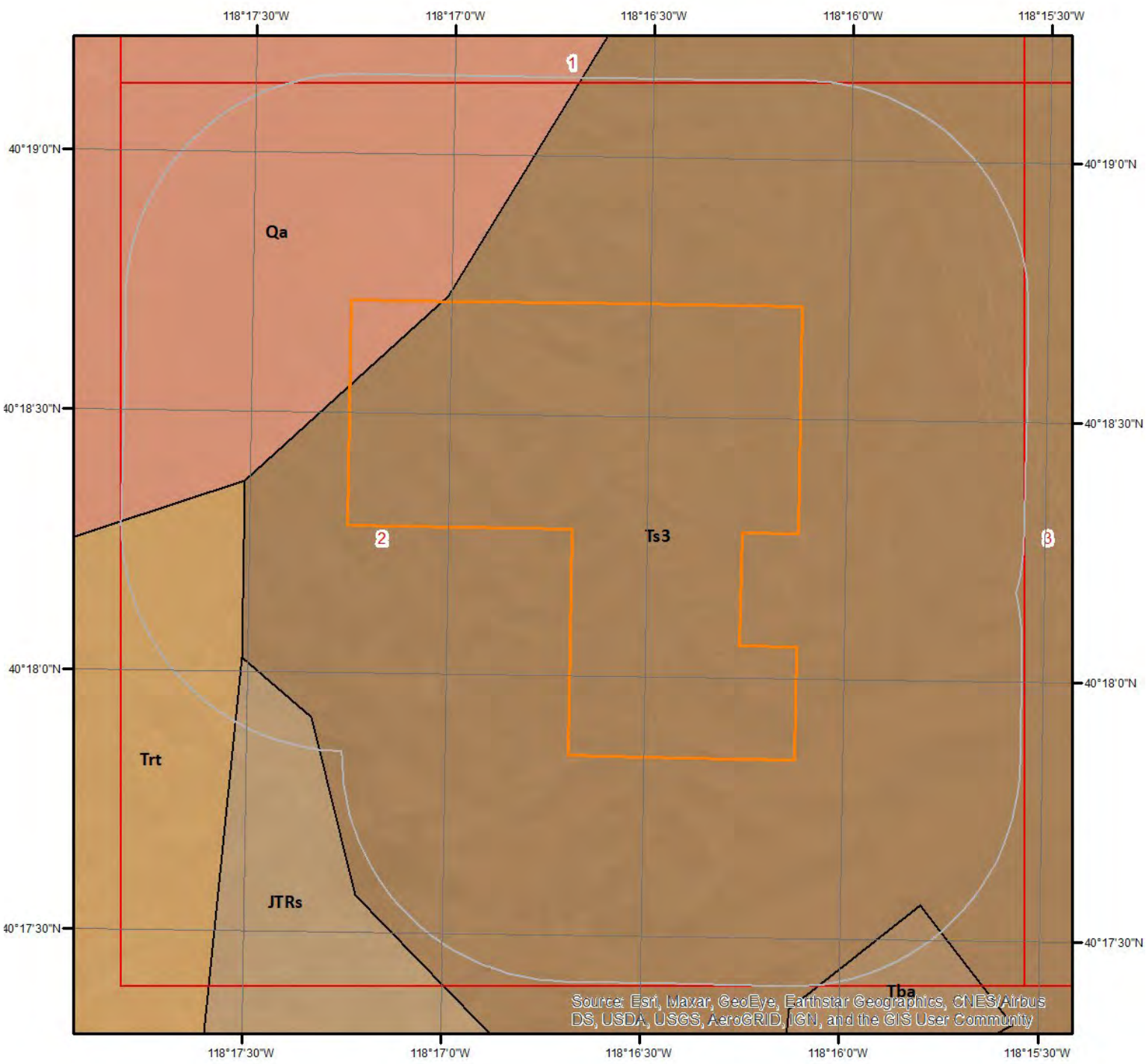
Geologic Information



Geologic Units - Page 1

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

Geologic Information

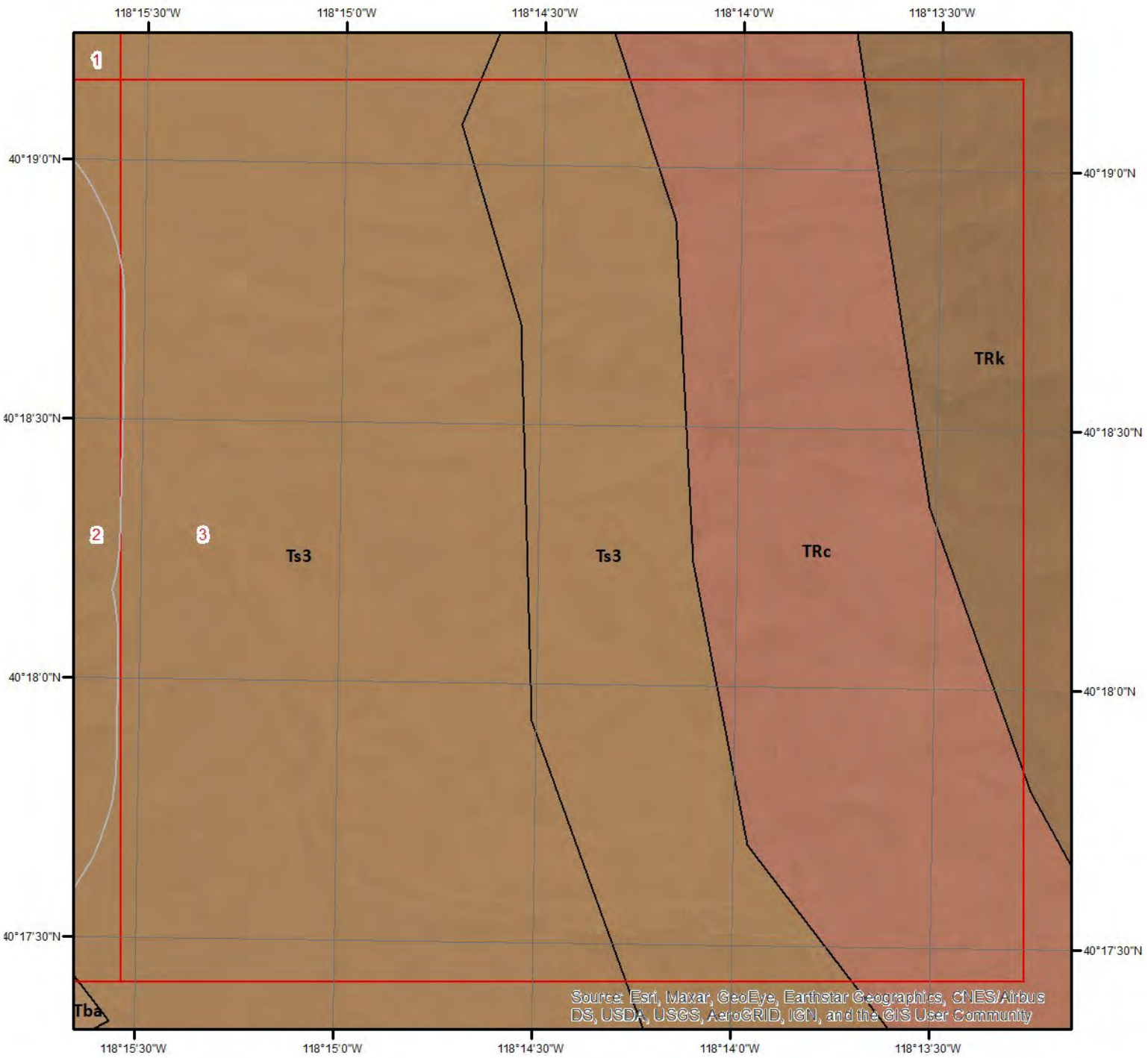


Geologic Units - Page 2

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

ERIS

Geologic Information



Miles
0 0.2 0.4

N

Geologic Units - Page 3

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

ERIS

Geologic Information

The previous page shows USGS geology information. Detailed information about each unit is provided below.

Geologic Unit Qa

Unit Name:	Alluvial deposits
Unit Age:	Quaternary
Primary Rock Type:	alluvium
Secondary Rock Type:	mass wasting
Unit Description:	ALLUVIAL DEPOSITS-Locally includes beach and sand dune deposits

Geologic Unit Ts3

Unit Name:	Tuffaceous sedimentary rocks
Unit Age:	Late Eocene to Late Miocene
Primary Rock Type:	sandstone
Secondary Rock Type:	limestone
Unit Description:	TUFFACEOUS SEDIMENTARY ROCKS-Locally includes minor amounts of tuff

Geologic Unit Trt

Unit Name:	Ash-flow tuffs, rhyolitic flows, and shallow intrusive rocks
Unit Age:	Middle Miocene to Late Miocene
Primary Rock Type:	rhyolite
Secondary Rock Type:	dacite
Unit Description:	ASH-FLOW TUFFS, RHYOLITIC FLOWS, AND SHALLOW INTRUSIVE ROCKS

Geologic Unit JTRs

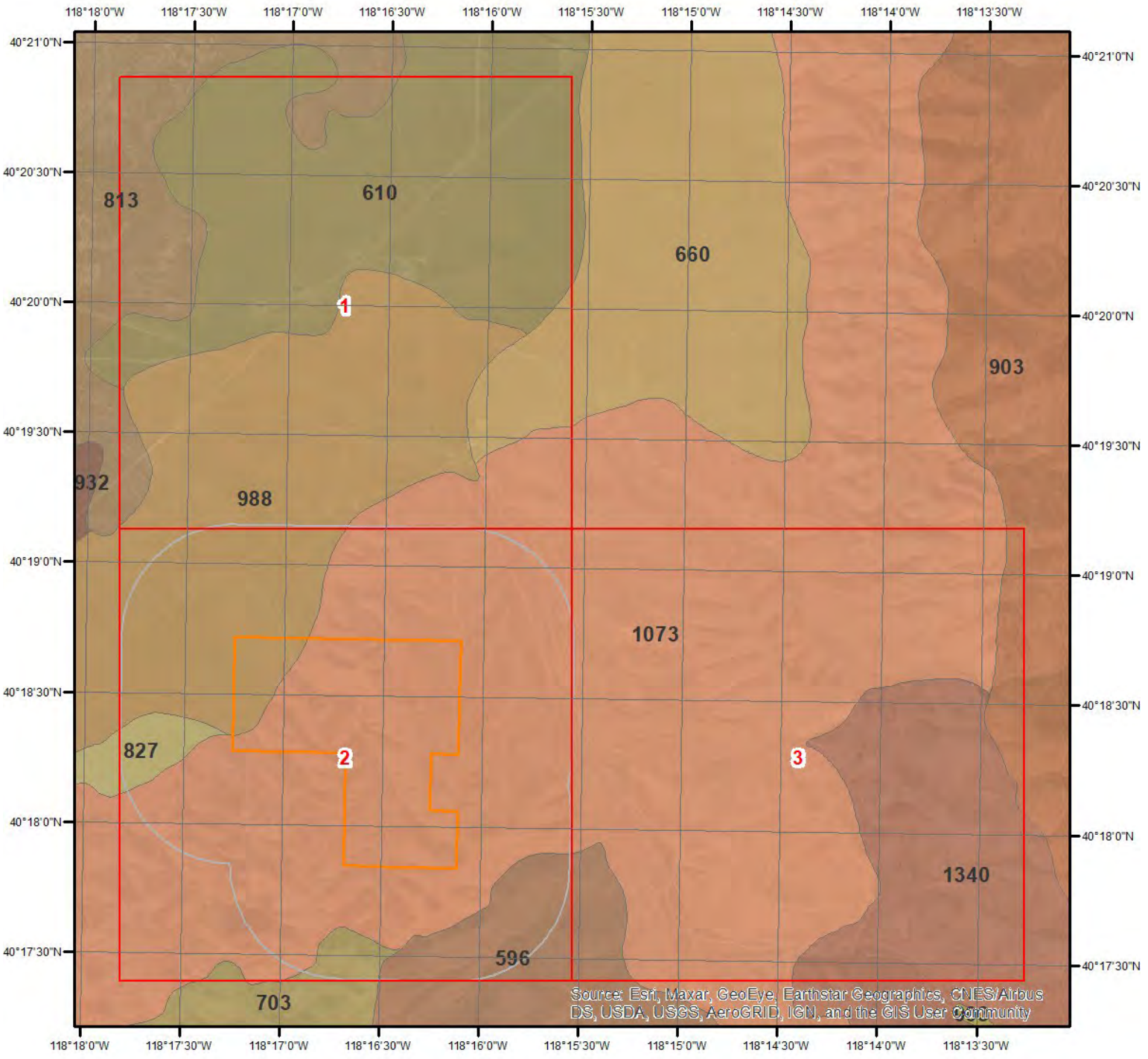
Unit Name:	Shale, mudstone, siltstone, sandstone, and carbonate rock; sparse volcanic rock
Unit Age:	Late Triassic to Early Jurassic
Primary Rock Type:	claystone
Secondary Rock Type:	shale
Unit Description:	SHALE, MUDSTONE, SILTSTONE, SANDSTONE, AND CARBONATE ROCK; SPARSE VOLCANIC ROCK (Upper Triassic and Lower Jurassic)-Includes Auld Lang Syne Group, Nightingale sequence of Bonham (1969), and Gabbs and Sunrise Formations

Geologic Unit Tba

Unit Name:	Andesite and basalt flows
Unit Age:	Early Miocene to Early Pliocene
Primary Rock Type:	basalt
Secondary Rock Type:	andesite
Unit Description:	ANDESITE AND BASALT FLOWS-Mostly in about 17 to about 6 m.y. age range. In Humboldt County, locally includes rocks as old as 21 m.y. May

include rocks younger than 6 m.y. in places

Soil Information



SSURGO Soils

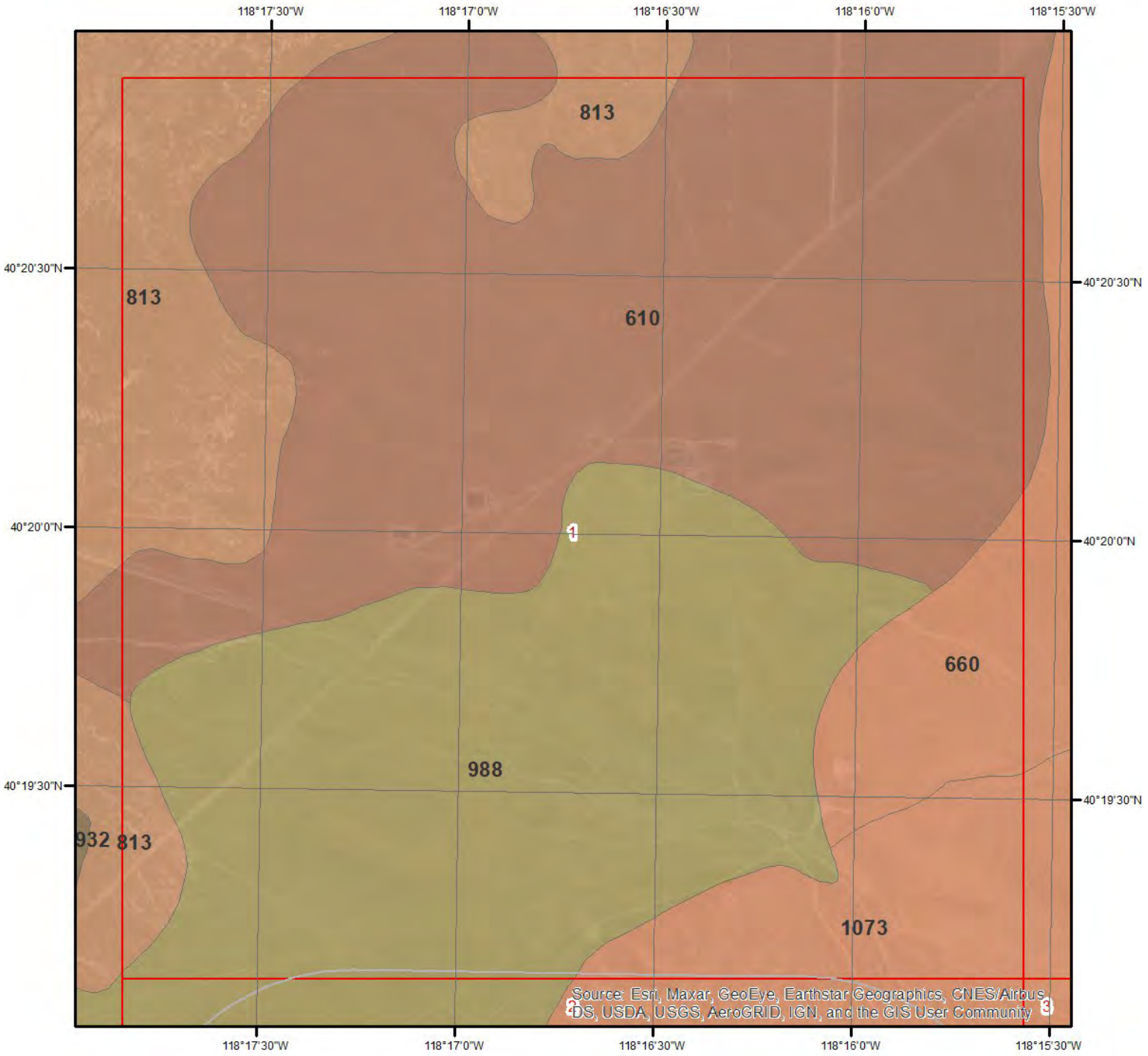
0 0.2 0.4 0.8 1.2 Miles

N

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 1

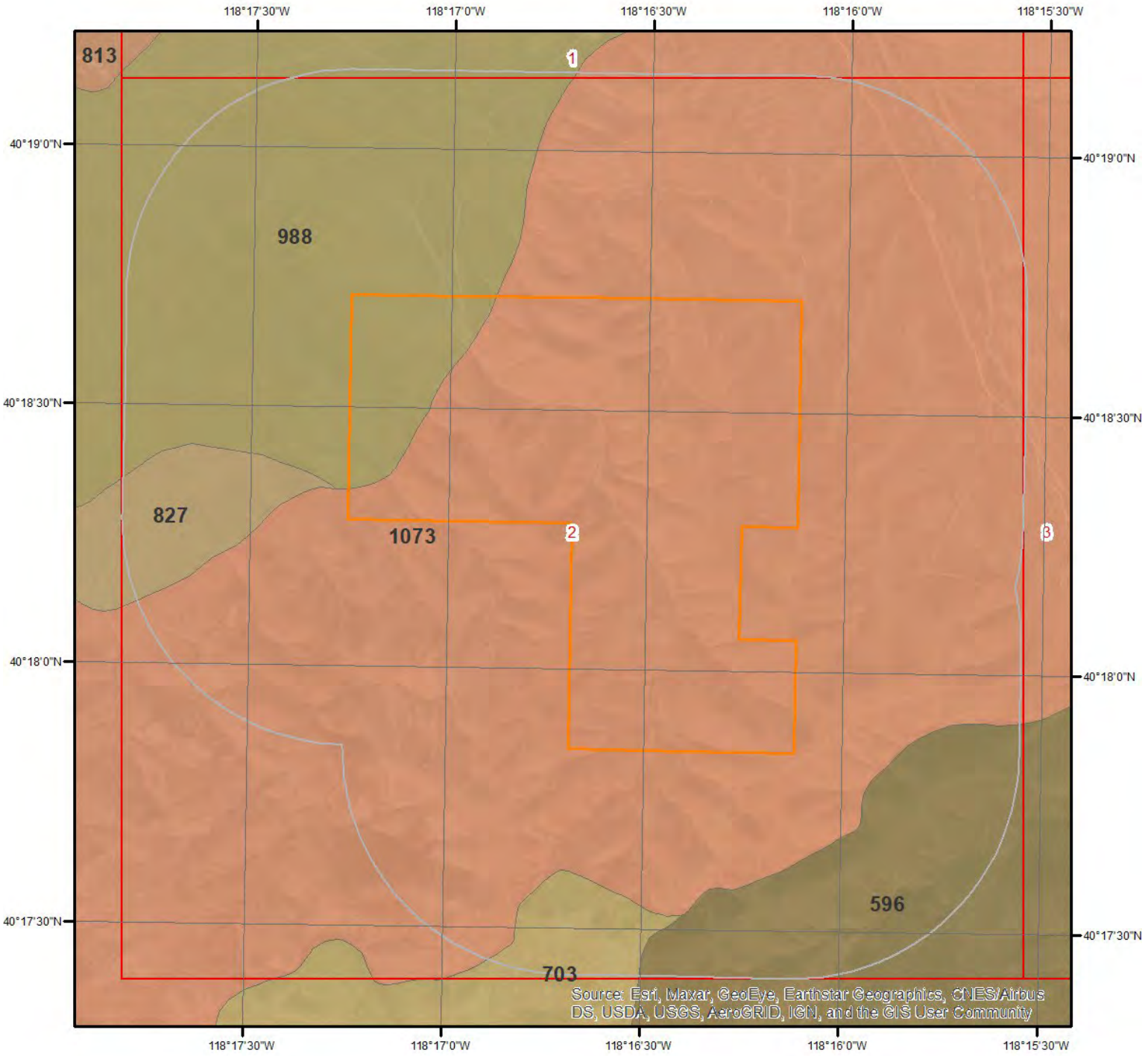
Miles
0 0.2 0.4

N

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 2

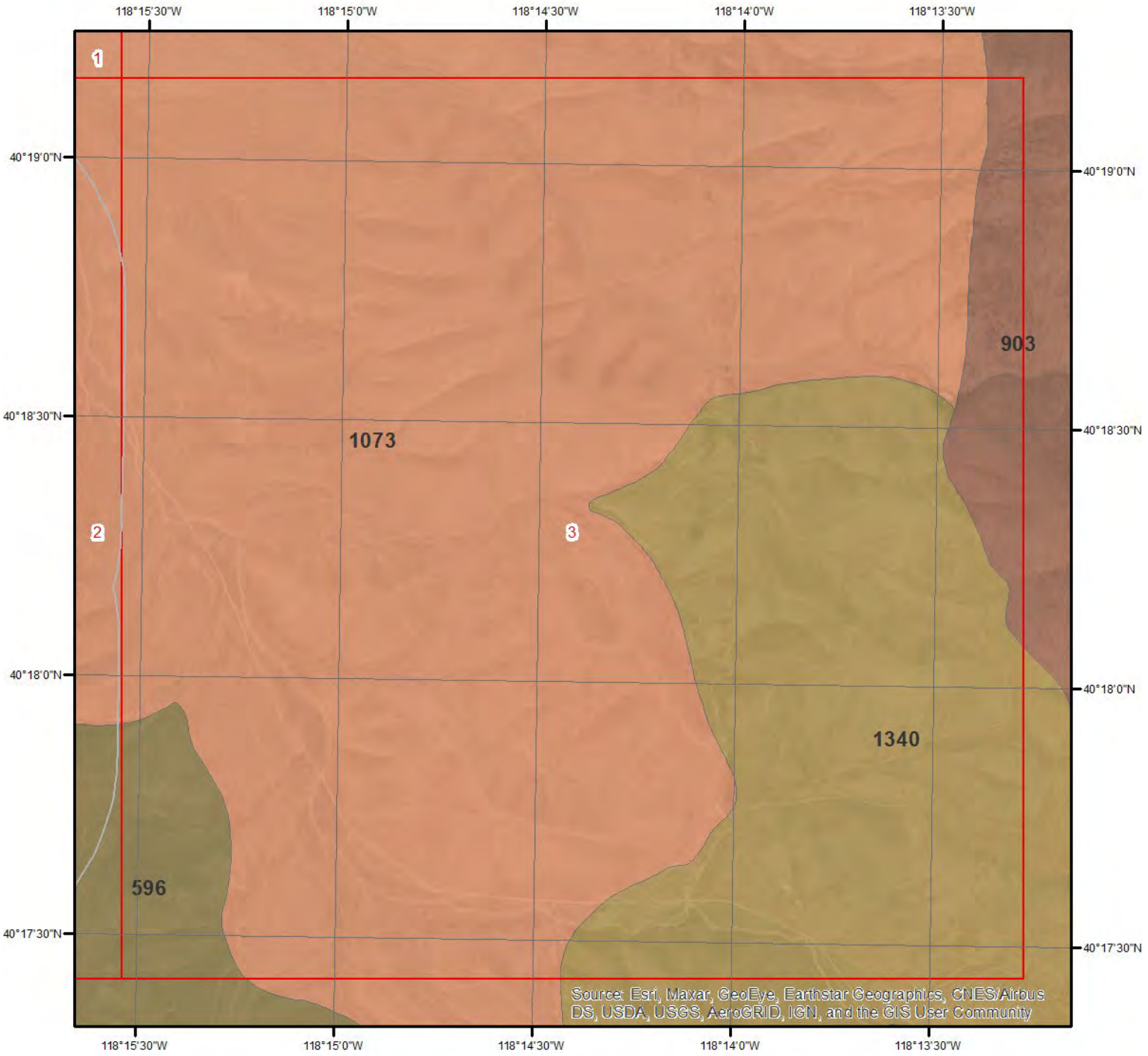
Miles
0 0.2 0.4

N

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 3

Miles
0 0.2 0.4

N

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information

The previous page shows a soil map using SSURGO data from USDA Natural Resources Conservation Service. Detailed information about each unit is provided below.

Map Unit 1073 (22.17%)

Map Unit Name:	Hoot, steep-Bojo-Hoot association
Bedrock Depth - Min:	25cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Hoot(50%)	
horizon H1(0cm to 10cm)	Very cobbly loam
horizon H2(10cm to 36cm)	Extremely gravelly clay loam
horizon H3(36cm to 61cm)	Unweathered bedrock
Bojo(25%)	
horizon H1(0cm to 8cm)	Very cobbly loam
horizon H2(8cm to 25cm)	Gravelly clay loam
horizon H3(25cm to 50cm)	Unweathered bedrock
Hoot(15%)	
horizon H1(0cm to 10cm)	Very cobbly loam
horizon H2(10cm to 36cm)	Extremely gravelly clay loam
horizon H3(36cm to 61cm)	Unweathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 1073 - Hoot, steep-Bojo-Hoot association

Component: Hoot (50%)
The Hoot component makes up 50 percent of the map unit. Slopes are 30 to 50 percent. This component is on foothills, hills. The parent material consists of colluvium derived from volcanic rock and/or residuum weathered from volcanic rock. Depth to a root restrictive layer, bedrock, lithic, is 10 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. This component is in the R024XY002NV Loamy 5-8 P.z. ecological site. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 6 within 30 inches of the soil surface.

Component: Bojo (25%)
The Bojo component makes up 25 percent of the map unit. Slopes are 30 to 50 percent. This component is on hills. The parent material consists of residuum weathered from volcanic and metamorphic rock. Depth to a root restrictive layer, bedrock, lithic, is 5 to 14 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. This component is in the R024XY026NV Stony Slope 8-10 P.z. ecological site. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 1 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 3 within 30 inches of the soil surface.

Component: Hoot (15%)
The Hoot component makes up 15 percent of the map unit. Slopes are 4 to 15 percent. This component is on hills. The parent material consists of colluvium derived from volcanic rock and/or residuum weathered from volcanic rock. Depth to a root restrictive layer, bedrock, lithic, is 10 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is

about 0 percent. This component is in the R024XY002NV Loamy 5-8 P.z. ecological site. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 6 within 30 inches of the soil surface.

Map Unit 596 (20.55%)

Map Unit Name:	Trunk-Burrita association
Bedrock Depth - Min:	43cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Trunk(60%)	
horizon H1(0cm to 8cm)	Very cobbly loam
horizon H2(8cm to 76cm)	Gravelly clay
horizon H3(76cm to 101cm)	Unweathered bedrock
Burrita(25%)	
horizon H1(0cm to 20cm)	Very cobbly loam
horizon H2(20cm to 43cm)	Very cobbly clay
horizon H3(43cm to 68cm)	Unweathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 596 - Trunk-Burrita associaiton

Component: Trunk (60%)
The Trunk component makes up 60 percent of the map unit. Slopes are 15 to 50 percent. This component is on mountains, mountains. The parent material consists of residuum and colluvium derived from mixed rocks. Depth to a root restrictive layer, bedrock, lithic, is 20 to 39 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R024XY005NV Loamy 8-10 P.z. ecological site. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 6 within 30 inches of the soil surface.

Component: Burrita (25%)
The Burrita component makes up 25 percent of the map unit. Slopes are 4 to 30 percent. This component is on mountains, mountains. The parent material consists of residuum and colluvium derived from mixed rocks. Depth to a root restrictive layer, bedrock, lithic, is 14 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R024XY005NV Loamy 8-10 P.z. ecological site. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 3 within 30 inches of the soil surface.

Component: Knott (8%)
Generated brief soil descriptions are created for major soil components. The Knott soil is a minor component.

Component: Rock outcrop (5%)
Generated brief soil descriptions are created for major soil components. The Rock outcrop soil is a minor component.

Component: Chug (2%)
Generated brief soil descriptions are created for major soil components. The Chug soil is a minor component.

Soil Information

Map Unit 703 (7.88%)

Map Unit Name:	Atlow, steep-Daick-Atlow association
Bedrock Depth - Min:	10cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Atlow(40%)	
horizon H1(0cm to 15cm)	Very gravelly loam
horizon H2(15cm to 38cm)	Very gravelly clay loam
horizon H3(38cm to 63cm)	Unweathered bedrock
Daick(30%)	
horizon H1(0cm to 10cm)	Cobbly clay loam
horizon H2(10cm to 152cm)	Weathered bedrock
Atlow(15%)	
horizon H1(0cm to 15cm)	Very gravelly loam
horizon H2(15cm to 38cm)	Very gravelly clay loam
horizon H3(38cm to 63cm)	Unweathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 703 - Atlow, steep-Daick-Atlow association

Component: Atlow (40%)
The Atlow component makes up 40 percent of the map unit. Slopes are 30 to 50 percent. This component is on mountains, mountains. The parent material consists of residuum weathered from tuff and/or residuum weathered from sedimentary rock. Depth to a root restrictive layer, bedrock, lithic, is 14 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R024XY030NV Shallow Calcareous Loam 8-10 P.z. ecological site. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Daick (30%)
The Daick component makes up 30 percent of the map unit. Slopes are 30 to 50 percent. This component is on mountains. The parent material consists of residuum weathered from tuff. Depth to a root restrictive layer, bedrock, paralithic, is 4 to 14 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R027XY027NV Barren Gravelly Slope 4-8 P.z. ecological site. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 6 within 30 inches of the soil surface.

Component: Atlow (15%)
The Atlow component makes up 15 percent of the map unit. Slopes are 4 to 15 percent. This component is on mountains. The parent material consists of residuum weathered from tuff and/or residuum weathered from sedimentary rock. Depth to a root restrictive layer, bedrock, lithic, is 14 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R024XY030NV Shallow Calcareous Loam 8-10 P.z. ecological site. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Map Unit 827 (42.93%)

Map Unit Name:	Trocken gravelly very fine sandy loam, 2 to 8 percent slopes

Soil Information

Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	B - Soils in this group have moderately low runoff potential when thoroughly wet. Water transmission through the soil is unimpeded.

Major components are printed below

Trocken(100%)

horizon H1(0cm to 8cm)	Very gravelly very fine sandy loam
horizon H2(8cm to 152cm)	Stratified extremely gravelly loamy coarse sand to very cobbly loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 827 - Trocken gravelly very fine sandy loam, 2 to 8 percent slopes

Component: Trocken (100%)
The Trocken component makes up 100 percent of the map unit. Slopes are 2 to 8 percent. This component is on fan piedmonts, fan skirts. The parent material consists of mixed alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. This component is in the R027XY013NV Loamy 4-8 P.z. ecological site. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. The soil has a very slightly saline horizon within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 9 within 30 inches of the soil surface.

Map Unit 988 (6.47%)

Map Unit Name:	Mazuma very fine sandy loam, 2 to 8 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	B - Soils in this group have moderately low runoff potential when thoroughly wet. Water transmission through the soil is unimpeded.

Major components are printed below

Mazuma(85%)

horizon H1(0cm to 8cm)	Very fine sandy loam
horizon H2(8cm to 76cm)	Sandy loam
horizon H3(76cm to 152cm)	Stratified gravelly coarse sand to silt loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 988 - Mazuma very fine sandy loam, 2 to 8 percent slopes

Component: Mazuma (85%)
The Mazuma component makes up 85 percent of the map unit. Slopes are 2 to 8 percent. This component is on fan piedmonts, fan skirts. The parent material consists of alluvium and lacustrine derived from mixed rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. This component is in the R027XY013NV Loamy 4-8 P.z. ecological site. Nonirrigated land capability classification is 7c. Irrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 8 percent. The soil has a moderately saline horizon within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 29 within 30 inches of the soil surface.

Component: Sondoa (8%)
Generated brief soil descriptions are created for major soil components. The Sondoa soil is a minor component.

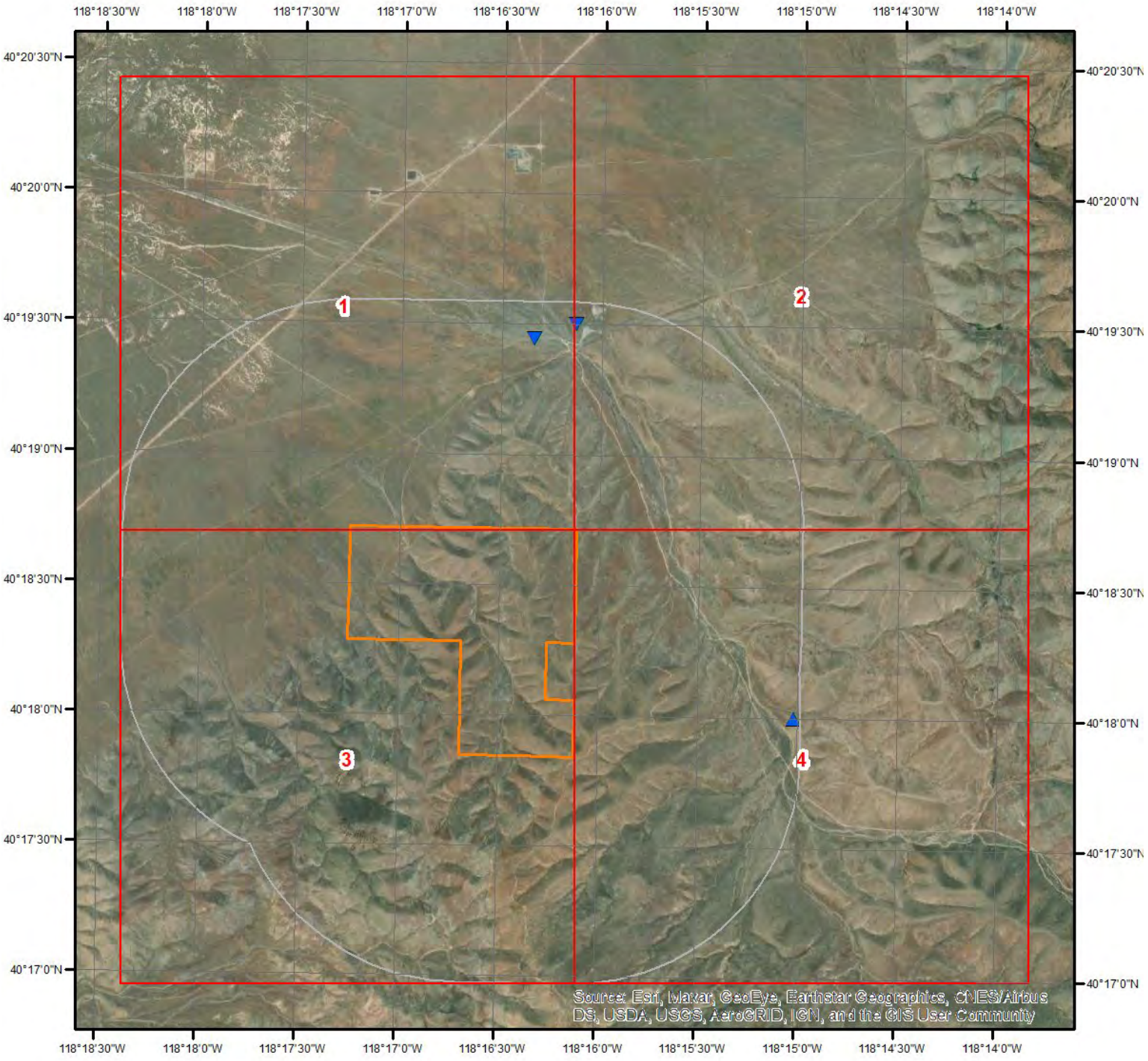
Soil Information

Component: Mazuma (3%)
Generated brief soil descriptions are created for major soil components. The Mazuma soil is a minor component.

Component: Hawsley (3%)
Generated brief soil descriptions are created for major soil components. The Hawsley soil is a minor component.

Component: Xeric Torriorthents (1%)
Generated brief soil descriptions are created for major soil components. The Xeric Torriorthents soil is a minor component.

Wells and Additional Sources



Wells & Additional Sources

N

0 0.3 0.6 1.2 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources

Wells & Additional Sources - Page 1

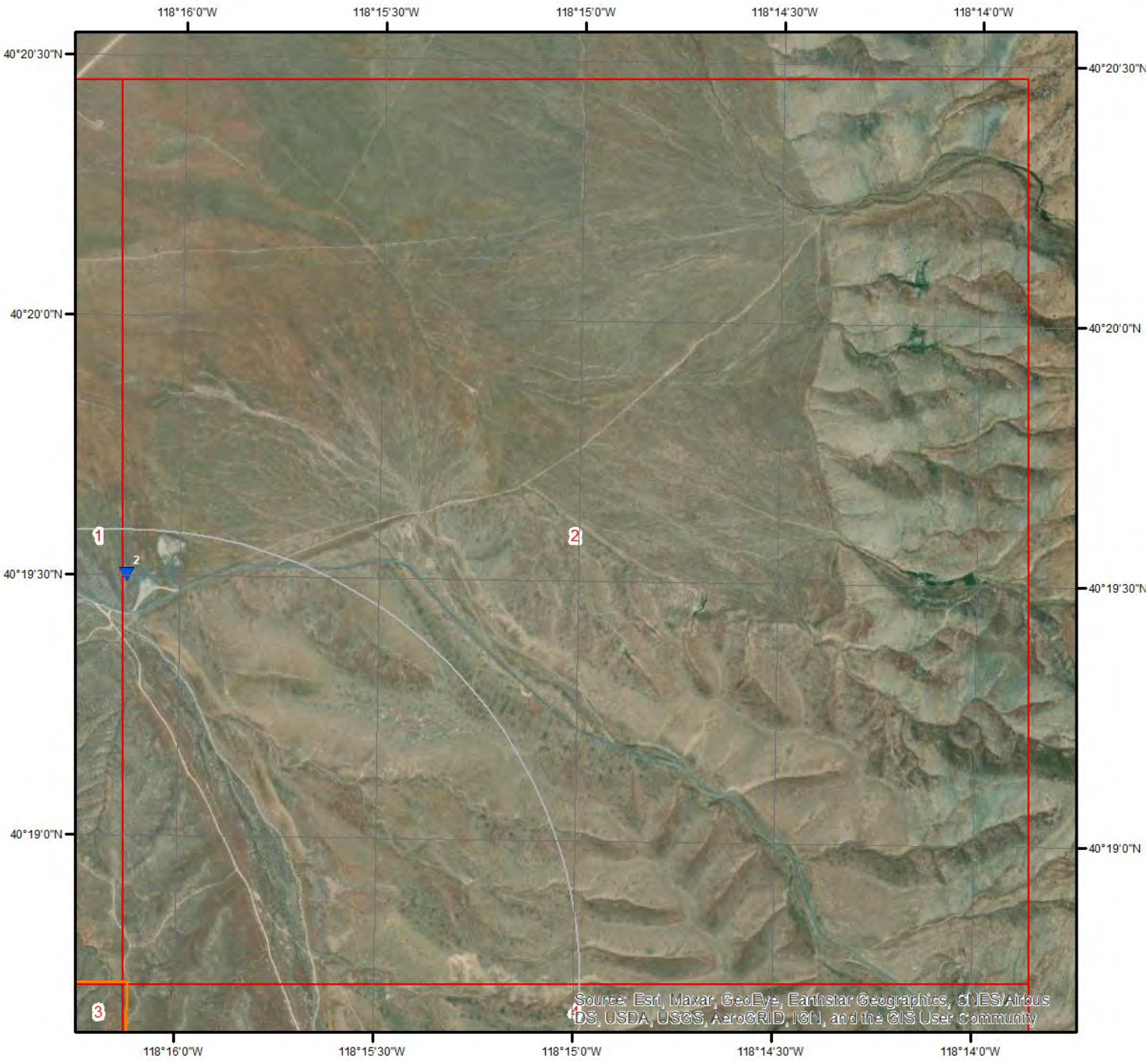
N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



Wells & Additional Sources - Page 2

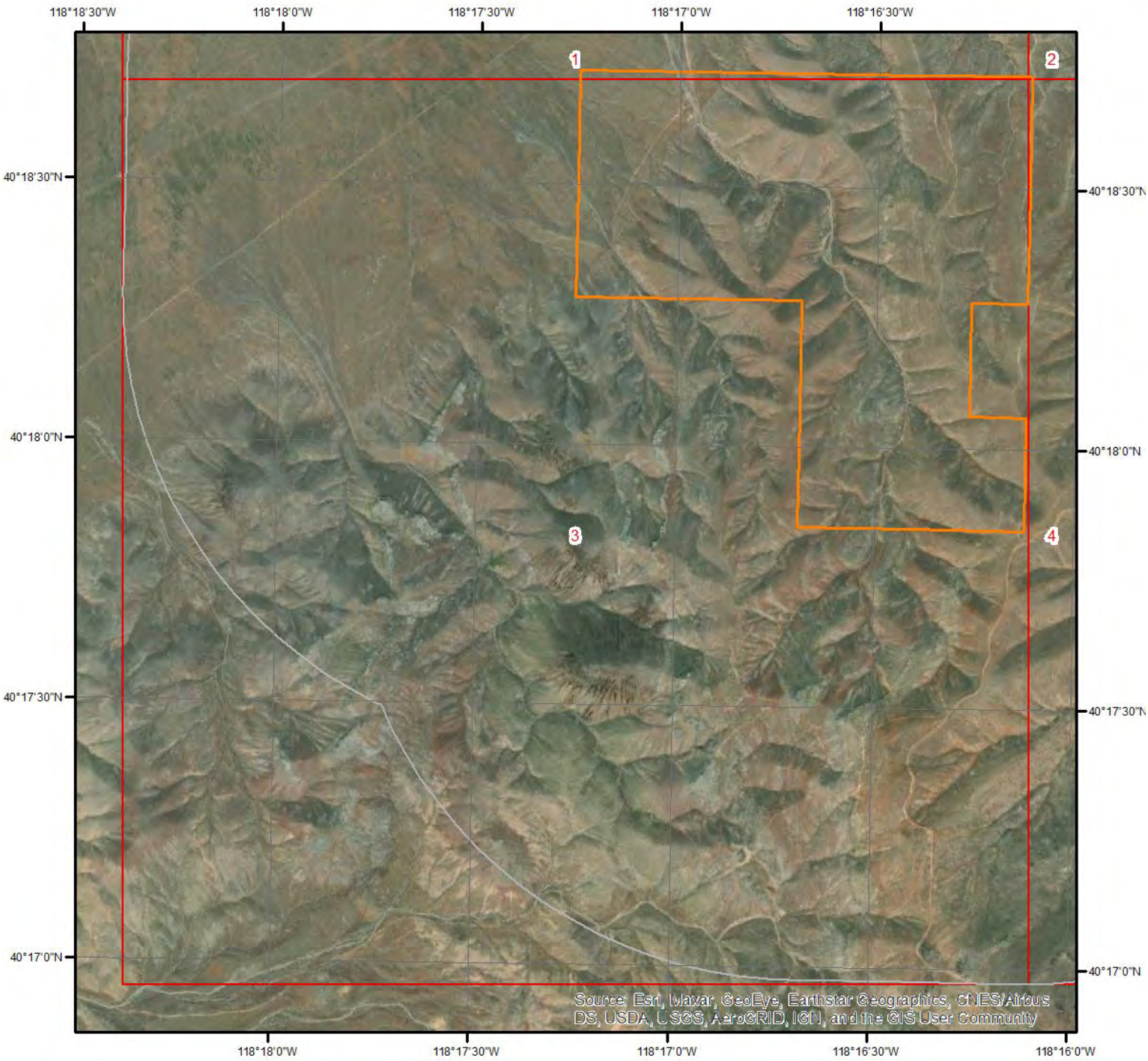
N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



Wells & Additional Sources - Page 3

N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources

Wells & Additional Sources - Page 4

N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources Summary

Federal Sources

Public Water Systems Violations and Enforcement Data

Map Key	ID	Distance (ft)	Direction
	No records found		

Safe Drinking Water Information System (SDWIS)

Map Key	ID	Distance (ft)	Direction
	No records found		

USGS National Water Information System

Map Key	Monitoring Loc Identifier	Distance (ft)	Direction
1	USGS-401927118161701	4411.096307692329	NNE

State Sources

Oil and Gas Wells

Map Key	ID	Distance (ft)	Direction
	No records found		

Well Log Database

Map Key	Well Log	Distance (ft)	Direction
2	390	4748.092185742162	NNE
3	23805	5137.040987774727	ESE

Wells and Additional Sources Detail Report

USGS National Water Information System

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	NNE	0.84	4,411.10	4,359.47	FED USGS

Organiz Identifier:	USGS-NV	Formation Type:	
Organiz Name:	USGS Nevada Water Science Center	Aquifer Name:	
Well Depth:	278	Aquifer Type:	
Well Depth Unit:	ft	Country Code:	US
Well Hole Depth:		Provider Name:	NWIS
W Hole Depth Unit:		County:	PERSHING
Construction Date:	19380101	Latitude:	40.3240751
Source Map Scale:	250000	Longitude:	-118.2723658
Monitoring Loc Name:	073A N28 E33 04A 1 USBLM		
Monitoring Loc Identifier:	USGS-401927118161701		
Monitoring Loc Type:	Well		
Monitoring Loc Desc:			
HUC Eight Digit Code:	16040108		
Drainage Area:			
Drainage Area Unit:			
Contrib Drainage Area:			
Contrib Drainage Area Unit:			
Horizontal Accuracy:	1		
Horizontal Accuracy Unit:	minutes		
Horizontal Collection Mthd:	Interpolated from MAP.		
Horiz Coord Refer System:	NAD83		
Vertical Measure:	4300.		
Vertical Measure Unit:	feet		
Vertical Accuracy:	1		
Vertical Accuracy Unit:	feet		
Vertical Collection Mthd:	Interpolated from topographic map.		
Vert Coord Refer System:	NGVD29		

Well Log Database

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
2	NNE	0.90	4,748.09	4,373.77	WATER WELLS

Well Log:	390	Notice of Intent:	0
Waiver No:		Yield:	10.0
Sequence No:	93366	Drawdown:	
Date Log Rcvd Acc:	D	Hours Pumped:	
Date Log Rcvd:	04-Mar-1948 00:00:00	Static Wl:	218.0
Well Start Date:	15-Feb-1938 00:00:00	Temperature:	

Well Finish Date:	06-Apr-1938 00:00:00	Ref:	MD
Edit Status:	F	App:	
Site Type Code:	N	Source Agency:	NV003
Site Type Desc:	New	Owner No:	GRAZING DIST 2
Work Type Code:	N	Owner Current:	U S BUREAU OF LAND MANAGEMENT
Work Type Desc:	New	Driller Lic No:	0
Work Type Rmks:	PROJECT NO 303	Contractor Lic No:	
Prop Use Code:	S	Contractor Drlr No:	
Prop Use Desc:	Stock	Contractor Name:	
Drilling Mthd Code:	C	User ID:	MTHORSON
Drilling Mthd Desc:	Cable tool	Parcel No:	
Test Method Code:	P	Lot No:	
Test Mthd Desc:	Piston Pump	Block No:	
Aquifer Desc:		Subdivision Name:	
Depth Seal:		SC:	32027
Depth Drilled:	278	HA:	073A
Depth Bedrock:		Twn:	N28
Depth Cased:	87	Legal Twn:	28N
Qual Const Data:	G	Rng:	E33
Qual Lith Data:	G	Legal Rng:	33E
Gravel Pack Top:		Sec:	04
Gravel Pack Bot:		Sec Quarters:	AA
Gravel Packed:		Legal Quarters:	NE NE
Top Perf:		Quarters Seq:	
Bottom Perf:		Latitude:	40.325
Perf Intervals:	1	Longitude:	118.268888888889
Casing Diameter:	6.0	Lat Long Src:	
Casing Reductions:	1	Lat Long Acc:	M
Update User ID:	APALMER	Utm X:	392198.963008278
Date Entry:	16-May-2005 00:00:00	Utm Y:	4464391.92801348
Date Update:	08-Nov-2005 00:00:00	Remarks Add:	
Date Cmplt Acc:	D		
Owner Address:	SERENA WELL		
Contractor Addr:			
Remarks:			

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	ESE	0.97	5,137.04	4,756.26	WATER WELLS

Well Log:	23805	Notice of Intent:	
Waiver No:		Yield:	
Sequence No:	4155	Drawdown:	
Date Log Rcvd Acc:		Hours Pumped:	
Date Log Rcvd:		Static Wl:	270.0
Well Start Date:		Temperature:	
Well Finish Date:	13-May-1982 00:00:00	Ref:	MD

Wells and Additional Sources Detail Report

Edit Status:	F	App:	
Site Type Code:	N	Source Agency:	NV003
Site Type Desc:	New	Owner No:	
Work Type Code:	G	Owner Current:	TRUE GEOTHERMAL ENERGY CO
Work Type Desc:	Geothermal	Driller Lic No:	1326
Work Type Rmks:		Contractor Lic No:	
Prop Use Code:	X	Contractor Drlr No:	
Prop Use Desc:	Test Well	Contractor Name:	WARNER F STODDARD
Drilling Mthd Code:	R	User ID:	NAFLECKS
Drilling Mthd Desc:	Reverse rotary	Parcel No:	
Test Method Code:		Lot No:	
Test Mthd Desc:		Block No:	
Aquifer Desc:		Subdivision Name:	
Depth Seal:	12	SC:	32027
Depth Drilled:	500	HA:	073A
Depth Bedrock:		Twn:	N28
Depth Cased:	500	Legal Twn:	28N
Qual Const Data:	G	Rng:	E33
Qual Lith Data:	G	Legal Rng:	33E
Gravel Pack Top:	0	Sec:	10
Gravel Pack Bot:	0	Sec Quarters:	DD
Gravel Packed:	N	Legal Quarters:	SE SE
Top Perf:		Quarters Seq:	
Bottom Perf:		Latitude:	40.29999923706055
Perf Intervals:	0	Longitude:	118.25027465820312
Casing Diameter:	1.0	Lat Long Src:	NV003
Casing Reductions:	0	Lat Long Acc:	T
Update User ID:		Utm X:	393740.96749674133
Date Entry:		Utm Y:	4461594.4627783
Date Update:		Remarks Add:	
Date Cmplt Acc:	D		
Owner Address:	P O BOX 2360 CASPER WY		
Contractor Addr:	P O BOX 216 LOVELOCK NV		
Remarks:			

Radon Information

This section lists any relevant radon information found for the target property.

Federal EPA Radon Zone for *PERSHING* County: **1**

Zone 1: Counties with predicted average indoor radon screening levels greater than 4 pCi/L
Zone 2: Counties with predicted average indoor radon screening levels from 2 to 4 pCi/L
Zone 3: Counties with predicted average indoor radon screening levels less than 2 pCi/L

Federal Area Radon Information for *LOVELOCK* City

No Measures/Homes:	32
Arithmetic Mean:	7.9
Maximum:	40.7
Minimum:	0.7
% >4 pCi/L:	56.3
Notes on Data Table:	TABLE 2. Screening indoor radon data for cities in Nevada with 10 or more usable indoor radon measurements. Data represent charcoal-canister tests made between 1989 and 1991.

Appendix

Federal Sources

FEMA National Flood Hazard Layer — **FEMA FLOOD**

The National Flood Hazard Layer (NFHL) data incorporates Flood Insurance Rate Map (FIRM) databases published by the Federal Emergency Management Agency (FEMA), and any Letters Of Map Revision (LOMRs) that have been issued against those databases since their publication date. The FIRM Database is the digital, geospatial version of the flood hazard information shown on the published paper FIRMs. The FIRM Database depicts flood risk information and supporting data used to develop the risk data. The FIRM Database is derived from Flood Insurance Studies (FISs), previously published FIRMs, flood hazard analyses performed in support of the FISs and FIRMs, and new mapping data, where available.

Indoor Radon Data — **INDOOR RADON**

Indoor radon measurements tracked by the Environmental Protection Agency(EPA) and the State Residential Radon Survey.

Public Water Systems Violations and Enforcement Data — **PWSV**

List of drinking water violations and enforcement actions from the Safe Drinking Water Information System (SDWIS) made available by the Drinking Water Protection Division of the US EPA's Office of Groundwater and Drinking Water. Enforcement sensitive actions are not included in the data released by the EPA. Address information provided in SWDIS may correspond either with the physical location of the water system, or with a contact address.

Radon Zone Level — **RADON ZONE**

Areas showing the level of Radon Zones (level 1, 2 or 3) by county. This data is maintained by the Environmental Protection Agency (EPA).

Safe Drinking Water Information System (SDWIS) — **SDWIS**

The Safe Drinking Water Information System (SDWIS) contains information about public water systems as reported to US Environmental Protection Agency (EPA) by the states. Addresses may correspond with the location of the water system, or with a contact address.

Soil Survey Geographic database — **SSURGO**

The Soil Survey Geographic database (SSURGO) contains information about soil as collected by the National Cooperative Soil Survey at the Natural Resources Conservation Service (NRCS). Soil maps outline areas called map units. The map units are linked to soil properties in a database. Each map unit may contain one to three major components and some minor components.

U.S. Fish & Wildlife Service Wetland Data — **US WETLAND**

The U.S. Fish & Wildlife Service Wetland layer represents the approximate location and type of wetlands and deepwater habitats in the United States.

USGS Current Topo — **US TOPO**

US Topo topographic maps are produced by the National Geospatial Program of the U.S. Geological Survey (USGS). The project was launched in late 2009, and the term "US Topo" refers specifically to quadrangle topographic maps published in 2009 and later.

USGS Geology — **US GEOLOGY**

Seamless maps depicting geological information provided by the United States Geological Survey (USGS).

USGS National Water Information System — **FED USGS**

The U.S. Geological Survey (USGS)'s National Water Information System (NWIS) is the nation's principal repository of water resources data. This database includes comprehensive information of well-construction details, time-series data for gage height, streamflow, groundwater level, and precipitation and water use data.

State Sources

Oil and Gas Wells — **OGW**

Oil and Gas Wells Data maintained by Nevada Bureau of Mines and Geology.

Appendix

Well Log Database **WATER WELLS**

The Division of Water Resources maintains a well log database that reports on water wells drilled in the State of Nevada. The location information may pertain to the physical location, contact or mailing address.

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Appendix D

DATABASE REPORT

Project Property:	*Rose Gultch Mine* *Rose Gultch Mine* *Lovelock NV*
Project No:	*19-23216-01-00004*
Report Type:	*Database Report*
Order No:	*21050700579*
Requested by:	*Converse Consultants*
Date Completed:	*May 9, 2021*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

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Executive Summary

Property Information:

Project Property:	*Rose Gultch Mine* *Rose Gultch Mine Lovelock NV*
Project No:	*19-23216-01-00004*

Coordinates:

Latitude:	*40.30602937*
Longitude:	*-118.27682396*
UTM Northing:	*4,462,506.51*
UTM Easting:	*391,497.31*
UTM Zone:	*UTM Zone 11T*

Elevation: *4,655 FT*

Order Information:

Order No:	*21050700579*
Date Requested:	*May 7, 2021*
Requested by:	*Converse Consultants*
Report Type:	*Database Report*

Historicals/Products:

Aerial Photographs	*Historical Aerials (Boundaries)*
ERIS Xplorer	*ERIS Xplorer*
Excel Add-On	*Excel Add-On*
Fire Insurance Maps	*US Fire Insurance Maps*
Physical Setting Report (PSR)	*Physical Setting Report (PSR)*
Topographic Map	*Topographic Maps*

Executive Summary: Report Summary

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
Standard Environmental Records								
Federal								
DOE FUSRAP	Y	1	0	0	0	0	0	0
NPL	Y	1	0	0	0	0	0	0
PROPOSED NPL	Y	1	0	0	0	0	0	0
DELETED NPL	Y	0.5	0	0	0	0	-	0
SEMS	Y	0.5	0	0	0	0	-	0
SEMS ARCHIVE	Y	0.5	0	0	0	0	-	0
ODI	Y	0.5	0	0	0	0	-	0
IODI	Y	0.5	0	0	0	0	-	0
CERCLIS	Y	0.5	0	0	0	0	-	0
CERCLIS NFRAP	Y	0.5	0	0	0	0	-	0
CERCLIS LIENS	Y	PO	0	-	-	-	-	0
RCRA CORRACTS	Y	1	0	0	0	0	0	0
RCRA TSD	Y	0.5	0	0	0	0	-	0
RCRA LQG	Y	0.25	0	0	0	-	-	0
RCRA SQG	Y	0.25	0	0	0	-	-	0
RCRA VSQG	Y	0.25	0	0	0	-	-	0
RCRA NON GEN	Y	0.25	0	0	0	-	-	0
FED ENG	Y	0.5	0	0	0	0	-	0
FED INST	Y	0.5	0	0	0	0	-	0
LUCIS	Y	0.5	0	0	0	0	-	0
ERNS 1982 TO 1986	Y	PO	0	-	-	-	-	0
ERNS 1987 TO 1989	Y	PO	0	-	-	-	-	0
ERNS	Y	PO	0	-	-	-	-	0
FED BROWNFIELDS	Y	0.5	0	0	0	0	-	0
FEMA UST	Y	0.25	0	0	0	-	-	0
FRP	Y	0.25	0	0	0	-	-	0
HIST GAS STATIONS	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
REFN	Y	0.25	0	0	0	-	-	0
BULK TERMINAL	Y	0.25	0	0	0	-	-	0
SEMS LIEN	Y	PO	0	-	-	-	-	0
SUPERFUND ROD	Y	1	0	0	0	0	0	0
State								
SHWS	Y	1	0	0	0	0	0	0
DELISTED SHWS	Y	1	0	0	0	0	0	0
SWF/LF	Y	0.5	0	0	0	0	-	0
LUST	Y	0.5	0	0	0	0	-	0
DELISTED LST	Y	0.5	0	0	0	0	-	0
UST	Y	0.25	0	0	0	-	-	0
UST NONCOMP	Y	0.25	0	0	0	-	-	0
AST	Y	0.25	0	0	0	-	-	0
AST SERC	Y	0.25	0	0	0	-	-	0
DTNK	Y	0.25	0	0	0	-	-	0
VCP	Y	0.5	0	0	0	0	-	0
BROWNFIELDS	Y	0.5	0	0	0	0	-	0
Tribal								
INDIAN LUST	Y	0.5	0	0	0	0	-	0
INDIAN UST	Y	0.25	0	0	0	-	-	0
DELISTED ILST	Y	0.5	0	0	0	0	-	0
DELISTED IUST	Y	0.25	0	0	0	-	-	0
County	***No County databases were selected to be included in the search.***							
Additional Environmental Records								
Federal								
PFAS NPL	Y	0.5	0	0	0	0	-	0
FINDS/FRS	Y	PO	0	-	-	-	-	0
TRIS	Y	PO	0	-	-	-	-	0
PFAS TRI	Y	0.5	0	0	0	0	-	0
PFAS WATER	Y	0.5	0	0	0	0	-	0
HMIRS	Y	0.125	0	0	-	-	-	0
NCDL	Y	0.125	0	0	-	-	-	0
TSCA	Y	0.125	0	0	-	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
HIST TSCA	Y	0.125	0	0	-	-	-	0
FTTS ADMIN	Y	PO	0	-	-	-	-	0
FTTS INSP	Y	PO	0	-	-	-	-	0
PRP	Y	PO	0	-	-	-	-	0
SCRD DRYCLEANER	Y	0.5	0	0	0	0	-	0
ICIS	Y	PO	0	-	-	-	-	0
FED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED FED DRY	Y	0.25	0	0	0	-	-	0
FUDS	Y	1	0	0	0	0	0	0
FORMER NIKE	Y	1	0	0	0	0	0	0
PIPELINE INCIDENT	Y	PO	0	-	-	-	-	0
MLTS	Y	PO	0	-	-	-	-	0
HIST MLTS	Y	PO	0	-	-	-	-	0
MINES	Y	0.25	0	0	0	-	-	0
SMCRA	Y	1	0	0	0	0	0	0
MRDS	Y	1	0	**1**	0	0	**2**	**3**
URANIUM	Y	1	0	0	0	0	0	0
ALT FUELS	Y	0.25	0	0	0	-	-	0
SSTS	Y	0.25	0	0	0	-	-	0
PCB	Y	0.5	0	0	0	0	-	0
State								
SPILLS	Y	0.125	0	0	-	-	-	0
HIST SPL	Y	0.125	0	0	-	-	-	0
TIER 2	Y	0.125	0	0	-	-	-	0
AIR PERMIT	Y	0.25	0	0	0	-	-	0
RECY HAZ	Y	PO	0	-	-	-	-	0
Tribal	***No Tribal additional environmental record sources available for this State.***							
County	***No County additional environmental databases were selected to be included in the search.***							
Total:			0	**1**	0	0	**2**	**3**

**** PO – Property Only***
**** 'Property and adjoining properties' database search radii are set at 0.25 miles.***

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number

No records found in the selected databases for the project property.

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
1	MRDS	LIMESTONE OCCURRENCE	PERSHING COUNTY LOVELOCK NV 89419	SW	0.10 / 541.46	162	15
2	MRDS	GOLD OCCURRENCE	PERSHING COUNTY LOVELOCK NV 89419	NE	0.76 / 4,024.45	-32	15
3	MRDS	WEST HUMBOLDT	PERSHING COUNTY LOVELOCK NV 89419	WSW	0.94 / 4,968.32	157	15

Executive Summary: Summary by Data Source

Non Standard

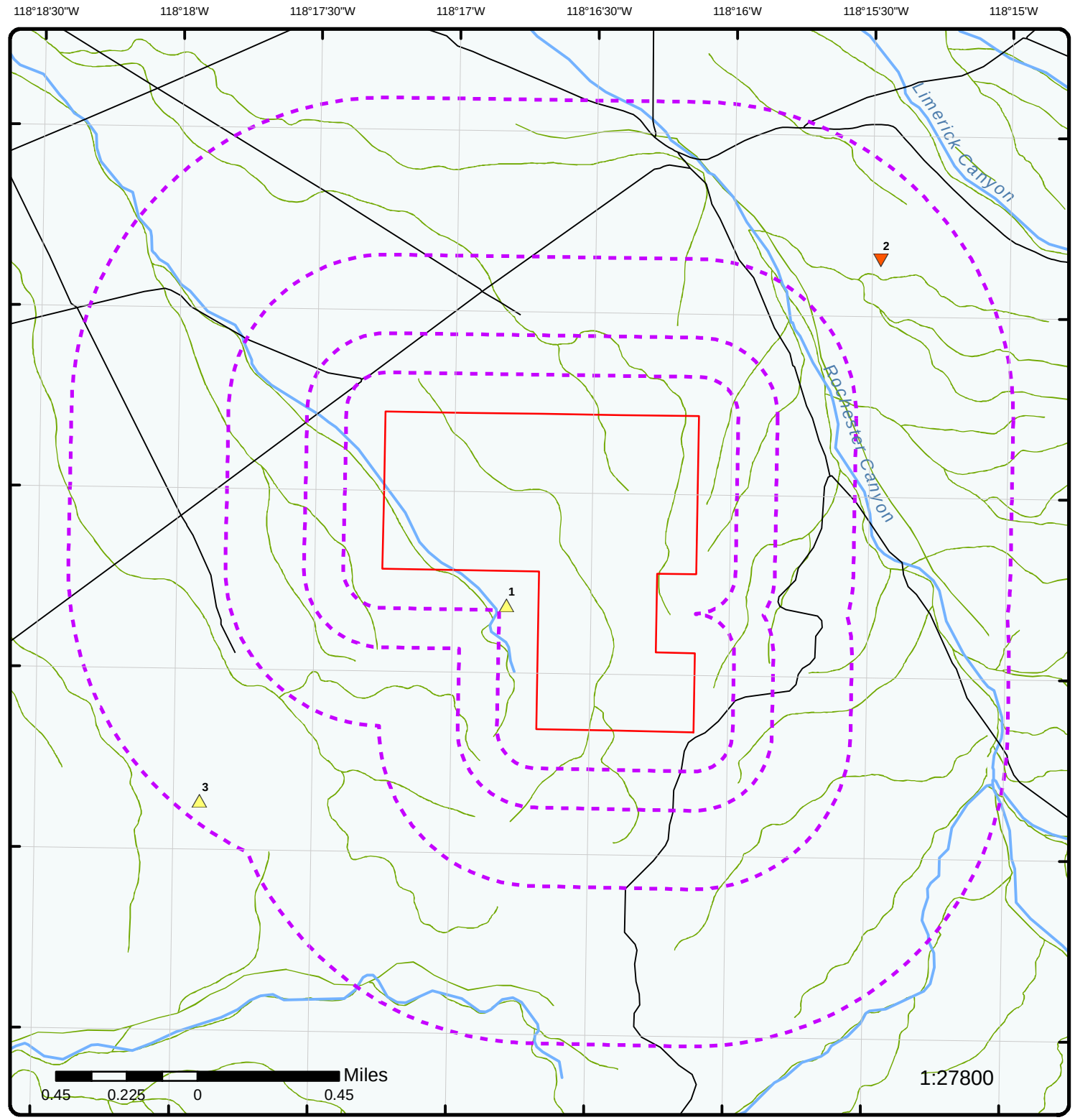
Federal

MRDS - Mineral Resource Data System

A search of the MRDS database, dated Mar 15, 2006 has found that there are 3 MRDS site(s) within approximately 1.00 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
LIMESTONE OCCURRENCE	PERSHING COUNTY LOVELOCK NV 89419	SW	0.10 / 541.46	1
WEST HUMBOLDT	PERSHING COUNTY LOVELOCK NV 89419	WSW	0.94 / 4,968.32	3

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
GOLD OCCURRENCE	PERSHING COUNTY LOVELOCK NV 89419	NE	0.76 / 4,024.45	2

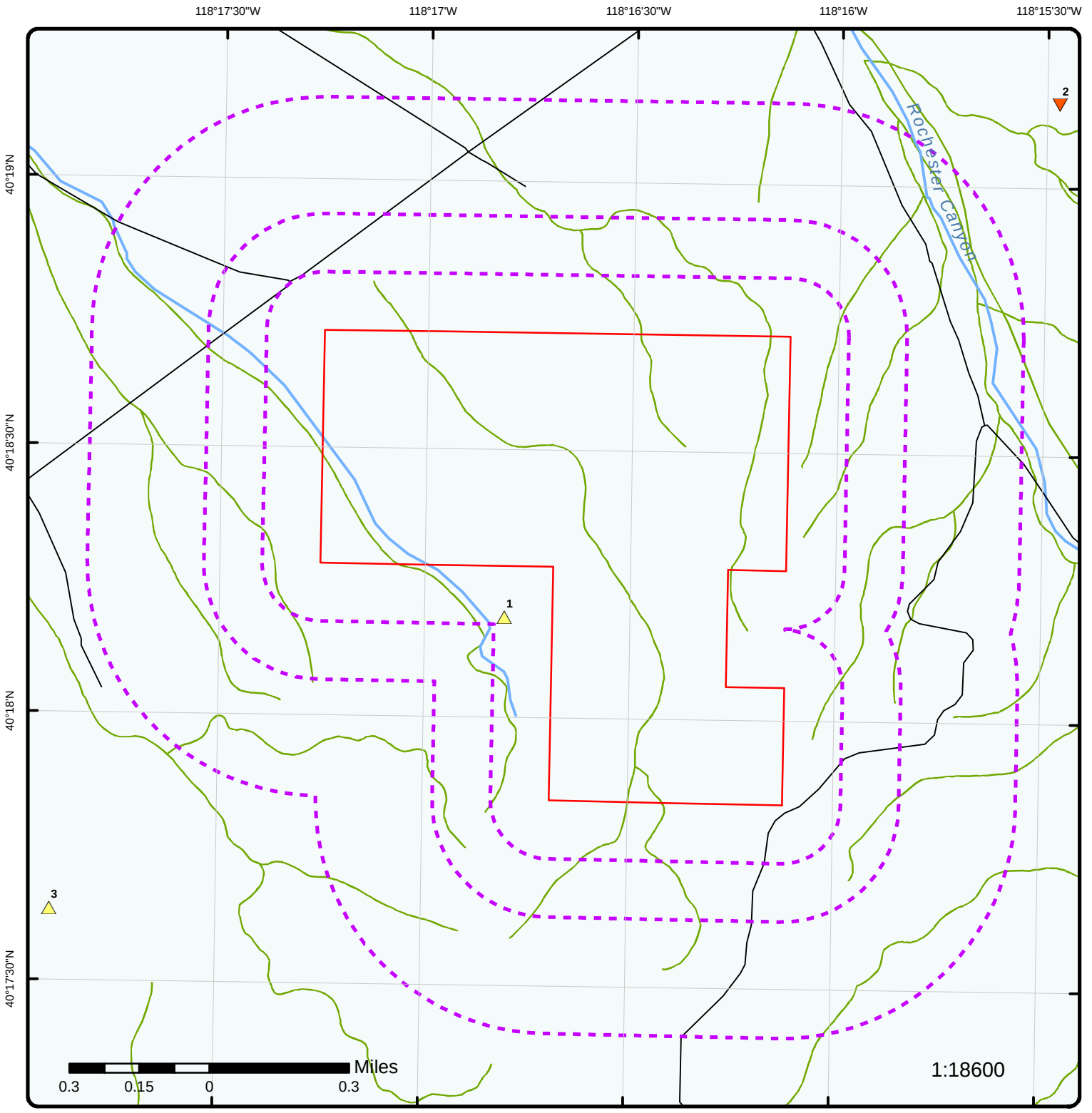


Map: 1.0 Mile Radius

Order Number: 21050700579

Address: Rose Gultch Mine, Lovelock, NV

- Project Property
- Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation
- County Boundary
- Rails
- Major Highways
- Major Highways Ramps
- Major Roads
- Major Roads Ramps
- Secondary Roads
- Secondary Roads Ramps
- Local Roads and Ramps
- State Boundary
- National Priority List Sites
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- Historic Fill
- FWS Special Designation Areas
- State Brownfield Sites
- State Brownfield Areas
- State Superfund Areas:Dept. of Defense
- State Superfund Areas:NPL
- WQARF Areas
- Federal Lands: Dept. of Defense (owned/administered areas)



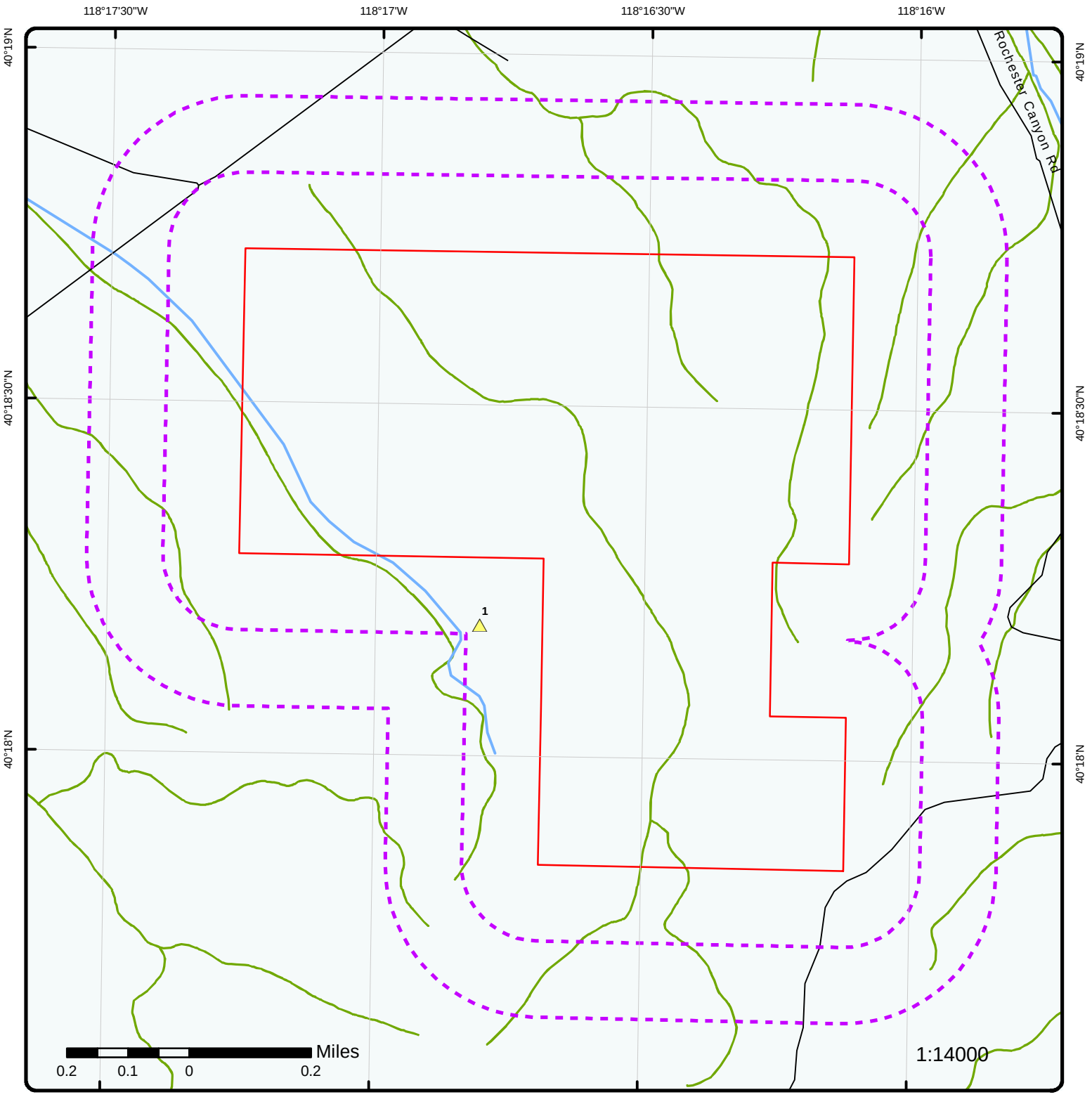
Map: 0.5 Mile Radius

Order Number: 21050700579

Address: Rose Gultch Mine, Lovelock, NV

ERIS

- Project Property
- Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation
- County Boundary
- Rails
- Major Highways
- Major Highways Ramps
- Major Roads
- Major Roads Ramps
- Secondary Roads
- Secondary Roads Ramps
- Local Roads and Ramps
- State Boundary
- National Priority List Sites
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- Historic Fill
- FWS Special Designation Areas
- State Brownfield Sites
- State Brownfield Areas
- State Superfund Areas:Dept. of Defense
- State Superfund Areas:NPL
- WQARF Areas
- Federal Lands: Dept. of Defense (owned/administered areas)

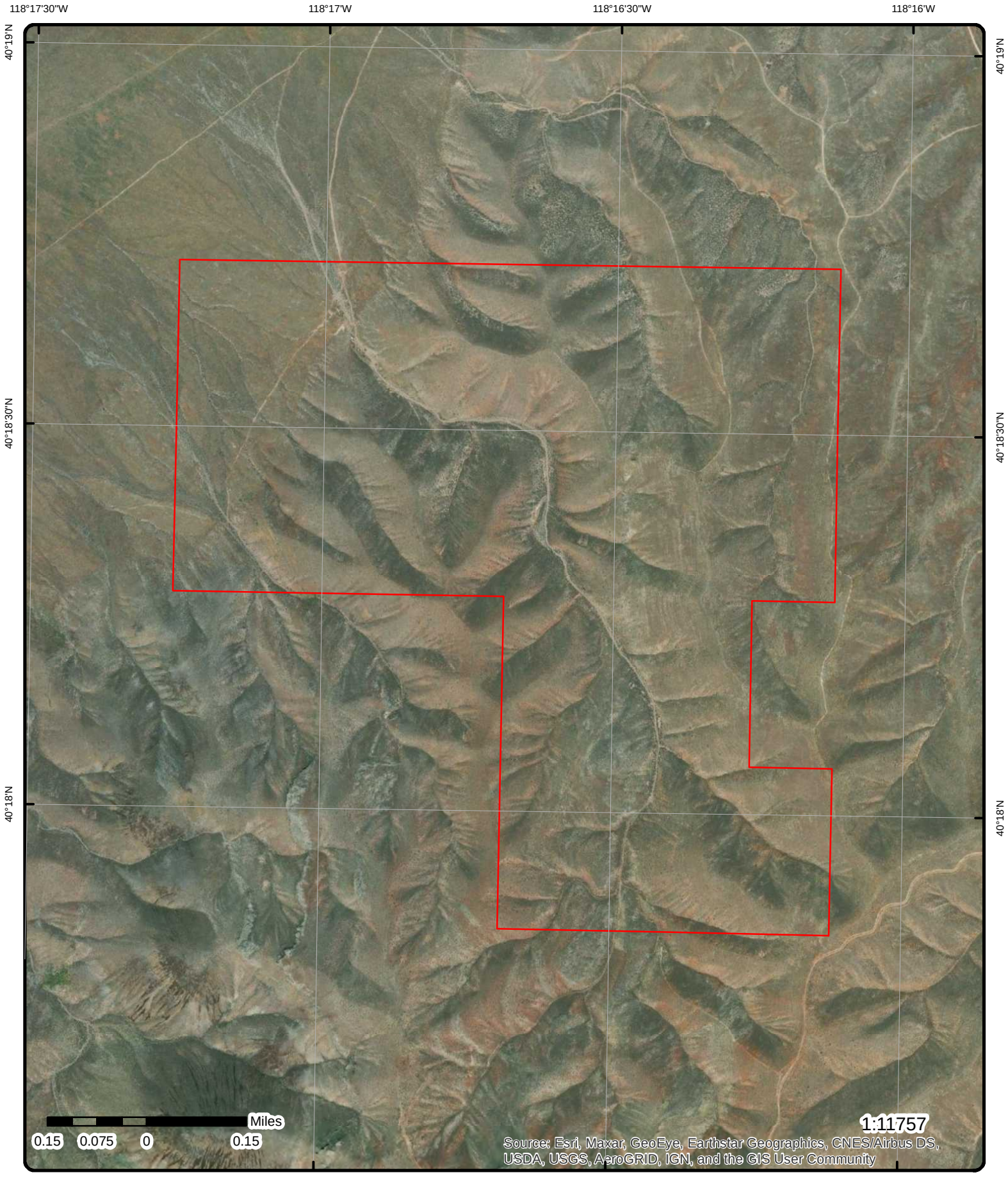


Map: 0.25 Mile Radius

Order Number: 21050700579

Address: Rose Gultch Mine, Lovelock, NV

- Project Property
- Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation
- County Boundary
- Rails
- Major Highways
- Major Highways Ramps
- Major Roads
- Major Roads Ramps
- Secondary Roads
- Secondary Roads Ramps
- Local Roads and Ramps
- State Boundary
- National Priority List Sites
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- Historic Fill
- FWS Special Designation Areas
- State Brownfield Sites
- State Brownfield Areas
- State Superfund Areas:Dept. of Defense
- State Superfund Areas:NPL
- WQARF Areas
- Federal Lands: Dept. of Defense (owned/administered areas)

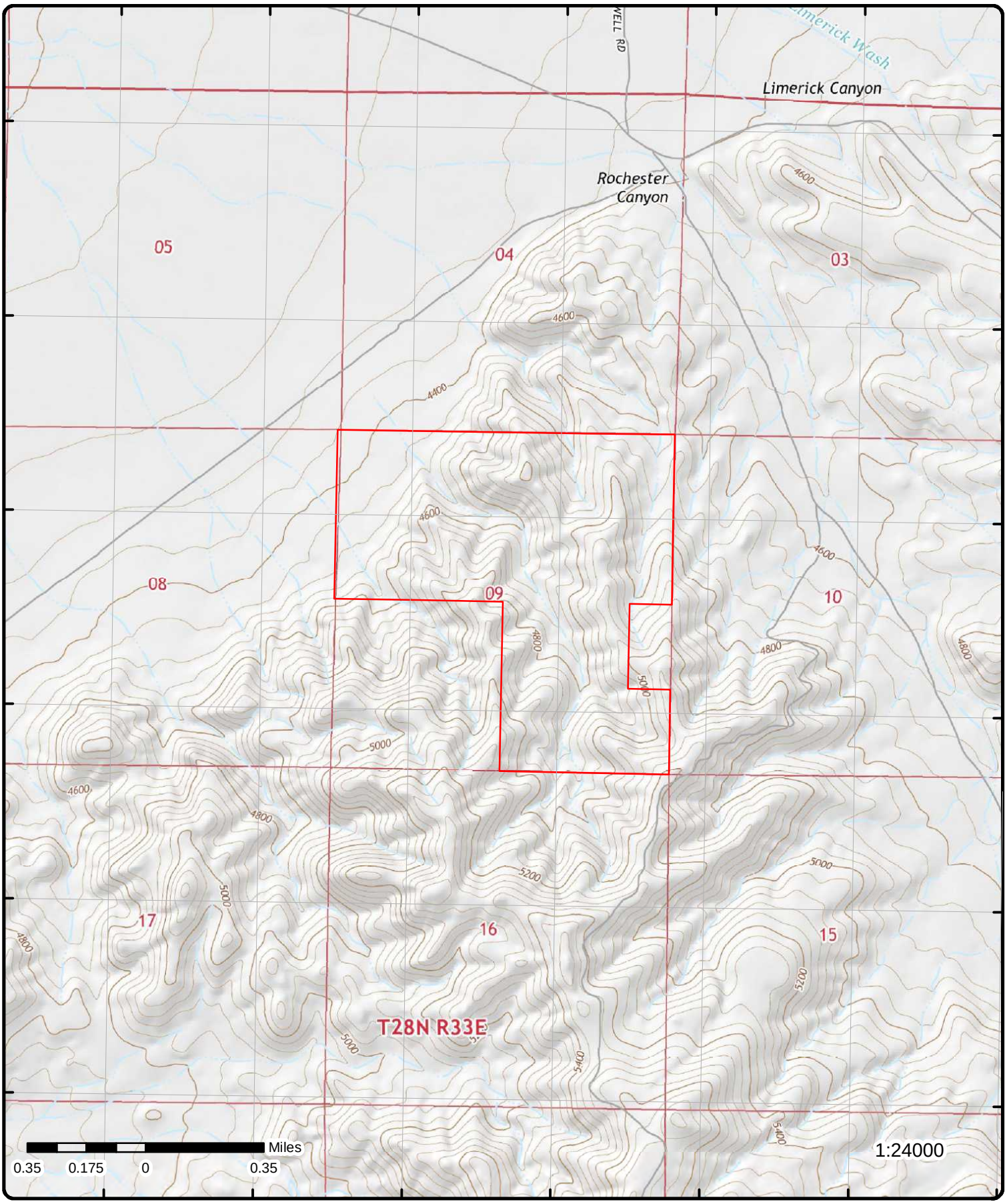


Aerial **Year: 2019**

Order Number: 21050700579

Address: Rose Gultch Mine, Lovelock, NV

Source: ESRI World Imagery



Topographic Map

Year: 2014

Order Number: 21050700579

Address: Rose Gultch Mine, NV

Quadrangle(s): Rochester, NV; Oreana, NV

Source: USGS Topographic Map

Detail Report

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
1	1 of 1	SW	0.10 / 541.46	4,816.99 / 162	LIMESTONE OCCURRENCE PERSHING COUNTY LOVELOCK NV 89419	MRDS

Dep ID: 10183733
Dev Status: OCCURRENCE
Code List: STN_C
Url: http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10183733
I1: 15
Latitude: 40.303101
Longitude: -118.28009

Commodity

I1: 33
Code: STN_C
Commodity: Stone, Crushed/Broken
Commodity Type: Non-metallic
Commodity Group: Stone, Crushed
Importance: Primary
Line: 1
Inserted By: MAS migration
Insert Date: 29-OCT-2002 09:00:24
Updated By: USGS
Update Date: 29-OCT-2002 09:01:45

Names

I1: 51
Status: Current
Site Name: Limestone Occurrence
Line: 1
Inserted By: MAS migration
Insert Date: 29-OCT-02
Updated By: USGS
Update Date: 29-OCT-02

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
2	1 of 1	NE	0.76 / 4,024.45	4,623.31 / -32	GOLD OCCURRENCE PERSHING COUNTY LOVELOCK NV 89419	MRDS

Dep ID: 10270879
Dev Status: OCCURRENCE
Code List: AU
Url: http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10270879
I1: 30
Latitude: 40.319275
Longitude: -118.257813

Commodity

I1: 28
Code: AU
Commodity: Gold
Commodity Type: Metallic
Commodity Group: Gold
Importance: Primary
Line: 1
Inserted By: MAS migration
Insert Date: 29-OCT-2002 09:00:24
Updated By: USGS
Update Date: 29-OCT-2002 09:02:23

Names

I1: 26
Status: Current
Site Name: Gold Occurrence
Line: 1
Inserted By: MAS migration
Insert Date: 29-OCT-02
Updated By: USGS
Update Date: 29-OCT-02

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
3	1 of 1	WSW	0.94 / 4,968.32	4,812.27 / 157	WEST HUMBOLDT PERSHING COUNTY LOVELOCK NV 89419	MRDS

Dep ID:	10295417	***I1:***	22
Dev Status:	UNKNOWN	***Latitude:***	40.293884
Code List:	CLY	***Longitude:***	-118.298401
Url:	http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10295417		

Commodity

I1:	15	***Line:***	1
Code:	CLY	***Inserted By:***	MAS migration
Commodity:	Clay	***Insert Date:***	29-OCT-2002 09:00:24
Commodity Type:	Non-metallic	***Updated By:***	USGS
Commodity Group:	Clays	***Update Date:***	29-OCT-2002 09:02:32
Importance:	Primary		

Names

I1:	25	***Inserted By:***	MAS migration
Status:	Current	***Insert Date:***	29-OCT-02
Site Name:	West Humboldt	***Updated By:***	USGS
Line:	1	***Update Date:***	29-OCT-02

Unplottable Summary

Total: 0 Unplottable sites

DB	Company Name/Site Name	Address	City	Zip	ERIS ID

No unplottable records were found that may be relevant for the search criteria.

Unplottable Report

No unplottable records were found that may be relevant for the search criteria.

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ERIS updates databases as set out in ASTM Standard E1527-13, Section 8.1.8 Sources of Standard Source Information:

"Government information from nongovernmental sources may be considered current if the source updates the information at least every 90 days, or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public."

Standard Environmental Record Sources

Federal

Formerly Utilized Sites Remedial Action Program: DOE FUSRAP

The U.S. Department of Energy (DOE) established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

Government Publication Date: Mar 4, 2017

National Priority List: NPL

National Priorities List (Superfund)-NPL: EPA's (United States Environmental Protection Agency) list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. The NPL, which EPA is required to update at least once a year, is based primarily on the score a site receives from EPA's Hazard Ranking System. A site must be on the NPL to receive money from the Superfund Trust Fund for remedial action.

Government Publication Date: Feb 23, 2021

National Priority List - Proposed: PROPOSED NPL

Includes sites proposed (by the EPA, the state, or concerned citizens) for addition to the NPL due to contamination by hazardous waste and identified by the Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment.

Government Publication Date: Feb 23, 2021

Deleted NPL: DELETED NPL

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.

Government Publication Date: Feb 23, 2021

SEMS List 8R Active Site Inventory: SEMS

The Superfund Program has deployed the Superfund Enterprise Management System (SEMS), which integrates multiple legacy systems into a comprehensive tracking and reporting tool. This inventory contains active sites evaluated by the Superfund program that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted.

Government Publication Date: Mar 23, 2021

SEMS List 8R Archive Sites: SEMS ARCHIVE

The Superfund Enterprise Management System (SEMS) Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time.

Government Publication Date: Mar 23, 2021

Inventory of Open Dumps, June 1985: ODI

The Resource Conservation and Recovery Act (RCRA) provides for publication of an inventory of open dumps. The Act defines "open dumps" as facilities which do not comply with EPA's "Criteria for Classification of Solid Waste Disposal Facilities and Practices" (40 CFR 257).

Government Publication Date: Jun 1985

EPA Report on the Status of Open Dumps on Indian Lands: IODI

Public Law 103-399, The Indian Lands Open Dump Cleanup Act of 1994, enacted October 22, 1994, identified congressional concerns that solid waste open dump sites located on American Indian or Alaska Native (AI/AN) lands threaten the health and safety of residents of those lands and contiguous areas. The purpose of the Act is to identify the location of open dumps on Indian lands, assess the relative health and environment hazards posed by those sites, and provide financial and technical assistance to Indian tribal governments to close such dumps in compliance with Federal standards and regulations or standards promulgated by Indian Tribal governments or Alaska Native entities.

Government Publication Date: Dec 31, 1998

Comprehensive Environmental Response, Compensation and Liability Information System - CERCLIS: CERCLIS

Superfund is a program administered by the United States Environmental Protection Agency (EPA) to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The EPA administers the Superfund program in cooperation with individual states and tribal governments; this database is made available by the EPA.

Government Publication Date: Oct 25, 2013

CERCLIS - No Further Remedial Action Planned: CERCLIS NFRAP

An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. The Archive designation means 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 this site on the National Priorities List (NPL). This 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 a potential NPL site.

Government Publication Date: Oct 25, 2013

CERCLIS Liens: CERCLIS LIENS

A Federal Superfund lien exists at any property where EPA has incurred Superfund costs to address contamination ("Superfund site") and has provided notice of liability to the property owner. A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Jan 30, 2014

RCRA CORRACTS-Corrective Action: RCRA CORRACTS

RCRA Info 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. At these sites, the Corrective Action Program ensures that cleanups occur. EPA and state regulators work with facilities and communities to design remedies based on the contamination, geology, and anticipated use unique to each site.

Government Publication Date: Jan 22, 2021

RCRA non-CORRACTS TSD Facilities: RCRA TSD

RCRA Info 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. This database includes Non-Corrective Action sites listed as treatment, storage and/or disposal facilities of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Government Publication Date: Jan 22, 2021

RCRA Generator List: RCRA LQG

RCRA Info 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. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Large Quantity Generators (LQGs) generate 1,000 kilograms per month or more of hazardous waste or more than one kilogram per month of acutely hazardous waste.

Government Publication Date: Jan 22, 2021

RCRA Small Quantity Generators List: RCRA SQG

RCRA Info is the 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. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Small Quantity Generators (SQGs) generate more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste per month.

Government Publication Date: Jan 22, 2021

RCRA Very Small Quantity Generators List: RCRA VSQG

RCRA Info is the 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. A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Very Small Quantity Generators (VSQG) generate 100 kilograms or less per month of hazardous waste, or one kilogram or less per month of acutely hazardous waste. Additionally, VSQG may not accumulate more than 1,000 kilograms of hazardous waste at any time.

Government Publication Date: Jan 22, 2021

RCRA Non-Generators: RCRA NON GEN

RCRA Info 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. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Non-Generators do not presently generate hazardous waste.

Government Publication Date: Jan 22, 2021

Federal Engineering Controls-ECs: FED ENG

Engineering controls (ECs) encompass a variety of engineered and constructed physical barriers (e.g., soil capping, sub-surface venting systems, mitigation barriers, fences) to contain and/or prevent exposure to contamination on a property. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Feb 23, 2021

Federal Institutional Controls- ICs: FED INST

Institutional controls are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Although it is EPA's (United States Environmental Protection Agency) expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable, ICs play an important role in site remedies because they reduce exposure to contamination by limiting land or resource use and guide human behavior at a site.

Government Publication Date: Feb 23, 2021

Land Use Control Information System: LUCIS

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

Government Publication Date: Sep 1, 2006

Emergency Response Notification System: ERNS 1982 TO 1986

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1982-1986

Emergency Response Notification System: ERNS 1987 TO 1989

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1987-1989

Emergency Response Notification System: ERNS

Database of oil and hazardous substances spill reports made available by the United States Coast Guard National Response Center (NRC). The NRC fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. These data contain initial incident data that has not been validated or investigated by a federal/state response agency.

Government Publication Date: Nov 9, 2020

The Assessment, Cleanup and Redevelopment Exchange System (ACRES) Brownfield Database: FED BROWNFIELDS

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 protects the environment, reduces blight, and takes development pressures off greenspaces and working lands. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Jan 6, 2021

FEMA Underground Storage Tank Listing: FEMA UST

The Federal Emergency Management Agency (FEMA) of the Department of Homeland Security maintains a list of FEMA owned underground storage tanks.

Government Publication Date: Dec 31, 2017

Facility Response Plan: FRP

List of facilities that have submitted Facility Response Plans (FRP) to EPA. Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit Facility Response Plans (FRPs). Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments.

Government Publication Date: Dec 2, 2020

Historical Gas Stations: HIST GAS STATIONS

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

Government Publication Date: Jul 1, 1930

Petroleum Refineries: REFN

List of petroleum refineries from the U.S. Energy Information Administration (EIA) Refinery Capacity Report. Includes operating and idle petroleum refineries (including new refineries under construction) and refineries shut down during the previous year located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and other U.S. possessions. Survey locations adjusted using public data.

Government Publication Date: Jul 10, 2020

Petroleum Product and Crude Oil Rail Terminals: BULK TERMINAL

List of petroleum product and crude oil rail terminals made available by the U.S. Energy Information Administration (EIA). Includes operable bulk petroleum product terminals located in the 50 States and the District of Columbia with a total bulk shell storage capacity of 50,000 barrels or more, and/or the ability to receive volumes from tanker, barge, or pipeline; also rail terminals handling the loading and unloading of crude oil that were active between 2017 and 2018. Petroleum product terminals comes from the EIA-815 Bulk Terminal and Blender Report, which includes working, shell in operation, and shell idle for several major product groupings. Survey locations adjusted using public data.

Government Publication Date: Apr 28, 2020

LIEN on Property: SEMS LIEN

The EPA Superfund Enterprise Management System (SEMS) provides LIEN information on properties under the EPA Superfund Program.

Government Publication Date: Mar 23, 2021

Superfund Decision Documents: SUPERFUND ROD

This database contains a listing of decision documents for Superfund sites. Decision documents serve to provide the reasoning for the choice of (or) changes to a Superfund Site cleanup plan. The decision documents include Records of Decision (ROD), ROD Amendments, Explanations of Significant Differences (ESD), along with other associated memos and files. This information is maintained and made available by the US EPA (Environmental Protection Agency).

Government Publication Date: Feb 23, 2021

State

Bureau of Corrective Actions' Project Tracking Database: SHWS

This is a list of sites available in Nevada Division of Environmental Protection (NDEP) - Bureau of Corrective Actions' Project Tracking (PT) Database. The PT Database includes both Leaking Underground Storage Tank (LUST) cases as well as Corrective Action (non-regulated) sites. This database is state equivalent CERCLIS.

Government Publication Date: Feb 24, 2021

Delisted Bureau of Corrective Actions' Project Tracking Database: DELISTED SHWS

This database contains a list of closed hazardous substance release and Corrective Action (non-regulated) sites that were removed from the Division of Environmental Protection (NDEP) - Bureau of Corrective Actions' Project Tracking (PT) Database.

Government Publication Date: Feb 24, 2021

Solid Waste Facilities and Landfill Sites: SWF/LF

A list of permitted Solid Waste Landfills and other waste management facilities within the state of Nevada. This list is made available by the Nevada Division of Environmental Protection (NDEP) - Bureau of Waste Management.

Government Publication Date: Nov 14, 2019

Leaking Underground Storage Tanks: LUST

This is a list of Leaking Underground Storage Tank (LUST) sites available in the Nevada Division of Environmental Protection (NDEP) - Bureau of Corrective Actions' Project Tracking (PT) Database. NDEP indicates there is no way to differentiate between LUST and other (non-LUST) Corrective Action sites - this list includes only those sites where the Program Type is LUST.

Government Publication Date: Feb 24, 2021

Delisted Leaking Storage Tanks: DELISTED LST

This database contains a list of closed Leaking Storage Tank sites that were removed from the Division of Environmental Protection (NDEP) - Bureau of Corrective Actions' Project Tracking (PT) Database.

Government Publication Date: Feb 24, 2021

Storage Tanks: UST

A list of regulated tanks in the State of Nevada. This list is made available by Nevada Division of Environmental Protection (NDEP) which administers the UST Program for the state.

Government Publication Date: Mar 3, 2021

Noncompliant Underground Storage Tanks: UST NONCOMP

A list of facilities with tanks that have been issued a red tag and are ineligible to receive deliveries of fuel under the Nevada Administrative Code (NAC) 459.9941. This list is made available by the Nevada Division of Environmental Protection (NDEP).

Government Publication Date: Feb 10, 2021

Aboveground Storage Tanks: AST

A list of Aboveground Storage Tanks in the State of Nevada made available by the Nevada Division of Environmental Protection (NDEP). This list no longer updated.

Government Publication Date: Jan 25, 2018

Aboveground Storage Tanks: AST SERC

List of aboveground storage tanks made available by the Nevada State Emergency Response Commission (SERC). In January 2009, the SERC discontinued the sharing of facility specific information due to the U.S. EPA's Office of General Counsel and a Nevada Attorney General's guidance relating to the Emergency Planning and Community Right-to-Know Act (EPCRA). According to the SERC, All Appropriate Inquiries (AAI) requirements do not fall under the EPCRA program and the SERC does not and never has regulated ASTs.

Government Publication Date: Jun 17, 2008

Delisted Storage Tanks: DTNK

This database contains a list of closed storage tank sites that were removed from the Nevada Division of Environmental Protection (NDEP) which administers the UST Program for the state.

Government Publication Date: Mar 3, 2021

Voluntary Cleanup Program: VCP

A list of facilities registered in the Nevada Division of Environmental Protection (NDEP)'s Voluntary Cleanup Program (VCP). The VCP program provides relief from liability to owners who undertake cleanups of contaminated properties under the oversight of the NDEP.

Government Publication Date: Feb 24, 2021

Project Tracking Database - Brownfields: BROWNFIELDS

List of Brownfield sites found in the Nevada Division of Environmental Protection - Bureau of Corrective Actions' Project Tracking Database.

Government Publication Date: Feb 24, 2021

Tribal

Leaking Underground Storage Tanks (LUSTs) on Indian Lands: INDIAN LUST
LUSTs on Tribal/Indian Lands in Region 9, which includes Nevada.
Government Publication Date: Apr 8, 2020

Underground Storage Tanks (USTs) on Indian Lands: INDIAN UST
USTs on Tribal/Indian Lands in Region 9, which includes Nevada.
Government Publication Date: Apr 8, 2020

Delisted Tribal Leaking Storage Tanks: DELISTED ILST
Leaking Underground Storage Tank facilities which have been removed from the Regional Tribal LUST lists made available by the EPA.
Government Publication Date: Apr 14, 2020

Delisted Tribal Underground Storage Tanks: DELISTED IUST
Underground Storage Tank facilities which have been removed from the Regional Tribal UST lists made available by the EPA.
Government Publication Date: Apr 14, 2020

County

No County databases were selected to be included in the search.

Additional Environmental Record Sources

Federal

PFOA/PFOS Contaminated Sites: PFAS NPL
List of sites where PFOA or PFOS contaminants have been found in drinking water or soil. Made available by the Federal Environmental Protection Agency (EPA).
Government Publication Date: Mar 1, 2021

Facility Registry Service/Facility Index: FINDS/FRS
The Facility Registry Service (FRS) is a centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest. FRS creates high-quality, accurate, and authoritative facility identification records through rigorous verification and management procedures that incorporate information from program national systems, state master facility records, and data collected from EPA's Central Data Exchange registrations and data management personnel. This list is made available by the Environmental Protection Agency (US EPA).
Government Publication Date: Nov 2, 2020

Toxics Release Inventory (TRI) Program: TRIS
The EPA's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U. S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment. One of TRI's primary purposes is to inform communities about toxic chemical releases to the environment.
Government Publication Date: Feb 19, 2020

Perfluorinated Alkyl Substances (PFAS) Releases: PFAS TRI
List of Toxics Release Inventory (TRI) facilities at which the reported chemical is a Per- or polyfluorinated alkyl substance (PFAS) included in the Environmental Protection Agency (EPA)'s consolidated PFAS Master List of PFAS Substances. The EPA's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment.
Government Publication Date: Feb 19, 2020

Perfluorinated Alkyl Substances (PFAS) Water Quality: PFAS WATER

The Water Quality Portal (WQP) is a cooperative service sponsored by the United States Geological Survey (USGS), the Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC). This listing includes records from the Water Quality Portal where the characteristic (environmental measurement) is in the Environmental Protection Agency (EPA)'s consolidated PFAS Master List of PFAS Substances.
Government Publication Date: Jul 20, 2020

Hazardous Materials Information Reporting System: HMIRS
US DOT - Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) Incidents Reports Database taken from Hazmat Intelligence Portal, U.S. Department of Transportation.
Government Publication Date: Sep 1, 2020

National Clandestine Drug Labs: NCDL
The U.S. Department of Justice ("the Department") provides this data 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.
Government Publication Date: Oct 5, 2020

Toxic Substances Control Act: TSCA
The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.
The CDR enables EPA to collect and publish information on the manufacturing, processing, and use of commercial chemical substances and mixtures (referred to hereafter as chemical substances) on the TSCA Chemical Substance Inventory (TSCA Inventory). This includes current information on chemical substance production volumes, manufacturing sites, and how the chemical substances are used. This information helps the Agency determine whether people or the environment are potentially exposed to reported chemical substances. EPA publishes submitted CDR data that is not Confidential Business Information (CBI).
Government Publication Date: Apr 11, 2019

Hist TSCA: HIST TSCA
The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.
The 2006 IUR data summary report includes information about chemicals manufactured or imported in quantities of 25,000 pounds or more at a single site during calendar year 2005. In addition to the basic manufacturing information collected in previous reporting cycles, the 2006 cycle is the first time EPA collected information to characterize exposure during manufacturing, processing and use of organic chemicals. The 2006 cycle also is the first time manufacturers of inorganic chemicals were required to report basic manufacturing information.
Government Publication Date: Dec 31, 2006

FTTS Administrative Case Listing: FTTS ADMIN
An administrative case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.
Government Publication Date: Jan 19, 2007

FTTS Inspection Case Listing: FTTS INSP
An inspection case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.
Government Publication Date: Jan 19, 2007

Potentially Responsible Parties List: PRP
Early in the cleanup process, the Environmental Protection Agency (EPA) conducts a search to find the potentially responsible parties (PRPs). EPA looks for evidence to determine liability by matching wastes found at the site with parties that may have contributed wastes to the site.
Government Publication Date: Feb 23, 2021

State Coalition for Remediation of Drycleaners Listing: SCRD DRYCLEANER
The State Coalition for Remediation of Drycleaners (SCRD) was established in 1998, with support from the U.S. Environmental Protection Agency (EPA) Office of Superfund Remediation and Technology Innovation. Coalition members are states with mandated programs and funding for drycleaner site remediation. Current members are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.
Government Publication Date: Nov 08, 2017

Integrated Compliance Information System (ICIS): ICIS

The Integrated Compliance Information System (ICIS) is a system that provides information for the Federal Enforcement and Compliance (FE&C) and the National Pollutant Discharge Elimination System (NPDES) programs. The FE&C component supports the Environmental Protection Agency's (EPA) Civil Enforcement and Compliance program activities. These activities include Compliance Assistance, Compliance Monitoring and Enforcement. The NPDES program supports tracking of NPDES permits, limits, discharge monitoring data and other program reports.

Government Publication Date: Mar 24, 2021

Drycleaner Facilities: FED DRYCLEANERS

A list of drycleaner facilities from Enforcement and Compliance History Online (ECHO) online search. The Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments.

Government Publication Date: Feb 17, 2021

Delisted Drycleaner Facilities: DELISTED FED DRY

List of sites removed from the list of Drycleaner Facilities (sites in the EPA's Integrated Compliance Information System (ICIS) with NAIC or SIC codes identifying the business as a drycleaner establishment).

Government Publication Date: Feb 17, 2021

Formerly Used Defense Sites: FUDS

Formerly Used Defense Sites (FUDS) are properties that were formerly owned by, leased to, or otherwise possessed by and under the jurisdiction of the Secretary of Defense prior to October 1986, where the Department of Defense (DoD) is responsible for an environmental restoration. This list is published by the U.S. Army Corps of Engineers.

Government Publication Date: Jan 28, 2020

Former Military Nike Missile Sites: FORMER NIKE

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

Government Publication Date: Dec 1, 1984

PHMSA Pipeline Safety Flagged Incidents: PIPELINE INCIDENT

A list of flagged pipeline incidents made available by the U.S. Department of Transportation (US DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA). PHMSA regulations require incident and accident reports for five different pipeline system types.

Government Publication Date: Jul 7, 2020

Material Licensing Tracking System (MLTS): MLTS

A list of sites that store radioactive material subject to the Nuclear Regulatory Commission (NRC) licensing requirements. This list is maintained by the NRC. As of September 2016, the NRC no longer releases location information for sites. Site locations were last received in July 2016.

Government Publication Date: Aug 5, 2020

Historic Material Licensing Tracking System (MLTS) sites: HIST MLTS

A historic list of sites that have inactive licenses and/or removed from the Material Licensing Tracking System (MLTS). In some cases, a site is removed from the MLTS when the state becomes an "Agreement State". An Agreement State is a State that has signed an agreement with the Nuclear Regulatory Commission (NRC) authorizing the State to regulate certain uses of radioactive materials within the State.

Government Publication Date: Jan 31, 2010

Mines Master Index File: MINES

The Master Index File (MIF) contains mine identification numbers issued by the Department of Labor Mine Safety and Health Administration (MSHA) for mines active or opened since 1971. Note that addresses may or may not correspond with the physical location of the mine itself.

Government Publication Date: Nov 3, 2020

Surface Mining Control and Reclamation Act Sites: SMCRA

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by the Office of Surface Mining Reclamation and Enforcement (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 Abandoned Mine Land (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.

Government Publication Date: Dec 18, 2020

Mineral Resource Data System: MRDS

The Mineral Resource Data System (MRDS) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS. The USGS has ceased systematic updates of the MRDS database with their focus more recently on deposits of critical minerals while providing a well-documented baseline of historical mine locations from USGS topographic maps.

Government Publication Date: Mar 15, 2006

Uranium Mill Tailings Radiation Control Act Sites: URANIUM

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

Government Publication Date: Mar 4, 2017

Alternative Fueling Stations: ALT FUELS

List of alternative fueling stations made available by the US Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Biodiesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE). The National Renewable Energy Laboratory (NREL) obtains information about new stations from trade media, Clean Cities coordinators, a Submit New Station form on the Station Locator website, and through collaborating with infrastructure equipment and fuel providers, original equipment manufacturers (OEMs), and industry groups.

Government Publication Date: Jan 18, 2021

Registered Pesticide Establishments: SSTS

List of active EPA-registered foreign and domestic pesticide-producing and device-producing establishments based on data from the Section Seven Tracking System (SSTS). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 7 requires that facilities producing pesticides, active ingredients, or devices be registered. The list of establishments is made available by the EPA.

Government Publication Date: Apr 13, 2021

Polychlorinated Biphenyl (PCB) Notifiers: PCB

Facilities included in the national list of facilities that have notified the United States Environmental Protection Agency (EPA) of Polychlorinated Biphenyl (PCB) activities. Any company or person storing, transporting or disposing of PCBs or conducting PCB research and development must notify the EPA and receive an identification number.

Government Publication Date: Nov 19, 2020

State

Nevada Spills Database: SPILLS

Listing of spills and releases sites, maintained by the Department of Nevada Division of Environmental Protection (NDEP).

Government Publication Date: May 05, 2016

Historical Spills Database: HIST SPL

Listing of spills and releases sites reported to the Department of Nevada Division of Environmental Protection (NDEP). This list only contains records prior to 1998.

Government Publication Date: Dec 31, 1997

Tier II Facility Listing: TIER 2

List of Tier II facilities which store hazardous chemicals or materials on-site, made available by the Nevada State Emergency Response Commission (SERC). In January 2009, the SERC discontinued the sharing of facility specific information due to the U.S. Environmental Protection Agency's Office of General Counsel and a Nevada Attorney General's guidance relating to the Emergency Planning and Community Right-to-Know Act (EPCRA).

Government Publication Date: Jun 17, 2008

Permitted Air Facilities: AIR PERMIT

List of facilities that have been issued an air quality operating permit by the Nevada Department of Environmental Quality. Only active permits are included in this list.

Government Publication Date: Mar 6, 2019

Hazardous Waste Recycling Facilities: RECY HAZ

Nevada Administrative Code (NAC) 444.84555 requires a facility or mobile unit for the recycling of hazardous waste obtain a Written Determination (WD) by the Nevada Department of Environmental Protection (NDEP) Administrator. This list of Written Determinations of hazardous waste recycling facilities is made available by the Nevada Division of Environmental Protection.

Government Publication Date: Mar 31, 2019

Tribal

No Tribal additional environmental record sources available for this State.

County

No County additional environmental databases were selected to be included in the search.

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

Appendix E

From: James Evans
To: James Jimenez
Subject: RE: Parcel 015-010-12
Date: Tuesday, July 13, 2021 3:07:57 PM

We have nothing that I'm aware of for this parcel.

James Evans
Pershing County Planning & Building Director
398 Main Street / P.O. Box 1656
Lovelock, NV 89419
(775) 273-2700 / (775) 273-3617 FAX

"The only limits to our realization of tomorrow will be our doubt of today"
-Franklin D. Roosevelt-

From: James Jimenez <JJimenez@ConverseConsultants.com>
Sent: Tuesday, July 13, 2021 3:04 PM
To: James Evans <jevans@pershingcountynv.gov>
Subject: Parcel 015-010-12

Hello,

Converse Consultants is conducting a Phase I Environmental Site Assessment of a parcel located in Lovelock, Nevada. As such, we would like to request building permits, violations, or environmentally significant permits/issues the Building Department may have.

I have attached the property card. Please let me know if you need additional information.

Thank you!

James Jimenez
Senior Project Manager
6610 West Arby Ave., Suite 104
Las Vegas, NV 89118

Office: 702-269-8336
Cell:
www.converseconsultants.com

Bureau of Mining Regulation and Reclamation

PREPARATION REQUIREMENTS AND GUIDELINES FOR PERMANENT CLOSURE PLANS AND FINAL CLOSURE REPORTS

This document explains the regulatory requirements for closure of a mining operation in Nevada. Within the Nevada Division of Environmental Protection (Division), Bureau of Mining Regulation and Reclamation (BMRR), the Regulation and Closure Branches issue Water Pollution Control Permits (WPCPs) to construct, operate and close mining operations pursuant to Nevada Revised Statutes (NRS) 445A.300 through 445A.730, and Nevada Administrative Code (NAC) 445A.350 through 445A.447. The primary function of both the Regulation and Closure Branches is to ensure that waters of the State, as defined at NRS 445A.415, are not degraded during and after mining activities. These regulations apply to all metal mining operations located within the State of Nevada (with the exceptions noted in NAC 445A.387), regardless of land ownership. Pursuant to NAC 445A.409, a valid WPCP, as issued, renewed, or subsequently modified, must be maintained until permanent closure and post-closure monitoring are completed and the Division has formally terminated the WPCP. All closure-related activities must be reviewed and approved by the Closure Branch. Branch staff will evaluate plans, reports, studies, and monitoring data to confirm chemical stabilization of all pollutant sources included in the mining operation.

Appendix A of this guidance document contains a list of applicable NRS 445A statutes and NAC 445A regulations that apply to mine closure. The Division has additional guidance documents available that provide more detail on specific topics referred to herein. Several of these documents are mentioned in context below. All mining-related guidance documents may be obtained either directly from the agency or may be downloaded from the website located at Bureau of Mining NAC445A Program Guidance Documents.

There are four required closure documents, listed in sequential order, which must be submitted to the Division for review and approval. The first two are regulatory requirements while the third and fourth are Division requirements.

1. Tentative Plan for Permanent Closure (TPPC): Submitted as part of an application for a new, renewed or modified WPCP and revised when necessary to address changes to the facility or operating plans (NAC 445A.398). A TPPC must include sufficient detail on the conceptual permanent closure of all pollutant sources to support reclamation bonding assumptions and reflect those actions as approved by the Division in the Reclamation Plan. The Division document "Guidance for Preparing Tentative Plans for Permanent Closure" provides additional information.

2. Final Plan for Permanent Closure (FPPC): Submitted at least two years *prior* to the anticipated permanent closure of the mine as a whole or of a specific process component (NAC 445A.447). A FPPC must provide closure goals and a detailed methodology of activities necessary to achieve a stabilization of all known and potential sources at the site as defined by NAC 445A.379. The plan must include a detailed description of all proposed monitoring that will be conducted to demonstrate that closure goals are achieved. The Permittee must receive Division approval for the plan before initiating action. Reclamation activities such as regrading, covering, placing of growth media, applying soil amendments, and revegetation are, in many

cases, major elements of the site stabilization and closure process. These activities should therefore become part of the closure plan and should be described or referenced as part of the FPPC. It is in the Permittee's interest, as general closure scenarios become more detailed, that the reclamation plan, together with the bond cost calculations, be reviewed and amended as necessary. Failure to coordinate closure and reclamation activities and documentation may result in additional expenditures.

3. Final Closure Report (FCR): Summarizes all completed closure-related activities, for example, monitoring, component characterization, pond(s) converted to evaporation cell(s), all completed earthwork, closure cover construction on tailings, waste rock facilities, and leach pads (as applicable); provides closure related as-built documentation per NAC 445A.427, and proposes post-closure monitoring, as applicable. The FCR must include a proposal for post-closure monitoring for an initial period of time not less than five years in order to provide additional supporting data that stabilization has been achieved. The Division approval for completion of permanent closure cannot be considered without a satisfactory FCR. Permanent closure is completed when the requirements contained in NAC 445A.429, 445A.430 and 445A.431, as applicable, have been achieved and all other sources at the facility have been stabilized, removed, or mitigated. At this point upon approval of the FCR, the mine site is considered to be in the post-closure monitoring period and a revised WPCP for post-closure monitoring is issued; Permit fees are reduced to those as provided for post-closure monitoring under NAC 445A.232, "Fees for WPCPs." Post-closure monitoring is defined as the period of time required for monitoring of a facility following the permanent closure of that facility. The length of time the Permittee will be required to monitor components is a function of both the complexity of the site and the success of the closure activities as documented by the post-closure monitoring. Factors that enter into this time frame include, depth to and quality of ground water; location and quality of surface waters; history of a particular component, and other factors.

   If the Division determines that the FCR indicates all physical closure activities associated with the Division-approved FPPC have been completed but the requirements contained in NAC 445A.429, 445A.430 and 445A.431, as applicable, have not yet been achieved, or any other sources at the facility remain to be stabilized, removed, or mitigated, permanent closure will not be deemed complete. However, a revised WPCP will be issued and Permit fees will be reduced to those as provided for "monitoring of mining facility that has completed all physical closure activities and is undergoing source stabilization" under NAC 445A.232 "Fees for WPCPs." The facility will not be placed into post-closure monitoring status until it is demonstrated that the above-referenced requirements are achieved.

4. Request for Final Closure: Demonstrates source stabilization (both chemical and physical) has been achieved and requests WPCP termination. The request is made following the completion of permanent closure and the post-closure monitoring period. The post-closure monitoring period must validate the Permittee's assertion that completed closure activities have successfully stabilized each source (per NAC 445A.379). The request should contain all post-closure monitoring information and clearly demonstrate stabilization. Upon the successful demonstration of stabilization and confirmation via post-closure monitoring, the WPCP is eligible for termination.

Guidelines for the Preparation of Final Plans for Permanent Closure

The Permittee is free to format the FPPC as he or she wishes; however, the FPPC should include the items outlined below (as appropriate).

An updated evaluation of the closure plan, using specific characterization data for each process component with respect to achieving stabilization, is to be submitted as part of the WPCP annual report.

I. Introduction

General Statement of Purpose: The FPPC must be submitted to the Division with the intent to fulfill the requirements as defined in NAC 445A. It must detail the procedures proposed for achieving stabilization of all mine source components. Details and direction of any proposed modeling, fate and transport analysis, or other projections of final closure configurations, should be clearly described in the plan. The Permittee must clearly demonstrate through the use of credible source, fate and transport evaluations, modeling, or other projections, that the proposed source does not have the potential to degrade waters of the State.

II. Site Location and Background Information

A. Geographic location, site climatology, and overall site geology;

B. WPCP status, pre-mining land use, historic mining activity (under previous ownership as applicable), and recent mining and/or exploration activity (under current ownership);

C. Background water depth and quality; the Permittee must clearly establish both of these parameters, per component of concern. The Permittee should refer to NAC 445A.424 to review potential closure options. The FPPC should include a physical description of the aquifer(s) and nearest downgradient wells;

D. Background surface water location and quality (if applicable); as with groundwater, background surface water quality must be established. The Permittee should refer to NRS 445A.565 regarding treatment of, and control over, if a discharge to surface waters is a possibility. The Plan must discuss the locations of any springs (whether ephemeral or perennial) and identify any mining components located nearby.

III. Facility Description

A. Provide the status and locations of all mine components, both active and inactive, including, but not limited to, process solution circuit, heap leach pads, ore stockpiles, process building(s), ponds, tailings impoundment(s), and non-process components such as waste rock disposal areas, open pits, overflow event ponds, vehicle maintenance shops, petroleum-contaminated soil (PCS) storage facilities, and landfills.

B. Provide applicable figures and flow charts of all process fluid system facilities; include dimensions and capacities of all components.

C. As applicable, describe the engineering specifications for all liners, to include sub-base, and leak detection systems for heap leach pads, ponds, tailings impoundments, and all associated conveyance devices that require containment; provide a schematic that shows the locations of all leak detection systems and sampling ports.

D. Describe all past, existing, and anticipated solid and liquid mine wastes and/or sources that will require formal closure.

E. Provide all monitoring, production, condemnation, and exploratory well logs; provide mapping with the locations of all the site wells. The Permittee is required to demonstrate that all wells and drill holes will be abandoned per Nevada State regulations.

IV. Source Characterization Program

As defined by NAC 445A.378, a "Source" means any building, structure, facility or installation from which there is or may be a discharge of pollutants. A Source Characterization Program is a detailed sampling and analytical approach to identify the materials, both solid and liquid present, per mining component, and to identify the materials that may require special attention, per mining component, in the closure and post-closure monitoring phase.

A Nevada State certified laboratory must be utilized for all sample analyses. A listing of those laboratories can be found at NDEP Certified Lab List under the heading 'Certified Lab List'.

It is recommended that the Permittee submit a sampling and characterization plan to the Division for review and approval before executing the plan. The Meteoric Water Mobility Procedure, acid/base accounting and static/kinetic are the primary testing methods the agency requires for characterization of source materials and wastes.

A. General Requirements

The following general requirements are requisite for any source that has the potential to degrade waters of the State.

1. Describe all past and present sampling programs, per source; discuss field sampling protocols such as field filtering, sample preservation, sample holding times, approved analytical method(s), and respective method detection limits (MDL); provide the rationale for your sampling program per source, i.e., how the number of samples to adequately characterize the material was determined.
2. Provide sample analysis results from all previous and ongoing sampling programs.
3. Provide an accurate and appropriately scaled map showing all past and present sample locations.
4. Acid/Base Accounting is required for each individual lithology in waste rock disposal areas, leach pads, tailings materials, and open pits. The Permittee will be required to provide all test results and a discussion, per component, predicting whether or not a source is or will be a future Acid Rock Drainage (ARD) concern.
5. Describe the following physical characteristics (as applicable to source):
   a. Specific gravity of solids;
   b. Slurry density (solids: liquids ratio);
   c. Deposition rate and method of deposition;
   d. Average operational dry density;
   e. Final operational height;
   f. Final operational area;
   g. Final operational top surface topography;
   h. Final operational water balance;
   i. Final operational embankment geometry;
   j. Strength characteristics of embankment and related components;

k. Potentiometric characteristics of embankment and related components;
l. Anticipated range of stability characteristics under expected and of operational conditions (static and pseudo-static);
m. Anticipated process water inventory at end of operations;
n. Anticipated surface water hydrology at end of operations and for predicted post-operational conditions (upstream diversion, required storm volume storage and flow rate, run-off and infiltration characteristics).

6. Describe the following chemical characteristics of solids and anticipated residual drainage:
   a. Mineralogy;
   b. Geochemistry;
   c. Metals leaching potential;
   d. Potential final run-off chemistry;
   e. Potential final seepage chemistry;
   f. Potential final drainage discharge chemistry.

B. Individual Source Discussion (the following requirements are source specific)

1. Waste rock storage facilities
   a. The Division document "Waste Rock and Overburden Evaluation" provides characterization guidance.
   b. Provide pertinent sections of the facility's Division-approved waste rock management plan(s), if applicable.

2. Open pit(s)
   a. If applicable, provide pertinent sections of the facility's Division-approved pit lake study (per NAC 445A.429).

3. Heap leach pads
   a. Heap leach pads must be stabilized per NAC 445A.430. Detail all previous characterization and other closure-related activities for spent heap leach ore (e.g., pore volumes, sampling, etc.).
   b. Discuss amounts and kinds of materials that make up the heap, per pad, as applicable (e.g., homogenous vs. heterogeneous ore types); detail whether the ore was crushed; provide a discussion on any heap draindown chemical constituents that are anticipated to be of concern; discuss the placement of the ore (e.g., number of lifts, radial stacked, end dumped, etc.); if the heap was agglomerated, provide details.

4. Tailings impoundment(s)
   a. Tailings must be stabilized per NAC 445A.431; discuss the amount of and the physical and chemical characteristics of the tailings' solids.

5. Process ponds
   a. Provide remaining sludge quantity and Division Profile I characterization analyses for each pond.

6. Process facilities
   a. Discuss and characterize any liquid and solid wastes not discussed above proposed to be left onsite following closure. This includes any waste or debris

planned to be buried in a Class III landfill. This would include residual material in tanks, thickeners, and CIL circuit for example.

7. Ancillary facilities
   a. Identify all ancillary sources that will need characterization and/or stabilization.
   b. Provide characterization information on any hydrocarbon storage pads, landfills and any potential sources to remain onsite.
   c. Indicate areas where waste rock and/or spent ore were used for construction purposes; provide representative characterization data for these locations.

V. Source Stabilization Program

A Source Stabilization Program will be those measures, per source, designed to preclude the migration of any contaminant having the potential to degrade the waters of the State.

VI. General Requirements

The following general requirements are requisite for any source that has the potential to degrade waters of the State.

1. Modeling: The Division will accept computer modeling as a tool in predicting future behavior of a source. The Permittee should, when submitting modeling results to the agency, provide a discussion of all knowns and assumptions used. In addition, uncertainty analysis; stress runs (high and low extremes); statistical analysis and outputs should be presented.
2. Long Term Physical Stability: As required by NAC 445A.433, "Minimum Design Criteria," 1(c) All process components must be designed to withstand the run-off from a 24-hour storm event with a 100-year recurrence interval. The Division interprets this requirement as adequate for an operating mine with personnel available for immediate maintenance. However, in the permanent closure and post-closure monitoring period, personnel are generally not available for emergency response and repair. Under this condition, the above design criteria requirement may be inadequate. Therefore, the Division will require the Permittee to demonstrate that all components in closure are designed to be stable for the long term. As of August 2018, closure components, including cover and stormwater diversions, must be designed to withstand a 24-hour storm event with a 500-year recurrence interval.
3. Division experience has shown that the best method to ensure that a component does not develop a long-term water quality problem is to preclude meteoric water from infiltrating through the component. As such, the agency will require investigation into various alternatives to minimize meteoric water infiltration such as an engineered cap, a topsoil cover, diversion ditches, regrading, compacting, or impermeable synthetic covers.
4. Should the evaluation of a source indicate that discharge (either surface or subsurface) may be possible, the Permittee shall provide:
   a. Evaluation of anticipated seepage discharge rate and chemistry;
   b. Evaluation of anticipated drain discharge rate and chemistry;
   c. Evaluation of potential storm water discharge and chemistry;
   d. Physical properties of pathway;
   e. Potential attenuation and diffusion in pathways.

5. Should it be determined that there is the potential to degrade waters of the State, the Permittee shall investigate:
   a. The need for additional controls to reduce or treat anticipated source releases, including seepage, drainage and surface run-off;
   b. The necessity to further characterize potential pathways for source releases;
   c. The necessity for additional storm water run-on and run-off controls;
   d. Data gaps limiting characterization;
   e. Proposed methods and schedules for additional data acquisition and evaluation required to refine predictions (e.g., source-pathway-receiving water analysis, bench or field scale treatment tests, attenuation tests, etc.);
   f. Proposed operational modifications, additional construction, and schedules needed to reduce potential for post-operation releases;
   g. Proposed additional monitoring to validate the benefits of modifications supporting the demonstration of non-degradation to receiving waters;
   h. Potential alternatives for reducing and/or treating post-closure source releases (i.e., cover application, anaerobic sulfate reduction);
   i. Anticipated closure period (the time required for near equilibrium condition to be attained, where after any source releases have no potential to degrade waters of the State).

6. Reuse or disposal of mine waste solids outside of containment is not allowed without approval from the Division and may be considered either a minor or major modification to a WPCP. To apply for approval, submit a proposal to the Division in accordance with the guidance document "Alternative Use of Mine Waste Solids, Disposal Outside of Containment."

7. Provide a complete and detailed post-closure monitoring plan. The proposed plan shall include sampling protocols such as field filtering, number of samples, sample preservation, sample holding times, and the approved method of analysis together with the method detection limits (MDL); include anticipated frequency and duration of closure and post-closure monitoring.

VII. Individual Source Discussion

The following requirements are source specific.

1. Waste Rock Storage Facilities (WRSFs): In general, as part of the active mine operating plan, waste rock is characterized, evaluated, and disposed of in the regulatory agency's approved manner. The Permittee should present current characterization and stabilization information. The Permittee will be required to observe the WRSFs during post-closure monitoring to ensure seepage does not emanate from the facilities.

2. Open Pits: As with WRSFs above, the Permittee must demonstrate that the pit(s) do not have the potential to degrade waters of the State (per NAC 445A.429). The Permittee will be required to monitor any open pits, whether or not they penetrated the water table, during post-closure monitoring to ensure they are behaving as predicted in the pit lake model.

3. Heap Leach Pads (HLPs): There are alternative methods to closing HLPs. A complete discussion of all scenarios is beyond the scope of this document. Presented below are basic requirements.

a. Heap leach facilities must meet the requirements as specified in NAC 445A.430, "Stabilization of Spent Ore."
b. The Permittee may describe or propose heap detoxification activities for WAD cyanide if applicable; provide required pore volume, application rates and duration, and planned sampling of the heap.
c. Provide a draindown curve (residual draindown flow over time); provide all knowns and assumptions used in predicting what the long-term residual volume of draindown will be.
d. Discuss the actual and anticipated residual heap draindown quality; include long-term draindown estimates; propose HLP effluent treatment, if necessary, and provide specific details of such items as dosing tanks, sampling ports, active or passive treatment systems, and the disposal system for treated effluent (in most cases a septic type leach field). The Division document titled "Monitoring and Analysis of Post-Closure Heap Discharge" provides details and guidelines for managing heap draindown in the post-closure monitoring period.
e. Describe the procedures for completing physical closure activities on the heap surface (e.g., re-sloping, capping or covering, solar reshaping, construction of diversion ditches, etc.)

4. Tailings Storage Facilities (TSFs)
   a. TSFs must meet the requirements specified in NAC 445A.431 "Stabilization of Tailings."
   b. The Permittee must consult with the State of Nevada's Division of Water Resources, Bureau of Engineering and Dam Safety, regarding closure of tailings dams.
   c. TSFs require dewatering activities that may involve the conversion of the underdrain pond to an evaporation or evapo-transpiration cell. Draindown management must be modeled and the rates incorporated into the FPPC.
   d. Describe the procedures for completing physical closure activities on the tailings surface (e.g., re-sloping, covering, construction of diversion ditches, etc.).

5. Process Ponds
   a. Based on analytical characterization data, describe the proposed fate of the pond solids (e.g., disposed of or left in place); if proposed to be left in place, describe method of stabilization or encapsulation;
   b. Describe whether liner material will be disposed of or left in place;
   c. Describe the ultimate fate of the process component (i.e., if the pond basin will be backfilled, describe the procedures and what backfill material is proposed for use).

6. Process Facilities
   a. Discuss the ultimate fate of all process facilities;
   b. Discuss any proposed decontamination of refineries, assay labs or associated areas, as applicable.

7. Ancillary Facilities
   1. Discuss the fate of all ancillary facilities (e.g., buildings removed, foundations buried onsite, area ripped, stabilized onsite, etc.); if materials are buried in place, a Class III Waivered landfill filing is required.

APPENDIX A

The following Nevada State statutes and regulations pertain to closure. Please note: this list may be incomplete depending upon site-specific conditions. Please refer to NAC 445A.350 through 445A.447, inclusive, for complete State mining regulations.

Applicable Statues

NRS 445A.415 "Waters of the State" defined. "Waters of the State" means all waters situated wholly or partly within or bordering upon this state, including but not limited to:

1. All streams, lakes, ponds, impounding reservoirs, marshes, water courses, waterways, wells, springs, irrigation systems and drainage systems, and
2. All bodies or accumulations of water, surface and underground, natural or artificial.

(Added to NRS by 1973, 1709) (Substituted in revision for NRS 445.191)

NRS 445A.565 Protection of surface waters of higher quality; treatment of and control over discharges constituting new or increased sources of pollution.

1. Any surface waters of the State whose quality is higher than the applicable standards of water quality as of the date when those standards become effective must be maintained in their higher quality. No discharges of waste may be made which will result in lowering the quality of these waters unless it has been demonstrated to the commission that the lower quality is justifiable because of economic or social considerations. This subsection does not apply to normal agricultural rotation, improvement or farming practices.
2. Any person who plans to discharge waste from any public or private project o development which would constitute a new or increased source of pollution to waters of the State whose quality is high shall, as part of the initial design of the project o development, provide:
   a. If the discharge will be from a point source, the highest and best degree of waste treatment available under the existing technology, consistent with the best practice in the particular field under the conditions applicable, and reasonably consistent with the economic capability of the project or development.
   b. If the discharge will be from a diffuse source, such measures, methods of operation or practices as are reasonably calculated or designed to prevent, eliminate or reduce water pollution from the source, under the circumstances pertaining to the particular place, in order to achieve control over water pollution which is reasonably consistent with the economic capability of the project or development.
3. This section does not limit a municipal sewage treatment plant in disposing of its solid sludge on land if the sludge is properly spread and incorporated into the soil.

(Added to NRS by 1979, 1029)(Substituted in revision for NRS 445.253)

Applicable Regulations

NAC 445A.357 "Degrade" defined. "Degrade" means to alter the physical or chemical properties of or to cause a change in the concentration of any substance in the waters of the State in violation of the standards established pursuant to NAC 445A.424. (Added to NAC by Environmental Comm'n, eff. 9-1-89)(Substituted in revision for NAC 445.24214)

NAC 445A.359 "Facility" defined. "Facility" means all portions of a mining operation, including, without limitation, the mine, waste rock piles, ore piles, beneficiation process components, processed ore disposal sites, and all associated buildings and structures. The term does not include any process component or non-process component which is not used for mining or mineral production and has not been used in the past for mining or mineral production as part of an operation which is active as of

September 1, 1989. (Added to NAC by Environmental Comm'n, eff. 9-1-89)-(Substituted in revision for NAC 445.24218)

NAC 445A.361 "Groundwater" defined. "Ground water" means all subsurface water comprising the zone of saturation, including perched zones of saturation, which could produce usable water. (Added to NAC by Environmental Comm'n, eff. 9-1-89)-(Substituted in revision for NAC 445.24222)

NAC 445A.363 "Meteoric waters" defined. "Meteoric waters" means any form of precipitation falling from the earth's atmosphere. (Added to NAC by Environmental Comm'n, eff. 9-1-89)-(Substituted in revision for NAC 445.24226)

NAC 445A.___"Mitigate" or "mitigation" defined. "Mitigate" or "mitigation" includes, without limitation:

1. Avoiding the potential degradation of waters of the State by taking or not taking a certain action or parts of an action;
2. Minimizing the degradation or potential degradation of waters of the State by limiting the degree or magnitude of an action and its implementation;
3. Reducing or eliminating the degradation or potential for degradation of waters of the State by taking corrective action as defined in NAC 445A.2262; or
4. Reducing or eliminating the degradation or potential for degradation of waters of the State over time through preservation and maintenance over the life of the action.

(Ref. NAC 445A.711**)** (Effective August 2018, not yet codified).

NAC 445A.367 "Permanent closure" defined**.** "Permanent closure" means the time in the life of a facility when activities for the final stabilization, removal or mitigation of sources are undertaken.
(Added to NAC by Environmental Comm'n, eff. 9-1-89; A by R046-18, 8-30-2018)-(Substituted in revision for NAC 445.24234)

NAC 445A.___ "Post-closure monitoring" defined. "Post-closure monitoring" means the period of time required for monitoring of a facility following the permanent closure of that facility.
(Effective August 2018, not yet codified).

NAC 445A.375 "Process component" defined. "Process component" means a distinct portion of a constructed facility which is a point source. (Added to NAC by Environmental Comm'n, eff. 9-1-89)-(Substituted in revision for NAC 445.2425)

NAC 445A.376 "Process fluid" defined. "Process fluid" means any liquids, including meteoric waters, which are intentionally or unintentionally introduced into any portion of the beneficiation process components. (Added to NAC by Environmental Comm'n, eff. 9-1-89)-(Substituted in revision for NAC 445.24252)

NAC 445A.378 "Source" defined. "Source" means any building, structure, facility or installation from which there is or may be the discharge of pollutants. (Added to NAC by Environmental Comm'n, eff. 9-1-89)-(Substituted in revision for NAC 445.24256)

NAC 445A.379 "Stabilized" defined. "Stabilized" means the condition which results when contaminants in a material are bound or contained so as to prevent them from degrading the waters of the State under the environmental conditions that may reasonably be expected to exist at a site.
(Added to NAC by Environmental Comm'n, eff. 9-1-89)-(Substituted in revision for NAC 445.24258)

NAC 445A.382 "Temporary closure" defined. "Temporary closure" means the cessation of the operation of a process component for more than 30 days as a result of a planned or unplanned activity.
(Added to NAC by Environmental Comm'n, eff. 9-1-89)-(Substituted in revision for NAC 445.24264)

NAC 445A.383 "WAD cyanide" defined. "WAD cyanide" means the weak acid dissociable cyanide concentration as determined by one of the following methods:

1. ASTM D2036-082, "Standard Test Methods for Cyanides in Water," Method C, Part 31. A copy of ASTM D2036-082 is available for purchase at the HIS Standards Store, 15 Inverness Way East, Englewood, Colorado 80112, or at the Internet address https://global.ihs.com, for the price of $72.
2. ASTM D2036-06, "Standard Test Methods for Cyanides in Water," Method C, followed by Part 16.2 (titrimetric), Part 16.3 (colorimetric) or Part 16.4 (ion-specific electrode). A copy of ASTM D2036-06 is available from ASTM International, P.O. Box C700, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959, by telephone at (877) 909-2786 or at the Internet address https://www.astm.org, for the price of $62.40.
3. ASTM D2036-09, "Standard Test Methods for Cyanides in Water," Method C, followed Page 7 of 36 by Part 16.2 (titrimetric), Part 16.3 (colorimetric) or Part 16.4 (ion-specific electrode). A copy of ASTM D2036-09 is available from ASTM International, P.O. Box C700, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959, by telephone at (877) 909-2786 or at the Internet address https://www.astm.org, for the price of $52.
4. "Standard Methods for the Examination of Water and Wastewater," SM 4500-CN-I, followed by SM 4500-CN-D (titrimetric), SM 4500-CN-E (colorimetric) or SM 4500-CN-F (cyanide-ion selective electrode). A copy of these standards is available from Standard Methods at the Internet address https://standardmethods.org, for the price of $75.
5. Another version or method approved by the Department and scientifically demonstrated to achieve performance in determining weak acid dissociable cyanide which is equivalent to one of the methods described in subsections 1 to 4, inclusive. (Effective August 2018, not yet codified).

NAC 445A.398 Contents of application: Proposed operating plans (August 2020 Update)**.**
The proposed operating plans for a facility must include:

7. A tentative plan for the permanent closure of the facility which describes the procedures, methods and schedule for stabilizing spent process materials and all other sources at the facility. The plan must:
   a. Include:
      1) Procedures for characterizing spent process materials as they are generated;
      2) The procedures to stabilize all process components and all other sources at the facility with an emphasis on stabilizing spent process materials and the estimated cost for the procedures; and
      3) Conceptual closure plans for all sources at the facility with sufficient detail to support an estimate of the cost of executing the plan for reclamation determined pursuant to NAC 519A.360.
   b. Be updated and resubmitted to the Department if the holder of the permit:
      1) Submits a request to modify a plan for reclamation pursuant to NAC 519A.295 and the requested modification will affect the conceptual closure plans. The revised plan must be submitted with the request to modify the plan for reclamation.
      2) Makes any other change to the facility or operating plans that requires submitting new information to the Department pursuant to NAC 445A.392, 445A.420 or 445A.427.

(Added to NAC by Environmental Comm'n, eff. 9-1-89; A by R046-18, 8-30-2018 and R018-20, 8-26-2020)-(Substituted in revision for NAC 445.24296)

NAC 445A.424 Limitations on degradation of water; exemptions.

1. A facility, regardless of size or type, may not degrade the waters of the State to the extent that:
   a. The quality of surface water is lowered below that allowed by NRS 445.565.
   b. For ground water:

1) The concentration of a constituent exceeds the greater of:
   (I) A state or federal regulation prescribing standards for drinking water; or
   (II) The natural background concentration of the regulated drinking water constituent; or
2) The concentration of WAD cyanide exceeds 0.2 mg/l. The department may establish a numerical limit for any constituent not regulated by subparagraphs 1 and 2 which may reasonably be expected to be discharged by the facility in sufficient volume and concentration to cause an adverse impact on human health.

c. The quality of those waters of the State which already exceed the criteria established by subsection 2 is lowered to a level that the department finds would render those waters unsuitable for the existing or potential municipal, industrial, domestic or agricultural use.

2. The department may exempt a body of ground water or portion thereof from the standards established in subsection 1 if the request for an exemption to the ground water standards and the supporting information is submitted as part of the application for the permit. The following criteria will be considered by the department in determining whether to exempt a potentially impacted body of ground water from the standards in subsection 1:
   a. The impacted ground water does not currently serve as a source of drinking water and because of the following reasons the ground water will not serve as a source of drinking water:
      1) The ground water produces a mineral, hydrocarbon or geothermal fluid which the applicant can demonstrate to the satisfaction of the department exists at a concentration that is expected to be capable of commercial production and that releases by the facility will not affect this production;
      2) The ground water is situated at a depth or location which makes recovery of water for drinking economically or technologically impractical; or
      3) It would be economically or technologically impractical to render the water fit for human consumption; or
   b. The total dissolved solids in the ground water is more than 10,000 milligrams per liter and the ground water is not reasonably expected to become a supply of drinking water.

(Added to NAC by Environmental Comm'n, eff. 9-1-89; A by R046-18, 8-30-2018)-(Substituted in revision for NAC 445.24342)

NAC 445A.429 Procedures required to prevent release of contaminants; requirements concerning impoundments. (August 2018 update.)

1. The holder of the permit must institute appropriate procedures to ensure that all mined areas do not release contaminants that have the potential to degrade the waters of the State.
2. Open pit mines must, to the extent practicable, be free-draining or left in a manner which minimizes the impoundment of surface drainage and the potential for contaminants to be transported and degrade the waters of the State.
3. Underground mines must, to the extent practicable, be left in a manner which minimizes the inflow and outflow of water through the openings to the mine on the surface of the land.
4. Bodies of water which are a result of mine pits penetrating the water table must not create an impoundment which:
   a. Has the potential to degrade the ground waters of the State, or
   b. Has the potential to affect adversely the health of human, terrestrial or avian life.
5. The holder of a permit may apply to the commission to establish a beneficial use with a level of protection less than that required by paragraph (b) of subsection 3 for water impounded in a specific mine pit.

(Added to NAC by Environmental Comm'n, eff. 9-1-89; A by R046-18, 8-30-2018)--(Substituted in revision for NAC 445.24352)

NAC 445A.430 Stabilization of spent ore.

1. Spent ore which has been left on pads or which will be removed from a pad must first demonstrate the stability of the discharge effluent from the pads or from the spent ore such that:
   a. WAD cyanide levels in the effluent rinse water are less than 0.2 mg/l;
   b. The pH level of the effluent is between 6.0 and 9.0, and
   c. Contaminants in any effluent from the processed ore which would result from meteoric waters would not degrade waters of the State.
2. If the requirements established in subsection 1 cannot be achieved, the Department will grant a variance to those conditions if the holder of the permit can demonstrate that:
   a. The remaining solid material, when representatively sampled, does not contain levels of contaminants that are likely to become mobile and degrade the waters of the State under the conditions that will exist at the site; or
   b. The spent ore is stabilized in such a fashion as to inhibit meteoric waters from migrating through the material and transporting contaminants that have the potential to degrade the waters of the State.
3. The Department may approve an alternate method for stabilizing ore that has been leached if the holder of the permit can clearly demonstrate that the condition in which the materials will be left will not create a potential for the waters of the State to be degraded.

(Added to NAC by Environmental Comm'n, eff. 9-1-89; A by R141-06, 10-31-2007) (Substituted in revision for NAC 445.24354)

NAC 445A.431 Stabilization of tailings. Upon termination of the active use of a tailings impoundment, representative samples of the material deposited in the impoundment must be collected and characterized. The tailings must be stabilized during the final closure of a facility so as to inhibit the migration of any contaminant that has the potential to degrade the waters of the State.
(Added to NAC by Environmental Comm'n, eff. 9-1-89)--(Substituted in revision for NAC 445.24356)

NAC 445A.433 Minimum design criteria: Universal requirements; areas where ground water is near surface; proximity of new process components to dwellings; liability for degradation of water. (NRS 445A.425, 445A.465) (August 2018 update.)

2) If the final plan for permanent closure of a facility that is required pursuant to NAC 445A.447 has not been approved by the Department before September 1, 2018, the following minimum criteria apply for the permanent closure period:
   a. All process components must be designed or modified to withstand the runoff from a 24-hour storm event with a 500-year recurrence interval.
   b. The primary fluid management system must be designed or modified to be able to remain fully functional and fully contain all fluids, including all accumulations resulting from a 24-hour storm event with a 500-year recurrence interval. The Department may require additional containment based on the following factors:
      1) Proximity to surface water bodies;
      2) Depth to groundwater, and
      3) Proximity to population.
   c. The fluid management system must be designed or modified to be functional for 5 years after the time required for post-closure monitoring pursuant to NAC 445A.446.

NAC 445A.445 Procedure upon unplanned temporary closure of process component (NRS 445A.425, 445A.465) (August 2018 update.)

NAC 445A.446 Permanent closure of facility. (August 2018 update.)

1. In the event of an unplanned temporary closure of one or more process components, the holder of the permit shall:
   a. Within 30 days after an unplanned temporary closure begins, inform the Department of the closure and describe the procedures and controls which have been carried out to maintain the process components during this period.
   b. Within 90 days after the Department has been notified of the unplanned temporary closure:
      1) Begin to evaluate the procedures which will be required to carry out a permanent closure of the process components affected and petition the Department to approve one or ore procedures needed for the permanent closure of the process components affected; or
      2) For just cause, request that the Department grant an extension and delay permanent closure. Except as otherwise provided in subsection 2 of NAC 445A.420, the extension may not be longer than the remaining term of the existing permit or for 3 years, whichever is greater.
2. The Department shall approve or disapprove the proposed procedures for permanent closure within 30 days after they are submitted to the Department.
3. Unless the Department has granted an extension pursuant to subparagraph (2) of paragraph (b) of subsection 1**,** within 270 days after the Department has been notified of the unplanned temporary closure, the holder of the permit shall initiate the approved procedures for permanent closure.
4. If the holder of the permit fails to inform the Department of an unplanned temporary closure as required pursuant to subsection 1 and the Department otherwise becomes aware of such closure, the Department may:
   a. Establish procedures and controls to maintain the process components during such closure;
   b. Establish procedures needed for the permanent closure of the process components affected, and
   c. Require the holder to implement the procedures and controls established pursuant to paragraphs (a) and (b).

NAC 445A.446 Permanent closure of facility. (August 2018 update.)

1. The permanent closure of a facility or a source at a facility, as applicable, must be initiated:
   a. Following the request of the holder of the permit;
   b. For a facility which is under a temporary closure, no later than at the end of one renewal of a 5-year permit which has been issued pursuant to subsection 2 of NAC 445A.420, or
   c. When the end of the design life of that process component is reached.
   d. For an underground mine, and any source therein, which has the potential to degrade the waters of the State, before the elimination of safe access to the mine.
2. Permanent closure is complete when the requirements contained in NAC 445A.429, 445A.430 and 445A.431, as applicable, have been achieved and all other sources at the facility have been stabilized, removed or mitigated.
3. The time required for post-closure monitoring depends upon the particular site and process characteristics, but, except as otherwise provided in subsection 4, the time required must not exceed 30 years.
4. If the Department determines that chemical stabilization, source removal or mitigation has not been achieved during the post-closure monitoring period, the Department shall require the holder of the permit to take additional actions to achieve the necessary chemical stabilization, source removal or mitigation. After such actions have been taken, the Department shall require an additional period of time for post-closure monitoring. The time required for this additional period of post-closure monitoring must not exceed 30 years.

   (Added to NAC by Environmental Comm'n, eff. 9-1-89; A by R046-18, 8-30-2018)--(Substituted in revision for NAC 445.24386)

NAC 445A.447 Plans for permanent closure; sources not classified as process components.
(August 2020 update.)

1. Plans for permanent closure are required for all sources at a facility.
2. A final plan for permanent closure of any source which has been identified as a process component must be submitted to the department at least two (2) years before the anticipated permanent closure of that process component.
3. Sources which have not been classified as process components must be evaluated at the end of their operating life to determine the potential for pollutants from these sources to migrate and degrade the waters of the State under the final proposed site conditions and must be closed in accordance with the state handbook of best management practices prepared pursuant to NAC 445A.336.
4. The Department may require the holder of a permit to revise a previously approved final plan for permanent closure if, based on new information received by the Department, the Department determines that the final plan for permanent closure will not achieve chemical stabilization, source removal or mitigation of a process component.
   (Added to NAC by Environmental Comm'n, eff. 9-1-89; A by R018-20, 8-26-2020)--Substituted in revision for NAC 445.24388)

Updated 9/10/20

Pershing County Property Inquiry

Property Information

Parcel ID	015-010-12	**Parcel Acreage**	460.0000
Tax Year	2020	**Assessed Value**	21,413
Land Use Group	VAC	**Tax Rate**	3.0968
Land Use	100 - Vacant - Unknown/Other	**Total Tax**	$663.12
Zoning	AMR	**Fiscal Year (2020 - 2021)**	
Tax District	020	**Total Unpaid All Years**	$0.00
Site Address	T28 R33 SEC 9		

Pay Taxes

Assessments

Taxable Value	Land	Building	Per. Property	Totals
Residential	61,180	0	0	**61,180**
Com / Ind.	0	0	0	**0**
Agricultural	0	0	0	**0**
Exempt	0	0	0	**0**
Pers. Exempt				**0**
Total	**61,180**	**0**	**0**	**61,180**

Assessed Value	Land	Building	Per. Property	Totals
Residential	21,413	0	0	**21,413**
Com / Ind.	0	0	0	**0**
Agricultural	0	0	0	**0**
Exempt	0	0	0	**0**
Pers. Exempt				**0**
Total	**21,413**	**0**	**0**	**21,413**

	New Land	New Const.	New P.P.	Omit Bldg
Residential	0	0	0	0
Com / Ind.	0	0	0	0
Agricultural	0	0	0	0
Exempt	0	0	0	0
Totals	0	0	0	0

Billing Fiscal Year (2020 - 2021)

Installment	Date Due	Date Paid	Tax Billed	Cost Billed	Penalty/Interest	Total Due	Amount Paid	Total Unpaid
1	8/17/2020	8/19/2020	$165.78	$0.00	$0.00	$165.78	$165.78	$0.00
2	10/5/2020	10/9/2020	$165.78	$0.00	$0.00	$165.78	$165.78	$0.00
3	1/4/2021	1/11/2021	$165.78	$0.00	$0.00	$165.78	$165.78	$0.00
4	3/1/2021	3/9/2021	$165.78	$0.00	$0.00	$165.78	$165.78	$0.00
Total			**$663.12**	**$0.00**	**$0.00**	**$663.12**	**$663.12**	**$0.00**

Payment History

	Fiscal Year	Total Due	Total Paid	Amount Unpaid	Date Paid
⊕	(2020 - 2021)	$663.12	$663.12	$0.00	3/9/2021
⊕	(2019 - 2020)	$663.12	$663.12	$0.00	3/9/2020
⊕	(2018 - 2019)	$663.12	$663.12	$0.00	3/12/2019

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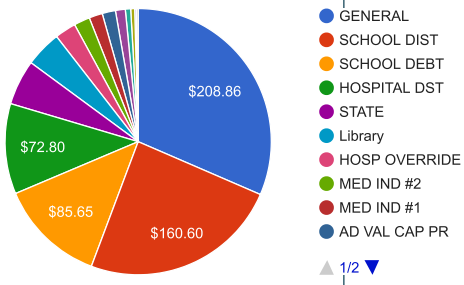
Taxing Entities

Tax Entity	Tax Rate	Amount
GENERAL	0.9753	$208.86
SCHOOL DIST	0.7500	$160.60
SCHOOL DEBT	0.4000	$85.65
HOSPITAL DST	0.3400	$72.80
STATE	0.1700	$36.40
Library	0.1360	$29.12
HOSP OVERRIDE	0.0800	$17.13
MED IND #2	0.0600	$12.85
MED IND #1	0.0505	$10.81
AD VAL CAP PR	0.0500	$10.71
AG EXTENSION	0.0370	$7.92
RECREATION	0.0200	$4.28
MED IND HVS	0.0150	$3.21
GEN INDIGENT	0.0060	$1.28
CHINA SPRINGS	0.0035	$0.75
EMER 911	0.0035	$0.75
Tax Entity Total	**3.0968**	**$663.12**
Year Total	**3.0968**	**$663.12**



Related Names

CURRENT OWNER FOR 2021 (2021 - 2022)

Name	HEIZER, JOHN M JR
Mailing Address	PO BOX 1 LOVELOCK, NV, 89419-0000
Status	Current
Account	

OWNER FOR 2020 (2020 - 2021)

Name	HEIZER, JOHN M JR
Mailing Address	PO BOX 1 LOVELOCK, NV, 89419-0000
Status	Current
Account	

No Structure Information

Assessor Descriptions

Assessor Descriptions	Subdivision Name	Section	Township	Range	Block & Lot
NW1/4;NE1/4;W1/2 NE1/4 SE1/4;NW1/4 SE1/4;,S1/2 SE1/4		9	28	33	

Sales History

Year	Document #	Document Type	Sale Date	Sold By	Sold To	Price
2012	481668	QUITCLAIM DEED	10/10/2012	JOHN HEIZER J HEIZER	JOHN HEIZER	$0
1999	225350	EXECUTORS/ADMINISTRATORS DEED	9/20/1999			$0
1999	224225	ESTATE/DECREE OF DISTRIBUTION	6/4/1999			$0

No Genealogy Information

Property Map

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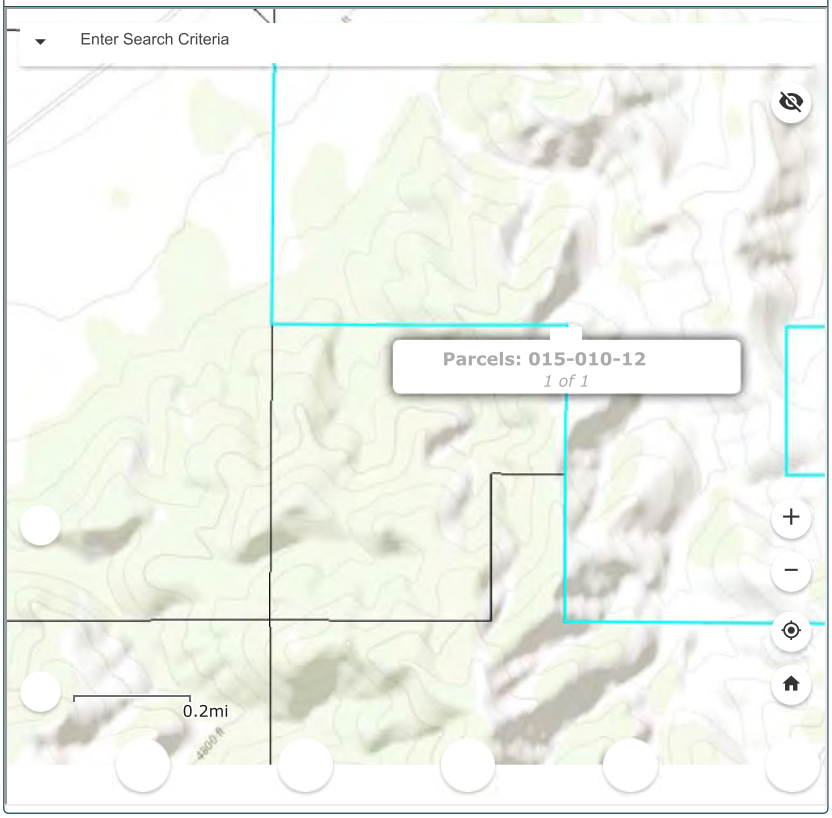

FACT SHEET
(Pursuant to Nevada Administrative Code (NAC) 445A.401)

Permittee Name: **John M. Heizer, Jr.**

Project Name: **Rose Gulch Project**

Permit Number: **NEV2004101**
Review Type/Year/Revision: Renewal 2019, Fact Sheet Revision 00

A. Location and General Description

Location: The facility, known as the **Rose Gulch Project**, is located on private land in central Pershing County, Nevada, within a portion of Section 9, Township 28 North, Range 33 East, Mount Diablo Baseline and Meridian (MDB&M), approximately 14 air-miles northeast of the town of Lovelock and 54 air-miles southwest of the town of Winnemucca. Access to the Project area is possible by traveling 14 miles east from Lovelock, or 58 miles west from Winnemucca, on Interstate Highway 80 to the Oreana-Rochester interchange exit #119. Exit the Interstate and proceed approximately 3 miles east on the pavement, then turn right and travel approximately ¾-mile southwest on a two-track dirt road along the front of the Humboldt Range, then veer left (south) approximately ½ mile to the mouth of Rose Canyon. The Project area begins about ¼ mile up the canyon.

General Description: The Project consists of a placer mining operation using physical separation methods, NAC 445A.414, with a maximum permitted processing rate of **5,000 tons of ore per year**. Gold will be extracted from Rose Gulch gravels using a loader/backhoe, a grizzly classifier, two rotating trommels, a portable placer plant with recycle water storage tank/fines bin, a dewatering screw, two process water clarifier tanks, a single-lined process water emergency catch pond, and associated pumps and pipelines. Chemicals are not approved for use in the beneficiation process, and make-up water, obtained from Lovelock Meadows Water District Well N$^{o.}$ 45577, is recycled within the process. The facility is designed and constructed to not release or discharge any process or non-process contaminants from the fluid management system that would result in degradation of waters of the State during operation and closure. The operation is located on private land (patented mining claims) and is anticipated to disturb fewer than 5 acres. The facility was constructed during 2010.

B. Synopsis

General: The Rose Gulch Project is located along Rose Canyon, an ephemeral drainage, which drains the west side of the Humboldt Range in response to major precipitation events and snow melt. Small prospecting pits, dating from the late 19th to early 20th centuries are present, but no large-scale mining activity has taken place in the immediate Project area. The Rochester mine, a medium-size, open pit,

silver-gold lode mining and heap leach processing operation, is located at a higher elevation in the Humboldt Range, approximately 4 miles to the southeast.

Mining and Processing: Gold-bearing gravels are excavated from Rose Gulch using a backhoe, loader, and excavator. Excavations are proposed to be a maximum of 15 feet deep or until bedrock is encountered. The gravity separation processing plant is a combination of home-built and pre-fabricated, trailer-mounted, self-contained mobile equipment that will be used to process an average of 1 to 3 tons of ore per hour. The mining and beneficiation circuit is described as follows:

Excavated material is run through a stationary grizzly to remove the 3-inch plus size fraction, which is placed on the oversize waste storage pile. The retained 3-inch minus material is gravity fed to a ¾-inch minus vibrating screen to separate ¾-inch plus reject material, which is also placed in the oversize waste storage pile. The ¾-inch minus material is processed through the first rotating trommel and ⅜-inch minus material is passed across riffles in the sluice. The ⅜-inch plus reject material from the first trommel is placed in the oversize waste storage pile. The ⅜-inch minus material from the sluice passes to a wet shaker table for further classification to ¼-inch minus ore feed material that is run across sluices and discharged into the dewatering screw. The ¼-inch plus reject material is placed in the oversize waste storage pile.

A second, trailer-mounted rotating trommel, measuring approximately 8 feet long, uses water pumped from the recycle water tanks through a spray bar to remove any additional ¼-inch plus reject material from the ore feed. The trommel reject material is placed in the oversize waste storage pile, and the ¼-inch minus fines pass through the trommel to the vibrating sluice and then through a pipeline for discharge into the dewatering screw. A 3.5 horsepower gasoline engine powers the trommel, water pump, and sluice.

Process water exiting the dewatering screw is conveyed by gravity through a half-pipe measuring 60 inches wide, 30 inches deep, and 19 feet long, to a weir to calm the flow and initiate clarification. The clarified process water skimmed from the weir is pumped to the #1 clarifier tank then skimmed by gravity to the #2 clarifier tank from which the clarified process water is recycled into the process circuit.

A 10,000-gallon, single-lined emergency catch pond is located downgradient of the clarifier tanks to accommodate spilled solution in the event of a process upset. Collected solution can be pumped from the catch pond back into the process circuit.

Fines collected in the sluice are fed to a 36-inch diameter spiral concentrator/classifier to recover a precious metal concentrate. A portable

gasoline-powered electric generator provides electricity for the concentrator/classifier motor. The recovered concentrate is shipped off site for custom processing. All reject material located in the oversize waste storage pile is mixed with solids periodically removed from the clarifier tanks and placed back into the original excavation.

Make-up Water: Make-up water is obtained from the Lovelock Meadows Water District Well No. 45577, located in Section 33, Township 29 North, Range 33 East, MDB&M, approximately 2 miles north of the Project area. Water is transported to the site in a tanker truck and stored in a 2,500-gallon polyurethane storage tank. The Permittee agreed to the use of a synthetic make-up water storage tank, steel clarifier tanks, and a lined emergency catch pond in lieu of additional characterization work and to minimize operating fluid loss. The emergency catch pond will be relocated from time-to-time as mining proceeds along the Rose Canyon drainage channel and, unless authorized otherwise in writing by the Division, the pond must be lined at all times.

Ore Characterization: The host rocks for the ore consist of slate, phyllite, schist, and hornfels. A 32-element inductively-coupled plasma (ICP) analysis of the ore identified naturally occurring, geochemically anomalous concentrations of manganese, nickel, antimony, strontium, arsenic, chromium, vanadium, and zinc, which are normal for the rock types and mineralization style found in the project area. Although mobilization of the anomalous metals is not expected, the make-up water is stored in tanks or a single-lined emergency catch pond and the process water will be routinely sampled at the #2 clarifier tank and analyzed for Division Profile I water quality parameters.

C. Receiving Water Characteristics

Analysis of the water supply well water for Division Profile I water quality parameters indicates the water is a bicarbonate type. The water is of good quality and all parameters meet the Division Profile I water quality reference values.

No boreholes exist in the immediate Project area, and surface flow is restricted to ephemeral flow along the Rose Canyon drainage in response to major precipitation events or snowmelt. The closest water well, recorded with the Division of Water Resources (DWR), is located in the alluvium at the foot of the Humboldt Range, approximately one-half to one mile downgradient from the Project area. The well is capped and no water quality data is available, but drilling records indicate the static water table elevation in this well was 108 feet below ground surface (bgs) when constructed. The static water table elevation in the water supply well, located approximately 2 miles north of the Project area, is 110 feet bgs according to DWR records.

D. Procedures for Public Comment

The Notice of the Division's intent to issue a Permit authorizing the facility to construct, operate and close, subject to the conditions within the Permit, is being published on the Division website: https://ndep.nv.gov/posts/category/land. The Notice is being mailed to interested persons on the Bureau of Mining Regulation and Reclamation mailing list. Anyone wishing to comment on the proposed Permit can do so in writing within a period of 30 days following the date the public notice is posted to the Division website. The comment period can be extended at the discretion of the Administrator. All written comments received during the comment period will be retained and considered in the final determination.

A public hearing on the proposed determination can be requested by the applicant, any affected State or intrastate agency, or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.403 through NAC 445A.406.

E. Proposed Determination

The Division has made the tentative determination to issue the renewed Permit.

F. Proposed Limitations, Schedule of Compliance, Monitoring, Special Conditions

See Section I of the Permit.

G. Rationale for Permit Requirements

The facility is located in an area where annual evaporation is greater than annual precipitation. The primary method of identification of escaping process solution will be placed on required routine monitoring identified in the permit.

H. Federal Migratory Bird Treaty Act

Under the Federal Migratory Bird Treaty Act, 16 U.S. Code 701-718, it is unlawful to kill migratory birds without license or permit, and no permits are issued to take migratory birds using toxic ponds. The Federal list of migratory birds (50 Code of Federal Regulations 10, 15 April 1985) includes nearly every bird species found in the State of Nevada. The U.S. Fish and Wildlife Service (the Service) is authorized to enforce the prevention of migratory bird mortalities at

ponds and tailings impoundments. Compliance with State permits may not be adequate to ensure protection of migratory birds for compliance with provisions of Federal statutes to protect wildlife.

Open waters attract migratory waterfowl and other avian species. High mortality rates of birds have resulted from contact with toxic ponds at operations utilizing toxic substances. The Service is aware of two approaches that are available to prevent migratory bird mortality: 1) physical isolation of toxic water bodies through barriers (e.g., by covering with netting), and 2) chemical detoxification. These approaches may be facilitated by minimizing the extent of the toxic water. Methods which attempt to make uncovered ponds unattractive to wildlife are not always effective. Contact the U.S. Fish and Wildlife Service at 1340 Financial Boulevard, Suite 234, Reno, Nevada 89502-7147, (775) 861-6300, for additional information.

Prepared by: Michelle Griffin

Date: 2 August 2019

Revision 00: Permit Renewal 2019

STATE OF NEVADA

Department of Conservation and Natural Resources

Division of Environmental Protection

Bureau of Mining Regulation and Reclamation

Water Pollution Control Permit

Permittee: **John M. Heizer, Jr.**
Rose Gulch Project
P.O. Box 1
Lovelock, Nevada 89419

Permit Number: **NEV2004101**
Review Type/Year/Revision: **Renewal 2019, Revision 00**

Pursuant to Nevada Revised Statutes (NRS) 445A.300 through 445A.730, inclusive, and regulations promulgated thereunder by the State Environmental Commission and implemented by the Division of Environmental Protection (the Division), this Permit authorizes the Permittee to construct, operate, and close the **Rose Gulch Project**, a facility utilizing physical separation methods to extract gold, in accordance with the limitations, requirements and other conditions set forth in this Permit. The Permittee is authorized to process up to **5,000 tons** of ore per year. Chemicals are not authorized for use in the process.

The facility is located on private land in central Pershing County, Nevada, within a portion of Section 9, Township 28 North, Range 33 East, Mount Diablo Baseline and Meridian, approximately 14 air-miles northeast of the town of Lovelock.

The Permittee must comply with all terms and conditions of this Permit and all applicable statutes and regulations.

This Permit is based on the assumption that the information submitted in the application of **23 March 2004**, as modified by subsequent approved amendments, is accurate and that the facility has been constructed and is being operated as specified in the application. The Permittee must inform the Division of any deviation from, or changes in, the information in the application, which may affect the ability of the Permittee to comply with applicable regulations or Permit conditions.

This Permit is effective as of **Day October 2019**, and shall remain in effect until **22 July 2024**, unless modified, suspended, or revoked.

Signed this **_____** day of **October 2019**

_____

Joseph Sawyer, P.E.
Chief, Bureau of Mining Regulation and Reclamation

I. Specific Facility Conditions and Limitations

A. In accordance with operating plans and facility design plans reviewed and approved by the Division the Permittee shall:

a. Construct, operate, and close the facility in accordance with those plans;

b. Contain within the fluid management system all process fluids including all meteoric waters which enter the system as a result of the 25-year, 24-hour storm event; and

c. Not release or discharge any process or non-process contaminants from the fluid management system that would result in degradation of waters of the State.

B. Schedule of Compliance:

a. Prior to commencing operation the Permittee shall install in the emergency catch pond and maintain at all times, a single-layer synthetic liner composed of a material and installed in a manner acceptable to the Division.

b. Thirty days prior to commencing operations, the Permittee shall schedule a reasonable time for the Division to conduct a facility inspection.

The schedule of compliance items above are not considered complete until approved in writing by the Division.

C. The fluid management system covered by this permit, consists of the following process components:

a. Portable placer plant, grizzly classifier, with classifier screens, shaker table, two trommels, sluice, process water clarifier tanks #1 and #2, recycle water fines bin, dewatering screw, spiral concentrator/classifier;

b. Single-lined, 10,000-gallon emergency catch pond; and

c. All transfer pipes, valves, and pumps used in conveyance or control of process materials or process fluids between process components.

D. Monitoring Requirements:

Identification	**Parameter**	**Frequency**
1. Water Supply At storage tank (WS)	Profile I[(1)]	Annually for any year of operation
2. Process Water At process water clarifier tank #2 (PWCT)	Profile I[(1)]	Quarterly when operating
3. Mined Materials Composite of oversize, undersize, and 'fines' reject material (RM)	MWMP[(2)]-Profile I[(1)]	Annually for any year of operation

The Permittee may request a reduction of the monitoring frequency after four quarters of complete monitoring based on justification other than cost. Such reductions may be considered modifications to the Permit and require payment of modification fees.

Abbreviations and Definitions:

$CaCO_3$ = calcium carbonate; N = nitrogen; SU = standard units; mg/L = milligrams per liter; MWMP = Meteoric Water Mobility Procedure; ASTM = American Society for Testing and Materials; NAC = Nevada Administrative Code; NDEP = Nevada Division of Environmental Protection; µS/cm = microSiemens per centimeter

Footnotes:

(1) Profile I:

Alkalinity (as $CaCO_3$)	Cadmium	Magnesium	Silver
Bicarbonate	Calcium	Manganese	Sodium
Total	Chloride	Mercury	Sulfate
Aluminum	Chromium	Nitrate + Nitrite (as N)	Thallium
Antimony	Copper	Nitrogen, Total (as N)	Total Dissolved Solids
Arsenic	Fluoride	pH (± 0.1 SU)(3)	Zinc
Barium	Iron	Potassium	-
Beryllium	Lead	Selenium	-

(2) The Meteoric Water Mobility Procedure (MWMP) shall be performed by a Nevada-approved laboratory, in accordance with ASTM Method E 2242-13 (or the most current method).

(3) All sample analyses resulting in a pH value less than or equal to 5.0 SU shall also be analyzed for acidity (mg/L, as $CaCO_3$ equivalent).

E. Quarterly and annual monitoring reports and release reporting shall be in accordance with Part II.B.

F. All sampling and analytical accuracy shall be in accordance with Part II.E.

G. Permit Limitations

a. Failure to meet a Schedule of Compliance requirement or date.

b. A minimum 4-foot freeboard must be maintained at all times in the single-lined emergency catch pond.

c. The use of any beneficiation chemical, not approved in writing by the Division, is prohibited.

d. The beneficiation of material other than that derived from sources within Rose Canyon or Rose Gulch must be approved in writing by the Division prior to moving any new source material onto the permitted Facility; characterization of new source material will be required, Permit monitoring requirements may be modified, and the payment of a modification fee may be required as part of an approval process.

e. The Permittee must submit to the Division, for prior review and approval, a Profile I analysis of water from any proposed new source of make-up water. Permit monitoring requirements may be modified and the payment of a modification fee may be required.

Exceedances of these limitations may be Permit violations and shall be reported as specified in Part II.B.4.

H. The facility shall maintain automated or manual calibrated rain and snow gauge(s), which shall be monitored to record precipitation (inches of water, including snow water equivalent) every day that the site is manned. A written and/or electronic record of precipitation data, and any other weather data required in Part I.D, shall be maintained on site and shall be submitted to the Division upon request, with each Permit renewal application, and pursuant to Parts II.B.1 and II.B.2, as applicable, in a Division-approved electronic format.

I. The Permittee shall inspect all control devices, systems and facilities weekly, and during (when possible) and after major storm events. These inspections are performed to detect evidence of:

a. Deterioration, malfunction, or improper operation of control or monitoring systems;

b. Sudden changes in the data from any monitoring device; and

c. Severe erosion or other signs of deterioration in dikes, diversions, closure covers, or other containment devices.

J. Prior to initiating permanent closure activities at the facility, or at any process component or other source within the facility, the Permittee must have an approved final plan for permanent closure.

K. The Permittee shall remit an annual review and services fee in accordance with Nevada Administrative Code (NAC) 445A.232 starting July 1 after the effective date of this Permit and every year thereafter until the Permit is terminated or the facility has received final closure certification from the Division.

L. The Permittee shall not dispose of or treat Petroleum-Contaminated Soil (PCS) on the mine site without first obtaining from the Division approval of a PCS Management Plan.

M. When performing dust suppression activities, the Permittee shall use best management practices and appropriate selection of water source and additives to prevent degradation of waters of the State. If a dust suppressant exceeds a water

quality standard and the corresponding natural background water concentration in the area where dust suppression will occur, the Permittee shall demonstrate no potential to degrade waters of the State.

N. Continuing Investigations: None Required.

II. General Facility Conditions and Limitations

A. General Requirements

1. The Permittee shall achieve compliance with the conditions, limitations, and requirements of the Permit upon commencement of each relevant activity. The Administrator may, upon the request of the Permittee and after public notice (if required), revise or modify a Schedule of Compliance in an issued permit if he or she determines good and valid cause (such as an act of God, a labor strike, materials shortage or other event over which Permittee has little or no control) exists for such revision.

2. The Permittee shall at all times maintain in good working order and operate as efficiently as possible, all devices, facilities, or systems installed or used by the Permittee to achieve compliance with the terms and conditions of this Permit.

3. Whenever the Permittee becomes aware that he or she failed to submit any relevant facts in the Permit application, or submitted incorrect information in a Permit application or in any report to the Administrator, the Permittee shall promptly submit such facts or correct information. Any inaccuracies found in this information may be grounds for revocation or modification of this Permit and appropriate enforcement action.

B. Reporting Requirements

1. The Permittee shall submit quarterly reports, regardless of whether the facility was in operation during the preceding quarter, which are due to the Division on or before the 28th day of the month following the quarter and must contain the following, as applicable:

a. Analytical results of the solution collected from the monitoring location identified in Part I.D.2, reported on NDEP Form 0190 or equivalent; and

b. A record of releases, and the remedial actions taken in accordance with the approved Emergency Response Plan on NDEP Form 0390 or equivalent.

Facilities which have not initiated mining or construction, must submit a quarterly report identifying the status of mining or construction. Subsequent to any noncompliance or any facility expansion which provides increased capacity, the Division may require an accelerated monitoring frequency.

2. The Permittee shall submit an annual report by February 28th of each year, for the preceding calendar year, which contains the following:

a. Analytical results of water quality samples collected from the water supply identified in Part I.D.1, reported on NDEP Form 0190 or equivalent;

b. Analytical results of the MWMP testing for the materials identified in Part I.D.3, reported on NDEP Form 0190 or equivalent;

c. A synopsis of releases on NDEP Form 0390 or equivalent;

d. A brief summary of site operations, including the number of tons of ore processed during the year, construction and expansion activities and major problems with the fluid management system;

e. A table of total monthly precipitation amounts recorded for the periods of operation, reported for the five-year history previous to the date of submittal; and

f. A table of pH, total dissolved solids (TDS), sulfate, chloride, nitrate + nitrite (as N), zinc, manganese, antimony, and arsenic concentration, versus time for all fluid sampling points. The table shall display a five-year history previous to the date of submittal. Additional parameters may be required by the Division if deemed necessary.

3. Release Reporting Requirements: The following applies to facilities with an approved Emergency Response Plan. If a site does not have an approved Emergency Response Plan, then all releases must be reported as per NAC 445A.347 or NAC 445A.3473, as appropriate.

   a. A release of any quantity of hazardous substance, as defined at NAC 445A.3454, to surface water, or that threatens a vulnerable resource, as defined at NAC 445A.3459, must be reported to the Division as soon as practicable after knowledge of the release, and after the Permittee notifies any emergency response agencies, if required, and initiates any action required to prevent or abate any imminent danger to the environment or the health or safety of persons. An oral report shall be made by telephone to (888)-331-6337 for in-State callers or (775) 687-9485 for out-of-State callers, and a written report shall be provided within 10 days in accordance with Part II.B.4.b.

   b. A release of a hazardous substance in a quantity equal to or greater than that which is required to be reported to the National Response Center pursuant to 40 Code of Federal Regulations (CFR) Part 302 must be reported as required by NAC 445A.3473 and Part II.B.3.a.

   c. A release of a non-petroleum hazardous substance not subject to Parts II.B.3.a. or II.B.3.b., released to soil or other surfaces of land, and the total quantity is equal to or exceeds 500 gallons or 4,000 pounds, or that is discovered in or on groundwater in any quantity, shall be reported to the Division no later than 5:00 P.M. of the first working day after knowledge of the release. An oral report shall be made by telephone to (888) 331-6337 for in-State callers or (775) 687-9485 for out-of-State callers, and a

written report shall be provided within 10 days in accordance with Part II.B.4.b. Smaller releases, with total quantity greater than 25 gallons or 200 pounds and less than 500 gallons or 4,000 pounds, released to soil or other surfaces of land, or discovered in at least 3 cubic yards of soil, shall be reported quarterly on NDEP Form 0390 or equivalent.

d. Petroleum Products and Coolants: If a release is subject to Parts II.B.3.a. or II.B.3.b., report as specified in Part II.B.3.a. Otherwise, if a release of any quantity is discovered on or in groundwater, or if the total quantity is equal to or greater than 100 gallons released to soil or other surfaces of land, report as specified in Part II.B.3.c. Smaller releases, with total quantity greater than 25 gallons but less than 100 gallons, released to soil or other surfaces of land, or if discovered in at least 3 cubic yards of soil, shall be reported quarterly on NDEP Form 0390 or equivalent.

4. The Permittee shall report to the Administrator any noncompliance with the Permit.

   a. Each such event shall be reported orally by telephone to (775) 687-9400, not later than 5:00 P.M. of the next regular work day from the time the Permittee has knowledge of the circumstances. This report shall include the following:

      i. Name, address, and telephone number of the owner or operator;

      ii. Name, address, and telephone number of the facility;

      iii. Date, time, and type of incident, condition, or circumstance;

      iv. If reportable hazardous substances were released, identify material and report total gallons and quantity of contaminant;

      v. Human and animal mortality or injury;

      vi. An assessment of actual or potential hazard to human health and the environment outside the facility; and

      vii. If applicable, the estimated quantity of material that will be disposed and the disposal location.

   b. A written summary shall be provided within 10 days of the time the Permittee makes the oral report. The written summary shall contain:

      i. A description of the incident and its cause;

      ii. The periods of the incident (including exact dates and times);

      iii. If reportable hazardous substances were released, the steps taken and planned to complete, as soon as reasonably practicable, an assessment of the extent and magnitude of the contamination pursuant to NAC 445A.2269;

      iv. Whether the cause and its consequences have been corrected, and if not, the anticipated time each is expected to continue; and

v. The steps taken or planned to reduce, eliminate, and prevent recurrence of the event.

c. The Permittee shall take all available and reasonable actions, including more frequent and enhanced monitoring to:

i. Determine the effect and extent of each incident;

ii. Minimize any potential impact to the waters of the State arising from each incident;

iii. Minimize the effect of each incident upon domestic animals and all wildlife; and

iv. Minimize the endangerment of the public health and safety which arises from each incident.

d. If required by the Division, the Permittee shall submit, as soon as reasonably practicable, a final written report summarizing any related actions, assessments, or evaluations not included in the report required in Part II.B.4.b., and including any other information necessary to determine and minimize the potential for degradation of waters of the State and the impact to human health and the environment. Submittal of the final report does not relieve the Permittee from any additional actions, assessments, or evaluations that may be required by the Division.

C. Administrative Requirements

1. A valid Permit must be maintained until permanent closure and post-closure monitoring are complete. Therefore, unless permanent closure and post-closure monitoring have been completed and termination of the Permit has been approved in writing by the Division, the Permittee shall apply for Permit renewal not later than 120 days before the Permit expires.

2. Except as required by NAC 445A.419 for a Permit transfer, the Permittee shall submit current Permit contact information described in paragraphs (a) through (c) of subsection 2 of NAC 445A.394 within 30 days after any change in previously submitted information.

3. All reports and other information requested by the Administrator shall be signed and certified as required by NAC 445A.231.

4. All reports required by this Permit, including, but not limited to, monitoring reports, corrective action reports, and as-built reports, as applicable, and all applications for Permit modifications and renewals, shall be submitted in both hard copy and a Division-approved electronic format.

5. The Permittee shall submit any new or updated Universal Transverse Mercator (UTM) location data for all monitoring points specified in Part I.D, expressed in meters and decimals of a meter, using the Nevada Coordinate System of 1983 (also known as the North American Datum of 1983 or NAD83), with each Permit renewal, as-built report, and monitoring plan

update, as applicable. Data shall be submitted electronically to the Division in Excel format.

6. When ordered consistent with Nevada Statutes, the Permittee shall furnish any relevant information in order to determine whether cause exists for modifying, revoking and reissuing, or permanently revoking this Permit, or to determine compliance with this Permit.
7. The Permittee shall maintain a copy of, and all modifications to, the current Permit at the permitted facilities at all times.
8. The Permittee is required to retain during operation, closure, and post-closure monitoring, all records of monitoring activities and analytical results, including all original strip chart or data logger recordings for continuous monitoring instrumentation, and all calibration and maintenance records. This period of retention must be extended during the course of any unresolved litigation.
9. The provisions of this Permit are severable. If any provision of this Permit, or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not thereby be affected.
10. The Permittee is authorized to manage fluids and solid wastes in accordance with the conditions of this Permit. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of Federal, State, or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought under the Water Pollution Control Statutes for releases or discharges from facilities or units not regulated by this Permit. NRS 445A.675 provides that any person who violates a Permit condition is subject to administrative or judicial action provided in NRS 445A.690 through 445A.705.

D. Division Authority

The Permittee shall allow authorized representatives of the Division, at reasonable times, and upon the presentation of credentials to:

1. Enter the premises of the Permittee where a regulated activity is conducted or where records are kept per the conditions of this Permit;
2. Have access to and copy any record that must be kept per the conditions of this Permit;
3. Inspect and photograph any facilities, equipment (including monitoring and control equipment), practices, or operations regulated by this Permit; and
4. Sample or monitor for any substance or parameter at any location for the purposes of assuring Permit and regulatory compliance.

E. Sampling and Analysis Requirements

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
2. For each measurement or sample taken pursuant to the conditions of this Permit, the Permittee shall record the following information:
   a. The exact place, date, and time of the inspection, observation, measurement, or sampling; and
   b. The person(s) who inspected, observed, measured, or sampled.
3. Samples must be taken, preserved, and labeled according to Division approved methods.
4. Standard environmental monitoring chain of custody procedures must be followed.
5. Samples shall be analyzed by a laboratory certified or approved by the State of Nevada, as applicable for the method(s) being performed. The Permittee must identify in all required reports the certified and approved laboratories used to perform the analyses, analytical methods performed, laboratory reference numbers, sample dates, and laboratory test dates.
6. The accuracy of analytical results, unless otherwise specified, shall be expressed in mg/L and be reliable to at least two significant digits. The analytical methods used must have a practical quantitation limit (PQL) equal to or less than one-half the reference value for Profile I parameters. Laboratories shall report the lowest reasonable PQL based on in-house method detection limit studies. Samples for Profile I parameters shall be filtered and analyzed for the dissolved fraction, unless otherwise required by the Division. Unless otherwise approved by the Division, analytical results that are less than the PQL shall be reported quantitatively by listing the PQL value preceded by the "<" symbol.

F. Permit Modification Requirements

1. Any material modification, as defined at NAC 445A.365, or plan to construct a new process component, must be reported to the Division by submittal of an application for a Permit modification, or if such changes are in conformance with the existing Permit, by submittal of a written notice of the changes. The Permit modification application must comply with NAC 445A.391 through 445A.399, 445A.410, 445A.414, 445A.4155, 445A.416, 445A.417, 445A.440, and 445A.442, as applicable. The construction or modification shall not commence until written Division approval is obtained.
2. Prior to the commencement of mining activities at any site within the State which is owned or operated by the Permittee but not identified and characterized in a previously submitted application or report, the Permittee shall submit to the Division a report which identifies the locations of the

proposed mine areas and waste disposal sites, and characterizes the potential of mined materials and areas to release pollutants. Prior to development of these areas the Division shall determine if any of these new sources will be classified as process components and require engineered containment as well as Permit modification.

3. The Permittee must notify the Division in writing at least 30 days before the introduction of process solutions into a new process component or into an existing process component which has been materially modified, or of the intent to commence active operation of that process component.
4. The Permittee must obtain a written determination from the Administrator of any planned process component construction or material modification as to whether it is considered a Permit modification, and if so, what type.
5. The Permittee must give advance notice to the Administrator of any planned changes or activities which are not material modifications in the permitted facility that may result in noncompliance with Permit requirements.

Prepared by: Michelle Griffin
Date: 2 August 2019

Revision 00: 2019 Renewal

NOTICE OF DECISION – Bureau of Mining Regulation and Reclamation

Web Posting: 10/11/2019

Deadline for Appeal: 10/21/2019

John M. Heizer, Jr.
Rose Gulch Project
WPCP NEV2004101

The Administrator of the Nevada Division of Environmental Protection (the Division) has decided to issue renewed Water Pollution Control Permit NEV2004101 to John M. Heizer, Jr. This Permit authorizes the construction, operation, and closure of approved mining facilities in Pershing County, Nevada. The Division has been provided with sufficient information, in accordance with Nevada Administrative Code (NAC) 445A.350 through 445A.447, to assure that the waters of the State will not be degraded by this operation, and that public safety and health will be protected.

The Permit will become effective 26 October 2019. The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to Nevada Revised Statute (NRS) 445A.605 and NAC 445A.407. All requests for appeals must be filed by 5:00 PM, 21 October 2019, on Form 3, with the State Environmental Commission, 901 South Stewart Street, Suite 4001, Carson City, Nevada 89701-5249. For more information, contact Michelle Griffin at (775) 687-9405 or visit the Division public notice website at https://ndep.nv.gov/posts.

No comments were received during the public comment period.

Case No. CV97-02825

Dept. No. 1

FILED

224225

'99 MAY 21 P2:10

A[illegible] T. WHYTE CLERK

BY

IN THE SECOND JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA

IN AND FOR THE COUNTY OF WASHOE

IN THE MATTER OF THE ESTATE

OF

JOHN M. HEIZER, SR.,
Deceased.

AMENDED ORDER APPROVING FIRST AND FINAL ACCOUNT, PETITION FOR COMPROMISE OF CLAIM, AND PETITION FOR FEES AND FOR FINAL DISTRIBUTION

JOHN M. HEIZER, JR., COROLYNN VOGT, and GRETCHEN DERMODY, having petitioned this Court for approval of the First and Final Account, Petition for Compromise of Claim, and Petition for Fees and for Final Distribution of said estate; and a hearing thereon having been had in open Court, due notice of which was proved; and no person objecting; and Petitioners having filed a Petition to File an Amended Order Approving First and Final Account, Petition For Compromise of Claim, and Petition For Fees and For Final Distribution; and the Court having heard the evidence, read the documents on file with the Court and considered the matter, and it appearing:

I.

DECEDENT

That JOHN M. HEIZER, SR., hereinafter called decedent, died on or about the 29th day of March, 1997.

II.

LAST WILL AND TESTAMENT

That decedent left an instrument duly executed on July 17, 1996, duly witnessed by CISSY BARRISON of Sparks, Nevada, and DANIETTE WILLIAMS, of Reno, Nevada, and containing a self-proving affidavit, which petitioners allege to be the Last Will and Testament of

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decedent, and which has been presented for probate. That to petitioners' knowledge, the Will presented was never revoked by the decedent.

III.

APPOINTMENT OF CO-EXECUTORS

That petitioners, on June 3, 1997, were issued Letters Testamentary, and ever since they have been, and now are, the duly qualified and acting Co-Executors of the estate of decedent, and have served without compensation.

IV.

NOTICE TO CREDITORS AND CLAIMS

That on June 9, 1997, petitioners caused first publication of the Notice to Creditors of decedent to be made, requiring creditors to present their respective claims within three (3) months from date of first publication of Notice to Creditors; and that the time for presenting claims against said estate, as fixed by said Notice to Creditors, expired on September 8, 1997; and that five (5) claims were filed against the estate, of which four (4) were duly approved by the Court on September 23, 1997, and have been paid.

The claim of MARGIT SEGERSTROM, which was disapproved, has since been duly settled for the sum of Sixty-Two Thousand Nine Hundred Seventy-Seven and 80/100 Dollars ($62,977.80), which is the face amount of the promissory note owed, plus accrued interest to date of payment. This amount was duly owed by the estate and has been paid.

V.

FEDERAL INCOME/ESTATE TAX

That the accountant for the estate has prepared and filed the 706 Estate Tax Return and has paid the estimated estate taxes, but to date no tax clearance has been received.

VI.

INVENTORY AND RECORD OF VALUE

That petitioners filed herein an Inventory, Appraisement and Record of Value, and that the estate of the decedent consists of personal property valued at One Million Two Hundred

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Eighty-Eight Thousand Eight Hundred Fifteen and 77/100 Dollars ($1,288,815.77) for purposes of probate.

VII.

HEIRS, LEGATEES, AND NEXT-OF-KIN

That the names, relationships, ages and residences of the heirs, legatees and next-of-kin of decedent are as follows:

NAME	RELATIONSHIP	AGE	ADDRESS
JOHN M. HEIZER, JR.	Son	Over 21	P.O. Box 47 Glenbrook, NV 89413
COROLYNN VOGT	Daughter	Over 21	P.O. Box 2984 Minden, NV 89423
GRETCHEN DERMODY	Daughter	Over 21	P.O. Box 2984 Minden, NV 89423
MURIEL TURNER LOPEZ	Friend	Over 21	6105 Vicksburg Lane Plymouth, MN 55446
YOSHIO NAKAMURA	Friend	Over 21	c/o JOHN HEIZER Box 30 Reno, NV 89504
MICHAEL HEIZER	Nephew	Over 21	Box 33 Hiko, NV 89017
PUBLIC RESOURCE FOUNDATION	N/A	N/A	1755 E. Plumb Lane Reno, NV 89502
WILLIAM A. KOTTINGER, III	Friend	Over 21	P.O. Box 3117 Reno, NV 89505
WILLIAM A. HARRIGAN	Friend	Over 21	1482 Clough Road Reno, NV 89509-3112
JOHN LIVERMORE	Friend	Over 21	100 N. Arlington Ave. Reno, NV 89501
INVESTIGATION AND RECOVERY	--	--	Nevada State Welfare Division 2527 N. Carson St. Carson City, NV 89710

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VIII.

FIRST AND FINAL ACCOUNT

That attached to the First and Final Account, Petition for Compromise of Claim, and Petition for Fees and for Final Distribution filed herein as Exhibit "A" and made a part thereof is petitioners' First and Final Account in the Estate of JOHN M. HEIZER, SR., for the period March 30, 1997 through March 31, 1998.

IX.

ATTORNEYS' FEES

That the law firm of ALLISON, MacKENZIE, HARTMAN, SOUMBENIOTIS & RUSSELL, LTD., has rendered services as attorneys for the petitioners from April 17, 1997 to June 30, 1998 and is entitled to be paid for its services rendered, which are in the sum of Ten Thousand Five Hundred and No/100 Dollars ($10,500.00) to date, as reflected on Exhibit "B" attached to the First and Final Account, Petition for Compromise of Claim, and Petition for Fees and for Final Distribution and incorporated by reference therein.

X.

ATTORNEYS' COSTS

That in addition, said attorneys are entitled to be reimbursed from the estate for costs and expenses advanced in the amount of Four Hundred Seventy-Two and 66/100 Dollars ($472.66) as reflected on Exhibit "B" attached to the First and Final Account, Petition for Compromise of Claim, and Petition for Fees and for Final Distribution and incorporated by reference therein.

XI.

COSTS OF CLOSING ESTATE

That certain expenses normal and usual in connection with the closing of such an estate may become due and payable in an amount of approximately Seven Hundred Fifty and No/100 Dollars ($750.00).

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XII.

DISTRIBUTION OF ESTATE

That the estate is now ready and in a condition to be closed and distributed, provided that the Co-Executors agree to be responsible for any additional estate tax that may be incurred arising out of an audit by the Internal Revenue Service, and any additional fees or expenses incurred by the estate prior to their discharge as Co-Executors. They have been duly advised of these obligations.

XIII.

AMENDED PETITION

That good cause exists for the allowing of an Amended Order to be filed herein in order to correct the legal description and to correctly describe the real property and patented mining claims owned by the estate to be distributed to the Petitioners, JOHN M. HEIZER, JR., COROLYNN VOGT, and GRETCHEN DERMODY.

NOW, THEREFORE, IT IS HEREBY ORDERED, ADJUDGED, AND DECREED as follows:

1. That the First and Final Account filed herein be settled, allowed and confirmed;

2. That the compromise of the claim of MARGIT SEGERSTROM in the amount of Sixty-Two Thousand Nine Hundred Seventy-Seven and 80/100 Dollars ($62,977.80) pursuant to NRS 147.180 be settled, allowed and confirmed;

3. That the Co-Executors are authorized to pay expenses of closing the estate up to Seven Hundred Fifty and No/100 Dollars ($750.00);

4. That the payment of an attorneys' fee to ALLISON, MacKENZIE, HARTMAN, SOUMBENIOTIS & RUSSELL, LTD., in the amount of Ten Thousand Five Hundred and No/100 Dollars ($10,500.00) as a reasonable attorneys' fee for ordinary services rendered to the Executor during the probate of the above-entitled estate; and to approve Four Hundred Seventy-Two and 66/100 Dollars ($472.66) as reimbursement for costs and expenses advanced by said attorneys, is approved;

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5. That the Co-Executors are authorized and directed to distribute the balance of the estate of the decedent now known or hereafter discovered pursuant to the provisions of the decedent's Last Will and Testament, dated July 17, 1996, as follows:

a. To MURIEL TURNER LOPEZ, the sum of Five Thousand and No/100 Dollars ($5,000.00).

b. To YOSHIO NAKAMURA, the sum of Thirty Thousand and No/100 Dollars ($30,000.00).

c. To MICHAEL HEIZER, the sum of Ten Thousand and No/100 Dollars ($10,000.00).

d. To JOHN M. HEIZER, JR., the real property located in Kalispell, Montana (this is being handled through a probate action in Montana).

e. To the PUBLIC RESOURCE FOUNDATION, all of the mining collection, mining memorabilia, mining mementos, mining artifacts, mining publications, mining reports, mining papers, mining maps, mining files, and mining equipment located at 3640 Lone Tree Lane, Reno, Nevada.

f. To WILLIAM A. KOTTINGER, III, all of the Indian artifacts.

g. To WILLIAM A. KOTTINGER, III, and WILLIAM A. HARRIGAN, all right, title and interest to Spearhead Corp., a Nevada corporation.

h. To JOHN LIVERMORE, the painting of Pyramid Lake by SHELDON PENNOGER.

i. The balance of the estate, shall be distributed in equal shares to decedent's children, JOHN M. HEIZER, JR., COROLYNN VOGT, and GRETCHEN DERMODY, with all rights, title and interest of the estate in the following real property being transferred thereto as tenants in common:

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(1) 3640 Lone Tree Lane, Reno, Washoe County, Nevada described as:

Portion of the north ½ of Section 11, Township 18 N, Range 19 E.

APN 041-130-14.

(2) Unimproved real estate located at 2430 Castle Rock Road, Douglas County, Nevada, described as:

Located in Section 6, T13N, R19E, the south half of the northwest quarter of the southwest quarter of the southwest quarter.

APN 11-020-03

(3) Southwesterly corner of Fifth and Broadway Streets which consists of four lots, each 25' x 25' in size, or a total of 100' x 25' indicating 2,500 square feet. This property is identified as Pershing County Assessor's Parcel No. 01-114-05 and is vacant and unimproved property. The property is described as:

Lots 15, 16, 17 and 18 of Block 10, city of Lovelock, Pershing County, state of Nevada.

APN 01-114-05

(4) Improved property located at northwesterly corner of Cornell and Sixth Street, which is identified as the old Ford automobile agency site. It is identified as Pershing County Assessor's Parcel No. 01-122-09 and 10, and is described as:

All of Lots 2, 3, 7, 8, 9 and 10, plus the easterly 45' of Lot 4, Block 7, City of Lovelock, state of Nevada.

APN 01-122-09
APN 01-122-10

(5) 140.62 acres plus 2,946 square feet within Old Mill Site of improved real estate, Toulon Property, located in Pershing County, Nevada, and described as:

Portion of Section 5, T.25N., R.30 E., M.D.B.&M.

APN 03-261-03
APN 03-261-04

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(6) 40 acre parcel, consisting of a fifty percent (50%) interest, located in Pershing County, Nevada, and described as:

A portion of Section 35, T.27N. R.32 E., M.D.B.&M.

APN 07-500-32

(7) 160 acre parcel, consisting of a fifty percent (50%) interest located in Pershing County, Nevada, and described as:

A portion of Section 25, T.25N., R.24 E., M.D.B.&M.

APN 03-211-03

(8) Marvelous and Marvelous No. 1, consisting of fifty percent (50%) undivided interest in Patent Mining Claim, Patented No. 870486, consisting of 41.322 acres, located in Pershing County, Nevada, and described as:

A portion of Section 30, T.25N., R.25 E., M.D.B.&M.

APN 88-010-01

(9) High Grade, consisting of fifty percent (50%) undivided interest in Patent Mining Claim, Patented No. 876078, consisting of 19.679 acres, located in Pershing County, Nevada, and described as:

A portion of Sections 30, 31, 25, and 36, T.25N., R.25 E., M.D.B.&M.

APN 88-010-01

(10) Phosphorous, consisting of fifty percent (50%) undivided interest in Patent Mining Claim, Patented No. 27750045, consisting of 20.66 acres, located in Pershing County, Nevada, and described as:

A portion of Section 10, T.25N., R.34 E., M.D.B.&M.

APN 88-010-20

(11) Moonlight (AKA Grant Lode), Cottonwood Canyon area, Patent Mining Claim, Patented No. 73, consisting of 4.59 acres, located in Pershing County, Nevada, and described as:

A portion of Sections 14 and 15, T.29N., R.34E., M.D.B.&M.

APN 88-010-21

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(12) Ruby, Cottonwood Canyon area, Patent Mining Claim, Patented No. 891321, consisting of 20.66 acres, located in Pershing County, Nevada, and described as:

A portion of Section 2, T.29N. R.34 E., M.D.B.&M.

APN 88-010-21

(13) Emerald, Cottonwood Canyon area, Patent Mining Claim, Patented No. 891321, consisting of 20.66 acres, located in Pershing County, Nevada, and described as:

A portion of Section 2, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

(14) Jason, Cottonwood Canyon area, Patent Mining Claim, Patented No. 891321, consisting of 20.66 acres, located in Pershing County, Nevada, and described as:

A portion of Section 2, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

(15) Iris, Cottonwood Canyon area, Patent Mining Claim, Patented No. 891321, consisting of 20.66 acres, located in Pershing County, Nevada, and described as:

A portion of Section 2, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

(16) Rosalie, Cottonwood Canyon area, Patent Mining Claim, Patented No. 891321, consisting of 20.66 acres, located in Pershing County, Nevada, and described as:

A portion of Sections 2 and 11, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

(17) Virginia, Cottonwood Canyon area, Patent Mining Claim, Patented No. 891321, consisting of 20.66 acres, located in Pershing County, Nevada, and described as:

A portion of Sections 2 and 11, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

(18) Ne Plus Ultra, Cottonwood Canyon area, Patent Mining Claim, Patented No. 891321, consisting of 20.32 acres, located in Pershing County, Nevada, and described as:

A portion of Section 2, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

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(19) Pride, Cottonwood Canyon area, Patent Mining Claim, Patented No. 860579, consisting of 17.04 acres, located in Pershing County, Nevada, and described as:

A portion of Section 10, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

(20) Mystery, Cottonwood Canyon area, Patent Mining Claim, Patented No. 860579, consisting of 16.54 acres, located in Pershing County, Nevada, and described as:

A portion of Section 10, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

(21) Echo, Cottonwood Canyon area, Patent Mining Claim, Patented No. 860579, consisting of 16.42 acres, located in Pershing County, Nevada, and described as:

A portion of Section 10, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

(22) Wonder, Cottonwood Canyon area, Patent Mining Claim, Patented No. 860579, consisting of 16.92 acres, located in Pershing County, Nevada, and described as:

A portion of Section 10, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

(23) Talisman, Cottonwood Canyon area, Patent Mining Claim, Patented No. 860579, consisting of 18.66 acres, located in Pershing County, Nevada, and described as:

A portion of Section 10, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

(24) Omega, Cottonwood Canyon area, Patent Mining Claim, Patented No. 860579, consisting of 19.67 acres, located in Pershing County, Nevada, and described as:

A portion of Section 10, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

(25) Alpha, Cottonwood Canyon area, Patent Mining Claim, Patented No. 860579, consisting of 20.59 acres, located in Pershing County, Nevada, and described as:

A portion of Section 10, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

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(26) Ingersoll, Cottonwood Canyon area, Patent Mining Claim, Patented No. 649107, consisting of 20.59 acres, located in Pershing County, Nevada, and described as:

A portion of Sections 10 and 11, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

(27) Waterlily Mine & Co., Cottonwood Canyon area, Patent Mining Claim, Patented No. 649107, consisting of 20.59 acres, located in Pershing County, Nevada, and described as:

A portion of Section 10, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

(28) Mermaid Mine & Co., Cottonwood Canyon area, Patent Mining Claim, Patented No. 649107, consisting of 20.66 acres, located in Pershing County, Nevada, and described as:

A portion of Sections 10 and 11, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

(29) Starlight, Cottonwood Canyon area, Patent Mining Claim, Patented No. 649107, consisting of 20.66 acres, located in Pershing County, Nevada, and described as:

A portion of Sections 10 and 11, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

(30) Saturn, Cottonwood Canyon area, Patent Mining Claim, Patented No. 649107, consisting of 20.66 acres, located in Pershing County, Nevada, and described as:

A portion of Section 11, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

(31) Fraction A, Cottonwood Canyon area, Patent Mining Claim, Patented No. 649107, consisting of 20.66 acres, located in Pershing County, Nevada, and described as:

A portion of Section 11, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

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(32) Fraction B, Cottonwood Canyon area, Patent Mining Claim, Patented No. 649107, consisting of 20.66 acres, located in Pershing County, Nevada, and described as:

A portion of Sections 10 and 11, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

(33) Jupiter, Cottonwood Canyon area, Patent Mining Claim, Patent No. 649107, consisting of 20.66 acres, located in Pershing County, Nevada, and described as:

A portion of Section 11, T.29N., R.34 E., M.D.B.&M.

APN 88-010-21

(34) 460 acre parcel, located in Pershing County, Nevada, and described as:

A portion of Section 9, T.28N., R.33 E., M.D.B.&M.

APN 15-010-12

(35) 161.1 acre parcel located in Pershing County, Nevada, and described as:

A portion of Section 3, T.29N., R.33 E., M.D.B.&M.

APN 11-120-02

(36) 299.34 acre parcel located in Pershing County, Nevada, and described as:

A portion of Section 3, T.29N., R.33 E., M.D.B.&M.

APN 11-120-03

(37) 640 Acre parcel located in Pershing County, Nevada, and described as:

All of Section 11, T.29N., R.33 E., M.D.B.&M.

APN 11-120-12

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6. That the petitioners are authorized and directed to do all things necessary and proper to effectuate such distributions; and upon making of such distributions, to release and discharge petitioners from their trust herein.

DATED this 20 day of May, 1999.

Janet J. Berry
DISTRICT JUDGE

Submitted by:

ALLISON, MacKENZIE, HARTMAN,
SOUMBENIOTIS & RUSSELL, LTD.
TODD RUSSELL, ESQ.
402 North Division Street
P.O. Box 646
Carson City, NV 89702
Attorneys for the Estate

CERTIFIED COPY
The document to which this certificate is attached is a full, true and correct copy of the original on file and of record in my office.
DATE: MAY 21 1999
AMY HARVEY, Clerk of the Second Judicial District Court, in and for the County of Washoe, State of Nevada.
By _____ Deputy

OFFICIAL RECORDS
PERSONAL PROPERTY
99 JUN -4 AM 9:49
TODD RUSSELL
ROLL 342 PAGE 658
DARLENE HUGHES
COUNTY RECORDER
DEP. 10 FILE NO. 224225
INDEXED

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DECLARATION OF VALUE

Instrument # 225350

Full Value of Property Interest Conveyed	$ 0.00
Less Assumed Liens & Encumbrances	$
Taxable Value (NRS 375.010)	$
Real Property Transfer Tax Due	$ 0.00

If exempt, state reason. NRS 375.090, Section Eleven (11).
Explain:

A transfer of title from the Estate of John M. Heizer, Sr. to his three (3) children (within the first degree of consanguinity).

INDIVIDUAL

Under penalty of perjury, I hereby declare that the above statements are correct.

Gretchen Dermody
Signature of Declarant

Gretchen Dermody
Name (Please Print)

P.O. Box 7118
Address

Reno NV 89510
City State Zip

ESCROW HOLDER

Under penalty of perjury, I hereby declare that the above statements are correct to the best of my knowledge based upon the information available to me in the documents contained in the escrow file.

Gretchen Dermody
Signature of Declarant

Name (Please Print)

Escrow Number

Firm Name

Address

City State Zip

REC 28 - NTC-RPTT Form 1

When recorded return to:
TODD RUSSELL, ESQ.
P.O. Box 646
Carson City, NV 89702
APN: 15-010-12

225350

Grantees' Address:
JOHN M. HEIZER, JR.
COROLYNN VOGT
GRETCHEN DERMODY
P.O. Box 7118
Reno, NV 89510

EXECUTOR'S GRANT DEED

BOOK 345 PAGE 708

THIS DEED, made this 10 day of Sept, 1999, by and between JOHN M. HEIZER, JR., COROLYNN VOGT, and GRETCHEN DERMODY, Co-Executors of the Estate of JOHN M. HEIZER, SR., deceased, hereinafter referred to as Grantors, and JOHN M. HEIZER, JR., COROLYNN VOGT, and GRETCHEN DERMODY, single persons, as tenants in common, each as to an undivided one-third (1/3) interest, hereinafter referred to as Grantees,

WITNESSETH:

WHEREAS, on June 3, 1997, the Grantors, JOHN M. HEIZER, JR., COROLYNN VOGT, and GRETCHEN DERMODY, were duly appointed Co-Executors of the Estate of JOHN M. HEIZER, SR., deceased, by the Second Judicial District Court of the State of Nevada, in and for the County of Washoe, in Case No. CV 97-02825, Dept. No. 1; and

WHEREAS, the above-referenced estate is the owner of all that certain parcel of real property located in the county of Pershing, state of Nevada, as more particularly hereinafter described; and

WHEREAS, on July 6, 1998, the Second Judicial District Court of the State of Nevada, in and for the County of Washoe, after a hearing thereon, approved a First and Final Account and Petition for Fees and for Final Distribution, which Order was duly amended on May 21, 1999, wherein transfer of the hereinafter described real property from the estate was granted to JOHN M. HEIZER, JR., COROLYNN VOGT, and GRETCHEN DERMODY, as tenants in common, each as to an undivided one-third (1/3) interest.

That the Grantors, in consideration of the sum of Ten and No/100 Dollars ($10.00), lawful money of the United States, and other good and valuable consideration to them in hand paid by the Grantees, the receipt whereof is hereby acknowledged, do by these presents grant, bargain, and sell to the Grantees and to their heirs, successors and assigns forever, all that certain lot, piece,

ALLISON, MacKENZIE, HARTMAN, SOUMBENIOTIS & RUSSELL, LTD.
402 North Division Street, P. O. Box 646, Carson City, NV 89702
Telephone: (775) 687-0202 Fax: (775) 882-7918

or parcel of land situate, lying, and being in the county of Pershing, state of Nevada, and more particularly described as follows:

> 460 acre parcel, located in Pershing County, Nevada, and described as:
>
> A portion of Section 9, T.28N., R.33 E., M.D.B.&M.
>
> APN 15-010-12

TOGETHER WITH all and singular the tenements, hereditaments, and appurtenances thereunto belonging or in anywise appertaining and the reversion and reversions, remainder and remainders, rents, issues, and profits thereof.

IN WITNESS WHEREOF, the Grantors have executed this conveyance the day and year first above written.

JOHN M. HEIZER, JR.

COROLYNN VOGT

GRETCHEN DERMODY

STATE OF NEVADA)
: ss.
COUNTY OF Washoe)

On Sept 10, 1999, personally appeared before me, a notary public, JOHN M. HEIZER, JR., personally known (or proved) to me to be the person whose name is subscribed to the foregoing document, who acknowledged to me that he executed the foregoing document.

NOTARY PUBLIC

BARBARA GASTON...
Notary Public - State of Nevada
Appointment Recorded in Washoe C...

ALLISON, MacKENZIE, HARTMAN, SOUMBENIOTIS & RUSSELL, LTD.
402 North Division Street, P. O. Box 646, Carson City, NV 89702
Telephone: (775) 687-0202 Fax: (775) 882-7918

STATE OF NEVADA)
: ss.
COUNTY OF Washoe)

On Sept 10, 1999, personally appeared before me, a notary public, COROLYNN VOGT, personally known (or proved) to me to be the person whose name is subscribed to the foregoing document, who acknowledged to me that she executed the foregoing document.

Barbara Gaston Geary
NOTARY PUBLIC

BARBARA GASTON GEARY
Notary Public - State of Nevada
Appointment Recorded in Washoe County
No: 90-0511-2 - Expires February 21, 2002

STATE OF NEVADA)
: ss.
COUNTY OF Washoe)

On Sept 10, 1999, personally appeared before me, a notary public, GRETCHEN DERMODY, personally known (or proved) to me to be the person whose name is subscribed to the foregoing document, who acknowledged to me that she executed the foregoing document.

Barbara Gaston Geary
NOTARY PUBLIC

BARBARA GASTON GEARY
Notary Public - State of Nevada
Appointment Recorded in Washoe County
No: 90-0511-2 - Expires February 21, 2002

OFFICIAL RECORDS
REQUESTED BY
WASHOE CO., NEVADA
'99 SEP 20 PM 12:30
JOHN HEIZER JR.
COUNTY RECORDER
BOOK 345 PAGE 708
DEP. Q FILE NO. 225350
INDEXED

ALLISON, MacKENZIE, HARTMAN, SOUMBENIOTIS & RUSSELL, LTD.
402 North Division Street, P. O. Box 646, Carson City, NV 89702
Telephone: (775) 687-0202 Fax: (775) 882-7918

State of Nevada
Declaration of Value

FOR RECORDERS OPTIONAL USE ONLY	
Document/Instrument #	481668
Book: 487	Page: 147
Date of Recording:	OCT 10 2012
Notes:	

1. **Assessor Parcel Number(s)**
   a) #011-120-18, #011-120-21, #011-120-22
   b) #011-120-23, #011-120-24, #011-120-26 (all
   c) formerly part of #011-120-02 &#011-120-03)
   d) #088-010-20, #088-010-01, #015-010-12

2. **Type of Property:**
   a) ☒ Vacant Land b) ☐ Single Fam. Res.
   c) ☐ Condo/Twnhse d) ☐ 2-4 Plex
   e) ☐ Apt. Bldg. f) ☐ Comm'l/Ind'l
   g) ☐ Agricultural h) ☐ Mobile Home
   i) ☒ Other Mining Claims

3. **Total Value/Sales Price of Property:** $ 66,895.00
   Deed in Lieu of Foreclosure Only (value of property) $ 0.00
   Transfer Tax Value per NRS 375.010, Section 2: $ 44,111.00
   Real Property Transfer Tax Due: $ 173.55

4. **If Exemption Claimed:**
   a. Transfer Tax Exemption, per NRS 375.090, Section: #3 Transfer recognizing true status
   b. Explain Reason for Exemption: #011-120-18, #011-120-21, #011-120-22, #011-120-23, #011-120-24 #011-120-26 (formerly part of #011-120-02 & #011-120-03) are owned by Buyer but are referenced for clarification purposes.

5. Partial Interest: Percentage being transferred: 66.666 %

The undersigned declares and acknowledges, under penalty of perjury, pursuant to NRS 375.060 and NRS 375.110, that the information provided is correct to the best of their information and belief, and can be supported by documentation if called upon to substantiate the information provided herein. Furthermore, the disallowance of any claimed exemption, or other determination of additional tax due, may result in a penalty of 10% of the tax due plus interest at 1% per month.

Pursuant to NRS 375.030, the Buyer and Seller shall be jointly and severally liable for any additional amount owed.

Signature Todd A. Plimpton Capacity Attorney for Buyer

Signature _____ Capacity _____

SELLER (GRANTOR) INFORMATION (REQUIRED)		BUYER (GRANTEE) INFORMATION (REQUIRED)	
Print Name:	Corolynn Vogt & Gretchen Dermody	Print Name:	John M. Heizer, Jr.
Address:	P.O. Box 7118	Address:	P.O. Box 1
City:	Reno	City:	Lovelock
State:	NV Zip: 89510	State:	NV Zip: 89419

COMPANY REQUESTING RECORDING
(REQUIRED IF NOT THE SELLER OR BUYER)

Print Name: **BELANGER & PLIMPTON** Escrow # _____
Address: P.O. Box 59
City: Lovelock State: NV Zip: 89419

(AS A PUBLIC RECORD THIS FORM MAY BE RECORDED/MICROFILMED)

481668

BOOK 487 PAGE 147
OFFICIAL RECORDS
PERSHING CO. NEVADA
RECORDED REQUESTED BY
BELANGER & PLIMPTON
12 OCT 10 PM 4:38
ROLL 487 PAGE 147
RENE CHILDS
COUNTY RECORDER
DEP CRS FILE NO 481668
22-
25-
1735 RPTT

APN'S: #011-120-18, #011-120-21, #011-120-22, #011-120-23 #011-120-24, #011-120-26 (all formerly part of APN #011-120-02 & #011-120-03) #088-010-20, #088-010-01 #015-010-12

After Recording, Mail To:
John M. Heizer, Jr
P.O. Box 1
Lovelock, NV 89419

Send Subsequent Tax Bills To:
John M. Heizer, Jr
P.O. Box 1
Lovelock, NV 89419

QUITCLAIM DEED

INDEXED

THIS INDENTURE WITNESSETH THAT,

COROLYNN VOGT, GRETCHEN HEIZER DERMODY, single persons, as tenants in common, each as to an undivided one-third (1/3) interest,

FOR GOOD AND VALUABLE CONSIDERATION, the receipt of which is hereby acknowledged, does hereby CONVEY AND QUITCLAIM to:

JOHN M. HEIZER, Jr., a single man;

Whose mailing address is P.O. Box 1, Lovelock, NV 89419;

All of their undivided interest in and to the following described real estate situated in the County of Pershing, State of **Nevada**:

SEE EXHIBIT "A" ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

Per NRS 111.312 – The Legal Description appeared previously in _____, recorded on _____, as Document No. _____ in _____ County Records, Pershing County, Nevada.

MORE commonly known as: Pershing County Assessor's Parcel Numbers: #011-120-18, #011-120-21, #011-120-22, #011-120-23, #011-120-24, #011-120-26 (all formerly part of #011-120-02 & #011-120-03), #088-010-20, #088-010-01, #015-010-12
SUBJECT TO: the Restrictions, Conditions, Covenants, Rights, Rights of Way, and Easements that are now of record, if any.

(Remainder of this page intentionally left blank)

TOGETHER with all and singular the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining.

The then-acting Trustee has the power and authority to encumber or otherwise to manage and dispose of the hereinabove described real property; including, but not limited to, the power to convey.

The undersigned hereby affirm that this document submitted for recording does not contain a social security number.

Dated this ____ day of April, 2012.

John M. Heizer, Jr.

State of Nevada
County of Pershing

This instrument was acknowledged before me on this ____ day of April, 2012, by John M. Heizer, Jr.

(Notary stamp)

(Signature of notarial officer)

Dated this 3rd day of ~~April~~ Oct., 2012.

Gretchen Heizer Dermody

Gretchen Heizer Dermody

State of Nevada
County of Pershing

This instrument was acknowledged before me on this 3rd day of ~~April~~ October, 2012, by Gretchen Heizer Dermody.

(Notary stamp)

M. RODRIGUEZ-NAVA
Notary Public - State of Nevada
Appointment Recorded in Washoe County
No: 04-88114-2 - Expires November 21, 2012

M. Rodriguez-Nava

(Signature of notarial officer)

Oct 3, 2012

Dated this ____ ~~day of April, 2012~~.

Corolynn Vogt

State of Nevada
County of Pershing

This instrument was acknowledged before me on this 3rd day of ~~April~~ October, 2012, by Corolynn Vogt.

(Notary stamp)

M. RODRIGUEZ-NAVA
Notary Public - State of Nevada
Appointment Recorded in Washoe County
No: 04-88114-2 - Expires November 21, 2012

M. Rodriguez-Nava

(Signature of notarial officer)

APN #011-120-18, #011-120-21, #011-120-22, #011-120-23, #011-120-24 & #011-120-26
(Formerly apart of #011-120-02, #011-120-03 & #011-120-12)

Parcels 2, 3, 4, 5, 8 and 9 of Parcel Map for JOHN M. HEIZER, JR., lying within a portion of Section 3 and 11 of Township 29 North, Range 33 East, filed for record April 2nd, 2004, Document No. 239729, Official Records, Pershing County, Nevada.

SUBJECT TO the Correction Easement Deed, recorded on December 9th, 2005, as Document #246276, in Book 402, Page 727, Official Records, Pershing County, Nevada.

APN #088-010-20

TOWNSHIP 25 NORTH, RANGE 34 EAST, M.D.B.&M.

Section 10: A portion of the S ½, consisting of 20.66 acres, and more particularly described as follows:

Phosphorous Lode, Patent #27750045, the location of which commences at Corner No. 1 of the Phosphorous Lode Mineral Survey No. 4882, from which the Corner of Sections 10, 11, 14 and 15 bears South 61°36' East, 1398.6 feet distance; thence South 70°54' West, 1500 feet to Corner No. 2; thence North 19°14' West, 17.50 feet to a ½" diameter steel pin set on line 2-3, the beginning point of a fractional portion of the Phosphorous Lode, thence North 19°14' West, 582.50 feet to Corner No. 3; thence North 70°54' East, 60.0 feet to Witness Corner No. 3; thence North 70°54' East, 142.3 feet to a ½" diameter steel pin set on line 3-4; thence South 0°04' East, 616.19 feet to a ½" diameter steel pin set on line 2-3 and the point of beginning of the fraction, containing 1.353 acres, more or less.

TOGETHER will all the dips, spurs and angles, and also all the metals, ores, gold and silver bearing quartz, deposits, rock and earth therein; and all the rights and privileges and franchises thereto incident, appendant and appurtenant.

EXCEPTING AND RESERVING TO THE UNITED STATES a right-of-way thereon for ditches and canals constructed by the authority of the United States Act of August 30, 1890, 26 Stat. 391; 43 U.S.C. 945.

NOTE: Previously recorded on July 18th, 1977, as Document #99213, in Book 84, Page 478, on June 29th, 1981, as Document #120232, in Book 123, Page 199, and on July 17th, 2012, as Document #480222, in Book 483, Page 748 of the Official Records of the Pershing County Recorder, State of Nevada. See also Patent #27750045, recorded on February 6th, 1975 as Document #91721, in Book 66, Page 83, of the Official Records of the Pershing County Recorder, State of Nevada.

APN #088-010-01

PARCEL ONE

TOWNSHIP 25 NORTH, RANGE 25 EAST, M.D.B.&M.

Sections: Portions of 25 and 36, Nightingale Mining District, **AND**

TOWNSHIP 25 NORTH, RANGE 24 EAST, M.D.B.&M.

Sections: Portions of 30 and 31, Nightingale Mining District more particularly described as follows:

High Grade, Patent #876078, the location of which commences at Corner No. 1 of the High Grade Mineral Survey No. 4475, a pine post 4 inches square, 4 feet long, marked H. G. 1-4475, with mound of stone; from which the SE Corner of Section 25, Township 25 North, Range 24 East, M.D.B.&M., bears South 17° 37' West 316.75 feet distant;

Thence, first course, South 56° 25' West 112.48 feet intersect the East boundary of the SE ¼ of Section 25, Township 25 North, Range 24 East, M.D.B.&M., at North 31' East 239.7 feet from the SE Corner; 543.5 feet intersect the South boundary of said SE ¼ of Section 25, at North 89° 48' West 356.9 feet from the SE Corner; 600 feet to Corner No. 2, a pine post 4 inches square, 4 feet long, marked H. G. 2-4475, with mound of stone;

Thence, second course, South 33° 35' East 1,500 feet to Corner No. 3, a pine post 4 inches square, 4 feet long, marked H. G. 3-4475, with mound of stone;

Thence, third course, North 56° 25' East 300 feet to a point from which discovery bears North 33° 35' West 500 feet distant; 600 feet to Corner No. 4, a pine post 4 inches square, 4 feet long, marked H. G. 4-4475, with mound of stone;

Thence, fourth course, North 33° 35' West 1,500 feet to Corner No. 1, the place of beginning; expressly excepting and excluding from these presents all that portion of the ground hereinbefore described embraced in said SE ¼ of Section 25; said Survey No. 4475, extending 1,500 feet in length along the High Grade vein or lode; the premises herein granted containing 19.679 of an acre.

NOTE: Previously recorded on September 16th, 2008, as Document #361677, in Book 440, Page 248, of the Official Records of the Pershing County Recorder, State of Nevada.

PARCEL TWO

TOWNSHIP 25 NORTH, RANGE 25 EAST, M.D.B.&M.

Sections: Portion of 30, Nightingale Mining District, more particularly described as follows:

Marvelous Lode, Patent #870486, the location of which commences at Corner No. 1 of the Marvelous Lode Mineral Survey No. 4476, the location of which commences at Corner No. 1, an iron post 1 inch in diameter, 1 foot above ground, marked ¼, identical with the W ¼ Corner of Section 30, Township 25 North, Range 25 East, M.D.B.&M.

Thence, first course, South 89° 37' East, 2.1 of a foot to witness Corner to said Corner No. 1, a granite stone 6 x 8 x 24 inches, marked W.C.M.M. 1, 1-1-4476; 300 feet to a point from which discovery bears North 23' East 708.7 feet distant; 600 feet to Corner No. 2, a pin post 4 inches square, 4 feet long, marked M.M. 1-2-2-4476, with mound of stone;

Thence, second course, North 23' East 1,500 feet to Corner No. 3, a pine post 4 inches square, 4 feet long, marked M 3,4476, with mound of stone;

Thence, third course, North 89° 37' West 600 feet to Corner No. 4, a pine post 4 inches square, 4 feet long, marked M 4-4476, with mound of stone;

Thence, fourth course, South 23' West 1,500 feet to Corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500 feet in length along said Marvelous vein or load.

Marvelous No. 1, Patent #870486, the location of which commences at Corner No. 1, identical with Corner No. 1 of Marvelous Lode Claim;

Thence, first course, South 89° 37' East, 0.2 of a foot to witness Corner to said Corner No. 1, identical with witness Corner No. 1 of said Marvelous Lode Claim; 300 feet to a point from which discovery bears South 23' West 929.5 feet distant; 600 feet to Corner No. 2, identical with Corner No. 2, of Marvelous Lode Claim;

Thence, second course, South 31' West 1,500 feet to Corner No. 3, a pine post 4 inches square, 4 feet long, marked M 1-4476, with mound of stone;

Thence, third course, North 89° 37' West 600 feet to Corner No. 4, a pine post 4 inches square, 4 feet long, with mound of stone;

Thence, fourth course, North 31' East 1,500 feet to Corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500 feet in length along said Marvelous No. 1 vein or lode; the premises herein granted containing 41.322 acres.

NOTE: Previously recorded on September 16th, 2008, as Document #361677, in Book 440, Page 248, of the Official Records of the Pershing County Recorder, State of Nevada.

APN #015-010-12

TOWNSHIP 28 NORTH, RANGE 33 EAST

Section 9: NW ¼; NE ¼; W ½ NE ¼ SE ¼; NW ¼ SE ¼; S ½ SE ¼, containing 460 acres more or less.

NOTE: Previously recorded on September 20th, 1999, as Document No. 225350, in Book 345, Page 708, of the Official Records, Pershing County, Nevada.