NI 43-101 TECHNICAL REPORT ON THE FEASIBILITY STUDY OF THE CLAYTON VALLEY LITHIUM PROJECT
Esmeralda County, Nevada, USA

Effective Date: 29 April 2024

Prepared for: Century Lithium Corp.

Prepared by:

Ms. Terre A. Lane, MMSA, RM SME, Global Resource Engineering Ltd.
Dr. Hamid Samari, MMSA, Global Resource Engineering Ltd.
Mr. Todd S. Fayram, MMSA, Century Lithium Corp.
Mr. Haiming (Peter) Yuan, PE, WSP USA Environment and Infrastructure Inc.
Mr. Paul Baluch, P.Eng, PE, Wood Canada Limited
Mr. Alan Drake, L.P.Eng, Wood Canada Limited
Mr. Farzad Kossari, P.Eng, Wood Canada Limited

Project Number: 252456

Important Notice

This Report was prepared for Century Lithium Corp. (Century) by Wood Canada Limited (Wood), WSP USA Environment and Infrastructure Inc. (WSP), Global Resource Engineering Ltd. (GRE), (collectively the Consultants). The quality of information, conclusions and estimates contained herein is consistent with the level of effort involved in the Consultants' services and based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions and qualifications set forth in this Report. This Report is intended to be used by Century, subject to the terms and conditions of its contracts with each of the Consultants. Except for the purposes legislated under Canadian provincial and territorial securities law, any use of, or reliance on, this Report by any third party is at that party's sole risk.

CERTIFICATE OF QUALIFIED PERSON

Terre Lane, RM SME, MMSA
Principal Mining Engineer
Global Resource Engineering Ltd.
17301 W. Colfax Ave, Suite 400
Golden, CO 80401

I, Terre Lane, RM SME, MMSA, am employed as a Principal Mining Engineer at Global Resource Engineering Ltd.

This certificate applies to the technical report titled "NI 43-101 Technical Report on the Feasibility Study of the Clayton Valley Lithium Project, Esmeralda County, Nevada, USA" with an effective date of April 29, 2024 (the "Technical Report").

I am a Qualified Professional in the United States from the Mining and Metallurgical Society of America (MMSA) with a membership number of 01407QP and a Registered Member of the Society of Mining, Metallurgy and Exploration (SME) with a membership number of 4053005. I graduated from Michigan Technological University with a Bachelor of Science in Mining Engineering in 1982.

I have practiced my profession for over 40 years. I have been directly involved in construction, startup, operations of several mines. I have been involved with or led geology, resource and reserve estimation, mine design, capital and operating cost estimation, economic analysis, and reports for hundreds of developing projects from preliminary to detailed design engineering levels.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 Standards of Disclosure for Mineral Projects (NI 43–101), for those sections of the Technical Report that I am responsible for preparing.

I visited the Clayton Valley property March 21, 2019 and between 31 May and 1 June, 2022.

I am responsible for Sections 1.1 to 1.3, 1.7, 1.9 to 1.11, 1.14, 1.16.1, 1.16.2, 1.17 to 1.20; Sections 2 to 5; Sections 12.1, 12.5.3; Sections 14 to 16; Section 19; Sections 21.1, 21.2.2.1, 21.2.3 to 21.2.5, 21.3, 21.4.1, 21.4.2; Sections 22 to 24; Sections 25.1, 25.2, 25.6, 25.9 to 25.11, 25.13, 25.14; Sections 26.1, 26.4, 26.8; and Section 27, of the Technical Report.

I am independent of Century Lithium Corp. as independence is described by Section 1.5 of NI 43-101.

I have been involved with the Clayton Valley property since 2018 and have acted as a Qualified Person for the preliminary economic assessment and prefeasibility study.

I have read NI 43-101, and the sections of the Technical Report that I am responsible for have been prepared in compliance with that Instrument.

As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible for preparing contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

"signed and stamped"

Terre A. Lane, RM SME, MMSA
Dated: June 12, 2024

CERTIFICATE OF QUALIFIED PERSON

Hamid Samari, MMSA
Global Resource Engineering Ltd.
17301 W Colfax Ave, Suite 400
Golden Colorado 80401

I, Hamid Samari, MMSA, am employed as a Principal Geologist with Global Resource Engineering Ltd.

This certificate applies to the technical report titled "NI 43-101 Technical Report on the Feasibility Study of the Clayton Valley Lithium Project, Esmeralda County, Nevada, USA" with an effective date of April 29, 2024 (the "Technical Report").

I am registered as a Professional Geologist with MMSA. I graduated with a PhD degree in Tectonics and structural geology, from Azad university, Sciences and Research Branch, Tehran in 2000. I got my master's degree in Tectonics from Beheshti university, Tehran in 1995 and my bachelor's degree in geology from Beheshti university, Tehran in 1991. I worked for Azad University, Mahallat branch, as an assistant professor and head of the geology department for 19 years, simultaneously for Tamavan Consulting Engineers as a senior geologist for 12 years, and as a general manager for four years for Tana Energy Management, mining and mineral department. I have also worked for Global Resource Engineering for nearly seven years.

I have practiced my profession for more than 26 years. As a consulting geologist I have worked on geologic reports and resource statements for gold, silver, precious metals and lithium deposits mainly in Nevada and Utah and Latin America. I have overseen exploration drilling programs involving sampling and QA/QC, have prepared geologic models and maps and conducted database validation. I have been involved with the preparation of several mining studies ranging for preliminary economic assessments to feasibility studies.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 *Standards of Disclosure for Mineral Projects* (NI 43–101), for those sections of the Technical Report that I am responsible for preparing.

I visited the Clayton Valley property between 31 May and 1 June 2022.

I am responsible for Sections 1.4 to 1.7, 1.18 to 1.20; Sections 2.2, 2.3, 2.5; Section 3; Sections 6 to 11; Sections 12.1 to 12.4, 12.5.1; Sections 25.1, 25.3, 25.4, 25.13, 25.14; Sections 26.1, 26.2, 26.8; and Section 27, of the Technical Report.

I am independent of Century Lithium Corp. as independence is described by Section 1.5 of NI 43-101.

I have had previous involvement with the Clayton Valley property, preparing the NI 43-101 Technical Report on the prefeasibility study dated December 15, 2022.

I have read NI 43-101, and the sections of the Technical Report that I am responsible for have been prepared in compliance with that Instrument.

As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible for preparing contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

"signed and stamped"

Hamid Samari, MMSA

Dated: June 12, 2024

CENTURY LITHIUM

CERTIFICATE OF QUALIFIED PERSON

Todd S. Fayram, QP1300, MMSA.
Century Lithium Corp.
2275 S. Cottonwood Lane
Amargosa Valley, NV 89020

I, Todd S. Fayram, MMSA am employed as a Senior Vice President Metallurgy with Century Lithium Corp.

This certificate applies to the technical report titled "NI 43-101 Technical Report on the Feasibility Study of the Clayton Valley Lithium Project, Esmeralda County, Nevada, USA" with an effective date of April 29, 2024 (the "Technical Report").

I am registered as a Metallurgical Engineer with Mining and Metallurgical Society of America, QP1300. I graduated from Montana Tech in 1983 with a Bachelor of Science in Mineral Processing Engineering and completed a Master of Science from Montana Tech in Metallurgical Engineering in 2013.

I have practiced my profession for over 35 years since graduation from undergraduate university and have years of diversified experience in the consulting and operating fields for various mining and milling operations across the world. Since 2017, I have worked on the Century Clayton Valley claystones as Chief Metallurgist to identify methods for lithium recovery.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 *Standards of Disclosure for Mineral Projects* (NI 43–101), for those sections of the Technical Report that I am responsible for preparing.

I visited the Clayton Valley property numerous times over the past five years with the most recent visit on 17 November 2023.

I am responsible for parts or all of Sections 1.7, 1.8, 1.18 to 1.20; Sections 2.2, 2.3, 2.5; Section 3; Sections 12.1, 12.5.2; Section 13; Sections 25.1, 25.5, 25.13, 25.14; Sections 26.1, 26.3, 26.8; and Section 27 of the Technical Report.

I am not independent of Century Lithium Corp. as independence is described by Section 1.5 of NI 43-101.

I have been involved with the Clayton Valley property since November 2017. Initial involvement started in November 2017 as a metallurgical consultant through Continental Metallurgical Services, LLC (CMS). Involvement though CMS continued until May 2023 when I went to work for Century Lithium Corp. as a fulltime employee.

I have read NI 43-101, and the sections of the Technical Report that I am responsible for have been prepared in compliance with that Instrument.

As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible for preparing contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

"signed and stamped"

Todd S. Fayram

Dated: June 12, 2024

CERTIFICATE OF QUALIFIED PERSON

Haiming (Peter) Yuan, PE, PhD
WSP USA Environment and Infrastructure Inc.
9460 Double R Blvd, Suite 201
Reno, Nevada, USA

I, Haiming (Peter) Yuan, PE, PhD, am employed as a Principal Geotechnical Engineer with WSP USA Environment and Infrastructure Inc.

This certificate applies to the technical report titled "NI 43-101 Technical Report on the Feasibility Study of the Clayton Valley Lithium Project, Esmeralda County, Nevada, USA" with an effective date of April 29, 2024 (the "Technical Report").

I am registered as a Professional Engineer (PE), in the State of Nevada (#019348). I graduated from Zhejiang University, in China in 1997 with a Bachelor of Civil Engineering degree, and obtained a Master of Science degree in Geotechnical Engineering from the same university in 2000. I graduated from Clemson University in 2003, with a doctoral degree in Geotechnical Engineering.

I have practiced my profession for 20 years. I have been directly involved in design of tailings impoundments, heap leach pads, and other mine waste disposal facilities. I have been supporting environmental, permitting, water management and social aspects of mining projects from engineering perspectives, and been involved in studies from scoping levels to closure for projects located throughout North America, South America and Asia.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 *Standards of Disclosure for Mineral Projects* (NI 43–101), for those sections of the Technical Report that I am responsible for preparing.

I most recently visited the Clayton Valley property on 3 August 2022.

I am responsible for Sections 1.7, 1.13, 1.15, 1.18 to 1.20; Sections 2.2, 2.3, 2.5; Section 3; Sections 12.1, 12.5.4; Sections 18.1, 18.6 to 18.7; Section 20; Sections 25.1, 25.8.1, 25.12 to 25.14; Sections 26.1, 26.5, 26.6, 26.8; and Section 27, of the Technical Report.

I am independent of Century Lithium Corp. as independence is described by Section 1.5 of NI 43-101.

I have had no previous involvement with the Clayton Valley property.

I have read NI 43-101, and the sections of the Technical Report that I am responsible for have been prepared in compliance with that Instrument.

As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible for preparing contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

"signed and stamped"

Dr. Haiming (Peter) Yuan, PE

Dated: June 12, 2024

CERTIFICATE OF QUALIFIED PERSON

Paul Baluch, P.Eng, PE
Wood Canada Limited
400-111 Dunsmuir Street
Vancouver, British Columbia, Canada V6B 5W3

I, Paul Baluch, P.Eng, PE am employed as a Technical Director, Civil/Structural/Architectural with Wood Canada Limited.

This certificate applies to the technical report entitled titled "NI 43-101 Technical Report on the Feasibility Study of the Clayton Valley Lithium Project, Esmeralda County, Nevada, USA" with an effective date of April 29, 2024 (the "Technical Report").

I am a member of Engineers & Geoscientists British Columbia, Association of Professional Engineers and Geoscientists of Alberta, Association of Professional Engineers and Geoscientists of Saskatchewan, Professional Engineers Ontario and member of Idaho Board of Professional Engineers and Professional Land Surveyors. I graduated from the Slovak Technical University in Bratislava, Slovakia with Diploma in Civil Engineering in 1980.

I have practiced my profession for 42 years. I have been directly involved in site investigations, site development, infrastructure and civil works scoping studies, prefeasibility and feasibility studies, and detailed engineering on mining, infrastructure, and other industry projects.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 *Standards of Disclosure for Mineral Projects* (NI 43–101), for those portions of the Technical Report that I take responsibility.

I am responsible for Sections 1.13, 1.18 to 1.20; Sections 2.2, 2.3, 2.5; Section 3; Section 18.1-18.5, 18.8-18.13; Sections 25.1, 25.8, 25.13, 25.14; Sections 26.1, 26.7, 26.8; and Section 27 of the Technical Report.

I am independent of Century Lithium Corp. as independence is described by Section 1.5 of NI 43–101.

I have had no previous involvement with the Clayton Valley property.

I have read NI 43–101, and the parts of the Technical Report that I am responsible for have been prepared in compliance with that Instrument.

As of the date of this certificate, to the best of my knowledge, information and belief, the parts of the Technical Report that I am responsible for preparing contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

"signed and stamped"

Paul Baluch, P.Eng, PE

Dated: June 12, 2024

CERTIFICATE OF QUALIFIED PERSON

Alan Drake, P.L.Eng
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111 Dunsmuir St, Suite 400
Vancouver, British Columbia, Canada V6B 5W3

I, Alan Drake, P.L.Eng, am employed as a Manager, Process Engineering with Wood Canada Limited.

This certificate applies to the technical report entitled "NI 43-101 Technical Report on the Feasibility Study of the Clayton Valley Lithium Project, Esmeralda County, Nevada, USA" with an effective date of April 29, 2024 (the "Technical Report").

I am a Professional Licensee Engineering with Engineers and Geoscientists British Columbia. I graduated from the Technicon Witwatersrand with a National Higher Diploma in Extraction Metallurgy in 1993.

I have practiced my profession for 30 years. I have been directly involved in metallurgical plant operations, process design, construction and commissioning of minerals processing and hydrometallurgical facilities for base and precious metals.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 *Standards of Disclosure for Mineral Projects* (NI 43–101), for those portions of the Technical Report that I take responsibility.

I am responsible for Sections 1.12, 1.16.2, 1.18; Sections 2.2, 2.3, 2.5; Section 3; Section 17; Sections 21.1, 21.4.1, 21.4.3; Sections 25.1, 25.7, 25.10; and Section 27 of the Technical Report.

I am independent of Century Lithium Corp. as independence is described by Section 1.5 of NI 43–101.

I have had no previous involvement with the Clayton Valley property.

I have read NI 43–101, and the parts of the Technical Report that I am responsible for have been prepared in compliance with that Instrument.

As of the date of this certificate, to the best of my knowledge, information and belief, the parts of the Technical Report that I am responsible for preparing contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

"signed and stamped"

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Alan Drake, P.L.Eng

Dated: June 12, 2024

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CERTIFICATE OF QUALIFIED PERSON

Farzad Kossari, P.Eng
Wood Canada Limited
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Vancouver, British Columbia, Canada V6B 5W3

I, Farzad Kossari, P.Eng, am employed as a Senior Lead Cost Estimator with Wood Canada Limited.

This certificate applies to the technical report entitled "NI 43-101 Technical Report on the Feasibility Study of the Clayton Valley Lithium Project, Esmeralda County, Nevada, USA" with an effective date of April 29, 2024 (the "Technical Report").

I am a Professional Engineering with Engineers and Geoscientists British Columbia registration licence number 31551. I graduated from Khajeh Nasir Toosi University of Technology Civil Engineering Department in 1995 and Northwestern University McCormick School of Engineering Master of Science in Project Management in 2002.

I have practiced my profession for 29 years. I've played a direct role in developing and overseeing capital cost estimates, as well as operating and sustaining capital costs for significant mining projects. This involvement spans from feasibility studies and initial design to detailed engineering across various mining processes and facilities. Additionally, I've taken on responsibilities as a project manager, construction manager, and civil site engineer for mining, hydroelectric, and infrastructure projects.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 *Standards of Disclosure for Mineral Projects* (NI 43–101), for those portions of the Technical Report that I take responsibility.

I am responsible for Sections 1.16.1; Sections 2.2, 2,3, 2.5; Section 3; Sections 21.1, 21.2.1, 21.2.2.2 to 21.2.2.7, 21.2.3, 21.2.5, 21.2.6; Sections 25.1, 25.10; and Section 27 of the Technical Report.

I am independent of Century Lithium Corp. as independence is described by Section 1.5 of NI 43–101.

I have had no previous involvement with the Clayton Valley property.

I have read NI 43–101, and the parts of the Technical Report that I am responsible for have been prepared in compliance with that Instrument.

As of the date of this certificate, to the best of my knowledge, information and belief, the parts of the Technical Report that I am responsible for preparing contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

"signed and stamped"

Farzad Kossari, P.Eng

Dated: June 12, 2024

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1.0 SUMMARY

1.1 Introduction

Wood Canada Limited (Wood), Global Resource Engineering Ltd. (GRE), and WSP USA Environment and Infrastructure Inc. (WSP) were retained by Century Lithium Corp. (Century) to prepare a technical report (Report) under National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101) for the Clayton Valley Lithium Project (Project) disclosing the results of a current feasibility study (FS) of the Clayton Valley deposit.

The Project is a greenfield site located in central Esmeralda County, approximately 354 km southeast of Reno, Nevada, USA (Figure 1-1).

1.2 Terms of Reference

This Report was prepared to support the disclosure in the news release dated 29 April 2024 titled "Century Lithium Announces Positive Feasibility Study for the Clayton Valley Lithium Project, Nevada".

Mineral Resource and Mineral Reserve estimates were prepared in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (CIM, 2019) (2019 CIM Best Practice Guidelines) and reported in accordance with the CIM Definition Standards on Mineral Resources and Mineral Reserves (CIM, 2014) (2014 CIM Definitions Standards).

All measurements used for the Project are metric units unless otherwise stated. Tonnages are in metric tonnes, and grade is reported as parts per million (ppm) unless otherwise noted.

All currency amounts in this FS are presented in US dollars.

The Project is planned to produce lithium carbonate (Li_2CO_3) as its primary product and includes the provision for selling of surplus sodium hydroxide (NaOH) from its on-site chlor-alkali plant. For reporting purposes, all production is quoted in terms of lithium carbonate equivalent (LCE).

1.3 Mineral Tenure, Surface Rights and Royalties

The Property is centered near 452,800 m east, 4,177,750 m north, WGS84, zone 11 north datum, in central Esmeralda County, Nevada. The Property comprises 276 unpatented placer mining claims and 227 unpatented lode mining claims. The claims are 100% owned by Cypress Holdings (Nevada), Ltd (Cypress), a wholly owned subsidiary of Century, and cover 2,286 ha. The claims provide Century with the rights to access all brines, placer, and lode minerals on the Property and subject to four separate underlying royalty agreements.

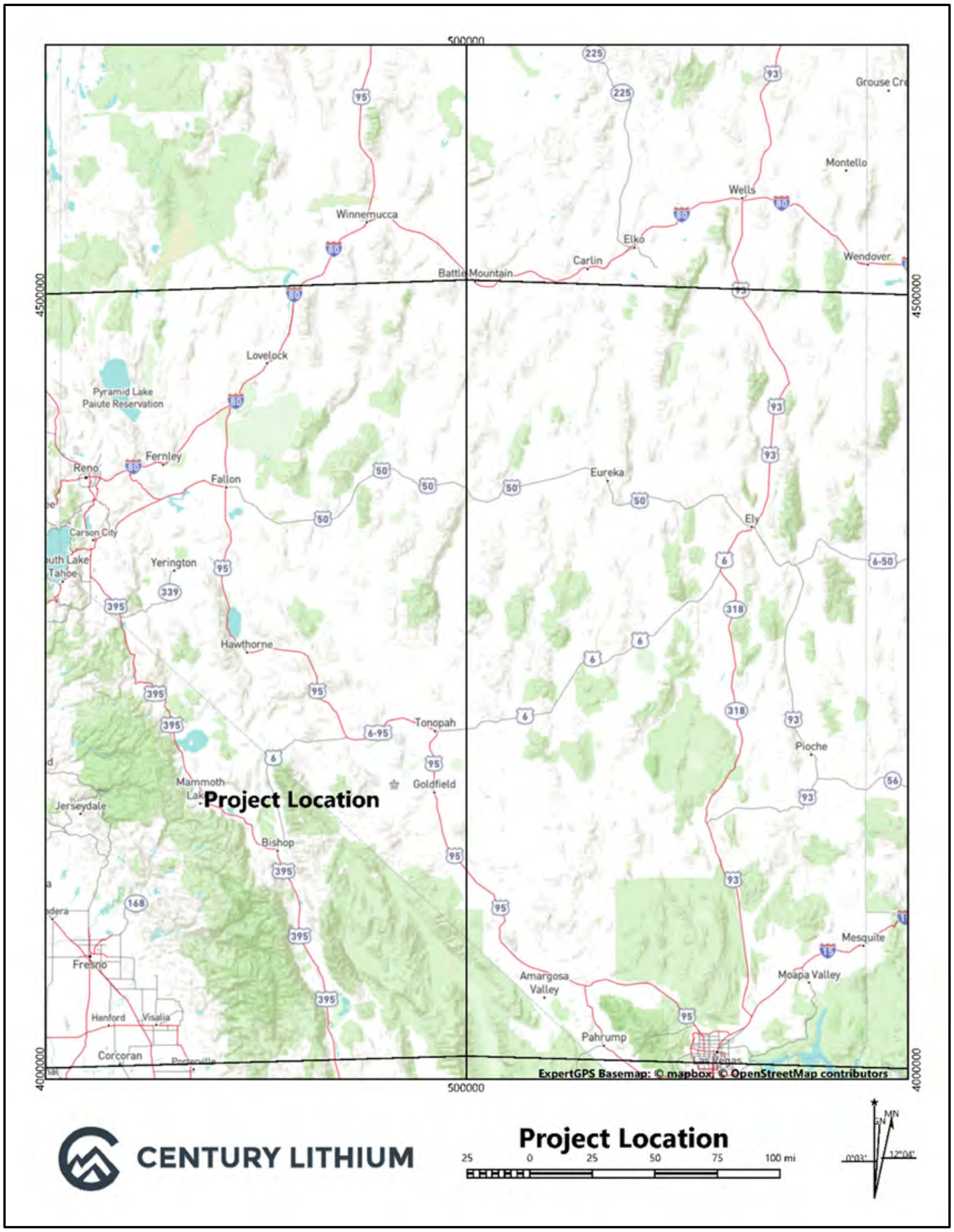


Figure 1-1: Project Location Map (Source: Century, 2023)

1.4 History

Lithium was first identified in Clayton Valley the 1950s with production of lithium carbonate at Silver Peak by 1967.

Century acquired first rights to mining claims in Clayton Valley in 2016 with the purchase of the Glory property and Dean property from third-party vendors. In 2018, Century staked additional claims directly from the Bureau of Land Management (BLM) at the Property. In 2021, Century amended the original Dean claims and staked additional Dean claims as well as staking additional claims directly from the BLM. In 2022, Century purchased property from Enertopia Corporation (Enertopia). In 2023, Century staked additional claims directly from the BLM at the Property.

1.5 Geology and Mineralization

The Clayton Valley is an endorheic basin in western Nevada near the southwestern margin of the Basin and Range Province, a vast physiographic region in the Western US. Horst and graben normal faulting is a dominant structural element of the Basin and Range and likely occurred in conjunction with deformation due to lateral shear stress, resulting in disruption of large-scale topographic features. Clayton Valley is the lowest in elevation of a series of regional playa filled valleys, with a playa floor of about 100 km^2 that receives surface drainage from an area of about 1,300 km^2. The valley is fault-bounded on all sides, delineated by the Silver Peak Range to the west, Clayton Ridge and the Montezuma Range to the east, the Palmetto Mountains and Silver Peak Range to the south, and Big Smokey Valley, Alkali Flat, Paymaster Ridge, and the Weepah Hills to the north.

The western portion of the project area is dominated by the uplifted basement rocks of Angel Island which consist of metavolcanic and clastic rocks, and colluvium. The southern and eastern portions are dominated by uplifted, lacustrine sedimentary units of the Esmeralda Formation. Within the project area, the Esmeralda Formation is comprised of fine grained sedimentary and tuffaceous units, with some occasionally pronounced local undulation and minor faulting. Elevated lithium concentrations, generally greater than 600 ppm, are encountered in the local sedimentary units of the Esmeralda Formation from surface to at least 142 meters below surface grade (mbsg). The lithium-bearing sediments primarily occur as silica-rich, moderately calcareous, interbedded tuffaceous mudstone, claystone, and siltstone.

1.6 Drilling and Sampling

Surface samples of outcropping claystone, tuffaceous mudstone and soil have been collected using standard hand tools, placed directly into cloth sample bags marked with a blind sample number and their location recorded with a global positioning system (GPS). Analytical results indicated elevated lithium concentrations over most of the area sampled and provided information for generating drill targets.

Different operators have carried out drilling, with the first drilling on the Property in 2017. Century drilled 33 core holes totaling 2,992.7 m from 2017 to 2019. In 2022, Century drilled eight sonic holes totaling 579.1 m. Enertopia drilled five holes (including one metallurgical hole) on the Property, totaling 439.8 m in 2018. The Mineral Resource estimate is based on 45 core holes totaling 3,955.2 m of drilling. All core drilling was conducted by at-arms-length drilling contractors. Drill hole collars were surveyed by Century geologists using a handheld Garmin GPS MAP 64s and then applied to the elevation on lidar. Downhole surveys were not conducted due to deposit type and relatively shallow holed depths. Core was geologically logged, photographed and prepped for splitting, sample processing and assay under the direction of Century geologists. Core recoveries ranged from a low of 67.35% to a high of 100% but generally were greater than 90% for holes drilled on the Property.

All core and surface samples were delivered to one of two ISL-certified, independent laboratories, ALS USA or Bureau Veritas Minerals (BV Minerals) in Reno, Nevada by Century personnel.

At the laboratory, samples were crushed, split and pulverized. Samples from holes drilled in 2017 and 2018 were analyzed by 33-element, 4-acid inductively coupled plasma (ICP)-atomic emission spectroscopy (AES) or ICP-mass spectrometry (MS) and soil and rock chip samples were analyzed by 33-element 4-acid ICP-AES and/or 35-element aqua regia atomic absorption spectrometry (AAS). Samples from the 2019 drilling and the CM-series were analyzed by 60-element, 4-acid ICP-MS, which added the ability to test for rare earth elements. Samples from the sonic holes were digested using aqua regia and subjected to ALS USA's MEMS-61r method which is an ICP-MS and ICP-AES analysis of digested 0.5 g samples.

Century's quality assurance (QA) and quality control (QC) procedures includes the insertion of blanks, certified reference material (CRM) standards and duplicate samples which were routinely inserted into the sample stream to monitor analytical accuracy, precision, and contamination, respectively.

1.7 Data Verification

The exploration programs completed at the Project to date are appropriate for the style of deposit and mineralization present on the Property.

The drilling and sample collection methods used by Century at the Project are acceptable for Mineral Resource and Mineral Reserve estimation.

The sample preparation, analysis, and security practices used by Century at the Project are acceptable and meet industry-standard practices and are sufficient to support Mineral Resource and Mineral Reserve estimation.

Century initiated a dynamic QA/QC program for the Project and used it in all sample collection and analysis streams from 2017 to 2022. The QA/QC protocol became more comprehensive and detailed with progressive years. The QA/QC submission rates meet industry-accepted standards and did not detect any material sample biases in the data reviewed that support the Mineral Resource and Mineral Reserve estimations.

Data verification concluded that the data collected from the Project adequately supports the geological interpretations and constituted a database of sufficient quality to support the use of the data in Mineral Resource and Mineral Reserve estimation.

1.8 Metallurgical Test Work

Metallurgical, process development, and pilot plant testing completed through mid- 2023 was used for flowsheet development, equipment selection, evolution of operating parameters and development of process design criteria. All test work was performed on material collected from the area of the proposed pit and is considered representative of the Mineral Reserves. Metallurgical practices identified off the shelf technology that was readily scalable. Where data was not available, assumptions were made based on best industry practices and recommendations from process consultants familiar with the metallurgical processes associated with the key aspects of lithium production from claystone. The pilot plant has operated more than two years to minimize technical challenges.

Attrition scrubbing has proven to be an effective method to reduce lithium-bearing clays to their smallest natural component, remove gangue material, and allow for optimum leaching without grinding.

An optimal acid dose to maximize lithium production was determined during testing. Based on later pilot plant results, approximately 88% lithium extraction can be expected in the leach stage.

Neutralization using sodium hydroxide is accomplished after leaching followed by pressure filtration to produce a filter cake suitable for dry stacking in the tailings storage facility (TSF).

Direct lithium extraction (DLE) has proven to be successful in removing deleterious elements such sodium, potassium, calcium, magnesium and boron, eliminating the need for evaporation in the flowsheet.

Treatment of concentrated lithium solution from the pilot plant has consistently resulted in lithium carbonate grading at greater than 99.8%. The chlor-alkali plant generates hydrochloric acid and sodium hydroxide for use in the process. At the design rates, surplus sodium hydroxide will be produced and available for sale.

Sufficient water supply is permitted for the current flowsheet design and operating parameters. No concerns were identified that would impact process performance or reagent consumption.

1.9 Mineral Resource Estimate

The Mineral Resource estimate presented in Table 1-1 assumes open pit mining methods and is reported in accordance with 2014 CIM Definition Standards. The Mineral Resource is reported at a break-even cut-off grade of 200 ppm Li was determined based on operating costs, process recovery and a lithium price of $24,000/t.

QP Lane is not aware of any known legal, political, environmental, permitting, title, taxation, socio-economic, marketing, mining, metallurgical, or other factors that would further materially affect the Mineral Resource estimate, other than what is described in this Report.

Table 1-1: Clayton Valley Mineral Resource Estimate

Domain	Tonnes Above Cut-off (millions)	Li Grade (ppm)	Li Contained (Mt)	LCE (Mt)
Measured				
Tuffaceous mudstone	49.12	787	0.039	0.206
Claystone all zones	682.84	1,055	0.720	3.835
Siltstone	126.31	717	0.091	0.482
Total	**858.26**	**990**	**0.850**	**4.523**
Indicated				
Tuffaceous mudstone	17.33	715	0.012	0.066
Claystone all zones	184.74	972	0.180	0.956
Siltstone	78.26	739	0.058	0.308
Total	**280.33**	**891**	**0.250**	**1.329**
Measured + Indicated				
Tuffaceous mudstone	66.45	768	0.051	0.272
Claystone all zones	867.58	1,037	0.900	4.791
Siltstone	204.57	725	0.148	0.790
Total	**1,138.59**	**966**	**1.099**	**5.852**
Inferred				
Tuffaceous mudstone	22.67	761	0.017	0.092
Claystone all zones	125.42	883	0.111	0.590
Siltstone	39.19	652	0.026	0.136
Total	**187.28**	**820**	**0.154**	**0.817**

1. The effective date of the Mineral Resource Estimate is April 29, 2024. The QP for the estimate is Ms. Terre Lane, MMSA, an employee of GRE and independent of Century.
2. The Mineral Resources are constrained by a pit shell with a 200 ppm Li cut-off and density of 1.505 g/cm^3. The cut-off grade considers an operating cost of $20/t mill feed, process recovery of 78% and a long-term lithium carbonate price of $24,000/t.
3. The Mineral Resource estimate was prepared in accordance with 2014 CIM Definition Standards and the 2019 CIM Best Practice Guidelines.
4. Mineral Resource figures have been rounded.
5. One tonne of lithium = 5.323 tonnes lithium carbonate.
6. Mineral Resources are inclusive of Mineral Reserves.

1.10 Mineral Reserves

The pit-constrained Mineral Resources were used to derive the Mineral Reserve estimate presented in Table 1-2. Mineral Reserves were classified in accordance with the 2014 CIM Definition Standards. Modifying factors were applied to the Measured and Indicated Mineral Resources to convert them to Proven and Probable Mineral Reserves. This was accomplished with a mine production plan based on selected areas >900 ppm generating six pit phases to support a target plant feed rates of 7,500 t/d for the first four years (Project Phase 1), 15,000 t/d for the next four years (Project Phase 2) and 22,000 t/d (Project Phase 3) for the remainder of the Project.

QP Lane is not aware of any known legal, political, environmental, permitting, title, taxation, socio-economic, marketing, mining, metallurgical, or other factors that would further materially affect the Mineral Reserve estimate, other than what is described in this Report.

1.11 Mining

The deposit will be mined in 2-m wide x 0.3125-m deep cuts by a cold planer (CAT PM620 or equivalent) and placed into windrows of loose material for drying. The consolidated sediments are free digging. No drilling or blasting will be required. After several days of drying, a scraper will remove the windrowed material to the bottom of the pit ramp for removal by a series of jump conveyors. The material will then be transferred to overland conveyors and transported to a radial stacker and run-of-mine (ROM) stockpile located at the processing plant. The number of jump conveyors will be limited to the number required to exit the pit up the ramp.

The waste material and low-grade mineralized material will be removed using scrapers and hauled to waste and low-grade material stockpiles, respectively. Some waste material will be backfilled into the pit phases to prepare the pit phases for construction of a lined tailings storage facility. Some low-grade material will be used to construct 30 cm-thick compacted clay liners for the waste and low-grade material stockpiles.

Table 1-2: Clayton Valley Mineral Reserve Estimate

Domain	Tonnes Above Cut-off (millions)	Li Grade (ppm)	Li Contained (Mt)	LCE (Mt)
Proven				
Tuffaceous Mudstone	8.68	1,159	0.010	0.054
Claystone Zone 1	122.34	1,135	0.139	0.739
Claystone Zone 2	111.19	1,161	0.129	0.687
Claystone Zone 3	24.18	1,140	0.028	0.147
Siltstone	0.00		0.000	0.000
Total	**266.39**	**1,147**	**0.306**	**1.626**
Probable				
Tuffaceous Mudstone	0.01	1,147	0.000	0.000
Claystone Zone 1	8.67	1,123	0.010	0.052
Claystone Zone 2	7.26	1,190	0.009	0.046
Claystone Zone 3	5.32	1,234	0.007	0.035
Siltstone	0.00		0.000	0.000
Total	**21.26**	**1,174**	**0.025**	**0.133**
Total Proven and Probable	**287.65**	**1,149**	**0.330**	**1.759**

1. The effective date of the Mineral Reserve Estimate is April 29, 2024. The QP for the estimate is Ms. Terre Lane, MMSA, an employee of GRE and independent of Century.
2. The Mineral Reserve estimate was prepared in accordance with 2014 CIM Definition Standards and 2019 CIM Best Practice Guidelines.
3. Mineral Reserves are reported within the final pit design at a mining cut-off of 900 ppm. The mine operating cost is $5.44/t milled, processing cost of $40.9/t milled, G&A cost of $2.68/t milled and a credit for the NaOH sales of $28.95/t milled. The NaOH sales credit is proportionally applied to all the operating costs to get appropriate costs for the cut-off grade calculation. The cut-off grade considers a mine operating cost of $2.22/t, a process operating cost of $16.69/t milled, a G&A cost of $1.09/t milled, process recovery of 78% and a long-term lithium carbonate price of $24,000/t.
4. The cut-off of 900 ppm is an elevated cut-off selected for the mine production schedule as the elevated cut-off is 4.5 times higher than the break-even cut-off grade.
5. Mineral Reserve figures have been rounded.
6. One tonne of lithium=5.323 tonnes lithium carbonate.

Mining will progress from the southwest where mineralized clays outcrop, to the northeast where higher grade clays dip underneath low-grade and waste materials. This approach in scheduling results in limited handling of low grade and waste material early in the project life.

The final pit design includes six pit phases based on target plant feed rates of 7,500 t/d in the first four years, 15,000 t/d for the next four years and 22,500 t/d for the remainder of the Project, resulting in a mine life of 40 years.

1.12 Recovery Methods

The process design was developed from metallurgical test work conducted on the Project. The plant availability will be 92%, has a process capacity of ranging from an initial 7,500 t/d of mill feed to 15,000 t/d and 22,500 t/d in two subsequent Project Phases of development. Estimated production of lithium carbonate ranges from 36 t/d to 107 t/d.

ROM material delivered to the stockpile is first passed through a roll crusher followed by attrition scrubbing prior to hydrochloric acid leaching. The feed material will be leached for four hours before being neutralized with sodium hydroxide to precipitate impurities. Neutralized slurry is filtered and dry stacked in the TSF. The filtrate, or pregnant leach solution (PLS) is pumped through polishing filters before flowing to the lithium-ion exchange (IX) circuit for purification. PLS is pumped through two polishing filters arranged in parallel, before advancing to the lithium IX circuit for extraction. Lithium is eluted from the resin and the lithium IX barren solution is sent to a neutralization stage where calcium and magnesium are precipitated.

Lithium-rich eluate solution from the lithium IX circuit is pumped to a softening circuit for impurity cation removal.

Lithium in solution is further concentrated in two stages by using an ultra-high-pressure reverse osmosis (UHP-RO) system and an evaporator system to achieve the optimal lithium concentrations required in the lithium precipitation stage. At the precipitation reactors, soda ash is added to precipitate lithium in the form of lithium carbonate slurry. The slurry is then centrifuged, washed, dried, milled and bagged to produce lithium carbonate as final product.

The chlor-alkali plant will produce sodium hydroxide and hydrochloric acid that are regenerated and used as pH control and leaching reagents in the production of lithium carbonate. The chlor-alkali plant is sized according to acid requirements of the Project and ranges from an initial 750 t/d to 2,250 t/d of hydrochloric acid (HCl) at 100% basis.

Power required for the process facilities will be supplied via power lines from the electrical grid.

1.13 Project Infrastructure

The Project is located near existing and planned infrastructure. Access to the site will be via a new 1.8 km long road connecting to the existing county road to Silver Peak. The terrain around the mine and plant site allows easy access for construction of internal roads and facilities.

Key elements of the process plant facilities are the ROM stockpile, attrition scrubbers, leach and neutralization tanks, pressure filters, DLE and lithium carbonate plants, RO systems, and chlor-alkali plant.

Water supply is designed based on a 31.2 km long pipeline from a source west of the Project. Potential exists to locate the source of water supply closer to the Project. As designed, the water supply is sufficient through Project Phase 2. Additional water supply will be needed to support Project Phase 3.

The Project design also includes on-site water storage and distribution, runoff diversions and ponds, as well as reagent and fuel storage.

The tailings storage facility (TSF) was designed in six phases to hold 288 Mt of tailings material. The TSF was planned for dry stacking filter cake from the filtration plant with the tailings placed by conveyor on a geomembrane liner. TSF Phases 1 and 2 will be constructed on the ground surface east of the open pit mine. TSF Phases 3 to 6 will be constructed as a combination of in pit fill and ground surface to form one TFS upon completion.

Power supply will be provided from the grid and regional electric utility. The anticipated average electrical loads range from 117.16 MW in Project Phase 1 to 323.37 MW in Project Phase 3.

1.14 Marketing and Contracts

Current commodity market research reports from Benchmark Mineral Intelligence (Benchmark) and Global Exchange & Trading Inc. (Global Exchange), were used to assess the long-term prices for lithium carbonate and sodium hydroxide, respectively. For lithium, a supply deficit is forecast by 2030 given the worldwide transition to electric vehicles (EVs) and use of lithium in lithium-ion batteries and stationary battery storage. In the US, growth in the demand for sodium hydroxide is linked to the growth in US Gross Domestic Product.

The lithium carbonate price used to estimate Mineral Resources and Mineral Reserves, and in the economic analysis for the Project is $24,000/t. The sales price for sodium hydroxide used in the economic analysis is $600/dmt. These prices are used for the base case in this Report and are free on board (F.O.B.) the Project.

There are currently no contracts or sales agreements in place for mining, concentrating, refining, transportation handling, hedging, forward sales contractors or arrangements.

1.15 Environment, Permitting and Social Considerations

Most of the baseline environmental surveys have been conducted in preparation for National Environmental Policy Act (NEPA) compliance through the BLM, the federal land management agency. Initial meetings have been held with the BLM and other federal and state agencies to initiate the permitting process with the BLM including NEPA compliance. Initial feedback identified several gaps in reference to field surveys or desktop studies, which are being addressed.

Several agencies will require permits and approvals the primary ones being the BLM and Nevada Division of Environmental Protection (NDEP). Following approval of baseline data, a Plan of Operations (PoO) will be submitted with its approval initiating the National Environmental Policy Act (NEPA) process. Compliance with NEPA will involve the completion of an Environmental Impact Study (EIS) and issuance of the Record of Decision by the BLM that is expected to take up to 24 months. NDEP will be responsible for issuance of the other major State permits including the Water Pollution Control Permit (WPCP), Reclamation Permit, Air Quality Operating Permit and other minor permits.

Given the current mining activity in Esmeralda County, additional mining in the area is likely to have a positive impact on the economy. Potential risks to the socioeconomic resources would be the ability for the local infrastructure to support the added workforce in the area.

Consultation with Native American Tribes is generally conducted as a government-to-government process while other community relations activities occur during public scoping and public comment periods associated with the NEPA process.

Reclamation and closure activities will include several activities to provide chemical and physical stability of the mine facilities that will remain, including the TSF, waste rock storage facilities (WRSFs), roads, ponds, and a partially backfilled pit. Post-closure monitoring will continue for a minimum of five years after closure. Based on the current design, the Nevada Standardized Reclamation Cost Estimator (SRCE) was used to develop a preliminary reclamation cost estimate of $13.4 million.

1.16 Capital and Operating Costs

1.16.1 Capital Costs

A Class 3 capital cost estimate was prepared in accordance with AACE International Guidelines Practice No. 47R-11 with an expected accuracy to be within +/- 15% of the Project's final cost, including contingency. Costs have been escalated to second quarter 2024 US dollars.

The capital cost is $1,581 million for the Project's initial phase of development, which is followed by two additional phases of expansion as summarized in Table 1-3. The Project Phase 2 capital costs represent the expansion of the process facilities and infrastructure established in Project Phase 1. The Project Phase 3 capital costs support an additional processing plant and facilities not built in the previous phases.

Sustaining capital is estimated to be $315.1 million and considers the cost for mining equipment replacement and tailings facility expansions.

Table 1-3: Capital Cost Summary

Description	Cost ($M)		
	Project Phase 1 (Initial)	Project Phase 2 (Years 3 & 4)	Project Phase 3 (Years 8 & 9)
	7,500 t/d	Expansion to 15,000 t/d	Expansion to 22,500 t/d
Mining	31.7	6.2	8.0
Site Preparation and Roads	32.7	-	20.7
Process Facilities	1,013.2	541.0	972.7
Tailings/Waste Management	23.5	-	-
On-site Services/Utilities	68.4	4.7	37.7
Buildings and Facilities	26.9	-	4.0
Off-site Facilities	11.7	-	-
Total Direct Costs	**1,208.1**	**552.0**	**1,043.1**
Owner's Costs	33.8	33.8	33.8
Indirect Costs	200.3	38.7	156.3
Working Capital	23.8	-	-
Total Indirect Costs	**257.9**	**72.5**	**190.1**
Total Direct + Indirect Costs	**1,466.0**	**624.5**	**1,233.1**
Escalation	19.1	6.1	-
Contingency	95.7	26.4	105.3
Total Capital Cost	**1,580.7**	**657.0**	**1,338.5**

Note: Figures may not sum due to rounding.

1.16.2 Operating Costs

The average annual operating cost is estimated at $128 million or $49.45/t of plant feed for Project Phase 1 to $308 million or $38.27/t of plant feed for Project Phase 3. Average operating costs for each phase are summarized in Table 1-4.

Table 1-4: Operating Cost Summary

Cost Area	Avg $(000s)/a	Avg $/t feed	Avg $/t LCE	% of Total
Project Phase 1				
Mining	13,475	5.44	1,209	11
Process	48,655	17.77	3,745	38
Process (chlor-alkali plant)	58,978	23.76	5,064	46
G&A	6,784	2.48	522	5
Total	**127,892**	**49.45**	**10,540**	**100**
Project Phase 2				
Mining	24,632	4.47	740	11
Process	72,678	13.27	2,798	33
Process (chlor-alkali plant)	114,163	20.85	4,342	52
G&A	7,324	1.34	282	4
Total	**218,797**	**39.93**	**8,162**	**100**
Project Phase 3				
Mining	21,606	2.82	549	7
Process	109,301	13.30	2,805	35
Process (chlor-alkali plant)	169,417	21.19	4,366	55
G&A	7,864	0.96	200	3
Total	**308,188**	**38.27**	**7,920**	**100**

Note: Figures may not sum due to rounding.

1.17 Economic Analysis

The results of the economic analyses discussed in this section represent forward-looking information as defined under Canadian securities law. The results depend on inputs that are subject to several known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those presented here. Information that is forward-looking includes the following:

- Mineral Resource and Mineral Reserve estimates
- Assumed commodity prices
- The proposed mine production plan
- Projected mining and process recovery rates
- Proposed processing method
- Proposed capital and operating costs
- Assumptions as to environmental, permitting, and social risks.

Additional risks to the forward-looking information include the following:

- Changes to costs of production from what are estimated
- Unrecognized environmental risks

- Unanticipated reclamation expenses
- Unexpected variations in quantity of mineralized material, grade, or recovery rates
- Geotechnical or hydrogeological considerations during mining being different from what was assumed
- Failure of mining methods to operate as anticipated
- Failure of plant, equipment, or processes to operate as anticipated.

The economic analysis of the Project was undertaken using a discounted cash flow (DCF) model in Microsoft Excel using only the first 40 years of Project life. Cash flows in the model were based on fourth-quarter 2024 US dollars with no escalation of costs or revenues. The DCF model uses a base-case discount rate of 8%. Financing costs were excluded from the valuation.

The analysis included generating gross sales from lithium carbonate and sodium hydroxide, before-tax cash flow, which is gross sales minus operating costs, and after-tax cash flow, which is before-tax cash flow minus taxes and capital costs. The net present value (NPV) at a discount rate of 8% was calculated to determine the DCF, and internal rate of return (IRR) was calculated from the DCF.

The economic analysis of the Project generates positive after-tax results. The results show an after-tax NPV of $3.16 billion at an 8% discount rate, an IRR of 17.2% and a payback period of nine years.

The Project is most sensitive to fluctuations in the lithium price.

1.18 Interpretation and Conclusions

The Project is based on the mining and processing a large flat-lying, lithium claystone deposit. Mineral Reserves support a mine life of approximately 40 years. A chloride leaching process is used to extract lithium from the claystone followed by DLE, concentration, purification and precipitation of the lithium-bearing solution to recover the lithium into a marketable product.

The Project is designed for a three-phase production plan which will generate a life-of-mine (LOM) average of 34,000 t/a of lithium carbonate.

Positive cash flows are generated over each of the three production phases, including the initial development in Project Phase 1, sized at 7,500 t/d of mill feed, and two expansion phases, Project Phase 2, at 15,000 t/d, and Project Phase 3, at 22,500 t/d.

The after-tax discounted cash flow analysis results in a positive 17.2% IRR and a $3.16 billion NPV-8% at a lithium carbonate price of $24,000/t.

The Project is a potential source of lithium, a strategic commodity, for the US domestic market. Based on these results the Project merits detailed engineering and permitting. Further work is noted to address identified opportunities and risks.

1.19 Opportunities and Risks

The following opportunities have been identified for the Project:

- The Project is a potential new source of lithium in the US. The US government has designated lithium a strategic mineral, therefore, the Project may have opportunity for accelerated permitting, access to designated financial support programs, and possible tax incentives.
- Although the sales prices of lithium carbonate and sodium hydroxide are subject to market fluctuations, forecasts indicate growth in domestic US demand supporting the price assumptions in this Report.
- Interest in battery metals and lithium as a commodity has spurred improvements in processing and the application of new technologies such as DLE. Application of such improvements may benefit the Project through increased lithium recovery, decreased reagent consumptions, or reduced capital and/or operating costs.
- Sales of surplus sodium hydroxide have potential to contribute significantly to the Project's cash flow. Use of lower cost neutralizing reagents in lieu of sodium hydroxide, such as limestone, calcium oxide or magnesium hydroxide, may increase the amount of sodium hydroxide available for sale.
- The Project has a large open area south of the pit which has been identified as suitable for development of a solar power field. A preliminary assessment by Wood identified the potential for constructing a 120 MW solar field at this location.
- Century holds a 256 ha geothermal lease 7 km northeast of the Project. The site requires exploration drilling to determine geothermal energy potential. There are two other active geothermal exploration/development projects in the area which also represent possible additional sources of power supply.
- Alternative sources of water supply closer to the plant site will be investigated to reduce costs and to mitigate the risks in maintaining this pipeline along the roads that are subject to flash floods and erosion.
- Costs for the TSF could be reduced if the geomembrane liner is replaced or augmented with non-permeable materials from the Property, if determined acceptable with engineering and permitting requirements.
- The capital costs associated with concrete and foundations may be reduced by locating a source of aggregate closer to the Project.

Specific areas of risk identified for the Project include the following:

- The Project is vulnerable to changes in the general economy, and especially, to the rate of adoption of battery metals for use in the EV market and energy storage. Changes in the sale price of lithium carbonate and sodium hydroxide may drop due to market fluctuations, possible oversupply from new and existing producers and/or reduction in demand.
- Permitting constraints or delay in the NEPA approval process may occur due to public or non-governmental organization (NGO) opposition to NDEP and BLM permitting process and approvals.

- Water supply for the Project could be impacted by unforeseen political or legal challenges to Century's water rights permit; damage to constructed pipeline or insufficient water volume at the source under water rights permits for the Project.
- The Project could be impacted by inability to secure a favorable power purchase agreement and/or limited by the power available for the Project.
- Average density was used in the estimation of Mineral Resources and Reserves. Actual tonnages may vary if densities differ locally between the different clay units. Lower than expected process recoveries for lithium and/or higher reagent consumptions may occur due to unforeseen changes in the estimated Mineral Reserves.
- Samples of tailings materials tested for the TSF design may not reflect the current process design.
- Strength values of liners in TSF design are based on conservative published data, not test work. Because of this, additional test work may be required for final engineering and/or permit requirements.
- Geotechnical investigations are limited to shallow surface borings, test pits and geophysical surveys. Additional test work may be required in detailed engineering to support the foundation designs for the process facility and TSF.
- Potential for increased capital cost and schedule delay may occur if potentially acid generating material is identified, requiring lining of low grade stockpiles and/or WRSFs.

1.20 Recommendations

Further work to advance the Project prior to detailed engineering and permitting is estimated at a cost of $5.63 million. The recommendations include 1) further testing at the pilot plant to continue to evaluate ways to improve revenues and confirm metallurgical characteristics of deeper materials in the deposit, 2) a drilling program to assess the potential for an area of relatively higher grade lithium, provide material for density and geotechnical test work, and potentially increase confidence in the Mineral Resource estimate, 3) and a drilling program to evaluate two areas identified with potential as alternate sources of water supply.

2.0 INTRODUCTION

Wood, GRE and WSP were retained by Century to prepare a FS for the Clayton Valley deposit and prepare a NI 43-101 technical report for the Project.

2.1 Terms of Reference

The Report was prepared to support the disclosure in the news release dated 29 April 2024 entitled "Century Lithium Announces Positive Feasibility Study for the Clayton Valley Lithium Project, Nevada".

Mineral resource and reserve estimates were prepared in accordance with the CIM Best Practice Guidelines and reported in accordance with the CIM Definition Standards.

All measurements used for the Project are metric units unless otherwise stated. Tonnages are in metric tonnes, and grade is reported as parts per million (ppm) unless otherwise noted.

All currency amounts in this FS are presented in US dollars.

The project is planned to produce lithium carbonate as its primary product and includes the provision for the sale of surplus sodium hydroxide from its on-site chlor-alkali plant. For reporting purposes, all production is quoted in terms of lithium carbonate equivalent (LCE).

2.2 Qualified Persons

The following individuals are Qualified Persons (QP) for their content of the repot and meet the definition as required by NI 43-101, Standards of Disclosure for Mineral Projects:

- Ms. Terre A. Lane, Mining and Metallurgical Society of America (MMSA) 01407, Society for Mining, Metallurgy & Exploration (SME) Registered Member 4053005, Principal Mining Engineer, GRE
- Dr. Hamid Samari, MMSA 01519, Principal Geologist, GRE
- Mr. Todd S. Fayram, MMSA 01300, Senior Vice President Metallurgy, Century
- Mr. Haiming (Peter) Yuan, PE, PhD, Principal Geotechnical Engineer, WSP
- Mr. Paul Baluch, P.Eng, PE, Technical Director Civil/Structural/Architectural, Wood
- Mr. Alan Drake, P.L.Eng, Manager Process Engineering, Wood
- Mr. Farzad Kossari, P.Eng, Senior Lead Cost Estimator, Wood.

Ms. Lane takes responsibility for property description and location, accessibility, climate, local resources, infrastructure and physiography, Mineral Resource estimation, Mineral Reserve estimation, mining methods, market studies and contracts, mining capital and operating costs, economic analysis, and parts of the data verification, summary, introduction, interpretation and conclusions, and recommendations relating to those areas.

Dr. Samari takes responsibility for history, geological setting and mineralization, deposit types, drilling, 2022 sample preparation, analysis and security, and parts of the data verification, summary, introduction, interpretation and conclusions, and recommendations relating to those areas.

Mr. Fayram takes responsibility for mineral processing and metallurgical testing and parts of the data verification, summary, introduction, interpretation and conclusions, and recommendations relating to those areas.

Mr. Yuan takes responsibility for project infrastructure relating to the dry stack TSF, environmental studies, permitting, and social or community impact, and parts of the data verification, summary, introduction, interpretation and conclusions, and recommendations relating to those areas.

Mr. Baluch takes responsibility for project infrastructure with the exception of dry stack TSF and parts of the summary, introduction, interpretation and conclusions, and recommendations relating to that area.

Mr. Drake takes responsibility for recovery methods, process operating costs, and parts of the data verification, summary, introduction, interpretation and conclusions, and recommendations relating to that area.

Mr. Kossari takes responsibility for the capital costs with the exception of mining, and parts of the summary, introduction, interpretation and conclusions, and recommendations relating to those areas.

2.3 Site Inspections

Ms. Terre A. Lane, MMSA 01407, Society for Mining, Metallurgy & Exploration (SME) Registered Member 4053005 conducted a site visit to the Property on 21 March 2019 and from 31 May to 1 June 2022. The visit comprised access to the Property from Tonopah and Goldfield, Nevada. The examination of active drilling at the Project, and inspection of the core storage facility in Silver Peak, Nevada. While on site, Ms. Lane recommended geotechnical samples be collected from drill core at select intervals and requested an additional hole be drilled.

Dr. Hamid Sumari, MMSA 01519 conducted a site visit to the Property from 31 May to 1 June 2022. The visit comprised access to the Property from Tonopah, Nevada. The examination of surface geology, location and confirmation of 2022 drill hole collars, and visual inspection of sonic samples sorted at Century's facility at the Tonopah Airport. While at site Dr. Sumari collected 17 samples from the 2022 drilling campaign for check assay.

Mr. Todd Fayram, MMSA 01300 has visited the Property numerous times over the past five years. His most recent visit to the Property was 17 November 2023. During his visits, he has identified potential plant layout areas, water issues, assessed road access challenges and has participated in numerous site tours during engineering reviews. Over the past three years, Mr.

Fayram has constructed and managed the Century pilot plant operation located in Amargosa Valley, approximately 160 km southeast of the project site. Mr. Fayram is also the owner and Principal of Continental Metallurgical Services, Inc. (CMS) (circa 2003) which maintains an office and laboratory in Butte, Montana where CMS has worked on and completed the Century metallurgical test work since 2017.

Mr. Peter Yuan, PE visited the Property twice in 2022. His most recent visit to the Property was 3 August 2022. During his visits, Mr. Yuan checked the site conditions of the planned TSF location and vicinity, reviewed progress of the geotechnical field investigation along with subsurface samples retrieved from the investigation. Mr. Yuan also visited the core storage facility in Reno in April 2022 when he reviewed core handling, logging, sampling and storage procedures of select coreholes.

Mr. Baluch, P.Eng, PE, conducted a site visit to the Property on 8 November 2022. The visit comprised access to the property from Goldfield, Nevada. During his visit, he assessed the junction of the proposed plant site access road at Silver Peak Road, accessed the area of the proposed mine site facilities and reviewed the siting of the processing facilities from the topography perspective, observed the condition of surface soils and general drainage in the area, travelled to the south end of the proposed resource pit and the dry stack tailings to observe the local site conditions, and travelled part way along the access road towards the 16 to 1 Mine, the proposed source of the water supply.

Mr. Drake, P.L.Eng, visited the Century pilot plant operation located in Amargosa Valley from 24 October to 26 October 2022. During his visit he participated in discussions around the configuration of the pilot plant, observed the operation and reviewed relevant production data.

Mr. Kossari, P.Eng, has not visited the Property. When necessary, he relied on the information obtained from the other Wood QP who visited the site to help develop the capital cost estimate.

2.4 Effective Data

This Report has the following effective dates:

- Mineral resource estimate – April 29, 2024
- Mineral reserve estimate – April 29, 2024.

The overall effective date is April 29, 2024.

2.5 Sources of Information

Reports and documents listed in Section 27 were used to support the preparation of this Report. Additional information was requested from Century personnel where required with expert documentation referenced in Section 3.

Key sources of information for this Report include the following technical reports:

- Fayram, T. S., Lane, T. A., and Brown, J. J., 2021. NI 43-101 Technical Report Prefeasibility Study Clayton Valley Lithium Project, Esmeralda County, Nevada. Effective date August 5, 2020.
- Fayram, T. S., Lane, T. A., and Kalmbach, D. W., 2020. NI 43-101 Technical Report Prefeasibility Study Clayton Valley Lithium Project, Esmeralda County, Nevada. Effective date May 19, 2020.
- Lane, T., Harvey, T., Fayram, T., Samari, H., and Brown, J. J., 2018. Preliminary Economic Assessment Technical Report, Clayton Valley Lithium Project, Esmeralda County, Nevada., Effective date September 4, 2018.
- Lane, T., Harvey, T., Samari, H., and Brown, J. J., 2018. Mineral Resource Estimate NI 43-101 Technical Report, Clayton Valley Lithium Project Esmeralda County, Nevada, USA. Effective date May 1, 2018.
- Marvin, R. D., 2018. Dean Lithium Project National Instrument 43-101 Technical Report. Effective date February 3, 2018.

3.0 RELIANCE ON OTHER EXPERTS

The QPs have relied upon other expert reports, which provided information regarding property claim tenure, property contracts and agreements, royalties and taxation, and marketing.

3.1 Legal Status

The QPs have relied on other experts for property ownership and mineral tenure. Regarding mineral tenure to the property set forth in Sections 4.2 and 4.3, the QPs have relied entirely, and without independent investigation, on the legal opinion of Thomas Erwin, an attorney with Erwin Thompson Faillers through the following document:

- Erwin, T.P. (6 June 2024). Letter from Erwin Thompson Faillers [letter to Ms. Terre Lane].

This information is used in support of the property description and mineral rights and tenure, royalties, and any obligations that must be met to retain the property described in Section 4, and in support of assessing reasonable prospects of eventual economic extraction of the Mineral Resource estimates in Section 14, and demonstrating economic viability of the Mineral Reserve estimates in Section 15 and in support of assumptions used in the economic analysis in Section 22.

3.2 Taxation

The QPs have not independently reviewed the taxation information. The QPs have fully relied upon, and disclaim responsibility for, information supplied by Century's tax consultant Ben Haberman for information related to taxation contained in the following document:

- Haberman, B. (13 May 2024). Taxation for Clayton Valley Feasibility Study Economic Model [letter to Ms. Terre Lane].

This information is used in support of the sub-section on tax information and the tax inputs to the financial model that provides the after-tax analysis in Section 22, and the Mineral Reserve estimate in Section 15.

3.3 Marketing

The QPs have not independently reviewed the marketing and commodity pricing information for lithium carbonate and sodium hydroxide. The QPs have fully relied upon, and disclaim responsibility for, information supplied by Benchmark Mineral Intelligence (Benchmark) and Global Exchange related to marketing, including lithium carbonate and sodium hydroxide pricing information, respectively through the following documents:

- Benchmark. (2024). Lithium Price Forecast, Q1 2024.
- Global Exchange. (February 2024). US Chlor-alkali Market Update.

Benchmark is a well-known and established price reporting agency that specializes in price forecasting for a variety of metals and commodities including lithium carbonate.

The lithium carbonate price forecast is dependent on future demand a large part of which is the electrification of the automobile industry and conversion to renewable energy. Changes in global economies and public perception of these industries will affect demand and prices.

Similarly, Global Exchange is a well-known supplier and established forecaster of sodium hydroxide demand and prices.

The QP visited the websites of the above companies as well as the websites of other companies that offer price forecasts and found they had a similar outlook.

This market research information is used in Section 14 as support for the commodity price input and marketability of lithium carbonate when establishing reasonable prospects for eventual economic extraction, in Section 15 for support of the assumptions used in mine planning, and in Section 22 to support the lithium carbonate and sodium hydroxide pricing.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The Property is centered near 452,800 m east, 4,177,750 m north, WGS84, zone 11 north datum, in central Esmeralda County, Nevada. The Property is located 333 km northwest of Las Vegas, Nevada, and 354 km southeast of Reno, Nevada (Figure 4-1). The regional towns of Tonopah and Goldfield are 66 km northeast and 38 km east of the Property, respectively, and the small community of Silver Peak lies 10 km west of the Property. The Property lies within township 2 south, range 40 east and township 3 south, range 40 east, Mt. Diablo Meridian. Access to the Property from Tonopah, is by traveling 35 km south on US Highway 95, then 30 km west on Silver Peak Road.

4.2 Mineral Rights and Tenure

The Property comprises 276 unpatented placer mining claims and 227 unpatented lode mining claims listed in Table 4-1, detailed in Appendix A and shown in Figure 4-2. The claims are 100% owned by Cypress Holdings (Nevada) Ltd. a wholly owned subsidiary of Century, cover 2,286 ha and provide Century with the rights to access all brines, placer, and lode minerals on the claims. The claims lie within portions of sections 2, 10, 11, 14-17, 20-23, 26-28, and 32-35 of township 2 south, range 40 east and section 2, 3 and 5 of township 3 south, range 40 east, Mt. Diablo meridian in the eastern portion of Clayton Valley, Nevada. All lode and placer claims are unpatented US Federal mining claims administered by the Bureau of Land Management (BLM).

The Property comprises mining clams acquired through purchase from property vendors and mining claims acquired by Century through the staking of open ground.

- Glory property: Angel, Glory, McGee, JLS and Longstreet claims
- Dean property: Dean and Clay claims
- Enertopia property: Dan and Steve claims
- Century: DX, DLX, GX, GLX, NDL and NDP claims.

Most of the Property is controlled with a combination of placer and lode claims while a portion of the Property is controlled only with placer claims. The placer claims are 8.09 ha in size and staked as aliquot parts of a surveyed section, as required under placer mine claim regulations. The lode claims are a maximum of 183 m x 457 m in size or 8.36 ha each. The mineral rights to the lithium in the Mineral Resources and Mineral Reserves are covered by and controlled entirely by the lode claims.

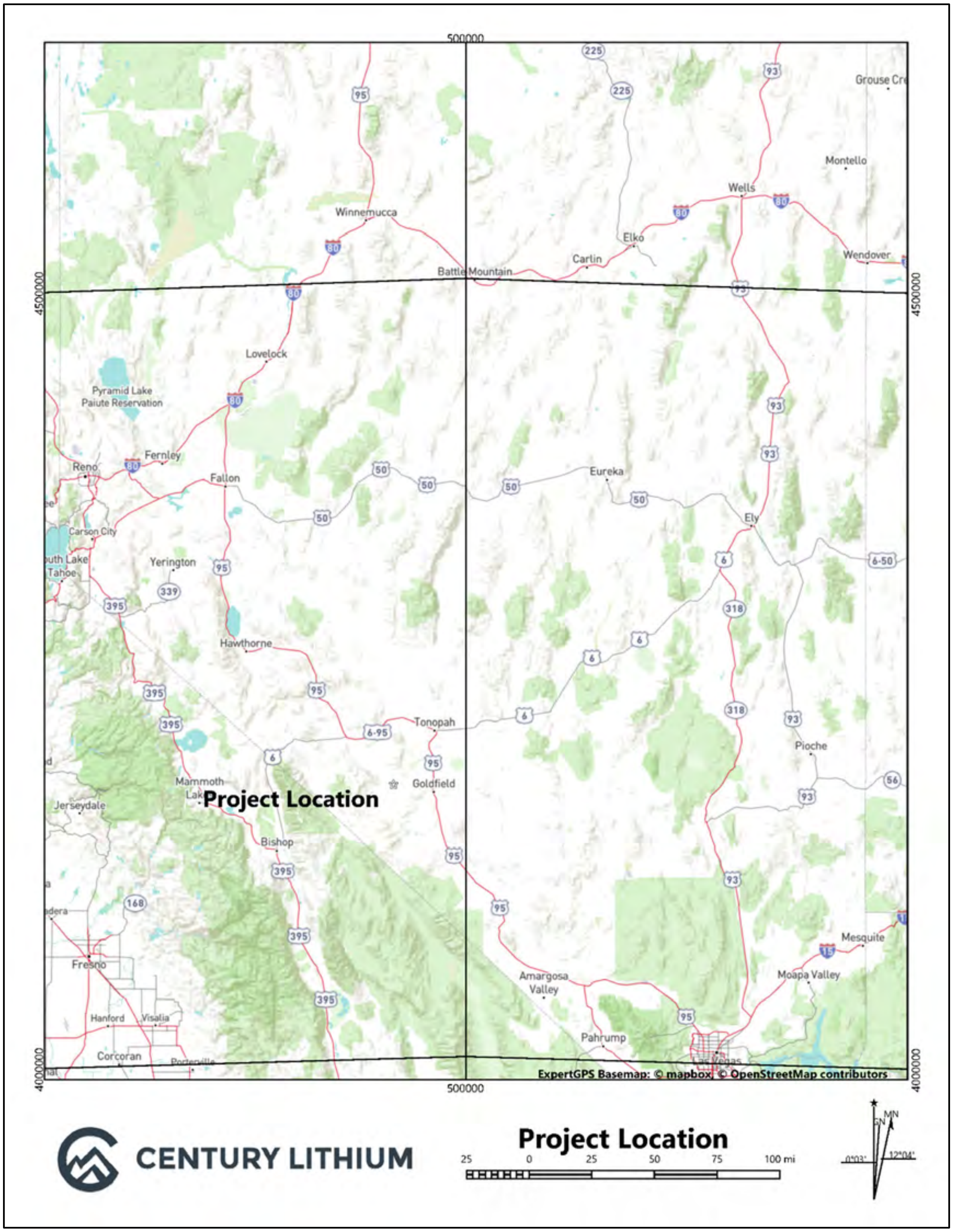


Figure 4-1: Project Location Map (Source: Century, 2023)

Table 4-1: Active Mining Claims

Serial Number From	Serial Number To	Number of Claims
Placer Claims		
NV101330726	NV101330732	7
NV101332557	NV101332558	2
NV101333183	NV101333200	18
NV101333335	NV101333337	3
NV101333920	NV101333931	12
NV101378980	NV101378995	16
NV101379917	NV101379937	21
NV101388149	NV101388158	10
NV101475862	NV101475880	19
NV101476771	-	1
NV101553227	NV101553228	2
NV101554268	NV101554278	11
NV101554401	NV101554405	5
NV101739343	-	1
NV101783884	NV101783885	2
NV101850484	NV101850490	7
NV105234190	NV105234289	100
NV105290433	NV105290468	36
NV106301926	NV106301928	3
Total Placer Claims		**276**
Lode Claims		
NV101544583	NV101544600	18
NV101545389	NV101545401	13
NV101545664	NV101545684	21
NV101546706	NV101546724	19
NV101553229	NV101553242	14
NV101554264	NV101554267	4
NV101570738	NV101570758	21
NV101648143	NV101648158	16
NV101649338	NV101649358	21
NV101739334	NV101739342	9
NV101763412	NV101763421	10
NV101763801	NV101763821	21
NV101764201	NV101764213	13
NV101782338	NV101782358	21
NV106301910	NV106301915	6
Total Lode Claims		**227**

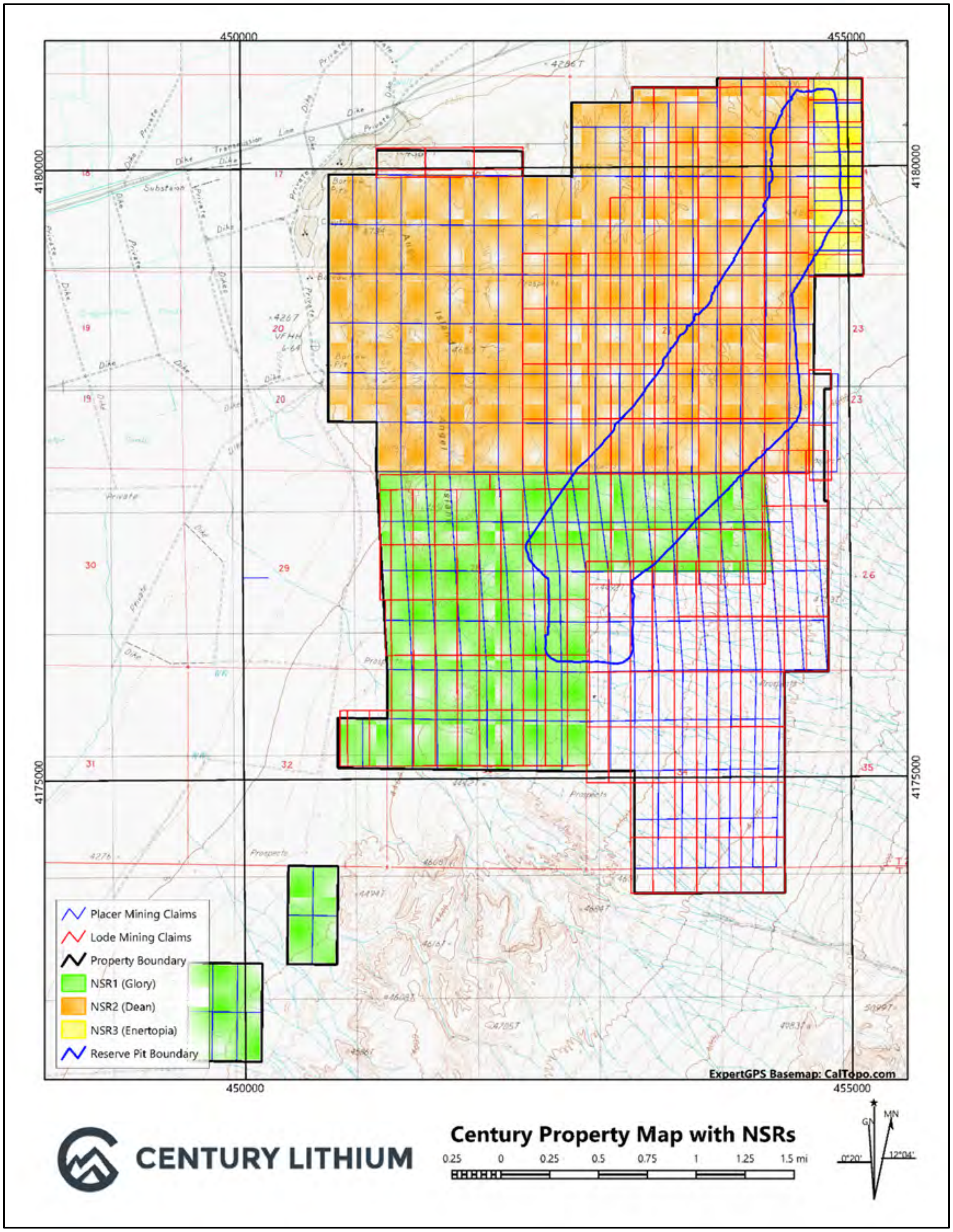


Figure 4-2: Property Land Map with Claims and Royalties (Source: Century, 2023)

The claims require annual filing of Intent to Hold and cash payments to the BLM and Esmeralda County totaling $167 per claim on or before September 1. All claims are all in good standing with the BLM and Esmeralda County through September 4, 2024. The Mineral Resource and Mineral Reserve estimates defined and described in this Report fall entirely on Century's unpatented mining claims.

4.3 Royalties

Multiple NSRs for lithium and other metals exist at the Property (Figure 4-2). They are related to the purchase of the Glory, Dean and Enertopia properties. The NSRs are further detailed in Appendix A.

- NSR1 (Glory) is 3% on 627 ha and can be brought down to 1% in return for $2 million in payments to the original property vendor.
- NSR2 (Dean) is 3% on 1,100 ha and can be brought down to 1% in return for $2 million in payments to the original property vendor.
- NSR3 (Enertopia) is two separate 1% NSRs for an aggregate of 2% on 65 ha, payable to royalty holding companies.

4.4 Environmental Liabilities

There are no current environmental liabilities known to Century on the Property. The Property is a greenfield site. There are rare small-scale pits and trenches from historical exploration efforts for salt or other metals on the Property. None of these very small disturbances appear to have any environmental liability. No buildings, mills, leach pads or other infrastructure has ever existed on the Property.

4.5 Permits

Project exploration activities to date were conducted using permits obtained BLM oversight utilizing the Notice of Intent under 43 CFR 3809 Exploration Notice procedures. Environmental and permitting considerations for future work are discussed in detail in Section 20.

4.6 Significant Factors and Risks

There are no known significant factors or risks that may affect Property access, title, or the right to perform work on the Property. The Property comprises unpatented US Federal mining claims administered by the BLM and the claims come with the right to access and conduct mineral exploration and mining under the guidelines and rules set forth in the General Mining Act of 1872, 30 U.S.C. §§ 22-42.

Additionally, according to the investment attractiveness index discussed in the 2022 Fraser Institute Annual Survey of Mining Companies (Mejia and Aliakbari, 2023), Nevada is ranked number one out of 62 jurisdictions in the world ranking of investment attractiveness index for favorable mining jurisdictions for investment.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

The Property is accessed from Tonopah, Nevada by traveling 35 km south on US Highway 95, then 31 km west on Silver Peak Road, a county-maintained road. This road is paved up to the Project's north entrance.

5.2 Climate

The climate of the Clayton Valley is hot in summer, with average high temperatures in mid-30°C and cool in the winter with daily average lows between -8 to 0°C (Table 5-1). Precipitation is normally in the form of thunderstorms which can be very strong and cause violent flooding even miles from the actual storm. Other precipitation events, including snowfall, are limited due to the nature of the rain shadow produced by the mountain ranges to the west. Snow cover in winter is rare, and year-round low humidity aids in evaporation. Windstorms are common all year but occur predominantly in the summer and fall. It is expected that any future mining operations in the Project area will be year-round.

Table 5-1: Project Weather Information

Silver Peak, Nevada Average Weather Data						
Month	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
Average high in °C	8	12	17	21	27	32
Average low in °C	-7	-4	0	3	9	14
Avg. precipitation in mm	10	9.5	13.5	12	9.5	9.5
Month	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Average high in °C	37	35	30	23	14	8
Average low in °C	17	15	10	3	-3	-8
Avg. precipitation in mm	11.5	10	6.5	10	8	5.5

Source: www.usclimatedata.com/climate/silverpeak/nevada/united-states/usnv0084

5.3 Local Resources and Infrastructure

The Property that comprises the Project has sufficient rights to explore, develop and mine the lithium mineralization present. There is adequate land to accommodate the infrastructure required to operate a mine and processing facility, including, buildings, roads, ponds, tailings, and waste storage areas. The local communities are of adequate size to accommodate required skilled labor with this labor generally available in Nevada. The existing power grid and lines will support the Project with necessary upgrades. Water resources are limited in the valley, though Century owns a water rights permit for appropriation of up to 2,183,260 m^3 of water per year. Options are available to acquire additional water if needed through rights acquisition, purchase, or other agreements.

Local resources available vary depending on distance from the Project. Silver Peak (population 88) is the closest census designated place (CDP) to the Project and consists primarily of housing, a post office, library, and a restaurant/bar and few other services. The next closest CDP is Goldfield (population 324), the Esmeralda County seat, which has housing, small stores, a restaurant, motel, and government offices. Tonopah (population 2,493) is the Nye County seat and closest full-service town to the Project. It has housing, grocery stores, restaurants, lodging, banks, hardware stores and government offices. Employment in Tonopah consists of service industry, government, mining, and industrial jobs. Experienced processing and other technical labor should be available as the Project is in a region of active lithium brine extraction, precious metals mining and solar power generation.

Infrastructure available includes paved and well-maintained gravel roads, power lines near the northern border of the Project, and substations at Silver Peak and east at Alkali Hot springs. NV Energy plans to construct its Greenlink West Project, a new 525-kilovolt (kV), electric transmission line, that will run from North Las Vegas to Reno. The project is in the permitting stage and is planned to run within 3 km east of the Project with a substation near the junction of 265 north from Silver Peak and US Highway 95.

5.4 Physiography

The Property is located in the southwestern margin of the Basin and Range Province within the Walker Lane geologic trough. The valley has a total watershed area of 1,430 km^2 and the floor of the valley lies at an altitude of 1,317 meters above sea level (masl). The surrounding mountains rise over a thousand meters above the valley floor, with the highest surrounding mountain, Silver Peak at 2,859 masl. The valley is bounded to the west by the Silver Peak Mountain Range, to the south by the Palmetto Mountains, to the east by Clayton Ridge and the Montezuma Range, and to the north by the Weepah Hills. There is no permanent surface water in the Clayton Valley watershed, all watercourses are ephemeral and only active during periods of intense precipitation or spring snowmelt. At the project site, the terrain is dominated by mound-like outcrops of mudstone and claystone, cut by dry gravel-filled washes across a broad alluvial fan. Access in the Property in the areas of lithium mineralization is excellent due to the overall low relief of the terrain (Figure 5-1 and Figure 5-2). The terrain to the east increases in elevation towards the sources of the alluvial fan on Clayton Ridge. The terrain in the northwestern third of the Property is dominated by a ridge of older sedimentary and volcanic rocks known as Angel Island.

Vegetation at the Property is found within five ecological site types, coarse gravelly loam, dry sodic terrace, loamy, loamy slope and sodic loam. Various shrubs, grasses, forbs, herbaceous and cacti species are present across the Property.

Figure 5-1: Property Looking East Up Dry Wash – Clayton Ridge in Background (Source: Century, 2022)

Figure 5-2: Dry Wash Channel Cutting Claystone (Source: Century, 2021)

6.0 HISTORY

The first recorded mining activity in Clayton Valley was in 1864 with the discovery of silver at the town of Silver Peak. The playa in the center of Clayton Valley was mined for salt as early as 1906, and later explored for potash during World War II. Lithium was noted during the 1950s. In 1964, Foote Minerals acquired leases and began production of lithium carbonate at Silver Peak by 1967. Production of lithium carbonate from brine has continued to the present under several companies, currently under Albemarle Corporation (www.albamarle.com).

The occurrence of lithium in sediments of Clayton Valley was reported as early as the 1970s by the United States Geological Survey (USGS).

The Property has rare small-scale pits and trenched from historical exploration efforts, but no known production of lithium or other minerals has occurred on the Property.

In 2016, Century acquired rights to mining claims on the south and east side of Angel Island through purchase options on two contiguous claim blocks from a third-party vendor. The first purchase option was on the Glory property, consisting of the Angel, Glory, and McGee claims and later added the JLS and Longstreet claims. The second purchase option was on the Dean property consisting of the Dean claims and later added the Clay claims.

Surface sampling revealed high lithium concentrations in exposed outcrops of tuffaceous mudstones and claystones.

In 2017, Century drilled its first holes on the Dean property in two phases, DCH-1 through DCH-9, and DCH-10 through DCH-14, followed later in the year by drilling on the Glory property, GCH-1 through GCH-4.

In 2018, Century conducted additional exploration drilling, DCH-11 through DCH-17 and GCH-5 and GCH-6.

Exploration results on the Dean property were reported in a NI 43-101 technical report (Marvin, 2018).

The combined Dean and Glory properties were named the Clayton Valley Lithium Project. Two NI 43-101 technical reports, an initial mineral resource estimate (Lane et al., 2018a) and a preliminary economic assessment (Lane et al., 2018b), were completed.

Century staked additional claims directly from the BLM at the Property these included the DX, DLX, GX (1-16) and GLX claims.

Drilling in 2018 was conducted by a private company on Century owned claims. Century retained the drill cores for four holes, CM001 through CM004, through a settlement agreement reached in 2019.

In 2019, Century conducted additional exploration drilling, GCH-7 through GCH-12. The purchase of the Glory property was finalized. Century retained drill cores in their entirety from CM001 through CM004 in a settlement agreement completed late in the year.

In 2020, Century filed a NI 43-101 technical report of a PFS (Fayram et al, 2020), an internal mineral resource estimate was updated, testing using chloride-based leaching commenced and initial baseline studies were conducted. In 2021, Century amended the NI 43-101 technical report of the PFS with an updated mineral resource estimate (Fayram et al, 2021).

Leases were acquired for property at the Tonopah, Nevada airport and at del Sol Refining in Armargosa Valley, Nevada. Assembly of a pilot plant was completed, and a water rights permit was purchased.

Century amended the original Dean claims and staked additional Dean claims. This was done to meet the maximum size requirement of a placer claim owned by a corporation and did not alter the property size.

Century staked additional claims in 2021 which resulted in additional GX claims.

In 2022, Century purchased property from Enertopia Corporation (Enertopia) consisting of the Dan and Steve claims. The property included five core holes drilled by Enertopia.

A bulk sample of lithium bearing claystone was collected for pilot plant testing. A large diameter sonic drilling program was also conducted, resulting in core holes CVS-1 through CVS-8.

Century acquired a license for direct lithium extraction (DLE) technology for use at the pilot plant and Project. High-purity lithium carbonate was produced by Saltworks Technologies, Inc. (Saltworks) from solutions derived at the pilot plant.

In 2023, the NDL and NDP claims were staked. Additional baseline studies were conducted to assist in future permitting.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The Clayton Valley is an endorheic basin in western Nevada near the southwestern margin of the Basin and Range Province, a vast physiographic region in the Western US (Figure 7-1). Horst and graben normal faulting is a dominant structural element of the Basin and Range and likely occurred in conjunction with deformation due to lateral shear stress, resulting in disruption of large-scale topographic features. The Walker Lane, a zone of disrupted topography (Locke et al., 1940) perhaps related to right-lateral shearing (Stewart, 1967), is within a few kilometers of the northern and eastern boundaries of Clayton Valley. Walker Lane is not well defined in this area and may be disrupted by the east-trending Warm Springs lineament (Ekren et al., 1976), which could be a left-lateral fault conjugate to the Walker Lane (Shawe, 1965). To the west of Clayton Valley, the Death Valley-Furnace Creek fault zone is a right-lateral fault zone that may die out against the Walker Lane northwest of the valley. South of Clayton Valley are the Palmetto Mountains whose arcuate form is thought to represent tectonic "bending," a mechanism taking up movement in shear zones at the end of major right lateral faults (Albers, 1967).

In the mountains bordering the valley to the east and west, faults in Cenozoic rocks generally trend about N20°E to N40°E. Near the margins of the playa surface, fault scarps with two distinct trends were studied in detail (Davis and Vine, 1979). At the eastern margin, a set of moderately dissected scarps in Quaternary alluvial gravels strike about N20°E. In the east central portion of the valley, a more highly dissected set of scarps in alluvium and upper Cenozoic lacustrine sediments strikes about N65°E. If the modification of these fault scarps is similar to fault-scarp modification elsewhere in Nevada and Utah (Wallace, 1977; Bucknam and Anderson, 1979) the most recent movement on the N20°E set of scarps probably occurred less than 10,000 ya, while the last movement on the N65°E set is probably closer to 20,000 ya (Davis and Vine, 1979).

Regional basement rocks consist of Precambrian (late Neoproterozoic) to Paleozoic (Ordovician) carbonate and clastic rocks deposited along the ancient western passive margin of North America. Regional shortening and low-grade metamorphism occurred during late Paleozoic and Mesozoic orogenies, along with granitic emplacement during the mid to late Mesozoic (ca. 155 and 85 Mya). Tectonic extension began in the late Cenozoic (16 Mya) and continues today.

East of Clayton Valley, more than 100 km^2 of Cenozoic ash-flow and air-fall tuff is exposed at Clayton Ridge and as far east as Montezuma Peak. These predominantly flat lying, pumiceous rocks are interbedded with tuffaceous sediments between Clayton Ridge and Montezuma Peak; but at Montezuma Peak these rocks are altered considerably and dip at angles of as much as 30°. In the Montezuma Range, they are unconformably overlain by rhyolitic agglomerates.

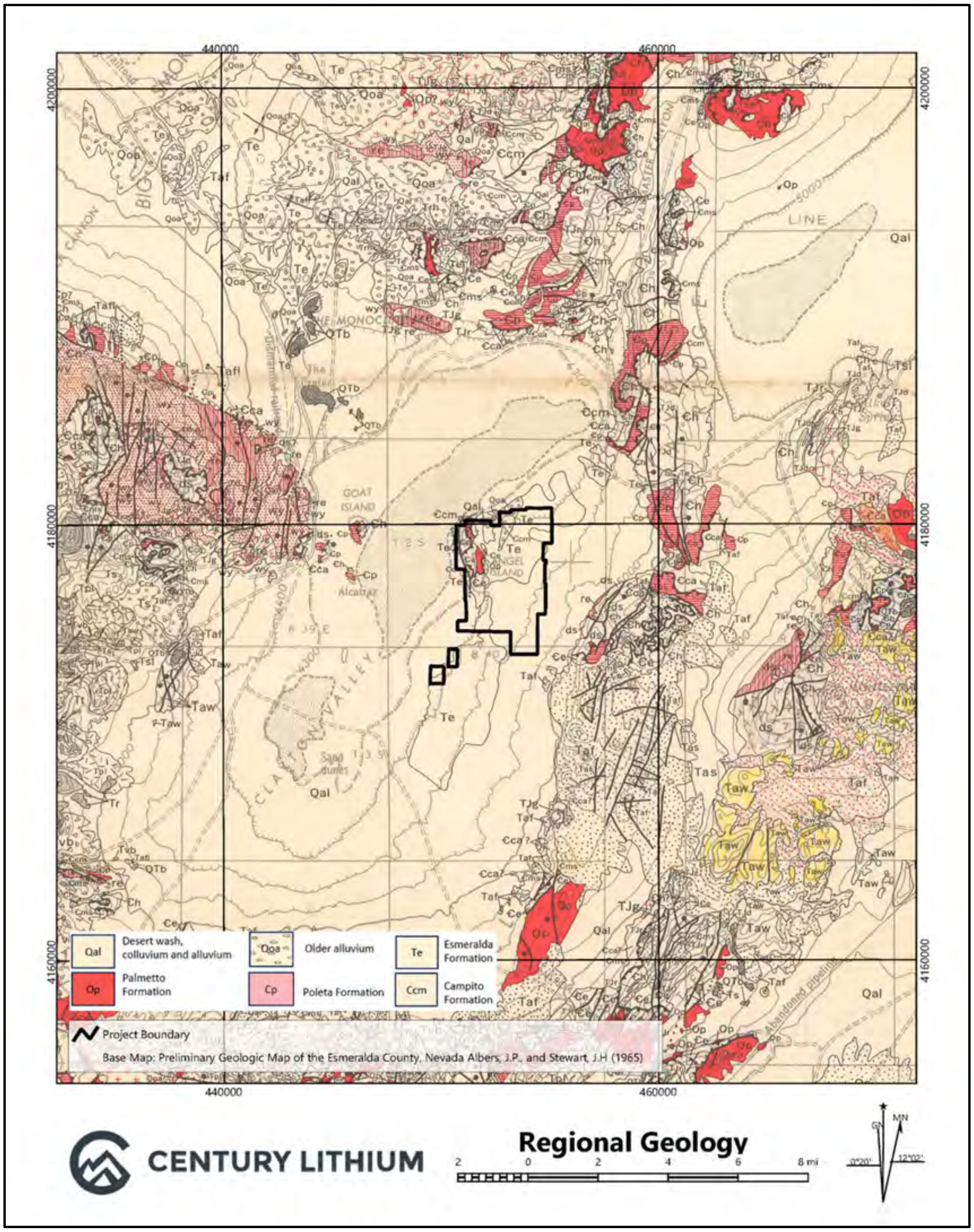


Figure 7-1: Regional Geology Map (Source: Century, 2024 modified after Albers and Stewart, 1965)

Davis et al. (1986) speculate that the source of these tuff sheets may be a volcanic center to the east near Montezuma Peak or to the south in the Montezuma Range, the Palmetto Mountains, Mount Jackson, or the Silver Peak center to the west.

Cenozoic sedimentary rocks are exposed in the Silver Peak Range, in the Weepah Hills, and in the hills due east of the Clayton Valley playa. These rocks all are included in the Esmeralda Formation (Turner, 1900). The Esmeralda Formation consists of sandstone, shale, marl, breccia, and conglomerate and is intercalated with volcanic rocks, although Turner excluded the major ash-flow units and other volcanic rocks in defining the formation. The rocks of the Esmeralda Formation in and around Clayton Valley apparently represent sedimentation in several discrete Miocene basins. The age of the lower part of the Esmeralda Formation in Clayton Valley is not known, but an air-fall tuff in the uppermost unit of the Esmeralda Formation has a K-Ar age of 6.9 ± 0.3 Mya Robinson et al, 1968).

7.2 Local Geology

Clayton Valley is the lowest in elevation of a series of local playa filled basins, with a playa floor of about 100 km^2 which collects surface drainage from an area of about 1,300 km^2. The valley is fault-bounded on all sides, delineated by the Silver Peak Range to the west, Clayton Ridge and the Montezuma Range to the east, the Palmetto Mountains and Silver Peak Range to the south, and Big Smokey Valley, Alkali Flat, Paymaster Ridge, and the Weepah Hills to the north.

The valley lies within an extensional half-graben system between a young metamorphic core complex and its breakaway zone (Oldow et al., 2009). The general structure of the north part of the Clayton Valley basin is known from geophysical surveys and drilling as a graben structure with its most down-dropped part on the east-northeast side of the basin along the extension of the Paymaster Canyon Fault and Angel Island Fault (Zampirro, 2005). A similar graben structure was identified in the south part of the Clayton Valley basin through gravity and seismic survey.

Multiple wetting and drying periods during the Pleistocene resulted in the formation of lacustrine deposits, salt beds, and lithium-rich brines in the Clayton Valley basin. Extensive diagenetic alteration of vitric material to zeolites and clay minerals has taken place in the tuffaceous sandstone and shale of the Esmeralda Formation, and anomalously high lithium concentrations accompany the alteration. The lacustrine sediment near the center of pluvial lakes in Clayton Valley is generally green to black calcareous mud. According to (Davis et al, 1986), about half of the sediments, by weight, are smectite and illite, which are present in nearly equal amounts, with the remaining half composed of calcium carbonate (10 to 20%), kaolinite, chlorite, volcaniclastic detritus, traces of woody organic material, and diatoms. These tuffaceous lacustrine facies of the Esmeralda Formation contain up to 1,300 ppm lithium and average 100 ppm lithium (Kunasz, 1974; Davis and Vine, 1979). Lithium bearing clays in the surface playa sediments contain from 350 to 1,171 ppm lithium (Kunasz, 1974). More recent work by

Morissette (2012) confirms elevated lithium concentrations in the range of 160-910 ppm from samples collected on the northeast side of Clayton Valley. Miocene silicic tuffs and rhyolites along the basin's eastern flank have lithium concentrations up to 228 ppm (Price et al., 2000).

7.3 Project Geology

The western portion of the project area is dominated by the uplifted basement rocks of Angel Island which consist of metavolcanic and clastic rocks, and colluvium. The southern and eastern portions are dominated by uplifted, lacustrine sedimentary units of the Esmeralda Formation. Locally the Esmeralda Formation is comprised of fine grained sedimentary and tuffaceous units, with occasional pronounced local undulation and minor faulting (Figure 7-2 and Figure 7-3).

The resulting topography consists of elongate, rounded ridges of exposed Esmeralda Formation separated by washes and gullies filled with alluvial cobble, gravel, and fine sediment. The ridge tops are commonly mantled weathered fragments of rock (desert pavement) sourced from the surrounding highlands. Century provides the following description of the stratigraphic units of the Esmeralda Formation in the project area, which form a laterally and vertically continuous stratigraphic section which underlies the south and eastern portions of the project area. Cross-sections showing logged geology, geologic interpretations, and assay results from the assayed core intervals are presented in report Section 14 with Figure 14-22 to Figure 14-31.

Figure 7-2: Exposed Esmeralda Formation in Southern Portion of Project (Source: GRE, 2018)

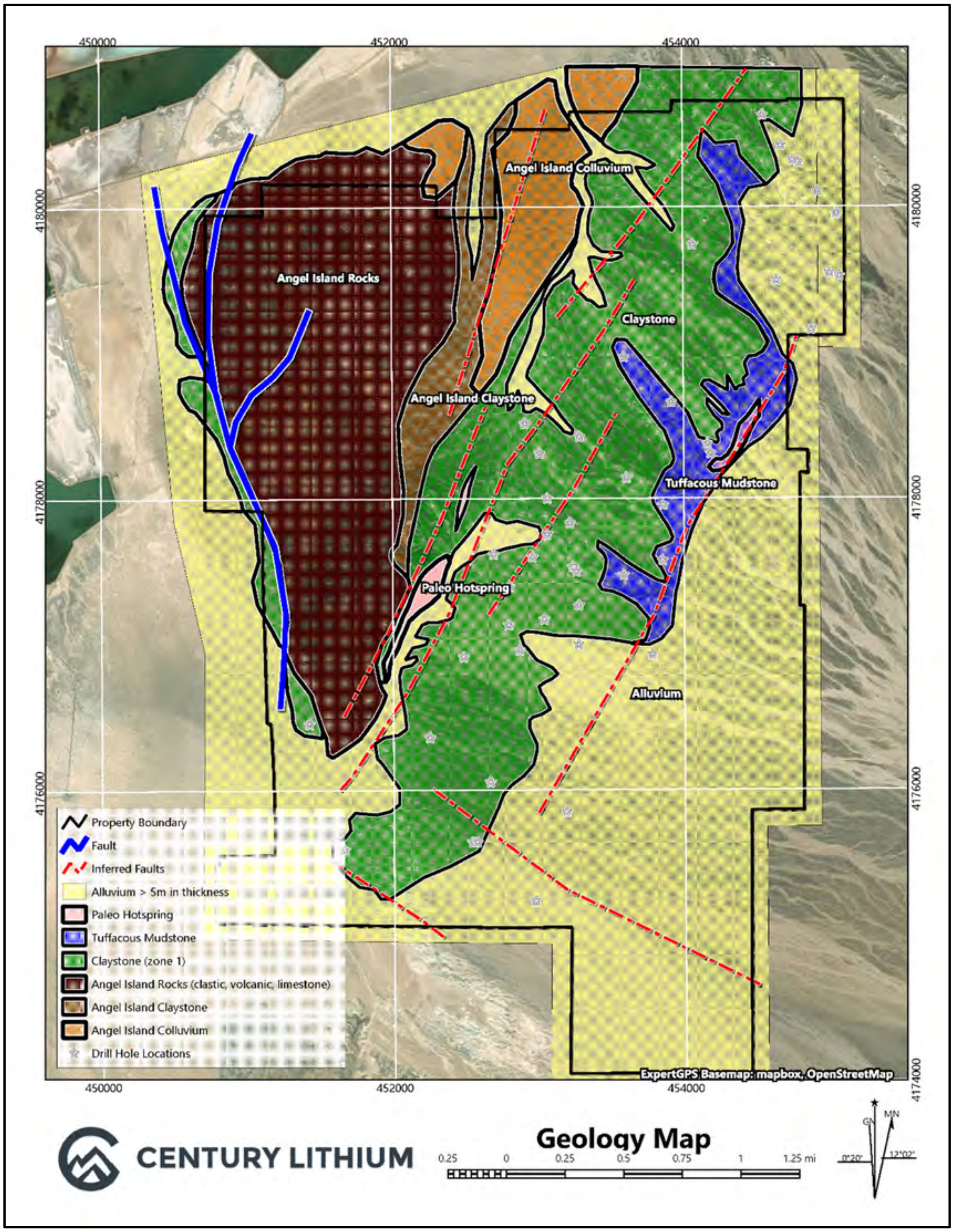


Figure 7-3: Project Geology Map (Source: Century, 2024)

Alluvium—this unit consists of polylithic sand, gravel, cobble, and boulder, and covers large portions of the Property. This unit varies from 0 to 10+ m in thickness, is a thin desert pavement on the ridge or mound tops and thickens in the fluvial channels and to the east up the alluvial fan. Most of the material is from the steep canyons cutting Clayton Ridge to the east with minor amounts from the eastern flanks of Angel Island. Lithium is locally not present in this unit.

Tuffaceous mudstone—this unit consists of interbedded silty mudstone and hard tuffaceous beds, tan to reddish brown in color. At some locations, this unit grades with the alluvium creating a thin (1 to 2 m) layer of semi-consolidated conglomerate. The unit is approximately 70% mudstone and 30% hard tuff layers. This unit is 0 to 15 m in thickness and lithium content averages 850 ppm.

Claystone—this unit is an ash-rich claystone and the primary lithium-bearing lithology at the project, the fresh color ranges from olive green, blue-gray, tan, to reddish-brown but becomes tan-brown with a light green hue when dry. Below an interbedded top section, this unit is massive with uniform texture and color, the grain size is consistent, and the clay is generally fat. Areas of ashy-lamina, thin tuff or zeolite layers, and ash/zeolite blebs are present. The unit is generally soft and weakly ductile, breaks with conchoidal fractures and hardens when dry. The primary differences within the unit are weathering, as three distinct zones of oxidized and unaltered material. These zones do not show significant differences geochemically or metallurgically outside of higher lithium concentrations in zones one and two. This unit is 60 to 120 m in thickness, and lithium content averages 1,060 ppm.

The first zone is olive to tan in color when fresh and tan when dry, is oxidized and contains locally abundant iron oxide staining, hematite, and partial layer replacement. The second zone begins with an interbedded area of oxidized and unaltered material, becoming completely unaltered at depth. Color is blue-gray when fresh and tan to light green when dry, is unaltered and contains occasional to pervasive zones of lamina containing dark carbon and formational pyrite. The third zone typically begins below an ash-fall tuff with gradational oxidation becoming completely oxidized with depth, color is olive when fresh and dark-tan to reddish-brown when dry. Zones of formational carbon and pyrite can be found high in the zone but soon become pervasive thin bands of hematite or limonite, and as depth approaches the next unit, zones of ashy/sandy or silica rich lamina and thin beds occur. In general, the grain size increases with silt and sand more prevalent.

Siltstone—this unit has a gradational upper contact and is a unit where the claystone becomes siltstone and is more firm and coarser grained than the claystone unit. Color is tan to reddish-brown, is oxidized with zones of hematite, cross bedding, slump features and other signs of a higher-energy depositional environment, and poorly to very well indurated with silt+sand fraction generally ~50% and higher in areas of thin beds/lamina. This unit's thickness is not known, although a 15.7- and 33.6-m section separated by a layer of claystone zone 3 is encountered in exploration hole CM004, and the lithium content averages 545 ppm over these two intercepts.

7.4 Mineralization

Elevated lithium concentrations, generally > 600 ppm, are encountered in the local sedimentary units of the Esmeralda Formation from surface to at least 142 mbsg. The lithium-bearing sediments primarily occur as silica-rich, moderately calcareous, interbedded tuffaceous mudstone, claystone, and siltstone. The overall mineralized sedimentary suite is a laterally and vertically extensive, roughly tabular zone with at least two prominent oxidation horizons (Figure 7-4). The primary area of mineralization is in a claystone unit consisting of three zones: oxidized claystone, unaltered claystone, and an oxidized claystone. The claystone unit is overlain by tuffaceous mudstone in the eastern portion of the project and underlain by a siltstone. Elevated lithium concentrations occur in all the uplifted lacustrine strata encountered; however, lithium concentrations are notably higher and more consistent in the claystone unit. The length, width, depth, and continuity of the mineralization are illustrated in Figure 14-22 to Figure 14-31.

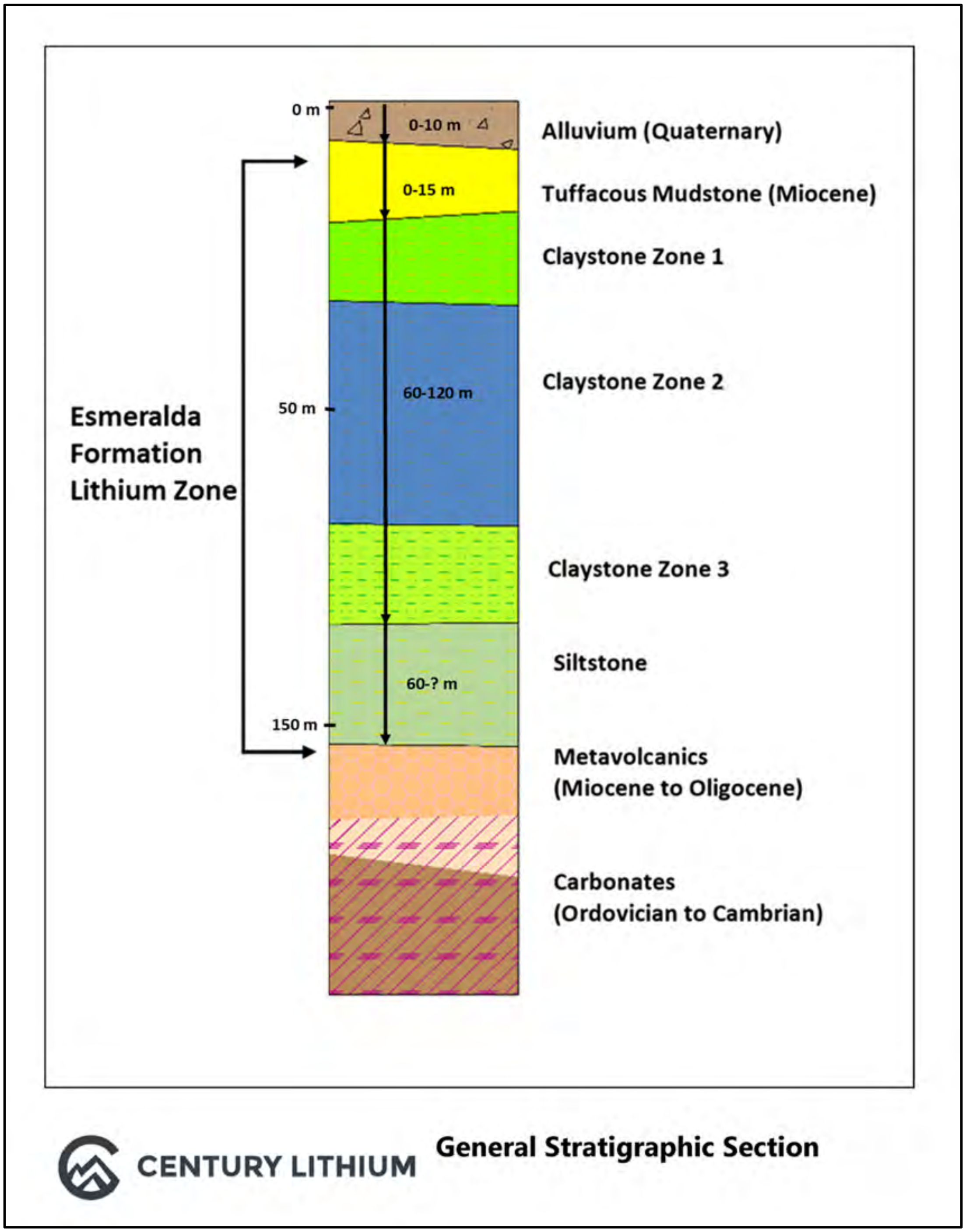


Figure 7-4: General Stratigraphic Section (Source: Century, 2024)

8.0 DEPOSIT TYPES

Lithium is known to occur in economic concentrations in three types of deposits: pegmatites, continental brines, and clays. Lithium is produced from pegmatites and brines, with brines the largest producer of lithium worldwide. There is no active mining of lithium clay deposits.

In clay deposits, lithium is often associated with smectite (montmorillonite) group minerals. The USGS presents a preliminary descriptive model of lithium in smectites of closed basins (Asher-Bolinder, 1991), Model 251.3(T), which suggests three forms of genesis for lithium clay deposits: alteration of volcanic glass to lithium-rich smectite; precipitation from lacustrine waters; and incorporation of lithium into existing smectites. In each case, the depositional/diagenetic model is characterized by abundant magnesium, silicic volcanic rocks, and an arid environment.

Regional geologic traits of lithium clay deposits, as presented by (Asher-Bolinder, 1991), include a basin-and-range or other rift tectonostratigraphic setting characterized by bimodal volcanism, crustal extension, and high rates of sedimentation. The depositional environment is limited to arid, closed basins of tectonic or caldera origin, with an age of deposition ranging from Paleocene to Holocene. Host rocks include volcanic ashes, pre-existing smectites, and lacustrine beds rich in calcium and magnesium.

The Clayton Valley deposit is reasonably well represented by the USGS preliminary deposit model, which describes the most readily ascertainable attributes of such deposits as light-colored, ash-rich, lacustrine rocks containing swelling clays, occurring within hydrologically closed basins with some abundance of proximal silicic volcanic rocks. The geometry of the Clayton Valley deposit is roughly tabular, with the lithium concentrated in gently dipping, locally undulating, sedimentary strata of the Esmeralda Formation. The sedimentary units are interbedded silica-rich, ash-rich mudstone and claystone, with interbeds of sandy and tuffaceous mudstone/siltstone and occasional poorly cemented silt and sandstone. The lithium concentrations are highest within the mudstone and claystone, but lithium is still also present in a siltstone unit underlying the claystone.

The deposition of the lithium-rich sediments likely occurred late in the history of the associated paleo brine lake, based largely on the stratigraphic position of the mudstone and claystone above the thick overall sandstone- and siltstone-dominated basin fill events. Such a setting would be ideal for the concentration of lithium from ash and groundwater inputs over an extensive period. As a result, the lithium-rich strata may represent several million years of lithium input and concentration within the basin. Figure 8-1 through Figure 8-3 show a conceptual sequence of depositional, erosional, and structural events which may account for the present-day nature and occurrence of the lithium deposits.

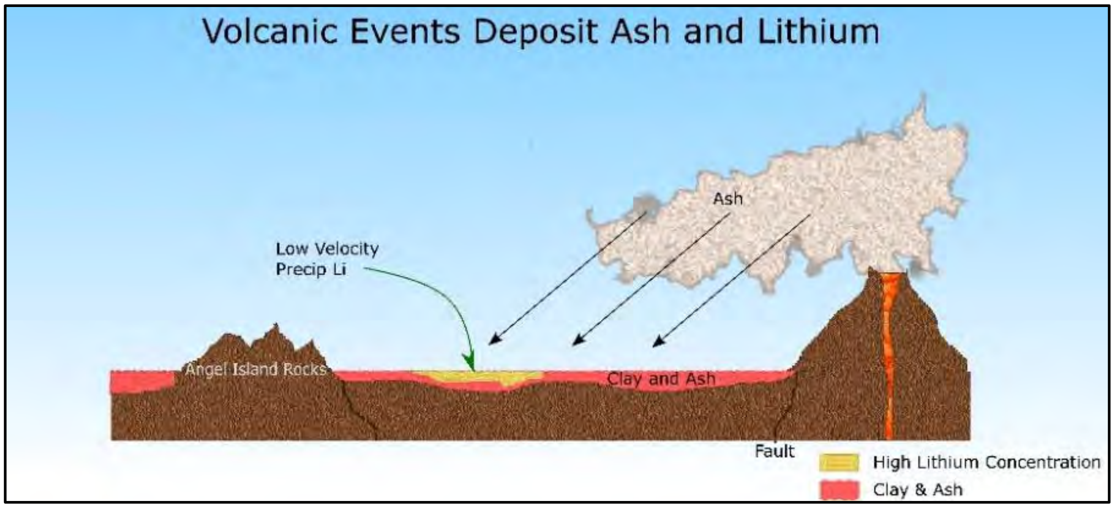


Figure 8-1: Deposit Origin: Volcanic Events (Source: GRE, 2020)

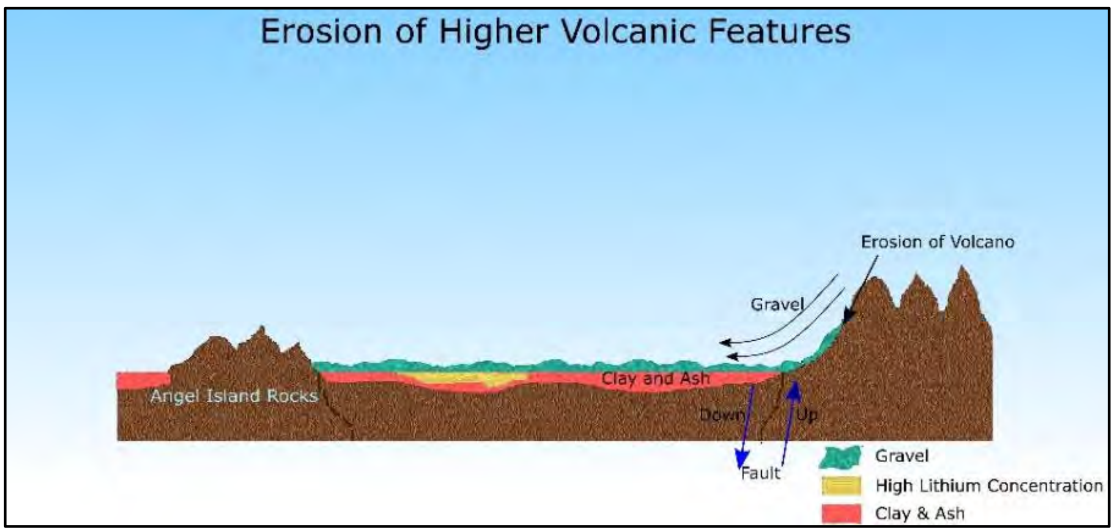


Figure 8-2: Deposit Origin: Erosion of Higher Volcanic Features (Source: GRE, 2020)

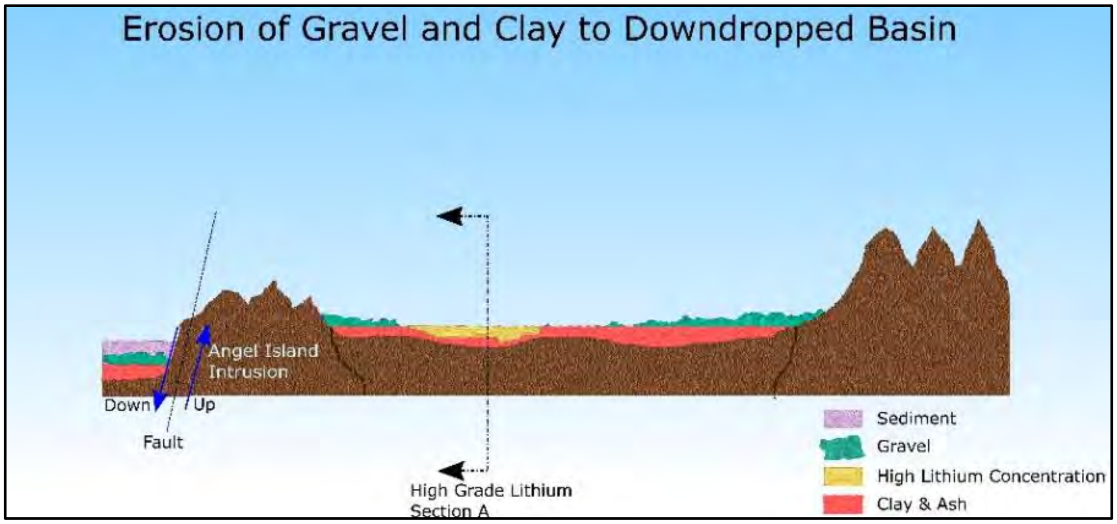


Figure 8-3: Deposit Origin: Erosion of Gravel and Clay (Source: GRE, 2020)

Within the lithium-bearing sediments of the deposit are oxidation and unaltered horizons that are recognizable in drill cores. Based on the drilling to date, the highest lithium concentrations occur within claystone zone 2 which has a central unaltered zone inter-layered between two oxidized layers. This distribution of mineralization may be the result of recent, oxidizing surface waters penetrating down dip within more permeable beds of the sedimentary package to create a series of oxidation-unaltered layers.

9.0 EXPLORATION

Century began exploring the project in late 2015. Exploration activities carried out by Century to date include surface sampling and detailed geological mapping. The QP author knows of no other exploration activities carried out by Century, except for drilling, that warrant discussion in this Report.

9.1 Surface Sampling

During 2015 and 2016 Century geologists collected 494 surface samples (including 28 duplicates) of outcroppings and soil. These samples typically consist of roughly 5 kg of rock or soil placed directly into a cloth sample bag and marked with a blind sample number. The samples cover most of the Property where claystone and tuffaceous mudstone are exposed. The sample density is highest in the southwest portion of the Property. In 2020, Century geologists collected an additional 19 surface samples in the southeast part of the Property on claims contested in a lawsuit which Century defended title thereof. The sample locations are shown on Figure 9-1 with lithium grades in ppm.

All samples were collected using hand tools, placed in cloth or plastic bags with sample designations, sample material was noted, and location recorded with a GPS. Samples collected in 2015 and 2016 were laboratory analyzed by 33 element 4-acid ICP-AES and 35-element aqua regia AAS. Samples collected in 2020 were laboratory analyzed by 48-element, 4-acid ICP-MS.

Analytical results indicate elevated lithium concentrations at the surface over most of the area sampled. Assay values exceeding 1,000 ppm Li were returned for samples collected in the central portion of the Property, trending northeast and just west of Angel Island. This information was utilized to generate drill targets, and, in all cases, holes drilled to date have confirmed the presence of elevated lithium mineralization.

Sample methods and sample quality are sufficient for the use in directing more detailed exploration like drill target generation. Samples are representative of the lithology and do not show any apparent sample biases. The samples cover a large portion of the Property and sample density varies; this is largely due to degree of exposure of the target lithologies.

9.2 Survey for Elevation and Orthoimagery

In February 2018, Century contracted Strix Imaging of Gardnerville, Nevada (now part of DOWL) to survey 1,052 ha in the mineral resource area or central portion of the Property for elevation and orthoimagery.

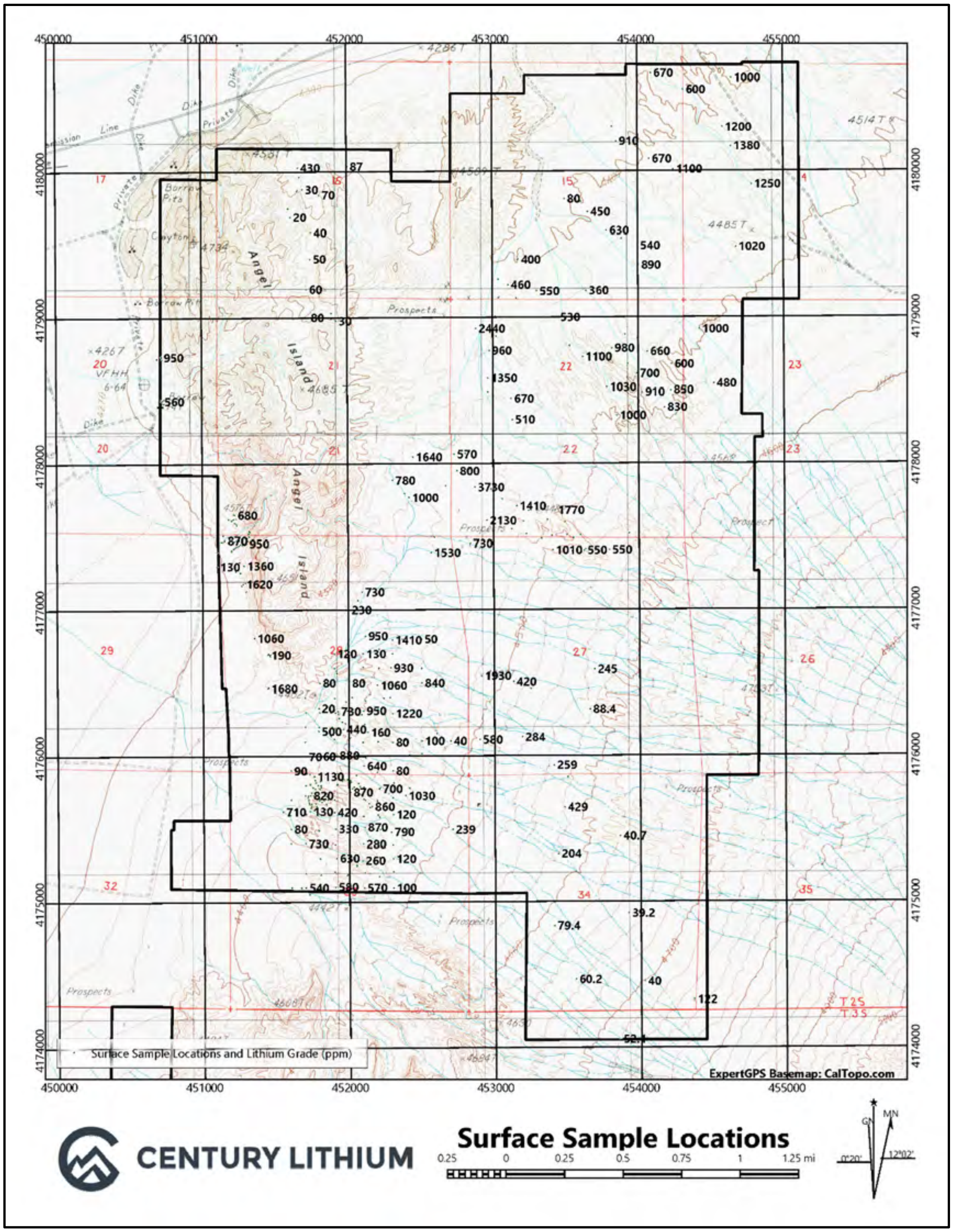


Figure 9-1: Surface Sample Locations (Source: Century, 2024)

The survey used ground panels 1 m x 1 m in size set throughout the mapping area as reference points. A drone was flown to collect imagery at approximately 3 cm resolution. All deliverables meet the following standards in non-vegetated areas: 1) National Mine Action Standards 30 cm contours (90% of ground points fall within 15 cm of model-derived elevation, 2) American Society for Photogrammetry and Remote Sensing 10 cm horizontal and vertical classes and 3) the orthoimagery with the same accuracy as the vertical model. The datum used was NAD 1983 UTM 11N with elevation products either in ellipsoid or ortho (NAVD88).

Strix Imaging delivered the following:

- 1 m and 0.5 m contours in SHP file format, 3D viewing compatible, for use in Leapfrog
- Orthophotographic imagery at high and low resolutions in TIFF file format with associated TFW file
- Additional terrain model products in DXF or DWG file format for use in CAD software
- Ground panel locations in both Microsoft Excel and SHP file format.

In March 2019, Century contracted Strix Imaging to survey an additional 1,376 ha not included in the original survey area. This included Angel Island and areas in the south and east to complete the elevation profile for the project area. The combined survey area of over 2,428 ha covers the project area.

9.3 Geologic Mapping

In March 2020, Century geologists completed general geologic surface mapping over much of the project area, the total mapped surface is approximately 20 km^2. The geologic mapping is sufficiently detailed to use in exploration planning, drill targeting and general property assessment.

10.0 DRILLING

Different operators have carried out drilling, with the first drilling on the Property in 2017. Enertopia drilled five holes (including one metallurgical hole) within the Property, totaling 439.8 m in 2018. Century drilled 33 core holes totaling 2,992.7 m from 2017 to 2019. In 2022, Century drilled eight sonic holes totaling 579.1 m. The Mineral Resource estimate is based on 45 core holes (3,955.2 m).

10.1 Enertopia

Enertopia drilled five BQ-size core drill holes, TOP 01 through TOP 04 and TOP-02M in December 2018 (Table 10-1), totaling 439.8 m. Four of the holes were for exploration, totaling 383.4 m. Hole TOP-02M with a length of 56.4 m was to be used for metallurgical testing and is located approximately 6 m northeast of TOP-02.

The holes were drilled using a combination of a track-mounted Longyear 44 and a custom-built drill rig attached to a small Caterpillar track loader (Cat rig). In some cases, the Cat rig would begin the hole, and the Longyear 44 would finish it. The core was drilled and recovered in 1.52-m intervals, logged by the on-site geologist for rock quality designation (RQD), percent recovery, and lithology, and then photographed and sampled. Due to the soft nature of the core, the catch spring in the core barrel was sometimes unable to secure all the core in the barrel, resulting in some loss of core down-hole in some parts of the hole. The Enertopia database shows this drilling program had fair core recoveries for holes TOP 01 and TOP 02, with core recovery averaging 67.35%, and good core recoveries for holes TOP 03 and TOP 04, with core recovery averaging 81.85%.

Table 10-1: Enertopia Drill Hole Summary

Drill Hole ID	Easting (m)	Northing (m)	Elevation (m)	Depth (m)
TOP 01	455076	4179522	1375	89.0
TOP 02	455046	4179949	1367	93.6
TOP 03	454874	4179154	1375	110.3
TOP 04	454805	4180310	1355	90.5
TOP 02M	455052	4179952	1369	56.4

10.2 Century

Century drilled 41 holes totaling 3,572.0 m, from 2017 to 2022 on the Property, including 17 core holes in 2017, 10 core holes in 2018, six core holes in 2019, and eight sonic holes in 2022 (Table 10-2). All holes are vertical, ranging in depth from 32.9 to 142.3 m.

Drill hole collars were surveyed by Century geologist in the field using handheld Garmin GPS MAP64s and then applied to the elevation on lidar.

Downhole surveys were not conducted on the drill holes due to the deposit type. The holes are relatively shallow and were all drilled vertically. Any minor deviation present in these short and widely spaced drill holes will have no material impact on the geologic model or the Mineral Resource estimate.

Drill hole collars are listed with coordinates in Table 10-3, and drill hole locations are shown in Figure 10-1.

Table 10-2: Century Drill Hole Summary

Year	Company	Drill Type	No. of holes	Meters Drilled (m)
2017	Century	Core Hole	17	1,478.6
2018	Century	Core Hole	10	810.6
2019	Century	Core Hole	6	703.5
2022	Century	Sonic Hole	8	579.1
		Total	**41**	**3,571.8**

Table 10-3: Detailed Drill Hole Data from each Campaign by Century

Drill Hole ID	Easting (m)	Northing (m)	Elevation (m)	Depth (m)
2017 and 2018 Drill Holes				
DCH-01	453,237	4,177,532	1,362	36.0
DCH-02	453,060	4,177,756	1,355	112.2
DCH-03	452,694	4,177,622	1,353	76.8
DCH-04	452,958	4,177,603	1,355	72.5
DCH-05	453,584	4,177,476	1,366	79.9
DCH-06	452,911	4,178,518	1,351	39.0
DCH-07	453,065	4,178,003	1,362	78.6
DCH-08	453,010	4,178,313	1,354	75.6
DCH-09	454,675	4,180,420	1,345	106.1
DCH-10	454,163	4,178,378	1,367	64.3
DCH-11	453,916	4,178,664	1,354	103.0
DCH-12	453,591	4,178,972	1,345	66.5
DCH-13	454,641	4,179,498	1,359	112.2
DCH-14	454,066	4,179,744	1,341	81.7
DCH-15	453,857	4,177,957	1,376	127.4
DCH-16	454,184	4,178,312	1,368	122.5
DCH-17	453,853	4,177,579	1,381	124.4
GCH-01	451,662	4,175,597	1,331	32.9
GCH-02	452,544	4,175,646	1,362	39.0
GCH-03	452,249	4,176,365	1,346	60.4

Drill Hole ID	Easting (m)	Northing (m)	Elevation (m)	Depth (m)
GCH-04	451,425	4,176,462	1,320	51.2
GCH-05	453,779	4,176,929	1,390	129.5
GCH-06	452,870	4,176,963	1,359	100.0
2018 Drill Holes				
CM001	453,187	4,175,853	1,356	124.3
CM002	452,665	4,176,059	1,368	88.8
CM003	452,973	4,175,238	1,358	92.0
CM004	452,571	4,175,646	1,365	92.4
2019 Drill Holes				
GCH-07	453,275	4,177,272	1,373	142.3
GCH-08	452,795	4,177,136	1,361	111.9
GCH-09	452,798	4,177,401	1,360	118.0
GCH-10	452,485	4,176,918	1,354	93.6
GCH-11	453,273	4,177,000	1,376	124.1
GCH-12	453,039	4,177,175	1,367	113.7
2022 Drill Holes				
CVS1	453,607	4,178,144	1,372	76.2
CVS2	453,286	4,178,426	1,360	76.2
CVS3	453,259	4,177,501	1,328	76.2
CVS4	453,215	4,177,835	1,355	76.2
CVS5	455,004	4,179,546	1,365	61.0
CVS6	454,924	4,180,104	1,355	76.2
CVS7	454,756	4,180,320	1,351	61.0
CVS8	454,548	4,180,630	1,411	76.2

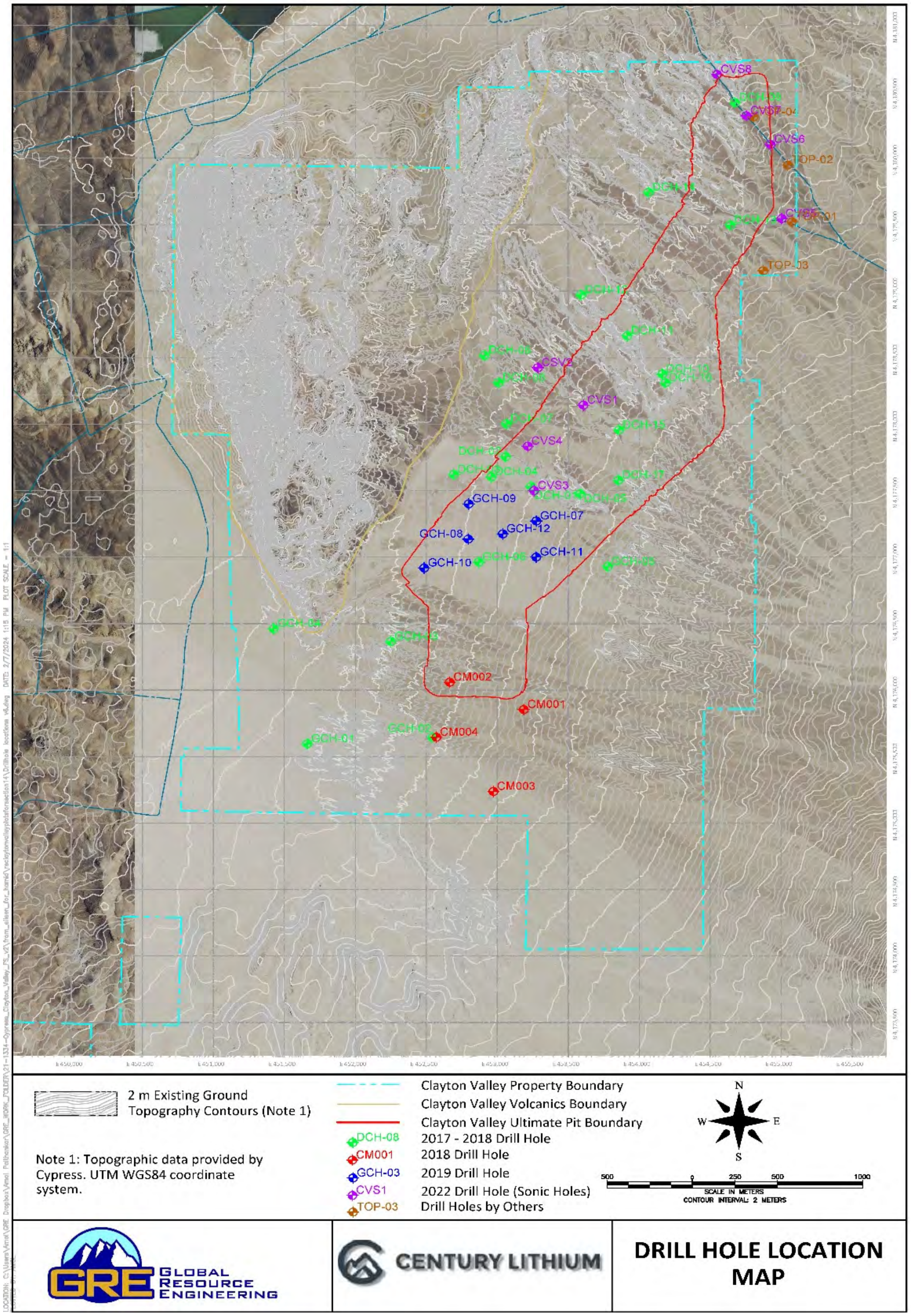


Figure 10-1: Drill Hole Location Map (Source: GRE, 2022)

10.2.1 2017-2018 Drilling

From 2017 through 2018, Century drilled a total of 23 vertical, NQ-size (47.6 mm diameter) totaling 1,891.6 m of drilling. Drilling was completed by Morning Star Drilling of Montana using Acker truck- and track-mounted drill rigs.

Core recoveries were measured by Century's geologist. The core was placed in order and pieces re-oriented to fit together as appropriate. The core recovery was then measured per interval by measuring the actual length of core retrieved from the drill interval against the recorded interval between the core blocks. The QP reviewed core drilling undertaken by Century during 2017 to 2018 for holes DCH-01 to DCH-17 and holes GCH-05 and GCH-06 and observed that the programs had excellent core recoveries, with core recovery averaging 92.3%.

In 2018, four HQ-size (63.5 mm) core holes, CM001 through CM004, totaling 397.5 m were drilled by a private company. The cores from these holes were retained by Century through a 2019 settlement agreement. CM001 was drilled to 124.3 m; the other three holes were drilled to depths ranging from 88.8 to 92.4 m. Century logged and sampled the cores from all four holes. CM004 intersected 15.7 m and 36.6 m of siltstone separated by claystone zone 3 starting at 35.8 m making it the shallowest and longest intercept of this unit on the Property. This indicates a thinning of the above lithological units at this location. All the holes intersected the lithium bearing tuffaceous mudstone and claystone units encountered in all the other drill holes on the Property.

In 2020, drill core was received at ALS USA where they were geologically logged, photographed, and prepped for splitting, sample processing, and assay under the direction of Century geologists. Cores from one of the four holes were processed through sample preparation in its entirety, with coarse reject material retained for use in metallurgical tests. All samples were accompanied by QA/QC samples including blanks, CRM standards and duplicates. Short, < 30.5 cm intervals, from CM001 and CM003 were selected and submitted for specific gravity testing.

10.2.2 2019 Drilling

In 2019 Century drilled a total of six vertical, NQ-size totaling 703.6 m of drilling. Drilling was completed by Morning Star Drilling of Montana. The goal of drilling in 2019 was to reduce drill spacing in a favorable mineralized area of the Property. The drilling was planned to generate data from deeper in the deposit, as elevated lithium concentrations persist at depth in all holes except GCH-04 where basement rocks were encountered in 2017.

Century utilized a truck-mounted drill rig, allowing deeper drilling depths. The six drill holes focused on a 0.5 km^2 area in the south-central portion of the project area. GCH-07 was drilled to 142.3 m and penetrated over 19 m into siltstone, the deepest lithological unit drilled.

The QP reviewed core drilling undertaken by Century during 2019 for holes GCH-07 to GCH-12 and observed that the program had excellent core recoveries, with core recovery averaging 97.6%.

All drill cores from the program were delivered to ALS USA where they were geologically logged, photographed, and prepped for splitting, sample processing and assay under the direction of Century geologists. Cores from five of the six holes were processed through sample preparation in their entirety, with coarse reject material retained for use in metallurgical tests. All samples were accompanied by QA/QC samples including blanks, CRM standards and duplicates. Short, < 30.5 cm intervals from GCH-09 were selected and submitted for specific gravity testing. Similar size samples were selected from GCH-10, GCH-11 and GCH-12 and submitted for geotechnical testing.

10.2.3 2022 Drilling

In 2022 Century drilled a total of eight vertical sonic holes totaling 579.2 m. Drilling was completed by Gregory Drilling Inc. using a sonic drill rig.

The purpose of the drilling was to complete the following tasks: 1) generated material for metallurgical testing at various depths and locations, 2) reduced drill spacing in the center of the Property, and 3) confirmed drill results and reduced drill spacing in the northeast portion of the Property, where Century acquired a 65 ha parcel in May 2022.

The sonic drill rig (Figure 10-2) allowed for continuous drilling with large-diameter core. Four drill holes, CVS1 to CVS4, focused on a 0.17 km^2 area in the central portion of the Property with an average spacing of 416 m. These holes were drilled with a 152.4 mm diameter to a depth of 76.2 m, totaling 304.8 m.

Four drill holes, CVS5 to CVS8, focused on the northeast portion of the Property, with an average spacing of 407 m along a 1,230 m line striking north-northwest to south-southeast. Holes CVS5 and CVS7 were drilled to a depth of 61.0 m, totaling 122.0 m, and holes CVS6 and CVS8 were drilled to a depth of 76.2 m, totaling 152.4 m. Holes CVS5 to CVS7 were drilled with a 152.4 mm diameter, and hole CVS8 was drilled with a 101.6 mm diameter.

Recorded core recoveries were excellent, with core recovery averaging 92.2%.

All drill cores from the program were delivered to Century's facility at the Tonopah Airport, Nevada where they were geologically logged, photographed, and sampled by a Century geologist. The Century geologist prepped two types of samples: disks and longitudinal slices. The samples were then delivered to ALS USA for assay. The remaining core was retained for use in metallurgical tests, placed in super sacks, and securely stored at the facility.

Figure 10-2: Sonic Drilling Rig and Equipment, Collar Hole, and Sonic Samples (Source: GRE, 2022)

10.3 Drilling Results

Based on drilling to date the subsurface stratigraphy consists of variably interbedded lakebed deposits of silica and ash-rich mudstone and claystone, and occasional tuffaceous zones, all dipping gently to the east. These sediments are underlain by a distinct, siltstone unit in 18 of the 33 drill hole locations. Lithium values in the siltstone are lower than those within the overlying sediments, and this unit represents the extent of drilling carried out to date.

The drilling results indicate a favorable section of claystone up to 120 m thick, where a strong, apparently planar, alternating oxidation/unaltered zone exists. These zone contacts have distinct color changes in fresh core which fade when dry. The change from oxidized to unaltered is sharp, but often interfingered indicating potential areas of varying permeability. The lithium content through these zones appears consistent, as do other geochemical factors and any specific significance of the oxidation/unaltered zones regarding lithium mineralization is not apparent. The lithium concentration decreases with depth as the claystone grades into the siltstone unit below.

Representative drill intervals from the 2017-2018 drilling, 2018 drilling, and 2019 drilling are shown in Table 10-4, Table 10-5 and Table 10-6, respectively. The 2019 and 2018 results shown are consistent with the thicknesses and grades of lithium mineralization encountered in previous drilling. A summary and interpretation of drill results is provided in cross-sections presented in Figure 14-22 to Figure 14-31.

Table 10-4: 2017-2018 Representative Drill Intervals

Drill Hole ID	Depth (m)		Length (m)	Avg Li (ppm)
	From	To		
DCH-01	4.4	36.0	31.5	1,140
DCH-02	0.5	54.3	53.8	1,036
DCH-03	8.5	36.0	27.4	999
DCH-04	1.5	51.2	49.7	1,127
DCH-05	8.5	75.6	67.1	1,129
DCH-06	14.6	31.4	16.8	1,013
DCH-07	32.2	51.2	19.0	974
DCH-09	11.3	69.5	58.2	1,093
DCH-10	8.5	64.3	55.8	1,108
DCH-11	8.2	63.4	55.2	1,209
DCH-13	23.8	106.1	82.3	1,221
DCH-15	20.1	124.4	104.2	1,106
DCH-16	14.6	122.5	107.9	1,199
DCH-17	14.6	109.1	94.5	1,050
GCH-04	3.7	29.9	26.2	1,077
GCH-05	84.7	109.7	25.0	1,018
GCH-06	3.0	100.0	96.9	1,142

Table 10-5: 2018 Representative Drill Intervals

Drill Hole ID	Depth (m)		Length (m)	Avg Li (ppm)
	From	To		
CM001	4.9	110.6	105.7	1,065
CM002	1.5	85.8	84.3	996
CM003	5.8	84.4	78.6	1,007
CM004	3	60.4	57.4	883

Table 10-6: 2019 Representative Drill Intervals

Drill Hole ID	Depth (m)		Length (m)	Avg Li (ppm)
	From	To		
GCH-07	2.7	90.5	87.8	1,188
GCH-08	8.2	87.5	84.7	1,229
GCH-09	8.3	72.2	64.0	1,163
GCH-10	3.0	69.2	66.2	1,069
GCH-11	8.2	72.2	64.0	1,176
GCH-12	1.8	81.4	79.6	1,252

Representative drill intervals from the 2022 sonic drilling campaign are shown in Table 10-7. Table 10-7 shows only intervals with more than 1,000 ppm as most of the assay results from this drilling campaign are greater than 700 ppm.

10.4 QP Comments on Section 10

Based on a careful review of the drilling, sampling, and analytical procedures employed by Century during the 2017 to 2019 drill campaign, the QP finds no drilling, sampling, or recovery factors that might materially impact the accuracy or reliability of the drilling results. Figure 10-3 shows typical excellent core recovery in a 2019 hole.

The QP considers that the quality of the drilling, logging, and collar data collected in the 2022 drilling exploration program are sufficient to be added to the database. No factors were identified with the data collection from the 2022 drill programs that could significantly affect Mineral Resource estimation. Drill orientations are generally appropriate for the mineralization style for the bulk of the deposit area.

Table 10-7: 2022 Representative Drill Intervals

Drill Hole ID	Depth (m)		Length (m)	Avg Li (ppm)
	From	To		
CVS1	9.1	21.4	12.3	1,582
CVS1	27.1	42.7	15.6	1,610
CVS1	67.1	76.1	9.1	1,262.5
CVS2	9.1	45.8	36.7	833.3
CVS2	54.9	70.2	15.3	1,011.7
CVS3	6.1	76.2	70.1	1,200.9
CVS4	3.0	27.5	24.4	1,228.9
CVS4	32.6	36.6	4.0	1,462.5
CVS4	45.7	54.9	9.2	1,080.3
CVS5	49.4	61.0	11.6	1,095
CVS6	27.4	57.9	30.5	1,501

Drill Hole ID	Depth (m)		Length (m)	Avg Li (ppm)
	From	To		
CVS6	61.0	76.2	15.2	1,136
CVS7	6.1	10.7	4.6	1,231.1
CVS7	15.2	33.6	18.3	1,461.6
CVS7	48.8	58.0	9.2	1,422.2
CVS8	21.3	33.7	12.3	1,003.3
CVS8	51.8	61.1	9.3	1,225

Figure 10-3: Core from GCH-07 (Source: GRE, 2020)

11.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

11.1 Campaign 2017-2019

11.1.1 Sample Preparation

During Enertopia's 2018 program, drill core was transported, logged and sampled by Enertopia personnel. The core was split by hand and transported by Enertopia to Mineral Exploration Geochemistry (MEG), for sample preparation and later analysis by ALS USA.

Samples collected from Century's 2017-2019 drill programs consisted of bulk surface samples (discussed in Section 9) and NQ-size and HQ-size drill core.

Drill core samples are collected at the drill rig and placed into waxed cardboard boxes by the drill crew. For holes DCH-01 through DCH-17 and GCH-01 through GCH-06, Century geologists photographed the core as it was received and collected core recovery information. Sample intervals were selected, primarily 3 m in length, and split using a cleaver. One half of the core was returned to the box for geologic logging, and the other half was bagged and tagged with sample number. Geologic logging was done in the field or at facilities in Silver Peak, Nevada.

For holes GCH-07 through GCH-12, and CM001 through CM004 core was transported to ALS USA by Century personnel. A Century geologist used logging facilities where each hole was viewed in its entirety for RQD, core recovery and geologic logging. The geologist selected and marked sample intervals for assay. Select holes had intervals of < 0.3 m removed for geotechnical and specific gravity testing. All core was photographed by ALS USA staff following logging. ALS USA staff split any duplicate samples with a saw or knife and whole-core samples were bagged and tagged as marked by the geologist for preparation and assay. Holes GCH-12 and CM001 through CM003, were split in half over their entire length using a saw or knife by ALS USA staff as marked by the geologist, the right half of the core down-hole was bagged by ALS USA staff for preparation and assay.

Figure 11-1 shows core from 2019 NQ drill hole and Figure 11-2 shows core from 2018 HQ drill hole, both ready for sample processing. All core and surface samples were delivered to one of two certified independent laboratories, ALS USA, accredited by the Standards Council of Canada (SCC) to ISO/IEC 17025:2017 or Bureau Veritas Minerals (BV Minerals), as ISO 17025 accredited laboratory in Reno, Nevada by Century personnel.

Figure 11-1: Core from GCH-12, (Source: GRE, 2020)

Figure 11-2: Core from CM003, (Source: GRE, 2020)

11.1.2 Analytical Procedures

Samples from Enertopia's 2018 drilling campaign were prepared at MEG laboratory where lithium standards, blanks and duplicates were inserted into the sample stream for QA/QC purposes. The samples were dried, weighed, and crushed to pass -10 mesh and split using a riffle splitter. A 150-gram split was then pulverized and delivered to ALS USA for analysis using the ALS method ME-ICP61. This method provided analyses for 33 elements with lithium added as the 34th element. The method has a detection limit of 10 ppm for Li.

The samples from metallurgical hole (TOP-02M) drilled by Enertopia were submitted separately for preparation and analysis. There were 26 samples submitted including four QA/QC samples, consisting of one blank, one standard, and two duplicate samples.

Samples from Century's drilling campaigns were crushed, split, and pulverized at the laboratory in preparation for analysis. After pulverizing, two subsamples were selected by the laboratory for duplicate analysis. Century submitted eight pulp duplicates to a secondary laboratory as check samples, the pulp duplicates are principally used by the primary laboratory for internal QC and were not relied on by Century to evaluate the overall quality of the sampling program.

Samples from holes DCH-01 through DCH-17 and GCH-01 through GCH-06 were analyzed by 33-element, 4-acid ICP-AES or ICP-MS and soil and rock chip samples were analyzed by 33-element 4-acid ICP-AES and/or 35-element aqua regia AAS. Samples from holes GCH-07 through GCH-12 and CM001 through CM004 were analyzed by 60-element, 4-acid ICP-MS, which added the ability to test for rare earth elements.

11.1.3 Quality Assurance and Quality Control

For samples collected during Enertopia's drilling program and for most samples collected during Century drilling program from 2017 to 2022 drilling programs, the in-house QA/QC procedures were limited to insertion of blanks, CRM standards, and duplicate samples.

Century used the same standard procedure for blanks, standards, and duplicate accuracy for all the drilling programs. Results of blank assays are acceptable when 95% or more of the assays from each batch of samples fall inside of +/- two standard deviations (SD) of the population's mean. Results of standard assays are acceptable when 95% or more of the assays from each batch of samples fall inside of +/- 2SD when using the standard data. The results of duplicate assays are acceptable when the difference between original and duplicate assays is 30% for split core, chip, or sample duplicates and 10% for pulp duplicates.

If a quality control sample returns results outside of the predetermined limit, the quality control sample will be re-assayed along with the samples on each side of the quality control sample in question.

11.1.3.1 2017-2018 Program

A total of 119 core samples from the Enertopia drilling campaign were collected from holes TOP-01 to TOP-04. A total of 11 QA/QC samples to the sample stream including two commercially prepared blank samples (at a rate of one blank per 60 samples), four commercially prepared standard samples (at a rate of one standard per 30 samples), and five duplicate samples (at a rate of one duplicate per 24 samples). Duplicate samples were made from one half core cut in half again, resulting in two-quarter cores which were bagged and sampled separately.

Figure 11-3 presents the assay results of the blanks (less than 10 ppm) by ALS USA showing there is no contamination.

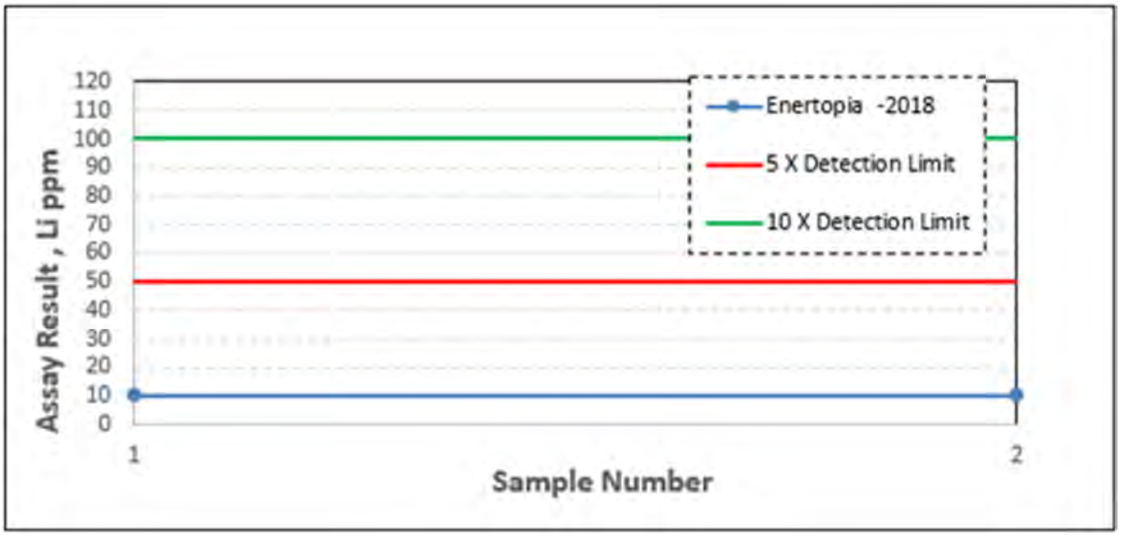


Figure 11-3: Blank Samples, Enertopia Drilling Program 2018 (Source: GRE, 2022)

A single standard, MEG-Li.10.11 (Li=723.1 ppm), was purchased in durable, pre-sealed packets from MEG. Figure 11-4 shows a control chart for the MEG-Li.10.11. The QP finds the results show reasonable analytical accuracy.

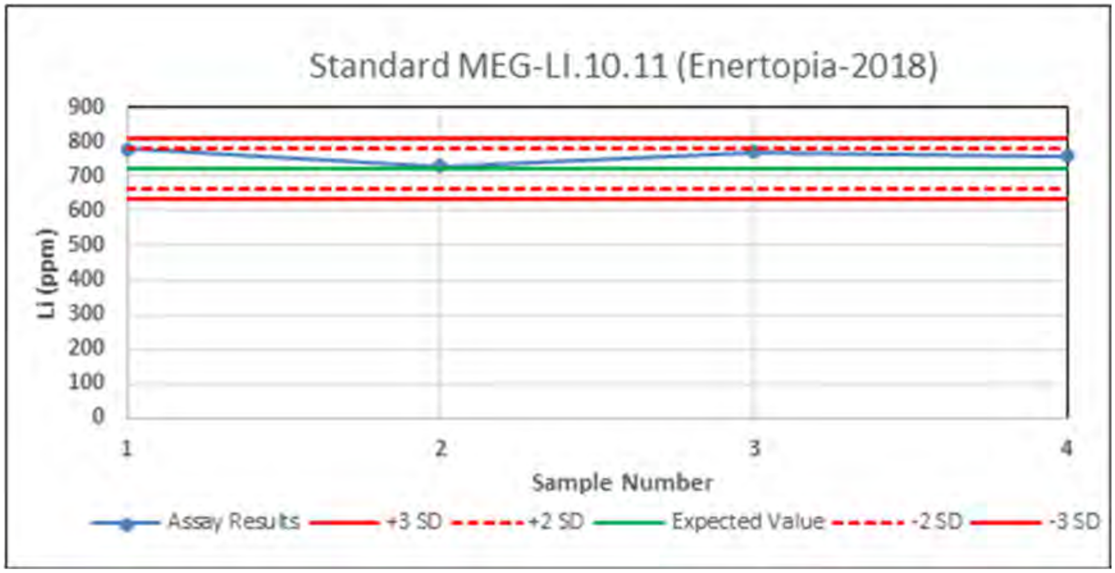


Figure 11-4: CRM MEG-Li.10.11, Enertopia Drilling Program 2018 (Source: GRE, 2022)

Five duplicate samples were inserted in the Enertopia sample stream. Figure 11-5 presents the comparison of the original and duplicate assays showing acceptable correlation with an R^2 of 0.76. There is a failure on one duplicate sample, but no record exists to show any follow-up on the sample was done by Enertopia.

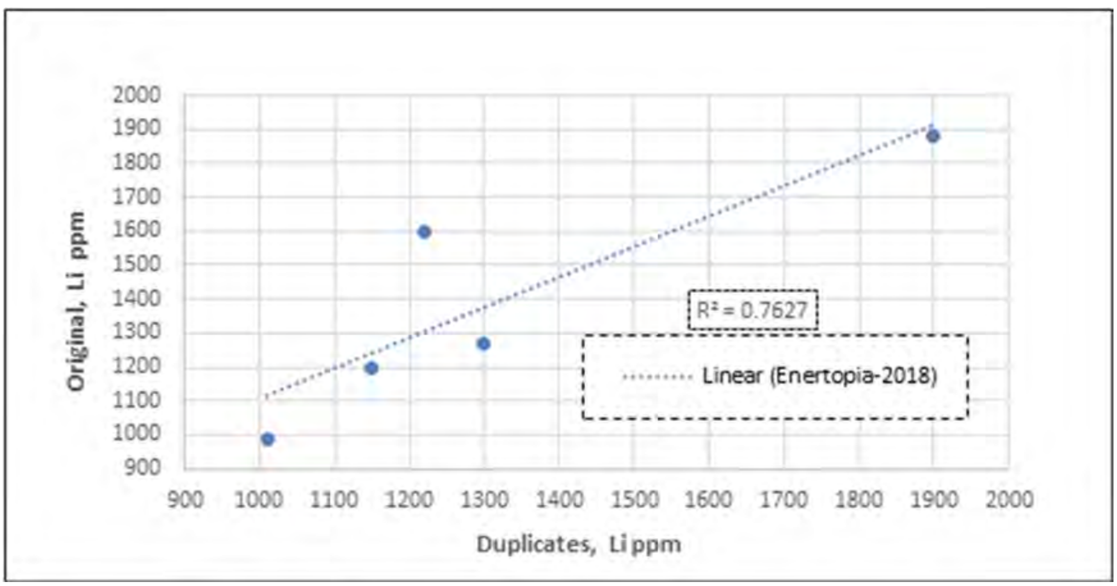


Figure 11-5: Duplicate Sample Analysis, Enertopia Drilling Program 2018 (Source: GRE, 2022)

During the 2017-2018 Century drilling program, a total of 618 core samples were collected from holes DCH-01 to DCH-17 and holes GCH-01 to GCH-06. For this drilling program, six blank samples (at a rate of one blank per 100 samples) and 19 standards (at a rate of one standard per 32 samples) were inserted in the stream sample.

Blank material used in the 2017-2018 drill programs was gray, silica-rich gravel sourced from a road construction project on North Redrock Road, Wasatch County, Nevada.

Figure 11-6 presents the assay results of the blanks by ALS USA. The drilling program 2017-2018 shows there is no contamination.

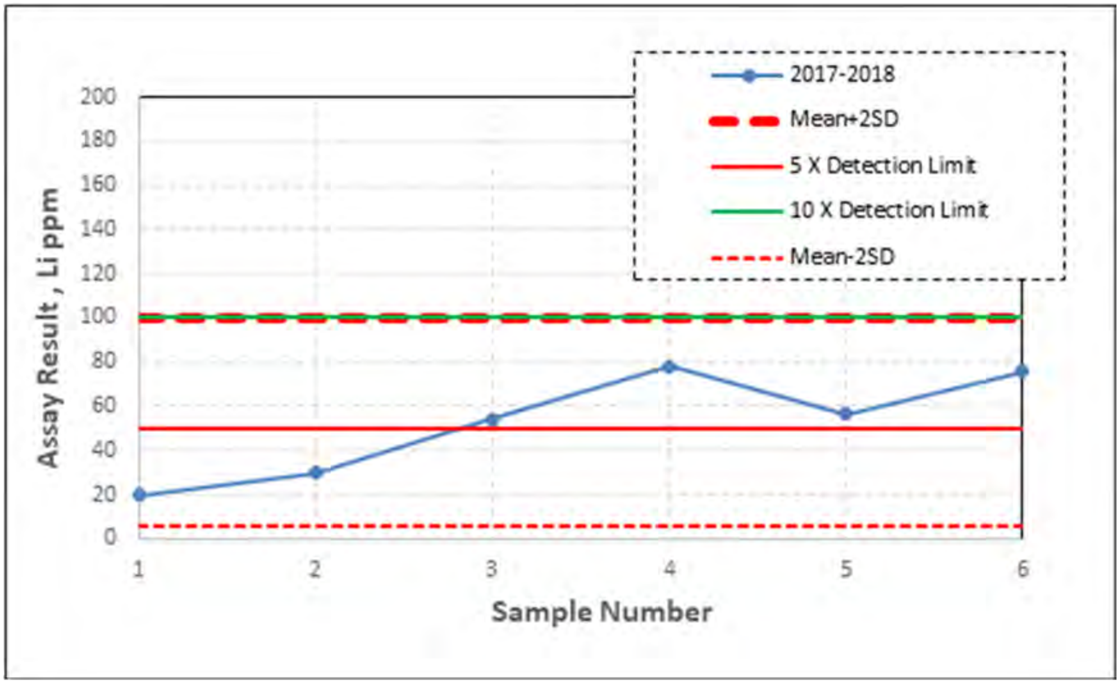


Figure 11-6: Blank Samples, Drilling Program 2017-2018 (Source: GRE, 2022)

Three different standards, including MEG-Li.10.13 (Li=1,180 ppm), MEG-Li.10.14 (Li=810 ppm), and MEG-Li.10.15 (Li=1,580 ppm) were purchased in durable, pre-sealed packets from MEG. Century geologists routinely reviewed the standard sample assay results, and the results fell within the anticipated range of variability, which is the 95% confidence limits of +/- 2SD, as described by the manufacturer of the standards. Figure 11-7, Figure 11-8 and Figure 11-9 show a control chart for the MEG-Li.1013, MEG-Li.1014, and MEG-Li.1015, respectively. The QP finds the results show reasonable analytical accuracy.

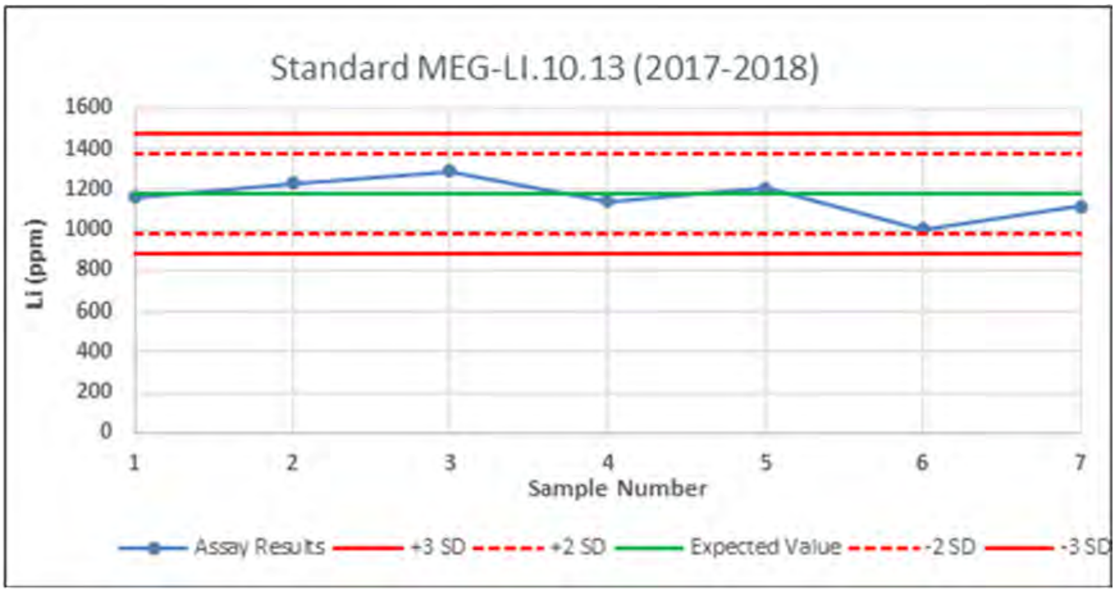


Figure 11-7: CRM MEG-Li.10.13, Drilling Program 2017-2018 (Source: GRE, 2022)

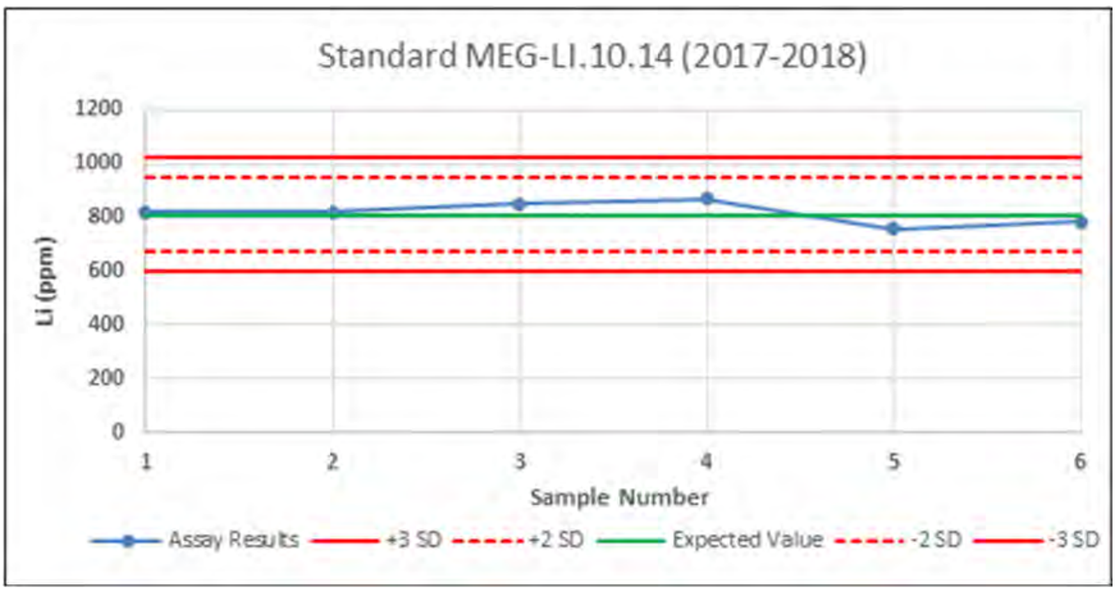


Figure 11-8: CRM MEG-Li.10.14, Drilling Program 2017-2018 (Source: GRE, 2022)

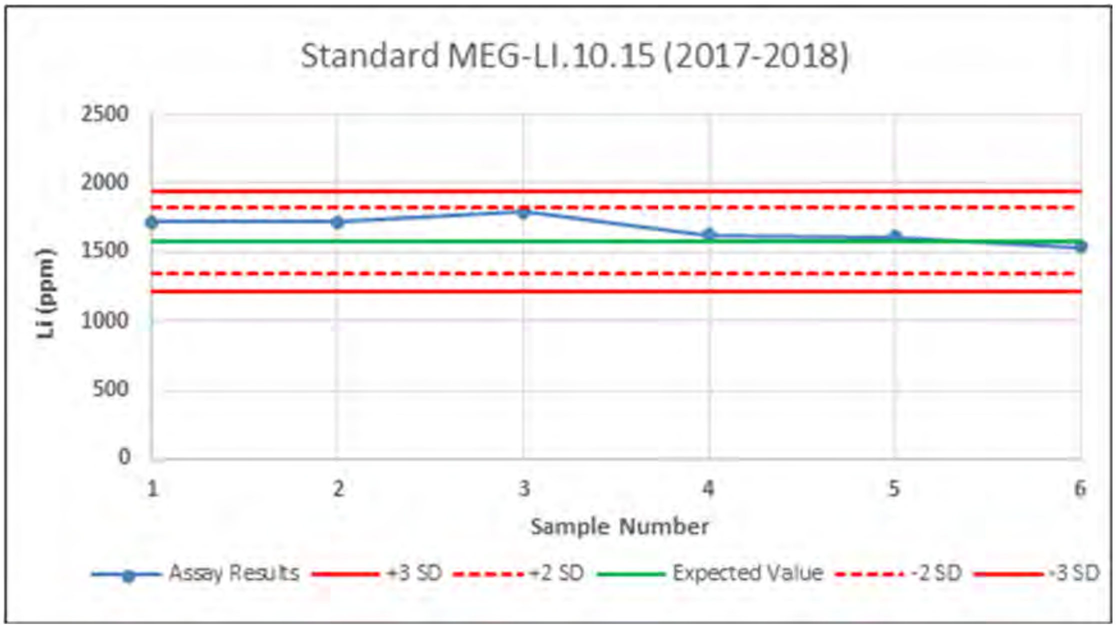


Figure 11-9: CRM MEG-Li.10.15, Drilling Program 2017-2018 (Source: GRE, 2022)

In 2018, four additional holes CM001 to CM004 totaling 397.5 m were drilled on the Property. Since the core samples were assayed in 2020, their QA/QC procedure is described separately from the drilling program 2017-2018.

A total of 132 core samples were collected with seven blank samples (at a rate of one blank per 19 samples), six core duplicates (at a rate of one blank per 22 samples), and six standards (at a rate of one standard per 22 samples) inserted in the stream sample.

Blank material was the same used in the 2017-2018 drill program.

Figure 11-10 presents the assay results of the blanks by ALS USA. The drilling program 2018 shows there is no contamination.

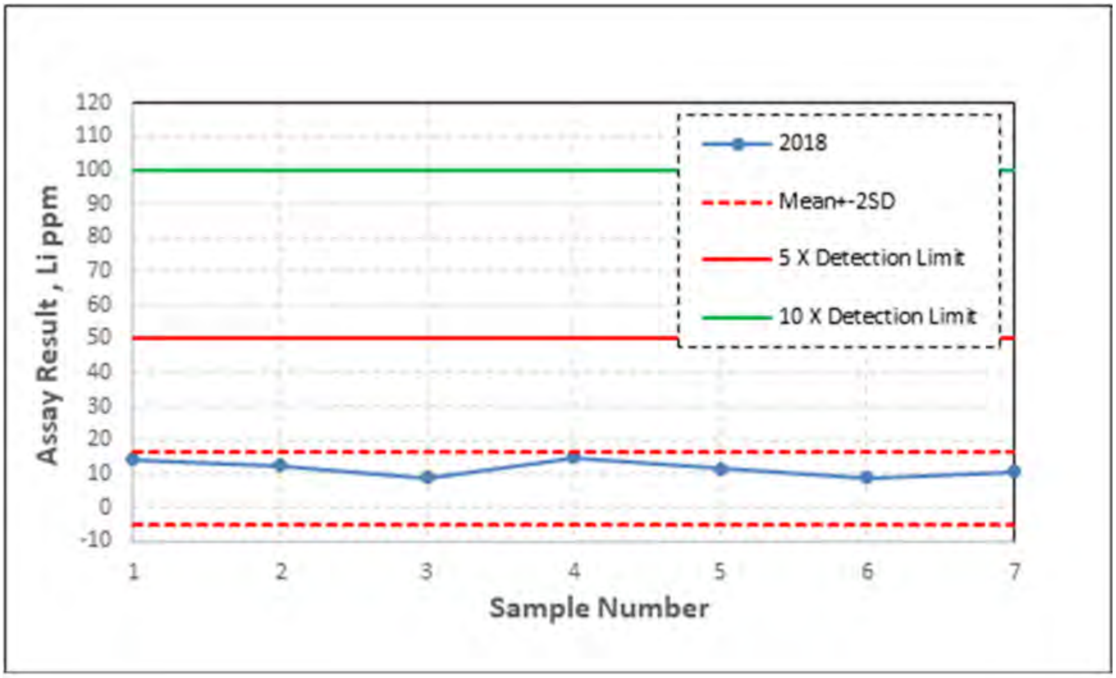


Figure 11-10: Blank Samples, Drilling Program 2018 (Source: GRE, 2022)

One sample duplicate, either half or quarter core was assayed for every 22 samples submitted. Six duplicate samples were taken and Figure 11-11 presents the comparison of the original and duplicate assays showing very good correlation with an R^2 of 0.98.

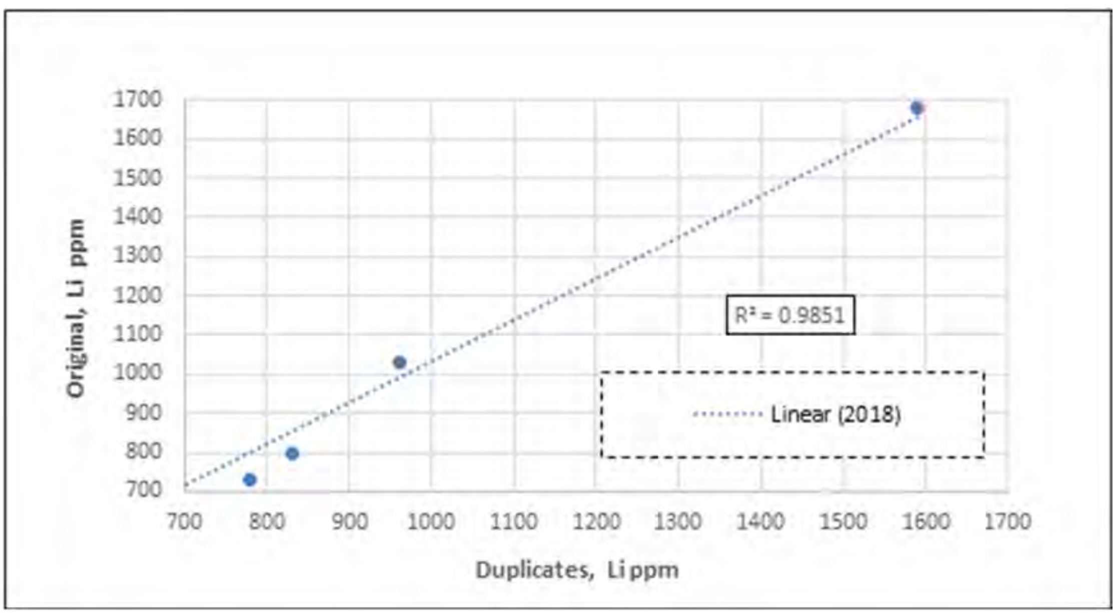


Figure 11-11: Duplicate Sample Analysis, Drilling Program 2018 (Source: GRE, 2022)

The OREAS 147 standard with a specific certified assay value of 2,270 ppm Li ± 110 ppm was used. Standards were inserted into the Century sample bags with company tags. Figure 11-12 shows a control chart for the OREAS 147. All samples returned assay values within +/- 2SD. The QP finds the results show reasonable analytical accuracy.

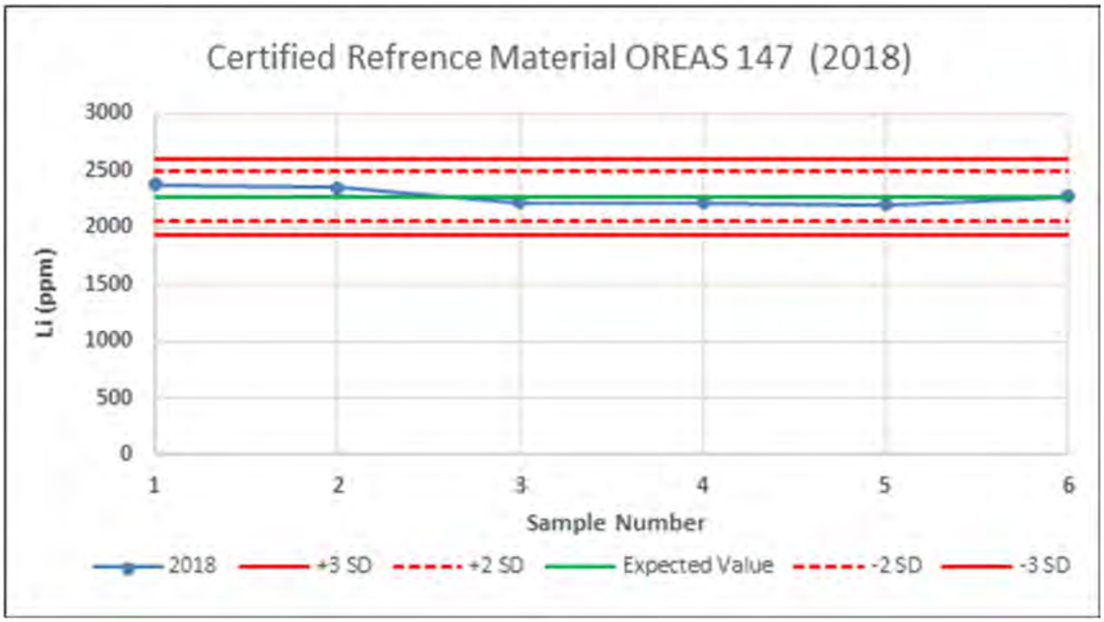


Figure 11-12: OREAS 147, Drilling Program 2018 (Source: GRE, 2022)

For the 2018 drilling campaign, assay results from the blank, standard and duplicate samples indicated no systematic errors.

11.1.3.2 2019 Program

A total of 226 core samples were collected from holes GCH-07 to GCH-12. For this drilling program, 11 blank samples (at a rate of one blank per 20 samples), 11 core duplicates (at a rate of one blank per 20 samples), and 12 standards (at a rate of one standard per 19 samples) were inserted in the sample stream.

Blank samples for this program were quartz silica sand samples from OREAS. Figure 11-13 presents the assay results of the blanks in the 2019 drilling program. The data shows there is only one sample with assay more than +2SD of the population's mean. The difference between blank and +2SD is only 6.0 ppm and considering the laboratory detection limit for lithium, it still can be considered that there is no contamination.

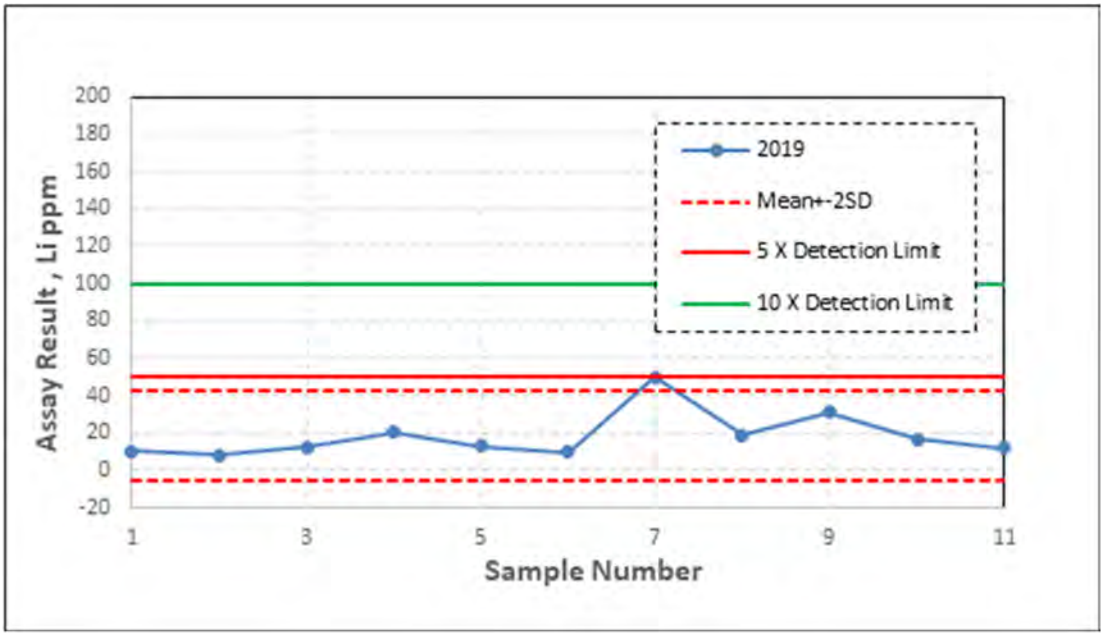


Figure 11-13: Blank Samples, Drilling Program 2019 (Source: GRE, 2022)

In this program one sample duplicate, either half or quarter core was assayed for every 20 samples submitted. Eleven duplicate samples were taken and Figure 11-14 presents the comparison of the original and duplicate assays showing very good correlation with an R^2 of 0.99.

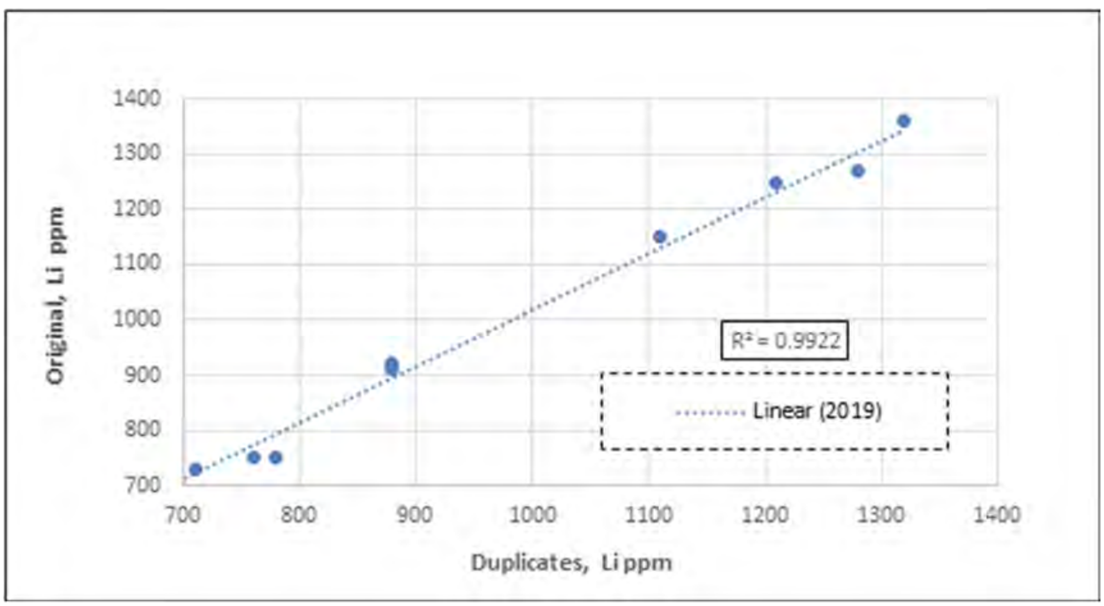


Figure 11-14: Duplicate Sample Analysis, Drilling Program 2019 (Source: GRE, 2022)

OREAS 147 standard with a specified assay value of 2,270 ppm Li ± 110 ppm was used. The standards were inserted into the Century sample bags with company tags. Figure 11-15 shows a control chart for the OREAS 147. All samples returned assays values within +/- 2SD. The QP finds the results show reasonable analytical accuracy.

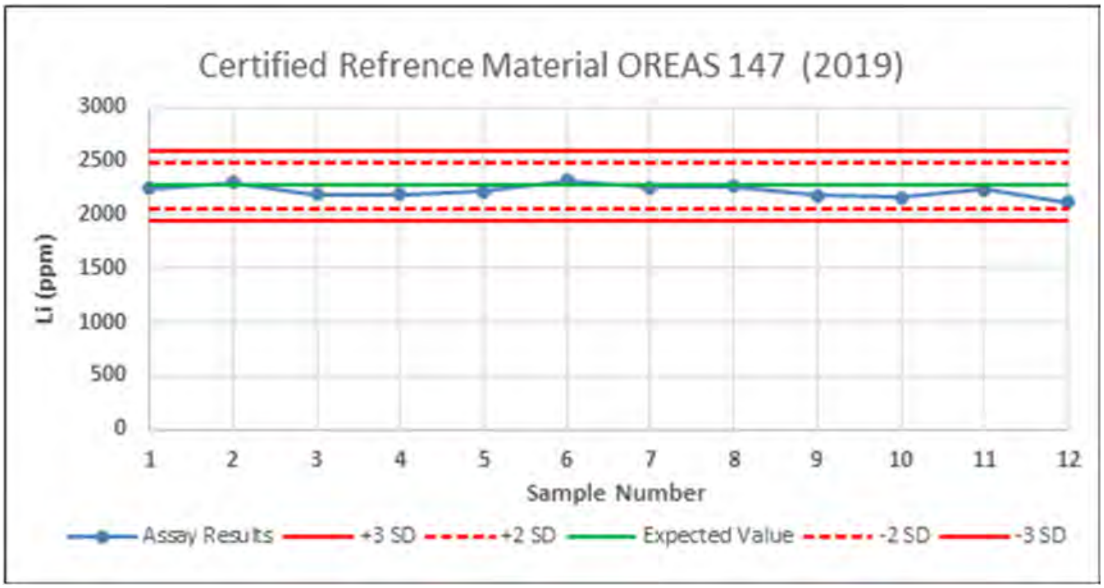


Figure 11-15: OREAS 147, Drilling Program 2019 (Source: GRE, 2022)

For the 2019 drilling campaign the blank, standard and duplicate sample returned assay values all within set tolerances, indicating no systematic errors.

11.1.4 Sample Security

Century maintains formal chain-of-custody procedures during all segments of sample transport. Samples prepared for transport to the laboratory are bagged and labeled in a manner which prevents tampering and remain in Century control until released to the laboratory. Upon receipt by the laboratory, samples are tracked by a sample number assigned and recorded by the geologist. Retained core, sample reject material and pulps are stored at a secure storage facility in Silver Peak (Figure 11-16), at ALS USA or BV Minerals laboratories.

Figure 11-16: Core Storage in Sliver Peak (Source: GRE, 2020)

11.1.5 QP Comments on Section 11 (2017-2019)

The QP finds the sample preparation, analytical procedures, and security measures employed by Century to be reasonable and adequate to ensure the validity and integrity of the data derived from Century's sampling programs between 2017 and 2019.

Items to consider for the Project are: 1) continue to utilize the procedures in place for data collecting, sampling, and QA/QC for analytical work, 2) increase assay confidence through systematic selection of samples for check assays at a second analytical laboratory, 3) continue to review analytical laboratories utilized for future work, and 4) catalogue locations of archived core, sample reject material and pulps.

The QP also confirms that the sample preparation analytical procedures, and security measures conducted by Enertopia in 2018 are reasonable and adequate to ensure the validity of the data from Enertopia's sampling program for resource estimation.

11.2 Campaign 2022

Century collected samples from the eight sonic holes (CVS1 to CVS8) drilled in June 2022 on the Property. Drilling of hole CVS8 was completed at the time of the QP's site visit. Sample preparation for all holes were done nearly in the same way at the Century Property as the in-house sample preparation.

11.2.1 Sonic Drill Sampling

Sonic drilling utilizes rotation, sound vibrations and a small amount of water (as necessary) to penetrate the subsurface. In this application, a 209.6 mm casing was set to 3 to 6 mbsg and then a 152.4 mm or 101.6 mm inner-diameter core barrel was used to collect the core sample. As the drill advances, the core is pushed upwards into the core barrel using pushrods attached to it and the drill head. In general, a 9 m length of core was collected in each run using three 3 m core barrel sections. The core barrel and each attached rod above the core barrel was lifted and removed from the hole for each run. When collecting the core, the top section of core barrel is brought above ground and disconnected from the string, where 3 m of recovered core is placed in labeled clear plastic bags in approximately 0.6 m pieces. The core is collected in reverse order of coring from the bottom of the core barrel section; for example, 5.5 to 6 m, 4.9 to 5.5 m and so on. This is done for each 3 m section of core barrel. The plastic bags of core were placed in mobile storage containers for transport off site.

11.2.2 Sample Preparation

Upon completion of each hole, the core was transported to Century's facility at the Tonopah Airport where the site geologist and field technician took disk and longitudinal slice samples for assaying. In the disk sampling method, disk samples (whole core) were cut with hand tools, with a maximum length between 6.1 to 12.2 cm, from the top of each 1.5 m or 3 m sonic sample interval. In longitudinal sampling, samples were cut with hand tools in longitudinal slices in which a narrow and shallow slice from the top to the bottom of each sample interval was collected.

11.2.3 Analytical Procedure

Samples were transported to ALS USA. The samples were initially weighed, dried (as required), crushed to 70% <2 mm, then pulverized up to 250 g 85% <75 µm and split using a riffle splitter. The samples were digested using aqua regia. The sample was then subjected to ALS USA's MEMS-61r method, which is an ICP-MS and ICP-AES analysis of digested 0.5 g samples. ALS USA notes the method has a precision of 1% for samples containing between 10 and 10,000 ppm Li.

11.2.4 Quality Assurance and Quality Control

Century's in-house QA/QC procedures in 2022 were limited to submitting 12 field duplicate samples as check samples, 13 blank samples, and 13 standard samples to the laboratory for all 234 sonic samples. The standards and the blanks were purchased from OREAS and their assay results were routinely reviewed by a Century geologist. The results fall within the anticipated range of variability as described by the manufacturer of the standards and as a result the QP is of the opinion that there is no indication of systematic errors that might be due to sample collection or assay procedures.

11.2.4.1 Blanks Analysis

Blank samples were inserted into the sample stream at a rate of one blank sample per 18 sonic samples. The blank sample material from OREAS was quartz silica. Figure 11-17 presents the assay results of the blanks by ALS USA for the 2022 drilling program. The data shows there is only one sample with an assay value more than +2SD of the population's mean. The difference between that blank and +2SD is only 2.7 ppm and considering the laboratory detection limit for lithium, it still can be considered that there is no contamination.

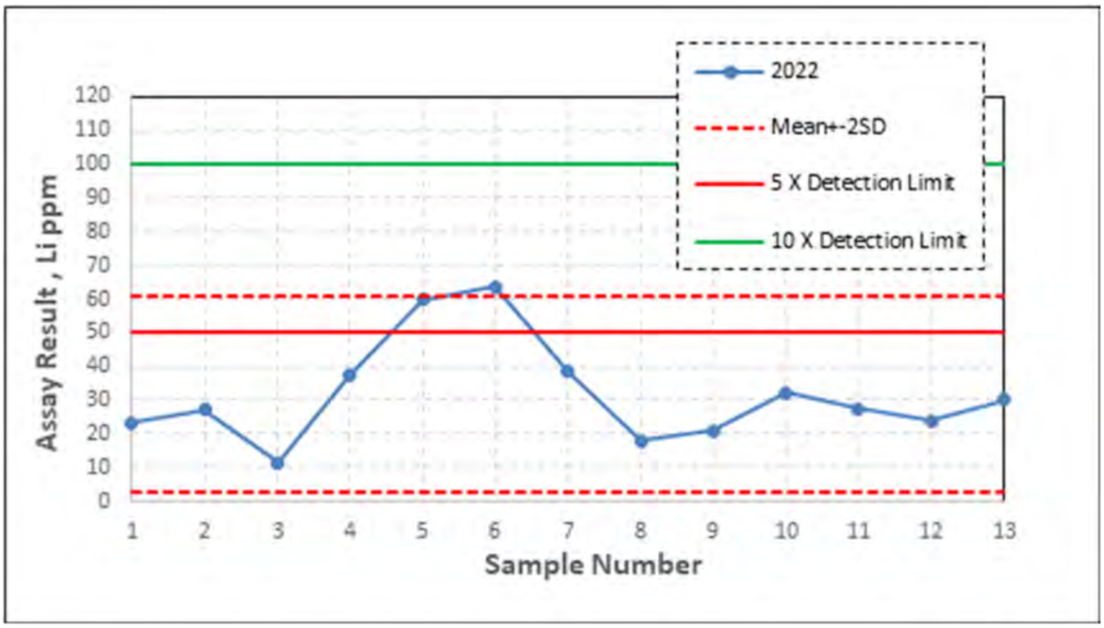


Figure 11-17: Assay Results, Blank Samples, Sonic Program 2022 (Source: GRE, 2022)

11.2.4.2 Duplicate Analysis

Based on Century's in-house QA/QC procedure, duplicate samples were inserted into the sample stream at a rate of one duplicate sample for every 19.5 sonic samples. Duplicate samples were prepared in the same manner as all samples, from the disk or longitudinal slice samples and were assayed at the same laboratory. Figure 11-18 shows a comparison of the field duplicates with the original assays.

The Q-Q plot effectively indicates no scatter in the data, with an R^2 value of 0.9605. Some scatter occurs at the upper-grade values but is still within acceptable range in the opinion of the QP.

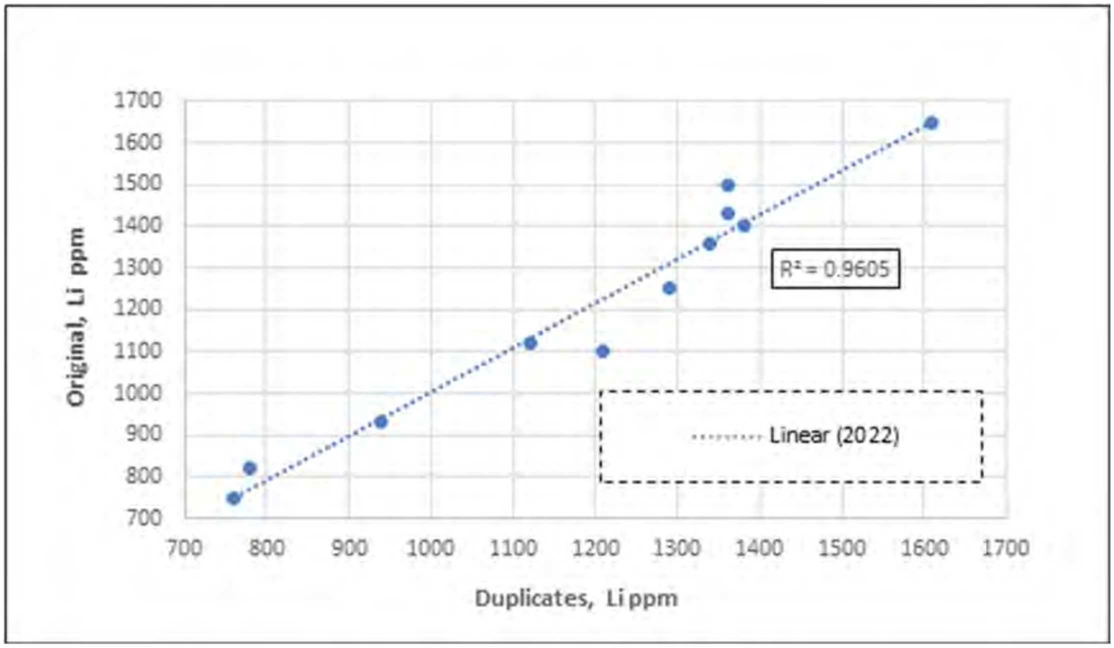


Figure 11-18: Duplicate Comparison, 2022 (Source: GRE, 2022)

11.2.4.3 Standards Analysis

Commercially prepared standard samples were inserted into the sample stream at a rate of one standard per 18 sonic samples. Standard OREAS 147 were inserted into the Century sample bags with company tags.

Figure 11-19 shows a scatter plot of the certified value for each assay standard compared to the value obtained by ALS USA. The laboratory's analytical results generally correlate well with the standard values, with no outliers. A 45-degree line represents a good correlation between the standard assay certified value and actual assay results. This line passes through almost all of the sample sets, with the majority of the points directly adjacent to the line, indicating acceptable accuracy performance for the standards. The scatter that is seen for lithium is acceptable.

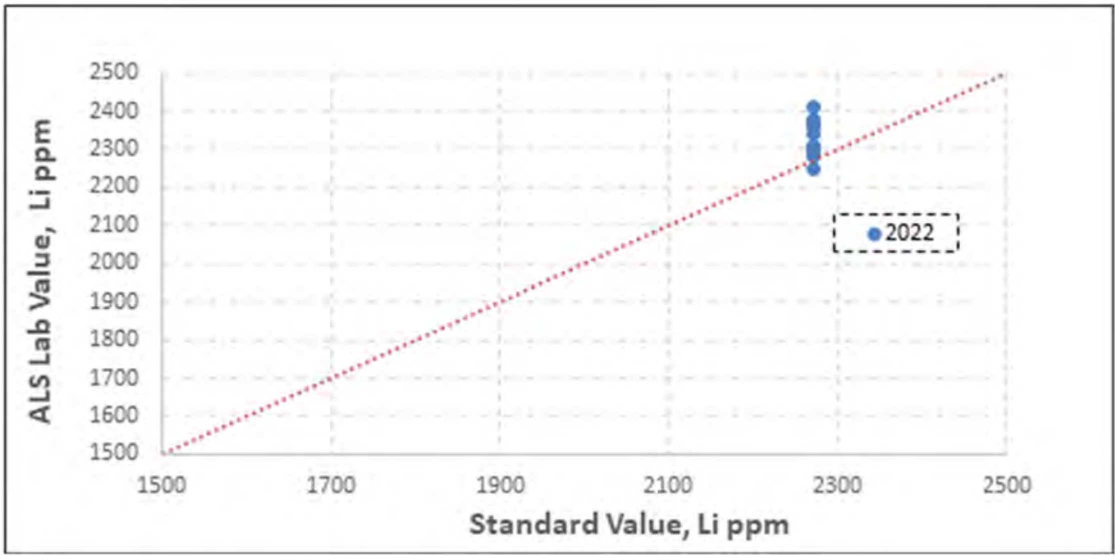


Figure 11-19: Assay Standard Results (2022) (Source: GRE, 2022)

Figure 11-20 shows a control chart for OREAS 147. Control lines are plotted on the chart for the expected value of the CRM, +/- 2SD of the expected value, and +/- 3SD of the expected value. CRM assay results are plotted in order of analysis. All samples returned assays values within +/- 2SD. The QP finds the results show reasonable analytical accuracy.

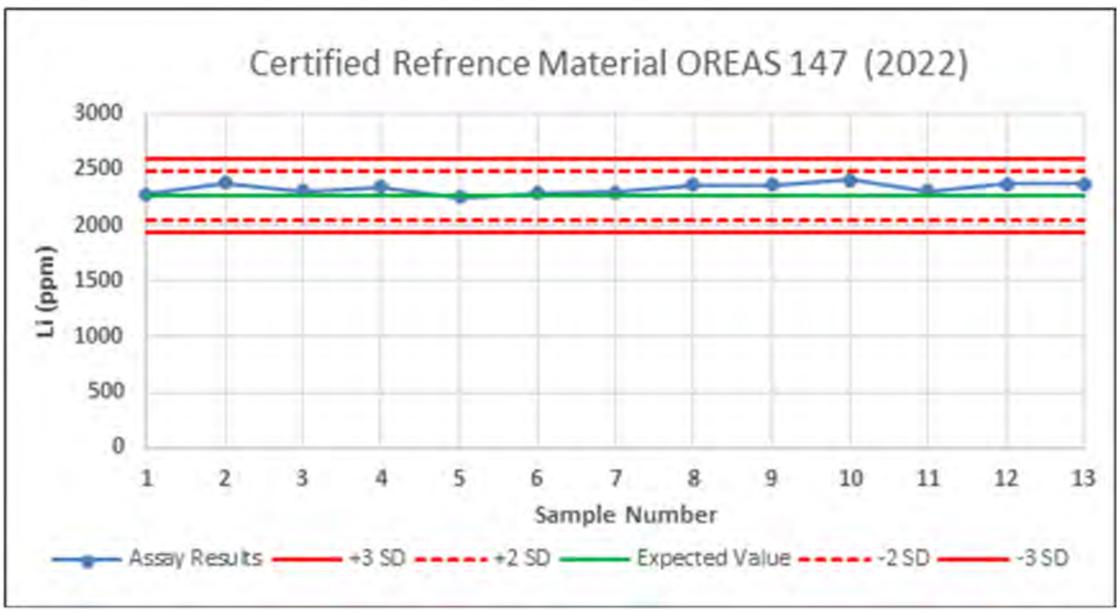


Figure 11-20: CRM OREAS 147 (Source: GRE, 2022)

11.2.5 Sample Security

Century maintained formal chain-of-custody procedures during all segments of sample transport.

Samples prepared for transport to ALS USA were placed into cloth bags, labeled and sealed to prevent tampering. Blank and standards were added to each run before submission to ALS USA. Samples remained in Century's control until released to the ALS USA. Retained samples were securely stored in Century's storage facility at the Tonopah Airport, and the rejects and pulps were returned to Century's facility for potential future check analysis. A chain of custody was documented throughout the entire transportation process.

11.2.6 QP Comment on Section 11 (2022)

The QP finds the sample preparation, analytical procedures, and security measures employed by Century to be reasonable and adequate to ensure the validity and integrity of the data derived from Century's 2022 sampling program.

Based on observations and conversations with the Century field geologist and the review and evaluation of Century's QA/QC program, Dr. Samari makes the following recommendations:

- Although the 2022 sonic program included both disk and longitudinal sampling methods, the longitudinal sampling method should be the only sampling method used for future drilling programs. A maximum 12.7 cm disk sample from the top of each 3 m sample interval does not reflect the amount of lithium for the entire 3 m sample interval.
- Formal, written procedures for data collection and handling should be developed and made available to Century field personnel. These should include procedures and protocols for fieldwork, logging, database construction, sample chain of custody, and documentation trail. These procedures should also include detailed and specific QA/QC procedures for analytical work, including acceptance/rejection criteria for batches of samples.
- A detailed review of field practices and sample collection procedures should be performed on a regular basis to ensure that the correct procedures and protocols are being followed.
- Review and evaluation of laboratory work should be an ongoing process, including visits to the analytical laboratories involved.
- Standards, blanks, and duplicates, including one standard, one duplicate, and one blank sample should be inserted every 20 interval samples, as is common within industry standards.

12.0 DATA VERIFICATION

Data verification efforts included on-site inspections of drilling activity, core storage facility, independent laboratory facilities, check sampling, and auditing of the project database.

12.1 Site Inspections

The most recent site visits made by independent QPs Samari and Lane was from 31 May to 1 June 2022, and QP Fayram in November 2023. QP Lane also visited the Property in March 2019 and QP Fayram on several occasions since August 2019. QP Yuan visited the Property in 2022.

12.2 Drill Hole Locations and Collar Identification

12.2.1 Collar Coordinate Validation (2017-2019)

Geographic coordinates for all drill hole collar locations were recorded by GRE's QP in the field using a hand-held Trimble of Garmin GPS unit. Drill holes have permanent (rebar and tag) markers erected at their collar locations (Figure 12-1). Drill hole elevations were cross referenced with professional elevation surveys conducted by Strix Imaging in February 2018 and March 2019.

Figure 12-1: Drill Collar Marker at DCH-03 (Source: GRE, 2020)

12.2.2 Collar Coordinate Validation (2022)

QP Samari used a handheld GPS, model Garmin 64st, to check the geographic coordinates of all drilled holes in the 2022 drilling campaign. The average variance between field collar coordinates and collar coordinates contained in the Project database for the eight holes is roughly 4.5 m, which is within the expected margin of error (Table 12-1). The average variance between field collar elevation and holes CVS1, CVS2, CVS5, CVS6, and CVS7 contained in the project database is 4.4 m, which is within the expected margin of error. The variances for holes CVS3, CVS4, and CVS8 are 45.4, 16.5, and 69 m respectively, which is not acceptable.

Elevations from the topographic maps for holes CVS1 to CVS8 correlate well with the coordinates collected by QP Samari, with maximum, minimum, and average differences of 5.6, 0.2, and 3.5 respectively (Table 12-2). Using the site topographic map and engineering judgment, QP Samari adjusted the elevation of all holes. Table 12-2 shows the modified elevations for these eight holes, which are suitable and were replaced in the database and used for mineral resource estimation.

During QP Samari's field visit, drill hole collars were located with a Century geologist using a handheld GPS as collars have no permanent markers. In following Century's protocol, a 61 cm rebar with attached metal marker stamped with hole name and company initials was installed at each collar in October 2023 for future reference.

All drill hole collars drilled on the Property have only been surveyed in the field using handheld Garmin GPS MAP64s. QP Samari recommends that all existing holes and future drill programs be surveyed using a differential GPS. These coordinates should then be compared to the digital topography in areas where lidar data is available. Any inconsistencies between the data set should then be reconciled.

Table 12-1: Collar Coordinate Inspections

General Hole Information			Coordinates from Century Database (UTM WGS84)			Coordinates from Hand-held GPS (UTM WGS84) by GRE			Distance Difference (m)	Elevation Difference (m)
No.	Hole ID	Depth (m)	Easting	Northing	Elevation (m)	Easting	Northing	Elevation (m)		
1	CVS1	76.2	456606.69	4178144.33	1371.7	453605.02	4178145.45	1376.0	2.0	4.3
2	CVS2	76.2	453285.84	4178426.29	1360.1	453286.71	4178424.73	1365.0	1.8	4.9
3	CVS3	76.2	453259.19	4177500.55	1327.6	453254.54	4177504.01	1373.0	5.8	45.4
4	CVS4	76.2	453214.74	4177834.66	1354.5	453217.20	4177832.87	1371.0	3.0	16.5
5	CVS5	61.0	455003.84	4179546.34	1365.3	455003.64	4179543.56	1371.0	2.8	5.7
6	CVS6	76.2	454923.91	4180104.31	1354.9	454920.22	4180105.55	1361.0	3.9	6.1
7	CVS7	61.0	454755.55	44180320.37	1351.0	454752.91	4180320.83	1352.0	2.7	1.0
8	CVS8	76.2	454548.08	4180629.85	1411.0	454540.75	4180642.09	1342.0	14.3	69.0
Maximum Difference									14.8	69.0
Minimum Difference									1.8	1.0
Average Difference									4.5	19.1

Table 12-2: Collar Coordinate Elevation Changes

General Hole Information			Coordinates from Century Database (UTM WGS84)			Modified Elevation based on Topography		Coordinates from Hand-held GPS (UTM WGS84) by GRE			Elevation Difference (m)
No.	Hole ID	Depth (m)	Easting	Northing	Elevation (m)	Elevation (m)	Explanation	Easting	Northing	Elevation (m)	
1	CVS1	76.2	456606.69	4178144.33	1371.7	1371.6	Detailed topography from aerial drone surveys completed in 2018	453605.02	4178145.45	1376	4.4
2	CVS2	76.2	453285.84	4178426.29	1360.1	1360.4		453286.71	4178424.73	1365	4.6
3	CVS3	76.2	453259.19	4177500.55	1327.6	1367.4		453254.54	4177504.01	1373	5.6
4	CVS4	76.2	453214.74	4177834.66	1354.5	1365.8		453217.20	4177832.87	1371	5.2
5	CVS5	61.0	455003.84	4179546.34	1365.3	1371.2	Lower resolution topography	455003.64	4179543.56	1371	0.2
6	CVS6	76.2	454923.91	4180104.31	1354.9	1360.5		454920.22	4180105.55	1361	0.5
7	CVS7	61.0	454755.55	44180320.37	1351.0	1355.0		454752.91	4180320.83	1352	3.0
8	CVS8	76.2	454548.08	4180629.85	1411.0	1346.6	Like CVS1 to CSV4	454540.75	4180642.09	1342	5.0
Maximum Difference											5.6
Minimum Difference											0.2
Average Difference											3.5

12.3 Geological Data Verification and Interpretation

During his site visit QP Samari checked the geological maps prepared by Century for the entire Property. QP Samari also visited Century's facility at the Tonopah Airport, where the sonic sample intervals were visually inspected and compared to the drill hole logs.

Field visit observations and inspection of sonic sample intervals generally confirmed geological maps of the project area. The lithology of exposed bedrock, alteration types, and significant structural features is consistent with descriptions provided in previous technical reports (Lane et al., 2018a; Lane et al., 2018b). QP Samari did not see any evidence in the field that might significantly alter or refute the current interpretation of the local geologic setting (Figure 12-2 and Figure 12-3).

Figure 12-2: Geological Inspections in 2022, view of upper olive claystone partially covered by alluvium (Source: GRE, 2022)

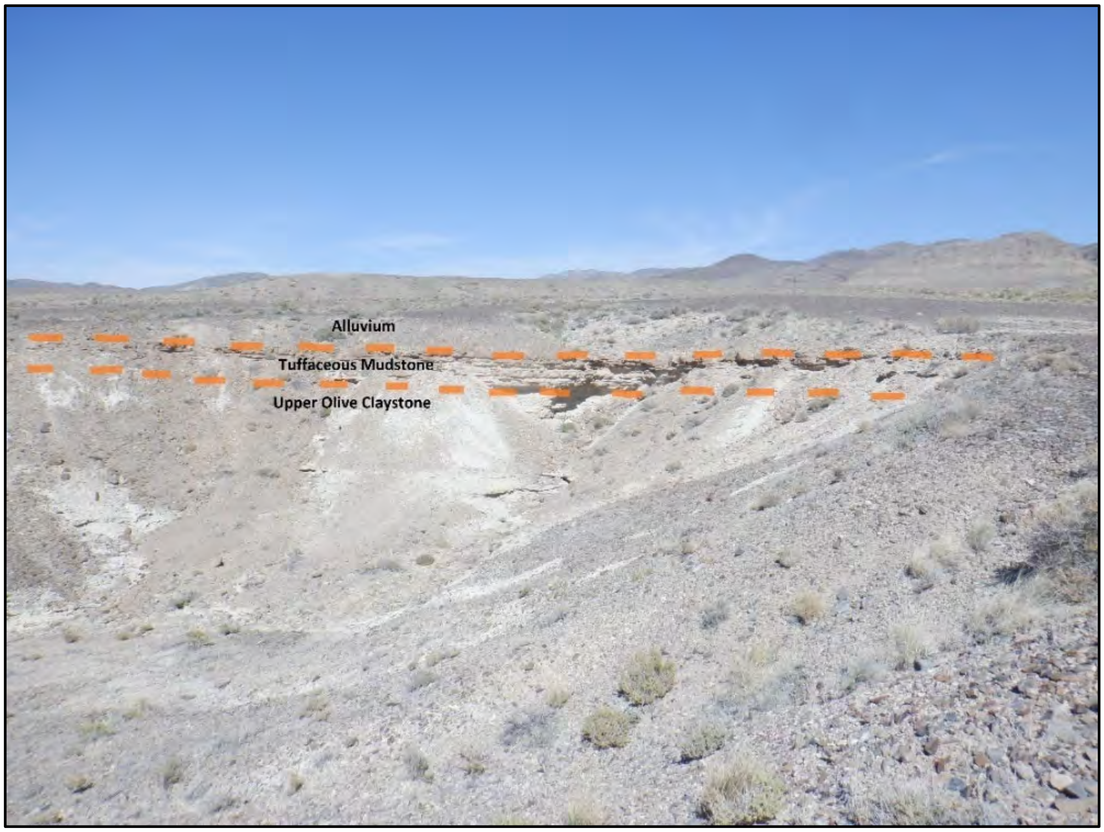


Figure 12-3: Geological Inspections in 2022, view of upper olive claystone, tuffaceous mudstone covered by alluvium (Source: GRE, 2022)

12.3.1 2017-2018

During the 2018 site inspection, GRE's QP selected 26 core sample intervals from eight drill holes for visual inspection and check sampling based on a review of the drill hole logs and original assay results. The sample intervals selected were gradational regarding both assay value and oxidation (i.e., high, moderate, and low original assay values; and above, within, and below the apparent oxidation horizons). Without exception, the core samples inspected accurately reflect the lithologies and sample descriptions recorded on the associated drill hole logs and within the Project database.

A total of 29 check samples (26 core intervals and three surface samples) were delivered to ALS Minerals in Elko, Nevada for analysis using the same sample preparation and analytical procedures as were used for the original samples (ALS USA 2018 to 2019). A comparison of the original versus check assay values for 24 of the 26 core samples shows a good correlation between the results, with an R^2 of 0.92 (Figure 12-4). Two surface samples also show a good correlation with their original. Two samples were removed from the sample population: one core sample based on a discrepancy in sample length and one surface sample for which an original assay value was unavailable.

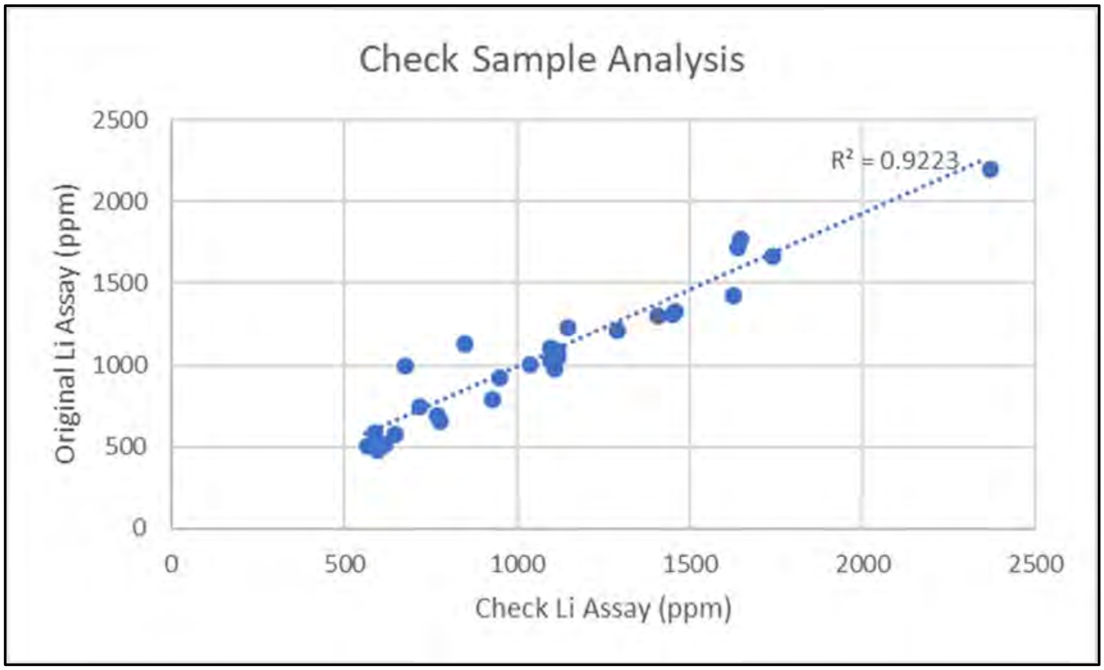


Figure 12-4: Check Sample Analysis, 2018 (Source: GRE, 2018)

12.3.2 2019

During the 2019 site inspection, QP Lane visited the Project during active drilling. She observed the drilling techniques and collection of the drill cores. QP Lane also visited Century's core storge facility in Silver Peak where she observed core from CM002 and CM004 awaiting processing pending the settlement of a title dispute. While on site, QP Lane recommended geotechnical samples be collected from drill core at select intervals and requested an additional hole be drilled.

12.3.3 2022

In 2022, approximately 17 sonic sample intervals from drill holes, CVS2, CVS4, and CVS5, were selected by QP Samari for visual inspection based on a review of the drill hole logs (Figure 12-5). The samples inspected accurately reflect the lithologies and sample descriptions recorded on the associated drill hole logs and within the Project database.

Figure 12-5: Visual Inspection of Sonic Samples (Claystone) in Century's Facility at the Tonopah Airport (Source: GRE, 2022)

QP Samari collected 17 check samples (from three different drill holes) and four surface samples to verify the assay results. Of the 17 samples, 14 were taken as disk samples with a maximum length between 6.1 to 12.2 cm from top of each 3 m sonic sample interval. In addition, three samples were taken as longitudinal slice samples from the top to the bottom of each sample interval, with a length of 3 m (Figure 12-6). Disk and longitudinal samples were split into two samples, one to be inserted into the stream samples for assaying and the other for a check sample.

All 17 samples with four surface samples were bagged, labeled packed and delivered by QP Samari to Hazen Research Inc. (Hazen) in Golden, Colorado, USA.

Figure 12-6: Check Sample Collection 2022 (Source: GRE, 2022)

Samples were analyzed by ICP-OES, 32 elements + lithium for both drilled and surface samples. The results of analysis from Hazen are provided in Table 12-3.

Table 12-3: Summary Table of Hazen Results with Original Assays (Drill Holes)

No.	Hole No.	Sampe ID	From (m)	To (m)	Longitudinal Sampling	Disk Sampling	Request Analysis		Original Li (ppm)	Hazen Li (ppm)	Hazen Duplicate Li (ppm)
							ICP Scan with Emphasis on Lithium	Duplicate			
1	CVS2	104285	18.29	18.34		☑	☑		710	690	
2	CVS2	104290	31.39	31.45		☑	☑		930	930	
3	CVS2	104301	54.86	54.92		☑	☑		1530	1390	
4	CVS2	104308	76.14	76.20		☑	☑		434	480	
5	CVS4	104311	6.10	6.15		☑	☑		1590	1520	
6	CVS4	104323	33.53	33.58		☑	☑	☑	1140	1200	1190
7	CVS4	104330	54.86	54.92		☑	☑		1010	980	
8	CVS4	104337	73.15	73.20		☑	☑		870	920	
9	CVS5	104348	30.48	30.60		☑	☑	☑	650	600	590
10	CVS5	104349	30.48	33.53	☑		☑		660	670	
11	CVS5	104350	35.23	35.36		☑	☑		680	670	
12	CVS5	104351	36.58	36.70		☑	☑		660	680	
13	CVS5	104352	39.62	42.67	☑		☑		710	750	
14	CVS5	104353	39.62	39.75		☑	☑		970	1030	
15	CVS5	104354	42.67	45.72	☑		☑		770	800	
16	CVS5	104355	42.67	42.82		☑	☑		570	670	
17	CVS5	104356	45.72	45.84		☑	☑		960	930	

A comparison of the original versus check assay values for the 17 sonic samples shows good correlation between the results with an R^2 of 0.9735 (Figure 12-7). Standard t-test statistical analysis was completed to look for any significant difference between the original and check assay population means. The results of the t-test showed no statistically significant difference between the means of the two trials (original versus check assay).

Assay results from four surface samples GRE01, GRE02, GRE03, and GRE04 also confirm the previous surface sampling results by Century that show the Zone 1 claystone has higher lithium grades than the tuffaceous mudstone (see Table 12-4).

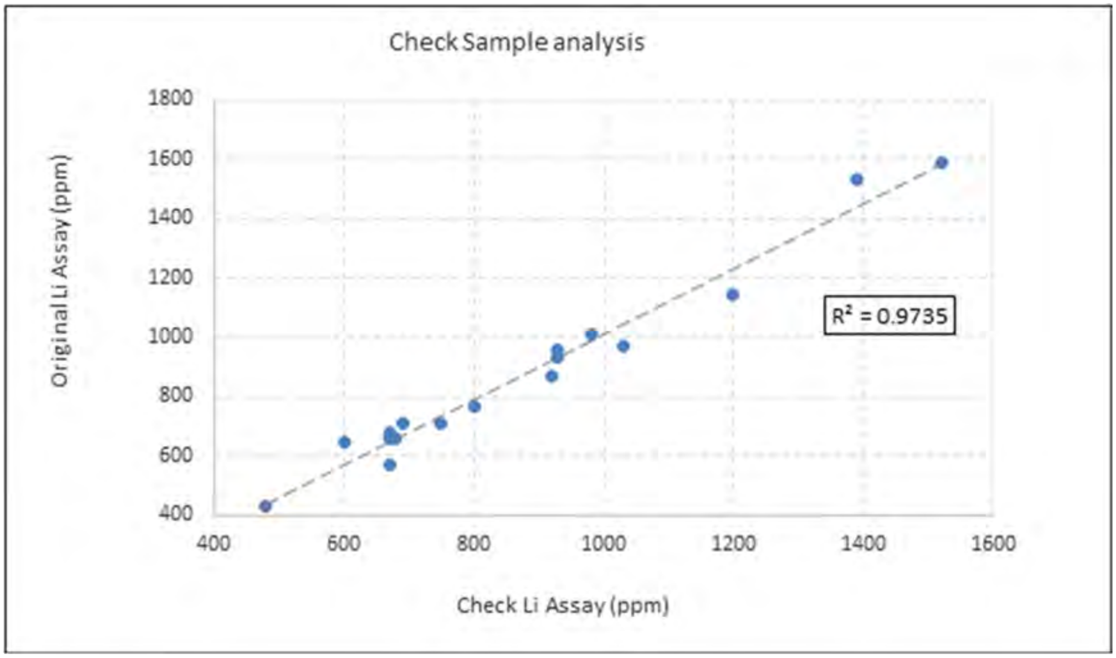


Figure 12-7: Check Sample Analysis, 2022 (Source: GRE, 2022)

Table 12-4: Summary Table of Hazen Results with Original Assays (Surface Samples)

Surface Samples	GRE Sample ID	Easting	Northing	Elevation (m)	ICP Scan with Emphasis on Li	Duplicate	lithology	Hazen Li (ppm)	Hazen Duplicate Li (ppm)
1	GRE01	453274.3	4177639	1369	☑		Upper Olive	990	
2	GRE02	453786.0	4177354	1391	☑		Tuffaceous Mudstone	390	
3	GRE03	453778.1	4177364	1388	☑		Upper Olive	630	
4	GRE04	453464.1	4179492	1347	☑	☑	Upper Part of Upper Olive	410	410

12.4 Database Audits

A manual audit of the digital Project database was completed. About 10% of the original assay certificates for surface samples and all drill holes were spot-checked with the database for accuracy and clerical errors. The manual audit revealed no discrepancies between the hard-copy information and the digital database.

QP Samari also manually audited 40% of original assay certificates with the database for the Enertopia drilling program in 2018 and found no material errors.

QP Samari recommends that Century establish a routine internal mechanical audit procedure to check for overlaps, gaps, total drill hole length inconsistencies, non-numeric assay values, or any missing information in the database. After any significant database update, an internal mechanical audit should be conducted. The results of each audit, including any corrective actions taken, should be documented to provide a running log of the database validation.

12.5 QP Comments on Section 12

12.5.1 Geology and Mineral Resources

Based on the findings of QP Samari's verification of the sampling practices, drill hole collars in the field, visual examination of sample intervals, and the results of both manual and mechanical database audit efforts for the drilling campaigns, QP Samari considers the collar, lithology, and assay data contained in the Project database to be reasonably accurate and suitable for use in estimating Mineral Resources and Mineral Reserves.

12.5.2 Metallurgy

Samples used in the metallurgical testing were delivered directly from ALS USA to the respective laboratories. Assays were verified by comparing the metallurgical head values with the respective intervals assayed in the database. QP Fayram verified the results in the database and other laboratories by checking and comparing assayed grades of solutions, heads and tails solids as determined from samples delivered by CMS to ALS USA. Results from filtration studies and on tailings handling were verified by comparison between two independent laboratories used in the study. Based on the verification completed, QP Fayram considers the metallurgical test results suitable to support feasibility level of study and the process design presented in this Report.

12.5.3 Mine Planning and Evaluation

Mining and processing methods and infrastructure were verified by comparison to other industry standards and experience of the QPs.

The pit slope angles were determined from results provided by a single laboratory using core from three selected drill holes. The verification of densities was determined by comparing values between the data sets from four different laboratories.

Mining methods and costs were verified by comparison to other similar sized open pit mines and experience of QP Lane. Mining costs were developed from vendor quotations and comparisons to published and internal data used by the QP Lane in the preparation of similar studies. Other mining cost data used in the Report was sourced from the most recent Infomine cost data report. All mining costs used in the analysis were verified and reviewed by QP Lane and were assessed to be current and appropriate for use.

12.5.4 Geotechnical

Select subsurface material samples and tailings samples were reviewed and tested for geotechnical characterization in support of infrastructure foundation and TSF designs. Moreover, geotechnical investigations, field mapping and laboratory testing have been performed under the oversight by QP Yuan. The geotechnical data is suitable to support the feasibility level design of the TSF in this Report.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Background

Lithium at the Project occurs in illite and smectite clays. Metallurgical test work by Century to extract lithium from the clays and recover it to a marketable form began in 2017.

Lithium recovery test work was conducted by various laboratories, including:

- CMS, Butte, Montana (CMS) – leaching, filtering, and precipitation testing
- Eagle Engineering, Butte, Montana (Eagle Engineering)– mineral liberation analysis
- ALS Metallurgical Laboratories, Reno, Nevada (ALS USA) – assaying
- SGS Minerals Services, Reno, Nevada (SGS) – leaching, assaying
- Hazen Research, Inc., Denver, Colorado (Hazen) – leaching, assaying
- Pocock Industrial, Salt Lake City, Utah (Pocock) – rheology, thickening
- Andritz, Dallas, Texas (Andritz) – filtration
- NORAM Engineering and Constructors Ltd., Vancouver, BC (NORAM) – leaching, evaporation, precipitation, reverse osmosis, lithium precipitation.

These studies resulted in the development of a flowsheet for the Project's 2021 Prefeasibility Study (PFS) (Fayram et al., 2021). In the PFS flowsheet, lithium extraction was accomplished by leaching the clay in a heated solution of dilute sulfuric acid, followed by filtration for the removal of solids and lithium recovery via chemical and membrane purification, evaporation, and crystallization.

Further test work was conducted to examine the effects of leaching clay in a sodium chloride brine, a potential source of process water in the Project area. Test work was conducted by the following laboratories:

- CMS – leaching, filtering, and precipitation
- Eagle Engineering – mineral liberation analysis
- Chemionex, Toronto, Ontario (Chemionex) – ion exchange, reverse osmosis
- Saltworks, Vancouver, BC (Saltworks) – lithium carbonate recovery
- Diemme, Italy – filtration
- BHS Filtration, Charlotte, North Carolina (BHS) – filtration
- Pocock – rheology, settling, filtration, and thickening
- Engineered Filtration Secrets, Sebastopol, California – osmotically assisted reverse osmosis
- ALS USA – assaying.

These studies resulted in the development of the Project's flowsheet where lithium is extracted from the clay by leaching in a heated solution of dilute hydrochloric acid. This is followed by precipitation of deleterious elements, filtration to remove solids, DLE to recover and concentrate lithium, chemical and membrane purification, evaporation, and crystallization to produce a final lithium carbonate product.

13.2 Testing Overview

Bench-scale tests were completed to compare sulfuric acid (H_2SO_4) versus hydrochloric acid as the leaching reagent. Numerous bench-scale tests were conducted which led to two bulk tests on 50 kg samples as specified in Table 13-1.

Table 13-1: Bulk Leach Tests

Bulk Test-A	Bulk Test-B
6% H_2SO_4	6% HCl
80.2% lithium extraction	81.4% lithium extraction

Tests -A and -B were conducted on a similar composite sample prepared from selected core samples representing the clay units from across the Project area and at depth. In each test, sulfuric acid or hydrochloric was added as a 6% solution (100% acid basis) and heated to 63°C. The resulting slurries were leached for four-hours. The extractions of lithium were similar for Test-A and Test-B, at 80.2% and 81.4% extraction, respectively.

In Test-A, using sulfuric acid, the leached slurry had no observed settling and took 40% more time to filter under vacuum than the slurry from Test-B. In Test-B, using hydrochloric acid, settling of the leached slurry occurred in under six hours. Both tests were conducted without the use of flocculent. These observations were significant as filtration was a significant problem experienced in previous tests using sulfuric acid.

With similar recoveries in both tests, the faster and more efficient filtration in Test-B was the reason for the switch to hydrochloric acid leaching. The benefits of using hydrochloric acid for leaching were also seen in the chemistry of the leach solution, but most importantly it eliminated the formation of gypsum (calcium sulfate) which in prior testing resulted in difficult filtration when using sulfuric acid. Switching reagents also eliminated the need for raw sulfur to make sulfuric acid at the Project.

Further bench tests using chloride leaching followed by DLE recovery of lithium from the leachate showed improved alkali earth element rejection, specifically sodium and potassium, and allowed softening to remove calcium and magnesium without fouling the softening resins. Using chloride leaching and DLE recovery of lithium, a process flowsheet was developed to produce a marketable lithium carbonate product.

For chloride-based leaching, the Project will require an on-site chlor-alkali plant to generate the two key reagents for the process, hydrochloric acid and sodium hydroxide, both of which are produced from the electrolysis of concentrated sodium chloride solutions. Based on the results demonstrating advantages in materials handling, and the ability to make use of locally obtained sodium chloride brine in the process, the chloride-based flowsheet was developed and pursued as the basis for the pilot plant program to support the FS.

13.3 Pilot Plant

In 2021, a pilot plant was designed and constructed in a facility in Amargosa Valley, Nevada. The plant was developed to leach one tonne per day of lithium clay and produce a high-grade lithium chloride solution for further processing to make lithium carbonate off-site.

The pilot plant focused on using currently available off-the-shelf technology. The initial configuration of the pilot plant consisted of screening and attrition scrubbing, followed by leaching, counter current decantation (CCD), a vacuum belt filter to produce dewatered solids and a clear leach extractant, and primary and secondary impurity removal (PIR/SIR) steps to produce a clean, neutral pH solution for lithium recovery. The impurity removal steps were used to remove deleterious elements such as magnesium, iron, manganese, aluminum, barium, and others prior to lithium recovery to minimize metal loading and potential fouling.

For lithium recovery, Century acquired a license and pilot-stage equipment for an ion-exchange-based DLE process from Chemionex. High grade lithium product solutions from the lithium recovery area were collected and shipped to Saltworks for final treatment and the production of lithium carbonate. At the pilot plant, the depleted lithium solution from the lithium recovery area is treated to remove excess calcium and magnesium and returned to leach as process water.

13.3.1 Sample Material

Lithium-bearing claystone was obtained from bulk samples collected at the Project. The material was obtained from a surface excavation taken in claystone zone 1, mostly from the top of the claystone deposit, but similar in deposition to the entire deposit. Calcium content in the surface material is higher than in deeper material in the deposit, likely due to the effects of surface weathering. Bench tests on cores from deeper in the deposit show similar if not better characteristics in leaching to the bulk sample.

The material was excavated and hauled to Century's Tonopah Airport facility where it was crushed and screened and placed in one tonne super sacks for transport to the pilot plant. Samples were collected from each super sack and sent to ALS USA for sample preparation. The head samples were then assayed for lithium and multi-element geochemistry at ALS USA.

13.3.2 Pilot Plant Operations

Construction of the pilot plant was completed in late 2021. Since its startup, there have been 44 operating runs. During each run, the pilot plant operated continuously for 24 hours per day, typically over a seven-day period. There are typically five to six days between runs for downtime, maintenance, and plant changes.

The pilot plant is operated with a crew of one operator and one helper on shift, and a supervisor and two technicians in the assay laboratory on days.

All solution samples collected during operations are analyzed by ICP in the on-site assay laboratory. Solid residues and duplicate solution samples are sent to ALS USA for further analysis.

Key reagents used in the operation are industrial grade hydrochloric acid and sodium hydroxide, both in dilute liquid form, in 900- to 1,000-L totes, and agricultural grade sodium chloride as solid salt in 22.7 kg bags.

13.3.3 Pilot Plant Initial Configuration: Run 1 to 32

For runs 1 to 31, the pilot plant was arranged around the five-stage CCD and two-stage PIR/SIR areas and utilized a vacuum belt filter for filtration (see Figure 13-1). Runs were operated under the controls detailed in Table 13-2.

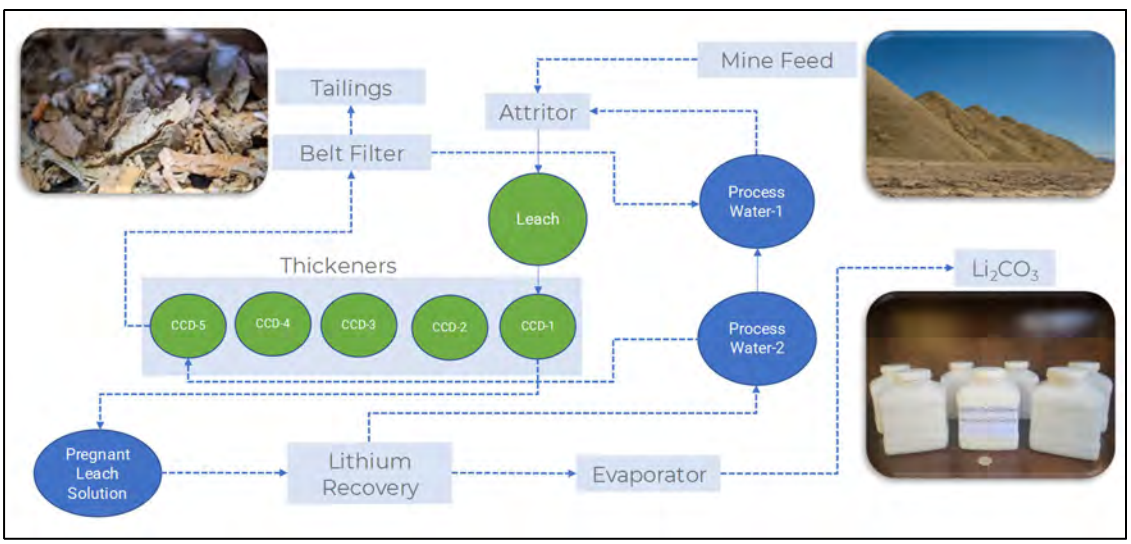


Figure 13-1: Initial Pilot Plant Flowsheet (Century, 2021)

Table 13-2: Initial Operational Conditions

Condition	Unit	Value
Feed rate	kg/min	0.6
Process water addition at attrition scrubber and CCD#5	mL/min	1,700
Leach tank temperature	°C	60
Residence time	Hour	4
Slurry density	% solids by wt	30%
Hydrochloric acid addition rate	mL/min	200
Hydrochloric acid concentration	%	28%
CCD circuit	% solids underflow	35
Flocculant addition	g/L	0.1
NaOH addition rate to CCD#1, PIR, lithium recovery discharge	mL/min	120
NaOH concentration	%	32%

For run 32 changes were made to the pilot plant in response to data collected, to resolve issues and effect operating improvements. The following are the key changes relevant to the final process flowsheet.

- PIR and SIR steps eliminated due to difficulties in precipitation and filtration
- Impurity removal (mainly iron, aluminum, and magnesium) accomplished by sodium hydroxide addition following leaching
- Removal of CCD thickeners and flocculant addition
- Replaced vacuum belt filter with pressure plate and frame filter
- Addition of a second leach tank to increase agitation during leaching.

The process design described in Section 17 was completed using information from Run 1 to 32. The process design and cost estimates do not include the PIR/SIR stages and the five-stage CCD circuit which were eliminated from the initial process flowsheet.

13.3.4 Runs 33 to 44

Operating conditions in runs 33 to 44 generally followed parameters established earlier for flow rates and leach and neutralization conditions.

Key changes to the operating conditions relevant to the final process are as follows:

- Run 34 – Upgraded lithium recovery unit in DLE area
- Run 39 – Upgraded softening unit in DLE area
- Run 41 – Added osmotically assisted reverse osmosis unit (OARO).

With the above changes, final lithium grades in product solutions from the pilot plant reached over 10 g/L. These higher lithium grades allowed the removal of evaporation in Saltworks' steps to produce lithium carbonate.

The current flowsheet at the pilot plant is illustrated in Figure 13-2.

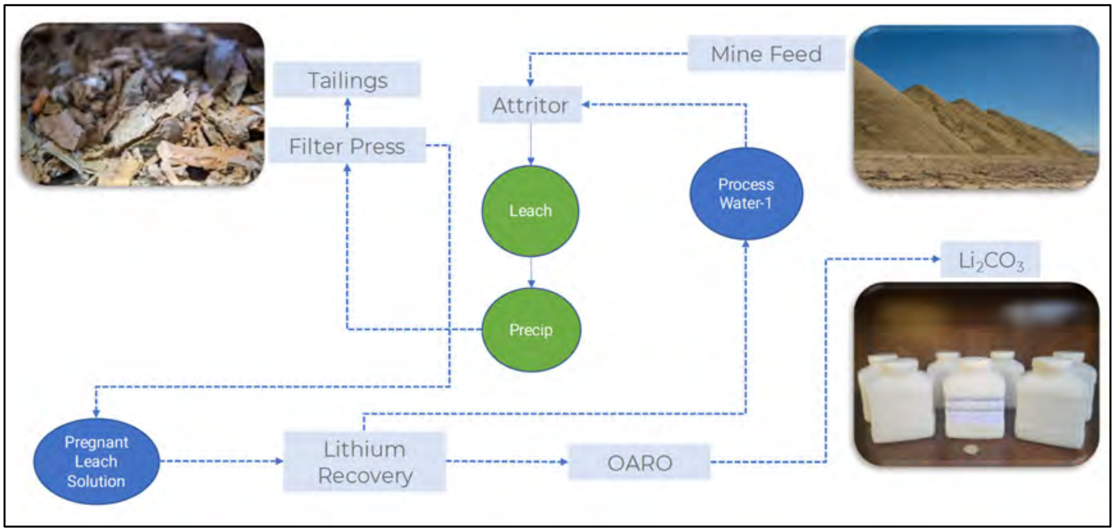


Figure 13-2: Current Flowsheet (Century, 2024)

13.3.5 Sampling

Samples were taken every six hours and analyzed daily in the on-site assay laboratory via ICP. Duplicate solution samples were collected at all sample points once daily and sent to ALS USA for check assays. Tailing samples were collected daily and sent to ALS USA for assay. All pH, eH, percent solids, and water flows are recorded throughout the plant hourly. Material weights and reagent additions are recorded every four hours.

The following identify the key sample points in the current configuration:

- Leach tank, generates information for hydrochloric acid addition and lithium extraction
- Neutralization mix tank, generates information for sodium hydroxide addition
- DLE feed tank, key point in recording head grade to DLE process
- DLE discharge – preceding sodium hydroxide addition for calcium removal, determined DLE recovery
- Process water tank – follows calcium removal, feed solution to attrition scrubber
- Filter press and centrifuge (calcium) solids, assayed to complete mass balance and recoveries.

13.4 Reagents Use

13.4.1 Hydrochloric Acid

Hydrochloric acid is provided in 1,000-L totes at 28-30% HCl (20 Baume). Acid is added to maintain a low target pH and generate a minimum solution grade of 250 mg/L lithium in the leach slurry.

Acid consumption is variable based on material flow rates and has varied in the pilot plant between 80 and 130 kg/t of dry material feed. The bulk sample material tested to date in the pilot plant was derived from shallow surface excavations at the Project. Laboratory testing on core samples deeper in the deposit indicates acid consumptions will be lower, in the range of 80 to 100 kg/t of dry material feed, for most of the deposit. For the FS, an average acid consumption of 104 kg/t of dry material is used.

13.4.2 Sodium Hydroxide

Sodium hydroxide is used at several points in the pilot plant for pH control and the precipitation of impurities. Sodium hydroxide at 32% concentration is provided in 1,000-L totes. Sodium hydroxide use has averaged 0.56 kg NaOH per kg of HCl used.

13.4.3 Sodium Chloride

Adding sodium chloride in the pilot plant simulates the salt levels present in a full-scale chlor-alkali process. In the pilot plant, sodium chloride in pure dry form is added at the attrition scrubber to elevate sodium levels to above 30,000 ppm, at a rate which averages approximately 15 kg/t of dry material feed. The amount of salt needed for a full-scale development is dependent upon feed rate, sodium hydroxide sales as a by-product sodium, and the availability of sodium chloride from brine or other sources.

13.4.4 Flocculant

Flocculant is currently not added to the system prior to tailings filtration.

13.5 Lithium Extraction and Recovery

Each supersack of feed material is sampled and assayed to determine lithium head grade and other constituents. In over two years of operation, the lithium head grades in the sample material fed to the pilot plant have been in the range of 950 to 1,150 ppm, and average 1,050 ppm Li.

Over the course of testing, solution samples collected at the point of leaching have varied from 200 to 320 ppm Li. Based on the feed rates of sample material, process water, and reagents, these grades equate to extractions of 80 to 95% of the lithium from the clay and averaged 88% in later runs.

These extraction rates; however, do not account for lithium losses downstream in the process, and are only indicative of the potential overall recovery. Based on solution assays and flow rates from the point of leaching through the delivery of the neutralized leach solution to the DLE area, a significant amount of lithium is retained in the moisture in the filter tailings. Work at the pilot plant continues to focus on minimizing lithium losses to the tailings.

Lithium recovery in the DLE area is determined from the flow rates and solution grades of the incoming and discharge solution streams. Over the course of testing and the various changes made within the DLE area, lithium recoveries to the product solutions have been high, typically averaging around 90%, and have been recorded at times to over 99% of the lithium in the incoming stream. All solutions are recycled through the process.

From the DLE area, a minor amount of lithium is lost during calcium and magnesium precipitation before the discharge water is recycled back to leach. A minor loss of lithium is also anticipated in the processing of the DLE product solutions in the formation of lithium carbonate and the recycling of lithium-bearing streams or solids back to the DLE area or leach.

The major loss of lithium is entrained solution in the tailings. Work is ongoing to examine high pressure filtration to compress the tails at higher pressures and further reduce water entrainment.

Accounting for the above potential losses through mass balance calculations and average lithium extraction from the clay, an overall lithium recovery of 78% is used for the Project.

13.6 Lithium Carbonate Production

Between 2022 and 2023, Saltworks treated the DLE product solutions from the pilot plant, successfully producing 5 to 20 kg batches of high-purity lithium carbonate at greater than 99.5% purity.

The basic process of Saltworks uses a series of precipitation steps with a chelating RO step prior to evaporation to obtain 10 g/L lithium in solution. The 10 g/L solution goes through final precipitation of lithium carbonate. After precipitation, the lithium carbonate is filtered, washed, dried, and bagged. In the planned flowsheet, all depleted solutions and solid residues from the Saltworks process will be recycled and returned to the leach or DLE stages for reprocessing.

During 2022, the product solution grades from the DLE area of the pilot plant were between 1,500 and 6,000 ppm Li with comparable levels of sodium to precipitate lithium carbonate, the flowsheet used by Saltworks requires lithium grades between 10,000 and 20,000 ppm (10 to 20 g/L) and is limited by the level of sodium and other dissolved solids in solution in the DLE product solution for precipitation of lithium carbonate.

In 2023, changes at the pilot plant were made that related to the steps in ion exchange and osmotically assisted RO. The changes resulted in product solution grades exceeding 10 g/L Li with lower levels of sodium and other dissolved solids. These changes enabled Saltworks to simplify the flowsheet and eliminate evaporation as a step in final lithium concentration.

13.7 QP Comments on Section 13

The QP finds the testing, analytical procedures, and security measures employed by Century, its pilot plant operators, and its consultants to be reasonable and adequate for the interpretation of metallurgical data presented in this Report. The data in this section has been used to establish the process design criteria presented in Section 17.

Key findings of the test work and pilot plant program are as follows:

- Feed material to the pilot plant was prepared from surface bulk samples collected at the Project
- The feed material averages 1,050 ppm lithium, which is consistent with the average feed grades anticipated for the Project when in production
- Lithium extractions at the pilot plant have ranged from 80 to 95% and averaged 88% in recent runs
- Feed solutions to the DLE area from leaching have varied from 200 to 320 ppm Li.
- Recoveries of lithium in the DLE area are typically above 90%. Unrecovered lithium in the depleted solutions from the DLE area are recycled back to leach following the precipitation and removal of calcium and magnesium.
- Losses of lithium are expected in the moisture retained by the tailings. It is estimated that 10% of the lithium in solution is retained by the tailings.
- Allowing for the loss of lithium to the tailings, an overall recovery of 78% is determined for the Project.
- With the combination of a chloride leach combined with DLE, on-site production of lithium carbonate is possible. Testing of product solutions from the pilot plant at Saltworks demonstrates the resulting lithium carbonate can exceed 99.5% purity, meeting the generally accepted purity levels for battery quality lithium carbonate.

Operation of the pilot plant has been ongoing for 2-½ years. Over this period, the data generated supports the conclusion that the process flowsheet as developed is viable. Continued operations are recommended to further generate supporting data, particularly in the DLE area, to complete testing on additional deeper material from the Project, and to test possible improvements that could lead to cost savings or improved efficiencies.

14.0 MINERAL RESOURCE ESTIMATE

14.1 Summary

The Mineral Resource estimate reported for the FS was completed under the direction of QP Lane, Principal of GRE.

This section describes the resource estimation methodology and summarizes the key assumptions. The Mineral Resources were estimated using the 2019 CIM Best Practice Guidelines and reported using the 2014 CIM Definition Standards.

Geologic and resource modeling and resource estimation was done with Seequent Leapfrog® software and incorporates information gained from additional drilling completed since the release of the PFS.

14.2 Geologic Model

The three dimensional (3D) geologic model is limited to Property shown in Figure 14-1. The geological model showing the lithological units is shown in Figure 14-2.

The Mineral Resource estimate includes all sedimentary units located in the eastern and southern part of the Property. There is no drilling or known lithium mineralization in the volcanic units that make up Angel Island, so this area is excluded from the Mineral Resource estimate.

14.3 Data Used for the Lithium Estimation

14.3.1 Drill Holes

The Mineral Resource estimate incorporates geologic and assay results from drilling of 45 drill holes on the Property. QP Samari compiled and verified data for all drill holes, collar coordinates, drill hole direction (azimuth and dip), lithology, sampling, and assay data. All drill holes are vertical and limited to the sedimentary rock units.

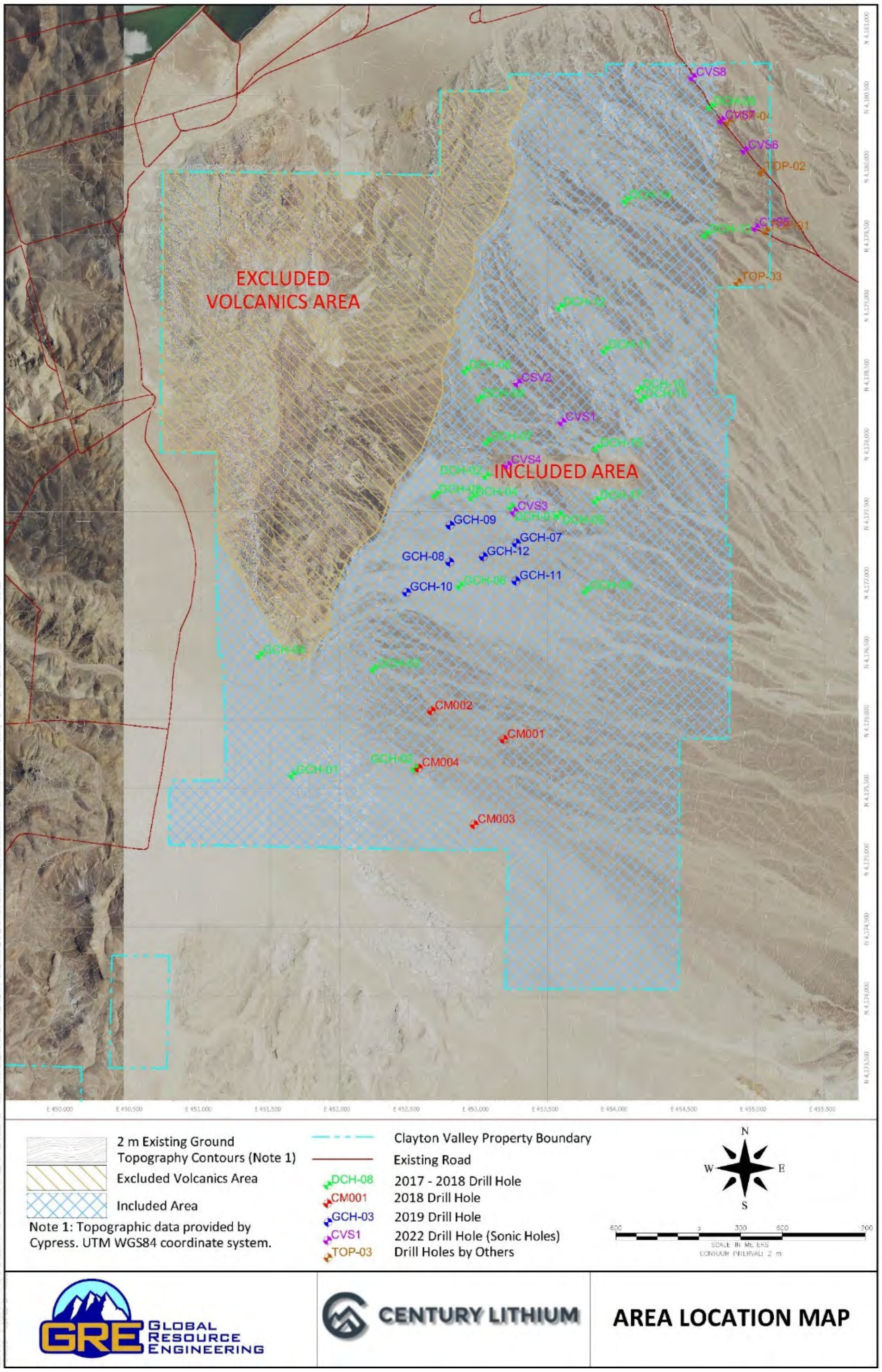


Figure 14-1: Area Included in the Geologic Model and Mineral Resource Estimation (Source: GRE, 2022)

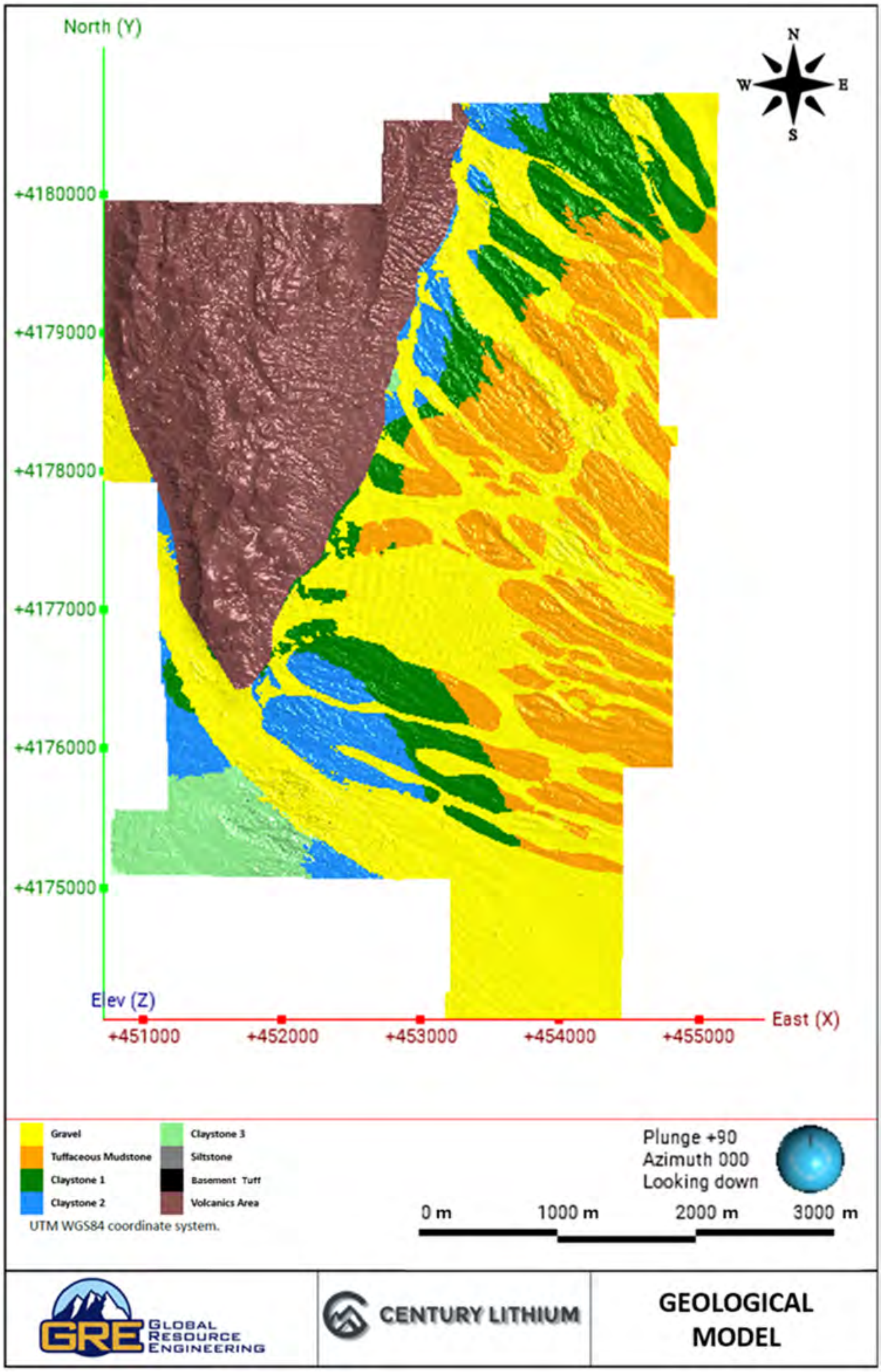


Figure 14-2: Geological Model Showing the Stratigraphical Units (Source: GRE, 2022)

14.3.2 Assay Data

The assay data included hole ID, sample weight, lithium in ppm, rock code, lithology code, and lithology description. The data set included 1,318 lithium assay values in ppm.

14.3.3 Density

For resource modelling, a density of 1.505 g/cm^3 is used for all lithological units. Within the tuffaceous mudstone and claystone zones that comprise most of the Mineral Resource, samples of drill core were collected for specific gravity measurements. The samples were selected from GCH-9 (Figure 14-3), CM001, and CM003 and assessed using the bulk density–paraffin coat method (OA-GRA09A) at ALS USA. (Table 14-1). The results ranged from 1.19 to 1.72 g/cm^3 with a mean of 1.505 g/cm^3. Additional lithology-specific testing is recommended for future study.

Figure 14-3: Core from GCH-09 Showing Density Sample (Source: GRE, 2022)

Table 14-1: Density Data

Drill Hole	Sample Number	Weight (kg)	Bulk Density (g/cm^3)	Top (m)	Bottom (m)	Lithological Unit
CM001	504254	0.63	1.57	9.9	10.1	TM
CM001	504255	0.47	1.21	27.9	27.7	CS1
CM001	504256	0.69	1.57	38.6	38.7	CS2
CM001	504257	0.6	1.64	58.4	58.5	CS2
CM001	504258	0.65	1.4	71.0	71.2	CS3
CM003	504260	0.64	1.33	13.1	13.3	TM
CM003	504261	0.64	1.55	20.7	20.9	CS1
CM003	504262	0.7	1.52	31.7	31.9	CS1
CM003	504263	0.67	1.47	42.4	42.5	CS1
CM003	504266	0.51	1.19	71.9	72.1	CS3
CM003	504267	0.79	1.62	78.9	79.1	CS3
GCH-9	512005	0.54	1.53	9.8	9.9	CS1
GCH-9	512006	0.56	1.69	22.9	23.0	CS1
GCH-9	512007	0.48	1.47	43.6	43.7	CS2
GCH-9	512008	0.58	1.72	62.8	62.9	CS3
GCH-9	512009	0.58	1.65	78.2	78.3	CS3
GCH-9	512010	0.54	1.46	98.9	99.1	CS3
MEAN			1.505			

Notes: TM-tuffaceous mudstone, CS1-claystone zone 1, CS2-claystone zone 2, CS3-claystone zone 3

14.4 Domains

Within Leapfrog®, the gravel (alluvium) lithological unit and waste were excluded from the resource estimation. The volcanics area was also excluded from resource estimation. The tuffaceous mudstone and siltstone lithological units were identified as separate domains during resource estimation. The three claystone zones were combined into a single domain to perform the resource estimation. Figure 14-4 and Figure 14-5 shows the lithological units used for creating estimation domains in the north (4,177,960) section and east (453,820) section, respectively.

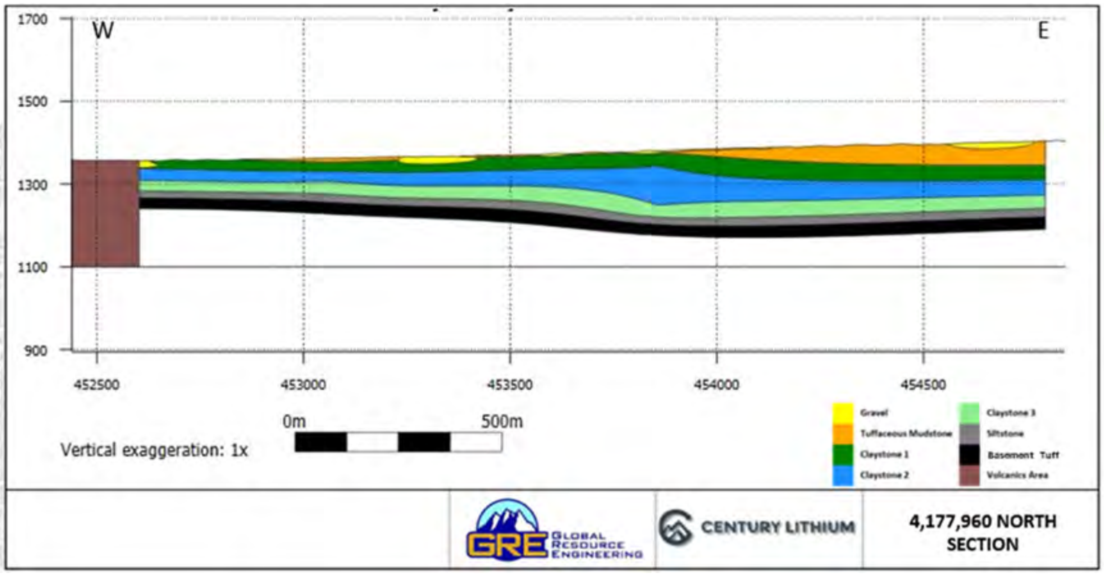


Figure 14-4: North Section (4,177,960) showing the Lithological Units (Source: GRE, 2022)

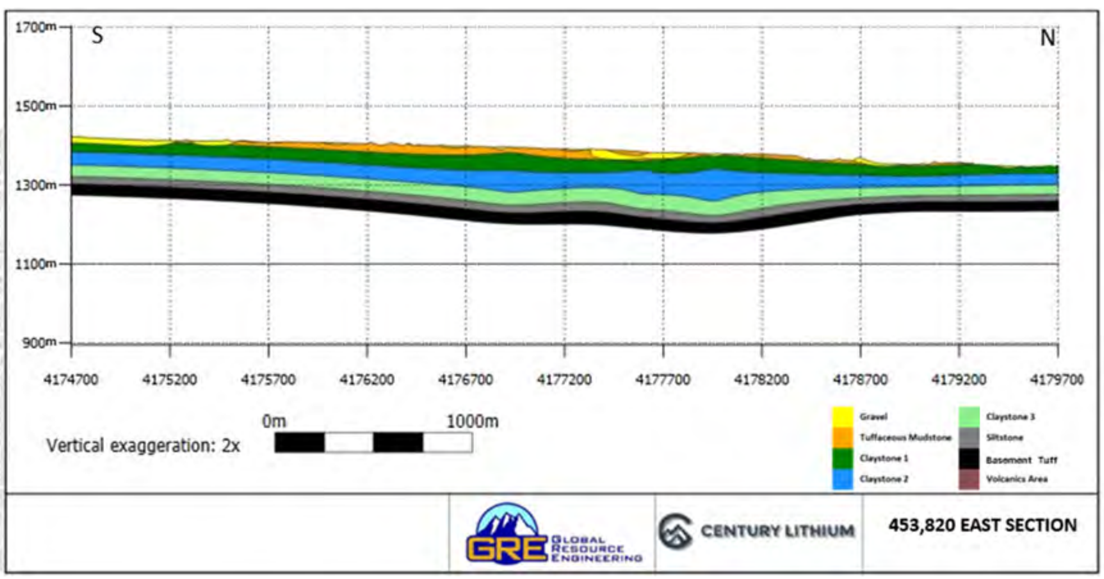


Figure 14-5: East Section (453,820) showing the Lithological Units (Source: GRE, 2022)

14.5 High Grade Capping

Histograms and cumulative frequency plots of the assay data were generated. If the cumulative frequency plots form a relatively straight line without a grade break, and the histograms show a nearly normal distribution, capping is not needed.

The assay data contains a total of 1,318 lithium assays, ranging from 115.7 ppm to 2,300 ppm. A histogram of the Project's assay data is shown in Figure 14-6.

A cumulative frequency plot (CFP) of the assay data is shown in Figure 14-7. The CFP indicates a log normal distribution with very few outliers. Six assay values over 2,000 ppm occur in the data. The data approximates a straight line, which is consistent with a nearly normal distribution and one population. Therefore, QP Lane concluded that no grade capping was needed.

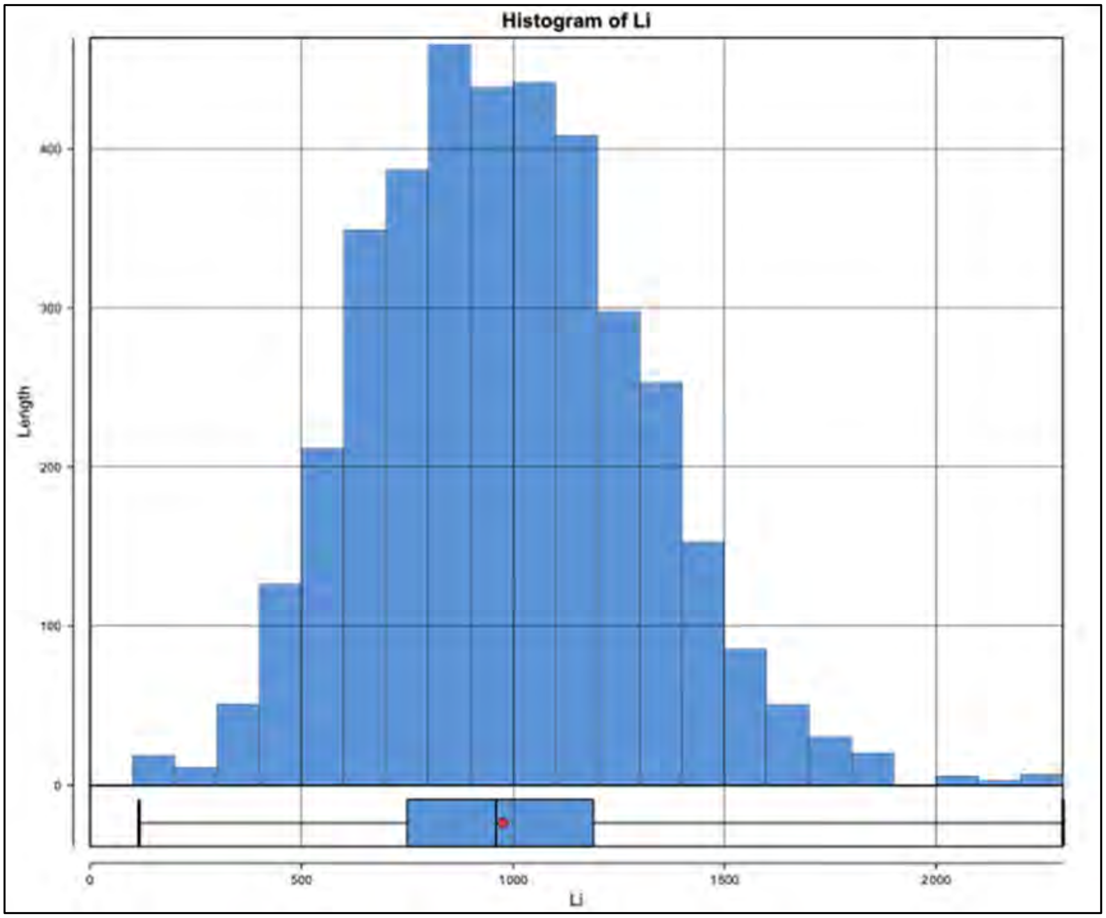


Figure 14-6: Lithium Assay Data Histogram (Source: GRE, 2022)

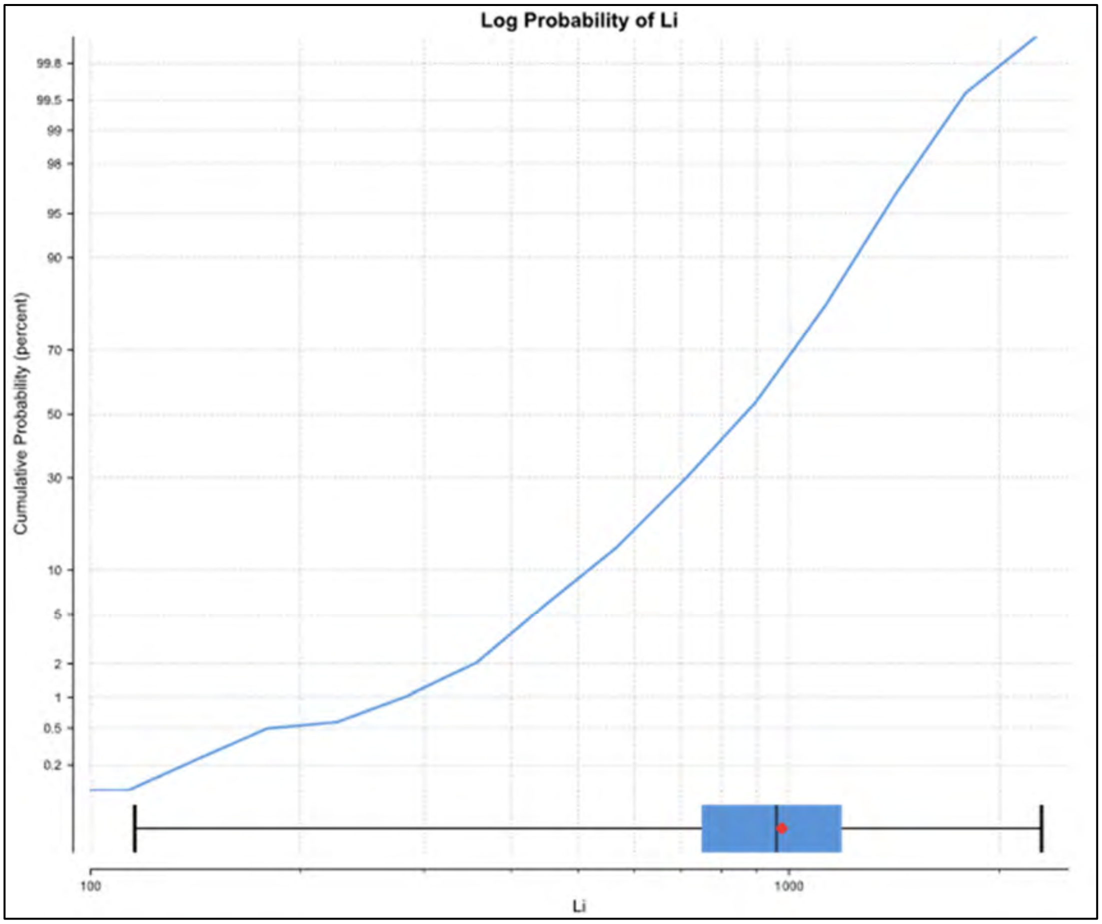


Figure 14-7: Cumulative Frequency Plot of Lithium Assay Data (Source GRE, 2022)

14.5.1 Assay Compositing

The Project's assaying was done almost exclusively using 1.52-m or 3.05-m long (or 5- or 10-foot long) sample intervals. Drill holes were composited to 6 m intervals within each domain. The 6-m composite length was selected based on the anticipated bench height in mining. Comparisons of the assay data and composited data by domain are shown in Figure 14-8 through Figure 14-10. The comparisons show that compositing does not change the mean or quartiles significantly but reduces the standard deviation and maximum value of grades, which indicates that the compositing is appropriate.

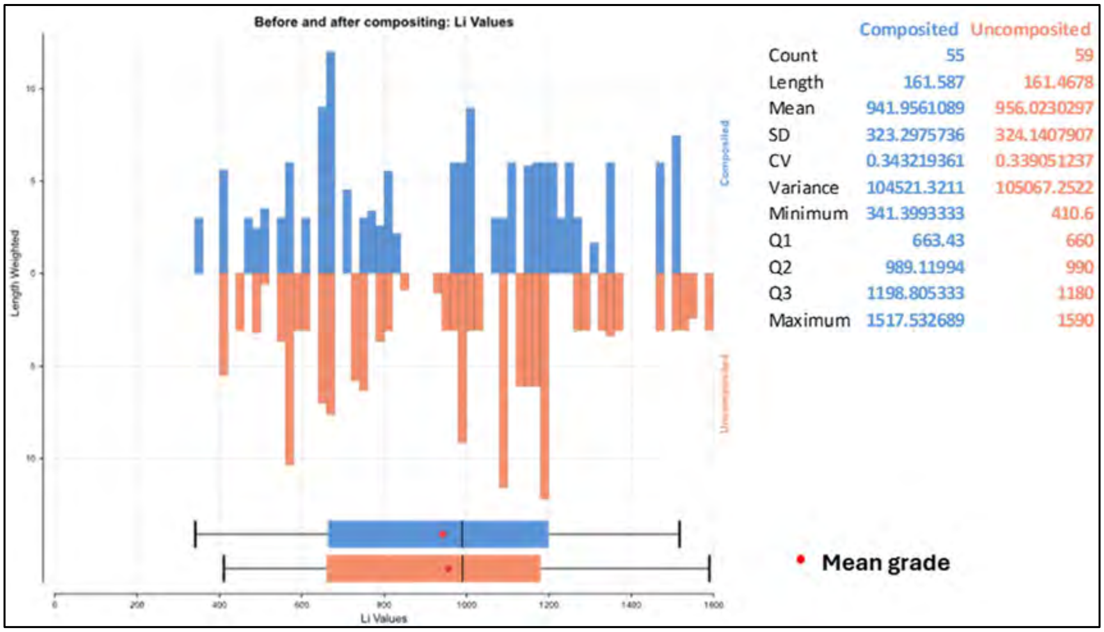


Figure 14-8: Tuffaceous Mudstone Comparison of Assay and Composited Data (Source: GRE, 2022)

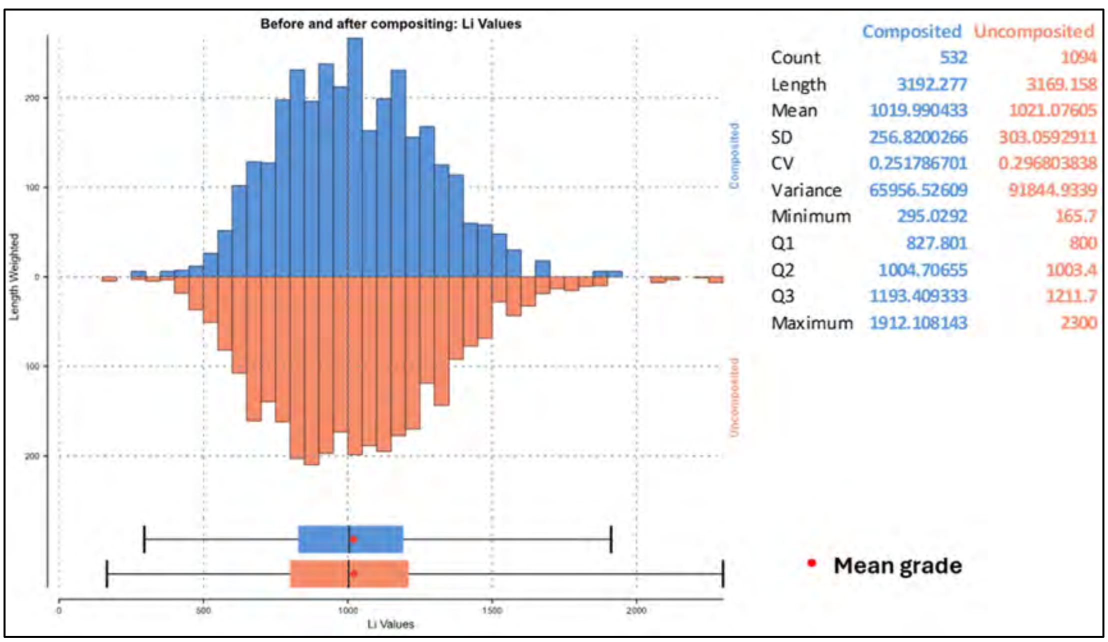


Figure 14-9: Claystone Comparison of Assay and Composited Data (Source: GRE, 2022)

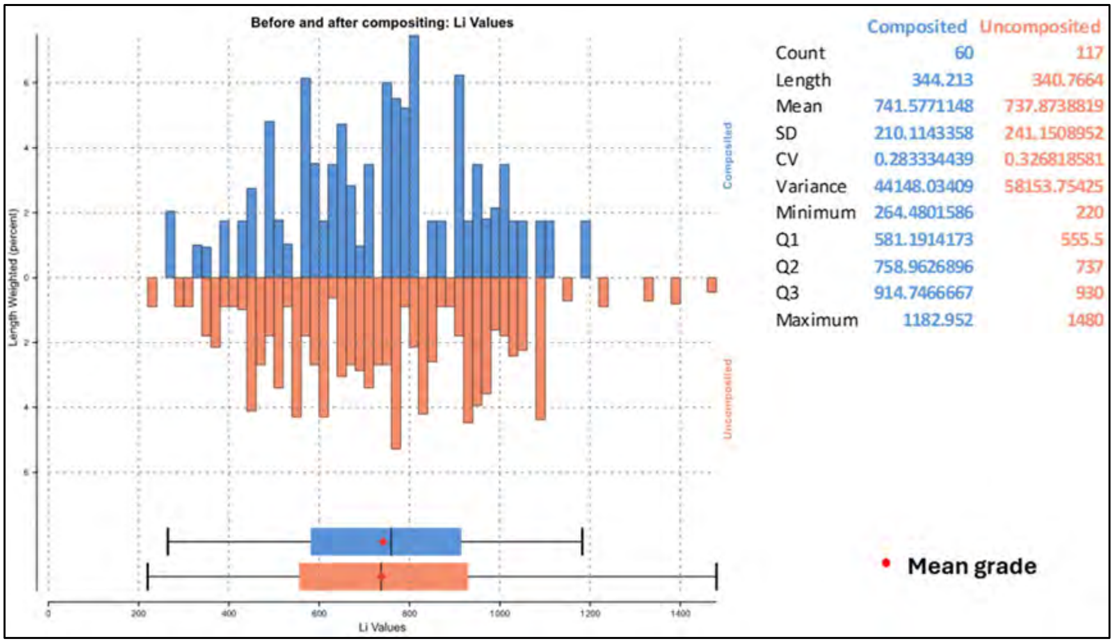


Figure 14-10: Siltstone Comparison of Assay and Composited Data (Source: GRE, 2022)

14.6 Estimation Methodology

The Project's lithium claystone deposit is laterally continuous in stratigraphy and lithium grades. Within the deposit, displacements due to faulting, if present, appear minor. Relatively low variability of lithium grades is also apparent within each of the beds. All drill holes intersected the mineralized beds. The southern portion of the Property appears to be in an uplifted fault block. No drill holes passed through the lowest (siltstone) unit; all drill holes ended with lithium values above 400 ppm, except for GCH-04 which ended in Angel Island rocks.

14.6.1 Variography

Pairwise variograms from the composite values using Leapfrog® Edge software were generated and modeled. The analysis was used to determine the size and orientation of the search ellipsoid for an inverse distance squared (ID^2) grade estimate. Each domain was analyzed to determine the orientation and relative length of the search ellipsoid axes, nugget, and sill. Based on the results of the variography, the search parameters used in the grade estimation are as shown on Table 14-2.

Figure 14-11 through Figure 14-13 show the variograms and radial graphs for each domain. The major axis was determined to be at an azimuth of 120° for all domains.

Table 14-2: Variography Results by Domain

Domain	Nugget	Sill	Orientation	Dip	Major Axis Range (m)	Semi-Major Axis Range (m)	Minor Axis Range (m)
Tuffaceous Mudstone	0.6888	1.000	120°	5°	1,500	800	50
Claystone	0.2525	1.008	120°	5°	1,000	400	70
Siltstone	0.1023	1.000	120°	5°	1,500	400	50

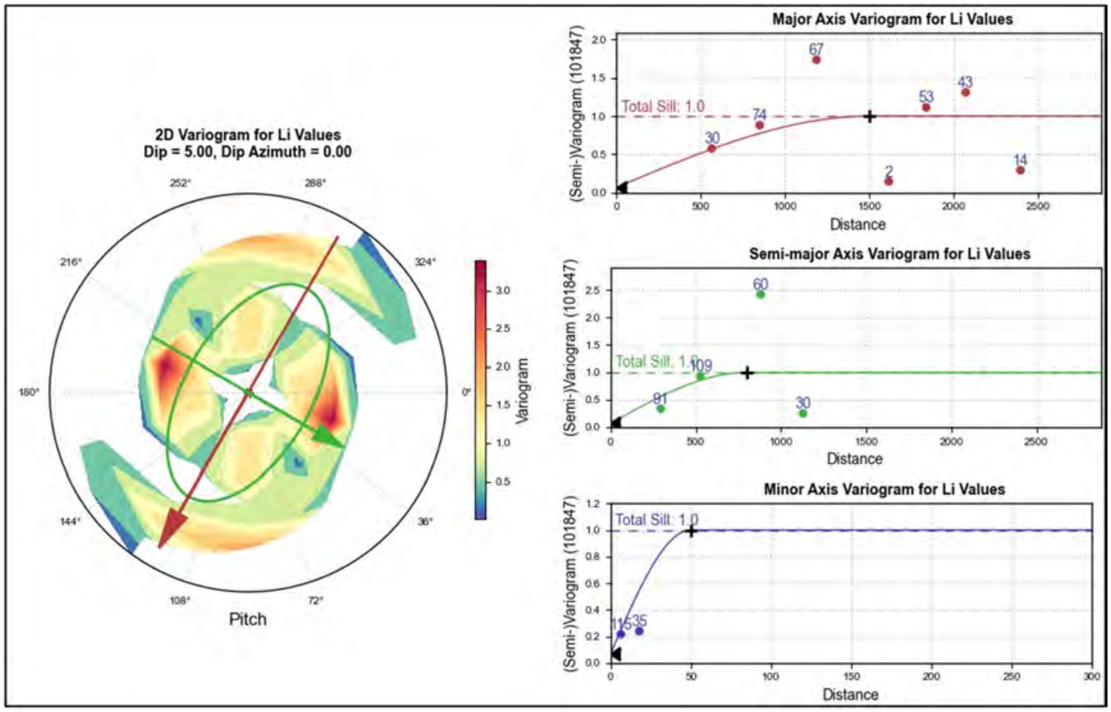


Figure 14-11: Tuffaceous Mudstone Variograms (Source: GRE, 2022)

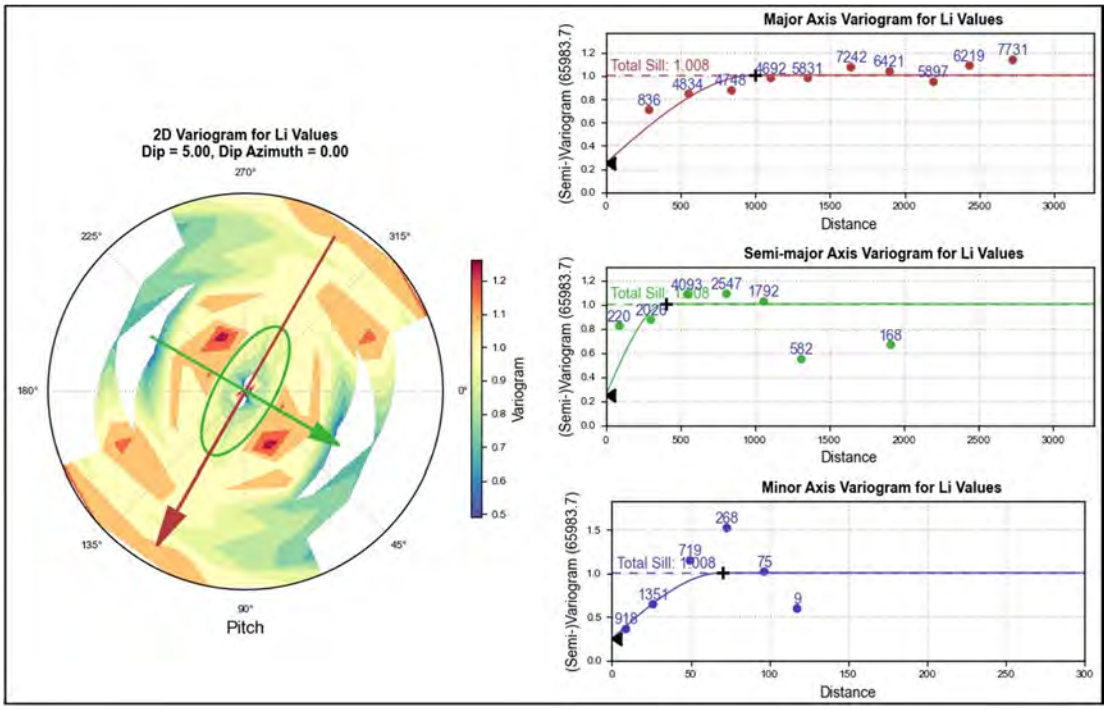


Figure 14-12: Claystone Variograms (Source: GRE, 2022)

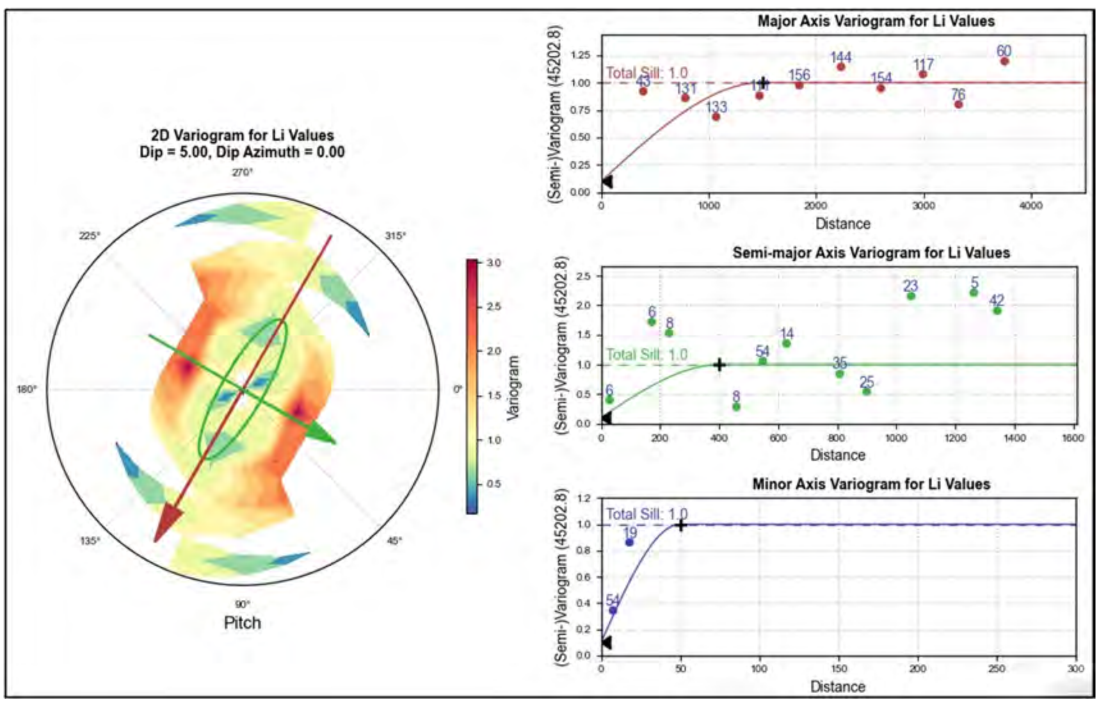


Figure 14-13: Siltstone Variograms (Source: GRE, 2022)

14.6.2 Block Model Parameters

A 3D block model was developed to represent the deposit using a block size of 50 m x 50 m x 5 m. The block model dimensions and model limits are shown in Table 14-3. The coordinate system used for the 3D modeling was UTM WGS 84. The block model is not rotated and contains no sub-blocking.

Table 14-3: Block Model Parameters

	Minimum	Maximum	Size	Number	Range
Easting	450,430	455,630	50	104	5,200
Northing	4,173,790	4,181,140	50	147	7,350
Elevation	1,145	1,700	5	111	555
Rotation			0	Degrees down axis	
Block Volume			12,500		

14.6.3 Grade Modeling and Resource Categories

All drill holes in the Century claim block have encountered economically significant (>400 ppm) mineralization over nearly the entire length of the hole. A higher-grade zone outcrops near GCH-10 and trends about 30 degrees to the northeast with a five-degree dip to the northeast.

Lithium grade was estimated using an ID^2 algorithm and the search ellipse detailed in Table 14-2. The estimation is carried out in two passes. In the first pass, the estimation uses a minimum of two composites and a maximum of 20 composites within the variogram ranges. In the second pass, the estimation uses a minimum of one composite and a maximum of 20 composites and uses double the variogram ranges. Figure 14-14 is a plan view of a 50-m thick slice showing the higher-grade zone.

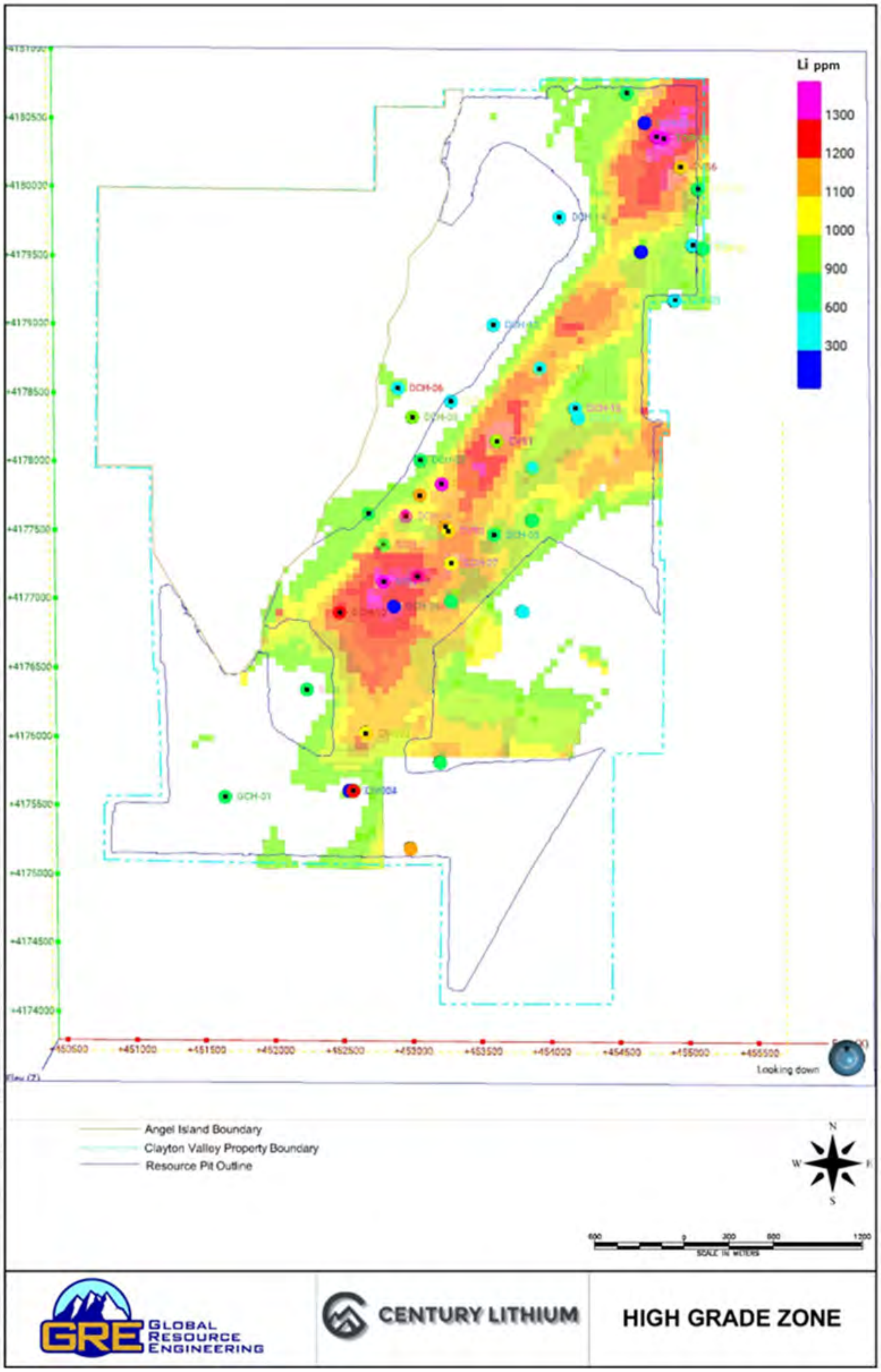


Figure 14-14: Plan View of High-Grade Zone (Source: GRE, 2022)

Resources were classified as Measured if the estimation resulted from a minimum of three drill holes within the variogram range, as Indicated if the estimation resulted from a minimum of two drill holes within the variogram range, and as Inferred for the remaining estimations.

A plan view showing the Mineral Resource confidence classification categories is provided in Figure 14-15.

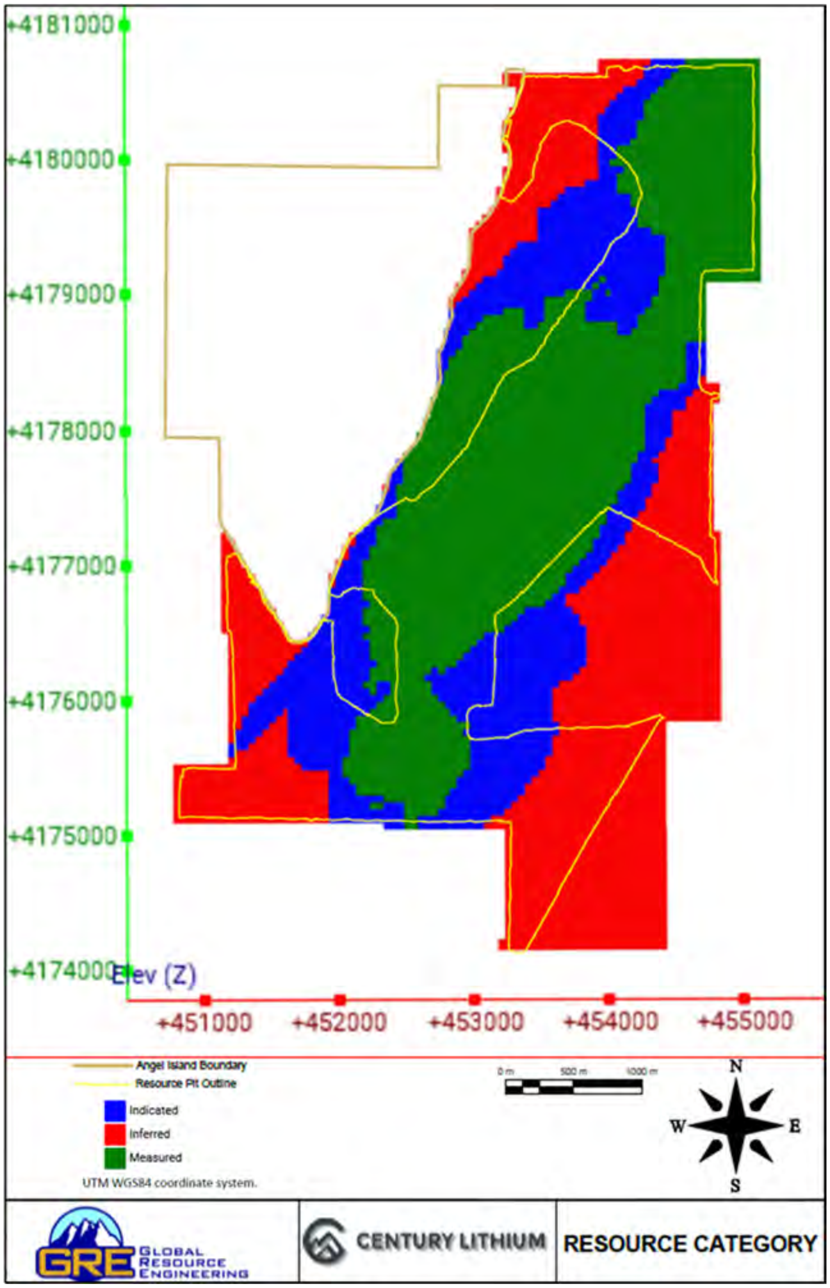


Figure 14-15: Plan View of Mineral Resource Confidence Classification Category Ranges (Source: GRE, 2022)

Plan views of lithium grades over a composite 10 m horizontal slice in the block model are shown for selected elevations in Figure 14-16 through Figure 14-19.

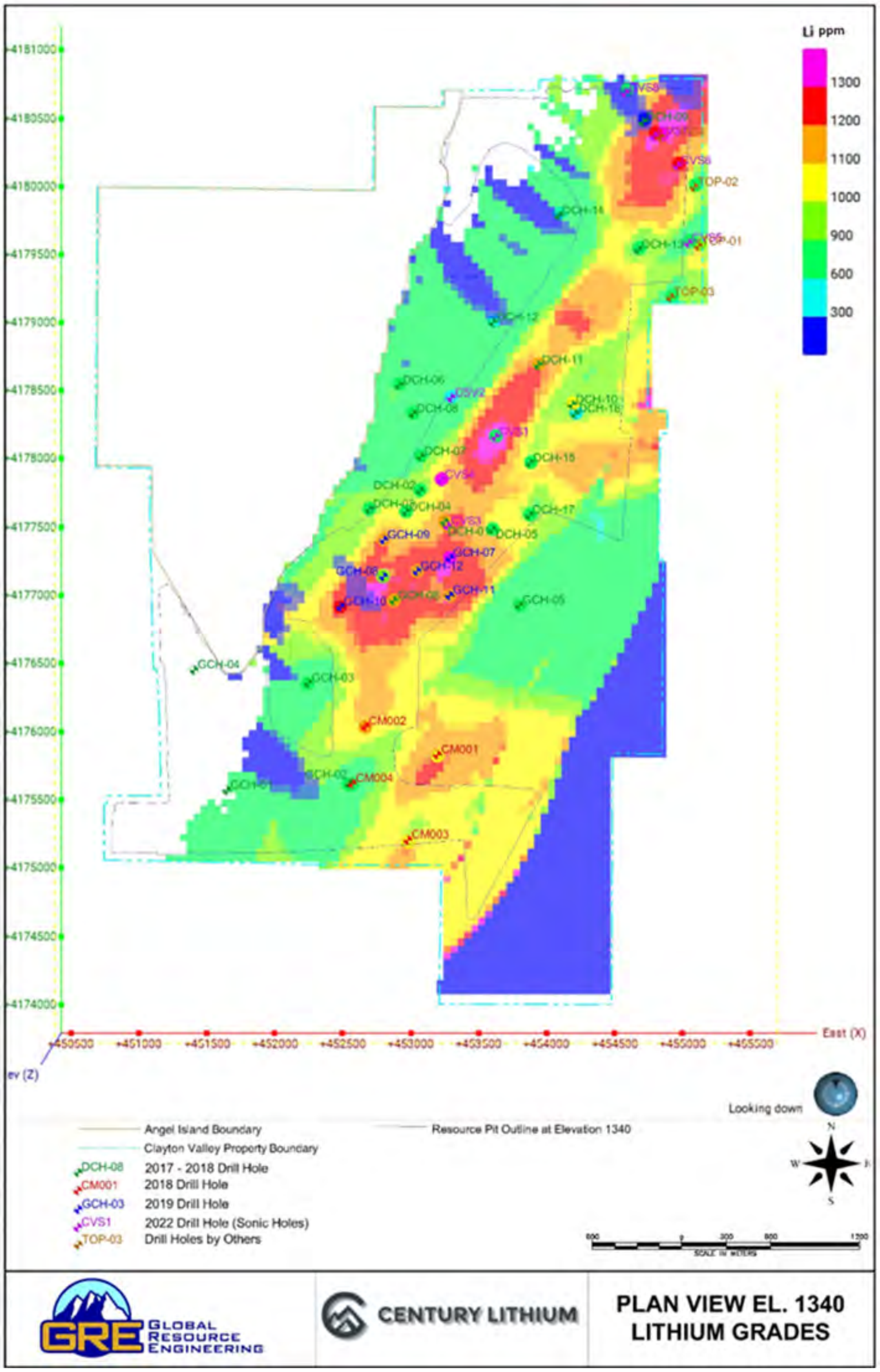


Figure 14-16: Plan View of Modeled Lithium Grades at Elevation 1340 m (Source: GRE, 2022)

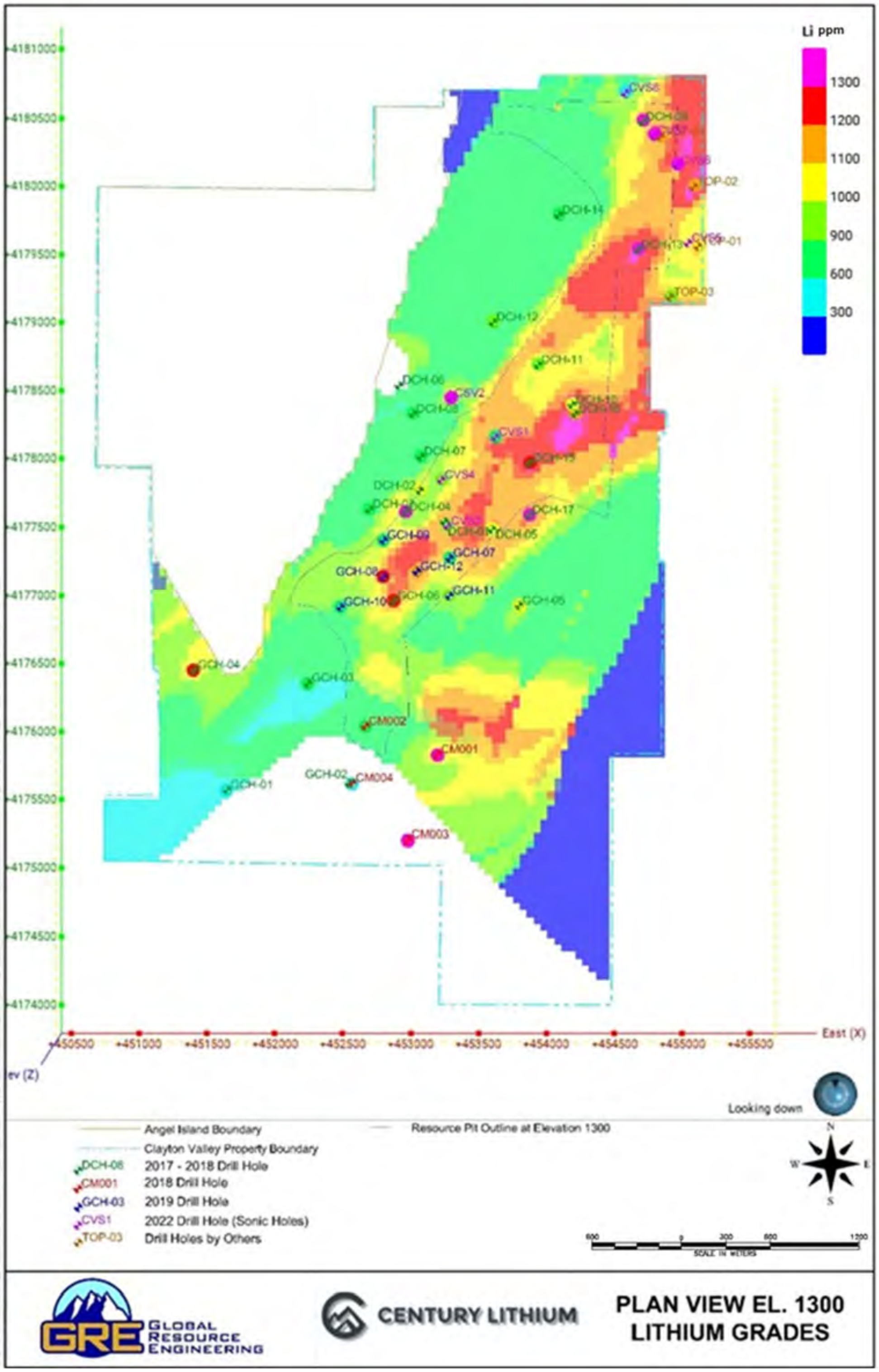


Figure 14-17: Plan View of Modeled Lithium Grades at Elevation 1300 m (Source: GRE, 2022)

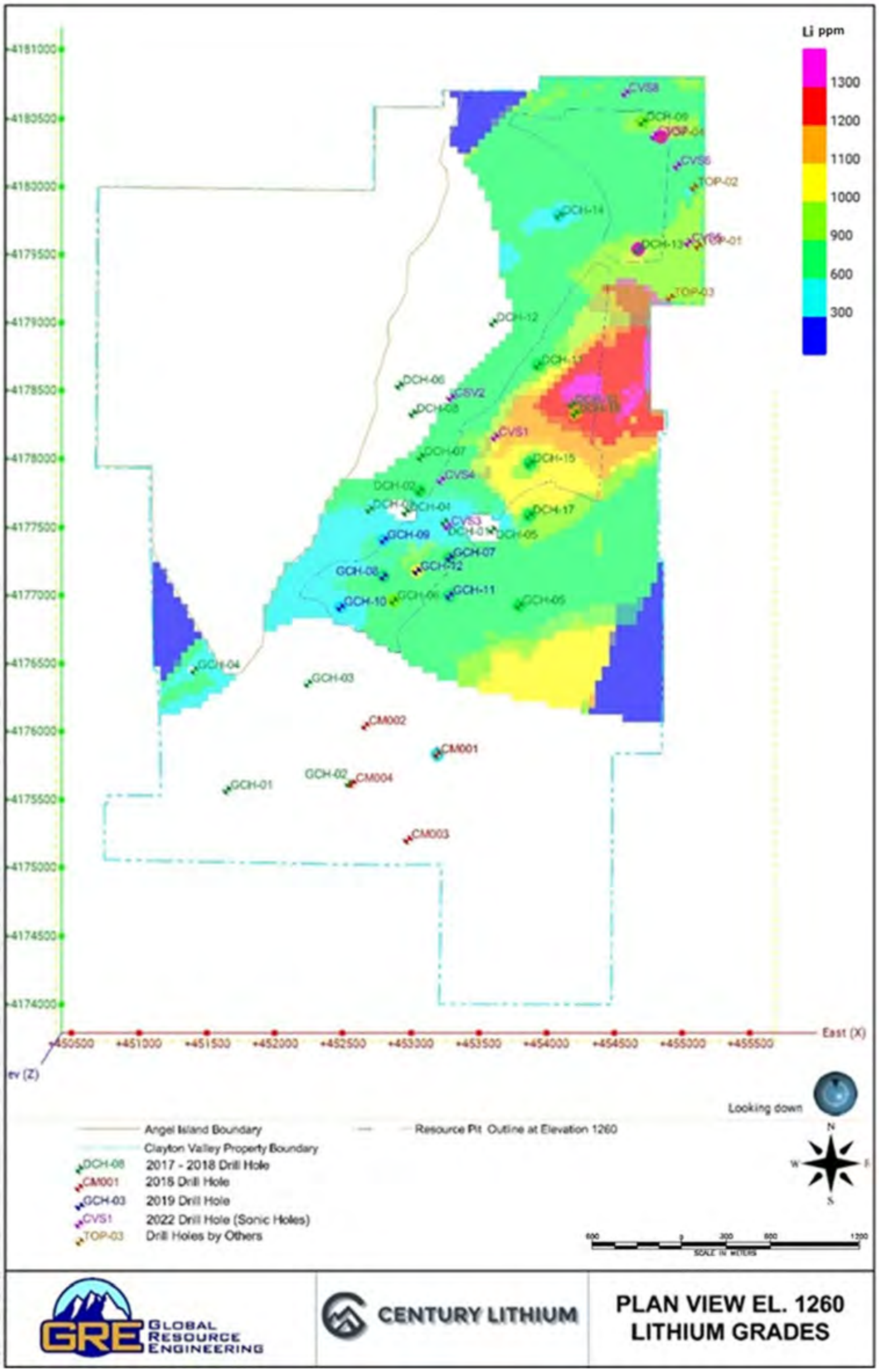


Figure 14-18: Plan View of Modeled Lithium Grades at Elevation 1260 m (Source: GRE, 2022)

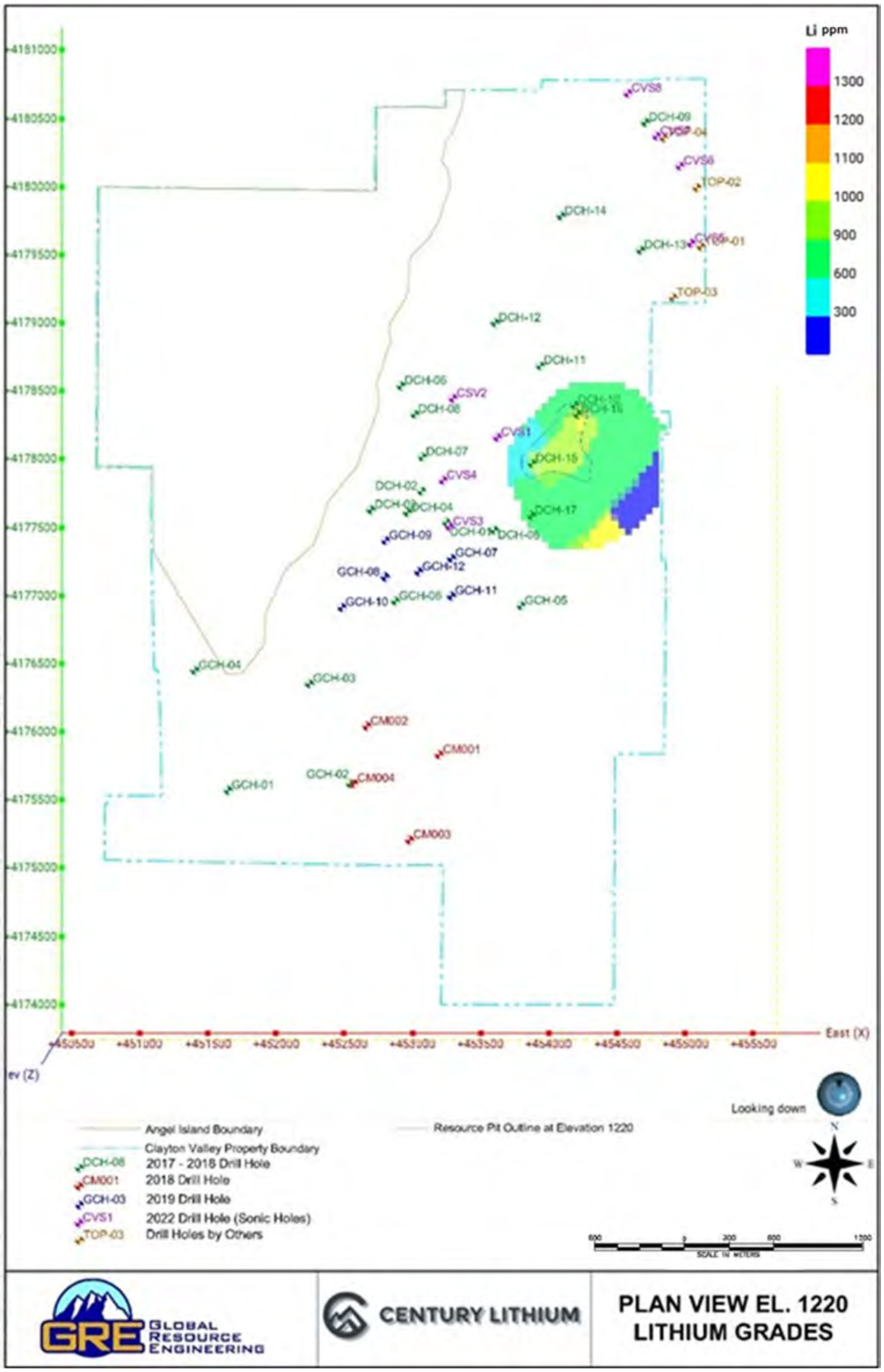


Figure 14-19: Plan View of Modeled Lithium Grades at Elevation 1220 m (Source: GRE, 2022)

14.7 Reasonable Prospects for Eventual Economic Extraction

14.7.1 Lithium Cut-off Grade

Prior to resource modeling, an economic break-even grade for lithium was determined based on the formula:

Break-even grade = operating cost / (recovery x price)

where:

- operating cost is \$20/t of mill feed (considers mining cost, process and G&A costs (Table 15-1))
- metallurgical recovery is 78%
- price/tonne for lithium = \$24,000/t Li_2CO_3 x 5.323 t Li_2CO_3/t Li = \$127,752/t

where \$24,000 is the base price assumed for lithium carbonate

and 5.323 is the factor to convert between ppm lithium and ppm lithium carbonate

Break-even grade = \$20/t / (78% × \$127,752/t) x 10^6 = 201 ppm Li (rounded to 200 ppm).

14.7.2 Constraining Pit Shell

QP Lane did not generate a Whittle pit shell because at the estimated operating costs, recovery and current lithium carbonate price, Whittle will generate a pit that encompasses all mineralized material within the Property boundary. Instead, QP Lane generated a pit shell that encompasses all mineralized material within the Property excluding areas that will be used for project infrastructure and placement of tailings, waste, and low-grade material. The resulting pit shell is shown in Figure 14-20. This ultimate pit shell uses the slope angles described in Section 16 with a 50-m set-back from the Property boundary and infrastructure such as the process plant, TSF, WRSFs, and low-grade material stockpiles.

It is therefore the QP's opinion that the ultimate pit shell is comprised of those Mineral Resources with reasonable prospects for eventual economic extraction.

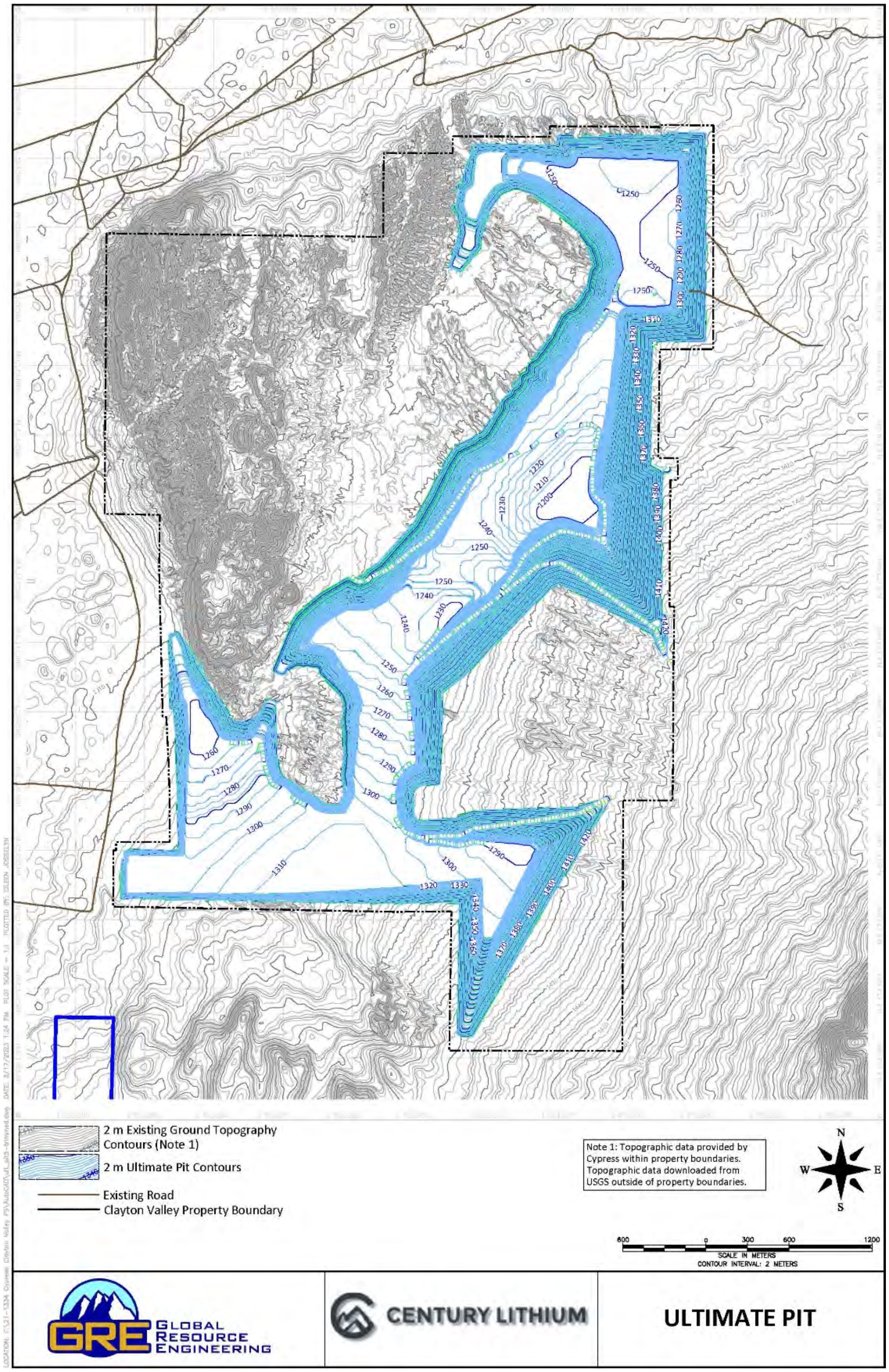


Figure 14-20: Constraining Ultimate Pit Outline (Source: GRE, 2022)

14.8 Mineral Resource Estimate

Table 14-4 presents the Mineral Resource estimate for Clayton Valley by lithological domain and confidence category assuming open pit mining methods and reported in accordance with 2014 CIM Definition Standards. A cut-off grade of 200 ppm Li was determined using a price of $24,000/t lithium carbonate.

14.9 Estimate Validation

Geological evidence is derived from sufficiently detailed and reliable exploration, sampling and testing, and is sufficient to confirm geological and grade or quality continuity between points of observation. The estimated resources are part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of modifying factors to support mine planning and evaluation of the economic viability of the deposit.

Validation of the resource model is supported by the following checks and comparisons.

14.9.1 Model to Drill Hole Validation

The sections indicate relatively flat lying depositional layers for each of the units. Figure 14-21 shows the cross-section locations. Figure 14-21 through Figure 14-31 present cross-sections and long-sections showing modeled lithium grades and lithology.

Table 14-4: Clayton Valley Mineral Resource Estimate

Domain	Tonnes Above Cut-off (millions)	Li Grade (ppm)	Li Contained (Mt)	LCE (Mt)
Measured				
Tuffaceous mudstone	49.12	787	0.039	**0.206**
Claystone all zones	682.84	1,055	0.720	3.835
Siltstone	126.31	717	0.091	0.482
Total	**858.26**	**990**	**0.850**	**4.523**
Indicated				
Tuffaceous mudstone	17.33	715	0.012	**0.066**
Claystone all zones	184.74	972	0.180	0.956
Siltstone	78.26	739	0.058	0.308
Total	**280.33**	**891**	**0.250**	**1.329**
Measured + Indicated				
Tuffaceous mudstone	66.45	768	0.051	**0.272**
Claystone all zones	867.58	1,037	0.900	4.791
Siltstone	204.57	725	0.148	0.790
Total	**1,138.59**	**966**	**1.099**	**5.852**
Inferred				
Tuffaceous mudstone	22.67	761	0.017	**0.092**
Claystone all zones	125.42	883	0.111	0.590
Siltstone	39.19	652	0.026	0.136
Total	**187.28**	**820**	**0.154**	**0.817**

1. The effective date of the Mineral Resource Estimate is April 29, 2024. The QP for the estimate is Ms. Terre Lane, MMSA, an employee of GRE and independent of Century.
2. The Mineral Resources are constrained by a pit shell with a 200 ppm Li cut-off and density of 1.505 g/cm^3. The cut-off grade considers an operating cost of $20/t mill feed, process recovery of 78% and a long-term lithium carbonate price of $24,000/t.
3. The Mineral Resource estimate was prepared in accordance with 2014 CIM Definition Standards and the 2019 CIM Best Practice Guidelines.
4. Mineral Resource figures have been rounded.
5. One tonne of lithium = 5.323 tonnes lithium carbonate.
6. Mineral Resources are inclusive of Mineral Reserves.

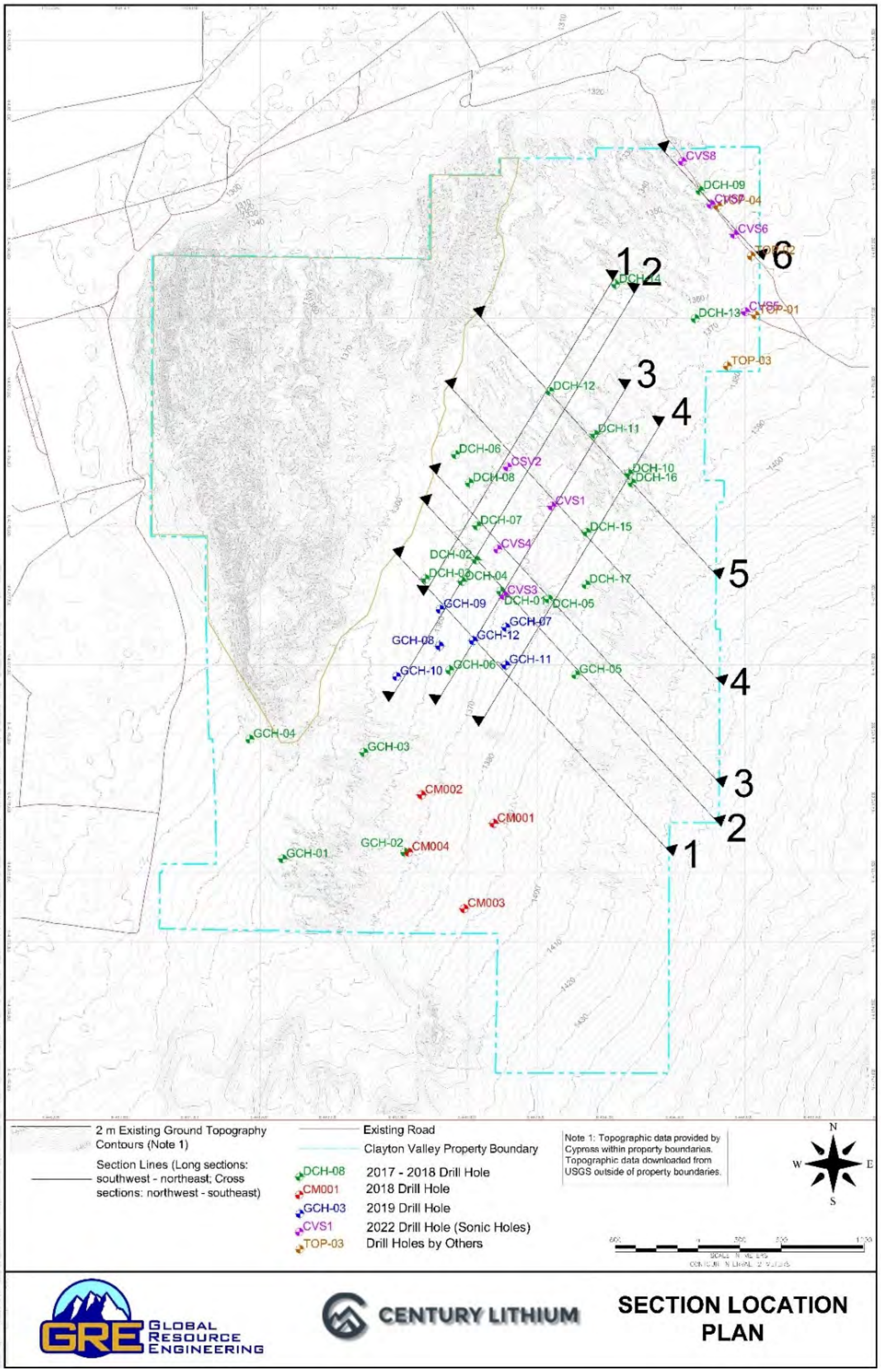


Figure 14-21: Section Locations (Source: GRE, 2022)

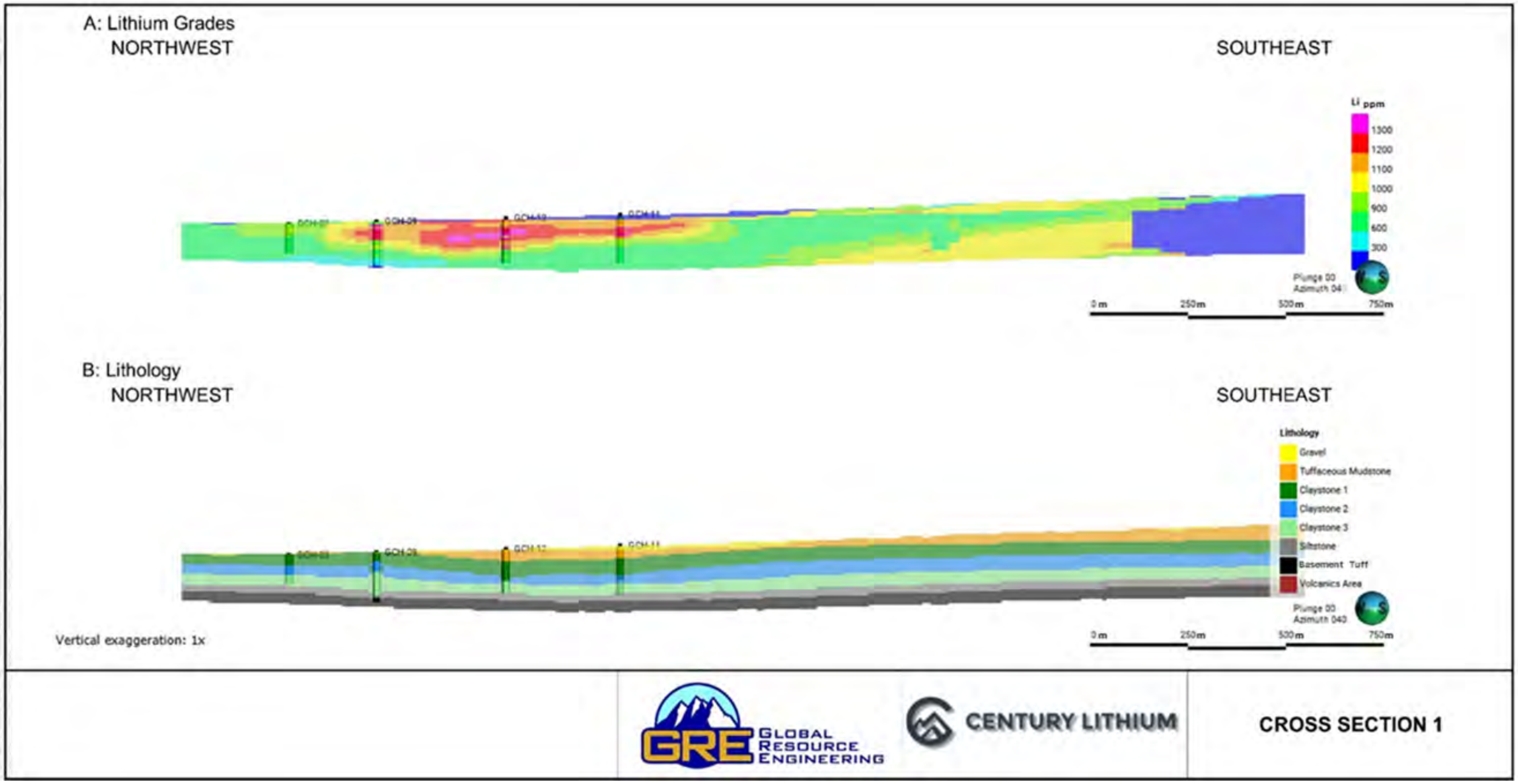


Figure 14-22: Cross Section 1 (Source: GRE, 2022)

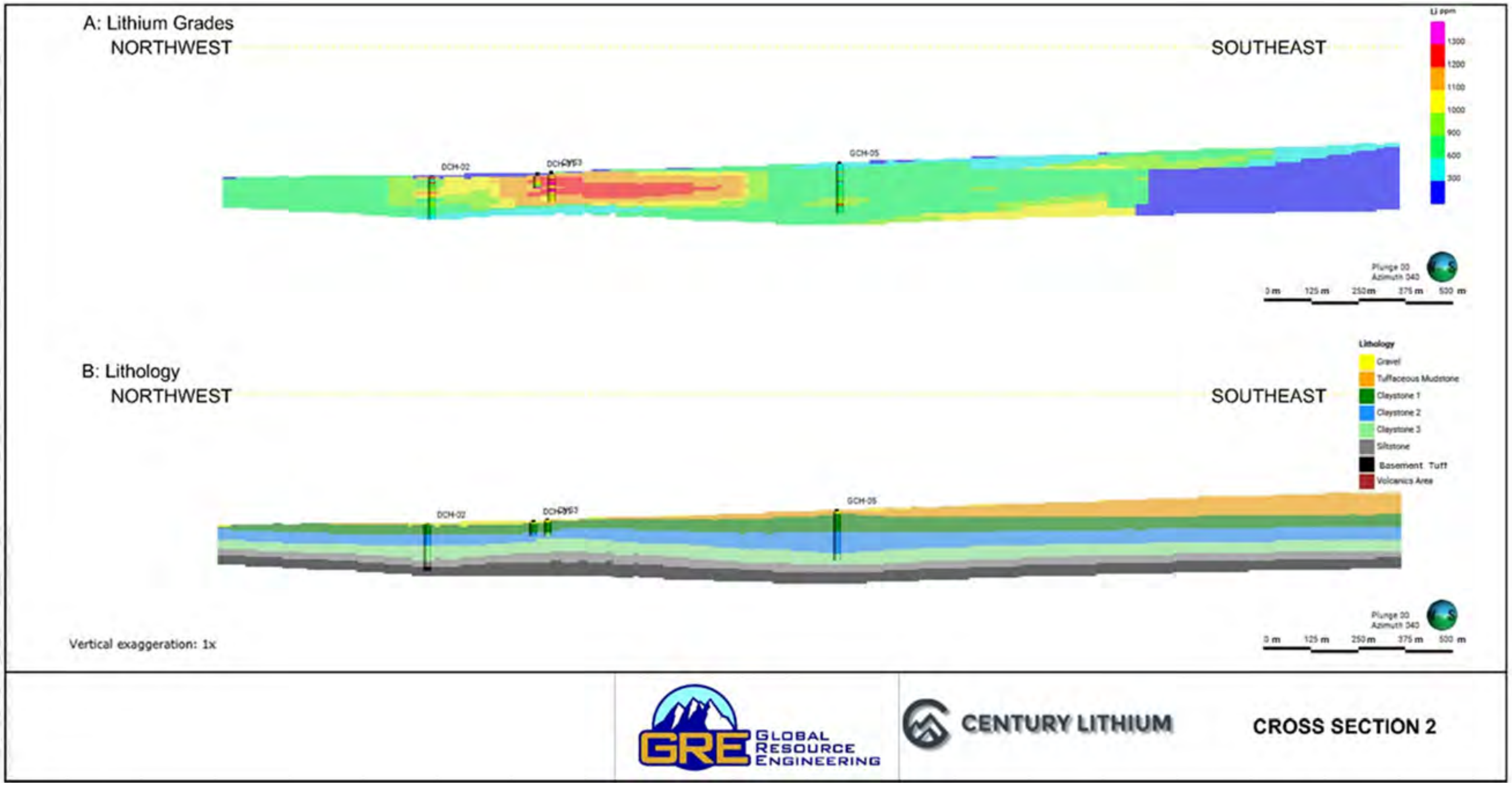


Figure 14-23: **Cross Section 2 (Source: GRE, 2022)**

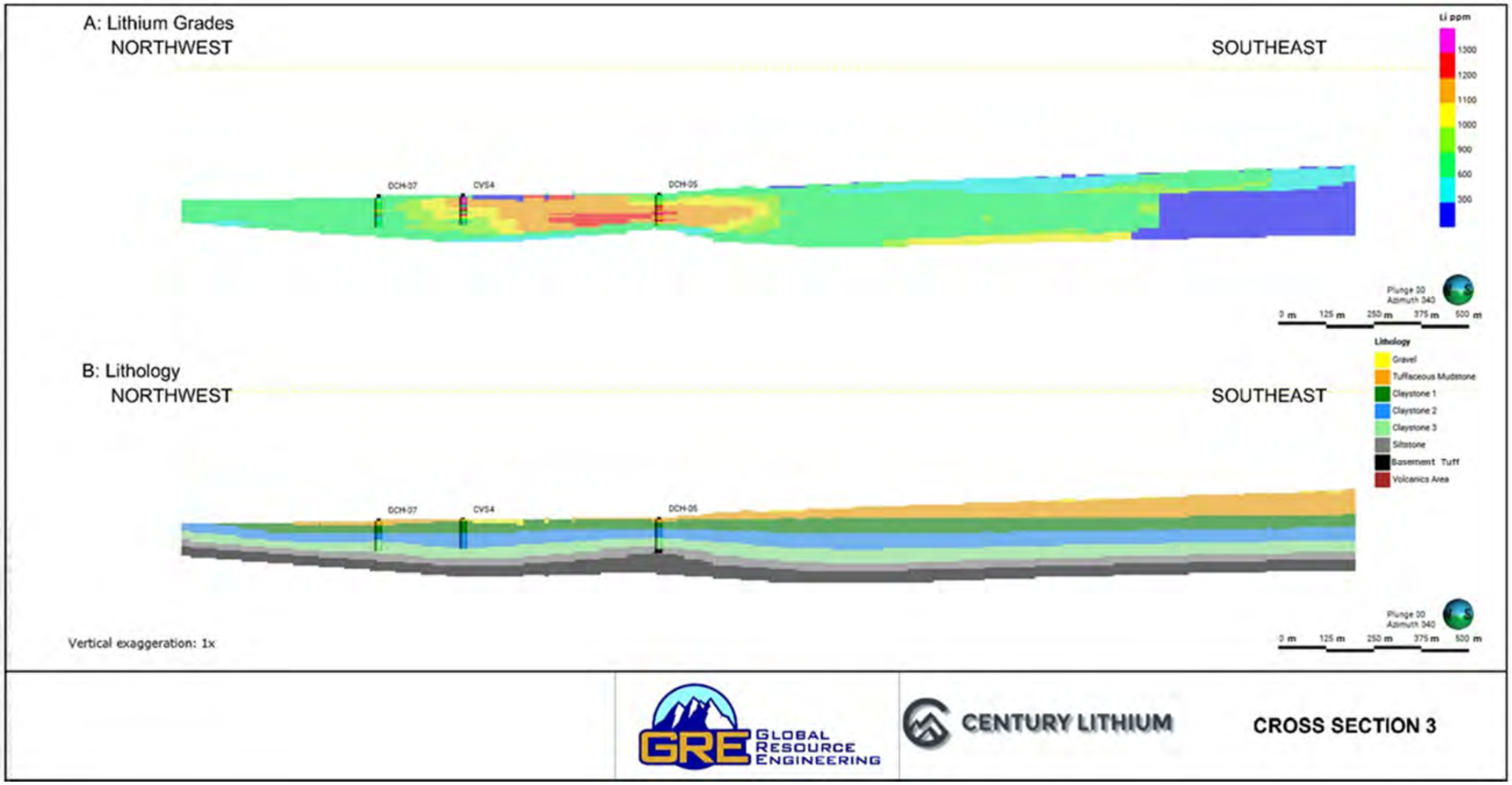


Figure 14-24: Cross Section 3 (Source: GRE, 2022)

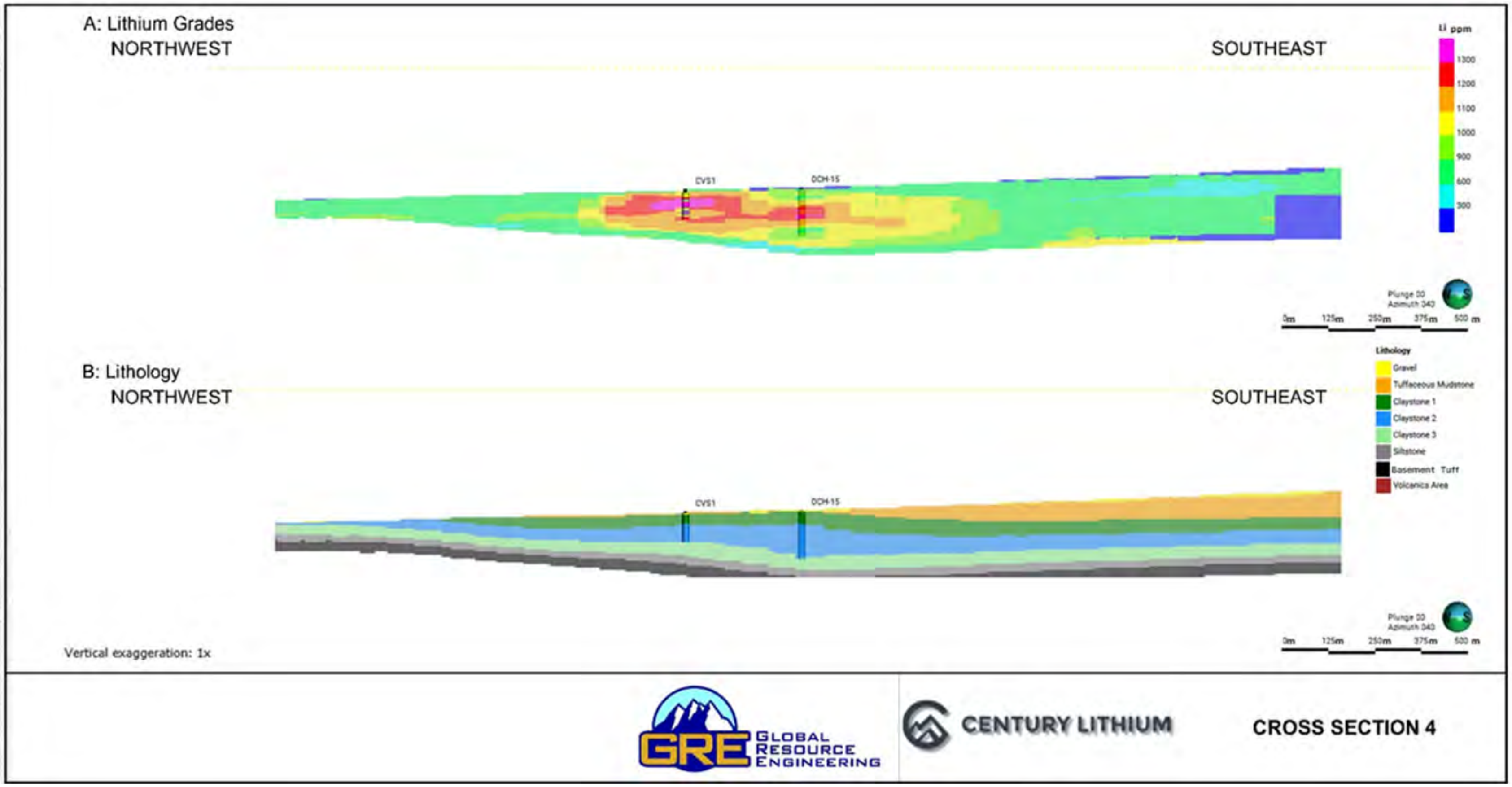


Figure 14-25: Cross Section 4 (Source: GRE, 2022)

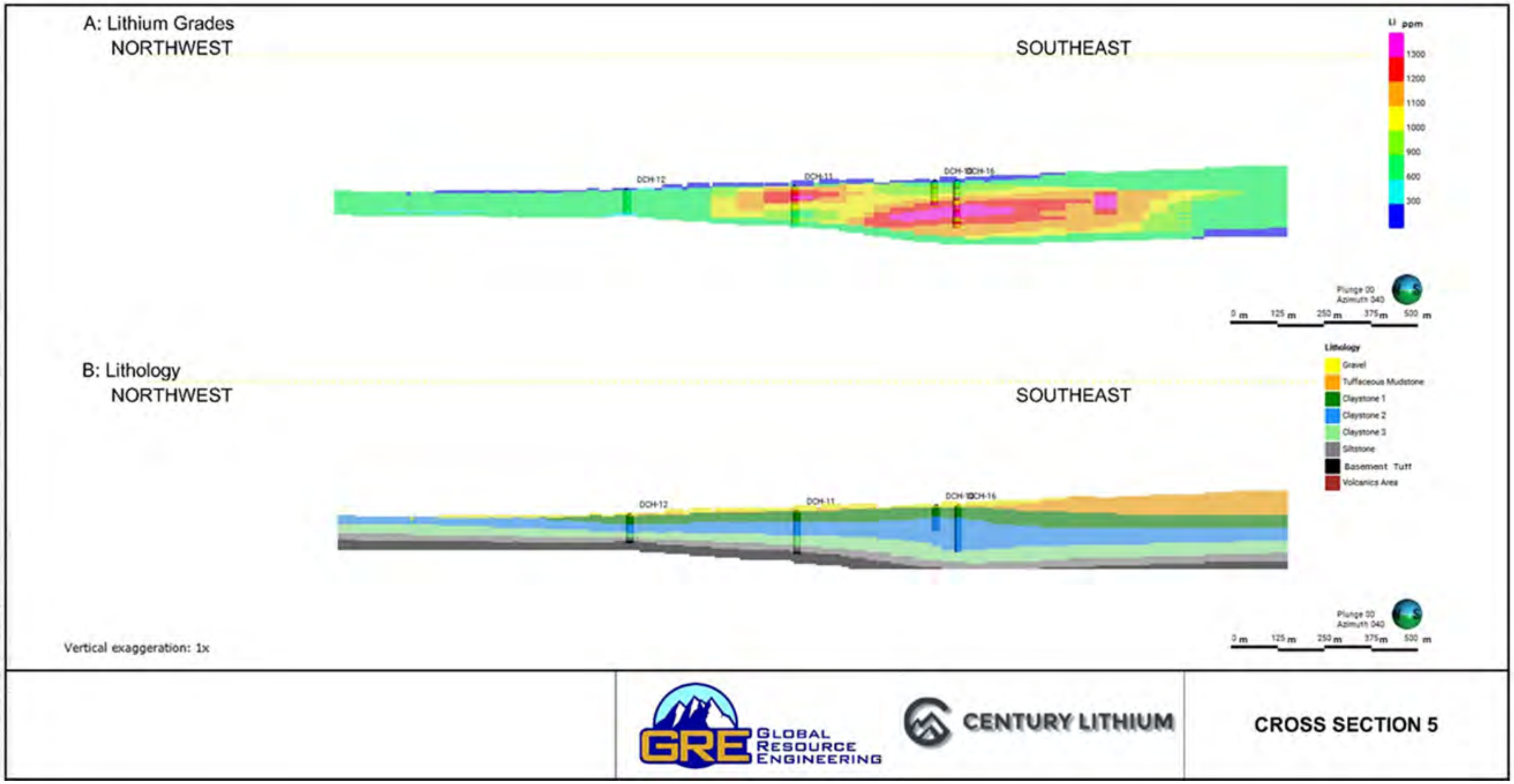


Figure 14-26: Cross Section 5 (Source: GRE, 2022)

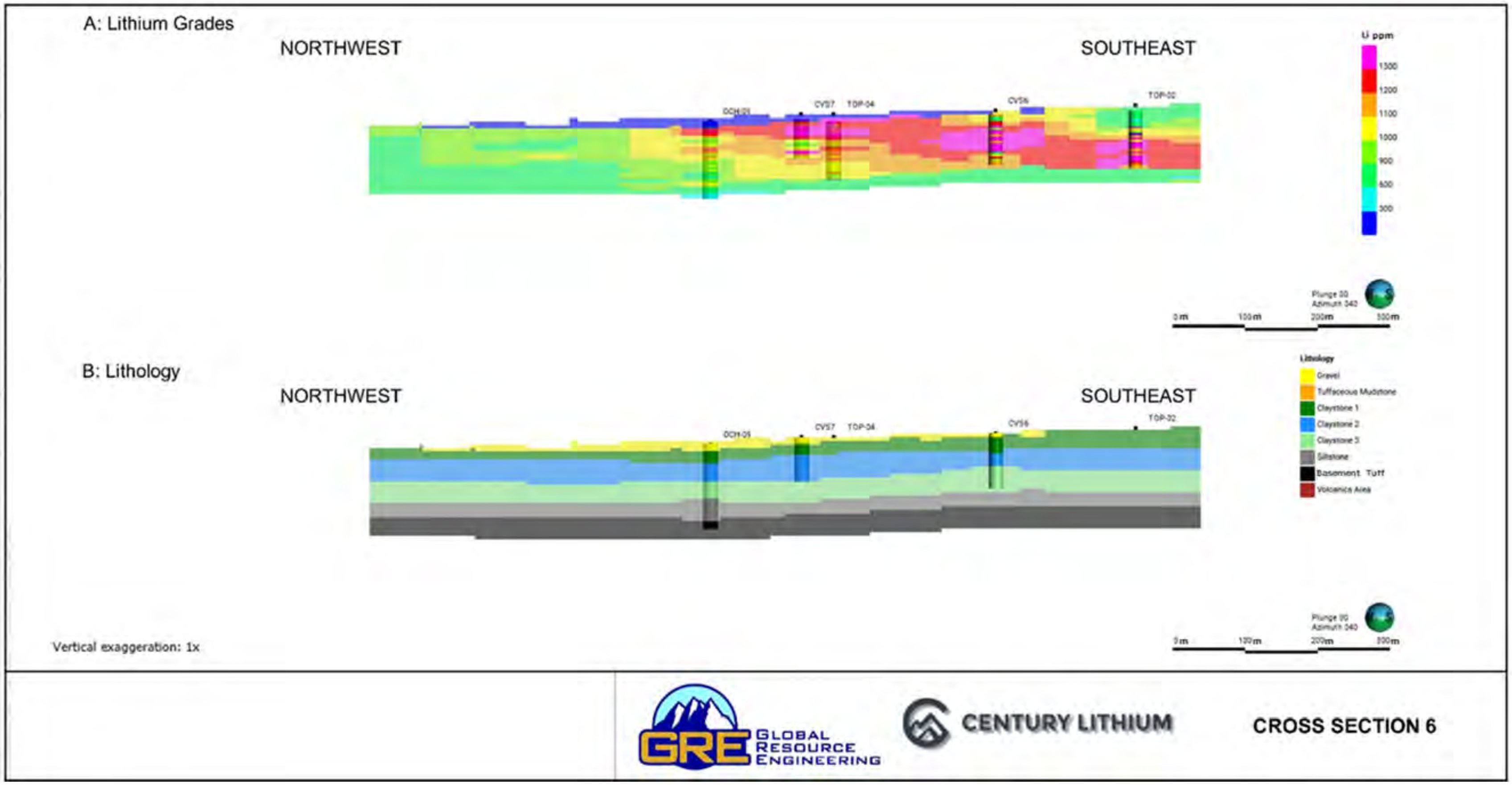


Figure 14-27: Cross Section 6 (Source: GRE, 2022)

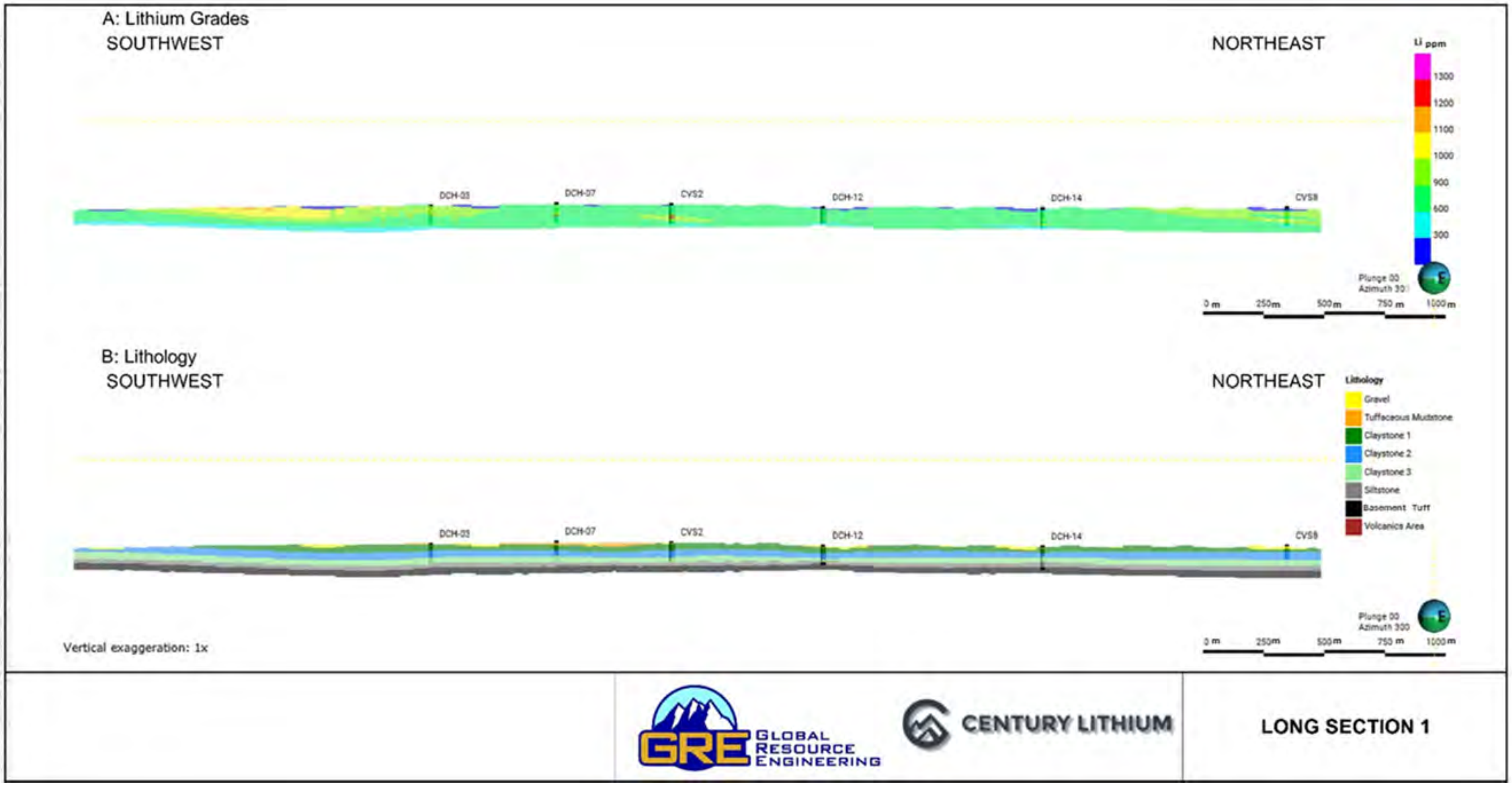


Figure 14-28: Long Section 1 (Source: GRE, 2022)

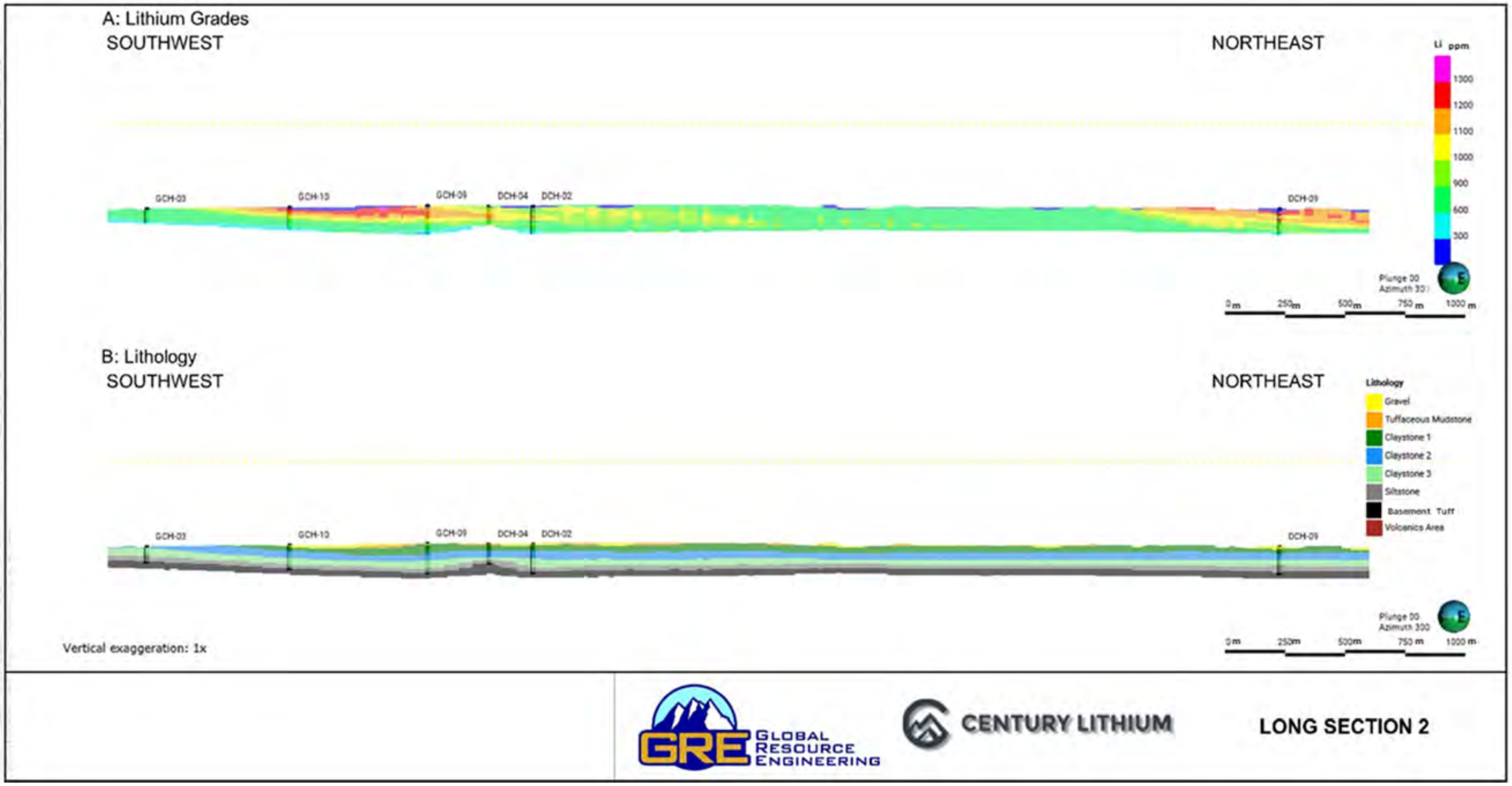


Figure 14-29: Long Section 2 (Source: GRE, 2022)

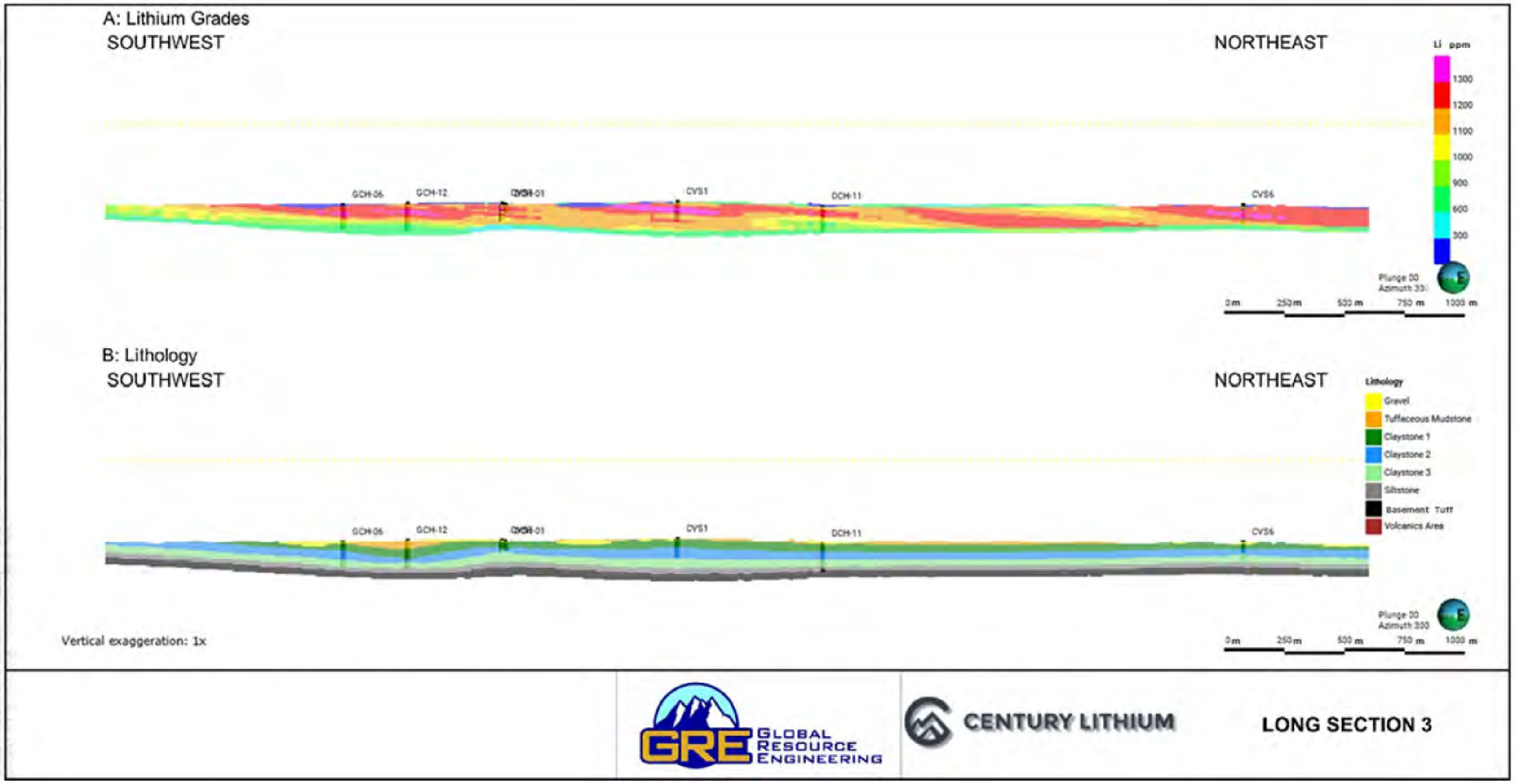


Figure 14-30: Long Section 3 (Source: GRE, 2022)

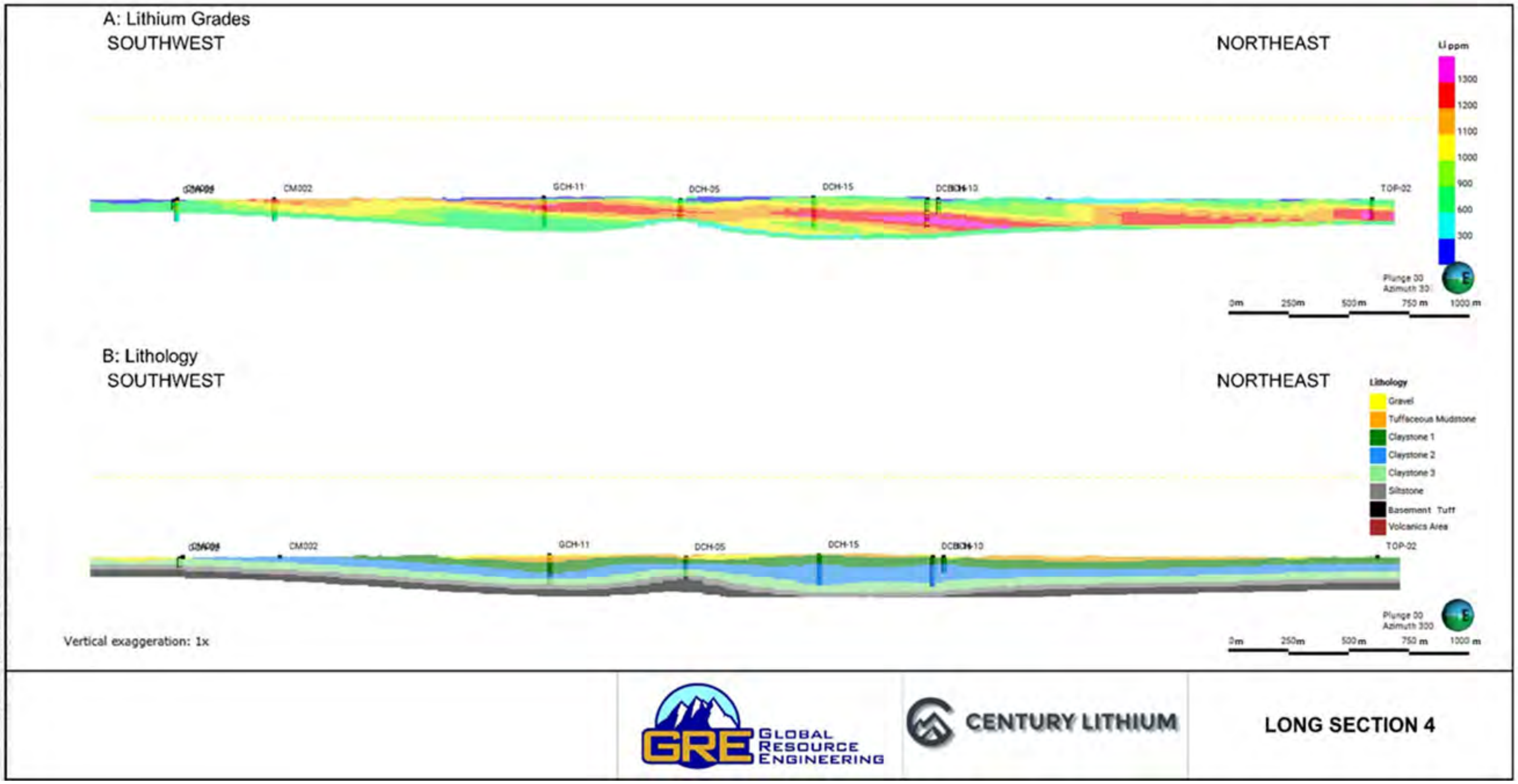


Figure 14-31: Long Section 4 (Source: GRE, 2022)

14.9.2 Swath Plots

To validate the model, estimations using the nearest neighbor (NN), ID^2 and ordinary kriging (OK) were performed within each domain. Swath plots were used to check the local trends between the grade estimation models. The mean values from the NN, ID^2 and OK estimates along north-south, east-west, and elevation swaths. Figure 14-32 to Figure 14-34 shows the swath plots along north-south, east-west and elevation where NN is shown in green, ID^2 is shown in red, and OK is shown in blue.

The NN, ID^2, and OK models show similar trends in grades with the expected smoothing for each method. The observed trends show no significant bias between the estimates. Since, OK minimizes error variance to improve local accuracy, OK estimations overestimate low-grade material and underestimate high-grade material. Thus, ID^2 was used for resource estimation.

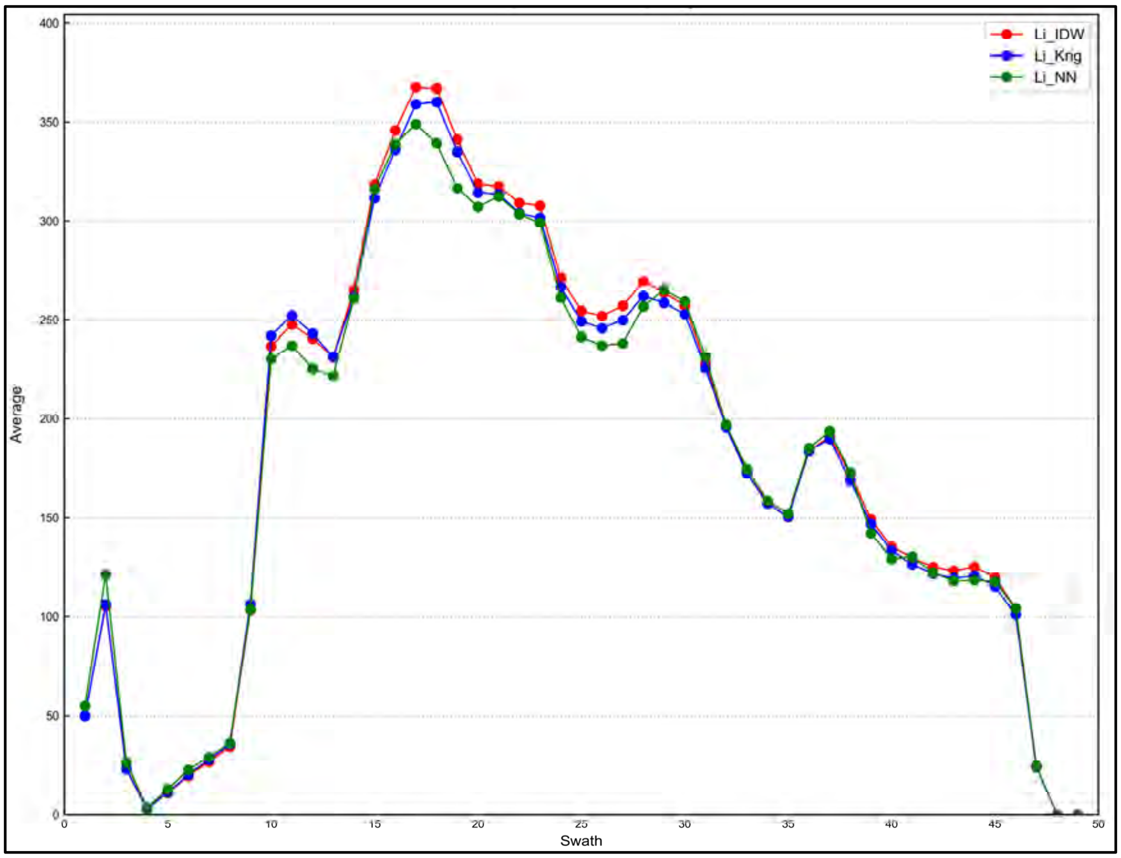


Figure 14-32: Swath Plot along North-South (Source: GRE, 2022)

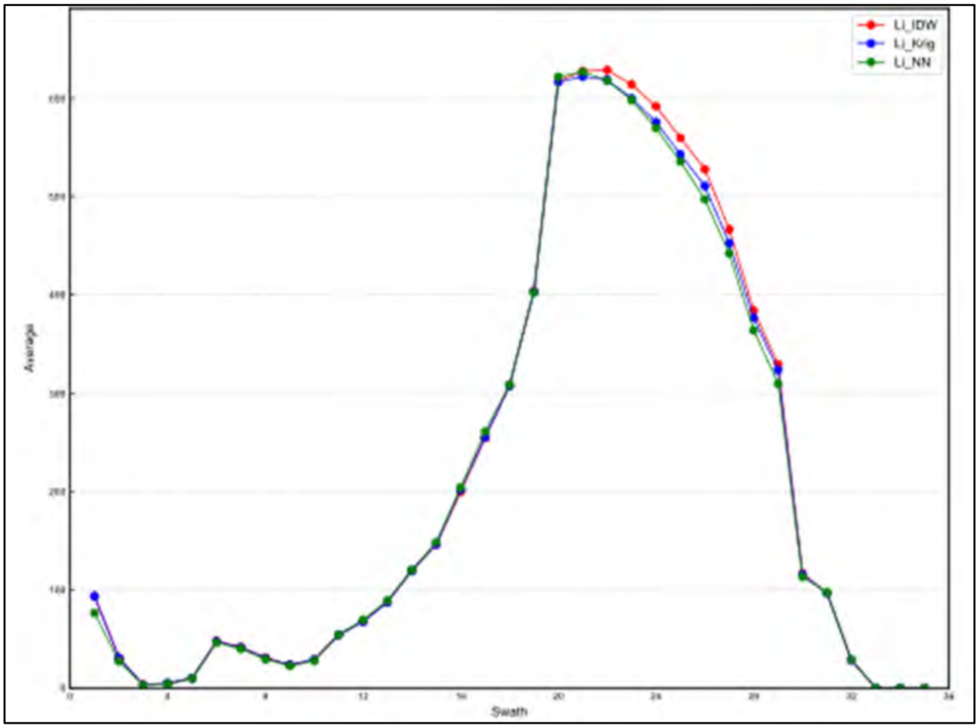


Figure 14-33: Swath Plot along East-West (Source: GRE, 2022)

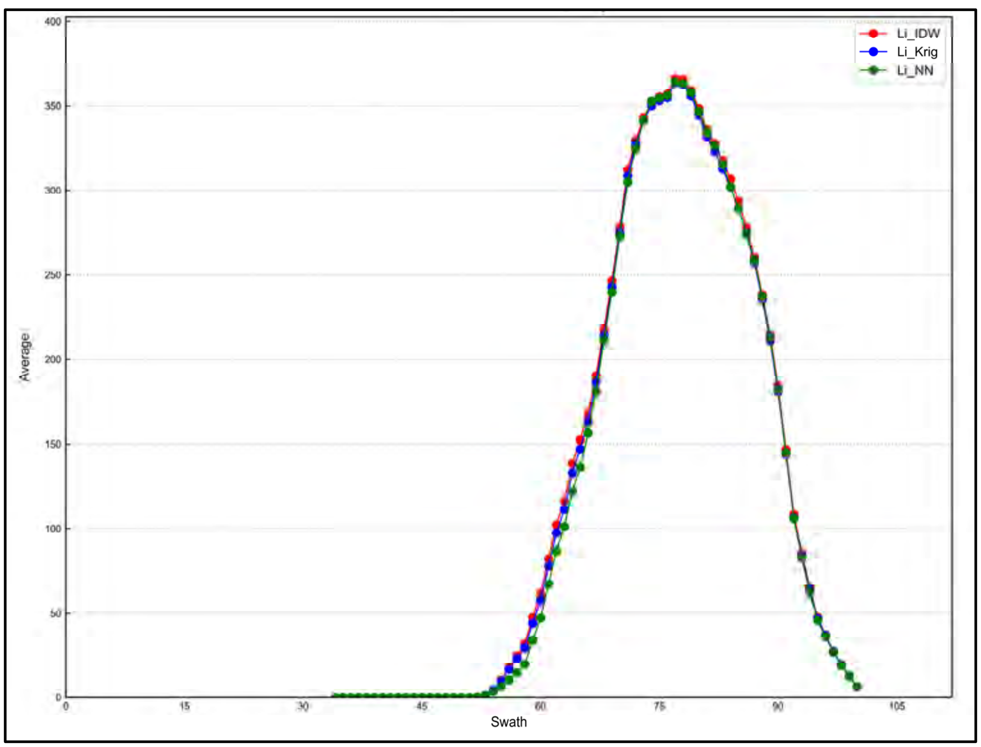


Figure 14-34: Swath Plot along Elevation (Source: GRE, 2022)

14.9.3 Drill Hole to Drill Hole Comparison

In 2022, Century drilled in-fill holes in both the central area of the Property (CSV1 to CSV4) and in the northeast corner (CVS5 to CVS8) (Figure 14-1). GRE evaluated the expected grades at the drill hole location based on the 2020 block model. The expected grades were then compared with the actual drill hole assay grades. The distribution and similarity in lithium values (Table 14-5) support the range and search parameters used in developing the resource model. Spacing in the in-fill program averaged 200 m in claystone; variograms show a range of 1,000 m in the major (northeast) axis and 450 m in the minor (southeast, downdip) axis.

Table 14-5: In-fill Drill Hole Comparison

Drill Hole ID	Depth (m)		Length (m)	Average Li (ppm) – Assay Grades	Average Li (ppm) – Expected Grade in Drill Hole Based on 2020 Block Model
	From	To			
CVS1	18.3	79.3	73.2	1,277	1,147
CVS2	3.0	79.3	81.4	808	862
CVS3	6.1	76.2	70.1	1,198	1,165
CVS4	3.0	76.2	73.1	1,095	993
CVS5	9.1	61.0	51.9	796	1,016
CVS6	6.1	76.2	70.1	1,263	1,215
CVS7	6.1	61.0	54.9	1,243	1,194
CVS8	6.1	76.2	79.4	840	1,115

14.10 Factors that Could Affect Mineral Resources

There are no known significant factors or risks that may affect property access, title, or the right to perform work on the Property. The Property comprises unpatented US Federal claims administered by the BLM and the claims come with the right to access and conduct mineral exploration and mining under the guidelines and rules set forth in the General Mining Act of 1872, 30 U.S.C. §§ 22-42.

To the best of the QP's knowledge, there are no known legal, political, environmental, permitting, title, taxation, socio-economic, marketing, mining, metallurgical, or other factors that would further materially affect the Mineral Reserves reported other than what is mentioned in this Report and highlighted below.

The Mineral Resource estimate could be materially affected negatively by low market prices for lithium, and by difficulties in material handling and processing that would affect the recovery and production of salable lithium product. Changes in the estimated materials and supply costs, and in labor availability and rates are other factors that could materially affect the Mineral Resource estimate. The taxation and political environment for mining in Nevada is relatively stable. Infrastructure development is required, including electrical power and water supply, to support the Project's phases of development.

15.0 MINERAL RESERVE ESTIMATE

Mineral Reserves were classified in accordance with the 2014 CIM Definition Standards. Modifying factors were applied to a portion of the Measured and Indicated Mineral Resources to convert them to Proven and Probable Mineral Reserves.

The pit-constrained Mineral Resources were used to derive the Mineral Reserves. This was accomplished by building a mine production schedule from an optimized sequence of pit shells which capture the Measured and Indicated blocks. The pit shells are nested within the ultimate pit-constrained shell.

15.1 Mine Design

Mineral Reserves were constrained to the property limits shown in Figure 14-1 and limited to the area of clay mineralization excluding the Angel Island rocks.

QP Lane believes the resource is adequately diluted based on the compositing method, and estimation method. The resource model was created to 50 x 50 x 5 m to generate a mine planning model. Mining will be performed using cold planers in 0.3 to 0.46-m thick slices, followed by windrowed drying allowing for ease in material handling, sampling and grade control. During mine operations, high-grade, low-grade and waste material boundaries will be delineated by a grade control model that uses a smaller block size, which will be defined by the smallest mining unit. The selective mining unit is much smaller than the block model used for mine planning. Thus, no additional dilution is added as a modifying factor to the 50 x 50 x 5 m mine planning block model.

Also, QP Lane believes dilution will be insignificant as there is very little internal waste within the deposit. During mine operations, mitigation of high-grade material loss will be a higher priority than mitigation of dilution to ensure that all high-grade mineralization is captured.

15.1.1 Pit Design Parameters

The process of evaluating the resource block model and converting it to Mineral Reserves was accomplished by applying modifying factors relating to mining, processing, metallurgy, infrastructure, G&A support, and economic value for lithium (Table 15-1). The Mineral Reserves adhered to the property boundary, mined material produced a saleable product (lithium carbonate) and respected any legal, social, governmental and environmental constraints. Mineralized and waste material mining require similar excavation and materials handling, and the costs were determined to be the same. All Inferred Mineral Resource blocks and gravel overburden were treated as waste and converted to waste blocks in the model. Processing and G&A costs were applied to the tonnes of plant feed. Material density, at 1.505 g/cm^3, was applied throughout the block model. Process recovery, at 78%, was applied to the three claystone zones. Slope angles for each claystone zone were applied to the mine design as determined by the geotechnical analysis described in Section 16. The price of lithium in the design is $24,000/t LCE. Using these parameters, the value of each material block is determined in the mine model.

Table 15-1: Pit Design Parameters

Parameter	Unit	Value
Mining Cost - mineralized material	$/t	2.22
Mining Cost - waste	$/t	2.22
Processing Cost	$/t milled	16.69
Process Recovery	%	78
G&A Cost	$/t milled	1.09
Material Density	g/cm^3	1.505
Pit Slope – Overburden and Claystone Zone 1	degree	23
Pit Slope – Claystone Zone 2	degree	32
Pit Slope – Claystone Zone 3	degree	43
Lithium Price – Base Price	$/t LCE	24,000

15.1.2 Pit Design Methodology

The widespread distribution of lithium within the claystone horizons prevents the deposit model from lending itself to the use of standard pit optimization algorithms.

Grade-thickness maps of the Mineral Resources at different lithium cut-off grades (300 ppm, 400 ppm, 600 ppm, and 900 ppm) were created. A grade-thickness map of Mineral Resources over 900 ppm Li was selected (Figure 15-1) to target higher grade areas and was used as a guide in pit design.

The thickness of waste and low-grade material was considered to assist in the selection of a final pit location. The pit design focuses on mineralization that is located near surface starting around drill hole GCH-10, where higher-grade mineralization outcrops.

To generate a cohesive mine plan, QP Lane manually selected areas of >900 ppm Li within the resource block model, keeping the shape of the designed pit shell shallow and roughly rectangular in each cut to facilitate the equipment selection for mining.

Using this approach, six pit phases were generated supporting the target feed rates to the plant of 7,500 t/d for the first four years (Project Phase 1), 15,000 t/d for the next four years (Project Phase 2), and 22,500 t/d for the remainder of the Project (Project Phase 3). The pit phases begin in the southwest and expand northeast, where mining is deeper and encounters increasing amounts of low-grade material and overburden. The six pit phases form the final pit outline shown in Figure 15-2. The final pit outline is a subset of the ultimate pit determined to constrain the Mineral Resources.

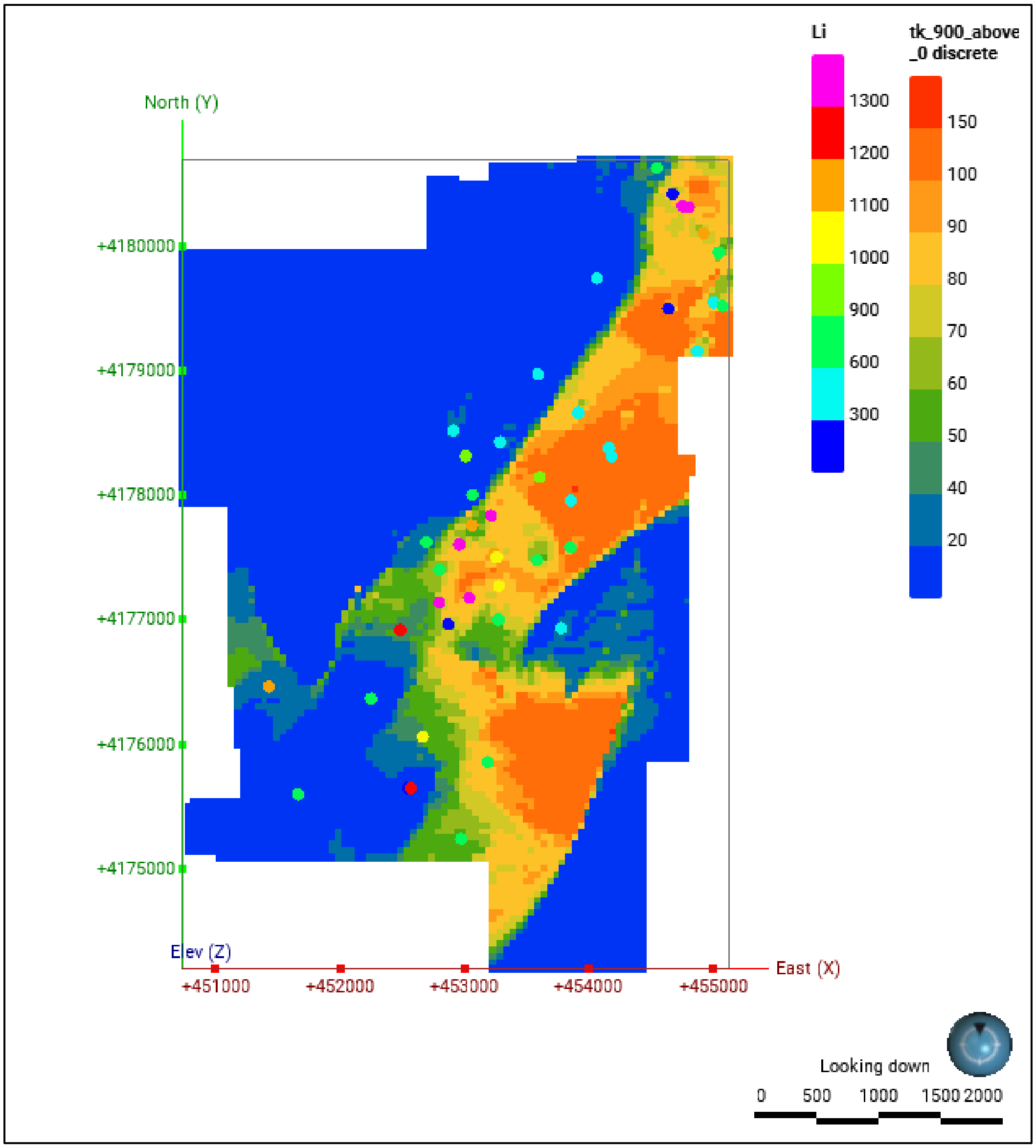


Figure 15-1: Grade-Thickness Map with Lithium Grade above 900 ppm (Source: GRE, 2022)

Note: Li legend refers to the drill hole grades in ppm. tk_900_above 0 discrete refers to the total thickness (m) when grades of the block are greater than 900 ppm.

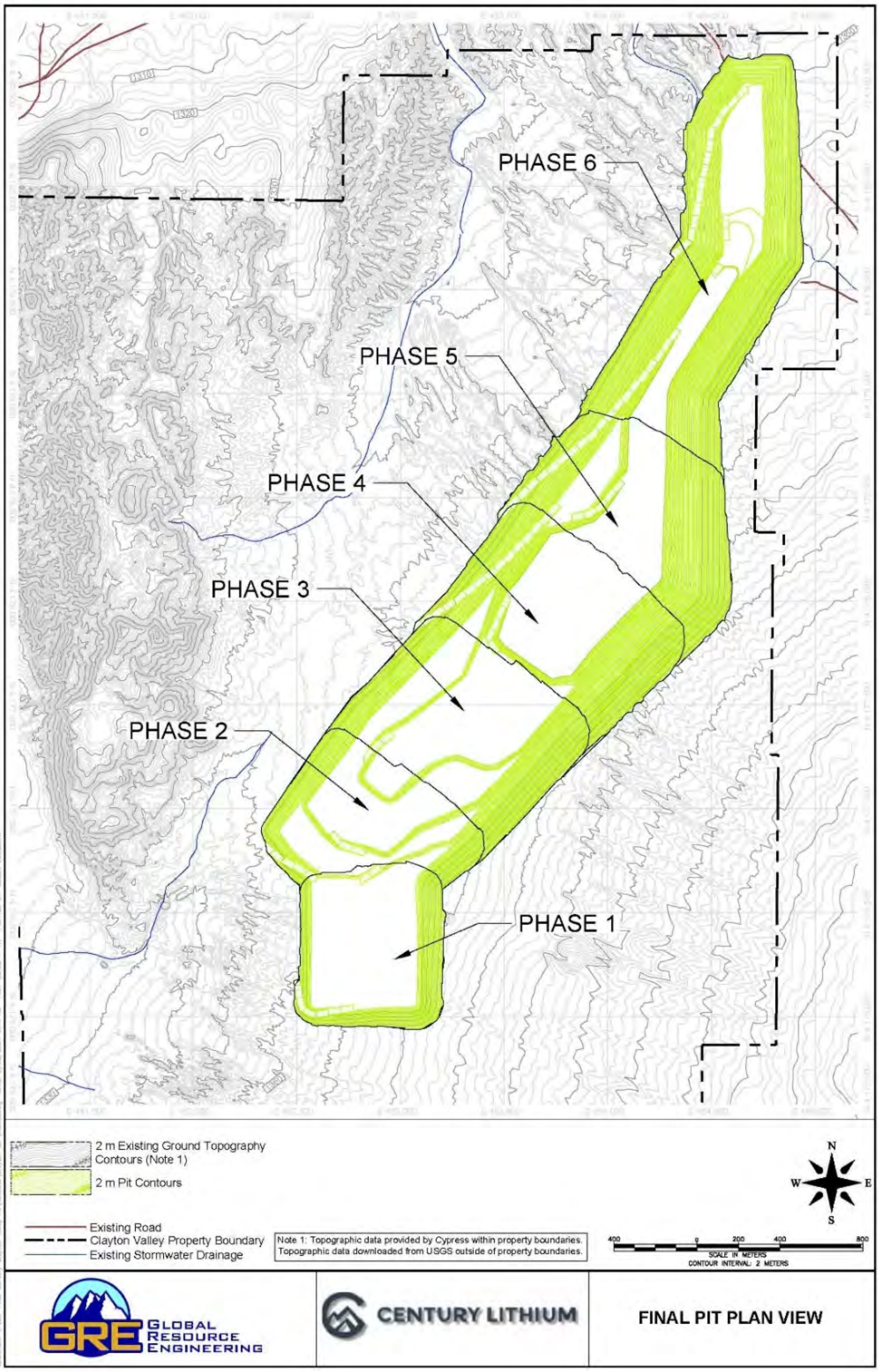


Figure 15-2: Plan View–Final Pit Outline Showing the Six Pit Phases (Source: GRE, 2022)

15.1.3 Lithium Cut-off Grade

For Mineral Reserve determination purposes, a cut-off grade of 900 ppm Li was used. This grade was selected during the process of pit design as the criterion in choosing blocks to form each pit phase and to generate an optimized grade over the life of the mine plan.

Using the parameters in Table 15-1, a 900-ppm lithium grade generates a value per tonne that is more than 4.5 times the value generated by the break-even grade before subtracting operating cost. QP Lane determined this margin, which is greater than a factor of two, as it assures the mine schedule will generate sufficient operating margin to maximize the return on capital and reduce risk. A 900-ppm Li cut-off was therefore considered as an appropriate grade for mine planning and reporting the Mineral Reserves.

Material between 400 and 900 ppm Li is designated as low-grade material to stockpile for possible future treatment and is not included in the Mineral Reserves. This material is treated as waste and included with gravel overburden and Inferred material in the determination of stripping ratio.

15.2 Mineral Reserve Statement

The cumulative result for all six pit phases forms the Mineral Reserves presented in Table 15-2. The Mineral Reserves have been classified in accordance with the 2014 CIM Definition Standards. All Measured Mineral Resources above cut-off within the final pit were converted to Proven Mineral Reserves and all Indicated Mineral Resources above cut-off within the final pit were converted to Probable Mineral Reserves. Inferred Mineral Resources are not part of the Mineral Reserve statement or mine production plan.

Claystone zone 1 and claystone zone 2 contain 87% of the total material tonnes and 83% of the total contained lithium.

Table 15-2: Clayton Valley Mineral Reserve Estimate

Domain	Tonnes Above Cut-off (millions)	Li Grade (ppm)	Li Contained (Mt)	LCE (Mt)
Proven				
Tuffaceous Mudstone	8.68	1,159	0.010	0.054
Claystone Zone 1	122.34	1,135	0.139	0.739
Claystone Zone 2	111.19	1,161	0.129	0.687
Claystone Zone 3	24.18	1,140	0.028	0.147
Siltstone	0.00		0.000	0.000
Total	**266.39**	**1,147**	**0.306**	**1.626**
Probable				
Tuffaceous Mudstone	0.01	1,147	0.000	0.000
Claystone Zone 1	8.67	1,123	0.010	0.052
Claystone Zone 2	7.26	1,190	0.009	0.046
Claystone Zone 3	5.32	1,234	0.007	0.035
Siltstone	0.00		0.000	0.000
Total	**21.26**	**1,174**	**0.025**	**0.133**
Total Proven and Probable	**287.65**	**1,149**	**0.330**	**1.759**

1. The effective date of the Mineral Reserve Estimate is April 29, 2024. The QP for the estimate is Ms. Terre Lane, MMSA, an employee of GRE and independent of Century.
2. The Mineral Reserve estimate was prepared in accordance with 2014 CIM Definition Standards and 2019 CIM Best Practice Guidelines.
3. Mineral Reserves are reported within the final pit design at a mining cut-off of 900 ppm. The mine operating cost is $5.44/t milled, processing cost of $40.9/t milled, G&A cost of $2.68/t milled and a credit for the NaOH sales of $28.95/t milled. The NaOH sales credit is proportionally applied to all the operating costs to get appropriate costs for the cut-off grade calculation. The cut-off grade considers a mine operating cost of $2.22/t, a process operating cost of $16.69/t milled, a G&A cost of $1.09/t milled, process recovery of 78% and a long-term lithium carbonate price of $24,000/t.
4. The cut-off of 900 ppm is an elevated cut-off selected for the mine production schedule as the elevated cut-off is 4.5 times higher than the break-even cut-off grade.
5. Mineral Reserve figures have been rounded.
6. One tonne of lithium=5.323 tonnes lithium carbonate.

15.3 Factors that Could Affect Mineral Reserves

The taxation and political environment for mining in Nevada is relatively stable. The Project requires infrastructure development, including the development of electrical power and water supply.

There are no known significant factors or risks that may affect property access, title, or the right to perform work on the property. The property comprises unpatented US Federal claims administered by the BLM and the claims come with the right to access and conduct mineral exploration and mining under the guidelines and rules set forth in the General Mining Act of 1872, 30 U.S.C. §§ 22-42.

To the best of the QP's knowledge, there are no known legal, political, environmental, permitting, title, taxation, socio-economic, marketing, mining, metallurgical, or other factors that would further materially affect the Mineral Reserves reported other than what is mentioned in this Report and highlighted below:

- Market price for lithium carbonate
- Changes in local interpretations of mineralization geometry and continuity of mineralized zones
- Changes to geological and mineralization shapes, and geological and grade continuity assumptions
- Density and domain assignments
- Changes to geotechnical assumptions including pit slope angles
- Changes to mining and metallurgical recovery assumptions
- Change to the input and design parameter assumptions.

16.0 MINING METHODS

16.1 Summary

All materials within the Project's resource area are relatively flat lying soft sedimentary rocks 100 to 140 m thick. The deposit is covered by a thin veneer of alluvial gravels. The material is very soft, so drilling and blasting will not be required.

QP Lane conducted a trade-off study of two mining methods:

- Excavation with a single Caterpillar 6020B or equivalent shovel (hydraulic excavator configuration) with a 12 m^3 bucket capacity. The excavated material will be loaded into a mobile mineral sizer/feeder-breaker and then moved out of the pit using a series of jump conveyors. The material will then be transferred to overland conveyors and transported to a radial stacker and ROM stockpile located at the processing plant. For this option, the mobile mineral sizer/feeder-breaker will be located near the open excavation face for immediate loading by the shovel, and the necessary number of jump conveyors will be placed to span from the open excavation face to the overland conveyor.
- Material will be mined in 2 m-wide x 0.3125 m-deep cuts by a cold planer (CAT PM620 or equivalent) and placed into windrows of loose material for drying. After several days of drying, a scraper will remove the wind-rowed material to the bottom of the pit ramp for removal by a series of jump conveyors. The material will then be transferred to overland conveyors and transported to a radial stacker and ROM stockpile located at the processing plant. The number of jump conveyors will be limited to the number required to exit the pit up the ramp. A cold planer is a piece of equipment that uses a series of rotating drums with carbide teeth to remove the top layer of material, grinding it into small granules. A heavy-duty scraper blade is used behind the cutting drum to collect the milled material. The milled material can be wind-rowed using the machine's conveyor or by leaving an opening in the scraper blade. The cold planer is suitable for use with material with the geotechnical characteristics present at the Project (see below), which are highly plastic clays. Because the cold planer is a tracked vehicle with low ground pressure, it would be able to operate in much softer ground during cool and wet weather when rubber-tired equipment might not be able to operate.

The waste material and low-grade mineralized material will be removed using scrapers and hauled to waste and low-grade stockpiles, respectively. Some waste material will be backfilled into the pit phases to prepare the pit phases for construction of a lined TSF (see Section 18). Some low-grade material will be used to construct 30 cm-thick compacted clay liners for the waste and low-grade material stockpiles (see Section 18).

The cold planer/conveyor method was selected as the preferred mining method because: 1) it allows for drying of the mined material before placing onto conveyors, reducing wear on and cleaning of the conveyors, 2) it requires fewer jump conveyors to manage, 3) it does not require a feeder-breaker to break up and size the mined material, and 4) it results in lower capital and operating costs.

16.2 Geotechnical Analysis

The open pit excavation mines five different material types that have been identified through multiple mineral exploration campaigns including surface gravel (alluvium), tuffaceous mudstone, claystone zone 1, claystone zone 2, and claystone zone 3. Sampling and physical testing of in situ soils from exploratory drill holes were performed within the pit limit. Samples collected represent claystone zone 1 and claystone zone 2 only; no samples were tested from the other units. The information from these samples was used in the stability analysis to determine the appropriate slope angles for pit design. This information was also used in the design of the stockpiles and WRSFs that form part of the Project infrastructure.

16.2.1 Pit Geotechnical Sampling and Testing

A total of 21 claystone samples were collected for laboratory testing at various depths from drill holes GCH-10, GCH-11, GCH-12, and CVS8 from two drilling campaigns. The tests were performed by independent testing laboratory Advanced Terra Testing in Lakewood, Colorado, following the technical standards of the American Society for Testing and Materials (ASTM) and completed in April 2019 and November 2022.

The laboratory tests included:

- Atterberg Limits (ASTM D4318)
- Shrinkage Limits (ASTM D4943)
- Specific Gravity (ASTM D854 – Method 8)
- Grain Size Analysis with Hydrometer (ASTM D6913, D7928)
- One-Dimensional Consolidation (ASTM D2435)
- Direct Shear (ASTM D3080)
- Consolidated Undrained Staged Triaxial Compression (ASTM D4767).

Table 16-1 and Table 16-2 show the samples collected and tests performed, respectively.

Table 16-1: Collected Pit Geotechnical Samples

Sample ID	Source Drill Hole	Depth (m)	
		From	To
512012	GCH-12	4.0	4.2
512013		20.1	20.3
512014		32.1	32.3
512015		51.6	51.8
512016		68.0	68.2
512018		105.1	105.3
512020	GCH-10	20.0	20.2
512022	GCH-11	11.0	11.2
512023		23.9	24.3
512024		44.6	44.8
512025		61.6	61.8
512026		87.6	87.8
512027		120.8	121.0
484012	CVS8	7.0	7.2
484013		19.3	19.5
484014		27.9	28.1
484015		37.0	37.2
484016		46.6	46.8
484017		55.2	55.4
484018		67.4	67.6
484019		74.2	74.4

Table 16-2: Pit Geotechnical Samples Testing Completed

Testing	Sample(s)
ASTM D4318	Composite (512014, 512015, 512016); 512020; 512026, 484012 through 484019
ASTM D4943	Composite (512014, 512015, 512016); 512027 (x2); 512020 (x2); 484012; 484015; 484019
ASTM D854 – Method 8	Composite (512014, 512015, 512016); 484012; 484015; 484019
ASTM D6913, D7928	Composite (512014, 512015, 512016); 512020; 512026; 484012; 484015; 484019
ASTM D2435	512012; 512016; 512018; 512023; 512025; 512026; 484013; 484015; 484019
ASTM D3080	Composite (512014, 512015, 512016); 512022; 484019
ASTM D4767	512012; 512014; 512018; 484013; 484017

16.2.2 Materials Classifications

Two laboratory testing programs were conducted to characterize subsurface conditions. Testing revealed claystone zone 1 as a highly plastic clay (CH) and claystone zone 2 as a mix of clay (CL) and highly plastic clay (CH) according to the Unified Soil Classification System (USCS) (Table 16-3). The resulting particle size distributions are displayed in Figure 16-1 and Figure 16-2.

Table 16-3: Material Characteristics of Lithologies

Unit	USCS Classification	LL	PL	PI	Fines (Passing #200)	Clay Percent
Claystone Zone 1	CH	59	23	37	89.4	50.3
Claystone Zone 2	CL, CH	57	26	31	77.8	39.5

Note: PL = Plastic Limit; LL = Liquid Limit; PI = Plasticity Index

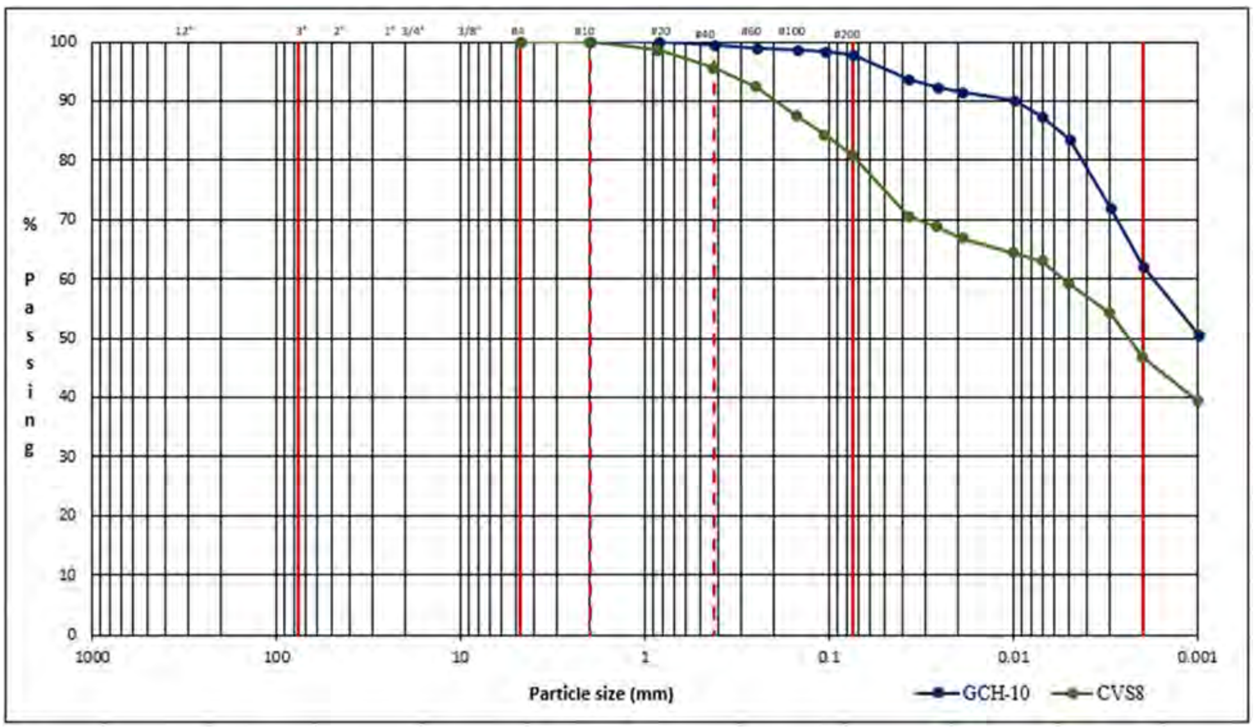


Figure 16-1: Particle Size Distribution—Claystone Zone 1 (Source: GRE, 2023)

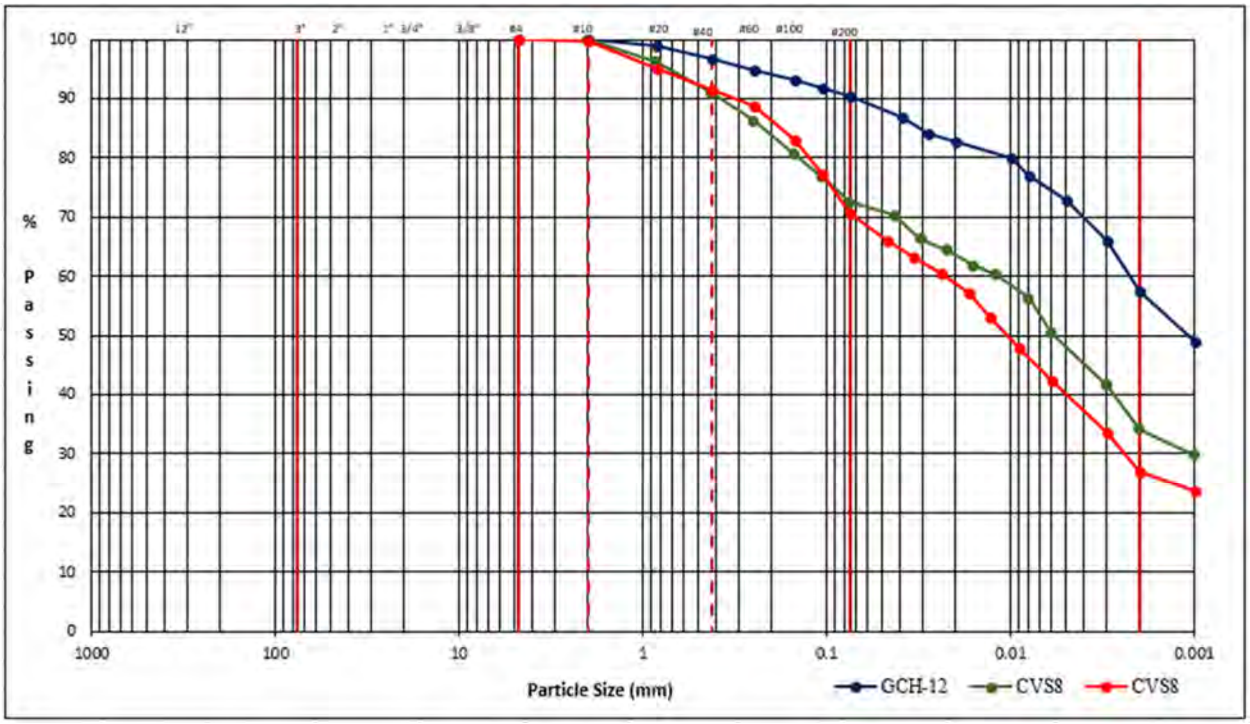


Figure 16-2: Particle Size Distribution—Claystone Zone 2 (Source: GRE, 2023)

As can be observed from the laboratory testing both claystone zone 1 and claystone zone 2 have highly plastic behavior and similar high capacities to retain water, as reflected in their Plastic Limit (PL), Liquid Limit (LL), and Plasticity Index (PI). Plastic Limit is the percent moisture content by weight at which a soil begins to behave as a plastic. Liquid Limit is the moisture content above which a soil becomes fluid. The Plasticity Index is the difference in percent between the two. Plastic behavior in a material can affect both mining and processing. Claystone zones 1 and 2 plot similarly on a Plasticity Chart, with the Atterberg Classification CL or CH, for plastic or highly plastic clay Figure 16-3.

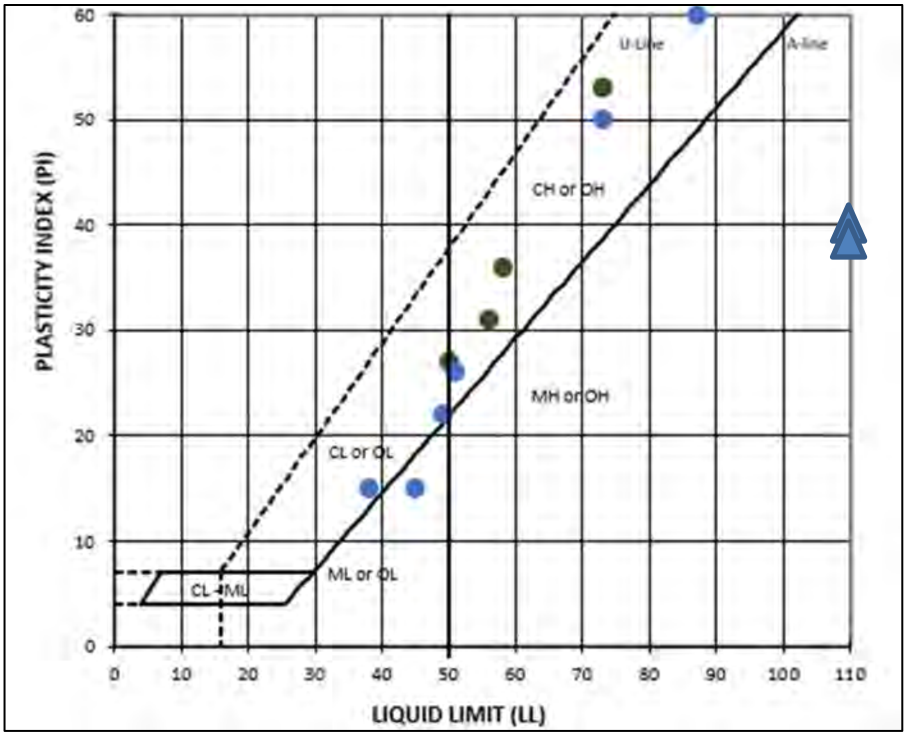


Figure 16-3: Plasticity Chart (Source: GRE, 2023)
Note: Plot showing Atterberg Classification for claystone 1 (green) and claystone 2 (blue). CL = Clay; CH = High Plasticity Clay; ML = Silt; MH = High Plasticity Silt; OL = Organic Low Plasticity; OH = Organic High Plasticity.

16.2.3 Pit Slope Stability Analysis

Slope stability cross-sections were developed for three locations in the final pit for this analysis. Cross-sections were selected to model the most critical section of the final pit. The term most critical is generally defined as the tallest and/or steepest section or having critical infrastructure in the vicinity that could be affected by or cause adverse loading on the pit wall (see Figure 16-4. Contact elevations between the different geological units were estimated using topography of the site, current pit design, and a Leapfrog 3D model of the geologic conditions at site that utilizes exploratory boreholes in the vicinity of the slope stability cross sections. Slope stability cross sections are shown on Figure 16-5 through Figure 16-7.

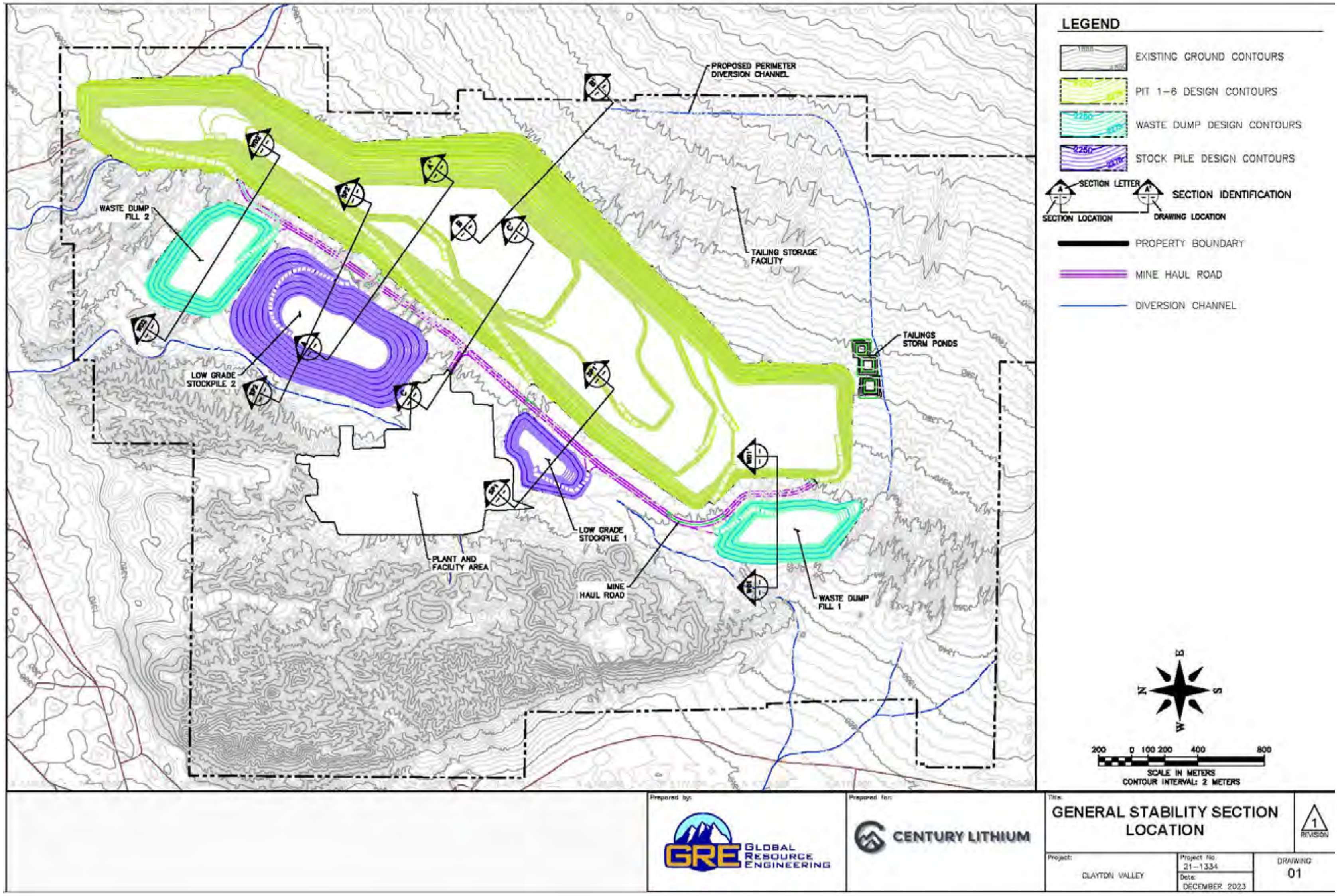


Figure 16-4: General Stability Section Locations (Source: GRE, 2023)

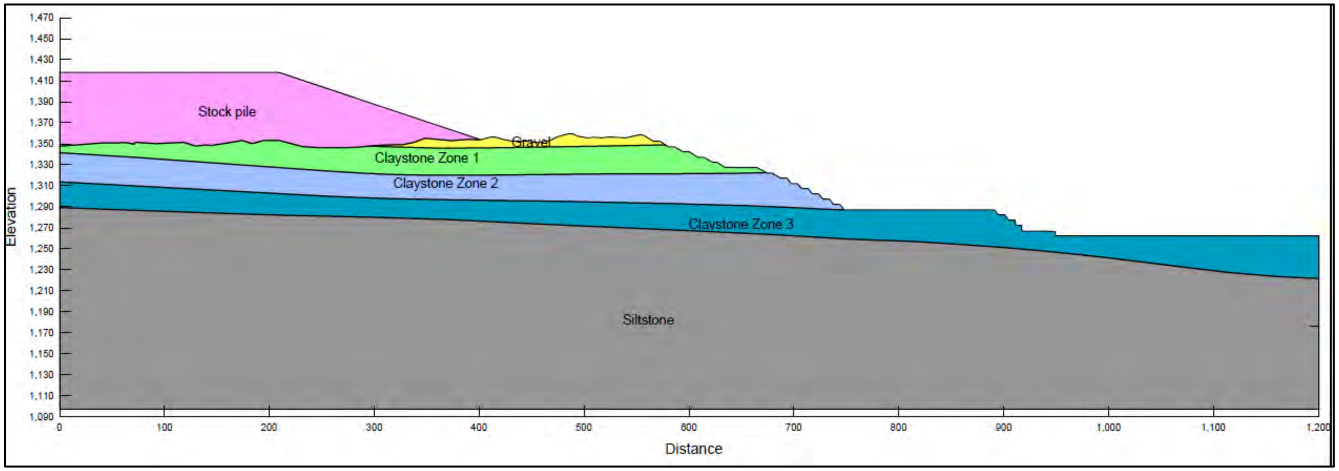


Figure 16-5: General Pit Stability Cross Section A (Source: GRE, 2023

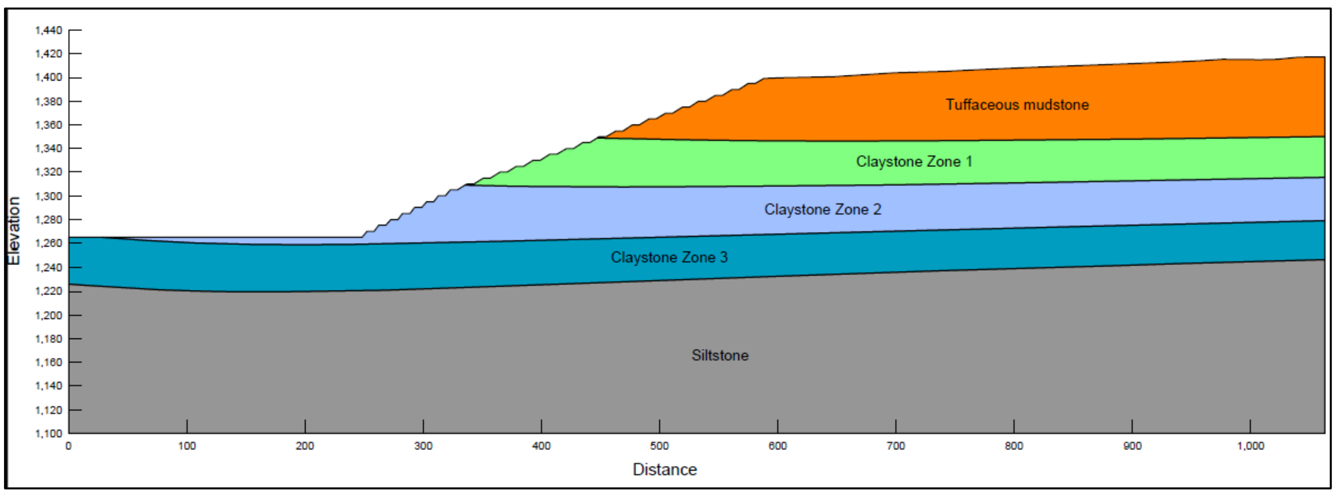


Figure 16-6: General Pit Stability Cross Section B (Source: GRE, 2023)

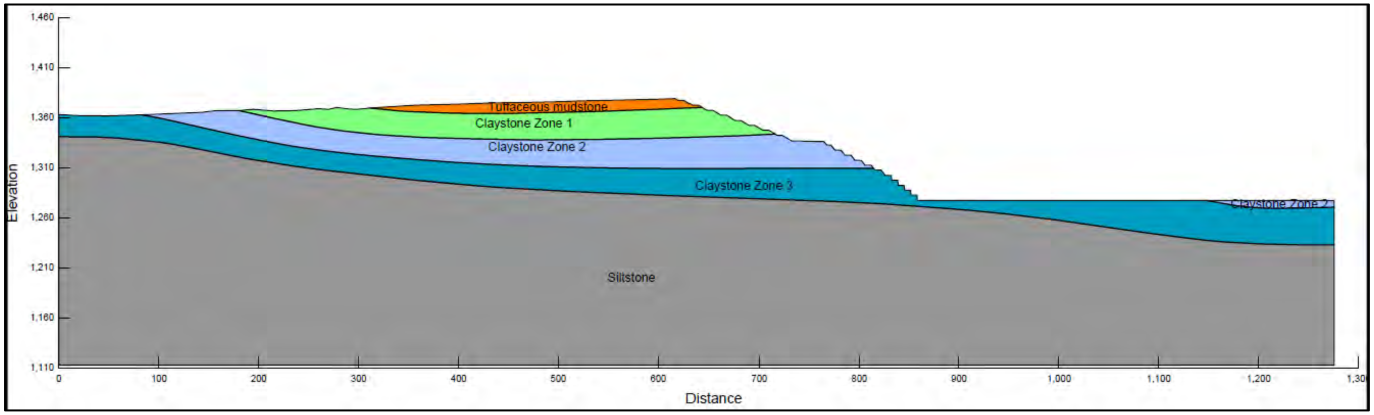


Figure 16-7: General Pit Stability Cross Section C (Source: GRE, 2023)

16.2.3.1 Pit Slope Determination

Slopes cut in the different material formations were initially selected during the analyses performed during the pre-feasibility phase in 2019. To obtain the final slope cut configuration, the SlopeW program was used to evaluate different slope angles until a static factor of safety of 1.5 was achieved for the steepest slope possible. The resulting cut slopes as determined from the analysis were:

- claystone zone 1 - 3.5H:1V or 16.0° (Figure 16-8)
- claystone zone 2 2H:1V or 26,6° (Figure 16-9)
- claystone zone 3 1.5H:1V, or 33.7° (Figure 16-10).

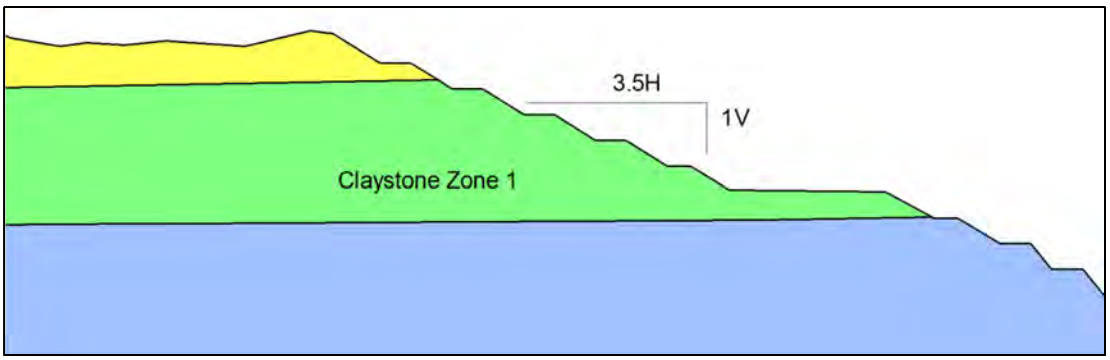


Figure 16-8: Claystone Zone 1 Slope Cut (Source: GRE, 2023)

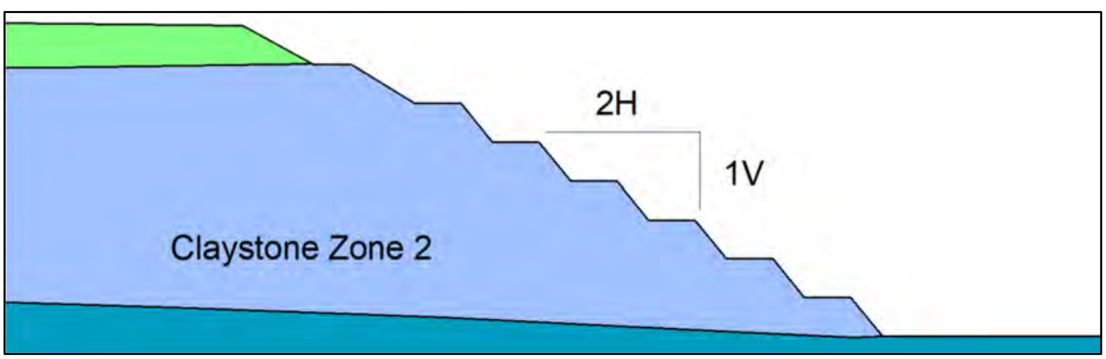


Figure 16-9: Claystone Zone 2 Slope Cut (Source: GRE, 2023)

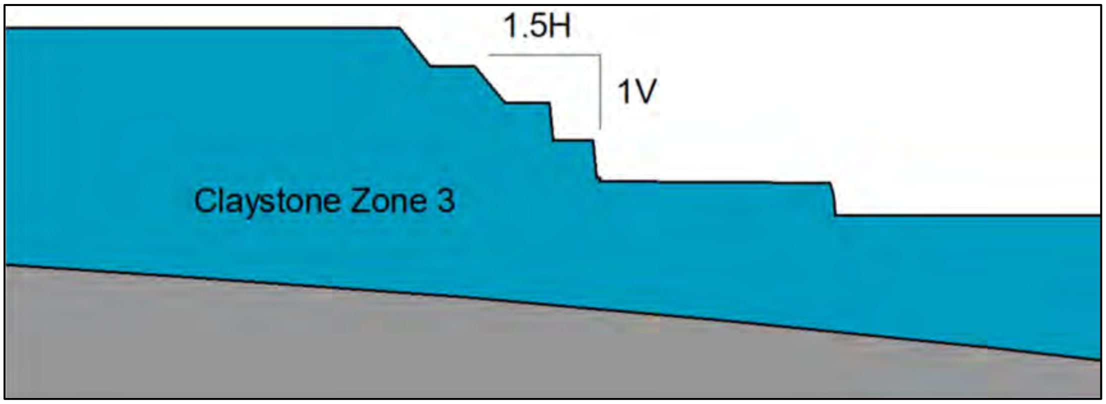


Figure 16-10: Claystone Zone 3 Slope Cut (Source: GRE, 2023)

16.2.3.2 Material Properties Selection

Shear strengths of the claystone zones were modeled using the Mohr-Coulomb constitutive model which defines the shear strength of the soil in terms of cohesion (C′) and internal friction (ϕ') of the material type. The cohesion and internal friction were selected from the averaged values obtained from the direct shear and triaxial tests. The unit weights were averaged from the laboratory tests as well.

Material properties for the tuffaceous mudstone, surface gravel, (alluvium), and stockpile were chosen based on engineering judgment. These materials were not sampled; therefore, no strength properties were obtained from laboratory testing. The tuffaceous mudstone properties were assigned based on the similarities to the claystone zone 1 according to field geologist observations.

The gravel and stockpile materials were modeled utilizing the Leps criteria (Leps, 1970) to characterize the material properties. Taking into consideration that rockfill materials with large particle sizes cannot be tested in the laboratory, Thomas Leps studied strength of these types of rockfill materials and developed relationships based on large triaxial shear tests, relative density, gradation, particle crushing strength and particle shape. Leps provides three different classifications considering rock quality, these are; a) low density poorly graded, weak particles, b) average rockfill, and c) high density, well graded, strong particles. A low density poorly graded, weak particles Leps model (Leps Lower Bound) was used for both materials as a conservative way to assess the stabilities of the stockpiles. Material properties used in slope stability analyses are summarized in Table 16-4.

Table 16-4: Pit Stability Material Strength Properties

Material Type	Unit Weight (kN/m^3)	Strength Model	C' (kPa)	ϕ' (°)
Claystone Zone 1	15	Mohr-Coulomb	67.95	25.5
Claystone Zone 2	13	Mohr-Coulomb	17.1	26.3
Claystone Zone 3	14	Mohr-Coulomb	288.4	15.0
Tuffaceous Mudstone	15	Mohr-Coulomb	67.95	25.5
Gravel (Alluvium)	13	Leps Lower Bound[1]	-	-
Stockpile	13	Leps Lower Bound[1]	-	-

Note: C' - Cohesion; ϕ' – Effective Friction Angle. [1] Leps (1970)

16.2.3.3 Slope Stability Analysis

Slope stability analyses were completed using the computer program SlopeW, part of the GeoStudio 2021.4 software suite, which enables the user to conduct limit equilibrium slope stability calculations by a variety of methods. Analyses were performed under static and pseudo-static loading conditions. This site has no shallow groundwater, and the pit design is above any natural aquifers; therefore, slope stability analyses do not include hydrostatic loading. However, the site is in a medium to high seismic zone with faulting identified in the vicinity of the Project. The resulting ground motion is 0.1375 g, and the full ground motion was applied as a horizontal force.

Six scenarios were run for each section for both static and pseudo-static loading:

1. Overall global stability, includes the entire slope.
2. Claystone zone 1 section general stability, includes the entire layer of material with entrance and exits in overlying and underlying material layers.
3. Claystone zone 1 section local stability, interbench slope stability in the unit.
4. Claystone zone 2 section general stability, includes the entire layer of material with entrance and exits in overlying and underlying material layers.
5. Claystone zone 2 section local stability, interbench slope stability in the unit.
6. Claystone zone 3 section local stability.

The selection of these scenarios was driven by the stratigraphy of the deposit and the changes in slope cuts to manage stability of the pit walls.

Accepted minimum factor of safety for static conditions is 1.3 and for pseudo-static conditions is 1.05 according to NDEP (2020). These values are also acceptable as an international standard and the static analysis for 1.3 is acceptable for construction and operation conditions. Slope stability results are summarized in Table 16-5 through Table 16-7 for the Sections A, B, and C, respectively.

Table 16-5: Slope Stability Results Section A

Section A Results (Factor of Safety)		
Scenario	**Static**	**Pseudostatic**
Global	1.8	1.8
Claystone Zone 1 (General)	3.2	1.8
Claystone Zone 1 (Local)	3.1	2.0
Claystone Zone 2 (General)	1.9	1.3
Claystone Zone 2 (Local)	1.6	1.2
Claystone Zone 3 (Local)	6.5	4.5

Table 16-6: Slope Stability Results Section B

Section B Results (Factor of Safety)		
Scenario	**Static**	**Pseudostatic**
Global	1.6	1.1
Tuffaceous Mudstone	2.5	1.7
Claystone Zone 1 (General)	1.9	1.3
Claystone Zone 1 (Local)	2.4	1.7
Claystone Zone 2 (General)	1.6	1.1
Claystone Zone 2 (Local)	1.5	1.1

Table 16-7: Slope Stability Results Section C

Section C Results (Factor of Safety)		
Scenario	**Static**	**Pseudostatic**
Global	2.3	1.6
Claystone Zone 1 (Local)	2.4	1.7
Claystone Zone 2 (General)	1.9	1.3
Claystone Zone 2 (Local)	1.6	1.2
Claystone Zone 3 (General)	2.3	1.6
Claystone Zone 3 (Local)	5.8	4.6

In general, the results of the analyses indicate compliance with adopted minimum factors of safety for slopes when modeled with Mohr-Coulomb and Leps Lower Bound parameters.

16.2.4 Stockpiles Slope Stability Analysis

Slope stability cross-sections were developed for the low grade stockpiles and WRSFs for this analysis. Cross sections for each were selected to model the the tallest and/or steepest section or having critical infrastructure in the vicinity that could be affected by a slope failure of the structures (Figure 16-4). Contact elevations between the different lithology units were estimated using topography of the site, current pit design, and a Leapfrog 3D model of the geologic conditions utilizing exploratory boreholes in the vicinity of the slope stability cross-sections. Slope stability cross-sections are shown on Figure 16-11 through Figure 16-14.

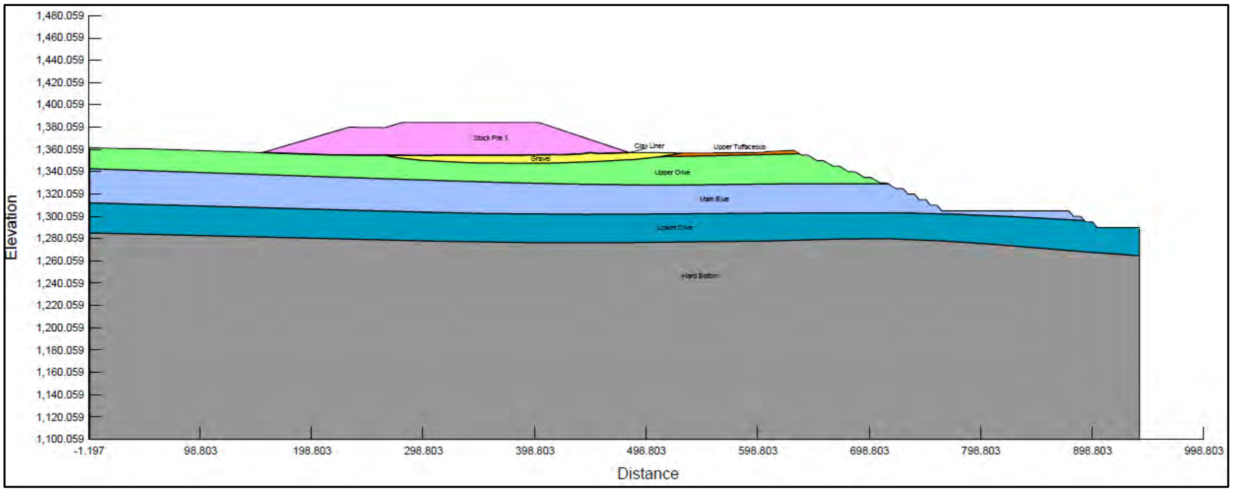


Figure 16-11: Low Grade Stockpile 1 Stability Cross-section (Source: GRE, 2023)

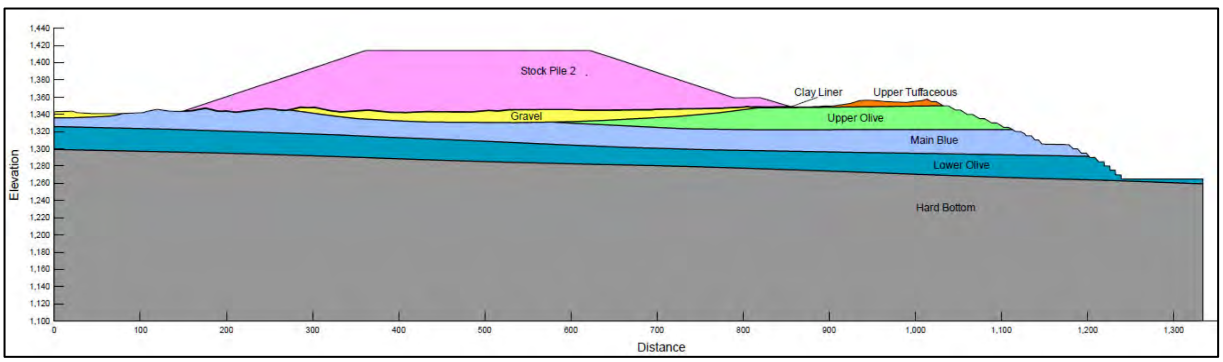


Figure 16-12: Low Grade Stockpile 2 Stability Cross-section (Source: GRE, 2023)

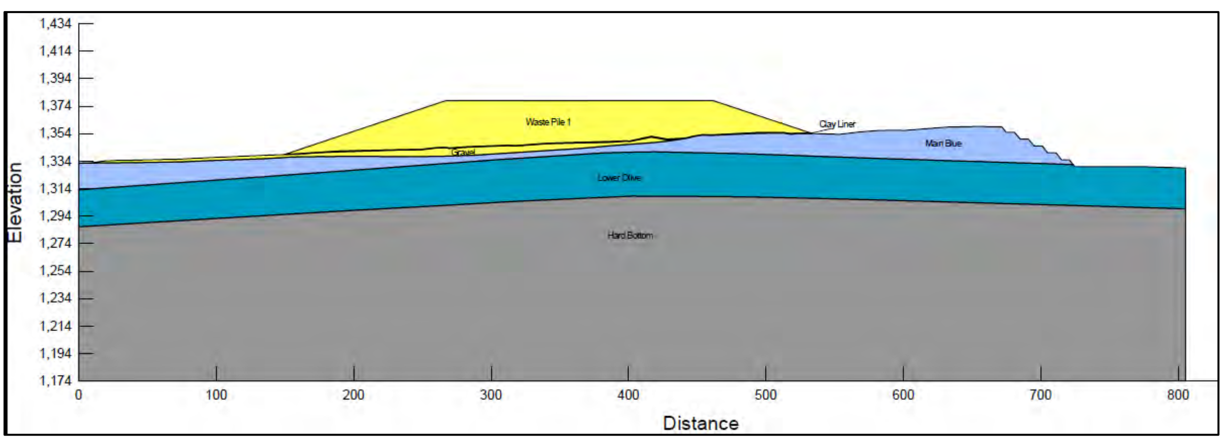


Figure 16-13: WRSF 1 Stability Cross-section (Source: GRE, 2023)

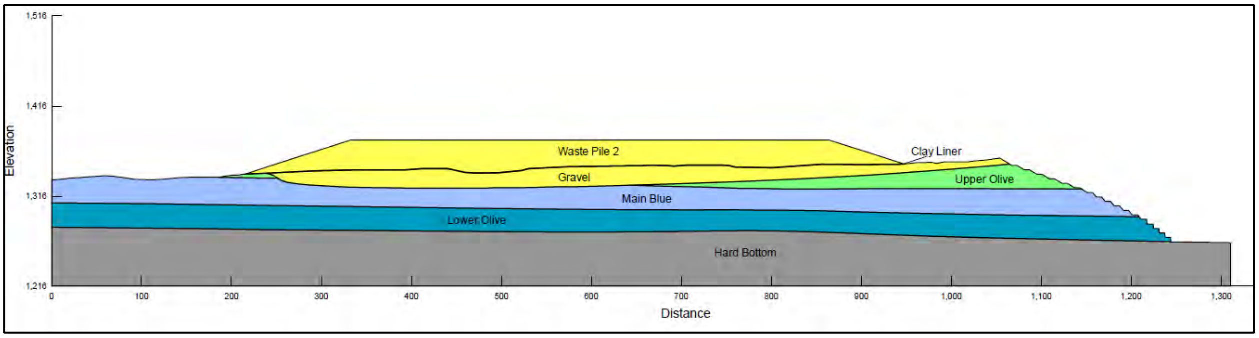


Figure 16-14: WRSF 2 Stability Cross-section (Source: GRE, 2023)

The slope stability analysis procedure and conditions used were the same as for the pit slope stability sections. Four scenarios were run for each section for both static and pseudo-static loading:

1. Overall static global stability right side (towards the pit), includes the entire slope.
2. Overall global stability left side, includes the entire slope.
3. Overall static global stability with clay liner right side (towards the pit), includes the entire slope.
4. Overall global stability with clay liner left side, includes the entire slope.

Accepted minimum factor of safety for static conditions is 1.3 and for pseudo-static conditions is 1.05 according to NDEP (2020). These values are also acceptable as an international standard and the static analysis for 1.3 is acceptable for construction and operation conditions. Slope stability results are summarized in Table 16-8 through Table 16-11 for the low grade stockpiles and WRSFs without and with clay liner.

Table 16-8: Slope Stability Results Low Grade Stockpiles

Low Grade Stockpiles Results (Factor of Safety)		
Scenario	**Static**	**Pseudostatic**
Global Low Grade Stockpile 1 Right	2.94	2.00
Global Low Grade Stockpile 1 Left	3.34	2.20
Global Low Grade Stockpile 2 Right	2.79	1.90
Global Low Grade Stockpile 2 Left	2.25	1.52

Table 16-9: Slope Stability Results WRSFs

WRSFs Results (Factor of Safety)		
Scenario	**Static**	**Pseudostatic**
Global WRSF 1 Right	2.60	1.75
Global WRSF 1 Left	2.44	1.65
Global WRSF 2 Right	3.05	2.05
Global WRSF 2 Left	2.77	1.81

Table 16-10: Slope Stability Results Low Grade Stockpiles with Clay Liner

Low Grade Stockpiles with Clay Liner Results (Factor of Safety)		
Scenario	**Static**	**Pseudostatic**
Global Low Grade Stockpile 1 Right	2.39	1.65
Global Low Grade Stockpile 1 Left	2.78	1.82
Global Low Grade Stockpile 2 Right	2.79	1.90
Global Low Grade Stockpile 2 Left	2.19	1.48

Table 16-11: Slope Stability Results WRSFs with Clay Liners

WRSFs with Clay Liners Results (Factor of Safety)		
Scenario	**Static**	**Pseudostatic**
Global WRSF 1 Right	2.59	1.74
Global WRSF 1 Left	2.43	1.64
Global WRSF 2 Right	2.59	1.70
Global WRSF 2 Left	2.77	1.80

In general, the results of the analyses indicate compliance with adopted minimum factors of safety for slopes when modeled with Mohr-Coulomb and Leps Lower Bound parameters.

16.3 Dilution

QP Lane believes the resource is adequately diluted based on the compositing method, estimation method, and selectivity by mining slices 30-46 cm thick.

16.4 Waste Rock Storage Facilities and Low-Grade Stockpiles

The WRSFs and low-grade stockpiles have been designed with an overall 3H:1V sidewall slopes, which is conservative for the materials present in the waste and low-grade materials. Designed capacities for each of the waste facilities and stockpiles are shown in Table 16-12.

Table 16-12: Waste Facility and Stockpile Capacities

Facility	Tonnage (kt)
WRSF 1	5,352
WRSF 2	4,566
Low grade stockpile 1	2,643
Low grade stockpile 2	26,404

16.5 Mine Plan

16.5.1 Pit Design

A final pit shell was used to limit the mine plan and was generated using the variable pit slope angles discussed in Section 16.1.3. The bench height and width were set at 5 m and 6 m, respectively based on operating equipment reach and minimum road width. In-pit haul roads were designed with maximum grades of 8%.

Within the final pit shell, six pit phases were generated. At the design nominal production rate of 7,500 t/d for years one through four, 15,000 t/d for years five through eight, and 22,500 t/d for the remainder of the Project, the mine life represented by these six pit phases is 39.75 years, and yields the Mineral Reserves described in Section 15.

The six pit phases are illustrated in Figure 16-15 and Figure 16-16.

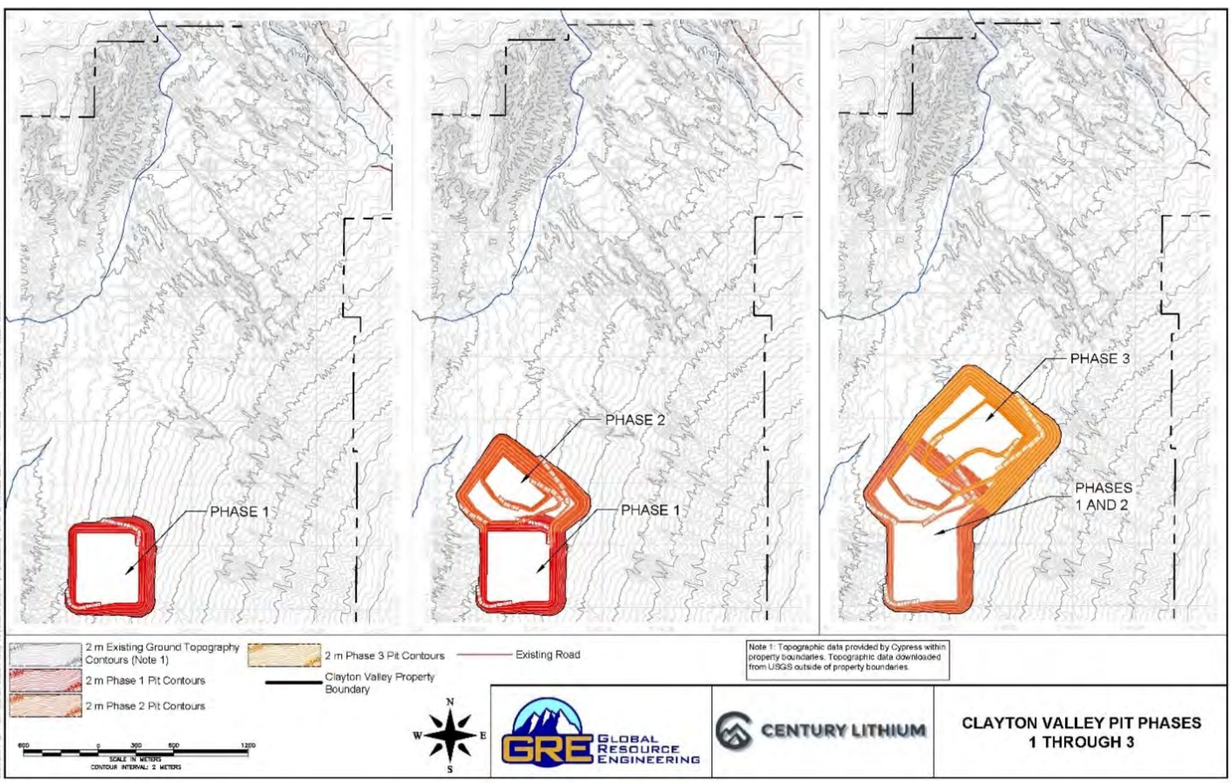


Figure 16-15: Pit Phases 1 through 3 (Source: GRE, 2023)

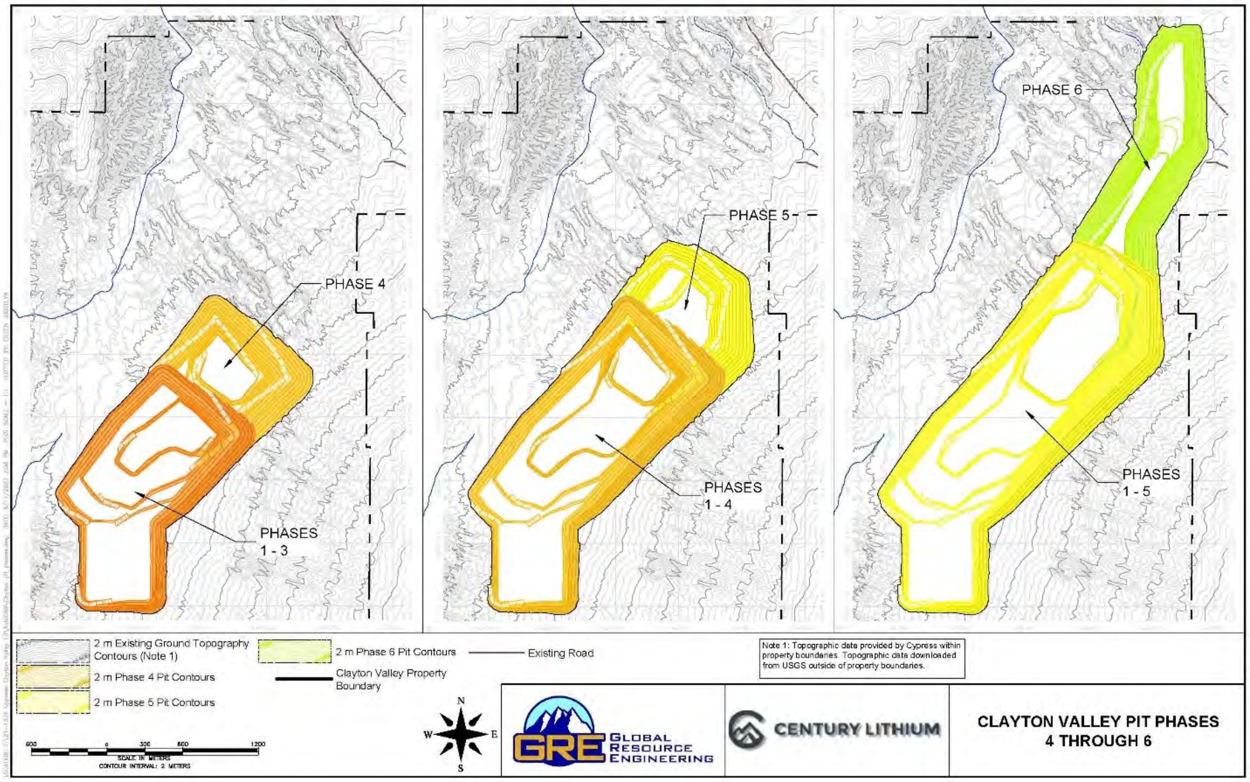


Figure 16-16: Pit Phases 4 through 6 (Source: GRE, 2023)

16.5.2 Mine Equipment

Within each pit phase, overburden and waste material will be removed using CAT 657G or equivalent scrapers with a nominal waste removal rate of 317 t/h.

Once the waste is removed, mining will be completed with a cold planer. The cold planer is a track rotating head cutter. The cold planer selected has a milling width of 2.0 m, a milling depth of 0.3125 m, an average milling speed of 24 m/min, an effective milling rate of 15.1 m^3/min, and a production rate of 1,131 t/h.

The cold planer will deposit the milled material into windrows immediately adjacent to the milled lane. The windrowed material will be allowed to dry in place for several days and will then be picked up with CAT 657G or equivalent scrapers with a nominal removal rate of 327 t/h.

The scrapers will deposit the mined material at the base of the pit ramp for removal via a razor-tail pan feeder into a series of portable jump conveyors. Finally, the material will be transferred to over-land conveyors and directed to the processing plant.

The cuts made by the cold planer will be oriented along the longest direction within each pit phase to reduce the number of times the cold planer must be turned and repositioned.

This mining method, using a cold planer combined with scrapers and conveyor haulage, has low operating costs and requires minimal support equipment. There is very little traffic on the haul roads, which reduces road maintenance requirements, water usage, and related costs. Additionally, this mining method and its placement of the mined material into windrows allows the clay to dry, minimizing potential operating problems.

Mine production equipment consists of the following:

- two CAT PM620 or equivalent cold planers (one for standby)
- up to four CAT 657 scrapers
- one CAT D10T dozer
- one CAT 992K Loader
- up to 45 30-hp 30-meter (100-foot) mobile jump conveyors for transporting mined material from mine to mill stockpile (the quantity will vary by year)
- up to two 400-hp overland conveyors (the quantity and length of overland conveyors will vary with each pit phase)
- one 72-inch wide truck loader for the conveyors.

Mining support equipment consists of the following:

- one CAT D10T or equivalent dozer
- one CAT D6 or equivalent dozer
- one CAT 320C or equivalent excavator
- two CAT 745 or equivalent articulated haul trucks
- one 14-foot-blade width grader
- one 10,000-gallon water truck
- two CAT CP56B or equivalent sheeps-foot compactors
- one service/tire truck
- one fuel/lube truck
- 10 light stands
- three dewatering pumps
- 9 pickup trucks.

The dozers and support equipment will also provide road and yard maintenance as needed.

16.5.3 Site Arrangement

The mining-related facility arrangement including low grade stockpiles, WRSFs, and haul roads is shown on Figure 16-17.

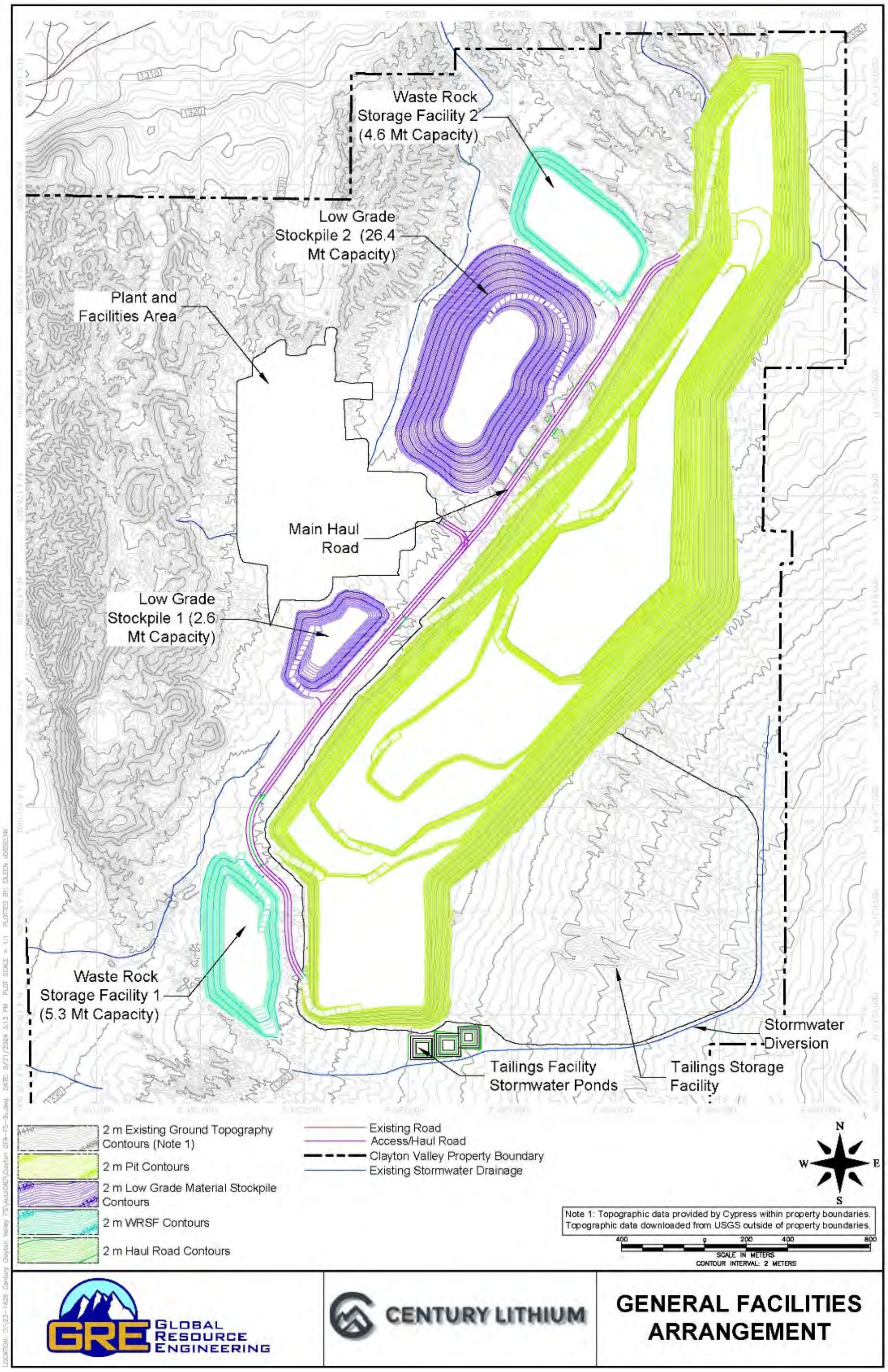


Figure 16-17: Mining-Related General Facilities Arrangement (Source: GRE, 2024)

16.6 Mine Production Schedule

The distribution of material is shown by pit phase in Table 16-13. Mining will progress from the southwest where mineralized clays outcrop, to the northeast where high-grade clays dip underneath low-grade and waste materials. This approach in scheduling results in limited handling of low-grade and waste material early in the project life.

Table 16-13: Production by Pit Phase

Phase	Mill Feed Tonnes (millions)	Li Contained (millions tonnes)	Li Grade (ppm)	Low Grade Tonnes (millions)	Waste Tonnes (millions)	Stripping Ratio
1	21.79	0.024	1,115	0.01	0.57	0.03
2	21.52	0.026	1,213	0.00	5.76	0.27
3	52.70	0.061	1,166	3.28	4.91	0.16
4	57.65	0.066	1,139	10.43	6.17	0.29
5	59.45	0.068	1,137	13.59	3.39	0.29
6	74.54	0.085	1,146	9.68	1.86	0.15
Total	**287.65**	**0.33**	**1,149**	**37.00**	**22.66**	**0.21**

Pre-stripping of waste is conducted if there is no mill feed present on a bench or if the amount of waste on any bench exceeds 10 times the amount of mill feed on that bench.

For all other benches, all waste and low-grade material on a bench is scheduled to be mined over the same duration as the mill feed on that bench. The schedule was adjusted to smooth equipment requirements in periods with high pre-stripping, waste, or low-grade material production and generate an efficient production schedule.

A portion of the waste material may be suitable for use as construction gravel or clay liner.

16.6.1 Mine Operation

The mining schedule was generated by pit phase and bench. The following parameters were used to generate the mine production schedule.

- Process production rate: 7,500 t/d for years 1 through 4
  15,000 t/d for years 5 though 8
  22,500 t/d for the remainder of the Project
- Mine operating days/week: 7
- Mine operating weeks/year: 52
- Mine operating shifts/day: 2
- Mine operating hours/shift: 10

A summary of the production schedule is shown in Table 16-14 and Figure 16-18.

16.6.2 Mine Roads

Haul roads were designed with a total width of 30 m with a maximum 8% grade. Traffic will be limited to light equipment carrying operators and maintenance personnel and occasional tracked vehicles. Scrapers will be used to remove waste material. The mine road is sufficiently wide to easily accommodate the jump conveyors and the widest pieces of equipment on site. A ditch and berm are provided. The berm can be constructed out of compacted claystone.

16.7 Pit Backfill

Waste material will be used to backfill pit phases 1 through 5 to provide a suitable surface for placement of the TSF liner. Some of the waste material will be directly transferred from the mining operation to the backfilling operation. Other waste material will be temporarily stored along the pit crest for easy placement into the pit phase as it becomes available for backfilling. All waste material placed into WRSF2 will be used for backfilling the pit phases, and approximately 1/3 of the waste material in WRSF1 will be used as backfill in the pit phases.

Table 16-14: Mine Schedule

Pit Phase	YR 1	YR 2	YR 3	YR 4	YR 5	YR 6	YR 7	YR 8	YR 9	YR 10	YR 11	YR 12	YR 13	YR 14	YR 15	YR 16	YR 17	YR 18	YR 19	YR 20
Reserve Ore Tonnes (millions)																				
1	1.85	2.74	2.60	3.02	5.19	5.48	0.91													
2							4.57	5.76	7.93	3.27										
3									0.00	4.95	8.21	8.21	8.21	8.21	8.21	6.69				
4																1.52	8.21	8.21	8.21	8.21
5																				
6																				
Waste Tonnes (Low Grade, Inferred, and Other Waste Material) (millions)																				
1	0.14	0.27	0.13	0.04	0.00															
2						0.56	4.35	0.86												
3									2.53	4.70	0.96	0.01	0.00			0.00				
4																11.97	4.22	0.34	0.02	
5																				
6																				
Reserve Li (million tonnes)																				
1	0.002	0.003	0.003	0.003	0.006	0.006	0.001													
2							0.006	0.007	0.010	0.004										
3									0.000	0.005	0.009	0.010	0.010	0.010	0.010	0.008				
4																0.002	0.009	0.009	0.009	0.010
5																				
6																				
Reserve Li Grade (ppm)																				
1	1,094	1,127	1,144	1,143	1,122	1,087	1,068													
2							1,211	1,229	1,214	1,183										
3									952	1,068	1,132	1,164	1,198	1,207	1,184	1,169				
4																1,043	1,093	1,126	1,148	1,161
5																				
6																				

Pit Phase	YR 21	YR 22	YR 23	YR 24	YR 25	YR 26	YR 27	YR 28	YR 29	YR 30	YR 31	YR 32	YR 33	YR 34	YR 35	YR 36	YR 37	YR 38	YR 39	YR 40	Total
Reserve Ore Tonnes (millions)																					
1																					21.79
2																					21.52
3																					52.70
4	8.21	8.21	6.85																		57.65
5			1.36	8.21	8.21	8.21	8.21	8.21	8.21	8.21	0.60										59.45
6											7.61	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	1.24	74.54
Waste Tonnes (Low Grade, Inferred, and Other Waste Material) (millions)																					
1																					0.59
2																					5.76
3																					8.20
4		0.03	0.01																		16.59
5			14.12	2.81	0.04					0.01	0.00										16.98
6										0.41	10.20	0.74	0.21								11.55
Reserve Li (million tonnes)																					
1																					0.024
2																					0.026
3																					0.061
4	0.010	0.010	0.008																		0.066
5			0.001	0.009	0.009	0.009	0.009	0.010	0.010	0.010	0.001										0.068
6											0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.010	0.001	0.085
Reserve Li Grade (ppm)																					
1																					1,115
2																					1,213
3																					1,166
4	1,169	1,174	1,114																		1,139
5			1,006	1,040	1,076	1,120	1,153	1,176	1,206	1,210	1,176										1,137
6											1,131	1,138	1,137	1,138	1,144	1,144	1,151	1,151	1,169	1,188	1,146

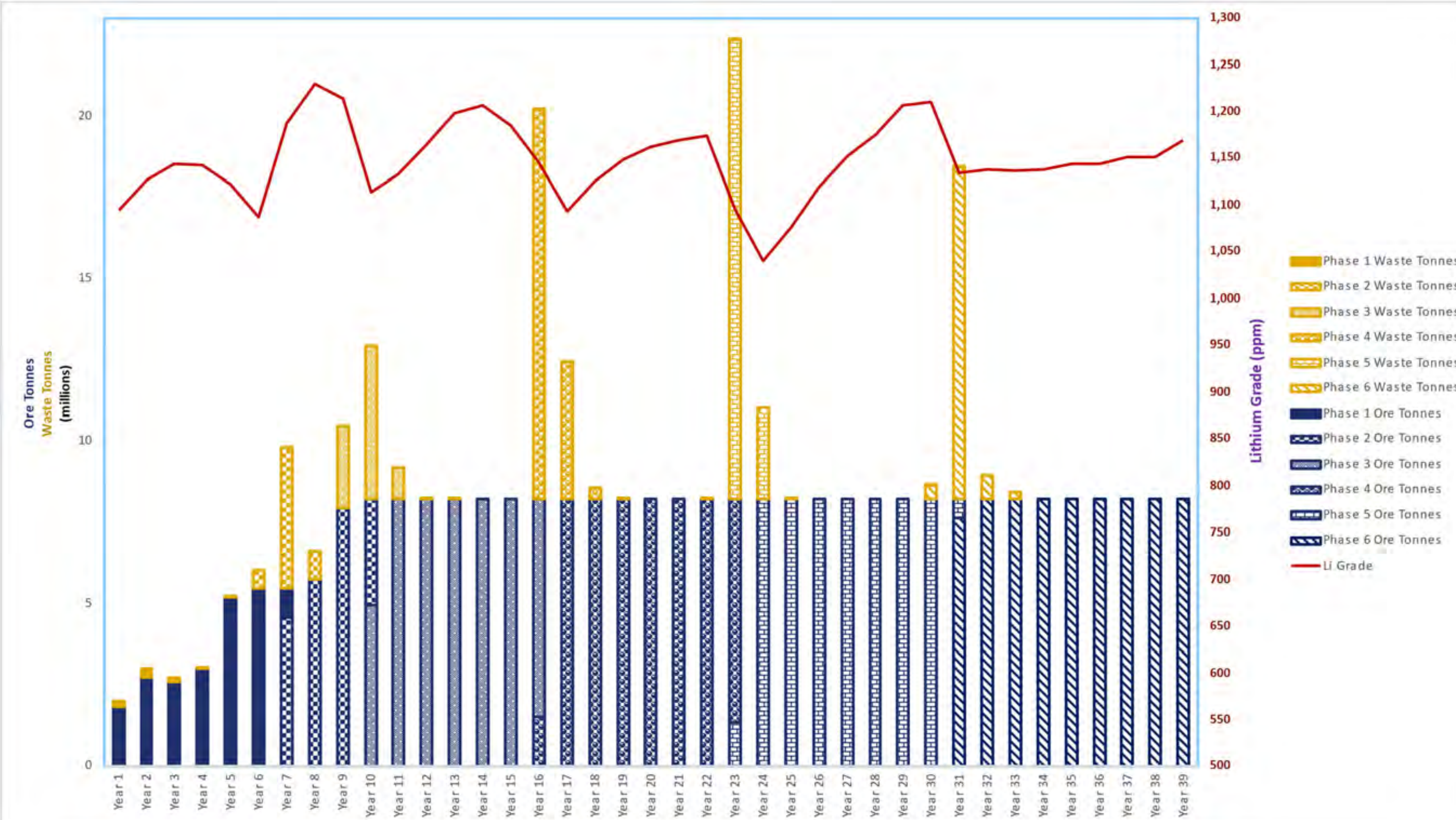


Figure 16-18: Mine Schedule (Source: GRE, 2024)

17.0 RECOVERY METHODS

17.1 Process Design Basis and Criteria

The process design is supported by the test work and results discussed in Section 13. The process plant design is based on maximizing the use of the chlor-alkali plant, and infrastructure limitations related to water and power availability. The process design focused on Project Phase 2 which was based on a plant capacity of 15,000 t/d, yielding an estimated 71.2 t/d of lithium carbonate.

The design capacity was modified to accommodate a staggered start-up, for an initial throughput of 7,500 t/d. The staggered start-up is accomplished by deferring the installation of selected equipment and of parallel trains, such as the second leach train and IX trains. The deferred scope was allocated to Project Phase 2 (15,000 t/d). As part of additional economic evaluations, the base case of 15,000 t/d served as the foundation for assessing the Project Phase 3 expansion to 22,500 t/d, with the additional equipment to be included as a separate plant facility.

Key parameters for the process design for Project Phase 1 and 2 are listed in Table 17-1.

17.2 Process Plant Description

Elements described in following are protected under patent application by the Company.

The block flow diagram in Table 17-1 presents an overview of the process plant design for the Project Phase 2 capacity, followed by the corresponding detailed process description.

The ROM material will be conveyed from the mine and stored in a feed material stockpile equipped with a stacker/reclaimer system. The feed material is then passed through a roll sizer to break up large lumps followed by attrition scrubbing to slurry the feed material prior to hydrochloric acid leaching.

The plant feed is leached in continuously stirred reactors at 60°C and atmospheric pressure for four hours. The leached slurry is neutralized with sodium hydroxide to precipitate impurities, primarily iron and aluminum.

The neutralized slurry is filtered to recover PLS and dewater tailings for dry stacking.

PLS is pumped through two polishing filters arranged in parallel before advancing to the lithium IX circuit for extraction. Lithium is eluted from the resin and the lithium IX barren solution is sent to a neutralization stage where calcium and magnesium are precipitated.

Table 17-1: Process Design Basis

Design Parameter	Units	Project Phase 1	Project Phase 2
Nominal processing rate	t/d	7,500	15,000
Annual processing rate	t/y	2,737,500	5,475,000
Plant availability	%	92	92
ROM feed moisture	%	20	20
Processing plant feed rate (dry)	t/h	340	680
Leach circuit			
Temperature	°C	60	60
Retention time	h	4	4
Number of tanks/trains	units	4 / 1	4 / 2
Acid consumption	t/t feed	0.104	0.104
Filtration circuit			
Number of filters	units	9	18
Filtrate cake water content	wt %	35	35
PLS to lithium recovery	m^3/h	1,041	2,083
Lithium solution feed to RO	m^3/h	99	198
Solution feed to chlor-alkali plant	m^3/h	1,130	2,260
Lithium carbonate production	t/d	35.6	71.2
Lithium balance			
Average lithium grade in feed material	%	0.113	0.113
Lithium Leach Recovery	%	80.2	80.2
Overall lithium recovery	%	78	78
Water Balance			
Total make-up water	m^3/h		221.4

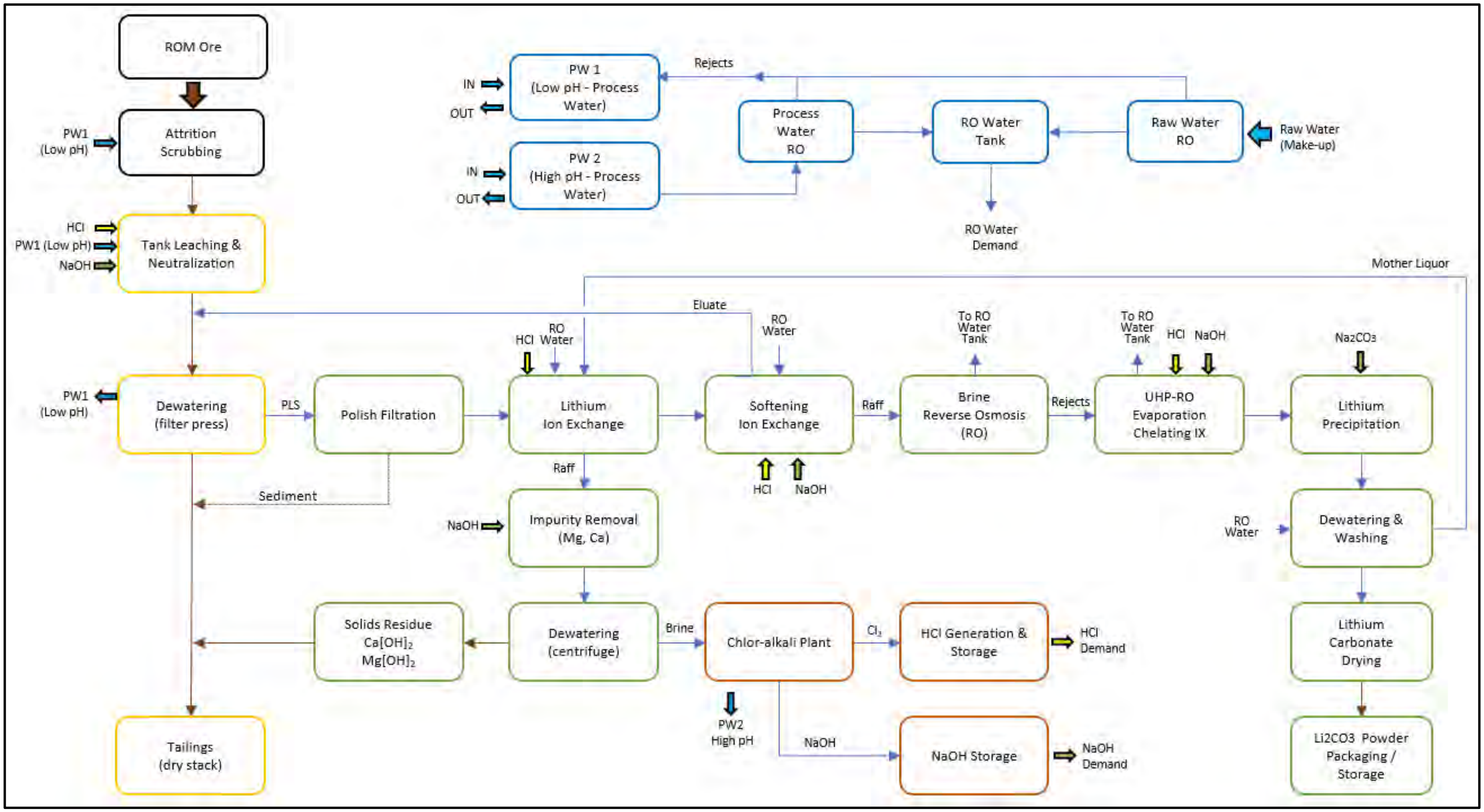


Figure 17-1: **Schematic Block Flow Diagram (Source: Wood, 2024)**

Lithium-rich eluate solution from the lithium IX circuit is pumped to a softening circuit for impurity cation removal.

Lithium in solution is further concentrated in two stages by using an UHP-RO system and an evaporator system to achieve the optimal lithium concentrations required in the lithium precipitation stage. At the precipitation reactors, soda ash (Na_2CO_3) is added to precipitate lithium in the form of lithium carbonate slurry. The slurry is then centrifuged, washed, dried, milled and bagged to produce battery grade lithium carbonate (>99.5% purity) as final product.

Concentrated sodium chloride barren solution from the Ca/Mg removal stage is transferred to the chlor-alkali circuit. By electrolysis, the chlor-alkali plant will produce sodium hydroxide solution and chlorine (Cl_2) gas. The chlorine gas is then burned with hydrogen (H^+) to produce hydrochloric acid. Both sodium hydroxide and hydrochloric acid are generated and used as pH control and leaching reagents in the production of lithium carbonate.

Unused barren solution in the chlor-alkali plant returns to the circuit as process water. Make-up raw water will be sourced from a fresh water well and treated to produce RO water to be used in the process plant.

17.3 Material Handling and Size Reduction

ROM claystone from the mine will be conveyed to a covered ROM material stockpile via a linear stacker/reclaimer unit. Material from the stockpile will then be dispensed onto a discharge reclaimer conveyor which will move the material into a roll crusher. Large size fractions in the feed material will be broken down in the roll crusher and the crushed material will be conveyed into two attrition scrubber units, where the feed material is mixed with neutral-pH process water (PW1) and disaggregated into a slurry. The slurry will be discharged onto two single deck vibrating screens with an aperture of 0.85 mm (20 mesh). Oversize and tramp material from the screens will be temporarily stored in the oversize material waste bin and periodically transferred by a front-end loader onto the tailings disposal conveyor. Screened undersize slurry will gravity flow into two leaching pump box units.

17.4 Leaching and Neutralization

The leach circuit consists of two identical trains. Each train is comprised of a pump box, a slurry heat exchanger, and four leach tanks. Leaching reactions are conducted at atmospheric pressure at 60°C and hydrochloric acid is used as the dissolution agent. Lithium is leached from the solid phase into an aqueous chloride state.

The screen undersize slurry flows to the leaching pump boxes. The slurry is pumped through a slurry-slurry spiral heat exchanger to recover energy from the leach discharge slurry and is then discharged into the first leach tank. The energy recovery heats the slurry to approximately 35°C. Hydrochloric acid is added to the first leach tank at a ratio of 10.4% w/w to solids in the slurry. The required process temperature of 60°C is achieved by the direct injection of saturated steam into the first and second tanks. PW1 is added as required to achieve 33% w/w solids in the slurry. The 10 m diameter x 12.5 m high leach tanks are agitated, covered, and sized to provide a retention time of one hour per leach tank with a total of four hours per train. Each leach train operates in cascade where the slurry overflows from the first tank through to the fourth tank.

Leach discharge slurry from the fourth tank in both trains is pumped through the spiral heat exchangers as a hot fluid to allow the pre-heating of the fresh slurry. Hot discharge from both heat exchangers overflows into one agitated 10 m diameter x 12.5 m high surge tank which receives sodium hydroxide to adjust the slurry to pH 7, measured on the tank discharge.

Neutralized slurry at approximately 30% w/w solids is pumped to the tailings filtration area.

17.5 Tailings Filtration

The tailings filtration area consists of two filtration trains arranged in parallel. Each filtration train consist of a tailings buffer tank that distributes slurry to three tailings filter feed tanks. Each filter feed tank then feeds two filter press units. The filtration circuit design considers eighteen 2.5 m x 2.5 m filter press units, including two stand-by filter press units. Filtrate is collected as PLS in the tailings filter filtrate tanks for lithium recovery.

The filtered tailings cake will be combined with the residue from the centrifuges generated at the impurity removal stage and transported by a series of belt conveyors, fifteen grasshopper units, and a mobile radial stacker to the dry TSF.

17.6 Lithium Recovery (DLE)

The following are generalized descriptions of processes proprietary to the Company and its intellectual property license.

17.6.1 Lithium Ion Exchange

PLS is pumped to the PLS surge tank which overflows to the PLS pond, providing a 12-hour surge ahead of the IX circuit. Forced aeration at the PLS pond will allow the precipitation of ferric compounds. Vertical turbine pumps will reclaim the PLS from the surge pond and return it to the surge tank.

The PLS is pumped from the PLS surge tank to the lithium IX columns that consist of 24 trains of three columns, with a total of 72 units that operate in a lead-lag arrangement. The IX barren solution discharges into the barren surge pond via the barren safety screens which scavenge lost resin. Any resin collected on the barren solution safety screen will be used to load up the resin into the IX columns during start-up and will provide make-up resin during operation as required. Barren solution from the covered barren surge pond will be pumped to the centrifuge precipitation tank.

Loaded resin is eluted and pumped to the IX columns from the IX water tank. Lithium is progressively transferred into the aqueous phase from the resin as the eluant moves through the elution column. Eluate solution discharges from the column and is pumped over one of two eluate safety screens to scavenge lost resin. Screened eluate then gravitates to the eluate tank and is pumped out of the tank to the softening system after passing through eluate polishing filters.

Resin considered in the plant design does not require a regeneration stage.

17.6.2 Softening Ion Exchange

The eluate from the lithium IX process, enriched in lithium, calcium and magnesium hardness, enters the softening circuit and is distributed to the ion exchange softening vessels. In the vessels, divalent cations such as Ca^{2+}, Mg^{2+}, Ba^{2+}, Sr^{2+}, Fe^{2+}, Mn^{2+} are exchanged onto the resin while lithium passes through. Resin regeneration is performed using a salt solution.

Regeneration backwash and weak waste solutions are returned to the process.

The lithium-rich softening effluent is pumped to the RO system.

17.6.3 Reverse Osmosis

The softening effluent will be filtered and treated in a two-pass RO system to concentrate and recover lithium from the effluent liquor, and to ensure that the generated RO permeate for reuse meets purity standards.

The RO system consists of eight 1 µm cartridge filters, eight first-pass two-stage RO skids and eight second-pass two-stage RO skids. RO reject from the first pass is concentrated in dissolved ions, including lithium, and is directed for further processing and lithium purification to the UHP-RO system. RO reject from the second pass is recycled back to the RO feed, and the RO permeate from the second pass is directed to the RO permeate make-up tank for reuse.

17.6.4 DLE Discharge Impurity Removal

Discharge solution from the lithium IX circuit is pumped from the surge tank into the centrifuge precipitation tank where sodium hydroxide is added to increase the pH to 12. As a result, calcium and magnesium impurities will precipitate. The resultant slurry with a solids content of approximately 1.5% is decanted in a 12 m diameter centrifuge feed thickener. A clear solution will overflow to the centrifuge centrate tank, and a 10% w/w solids underflow slurry is centrifuged. Two centrifuges will receive the underflow slurry to produce Ca/Mg precipitates with approximately 40% w/w solids. The centrifuged Ca/Mg precipitates will discharge onto the tailings collecting conveyor on top of the dry tailings being conveyed to the dry TSF. Centrate effluent from the centrifuges will report to the centrifuge centrate tank where, when combined with the centrifuge thickener overflow, the solution will be pumped as feed to the chlor-alkali plant.

17.6.5 Lithium Concentration and Precipitation

The concentration and precipitation plant has been quoted as a design/supply plant with the exception of the chelating ion exchange (CIX) system.

The concentrate from the RO system, with an estimated concentration of 2.4 g/L Li, undergoes further concentration via an UHP-RO membrane system. The UHP-RO operates at 120 bar and can reach concentrations up to 130,000 mg/L total dissolved solids on sodium chloride basis. The UHP-RO system consists of two skids/trains, high pressure pumps and centrifugal pumps. The UHP-RO permeate stream is reused and will report to the RO permeate make-up tank.

The UHP-RO reject or refined lithium stream with an estimated concentration of 4.1 g/L Li is further concentrated with the mechanical vapour recompression (MVR) evaporator. The MVR system consists of three skids with three vessels each with a total evaporation capacity of 3,100 m^3/d. The refined lithium stream is adjusted to a pH of 5 with HCl and then pumped to the evaporation stage. The evaporation distillate water produced is reused as RO water reporting to the RO permeate make-up tank.

The resulting 9.7 g/L Li-concentrated liquor from the evaporator (mother liquor) will pass through a final polishing step removing residual hardness of mainly calcium and magnesium prior to lithium carbonate production. The concentrated liquor enters the CIX circuit at approximately 84 m^3/h and is distributed to three CIX softening vessels with a resin capacity of 7.4 m^3 each. The CIX circuit is designed to provide discharge concentrations of calcium and magnesium of less that 1 mg/L within a cycle time of 2.8 hours. Hydrochloric acid, sodium hydroxide, and RO water regenerate and rinse the resin. Weak waste solution is recycled to the RO raw water system, and the high strength waste is returned to the surge tank.

The effluent mother liquor from the CIX circuit reports to a series of stirred lithium carbonation refining reactors for the precipitation of lithium as lithium carbonate with a solution of soda ash at 28% w/w concentration. A total of four 7.6 m^3 refining reactors are distributed in two modules with a capacity of 930 m^3/d per module. The precipitation reaction occurs at 80°C and the reactor temperature is achieved and maintained by the direct injection of steam. The refining reactors are highly automated to ensure a high lithium carbonate yield and quality.

The resulting lithium carbonate slurry at an estimated 3% w/w solids undergoes dewatering and washing through a single-stage peeler centrifuge to reduce its water content to approximately 20% w/w. The blowdown solution from the centrifuge still contains important levels of lithium and will report to the mother liquor storage tank for temporary storage before it is recycled back to the PLS surge tank to increase lithium recovery. Centrifuge rinsing solution containing soda ash and lithium is recycled to the soda ash solution preparation tank. A total of two operational and one standby peeler centrifuge units with a capacity of 1.8 t/h each are considered in the design.

17.7 Lithium Carbonate Drying and Loadout

The washed lithium carbonate filter cake is conveyed by a screw conveyer to an indirect electric rotary dryer with a capacity of 4 t/h. The dried lithium carbonate is discharged at 160°C from the dryer to a blower, which pneumatically transports the material to a transfer bin feeding a magnetic detector and a cage mill. The cage mill breaks up agglomerates formed in the drier. Dust generated at the dryer is captured in a baghouse and discharged into the transfer bin. The fine lithium carbonate is stored in a silo, packaged into 1 m^3 bags and loaded into intermodal shipping containers for delivery.

17.8 Chlor-alkali Plant

The chlor-alkali unit comprises of two parallel trains. Process discharge from the lithium IX, is mixed with depleted solution and concentrated to 300 g/l as sodium chloride. This concentrated salt solution is purified through various filtration, precipitation and ion exchange steps to remove magnesium, calcium, lithium, boron and aluminium. Purified salt solution is then passed through a heat exchanger before feeding into the electrolysers. The number of electrolysers and elements/cells in each electrolyser is designed based on the requirement of production. Each cell is divided into an anode and cathode side, separated by an ion exchange membrane. Salt solution and 30% w/w caustic are fed to the anode and cathode chambers, respectively. From the electrolyser, chlorine gas, hydrogen gas, depleted salt solution and 32% w/w caustic are discharged. The hydrogen and chlorine gas feeds the hydrochloric acid synthesis to produce 35-36% w/w HCl solution. Caustic is diluted and recycled to the electrolyser with excess used in the process plant.

Key process design criteria parameters for the chlor-alkali plant for Project Phase 2 are listed in Table 17-2.

Table 17-2: Chlor-alkali Plant Process Design Basis

Design Parameter	Units	Value
Nominal chlorine (100% cell gas)	t/d	1,234
Nominal hydrogen (100% cell gas)	Nm^3/h	16,607
NaOH 100% as (32% solution)	t/d	1,387
NaCl concentration (min) from process	g/L	118
Electrolyser circuit		
Number of units		24
Number of cell elements per electrolyser		86
Salt storage	d	5
HCl concentration (min)	% w/w	36

17.8.1 Hydrochloric Acid

Hydrochloric acid at 36% purity will be produced at the chlor-alkali plant and will be pumped into two hydrochloric acid storage tanks. During plant start-up, the hydrochloric acid will arrive by bulk tanker trucks and pumped into the storage tanks. From the storage tanks, the hydrochloric acid solution is pumped to the leach tanks, WAC IX and CIX circuits, and other areas of the plant where is used as pH modifier. The hydrochloric acid storage tanks will provide a total of five days of storage capacity.

17.8.2 Sodium Hydroxide

Sodium hydroxide at 32% purity will be produced at the chlor-alkali plant and will be pumped into two sodium hydroxide storage tanks. During plant start-up, the sodium hydroxide will arrive by bulk tanker trucks and pumped into the storage tanks. From the storage tanks, the sodium hydroxide solution is pumped to the surge tank following leach, centrifuge precipitation tank, and the CIX circuits. The sodium hydroxide storage tanks will provide a total of five days of storage capacity.

17.8.3 Antiscalant

Antiscalant is used to prevent scaling and fouling of the RO membranes. The antiscalant is delivered in drums and will be dosed to the water feed in the RO system. Drums will be placed close to each RO system and dosed using peristaltic pumps at a rate of 5 mg/L.

17.9 Utilities

17.9.1 Water System

The water system will consist of two separate systems: make-up water and process water. The process water system is designed to allow the re-use of process water at various points of the plant, and the make-up water system allows the injection of raw water to the plant as required to compensate for water losses, mainly in tailings.

17.9.1.1 Make-up Water

Raw water will be supplied from a new well and pumped to the raw water tank located at the process plant. Raw water will be filtered and treated in a RO system which will generate RO water with the required quality for the process. Rejects from the filtration stage and RO units will be pumped to the process water tank. RO permeate is pumped to and stored in the RO/fire water tank.

The primary RO water usage is as RO permeate make-up water, which is used for elution at the lithium IX system, and for reagent dilution in the lithium IX, softening and CIX systems.

The raw water requirement has been estimated at 221 m^3/h.

17.9.1.2 Process Water

The plant design contemplates two process water circuits. A neutral-pH process water (PW1) circuit and a high pH (~12 pH) process water (PW2) circuit.

PW2 is generated from the chlor-alkali plant and tailings filtrate water from the tailings filtration circuit. Excess PW2 will be neutralized with hydrochloric acid and combined with the raw water RO and process water RO reject streams to generate PW1. PW1 is used in the chlor-alkali plant, leaching tanks, and wash water in the tailings filters.

Excess neutralized water from the water neutralization tank is further treated in a process water ultrafiltration and RO system. The process water RO system includes six ultra filtration UF filters and six two-pass/two-stage RO skids. The treatment of the excess neutralized process water is meant to decrease the requirements of raw water by recycling all excess water back to the system.

17.9.2 Steam System

Steam is supplied for process heating from an electric steam boiler. The main users will be the leaching circuit, and the lithium carbonation tanks.

17.9.3 Air Services

Two dedicated process air compressor systems will generate high pressure compressed air to be used for air squeeze on the pressure filters, and for blowdown air on the lithium IX columns.

Instrument air is used throughout the plant for instrumentation.

17.9.4 Power Requirements

The power required by the various process related areas is provided in Table 17-3 for Project Phase 1 and 2. Power required for the processing facilities will be supplied via power lines from the electrical grid.

Table 17-3: Power Requirements

Process Area	Project Phase 1 (MWh)	Project Phase 2 (MWh)
ROM material handling and sizing	1.20	1.68
Leaching	0.34	0.42
Tailings filtration/handling	2.46	3.76
Ion exchange and impurity removal	1.87	2.31
Lithium production (RO, evaporation, precipitation, packaging)	9.21	17.85
Chlor-alkali plant	78.0	120.0
Reagents	0.05	0.10
Process plant services (steam, air, fuel)	19.54	27.47
Ancillary buildings	1.1	1.1
Total	**113.75**	**174.69**

18.0 PROJECT INFRASTRUCTURE

18.1 Summary

The on-site infrastructure required for the Project includes:

- New access road
- On-site roads
- ROM stockpile
- Chlor-alkali plant
- Process plant, warehouse and workshop
- Mine maintenance workshop, mine dry, warehouse and ready line
- Administration and first aid building
- WRSFs (see Section 16)
- Low grade stockpiles (see Section 16)
- Dry stack tailings construction stockpile area
- Dry stack TSF, collection and event ponds
- TSF conveyor
- Mine conveyor
- Contact water ponds, clean water diversion channels/ditches
- Site power supply and distribution
- Potable water and sanitary sewage treatment.

The proposed site layout is shown in Figure 18-1.

18.2 Site Access

The site will be accessed via a new 1.8 km long road that will tie into Silver Peak Road north of the mine site. There is an existing access road to site farther to the east, suitable for four-wheel drive vehicles; however, its alignment follows a major drainage channel that during heavy rainfalls is subject to flash floods.

The main access road will be a two-lane, 10-m wide gravel surfaced road with shoulders and ditches as required for drainage. The road climbs from the Silver Peak Road to the process plant site approximately 50 m over the length of 1.8 km, with a maximum grade of 8% over a short section. The new power supply line to the process plant will follow this road alignment.

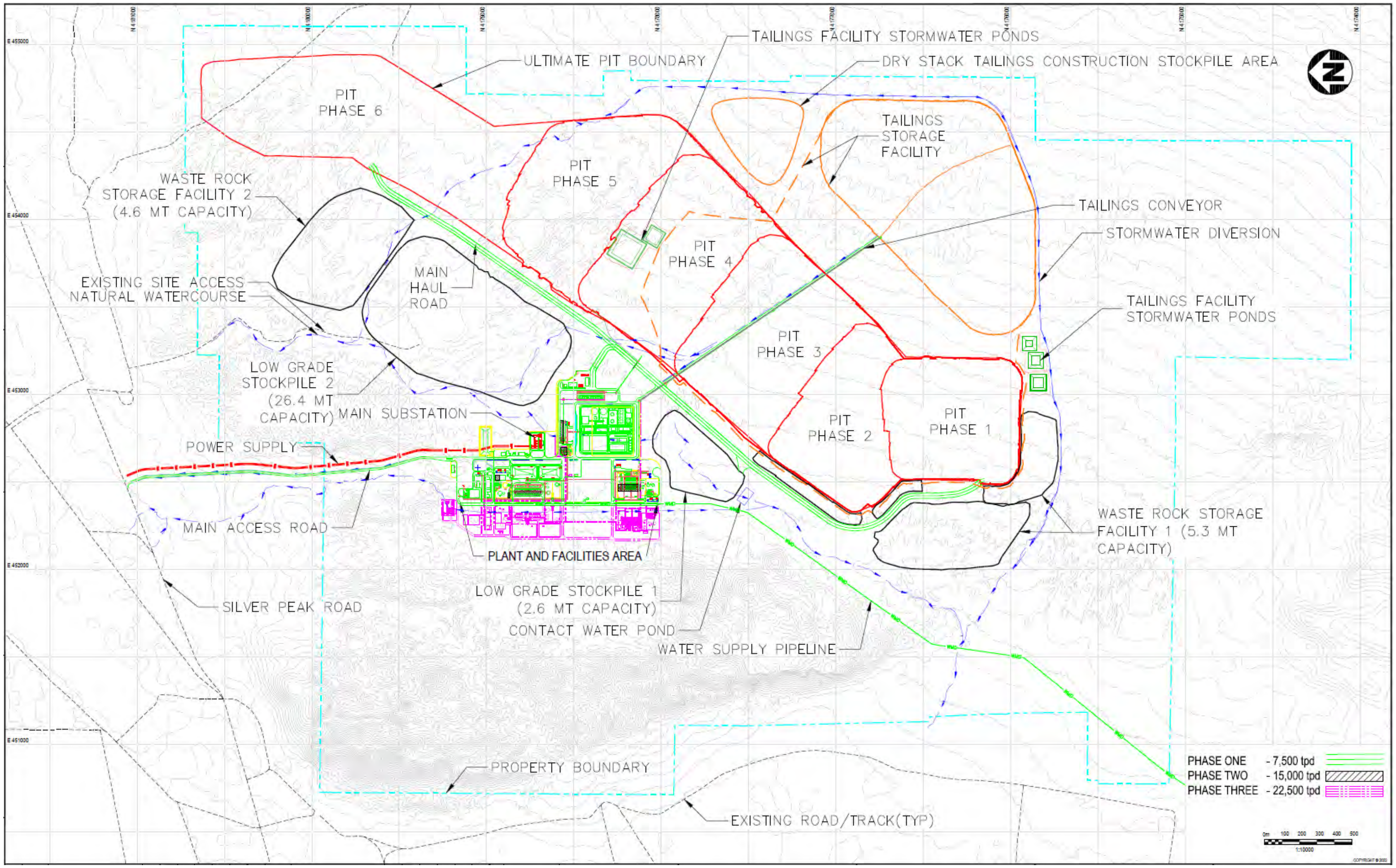


Figure 18-1: Overall Site Plan (Source: Wood, 2024)

18.3 Process Plant Site Roads

The process plant site roads provide access to all process and ancillary facilities, both for the operation and maintenance; these include access to all truck doors, unloading facilities and ramps to various spill containment areas across the site. They follow the same design as the main access road and are planned to be two-lane, 10-m wide gravel surfaced roads.

18.4 Process Facilities

The process plant facility consists of several areas including:

- ROM stockpile
- Chlor-alkali plant
- Attrition scrubber
- Leaching
- Tailings filtration
- Ion exchange
- Surge ponds
- RO system and process water
- Reagents
- Lithium carbonate production
- Product loadout.

The chlor-alkali plant, lithium carbonate production, and RO and process water systems will be a turnkey design-supply and install. All other process facilities will be stick-built steel structures with cast-in-place concrete foundations and slabs. Process buildings will be open-air structures except for the ROM stockpile, tailings filtration building, product loadout building and reagents storage building.

18.5 Ancillary Buildings

In addition to the administration and first aid building at the entrance to the plant site, ancillary buildings located around the plant site related to process include:

- Lunchroom and change room
- Assay and metallurgical laboratory
- Control rooms
- Warehouse and storage building
- Plant maintenance shop building
- Light vehicle building.

Ancillary buildings related to mining are located east of the ROM stockpile and include:

- Lunchroom and change room
- Warehouse and storage building
- Mine maintenance shop building.

Administration, lunchrooms and change rooms, laboratory and control rooms will be prefabricated modular buildings while the maintenance, warehouse and vehicle buildings will be pre-engineered fabric buildings.

18.6 Dry Stack Tailings Storage Facility

The proposed TSF is planned to be constructed as a geomembrane lined facility. The tailings waste material is to be mechanically dried to a cake-like material using a filter press and placed in the TSF in a dry stack fashion. Additionally, a small fraction of the precipitated solid (white residue) will be dewatered and be co-disposed in the TSF.

The design criteria for the TSF design were developed based on the following regulations and with consideration of the requirements of Global Industry Standard on Tailings Management (GISTM, 2020):

- Nevada Administrative Code (N.A.C) 535.210 – Submission of application for approval of plans for dam.
- N.A.C 445A.350 through N.A.C 445A.447 – Mining facilities
- NDEP, Bureau of Mining Reclamation and Regulation (BMRR) – Stability Requirements for Heap Leach Pads (BMRR, 1994).

The TSF has been designed to contain the currently planned tailings production of 288 Mt at an average dry density of 1.35 t/m^3. Both filtered tailings and white residue material will be transported via overland conveyor to the TSF.

Tailings will be stored within a geomembrane liner consisting of the following containment assembly (from bottom to top):

- Prepared subgrade
- A layer of liner bedding fill (if needed)
- 2.0 mm double sided textured high-density polyethylene (HDPE) geomembrane liner.

An over-liner drainage system is to be installed over the geomembrane liner consisting of a gravity piping network surrounded by both a granular fill and protective fill, to collect and convey stormwater, along with drain-down through tailings (if any), and to minimize fluid pressure on the liner.

The TSF is planned to be developed in six phases (in line with the pit phases) with TSF Phases 1 and 2 constructed to the east of the open pit as an above-ground pad, and TSF Phases 3 to 6 to be constructed as a combination of in-pit disposal and above-ground disposal to form one storage facility upon completion. Figure 18-2 shows the site layout and development plan of the proposed TSF.

The material will be dry stacked and follow stacking restrictions. A structural zone is designated around the outer shell of each lift and only filtered tailings can be placed in nominal lifts of 1 m with the top 0.3 m compacted to achieve a minimum 95% of the maximum dry density as determined by the Standard Proctor method (ASTM D698). The remaining stack is designated as a non-structural zone and can accommodate both the filtered tailings and white residual materials placed in nominal lifts of 2 m with the top 0.3 m compacted to a minimum 90% of the maximum dry density as determined by the Standard Proctor method (ASTM D698).

Benching will be provided between lifts along perimeter slopes to provide overall average slopes no steeper than 3H:1V (horizontal to vertical) for slopes above ground and no steeper than 4H:1V for slopes in-pit.

18.6.1 Tailings Storage Facility Collection and Event Ponds

The over-liner collection ponds will be constructed for long-term fluid storage and large enough to contain runoff from a five-year, 24-hour event. Storage of runoff greater than the five-year, 24-hour event will be provided by lined event ponds. The event pond(s) will be constructed to accommodate a combination of the drain-down from the dry stack (if any) and runoff resulted from a 500-year, 24-hour storm event falling on the TSF Phases 1 and 2 areas, or from a 100-year, 24-hour stormwater event falling on the TSF Phases 3 to 6 areas. Moreover, an overflow spillway has been designed connecting TSF Phases 1 and 2 event ponds to the pit. This will ensure that if the extreme event precipitation exceeds the design storm, the overflow is fully contained on site.

A leak collection and recovery system will be constructed between the primary and secondary geomembrane liners of each over liner collection pond.

Storm water diversion channels discussed in Section 18.7 will divert storm water flows from tributary areas around the TSF.

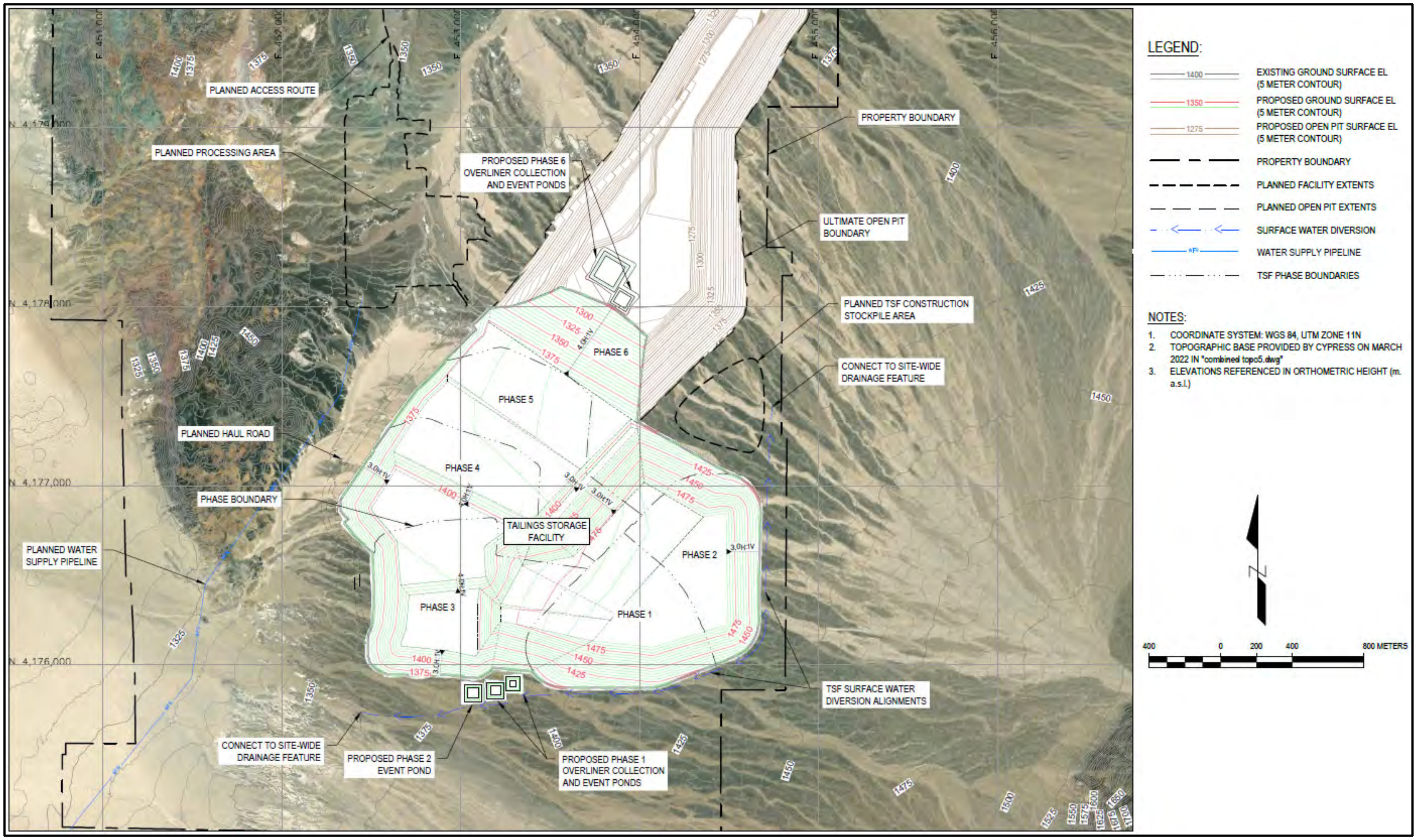


Figure 18-2: Tailings Storage Facility Plan (Source: WSP, 2023)

18.7 Site Water Management

Non-contact storm water will be separated from contact water. Non-contact storm water is defined as storm runoff from off-site undeveloped surfaces. Contact water is defined as storm runoff from developed site surfaces and adjoining undeveloped surfaces where stormwater runoff water quality could be impacted from mining disturbance.

Non-contact storm water will be directed to natural drainage paths or streams by diversion ditches or channels. Contact water from the plant site area will be collected in swales and ditches and directed to a lined contact water pond. The pond water will be pumped to the process plant as required.

The use of ditches will be minimized; they will be located within the plant site and along the roads where necessary to manage storm runoff. The use of buried stormwater culvert piping will be avoided unless surface drainage systems are not feasible.

The stormwater management system will be designed to accommodate a storm event with 100-year return period without flooding the plant site or critical infrastructure during operations.

Drainage infrastructure related to the dry stack tailings area are designed to pass a 1 in 500-year storm event. All channels will be sized to manage the runoff from tributary areas under the design events and protected with erosional armoring using durable, non-acid generating rock riprap over a non-woven geotextile.

Runoff from the low-grade stockpile and plant site will be managed as contact water and report to contact water ponds. The ponds will be lined with primary and secondary geomembrane HDPE liners with a leach detection system and will include a pumping system for water evacuation as needed.

18.8 Water Supply

Water for the project will be supplied via a 31.2 km long 12-inch DR11 HDPE pipeline from the new well at 16 to 1 Mine. Alternative sources of water supply closer to the plant site will be investigated in the next phase of the Project to reduce the capital and operating costs and to mitigate the risks in maintaining this pipeline along the roads that are subject to flash floods and erosion.

Fresh water will be distributed from the raw water tank located inside the RO water plant and will supply the plant site and mine vehicle maintenance buildings and the dust suppression water tank.

There will be a potable water treatment plant and associated potable water tank in the process plant site area. Potable water will be distributed throughout the plant site as required. Remote sites, related to mining and the TSF, will have potable water delivered in bottles.

Collected surface runoff in the contact water pond in the plant site area will be pumped to the RO water system via a buried HDPE pipeline.

This water supply will be suitable for Project Phases 1 and 2. It is expected that the Project will be able to access water adjacent to the plant or have an alternative source by Project Phase 3.

18.9 Fire Water

Fire water for the process plant site areas will be supplied from the RO/fire water tank and pumps, located in the process facilities. The system will be complete with fire pumps, a jockey pump, distribution piping and fire hydrants.

Firewater distribution water mains are dedicated to the supply of fire protection water only.

Firewater distribution piping will be buried at a sufficient depth below frost line to protect the system against freezing. Firewater distribution piping installed above ground and outside the heated buildings will be insulated and electric heat traced for freeze protection. Electric heat trace circuit failure will be alarmed in the fire alarm signaling network for quick response and isolation of the affected zone.

It is planned to initially construct the system to support Project Phases 1 and 2. This will be expanded prior to Project Phase 3.

18.10 Power Supply and Distribution

The mine site has the capability of importing power from the regional utility, NV Energy. In 2023, Century met formally with NV Energy to introduce the Project and discuss energy requirements relative to power available from the grid. Current infrastructure is not adequate to supply the expansion phases of the Project; however, the utility plans to construct a 525 kVa powerline within the next four years that will serve planned renewable energy projects in the region and will pass within 2 miles east of the Project. Connection to this service is anticipated to provide sufficient power for all phases of the Project. A draft EIS for the powerline project was completed in May 2023 and a final Record of Decision from BLM could occur by August 2024.

The main mine site substation will step down the transmission line voltage from 138 kV to 34.5 kV via three 70 MVA main power transformers complete with automatic tap changers. The purpose of the automatic tap changer is to maintain the transformer’s secondary voltage level at 34.5 kV. The three main power transformers will feed power to a single 34.5 kV switchgear located inside a prefabricated electrical room. The 34.5 kV switchgear will contain tie breakers that will allow power (if required) to be transferred between transformers.

The anticipated electrical load for the mine site is as follows:

Project Phase 1:

- Connected Load 165.96 MW
- Peak Load 137.32 MW
- Average Load 117.16 MW

Project Phase 2:

- Connected Load 262.16 MW
- Peak Load 219.07 MW
- Average Load 186.05 MW

Project Phase 3:

- Connected Load 428.13 MW
- Peak Load 356.39 MW
- Average Load 323.37 MW

The main substation will be centrally located on the mine site and will consist of three 138kV – 34.5kV, 70/100/132MVA, 3 phase, 60 Hz power transformers.

The main 34.5 kV distribution switchgear will provide circuit protection and power monitoring for feeders to each process area where secondary transformers convert the power to the local utilization level of 4.16 kV or 480 V.

The power feeds from the main 34.5 kV switchgear to the process areas will be installed in buried conduits. From the stacker/reclaim area, the 34.5 kV power will transition from a buried power system to a 34.5 kV overhead power line. This overhead power line will supply power to the mining operation and to the dry stack TSF. To minimize installation costs, the electrical rooms will be distributed around the site and installed as close as possible to the major electrical loads.

All process electrical rooms will be modular units assembled off site. The rooms will be installed outdoors on elevated steel structures adjacent to process areas. The rooms will be self-supporting, designed and packaged for road shipment to site. All electrical distribution equipment, controls and instrumentation equipment will be installed, wired, and completely tested before shipment.

The rooms will be built to meet a one-hour fire rating. All openings will be sealed and made water- and dust-tight by using approved fire-retardant materials.

All electrical rooms will have two means of egress at opposite ends of the room. Doors to the rooms will be supplied with panic exit type hardware. Each room will also have an equipment door sized to permit the largest piece of equipment to be installed/removed without removing the door from its hinges.

The electrical rooms will be pressurized, air conditioned, and designed in accordance with occupancy regulations.

A 4 MW modular standby power plant will be provided, rated for the maximum power required in the event of a Utility power failure. The power plant will consist of 2 x 2,000 kW units.

The emergency power loads will be controlled through the process control system, which will stagger starts, automatically start and stop loads to keep process tanks properly agitated, and and other critical operational equipment.

Uninterruptible power supplies (UPS) will be used to provide backup power to critical control systems. The UPS equipment will be sized to permit operations to shut down and back up the computer and control systems for start-up on restoration of normal (utility) power.

Emergency battery power packs will be available for backup power to the fire alarm system and emergency egress lighting fixtures.

18.11 Communications

Connection to off-site services such as internet and telephones will be through a satellite communication uplink.

On-site communications will be through a fiber optic backbone, connecting all facilities. Located in each of the facilities will be a communication room containing a communication cabinet. The communications cabinet will house the operational technology and business local area network switches.

The site telephony system will be a phone network comprised of a local internet protocol private branch exchange located in the administration building communications room and connected to the business network. Telephone handset will be wired to the network switches with Cat 6e ethernet cables running back to the communication cabinets within each facility.

Process closed circuit television (CCTV) will be installed in hazardous areas to operation personnel to allow for remote viewing of the process. The CCTV camera will be powered over ethernet and wired back to the closest communication cabinet. The CCTV cameras will reside on the business network and a control console with quad screen display will be located in the main control room for viewing by the operator.

Radio communications on site is based on a two-way trunked radio communication system. Portable handsets will be issued to site personnel with a base station located in the administration building.

There is a 30-m tall communication tower in the process plant area where the satellite communication dish and the two-way trunked radio communications system antennas will be mounted.

18.12 Fuel

The main diesel fuel storage and dispensing facility for the mining fleet will be located by the Mine Maintenance Workshop area north of the stacker reclaimer. As a cost saving measure, this facility will also service light vehicles. The station will have a two-day storage capacity and will include unloading facilities for bulk delivery.

18.13 Waste Management

The sanitary system comprises sanitary collection and conveyance pipes, pump stations, treatment plant, and treated sanitary effluent line discharging to RO potable water rejects tank in the RO system.

The sanitary sewer is conveyed to the packaged sanitary sewage treatment plant for treatment. In remote locations the sanitary sewage will be collected in a holding tank and pumped out by a vacuum truck as required.

19.0 MARKET STUDIES AND CONTRACTS

19.1 Market Studies

19.1.1 Lithium

Various sources exist for information on the lithium market and prices forecasts. The QP has relied primarily on the most recent market data and price forecast from Benchmark, a widely recognized source of commodity research (Benchmark, 2024).

19.1.1.1 Lithium Supply and Demand

According to Benchmark, the primary use of lithium driving demand will continue to be for lithium-ion batteries used in the electric vehicle (EV) battery market. Benchmark forecasts that battery demand will grow to represent 95% of all lithium usage by 2040. This growth in demand will drive the demand for lithium consumption from approximately 1 Mt/a in 2023 to 5.5 Mt/a by 2040 (Figure 19-1).

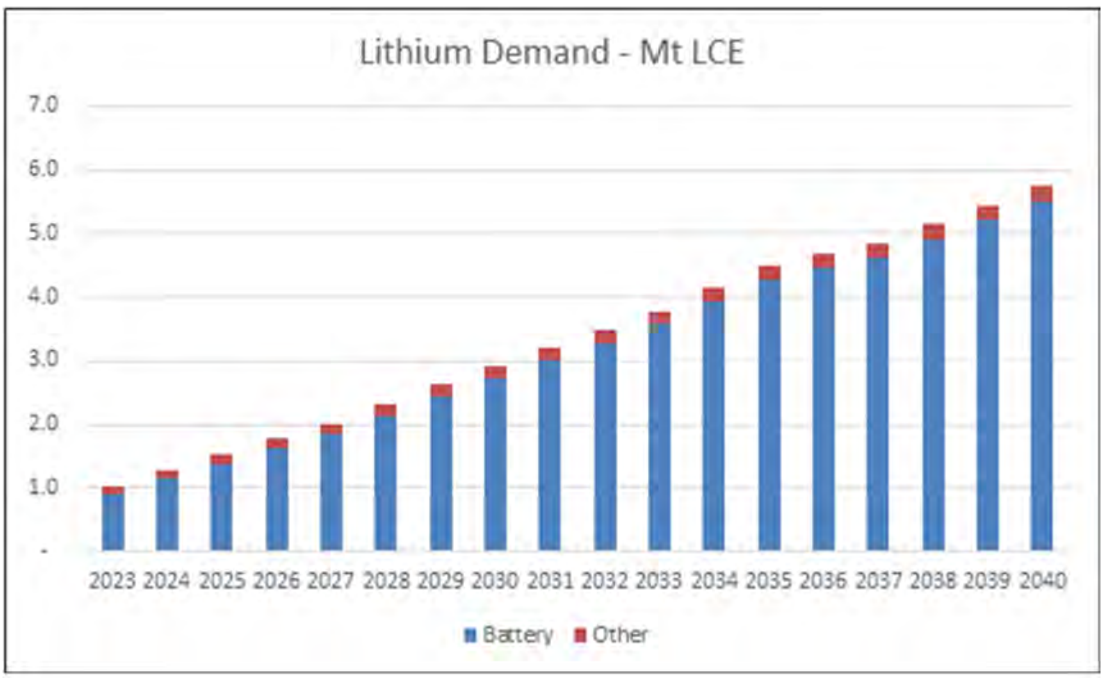


Figure 19-1: Lithium Carbonate Demand (Source: Benchmark, 2023*)*

Worldwide, the transition to EVs and lithium-ion batteries is progressing, increasing the demand for lithium. The base case penetration rates for electric vehicles are forecast by Benchmark to outpace lithium supply from 2030 onwards unless additional lithium supply can be identified, use is reduced through technological advancements, or alternative technologies developed (Figure 19-2).

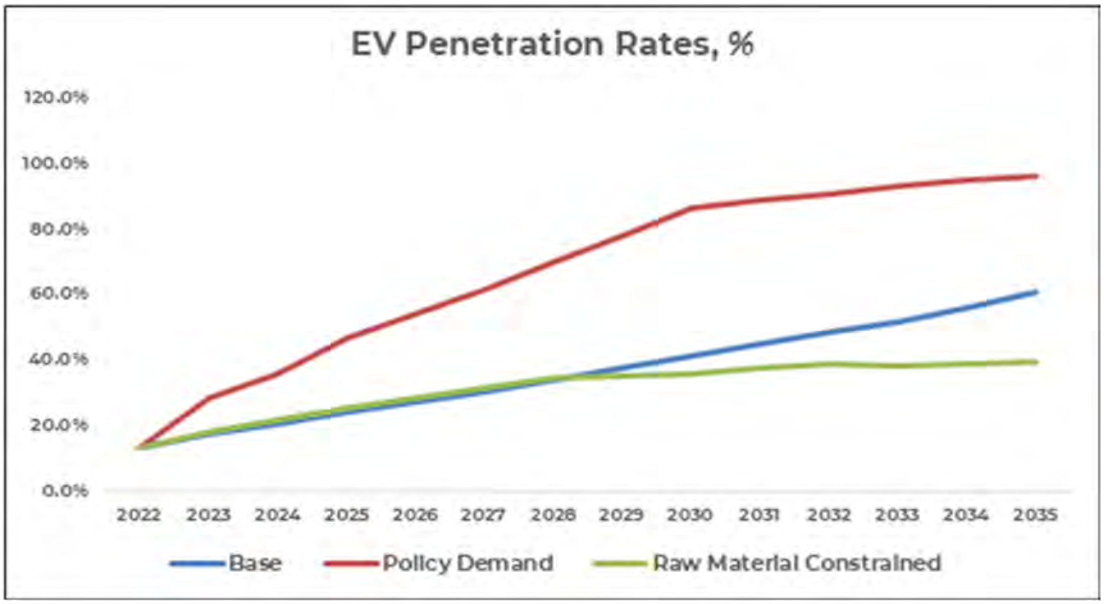


Figure 19-2: EV Penetration Rates (Source: Benchmark, 2023)

In the near-term, the lithium market is expected to be in oversupply from 2024 through to 2028. Over the long term, from 2028 onwards, the market is expected to be undersupplied as the adoption of EVs and use in stationary battery storage increases and exceeds the ability of existing producers and new projects to meet demand (Figure 19-3).

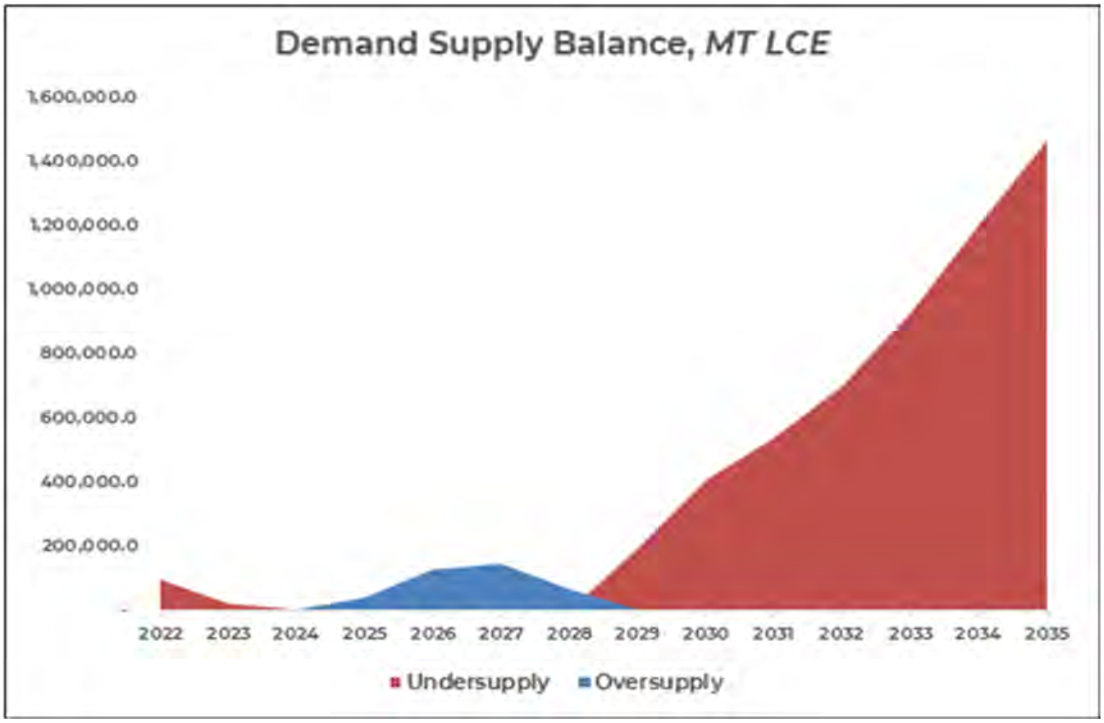


Figure 19-3: Lithium Carbonate Demand Supply Balance (Source: Benchmark, 2023)

19.1.2 Sodium Hydroxide

Sodium hydroxide is a product of the chlor-alkali process along with hydrochloric acid. Based upon the Project's material mass balance, it is expected that surplus sodium hydroxide will be produced and available for sale.

The QP relied on data from market studies conducted for Century by Global Exchange (Bistolas, 2024), a US based research firm specializing in market data of chlor-alkali products.

19.1.2.1 Sodium Hydroxide Supply and Demand

In the Western US, the primary markets for sodium hydroxide are:

- Pulp and paper
- Water treatment – both industrial and municipal
- Manufacture of sodium hypochlorite (bleach)
- Mining
- Agriculture.

Total US domestic manufacturing of sodium hydroxide was approximately 11.6 million dmt in 2019. Domestic manufacturing takes place at chlor-alkali facilities throughout the US Production is dominated by a small number of companies including Olin Corporation, Formosa Plastics Group, Westlake Corporation, and Oxy Chemical Corporation. Westlake Corporation and Formosa Plastics Group are the leading global and domestic manufacturers of sodium hydroxide.

Total US consumption of sodium hydroxide in 2019 was approximately 6.0 million dmt, which reflected 11.6 million dmt of production less 6.4 million dmt in exports plus 0.8 million dmt of imports. In general, imports of sodium hydroxide to the US travel through West Coast ports whereas exports travel through Gulf Coast ports. Historically, growth in US consumption is closely linked to growth in US Gross Domestic Product. The Western US market relies heavily on imports of sodium hydroxide. Imports, primarily from Asia, arrive through ports at Long Beach, Los Angeles and Richmond, California, and Vancouver, BC, and are transported by rail or truck inland. In 2023, imports for the four ports totaled 510,412 dry metric tonne (dmt), as summarized Table 19-1.

Table 19-1: West Coast Imports of Sodium Hydroxide

Port	2023 Imports (dmt)
Long Beach	85,284
Los Angeles	173,517
Richmond	75,190
Vancouver	176,421
Total	**510,412**

The demand for sodium hydroxide is closely linked to the general economy and expected to grow linearly with the US economy and population. It is forecasted that the US will need new capacity as growth in China increases and absorbs Asian supply and US plants are forced to close or upgrade from older technology.

Potential competition for sales in the Western US is from three identified producers and imports from Asia. The largest regional producer is in Vancouver and produces 230,000 dmt annually which is consumed in pulp and paper manufacturing. The other two producers, located in Washington State and California, have combined capacities of less than 160,000 dmt annually. Competition from these sources would be on par with imports arriving on the west coast.

19.2 Product Quality Requirements and Pricing

19.2.1 Lithium

19.2.1.1 Quality Specifications

Purchasers of lithium products vary in their requirements for quality and end use. The typical arrangement for producers is through offtake agreements which may specify the quantity and quality of the mine product. Lithium products exceeding 99.5% purity are generally recognized as battery quality. It is anticipated that the lithium carbonate produced by the Project will exceed this level. Other requirements on purity and quality of the material are subject to the specifications of customers.

19.2.1.2 Lithium Pricing

During 2023, prices for lithium products were volatile and fell to three-year lows of under $20,000/t. To meet the growth in long-term demand, it is recognized that higher cost production will need to be brought online and higher lithium prices will be needed to support the development of new sources of supply.

As of the first quarter of 2024, Benchmark forecasts the average medium-term (supply-demand based) price for lithium carbonate at $32,875/t, for the years 2025 to 2032, and the long-term (incentive) price to average $28,980/t in the 2033 to 2040 timeframe (Figure 19-4).

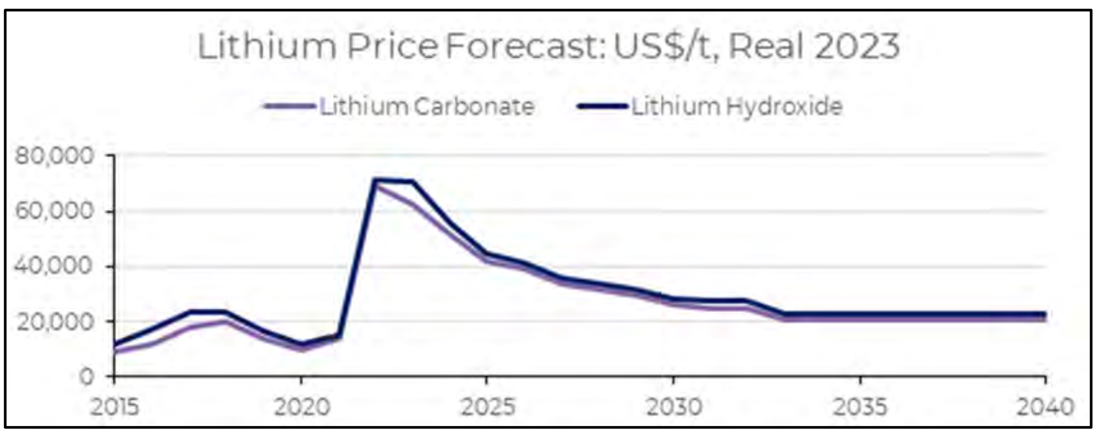


Figure 19-4: Lithium Price Forecast (Source: Benchmark, 2023)

19.2.1.3 Clayton Valley Lithium Product

A price of $24,000/t for lithium carbonate is used for the base case in this Report. This price is selected as a mid-point between current market prices, which are under $20,000/t, and forecast prices from Benchmark, which are in the range of $23,000 to $39,000/t over the duration of the Project through 2040. The sales price is free on board (F.O.B.) the Project site.

19.2.2 Sodium Hydroxide

19.2.2.1 Quality Specifications

Sodium hydroxide from the Project will be produced through modern membrane-based electrolysis and is expected to meet the specifications for membrane-grade sodium hydroxide. Provision in the Project is made to produce the surplus material in liquid form at 50 wt% NaOH.

19.2.2.2 Sodium Hydroxide Pricing

According to research provided by Global Exchange, the sales price for sodium hydroxide in fourth quarter 2023 was $825 to $880 per dmt, F.O.B. West Coast tank storage. West Coast prices are relatively stable and are expected to increase with support from domestic demand. Additionally, increases in global shipping costs, particularly for chemical ocean freight, are expected to increase import prices. US production is also expected to be under pressure as domestic producers are required to close or upgrade their plants to membrane technology to meet environmental standards. These changes and probable reductions in domestic supply are expected to result in long-term price stability.

19.2.2.3 Clayton Valley Sodium Hydroxide Product

Based on the outlook for supply and demand, Global Exchange indicates that prices above $800/dmt F.O.B. West Coast tank rate should be sustainable over the long term. For a new chlor-alkali plant in Nevada, Global Exchange anticipates a sales price of $600/dmt, at approximately 3/4 the West Coast tank rate, would be sufficient to compete with imports and US domestic supply. This price is used for the base case in this study and is F.O.B. the Project.

19.3 Marketing Strategy

19.3.1 Lithium

Century does not have any offtake agreements for lithium from the Project or engaged in any formal offtake discussions. Through its pilot plant, Century has produced small lots of battery-quality lithium carbonate which it anticipates providing to potential parties in future discussions. Under the present regulatory environment, it is anticipated there will be support for domestically produced lithium in the US and encourage domestic sales of the lithium produced from the Project.

19.3.2 Sodium Hydroxide

Century has no offtake agreements for the sale of sodium hydroxide from the Project but has received expressions of interest from potential parties. Century and Global Exchange anticipate that competitive pricing combined with regional demand will develop sufficient sales to place all surplus sodium hydroxide produced by the Project.

19.4 Contracts

Century has no current sales agreements or contracts in place for mining, concentrating, smelting, refining, transportation handling, hedging, sale of lithium carbonate or sodium hydroxide products, or for the purchase or sale of any other commodities, resources or supplies except for the underlying royalty agreement described in Section 4.

19.5 QP Comment on Section 19

The QP has reviewed the price assumptions for lithium carbonate and sodium hydroxide and relevant market studies and considers the information an acceptable basis to support the price assumptions used in the Report. The QP examined other technical reports and publicly available information on commodity prices and markets to verify the information provided.

The QP notes that risks exist with commodity prices that may fluctuate based on economic conditions and with marketability of products that may be affected by unforeseen changes in the Project.

20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

This section of the Report describes the environmental information collected from the Project, the regulatory requirements in permitting for operations, potential impacts of the Project, and the requirements for reclamation and closure.

20.1 Environmental Assessment and Permitting

20.1.1 Baseline Studies

Biological baseline surveys were conducted in 2019, 2020, and 2023 (Stantec, 2020; Western Biological, 2023) in preparation for NEPA compliance through the BLM, the federal land management agency.

The Stantec, 2020 report provides information related to natural resources (vegetation and wildlife) within Century's 2019 claim boundary. Since conducting baseline surveys in 2019 and 2020, Century has acquired additional unpatented mining claims, increasing the size of the Project Area.

Biological baseline surveys conducted by Western Biological in 2023 incorporated Century's unpatented mining claims within the now larger Project Area. The Western Biological 2023 biological baseline report was submitted to the BLM in early January 2024 and approved in February. Potential linear features outside of the Project Area boundary will require that biological baseline surveys be conducted when those areas when defined.

Preliminary meetings were held with the BLM and other federal and state agencies to initiate the permitting process pursuant to the NEPA. As part of this process, Century has provided several of the required baseline survey reports to the BLM for review and comment. The baseline kick-off meeting identified the following baseline studies that will be required:

- Cultural Resources (field survey and report) – completed in 2023
- Paleontological Resources (desktop study) – completed in 2023
- Environmental Justice and Social and Economic Values (desktop study) – completed in 2024
- Geology/Minerals (waste rock characterization report and feasibility level pit slope design) – initiated but not yet completed
- Wildlife (update 2020 field survey) – completed in 2023
- Threatened and Endangered Species (update 2020 field survey) – completed in 2023
- Special Status Species (update 2020 field survey) – completed in 2023
- Migratory birds and raptors (update 2020 field survey) – completed in 2023
- Noise (desktop study) – completed in 2024

- Water Quality and Quantity (desktop study) – seep and spring desktop and field surveys completed in 2023, report completed in 2024, water source identification initiated
- Wetland/Riparian Zones (desktop study) – completed in 2023
- Floodplains (desktop study) – completed in 2024
- Noxious Weeds and Invasive Non-Native Species (update 2020 field survey) – completed in 2023
- Soils – (update 2020 field survey) - completed in 2023
- Vegetation – (update 2020 field survey) - completed in 2023
- Forestry – Cacti (update 2020 field survey) – completed in 2023
- Global Climate Change (desktop study) – not yet initiated
- Air Quality (desktop study) – not yet initiated
- Land Use – completed in 2024.

The following sections provide additional detail on existing physiographic and biological conditions at the Project Area and vicinity.

20.1.1.1 Climate

The climate for the Project Area is hot during the summer months with high temperatures reaching above 37°C, and cooler winters that have average lows as cold as -8°C. Precipitation comes mainly as thunderstorms and can cause significant flooding, even miles from the site of the storm itself. Snowfall and other forms of precipitation are rare in Clayton Valley due to the rain shadow cast by the mountains to the west. Rarely does snow accumulate on the ground and provide coverage, and the high temperatures paired with low humidity create a high rate of evaporation. Wind and dust storms are common throughout the year but are more frequent during the summer and fall.

20.1.1.2 Surface Water

The Project is on an alluvial fan that slopes generally from southeast to northwest toward Angel Island and the Clayton Valley playa. Angel Island is a large outcrop on the west edge of the Project Area. There are no permanent or intermittent surface waters located within the project site, but several defined ephemeral drainages do cross the Project Area. The drainages in the area flow to the north or south of Angel Island to the Clayton Valley playa.

The annual average precipitation is 115.5 mm, with a 100-year, 24-hour peak event calculated at 61 mm. Due to the arid conditions, the ephemeral drainage only flows during significant precipitation events. The topography of the Project Area is flat to moderate, ranging in elevation from 1,330 to 1,420 masl. Recharge to the basin from surface water is by precipitation and runoff, controlled by unnamed ephemeral drainages in alluvial washes and at mountain fronts.

20.1.1.3 Groundwater

The Project is in the Clayton Valley Basin within the Cactus-Sarcobatus Flats Watershed. The Clayton Valley Basin is endorheic and bounded by mountain ranges. Recharge via groundwater is mainly from water infiltration from the surrounding mountain ranges and inflows from the Big Smoky Valley and the Alkali Springs Valley, and potentially from Fish Lake Valley and Lida Valley basins. As an endorheic basin, there is no surface outflow from the basin.

The Albemarle Corporation (Albemarle) operates a lithium mine in Clayton Valley, which has been in operation since the 1960s. Their operation processes brine pumped from underground to produce lithium carbonate and lithium hydroxide. Albemarle has rights to Brine Water Sources within a designated exclusion zone within Clayton Valley. Brine Water Sources are defined as underground water with greater than 5,000 mg/l of total dissolved solids. The exclusion zone includes most of the Clayton Valley Basin and extends north into Paymaster Canyon.

20.1.1.4 Water Quality

The Project is at the base of an alluvial fan. The alluvial fan is fed by a canyon 3.2 km east of the Project Area and covers an area of several square kilometers. Minor fans radiate from the canyons to the north and south and contribute to the surface runoff. Surface runoff during significant precipitation events flows mostly northwest, around Angel Island, and onto the playa.

The quality of surface water (ephemeral flow) has not been determined but is expected to be of good quality except for high total suspended solids. Surface flow eventually either evaporates or infiltrates into the Clayton Valley subsurface. Groundwater quality in the basin is likely to be very high in total dissolved solids as documented by Albemarle. The drilling completed to date on-site has not intersected the groundwater table and the open pit was designed to avoid contact with groundwater.

20.1.1.5 Flora and Fauna

Biological surveys were conducted in 2020 with a biological baseline report produced in late 2020 (Stantec, 2020). The biological baseline surveys were conducted in anticipation of BLM requirements for permitting. The survey included identification of general habitats, identification of soil units, descriptions of vegetation and wildlife, and identification of special status species that have the potential to occur in or near the Project Area.

Five vegetation communities were mapped within the Project Area. Three special status plant species were observed including the sand cholla (State of Nevada protected species and BLM sensitive species), hermit cactus (State of Nevada protected species), and Joshua tree (State of Nevada protected species).

Wildlife surveys included specific surveys for the pale and dark kangaroo mice, both of which are BLM sensitive species, raptor nests within an approximately 16 km radius, and acoustic bat surveys. No pale or dark kangaroo mice were detected, five BLM sensitive bat species were recorded, and 82 nest sites (16 that were occupied) were observed within the survey area.

The findings of the biological baseline surveys conducted in 2023 agreed with the findings of the 2020 survey report. Additional BLM requirements included, digging of soil pits to confirm the 2020 findings, conducting pale and dark kangaroo mouse trapping in a new location, and conducting acoustic bat surveys near Angel Island. Results from the soil pits confirmed the units found in the 2020 report; no kangaroo mice of either species were trapped; and acoustic bat surveys indicated the presence of up to 10 different bat species. There was one active golden eagle nest confirmed during the raptor surveys, located at the south end of Angel Island.

Impacts to sensitive biological resources are expected to be minimal due to the limited sensitive resources in the area. Vegetation, including special status plant species, may potentially be impacted by ground disturbance. Mitigation measures may be implemented to minimize impacts to special status species, and any such measures will be identified during the NEPA process. Two raptor nests were identified in the western portion of the Project Area, but they should not be impacted by the operations.

20.1.2 Permitting

Environmental permitting requirements for the Project are expected to be like other mines permitted in Nevada (Table 20-1). The two primary permitting agencies will be the BLM and the NDEP. There will be other agencies requiring permits and approvals, but the BLM and NDEP permits and approvals will require the most time for approval.

The BLM process includes several pre-planning and planning meetings to initiate the permitting process. Collection of baseline data is the first step in the BLM process, most of which has already occurred. Several baseline data reports were submitted to the BLM for review and approval in 2023 and 2024. Following approval of the baseline data, the PoO and Reclamation

Permit Application will be submitted. These documents will describe the proposed operation including background information, mining and processing descriptions, and a description of the reclamation plans for all facilities. Approval of the PoO, and the completion and approval of all baselines will initiate the NEPA process. The NEPA process requires an assessment of the potential impacts associated with the proposed operation and identified alternatives and the determination of potential measures to mitigate those impacts.

For projects of this size, the level of NEPA analysis required is typically an EIS. Initial and subsequent meetings with the BLM were completed during 2022 and 2023. The process is moving forward with the collection of additional baseline data as required, as well as pending reviews and approvals of several baseline reports by the BLM. The PoO is planned to be submitted in 2024 following completion and acceptance of all baseline studies by the BLM. Compliance with NEPA, including EIS development, and issuance of the Record of Decision by the BLM is expected to take up to two years.

The NDEP will be responsible for issuance of the other major State permits including the WPCP, Reclamation Permit, Air Quality Operating Permit, and other ancillary permits. The WPCP addresses the protection of surface and groundwater resources. The data required to support this permit application includes ore and waste rock characterization, water management control methods, processing methods, and waste management including tailings and waste rock. The Reclamation Permit requires development of a reclamation plan and the associated reclamation and closure cost estimate. The reclamation and closure cost estimate will be used by the NDEP and BLM to set the reclamation bond held by the BLM. A conceptual level closure plan and cost estimate is provided in Section 20.3.9. For the Air Quality Operating Permit, it is assumed line power, or a combination of on-site solar energy generation will be used as the power source. Under this scenario a Class II Operating Permit will be required.

Table 20-1: List of Potential Permits and Approvals

Permit/Approval	Granting Agency	Cost	Timeframe
PoO and NEPA Compliance (EA or EIS)[1]	BLM	Cost recovery agreement with BLM NEPA Compliance $200K (EA) to $4.0 million (EIS)	From PoO approval to Record of Decision (assuming EIS) – at least 24 months
EPA Hazardous Waste ID Number	US Environmental Protection Agency	None	
Class II Air Quality Operating Permit	NDEP/Bureau of Air Pollution Control	$15,000 application fee $7,500 renewal fee	up to 12 months Renew every 5 years
Surface Disturbance Permit	NDEP/Bureau of Air Pollution Control	$5,000 for >500 acres disturbance	Estimated at 1 to 2 months (or faster)
Reclamation Permit	NDEP/Bureau of Mining Regulation and Reclamation	$1.50/acre public land $2.50/acre private land $500 to $16,000 annual fee	4 to 8 months
Water Pollution Control Permit	NDEP/Bureau of Mining Regulation and Reclamation	$20,000 application fee $250 to $20,000 annual fee	6 months average
Solid Waste Class III Landfill Waiver (Part 1 & 2)	NDEP/Bureau of Waste Management	$5,000 application fee $5,000 annual fee	90 to 120 days
Permit to Appropriate Waters	Nevada Division of Water Resources	TBD	
Industrial Artificial Pond Permit	Nevada Department of Wildlife	$125 annual fee up to $10,000 annual operating fee depending on tons processed	30+ days
On-site Sewage Disposal System	NDEP/Bureau of Water Pollution Control	$400 - $600 application fee for general permit depending on capacity	30 to 60 days
Hazardous Materials Permit	Nevada State Fire Marshal and State Emergency Response Commission	Basic fee $150 Additional fee based on chemicals stored on-site	Required 30 days from start of operations and renewed annually

[1] EA: Environmental Assessment

20.2 Socioeconomic and Community Relations

Much of the economy in Esmeralda County and adjacent counties is based on exploration and mining activity. This includes the existing Albemarle operation in Clayton Valley and other active and proposed mining operations in the region. Socioeconomic considerations associated with the proposed operation will be addressed during the baseline data acquisition and during the NEPA process. Generally, additional mining in the area will have a positive impact on the economy of the county and region. Potential risks to the socioeconomic resources would be the ability of the local infrastructure to adequately support the added workforce in the area.

Several avenues for addressing community relations will be completed by Century and permitting agencies. Required consultation with Native American Tribes is conducted as a government-to-government process; thus, the BLM would conduct this consultation. Other community relations activities occur during public scoping and public comment periods associated with the NEPA process. There are also public comment periods during the WPCP and Reclamation Permit processes.

Currently, community relations activities are limited to on- and off-site Company personnel conducting business while employing best management practices. Century has had a local presence with an administrative office at the Tonopah airport since 2021, and uses community resources, including local business for supplies, lodging, labor, restaurants, and other items required during development at the Project. In 2024, the Company anticipates additional forms of community involvement to be organized to help inform the local community of the Project and its potential benefits.

The BLM has placed significant emphasis on socio-economic resources due to several large potential projects in the area including mining, renewable energy and construction projects. The primary concern for the BLM is impacts to infrastructure and services during development and operations.

20.3 Reclamation and Closure Activities

The overall objective of reclamation and closure is to provide chemical and physical stability of the mine facilities that will remain, including the TSF, WRSFs, roads, ponds, and partially backfilled pit. For the Reclamation Permit, assumptions include decommissioning and demolition of or removal of all on-site buildings. The reclamation and closure approach proposed for the Project has several key concepts that provide the basis for this plan throughout the facility’s operational life. These concepts include:

- Designing facilities with reclamation and closure in mind
- Backfilling a portion of the open pit
- Managing operations to minimize environmental impacts
- Salvaging soil resources.

Salvage of alluvial material to be later used as growth medium will occur during initial construction activities. Stockpiling of alluvial material may occur throughout the area, but defined locations have not been determined yet. This material will be used as cover/growth media for the TSF, WRSFs, and other facilities during reclamation. Reclamation progress must be monitored, at a minimum, during the first three years after completion. Post-closure monitoring of the site will continue for a minimum of five years after closure but may be required for a longer period based on requirements by the BLM and NDEP.

The following sections provide a conceptual-level description of reclamation and closure methods for the mine's larger components.

20.3.1 Roads

Both haul roads and access roads, without a defined post-mining use, will be reclaimed when they are no longer needed for access. The primary reclamation objectives for roads will be long-term stabilization and surface water management. Roads will be scarified to breakup consolidation and then recontoured to blend with surrounding topography. Berm material will be pulled back onto roads and then seeded. Roads cut into hillsides will be reclaimed by pulling up the cut material on the downgradient slope to fill the road cut. Following final grading, the reclaimed area will be seeded with an agency approved seed mix.

20.3.2 Facilities

Structures and facilities located on public land will be decommissioned and demolished or removed from site. Some facilities may temporarily remain to facilitate mine closure, including the administrative building and shop areas. Salvageable materials and equipment will be removed from the site for salvage or reuse. Demolition debris may be placed in the on-site landfill if material meets the characterization criteria for a Class III landfill. Materials that do not meet the Class III landfill criteria, including hazardous waste, will be hauled from the site, and disposed of at a properly licensed waste facility.

Building foundations will generally be broken and buried. Due to limited amounts of growth media, it will be placed where deemed most useful and then seeded.

20.3.3 Process Ponds

Closure and reclamation of lined process ponds (seepage collection and process water ponds) will include testing of any sludge, and based on characterization, the removal and proper disposal of the sludge, followed by cutting and folding the liner into the pond, backfilling the pond, and seeding.

20.3.4 Tailings Storage Facility

Closure and reclamation of the dry stack TSF (surface and in-pit) will focus on minimizing infiltration. Surfaces will be graded to shed precipitation and a soil cover placed to both minimize infiltration and provide growth media for vegetation. The cover depth and material will be determined in coordination with the NDEP. In addition, the seepage collection ponds may be converted to evaporation basins to allow the seepage to evaporate, thus eliminating active management of any seepage. Due to the use of dry stack tailings and low precipitation in the area, seepage is expected to be minimal. Thus, if the seepage ponds are converted to evaporation cells, this activity is anticipated to occur shortly after active operations cease.

20.3.5 Waste Rock Storage Facilities

WRSF closure and reclamation will include grading the surface and slopes to promote runoff from the surface, placing a soil cover, and seeding. Cover material will serve as growth media for vegetation and minimize infiltration of precipitation. The NDEP requires a 3:1 horizontal to vertical repose.

20.3.6 Pits

Approximately half of the pit will be backfilled with dry stack tailings during operations. The remaining portion of the pit will be left open. Safety berms or fencing will be placed around the pit perimeter to limit access. The pit depth is expected to be above the groundwater table; thus, a pit lake will not form. Ingress and egress access to accommodate wildlife will be constructed.

20.3.7 Stormwater Drainage Control Structures

Stormwater diversion channels upgradient of the mine facilities will be left in place. Generally, diversion channels would be designed for closure, so modifications to the diversion channels are not anticipated.

20.3.8 Post-Closure Monitoring and Maintenance

Post-closure monitoring and maintenance will continue for a period based on agency requirements. Monitoring will include stability (erosion) monitoring, revegetation monitoring, and water quality monitoring.

20.3.9 Mine Reclamation Cost Estimate

A conceptual level reclamation plan and cost estimate has been developed. A formal reclamation plan and cost will be developed for the Reclamation Permit application process. However, based on the current design, the SRCE was used to develop a preliminary reclamation cost estimate of $13.4 million. The SRCE was developed by the BLM and NDEP as a standard method to calculate reclamation and closure costs. The cost data used in the SRCE is updated annually by the BLM and NDEP.

21.0 CAPITAL AND OPERATING COSTS

21.1 Summary

This capital cost estimate is classified as a Class 3 estimate in accordance with AACE International Guidelines Practice No. 47-R-11 (AACE International, 2020) with an accuracy expected to be within +/-15% range of final project cost including contingency.

Responsibility for each area of the capital cost estimate is as follows:

- Mining GRE
- Processing Wood
- Chlor-alkali plant thyssenkrupp
- Lithium production Saltworks
- G&A Wood
- Owner's Costs Century

Costs for equipment and materials are based on vendor pricing from fourth-quarter 2022. Escalation has been included to bring these prices in line with the rest of the estimate to second quarter 2024. Conversion rates used are summarized in Table 21-1.

Table 21-1: Currency Conversion Rates

Currency	Unit per US$
Canadian Dollar (CA$)	0.80
European Union (EUR)	1.13

The total capital cost for the Project is $3,576.2 million, phased over the first nine years as shown in Table 21-2. Project Phase 2 capital costs represent the expansion of the process facilities and infrastructure established in Project Phase 1. Project Phase 3 capital costs support an additional processing plant and facilities not built in the previous phases.

Sustaining capital is required for mining equipment replacement and tailings facility expansion. The total sustaining capital is estimated at $315.1 million over the life of the Project. These costs are in addition to the expansion capital costs shown in Table 21-2.

Operating costs were estimated for mining, process and G&A. Over the LOM, the operating costs will average from $49.45/t of plant feed in Project Phase 1 to $38.27/t in Project Phase 3.

Table 21-2: Capital Cost Estimate Summary

Description	Cost ($M)		
	Project Phase 1 (Initial)	Project Phase 2 (Years 3 & 4)	Project Phase 3 (Years 8 & 9)
	7,500 t/d	Expansion to 15,000 t/d	Expansion to 22,500 t/d
Mining	31.7	6.2	8.0
Site Preparation and Roads	32.7	-	20.7
Process Facilities	1,013.2	541.0	972.7
Tailings / Waste Management	23.5	-	-
On-site Services / Utilities	68.4	4.7	37.7
Buildings and Facilities	26.9	-	4.0
Off-site Facilities	11.7	-	-
Total Direct Costs	**1,208.1**	**552.0**	**1,043.1**
Owner's Costs	33.8	33.8	33.8
Indirect Costs	200.3	38.7	156.3
Working Capital	23.8	-	-
Total Indirect Costs	**257.9**	**72.5**	**190.1**
Total Direct + Indirect Costs	**1,466.0**	**624.5**	**1,233.1**
Escalation	19.1	6.1	-
Contingency	95.7	26.4	105.3
Total Capital Cost	**1,580.7**	**657.0**	**1,338.5**

Note: Figures may not sum due to rounding.

21.2 Capital Costs

21.2.1 Basis of Estimate

21.2.1.1 Summary

This section outlines the process behind developing the initial estimate of 15,000 t/d for the base case. Subsequently, this estimate was amended to accommodate an initial throughput of 7,500 t/d during Project Phase 1 by deferring equipment and associated infrastructure costs. The remaining scope of work, including capital cost expenditures related to mobilization, demobilization and working around existing operations, was allocated to Project Phase 2 (15,000 t/d). Finally, the base case estimate of 15,000 t/d served as the foundation for calculating costs associated with the Project Phase 3 expansion to 22,500 t/d.

The basis of estimate has been developed in accordance with the following documents:

- Project scope of facilities
- Process design criteria

- Process flow diagrams (PFDs)
- Engineering discipline design criteria's
- Equipment list
- Preliminary general arrangement drawings (GAs)
- Preliminary site layouts
- Preliminary single line diagrams
- Geotechnical report
- Discipline material take-offs (MTOs)
- Budget quotations from vendors
- MTOs/estimates as provided by Century, GRE and/or other third parties
- Regional climatic data
- Project work breakdown structure (WBS) and code of accounts
- Historical in-house data
- Documents and information as provided by Century
- Project execution plan
- Project schedule.

21.2.1.2 Quantity Development Basis

Quantities were organized by WBS area and discipline codes.

Engineering MTOs were based on "neat" quantities derived from project drawings and sketches. Conceptual quantities were prepared where drawing information was not available.

Table 21-3 demonstrates the level of the received MTO information to support a Class 3 estimate.

Table 21-3: Level MTO Development

Definitions	
Design	Quantities taken off from design layout drawings, equipment lists based on PFDs, calculations from mass/energy balance calculations, and other engineered calculations specific for the project
Concept	Quantities calculated from general project information, GAs, conceptual design, preliminary drawings, sketches, basic 3D models
Factored	Calculated from similar sized projects and factored to adjust for plant size, capacity and site-specific requirements
Allowance	Quantities estimated based on engineering or estimating judgment and is unsupported with engineering data or calculations

Discipline	Description	Units	Design	Concept	Factored	Allowance	Total
Civil	General Site Prep and Roads	various	0%	80%	0%	20%	100%
	Structural Excavations & Backfills	m^3	0%	80%	10%	10%	100%
	Major Structures (TSF)	various	0%	80%	0%	20%	100%
	Infrastructure Packages	various	0%	80%	10%	10%	100%
Civil Piping	Infrastructure Piping	m	0%	80%	0%	20%	100%
	Overland Pipelines	m	0%	80%	0%	20%	100%
Concrete	Cast-In-Place Concrete	m^3	0%	80%	10%	10%	100%
Steel	Heavy Steel	tonne	0%	80%	10%	10%	100%
	Medium Steel	tonne	0%	80%	10%	10%	100%
	Light Steel	tonne	0%	80%	10%	10%	100%
	Miscellaneous Steel (Grating, Stairs)	various	0%	80%	10%	10%	100%
Architectural	Pre-Engineered Fabric and Prefabricated Modular Buildings	various	75%	5%	10%	10%	100%
Building Services	HVAC	m^3	0%	0%	80%	20%	100%
	Fire Protection	m^2	0%	0%	100%	0%	100%
	Services Piping	m^2	0%	0%	75%	25%	100%
Mechanical	Mobile Equipment	ea	0%	80%	0%	20%	100%
	Major Equipment	ea	80%	10%	5%	5%	100%
	Minor Equipment	ea	0%	80%	10%	10%	100%
Bulk Mechanical	Plate work (Tanks, Pump boxes, Chutes)	tonne	0%	60%	25%	15%	100%

Discipline	Description	Units	Design	Concept	Factored	Allowance	Total
Piping	Within Battery Limits of the Process Plant	ls	0%	0%	0%	100%	100%
	Outside Battery Limits of the Process Plant	ls	0%	50%	0%	50%	100%
Electrical Supply	HV Lines	ls	0%	70%	20%	10%	100%
	HV/MV Distribution Equipment	ls	0%	70%	20%	10%	100%
	LV Equipment	ls	0%	0%	0%	100%	100%
	LV Wire/Cable/Tray	ls	0%	0%	0%	100%	100%
	Grounding/Lighting /Receptacles	ls	0%	0%	0%	100%	100%
Instrumentation	Control System	ls	0%	100%	0%	0%	100%
	Specialty Items	ls	0%	50%	40%	10%	100%
	Field Instruments/ Cabling	ls	0%	0%	0%	100%	100%

21.2.1.3 Labor Assumptions

Wage rates for construction crews have been established using rates provided by Century. Base unit labor work hours and rotations are based on 40 hours per week or five days at eight hours per day with no overtime. Different criteria were used to calculate direct labor costs per hour and indirect construction labor costs per hour.

Productivity factors were incorporated into construction labor unit work hours as multipliers on the base unit work hours. The factors consider project specific conditions such as contracting strategy, weather, crew skill and availability and craft work-site conditions.

21.2.2 Direct Costs

21.2.2.1 Mine Capital Costs

Mine development costs include access and haul roads, earthworks for preparation of stockpile and WRSF pads, and construction of 300 mm compacted clay liners for both the stockpiles and WRSFs. Estimates are made from calculated earthwork volumes, equipment productivities, and equipment operating costs.

The estimates for mine production and support equipment are derived from vendor quotations for major items (such as Caterpillar, Superior, and Curry). Additionally, internal data is used for minor equipment.

The category of other mining supplies and equipment encompasses surveying equipment, computers, software, plotters, and radios. These items are estimated based on internal data using appropriate factors. Additionally, the estimate includes allowances for initial consumables such as diesel fuel and tires. The initial estimate for diesel fuel is based on one month of usage in operating costs. Additionally, the initial tire costs are estimated using InfoMine tire costs specific to each piece of equipment.

A breakdown of these costs is presented in Table 21-4.

Table 21-4: Mine Capital Costs

Description	Project Phase 1 ($M)	Project Phase 2 ($M)	Project Phase 3 ($M)
Mining Equipment	27.7	5.5	2.3
Other Mining Related Supplies	1.0	0.5	2.9
Mine Consumables	0.2	-	-
Mine Development	2.8	0.3	2.9
Total	**31.7**	**6.2**	**8.0**
% of Total Direct Costs	**3%**	**1%**	**1%**

21.2.2.2 Site Preparation and Roads

Site preparation and roads costs include the cost of the new access road to site. A breakdown of these costs is presented in Table 21-5.

Table 21-5: Site Preparation and Roads Capital Costs

Description	Project Phase 1 ($M)	Project Phase 2 ($M)	Project Phase 3 ($M)
Site Development	31.3	-	20.7
On-site Roads	1.4	-	-
Total	**32.7**	**-**	**20.7**
% of Total Direct Costs	**3%**	**-**	**2%**

21.2.2.3 Process

Mined material handling costs include sizing, classification, conveying, stockpiling, screening, reclaim and attrition scrubbing. Mineral processing costs include leaching; tailings dewatering and handling; polish filtration; lithium ion exchange (including impurity removal); solids residue dewatering, softening ion exchange and reverse osmosis; lithium production (complete scope and capital costs by SaltWorks), which includes brine refinement, lithium concentration, precipitation and preparation; lithium carbonate product handling and packaging (including storage and distribution); chlor-alkali processing (complete scope and capital costs by thyssenkrupp); reagents; and process services (including piping for each area, water supply tanks, fuel storage and distribution and ventilation for the process plant). A breakdown of these costs is presented in Table 21-6.

Table 21-6: Process Capital Costs

Description	Project Phase 1 ($M)	Project Phase 2 ($M)	Project Phase 3 ($M)
Mined Material Handling and Sizing	56.7	7.8	42.6
Leaching	23.1	14.2	24.6
Tailings Filtration/Handling	132.2	66.1	131.0
Ion Exchange and Impurity Removal	121.8	55.3	116.9
Lithium Production	108.1	43.8	100.3
Chlor-alkali Plant/Acid Production	496.0	336.0	496.0
Reagents	4.0	0	2.5
Process Plant Services	71.3	17.8	58.8
Total	**1,013.2**	**541.0**	**972.7**
% of Total Direct Costs	**84%**	**98%**	**93%**

21.2.2.4 Tailings Storage Facility

The TSF is scheduled to be developed in six TSF phases (in line with the pit phases) over the mine life. Initial capital costs (Table 21-7) are based on TSF phase 1A works and include earthworks and installation of the following TSF elements:

- Geomembrane liner
- Over liner drainage system
- Lined over liner collection ponds and event ponds
- Stormwater diversion channel system.

Table 21-7: Tailings Storage Facility Capital Costs

Description	Project Phase 1 ($M)	Project Phase 2 ($M)	Project Phase 3 ($M)
Tailings Storage Facility	23.5	-	-
% of Total Direct Costs	**2%**	**-**	**-**

Note: Future phases of the TSF (1B to 6) are included in the sustaining capital cost.

21.2.2.5 On-site Services and Utilities

On-site services and utilities costs comprise power supply and distribution; water supply distribution around the plant; water systems such as process water, potable water, fire water, sanitary and stormwater management; site wide instrumentation control (including process control system) and communications; piping (pipe racks) and heat, ventilation and air conditioning (HVAC) in auxiliary buildings. A breakdown of these costs is presented in Table 21-8.

Table 21-8: On-site Services and Utilities Capital Costs

Description	Project Phase 1 ($M)	Project Phase 2 ($M)	Project Phase 3 ($M)
Power Supply and Distribution	28.4	4.7	11.3
Water Systems	4.5	-	3.0
Control and Communication System	11.4	-	7.5
Piping	23.5	-	15.5
Ventilation	0.6	-	0.4
Total	**68.4**	**4.7**	**37.7**
% of Total Direct Costs	**6%**	**1%**	**4%**

21.2.2.6 Buildings and Facilities

Buildings and facilities costs include the following:

- Administration/office building
- Truck maintenance/mine shop (including truck wash/repair/tire change)
- Mill dry/offices/lunchroom
- First aid building/emergency vehicle storage
- Assay/metallurgical laboratory
- Process warehouse
- Gatehouse/security and weigh scale.

A breakdown of these costs is presented in Table 21-9.

Table 21-9: Building and Facilities Capital Costs

Description	Project Phase 1 ($M)	Project Phase 2 ($M)	Project Phase 3 ($M)
Ancillary Buildings	26.9	-	4.0
% of Total Direct Costs	**2%**	**-**	**0.5%**

21.2.2.7 Off-site Facilities

Off-site infrastructure costs include water supply pipeline and facilities from the 16 to 1 mine water supply line. The cost of this water supply line is presented in Table 21-10.

Table 21-10: Off-site Facilities Capital Costs

Description	Project Phase 1 ($M)	Project Phase 2 ($M)	Project Phase 3 ($M)
16 to 1 Mine Water Supply Line	11.7	-	-
% of Total Direct Costs	**1%**	**-**	**-**

21.2.3 Indirect Costs

Construction indirect field costs are based on the proposed construction execution plan after reviewing the overall project scope and schedule of just over 26 months for the base case (15,000 t/d).

The engineering and procurement (EP) estimate encompass the home-office-based engineering services for designing and procuring equipment related to the process and associated infrastructure. Additionally, it includes home office health, safety and environmental, human resources, document control, accounting, information technology, vendor inspection and expediting, contract administration and estimating. Engineering and procurement for the Project is calculated at 6% of direct field costs (excluding chlor-alkali plant and mining scope of work).

The chlor-alkali plant and mining scope of work engineering and procurement is estimated by the major vendors and included separately from the overall design and procurement estimated costs.

The construction management (CM) estimate covers field or site-based services required to construct the facilities within the scope described. Staff who are assigned to the field office are included in the estimate with the assumption that they will be housed off-site in the local community. Construction management for the Project is calculated at 7% of direct field costs.

The construction management for the chlor-alkali plant, lithium production, and mining scope of work is estimated by major vendors and is included separately from the overall construction management costs.

All temporary buildings, services and utilities required during construction and commissioning are estimated based on durations from the construction schedule and actual costs or in-house data.

Inland freight estimates for material and equipment without quoted freight costs are based on a percentage factor of the material supply costs that required transport to site.

Start-up and capitalized spares are based on an allowance of 3% of plant equipment supply price.

Plant first fill include such items as HCl, sodium hydroxide, lithium resin, WAC resin, chelating resin, cartridge filters and RO membranes. A cost of $40 million, based on the quantities required, is included in the estimate.

The cost of commissioning assistance, by the EPCM contractor prior to handing over to operations is based on providing an allowance for a crew of 60 trade personnel as support over a period of one month. Technical staff during this period was included in the engineering and procurement estimate. Startup and commissioning spares are included spares.

Vendor representative costs are based on an allowance of 2.5% of mechanical equipment costs.

A breakdown of these costs is presented in Table 21-11.

Table 21-11: Indirect Costs

Description	Project Phase 1 ($M)	Project Phase 2 ($M)	Project Phase 3 ($M)
EPCM	94.8	23.2	78.8
Field Indirects	101.0	15.1	77.5
Other Mobile Equipment (GRE)	4.5	0.4	-
Total	**200.3**	**38.7**	**156.3**

21.2.3.1 Owner's Cost

Owner's cost items are estimated and provided by Century as detailed in Table 21-12.

Table 21-12: Owner's Costs

Description	Project Phase 1 ($M)	Project Phase 2 ($M)	Project Phase 3 ($M)
Owner's Construction Management Team	2.0	2.0	2.0
Environmental and Permitting	3.3	3.3	3.3
Owner's Pre-production Expenses	5.4	5.4	5.4
Owner's Pre-production Labor	9.3	9.3	9.3
Interconnection to Transmission	13.8	13.8	13.8
Total	**33.8**	**33.8**	**33.8**

21.2.4 Working Capital

Working capital equal to two months of Project Phase 1 operating costs is included in Year -2 totaling $23.8 million.

21.2.5 Contingency

Contingency is defined as a monetary provision additional to the base cost estimate intended to cover unforeseeable elements of cost, risk, and uncertainty within the defined scope of work as described in this Report. Contingency should be considered as an expenditure that is predictable but undefinable at this stage of the Project. Contingency is expected to be spent.

Additionally, contingency only applies to what has been estimated, it does not account for any omission, missing items, project scope changes, scope creep, additions, modifications nor does it exist to cover any of the items listed within the exclusions (Section 21.2.6) or to be used as a Project fund for poorly performing areas.

For this stage of the Project, contingency is calculated using a probabilistic methodology. Wood's contingency model was used along with the @RISK program. The Monte Carlo simulator within the program (a statistical method based on random number generation) was used to determine the expected range of probability for each line item of analysis. Labor field hours, labor rates, construction equipment rates, bulk materials, permanent equipment and subcontractor costs for each discipline or area of the WBS was evaluated individually based on the amount of definition available at the time the estimate was compiled.

The ranges used in the model are based on the quality of information. Budgetary pricing information for example received a tighter range of cost variability in the model then historical data or allowances which receive wider ranges. The ranges, minimum and maximum (worst case scenario/best case scenario) are based on an appropriate ± value for each range of element to be analyzed. Each of these elements are based on a combination of formal assessment, historical results, and estimating judgment.

Contingency is calculated on all direct and indirect costs in the estimate with the exemption of any sunk costs, growth allowances, or separate contingencies such as project risk and schedule.

The contingency applied to the capital cost estimate is based on a P50 value, as directed by Century which represents a contingency value that will not overrun the budget (including the contingency amount) 50% of the time. Given the level of engineering conducted for this FS, Wood recommends that a P85 value be carried to de-risk the Project.

A management reserve is highly recommended when a P50 value is used for contingency. The general rule is to use the difference in cost from the P85 to P50 values as a starting point for a management reserve fund, to cover scope creep that inevitably occurs when engineering is advanced.

Contingency does not allow for escalation of costs covering the time the estimate was completed and compiled, to the time the Project will be completed. Wood highly recommends Century include a suitable additional provision in the management reserve for escalation.

Additionally, the contingency calculated does not cover for weather related delays or events, social unrest, delays to permits nor any other type of schedule complications. Wood recommends Century include a suitable additional provision for schedule delays in the management reserve, equivalent to a few weeks/months of the collective burn rate of contractors, construction management, owner's costs, and project related overheads. These types of contingencies should be identified in the capital cost estimate under the provisional account.

Overall contingency is 10.5% for Project Phases 1 and 2 and 14.9% for Project Phase 3. A breakdown of these costs is presented in Table 21-13.

Table 21-13: Contingency

Description	Project Phase 1 ($M)	Project Phase 2 ($M)	Project Phase 3 ($M)
Mining	3.3	0.6	1.0
Process and Infrastructure	92.4	25.8	104.3
Total	**95.7**	**26.4**	**105.3**

21.2.6 Exclusions

The following items have been specifically excluded from the capital cost estimate, unless identified in Owner's costs:

- Cost of financing and interest during construction
- Costs due to extraordinary currency fluctuations
- Operating costs (separate estimate)
- Reclamation and replanting or other closure capital costs
- Duties and taxes
- Changes to FS design criteria
- Scope changes after FS or accelerated schedule
- Changes in US federal and/or state law
- Site mitigation (identification and removal of contaminated soils from major oil and fuel spills, heavy metals, pesticides, asbestos solids, etc.)
- Deferred capital (operating or closure costs)
- Any provision for force majeure events
- Systems operations and maintenance
- License and royalty fees
- Bonds

- Sunk costs
- Cost of permits
- Schedule delays.

21.3 Sustaining Capital Costs

The basis for estimating the sustaining costs is similar to that used for estimating the initial capital costs in both methodology and the principles applied. Indirect costs, contingency, and Owners' costs were applied and added to the direct sustaining capital cost to arrive at the total sustaining capital cost.

Sustaining capital covers capital costs during mine operation after initial project construction and include considerations for mine equipment replacement, other support mobile equipment replacement and TSF expansion over six TSF phases. Annual sustaining capital costs are shown in Table 21-14.

Sustaining capital over the life of the Project is estimated at $315.1 million. These costs are in addition to the expansion capital costs shown in Section 21.1.

Table 21-14: Sustaining Capital Costs

Area	Total	YR1 ($M)	YR2 ($M)	YR3 ($M)	YR4 ($M)	YR5 ($M)	YR6 ($M)	YR7 ($M)	YR8 ($M)	YR9 ($M)	YR10 ($M)	YR11 ($M)	YR12 ($M)	YR13 ($M)
Mining Equipment Replacement	**82.8**	-	-	2.0	-	0.6	1.4	5.4	0.1	1.6	0.4	0.8	1.9	1.0
TSF Expansion	**219.8**	-	-	10.2	10.2	-	14.8	14.9	-	-	26.3	26.3	-	-
Other Mobile Support Equipment Replacement	**12.5**	-	-	-	0.2	0.5-	-	-	0.2	-	0.5	0.4	0.5	-
Total	**315.1**	**-**	**-**	**12.2**	**10.4**	**1.2**	**16.2**	**20.2**	**0.3**	**1.6**	**27.2**	**27.5**	**2.4**	**1.0**

Area	YR14 ($M)	YR15 ($M)	YR16 ($M)	YR17 ($M)	YR18 ($M)	YR19 ($M)	YR20 ($M)	YR21 ($M)	Y22 ($M)	YR23 ($M)	YR24 ($M)	YR25 ($M)	YR26 ($M)	YR27 ($M)
Mining Equipment Replacement	9.1	4.1	0.5	1.8	3.2	1.1	1.2	7.0	0.2	0.5	2.1	2.5	1.1	1.2
TSF Expansion	-	19.3	19.3	-	-	-	-	-	20.0	20.0	-	-	-	-
Other Mobile Support Equipment Replacement	-	2.4	-	-	0.2	0.5	-	0.8	-	-	1.0	0.2	-	-
Total	**9.1**	**25.8**	**19.8**	**1.8**	**3.4**	**1.7**	**1.2**	**7.8**	**20.2**	**20.5**	**3.1**	**2.7**	**1.1**	**1.2**

Area	YR28 ($M)	YR29 ($M)	YR30 ($M)	YR31 ($M)	YR32 ($M)	YR33 ($M)	YR34 ($M)	YR35 ($M)	YR36 ($M)	YR37 ($M)	YR38 ($M)	YR39 ($M)	YR40 ($M)
Mining Equipment Replacement	8.3	2.6	5.7	0.5	0.9	3.5	1.6	0.3	6.0	1.0	1.1	0.4	-
TSF Expansion	-	19.2	19.3	-	-	-	-	-	-	-	-	-	-
Other Mobile Support Equipment Replacement	1.4	1.0	-	-	0.4	0.6	-	0.7	-	0.5	-	0.2	-
Total	**9.7**	**22.9**	**25.0**	**0.5**	**1.4**	**4.1**	**1.6**	**1.0**	**6.0**	**1.6**	**1.1**	**0.6**	**-**

Note: Figures may not sum due to rounding.

21.4 Operating Cost Estimates

21.4.1 Summary

The project operating costs have been developed from estimates of labor, operating and maintenance supplies, power, and fuel. The operation was sized to the nominal production rate of Project Phase 2 at 15,000 t/d. These numbers were then used to develop costs for Project Phase 1 at 7,500 t/d and Project Phase 3 at 22,500 t/d of processed material.

Responsibility for each area of the operating cost estimates is as follows:

- Mining GRE
- Processing Wood/thyssenkrupp
- G&A Wood

The total annual operating cost is estimated to range on average from $128 million for Project Phase 1 to $308 million for Project Phase 3. Average operating cost estimates range from $49.45/t for Project Phase 1 to $38.27/t of plant feed for Project Phase 3 and summarized in Table 21-15.

Table 21-15: Average Annual Operating Cost Summary

Cost Area	Avg $(000s)/a	Avg $/t feed	Avg $/t LCE	% of Total
Project Phase 1				
Mining	13,475	5.44	1,209	11
Process	48,655	17.77	3,745	38
Process (chlor-alkali plant)	58,978	23.76	5,064	46
G&A	6,784	2.48	522	5
Total	**127,892**	**49.45**	**10,540**	**100**
Project Phase 2				
Mining	24,632	4.47	740	11
Process	72,678	13.27	2,798	33
Process (chlor-alkali plant)	114,163	20.85	4,342	52
G&A	7,324	1.34	282	4
Total	**218,797**	**39.93**	**8,162**	**100**
Project Phase 3				
Mining	21,606	2.82	549	7
Process	109,301	13.30	2,805	35
Process (chlor-alkali plant)	169,417	21.19	4,366	55
G&A	7,864	0.96	200	3
Total	**308,188**	**38.27**	**7,920**	**100**

Note: Figures may not sum due to rounding.

21.4.2 Mine Operating Costs

The estimated average annual mine operating cost ranges from $13.5 million to $21.6 million, or $5.44/t to $2.82/t.

Mine operating costs include stripping, excavation, waste and low grade material handling, road, stockpile, and waste pile maintenance.

Supervision and technical staff are allocated based on similar size and type of operation.

Mine operation and maintenance labor are allocated by operating area, piece of equipment and number of crew shifts required.

Labor rates by job function are based on typical current Nevada rates. A burden factor of 40% was applied to all hourly positions and 32% for all salaried positions to allow for benefits, holidays, vacations, sick leave, and payroll taxes.

Diesel and gasoline will be delivered to on-site fuel storage for use primarily by mine equipment. Diesel is assumed at cost of $1.06/L.

Mining production equipment hours are estimated from the equipment productivity estimates, the scheduled tonnages of plant feed and waste and the number of equipment required.

Mining support equipment hours are calculated from the number of pieces of equipment times the operating hours/day, assuming utilization of 90% and availability of 85%, times the operating days/year.

The mine operating costs are summarized in Table 21-16.

Table 21-16: Average Annual Mining Operating Cost Summary

Area	Avg $(000s)/a	Avg $/t feed
Project Phase 1		
Production Equipment	$3,922	$1.58
Support Equipment	$1,516	$0.61
Mine Labor	$7,951	$3.20
Backfill Equipment	$0	$0.00
Backfill Labor	$0	$0.00
Power	$86	$0.03
Total	**$13,475**	**$5.44**
Project Phase 2		
Production Equipment	$5,958	$1.08
Support Equipment	$2,573	$0.47
Mine Labor	$10,791	$1.96
Backfill Equipment	$385	$0.07
Backfill Labor	$4,781	$0.87
Power	$145	$0.03
Total	**$24,632**	**$4.47**

Area	Avg $(000s)/a	Avg $/t feed
Project Phase 3		
Production Equipment	$7,606	$0.99
Support Equipment	$2,524	$0.33
Mine Labor	$11,000	$1.44
Backfill Equipment	$260	$0.03
Backfill Labor	$47	$0.01
Power	$172	$0.02
Total	**$21,606**	**$2.82**

Note: Figures may not sum due to rounding.

21.4.3 Process Operating Costs

21.4.3.1 Process Plant

The total annual operating cost for the process plant (excluding the chlor-alkali plant) starts at approximately $49 million, equivalent to $3,745/t LCE for Project Phase 1 and increases to approximately $109 million, equivalent to $2,805/t LCE for Project Phase 3.

Table 21-17 provides a summary of the estimated operating costs for the process plant by cost center. The summary estimate includes labor, energy consumption, supplies (operating and maintenance), mobile equipment, laboratory, and TSF.

Table 21-17: Summary of Process Plant Operating Costs per Year

Cost Area	Avg $(000s)/a	Avg $/t feed	Avg $/t LCE
Project Phase 1			
Power Consumption	14,694	5.37	1,131
Reagents	8,916	3.26	686
Labor	7,021	2.56	541
Mobile Equipment	1,070	0.39	82
Laboratory	773	0.28	59
Maintenance Materials	16,181	5.91	1,246
Total	**48,655**	**17.77**	**3,745**
Project Phase 2			
Power Consumption	22,480	4.11	865
Reagents	17,824	3.25	686
Labor	7,315	1.34	282
Mobile Equipment	1,646	0.30	64
Laboratory	773	0.14	30
Maintenance Materials	22,640	4.13	871
Total	**72,678**	**13.27**	**2,798**

Cost Area	Avg $(000s)/a	Avg $/t feed	Avg $/t LCE
Project Phase 3			
Power Consumption	35,696	4.35	916
Reagents	26,737	3.25	686
Labor	9,085	1.10	233
Mobile Equipment	1,646	0.20	42
Laboratory	989	0.12	26
Maintenance Materials	35,148	4.28	902
Total	**109,301**	**13.30**	**2,805**

Note: Figures may not sum due to rounding.

21.4.3.2 Chlor-alkali Plant

The total annual operating cost for the chlor-alkali plant starts at approximately $59 million, equivalent to $5,064/t LCE for Project Phase 1 and increases to approximately $169 million, equivalent to $4,366/t LCE for Project Phase 3.

Table 21-18 provides a summary of the estimated operating costs for the chlor-alkali plant by cost center. The summary estimate includes labor, energy consumption, supplies (operating and maintenance), and utilities.

Table 21-18: Summary of Chlor-alkali Plant Operating Costs per Year

Cost Area	Avg $ (000s)/a	Avg $/t feed	Avg $/t LCE
Project Phase 1			
Feed Stock	44,044	17.74	3,782
Consumable Materials	2,189	0.88	188
Utilities	5,342	2.15	459
Staffing	3,580	1.44	307
Maintenance	3,824	1.54	328
Total	**58,978**	**23.76**	**5,064**
Project Phase 2			
Feed Stock	85,003	15.53	3,233
Consumable Materials	4,828	0.88	184
Utilities	11,140	2.03	424
Staffing	3,947	0.72	150
Maintenance	9,246	1.69	352
Total	**114,163**	**20.85**	**4,342**

Cost Area	Avg $ (000s)/a	Avg $/t feed	Avg $/t LCE
Project Phase 3			
Feed Stock	127,505	15.95	3,286
Consumable Materials	7,241	0.91	187
Utilities	16,709	2.09	431
Staffing	3,947	0.49	102
Maintenance	14,014	1.75	361
Total	**169,417**	**21.19**	**4,366**

Note: Figures may not sum due to rounding.

21.4.3.3 General and Administrative Operating Costs

G&A labor costs are based on 16 full-time equivalent employees including management, environmental, human resources, security, finance, procurement and logistics, community relations and services. The manpower requirements for the G&A have been estimated by Wood based on similar projects.

The G&A expenses have been estimated by Wood based on similar projects and include costs related to health, safety, security and environment, community, communications, information technology, office supplies, freight, training, travel, land holding leases and water rights, human resources, janitorial, insurances, licenses, taxes and legal.

G&A costs are based on the base case 15,000 t/d production rate and a cost adjustment for expenses for Project Phases 1 and 3 was included in the financial model.

A summary of the estimated G&A costs is shown in Table 21-19.

Table 21-19: Summary of G&A Annual Costs

Description	Avg $(000s)/a	Avg $/t feed	Avg $/t LCE
Project Phase 1			
Labor	1,884	0.69	145
Expenses	4,900	1.79	377
Total	**6,784**	**2.48**	**522**
Project Phase 2			
Labor	1,884	0.35	73
Expenses	5,440	0.99	209
Total	**7,324**	**1.34**	**282**
Project Phase 3			
Labor	1,884	0.23	48
Expenses	5,980	0.73	152
Total	**7,864**	**0.96**	**200**

Note: Figures may not sum due to rounding.

22.0 ECONOMIC ANALYSIS

22.1 Cautionary Statement

The results of the economic analyses discussed in this section represent forward-looking information as defined under Canadian securities law. The results depend on inputs that are subject to a number of known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those presented here. Information that is forward-looking includes the following:

- Mineral Resource and Mineral Reserve estimates
- Assumed commodity prices
- The proposed mine production plan
- Projected mining and process recovery rates
- Proposed processing method
- Proposed capital and operating costs
- Assumptions as to environmental, permitting, and social risks.

Additional risks to the forward-looking information include the following:

- Changes to costs of production from what are estimated
- Unrecognized environmental risks
- Unanticipated reclamation expenses
- Unexpected variations in quantity of mineralized material, grade, or recovery rates
- Geotechnical or hydrogeological considerations during mining being different from what was assumed
- Failure of mining methods to operate as anticipated
- Failure of plant, equipment, or processes to operate as anticipated.

22.2 Financial Model Assumptions

The financial analysis was based on: royalty agreements described in Section 4; the Mineral Resources presented in Section 14; the mine and process plan and assumptions detailed in Sections 16 and 17, respectively; the projected infrastructure requirements outlined in Section 18; the lithium carbonate and sodium hydroxide price assumptions in Section 19; the permitting, social and environmental regime discussions in Section 20; and the capital and operating cost estimates detailed in Section 21.

All costs within the financial model are expressed in fourth-quarter 2023 US dollars.

Responsibilities for the model assumptions and economic analysis are as follows:

• Mine Production, Capital & Operating Costs	GRE
• Processing Capital & Operating Costs	Wood/thyssenkrupp/Saltworks
• G&A and Owners Costs	GRE/Wood/Century
• Owner's Costs, Commodity Prices & Royalties	Century

22.3 Methodology Used

The economic analysis of the Project was undertaken using a DCF model in Microsoft Excel using only the first 40 years of Project life. Cash flows in the model were based on fourth-quarter 2024 US dollars with no escalation of costs or revenues. The DCF model uses a base-case discount rate of 8%. Financing costs were excluded from the valuation.

The analysis included determining lithium carbonate and sodium hydroxide sales from the Project production schedule using the base case prices, less operating costs and royalties to arrive at a before-tax cash flow, and less taxes and capital costs to determine after-tax cash flow. A discount rate of 8% was used to determine the NPV and IRR) from the after-tax cash flow.

22.4 Capital Costs

Capital costs are summarized in Section 21.

22.5 Operating Costs

Operating costs are summarized in Section 21.

22.5.1 Price

The price for lithium carbonate product used in the economic model is $24,000/t assuming free on board (FOB) project site, as discussed in Section 19.

The project has potential to generate additional revenue from by-product sales of sodium hydroxide which is produced in surplus from Project's the chlor-alkali plant. The price for sodium hydroxide is assumed at $600/dmt, as discussed in Section 19. Sales are projected ranging from 357 dmt per day in Project Phase 1 to 975 dmt per day in Project Phase 3.

22.5.2 Royalties

The royalty rate in the model is 1% NSR. Costs for the buy-down of royalties are included in the model.

22.5.3 Taxes

Assumptions made for the tax calculations are:

- Federal Income Tax is applied at 21% after deductions for depletion, depreciation and state and local taxes.
  - Depreciation is calculated using basic straight-line method with seven years on mobile equipment and 15 years on all other plant and facilities.
  - The depletion allowance is calculated on the revenues from lithium carbonate only and is the lesser of 23% of net profits after operating costs or 50% of the net profits after depreciation.
  - Reductions in table income are possible through government incentive programs. Such allowances are not included in the economic model.
- State and local taxes are applied at full rates. Certain deductions or exemptions may apply but are not included in the economic model.
  - Nevada Net Proceeds Tax is applied at 6.1% of net profits after depreciation and depletion.
  - An effective property tax rate of 1.05% is applied on the book value of capital.
  - A sales tax of 6.85% is applied to equipment capital costs based on the rate for Esmeralda County.

The tax calculations are based on the tax regime as of the date of this 2024 FS. The tax calculations should be considered approximations because actual tax estimates involve complex calculations that can be accurately determined only during operations.

22.5.4 Closure Costs

Closure costs would occur beyond the 40-year period included in the economic analysis and are therefore not included in the analysis.

22.5.5 Financing

The analysis was conducted with the assumption that the initial investment would be funded on a 100% equity basis with no debt leveraging.

22.5.6 Inflation

No price inflation or escalation factors were considered.

22.5.7 Economic Results

Results for the project base case are:

- Average annual production of 35,000 tonnes of lithium carbonate
- Average cash costs (a non-GAAP financial measure), inclusive of operating mining costs, processing costs, and site G&A costs, per tonne of lithium carbonate are:
  - $8,240 for operating costs only, no credit for NaOH
  - $2,833 operating costs only, with NaOH as a credit
- After-tax NPV at 8% discount rate of $3.16 billion
- After-tax IRR of 17.2%.

The economic results are summarized in Table 22-1, and the annual economic model is shown in Table 22-2. The cash flow model of the two revenue streams, lithium carbonate and sodium hydroxide, is presented in Figure 22-1.

Table 22-1: Summary of Economic Results

Valuation Indicator	Unit	After Tax
NPV@8%	$B	$3.16
IRR	%	17.2%
Payback	years	9

Table 22-2: Cash Flow Summary

Item	Total	YR -2	YR -1	YR 1	YR 2	YR 3	YR 4	YR 5	YR 6	YR 7	YR 8	YR 9	YR 10	YR 11	YR 12
Production															
High Grade Material Mined (Mt)	287.65	0.00	0.00	1.85	2.74	2.60	3.02	5.19	5.48	5.48	5.76	7.93	8.21	8.21	8.21
Li Grade (ppm)	1,149	0	0	1,094	1,127	1,144	1,143	1,122	1,087	1,188	1,229	1,214	1,114	1,132	1,164
Lithium Contained (Mt)	0.330	0.000	0.000	0.002	0.003	0.003	0.003	0.006	0.006	0.007	0.007	0.010	0.009	0.009	0.010
Waste & Low-Grade Material (Mt)	59.67	0.00	0.00	2.14	3.28	2.87	3.10	5.19	6.03	13.35	7.47	11.70	16.62	10.13	8.23
Plant Feed (Mt)	330.49	0.00	0.00	1.72	2.74	2.74	2.74	5.48	5.48	5.48	5.48	8.21	8.21	8.21	8.21
Lithium Recovered (Mt)*	0.258	0.000	0.000	0.001	0.002	0.002	0.002	0.005	0.005	0.005	0.005	0.008	0.007	0.007	0.007
Li_2CO_3 Produced (kt)	**1,393.4**	**0.0**	**0.0**	**7.8**	**12.8**	**13.0**	**13.0**	**25.5**	**24.7**	**27.0**	**27.9**	**41.4**	**38.0**	**38.6**	**39.7**
NaOH Produced (kt)	**12,556.7**	**0.0**	**0.0**	**130.5**	**130.5**	**130.5**	**130.5**	**237.3**	**237.3**	**237.3**	**237.3**	**355.9**	**355.9**	**355.9**	**355.9**
Revenue															
Li_2CO_3 Gross Revenue ($M)	$33,442	$0	$0	$187	$307	$312	$312	$613	$593	$648	$671	$994	$911	$927	$953
NaOH Gross Revenue ($M)	$7,534	$0	$0	$78	$78	$78	$78	$142	$142	$142	$142	$214	$214	$214	$214
Royalty ($M)	($338)	$0	$0	($4)	($3)	($3)	($3)	($6)	($8)	($6)	($7)	($10)	($9)	($9)	($10)
Net Revenue ($M)	**$40,637**	**$0**	**$0**	**$262**	**$383**	**$387**	**$387**	**$749**	**$727**	**$784**	**$806**	**$1,198**	**$1,116**	**$1,131**	**$1,157**
Total Operating Costs ($M)	($11,417)	$0	$0	($106)	($134)	($136)	($144)	($207)	($209)	($236)	($238)	($322)	($311)	($306)	($304)
Before Tax Cash Flow ($M)	**$29,220**	**$0**	**$0**	**$155**	**$249**	**$251**	**$243**	**$542**	**$519**	**$547**	**$569**	**$876**	**$805**	**$825**	**$853**
Tax															
Federal Tax ($M)	($3,088)	$0	$0	$0	($7)	($3)	$0	($28)	($24)	($18)	($26)	($64)	($57)	($67)	($69)
State and Local Tax ($M)	($1,058)	$0	$0	($2)	($3)	($2)	($2)	($9)	($8)	($7)	($10)	($21)	($20)	($23)	($23)
Capital Costs															
Initial Capital ($M)	($3,552)	($750)	($753)	($41)	($11)	($305)	($311)	($18)	($20)	($650)	($648)	($1)	($0)	($18)	($17)
Sustaining Capital ($M)	($315)	$0	$0	$0	$0	($12)	($10)	($1)	($16)	($20)	($0)	($2)	($27)	($28)	($2)
Working Capital ($M)	($24)	$0	$0	($24)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Capital Cost ($M)	**($3,892)**	**($750)**	**($753)**	**($65)**	**($11)**	**($318)**	**($322)**	**($19)**	**($36)**	**($671)**	**($648)**	**($3)**	**($28)**	**($45)**	**($19)**
Cash Flow															
Net After Tax Cash Flow ($M)	**$21,182**	**($750)**	**($753)**	**$89**	**$227**	**($72)**	**($81)**	**$486**	**$451**	**($148)**	**($115)**	**$788**	**$701**	**$690**	**$741**
Cumulative Cash Flow After Tax ($M)		($750)	($1,504)	($1,415)	($1,187)	($1,259)	($1,340)	($854)	($404)	($551)	($666)	$121	$822	$1,512	$2,253

Item	YR 13	YR 14	YR 15	YR 16	YR 17	YR 18	YR 19	YR 20	YR 21	YR 22	YR 23	YR 24	YR 25	YR 26	YR 27
Production															
High Grade Material Mined (Mt)	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21
Li Grade (ppm)	1,198	1,207	1,184	1,145	1,093	1,126	1,148	1,161	1,169	1,174	1,096	1,040	1,076	1,120	1,153
Lithium Contained (Mt)	0.010	0.010	0.010	0.009	0.009	0.009	0.009	0.010	0.010	0.010	0.009	0.009	0.009	0.009	0.009
Waste & Low-Grade Material (Mt)	0.00	0.00	0.00	11.97	4.22	0.34	0.02	0.00	0.00	0.03	14.13	2.81	0.04	0.00	0.00
Plant Feed (Mt)	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21
Lithium Recovered (Mt)	0.008	0.008	0.008	0.007	0.007	0.007	0.007	0.007	0.007	0.008	0.007	0.007	0.007	0.007	0.007
Li_2CO_3 Produced (kt)	**40.9**	**41.1**	**40.4**	**39.1**	**37.3**	**38.4**	**39.2**	**39.6**	**39.9**	**40.0**	**37.4**	**35.5**	**36.7**	**38.2**	**39.3**
NaOH Produced (kt)	**355.9**	**355.9**	**355.9**	**355.9**	**355.9**	**355.9**	**355.9**	**355.9**	**355.9**	**355.9**	**355.9**	**355.9**	**355.9**	**355.9**	**355.9**
Revenue															
Li_2CO_3 Gross Revenue ($M)	$980	$988	$969	$937	$895	$921	$940	$950	$957	$961	$897	$851	$880	$916	$943
NaOH Gross Revenue ($M)	$214	$214	$214	$214	$214	$214	$214	$214	$214	$214	$214	$214	$214	$214	$214
Royalty ($M)	($10)	($10)	($10)	($9)	($9)	($9)	($9)	($10)	($10)	($10)	($9)	($9)	($9)	($9)	($9)
Net Revenue ($M)	**$1,184**	**$1,191**	**$1,173**	**$1,141**	**$1,099**	**$1,125**	**$1,144**	**$1,155**	**$1,161**	**$1,165**	**$1,101**	**$1,056**	**$1,085**	**$1,121**	**$1,148**
Total Operating Costs ($M)	($306)	($307)	($307)	($338)	($325)	($324)	($306)	($301)	($303)	($306)	($324)	($312)	($326)	($318)	($322)
Before Tax Cash Flow ($M)	**$878**	**$885**	**$866**	**$803**	**$775**	**$801**	**$837**	**$854**	**$858**	**$858**	**$778**	**$744**	**$759**	**$802**	**$826**
Tax															
Federal Tax ($M)	($72)	($86)	($96)	($91)	($88)	($93)	($100)	($103)	($104)	($106)	($94)	($90)	($93)	($100)	($104)
State and Local Tax ($M)	($24)	($28)	($31)	($31)	($29)	($31)	($33)	($34)	($34)	($35)	($32)	($31)	($32)	($34)	($35)
Capital Costs															
Initial Capital ($M)	($0)	($2)	($0)	($1)	($2)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)
Sustaining Capital ($M)	($1)	($9)	($26)	($20)	($2)	($3)	($2)	($1)	($8)	($20)	($21)	($3)	($3)	($1)	($1)
Working Capital ($M)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Capital Cost ($M)	**($1)**	**($11)**	**($26)**	**($21)**	**($3)**	**($4)**	**($2)**	**($1)**	**($8)**	**($20)**	**($21)**	**($3)**	**($3)**	**($1)**	**($1)**
Cash Flow															
Net After Tax Cash Flow ($M)	**$780**	**$759**	**$713**	**$661**	**$654**	**$674**	**$702**	**$716**	**$712**	**$696**	**$631**	**$620**	**$632**	**$667**	**$686**
Cumulative Cash Flow After Tax ($M)	$3,033	$3,792	$4,506	$5,167	$5,821	$6,494	$7,197	$7,912	$8,624	$9,320	$9,951	$10,571	$11,203	$11,869	$12,555

Item	YR 28	YR 29	YR 30	YR 31	YR 32	YR 33	YR 34	YR 35	YR 36	YR 37	YR 38	YR 39	YR 40
Production													
High Grade Material Mined (Mt)	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	1.24
Li Grade (ppm)	1,176	1,206	1,210	1,135	1,138	1,137	1,138	1,144	1,144	1,151	1,151	1,169	1,188
Lithium Contained (Mt)	0.010	0.010	0.010	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.010	0.001
Waste & Low-Grade Material (Mt)	0.00	0.00	0.41	10.20	0.74	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Plant Feed (Mt)	8.21	8.21	9.94	9.32	9.35	9.34	9.35	9.39	9.39	9.45	9.45	9.60	1.47
Lithium Recovered (Mt)	0.008	0.008	0.008	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.001
Li_2CO_3 Produced (kt)	**40.1**	**41.1**	**41.3**	**38.7**	**38.8**	**38.8**	**38.8**	**39.0**	**39.0**	**39.2**	**39.2**	**39.9**	**27.3**
NaOH Produced (kt)	**355.9**	**355.9**	**355.9**	**355.9**	**355.9**	**355.9**	**355.9**	**355.9**	**355.9**	**355.9**	**355.9**	**355.9**	**53.7**
Revenue													
Li_2CO_3 Gross Revenue ($M)	$962	$987	$990	$928	$931	$931	$931	$936	$936	$942	$942	$957	$655
NaOH Gross Revenue ($M)	$214	$214	$214	$214	$214	$214	$214	$214	$214	$214	$214	$214	$32
Royalty ($M)	($10)	($10)	($10)	($9)	($9)	($9)	($9)	($9)	($9)	($9)	($9)	($10)	($7)
Net Revenue ($M)	**$1,166**	**$1,191**	**$1,194**	**$1,133**	**$1,136**	**$1,135**	**$1,136**	**$1,140**	**$1,140**	**$1,146**	**$1,146**	**$1,161**	**$681**
Total Operating Costs ($M)	($306)	($301)	($306)	($332)	($311)	($308)	($326)	($320)	($322)	($307)	($301)	($305)	($294)
Before Tax Cash Flow ($M)	**$860**	**$890**	**$888**	**$801**	**$824**	**$827**	**$810**	**$820**	**$818**	**$839**	**$845**	**$856**	**$387**
Tax													
Federal Tax ($M)	($110)	($114)	($114)	($98)	($104)	($104)	($101)	($103)	($102)	($107)	($108)	($110)	($32)
State and Local Tax ($M)	($37)	($39)	($39)	($34)	($36)	($36)	($35)	($35)	($35)	($37)	($37)	($38)	($15)
Capital Costs													
Initial Capital ($M)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)	($0)
Sustaining Capital ($M)	($10)	($23)	($25)	($0)	($1)	($4)	($2)	($1)	($6)	($2)	($1)	($1)	$0
Working Capital ($M)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Capital Cost ($M)	**($10)**	**($23)**	**($25)**	**($1)**	**($2)**	**($4)**	**($2)**	**($1)**	**($6)**	**($2)**	**($1)**	**($1)**	**($0)**
Cash Flow													
Net After Tax Cash Flow ($M)	**$703**	**$714**	**$711**	**$667**	**$683**	**$682**	**$672**	**$681**	**$674**	**$694**	**$698**	**$708**	**$340**
Cumulative Cash Flow After Tax ($M)	$13,258	$13,972	$14,683	$15,351	$16,034	$16,716	$17,388	$18,069	$18,743	$19,436	$20,135	$20,842	$21,182

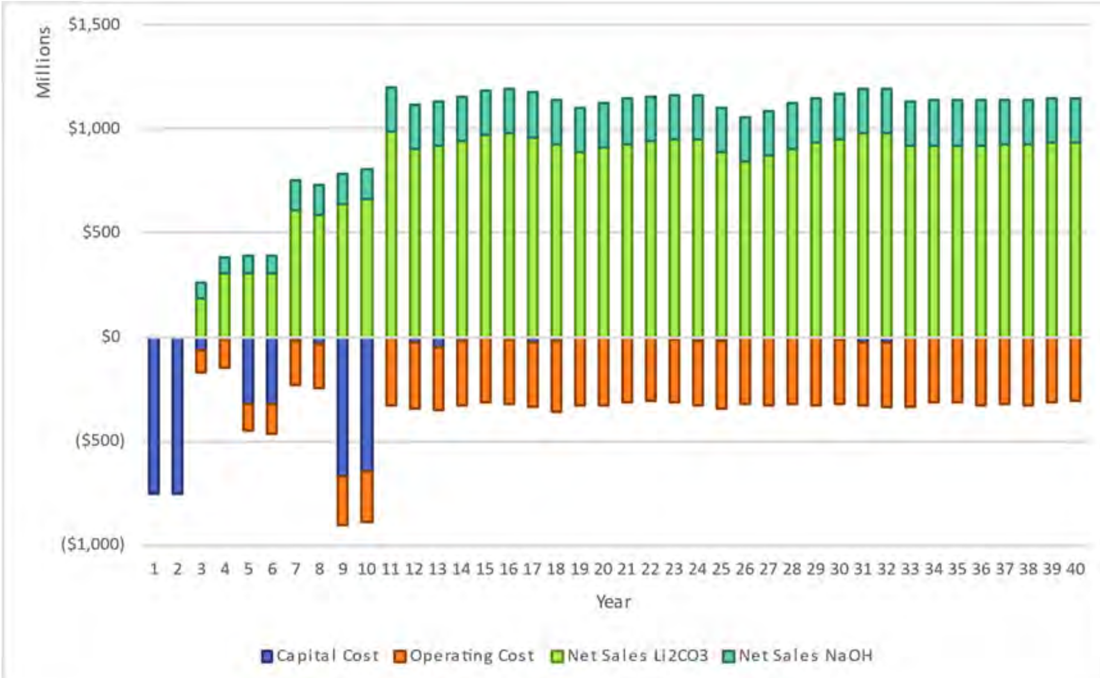


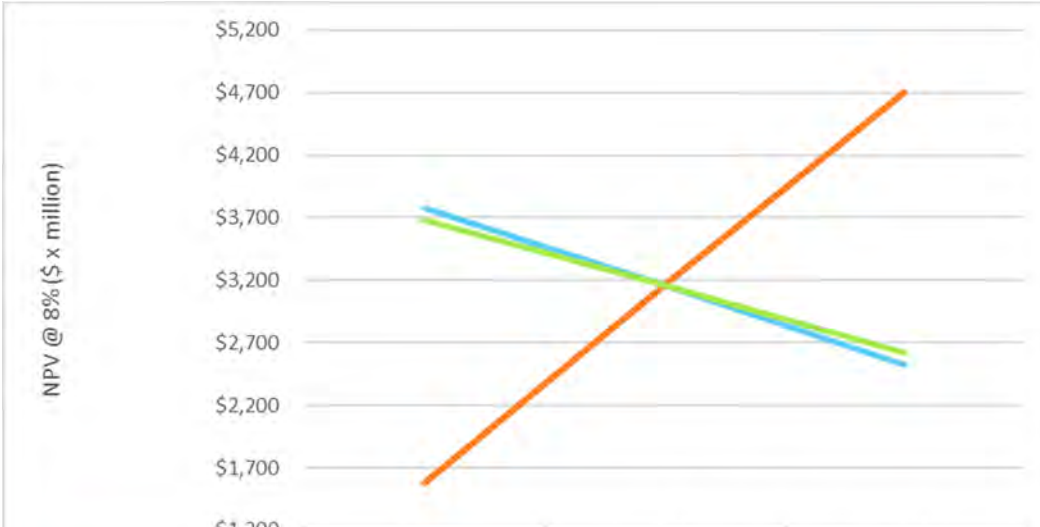
Figure 22-1: Cash Flow Model (Source: GRE, 2024)

22.6 Sensitivity Analyses

Sensitivity of the Project was evaluated to changes in lithium price, lithium grade, capital costs, and operating costs with results shown in Table 22-3, Figure 22-2 and Figure 22-3. The cash flow model is most sensitive to changes in lithium price.

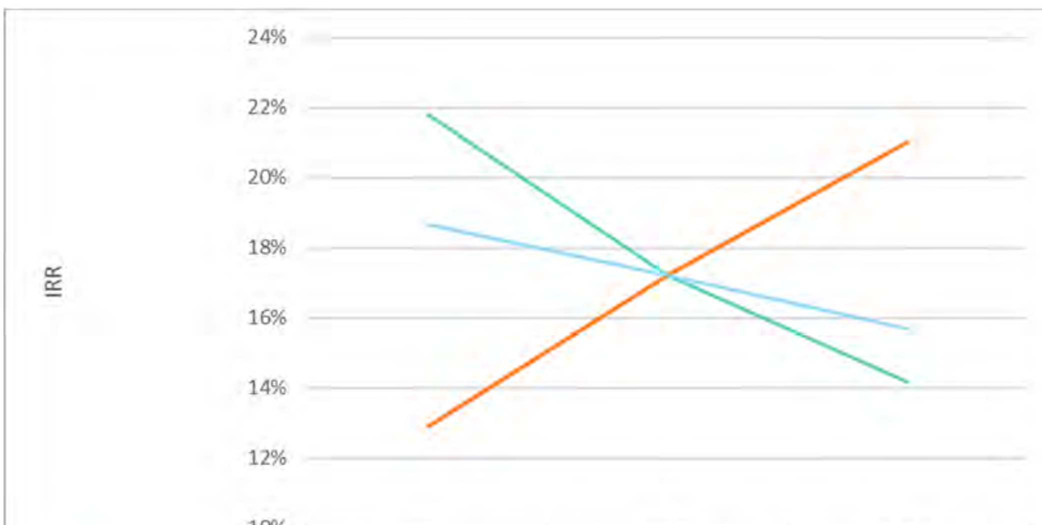
Table 22-3: After-tax Sensitivity Assessment

Variation	Units	-25%	Base Case	+25%
Lithium Price	**%/t LCE**	**$18,000**	**$24,000**	**$30,000**
NPV-8%	$B	$1.58	$3.16	$4.70
IRR	%	12.9%	17.2%	21.0%
Lithium Grade	**ppm**	**862**	**1,149**	**1,436**
NPV-8%	$B	$1.58	$3.16	$4.70
IRR	%	12.9%	17.2%	21.0%
Capital Cost	**$M**	**$2,919**	**$3,892**	**$4,864**
NPV-8%	$B	$3.78	$3.16	$2.53
IRR	%	21.8%	17.2%	14.2%
Operating Cost	**$/t LCE**	**$6,145**	**$8,194**	**$10,242**
NPV-8%	$B	$3.68	$3.16	$2.62
IRR	%	18.6%	17.2%	15.7%



	75%	100%	125%
Lithium Price	$1,578	$3,156	$4,703
Lithium Grade (ppm)	$1,578	$3,156	$4,703
Capital Costs	$3,782	$3,156	$2,525
Operating Costs	$3,681	$3,156	$2,623

Figure 22-2: Sensitivity in After-Tax NPV (Source: GRE, 2024)



	75%	100%	125%
Lithium Price	12.89%	17.20%	21.02%
Lithium Grade (ppm)	12.89%	17.20%	21.02%
Capital Costs	21.79%	17.20%	14.18%
Operating Costs	18.65%	17.20%	15.71%

Figure 22-3: Sensitivity in After-Tax IRR (Source: GRE, 2024)

23.0 ADJACENT PROPERTIES

Seven companies hold mining claims or private property adjacent to the Project. The authors have not independently verified the information on adjacent properties and that such information is not indicative of mineralization on the property that is the subject of this Report. The information summarized below is from publicly available sources.

23.1 Lithium in Sediments

Three companies have claims immediately adjacent to the Project with Mineral Resources for lithium-bearing clays reported to have been prepared to NI 43-101 standards:

- Noram Lithium Corp. holds property north and east of the Project.
- Authium Ltd. holds property east and south of the Project
- Spearmint Resources, Inc. holds property south and east of the Project.

23.2 Lithium in Brine

Four companies have private property or claims immediately adjacent to the Project with active production, mineral resources, or exploration potential for lithium-bearing brines:

- Albemarle Corp. owns property and holds claims west and north of the Project with an active commercial brine operation.
- Pure Energy Minerals, Ltd. holds claims west and north of the Project with a Mineral Resource that is reported to be prepared to NI 43-101 standards. Ameriwest Lithium, Inc. holds claims east and south of the Project's claims.
- Marquee Resources, Ltd. holds claims south of the Project's claims.

24.0 OTHER RELEVENT DATA AND INFORMATION

There are no additional data or information to make this Report understandable and not misleading.

25.0 INTERPRETATION AND CONCLUSIONS

25.1 Summary

This Report presents the results of a FS for the Project.

The Project is based on mining and processing a large flat-lying, lithium claystone deposit. Mineral Reserves support a mine life of approximately 40 years. A chloride leaching process is used to extract lithium from the claystone followed by DLE, concentration, purification and precipitation of the lithium-bearing solution to recover the lithium into a marketable product.

The Project is designed for a three-phase production plan which will generate a LOM average of 34,000 t/a of lithium carbonate.

The Project generates positive cash flows over each of the three production phases, including the initial development in Project Phase 1, sized at 7,500 t/d of mill feed, and two expansion phases, Project Phase 2, at 15,000 t/d, and Project Phase 3, at 22,500 t/d.

The after-tax discounted cash flow analysis results in a positive 17.2% IRR, a $3.16 billion NPV at an 8% discount rate and a payback of nine years at a lithium carbonate price of $24,000/t.

The Project is a potential source of lithium, a strategic commodity, for the US domestic market. Based on these results the Project merits detailed engineering and permitting. Further work is noted by the QPs to address identified opportunities and risks.

25.2 Mineral Tenure, Surface Rights and Royalties

Century provided expert information relating to the mineral tenure, surface rights and royalties that supports the assumptions used in this Report. All claims defining the Property are 100% owned by Cypress, a wholly owned subsidiary of Century and provide Century with the rights to access all brines, placer, and lode minerals on the Property and subject to four separate underlying royalty agreements. All claims are all in good standing with the BLM and Esmeralda County through September 4, 2024. The Mineral Resource and Mineral Reserve estimates defined and described in this Report fall entirely on Century's unpatented mining claims.

25.3 Geology and Mineralization

The Clayton Valley is an endorheic basin in western Nevada near the southwestern margin of the Basin and Range Province, a vast physiographic region in the Western US. The western portion of the project area is dominated by the uplifted basement rocks of Angel Island which consist of metavolcanic and clastic rocks, and colluvium. The southern and eastern portions are dominated by uplifted, lacustrine sedimentary units of the Esmeralda Formation. Locally the Esmeralda Formation is comprised of fine grained sedimentary and tuffaceous units.

Lacustrine deposits, salt beds, and lithium-rich brines in the basin were formed during the Pleistocene. Diagenetic alteration of vitric material to zeolites and clay minerals occurred and resulted in anomalously high lithium concentrations.

Understanding Clayton Valley deposit setting, lithologies, mineralization, and the geological, structural, and alteration controls on mineralization is sufficient to support the estimation of Mineral Resource and Mineral Reserves.

25.4 Exploration, Drilling and Analytical Data Collection in Support of Mineral Resource Estimation

The exploration programs completed at the Project to date are appropriate for the style of deposit and mineralization present on the Property.

The drilling and sample collection methods used by Century at the Project are acceptable for Mineral Resource and Mineral Reserve estimation.

The sample preparation, analysis, and security practices used by Century at the Project are acceptable and meet industry-standard practices and are sufficient to support Mineral Resource and Mineral Reserve estimation.

Century initiated a dynamic QA/QC program for the Project and used it in all sample collection and analysis streams from 2017 to 2022. The QA/QC protocol became more comprehensive and detailed with progressive years. The QA/QC submission rates meet industry-accepted standards and did not detect any material sample biases in the data reviewed that support the Mineral Resource and Mineral Reserve estimations.

Data verification concluded that the data collected from the Project adequately supports the geological interpretations and constituted a database of sufficient quality to support the use of the data in Mineral Resource and Mineral Reserve estimation.

25.5 Metallurgical Test Work

Metallurgical, process development and pilot plant testing were completed through mid- 2023 and were used for flowsheet development, equipment selection, evolution of operating parameters and development of process design criteria. All test work was performed on material collected from the area of the proposed pit and is considered representative of the Mineral Reserves. Metallurgical practices identified off the shelf technology that was readily scalable. Where data was not available, assumptions were made based on best industry practices and data. The Project will use chloride leaching to recover lithium from the claystone deposit. The process flowsheet is supported by data generated over several years of bench scale and pilot plant testing.

Attrition scrubbing has proven an effective method to reduce lithium-bearing clays to their smallest mineral component, remove gangue material, and allow for optimum leaching without grinding.

An optimal acid dose to maximize lithium production was determined during testing. Based on later pilot plant results, approximately 88% lithium extraction can be expected in the leach stage.

Neutralization using sodium hydroxide is accomplished after leaching followed by pressure filtration to produce a filter cake suitable for dry stacking in the TSF.

DLE has proven successful in removing elements such sodium, potassium, calcium, magnesium and boron, and eliminating the need for evaporation in the flowsheet.

Treatment of concentrated lithium solution from the pilot plant has consistently resulted in lithium carbonate grading at greater than 99.8%. The chlor-alkali plant generates hydrochloric acid and sodium hydroxide for use in the process. At the design rates, surplus sodium hydroxide will be produced and available for sale.

Sufficient water supply is permitted for the current flowsheet design and operating parameters. No concerns were identified that would impact process performance or reagent consumption.

25.6 Mining

All materials within the Project's resource area are relatively flat lying soft sedimentary rocks ranging from 100 to 140 m in thickness. The deposit is covered by a thin veneer of alluvial gravels. The material is soft, so drilling and blasting will not be required.

The cold planer/conveyor method was selected as the preferred mining method for the mineralized material because: 1) it allows for drying of the material before placing onto conveyors, reducing wear on and cleaning of the conveyors, 2) it requires fewer jump conveyors to manage, 3) it does not require a feeder-breaker to break up and size the material, and 4) it results in lower capital and operating costs.

The waste material and low-grade mineralized material will be removed using scrapers and hauled to waste and low-grade stockpiles, respectively. Additionally, waste material will be backfilled into the pit to prepare for construction of a lined in-pit TSF if required or used to construct 30 cm-thick compacted clay liners for the waste and low-grade material stockpiles.

Geotechnical slope stability analyses were completed under static and pseudo-static loading conditions. This site has no shallow groundwater, and the pit design is above any natural aquifers; therefore, slope stability analyses did not include hydrostatic loading. Slope stability results met acceptable factors of safety under both static and pseudo-static conditions.

Within the final pit shell, six pit phases were generated. At the design nominal production rate of 7,500 t/d for years 1 through 4, 15,000 t/d for years 5 through 8, and 22,500 t/d for the remainder of the Project. The mine life represented by these six pit phases is 40 years.

25.7 Recovery Methods

The process design was developed from metallurgical test work conducted on representative samples and supports the current flowsheet. The process plant has been designed based on a plant capacity of 15,000 t/d and was modified for an initial throughput of 7.500 t/d. The expansion to 22,500 t/d was based on 15,000 t/d with additional equipment to be included as a separate plant facility.

25.8 Infrastructure

The site requires the development of a new 1.8 km long access road; a process facility including a chlor-alkali plant; ancillary facilities to support process and mining operations; waste management in the form of WRSFs, low grade stockpiles, and TSF; water management including stormwater diversion and contact water ponds; and water and power supply and distribution.

Contact water ponds are designed for the process plant, TSF and initial low-grade stockpile. Additional contact water ponds will be required, initially for the WRSF (approximately $2 million) and future low-grade stockpile and WRSF later in the mine life.

Water for Project Phases 1 and 2 is sourced from a 31km long pipeline with the potential to locate a water supply source closer to the Project to support Project Phase 3.

NV Energy will be constructing a high voltage powerline close to the site, to serve planned renewable energy projects in the region. Connection to this service will provide sufficient power for all Project Phases of the Project.

25.8.1 Tailings Storage Facility

The TSF is designed as a geomembrane lined facility to accommodate all the tailings produced during the life of mine. The tailings material will be mechanically dried to a cake-like material using a filter press and placed in a dry stack fashion. The TSF is designed with a capacity of 288 Mt at an average dry density of 1.35 t/m^3.

The TSF is designed in six phases (in line with the pit phases), TSF Phases 1 and 2 will be constructed on the ground surface east of the open pit mine, and TSF Phases 3 to 6 will be constructed as a combination of in pit fill and ground surface to form one TFS upon completion.

25.9 Markets and Contracts

A current commodity market research report was obtained for both lithium carbonate and sodium hydroxide by independent research companies recognized as experts in generating commodity reports for these commodities. The analysis provided long-term price forecasts for both saleable products. The research predicts a lithium supply deficit by 2030 given the worldwide transition to EVs currently requiring the use of lithium-ion batteries and increased use in stationary battery storage. The research predicts growth in sodium hydroxide demand domestically as China increases and absorbs Asian supply, and with existing US chlor-alkali plants forced to close or upgrade from older, less environmentally friendly technology.

The lithium carbonate price used to estimate Mineral Resources and Mineral Reserves, and in the economic analysis for the Project is $24,000/t. The price for sodium hydroxide produced by the chlor-alkali plant used in the economic analysis for the Project is $600/dmt.

There are currently no contracts or sales agreements in place for mining, concentrating, smelting, refining, transportation handling, hedging, forward sales contractors or arrangements.

25.10 Capital and Operating Costs

The capital cost estimate is classified as a Class 3 estimate following the AACE International Guidelines Practice No. 47-R-11 with an accuracy within the range of +/- 15% of the final project cost, including contingency. Initial capital cost, for Project Phase 1 is $1,580.7 million. The total capital cost for the Project is $3,576.2 million phased over the first nine years.

Sustaining capital over the life of the Project is estimated at $315.1 million for tailings facility expansion and equipment replacements. These costs are in addition to the expansion capital costs shown above.

Operating costs were estimated for mining, process and G&A. Over the LOM, the operating costs will average from $49.45/t of plant feed in Project Phase 1 to $38.27/t in Project Phase 3.

25.11 Economic Analysis

Under the assumptions presented in this Report, the after-tax economic results for the Project are summarized in Table 25-1. The Project is most sensitive to changes in lithium price, grade and recovery.

Table 25-1: Summary of Economic Results

Valuation Indicator	Unit	After Tax
NPV@8%	$B	$3.16
IRR	%	17.2%
Payback	years	9

25.12 Environmental, Permitting and Social Considerations

The two primary regulatory agencies, BLM and NDEP, are experienced at permitting mining operations in Nevada, which is considered a mining friendly state. The processes for Federal approval and state permitting are very well defined. Much of the upfront work needed for the BLM and the NEPA process has been completed or is near completion, including BLM approval of several of the baseline resource reports. Additionally, the BLM and NDEP have a public involvement process to obtain input from stakeholders and the public.

25.13 Opportunities

The following opportunities have been identified for the Project.

- The Project is a potential new source of lithium in the US. The US government has designated lithium a strategic mineral, therefore, the Project may have opportunity for accelerated permitting, access to designated financial support programs, and possible tax incentives.
- Although the sales prices of lithium carbonate and sodium hydroxide are subject to market fluctuations, forecasts indicate growth in domestic US demand supporting the price assumptions in this Report.
- Interest in battery metals and lithium as a commodity has spurred improvements in processing and the application of new technologies such as DLE. Application of such improvements may benefit the Project through increased lithium recovery, decreased reagent consumptions, or reduced capital and/or operating costs.
- Sales of surplus sodium hydroxide have potential to contribute significantly to the Project's cash flow. Use of lower cost neutralizing reagents in lieu of sodium hydroxide, such as limestone, calcium oxide or magnesium hydroxide, may increase the amount of sodium hydroxide available for sale.
- The Project has a large open area south of the pit which has been identified as suitable for development of a solar power field. A preliminary assessment by Wood identified the potential for constructing a 120 MW solar field at this location.
- Century holds a 256 ha geothermal lease 7 km northeast of the Project. The site requires exploration drilling to determine geothermal energy potential. There are two other active geothermal exploration/development projects in the area which also represent possible additional sources of power supply.
- Alternative sources of water supply closer to the plant site will be investigated to reduce costs and to mitigate the risks in maintaining this pipeline along the roads that are subject to flash floods and erosion.
- Costs for the TSF could be reduced if the geomembrane liner is replaced or augmented with non-permeable materials from the Property, if determined acceptable with engineering and permitting requirements.
- The capital costs associated with concrete and foundations may be reduced by locating a source of aggregate closer to the Project.

25.14 Risks

The following risks have been identified for the Project.

- The Project is vulnerable to changes in the general economy, and especially, to the rate of adoption of battery metals for use in the EV market and energy storage. Changes in the sale price of lithium carbonate and sodium hydroxide may drop due to market fluctuations, possible oversupply from new and existing producers and/or reduction in demand.
- Permitting constraints or delay in the NEPA approval process may occur due to public or non-governmental organization (NGO) opposition to NDEP and BLM permitting process and approvals.
- Water supply for the Project could be impacted by unforeseen political or legal challenges to Century's water rights permit; damage to constructed pipeline or insufficient water volume at the source under water rights permits for the Project.
- The Project could be impacted by inability to secure a favorable power purchase agreement and/or limited by the power available for the Project.
- Average density was used in the estimation of Mineral Resources and Reserves. Actual tonnages may vary if densities differ locally between the different clay units. Lower than expected process recoveries for lithium and/or higher reagent consumptions may occur due to unforeseen changes in the estimated Mineral Reserves.
- Samples of tailings materials tested for the TSF design may not reflect the current process design.
- Strength values of liners in TSF design are based on conservative published data, not test work. Because of this, additional test work may be required for final engineering and/or permit requirements.
- Geotechnical investigations are limited to shallow surface borings, test pits and geophysical surveys. Additional test work may be required in detailed engineering to support the foundation designs for the process facility and TSF.
- Potential for increased capital cost and schedule delay may occur if potentially acid generating material is identified, requiring lining of low grade stockpiles and/or WRSFs.

26.0 RECOMMENDATIONS

26.1 Summary

Further steps are required to advance the Project prior to detailed engineering and permitting. The QPs make the following recommendations to address areas of opportunity and risk.

26.2 Geology and Mineral Resources

The QPs recommend an in-fill drilling program within and immediately adjacent to the planned Pit Phase 1. The drill plan would assess the potential for an area of higher relative grade lithium mineralization, provide material for additional pit slope stability analysis, strengthen the detail of the geologic model, and potentially increase confidence in the Mineral Resource estimate.

The goals of the program would be 1) collect additional data to optimize the Project's Phase 1 economic model, 2) collect material for density test work, and 3) collect material for geotechnical test work. This drill program would include ten core holes to a maximum depth of 130 m each, totaling 1,300 m. Inclusive of sampling, assaying, and density and geotechnical test work, the total cost for the program is estimated at $0.75 million.

26.3 Metallurgical Test Work

Additional studies which include test work at the pilot plant, are recommended to advance the Project and support detailed engineering. Testing at the pilot plant to date has been on sample material derived from surface excavation in claystone zone 1. Pilot runs on deeper material from claystone zones 1 and 2 are recommended to confirm the observations from bench tests that the behavior of deeper materials is the same or better than the material tested so far at the pilot plant. Approximately 15 tonnes of deeper material was collected during Century's sonic drill program for this testing. The estimated cost for this program, at three months of pilot plant operation, is $0.6 million.

Retention of PLS by the tailings is identified as a source of lithium loss in the process. Further work through selected vendors of pressure filtration equipment is recommended to determine how to minimize moisture content and improve lithium recovery. Filtration testing is also needed to ensure optimum filter sizing design pressure. The cost of these tests is estimated at $20,000.

Industry-wide research on DLE resins has been ongoing. Recent improvements have been reported that could lead to more durable and efficient materials for lithium recovery and softening. Further testing with alternative materials is recommended and could lead to reduced capital requirements by the reduction of resin volumes and DLE tanks, piping and equipment.

The cost of this testing, which is allocated for bench tests and two months of pilot plant operation is estimated at $0.5 million.

The value from the sale of surplus sodium hydroxide appears significant. Further testing using lower cost materials, such as limestone, calcium oxide or magnesium hydroxide, is recommended to replace some or all the sodium hydroxide used in neutralization, thereby increasing the amount of sodium hydroxide available for sale. The cost of this testing is estimated at $0.6 million based on three months of pilot plant operation.

To date, lithium carbonate samples have been produced off site. Addition of a final lithium carbonate precipitation stage is recommended at the pilot plant to better understand and minimize recycle streams within the overall process. The cost for this work is estimated at $0.1 million for equipment with other costs covered in pilot plant operations above.

Additional improvement in leaching and neutralizations stages may be possible through the review of leach kinetics to optimize agitator design and reduce energy requirements. The estimated cost is approximately $35,000.

Total estimated cost for metallurgical test work is $1.855 million.

26.4 Mining

The QPs find the mine design, selection of mining equipment, and the mine production schedule are sufficient to support the next stage of the Project, The QPs have no further recommendations unless changes occur in the resource model with further drilling or geotechnical information.

26.5 Geotechnical

Additional geotechnical data are to be collected to supplement the existing characterization data and further support the TSF design relevant to the following:

- Confirm TSF and process plant foundation characterization
- Confirm tailings characterization
- Confirm Liner interface strength
- Examine opportunity to use a compacted soil layer in lieu of a geomembrane liner.

The estimated cost for the geotechnical work is $0.3 million.

26.6 Environmental, Permitting and Social Considerations

Additional characterization of ore, waste rock, and tailings will be critical for the WPCP with NDEP, including acid base accounting to confirm there is no presence of potentially acid generating material. Also, identification and characterization of groundwater resources beneath the Project area will be needed for the WPCP. A conceptual groundwater model (CSM) is currently being developed. The need for additional information on groundwater resources will be determined following the completion of the CSM. The estimated cost is $0.2 million.

26.7 Infrastructure

Water supply has been estimated to require construction of a pipeline from a source west of the Project. Review of the water supply options closer to the plant site is recommended to reduce the length of pipeline and the cost of infrastructure. Two areas, one to the east and one to the south of the Project have been identified as potential sources for relocating the water supply source. The estimated cost for testing these areas is $2.5 million, to include drilling four holes at 700 m in depth in each.

Further discussion with NV Energy is needed to plan connection of the Project with the electrical grid and determine contract rates for power supply. There is no cost attributed to this activity.

To reduce the cost of construction materials, investigation of potential borrow sources for production of concrete aggregate is recommended. Estimated cost of site investigations is $25,000.

26.8 Summary of Costs

Table 26-1 summarized the cost of the recommended work program for progressing the Project.

Table 26-1: Summary of Costs for Recommended Work Program

Item	Cost ($M)
Geology and Mineral Resources	0.750
Metallurgical Test Work	1.855
Geotechnical	0.30
Environmental, Permitting and Social Considerations	0.20
Infrastructure	2.525
Total	**5.63**

27.0 REFERENCES

AACE International. 2020. AACE International Recommended Practice No. 47R-11 Cost Estimate Classification System – As Applied in Engineering, Procurement, and Construction for the Mining and Mineral Processing Industries, TCM Framework: 7.3 – Cost Estimating and Budgeting.

Albers, J. P. 1967. Belt of Sigmoidal Bending and Right-lateral Faulting in the Western Great Basin. *Geol. Soc. Amer. Bull.* 1967, Vol. 78, pp. 143-156.

ALS. 2018 - 2019. Various Correspondence and Testing Reports.

Anderson, C. 2020. Senior Design Project, Flocculent Testing, March.

Andritz. 2019. Laboratory Report, Centrifuge Testing - Report Number L-14088, July.

Andritz. 2019. Laboratory Report, Filter Testing - Report Number L-14040, September.

Asher-Bolinder, S. 1991. Descriptive Model of Lithium in Smectites of Closed Basins. [ed.] G. J. Orris and J. D. Bliss. *Some Industrial Minerals Deposit Models, Descriptive Deposit Models, USGS Open File Report 91-11A.* 1991, pp. 11-12.

Ausenco Engineering Canada Inc. 2020. Acid Supply Trade-Off Study February.

Ausenco Engineering Canada Inc. 2019. Clayton Valley PFS Review and Gap Analysis.

Benchmark Mineral Intelligence. 2024. Lithium Forecast Report-Q1 2024

Bistolas, T. 2024. U.S. Chlor-alkali Market Update.

BLM. 2019. September 2019 Competitive Geothermal Lease Sale EA. 2019. DOI-BLM-B000-2019-0009-EA. September.

Bradley, Dwight, et al. 2013. A Preliminary Deposit Model for Lithium Brines. *U.S. Geological Survey Open-File Report 2013-1006.* 6 p., 2013.

Bucknam, R. C. and Anderson, R. E. 1979. Estimation of Fault Scarp Ages form a Scarp-Height-Slope-Angle Relationship. *Geology.* 1979, Vol. 7, pp. 11-14.

Bureau of Mining Reclamation and Regulation. 1994. Stability Requirements Heap Leach Pads, by Bureau of Mining Regulation and Reclamation, Nevada Division of Environmental Protection, April 22, 1994.

Chellam, S., Serra, C. A. and Wiesner, M. R. 1998. Estimating Costs for Integrated Membrane Systems. *Journal American Water Works Association.* No. 11, 1998, Vol. 90, pp. 96-104.

CIM. 2014. CIM Definition Standards for Mineral Resources and Mineral Reserves. s.l. : CIM Standing Committee on Reserve Definitions, 2014.

CIM. 2019. CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines. s.l. : CIM Mineral Resource & Mineral Reserve Committee, 2019.

CIM. 2018. CIM Mineral Exploration Best Practice Guidelines. s.l. : CIM Mineral Resource & mineral Reserve Committee, 2018.

CMS. 2018. Dean Lithium Claystone Metallurgical Review, March.

CMS. 2020. Various Correspondence, Laboratory Testing Reports, 2019 - 2020. 2020.

Costa, R. and Pinho, M. 2006. Performance and Cost Estimation of Namofiltration for Surface Water Treatment in Drinking Water Production. *Desalination*. Vol. 196, pp. 55-65.

Davis, J. R. and Vine, J. D. 1979. Stratigraphic and Tectonic Setting of the Lithium Rine Field, Clayton Valley, Nevada. *RMAG-UGA 1979 Basin and Range Symposium*. 1979, pp. 421-430.

Davis, J. R., Friedman, I. and Gleason, J. D. 1986. Origin of the Lithium-rich Brine, Clayton Valley, Nevada, US. *U.S. Geological Survey Bulletin*. 1986, pp. 131-138.

Ekren, E. B., Bucknam, R. C., Carr, W. J., Dixon, G. L., Quinlivan, W. D. 1976. East-trending Structural Lineaments in Central Nevada. *U.S. Geol. Survey Prof. Paper 986*. p. 16, 1976.

Exec. Order No. 13817. 2017. A Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals. 2017. 3 C.F.R..

Fayram, T. S., Lane, T. A., and Kalmbach, D. W. 2020. NI 43-101 Technical Report Prefeasibility Study, Clayton Valley Lithium Project, Esmeralda County, Nevada. Effective date May 19, 2020.

Fayram, T. S., Lane, T. A., and Brown, J. J. 2021. NI 43-101 Technical Report Prefeasibility Study, Clayton Valley Lithium Project, Esmeralda County, Nevada. Effective date August 5, 2020.

Global Industry Standard on Tailings Management, by International Council on Mining and Metals (ICMM). 2020. UN Environment Programme, Principles for Responsible Investment (PRI), published on GlobalTailingsReview.org, August 2020.

Lane, T., Harvey, T., Samari, H., and Brown, J. J. 2018a. Resource Estimate NI 43-101 Technical Report, Clayton Valley Lithium Project Esmeralda County, Nevada, USA.Effective date May 1, 2018.

Lane, T., Harvey, T., Fayram, T., Samari, H., and Brown, J. J. 2018b. Preliminary Economic Assessment Technical Report, Clayton Valley Lithium Project, Esmeralda County, Nevada. Effective date September 4, 2018

Irwin, L. 2020. Various Correspondence - Flocculent Usage/Testing.

Killian, Stephane. 2018. Ameco Group - Stacker/Reclaimer Correspondence, July.

Kunasz, I. A. 1974. Lithium Occurrence in the Brines of Clayton Valley, Esmeralda county, Nevada. [ed.] A. H. Koogan. *Fourth Symposium on Salt.* 1974, Vol. 1, pp. 57-66.

Locke, A., Billingsly, P. R. and Mayo, E. B. 1940. Sierra Nevada Tectonic Patterns. *Geol. Soc. Amer. Bull.* 1940, Vol. 51, pp. 513-540.

Leps. 1970. Review of Shearing Strength of Rockfill. Journal of the Soil Mechanics and Foundations Division ASCE, 1159-1170.

Lodewijks, T. A. 2017. Stockyard Layout (re)design, Delft University.

Marvin, R. D. 2018. Dean Lithium Project National Instrument 43-101 Technical Report. Effective date 3 February 2018.

Mejia and Aliakbari. 2023. Fraser Institute Annual Survey of Mining Companies 2022.

Montolvo, P. 2019. Solids-Liquid Separation Testing Report, Pocock Industrial, May.

Morissette, C. L. 2012. The Impact of Geological Environment on the Lithium Concentration and Structural Composition of Hectorite Clays. s.l. : M.S. Thesis, University of Nevada, Reno, 2012. 244 p.

Mular, A., Halbe, D. and Barratt, D. 2002. Mineral Processing Plant Design, Practice and Control, Volume 1, Sec 2 and 3.

Munk, L. and Chamberlain, C. P. 2011. Final Technical Report: G10AP00056 - Lithium Brine Resources: A Predictive Exploration Model. s.l. : USGS Mineral Resources External Research Program.

NDEP. 2020. Stability Requirements for Heap Leach Pads, Bureau of Mining Regulation and Reclamation, State of Nevada, https://ndep.nv.gov/uploads/land-mining-regs-guidance-docs/20210308_StabilityReq_HLPs_ADA.pdf.

Oldow, J. S., et al. 2009. Late Miocene to Pliocene Synextensional Deposition in Fault-bounded Basins within the Upper Plate of the Western Silver Peak-Lone Mountain Extensional Complex, West-Central Nevada. *Geological Society of America, Special Papers 2009.* 2009, Vol. 447, doi: 10.1130/2009.2447(14), pp. 275-312.

Pace, C. 2018. Derrick Fine Screen Solutions, Derrick Flo-Divider Brochure, Derrick Equipment, July.

Peek Consulting Inc. 2017. NI 43-101 Technical Report, Lithium Inferred Mineral Resource Estimate, Clayton Valley, Esmerala County, Nevada, USA.

Peek Consulting Inc. 2019. NI-43-101 Technical Report Updated Inferred Lithium Mineral Resource Estimate Zeus Project, Clayton Valley Esmeralda County, Nevada, USA.

Peek Consulting Inc. 2016. Technical Report, Lithium Exploration Project, Clayton Valley, Esmeralda County, Nevada, USA.

Price, J. G., Lechler, P. J., Lear, M. B., Giles, T. R. 2000. Possible Volcanic Sources of Lithium in Brines in Clayton Valley, Nevada. [ed.] J. K. Cluer, et al. *Geology and Ore Deposits 2000: The Great Basin and Beyond.* 2000, pp. 241-248.

Rima, U. S. 2013. Characterization and Centrifuge Dewatering of Oil Sands Fine Tailings, 2013 Thesis. 2013. pp. 20-31.

Robinson, P. T., McKee, E. H. and Moiola, R. J. 1968. Cenozoic Volcanism and Sedimentation, Silver Peak Region, Western Nevada and Adjacent California. *Geological Society of America Memoir 116.* 1968, pp. 577-611.

Shawe, D. R. 1965. Strike-slip Control of Basin-Range Structure Indicated by Historical Faults in Western Nevada. *Geol. Soc. Amer. Bull.* 1965, Vol. 76, pp. 1361-1378.

SlopeW GeoStudio Suite v. 11.3.2.23783, SEEQUENT, 2021.

Stantec. 2020. Clayton Valley Lithium Project Bilogical Baseline Report, December**.**

Stewart, J. H. 1967. Possible Large Right-lateral Displacement along Fault and Shear Zones in the Death Valley Area, California and Nevada. *Gol. Soc. Amer. Bull.* 1967, Vol. 78, pp. 131-142.

Turner, H. W. 1900. The Esmeralda Formation, A Fresh Water Lake Deposit. *U.S. Geological Survey Annual Report 21.* 1900, pt. 2, pp. 191-208.

USGS. 2018. Long-term National Seismic Hazard Map, , **2018 Long-term National Seismic Hazard Map | U.S. Geological Survey (usgs.gov)**.

Wakeman, R. and Tarleton, S. 2005. Solid Liquid Separation - Scale-up of Industrial Equipment, Sec 6. 2005. pp. 239-281.

Wallace, R. E. 1977. Profiles and Ages of Young Fault Carps. *Jour. of Geophys. Research.* 1977, Vol. 67, pp. 2385-2389.

Western Biological. 2023. Angel Island Mine Project Biological Baseline Survey Report, December**.**

Willis, D. 2020. Modular Skid Pilot Plant Proposal, DEPOR Equipment, REF # D2002-14-059PP, March.

Wohlbier, R. H. 1977. Stacking, Blending, Reclaiming. 1977. pp. 1-57.

Zampirro, D. 2005. Hydrogeology of Clayton Valley Brine Deposits, Esmeralda County, Nevada. *The Professional Geologist.* 2005, Vol. 42, No. 3, pp. 46-54.

Appendix A Claims List

Claim Name	Type	Listed Owner	Serial Number	Date Of Location	Size (ha)	Township	Range	Section(s)	Royalty	NOTES
ANGEL 1	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379934	12/10/2015	8.09	0020S	0400E	28	NSR1	Mt Diablo Meridian no. 21
ANGEL 2	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379935	12/10/2015	8.09	0020S	0400E	28	NSR1	503 active claims
ANGEL 3	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379936	12/10/2015	8.09	0020S	0400E	28	NSR1	Esmeralda County
ANGEL 4	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379937	12/10/2015	8.09	0020S	0400E	33	NSR1	
ANGEL 5	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101330726	12/10/2015	8.09	0020S	0400E	33	NSR1	NSR1 - glory
ANGEL 6	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101330727	12/10/2015	8.09	0020S	0400E	33	NSR1	NSR2 - dean
ANGEL 7	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101330728	12/10/2015	8.09	0020S	0400E	33	NSR1	NSR3 - enertopia
ANGEL 8	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101330729	12/11/2015	8.09	0020S	0400E	33	NSR1	NA - none
ANGEL 9	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101330730	12/11/2015	8.09	0020S	0400E	33	NSR1	
ANGEL 10	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101330731	12/11/2015	8.09	0020S	0400E	33	NSR1	
ANGEL 11	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101330732	12/11/2015	8.36	0020S	0400E	33	NSR1	
CLAY 1	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101648143	10/8/2017	8.36	0020S	0400E	23	NSR2	
CLAY 2	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101648144	10/8/2017	8.36	0020S	0400E	23	NSR2	
CLAY 3	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101648145	10/8/2017	8.36	0020S	0400E	23	NSR2	
CLAY 4	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101648146	10/8/2017	8.36	0020S	0400E	23	NSR2	
CLAY 5	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101648147	10/8/2017	8.36	0020S	0400E	22 23	NSR2	
CLAY 6	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101648148	10/8/2017	8.36	0020S	0400E	22 23	NSR2	
CLAY 7	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101648149	10/8/2017	8.36	0020S	0400E	22	NSR2	
CLAY 8	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101648150	10/8/2017	8.36	0020S	0400E	22	NSR2	
CLAY 9	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101648151	10/8/2017	8.36	0020S	0400E	22	NSR2	
CLAY 10	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101648152	10/8/2017	8.36	0020S	0400E	22	NSR2	
CLAY 11	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101648153	10/8/2017	8.36	0020S	0400E	22	NSR2	
CLAY 12	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101648154	10/8/2017	8.36	0020S	0400E	22	NSR2	
CLAY 13	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101648155	10/8/2017	8.36	0020S	0400E	22	NSR2	
CLAY 14	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101648156	10/8/2017	8.36	0020S	0400E	22	NSR2	
CLAY 15	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101648157	10/8/2017	8.36	0020S	0400E	22	NSR2	
CLAY 16	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101648158	10/8/2017	8.36	0020S	0400E	22	NSR2	
CLAY 17	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649338	10/8/2017	8.36	0020S	0400E	22	NSR2	
CLAY 18	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649339	10/8/2017	8.36	0020S	0400E	22	NSR2	
CLAY 19	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649340	10/8/2017	8.36	0020S	0400E	22	NSR2	
CLAY 20	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649341	10/8/2017	8.36	0020S	0400E	22	NSR2	
CLAY 21	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649342	10/8/2017	8.36	0020S	0400E	21 22	NSR2	
CLAY 22	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649343	10/8/2017	8.36	0020S	0400E	21 22	NSR2	
CLAY 23	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649344	10/8/2017	8.36	0020S	0400E	21	NSR2	
CLAY 24	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649345	10/8/2017	8.36	0020S	0400E	21	NSR2	
CLAY 25	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649346	10/8/2017	8.36	0020S	0400E	21	NSR2	
CLAY 26	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649347	10/8/2017	8.36	0020S	0400E	21	NSR2	
CLAY 27	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649348	10/7/2017	8.36	0020S	0400E	23	NSR2	
CLAY 28	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649349	10/7/2017	8.36	0020S	0400E	14 23	NSR2	
CLAY 29	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649350	10/7/2017	8.36	0020S	0400E	23	NSR2	
CLAY 30	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649351	10/7/2017	8.36	0020S	0400E	14 23	NSR2	
CLAY 31	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649352	10/7/2017	8.36	0020S	0400E	22	NSR2	
CLAY 32	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649353	10/7/2017	8.36	0020S	0400E	15 22	NSR2	
CLAY 33	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649354	10/7/2017	8.36	0020S	0400E	22	NSR2	
CLAY 34	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649355	10/7/2017	8.36	0020S	0400E	15 22	NSR2	
CLAY 35	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649356	10/7/2017	8.36	0020S	0400E	22	NSR2	
CLAY 36	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649357	10/7/2017	8.36	0020S	0400E	15 22	NSR2	
CLAY 37	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101649358	10/7/2017	8.36	0020S	0400E	22	NSR2	
CLAY 38	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570738	10/7/2017	8.36	0020S	0400E	15 22	NSR2	
CLAY 39	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570739	10/7/2017	8.36	0020S	0400E	22	NSR2	
CLAY 40	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570740	10/7/2017	8.36	0020S	0400E	15 22	NSR2	
CLAY 41	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570741	10/7/2017	8.36	0020S	0400E	22	NSR2	
CLAY 42	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570742	10/7/2017	8.36	0020S	0400E	15 22	NSR2	
CLAY 43	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570743	10/7/2017	8.36	0020S	0400E	22	NSR2	
CLAY 44	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570744	10/7/2017	8.36	0020S	0400E	15 22	NSR2	
CLAY 45	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570745	10/7/2017	8.36	0020S	0400E	22	NSR2	
CLAY 46	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570746	10/7/2017	8.36	0020S	0400E	15 22	NSR2	
CLAY 47	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570747	10/7/2017	8.36	0020S	0400E	21 22	NSR2	
CLAY 48	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570748	10/7/2017	8.36	0020S	0400E	15 16 21 22	NSR2	
CLAY 49	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570749	10/7/2017	8.36	0020S	0400E	21	NSR2	
CLAY 50	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570750	10/7/2017	8.36	0020S	0400E	16 21	NSR2	
CLAY 51	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570751	10/8/2017	8.36	0020S	0400E	21	NSR2	
CLAY 52	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570752	10/8/2017	8.36	0020S	0400E	16 21	NSR2	

Claim Name	Type	Listed Owner	Serial Number	Date Of Location	Size (ha)	Township	Range	Section(s)	Royalty	NOTES
CLAY 53	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570753	10/6/2017	8.36	0020S	0400E	14	NSR2	
CLAY 54	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570754	10/7/2017	8.36	0020S	0400E	14	NSR2	
CLAY 55	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570755	10/6/2017	8.36	0020S	0400E	14 15	NSR2	
CLAY 56	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570756	10/7/2017	8.36	0020S	0400E	14 15	NSR2	
CLAY 57	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570757	10/6/2017	8.36	0020S	0400E	15	NSR2	
CLAY 58	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101570758	10/7/2017	8.36	0020S	0400E	15	NSR2	
CLAY 59	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782338	10/6/2017	8.36	0020S	0400E	15	NSR2	
CLAY 60	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782339	10/7/2017	8.36	0020S	0400E	15	NSR2	
CLAY 61	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782340	10/6/2017	8.36	0020S	0400E	15	NSR2	
CLAY 62	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782341	10/7/2017	8.36	0020S	0400E	15	NSR2	
CLAY 63	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782342	10/6/2017	8.36	0020S	0400E	15	NSR2	
CLAY 64	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782343	10/7/2017	8.36	0020S	0400E	15	NSR2	
CLAY 65	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782344	10/6/2017	8.36	0020S	0400E	15	NSR2	
CLAY 66	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782345	10/7/2017	8.36	0020S	0400E	15	NSR2	
CLAY 67	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782346	10/6/2017	8.36	0020S	0400E	15	NSR2	
CLAY 68	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782347	10/5/2017	8.36	0020S	0400E	15	NSR2	
CLAY 69	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782348	10/5/2017	8.36	0020S	0400E	14	NSR2	
CLAY 70	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782349	10/7/2017	8.36	0020S	0400E	14 15	NSR2	
CLAY 71	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782350	10/5/2017	8.36	0020S	0400E	15	NSR2	
CLAY 72	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782351	10/5/2017	8.36	0020S	0400E	15	NSR2	
CLAY 73	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782352	10/5/2017	8.36	0020S	0400E	15	NSR2	
CLAY 74	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782353	10/5/2017	8.36	0020S	0400E	15	NSR2	
CLAY 75	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782354	10/5/2017	8.36	0020S	0400E	15	NSR2	
CLAY 76	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782355	10/5/2017	8.36	0020S	0400E	15	NSR2	
CLAY 77	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782356	10/6/2017	3.68	0020S	0400E	15	NSR2	
CLAY 78	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782357	10/12/2017	3.68	0020S	0400E	10 15	NSR2	
CLAY 79	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101782358	10/12/2017	8.36	0020S	0400E	10 11 14 15	NSR2	
DAN 1	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101739334	7/9/2017	8.36	0020S	0400E	11 14	NSR3	
DAN 2	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101739335	7/9/2017	8.36	0020S	0400E	14	NSR3	
DAN 3	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101739336	7/9/2017	8.36	0020S	0400E	14	NSR3	
DAN 4	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101739337	7/9/2017	8.36	0020S	0400E	14	NSR3	
DAN 5	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101739338	7/9/2017	8.36	0020S	0400E	14	NSR3	
DAN 6	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101739339	7/9/2017	8.36	0020S	0400E	14	NSR3	
DAN 7	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101739340	7/9/2017	8.36	0020S	0400E	14	NSR3	
DAN 8	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101739341	7/9/2017	8.36	0020S	0400E	14	NSR3	
DAN 9	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101739342	7/9/2017	8.09	0020S	0400E	14 23	NSR3	
DEAN 1	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101332557	1/2/2016	8.09	0020S	0400E	14	NSR2	
DEAN 1A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234190	4/7/2021	8.09	0020S	0400E	14	NSR2	
DEAN 1B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234191	2/24/2021	8.09	0020S	0400E	14	NSR2	
DEAN 1C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234192	2/24/2021	8.09	0020S	0400E	14 15	NSR2	
DEAN 2	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101332558	1/2/2016	8.09	0020S	0400E	15	NSR2	
DEAN 2A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234193	2/24/2021	8.09	0020S	0400E	15	NSR2	
DEAN 2B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234194	2/24/2021	8.09	0020S	0400E	15	NSR2	
DEAN 2C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234195	2/24/2021	8.09	0020S	0400E	15	NSR2	
DEAN 3	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333183	1/28/2016	8.09	0020S	0400E	15	NSR2	
DEAN 3A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234196	2/24/2021	8.09	0020S	0400E	15	NSR2	
DEAN 3B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234197	2/24/2021	8.09	0020S	0400E	15	NSR2	
DEAN 4	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333184	1/28/2016	8.09	0020S	0400E	15	NSR2	
DEAN 4A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234198	2/24/2021	8.09	0020N	0400E	15	NSR2	
DEAN 4B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234199	2/24/2021	8.09	0020S	0400E	15	NSR2	
DEAN 5	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333185	1/28/2016	8.09	0020S	0400E	15	NSR2	
DEAN 5A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234200	2/25/2021	8.09	0020S	0400E	15	NSR2	
DEAN 5B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234201	2/25/2021	8.09	0020S	0400E	15	NSR2	
DEAN 6	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333186	1/2/2016	8.09	0020S	0400E	14	NSR2	
DEAN 6A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234202	2/23/2021	8.09	0202S	0400E	14	NSR2	
DEAN 6B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234203	2/23/2021	8.09	0020S	0400E	14	NSR2	
DEAN 6C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234204	2/23/2021	8.09	0020S	0400E	14	NSR2	
DEAN 7	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333187	1/2/2016	8.09	0020S	0400E	15	NSR2	
DEAN 7A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234205	2/23/2021	8.09	0020S	0400E	15	NSR2	
DEAN 7B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234206	2/23/2021	8.09	0020S	0400E	15	NSR2	
DEAN 7C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234207	2/23/2021	8.09	0020S	0400E	15	NSR2	
DEAN 8	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333188	1/2/2016	8.09	0020S	0400E	15	NSR2	
DEAN 8A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234208	2/23/2021	8.09	0020S	0400E	15	NSR2	

Claim Name	Type	Listed Owner	Serial Number	Date Of Location	Size (ha)	Township	Range	Section(s)	Royalty	NOTES
DEAN 8B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234209	2/24/2021	8.09	0020S	0400E	15	NSR2	
DEAN 8C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234210	2/23/2021	8.09	0020S	0400E	15	NSR2	
DEAN 9	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333189	1/2/2016	8.09	0020S	0400E	15	NSR2	
DEAN 9A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234211	2/23/2021	8.09	0020S	0400E	15	NSR2	
DEAN 9B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234212	2/23/2021	8.09	0200S	0400E	15	NSR2	
DEAN 9C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234213	2/23/2021	8.09	0200S	0400E	15	NSR2	
DEAN 10	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333190	1/2/2016	8.09	0020S	0400E	15	NSR2	
DEAN 10A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234214	2/23/2021	8.09	0020S	0400E	15	NSR2	
DEAN 10B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234215	2/23/2021	8.09	0020S	0400E	15	NSR2	
DEAN 10C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234216	2/23/2021	8.09	0020S	0400E	15	NSR2	
DEAN 11	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333191	1/2/2016	8.09	0020S	0400E	16	NSR2	
DEAN 11A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234217	2/23/2021	8.09	0200S	0400E	16	NSR2	
DEAN 11B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234218	2/24/2021	8.09	0020S	0400E	16	NSR2	
DEAN 11C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234219	2/23/2021	8.09	0020S	0400E	16	NSR2	
DEAN 12	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333192	1/2/2016	8.09	0020S	0400E	16	NSR2	
DEAN 12A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234220	2/23/2021	8.09	0020S	0400E	26	NSR2	
DEAN 12B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234221	2/24/2021	8.09	0020S	0400E	16	NSR2	
DEAN 12C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234222	2/24/2021	8.09	0020S	0400E	16	NSR2	
DEAN 13	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333193	1/2/2016	8.09	0020S	0400E	16	NSR2	
DEAN 13A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234223	2/23/2021	8.09	0020S	0400E	16	NSR2	
DEAN 13B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234224	2/24/2021	8.09	0020S	0400E	16	NSR2	
DEAN 13C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234225	2/24/2021	8.09	0020S	0400E	16	NSR2	
DEAN 14	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333194	1/2/2016	8.09	0020S	0400E	16	NSR2	
DEAN 14A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234226	2/23/2021	8.09	0200S	0400E	16	NSR2	
DEAN 14B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234227	2/24/2021	8.09	0020S	0400E	16	NSR2	
DEAN 14C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234228	2/24/2021	8.09	0020S	0400E	16	NSR2	
DEAN 15	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333195	1/2/2016	8.09	0020S	0400E	17	NSR2	
DEAN 15A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234229	2/23/2021	8.09	0020S	0400E	17	NSR2	
DEAN 15B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234230	2/24/2021	8.09	0020S	0400E	17	NSR2	
DEAN 15C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234231	2/24/2021	8.09	0020S	0400E	17	NSR2	
DEAN 16	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333196	1/2/2016	8.09	0020S	0400E	23	NSR2	
DEAN 16A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234232	2/23/2021	8.09	0020S	0400E	23	NSR2	
DEAN 16B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234233	2/24/2021	8.09	0020S	0400E	23	NSR2	
DEAN 16C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234234	2/24/2021	8.09	0020S	0400E	23	NSR2	
DEAN 17	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333197	1/2/2016	8.09	0020S	0400E	22	NSR2	
DEAN 17A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234235	2/23/2021	8.09	0200S	0400E	22	NSR2	
DEAN 17B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234236	2/24/2021	8.09	0020S	0400E	22	NSR2	
DEAN 17C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234237	2/24/2021	8.09	0020S	0400E	22	NSR2	
DEAN 18	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333198	1/2/2016	8.09	0020S	0400E	22	NSR2	
DEAN 18A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234238	2/23/2021	8.09	0020S	0400E	22	NSR2	
DEAN 18B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234239	2/24/2021	8.09	0200S	0400E	22	NSR2	
DEAN 18C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234240	2/24/2021	8.09	0020S	0400E	22	NSR2	
DEAN 19	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333199	1/2/2016	8.09	0020S	0400E	22	NSR2	
DEAN 19A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234241	2/23/2021	8.09	0020S	0400E	22	NSR2	
DEAN 19B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234242	2/24/2021	8.09	0020S	0400E	22	NSR2	
DEAN 19C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234243	2/24/2021	8.09	0020S	0400E	22	NSR2	
DEAN 20	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333200	1/2/2016	8.09	0020S	0400E	22	NSR2	
DEAN 20A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234244	2/24/2021	8.09	0020S	0400E	22	NSR2	
DEAN 20B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234289	2/24/2021	8.09	0020S	0400E	22	NSR2	
DEAN 20C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234245	2/24/2021	8.09	0020S	0400E	22	NSR2	
DEAN 21	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333335	1/2/2016	8.09	0020S	0400E	21	NSR2	
DEAN 21A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234246	2/24/2021	8.09	0020S	0400E	21	NSR2	
DEAN 21B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234247	2/24/2021	8.09	0020S	0400E	21	NSR2	
DEAN 21C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234248	2/24/2021	8.09	0020S	0400E	21	NSR2	
DEAN 22	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333336	1/2/2016	8.09	0020S	0400E	21	NSR2	
DEAN 22A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234249	2/25/2021	8.09	0020S	0400E	21	NSR2	
DEAN 22B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234250	2/25/2021	8.09	0020S	0400E	21	NSR2	
DEAN 22B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234253	2/25/2021	8.09	0020S	0400E	21	NSR2	
DEAN 22C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234251	2/24/2021	8.09	0020S	0400E	21	NSR2	
DEAN 23	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333337	1/2/2016	8.09	0020S	0400E	21	NSR2	
DEAN 23A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234252	2/25/2021	8.09	0020S	0400E	21	NSR2	
DEAN 23C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234254	2/25/2021	8.09	0020S	0400E	21	NSR2	
DEAN 24	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333920	1/2/2016	8.09	0020S	0400E	21	NSR2	

Claim Name	Type	Listed Owner	Serial Number	Date Of Location	Size (ha)	Township	Range	Section(s)	Royalty	NOTES
DEAN 24A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234255	2/25/2021	8.09	0020S	0400E	21	NSR2	
DEAN 24B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234256	2/25/2021	8.09	0020S	0400E	21	NSR2	
DEAN 24C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234257	2/25/2021	8.09	0020S	0400E	21	NSR2	
DEAN 25	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333921	1/2/2016	8.09	0020S	0400E	20	NSR2	
DEAN 25A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234258	2/25/2021	8.09	0020S	0400E	20	NSR2	
DEAN 25B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234259	2/25/2021	8.09	0020S	0400E	20	NSR2	
DEAN 25C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234260	2/25/2021	8.09	0020S	0400E	20	NSR2	
DEAN 26	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333922	1/2/2016	8.09	0020S	0400E	23	NSR2	
DEAN 26A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234261	2/24/2021	8.09	0020S	0400E	23	NSR2	
DEAN 26B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234262	2/24/2021	8.09	0020S	0400E	23	NSR2	
DEAN 26C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234263	2/24/2021	8.09	0020S	0400E	23	NSR2	
DEAN 27	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333923	1/2/2016	8.09	0020S	0400E	22	NSR2	
DEAN 27A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234264	2/27/2021	8.09	0020S	0400E	22	NSR2	
DEAN 27B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234265	2/24/2021	8.09	0020S	0400E	22	NSR2	
DEAN 27C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234266	2/24/2021	8.09	0020S	0400E	22	NSR2	
DEAN 28	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333924	1/2/2016	8.09	0020S	0400E	22	NSR2	
DEAN 28A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234267	2/24/2021	8.09	0020S	0400E	22	NSR2	
DEAN 28B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234268	2/24/2021	8.09	0020S	0400E	22	NSR2	
DEAN 28C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234269	2/24/2021	8.09	0020S	0400E	22	NSR2	
DEAN 29	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333925	1/2/2016	8.09	0020S	0400E	22	NSR2	
DEAN 29A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234270	2/24/2021	8.09	0020S	0400E	22	NSR2	
DEAN 29B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234271	2/24/2021	8.09	0020S	0400E	22	NSR2	
DEAN 29C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234272	2/24/2021	8.09	0020S	0400E	22	NSR2	
DEAN 30	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333926	1/2/2016	8.09	0020S	0400E	22	NSR2	
DEAN 30A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234273	2/24/2021	8.09	0020S	0400E	24	NSR2	
DEAN 30B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234274	2/24/2021	8.09	0020S	0400E	22	NSR2	
DEAN 30C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234275	2/24/2021	8.09	0020S	0400E	22	NSR2	
DEAN 31	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333927	1/2/2016	8.09	0020S	0400E	21	NSR2	
DEAN 31A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234276	2/24/2021	8.09	0020S	0400E	21	NSR2	
DEAN 31B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234277	2/24/2021	8.09	0020S	0400E	21	NSR2	
DEAN 31C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234278	2/24/2021	8.09	0020S	0400E	21	NSR2	
DEAN 32	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333928	1/2/2016	8.09	0020S	0400E	21	NSR2	
DEAN 32A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234279	2/24/2021	8.09	0020S	0400E	21	NSR2	
DEAN 32B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234280	2/24/2021	8.09	0020S	0400E	21	NSR2	
DEAN 32C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234281	2/24/2021	8.09	0020S	0400E	21	NSR2	
DEAN 33	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333929	1/2/2016	8.09	0020S	0400E	21	NSR2	
DEAN 33A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234282	2/25/2021	8.09	0020S	0400E	21	NSR2	
DEAN 33B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234283	2/25/2021	8.09	0020S	0400E	21	NSR2	
DEAN 33C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234284	2/25/2021	8.09	0020S	0400E	21	NSR2	
DEAN 34	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333930	1/2/2016	8.09	0020S	0400E	21	NSR2	
DEAN 34A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234285	2/25/2021	8.09	0020S	0400E	21	NSR2	
DEAN 34B	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234286	2/25/2021	8.09	0020S	0400E	21	NSR2	
DEAN 34C	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234287	2/25/2021	8.09	0020S	0400E	21	NSR2	
DEAN 55	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101333931	1/28/2016	8.09	0020S	0400E	21	NSR2	
DEAN 55A	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105234288	2/25/2021	8.36	0020S	0400E	20	NSR2	
DLX 1	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101553229	7/2/2018	8.36	0020S	0400E	23	NA	
DLX 2	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101553230	7/2/2018	8.09	0020S	0400E	23 26	NA	
DX 1	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101553227	7/2/2018	8.09	0020S	0400E	23	NA	
DX 2	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101553228	7/2/2018	8.09	0020S	0400E	23	NA	
GLORY 1	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101378980	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 2	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101378981	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 3	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101378982	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 4	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101378983	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 5	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101378984	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 6	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101378985	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 7	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101378986	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 8	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101378987	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 9	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101378988	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 10	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101378989	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 11	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101378990	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 12	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101378991	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 13	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101378992	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 14	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101378993	12/18/2015	8.09	0020S	0400E	28	NSR2	

Claim Name	Type	Listed Owner	Serial Number	Date Of Location	Size (ha)	Township	Range	Section(s)	Royalty	NOTES
GLORY 15	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101378994	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 16	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101378995	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 17	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379917	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 18	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379918	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 19	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379919	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 21	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379920	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 22	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379921	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 23	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379922	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 24	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379923	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 25	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379924	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 26	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379925	12/18/2015	8.09	0020S	0400E	28	NSR2	
GLORY 29	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379926	12/18/2015	8.09	0020S	0400E	33	NSR2	
GLORY 30	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379927	12/18/2015	8.09	0020S	0400E	33	NSR2	
GLORY 31	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379928	12/18/2015	8.09	0020S	0400E	33	NSR2	
GLORY 32	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379929	12/18/2015	8.09	0020S	0400E	33	NSR2	
GLORY 37	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379930	12/18/2015	8.09	0020S	0400E	33	NSR2	
GLORY 38	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379931	12/18/2015	8.09	0020S	0400E	33	NSR2	
GLORY 39	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379932	12/18/2015	8.09	0020S	0400E	33	NSR2	
GLORY 40	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101379933	12/18/2015	8.09	0020S	0400E	33	NSR2	
GLORY 41	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101475862	3/31/2016	8.09	0020S	0400E	28	NSR2	
GLORY 42	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101475863	3/31/2016	8.09	0020S	0400E	28	NSR2	
GLORY 43	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101475864	3/31/2016	8.09	0020S	0400E	27	NSR2	
GLORY 44	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101475865	3/31/2016	8.09	0020S	0400E	27	NSR2	
GLORY 45	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101475866	3/31/2016	8.09	0020S	0400E	27	NSR2	
GLORY 46	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101475867	3/31/2016	8.09	0020S	0400E	27	NSR2	
GLORY 47	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101475868	3/31/2016	8.09	0020S	0400E	27	NSR2	
GLORY 48	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101475869	3/31/2016	8.09	0020S	0400E	27	NSR2	
GLORY 49	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101475870	3/31/2016	8.09	0020S	0400E	27	NSR2	
GLORY 50	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101475871	3/31/2016	8.09	0020S	0400E	27	NSR2	
GLORY 51	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101475872	3/31/2016	8.09	0020S	0400E	28	NSR2	
GLORY 52	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101475873	3/31/2016	8.09	0020S	0400E	28	NSR2	
GLORY 53	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101475874	3/31/2016	8.09	0020S	0400E	27	NSR2	
GLORY 54	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101475875	3/31/2016	8.09	0020S	0400E	27	NSR2	
GLORY 55	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101475876	3/31/2016	8.09	0020S	0400E	27	NSR2	
GLORY 56	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101475877	3/31/2016	8.09	0020S	0400E	27	NSR2	
GLORY 57	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101475878	3/31/2016	8.09	0020S	0400E	27	NSR2	
GLORY 58	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101475879	3/31/2016	8.09	0020S	0400E	27	NSR2	
GLORY 59	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101475880	3/31/2016	8.09	0020S	0400E	27	NSR2	
GLORY 60	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101476771	3/31/2016	8.36	0020S	0400E	27	NSR2	
GLX 1	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101553231	7/1/2018	8.36	0020S	0400E	27	NA	
GLX 2	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101553232	7/1/2018	8.36	0020S	0400E	27 34	NA	
GLX 3	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101553233	7/1/2018	8.36	0020S	0400E	27	NA	
GLX 4	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101553234	7/1/2018	8.36	0020S	0400E	27 34	NA	
GLX 5	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101553235	7/1/2018	8.36	0020S	0400E	27	NA	
GLX 6	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101553236	7/1/2018	8.36	0020S	0400E	27 34	NA	
GLX 7	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101553237	7/1/2018	8.36	0020S	0400E	27	NA	
GLX 8	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101553238	7/1/2018	8.36	0020S	0400E	27 34	NA	
GLX 9	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101553239	7/1/2018	8.36	0020S	0400E	27	NA	
GLX 10	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101553240	7/1/2018	8.36	0020S	0400E	27 34	NA	
GLX 11	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101553241	7/1/2018	8.36	0020S	0400E	27	NA	
GLX 12	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101553242	7/1/2018	8.36	0020S	0400E	27 34	NA	
GLX 13	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101554264	7/1/2018	8.36	0020S	0400E	27	NA	
GLX 14	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101554265	7/1/2018	8.36	0020S	0400E	27 34	NA	
GLX 15	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101554266	7/1/2018	8.36	0020S	0400E	27	NA	
GLX 16	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101554267	7/1/2018	8.36	0020S	0400E	27 34	NA	
GLX 17	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763412	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 18	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763413	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 19	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763414	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 20	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763415	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 21	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763416	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 22	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763417	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 23	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763418	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 24	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763419	9/9/2018	8.36	0020S	0400E	34	NA	

Claim Name	Type	Listed Owner	Serial Number	Date Of Location	Size (ha)	Township	Range	Section(s)	Royalty	NOTES
GLX 25	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763420	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 26	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763421	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 27	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763801	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 28	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763802	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 29	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763803	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 30	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763804	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 31	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763805	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 32	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763806	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 33	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763807	9/9/2018	8.36	0020S	0400E	34 35	NA	
GLX 34	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763808	9/9/2018	8.36	0020S	0400E	34 35	NA	
GLX 39	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763809	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 40	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763810	9/9/2018	0.00	0020S	0400E	34	NA	
					8.36	0030S	0400E	3		
GLX 41	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763811	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 42	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763812	9/9/2018	0.00	0020S	0400E	34	NA	
					8.36	0030S	0400E	3		
GLX 43	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763813	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 44	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763814	9/9/2018	0.00	0020S	0400E	34	NA	
					8.36	0030S	0400E	3		
GLX 45	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763815	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 46	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763816	9/9/2018	0.00	0020S	0400E	34	NA	
					8.36	0030S	0400E	3		
GLX 47	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763817	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 48	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763818	9/9/2018	0.00	0020S	0400E	34	NA	
					8.36	0030S	0400E	3		
GLX 49	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763819	9/9/2018	8.36	0020S	0400E	34	NA	
GLX 50	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763820	9/9/2018	0.00	0020S	0400E	34	NA	
					8.36	0030S	0400E	3		
GLX 51	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101763821	9/9/2018	8.36	0020S	0400E	34 35	NA	
GLX 52	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101764201	9/9/2018	0.00	0020S	0400E	34 35	NA	
					8.36	0030S	0400E	2 3		
GLX 53	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101764202	9/9/2018	8.36	0020S	0400E	22 23 26 37	NA	
GLX 54	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101764203	9/9/2018	8.36	0020S	0400E	26 27	NA	
GLX 55	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101764204	9/9/2018	8.36	0020S	0400E	23 26	NA	
GLX 56	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101764205	9/9/2018	8.36	0020S	0400E	26	NA	
GLX 57	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101764206	9/9/2018	8.36	0020S	0400E	23 26	NA	
GLX 58	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101764207	9/9/2018	8.36	0020S	0400E	26	NA	
GLX 59	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101764208	9/9/2018	8.36	0020S	0400E	26 27	NA	
GLX 60	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101764209	9/9/2018	8.36	0020S	0400E	26 27 34 35	NA	
GLX 61	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101764210	9/9/2018	8.36	0020S	0400E	26	NA	
GLX 62	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101764211	9/9/2018	8.36	0020S	0400E	26 35	NA	
GLX 63	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101764212	9/9/2018	8.36	0020S	0400E	26	NA	
GLX 64	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101764213	9/9/2018	8.09	0020S	0400E	26 35	NA	
GX 1	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101554268	7/2/2018	8.09	0020S	0400E	27	NA	
GX 2	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101554269	7/1/2018	8.09	0020S	0400E	27	NA	
GX 3	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101554270	7/1/2018	8.09	0020S	0400E	27	NA	
GX 4	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101554271	7/1/2018	8.09	0020S	0400E	27	NA	
GX 5	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101554272	7/1/2018	8.09	0020S	0400E	27	NA	
GX 6	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101554273	7/1/2018	8.09	0020S	0400E	27	NA	
GX 7	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101554274	7/1/2018	8.09	0020S	0400E	27	NA	
GX 8	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101554275	7/1/2018	8.09	0020S	0400E	27	NA	
GX 9	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101554276	7/1/2018	8.09	0020S	0400E	27	NA	
GX 10	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101554277	7/1/2018	8.09	0020S	0400E	27	NA	
GX 11	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101554278	7/1/2018	8.09	0020S	0400E	27	NA	
GX 12	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101554401	7/1/2018	8.09	0020S	0400E	27	NA	
GX 13	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101554402	7/1/2018	8.09	0020S	0400E	27	NA	
GX 14	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101554403	7/1/2018	8.09	0020S	0400E	27	NA	
GX 15	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101554404	7/1/2018	8.09	0020S	0400E	27	NA	
GX 16	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101554405	7/1/2018	8.09	0020S	0400E	27	NA	
GX 17	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290433	10/28/2021	8.09	0020S	0400E	34	NA	
GX 18	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290434	10/28/2021	8.09	0020S	0400E	34	NA	
GX 19	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290435	10/28/2021	8.09	0020S	0400E	34	NA	
GX 20	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290436	10/28/2021	8.09	0020S	0400E	34	NA	

Claim Name	Type	Listed Owner	Serial Number	Date Of Location	Size (ha)	Township	Range	Section(s)	Royalty	NOTES
GX 21	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290437	10/28/2021	8.09	0020S	0400E	34	NA	
GX 22	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290438	10/28/2021	8.09	0020S	0400E	34	NA	
GX 23	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290439	10/28/2021	8.09	0020S	0400E	34	NA	
GX 24	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290440	10/28/2021	8.09	0020S	0400E	34	NA	
GX 25	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290441	10/28/2021	8.09	0020S	0400E	34	NA	
GX 26	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290442	10/28/2021	8.09	0020S	0400E	34	NA	
GX 27	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290443	10/28/2021	8.09	0020S	0400E	34	NA	
GX 28	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290444	10/28/2021	8.09	0020S	0400E	34	NA	
GX 29	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290445	10/28/2021	8.09	0020S	0400E	34	NA	
GX 30	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290446	10/28/2021	8.09	0020S	0400E	34	NA	
GX 31	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290447	10/28/2021	8.09	0020S	0400E	34	NA	
GX 32	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290448	10/28/2021	8.09	0020S	0400E	34	NA	
GX 37	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290449	10/28/2021	8.09	0020S	0400E	34	NA	
GX 38	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290450	10/28/2021	8.09	0020S	0400E	34	NA	
GX 39	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290451	10/28/2021	8.09	0020S	0400E	34	NA	
GX 40	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290452	10/28/2021	8.09	0020S	0400E	34	NA	
GX 41	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290453	10/28/2021	8.09	0020S	0400E	34	NA	
GX 42	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290454	10/28/2021	8.09	0020S	0400E	34	NA	
GX 43	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290455	10/28/2021	8.09	0020S	0400E	34	NA	
GX 44	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290456	10/28/2021	8.09	0020S	0400E	34	NA	
GX 45	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290457	10/28/2021	8.09	0020S	0400E	34	NA	
GX 46	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290458	10/28/2021	8.09	0020S	0400E	34	NA	
GX 47	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290459	10/28/2021	8.09	0020S	0400E	34	NA	
GX 48	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290460	10/28/2021	8.09	0020S	0400E	34	NA	
GX 49	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290461	10/28/2021	8.09	0020S	0400E	26	NA	
GX 50	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290462	10/28/2021	8.09	0020S	0400E	26	NA	
GX 51	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290463	10/28/2021	8.09	0020S	0400E	26	NA	
GX 52	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290464	10/28/2021	8.09	0020S	0400E	26	NA	
GX 53	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290465	10/28/2021	8.09	0020S	0400E	26	NA	
GX 54	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290466	10/28/2021	8.09	0020S	0400E	26	NA	
GX 55	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290467	10/28/2021	8.09	0020S	0400E	26	NA	
GX 56	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV105290468	10/28/2021	8.36	0020S	0400E	26	NA	
JLS 2	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101544584	9/23/2016	8.36	0020S	0400E	28	NSR1	
JLS 3	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101544585	9/23/2016	8.36	0020S	0400E	28	NSR1	
JLS 4	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101544586	9/23/2016	8.36	0020S	0400E	28	NSR1	
JLS 5	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101544587	9/23/2016	8.36	0020S	0400E	28	NSR1	
JLS 6	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101544588	9/23/2016	8.36	0020S	0400E	28	NSR1	
JLS 7	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101544589	9/23/2016	8.36	0020S	0400E	28	NSR1	
JLS 8	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101544590	9/23/2016	8.36	0020S	0400E	28	NSR1	
JLS 9	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101544591	9/23/2016	8.36	0020S	0400E	28	NSR1	
JLS 10	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101544592	9/23/2016	8.36	0020S	0400E	28	NSR1	
JLS 11	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101544593	9/23/2016	8.36	0020S	0400E	28	NSR1	
JLS 12	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101544594	9/23/2016	8.36	0020S	0400E	28	NSR1	
JLS 13	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101544595	9/23/2016	8.36	0020S	0400E	28	NSR1	
JLS 14	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101544596	9/23/2016	8.36	0020S	0400E	28 33	NSR1	
JLS 15	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101544597	9/23/2016	8.36	0020S	0400E	28 33	NSR1	
JLS 16	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101544598	9/23/2016	8.36	0020S	0400E	28 33	NSR1	
JLS 17	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101544599	9/23/2016	8.36	0020S	0400E	28 33	NSR1	
JLS 18	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101544600	9/23/2016	8.36	0020S	0400E	33	NSR1	
JLS 19	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545664	9/23/2016	8.36	0020S	0400E	33	NSR1	
JLS 20	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545665	9/23/2016	8.36	0020S	0400E	33	NSR1	
JLS 21	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545666	9/23/2016	8.36	0020S	0400E	33	NSR1	
JLS 22	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545667	9/23/2016	8.36	0020S	0400E	28	NSR1	
JLS 23	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545668	9/23/2016	8.36	0020S	0400E	28	NSR1	
JLS 24	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545669	9/23/2016	8.36	0020S	0400E	28	NSR1	
JLS 25	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545670	9/23/2016	8.36	0020S	0400E	28 33	NSR1	
JLS 26	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545671	9/23/2016	6.27	0020S	0400E	33	NSR1	
JLS 27	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545672	9/25/2016	6.27	0020S	0400E	28	NSR1	
JLS 28	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545673	9/25/2016	6.27	0020S	0400E	28	NSR1	
JLS 29	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545674	9/25/2016	8.36	0020S	0400E	27 28	NSR1	
JLS 30	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545675	9/25/2016	8.36	0020S	0400E	28	NSR1	
JLS 31	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545676	9/25/2016	8.36	0020S	0400E	28	NSR1	
JLS 32	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545677	9/25/2016	8.36	0020S	0400E	28	NSR1	

Claim Name	Type	Listed Owner	Serial Number	Date Of Location	Size (ha)	Township	Range	Section(s)	Royalty	NOTES
JLS 33	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545678	9/25/2016	8.36	0020S	0400E	27 28	NSR1	
JLS 34	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545679	9/25/2016	8.36	0020S	0400E	28	NSR1	
JLS 35	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545680	9/25/2016	8.36	0020S	0400E	28	NSR1	
JLS 36	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545681	9/25/2016	8.36	0020S	0400E	28	NSR1	
JLS 37	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545682	9/25/2016	8.36	0020S	0400E	28	NSR1	
JLS 38	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545683	9/25/2016	8.36	0020S	0400E	28	NSR1	
JLS 39	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545684	9/25/2016	8.36	0020S	0400E	28	NSR1	
JLS 40	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545389	9/25/2016	8.36	0020S	0400E	27 28	NSR1	
JLS 41	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545390	9/25/2016	8.36	0020S	0400E	28	NSR1	
JLS 42	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545391	9/25/2016	8.36	0020S	0400E	28 33	NSR1	
JLS 43	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545392	9/25/2016	8.36	0020S	0400E	33	NSR1	
JLS 44	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545393	9/25/2016	8.36	0020S	0400E	28 33	NSR1	
JLS 45	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545394	9/25/2016	8.36	0020S	0400E	33	NSR1	
JLS 46	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545395	9/25/2016	8.36	0020S	0400E	28 33	NSR1	
JLS 47	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545396	9/25/2016	8.36	0020S	0400E	33	NSR1	
JLS 48	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545397	9/25/2016	8.36	0020S	0400E	28 33	NSR1	
JLS 49	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545398	9/25/2016	8.36	0020S	0400E	33	NSR1	
JLS 50	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545399	9/25/2016	8.36	0020S	0400E	27	NSR1	
JLS 51	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545400	9/25/2016	8.36	0020S	0400E	27	NSR1	
JLS 52	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101545401	9/25/2016	8.36	0020S	0400E	27	NSR1	
JLS 53	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101546706	9/25/2016	8.36	0020S	0400E	27	NSR1	
JLS 54	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101546707	9/25/2016	8.36	0020S	0400E	27	NSR1	
JLS 55	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101546708	9/25/2016	8.36	0020S	0400E	27	NSR1	
JLS 56	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101546709	9/25/2016	8.36	0020S	0400E	27	NSR1	
JLS 57	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101546710	9/25/2016	8.36	0020S	0400E	27	NSR1	
JLS 58	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101546711	9/25/2016	8.36	0020S	0400E	27	NSR1	
JLS 59	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101546712	9/25/2016	8.36	0020S	0400E	27	NSR1	
JLS 60	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101546713	9/25/2016	8.36	0020S	0400E	27	NSR1	
JLS 61	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101546714	9/25/2016	8.36	0020S	0400E	27	NSR1	
JLS 62	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101546715	9/25/2016	8.36	0020S	0400E	27	NSR1	
JLS 63	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101546716	9/25/2016	8.36	0020S	0400E	27	NSR1	
JLS 64	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101546717	9/25/2016	8.36	0020S	0400E	27	NSR1	
JLS 65	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101546718	9/25/2016	2.79	0020S	0400E	27	NSR1	
JLS 66	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101546719	9/25/2016	2.79	0020S	0400E	28	NSR1	
JLS 67	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101546720	9/25/2016	2.79	0020S	0400E	28	NSR1	
JLS 68	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101546721	9/25/2016	8.36	0020S	0400E	32	NSR1	
JLS 69	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101546722	9/25/2016	8.36	0020S	0400E	32	NSR1	
JLS 70	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101546723	9/25/2016	8.36	0020S	0400E	32	NSR1	
JLS 71	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101546724	9/25/2016	8.36	0020S	0400E	28	NSR1	
LONGSTREET 1	Lode	CYPRESS HOLDINGS (NEVADA) LTD	NV101544583	9/23/2016	8.09	0020S	0400E	28	NSR1	
MCGEE 2	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101388149	1/24/2016	8.09	0030S	0400E	5	NSR1	
MCGEE 3	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101388150	1/24/2016	8.09	0030S	0400E	5	NSR1	
MCGEE 4	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101388151	1/24/2016	8.09	0030S	0400E	5	NSR1	
MCGEE 9	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101388152	1/24/2016	8.09	0030S	0400E	5	NSR1	
MCGEE 10	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101388153	1/24/2016	8.09	0030S	0400E	5	NSR1	
MCGEE 11	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101388154	1/24/2016	8.09	0030S	0400E	5	NSR1	
MCGEE 18	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101783884	7/25/2016	8.09	0030S	0400E	5	NSR1	
MCGEE 19	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101783885	7/25/2016	8.09	0030S	0400E	5	NSR1	
MCGEE 22	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101388155	1/24/2016	8.09	0030S	0400E	5	NSR1	
MCGEE 23	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101388156	1/24/2016	8.09	0030S	0400E	5	NSR1	
MCGEE 28	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101388157	1/24/2016	8.09	0020S	0400E	32	NSR1	
MCGEE 29	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101388158	1/24/2016	7.36	0020S	0400E	32	NSR1	
NDL 1	Lode	CYPRESS HOLDINGS (NV) LTD	NV106301910	5/16/2023	7.36	0020S	0400E	16	NA	
NDL 2	Lode	CYPRESS HOLDINGS (NV) LTD	NV106301911	5/16/2023	2.45	0020S	0400E	16	NA	
NDL 3	Lode	CYPRESS HOLDINGS (NV) LTD	NV106301912	3/16/2023	2.45	0020S	0400E	16	NA	
NDL 4	Lode	CYPRESS HOLDINGS (NV) LTD	NV106301913	5/16/2023	7.36	0020S	0400E	16	NA	
NDL 5	Lode	CYPRESS HOLDINGS (NV) LTD	NV106301914	5/16/2023	2.45	0020S	0400E	16	NA	
NDL 6	Lode	CYPRESS HOLDINGS (NV) LTD	NV106301915	5/16/2023	8.09	0020S	0400E	16	NA	
NDP 1	Placer	CYPRESS HOLDINGS (NV) LTD	NV106301926	5/13/2023	8.09	0020S	0400E	2	NA	
NDP 2	Placer	CYPRESS HOLDINGS (NV) LTD	NV106301927	5/13/2023	8.09	0020S	0400E	2	NA	
NDP 3	Placer	CYPRESS HOLDINGS (NV) LTD	NV106301928	5/13/2023	8.09	0020S	0400E	2	NA	
STEVE 1	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101739343	7/8/2017	8.09	0020S	0400E	14	NSR3	
STEVE 2	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101850484	7/8/2017	8.09	0020S	0400E	14	NSR3	

Claim Name	Type	Listed Owner	Serial Number	Date Of Location	Size (ha)	Township	Range	Section(s)	Royalty	NOTES
STEVE 3	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101850485	7/8/2017	8.09	0020S	0400E	14	NSR3	
STEVE 4	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101850486	7/8/2017	8.09	0020S	0400E	14	NSR3	
STEVE 5	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101850487	7/8/2017	8.09	0020S	0400E	14	NSR3	
STEVE 6	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101850488	7/8/2017	8.09	0020S	0400E	14	NSR3	
STEVE 7	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101850489	7/8/2017	8.09	0020S	0400E	14	NSR3	
STEVE 8	Placer	CYPRESS HOLDINGS (NEVADA) LTD	NV101850490	7/8/2017	8.09	0020S	0400E	14	NSR3	