# **CONVERSE CONSULTANTS**



# Phase II Environmental Site Assessment Report

Rose Gulch Mine APN 015-010-12 T28N R33E SEC 9 Pershing County, Nevada

Converse Project No. 19-23216-01 November 30, 2021

**Prepared For:** 

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

**Prepared By:** 

Converse Consultants 1 E. Liberty Street Suite 600 Reno, Nevada 89501 November 30, 2021

Western Nevada Development District 1000 North Division Street, Suite 102B Carson City, NV 89703

Attn: Ms. Sheryl Gonzales

Subject: PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT

Rose Gulch Mine APN 015-010-12 T28N, R33E, SEC 9

Pershing County, Nevada

Converse Project No. 19-23216-01

Dear Ms. Gonzales:

Converse Consultants (Converse) is pleased to submit the attached Report that summarizes the activities and results of a Phase II Environmental Site Assessment that was conducted at the above referenced property.

Should you have any questions or comments regarding this report, please contact us. We appreciate the opportunity to have worked with you on this project.

#### **CONVERSE CONSULTANTS**

Tracy Johnston, P.E. C.E.M

Senior Engineer

Philip Childers, C.E.M.

Senior Environmental Manager

Attachments: Phase II ESA Report

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# **Executive Summary**

The following is an Executive Summary of the Phase II Environmental Site Assessment (ESA) conducted by Converse Consultants (Converse), as presented in the body of this Report. 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.

Converse has performed a Phase II ESA at the property located in a portion of Section 9, Township 28N, Range 33E, Mount Diablo Baseline Meridian, referred to hereinafter as the "Property", in conformance with the scope of limitations of the American Society for Testing Materials (ASTM) Designation: E1903-11 Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (ASTM, E 1903-11) with the objective to reconcile the Recognized Environmental Conditions (RECs) identified during a Phase I ESA conducted by Converse at the Property. This investigation focused primarily on the portion of the Property located approximately ¼ -mile into the mouth of Rose Canyon, an ephemeral drainage, which drains the west side of the Humboldt Range Placer, herein referred to as the "Rose Gulch Mine" (Site). The Site is approximately 1.25 acres in size. The Site location is shown in Figure 1. The following RECs were identified at the Site during the Phase I ESA:

- Potential that Chemicals of Potential Concern (COPCs) may have been released to the environment during historic mining operations and/or are leaching into the environment.
- Piles of reject/waste material and mine tailings were observed throughout the Site. COPCs that are present in this material may pose a threat to human health and/or environmental receptors and have a negative impact on future development of the Property.
- A small, single-lined pond/containment was observed at the Site. No liquid was present in the pond at the time of the Phase I ESA site visit. The past use of the pond and the integrity of the pond liner are not known at this time. The potential exists that COPCs present in liquid that was contained in the pond 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, were observed at the Site along with miscellaneous debris.

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• Several pieces of abandoned mining equipment (e.g., hopper, conveyors, trommel, shaker table, grizzly screens, gold separator, tanks, dewatering screw, etc.) were observed at the Site along with a portable mobile home and a metal cargo container.

- A large mining excavation/trench is present at the entrance to the Site and several exploratory test pits are present throughout the Site.
- The Site has a current water pollution control permit (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 permit. All closure-related activities must be reviewed and approved by the NDEP.

#### Site Description

The Site comprises approximately 1.25 acres and is vacant. It is located approximately 1/4 -mile into the mouth of Rose Canyon, an ephemeral drainage, which drains the west side of the Humboldt Range Placer. Several abandoned pieces of mining equipment are located at the Site. Waste rock piles and exploratory test pits are located throughout the Site along with an approximate 12' deep x 25' wide x 150' long mining excavation/trench.

#### Summary of Phase II ESA Activities and Results

The Phase II ESA consisted of collecting soil samples at mined areas, piles (i.e. waste rock/tailings/process material), an impoundment (single-lined pond), and a waste disposal area. Soil samples were screened using a field portable X-ray fluorescence (FPXRF) instrument and a photoionization detector (PID). Following field screening, soil samples were collected and delivered to Alpha Analytical, Inc. in Sparks, Nevada.

The samples collected from the mined areas, waste piles, and an impoundment were analyzed for pH by Method SM 4500, metals by EPA Method 6020, total cyanide (CN) by Method SM 4500-CN-C, and mercury (Hg) by Method SM 245.5. The samples collected from the waste disposal area were analyzed for Total Petroleum Hydrocarbons – Extractable (TPH-E) by EPA Method 8015. Copies of the chain-of-custody documentation and laboratory reports for the soil samples are provided in Appendix B.

The analytical results for the soil samples are presented in Table 1 of the report and are summarized below:

- No detectable concentrations of TPH-E were reported in the soil samples.

WNDD/Rose Gulch Mine Site/Phase II ESA Pershing County APN #015-010-12 Project No.: 19-23216-01

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 None of the metal concentrations exceeded a State Reporting Limit (SRL) with the exception of arsenic (As), which has an SRL of 0.39 milligrams per Kilogram (mg/Kg). The highest reported As concentration was 47 mg/Kg. An As concentration of 31 mg/Kg was reported in the background sample.

- All the CN concentrations were below the laboratory reporting limit with the exception of one of the samples collected from the mining trench. A CN concentration of 1 mg/Kg was reported in that sample.
- Hg concentrations in the samples ranged from 0.1 to 0.76 mg/Kg.

#### Phase II ESA Conclusions and Recommendations

All of the COPC concentrations in the samples submitted for analytical testing were below the SRLs with the exception of As. The As concentration in the samples are consistent with background levels. Based on the analytical results of the soil samples, it is our opinion that the piles, mined areas, and the impoundment at the Site do not pose a risk to human health or the environment. Although groundwater sampling was proposed in the FSP, it is Converse's opinion that groundwater sampling is not warranted to achieve the stated objectives based on the analytical results of soil samples collected during the Phase II ESA.

Based on the findings of this Phase II ESA, no further assessment and/or remediation is recommended at this time. It should be noted that the potential exists that hazardous/regulated materials, substances and/or contaminated soil may be present at the Site that were not evident at the time of this investigation. If impacted soils or other environmental concerns are encountered during development of the Site, we recommend that a certified environmental manager (CEM) be contacted to address these issues. Converse has CEMs who can help in resolution of any future environmental concerns that may arise during development of the Property.

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#### 1.0 Introduction

This Phase II Environmental Site Assessment (ESA) report has been prepared for the Western Nevada Development District (WNDD) in accordance with the Quality Assurance Project Plan (QAPP), approved by the U.S. Environmental Protection Agency (EPA) on October 29, 2019 ([DCN] BNFD91009SV1). The Phase II ESA was conducted in general accordance with Converse's August 25, 2021, Field Sampling Plan. The "Property" is defined herein as the Pershing County Assessor Parcel Number (APN) 015-010-12 and comprises one (1) asymmetrical-shaped parcel totaling 21,413 acres, located in Section 9, Township 28N, Range 33E, Mount Diablo Baseline Meridian. The Phase II ESA focused on the portion of the Property located approximately \( \frac{1}{4} \) -mile into the mouth of Rose Canyon, an ephemeral drainage, which drains the west side of the Humboldt Range Placer, herein referred to as the "Rose Gulch Mine" (Site). The Site is approximately 1.25 acres in size. The Site location is shown in Figure 1.

Converse has performed a Phase II ESA at the Site in conformance with the scope of limitations of the American Society for Testing Materials (ASTM) Designation: E1903-11 Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (ASTM, E 1903-11) with the objective to reconcile the Recognized Environmental Conditions (RECs) identified during a Phase I ESA conducted by Converse at the Property. The following RECs were identified at the Site during the Phase I ESA:

- Potential that Chemicals of Potential Concern (COPCs) may have been released to the environment during historic mining operations at the Site and/or are leaching into the environment.
- Piles of reject/waste material and mine tailings were observed throughout the Site. COPCs that are present in this material may pose a threat to human health and/or environmental receptors and have a negative impact on future development of the Property.
- A small, single-lined pond/containment was observed at the Site. No liquid was present in the pond at the time of the Phase I ESA site visit. The past use of the pond and the integrity of the pond liner are not known at this time. The potential exists that COPCs present in liquid, that was contained in the pond, 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, were observed at the Site along with miscellaneous debris.

 Several pieces of abandoned mining equipment (e.g., hopper, conveyors, trommel, shaker table, grizzly screens, gold separator, tanks, dewatering screw, etc.) were observed at the Site along with a portable camp trailer and metal cargo container.

- A large mining excavation/trench, exploratory pits, and a boarded up horizontal mining shaft were observed at the Site.
- The Site 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 permit. All closure-related activities must be reviewed and approved by the NDEP.

## 2.0 Background

#### 2.1 Site Description and Features

The Site comprises approximately 1.25 acres and is vacant. The Site is located approximately ¼ -mile into the mouth of Rose Canyon, an ephemeral drainage, which drains the west side of the Humboldt Range Placer. Several abandoned pieces of mining equipment are located at the Site. Waste rock piles and exploratory test pits area are located throughout the Site along with a small, boarded up horizontal mine shaft and an approximate 12' deep x 25' wide x 150' long mining excavation/trench.

#### 2.2 Physical Setting

#### 2.2.1 Topography

The topography of the Site slopes towards the northwest. The Site is situated at an elevation of approximately 4,655 feet above mean sea level. Surface flow at the Site is restricted to the ephemeral flow along the Rose Canyon drainage.

#### 2.2.2 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 (ref: Phase I ESA report, August 3, 2021, Converse).



According to the U.S. Department of Agriculture (USDA) Soil Conservation Service (SCS), the Site contains Slawha silt loam. Slawha silt loam has a moderately high runoff potential when thoroughly wet. Soils observed at the site during the Phase II ESA consisted of a mixture of gravel, silt, and sand.

#### 2.2.3 Hydrogeology

Converse reviewed well logs available on the Nevada Division of Water Resources' Nevada Hydrology Data Mapper. No wells are located on the Property. The well log for a domestic well installed in 1938 approximately 4,748 feet northeast of the Property indicated groundwater was first encountered at approximately 218-feet below ground surface (bgs). Converse estimates groundwater at the Site is located approximately 150 to 200 feet below ground surface. 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. Groundwater flow direction at the Site is estimated to be west-northwesterly.

#### 2.3 Site History and Land Use

The Site was used for placer mining using physical separation methods. The Site is classified by the Nevada Bureau of Mining Regulation and Reclamation (BMRR) as a small mining operation, which is defined as an operation which disturbs less than 5 acres of land and does not remove from the earth more than 36,500 tons in any calendar year. Based on information provided by the BMRR, it is Converse's understanding that gold was extracted from the Site using a loader/backhoe, a grizzly classifier(s), a rotating trommel, a M7 separator, a portable placer plant with recycle water storage tank/fines bin, a dewatering screw, a single-lined pond and associated pumps and pipelines. Much of the equipment used during previous mining activities remains at the Site.

Several exploratory test pits and piles of waste rock/reject material are present throughout the Site. Test pits and waste piles were observed at several locations where tributary ravines and gullies intersect the Rose Canyon drainage channel. An approximate 12' deep, 25' wide, 150' long open trench is located near the entrance to the Site. Empty drums and miscellaneous debris are scattered throughout the Site.

#### 2.4 Adjacent Property Land Use

The adjoining properties have been undeveloped from at least 1941 until the present day.

#### 2.5 Summary of Previous Assessment

Converse performed a Phase I ESA on the Property dated August 3, 2021, which identified the following RECs at the Site:

 Potential that Chemicals of Potential Concern (COPCs) may have been released to the environment during historic mining operations and/or are leaching into the environment.



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 Piles of reject/waste material and mine tailings were observed throughout the Site. COPCs that are present in this material may pose a threat to human health and/or environmental receptors and may have a negative impact on future development of the Property.

A small, single-lined pond/containment was observed at the Site. No liquid was present in the pond at the time of the Phase I ESA site visit. The past use of the pond and the integrity of the pond liner are not known at this time. The potential exists that COPCs present in liquid that was contained in the pond 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, were observed at the Site along with miscellaneous debris.
- Several pieces of abandoned mining equipment (e.g., hopper, conveyors, trommel, shaker table, grizzly screens, gold separator, tanks, dewatering screw, etc.) were observed at the Site along with a portable camp trailer and metal cargo container.
- An open mining excavation/trench and exploratory pits were observed at the Site.
- The Site has a current water pollution control permit (NEV2004101) approved for mining facilities. This permit must be maintained until permanent closure and post-closure monitoring are completed and the NDEP has formally terminated the permit. All closure-related activities must be reviewed and approved by the NDEP.

#### 3.0 Work Performed and Rationale

#### 3.1 Scope of Assessment

The Phase II ESA consisted of:

- Collecting soil samples at mined areas, piles (i.e. waste rock/tailings/process) material), the single lined pond, and the waste disposal area
- Collecting a background sample
- Screening samples for metals using field portable X-ray fluorescence (FPXRF) equipment



- Delivering select samples to Alpha Analytical, Inc. (Alpha)
- Analytical testing of samples for metals, mercury (Hg), Cyanide (CN) and pH.
   Soil samples collected from the waste disposal area were analyzed for Total Petroleum Hydrocarbons – Extractable (TPH-E).

The FSP included groundwater sampling (i.e. installation and sampling of one groundwater monitoring well). Based on the analytical results of soil samples collected during the Phase II ESA, it is Converse's opinion that groundwater sampling is not necessary to achieve the stated objectives.

#### 3.2 Pre-field Activities

Prior to commencing with field activities, a site-specific health and safety plan was prepared and reviewed by all onsite personnel.

#### 3.3 Exploratory Sampling and Test Screening Methods

#### 3.3.1 Field Quality Assurance/Quality Control

The FPXRF and PID were calibrated in accordance with manufacturer's recommendations prior to commencing with field screening. Samples collected for field screening were placed in new one-gallon zip-closure plastic bags (a dedicated bag was used for each sample). The zip lock bags used for sample containment were labeled with a unique identifier. A portable table was set up in the field for sample storage and field screening activities. The sample identification and corresponding FPXRF readings were recorded on log sheets. The sampler wore latex gloves during sample collection. Sampling tools were decontaminated by rinsing with distilled water prior to use at each sample location.

#### 3.3.2 Field Screening

#### Metals

Samples collected for field screening of metals using the FPXRF were flattened to the extent possible and FPXRF readings were obtained by reading directly through the ziplock bag. Data collected during field screening was evaluated to determine sample locations and identify samples to be submitted for analytical testing. Soil samples with the highest metals concentrations from each of the investigated areas of concern (i.e. mined areas, piles, impoundment) based on FPXRF readings were transferred to laboratory-provided sample containers, sealed, labeled, and preserved on ice in a cooler pending delivery to the laboratory.

#### Volatile Organic Compounds

Samples collected from the waste disposal area were screened for volatile organic compounds (VOCs) using the PID. Soil samples were placed in a sealable Ziploc bag for approximately 5 to 10 minutes and screened for VOCs using a PID and olfactory senses. No VOCs were detected during field screening

#### 3.3.3 Soil Sample Collection

Soil sampling was conducted on September 28, 2021. A backhoe, operator, and spotter provided by Bramco Construction, Inc. (Bramco) were onsite to assist with sample collection in the piles, mining excavation/trench, and unlined pond. Photos of the sample locations are provided in Appendix A. Samples were collected from soil that was not in direct contact with the backhoe bucket. Samples were collected using a spade and placed in a zip-lock bag for field screening. Samples to be submitted for analytical testing were collected in laboratory-provided containers, sealed, labeled, and preserved on ice in a cooler pending delivery to the laboratory.

#### 3.3.3.1 Mined Areas

Samples were collected from the large mining excavation/trench using the backhoe due to safety concerns (excessive vegetation in bottom of trench, walls of trench were vertical and unsupported). Two samples were collected from the bottom of the trench at approximately 0 to 4 inches below ground surface (bgs). Based on the field screening results for these samples, no additional sampling was conducted in the trench.

#### 3.3.3.2 Piles

Soil samples were collected from select waste rock piles using a backhoe using the methods described above and/or hand tools. Samples were collected at approximately 0 to 4 inches below the pile surface and at approximate two-foot intervals thereafter until native material was encountered.

#### 3.3.3.3 Impoundment

A soil sample was collected beneath the single-lined pond. The liner was folded back to facilitate sample collection. A sample was collected from approximately one foot below the bottom of the impoundment using the backhoe using the methods described above. Based on the field screening results for this sample, no additional sampling was conducted at this location.

#### 3.3.3.4 Waste Disposal Areas

Two soil samples were collected at the waste disposal area using hand tools, as described above. Sample locations were determined based on field observations, field screening results, and professional judgment.



#### 3.4 Chemical Analytical Methods

The samples were delivered under chain-of-custody protocol to Alpha. The samples collected from the mined areas, piles, and impoundments were analyzed for pH by Method SM 4500, metals by EPA Method 6020, CN by Method SM 4500-CN-C, and Hg by Method SM 245.5. The samples collected from the waste disposal area were analyzed for Total Petroleum Hydrocarbons – Extractable (TPH-E) by EPA Method 8015. Copies of the chain-of-custody documentation and laboratory reports for the soil samples are provided in Appendix B.

### 4.0 Presentation and Evaluation of Results

#### 4.1 Subsurface Conditions

Based on our observations of the exposed walls of the mining excavation and exploratory test pits, the shallow soils are comprised of a mixture of silt, sand, gravel, and alluvial deposits.

#### 4.2 Analytical Results

The analytical results for the soil samples are presented in Table 1 and are summarized below.

- No detectable concentrations of TPH-E were reported in the soil samples.
- None of the metals concentrations exceeded a State Reporting Limit (SRL) with the exception of As. The highest reported As concentration was 47 milligrams per Kilogram (mg/Kg).
- All of the CN concentrations were below the laboratory reporting limit with the exception of one of the samples collected from the mining trench. A CN concentration of 1 mg/Kg was reported in that sample.
- Hg concentrations in the samples ranged from 0.1 to 0.76 mg/Kg.

Table 1. Summary of Analytical Results for Soil Samples

			TDI	H-E	11.541		mary mou	ixesuits ioi	oon oamp	Metals						
Sample			(mg												CN	Hg
Sample Location	Sample ID	Date	DRO	ORO	рН	Mg	Ni	Cu	Zn	(mg/Kg) As	Se	Sb	Ва	Pb		
	Sample ID	Date	DKO	OKO	рп	ivig	INI	Cu	<b>Z</b> 11	AS	36	30	Ба	FU	(mg/Kg)	(mg/Kg)
Waste Disposal	40,0040,14/0,@4# (4)	0.0-4.04	ND	40.0	NIA	NIA	N I A	NI A	NIA	NI A	NIA I	NIA	NI A	NI A	NI A	NIA
Area	19-2316-WD@4" (1)	8-Oct-21	ND	10 C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Waste Disposal																
Area	19-2316-WD@4" (2)	8-Oct-21	12 LC	41 C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pile	Pile 1 - SS @4"	8-Oct-21	NA	NA	8.52	4,500	15	10	68	39	ND	8.2	110	13	<0.5	0.10
Pile	Pile 2 - SS @4"	8-Oct-21	NA	NA	8.61	4,800	15	13	74	47	2.3	8.5	140	20	< 0.5	0.10
Test Pit	Exp. Pit - SS@8"	8-Oct-21	NA	NA	8.61	4,400	13	10	59	37	ND	13.0	90	17	<0.5	0.76
Large Trench	Mine ExSS1@4"	8-Oct-21	NA	NA	8.62	4,800	14	10	54	22	ND	3.8	200	14	1.0	0.06
Large Trench	Mine Ex SS2@4"	8-Oct-21	NA	NA	9.51	3,400	10	6.6	45	48	ND	6.8	69	11	<0.5	0.06
	Mine Exc-SS1@4"															
Large Trench	(D)	8-Oct-21	NA	NA	9.63	3,600	9.5	7.5	42	27	ND	8.6	72	13	<0.5	0.07
Pile	Pile 11-SS@4"	8-Oct-21	NA	NA	8.85	5,000	14	17	41	17	ND	3.7	220	9.3	<0.5	0.07
Pile	Pile 10-SS@4"	8-Oct-21	NA	NA	8.77	260	ND	ND	ND	1.9	ND	4.4	18	4.0	<0.5	0.13
Pile (separate	Prospects 2 - Pile -															
site)	SS @4"	8-Oct-21	NA	NA	8.69	6,400	15	16	62	17	ND	3.0	150	13	<0.5	0.03
Below unlined	Impoundment-															
pond	SS@2'	8-Oct-21	NA	NA	8.75	6,200	21	11	86	43	ND	11	110	14	<0.5	0.39
Background	BG-SS@4"	8-Oct-21	NA	NA	8.46	8,300	20	12	65	31	ND	8.6	170	14	<0.5	0.73
_			100													
	SRL		(total)		-	-	-	3.10E+03	-	3.90E-01	5.00E+00	-	1.60E+03	4.00E+02	1.60E+03	6.70E+00
			100													
	RSL		(total)		-	-	-	4.70E+04	3.50E+05	3.00E+00	5.80E+02	-	2.20E+05	8.00E+02	1.60E+03	4.00E+01

IPH-E	Total Petroleum Hydrocarbons - Extractable	DRO	Diesel Range Organics	ORO	Oil Range Organics
mg/Kg	milligrams per kilogram	Mg	Magnesium	Ni	Nickel
Cu	Copper	Zn	Zinc	As	Arsenic
Se	Selenium	Sb	Antimony	Ва	Barium
Pb	Lead	CN	Cyanide, Total	Hg	Mercury
NΙΛ	Not enalty and				

Not analyzed

Not detected (i.e. below laboratory reporting limit) ND

SRL State reporting limit

RSL Regional Screening Level (EPA Region 9, industrial soil)
C Reported concentration includes additional compounds uncharacteristic of common fuels and lubricants
L DRO concentration may include contributions from heavier end hydrocarbons (e.g. motor oil) that elute in the DRO range

#### 4.3 Data Quality Assurance/Quality Control

Samples were received and analyzed within the EPA recommended holding times. The laboratory provided data to estimate precision, accuracy, and bias. The quality control data is within laboratory defined or method specified acceptance limits.

# 5.0 Interpretation and Conclusions

#### 5.1 Recognized Environmental Condition/Potential Release Area

The RECs identified in the Phase I ESA were resolved during this investigation.

#### 5.2 Conceptual Model Validation/Adequacy of Investigations

It is Converse's opinion that the field and analytical data obtained during this Phase II ESA was adequate to meet the stated objectives.

#### 5.3 Absence, Presence, Degree, Extent of Target Analytes

The concentrations of target analytes were below SRLs with the exception of As. The As concentration reported in the samples were consistent with the background sample; therefore, As is not considered a COPC.

#### 5.4 Other Concerns

It was assumed, based on available data, that the selected sample locations were the most likely to have the highest concentrations of the target analytes. No limitation or exception was encountered during the completion of the Phase II ESA.

#### 5.5 Conclusions/Objectives Met

There is no evidence to suggest that chemicals were used during previous mining operations. The COPC concentrations in all of the samples were below the SRL with the exception of As. The As concentrations in the samples are consistent with background levels. Based on the analytical results of the soil samples, it is our opinion that the piles, mined areas, and the impoundment at the Site do not pose a risk to human health or the environment.

Although groundwater sampling was proposed in the FSP, it is Converse's opinion that groundwater sampling is not warranted to achieve the stated objectives based on the analytical results of soil samples collected during the Phase II ESA.

#### 5.6 Future Mining Activities and Mine Closure

A copy of the water pollution control permit (Permit) issued by the NDEP is provided in Appendix C. The permittee is John Heizer, Jr. (Property owner). It does not appear that any mining operations have occurred at the Site since the Permit was issued. The

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Permit authorizes the permittee to construct, operate and close the Site in accordance with the limitations, requirements, and other conditions set forth in the Permit. The Permit includes a description of the permitted mining process, mining equipment, and design requirements for the fluid management system. Mining must be conducted using physical separation methods; chemicals are not authorized for use in the process. The Permit requires that the fluid management system associated with any future mining operations at the Site be designed to contain all process fluids, including all meteoric waters which enter the system. The Permit states that future mining operations shall "...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." The permit requires monitoring of the water supply and process water for the Site.

The Permittee provided the NDEP with a post-mining land use/reclamation plan for the Site prior to issuance of the Permit (see Appendix D). The Permit states that the Permittee must have an approved final plan for permanent closure prior to initiating permanent closure activities at the Site.

#### 6.0 Recommendations

Based on the findings of this Phase II ESA, no further assessment and/or remediation is recommended at this time. It should be noted that the potential exists that hazardous/regulated materials, substances and/or contaminated soil may be present at the Site that were not evident at the time of this investigation. If impacted soils or other environmental concerns are encountered during development of the Site, we recommend that a certified environmental manager (CEM) be contacted to address these issues. Converse has CEMs who can help in resolution of any future environmental concerns that may arise during development of the Property.

# 7.0 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 all appropriate inquiries in conformance with the standard and practices set forth in 40 CFR Part 312.

Philip Childers, CEM

Olilip S. Chal

Senior Environmental Manager

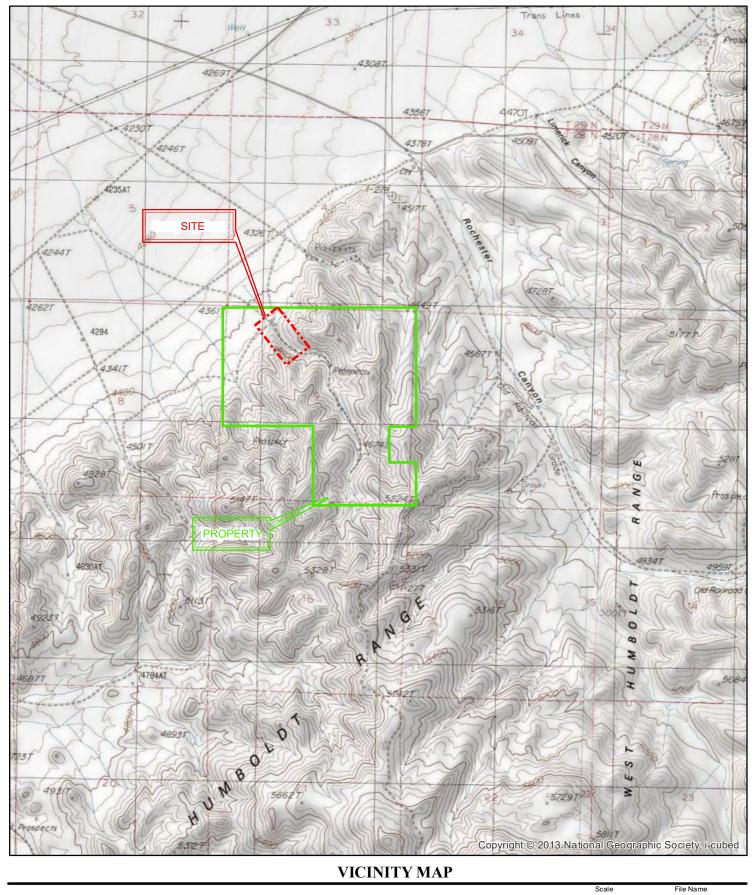
Nevada CEM 1952 (Exp. 09/30/2022)

#### 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.

### 8.0 References

- 1) Phase I Environmental Site Assessment Report, Parcel 015-010-12, T 28, R 33, SEC 9, Pershing County, Nevada, August 3, 2021, Converse Consultants
- 2) Field Sampling Plan for Hazardous Waste Phase II Environmental Site Assessment, Parcel 015-010-12, T 28N, R 33E, SEC 9, Pershing County, Nevada, August 25, 2021, Converse Consultants
- 3) Water Pollution Control Permit, Permit Number NEV2004101, October 8, 2019, State of Nevada Department of Conservation and Natural Resources Division of Environmental Protection Bureau of Mining Regulation and Reclamation
- 4) Small Mining Operations Information and Documentation Filing, July 5, 2001, Belanger and Plimpton



VACANT LAND Parcel # 015-010-12 T28N R33E S9 Lovelock, Pershing County, Nevada

Converse Consultants
75 Years of Dedication and Geotechnical and Environmental Services

1 inch = 0.5 miles Project No. Created By Drawing No. Checked By Approved By

Vicinity Map

19-23216-01

0.25 0.5 Miles

# Site Photographs

# Appendix A



**Photograph 1:** View of Mining Excavation/Trench (looking southeast)



Photograph 2: View of Mining Excavation/Trench (further up canyon)





Photograph 3: Sampling of Pile



Photograph 4: Sampling of Pile



Photograph 5: Sampling of Pile



Photograph 6: View of Impoundment/Single-Lined Pond



**Photograph 7:** Sampling at Impoundment



Photograph 8: View of Waste Disposal Area



**Photograph 9:** View of Mining Excavation/Trench (Looking northwest)



**Photograph 10:** Sampling of Exploratory Test Pit



**Photograph 11:** View of Material Processing Plant and Waste Disposal Area

# Chain of Custody Documentation and Laboratory Reports

# Appendix B



Alpha Analytical, Inc. 255 Glendale Ave, #21 Sparks, Nevada 89431 TEL: (775) 355-1044 FAX: (775) 355-0406

Website: www.alpha-analytical.com

Order No.: CON2109477

October 01, 2021

Tracy Johnston

Converse

1 East Liberty St. Ste. 600

Reno, NV 89501

TEL: (775) 284-9752 FAX: (775) 856-3513

RE: 19-23216-01/Rose Gulch

Dear Tracy Johnston:

The result of this report apply to the sample(s) as received.

There were no problems with the analytical events associated with this report unless noted.

Quality control data is within laboratory defined or method specified acceptance limits except if noted.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Randy Gardner

Laboratory Manager

255 Glendale Ave, #21

Sparks, Nevada 89431



Alpha Analytical, Inc. 255 Glendale Ave, #21 Sparks, Nevada 89431 TEL: (775) 355-1044 FAX: (775) 355-0406 Website: www.alpha-analytical.com **Analytical Report** 

WO#: **CON2109477** 

Report Date: 10/1/2021

**CLIENT:** Converse

**Project:** 

19-23216-01/Rose Gulch

**Lab ID:** 2109477-01

**Client Sample ID:** 19-2316-WD@4"(1)

Matrix: SOIL

**Collection Date:** 9/28/2021 12:40:00 PM

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
TPH-E (DRO)	ND	10		mg/Kg	9/30/2021	TPH-E by EPA 8015C
TPH-E (ORO)	10	10	С	mg/Kg	9/30/2021	TPH-E by EPA 8015C
Surr: Nonane	95	66-134		%Rec	9/30/2021	TPH-E by EPA 8015C



Alpha Analytical, Inc. 255 Glendale Ave, #21 Sparks, Nevada 89431 TEL: (775) 355-1044 FAX: (775) 355-0406 Website: www.alpha-analytical.com **Analytical Report** 

WO#: **CON2109477** 

Report Date: 10/1/2021

**CLIENT:** Converse

**Project:** 

19-23216-01/Rose Gulch

**Lab ID:** 2109477-02

**Client Sample ID:** 19-2316-WD@4'(2)

Matrix: SOIL

**Collection Date:** 9/28/2021 12:42:00 PM

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
TPH-E (DRO)	12	10	LC	mg/Kg	10/1/2021	TPH-E by EPA 8015C
TPH-E (ORO)	41	10	С	mg/Kg	10/1/2021	TPH-E by EPA 8015C
Surr: Nonane	97	66-134		%Rec	10/1/2021	TPH-E by EPA 8015C



Alpha Analytical, Inc. 255 Glendale Ave, #21 Sparks, Nevada 89431 TEL: (775) 355-1044 FAX: (775) 355-0406

Website: www.alpha-analytical.com

**QC SUMMARY REPORT** 

WO#: **2109477** 

01-Oct-21

**Client:** Converse

Project: 19-23216-01/Rose Gulch TestCode: TPH/E\_S

Sample ID: MB-14008 SampType: MBLK TPH/E S TestCode: Units: mg/Kg Client ID: PBS Batch ID: 14008 TestNo: SW8015 SW8015 Prep Date: 9/30/2021 RunNo: SeqNo: 355732 12754 Analysis Date: 9/30/2021 SPK **RPD SPK** Ref Val Analyte Result PQL Value Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual TPH-E (DRO) ND 5

TPH-E (ORO) ND 10 Surr: Nonane 5.9 6 98.4 66 134

Sample ID: LCS-14008 SampType: LCS TestCode: TPH/E S Units: mg/Kg Client ID: LCSS Batch ID: 14008 TestNo: SW8015 SW8015 Prep Date: 9/30/2021 RunNo: 12754 SeqNo: 355733 Analysis Date: 9/30/2021 SPK SPK **RPD** PQL %RPD RPDLimit Qual Analyte Result Value Ref Val %REC LowLimit HighLimit Ref Val TPH-E (DRO) 104 5 100 104 79.4 120.49 Surr: Nonane 5.94 99.0 78 6 138

Sample ID: 2109477-01AMSD SampType: MSD TestCode: TPH/E\_S Units: mg/Kg 19-2316-WD@4"(1)MSD Batch ID: TestNo: SW8015 Client ID: 14008 SW8015 Prep Date: 9/30/2021 RunNo: 12754 SeqNo: 355741 Analysis Date: 9/30/2021 SPK SPK RPD PQL %REC LowLimit Analyte Result Value Ref Val HighLimit Ref Val %RPD **RPDLimit** Qual TPH-E (DRO) 105 5 100 2.7 37.9 3.63 101 59.8 136 108 Surr: Nonane 5.97 6 99.4 134 5.99 0 0 63

Sample ID: 2109477-01AMS SampType: MS TestCode: TPH/E\_S Units: mg/Kg Batch ID: TestNo: SW8015 Client ID: 19-2316-WD@4"(1)MS 14008 SW8015 Prep Date: 9/30/2021 RunNo: 12754 SeqNo: 355740 Analysis Date: 9/30/2021 SPK **SPK RPD** PQL %REC LowLimit HighLimit %RPD RPDLimit Qual Analyte Result Value Ref Val Ref Val TPH-E (DRO) 108 5 100 3.63 104 59.8 136 Surr: Nonane 5.99 6 99.8 63 134

Qualifiers: B Analyte detected in the associated Method Blank

ND Not Detected at the Reporting LimitR RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits



Alpha Analytical, Inc. 255 Glendale Ave, #21 Sparks, Nevada 89431 TEL: (775) 355-1044 FAX: (775) 355-0406 Website: www.alpha-analytical.com **Definition Only** 

WO#: **2109477**Date: **10/1/2021** 

#### **Definitions:**

ND = Not Detected

C = Reported concentration includes additional compounds uncharacteristic of common fuels and lubricants.

D = Reporting Limits were increased due to high concentrations of non-target analytes.

H = Reporting Limits were increased due to the hydrocarbons present in the sample.

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

K = DRO concentration may include contributions from lighter-end hydrocarbons (e.g. gasoline) that elute in the DRO range.

L = DRO concentration may include contributions from heavier-end hydrocarbons (e.g. motor oil) that elute in the DRO range.

O = Reporting Limits were increased due to sample foaming.

V = Reporting Limits were increased due to high concentrations of target analytes.

X = Reporting Limits were increased due to sample matrix interferences.

Z = DRO concentration may include contributions from lighter-end (e.g. gasoline) and heavier-end (e.g. motor oil) hydrocarbons that elute in the DRO range.

S50 = The analysis of the sample required a dilution such that the surrogate concentration was diluted below the laboratory acceptance criteria. The laboratory control sample was acceptable.

S51 = Surrogate recovery could not be determined due to the presence of co-eluting hydrocarbons.

S52 = Surrogate recovery was above laboratory acceptance limits. Probable matrix effect.

S53 = Surrogate recovery was below laboratory acceptance limits. Probable matrix effect.

S54 = Surrogate recovery was below laboratory acceptance limits.

S55 = Surrogate recovery was above laboratory acceptance limits.

#### Report CC's Connor Welsh **Tracy Johnston**

# **WORKORDER SUMMARY**

#### Alpha Analytical, Inc.

255 Glendale Ave, #21

Sparks, Nevada 89431

TEL: (775) 355-1044

FAX: (775) 355-0406

Report Attention: Tracy Johnston

Client:

Converse

1 East Liberty St. Ste. 600

Reno, NV 89501

TEL:

7752849752

FAX:

7758563513

ProjectNo: 19-23216-01/Rose Gulch

Date Received:

CON2109477

06-Oct-21

WorkOrder:

Report Due By:

EDD Required: NO

29-Sep-21

Al-ab-a	Collectio			n No. of Bottles		Requested Tests													
Alpha Sample ID					Alpha Sub TAT		ha Sub TAT		Alpha Sub TAT		Alpha Sub TAT		Alpha Sub TAT		Alpha Sub TAT		TPH/E_S	Sample R	Remarks
CON2109477-01	19-2316-WD@4"(1)	so	9/28/2021 12:40:00 PM	1	0	5	A - TPH/E_N												
CON2109477-02	19-2316-WD@4'(2)	so	9/28/2021 12:42:00 PM	1	0	5	A - TPH/E_N												

Comments:

Samples brought in by client on 9/29/21, kept cold and secure until login on 9/30/21.

Date/Time Company **Print Name** Signature Hayler tiltan Alpha Analytical, Inc. Logged in by:

NOTE: Samples are discarded 60 days after sample receipt unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

# **CHAIN OF CUSTODY**

06733

	Billing information:
Company:	Onvede Consulation
Attn:	
Address:	
City, State, Zip:	
Phone Number:	Fax:



Alpha Analytical, Inc.

Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431

#### Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Northern NV: 350 7th St., Elko, NV 89801

Phone: 775-355-1044

Fax: 775-355-0406

Phone: 916-366-8089 Phone: 775-388-7043

onmento		
Consultant/ Client Info:   Job and Purchase Order Info:	Report Attention/Project Manager:  Name:  Email Address:  Phone #:  Cell #:  QC Deliverate  EDD Required? Yes No  Global ID:  Data Validation Packages:	ole Info: EDF Required? Yes / No
City, State, Zip: P.O. #:  Samples Collected from which State? (circle one) AR CA KS (NV) OR WA Other	Phone #: Cell #: 2x 7 225 - 76.55 Data Validation Packages:	III or IV
The state of the s	Analysis Requested	Remarks
Time Sampled (See Key Below)  1240 0428 So CON2109477- 01 0:19-23216-WDC4" (1)  1249 0428 SO CON2109477- 02 19-23216-WDC4" (2)	TAT  TAT  TAT  TAT  TAT  TAT  TAT  TAT	
ADDITIONAL INSTRUCTIONS:		
I (field sampler) attest to the validity and authenticity of this sample(s). I am aware that tampering with or intentionally mislabeling	ng the sample location, date or time of collection is considered fraud and may be grounds for legal action. NAC 445.0636	(c) (2).
Sampled By:  Relinguished by: (Signature Affiliation):  Ox. 1775-100  Date: 179/11 Time: 4:00  Reco	ceived by: (Signature/Affiliation):  Date:  Date:  Date:	71 Time: 16:00
Retiniquished by: (Algoratule/Aviillation): Date: Time: Reco	ceived by. (Signature/Affiliation):  Date:	Time:
Refinquished by: (Signature/Affiliation):  Date: Time: Reco	ceived by: (Signature/Affiliation):  Date:	Time:
AND AD ALL OF ONLY DO ONLY WAS WARRED.	Page 7 of 7           B - Brass         L - Liter         O - Orbo         OT - Other         P - Plastic         S-Soil Jar         T - Tedlar         V - VOA	
* Key: AQ - Aqueous AR-Air OT - Other So-Soil WA - Waste ** B  NOTE: Samples are discarded 60 days after sample receipt unless other arrangements are made. Hazardous samples will be returned to the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.	D DIGGO E ENGI O GIEGO O TIMO	



Alpha Analytical, Inc. 255 Glendale Ave, #21 Sparks, Nevada 89431 TEL: (775) 355-1044 FAX: (775) 355-0406 Website: www.alpha-analytical.com

Order No.: CON2110066

October 20, 2021

Tracy Johnston Converse

1 East Liberty St. Ste. 600

Reno, NV 89501

TEL: (775) 284-9752 FAX: (775) 856-3513

RE: 19-23216-01/Rose Gulch Mine

Dear Tracy Johnston:

The result of this report apply to the sample(s) as received.

There were no problems with the analytical events associated with this report unless noted.

Quality control data is within laboratory defined or method specified acceptance limits except if noted.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Randy Gardner

**Laboratory Director** 

255 Glendale Ave, #21

Sparks, Nevada 89431



Alpha Analytical, Inc. 255 Glendale Ave, #21 Sparks, Nevada 89431 TEL: (775) 355-1044 FAX: (775) 355-0406 Website: www.alpha-analytical.com

# **Analytical Report**

WO#: **CON2110066**Report Date: **10/20/2021** 

**Collection Date:** 9/28/2021 10:00:00 AM

**CLIENT:** Converse

**Project:** 

19-23216-01/Rose Gulch Mine

**Lab ID:** 2110066-01 **Matrix:** SOIL

Client Sample ID: Pile 1-SS@4"

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Beryllium (Be)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Magnesium (Mg)	4,500	100		mg/Kg	10/8/2021	Metals by EPA 6020
Nickel (Ni)	15	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Copper (Cu)	10	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Zinc (Zn)	68	20		mg/Kg	10/8/2021	Metals by EPA 6020
Arsenic (As)	39	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Selenium (Se)	ND	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Silver (Ag)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Cadmium (Cd)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Antimony (Sb)	8.2	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Barium (Ba)	110	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Thallium (TI)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Lead (Pb)	13	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
рН	8.52	1.70		pH Units	10/8/2021	pH by SM 4500
oH - Temperature	21.8	1.00		°C	10/8/2021	pH by SM 4500



**Analytical Report** 

WO#: CON2110066

Report Date: 10/20/2021

**Collection Date:** 9/28/2021 10:13:00 AM

**CLIENT:** Converse

**Project:** 19-23216-01/Rose Gulch Mine

**Lab ID:** 2110066-02 **Matrix:** SOIL

Client Sample ID: Pile 2-SS@4"

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Beryllium (Be)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Magnesium (Mg)	4,800	100		mg/Kg	10/8/2021	Metals by EPA 6020
Nickel (Ni)	15	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Copper (Cu)	13	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Zinc (Zn)	74	20		mg/Kg	10/8/2021	Metals by EPA 6020
Arsenic (As)	47	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Selenium (Se)	2.3	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Silver (Ag)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Cadmium (Cd)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Antimony (Sb)	8.5	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Barium (Ba)	140	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Thallium (TI)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Lead (Pb)	20	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
рН	8.61	1.70		pH Units	10/8/2021	pH by SM 4500
pH - Temperature	21.7	1.00		°C	10/8/2021	pH by SM 4500



**Analytical Report** 

WO#: CON2110066

Report Date: 10/20/2021

**Collection Date:** 9/28/2021 11:10:00 AM

Matrix: SOIL

**CLIENT:** Converse

**Project:** 

19-23216-01/Rose Gulch Mine

**Lab ID:** 2110066-03

Client Sample ID: Exp. Pit-SS@8'

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Beryllium (Be)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Magnesium (Mg)	4,400	100		mg/Kg	10/8/2021	Metals by EPA 6020
Nickel (Ni)	13	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Copper (Cu)	10	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Zinc (Zn)	59	20		mg/Kg	10/8/2021	Metals by EPA 6020
Arsenic (As)	37	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Selenium (Se)	ND	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Silver (Ag)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Cadmium (Cd)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Antimony (Sb)	13	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Barium (Ba)	90	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Thallium (TI)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Lead (Pb)	17	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
рН	8.61	1.70		pH Units	10/8/2021	pH by SM 4500
pH - Temperature	21.8	1.00		°C	10/8/2021	pH by SM 4500



# **Analytical Report**

WO#: **CON2110066**Report Date: **10/20/2021** 

**Collection Date:** 9/28/2021 11:15:00 AM

Matrix: SOIL

**CLIENT:** Converse

**Project:** 

19-23216-01/Rose Gulch Mine

**Lab ID:** 2110066-04

Client Sample ID: Mine Ex.-SS1@4"

Analyses	Result	RL	Qual	Units	Date Analyzed	Method		
Beryllium (Be)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Magnesium (Mg)	4,800	100		mg/Kg	10/8/2021	Metals by EPA 6020		
Nickel (Ni)	14	2.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Copper (Cu)	10	2.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Zinc (Zn)	54	20		mg/Kg	10/8/2021	Metals by EPA 6020		
Arsenic (As)	22	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Selenium (Se)	ND	2.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Silver (Ag)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Cadmium (Cd)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Antimony (Sb)	3.8	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Barium (Ba)	200	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Thallium (TI)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Lead (Pb)	14	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
рН	8.62	1.70		pH Units	10/8/2021	pH by SM 4500		
pH - Temperature	21.9	1.00		°C	10/8/2021	pH by SM 4500		



**Analytical Report** 

WO#: CON2110066

Report Date: 10/20/2021

**Collection Date:** 9/28/2021 11:45:00 AM

Matrix: SOIL

**CLIENT:** Converse

**Project:** 

19-23216-01/Rose Gulch Mine

**Lab ID:** 2110066-05

Client Sample ID: Mine Ex.-SS2@4"

Analyses	Result	RL	Qual	Units	Date Analyzed	Method		
Beryllium (Be)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Magnesium (Mg)	3,400	100		mg/Kg	10/8/2021	Metals by EPA 6020		
Nickel (Ni)	10	2.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Copper (Cu)	6.6	2.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Zinc (Zn)	45	20		mg/Kg	10/8/2021	Metals by EPA 6020		
Arsenic (As)	48	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Selenium (Se)	ND	2.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Silver (Ag)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Cadmium (Cd)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Antimony (Sb)	6.8	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Barium (Ba)	69	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Γhallium (Tl)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
_ead (Pb)	11	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Н	9.51	1.70		pH Units	10/8/2021	pH by SM 4500		
oH - Temperature	21.8	1.00		°C	10/8/2021	pH by SM 4500		



# **Analytical Report**

WO#: **CON2110066**Report Date: **10/20/2021** 

**Collection Date:** 9/28/2021 11:50:00 AM

**CLIENT:** Converse

**Project:** 19-23216-01/Rose Gulch Mine

**Lab ID:** 2110066-06 **Matrix:** SOIL

Client Sample ID: Pile 11-SS@4'

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Beryllium (Be)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Magnesium (Mg)	5,000	100		mg/Kg	10/8/2021	Metals by EPA 6020
Nickel (Ni)	14	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Copper (Cu)	17	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Zinc (Zn)	41	20		mg/Kg	10/8/2021	Metals by EPA 6020
Arsenic (As)	17	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Selenium (Se)	ND	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Silver (Ag)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Cadmium (Cd)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Antimony (Sb)	3.7	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Barium (Ba)	220	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Thallium (TI)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Lead (Pb)	9.3	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
рН	8.85	1.70		pH Units	10/8/2021	pH by SM 4500
pH - Temperature	21.6	1.00		°C	10/8/2021	pH by SM 4500



**Analytical Report** 

WO#: CON2110066

Report Date: 10/20/2021

CLIENT: Converse Collection Date: 9/28/2021 12:40:00 PM

**Project:** 19-23216-01/Rose Gulch Mine

**Lab ID:** 2110066-07 **Matrix:** SOIL

Client Sample ID: Pile 10-SS@4"

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Beryllium (Be)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Magnesium (Mg)	260	100		mg/Kg	10/8/2021	Metals by EPA 6020
Nickel (Ni)	ND	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Copper (Cu)	ND	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Zinc (Zn)	ND	20		mg/Kg	10/8/2021	Metals by EPA 6020
Arsenic (As)	1.9	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Selenium (Se)	ND	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Silver (Ag)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Cadmium (Cd)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Antimony (Sb)	4.4	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Barium (Ba)	18	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Thallium (TI)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Lead (Pb)	4.0	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
рН	8.77	1.70		pH Units	10/8/2021	pH by SM 4500
pH - Temperature	21.8	1.00		°C	10/8/2021	pH by SM 4500



**Analytical Report** 

WO#: CON2110066 Report Date: 10/20/2021

**Collection Date:** 9/28/2021 12:50:00 PM

Matrix: SOIL

**CLIENT:** Converse

19-23216-01/Rose Gulch Mine

**Project:** Lab ID: 2110066-08

Client Sample ID: Prospects 2-Pile 1-SS@4"

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Beryllium (Be)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Magnesium (Mg)	6,400	100		mg/Kg	10/8/2021	Metals by EPA 6020
Nickel (Ni)	15	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Copper (Cu)	16	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Zinc (Zn)	62	20		mg/Kg	10/8/2021	Metals by EPA 6020
Arsenic (As)	17	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Selenium (Se)	ND	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Silver (Ag)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Cadmium (Cd)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Antimony (Sb)	3.0	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Barium (Ba)	150	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Thallium (TI)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Lead (Pb)	13	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
рН	8.69	1.70		pH Units	10/8/2021	pH by SM 4500
pH - Temperature	21.8	1.00		°C	10/8/2021	pH by SM 4500



**Analytical Report** 

WO#: **CON2110066**Report Date: **10/20/2021** 

**Collection Date:** 9/28/2021 1:20:00 PM

**CLIENT:** Converse

**Project:** 

19-23216-01/Rose Gulch Mine

**Lab ID:** 2110066-09 **Matrix:** SOIL

Client Sample ID: Impoundment-SS@2'

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Beryllium (Be)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Magnesium (Mg)	6,200	100		mg/Kg	10/8/2021	Metals by EPA 6020
Nickel (Ni)	21	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Copper (Cu)	11	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Zinc (Zn)	86	20		mg/Kg	10/8/2021	Metals by EPA 6020
Arsenic (As)	43	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Selenium (Se)	ND	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Silver (Ag)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Cadmium (Cd)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Antimony (Sb)	11	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Barium (Ba)	110	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Thallium (TI)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Lead (Pb)	14	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
рН	8.75	1.70		pH Units	10/8/2021	pH by SM 4500
pH - Temperature	21.7	1.00		°C	10/8/2021	pH by SM 4500



**Analytical Report** 

WO#: CON2110066

Report Date: 10/20/2021

**Collection Date:** 9/28/2021 11:15:00 AM

Matrix: SOIL

**CLIENT:** Converse

**Project:** 

19-23216-01/Rose Gulch Mine

**Lab ID:** 2110066-10

Client Sample ID: Mine Exc-SS1@4" (D)

Analyses	Result	RL Qual		Units	Date Analyzed	Method		
Beryllium (Be)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Magnesium (Mg)	3,600	100		mg/Kg	10/8/2021	Metals by EPA 6020		
Nickel (Ni)	9.5	2.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Copper (Cu)	7.5	2.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Zinc (Zn)	42	20		mg/Kg	10/8/2021	Metals by EPA 6020		
Arsenic (As)	27	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Selenium (Se)	ND	2.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Silver (Ag)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Cadmium (Cd)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Antimony (Sb)	8.6	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Barium (Ba)	72	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Thallium (TI)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
Lead (Pb)	13	1.0		mg/Kg	10/8/2021	Metals by EPA 6020		
рН	9.63	1.70		pH Units	10/8/2021	pH by SM 4500		
pH - Temperature	21.7	1.00		°C	10/8/2021	pH by SM 4500		



**Analytical Report** 

WO#: CON2110066

Report Date: 10/20/2021

**Collection Date:** 9/28/2021 2:00:00 PM

**CLIENT:** Converse

**Project:** 19-23216-01/Rose Gulch Mine

**Lab ID:** 2110066-11 **Matrix:** SOIL

Client Sample ID: BG-SS@4"

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Beryllium (Be)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Magnesium (Mg)	8,300	100		mg/Kg	10/8/2021	Metals by EPA 6020
Nickel (Ni)	20	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Copper (Cu)	12	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Zinc (Zn)	65	20		mg/Kg	10/8/2021	Metals by EPA 6020
Arsenic (As)	31	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Selenium (Se)	ND	2.0		mg/Kg	10/8/2021	Metals by EPA 6020
Silver (Ag)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Cadmium (Cd)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Antimony (Sb)	8.6	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Barium (Ba)	170	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Thallium (TI)	ND	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
Lead (Pb)	14	1.0		mg/Kg	10/8/2021	Metals by EPA 6020
рН	8.46	1.70		pH Units	10/8/2021	pH by SM 4500
pH - Temperature	21.6	1.00		°C	10/8/2021	pH by SM 4500



Alpha Analytical, Inc. 255 Glendale Ave, #21 Sparks, Nevada 89431

TEL: (775) 355-1044 FAX: (775) 355-0406 Website: www.alpha-analytical.com **QC SUMMARY REPORT** 

WO#: **2110066** 

20-Oct-21

Client: Converse

Project: 19-23216-01/Rose Gulch Mine TestCode: METALS\_SO

Sample ID: <b>MB-14073</b>			SampType	e: MBLK	TestCo	de: <b>METAL</b>	s_so	Units:	mg/Kg	
Client ID: PBS			Batch ID:	14073	TestNo	E200.8				
Prep Date: 10/8/2021			RunNo:	12820	SeqNo:	357443				
Analysis Date: 10/8/2021										
			SPK	SPK			RPD			
Analyte	Result	PQL	Value	Ref Val	%REC LowLimit	HighLimit	Ref Val	%RPD	RPDLimit	Qual
Beryllium (Be)	ND	1								
Magnesium (Mg)	ND	100								
Nickel (Ni)	ND	2								
Copper (Cu)	ND	2								
Zinc (Zn)	ND	20								
Arsenic (As)	ND	1								
Selenium (Se)	ND	2								
Silver (Ag)	ND	1								
Cadmium (Cd)	ND	1								
Antimony (Sb)	ND	1								
Barium (Ba)	ND	1								
Thallium (TI)	ND	1								
Lead (Pb)	ND	1								

Sample ID: LCS-14073			SampType	: LCS		TestCo	de: <b>METAL</b>	s_so	Units:	mg/Kg	
Client ID: LCSS			Batch ID:	14073		TestNo:	E200.8				
Prep Date: 10/8/2021			RunNo:	12820		SeqNo:	357444				
Analysis Date: 10/8/2021											
Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium (Be)	50	1	50	0	100	79.51	120.49				
Magnesium (Mg)	477	100	500	0	95.4	79.51	120.49				
Nickel (Ni)	47.7	2	50	0	95.3	79.51	120.49				
Copper (Cu)	48.5	2	50	0	97.1	79.51	120.49				
Zinc (Zn)	49.4	20	50	0	98.9	79.51	120.49				
Arsenic (As)	49.8	1	50	0	99.6	79.51	120.49				
Selenium (Se)	48.8	2	50	0	97.5	79.51	120.49				
Silver (Ag)	50.6	1	50	0	101	79.51	120.49				
Cadmium (Cd)	48.4	1	50	0	96.7	79.51	120.49				
Antimony (Sb)	45.3	1	50	0	90.5	79.51	120.49				
Barium (Ba)	52.3	1	50	0	105	79.51	120.49				
Thallium (TI)	51.2	1	50	0	102	79.51	120.49				
Lead (Pb)	51.2	1	50	0	102	79.51	120.49				

Qualifiers: B Analyte detected in the associated Method Blank

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits



Alpha Analytical, Inc. 255 Glendale Ave, #21 Sparks, Nevada 89431

TEL: (775) 355-1044 FAX: (775) 355-0406 Website: www.alpha-analytical.com **QC SUMMARY REPORT** 

WO#: **2110066 20-Oct-21** 

Client: Converse

Project: 19-23216-01/Rose Gulch Mine TestCode: METALS\_SO

Sample ID: 2110066-01AMSD			SampType	e: MSD		TestCod	de: METAL	s_so	Units:	mg/Kg	
Client ID: Pile 1-SS@4"MSD			Batch ID:	14073		TestNo:	E200.8				
Prep Date: 10/8/2021			RunNo:	12820		SeqNo:	357447				
Analysis Date: 10/8/2021											
Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium (Be)	54.8	1	50	0	110	69.51	130.49	50.5	8.2	20	
Magnesium (Mg)	5620	100	500	4550	215	69.51	130.49	4930	13	20	S
Nickel (Ni)	66.1	2	50	14.5	103	69.51	130.49	60.8	8.5	20	
Copper (Cu)	62.4	2	50	10.1	105	69.51	130.49	58.7	6.1	20	
Zinc (Zn)	126	20	50	67.6	118	69.51	130.49	111	13	20	
Arsenic (As)	105	1	50	39.2	132	69.51	130.49	168	46	20	RS
Selenium (Se)	56.1	2	50	1.02	110	69.51	130.49	46.3	19	20	
Silver (Ag)	54.2	1	50	0	108	69.51	130.49	48.3	11	20	
Cadmium (Cd)	52.7	1	50	0	105	69.51	130.49	47.5	10	20	
Antimony (Sb)	63.5	1	50	8.2	111	69.51	130.49	58.8	7.6	20	
Barium (Ba)	184	1	50	110	147	69.51	130.49	185	0.64	20	S
Thallium (TI)	55.4	1	50	0	111	69.51	130.49	49.3	12	20	
Lead (Pb)	72.3	1	50	12.8	119	69.51	130.49	66.2	8.8	20	

Sample ID: 2110066-01AMS			SampType	e: MS		TestCod	de: METAL	.s_so	Units:	mg/Kg	
Client ID: Pile 1-SS@4"MS			Batch ID:	14073		TestNo:	E200.8				
Prep Date: 10/8/2021			RunNo:	12820		SeqNo:	357446				
Analysis Date: 10/8/2021											
			SPK	SPK				RPD			
Analyte	Result	PQL	Value	Ref Val	%REC	LowLimit	HighLimit	Ref Val	%RPD	RPDLimit	Qual
Beryllium (Be)	50.5	1	50	0	101	69.51	130.49				
Magnesium (Mg)	4930	100	500	4550	76.5	69.51	130.49				
Nickel (Ni)	60.8	2	50	14.5	92.5	69.51	130.49				
Copper (Cu)	58.7	2	50	10.1	97.3	69.51	130.49				
Zinc (Zn)	111	20	50	67.6	87.2	69.51	130.49				
Arsenic (As)	168	1	50	39.2	257	69.51	130.49				S
Selenium (Se)	46.3	2	50	1.02	90.6	69.51	130.49				
Silver (Ag)	48.3	1	50	0	96.7	69.51	130.49				
Cadmium (Cd)	47.5	1	50	0	95.0	69.51	130.49				
Antimony (Sb)	58.8	1	50	8.2	101	69.51	130.49				
Barium (Ba)	185	1	50	110	149	69.51	130.49				S
Thallium (TI)	49.3	1	50	0	98.7	69.51	130.49				
Lead (Pb)	66.2	1	50	12.8	107	69.51	130.49				

Qualifiers: B Analyte detected in the associated Method Blank

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits



Alpha Analytical, Inc. 255 Glendale Ave, #21 Sparks, Nevada 89431 TEL: (775) 355-1044 FAX: (775) 355-0406

Website: www.alpha-analytical.com

## **QC SUMMARY REPORT**

WO#: **2110066** 

20-Oct-21

Client: Converse

Project: 19-23216-01/Rose Gulch Mine TestCode: PH\_S

Sample ID: LCS-14070 SampType: LCS TestCode: PH\_S Units: pH Units

 Client ID:
 LCSS
 Batch ID:
 14070
 TestNo:
 E150.1

 Prep Date:
 10/8/2021
 RunNo:
 12813
 SeqNo:
 357098

Analysis Date: 10/8/2021

SPK SPK RPD
Analyte Result PQL Value Ref Val %REC LowLimit HighLimit Ref Val %RPD RPDLimit Qual

pH 5.03 1.7 5 0 101 89.51 110.49

Qualifiers: B Analyte detected in the associated Method Blank

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits

Silver State Labs-Reno 1135 Financial Blvd www.ssalabs.com

October 19, 2021 Workorder 21100234

Reyna Vallejo Alpha Analytical 255 Glendale Ave, Suite 21 **Sparks**, NV 89431

Project: 2110066/ CONR 2110066-01A

Dear Reyna Vallejo:

It is the policy of Silver State Analytical Laboratory - Reno to strictly adhere to a comprehensive Quality Assurance Plan that ensures the data presented in this report are both accurate and precise. Silver State Analytical Laboratory - Reno maintains accreditation in the State of Nevada (NV-00015) and the State of California (ELAP 2990).

The data presented in this report was obtained from the analysis of samples received under a chain of custody. Unless otherwise noted below, samples were received in good condition, properly preserved and within the hold time for the requested analyses. Any anomalies associated with the analysis of the samples have been flagged in the Analytical Report with an appropriate explanation in the Definitions & Qualifiers.

Sincerely,

Carly Wood Laboratory Director 1135 Financial Blvd Reno, NV 89502



(775) 857-2400 FAX: (888) 398-7002

www.ssalabs.com

**Analytical Report** 

Workorder#:

21100234

Date Reported:

Sampled By: Client

10/6/2021

KK

0.02

10/12/2021 16:54

10/19/2021

**Client:** Alpha Analytical

**Project Name:** 2110066/ CONR 2110066-01A

PO #:

Laboratory Accreditation Number: NV015/CA2990

Laboratory ID **Client Sample ID Date/Time Sampled Date Received** 

21100234-01 CONR 2110066-01A 09/28/2021 10:00

Date/Time Data **PQL** Analyzed Flag **Parameter** Method Result Units **Analyst** SM 4500-CN-C МС Cyanide, Total < 0.5 mg/Kg 0.5 10/12/2021 14:51 Mercury EPA 245.5 0.1 mg/Kg 0.02 ΚK 10/12/2021 16:54

Laboratory Accreditation Number: NV015/CA2990

Laboratory ID **Client Sample ID Date/Time Sampled Date Received** 10/6/2021

CONR 2110066-02A 21100234-02 09/28/2021 10:13

Date/Time Data **PQL** Analyzed Flag **Parameter** Method Result Units **Analyst** SM 4500-CN-C Cyanide, Total < 0.5 MC 10/12/2021 14:51 mg/Kg 0.5 Mercury EPA 245.5 0.10 mg/Kg 0.02 KK 10/12/2021 16:54

Laboratory Accreditation Number: NV015/CA2990

Laboratory ID **Client Sample ID Date/Time Sampled Date Received** 21100234-03 CONR 2110066-03A 09/28/2021 11:10 10/6/2021

Date/Time Data Units **PQL** Analyzed Flag **Parameter** Method Result Analyst Cyanide, Total SM 4500-CN-C < 0.5 MC 10/12/2021 14:51 mg/Kg 0.5

mg/Kg

Laboratory Accreditation Number: NV015/CA2990

EPA 245.5

**Client Sample ID Date/Time Sampled** Laboratory ID **Date Received** 21100234-04 CONR 2110066-04A 09/28/2021 11:15 10/6/2021

0.76

Date/Time Data Flag Parameter Method Result Units **PQL Analyst** Analyzed Cyanide, Total SM 4500-CN-C 1.0 0.5 MC 10/12/2021 14:51 mg/Kg EPA 245.5 0.06 mg/Kg 0.02 KK 10/12/2021 16:54 Mercury

Mercury



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**Analytical Report** 

Workorder#:

21100234

Date Reported:

Sampled By: Client

10/19/2021

**Client:** Alpha Analytical

**Project Name:** 

2110066/ CONR 2110066-01A

PO #:

Laboratory Accreditation Number: NV015/CA2990

Laboratory ID **Client Sample ID** 

21100234-05 CONR 2110066-05A **Date/Time Sampled** 

**Date Received** 

09/28/2021 11:45 10/6/2021

Parameter	Method	Result	Units	PQL	Analyst	Date/Time Analyzed	Data Flag
Cyanide, Total	SM 4500-CN-C	< 0.5	mg/Kg	0.5	MC	10/12/2021 14:51	
Mercury	EPA 245.5	0.06	mg/Kg	0.03	KK	10/12/2021 16:54	

Laboratory Accreditation Number: NV015/CA2990

Laboratory ID **Client Sample ID** 21100234-06 CONR 2110066-06A **Date/Time Sampled** 

**Date Received** 

09/28/2021 11:50

10/6/2021

Parameter	Method	Result	Units	PQL	Analyst	Date/Time Analyzed	Data Flag
Cyanide, Total	SM 4500-CN-C	< 0.5	mg/Kg	0.5	MC	10/12/2021 14:51	
Mercury	EPA 245.5	0.07	mg/Kg	0.02	KK	10/12/2021 16:54	

**Laboratory Accreditation Number:** NV015/CA2990

Laboratory ID 21100234-07

**Client Sample ID** CONR 2110066-07A **Date/Time Sampled** 

**Date Received** 

09/28/2021 12:40

10/6/2021

Parameter	Method	Result	Units	PQL	Analyst	Date/Time Analyzed	Data Flag
Cyanide, Total	SM 4500-CN-C	< 0.5	mg/Kg	0.5	MC	10/12/2021 14:51	
Mercury	EPA 245.5	0.13	mg/Kg	0.02	KK	10/12/2021 16:54	

Laboratory Accreditation Number: NV015/CA2990

Laboratory ID **Client Sample ID** 21100234-08

CONR 2110066-08A 09/28/2021 12:50

**Date/Time Sampled** 

**Date Received** 

10/6/2021

Parameter	Method	Result	Units	PQL	Analyst	Date/Time Analyzed	Data Flag
Cyanide, Total	SM 4500-CN-C	< 0.5	mg/Kg	0.5	MC	10/12/2021 14:51	
Mercury	EPA 245.5	0.03	mg/Kg	0.02	KK	10/12/2021 16:54	



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**Analytical Report** 

Workorder#:

21100234

Date Reported:

Sampled By: Client

10/19/2021

**Client:** Alpha Analytical

**Project Name:** 

2110066/ CONR 2110066-01A

PO #:

Laboratory Accreditation Number: NV015/CA2990

Laboratory ID **Client Sample ID** 21100234-09

CONR 2110066-09A

**Date/Time Sampled** 

**Date Received** 

09/28/2021 13:20 10/6/2021

Parameter	Method	Result	Units	PQL	Analyst	Date/Time Analyzed	Data Flag
Cyanide, Total	SM 4500-CN-C	< 0.5	mg/Kg	0.5	MC	10/12/2021 14:51	
Mercury	EPA 245.5	0.39	mg/Kg	0.02	KK	10/12/2021 16:54	

Laboratory Accreditation Number: NV015/CA2990

Laboratory ID

21100234-10

**Client Sample ID** 

CONR 2110066-10A

**Date/Time Sampled** 09/28/2021 11:15

**Date Received** 

10/6/2021

Parameter	Method	Result	Units	PQL	Analyst	Date/Time Analyzed	Data Flag
Cyanide, Total	SM 4500-CN-C	< 0.5	mg/Kg	0.5	MC	10/12/2021 14:51	
Mercury	EPA 245.5	0.07	mg/Kg	0.02	KK	10/12/2021 16:54	S

**Laboratory Accreditation Number:** NV015/CA2990

Laboratory ID 21100234-11

**Client Sample ID** 

CONR 2110066-11A 09/28/2021 14:00

**Date/Time Sampled** 

**Date Received** 

10/6/2021

Parameter	Method	Result	Units	PQL	Analyst	Date/Time Analyzed	Data Flag
Cyanide, Total	SM 4500-CN-C	< 0.5	mg/Kg	0.5	MC	10/12/2021 14:51	
Mercury	EPA 245.5	0.73	mg/Kg	0.02	KK	10/12/2021 16:54	S



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## **Quality Control Report**

R59069

**Batch ID:** 

WO#: 21100234

10/19/2021

**Analysis:** Cyanide, Total Method: SM 4500-CN-C

**Method Blank** 

RunID: 59069 SeqNo 1436337 Units: mg/L Analysis Date: 10/12/2021 2:51:00 PM Analyst: MC

Analyte Result Rep Limit Rep Qual Cyanide, Total < 0.005 0.005

Original



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### **Quality Control Report**

WO#: **21100234** 

10/19/2021

### **Method Blank**

RunID: 59069 SeqNo 1436350 Units: mg/L Analysis Date: 10/12/2021 2:51:00 PM Analyst: MC

Analyte	Result	Rep Limit	Rep Qual
Cyanide, Total	< 0.005	0.005	

### **Laboratory Control Sample (LCS)**

RunID: 59069 SeqNo 1436338 Units: mg/L Analysis Date: 10/12/2021 2:51:00 PM Analyst: MC

Analyte	LCS Spike Added	LCS Result	LCS % Recovery		RPD	RPD Limit	Low Limit	High Limit	Qual
Cyanide, Total	0.04000	0.0413	103	•	•		•		

### **Laboratory Control Sample (LCS)**

RunID: 59069 SeqNo 1436351 Units: mg/L Analysis Date: 10/12/2021 2:51:00 PM Analyst: MC

Analyte	LCS Spike Added	LCS Result	LCS % Recovery	Result	LCSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Cyanide, Total	0.04000	0.0413	103							

Analysis: Mercury, Solid

**Method:** EPA 245.5 **Batch ID: R59086** 

### **Method Blank**

RunID: 59086 SeqNo 1436565 Units: mg/Kg Analysis Date: 10/12/2021 4:54:05 PM Analyst: KK

Analyte	Result	Rep Limit	Rep Qual
Mercury	< 0.0001	0.0001	

### **Laboratory Control Sample (LCS)**

RunID: 59086 SeqNo 1436564 Units: mg/Kg Analysis Date: 10/12/2021 4:54:05 PM Analyst: KK

Analyte	LCS Spike Added	LCS Result		 	LCSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Mercury	0.006000	0.00560	93.3							

### Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 21100234-01A

RunID: 59086 SeqNo 1436569 Units: mg/Kg Analysis Date: 10/12/2021 4:54:05 PM Analyst: KK

	Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Λ	Mercury	0.09773	0.9000	0.964	96.3	1.335	1.31	90.8	30.4	20	70	130	



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# **Quality Control Report**

WO#: 21100234

10/19/2021

### Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 21100234-10A

RunID: 59086 SeqNo 1436586 Units: mg/Kg Analysis Date: 10/12/2021 4:54:05 PM Analyst: KK

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Mercury	0.07457	1.060	0.0568	-1.68	0.5350	0.0546	-3.73	3.95	20	70	130	S





11 CONR 2110066-11A BG-SS@4"

80ZCG-U

Soil

### CHAIN OF CUSTODY RECORD

9/28/2021 2:00:00 PM

\*Please reference the Work Order Number on all reports and invoices. \*Also please include the dates of analysis and detection limits. Please send the report to Alpha Analytical (Sparks). Attention To Reyna Vallejo (reyna@alpha-analytical.com).

Alpha Analytical, Inc.

255 Glendale Ave. #21 TEL: (775) 355-1044

Sampled by:

Report Due

Sparks, Nevada 89431 FAX: (775) 355-0406

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ON: 19-Oct-21 SUB CONTRATOR: SSL SPECIAL INSTRUCTIONS / COMMENTS: COMPANY: Silver State Analytical Laborato Cyanide and Mercury. NV samples. ADDRESS: 1135 Financial Blvd. CITY, STATE, ZIP Reno, NV 89502-FAX: ANALYTICAL PARAMETERS PHONE: (775) 857-2400 (775) 857-2404 ACCOUNT #: EMAIL: CYANIDE\_SUB NUMBER OF CONTAINERS 2110066 ITEM # SAMPLE ID MATRIX DATE COLLECTED Client Sample ID Bottle Type 1 CONR 2110066-01A Pile 1-SS@4" 80ZCG-U 9/28/2021 10:00:00 AM 1 Soil 2 CONR 2110066-02A Pile 2-SS@4" 80ZCG-U Soil 9/28/2021 10:13:00 AM 1 3 CONR 2110066-03A Exp. Pit-SS@8' 80ZCG-U 1 Soil 9/28/2021 11:10:00 AM V V 80ZCG-U 4 CONR 2110066-04A Mine Ex.-SS1@4" Soil 9/28/2021 11:15:00 AM 1 80ZCG-U CONR 2110066-05A Mine Ex.-SS2@4" Soil 9/28/2021 11:45:00 AM 1  $\sqrt{}$ 6 CONR 2110066-06A Pile 11-SS@4' 80ZCG-U 9/28/2021 11:50:00 AM 1 Soil V V CONR 2110066-07A Pile 10-SS@4" 80ZCG-U Soil 9/28/2021 12:40:00 PM 1 8 CONR 2110066-08A Prospects 2-Pile 1-80ZCG-U 9/28/2021 12:50:00 PM Soil 1 V 9 CONR 2110066-09A Impoundment-9/28/2021 1:20:00 PM 80ZCG-U Soil 1 V 10 CONR 2110066-10A Mine Exc-SS1@4" 80ZCG-U Soil 9/28/2021 11:15:00 AM 1

Relinquished By:	Date: 10/6(21	Time: 25	Received By:	Date	T925	Comments:	1100
Relinquished By:	Date:	Time:	Received By:	Date:	Time:		//

1 V



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### **Definitions & Qualifiers**

WO#: 21100234 Date: 10/19/2021

### **Definitions:**

LCS: Laboratory Control Sample; prepared by adding a known mass of target analytes to a specified amount of de-ionized water and prepared with the batch of samples, used to calculate Accuracy (%REC).

LCSD: LCS Duplicate; used to calculate both Accuracy (%REC) and Precision (%RPD)

MBLK: Method Blank; a sample of similar matrix that is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedure, and in which no target analytes or interferences are present at concentrations that impact the analytical results for sample analyses.

MS: Matrix Spike; prepared by adding a known mass of target analytes to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available, used to calculate Accuracy (%REC)

MSD: Matrix Spike Duplicate; used to calculate both Accuracy (%REC) and Precision (%RPD)

RPD: Relative Percent Difference; comparison between sample and duplicate and/or MS and MSD.

POL: Practical Quantitation Limit; the limit to which data is quantitated for reporting.

MDL: Method Detection Limit; the limit to which the instrument can reliably detect.

MCL: Maximum Contaminant Level; value set according to EPA guidelines.

### **Oualifiers:**

- \* Analyte exceeds Safe Drinking Water Act MCL, does not meet drinking water standards.
- C Analyte value below Safe Drinking Water Act MCL, does not meet drinking water standards.
- B Analyte found above the PQL in associated method blank.
- G Calibration blank analyte detected above POL.
- H Sample analyzed beyond holding time for this parameter.
- J Estimated Value; Analyte found between MDL and PQL limits.
- L Sample concentration is at least 5 times greater than spike contribution. Spike recovery criteria do not apply.
- R RPD between sample and duplicate sample outside the RPD acceptance limits.
- S Batch MS and/or MSD were outside acceptance limits, batch LCS was acceptable.
- W Sample temperature when recieved was out of limit as specified by method.
- Z Batch LCS and/or LCSD were outside acceptance limits.

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**Definition Only** 

WO#: **2110066**Date: **10/20/2021** 

### **Definitions:**

ND = Not Detected

C = Reported concentration includes additional compounds uncharacteristic of common fuels and lubricants.

D = Reporting Limits were increased due to high concentrations of non-target analytes.

H = Reporting Limits were increased due to the hydrocarbons present in the sample.

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

K = DRO concentration may include contributions from lighter-end hydrocarbons (e.g. gasoline) that elute in the DRO range.

L = DRO concentration may include contributions from heavier-end hydrocarbons (e.g. motor oil) that elute in the DRO range.

O = Reporting Limits were increased due to sample foaming.

V = Reporting Limits were increased due to high concentrations of target analytes.

X = Reporting Limits were increased due to sample matrix interferences.

Z = DRO concentration may include contributions from lighter-end (e.g. gasoline) and heavier-end (e.g. motor oil) hydrocarbons that elute in the DRO range.

S50 = The analysis of the sample required a dilution such that the surrogate concentration was diluted below the laboratory acceptance criteria. The laboratory control sample was acceptable.

S51 = Surrogate recovery could not be determined due to the presence of co-eluting hydrocarbons.

S52 = Surrogate recovery was above laboratory acceptance limits. Probable matrix effect.

S53 = Surrogate recovery was below laboratory acceptance limits. Probable matrix effect.

S54 = Surrogate recovery was below laboratory acceptance limits.

S55 = Surrogate recovery was above laboratory acceptance limits.

# Report CC's Connor Welsh Tracy Johnston

# **WORKORDER SUMMARY**

### Alpha Analytical, Inc.

255 Glendale Ave, #21 Sparks, Nevada 89431 TEL: (775) 355-1044 FAX: (775) 355-0406

Report Attention: Tracy Johnston

NV

WorkOrder: CON2110066 Report Due By: 19-Oct-21 EDD Required: YES

Client:

Converse

1 East Liberty St. Ste. 600

Reno, NV 89501

TEL: 7752849752 FAX: 7758563513

ProjectNo: 19-23216-01/Rose Gulch Mine

Date Received:

04-Oct-21

Alpha	Client		Collection	No. of	Bottle	es				Requested	Tests	
Sample ID	Sample ID	Matrix		Alpha	Sub	TAT	CYANIDE_SUB	METALS_SO	OTHER	PH_S		Sample Remarks
CON2110066-01	Pile 1-SS@4"	so	9/28/2021 10:00:00 AM	1	1	10	Α-	A - Special List	A - Mercury	A - pH		
CON2110066-02	Pile 2-SS@4"	so	9/28/2021 10:13:00 AM	1	1	10	Α-	A - Special List	A - Mercury	A - pH		
CON2110066-03	Exp. Pit-SS@8*	so	9/28/2021 11:10:00 AM	1	1	10	Α-	A - Special List	A - Mercury	A - pH		
CON2110066-04	Mine ExSS1@4"	so	9/28/2021 11:15:00 AM	1	1	10	A -	A - Special List	A - Mercury	A - pH		
CON2110066-05	Mine ExSS2@4"	so	9/28/2021 11:45:00 AM	1	1	10	Α-	A - Special List	A - Mercury	A - pH		
CON2110066-06	Pile 11-SS@4'	so	9/28/2021 11:50:00 AM	1	1	10	Α-	A - Special List	A - Mercury	A - pH		
CON2110066-07	Pile 10-SS@4"	so	9/28/2021 12:40:00 PM	1	1	10	Α-	A - Special List	A - Mercury	A - pH		
CON2110066-08	Prospects 2-Pile 1-SS@4"	so	9/28/2021 12:50:00 PM	1	1	10	A -	A - Special List	A - Mercury	A - pH		
CON2110066-09	Impoundment-SS@2'	so	9/28/2021 1:20:00 PM	1	1	10	Α-	A - Special List	A - Mercury	A - pH		
CON2110066-10	Mine Exc-SS1@4" (D)	so	9/28/2021 11:15:00 AM	1	1	10	Α-	A - Special List	A - Mercury	A - pH		

Comments:

Samples brought in by client on 10/4/21, kept cold and secure until login on 10/5/21. Samples received after 16:00 cutoff time, therefore one day added to due date. TAT 10 day due to cyanide and mercury being subbed to SSL. Additional samples received on 10/5/21. Metals list per email from Tracy.

	Signature	Print Name	Company	Date/Time
Logged in by:	Haylu tiltan	Itayle tiltan	Alpha Analytical, Inc.	10/6/21 0808

Alpha	Client		Collection	No. of	Bottl	es				Req	Tests
Sample ID	Sample ID	Matrix	Date	Alpha	Sub	TAT	CYANIDE_SUB	METALS_SO	OTHER	PH_S	Sample Remarks
CON2110066-11	BG-SS@4"	so	9/28/2021 2:00:00 PM	1	1	10	Α-	A - Special List	A - Mercury	A - pH	

**Comments:** 

Samples brought in by client on 10/4/21, kept cold and secure until login on 10/5/21. Samples received after 16:00 cutoff time, therefore one day added to due date. TAT 10 day due to cyanide and mercury being subbed to SSL. Additional samples received on 10/5/21. Metals list per email from Tracy.

	Signature	Print Name	Company	Date/Time
Logged in by:	Haylu Telton	Haylestiltan	Alpha Analytical, Inc.	10/6/21 0808
e 2		O		

NOTE: Samples are discarded 60 days after sample receipt unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

## **CHAIN OF CUSTODY**

06383

Company:
Attn:
Address:
City, State, Zip:
Phone Number:

Billing Information:
Gusulfaut
Fax:



Alpha Analytical, Inc.

Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431

#### Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Northern NV: 350 7th St., Elko, NV 89801 Phone: 775-355-1044

Fax: 775-355-0406

Phone: 916-366-8089 Phone: 775-388-7043

	Purchase Order Info:  9 - 232(6 - 0)  Name:  Email A  Phone:	address: Tjobuster @ converse consultants, co	Global ID:
Samples Collected from which State? (circle one) AR CA KS NV	OR WA Other		Data Validation Packages: III or IV
10:00 09/28 SO CON2110066-01 PIR-3 10:13 09/28 SO 02 PIR-3 11:10 09/28 SO 03 Explit- 11:15 09/28 SO 09 Mino Explit- 11:15 09/28 SO 05 Mino Explit- 11:15 09/28 SO 05 PIRE 11- 12:40 09/28 SO 07 Pile 10-	Sample Description  TAT  SSO 4"  SSO 4"  SSO 4"  SSO 4"  SSO 4"  SSO 6"  L  S	Analysis Requested  Analysis Requested	Remarks
12:50 09/28 So 08 Prospects 1:20 09/28 So 09 Impound	2-Pile)-55 Q4" /	X X X X	
ADDITIONAL INSTRUCTIONS:			
I (field sampler) attest to the validity and authenticity of this sample(s). I am aware that tampering	g with or intentionally mislabeling the sample location	, date or time of collection is considered fraud and may be grounds fo	r legal action. NAC 445.0636 (c) (2).
Relinquished by: (Signatu/e/Affiliation):	Time: Received by: (Signature/Al Received by: (Signature/Al Received by: (Signature/Al Received by: (Signature/Al		Date: Time: 1 6:25  Date: Time: Time: 1 6:25
		Page 28 of 29	
* Key: AQ - Aqueous AR-Air OT - Other So-So NOTE: Samples are discarded 60 days after sample receipt unless other arrangements are made. Ha			T - Tedlar V - VOA plicable only to those samples
received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for		at anoth expenses. The report to the distinguist of the doors earlings is up	,

# **CHAIN OF CUSTODY**

Analytical Edition of the Commental Edition of

Company:

Address:

City, State, Zip:

Phone Number:

Attn:

Alpha Analytical, Inc.

Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431

#### Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Northern NV: 350 7th St., Elko, NV 89801 07572

Phone: 775-355-1044

Fax: 775-355-0406

Phone: 916-366-8089

Phone: 775-388-7043

Page # Z of Z

	ble Info:
Company: Com	EDF Required Y96 / No
Time Sampled (See Koy Habitot Sampled (See Koy Habitot Sampled Description TAT Sampled Description TAT See No. 1100 (6 (6 - 10) Mine Exe - 551 (24 (11) ) \$\frac{1}{2}\$ \$\	
ADDITIONAL INSTRUCTIONS:  I (field sampler) attest to the validity and authenticity of this sample(s). I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. NAC 445.0636	(c) (2).
Sampled By:  Relinquished by: (Signature/Affiliation):  Relinquished by: (Signature/Affiliation):  Date:    Date:   Time:   Received by: (Signature/Affiliation):   Date:   Da	Time: 1545
Relinquished by: (Signature/Affiliation):  Date: Time: Received by: (Signature/Affiliation):  Page 29 of 29	Time:
*Key: AQ - Aqueous AR-Air OT - Other So-Soil WA - Waste **B - Brass L - Liter O - Orbo OT - Other P - Plastic S-Soil Jar T - Tedlar V - VOA	
NOTE: Samples are discarded 60 days after sample receipt unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.	

# Water Pollution Control Permit (NEV2004101)

# Appendix C

### 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: Review Type/Year/Revision:

NEV2004101 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 26 October 2019, and shall remain in effect until 22 July 2024, unless modified, suspended, or revoked.

Signed this day of October 2019

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:

<u>Identification</u>	<u>Parameter</u>	<b>Frequency</b>
1. Water Supply At storage tank (WS)	Profile I <sup>(1)</sup>	Annually for any year of operation
2. Process Water At process water clarifier tank #2 (PWCT)	Profile I <sup>(1)</sup>	Quarterly when operating

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;  $\mu$ S/cm = microSiemens per centimeter

### Footnotes:

### (1) Profile I:

Alkalinity (as CaCO <sub>1</sub> )	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) <sup>(2)</sup>	Zinc
Barium	Iron	Potassium	-
Beryllium	Lead	Selenium	-

- (2) 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<sub>3</sub> 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 28<sup>th</sup> 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 28<sup>th</sup> 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. A synopsis of releases on NDEP Form 0390 or equivalent;

- c. 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;
- d. 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
- e. 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

John M. Heizer, Jr. Rose Gulch Project Permit Nº NEV2004101 (Renewal 2019, Revision 00) Page 11 of 11

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:

7 October 2019

Revision 00

7 October 2019; Renewal

# Supporting Documentation for Water Pollution Control Permit

# Appendix D

# SMALL MINING OPERATIONS INFORMATION AND DOCUMENTATION FILING

The Nevada Division of Environmental Protection (NDEP) is required by Sections 519A.160 of the Nevada Revised Statutes and 519A.410 of the Nevada Administrative Code (NAC) to collect the following information from Small Mining Operations. This information must be provided by October 1, 1991 for a small mining operation which is active on October 1, 1990 or before disturbance of the surface for a new small mining operation.

Sitan mining	g operation.
1. Gen	eral Information:
	Owner Name(s) John M. Heizer Jr. Owner's Address P.O. Bax I Telephone Number Love Lock, Nevada 89419
	Operator Name Richard C Toscano Operator's Address PO Box 194 Livelock Nevada 8941 Telephone Number 775-771-9585
·	Project and Claim Name Rose Gulch Project Permit New 204101 Location of Mine (Township, Range, Section) T 28N R 33 E S 9 County Pershing
Calendar Year	2010 Proposed Total Acres of Disturbance 1 - 25A Proposed Total Material to be Removed from
	Calendar Year (short tons per year) 4,500
2. A ske	etch or topographic map of the operation depicting the following types of disturbances should tached along with an estimate of the acreage affected by each type of disturbance:
a. b. c. d.	the boundaries of the project area; surface ownership within the project area; areas to be affected and the nature of the disturbances including tailing impoundments, leach pads, waste rock dumps, buildings, roads and all other surface facilities; areas within the project area which were previously affected by activities other than those of the operator or which will not be subject to additional or continuing disturbance because of his activities; the location of any body of surface water within one-half mile down gradient from the operation which may be impacted by excess sedimentation resulting from the mining
f.	operation; and, the location of access roads that were created before January 1, 1981.
3. An at	tached statement of the proposed post-mining land use and a general description of the ser in which the post-mining use of the land will be attained by reclamation.
Print Name	Sohn M. Heizer Jr Title Owner Chum Heizer L. Date 6/24/10
Telephone Nu	DDF DAAWIE
	n information filing for small mining operations; not a report on assessment work on claims. A small

mining operation is defined as an operation which disturbs less than 5 acres of land and does not remove from the earth

material in excess of 36,500 tons in any calendar year.

06-28-2010

### **ATTACHMENT**

Rose Gulch Project WPC Permit NEV2004101

Item	2

- a 80ft X 630ft = 50,400 sq ft
- b John Heizer, Jr
- c See Sketch attached
- d The lower trench 12ft X 150ft = 1800sq ft that will be reclaimed with waste rock
- e None
- f see attached usgs topo map

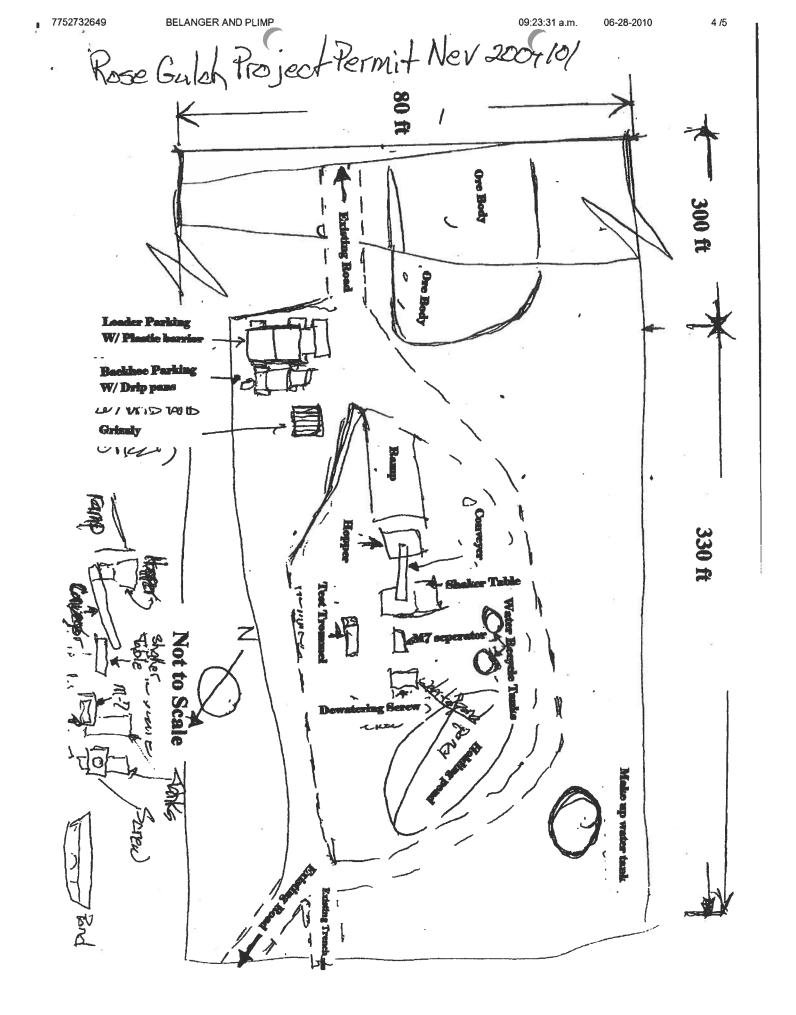
### Item 3

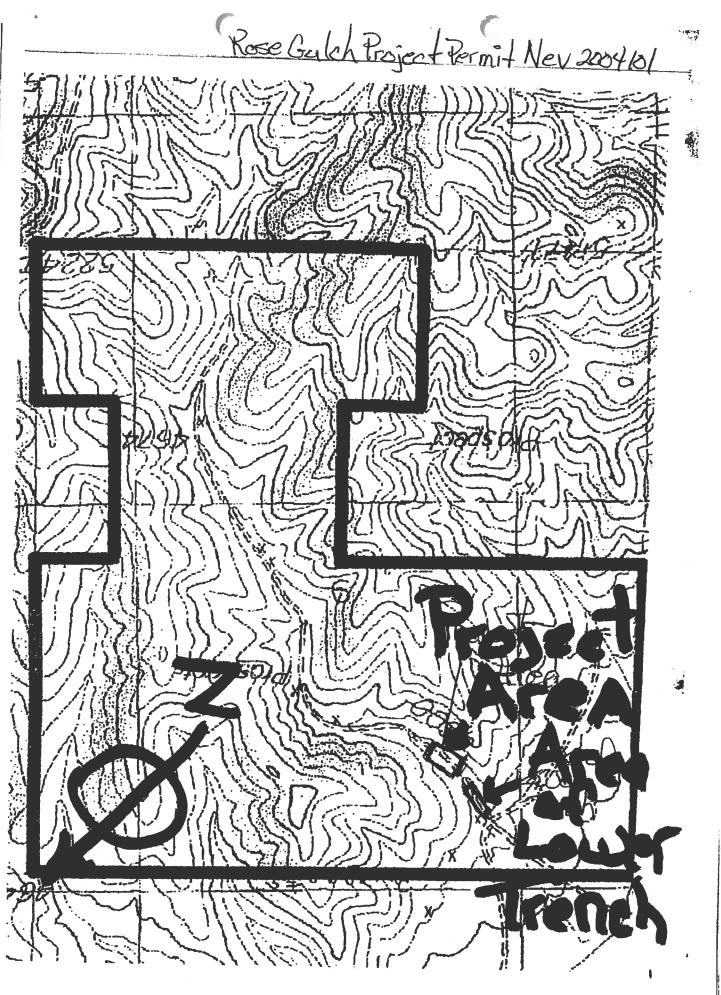
The disturbed area will be contoured and blended with the existing terrain.

The existing road bed will be widened to accommdate two vehicles.

The excess material will be put into the existing trench below and contoured to match surrounding areas.

The end effect is the finshed road will give the property safer access to the remaining 420 acres.





### **BELANGER & PLIMPTON**

1135 Central Ave. P.O. Box 59 Lovelock, NV 89419 (775) 273-2631

Todd A. Plimpton, Esq.
Roland W. Belanger, Esq.
-Of Counsel

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-Of Counsel

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# DATE: 6/00/10 TOTAL PAGES: 5

(including this cover page)

	PLEASE DELIVER TRANSMITTAL TO:	
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COMPANY:		
FAX NO.:	775-684-5259	
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FROM:	TODD A. PLIMPTON, ESQY From John BELANGER & PLIMPTON Hizer	
COMMENTS:		

### OUR FAX NUMBER IS: (775) 273-2649

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