GRASSY MOUNTAIN MINE PROJECT

Tailings Chemical Monitoring Plan

Submitted to:

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August 2023

CALICO
RESOURCES

CONTENTS

TABLES

FIGURES

ACRONYMS

>	greater than
±	plus or minus
°C	degrees Celsius
ABA	Acid Base Accounting
Ausenco	Ausenco Engineering Canada Inc.
$CaCO_3$	calcium carbonate
Calico	Calico Resources USA Corp.
CIL	carbon-in-leach
COC	chain of custody
CPA	Consolidated Permit Application
EDD	electronic data deliverable
kg	kilogram
NNP	Net Neutralization Potential
NP	Neutralization Potential
NPR	Neutralization Potential Ratio
OAR	Oregon Administrative Rule
ODEQ	Oregon Department of Environmental Quality
Project	Grassy Mountain Mine Project
QA/QC	quality assurance/quality control
SO_2	sulfur dioxide
SRK	SRK Consulting
TCMP	Tailings Chemical Monitoring Plan
TSF	Tailings Storage Facility
TWRSF	Temporary Waste Rock Storage Facility
WAD	weak acid dissociable

1. INTRODUCTION

This *Tailings Chemical Monitoring Plan* (TCMP) has been prepared in support of the Grassy Mountain Mine Project (Project), Oregon (the Site, Figure 1). Calico Resources USA Corp. (Calico) proposes to construct, operate, reclaim, and close an underground mining and precious metal beneficiation operation. The Project is located in Malheur County, Oregon, approximately 22 miles south-southwest of Vale, Oregon, and covers an area of approximately 1,760 acres (Figures 1 and 2).

This TCMP has been prepared to provide a basis to demonstrate compliance with applicable Oregon Administrative Rules (OARs) pertaining to management and monitoring of chemical aspects of stored tailings, waste rock, and wildlife protection. The Project's cyanide leaching gold recovery circuit will generate tailings that will be stored in the onsite Tailings Storage Facility (TSF). The tailings and liquid in the TSF are subject to certain OARs that regulate cyanide concentrations and acid generating properties of materials stored in the TSF, as well as other potentially toxic constituents such as metals. Prior to being conveyed to the TSF, the tailings will undergo cyanide detoxification and lime treatment to comply with OAR criteria. The tailings solids and liquids must be sampled and analyzed on an ongoing basis to provide the data to demonstrate compliance with OARs.

Waste rock (also known as development rock) is material removed from the mine to gain access to ore. The waste rock has been demonstrated to be potentially acid generating. Waste rock will be temporarily stored in the Temporary Waste Rock Storage Facility (TWRSF), a lined facility adjacent to the TSF. Leachate from the TWRSF will drain to the Reclaim Pond (where TSF leachate is also collected) and recycled into the beneficiation process circuit. Waste rock will be used as a minor source of aggregate for making Cemented Rock Fill (CRF) which is used during mining as backfill of the underground workings (the main source of aggregate is inert basalt from the Project quarry). Mixing the waste rock with cement binders to make CRF has been demonstrated to eliminate the potential for acid generation. The waste rock and leachate must be sampled and analyzed on an ongoing basis to provide data to assure that CRF made with waste rock is non-acid-generating.

In addition, OAR 632-037-0060 requires that operational monitoring and reporting programs must be established and documented as part of the Consolidated Permit Application. Therefore, sampling, analytical, and related aspects of chemically monitoring Project tailings solids and liquids, liquids in the TSF, and waste rock and leachate in the TWRSF are documented herein.

1.1 TAILINGS DISPOSAL REGULATORY REQUIREMENTS

OAR 340-043-0130 promulgates requirements applicable to the Project in terms of managing acid generation and residual cyanide concentrations of mine wastes stored in the TSF. Relevant portions of 340-043-0130 is provided below.

(1) Mill tailings shall be treated by cyanide removal, reuse, or destruction prior to disposal to reduce the amount of cyanide introduced into the tailings pond to the lowest practicable level. The permittee shall conduct laboratory column tests on mill tailings to determine the lowest practicable concentration to which the WAD cyanide (weak-acid dissociable cyanide as measured

by ASTM Method D2036-82 C) can be reduced. In no event, shall the permitted WAD cyanide concentration in the liquid fraction of the tailings be greater than 30 ppm.

(2) The permittee shall determine the potential for acid-water formation from the tailings by means of acid-base accounting and other suitable laboratory static and dynamic tests. If acid formation can occur, basic materials shall be added to the tailings in the amount of three (3) times the acid formation potential or to give a net neutralization potential of at least 20 tons of CaCO3 per 1,000 tons of tailings, whichever is greater, before placing tailings in the disposal facility.

In addition, OAR 635-420-0020(4) describes requirements for monitoring of chemical mining facilities. Specifically, OAR 635-420-0020(4)(d)(C) requires *Current scientific data which is well-documented and verifiable to demonstrate the chemical composition of the wastewaters will not be harmful to wildlife,* and OAR 635-420-0020(4)(e) requires: *A program for ongoing and constant monitoring and maintenance of wildlife protection measures, including a schedule of activities and the job title of the person or persons responsible for the monitoring program.*

1.2 TAILINGS GEOCHEMICAL CHARACTERISTICS

The *Baseline Geochemical Characterization Report* (SRK, 2022a; CPA Appendix B6) describes laboratory studies conducted in support of the Project for predicting the acid generating potential and other geochemical properties of the Project tailings. These data were then used to predict the amount of base needed to treat the tailings before being deposited in the TSF in compliance with OARs.

Acid Base Accounting (ABA) and Net Acid Generation (NAG) testing included tailings material from the 2015 metallurgical test program (one sample) and the 2018 metallurgical test program (three samples). The results indicate that despite low sulfide sulfur, the Project tailings material has a potential to generate acid due to the low Neutralization Potential (NP). To increase the NP of the Project tailings, lime will be added to the tailings before TSF deposition.

ABA test results were used to estimate the amount of lime treatment that will be required to neutralize the tailings to meet OAR 340-043-0130(2) requirements. As described in Section 1.1, Project tailings must have a Neutralization Potential Ratio (NPR) >3 and a Net Neutralization Potential (NNP) >20 kg $CaCO_3$/t. The ABA results for the tailings material demonstrate that there is some inherent variation in the sulfide sulfur and NP content of the tailings materials that is likely to occur during mining operations. To account for the slight variation in NP and sulfide sulfur in the tailings material, the amount of lime amendment needs to exceed the minimum amount required to ensure that the neutralization criteria specified in the OAR 340-043-0130(2) is met.

1.3 CYANIDE DETOXIFICATION

Tailings from the cyanide carbon-in-leach circuit that no longer contain economically recoverable gold will flow to the cyanide detoxification tank (Figure 3). Concentrations of weak acid dissociable (WAD) cyanide in tailings from the circuit will be reduced from approximately 200 mg/L to a target level of less than 15 mg/L, which is below the not-to-exceed regulatory limit of 30 mg/L. The tailings will be treated with air and sulfur dioxide (SO_2) in the onsite cyanide detoxification tank such that residual WAD cyanide concentration in the liquid component of Project tailings comply with OARs (Ausenco, 2022, 2023).

Laboratory testing has demonstrated that the detoxification process can achieve a level of 1 mg/L or less. However, it is typically not possible or practicable for the operations-scale process to achieve the same levels of performance as what can be achieved in the laboratory. Therefore, during startup, the cyanide detoxification circuit will be optimized to establish if there is a practicable level for discharge to the tailings pond that is less than 15 mg/L.

The final WAD cyanide concentration in the plant tailings stream will be continuously monitored by automated titration to ensure compliance with the initial operational target of 15 mg/L to comply with the not-to-exceed Oregon regulatory limit of 30 mg/L. A secondary means of control and monitoring of the cyanide destruction process is provided through automated ORP (Oxidation Reduction Potential) measurement. WAD cyanide levels in the process plant are continuously monitored, with a sample analysis cycle time of under 30 minutes, which will enable a prompt response to any deviations to the target setpoint. The onsite laboratory will be equipped to determine WAD cyanide concentration by manual titrations using the picric acid method as a back up to the automatic WAD cyanide analyzer. The plan if WAD cyanide concentrations in the tailings stream exiting the process plant become elevated would be to stop plant operations until the deviation can be rectified.

1.4 TAILINGS STORAGE FACILITY AND RECLAIM POND

Tailings are then transported to the TSF (Figure 2) and discharged into the lined impoundment through evenly spaced spigots. As tailings are deposited into the impoundment, the solids separate from the slurry. A portion of the separated water flows to a low point within the impoundment to form the supernatant pool. The remaining water within the tailings mass will drain downward to the underdrain collection and lining system. The TSF and associated infrastructure are located within the perimeter fence, which excludes the public, livestock, and wildlife from access to the tailings, waste rock, and supernatant pool.

The TSF will also provide for the natural degradation of cyanide that remains after detoxification treatment. Cyanide degradation occurs through exposure to ultraviolet light from the sun and metabolic processes from micro-organisms native to the environment in the water of the supernatant pond (Ausenco, 2022, 2023).

The Reclaim Pond will receive waters originating from the underdrains and leak detection systems of the TSF and TWRSF. Water from the supernatant pond and Reclaim Pond will be recovered for re-use in the Process Plant. The Reclaim Pond will be covered with floating plastic balls to prevent birds from landing on it or using it as a source of drinking water.

Birds may access the supernatant pond and could use it as a source of drinking water. An Ecological Risk Assessment performed for the supernatant pond (SLR, 2023; CPA Appendix H) suggests that the average (six-month) WAD cyanide concentration of the pond should be kept below a concentration of 1 mg/L. The six-month average is used as 1/10 of the lifetime of a typical small bird. The monitoring described herein will allow tracking of the WAD cyanide concentration of the supernatant pond to confirm that the concentration remains at the target level of 1 mg/L. Section 4 of this plan describes contingency actions that can be taken if WAD cyanide levels in the supernatant pond need to be reduced.

Further details regarding the design of the TSF, TWRSF, and Reclaim Pond can be found in Golder (2021).

1.5 WASTE ROCK AND CEMENTED ROCK FILL GEOCHEMISTRY

SRK Consulting (SRK, 2022a) describes laboratory studies conducted in support of the Project for predicting the acid generating potential and other geochemical properties of waste rock from the Project. There are several lithologies/rock types that will become waste rock, and all were determined to be potentially acid-generating to various degrees except for basalt from the Quarry.

As with the tailings, the acid generation potential of the waste rock is relatively low, but the neutralization potential is typically lower which render all the rock types except basalt net acid-generating. The rock types that were determined to be acid-generating were also demonstrated to potentially leach metals.

Cemented Rock Fill is waste rock or quarry basalt that is crushed to aggregate and mixed with binders (cement and fly ash) in proportions of 5% to 7% binder. SRK Consulting (SRK, 2022b) performed geochemical testing on cylinders of cured CRF to confirm that the binders rendered the backfill material as non-acid generating. The testing also demonstrated that CRF does not leach metals.

1.6 TEMPORARY WASTE ROCK STORAGE FACILITY

The TWRSF is used to temporarily store waste rock until it is used to make CRF. The TWRSF is located adjacent to the TSF (Figure 2). The design of the TWRSF containment system (liners) is essentially the same as the containment system of the TSF.

Leachate will be generated in the TWRSF by rainfall interacting with the waste rock. The leachate is collected in an underdrain system that drains to the Reclaim Pond. Further details regarding the design of the TSF, TWRSF, and Reclaim Pond can be found in Golder (2021).

2. MONITORING LOCATIONS AND APPROACH

Sample collection will be performed in accordance with standard industry practices and regulatory requirements. Applicable field procedures that will be followed are summarized below.

2.1 SAMPLING MEDIA, LOCATIONS, AND RATIONALE

Table 1 contains a summary of sample locations, sample media (liquid or solids), and analytes. The rationale for collecting each sample and selected analytes is also provided.

Total and WAD cyanide data from samples collected downstream of cyanide detoxification stage will be used to verify that residual WAD cyanide concentrations are compliant with OAR 340-043-0130(1). Results obtained from upstream samples will be used to track potential fluctuations in cyanide concentrations in influent to the detoxification stage and will be used for decision-making should process modifications be warranted to achieve and define the operational lowest practical level as described in Section 1.4.

Similarly, ABA results from downstream of the lime addition will be used to verify that NNP and NPR properties of outgoing tailings are compliant with OAR 340-043-0130(2). ABA results from upstream will be used to determine if the ABA properties of the tailings are changing, and if lime dosages need to change accordingly.

WAD and total cyanide results from liquid samples collected from the TSF will be used to verify that concentrations in the TSF are compliant with OAR 340-043-0130(1). Metals results from the liquid TSF samples will be used to verify that metals concentrations do not result in a Hazard Quotient exceeding 1.0 for representative wildlife species when analyzed following the EPA's Guidelines for Risk Assessment (EPA, 1998) and the Guide for Performing Screening Ecological Risk Assessments at DOE Facilities (Sutter, 1995).

Table 1. Summary of Sampling Locations, Media, Analytes, and Rationale

Sample Location	Sample Medium	Laboratory Analytes	Initial Frequency	Rationale
Downstream of cyanide detox tank	Treated tailings solids and liquids	Total cyanide pH Acid-base accounting	Weekly	Evaluate lime dosage Verify NNP >20 Verify NPR >3 Verify WAD cyanide compliant with OARs
Upstream of cyanide detox tank	Untreated tailings solids and liquids	Total and WAD cyanide pH Acid-base accounting	Weekly	Evaluate lime dosage Verify head grade properties to assure proper treatment
Plant tailings stream	Treated tailings slurry effluent	WAD cyanide	Continuously monitored by automated titration	Ensure compliance with the initial operational target of 15 mg/L to comply with the not-to-exceed Oregon regulatory limit of 30 mg/L

Sample Location	Sample Medium	Laboratory Analytes	Initial Frequency	Rationale
TSF and Reclaim Pond	Tailings liquid and TWRSF leachate	Total and WAD cyanide pH Metals (Al, As, Cu, Cr, Mo, V, Sb, Pb, Hg, Ni, Fe, Mn)	Daily during initial startup (WAD CN) Weekly (Total CN, pH) Quarterly (Metals)	Verify WAD cyanide 6-month average less than or equal to 1 mg/L in supernatant; Verify metals concentrations do not result in a HI > 1 for wildlife species.
TWRSF	Waste rock (solids)	Acid-base accounting	Weekly	Confirm that the waste rock acid-generating characteristics are represented by the results in the *Baseline Geochemical Characterization Report* (CPA Appendix B6) and in the *Cemented Rock Fill Characterization Report* (CPA Appendix F).

2.2 SAMPLING LOCATIONS AND PROCEDURES

This section describes locations where samples will be collected, and the procedures for sample collection.

2.2.1 COLLECTION OF TAILINGS SOLIDS AND LIQUIDS SAMPLES

Downstream tailings samples will be collected from a safe location in the vicinity of the Tailings Pump Box (3710-BX-001). Upstream tailings samples will be collected from a safe location in the vicinity of the carbon-in-leach (CIL) Tails Sampler (3600-SA-001). These locations are shown in Figure 3.

Tailings waste streams are a slurry of solids and liquids. Tailings samples will be collected using a bucket. The bucket will be filled at a sampling port. The bucket will be affixed with a lid and its contents will be allowed to settle in the dark overnight. The water will then be decanted from the bucket into a sample container. Decanting will continue until no further water can be poured out without also pouring out solids. The bucket, still containing the solids, will then be affixed with a lid, taped, labeled with its sample ID, and shipped to the laboratory with its chain of custody. The laboratory requires at least 200 grams of solids to be submitted.

Liquid samples decanted from the bucket will be collected in containers provided by the analytical laboratory. Containers must be filled completely with minimal headspace. After filling and labeling, each sample bottle will be placed in an iced cooler. Ice will be contained in plastic bags within the cooler.

2.2.2 COLLECTION OF LIQUID SAMPLES FROM TSF AND RECLAIM POND

Liquid samples will be collected from the TSF and Reclaim Pond. Samples from the TSF will be collected from the supernatant pool. Samples from these two areas will be collected from a safe location using a sampling pole to collect a representative sample. The sampling pole used will be capable of holding the laboratory-provided bottles to avoid use of intermediate sampling vessels. Sample containers and post-collection handling will be as described above for tailings liquid samples.

The pH of these samples will be measured using a field electrode during sample collection. The electrode will be decontaminated, calibrated, and operated pursuant to manufacturer guidance. The pH of each sample will be documented on field forms.

2.2.3 COLLECTION OF WASTE ROCK FROM THE TWRSF

Samples of waste rock will be collected from fresh material recently deposited in the TWRSF using a shovel or similar implement. Finer-grained material (< 1-inch diameter) will be collected to minimize the requirement for crushing by the laboratory and to maximize representation of all rock types in the waste rock sample. Samples will be placed in plastic bags, labeled and then each bagged sample is placed in a second plastic bag. The laboratory requires at least 200 grams of solids to be submitted.

2.3 FREQUENCY OF SAMPLING EVENTS

During the startup of operations, the supernatant pool will stabilize and water may be accessible to birds or bats. Sampling of the supernatant pool will be conducted daily to ensure the target level of 1 mg/L is met during this initial period. If this target level is exceeded, the initial 15 mg/L target for discharges from the cyanide detoxification circuit will be adjusted to ensure the supernatant pool is kept at the lowest practical level.

Sampling of tailings and waste rock for ABA analyses will be conducted weekly for the first six months of mine operations, at which time sampling frequency will be re-evaluated to account for variations (or lack thereof) in the mineralogy and the physical and chemical composition of the tailings and waste rock. Note that it may be appropriate to discontinue some or all of this monitoring based on the evaluation of results. In addition, analysis of metals on the liquid samples from the Reclaim Pond and TSF supernatant pool will occur on a quarterly basis.

2.4 SAMPLING EQUIPMENT DECONTAMINATION PROCEDURES

Non-disposable sampling equipment will be decontaminated prior to use and after use at each sampling location. Decontamination will consist of a two-part wash: first with Alconox® or equivalent detergent mixed with deionized water, followed by a rinse with deionized water. Water generated during decontamination of sampling equipment will be discharged to the TSF or Reclaim Pond.

2.5 INSTRUMENT CALIBRATION

Field instruments including a pH meter will be calibrated according to manufacturer specifications prior to use and periodically during sampling if instrument drift is suspected. At a minimum, field instruments will be calibrated daily prior to use.

2.6 SAMPLING DOCUMENTATION

A sample collection form will be completed for each sample during each sampling event to document field activities and field observations. The form will include the following information:

- Date and time of sample collection;
- Location of sample collection;
- Name(s) of individual who conducted sampling;
- Field observations such as weather conditions or issues that may affect sample results;
- Number and type of samples collected and sample identification numbers;
- Field pH results of each liquid sample;
- Explanations of any deviations from this TCMP, with rationale for deviation;
- Problems encountered, if any, and their resolution; and
- Whether or not photographs were taken.

3. ANALYTICAL PROGRAM AND QUALITY ASSURANCE

3.1 ANALYTICAL METHODS

Samples collected will be submitted to an analytical laboratory certified for the designated analyses by the State of Oregon, as appropriate (ABA analyses do not typically require state certification). A schedule of laboratory methods is provided in Table 2.

Table 2. Schedule of Laboratory Methods

Analyte	Method
WAD Cyanide	ASTM D2036
Total Cyanide	ASTM D2036
ABA	Modified Sobek (Lawrence and Wang, 1997)
Metals (Al, As, Cu, Cr, Mo, V, Sb, Pb, Ni, Fe, Mn)	EPA 6010
Mercury	EPA 7471

ABA analyses will include the following individual parameters.

- Sulfur Forms;
- Acid Generation potential (calculated);
- Acid neutralization potential;
- Neutralization potential as $CaCO_3$;
- Net Neutralization Potential (calculated);
- Neutralization Potential Ratio (calculated); and
- pH, saturated paste.

3.1.1 CONTINUOUS ANALYSIS OF CYANIDE DETOXIFICATION

A Cynoprobe or similar will be installed after the detox process to continuously analyze cyanide concentrations.

The Cynoprobe is an online cyanide measurement instrument developed by Mintek that uses an amperometric technique to accurately measure Free and WAD cyanide concentrations in a pulp medium. The Cynoprobe is also capable of providing a potentiometric measurement tool (as part of the standard design). The Cynoprobe is made up of a control process unit and a wet box unit and includes a pump and filter probes. Cynoprobes are installed at numerous sites globally and at mines in North America and Canada.

3.2 SAMPLE HANDLING AND CHAIN OF CUSTODY

Samples will be labeled and placed into a chilled cooler or suitable container under chain of custody (COC) procedures before being shipped to the analytical laboratory. Liquid samples will be placed in the chilled cooler or refrigerated as soon as possible after collection. Sample and cooler temperatures will be maintained at approximately 4 degrees Celsius (°C) ± 2°C, throughout transport to the laboratory. Samples will be handled and transported in a manner that maintains sample integrity and does not exceed specified holding times. Each sample will be documented on a COC form and in the field logbook. The COC form will be sealed in the sample cooler during transport to the laboratory. Each cooler will be sealed with a signed custody seal for shipment.

3.3 QUALITY ASSURANCE AND QUALITY CONTROL

Sampling activities will be documented on designated forms. Each sample will be documented on the COC form(s) submitted to each laboratory and the name of the field scientist will be printed on the COC adjacent to their signature.

Field duplicate samples will be collected at a frequency of 10 percent of the total number of liquid samples collected during the sampling event. A minimum of one duplicate will be collected. To provide complete laboratory blindness, duplicates will be given false sample names on the label and COC. For example, a blind duplicate name for primary sample MW-4 would be MW-99. Duplicate sample identification will be documented in the field logbook, or on project-specific field forms, in connection with the primary sample identification.

All laboratory work will be conducted by a laboratory having State of Oregon accreditation to ensure adequate data quality. This shall include analysis of certified reference materials. This also includes analysis of laboratory control samples, matrix spikes, standards, method blanks, and instrument blanks.

Data quality parameters will be reviewed upon receipt of the laboratory reports to verify the integrity of the laboratory data. QA/QC data provided by the laboratory, such as blanks, surrogates, laboratory control samples, matrix spikes, matrix spike duplicates will be reviewed. In addition, any laboratory qualifiers (indications of limitations or biases) will be reviewed.

3.4 DATA MANAGEMENT

Laboratory reports will be filed in a designated location. Electronic data deliverables (EDDs) from the laboratory will be used to update the Project monitoring database within two weeks of final EDDs being provided by the laboratory. The data will be reviewed periodically to establish that the objectives of monitoring are being met (i.e., compliance with OARs) and to determine if any process or monitoring changes are appropriate. Metals data pertaining the TSF supernatant pool will be used to verify that hazard quotients for each metal evaluated do not exceed 1.0 pursuant to guidance such as EPA (1998) and Sutter (1995). Similarly, WAD cyanide results for the TSF supernatant pool will be evaluated to confirm that the six-month average concentration is less than or equal to 1 mg/L.

It may be necessary to provide the cyanide and ABA results in a monitoring report to the Oregon Department of Environmental Quality (ODEQ).

4. POTENTIAL CONTINGENCY ACTIONS

Depending on monitoring results, contingency actions may be necessary. However, much of the monitoring data is collected to determine if process adjustments may be necessary, such as adjusting the amount of lime added to the tailings being discharged from the plant if the target neutralization potential or neutralization potential ratios do not match up with requirements, or making refinements to the cyanide detoxification process to comply with the target 15 mg/L WAD cyanide in the tailings liquid being discharged to the TSF.

Monitoring observations that may trigger contingency actions include:

- Supernatant pond WAD cyanide concentration (six-month average) exceeds 1 mg/L,
- HI for metals in the supernatant pond exceeds 1,
- Bird mortality in the vicinity of the supernatant pond, or
- Excessively high pH (e.g., > pH = 9.0) in the supernatant pond because of lime addition.

Potential contingency actions will be developed and evaluated on a case-by-case basis as issues arise, but potential contingency actions that could be taken to address the first three issues above include:

- Lowering the target WAD cyanide concentration for the cyanide detoxification circuit to a level less than 15 mg/L to reduce the WAD cyanide level in the supernatant pond;
- Bird hazing and deterrents to prevent birds from drinking from the supernatant pond;
- Treating the supernatant pond (e.g., with hydrogen peroxide) to destroy WAD cyanide within the pond;
- Treating the supernatant pond to reduce metals concentrations;
- Evaluating water management systems to reduce the load of WAD cyanide and/or metals in the pond water or to reduce the volume of water in the supernatant pond; and/or
- Further evaluation of WAD cyanide toxicity to avian species/additional ecological risk assessment to establish if the supernatant pond is affecting birds.

For an excessively high pH in the supernatant pond, which could be caused by the lime addition to neutralize the tailings, an approach would have to be developed in consultation with ODEQ because the contingency action would likely require reduction of the amount of lime added (i.e., reducing the lime additions to levels below what is required by OARs). Engineering evaluations would be required to support any plan developed and may include determining the acid/base balance in the deposited tailings and process water circuit (to assure that there is adequate base in the tailings to prevent acid generation), additional investigation of the potential for acid generation by deposited tailings, further ecological risk evaluation, or investigation of alternative bases to add to the tailings (e.g., fly ash, Portland cement, limestone, etc.).

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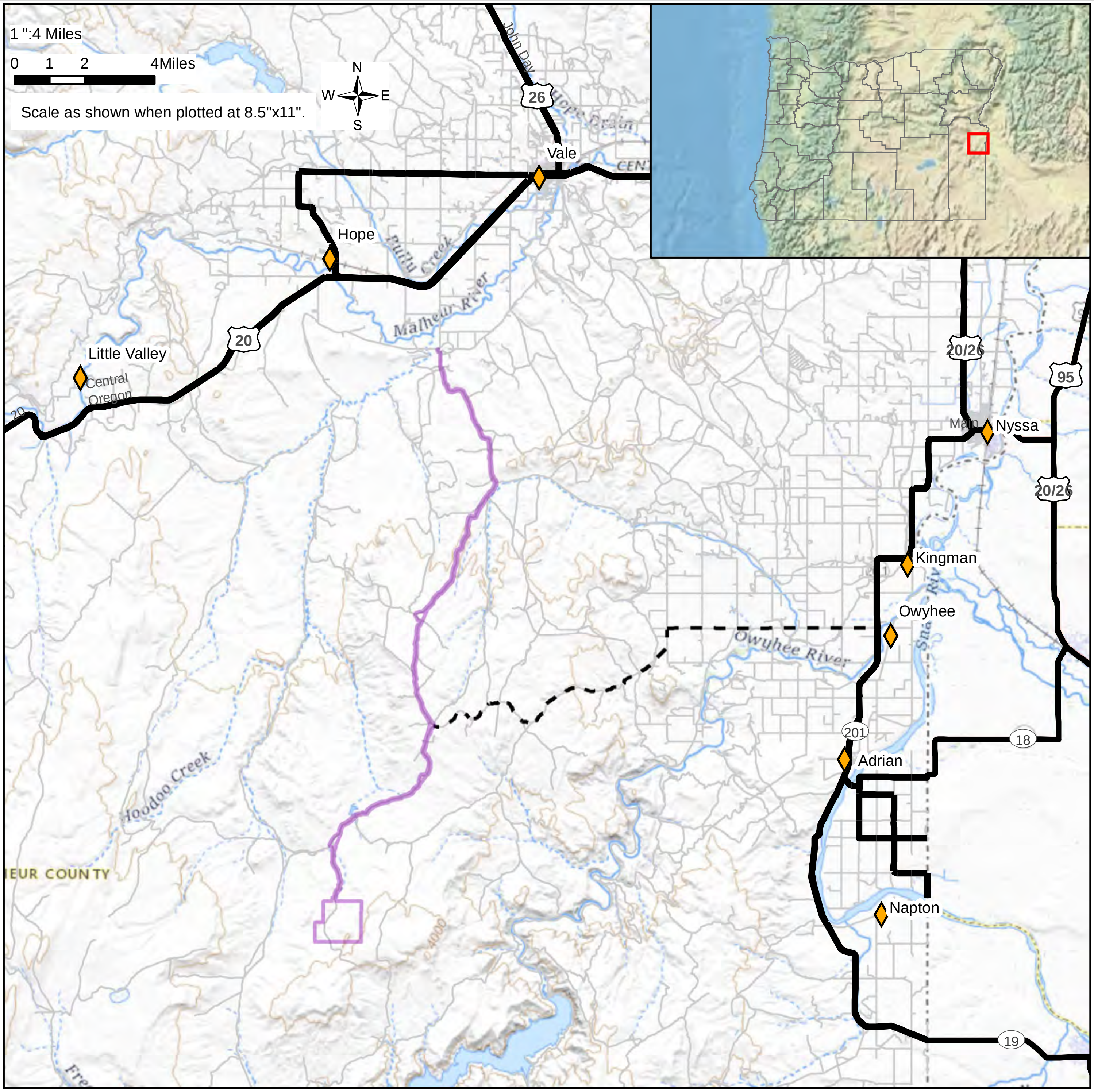
FIGURES



Legend

PoO Boundary

Emergency Access Road

Roads

Notes:

1. Figure references 1983 UTM zone 11N datum.
2. Road and highway system were referenced from the Bureau of land Managment.
3. PoO boundary provided by others.

Site/Report:

Calico Resources USA Corp.
Grassy Mountain Mine

Tailings Chemical Monitoring Plan

Figure:

Location Map

SLR

CALICO RESOURCES

Date:	November, 2021		Figure:
Project No:	108.02203.00001		1
By:	MS	Chk'd: TM	

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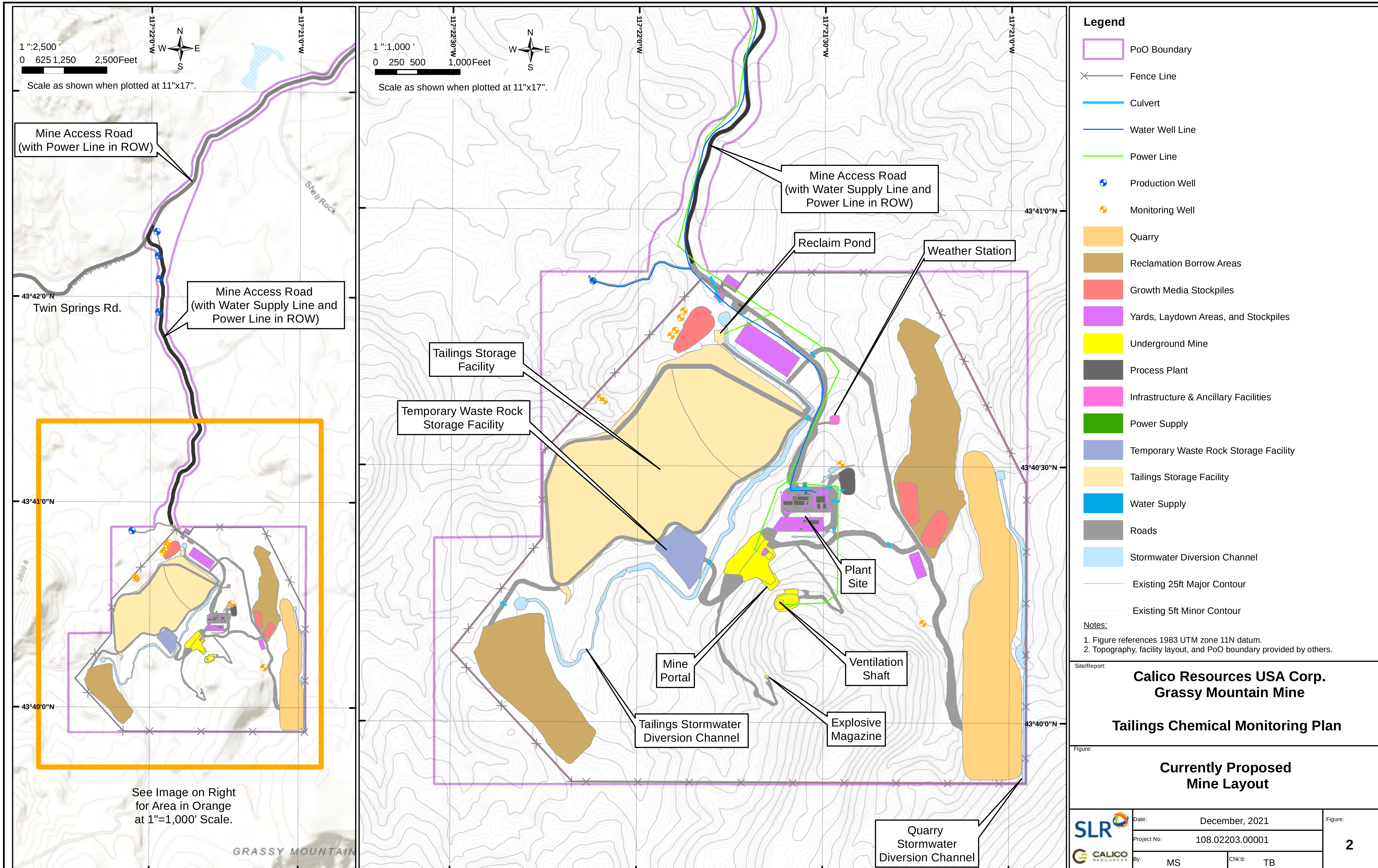

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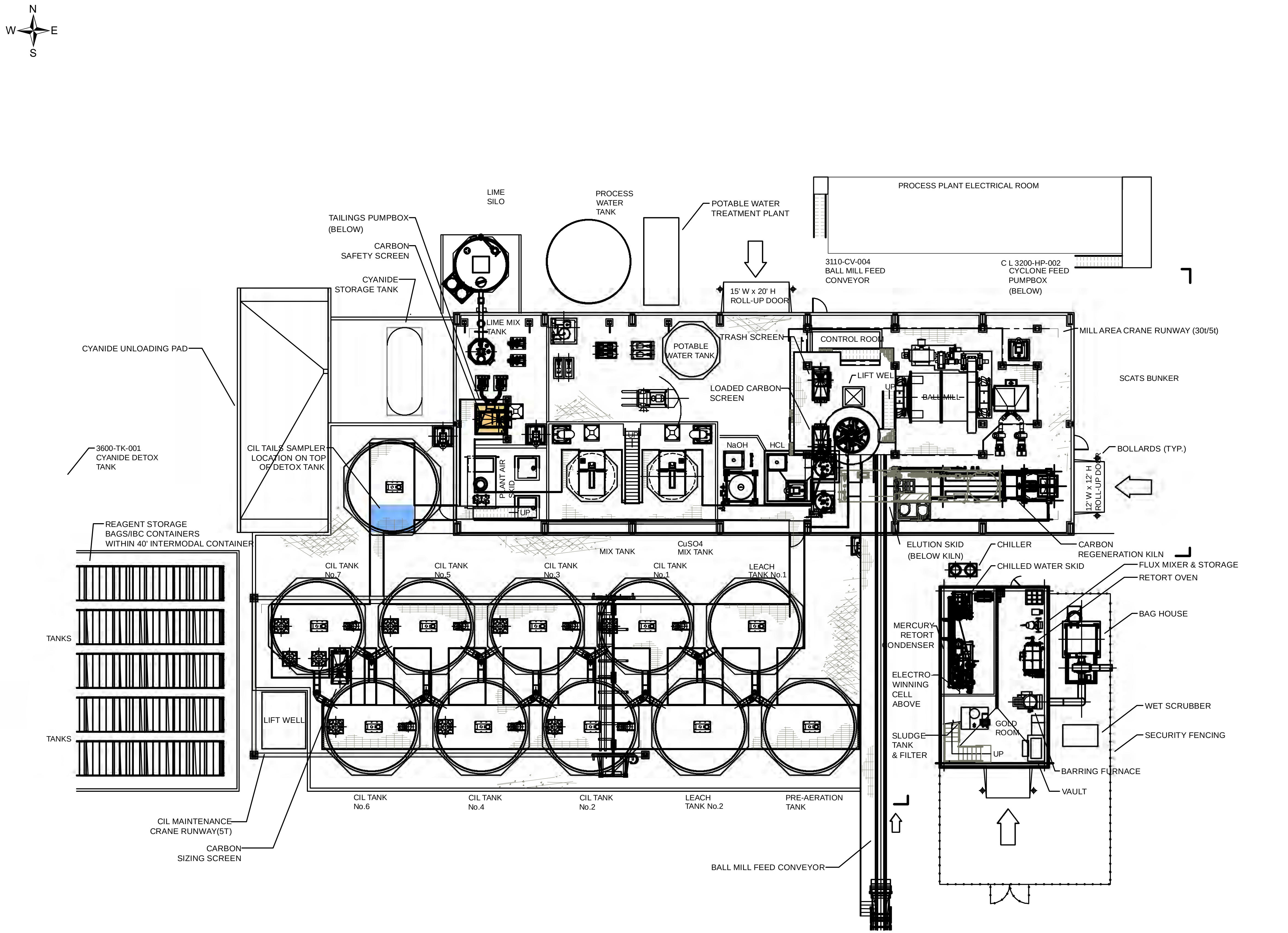

Legend

CIL Tails Sampler

Tailings Pumpbox

1 ":24 '

0 4 8 16 24 Feet

Scale as shown when plotted at 11"x17".

Notes:

1. Facility layout was referenced based on Ausenco site analysis, 2018.

Site/Report:

Calico Resources USA Corp.
Grassy Mountain Mine

Tailings Chemical Monitoring Plan

Figure:

Plant Area Tailings Sample Locations

SLR / CALICO RESOURCES	Date: November, 2021		Figure:
	Project No: 108.02203.00001		3
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