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Nevada North Lithium Project

NI 43-101 Technical Report

Preliminary Economic Assessment

Elko County, Nevada

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SURGE BATTERY METALS

DATE AND SIGNATURES PAGE

The effective date of this Technical Report is May 19, 2025. The report issuance date is July 23, 2025. The Qualified Persons (QPs) do not believe that material changes have occurred with the assumptions or base data from the effective date to the report's date of issuance. This Preliminary Economic Assessment (PEA) is based on the following key data and assumptions:

- Mineral Resource Estimate effective as of August 7, 2024,
- Metallurgical testing results current as of October 29, 2024, and
- Reagent pricing data covering the period from December 2024 through May 19, 2025.

See Appendix A, Preliminary Economic Assessment Contributors and Professional Qualifications, for certificates of qualified persons. These certificates are considered the date and signature of this Technical Report in accordance with Form 43-101F1.

NEVADA NORTH LITHIUM PROJECT
FORM 43-101F1 TECHNICAL REPORT

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1 SUMMARY

1.1 INTRODUCTION

Surge Battery Metals Inc. ("Surge" or "the Company") is a Canadian corporation publicly traded on the TSX-Venture exchange (TSX-V:NILI) and on the OTCQX exchange (OTCQX:NILIF). Surge holds interest in the Nevada North Lithium Project ("NNLP" or "the Project") through its wholly-owned and Nevada-domiciled subsidiary, Surge Battery Metals USA Inc. ("Surge USA").

M3 Engineering & Technology Corporation (M3) was commissioned by Surge to prepare this Technical Report to summarize the results of a Preliminary Economic Assessment (PEA) on the Nevada North Lithium deposit in compliance with National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101). In preparing this Technical Report, M3 has relied upon input from Surge and information prepared by a number of qualified independent consulting groups. See Section 2 for a full discussion of contributors to this study.

The economic analysis is based on Q1-Q2 2025 pricing for capital and operating costs.

1.2 PROPERTY LOCATION, DESCRIPTION AND OWNERSHIP

The NNLP is centered at 41.68° N 114.56° W in northeastern Elko County, NV approximately 140 km (87 mi) northeast of Elko, NV, and 74 km (46 mi) north of Wells, NV.

Cadastral description of the NNLP with respect to Mt. Diablo Base and Meridian includes portions or all of the following Sections:

- Township 43 North, Range 65 East – Secs. 1, 2, 3;
- Township 43 North, Range 66 East – Sec. 6;
- Township 44 North, Range 65 East – Secs. 1, 2, 3, 10, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 27, 34, 35, 36;
- Township 44 North, Range 66 East – Secs. 8, 9, 16, 17, 18, 19, 20, 21, 28, 29, 30, 31, 32, 33;
- Township 45 North, Range 65 East – Sec. 34

Surge holds ownership in the DK-, DKN-, DKX-, DX- and LIT- series of claims by means of purchase from Alan Morris in 2021 and by staking.

Adjacent to and surrounded by the unpatented mining claims of the NNLP are certain parcels of private land of which the surface rights are primarily owned by the Salmon River Cattlemen's Association ("the Private Lands"). The parcels total approximately 356 ha (880 ac). Surge USA has purchased 25% of the subsurface mineral rights ("the Private Mineral Rights") on the Private Lands in two separate transactions. The sales agreements for these separate transactions make provision for payment of a three (3%) royalty on production based on the percentage of the Mineral Rights on the Private Lands purchased (Surge press release, October 3, 2023). Surface use on the Private Lands was provided for Surge's 2024 drilling on the Private Lands by way of an Entry and Exploration Agreement with the Salmon River Cattlemen's Association (Surge press release April 4, 2024). Drilling on the Private Lands in 2024 was paid for, pro rata, by Surge and the holder of the majority of the remaining 75% of the Private Lands, Rubicon Nevada Corp., a wholly owned subsidiary of Evolution Mining Ltd., an ASX listed producing company ("Evolution"). Both Surge's agreement with the Salmon River Cattleman's Association and its agreement with Evolution must be renewed each year and applied only to the 2024 drilling activities upon completion of which they terminated. Surge has not entered into such renewal agreements for 2025 as of the effective date of this Technical Report.

Surge currently owns a 50% interest in, and has entered into an agreement (the "Purchase Agreement") to acquire the remaining 50% interest in (the "Remaining Interest"), for a total of 100%, certain unpatented mining claims (the "M3

Metals Claims") from M3 Metals Corp. ("M3 Metals"). The Purchase Agreement for the purchase of the remaining Interest is subject to its final approval by the TSX Venture Exchange. This final approval is conditional upon disinterested shareholder approval of the Purchase Agreement from Surge's shareholders which disinterested shareholder approval is being sought by Surge at its annual general meeting of shareholders expected to be held on July 2, 2025. In the event that disinterested shareholder approval is not obtained or the TSX Venture Exchange does not otherwise provide final approval to acquire the Remaining Interest, Surge would still have the right to acquire the Remaining Interest pursuant to its original mineral property option agreement with M3 Metals.

A group of the M3 Metals Claims have been the subject of a staking dispute between M3 Metals and CAT Strategic Metals Corp. M3 Metals' position is that these claims were correctly staked.

The current federal annual fees for all 684 DK-, DKN-, DKX-, LIT- and TX- series unpatented mining claims are estimated at $137,000 and there are no other associated holding costs.

Ownership of the unpatented mining claims is in the name of the holder (locator), subject to the paramount title of the United States of America, under the administration of the BLM. Under the Mining Law of 1872, which governs the location of unpatented mining claims on federal lands, the locator has the right to explore, develop, and mine minerals on unpatented mining claims without payments of production royalties to the U.S. government, subject to the surface management regulation of the BLM. Currently, annual claim maintenance fees are the only federal payments related to unpatented mining claims, and Surge represents these fees have been paid in full to September 1, 2025.

There is no expiration of ownership for the unpatented claims if annual federal claim maintenance fees are paid on time.

1.3 GEOLOGY

The NNLP lies in the fault-bounded Texas Spring Basin of Tertiary age. The Texas Spring Basin is filled with locally-derived sediments and felsic volcanoclastic rocks referred to as the Humboldt Formation. This basin is bounded by a ridge of Paleozoic-Mesozoic age sediments to the east and Paleozoic sediments intruded by the Jurassic age Contact Granite complex to the west and north.

The Miocene-age sedimentary sequence in the main part of the NNLP consists of a welded ash-flow tuff overlain by a sequence of interbedded clay-rich siltstone and shale punctuated by apparent air-fall tuff beds. The clay-rich sequence is capped by a layer of tuff and tuffaceous sediments with thin silicified beds. On the west and south, these rocks are covered with alluvial material derived from metamorphosed Paleozoic metasedimentary rocks and from the Jurassic-age Contact Pluton. A small igneous dome is found on the east and northeast edge of the claim block; the exact nature of the body is not well known but it appears to pre-date the mineralized claystone.

Lithium mineralization is found in three distinct horizons of silty, weakly calcareous claystone with seams of blue-grey clay. The depositional environment is lacustrine. Rocks between the lithium mineralized claystones are mostly reduced felsic air fall tuffs and tuffaceous siltstone.

1.4 DEPOSIT TYPES

Lithium-bearing clays at the NNLP share characteristics with the closed hydrologic system diagenesis (CHSD) model. A closed hydrologic system refers to a basin environment where hydrologic inputs are exceeded by evaporation. Closed hydrologic systems in the Great Basin are formed by either caldera collapse or divergent tectonic activity, both resulting in graben blocks suitable for lake formation. Hydrothermal circulation within the basin may contribute to the development of lithium-bearing claystone strata.

1.5 EXPLORATION

Lithium values to 780 ppm in historical United States government-sponsored stream sediment samples collected near Texas Spring prompted discovery and exploration of lithium clay mineralization at the NNLP. Subsequent collection and chemical analysis of 2,141 soil samples in the years 2021-2023 yielded lithium values to 5,120 ppm and assisted in the selection of drill hole locations. These geochemical data sets were supplemented in 2023 with electrical resistivity tomography (ERT) and towed transient electromagnetics (tTEM) which provided useful resistivity profiling for drill planning.

1.6 DRILLING

The drill hole inventory for the NNLP comprises 28 holes totaling 4,030.5 m (13,223.5 ft) completed in three phases in the years 2022-2024. This total represents 2,050 m (6725 ft) of reverse circulation, 461 m (1,512.5 ft) of sonic core, and 1,520 meters (4,986 ft) of diamond core drilling. Results of the 2024 drilling program of 1,274 m (4,180 ft) of reverse circulation drilling in eight holes prompted the update of the Mineral Resource Estimate that is presented in Section 14. Excluding the four closely-spaced drill hole pairs discussed in Section 10, drill hole spacing within the footprint of the lithium inferred mineral resource ranges approximately from 125 m to 1,000 m.

1.7 SAMPLE PREPARATION, ANALYSES AND SECURITY

Soil samples and drill samples were collected by experienced geotechnical and drill crews using industry-accepted methods. Surge geologists inserted samples of certified reference materials and blanks in a systematic schedule prior to laboratory submittal. ALS Global, an internationally recognized analytical laboratory that is independent of both Surge Battery Metals and the NNLP, provided chemical analyses for soil and drill samples. Analytical performance for certified reference materials and blanks was monitored and documented by Surge geologists.

It is the QP’s opinion that the sample collection, preparation, security, and analytical procedures as described in Section 11 are sufficient for this Technical Report.

1.8 DATA VERIFICATION

Laboratory analytical values that have been spot-checked against the working data tables are accurate. The drill hole collars examined by the QP during the site visit of October 8, 2024 are clearly and correctly monumented, with coordinates consistent with the professionally surveyed values.

A SciAps Model Z900 laser-induced breakdown spectroscopy (LIBS) analyzer was used in the field and in the core archive to confirm strong enrichment in lithium for multiple samples.

The QP concludes that the NNLP data are acceptable as used in this Technical Report and to support the planning of further exploration activities.

1.9 METALLURGICAL TESTING

Metallurgical test work for the Nevada North Lithium Project was undertaken between 2023 and 2024 to support process flowsheet development for the production of technical-grade lithium carbonate from claystone-hosted lithium mineralization. Testing was conducted at several independent laboratories, including Kappes, Cassiday & Associates (KCA) in Nevada; Florida Engineering and Design, Inc. (FEDINC) in Florida; Sepro Laboratories in British Columbia; and Kemetco Research Inc. (Kemetco) in British Columbia. The metallurgical program included mineral characterization, beneficiation, leaching, impurity removal, lithium carbonate precipitation, and solid-liquid separation.

Key findings from the program are as follows:

- **Beneficiation**: Wet screening and scrubbing demonstrated that lithium is predominantly concentrated in fine particle fractions (-20 µm to -75 µm), while carbonate gangue is associated with the coarse fractions. Attritioning and size classification allowed for the potential selective removal of carbonate material, enhancing lithium grades and reducing acid consumption during leaching.

- **Leaching**: Sulfuric acid leach tests achieved lithium extractions exceeding 90% across multiple composite grades. Acid consumption varied with carbonate content, ranging from 318 g/kg to 399 g/kg for beneficiated samples. Lithium extraction kinetics were rapid, with the majority of recovery occurring within the first 30 minutes. Testing showed that low-grade composites required 21 to 28 g/L in the final solution to achieve lithium extractions above 90%, while medium- and high-grade composites needed 50 to 60 g/L.

- **Purification and Precipitation**: Pregnant leach solutions were successfully purified through staged removal of aluminum, iron, magnesium, and calcium via precipitation, crystallization, and ion exchange. Subsequent lithium carbonate precipitation yielded a product purity of approximately 99.3%. Additional refining will be required to meet battery-grade specifications, particularly with respect to sulfate content.

- **Solid-Liquid Separation**: Settling and thickening tests on beneficiation and neutralized post-leach slurries identified FO 4808 SSH and FO 4990 SH as the most effective flocculants for beneficiation material. Static settling alone was insufficient to reach the ≥30% pulp density target, but centrifugation improved densities from 17–18% to 28–30%. For neutralized leach slurry, FA 920 VHM achieved a settling rate of 37 mm/min and 23% pulp density, increasing to 24.5% with a cationic flocculant.

1.10 MINERAL RESOURCES

The Qualified Person Dr. Bruce Davis, FAUSIMM prepared the mineral resource estimate for the lithium mineralization at the Northern Nevada Lithium Property. The effective date of the of the mineral resource estimate is August 7, 2024.

Mineral resources are not mineral reserves, and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into a mineral reserve upon application of modifying factors.

The mineral resources were classified into the Inferred mineral resource category according to their proximity to the sample data locations and are reported, as required by NI 43-101, according to the CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014) and CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (November 2019).

In the opinion of the Qualified Person, the mineral resource estimate is a reasonable representation of the mineralization found at the NNLP deposits at the current level of sampling.

This mineral resource estimate uses all drilling data that is available in the deposit areas. The mineral resource estimate included in this Technical Report is expected to be mined through open pit extraction methods.

The mineral resource estimate was generated using drill hole sample assay results for lithium and is restricted within clays horizons interpreted from drilling and geophysical data. Interpolation characteristics were defined based on geology, drill hole spacing, and geostatistical analysis of the data.

The estimate of mineral resources reported at 1,250 Li ppm cut-off and contained within the $20,000 LCE price pit shell, is shown in Table 1-1. Based on the assumed metal prices, operating costs and projected metallurgical recoveries, the base case cut-off grade for mineral resources is estimated to be 1,250 Li ppm. Note that the average bulk density of the mineral resources is 1.79.

Table 1-1: Estimate of Inferred Mineral Resource reported at 1,250 ppm Lithium Cut-off within $20,000 LCE Price Pit Shell

Zone	Li ppm Cut-off	Tonnes	Li (ppm)	LCE (Mt)
580 CY1	1,250	4,600,000	1,276	0.03
570 CU3	1,250	195,200,000	3,872	4.02
560 CU2	1,250	127,000,000	2,814	1.90
550 CU1	1,250	159,200,000	2,412	2.04
540 CL3	1,250	44,500,000	1,937	0.46
520 CL2	1,250	19,500,000	1,862	0.19
Total	**1,250**	**550,000,000**	**2,956**	**8.65**

1. The effective date of the mineral resource estimation is August 7, 2024.
2. The MRE has been prepared by Bruce M. Davis, in conformity with CIM "Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines and are reported in accordance with the Canadian Securities Administrators NI 43-101 requirements. Mineral resources are not mineral reserves and have not demonstrated economic viability. There is no certainty that any mineral resource will be converted into a mineral reserve.
3. Resources are constrained by a pit shell using Hexagon MinePlan™ 3D software.
4. The pit shell defined uses a 27° pit slope and assumes a US$88.50/t operating cost, 73.5% recovery and a US$20,000/t LCE price resulting in a reporting cut-off grade of 1,250 ppm Li.
5. A Li to Li_2Co_3 factor of 5.323 was used.
6. A fixed density of 1.79 t/m^3 was used.

There are no known factors related to environmental, permitting, legal, title, taxation, socio- economic, marketing, political or other relevant factors which could materially affect the mineral resource. Mineral resources in the Inferred category have a lower level of confidence than that applied to mineral resources in the Indicated category, and, although there is sufficient evidence to imply geologic grade and continuity, these characteristics cannot be verified based on the current data. It is reasonable to expect that the majority of Inferred mineral resources could be upgraded to Indicated mineral resources with continued exploration.

1.11 MINING METHODS

The NNLP is currently planned to be an open pit operation using backhoes, and front loaders to load the mineralized material and waste into ridged frame haul trucks. Blasting is not expected to be required. The mineralized material will be hauled directly to the processing facility, and the sub-grade and waste material will be hauled to a waste storage facility located northeast of the open pit.

There are no mineral reserves at NNLP at this time. All of the mineralization within the mineral resource block model is classified as inferred category. The use of the term "ore" will be avoided throughout this Technical Report because there is insufficient confidence to establish a mineral reserve. The terms mineralized material or process feed will be used to discuss the component of mineral resource that is planned for processing within this PEA.

References to the grade of process feed within this section of the report means the diluted in-situ grade of material fed to the process plant from the mine. One should understand that the first stage of the process facility will remove a coarse fraction from the initial process feed in order to send an upgraded feed to the later stages of the process. The mine plan presented in this section reports the initial feed grade and does not incorporate the results of the early stage of process upgrade.

The mine planning process applies modifying factors to the mineral resource block values in order to provide the best estimate of the grade of material delivered to the front end of the process plant.

Table 1-2 summarizes the mine production schedule that was developed for NNLP. The procedures used to develop that schedule are discussed in the following sub-sections.

The column titled "Percentage of Process Ktonnes on Land Owned by Surge" is required for royalty calculations that are included within the financial analysis.

The grades reported on the table include mining dilution and reflect the estimated grade of the material that will be delivered to the process plant.

Table 1-2: NNLP Production Schedule – Inferred Mineralization

Year	Li Cut-off (ppm)	Process Feed (kt)	Grade Li (ppm)	Percentage of Process Ktonnes on Land Owned by Surge	Waste (kt)	Total (kt)
Preprod	1,250	0	0		565	565
1	1,250	1,288	4,620	67.5%	8,712	10,000
2	1,250	2,575	4,781	70.0%	10,425	13,000
3	1,250	3,863	4,790	68.0%	9,137	13,000
4	1,250	5,150	4,783	89.7%	7,897	13,047
5	1,250	5,150	4,598	87.0%	7,400	12,550
6	1,250	5,150	4,807	74.1%	7,400	12,550
7	1,250	5,150	4,702	70.5%	7,400	12,550
8	1,250	5,150	4,531	93.6%	7,400	12,550
9	1,250	5,150	4,162	76.4%	7,400	12,550
10	1,250	5,150	4,418	84.4%	7,400	12,550
11	1,250	5,150	4,381	38.8%	7,400	12,550
12	1,250	5,150	4,546	42.4%	7,400	12,550
13	1,250	5,150	3,960	51.0%	7,400	12,550
14	1,250	5,150	4,053	90.4%	7,400	12,550
15	1,250	5,150	3,992	40.2%	7,400	12,550
16	1,250	5,150	4,028	17.5%	7,400	12,550
17	1,250	5,150	4,061	49.2%	7,400	12,550
18	1,250	5,150	3,797	88.6%	7,400	12,550
19	1,250	5,150	3,906	95.2%	7,400	12,550
20	1,250	5,150	3,982	92.7%	7,400	12,550
21	1,250	5,150	4,092	89.8%	7,400	12,550
22	1,250	5,150	4,292	70.6%	7,400	12,550
23	1,250	5,150	4,215	72.7%	4,850	10,000
24	1,250	5,150	3,736	85.3%	4,850	10,000
25	1,250	5,150	3,558	72.5%	4,850	10,000
26	1,250	5,150	3,429	57.3%	4,850	10,000
27	1,250	5,150	3,366	51.5%	4,850	10,000
28	1,250	5,150	3,560	43.0%	4,850	10,000
29	1,250	5,150	3,559	35.6%	4,850	10,000
30	1,250	5,150	3,551	43.7%	4,850	10,000

Year	Li Cut-off (ppm)	Process Feed (kt)	Grade Li (ppm)	Percentage of Process Ktonnes on Land Owned by Surge	Waste (kt)	Total (kt)
31	1,250	5,150	3,529	43.6%	4,850	10,000
32	1,250	5,150	3,782	34.8%	4,850	10,000
33	1,250	5,150	3,955	28.6%	4,850	10,000
34	1,250	5,150	3,848	20.8%	4,850	10,000
35	1,250	5,150	3,612	36.4%	4,850	10,000
36	1,250	5,150	3,678	19.9%	1,419	6,569
37	1,250	5,150	3,742	30.9%	1,189	6,339
38	1,250	5,150	3,908	33.0%	652	5,802
39	1,250	5,150	3,907	35.2%	636	5,786
40	1,250	5,150	3,842	33.8%	872	6,022
41	1,250	5,150	3,696	25.8%	647	5,797
42	1,250	1,418	3,846	0.0%	14	1,432
Total		**204,844**	**4,017**	**56.5%**	**238,415**	**443,259**

1.12 RECOVERY METHODS

The current flowsheet, process design criteria (PDC), and steady-state process model built in METSIM® software for the Project have been developed from scoping level metallurgical test work (beneficiation and leaching) and industry benchmarks (lithium brine treatment). Incidental lithium carbonate precipitation and purification testwork has also been conducted at lab scale. This work, however, has not displayed any unique metallurgical challenges or been piloted in a manner to incorporate it into the overall process model, yet. Design criteria, major equipment, reagent and utility consumptions, and overall recovery estimates used for lithium carbonate production forecasts provide the basis for the Project economic model. The process flowsheet consists of five key areas: beneficiation, leaching and neutralization, CCD and filtration circuit, magnesium and calcium removal (i.e., purification) and lithium carbonate production. In beneficiation, the lithium concentration of mineralized material is on average, upgraded from approximately 4,017 ppm to approximately 4,982 ppm. Lithium is then leached from process slurry by sulfuric acid (H_2SO_4), with an assumed average leach extraction of approximately 93.0% over the life-of-mine.

Major waste products include coarse gangue from beneficiation, neutralized leach residue filter cake, magnesium sulfate salts, and sodium/potassium sulfate salts. The filter cake and salts will be conveyed to a clay tailings filter stack facility which will be progressively reclaimed during the life of the Project. On average, nearly 15,800 tonnes per day (t/d) of cake and salts will be generated. Coarse gangue is generated at an average rate of 2,400 t/d.

There are five major areas contributing to lithium losses in the process plant:

- Beneficiation: lithium associated with rejected coarse gangue mineralization, loss is estimated at 7.2%
- Leach: lithium not leached from the mineralized material, loss is estimated at 6.5%
- CCD and filtration: lithium lost in entrained moisture within the filter cake, lithium loss is approximately 1.2%
- Magnesium sulfate ($MgSO_4$) and sodium and potassium sulfate salts: lithium is lost in residual mother liquor remaining on the crystals. Based on test data and typical separation and wash efficiencies, the loss estimates
    - for the magnesium crystallization circuit is 1.2% and
    - for the ZLD crystallization circuit 1.3%.

Recovery of lithium during operations will fluctuate with varying mineralization and mineralized material chemistry but is assumed as a constant 82.8% for the purposes of this study.

1.13 PROJECT INFRASTRUCTURE

1.13.1 Site Access

The Project envisions improving the junction of US Hwy 93 and State Experimental Station Rd, which lies 38.5 km (24.0 mi) south of Jackpot, NV and 68.4 km (42.5 mi) north of Wells, NV on US Hwy 93. Approximately 22.8 km (14.2 mi) of State Experimental Station Rd and paralleling Knoll Creek will be upgraded as this section is presently for high clearance four-wheel drive vehicles in fair weather and dry road conditions. A new 11.3 km (7.0 mi) road will be constructed from State Experimental Station Rd, skirting the south side of the open pit to access the process plant.

The 34.1 km (21.2 mi) access road from US Hwy 93 will allow for legal haul tractor-trailers for construction and operations, including flatbed deliveries for bulk materials and wide load transports delivering plant facility equipment.

See overall site general arrangement including the process plant, open pit, waste rock, coarse gangue storage (CGS) and clay tailings filter stack (CTFS) in Figure 1-1.

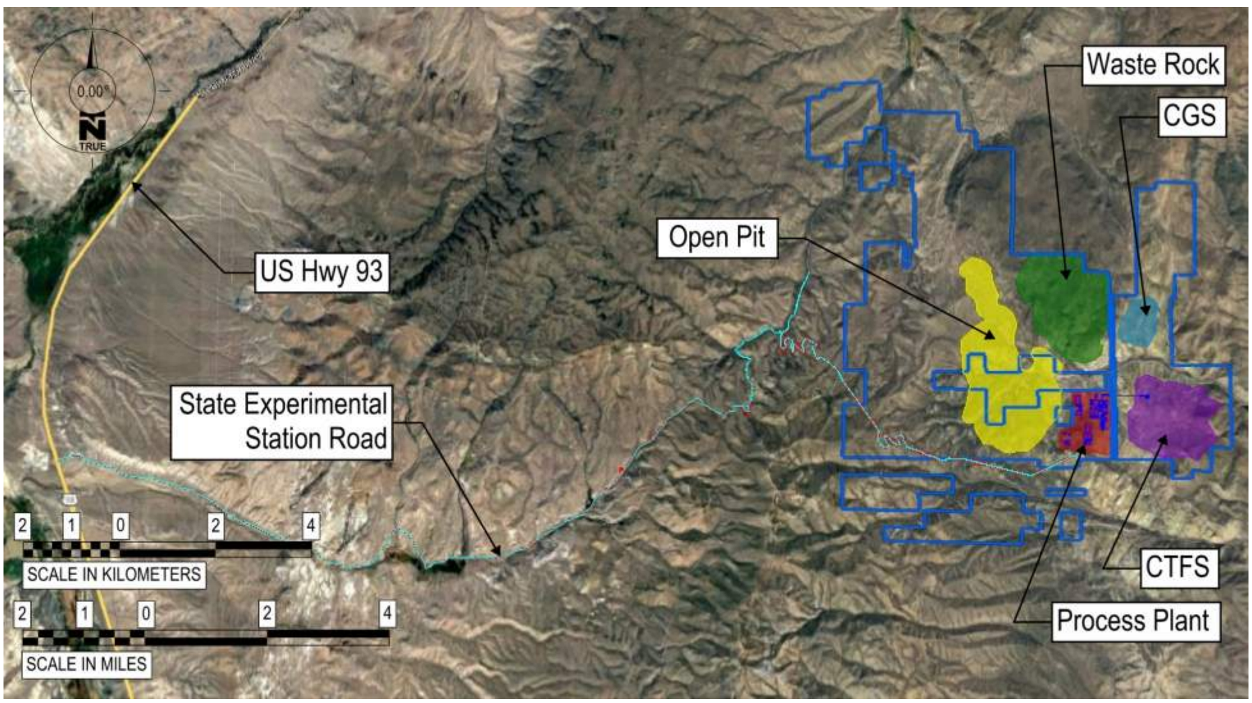


Figure 1-1: Overall Site General Arrangement

1.13.2 Raw Material Logistics

Raw materials for the Project are to be delivered to the site by over highway trucks during the life of mine. A local rail-to-truck transload facility will allow for transfer of most raw materials for delivery to the Project site. The transload facility will be located between Wells and Jackpot, Nevada.

1.13.3 Electrical Power Supply

Electrical power for the Project will be primarily supplied by on-site power generation from the waste heat provided by the sulfuric acid plant through a steam turbine generator. The balance of electricity will be supplied by the Wells Rural Electric Company, who are the electrical utility providers in the area of the NNLP, through one of the nearby high voltage transmission lines. Demand loads for Phase 1 and Phase 2 are 75 megawatts (MW) and 66 MW respectively, for a combined total of 141 MW demand during Phase 2. Power will be generated at the sulfuric acid plants from the steam generated from excess heat , lowering the maximum anticipated net import load to 52 MW.

The source of the external electricity will be via either the 138 kV or 345 kV transmission lines that run parallel to US Hwy 93. The 138 kV line is owned by Idaho Power while the 345 kV line is owned by NV Energy. Consultations with Wells Rural Electric Company are ongoing.

1.13.4 Sulphuric Acid Production

The sulfuric acid plants for the Project are Double Contact Double Absorption (DCDA) sulfur burning sulfuric acid plants with heat recovery systems (HRS). The acid plant will also generate power. Additional power will be purchased and delivered to site.

Phase 1 and Phase 2 will each have a single dedicated sulfuric acid plant capable of producing a nominal 3,000 t/d (100 wt% H_2SO_4 basis) of sulfuric acid by burning liquid elemental sulfur. Solid, prilled sulfur is delivered to site by truck and is stored under cover prior to being fed to the melter. The sulfuric acid generated from each plant is used in the process plant for the chemical production of lithium carbonate. Each sulfuric acid plant has dry prill storage and liquid sulfur tankage providing a combined capacity of approximately 1 month.

1.13.5 Water

Surge anticipates total water supply requirements of 6,420 acre-ft per annum (AFA). The primary source of water supply to support the construction period and Phase 1 is proposed to consist of groundwater wells located east of the Project area. NDWR issues approvals to use groundwater for mining, milling, and domestic purposes. Surge is applying for water rights to meet Phase 1 demands and anticipates leasing or purchasing additional private water rights for Phase 2.

1.14 MARKET STUDIES AND CONTRACTS

The lithium market has shown a great deal of volatility over the last 5 to 7 years. Analyses of past pricing and long-term forecasting shows a weighted average pricing $24,832 per tonne lithium carbonate. A long-term price of $24,000 per tonne lithium carbonate is used for this PEA.

There are no existing contracts on this Project.

1.15 ENVIRONMENTAL STUDIES AND PERMITTING

Surge will need to secure permits and authorizations from several Federal, State, and local agencies to construct, operate, and close/reclaim the NNLP along with conducting requisite studies and analyses and public involvement.

Surge will submit a Plan of Operations and Reclamation Plan to develop the mining project in accordance with the Bureau of Land Management (BLM) Surface Management Regulations under 43 Code of Federal Regulations (CFR) 3809, Surface Occupancy regulations under 43 CFR 3715, and Nevada reclamation regulations under Nevada Administrative Code (NAC) 519A. The BLM and the Nevada Division of Environmental Protection (NDEP) Bureau of Mining Regulation and Reclamation (BMRR) will concurrently review the Plan of Operations (including the Reclamation

Plan that serves as the Reclamation Permit Application) under a Memorandum of Understanding between these two agencies.

The Plan of Operations will comply with BLM regulations associated with preparation of Plan of Operations and Reclamation Plan (43 CFR 3809.401 and 43 CFR 3809.420); and Nevada guidance for Preparation of Operating Plans for Mining Facilities (NAC 445A.398) including all associated drawings/figures, maps, and attachments.

Instruction Memorandum (NV-IM) 2024-019 provides guidance to all BLM Nevada offices on the National Environmental Policy Act (NEPA) project management process including review and publication of Environmental Impact Statements (EISs) that cover major projects and other applicable Federal actions subject to compliance with NEPA. Surge assumes that the BLM will determine an EIS-level review will be required to assess the environmental effects of the Project under NEPA. The Project's permitting schedule may benefit from implementation of the Executive Order (EO) 14241 titled Immediate Measures to Increase American Mineral Production issued in March 2025 to streamline permitting processes for mining projects, particularly those focused on critical minerals. In addition to specific this EO and BLM Nevada direction, Surge also recognizes recent changes made to NEPA and assumes BLM will comply with the Department of Interior's (DOI's) July 3, 2025 Interim Final Rule, including adherence to 516 DM 1 – US DOI Handbook of NEPA Implementing Procedures.

The State of Nevada requires permits for all mineral exploration and mining operations regardless of the land status. The most comprehensive State operational permits that will likely be required for the Project include the Reclamation Permit, Water Pollution Control Permits (WPCP), Air Quality Permit to construct and operate, Section 401 Certification, and Permit to Appropriate Water.

Surge anticipates securing the required Federal, State, and local permits required to construct, operate, and reclaim the mine operations within a reasonable timeframe in line with other similar open pit mine operations in Nevada recently permitted.

Surge completed environmental baseline characterization studies in 2023 and 2024 over a 7,819-acre project area to support permitting of the Nevada North Lithium Exploration Project. Based on the environmental baseline studies completed to date to support the exploration project, Surge does not anticipate issues that would significantly affect mine planning or preclude securing required permit and development and operations of the Project.

Surge will ensure that the breadth and depth of the environmental and social studies are adequate to characterize the existing conditions and to support studies and analyses as determined necessary by the BLM. Surge may expand these surveys and/or perform additional baseline characterization studies and analyses on other resources as deemed necessary by the agencies to support State and Federal permitting processes, including BLM's effect analysis under NEPA.

At this early stage, the QP is not aware of any known environmental issues that would preclude development of a mine operation based on environmental studies conducted in and around the exploration project area. There are no identified issues that are expected to prevent Surge from securing all permits and authorizations required to commence construction and operation of the Project based on the data that has been collected to date.

All waste rock, coarse gangue, and tailings management will follow the regulatory requirements and permit conditions for the Project. Surge will meet monitoring requirements as established by the outcome of BLM's NEPA analysis and NDEP's requirements as part of the Project's WPCP, the Air Quality Permit, and other required permits.

Surge will develop a Stakeholder Engagement Plan to seek input and feedback from community members, Native American Tribes, local community organizations and business, elected officials, and non-governmental organizations. Surge will consider feedback shared by the participants during these engagements (to the extent feasible) in the development of the Plan of Operations to avoid, minimize, or mitigate potential negative effects on the communities and enhance project benefits.

Surge will complete closure and reclamation of disturbed areas resulting from Project's activities in accordance with BLM and NDEP regulations. Surge will reclaim disturbed areas in accordance with the performance standards under BLM 43 CFR 3809.420(b)(3) and NAC 445A.350 through 447 that include the State of Nevada's regulations governing design, construction, operation, and closure of mining operations. Surge will ensure the reclamation surety is adequate before authorization to proceed with the Project. Surge expects to provide a bond equivalent to the actual cost of performing the agreed-upon reclamation measures. BLM and NDEP-BMRR will approve the bond prior to approving the Plan of Operations.

1.16 CAPITAL AND OPERATING COSTS

The capital cost estimate for the NNLP has been prepared by M3 and IMC and covers early works, mine development, mining, the process plant, the transload facility, commissioning and all associated infrastructure required to allow for successful construction and operations.

Process, Infrastructure and Mine capital costs are based on Q1-Q2 2025 pricing and in US dollars. The CAPEX is a Class 5 Association for the Advancement of Cost Engineering (AACE) estimate and includes offsite infrastructure, owner's cost and contingency. Note that the tables in this section were rounded to a limited number of significant figures and therefore some summation errors may be present. Table 1-3 summarizes the capital cost estimate developed for the Project. Table 1-4 summarizes the operating cost.

Table 1-3: Summary of Capital Cost Estimate

Area	Phase 1 CAPEX ($M)	Phase 2 CAPEX ($M)	Sustaining Capital ($M)	LoM ($M)
Mine	$23		$142	$165
Process Plant & Infrastructure	$2,950	$2,350	$1,371	$6,671
Total	**$2,973**	**$2,350**	**$1,514**	**$6,836**

Table 1-4: Project Operating Cost Summary (Years 1-42 Life of Mine – Base Case)

Area	Annual Average ($M)	$/tonne Product	Percent of Total
Mine	$35.67	$413.17	8%
Lithium Process and Acid Plant	$380.43	$4,406.18	84%
Tailings and Gangue	$24.75	$286.65	5%
General & Administrative	$11.85	$137.30	3%
Total	**$452.71**	**$5,243.31**	**100%**

1.17 ECONOMIC ANALYSIS

A discount cash flow model was conducted for the construction period and first 42 operating years of the Project, in accordance with the latest mine plan for the Project.

Table 1-5: After Tax NPV at 8% and IRR

Economic Indicator	Units	Value
NPV @ 8%	$000	$9,165,335
IRR	%	22.8%
Payback (undiscounted)	Years	4.64

1.18 CONCLUSIONS AND RECOMMENDATIONS

1.18.1 Conclusions

The NNLP has demonstrated potential as a lithium-bearing claystone deposit located in a favorable mining jurisdiction. Based on current exploration efforts, the NNLP hosts Inferred Mineral Resources totaling approximately 550 million tonnes (Mt) at an average grade of 2,956 ppm lithium, equivalent to 8.65 Mt of lithium carbonate equivalent (LCE). While these resources are presently classified as Inferred and thus carry lower confidence, there is a reasonable expectation that continued exploration could upgrade a substantial portion to the Indicated category.

Metallurgical test work conducted between 2023 and 2024 has established that the claystone mineralization is amenable to sulfuric acid leaching following beneficiation, achieving high lithium extractions (exceeding 90%) and yielding technical-grade lithium carbonate at ~99.3% purity. Solid-liquid separation tests further confirm the viability of thickening and filtration processes required at both beneficiation and post-leach stages.

From an infrastructure perspective, the NNLP is well situated. The planned access road from US Hwy 93, secure water sourcing strategies, and reliable power solutions leveraging waste heat recovery and supplemental grid power all support the development of a robust operational framework. Mining methods proposed are conventional and suited to the deposit type, with no major technical impediments identified.

On the environmental front, baseline studies and permitting plans are progressing as anticipated, with no significant constraints identified to date. The March 2025 Executive Order 14241 is expected to potentially streamline the permitting process, further supporting timely advancement of the Project along with recent changes made to NEPA in the Department of Interior's (DOI's) July 3, 2025 Interim Final Rule, including adherence to 516 DM 1 – US DOI Handbook of NEPA Implementing Procedures.

Overall, the NNLP is considered technically feasible at its current stage, with clear pathways to advance through further exploration, metallurgical optimization, and environmental permitting toward a potential development decision.

1.18.2 Recommendations

The following work programs are recommended to advance the NNLP:

1.18.2.1 Geology and Resource Development

- **Resource Conversion Drilling:** Prioritize drilling to convert current Inferred resources to Indicated and Measured categories. Examination of the block model in plan and cross-sectional views suggests that two areas of approximately 220 ha each are priority areas for this effort. The resource conversion drilling has an estimated cost of $4 million.
- **Exploration Drilling:** Test four additional soil-anomalous areas (particularly northeast of the current footprint) with 20 reconnaissance drill holes. The exploration drilling has an estimated cost of $1 million.

- **Soil and Geophysical Surveys:** Conduct soil sampling in four additional Tertiary outcrop areas (approx. 500 samples at 200 m spacing, with potential for an additional 500 samples at 100 m spacing depending on results) and expand transient electromagnetics (tTEM) data acquisition during drill road construction. The Geochemical and geophysical surveys have an estimated cost of $350,000.

- **Clay Mineral Studies:** Characterize lithium-hosting clay minerals and lithium residence to support metallurgical process optimization. The clay mineral studies have an estimated cost of $50,000.

- **Reference Materials:** Develop certified reference materials across five lithium grades for ongoing quality control. The reference materials have an estimated cost of $25,000.

1.18.2.2 Metallurgical Testing

- **Process Optimization:** Continue beneficiation and leach testing to validate flowsheet performance across different geological domains and optimize acid consumption.

- **Solid-Liquid Separation Strategies:** Validate settling, thickening, and filtration performance under continuous conditions to inform industrial-scale design.

- **Impurity Management:** Further define impurity deportment and develop targeted removal strategies to produce battery-grade lithium carbonate.

- **Internal Neutralization:** Evaluate the use of carbonate-rich beneficiation rejects for internal acid neutralization.

- **Crystallization Studies:** Investigate sodium and potassium behavior and residual lithium recovery strategies in brine recycle streams.

- **Battery-Grade Refinement:** Develop additional refining steps to achieve international battery-grade product specifications.

1.18.2.3 Mineral Resources

- Conduct additional geologic mapping, geophysics, and interpretation to improve the model, and undertake drilling to upgrade to Indicated Resources and expand Inferred Resources beyond the current footprint.

1.18.2.4 Mining and Geotechnical Work

- Undertake detailed geotechnical studies of pit slopes and assess material bearing conditions for the operation of heavy equipment.

- Conduct thorough sampling to assess material density and moisture content.

1.18.2.5 Environmental and Permitting

- Continue ecological monitoring (e.g., greater sage-grouse, raptors, eagle nests) and expand surface water and groundwater surveys up to a 5-mile radius.

- Install groundwater monitoring infrastructure and conduct long-term pumping tests to build a hydrogeological conceptual site model.

- Develop a comprehensive water balance model for processing and reclamation planning.

- Integrate ongoing geochemical characterization of overburden and waste rock, guided by exploration data.
- Enhance community and tribal engagement initiatives to ensure proactive stakeholder involvement.

1.18.2.6 Infrastructure and Market Studies

- Secure necessary water rights to support phased operational requirements.
- Continue discussions with Wells Rural Electric Company and regional utilities to secure power supply agreements.
- Update market studies and lithium price forecasts as part of the next stage prefeasibility-level evaluation.

2 INTRODUCTION

This Technical Report was prepared at the request of Surge Battery Metals Inc. (Surge) to summarize the results of a Preliminary Economic Assessment (PEA) on the Nevada North Lithium deposit in compliance with National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101) applicable in Canada. The report includes estimates of mineral resources, project design, capital and operating costs, and economic projections.

Mineral Resources estimation is based on the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) 2019 Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (2019 CIM Guidelines). Definitions of Mineral Resources are as set out in the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves.

2.1 SOURCES OF INFORMATION

The qualified persons for this technical report are listed in Table 2-1.

Table 2-1: Qualified Persons and Areas of Responsibilities

QP Name	Designation	Company	Site Visit Date	Area of Responsibility
Daniel Roth	PE, P.Eng.	M3 Engineering & Technology Corp.	May 25, 2024	1.1, 1.13, 1.16, 1.18, 2, 3, 18 (except 18.4 and 18.5), 21.1 (except 21.1.3), 24, 25.5, 26.5, and 27.
Joshua Huss	PE	M3 Engineering & Technology Corp.	No Site Visit	Sections 1.12, 1.17, 17, 18.4, 18.5, 21.2 (except 21.2.3.1), and 22.
Bruce Davis	FAusIMM	Bruce Davis Consulting	September 19, 2023	Sections 1.10, 14, 25.3 and 26.3.
Marie-Hélène Paré	SME-RM	GSI Environmental Inc. (GSI)	June 11, 2024	Sections 1.15, 20, 25.6, and 26.7.
John M. Marek	PE	Independent Mining Consultants, Inc. (IMC)	No Site Visit	Sections 1.11, 15, 16, 21.1.3, 21.2.3.1, 25.4 and 26.4.
William van Breugel	P.Eng.	SGS Canada Inc.	No Site Visit	Section 1.14, 19 and 26.6.
Jeffrey D. Phinisey	SME-RM, AAPG	TAG Resources LLC	October 8, 2024	Sections 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 4, 5, 6, 7, 8, 9, 10, 11, 12, 23, 25.1, 26.1 and Appendix B.
Norman Chow	P.Eng.	Kemetco Research Inc.	No Site Visit	Sections 1.9, 13, 25.2, and 26.2.

2.2 DESCRIPTION OF PERSONAL INSPECTIONS

Daniel Roth visited the Nevada North Lithium Project on May 25, 2024 and viewed all infrastructure sites including process plant area, tailing area and open pit.

Bruce Davis visited the Nevada North Lithium Project on September 19, 2023. He inspected sonic and core samples. He reviewed geological logging procedures and drilling practices and viewed drill operations. Sonic and drill core sampling procedures were described and sample chain of custody and security was reviewed. Geological models and assay QA/QC practice were observed. Sampling to determine specific gravity was demonstrated. Surge drill hole locations were verified. The presence of lithium mineralization was verified by a LIBS (laser induced breakdown spectrography) machine applied to selected samples.

Marie-Hélène Paré visited the project area on June 11, 2024 during the preparation of the Environmental Assessment for the exploration phase. She joined Surge geologists and a team of BLM specialists.

Jeffrey D. Phinisey visited the Nevada North Lithium Project on October 8, 2024 and examined access, physiography, surface geology, drill hole pads and associated ground disturbance/reclamation, drill hole monumentation, and piezometer installations. Significant lithium enrichment in claystone and silica lenses was confirmed by laser induced breakdown spectroscopy (LIBS) analysis.

2.3 UNITS, CURRENCY AND TERMS OF REFERENCE

All units used in this Technical Report are metric unless otherwise stated. Currency in this technical report is in United States Dollars (US$) unless otherwise specified. Table 2-2 lists the abbreviations for technical terms used throughout the text of this technical report.

Table 2-2: List of Abbreviations and Acronyms

Abbreviation/Acronym	Name
%	Percent
<	Less Than
>	Greater Than
°	Degrees of Arc
°C	Degrees Celsius
°F	Degrees Fahrenheit
$M	Million dollars
µm	Micrometer (10^{-6} meter) or microns
%	Percent
3D	Three-Dimensional
AFA	Acre-feet per annum
BAPC	Bureau of Air Pollution Control
BLM	Bureau of Land Management
BMRR	Bureau of Mining Regulation and Reclamation
BNAF	Baseline Needs Assessment Form
BWPC	Bureau of Water Pollution Control
CFR	Code of Federal Regulations
CGS	Coarse Gangue Storage
cm	Centimeter
CPC	Certificate of Public Convenience
CTFS	Clay Tailings Filter Stack
DCDA	Double Contact Double Absorption
DPBH	Nevada Division of Public and Behavioral Health
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ERT	Electrical Resistivity Tomography
ESA	Endangered Species Act

Abbreviation/Acronym	Name
ft	Feet, foot or '
FONSI	Finding of No Significant Impact
FEDINC	Florida Engineering and Design, Inc.
g	Grams
g/kg	Grams per kilogram
g/L	Grams per liter
ha	Hectare
HAP	Hazardous Air Pollutant
HCl	Hydrogen Chloride
HRS	Heat Recovery Systems
IM	Instruction Memorandum
in	Inch or "
ITP	Incidental Take Permit
kg	Kilogram
km	Kilometer
kt	Kilotonne or Ktonne
kV	Kilovolt
L	Liter
Li	Lithium
LoM	Life of Mine
m^3	Cubic Meter
m	Meter
M	million
mg	Milligrams
mg/L	Milligrams per Liter
mi	Mile(s)
MSHA	Mine Safety and Health Administration
Mt	Million tonnes
MW	Megawatt
NAC	Nevada Administrative Code
NAG	Net Acid Generation
NDEP	Nevada Division of Environmental Protection
NDWR	Nevada Division of Water Resources
NDOW	Nevada Department of Wildlife
NDOT	Nevada Department of Transportation
NEPA	National Environmental Protection Act
NNLP or “the Project”	Nevada North Lithium Project
NOI	Notice of Intent

Abbreviation/Acronym	Name
NPDES	Stormwater National Pollutant Discharge Elimination System
NRS	Nevada Revised Statutes
NV	Nevada
PLS	Pregnant Leach Solution
ppm	Parts per million
PM_{10}	Particular Matter less than 10 Microns in Diameter
PUCN	Public Utilities Commission of Nevada
QP	Qualified Person
ROD	Record of Decision
ROW	Right-of-Way
SER	Supplemental Environmental Report
SFM	State Fire Marshal
SHPO	Nevada State Historic Preservation Office
SIR	Supplemental Information Report
STG	Steam Turbine Generator
t/d	Tonnes per day
tTEM	Towed Transient Electromagnetic
UES	UES Consulting Services, Inc.
US$	United States Dollars
USACE	US Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Services
WB	Western Biological
WOTS	Waters of the State
WOTUS	Waters of the United States
WPCP	Water Pollution Control Permit
wt%	Weight Percent

3 RELIANCE ON OTHER EXPERTS

In cases where the study authors have relied on contributions from third parties, the conclusions and recommendations are exclusively those of the particular QP. The results and opinions outlined in this Technical Report that are dependent on information provided by third parties are assumed to be current, accurate and complete as of the date of this Technical Report.

Information received from other experts has been reviewed for factual errors by the Qualified Persons. Any changes made as a result of these reviews did not involve any alteration to the conclusions made. Hence, the statements and opinions expressed in these documents are given in good faith and in the belief that such statements and opinions are not false and misleading at the date of these reports. These experts were relied upon for the following information:

- Water resources were provided by Dwight L. Smith, PE, PG, CHg from UES in the memorandum titled "Nevada North Lithium Project – Water Resources Strategy" dated August 15, 2024.
- The QP has relied upon statements from the issuer for property description, ownership, agreements, and encumbrances described in Section 4 and Appendix B.

4 PROPERTY DESCRIPTION AND LOCATION

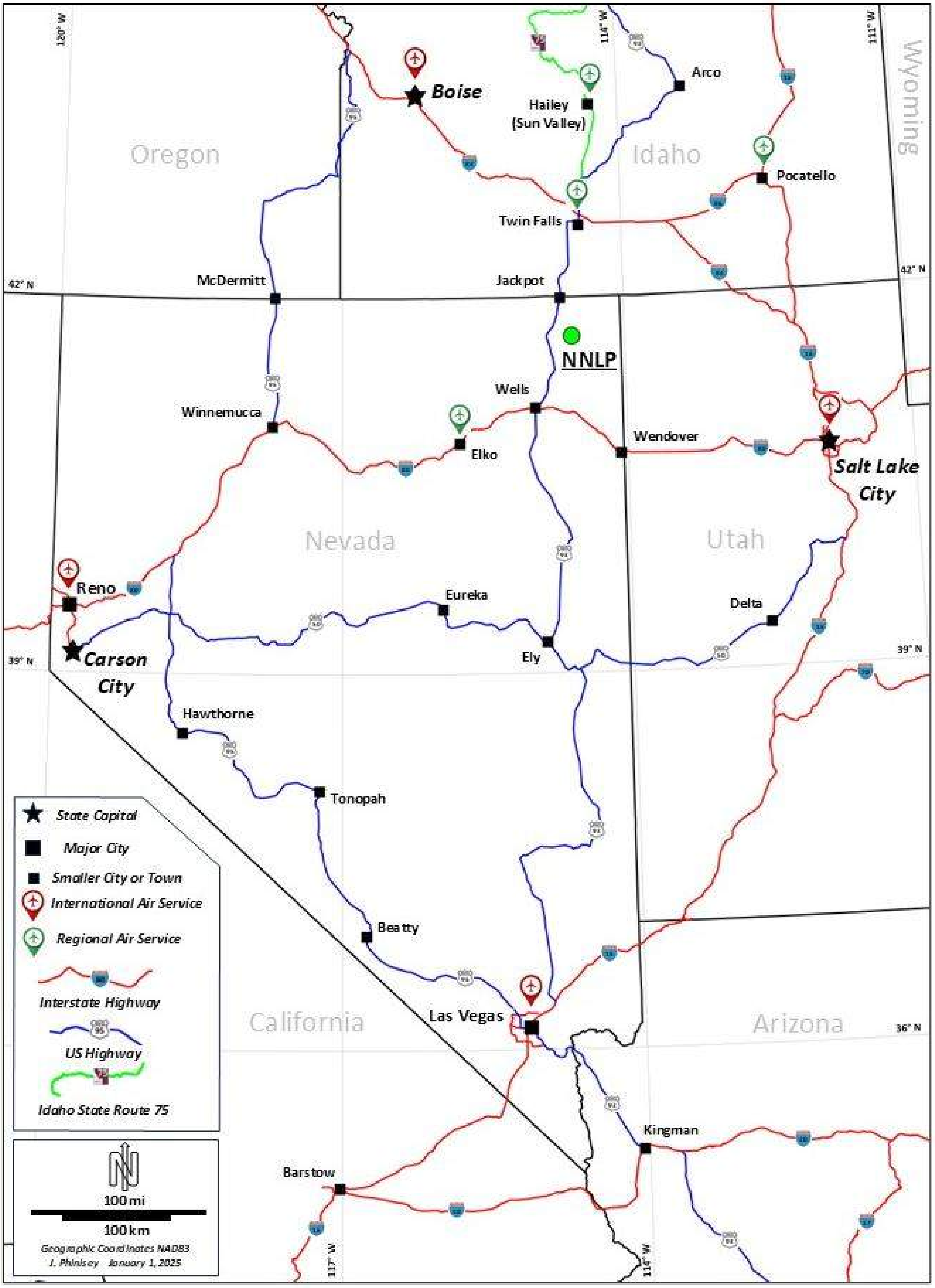
Unless otherwise noted, the geographic coordinate system referenced in this Technical Report is NAD83 datum, UTM Zone 11 projection. Linear measurements are in meters and area measurements are in hectares, often supplemented with the imperial unit equivalent in parentheses.

4.1 LOCATION AND LAND AREA

The Nevada North Lithium Project (NNLP) is centered at 41.68° N 114.56° W in northeastern Elko County, NV approximately 140 km (87 mi) northeast of Elko, NV, and 74 km (46 mi) north of Wells, NV (Figure 4-1). The NNLP falls within the USGS Texas Spring and Emigrant Springs 7.5' topographic quadrangles, the Jackpot, NV 1:100,000 scale topographic quadrangle, and the Wells, NV 1:250,000 scale topographic quadrangle.

Cadastral description with respect to Mt. Diablo Base and Meridian includes portions or all of the following Sections:

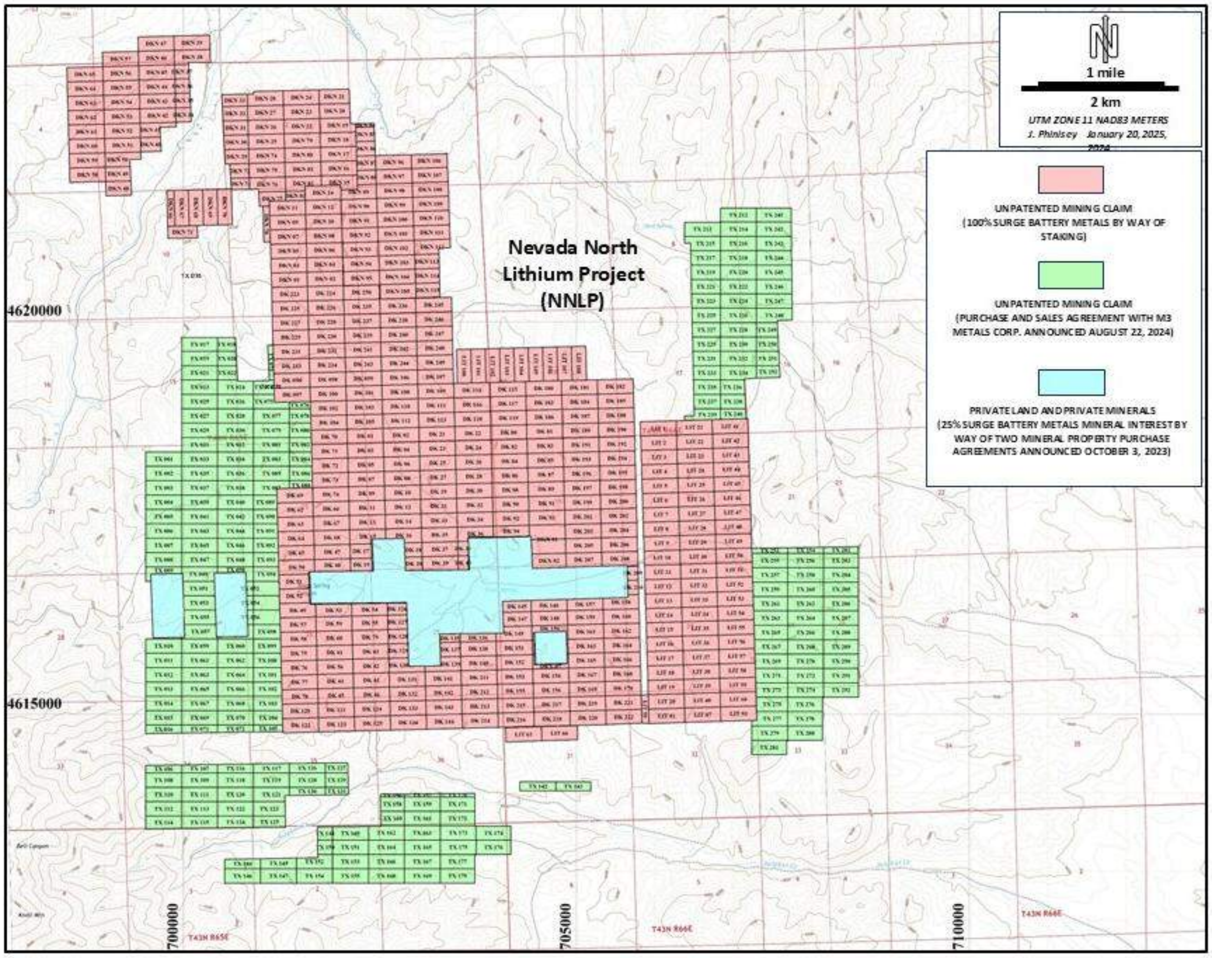
- Township 43 North, Range 65 East – Secs. 1, 2, 3;
- Township 43 North, Range 66 East – Sec. 6;
- Township 44 North, Range 65 East – Secs. 1, 2, 3, 10, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 27, 34, 35, 36;
- Township 44 North, Range 66 East – Secs. 8, 9, 16, 17, 18, 19, 20, 21, 28, 29, 30, 31, 32, 33;
- Township 45 North, Range 65 East – Sec. 34.



Source: J. Phinisey, 2025

Figure 4-1: Location of the Nevada North Lithium Project (NNLP)

The NNLP comprises 684 federal unpatented lode mining claims which total approximately 5,160 ha (12,751 acres) on lands administered by the BLM (Figure 4-2, Appendix B). Minority ownership of subsurface mineral rights on privately-owned parcels constitutes an additional 356 ha (880 acres) lying surrounded by and contiguous with the unpatented lode mining claims. Total area represented by the NNLP is approximately 5,516 ha (13,631 acres).



Source: J. Phinisey, 2025

Figure 4-2: Unpatented Mining Claims and Private Land Ownership

4.2 AGREEMENTS AND ENCUMBRANCES

Surge holds ownership in the DK-, DKN-, DKX-, DX- and LIT- series of claims by means of purchase from Alan Morris in 2021 and by staking (red, Figure 4-2).

Adjacent to and surrounded by the unpatented mining claims of the NNLP are certain parcels of private land (blue, Figure 4-2) of which the surface rights are primarily owned by the Salmon River Cattlemen's Association ("the Private Lands"). The parcels total approximately 356 ha (880 ac). Surge USA has purchased 25% of the subsurface mineral rights ("the Private Mineral Rights") on the Private Lands in two separate transactions. The sales agreements for these separate transactions make provision for payment of a three (3%) royalty on production based on the percentage of the Mineral Rights on the Private Lands purchased (Surge press release, October 3, 2023). Surface use on the Private Lands was provided for Surge's 2024 drilling on the Private Lands by way of an Entry and Exploration Agreement with the Salmon River Cattlemen's Association (Surge press release April 4, 2024). Drilling on the Private Lands in 2024 was paid for, pro rata, by Surge and the holder of the majority of the remaining 75% of the Private Lands, Rubicon Neva da Corp., a wholly owned subsidiary of Evolution Mining Ltd., an ASX listed producing company ("Evolution"). Both Surge's agreement with the Salmon River Cattleman's Association and its agreement with Evolution must be renewed each year and applied only to the 2024 drilling activities upon completion of which they terminated. Surge has not entered into such renewal agreements for 2025 as of the effective date of this Technical Report.

Surge currently owns a 50% interest in, and has entered into an agreement (the "Purchase Agreement") to acquire the remaining 50% interest in (the "Remaining Interest"), for a total of 100%, certain unpatented mining claims (green, Figure 4-2) (the "M3 Metals Claims") from M3 Metals Corp. ("M3 Metals") (Surge press release, August 22, 2024). The Purchase Agreement for the purchase of the Remaining Interest is subject to its final approval by the TSX Venture Exchange. This final approval is conditional upon disinterested shareholder approval of the Purchase Agreement from Surge's shareholders which disinterested shareholder approval is being sought by Surge at its annual general meeting of shareholders expected to be held on July 2, 2025. In the event that disinterested shareholder approval is not obtained or the TSX Venture Exchange does not otherwise provide final approval to acquire the Remaining Interest, Surge would still have the right to acquire the Remaining Interest pursuant to its original mineral property option agreement with M3 Metals (Surge press release, July 26, 2023).

A group of the M3 Metals Claims, the block in the northeast corner of Figure 4-2, have been the subject of a staking dispute between M3 Metals and CAT Strategic Metals Corp. M3 Metals' position is that these claims were correctly staked.

The current federal annual fees for all 684 DK-, DKN-, DKX-, LIT- and TX- series unpatented mining claims are estimated at $137,000 and there are no other associated holding costs.

Ownership of the unpatented mining claims is in the name of the holder (locator), subject to the paramount title of the United States of America, under the administration of the BLM. Under the Mining Law of 1872, which governs the location of unpatented mining claims on federal lands, the locator has the right to explore, develop, and mine minerals on unpatented mining claims without payments of production royalties to the U.S. government, subject to the surface management regulation of the BLM. Currently, annual claim maintenance fees are the only federal payments related to unpatented mining claims, and Surge represents these fees have been paid in full to September 1, 2025.

There is no expiration of ownership for the unpatented claims if annual federal claim maintenance fees are paid on time.

4.3 ENVIRONMENTAL LIABILITIES

Decades-old prospect pits and adits, possibly dating to mid-century uranium exploration, are found on the property (Figure 4-2). Additionally, various dozer cuts and trenches may represent hobbyist-level prospecting for petrified wood. Significant legacy environmental liabilities requiring remediation are not known to the QP.

Ground disturbance on BLM-administered land has been performed to date by Surge under a Notice, with the estimated cost of reclamation secured with a monetary bond. Reclamation of drill pads and other forms of ground disturbance is performed by Surge typically within the same field season as the disturbance (Figure 4-3 and Figure 4-4).

UTM Zone 11 NAD83 704,416 E, 4,617,502N, looking south. Photo: A. Morris, May 18, 2022.

Figure 4-3: Example of Historical Ground Disturbance

UTM Zone 11 NAD83 700706.94 E, 4618433.25 N, looking northwest at center of panorama. Photo: J. Phinisey October 8, 2024

Figure 4-4: Example of Drill Pad Grading and Seeding, Hole NNL-025

4.4 ENVIRONMENTAL PERMITTING

In November 2023, Surge submitted the Nevada North Lithium Project Exploration Plan of Operations and Reclamation Plan Permit Application (Revised January 2024 [Rev. 1]) to the Bureau of Land Management (BLM Casefile Number NVNV106332440) and to the Nevada Division of Environmental Protection, Bureau of Mining Regulation and Reclamation. The BLM deemed the plan complete on February 28, 2024. Exploration activities proposed within this Plan of Operations application include:

- Mineral exploration activities and condemnation drilling.
- Metallurgical characterization and testing via bulk sampling and test pitting and/or a large diameter drill core program.
- Hydrogeologic investigations to support baseline characterization including installation of groundwater characterization wells, an exploration water supply well, vibrating wire piezometers, and surface water instrumentation.
- Geotechnical investigations, including drilling and related sampling, bulk sampling of excavations, and test pits.
- Infiltration testing via soil borings and test pitting.

Surge announced receipt of a positive record of decision from the BLM for the Nevada North Exploration Plan of Operations ("EPoO") on March 5, 2025. As further considered in Section 20, the EPoO allows for up to 250 acres of combined surface disturbance to be undertaken within the EPoO boundary.

4.5 OTHER SIGNIFICANT FACTORS AND RISKS

The QP is not aware of any additional significant factors or risks that may affect access, title, or the right or ability to perform work on the Property.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 ACCESSIBILITY

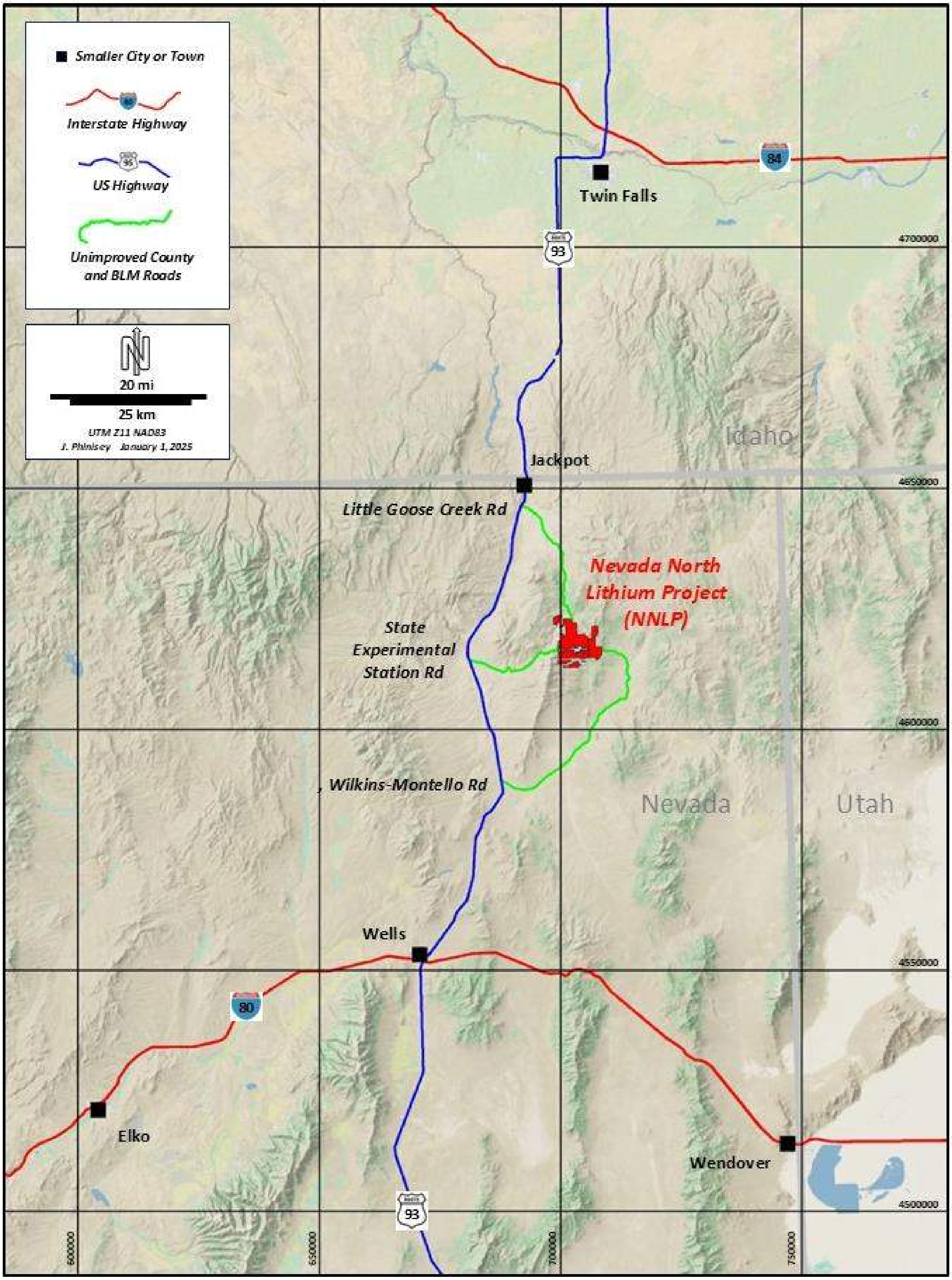
International air service is available in Salt Lake City, Boise, Reno, and Las Vegas. Regional connector airlines serve Elko, NV and Twin Falls, Pocatello, and Hailey (Sun Valley) in Idaho (Figure 4-1). These airports have facilities for large private jets.

Vehicular access is by interstate highway to either Wells, NV or Twin Falls, ID, thence by US Hwy 93 to one of three unimproved roads that leads to the NNLP (Figure 5-1). The northern access, Little Goose Creek Rd, lies 3.7 km (2.3 mi) south of Jackpot, NV on US Hwy 93. Turn east on Little Goose Creek Rd and proceed 5.2 km (3.2 mi), then turn south on BLM 1097 and continue an additional 32 km (20 mi) to the NNLP at Texas Spring.

The southern access, Wilkins-Montello Rd, lies 42 km (26 mi) north of Wells, NV on US Hwy 93. Turn east on Wilkins-Montello Rd and proceed 35.3 km (21.9 mi), turn north onto Rock Springs Rd and proceed 7.6 km (4.7 mi), and take the northwesterly fork onto BLM 1123 (Texas Spring Canyon Rd) for an additional 12.5 km (7.8 mi) to the NNLP at Texas Spring.

The middle access, State Experimental Station Rd, lies 38.5 km (24.0 mi) south of Jackpot, NV and 68.4 (42.5 mi) north of Wells, NV on US Hwy 93. Turn east on State Experimental Station Rd and proceed 6.3 km (3.9 mi) to BLM 1099, thence easterly on BLM 1099 paralleling Knoll Creek for 6.2 km (3.9 mi). Continue northeasterly on BLM 1099 (away from Knoll Creek) for 12.0 km (7.5 mi) to cross the northern end of Knoll Creek Mountain at Agort Pass and to intersect BLM 1097. Proceed south on BLM 1097 for 4.3 km (2.7 mi) to arrive at Texas Spring.

Both northern and southern unimproved routes are less challenging for vehicles with lower ground clearance, for towing trailers, or during wet conditions. Use of State Experimental Station Rd and BLM 1099 is recommended for only high clearance four-wheel drive vehicles in fair weather and dry road conditions.



Source: J. Phinisey, 2025

Figure 5-1: Road Access to the NNLP

5.2 CLIMATE

The NNLP is represented by the Köppen climate classification "cold semi-arid" (code Bsk). At the town of Jackpot, NV (40 km north of the NNLP), average annual precipitation is 270 mm per year (Table 5-1 and Figure 5-2). Maximum temperatures can approach 40°C during summer. Winter temperatures in Jackpot can be among the coldest in the coterminous United States, with a lowest recorded temperature of -35°C on January 6, 2017. Exploration activities such as geologic mapping, rock and soil sampling, and geophysical surveys may be practically limited to the months of April to November; drilling may be conducted year-round with adequate preparations and logistical support.

Table 5-1: Summary of Monthly Climate Data for Jackpot, NV

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average high in °C	2.3	4	8.7	12.9	17.9	23.7	29.7	28.9	23.1	15.6	7.3	2.2
Average low in °C	-10.8	-9.4	-5.6	-2.8	1.6	5.3	9.2	7.9	3	-2.6	-6.9	-10.7
Av. precipitation in mm	21	17	24	28	40	28	12	17	17	22	25	19

Source: https://www.usclimatedata.com/climate/jackpot/nevada/united-states/usnv0045 on October 18, 2024.

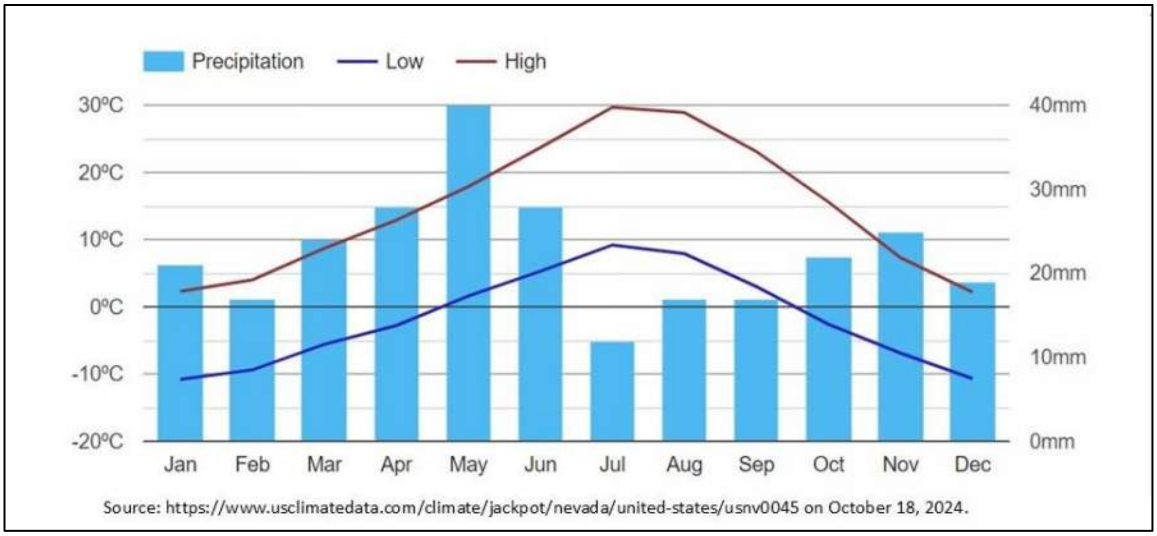


Figure 5-2: Monthly Climate Averages for Jackpot, NV

5.3 LOCAL RESOURCES AND INFRASTRUCTURE

Sources of fuel, groceries, and accommodations sufficient for exploration needs are available in Jackpot, NV. Skilled labor for mining, engineering services, and mining equipment services are available in Elko, NV, located 187 km (116 mi) by highway from the NNLP (Figure 5-3). All mineral exploration services including supplies, analytical laboratories, contract geological professionals and geotechnical labor, and drilling service companies are available in Elko.

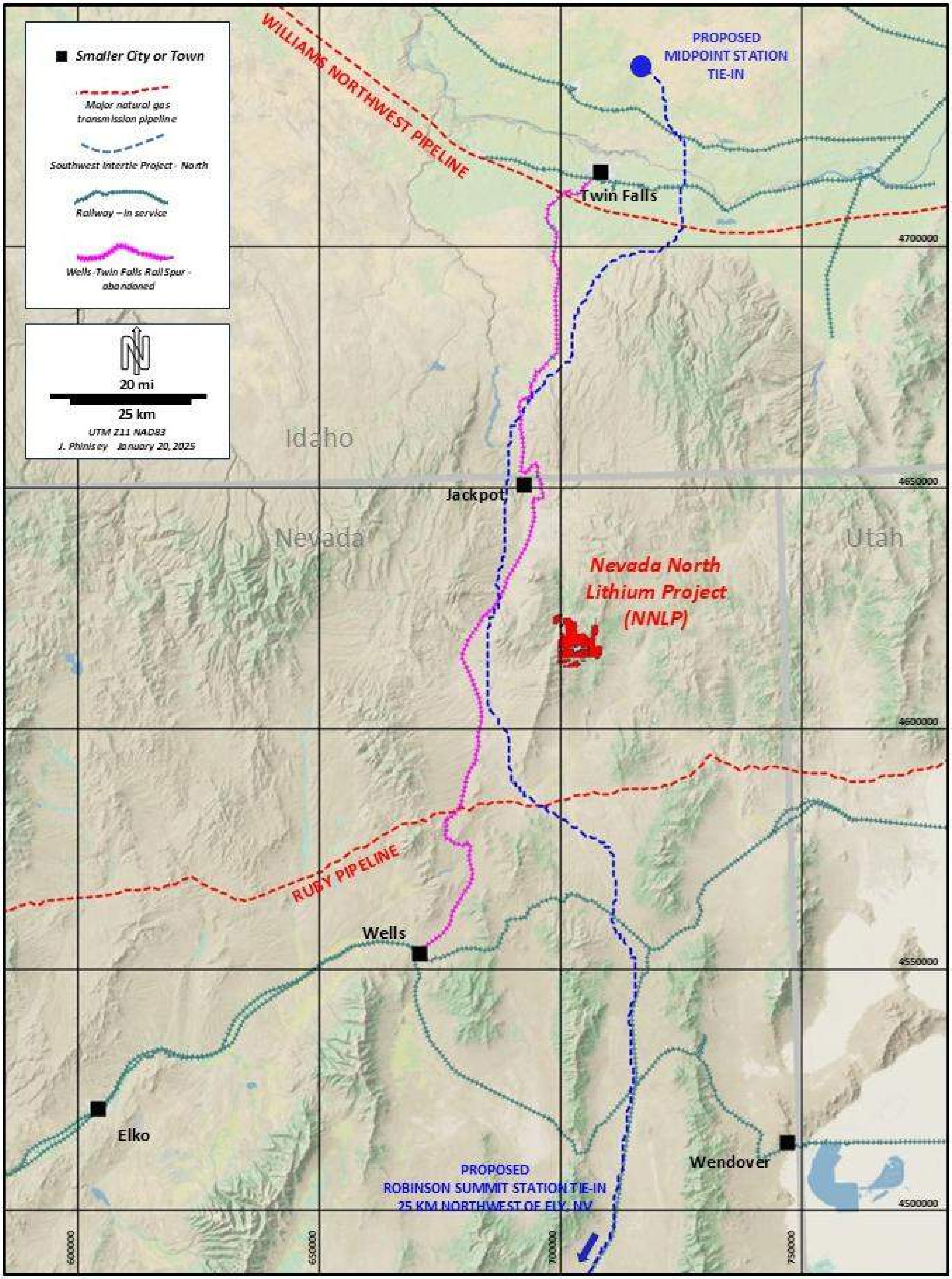
Railhead facilities are currently available in Twin Falls, ID and Wells, NV. The Union Pacific Railroad operated the Oregon Short Line, a rail spur connecting Wells to Twin Falls, 1926-c.1978 (Myrick, 2007). This spur also served the settlement at Contact, NV 20 km (12 mi) west of the NNLP (Figure 5-3). A decades-long mining operation at the NNLP could justify inquiry into the status of the right-of-way and possible reconstruction of the line.

The Southwest Intertie Project North (SWIP North) 500-kilovolt electrical transmission line will deliver 1,100 megawatts (MW) of electrical energy from Idaho wind turbines to the southern California market (LS Power, 2024). SWIP North will connect the Midpoint station near Twin Falls to the Robinson Summit station near Ely, NV and will pass 19 km (12 mi) west of the NNLP (Figure 5-3). Construction of SWIP North is slated to commence in 2025.

The Williams Northwest natural gas transmission pipeline passes approximately 90 km (56 mi) north of the NNLP and the 107 cm (42 in) diameter Ruby natural gas transmission pipeline passes approximately 32 km (20 mi) south of the NNLP (Figure 5-3).

Highways to the Project unimproved access roads are sufficient for transportation of heavy equipment. A network of four-wheel drive roads and ATV trails provide access throughout much of the property.

The sufficiency of surface rights for mining operations, the availability and sources for water, potential tailings storage areas, potential waste disposal areas, and potential processing plant sites are discussed in Sections 18 and 20 of this Technical Report.

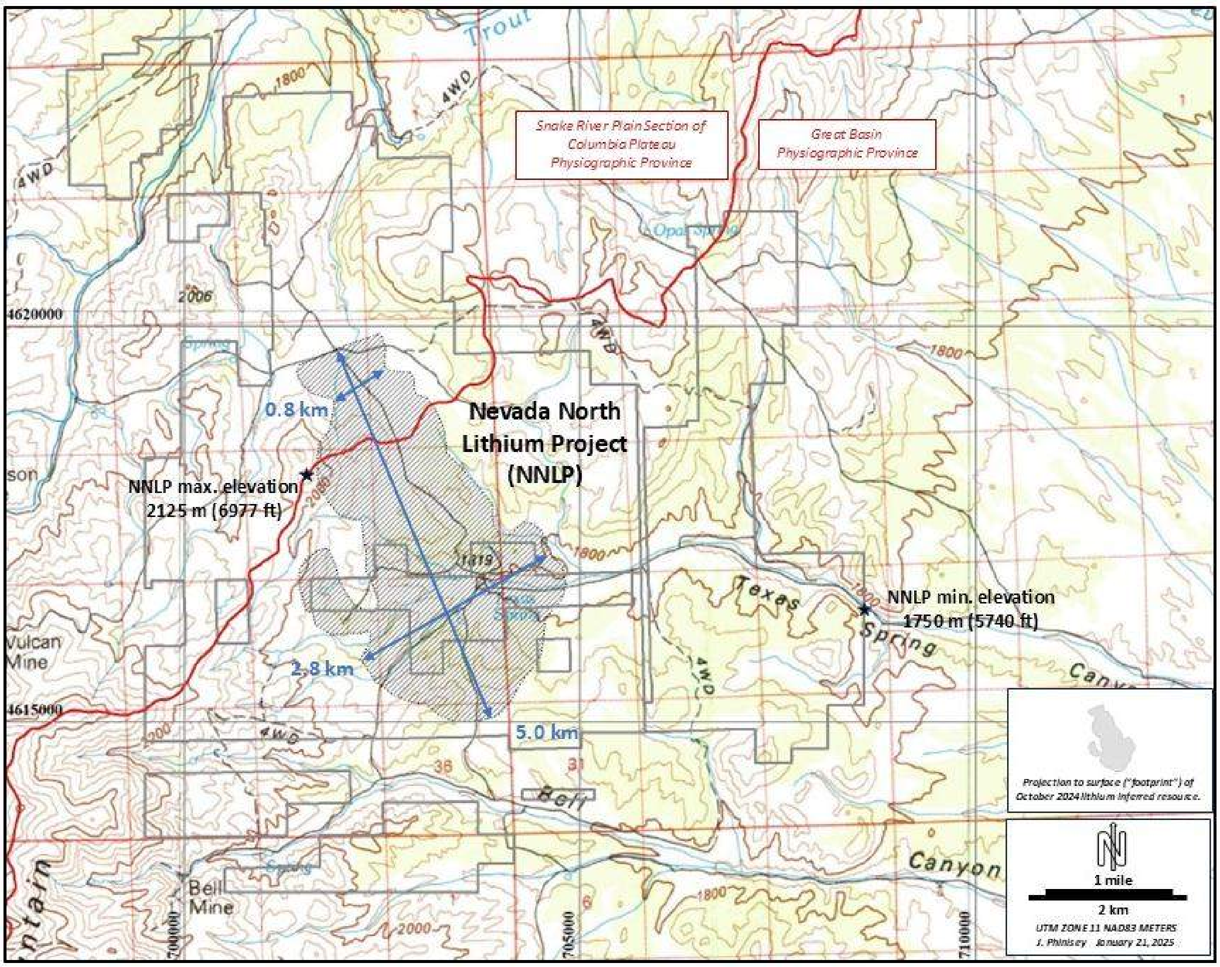


Source: J. Phinisey, 2025

Figure 5-3: Rail, Electrical Transmission, and Natural Gas Pipeline Infrastructure near NNLP

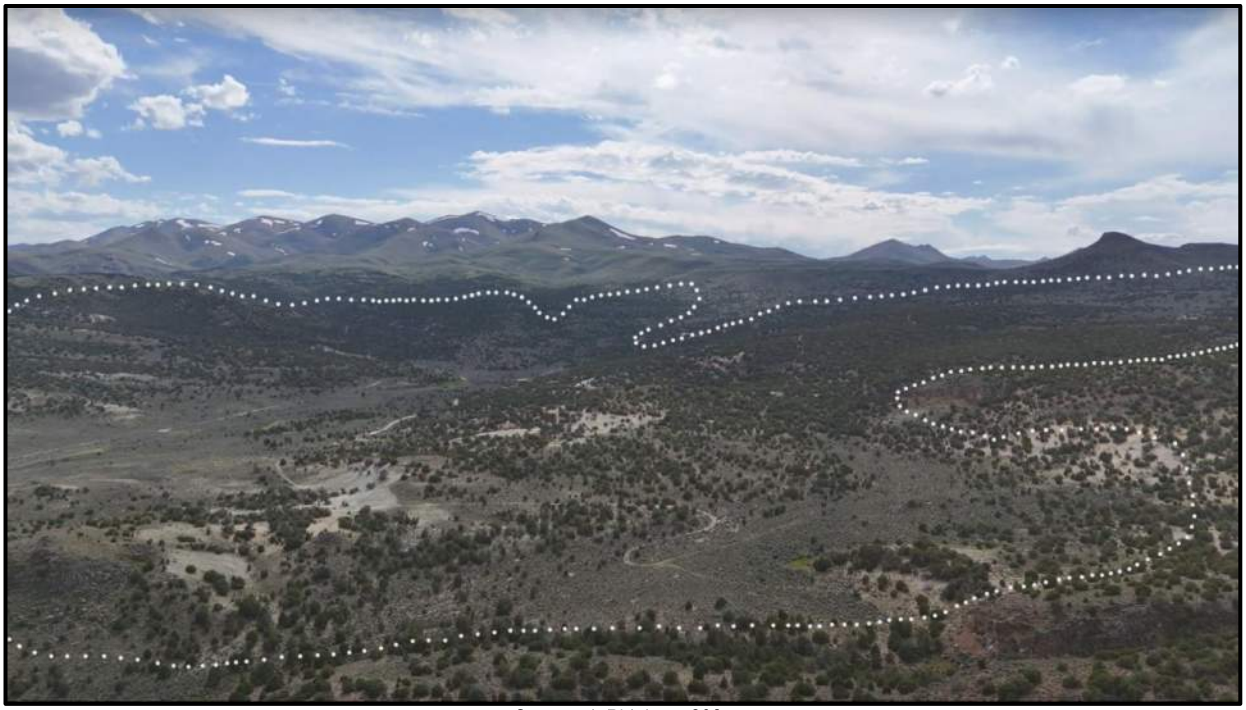
5.4 PHYSIOGRAPHY

The NNLP straddles the Great Basin and Columbia Plateau (Snake River Plain) physiographic provinces (Fenneman, 1931) (Figure 5-4 and Figure 8-1). Elevations range from a maximum of 2,125 m (6,977 ft) at the hill northwest of Texas Spring to a minimum of approximately 1,750 m (57,400 ft) at Texas Spring Canyon. Topography within the Texas Spring Basin is generally characterized by rolling hills (Figure 5-5). Vegetation is dominated by sagebrush and grasses with sparse stands of juniper trees.



Source: J. Phinisey, 2025

Figure 5-4: Topographic Detail, Physiographic Setting, and Lithium Inferred Resource Plan Dimensions for the NNLP



Source: J. Phinisey, 2025

Figure 5-5: Southwesterly Aerial View across the NNLP Lithium Inferred Resource Footprint

6 HISTORY

6.1 PRIOR TO DISCOVERY OF SIGNIFICANT LITHIUM MINERALIZATION AT THE NNLP

Historical mineral exploration involving significant recognizable ground disturbance has not taken place on the NNLP. Several small prospect pits and bulldozer cuts found on the property may date to the 1950-1970 uranium exploration era. In the southern part of the property, numerous road cuts, bulldozer trenches, and prospect pits were dug for petrified wood and other siliceous materials. Casual weekend-type prospectors still occasionally visit these sites.

BLM records document claims held in past decades by major and lesser companies in the vicinity of the NNLP (Table 6-1). The mineral focus and the nature and extent of exploration activities by these companies are not known to the QP.

Table 6-1: Compilation of Previous Claim Holders in the Vicinity of NNLP

Claimant	Years Claims Held
Utah International	1984-1991
Orvana Resources Corp.	1988-1991
Aur Resources	1991-1993
Enexco International Inc.	2007-2009
Newmont USA Ltd.	2014-2018
Kestrel Resources LLC	2018-2019

Source: BLM Mineral & Land Records System (MLRS)

6.2 DISCOVERY AND EARLY EXPLORATION OF LITHIUM MINERALIZATION AT THE NNLP

Interest in the potential for significant lithium concentrations in the Tertiary clays of the NNLP was sparked by examination of the NURE stream sediment sample geochemical database maintained by the USGS. Samples in the NURE program were collected within the area of the NNLP in December 1979, analyzed for uranium and a limited suite of associated elements, then archived. Re-analysis for a broad suite of chemical elements for NURE samples from western States was undertaken starting in November 2015, with results subsequently made available for public use. Included was sample WEBF032S1 (NURE record #5135950) located immediately above Texas Spring. Re-analysis of this sample yielded a lithium value of 780 ppm, the highest lithium value in the NURE data set for the State of Nevada (Figure 6-1).

Subsequent stream sediment samples collected by Alan Morris in 2016 in the vicinity of NURE sample WEBF032S1 yielded lithium values of greater than 250 ppm with a highest lithium value of 1,980 ppm, further indications of significant lithium enrichment in rocks of the associated watersheds (Figure 6-2 and Figure 6-3). Upon further investigation, it was determined that the area was under a moratorium for new unpatented mining claims as part of a recovery plan for Sage Grouse. The moratorium was dropped, and a core of claims was staked by the geologist and his wife. After unsuccessful attempts to vend the claims, they were allowed to expire.

With a renewed interest in lithium clay deposits in 2020, Mr. Morris staked a block of thirty-eight claims in January and February 2021. Surge purchased the claims in the spring of 2021. Exploration began with grid soil sampling in the fall of 2021, followed by additional soil samples and reverse circulation drilling in 2022. Additional drilling in 2023 allowed calculation of a maiden Mineral Resource Estimate (Kerr, S.B. and Davis, B.M., 2024). Drilling in 2024 prompted calculation of an updated Mineral Resource Estimate (Section 14).

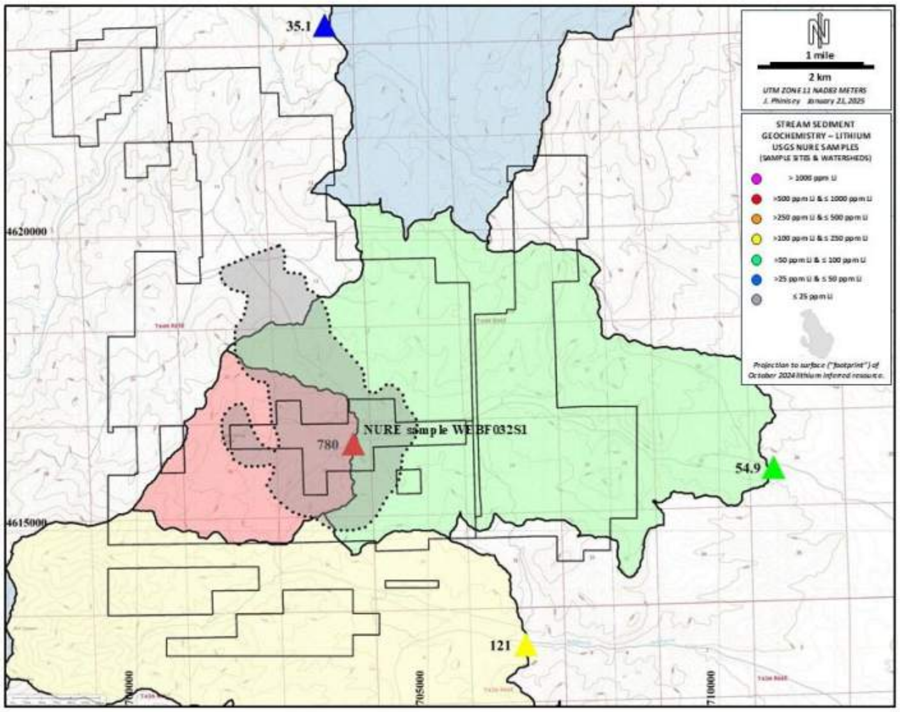


Figure 6-1: Locations, Watersheds and Lithium Values for NURE Stream Sediment Samples 1979

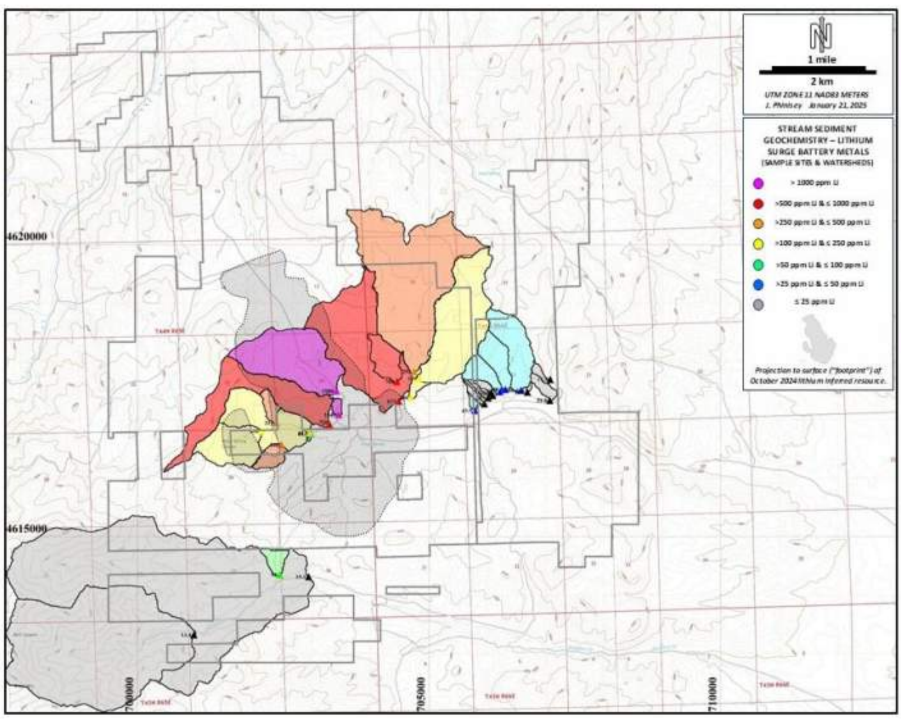
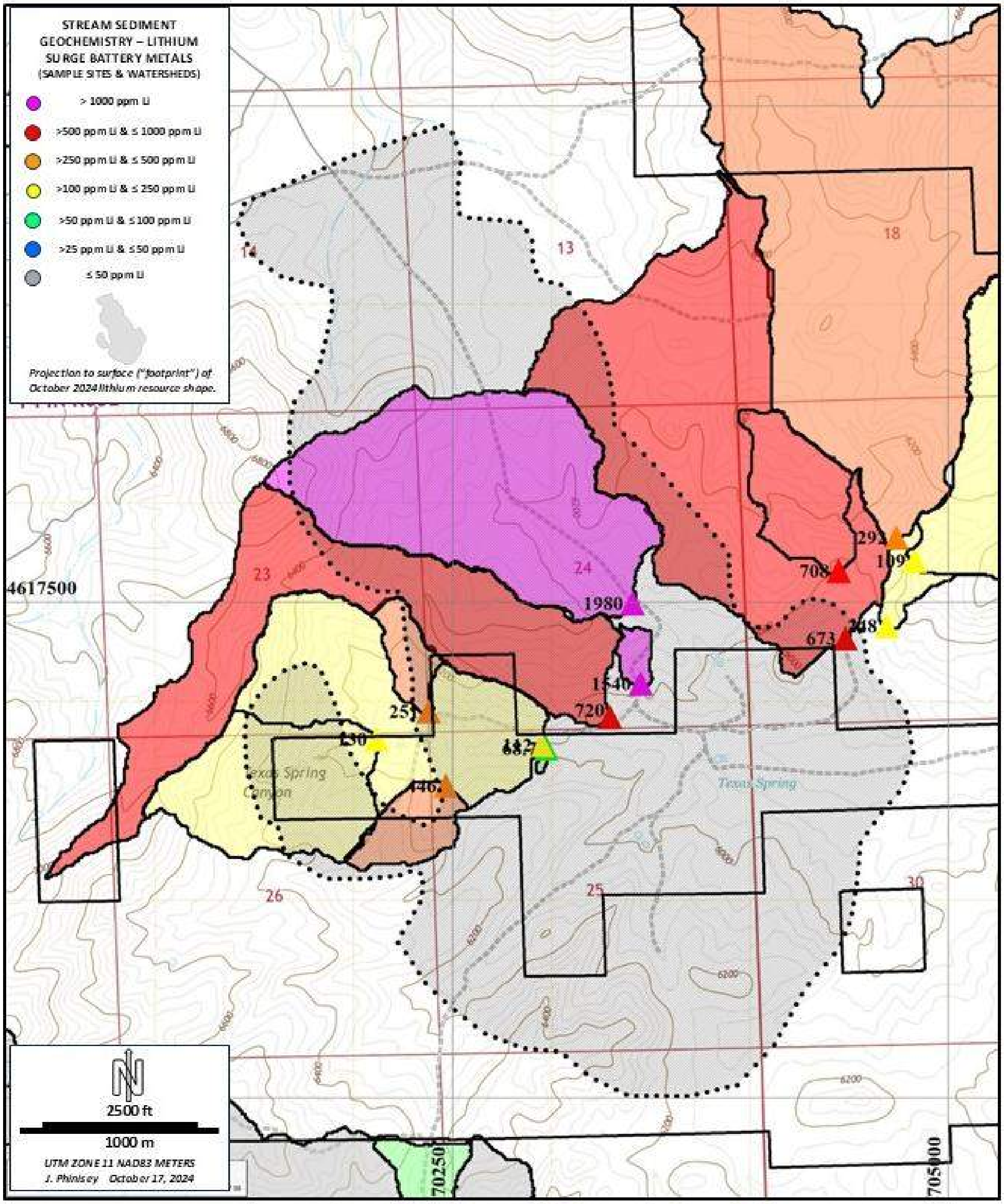


Figure 6-2: Watersheds and Lithium Values for NNLP Stream Sediment Samples 2016



Chemical analyses by ALS Global. Source: Surge Battery Metals.

Figure 6-3: Locations, Watersheds and Lithium Values for NNLP Stream Sediment Samples 2016 Detail for Area of NNLP Inferred Lithium Resource

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 REGIONAL AND DISTRICT GEOLOGICAL SETTING

Regionally, basement rocks are Cambrian through Devonian in age and consist primarily of carbonate platform and near-shelf calcareous fine grained clastic rocks (Figure 7-1). During the Mississippian Antler Orogeny, clastic rocks from the Antler highlands to the west along with contemporaneous deposition of carbonate mud from the carbonate platform to the east resulted in a sequence of sandstones, conglomerates, and lenses of limestone making up the Diamond Peak formation. Deep water siliceous shales and chert were thrust over the eastern assemblage carbonates along the Roberts Mountains Thrust during the Antler Orogeny.

Following the Antler Orogeny, Pennsylvanian-Permian age lagoonal carbonate and siliciclastic rocks covered the older Paleozoic section. A few pockets of Triassic continental rocks are found in the region, but they are not widespread. During the Jurassic, the Elko Orogeny resulted in major eastward thrusting of the Permian package and the emplacement of several granitic bodies, including the Contact pluton.

The Cretaceous Period and early Eocene Epoch were marked by contractional tectonics due to the collision of the Farallon plate with the North American craton, subsequent subduction of the Farallon plate, and eventual change in plate motions that caused the plate to break off and sink into the mantle. As the plate foundered and sank, waves of volcanism swept south from about southern Idaho to the Las Vegas and Southern Sierra Nevada mountains starting about 45 Ma and ending about 20 Ma (Dickinson, 2011).

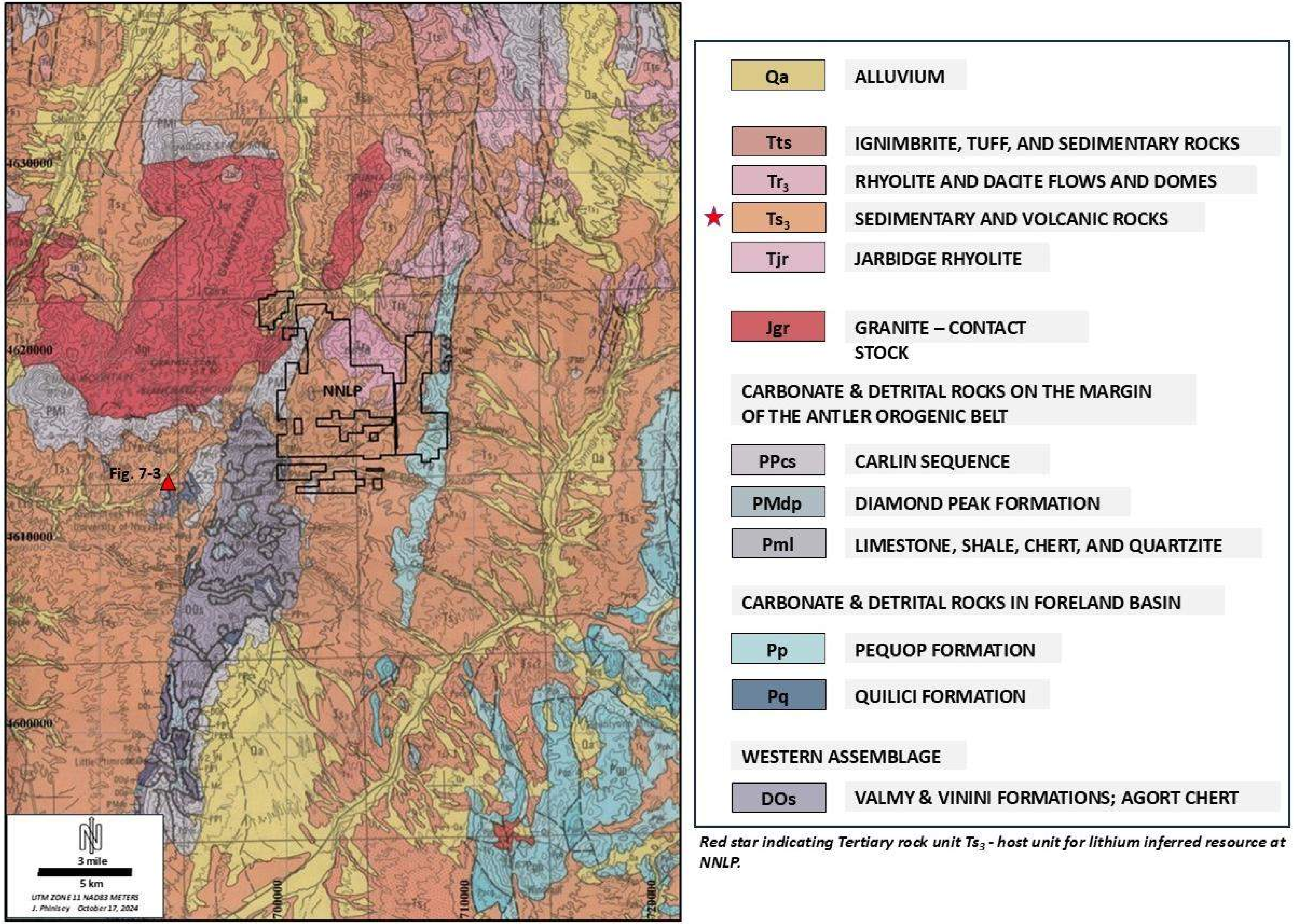
During the middle Miocene, outbreaks of caldera-forming felsic eruptions covered the area with ash flow tuffs of various facies. Two major packages have been identified in the area: the Jarbidge Rhyolite dated in the 16.1 to 15.0 Ma range (Brueske et al., 2014) and the Cougar Point Tuff dated between 12.7 and 9.5 Ma (Bonnichsen et al., 2008).

Brueske, et al (2014) attribute the Jarbidge Rhyolite to melting of quartzofeldspathic continental crust due to crustal extension and the collapse of the Nevada altiplano. The Jarbidge Rhyolite appears to have erupted in relatively quiet effusive flows from multiple domes and fissures rather than more explosive caldera forming events.

The overlying Cougar Point Tuff is thought to be sourced from the Bruneau-Jarbidge caldera complex and be related to the southwesterly passage of North America over the Yellowstone Hot Spot mantle plume (Figure 7-2). The unit consists of at least nine cooling units that can be traced throughout northern Nevada, southern Idaho, and northwest Utah (Perkins, 2014).

The NNLP lies in the fault-bounded Texas Spring Basin of Tertiary age. The Texas Spring Basin is filled with locally-derived sediments and felsic volcanoclastic rocks referred to as the Humboldt Formation (Camilleri et. al., 2017). This basin is bounded by a ridge of Paleozoic-Mesozoic age sediments to the east and Paleozoic sediments intruded by the Jurassic age Contact Granite complex to the west and north.

The formation of the Texas Spring Basin likely started in the Late Eocene with an acceleration during the Miocene. The process of Texas Spring Basin formation is undetermined and both deep-seated extensional tectonics and local caldera collapse hypotheses are considered, the resolution of which having bearing on the geologic model applicable to the NNLP (Section 8). Crustal extension may have resulted from uplift associated with low angle subduction, collapse of the Nevada altiplano as the plate rolled back, or perhaps incipient rifting related to the upwelling mantle associated with the Yellowstone Hotspot. Additionally, but not necessarily alternatively, Capps et al. (2020) suggest the possibility of a local caldera based on mapping of a breccia body that coincides with aeroradiometric and geochemical anomalies that lie centered on the historical Prince Mine. The rhyolite-dacite flow-dome complex mapped by Coats (1987) at the northeast corner of the NNLP (Figure 7-1, unit Tr_3) might then represent a resurgent intrusion lying central to such an inferred caldera (Section 23).



Red star indicating Tertiary rock unit Ts_3 - host unit for lithium inferred resource at NNLP.

Modified from Coats (1987).

Figure 7-1: Regional Geologic Map

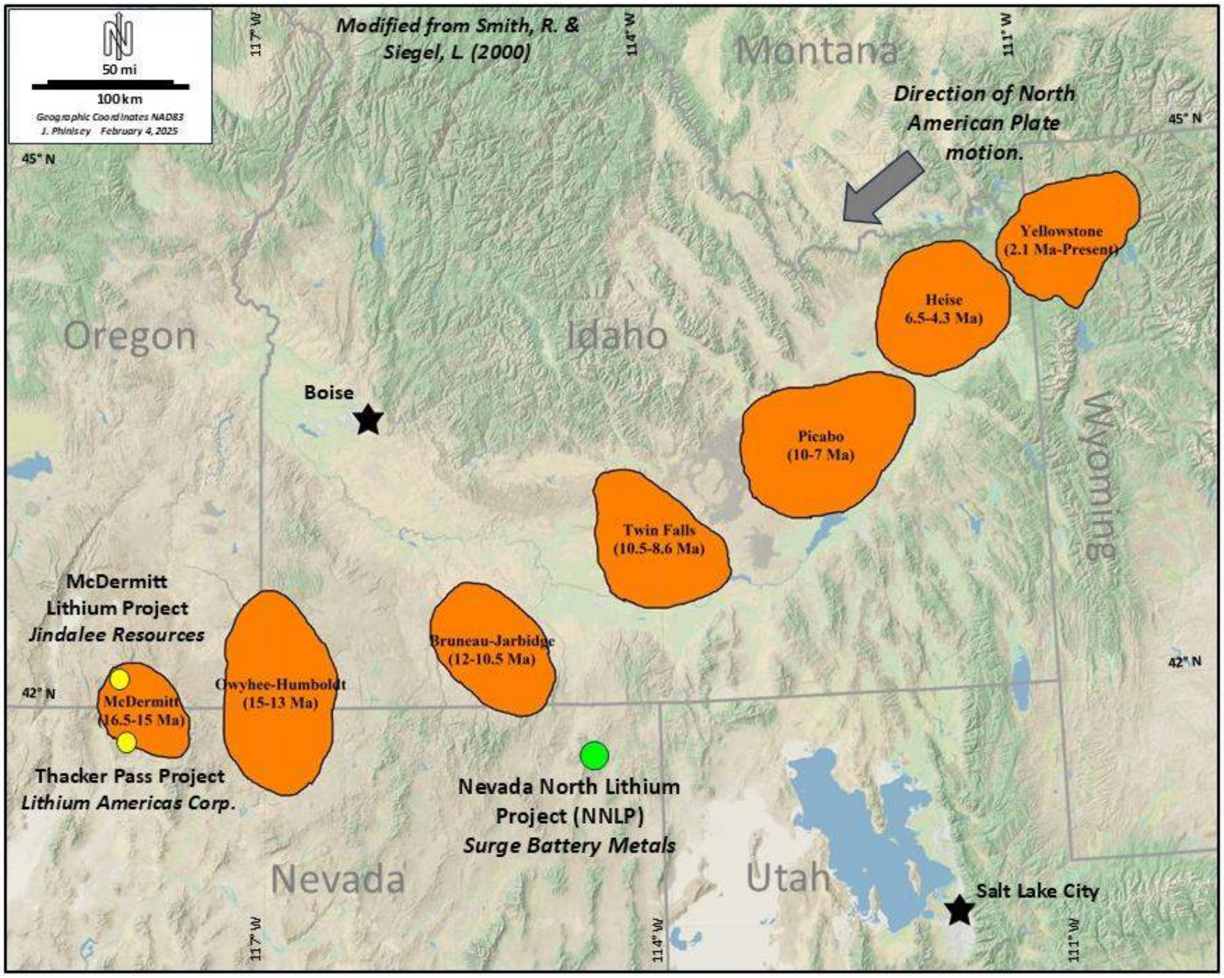


Figure 7-2: Lithium Clay Resources of Northern Nevada and Southern Oregon with Respect to Calderas of the Yellowstone Hotspot Track

Based on age dates (Camilleri et. al., 2017), the basin was long-lived and contains air-fall tuffs from multiple caldera events. Three tuff beds in the Bell Canyon area, about 2 km (1.24 mi) south of the property are dated at 11.7, 11,4, and 10.7 Ma (Camilleri et. al., 2017). These ages are contemporaneous with the Cougar Point Tuff (Perkins, 2014) which likely erupted from the Bruneau-Jarbidge caldera. An exposure of felsic rocks adjacent to the property on the northeast is mapped as a rhyolite-dacite flow-dome complex by Coats (1987). Previous workers in the area suggested that these rocks might be related to a local caldera, but the exact origin of the basin (deep seated extensional tectonics or caldera collapse) is not clear at this point. The detailed mapping by Camilleri et. al. (2017) ends south of the dome complex. The Surge project geologist has observed striated textures in rotated blocks suggestive of the edges of a felsic flow-dome environment. Coats mapped this outcrop area as “Porphyritic, Phenorhyolitic, and Phenodacitic Flows and Domes” and places it as younger than the Jarbidge Rhyolite but it has not been dated.

7.2 PROPERTY AREA GEOLOGY

Outcrop exposures are rare in the main part of the property as the Tertiary basin-filling sediments and felsic ash fall tuffs are easily weathered and form rolling hills. Abundant sage scrub and juniper vegetation further conceal the surface rock units. A prominent exposure of felsic ash fall tuff (with possible fluvial scouring and re-working of certain beds) from 10 km west of the NNLP on BLM 1099 provides a suitable visual example (Figure 7-3).

UTM Zone 11 NAD83 693610 E, 4613370 N   Photos: J. Phinisey October 8, 2024

UTM Zone 11 NAD83 693610 E, 4613370 N   Photos: J. Phinisey October 8, 2024

Figure 7-3: Example of Felsic Ash Fall Tuff of Tertiary Humboldt Formation (Coats' Unit Ts_3) with Possible Fluvial Re-Working of Certain Beds

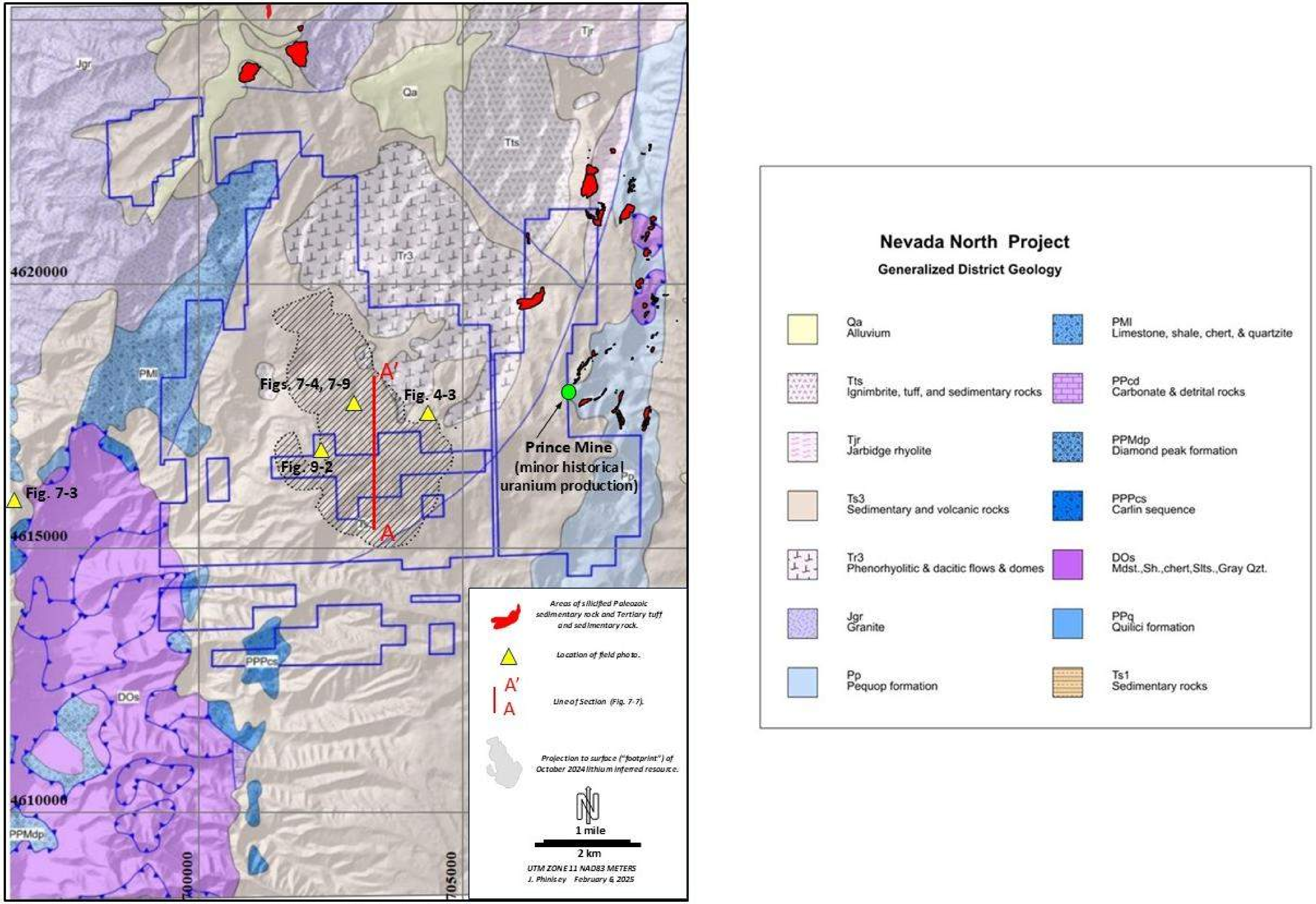
Prominent outcrops of lithium mineralization-hosting claystone are rare and these stratigraphic units are best understood from core drilling. A hill that is capped by tuff unit Ty1 overlying lithium mineralized claystone unit Cu3 provided the best field example of claystone exposure during the site visit of October 8, 2024 (Figure 7-4).

UTM Zone 11 NAD83 703252E 4617757N, looking northerly. Photo: J. Phinisey October 8, 2024

Figure 7-4: Northerly View of Recessively-Weathering Lithium Mineralized Claystone in Outcrop

Regional mapping by Coats (1987) shows an undifferentiated package of Tertiary tuffs and sediments with the patch of flows and domes on the northeast corner (Figure 7-5). Mapping by Redfern (1977) used the older term "Idavada Formation" to describe primarily the felsic flows and tuffs now more associated with the Cougar Point Tuff. The unit descriptions and measured sections by Redfern are still valid locally, as well as measured sections and age dates by Camilleri et. al. (2017). Redfern's Opal Springs Volcanic unit is likely a member of the Cougar Point Tuff but further work including radiometric age dating is needed to confirm this and place the subunits of the Opal Springs into the regional sequence.

There is a major change in the tuffs and clastic rocks in the Redfern measured sections in Texas Spring Canyon south of the Prince Mine and the dark claystone on the NNLP property. Tuffs in the eastern part of the canyon are nearly flat-lying while those on the property have a shallow west dip. The claystone units are not seen in the eastern part of the canyon, and stream sediment analyses suggest these rocks are devoid of significant lithium.



Modified from Coats (1987), Capps (2006), and Limbach (1991).

Figure 7-5: Geologic Map of the NNLP and Vicinity

As known from core drilling, the sedimentary sequence in the main part of the property consists of a welded ash-flow tuff overlain by a sequence of interbedded clay-rich siltstone and shale punctuated by apparent air-fall tuff beds (Figure 7-6 and Figure 7-7). The clay-rich sequence is capped by a layer of tuff and tuffaceous sediments with thin silicified beds. On the west and south, these rocks are covered with alluvial material derived from the Contact Pluton and associated metamorphosed Paleozoic metasedimentary rocks. A small igneous dome is found on the east and northeast edge of the claim block; the exact nature of the body is not well known but it appears to pre-date the mineralized claystone.

Mineralization is found in three distinct horizons of silty, weakly calcareous claystone with seams of blue-grey clay. The depositional environment is lacustrine. Rocks between the lithium mineralized claystones are mostly reduced felsic air fall tuffs and tuffaceous siltstone. Holes targeted completion in a basal coarse cobble to pebble conglomerate, ash flow tuff, or a Paleozoic phyllite. The lower tuff shows moderate propylitic alteration with replacement of mafic minerals by chlorite and disseminated pyrite. The basement in hole NNL-007 has coarse quartz and metamorphic rocks derived from the Contact Pluton and associated metamorphic rocks to the west. This would be consistent with a localized basin as proposed by Camilleri, et. al (2017).

In the northern part of the property, several white ash units form outcrops that cap the mineralized claystone. Superficially, these resemble the dated tuff beds in Bell Canyon measured and dated by Camilleri et al. (2017) and are exposed at a similar elevation. If these can be shown to be the same horizons, the host units (if not the mineralization in general) can be shown to have been laid down around 11 Ma.

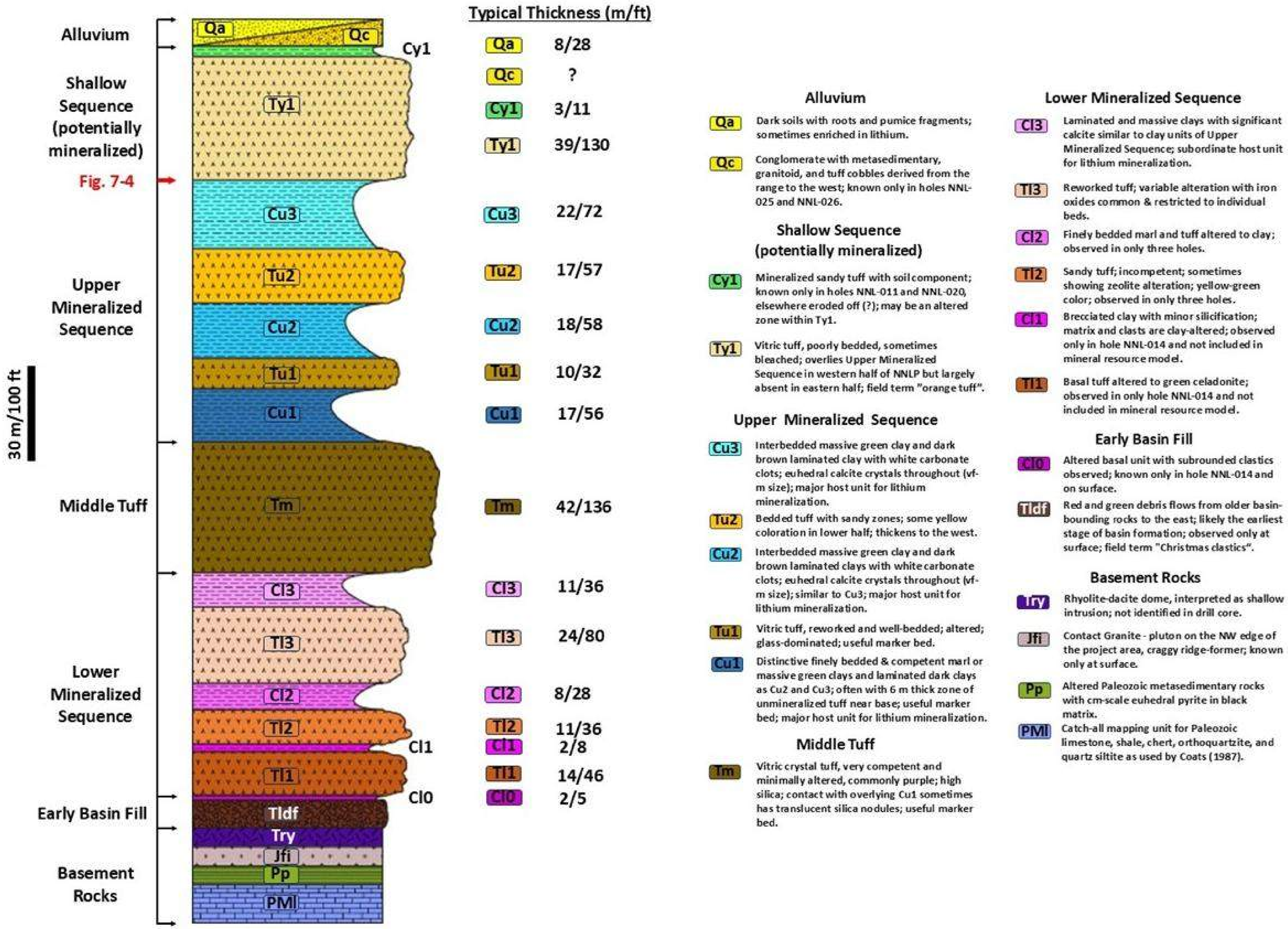


Figure 7-6: Generalized Stratigraphic Column for the NNLP

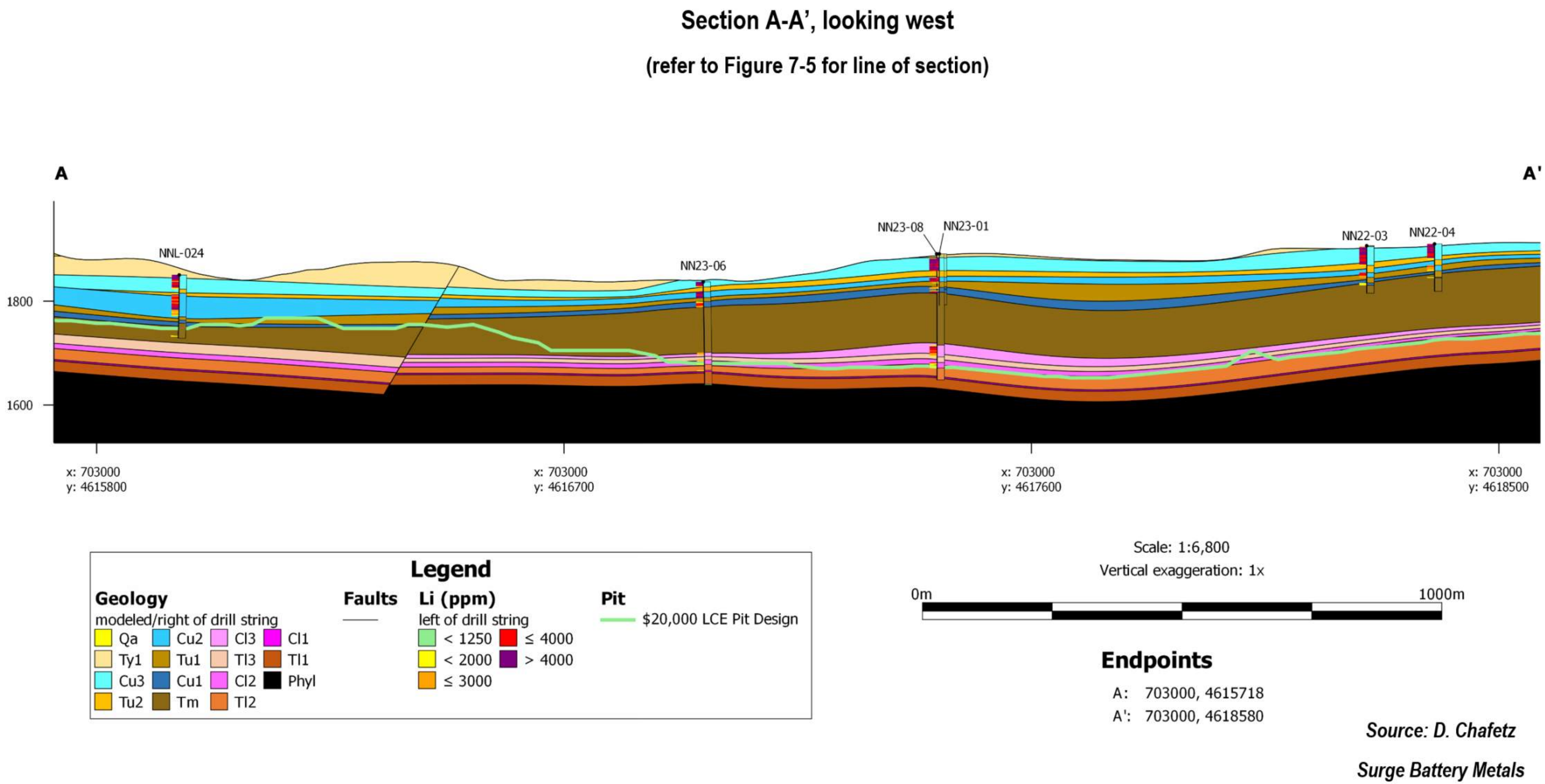


Figure 7-7: Cross Section A-A'

7.3 MINERALIZATION

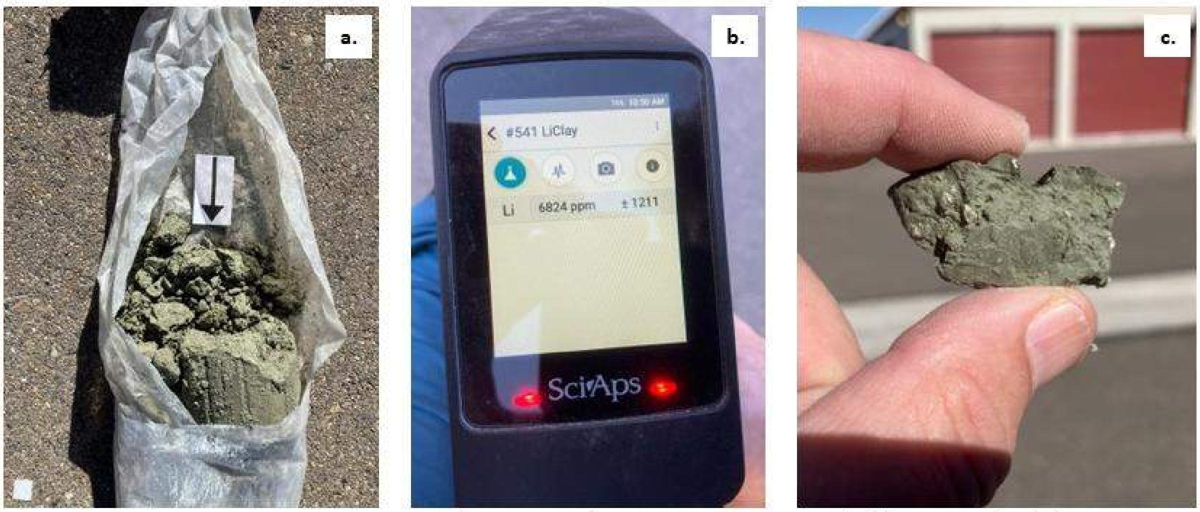
7.3.1 Resource Dimensions and Continuity

In plan view, the northwest-southeast long dimension of the NNLP lithium inferred resource is 5.0 km. The widest portion is 2.8 km near the southern limit while the narrowest portion is 0.8 km near the northern limit (Figure 5-4).

Continuity of mineralization is discussed in Section 10.2.

7.3.2 General Description and Visual Clues to Possible Lithium Mineralization

Lithium mineralized claystone is typically olive green to dark green (Figure 7-8a and b) and may contain seams of a more intense blue-grey color. When wet, this clay is plastic with a potter's clay texture.



Sonic core interval 19.81-21.34 m for hole NNL-017. ALS Global: 7000 ppm Li.

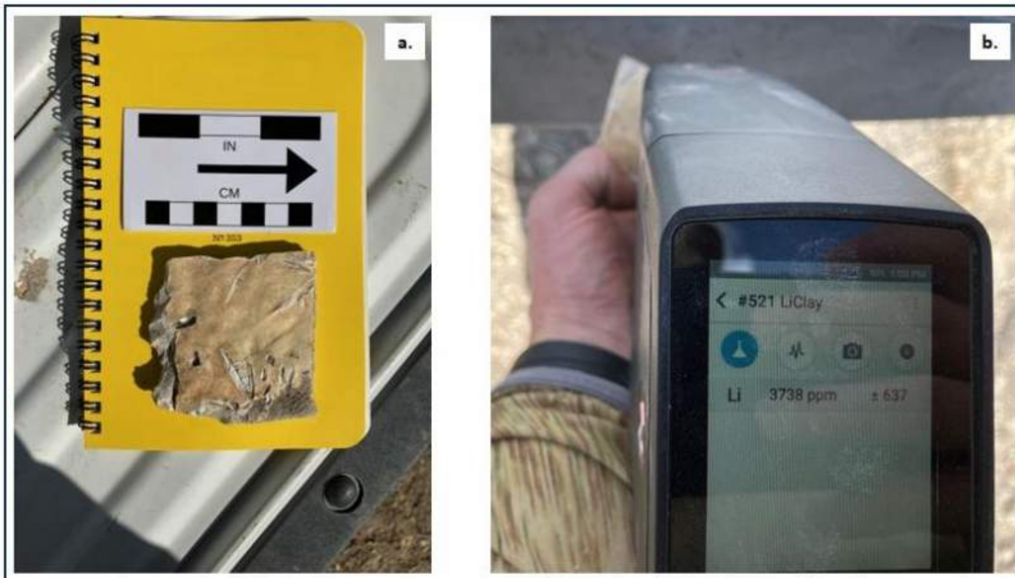
LIBS determination of 6824 ± 1211 ppm lithium for piece from same core interval.

Detail of lithium mineralized claystone from same core interval demonstrating mm-scale white calcite crystals.

Photos: J. Phinisey October 9, 2024

Figure 7-8: Example of Lithium Mineralized Claystone from Sonic Core Hole NNL-017

Visual clues to possible lithium enrichment in claystone include dominance of the clay fraction over the coarser clastic component in the claystone / siltstone, the presence of megascopic disseminated white calcite crystals (Figure 7-8c), and the presence of thin silica lenses or laminae which can sometimes preserve trona crystals or crystal casts (Figure 7-9a); Surge geologists interpret these lenses as indurated lakebed silica gel accumulations.



Trona crystal casts in silica (lithified gel?). LIBS determination of 3738 ± 637 ppm lithium for same specimen.

UTM Zone 11 NAD83 703252E 4617757N Photos: J. Phinisey October 8, 2024

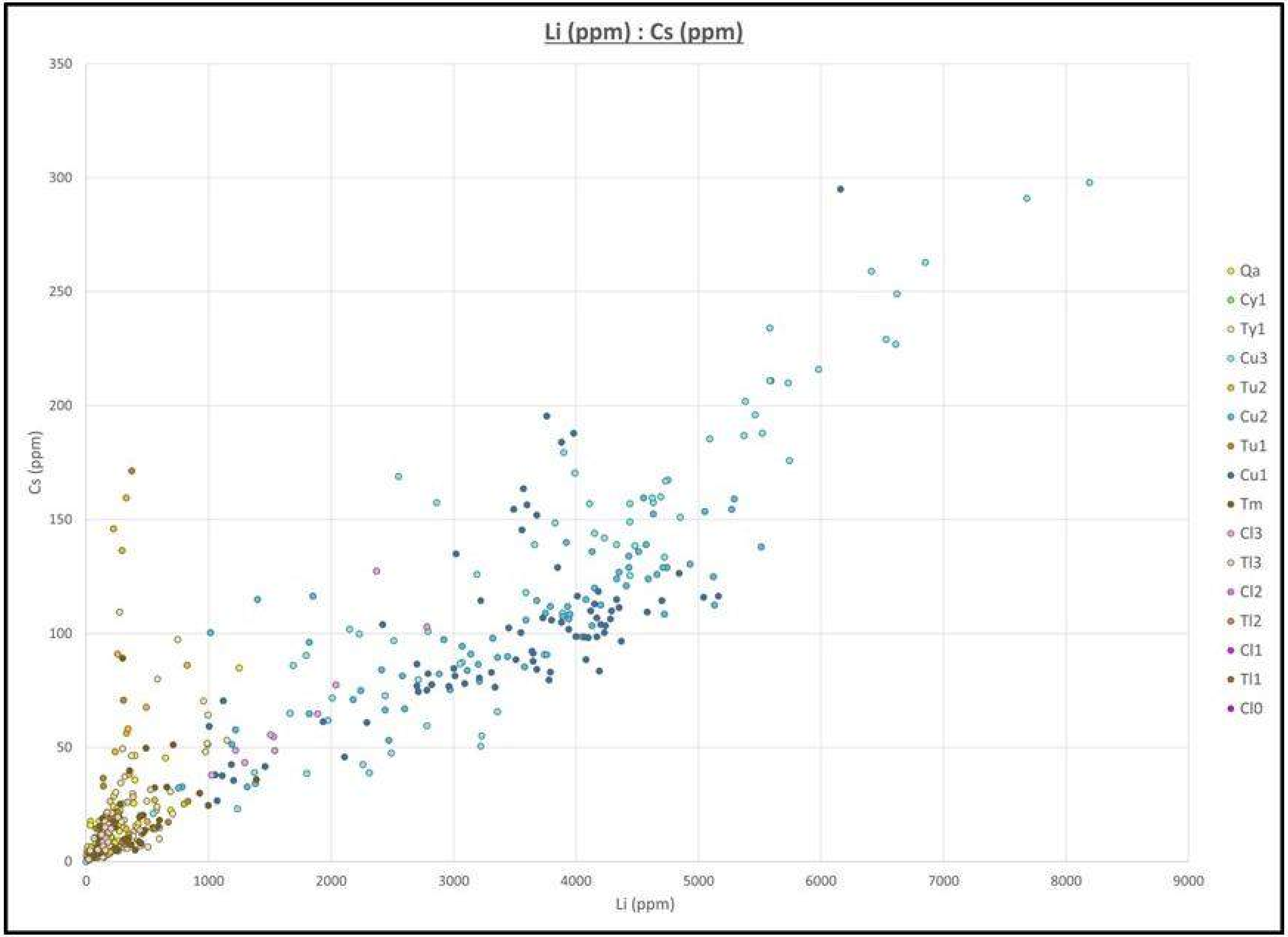
Figure 7-9: Example of Lithium Mineralized Silica Lens with Trona Crystal Casts

7.3.3 Lithium Residence in Mineralized Claystone

As further examined in Section 14, preliminary screen testing of mineralized claystone demonstrates that 98% of the lithium endowment reports to the minus 200 mesh fraction (Kappes, Cassiday & Associates, 2023). While this observation supports the conclusion that lithium resides in clay mineral(s), neither the specific mineral species nor the preferred site(s) for lithium within the clay crystal lattice are known at present.

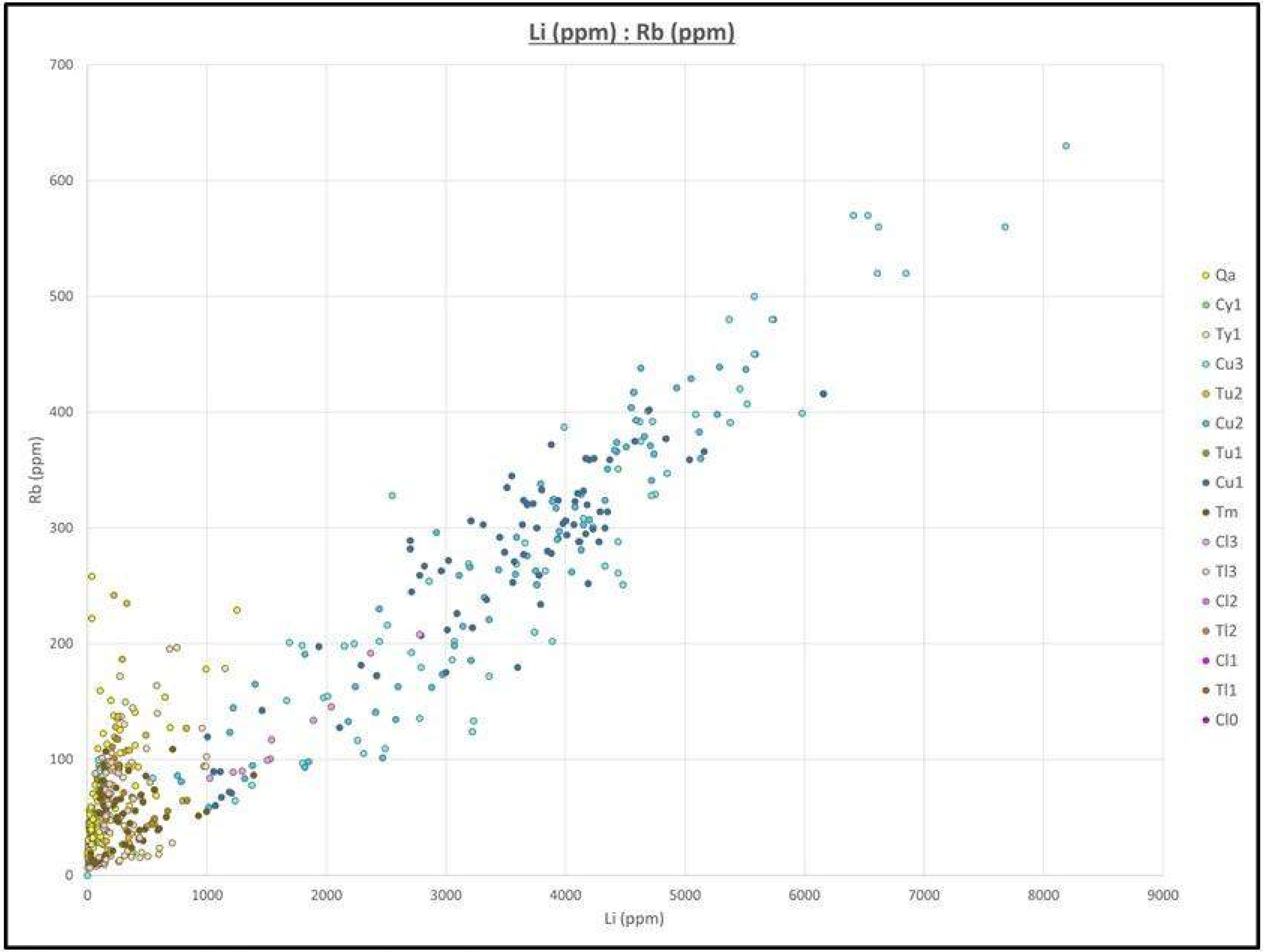
7.3.4 Geochemical Associations with Lithium in Drill Samples

Enrichment in cesium and rubidium correlates strongly with lithium enrichment (Figure 7-10 and Figure 7-11). Somewhat weaker positive correlation is seen for magnesium and boron (Figure 7-12 and Figure 7-13). Tungsten shows positive correlation with lithium content only at highest lithium grades and preferentially in the claystones of the Upper Mineralized Sequence (Figure 7-14). A correlation of molybdenum with lithium content is weak and equivocal (Figure 7-15). There is no evidence of arsenic or antimony enrichment associated with elevated lithium content (Figure 7-16 and Figure 7-17).



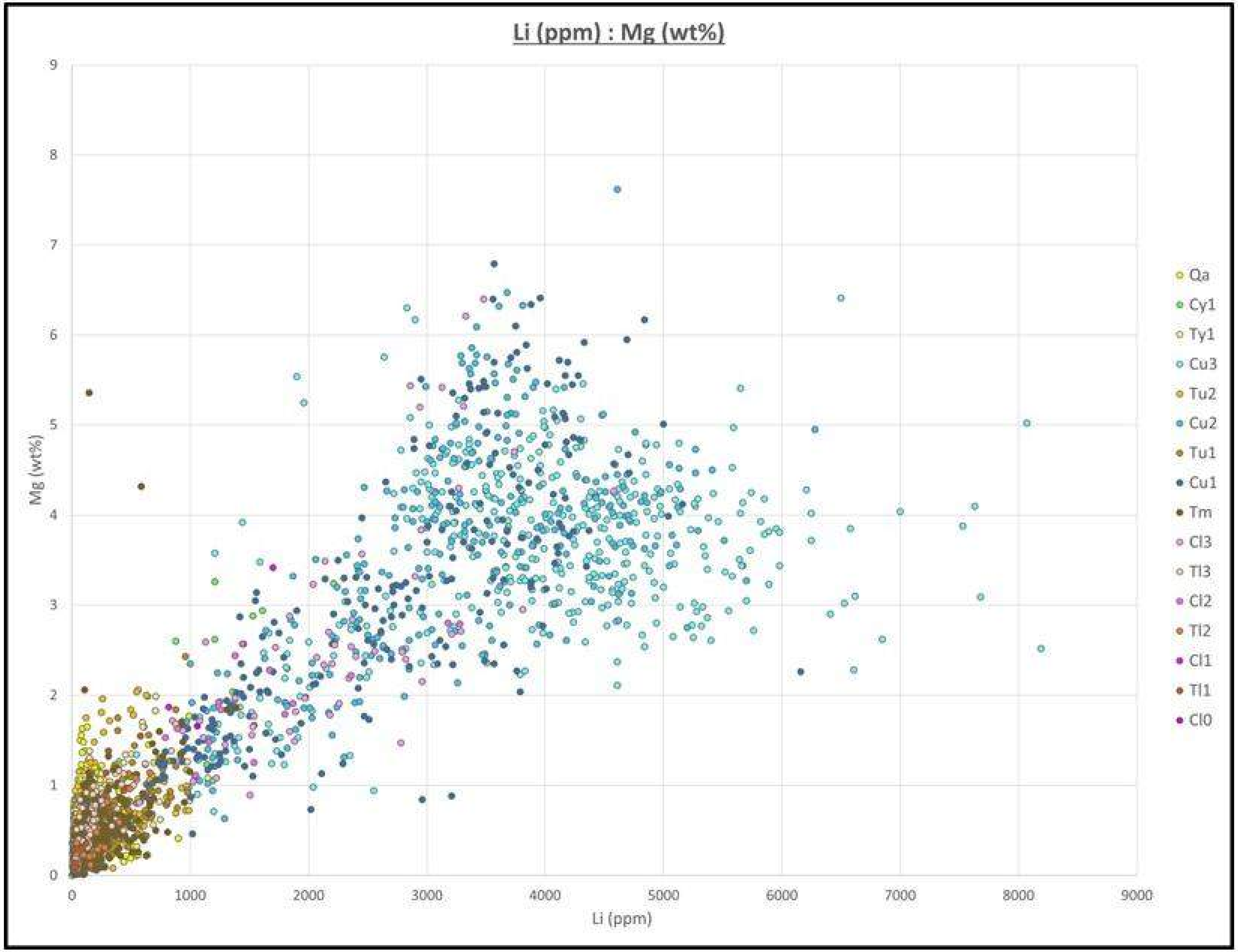
D. Chafetz. Source: Surge Battery Metals, October 30, 2024

Figure 7-10 Cross Plot of Lithium vs Cesium for Drill Samples



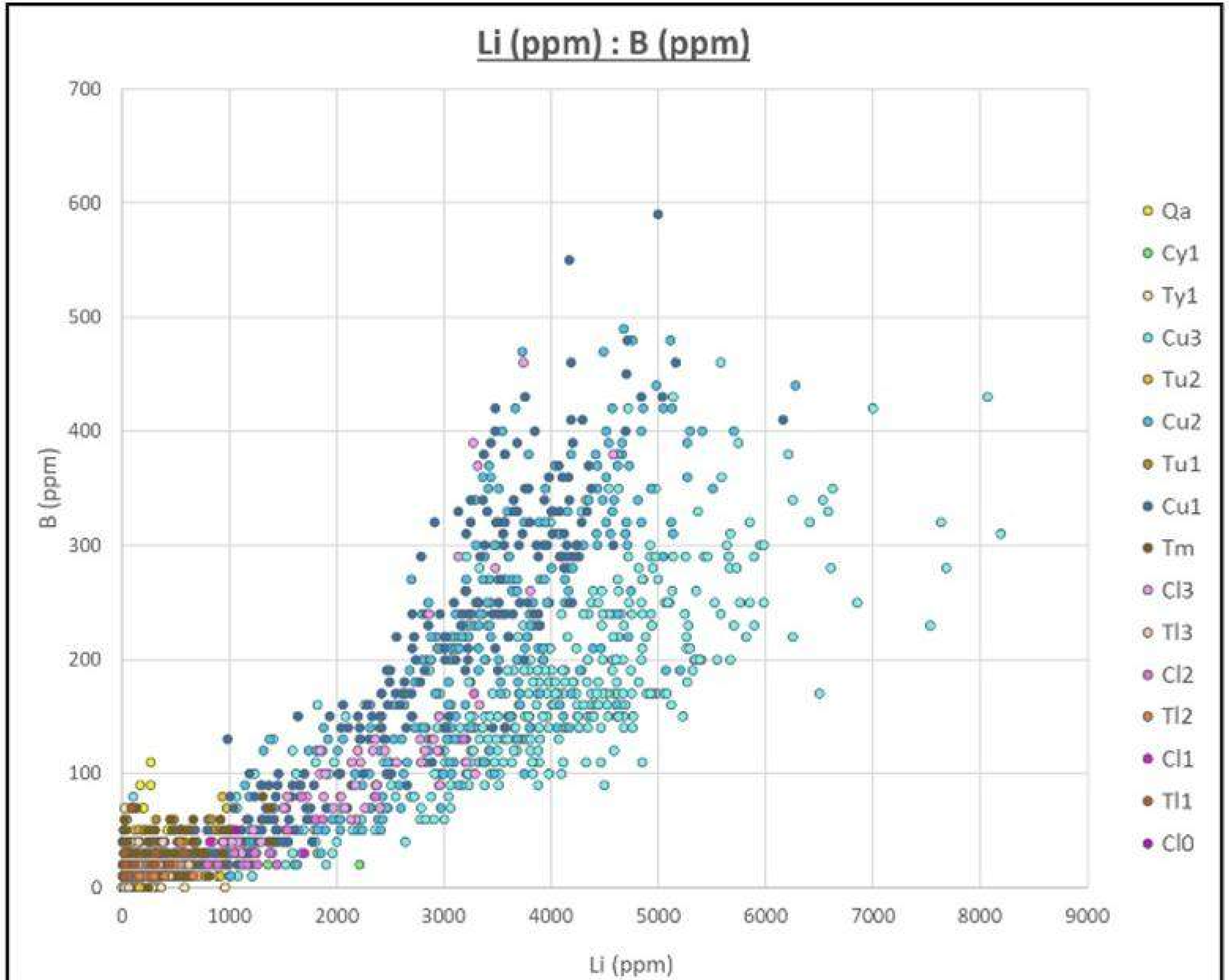
D. Chafetz. Source: Surge Battery Metals, October 30, 2024

Figure 7-11: Cross Plot of Lithium vs Rubidium for Drill Samples



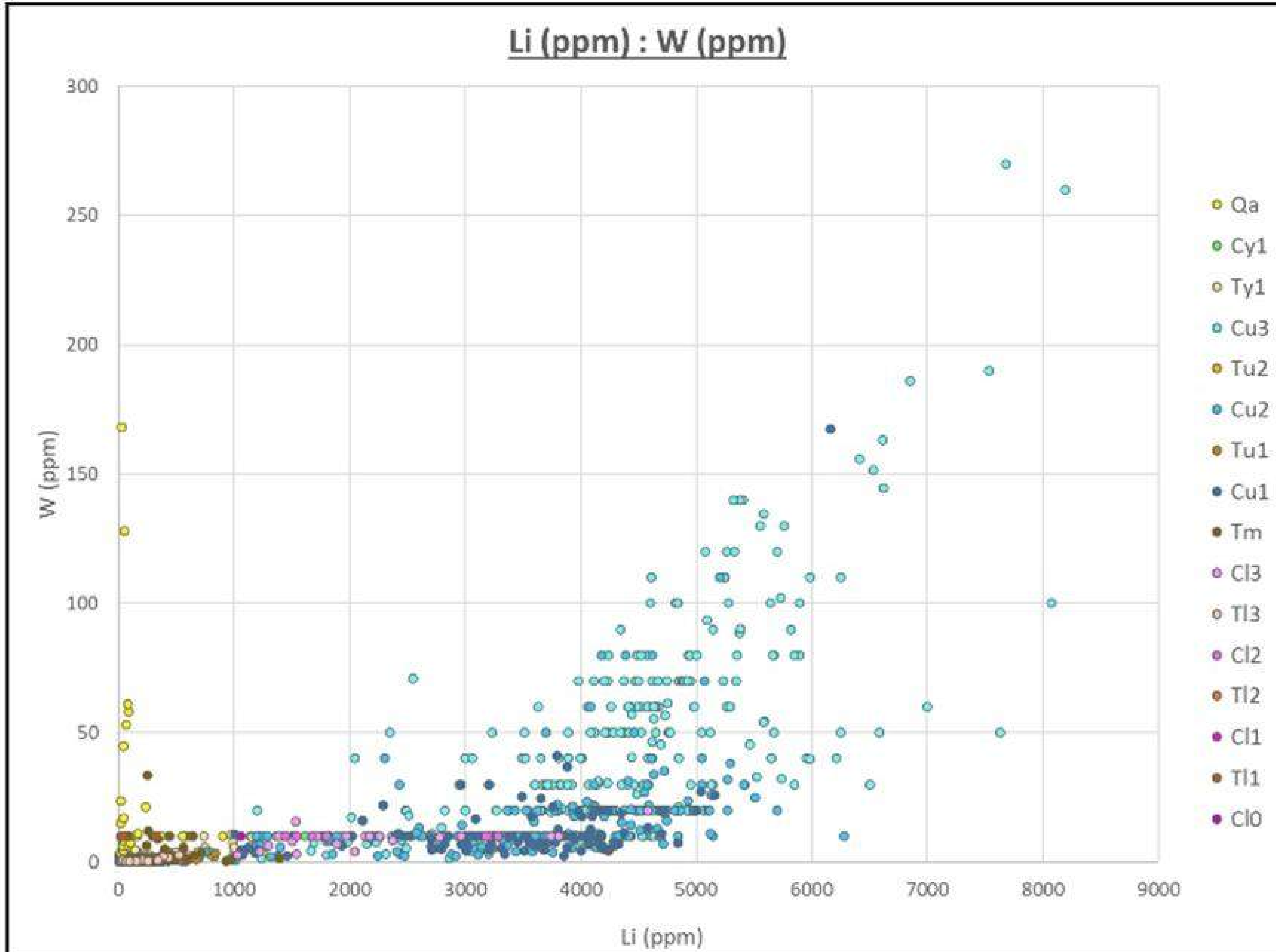
D. Chafetz. Source: Surge Battery Metals, October 30, 2024

Figure 7-12: Cross Plot of Lithium vs Magnesium for Drill Samples



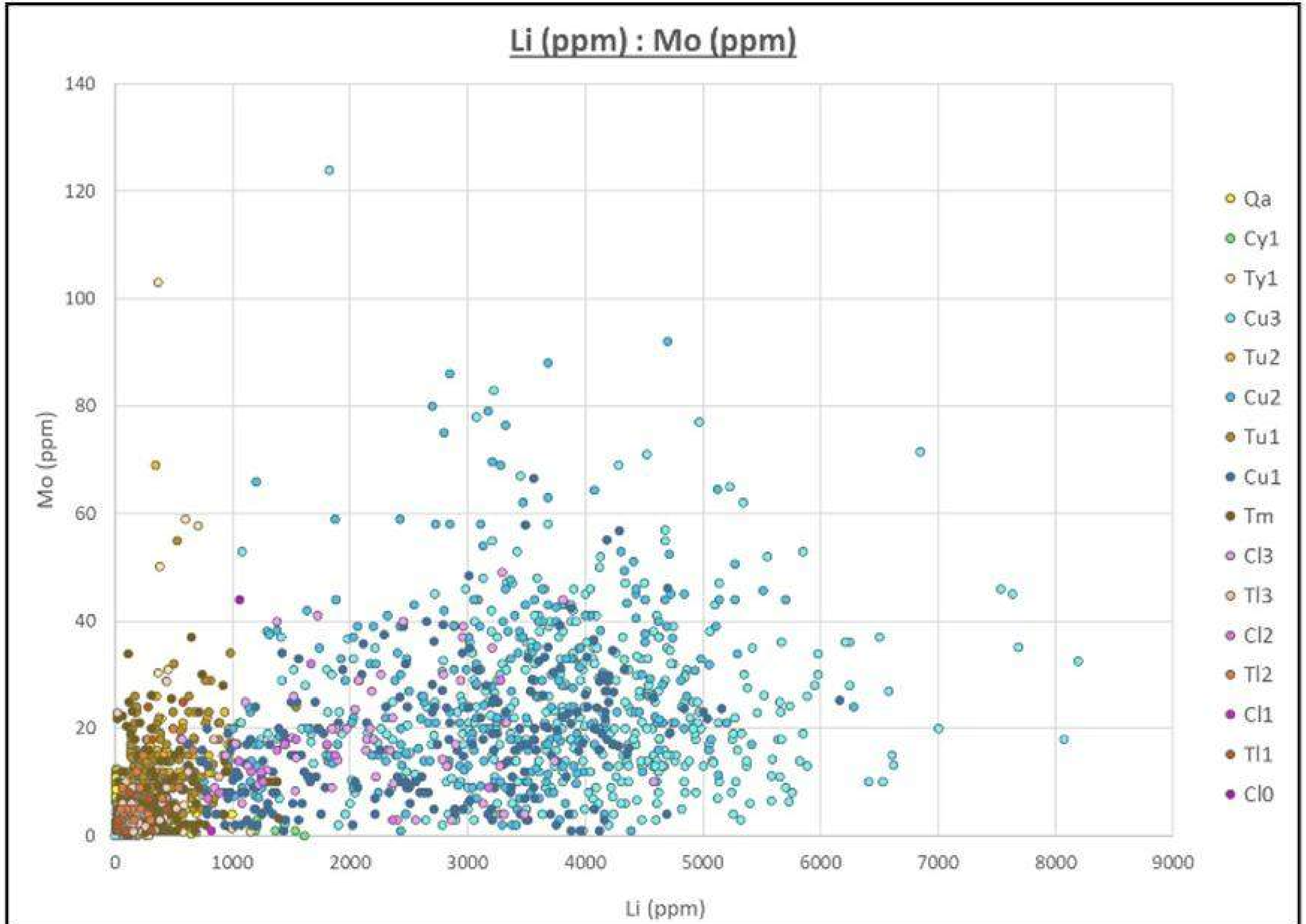
D. Chafetz. Source: Surge Battery Metals, October 30, 2024

Figure 7-13: Cross Plot of Lithium vs Boron for Drill Samples



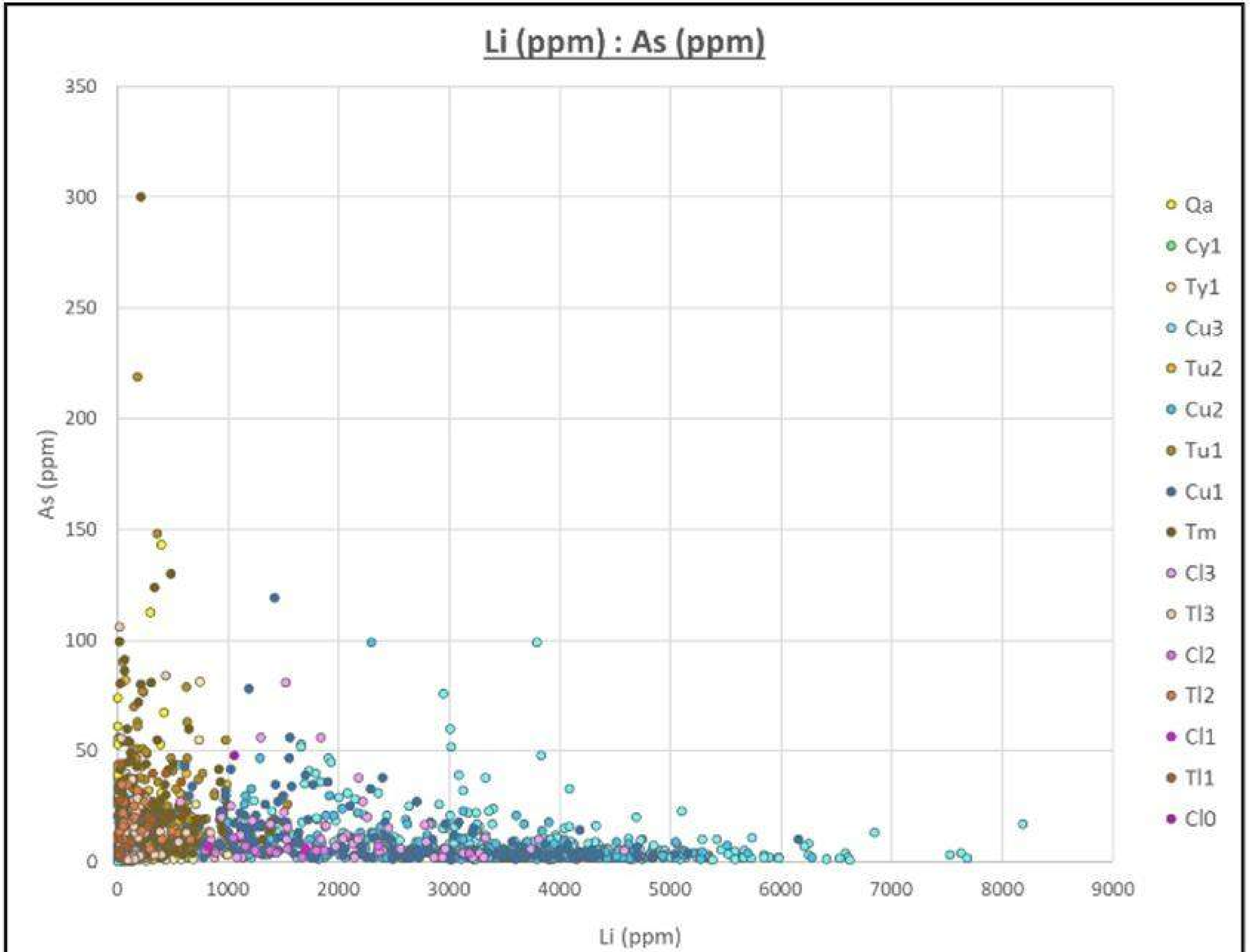
D. Chafetz. Source: Surge Battery Metals, October 30, 2024

Figure 7-14: Cross Plot of Lithium vs Tungsten for Drill Samples



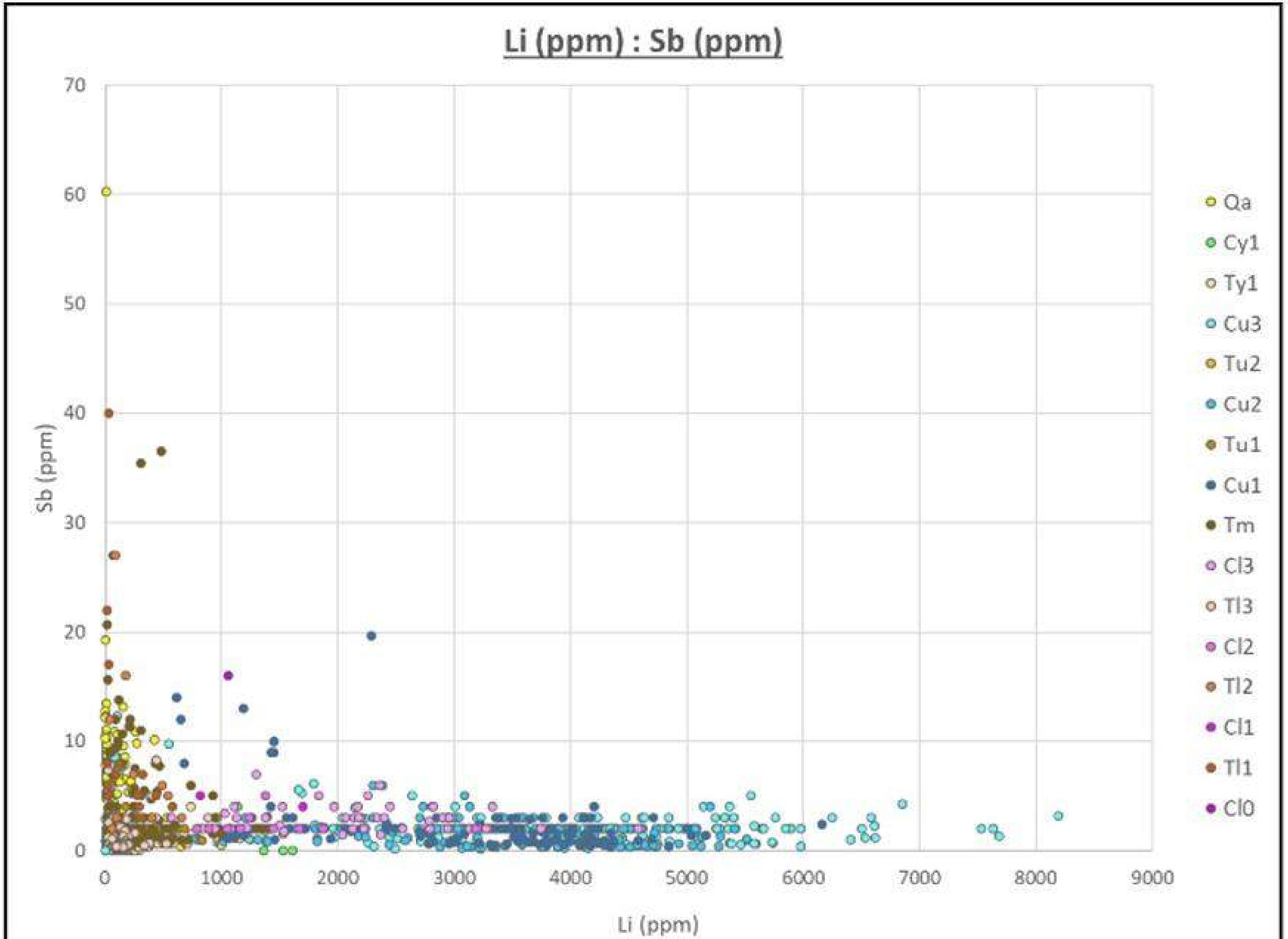
D. Chafetz. Source: Surge Battery Metals, October 30, 2024

Figure 7-15: Cross Plot of Lithium vs Molybdenum for Drill Samples



D. Chafetz. Source: Surge Battery Metals, October 30, 2024

Figure 7-16: Cross Plot of Lithium vs Arsenic for Drill Samples



D. Chafetz. Source: Surge Battery Metals, October 30, 2024

Figure 7-17: Cross Plot of Lithium vs Antimony for Drill Samples

8 DEPOSIT TYPES

A total of 69 lithium clay deposit projects are documented by the Author in the Great Basin and other portions of the Basin and Range of the western United States (Figure 8-1). Most are exploration projects, but nine are sufficiently advanced to report independent mineral resource estimates. The most developed of these are the Thacker Pass Project (northern Humboldt Co., NV) and Rhyolite Ridge Project (western Esmeralda Co., NV), both of which are nearing mine construction. This relatively new deposit type has no examples currently in production in the western United States and detailed geologic examinations are in early days.

The USGS descriptive geologic model for lithium in smectites of closed basins offers certain defining characteristics (Asher-Bolinder, 1991):

- Basin and Range or other rift settings characterized by bimodal volcanism, crustal extension, and high rates of sedimentation.
- Closed basins of caldera origin (e.g. Thacker Pass) or tectonic origin (e.g. Rhyolite Ridge) in arid environments.
- Host rocks consisting of volcanic ashes, pre-existing smectites, and lacustrine beds rich in calcium and magnesium.
- Associated rocks comprising volcanic flows and detritus, alluvial-fan and -flat and lacustrine rocks, and spring deposits.

Asher-Bolinder also postulates three possible methods for the genesis of lithium clay mineralization:

- Alteration of volcanic glass to lithium-rich smectite.
- Precipitation from lacustrine waters.
- Incorporation of lithium into existing smectites.

More recent research focuses on Thacker Pass and Rhyolite Ridge and emphasizes this closed caldera moat vs. down-dropped tectonic basin distinction. Thacker Pass is hosted in the McDermitt Caldera, a 16.5-14.6 Ma eruption event of the Yellowstone hotspot on the Nevada-Oregon border (Camilleri et al., 2017), while Rhyolite Ridge is hosted in an intermontane basin in the Silver Peak Range near Fish Lake Valley, approximately 20 miles south of the Mina Deflection, with an age of no greater than 6 My (Chafetz, 2023).

Lithium-bearing clays, including both the clays at both Thacker Pass and Rhyolite Ridge, are formed in environments sharing characteristics with the closed hydrologic system diagenesis (CHSD) model (Langella et al., 2001; Castor and Henry, 2020). A closed hydrologic system refers to a basin environment where hydrologic inputs are exceeded by evaporation. Closed hydrologic systems in the Great Basin are formed by either caldera collapse or divergent tectonic activity, both resulting in graben blocks suitable for lake formation (Figure 8-2). Figure 8-2a is reflective of the depositional environment at Thacker Pass, where caldera collapse and subsequent hydrothermal inputs are direct components of the system. The ignimbrites exposed at surface are primarily derived from local volcanic activity. Rhyolite Ridge is more similar to Figure 8-2b, where tectonic spreading created a series of north-south trending graben and horst blocks reflective of regional tectonism. Hydrothermal circulation is nearby and possibly directly influencing the lake, but is not required as a direct input to the lake environment. The source of ignimbrites exposed at surface are considered regional, as a volcanogenic source has not been identified in the immediate area of the deposit.

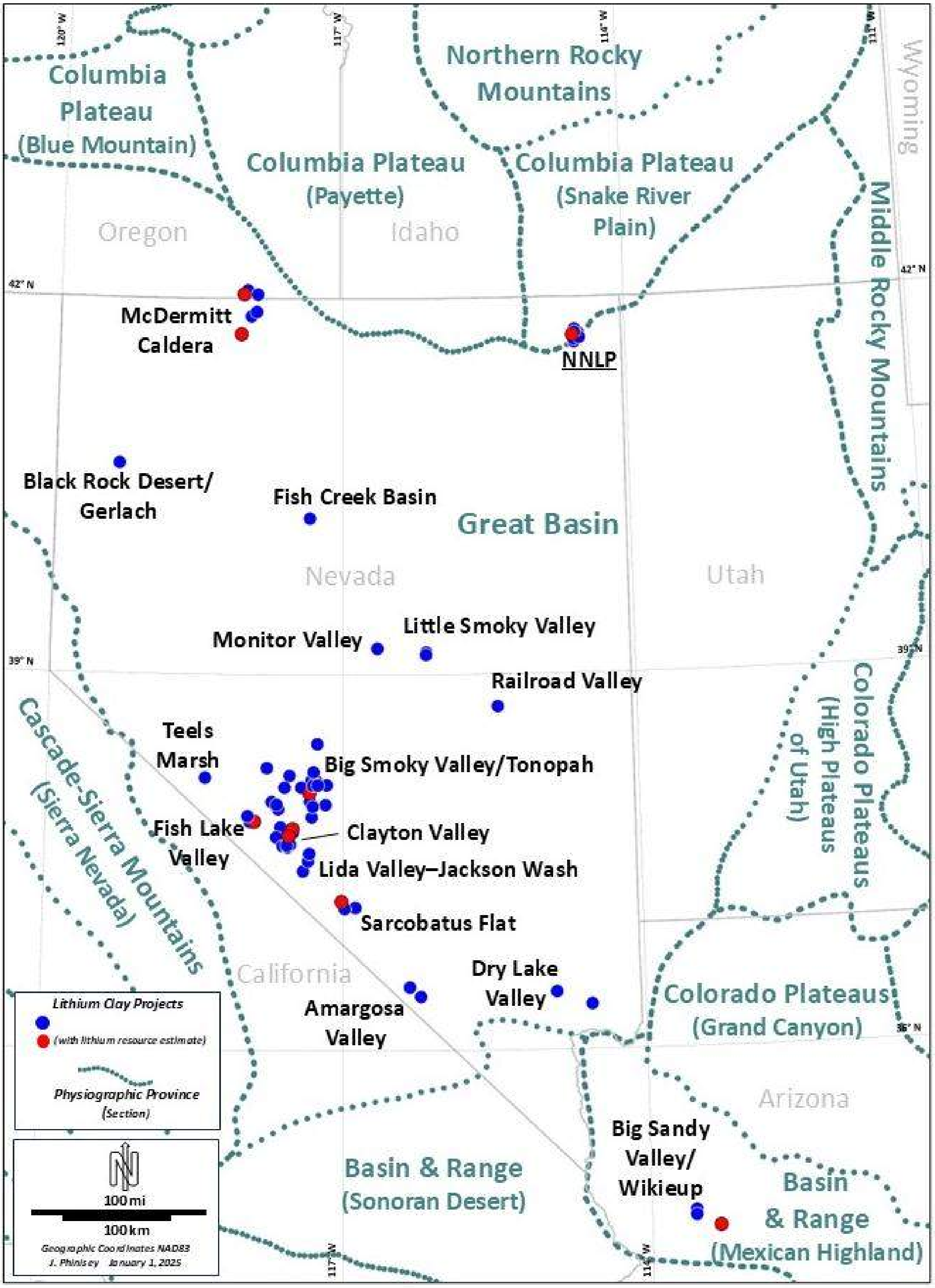
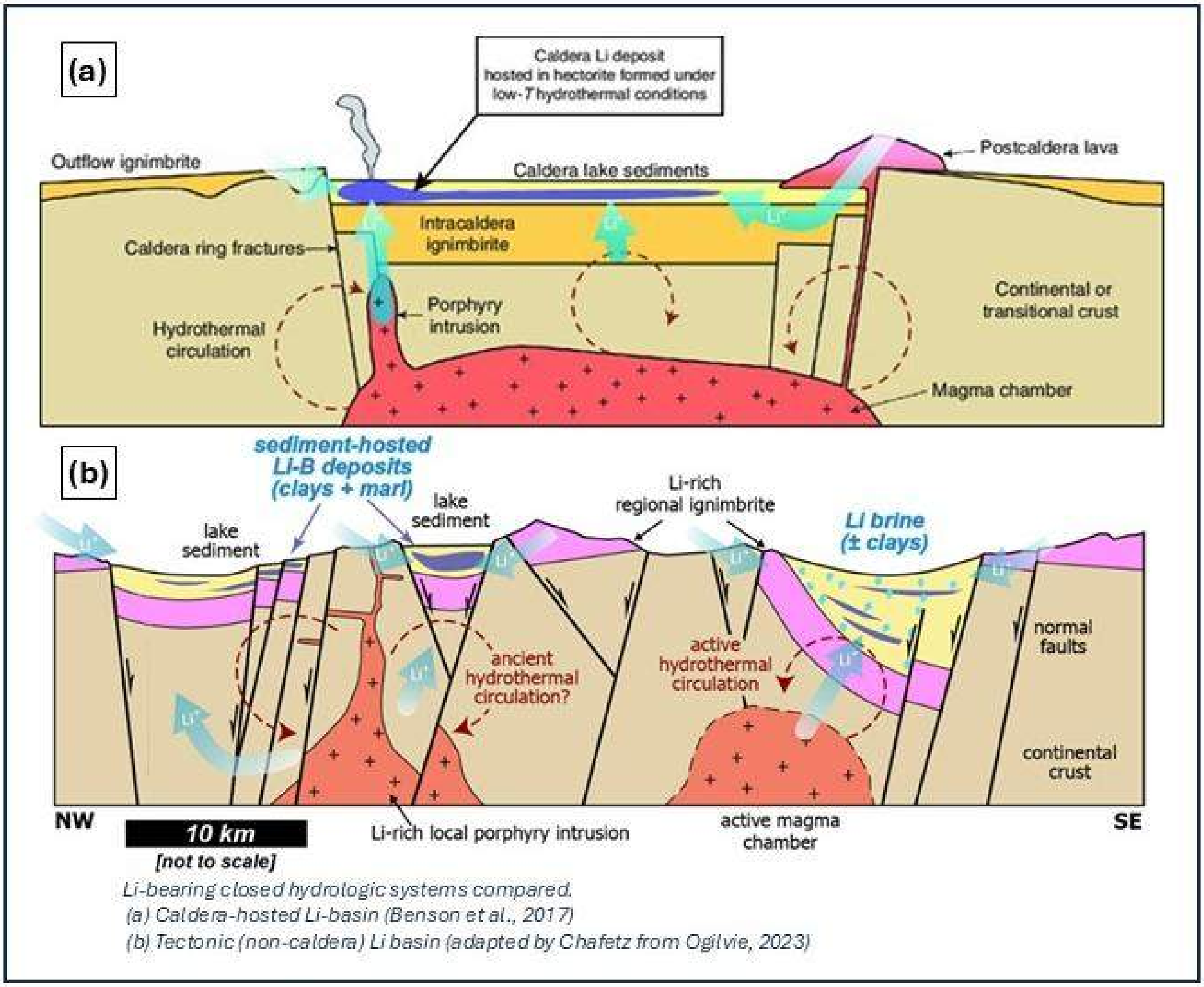


Figure 8-1: Known Lithium Clay Exploration and Development Projects with Respect to Physiographic Province Boundaries



Modified by Chafetz (2023) from Ogilvie (2023). Source: Surge Battery Metals, October 30, 2024.

Figure 8-2: Conceptual Models for Lithium Clay Deposit Genesis in Caldera and Tectonic Basin Closed Hydrologic Systems

The Nevada North Lithium Project (NNLP) shares characteristics with both the Rhyolite Ridge and Thacker Pass deposits. The geomorphologic environment shares characteristics with a tectonic (non-caldera) Li-basin, like Rhyolite Ridge. The ignimbrites in the area are also considered regional, and a local volcanogenic source in the deposit area is as-yet unidentified. It is notable that only Rhyolite Ridge has an abundance of boron – likely sourced from springs in the range – hosted in the sodium-borosilicate searlesite. The ignimbrites at the NNLP are more similar to Thacker Pass as it is observed that they are sourced from the Jarbidge-Bruneau Volcanic Field, which is a younger (12.7-8.0 Ma) expulsion from the Yellowstone hotspot than McDermitt Caldera (Camilleri et. al., 2017) and searlesite is not found at Thacker Pass or NNLP.

Li-bearing clays precipitate from diagenesis of felsic volcanic glass in a closed hydrologic system environment. Diagenesis is the sum of post-deposition processes affecting sediments near-surface and excludes metamorphic or weathering processes (Chafetz, 2023). Through evaporation in these systems, salinity and alkalinity increase significantly; it is well-documented that these lake environments host authigenic clays precipitating from saturated solutions after dissolution of reactive substances such as volcanic glass (Larsen, 2008; Calvo et al., 1999; Robinson, 1966; Taylor and Surdam, 1981). Robinson (1966) proposed a diagenetic mineral alteration sequence of volcanic glass → smectite → zeolites → potassium feldspar → calcite, opal, quartz, and searlesite; basin margins are observed to be less-altered while deeper parts of the basin where dense diagenetic fluids circulate and settle are more altered. Others (Taylor and Surdam, 1981; Surdam and Sheppard, 1978; Chafetz, 2023) have observed the transformation of smectite to illite in highly progressed diagenetically altered mineral assemblages. This is relevant because illite has been observed to have higher concentrations of lithium than Li-bearing smectite in the same deposit (Morissette, 2012; Castor and Henry, 2020; Chafetz, 2023). The driver of smectite-illite transformation is evolving pore water chemistry – typically a decrease in Si activity and a high K+/Na+ ratio – which can be caused by precipitation of quartz and analcime or searlesite (Singer and Stoffers, 1980; Taylor and Surdam, 1981; Surdam and Sheppard, 1978). The mineral assemblages at Thacker Pass and NNLP do contain analcime and quartz, but no searlesite, so the mineral assemblage and the mechanisms for illitization of clays are the NNLP is more reflective of that of Thacker Pass than Rhyolite Ridge.

9 EXPLORATION

Due to few outcrop exposures, surface exploration has focused on soil geochemical sampling completed in grid layouts. Initially, geological mapping was limited to reconnaissance and prospecting to investigate areas of higher lithium values in soil samples. A program of systematic surface mapping was initiated in the 2024 field season and is ongoing.

9.1 SOIL GEOCHEMISTRY

A soil sampling program was commenced in 2021. Results of the initial sampling program returned lithium values up to 5,120 ppm lithium with 132 of the 447 samples yielding values at or above 500 ppm lithium. Nominal sample spacing is 100 m with line spacing for most of the coverage at 100 m. Multiple sampling iterations have expanded soil geochemical coverage to the current total of 2,141 samples. Summary statistics are adapted from Kerr, S.B. and Davis, B.M. (2024) in Table 9-1.

Table 9-1: Soil Geochemistry Summary Statistics

Element	Min	Max	Mean	Median	Std Dev	66 % tile	80%	90%	95%	98%
Ag ppm	0.01	3.12	0.22	0.13	0.23	0.18	0.29	0.47	0.66	0.85
Al %	0.54	8.51	5.11	6.32	2.28	6.67	6.94	7.19	7.39	7.632
As ppm	1.1	197	12.12	8.8	10.41	11.5	16.4	23.7	30.6	42.32
B ppm	0	130	4.3	0	8.71	0	10	10	20	30
Ba ppm	80	5860	862.73	870	560.88	990	1120	1290	1680	2252
Be ppm	0.34	16.8	2.83	2.97	1.44	3.32	3.68	4.31	5.05	6.27
Bi ppm	0.07	1.66	0.45	0.41	0.19	0.48	0.57	0.67	0.81	1
Ca %	0.21	16.45	1.46	1.23	1.33	1.37	1.57	2.14	3.53	5.952
Cd ppm	0.01	22.2	1.29	0.66	1.4	1.12	2.04	2.97	3.94	5.122
Ce ppm	11.85	500	96.34	102.5	39.15	116.5	131.5	144	151.5	159.5
Co ppm	0.8	28.9	7.38	7.1	2.53	8	9	10.3	11.6	13.2
Cr ppm	0	134	26.02	22	15.95	28	36	46	58	73
Cs ppm	0.3	217	20.35	11.1	27.13	17.45	28.7	48.4	74.4	113.1
Cu ppm	2.5	155	28.87	22.4	18.69	28.5	40.3	55.1	67.9	81.96
Fe %	0.41	15.45	2.69	2.61	0.89	2.83	3.1	3.51	3.93	4.826
Ga ppm	0.96	30.5	14.81	17.8	6.54	19	20.1	21.3	22.2	23.3
Ge ppm	0	3.15	0.19	0.19	0.13	0.22	0.24	0.27	0.29	0.35
Hf ppm	0.03	14.5	5.04	5.7	3.5	6.8	8.2	9.5	10.3	11.1
Hg ppm	0	1.49	0.01	0	0.04	0	0.02	0.04	0.06	0.09
In ppm	0.019	0.584	0.07	0.071	0.03	0.079	0.087	0.098	0.109	0.1234
K %	0.06	6.66	2.3	2.68	1.38	3.02	3.39	3.84	4.18	4.836
La ppm	6.4	248	50.06	52.5	20.49	60.7	68.7	75.1	79.5	85.12
Li ppm	3.1	5120	262.14	86.3	542.09	141	280	630	1320	2206
Mg %	0.13	4.86	0.79	0.72	0.48	0.834	0.99	1.26	1.64	2.262
Mn ppm	52	2790	529.43	531	175.63	580	627	690	755	882.4
Mo ppm	0.06	32.8	3.41	2.73	2.62	3.41	4.55	6.17	8.25	10.81

Element	Min	Max	Mean	Median	Std Dev	66 % tile	80%	90%	95%	98%
Na %	0.01	1.65	0.66	0.81	0.47	0.96	1.08	1.2	1.28	1.39
Nb ppm	0.21	84.9	23.39	26.7	15.66	31.8	37.1	42	45.9	49.52
Ni ppm	1.5	186	23.72	16.8	18.29	24.6	35.9	48.7	60	74.26
P ppm	0	5290	834.11	660	518.34	820	1100	1480	1860	2322
Pb ppm	2.8	182.5	26.28	25.8	10.32	28.4	31.3	35.3	39.6	48.82
Rb ppm	3.8	478	137.86	152	79.23	172	195	221	256	312.2
Re ppm	0.0005	0.042	0	0.001	0	0.001	0.001	0.002	0.003	0.00456
S %	0	10	0.04	0.03	0.22	0.03	0.04	0.05	0.07	0.11
Sb ppm	0.24	37.5	2.61	1.82	2.22	2.47	3.46	5.03	6.88	9.246
Sc ppm	0.6	23.2	6.81	7.1	2.52	8	9	9.9	10.6	11.62
Se ppm	0	36	1.21	1	1.19	1	1.5	2	2.9	3.6
Sn ppm	0.3	32.9	3.83	3.9	2.37	4.7	5.4	6.1	7	9.1
Sr ppm	9	3300	207.95	192.5	180.01	234	286	366	476	634.4
Ta ppm	0.005	7.48	1.94	1.99	0.76	2.23	2.47	2.7	2.97	3.323
Te ppm	0	0.26	0.04	0.025	0.03	0.04	0.06	0.08	0.1	0.13
Th ppm	0.7	109.5	19.54	20.5	11.6	24.6	27.8	31.1	35.4	44.82
Ti %	0	3.48	0.3	0.317	0.22	0.354	0.414	0.502	0.609	0.7908
Tl ppm	0.05	3.95	0.83	0.9	0.41	0.99	1.09	1.21	1.39	1.78
U ppm	0.14	28	4.57	4.7	2.44	5.4	6.1	7	7.8	10.4
V ppm	3	620	72.62	53	68.42	63	78	128	219	329.2
W ppm	0.08	139.5	4.84	2.8	8.93	3.7	5.5	8.7	15.1	33.28
Y ppm	3.66	193.5	37.26	38.2	15.62	44.1	49.8	54.8	59.5	69.6
Zn ppm	14	833	141.38	108	85.82	135	183	249	321	397
Zr ppm	1.3	500	183.25	199.5	124.67	241	296	344	380	412.8

Yielding results similar to the graphical presentation of drill sample geochemistry in Section 7.3, Kerr, S.B. and Davis, B.M. (2024) demonstrate that lithium correlates with cesium, magnesium, tungsten and to a lesser degree, rubidium in soils (Table 9-2). The correlation coefficient for lithium-tungsten is higher than what might be expected from drill geochemistry and probably reflects soils having formed from subcropping portions of the Upper Mineralized Zone. The correlation coefficient of -0.0089 for lithium-boron is markedly low and suggests that boron was leached from the rock by meteoric water during soil formation; the drill hole geochemical data set should be examined for a possible thin "boron blanket" at the base of surface weathering effects.

Table 9-2: Correlation Coefficients with Lithium in Soil Geochemistry

Element	Li
Ag ppm	-0.1579
Al %	0.0403
As ppm	-0.1392
B ppm	-0.0089
Ba ppm	-0.0159

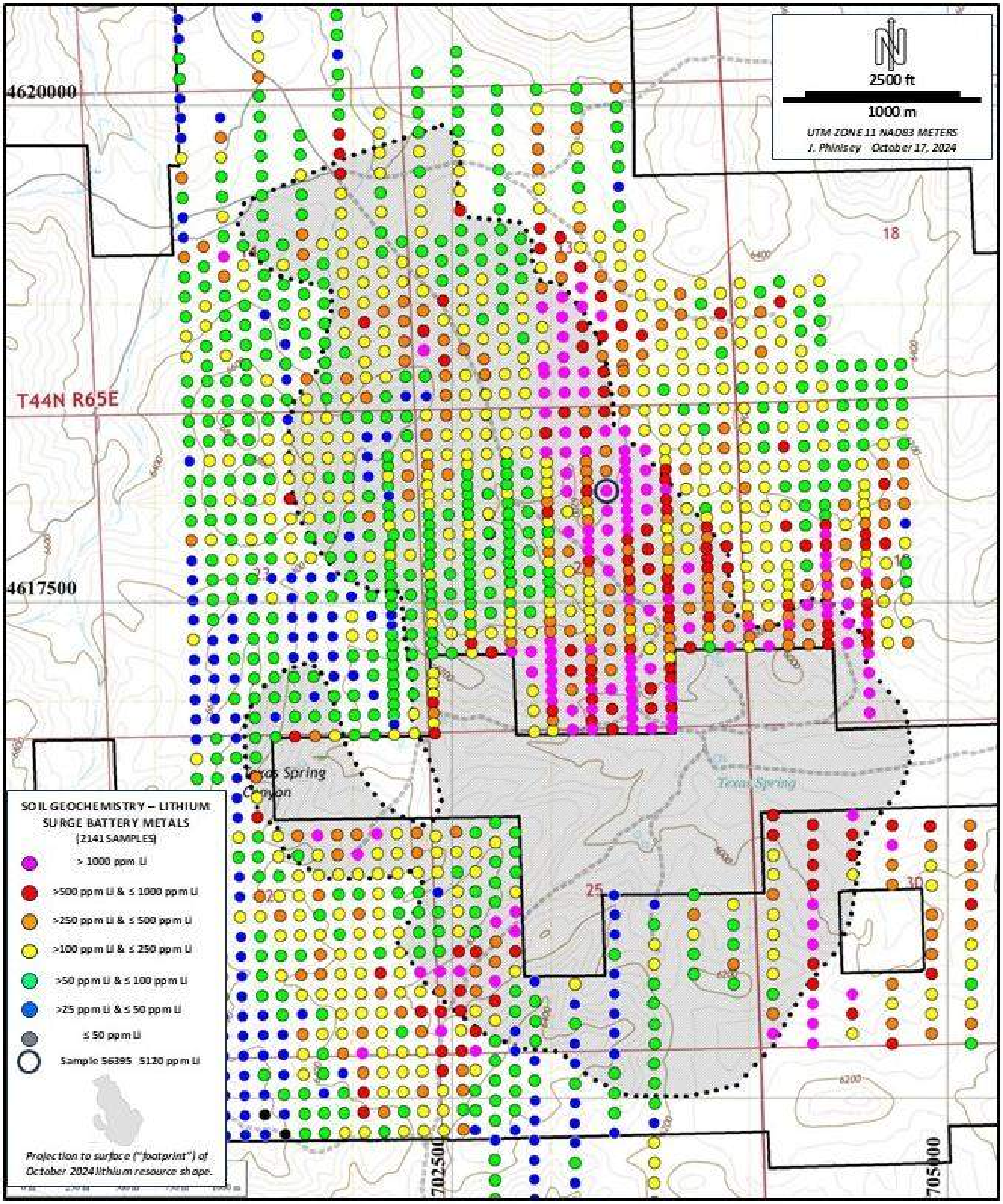
Element	Li
Ge ppm	0.268
Hf ppm	0.0885
Hg ppm	-0.1286
In ppm	0.0216
K %	0.3517

Element	Li
Sb ppm	-0.1398
Sc ppm	-0.0743
Se ppm	-0.0731
Sn ppm	0.0199
Sr ppm	0.3662

Element	Li	Element	Li	Element	Li
Be ppm	0.2631	La ppm	0.0084	Te ppm	-0.2659
Bi ppm	0.0429	Mg %	0.8092	Th ppm	-0.0326
Ca %	0.1659	Mn ppm	0.046	Ti %	-0.0085
Cd ppm	-0.1934	Mo ppm	0.3949	Tl ppm	0.2521
Ce ppm	0.0098	Na %	-0.038	U ppm	0.0074
Co ppm	-0.2353	Nb ppm	0.0506	V ppm	-0.0857
Cr ppm	-0.0988	Ni ppm	-0.249	W ppm	0.8324
Cs ppm	0.8809	P ppm	-0.2616	Y ppm	-0.0189
Cu ppm	-0.2232	Pb ppm	-0.1214	Zn ppm	-0.2342
Fe %	-0.1599	Rb ppm	0.6131	Zr ppm	0.0937
Ga ppm	0.0358	S %	0.037		

Correlation coefficients >0.8 highlighted in red and 0.6-0.8 highlighted in orange.

Lithium content in soil samples is a powerful tool for highlighting lithium enrichment in subcropping rocks and for target definition of the first stages of drill testing (Figure 9-1).



Chemical analyses by ALS Global. Source: Surge Battery Metals.

Figure 9-1: Soil Geochemistry – Lithium

9.2 ELECTRICAL RESISTIVITY TOMOGRAPHY (ERT) AND TOWED TRANSIENT ELECTROMAGNETICS (tTEM)

Surge contracted BGC Engineering of Calgary, Alberta to conduct an Electrical Resistivity Tomography (ERT) and a Towed Transient Electromagnetic (tTEM) survey at the NNLP in May 2023. Two lines of ERT were collected on the property with Line 1 extending 3,537 m and Line 2 extending 4,104 m. Minimum electrode spacing was 30 m which yielded a search depth of about 360 m below ground surface (Ernst and Woods, 2023).

The towed array system uses a transmitter and receiver setup similar to that used by airborne surveys but mounted on plastic skids and pulled by a small side by side ATV. The survey was restricted to roads and jeep trails but was too wide to work on some of the trails due to the array being too wide to fit between the trees and brush. About 15.3 km of data were collected in one day of work (Figure 9-2).

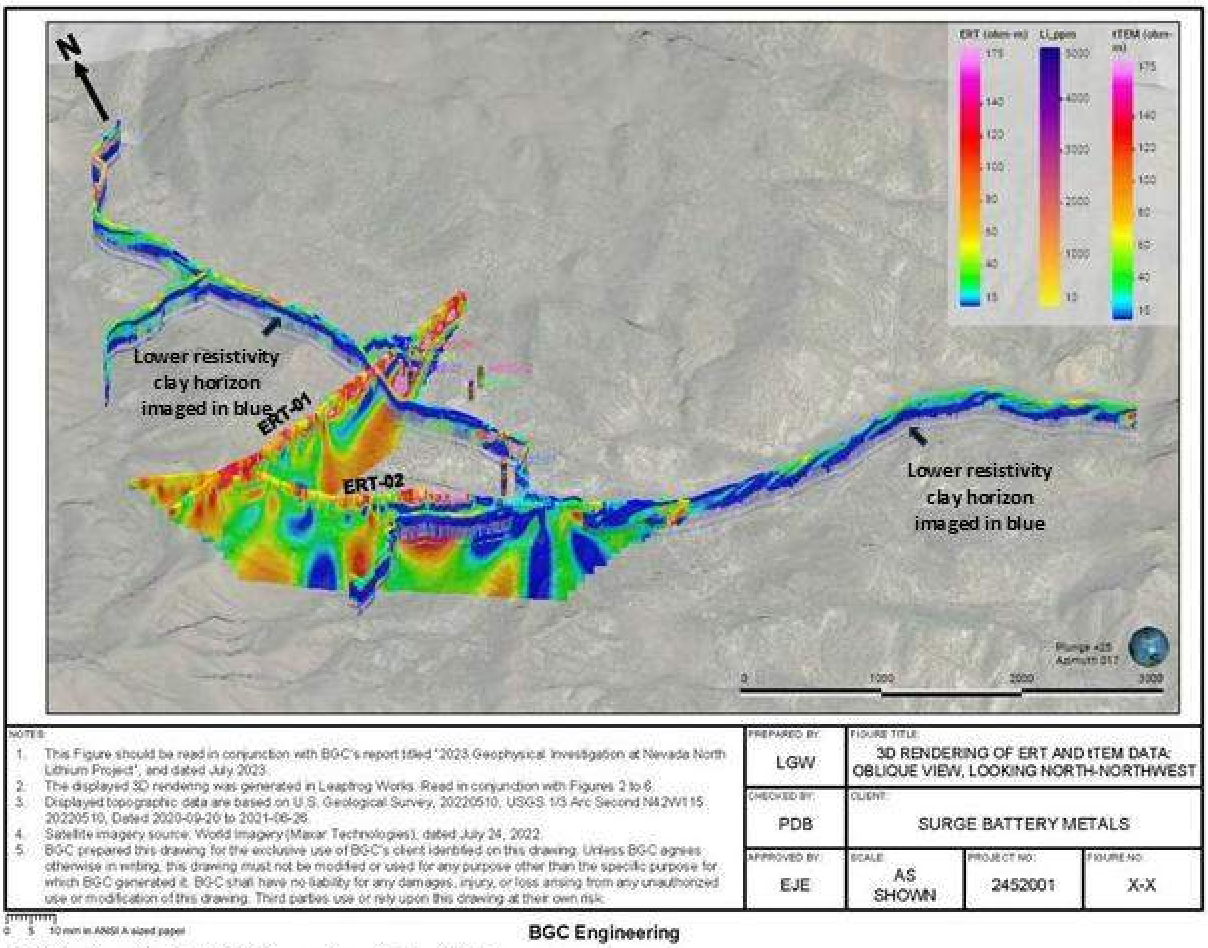
UTM Z11 NAD83 702655 E 4616918 N, looking east. BGC Engineering May 23, 2023. Source: Surge Battery Metals.

Figure 9-2: tTEM Data Acquisition, May 2023

Surge geologists report that the tTEM data were effective in predicting depth to target claystone beds for the 2023 drilling program (Figure 9-3, arrows). While effective, the continued use of tTEM at NNLP is limited to available roads of adequate width and clearance. It is recommended to align and space future drill road construction to facilitate additional tTEM data acquisition.

ERT data was collected over a four-day period (May 23-26, 2023) by two field technicians provided by BGC and contract labor contracted by Surge. The Surge project geologist provided assistance with logistics and geologic context related to the data collection and interpretation.

Data reduction, modeling, and presentation was performed by BGC staff (Figure 9-3).



BGC Engineering July 2023. Source: Surge Battery Metals

Figure 9-3: Electrical Resistivity Tomography and Towed Transient Electromagnetics

10 DRILLING

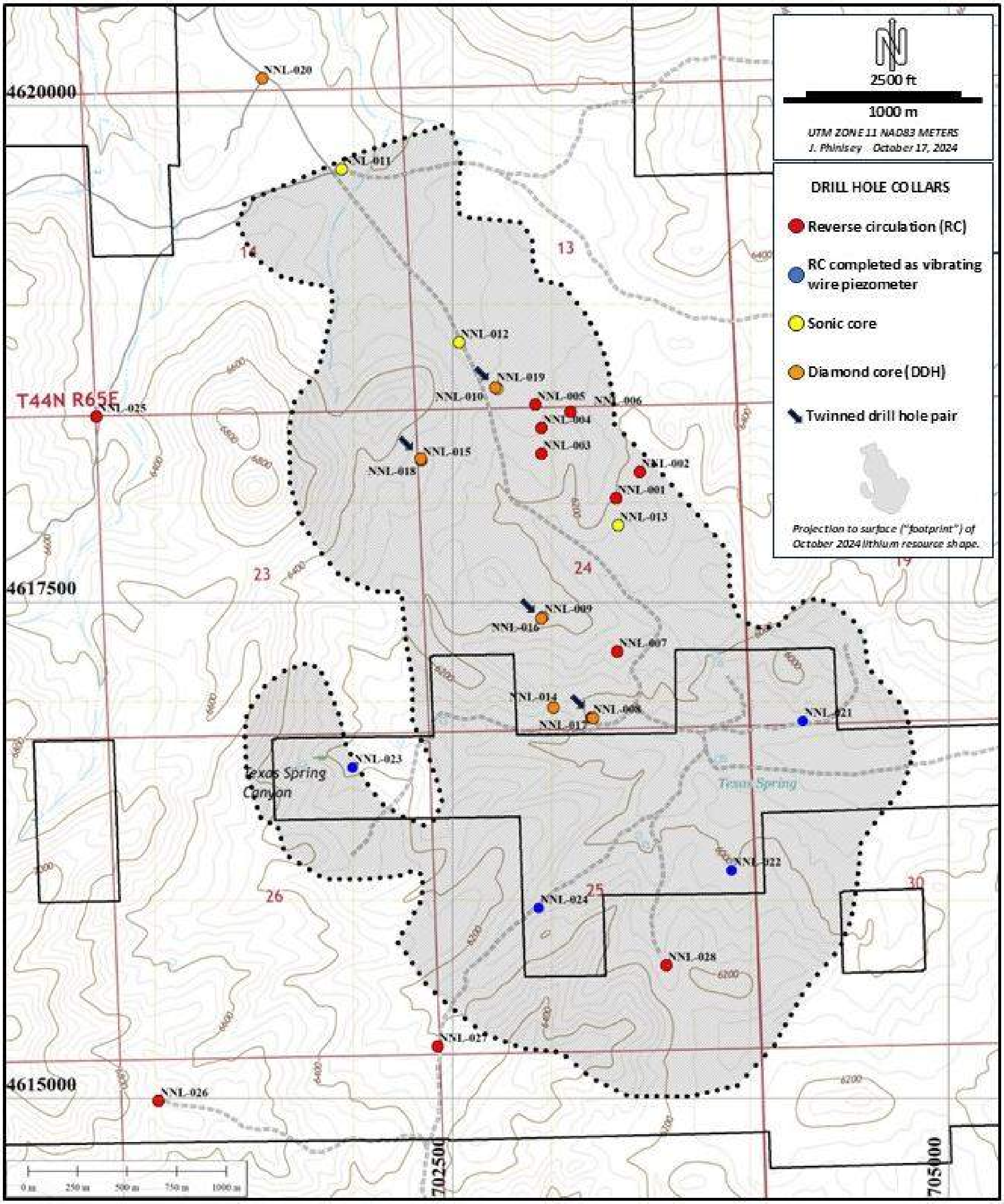
10.1 SUMMARY STATISTICS

The drill hole inventory for the NNLP comprises 28 holes totaling 4,030.5 m (13,223.5 ft) completed in three phases in the years 2022-2024. This total represents 2,050 m (6,725 ft) of reverse circulation, 461 m (1,512.5 ft) of sonic core, and 1,520 m (4,986 ft) of diamond core drilling (Table 10-1). Results of the 2024 drilling program of 1,274 m (4,180 ft) of reverse circulation drilling in eight holes (Table 10-1, green shading) prompted the update of the Mineral Resource Estimate first published in Phinisey, J.D. and Davis, B.M. (2024) and that is presented in Section 14. Excluding the four drill hole pairs discussed below, drill hole spacing within the footprint of the lithium inferred mineral resource ranges approximately from 125 m to 1,000 m (Figure 10-1).

Table 10-1: Drill Hole Summary for the NNLP

Hole ID		UTM NAD83 Z11		Elevation		Depth		Azimuth	Dip	Drill Type	Year Drilled
Original	Updated	Easting	Northing	(m)	(ft)	(m)	(ft)	(degrees)	(degrees)		
NN22-01	NNL-001	703325.58	4618023.22	1884.63	6183.18	82.296	270	0	-90	RC	2022
NN22-02	NNL-002	703445.56	4618155.91	1877.42	6159.51	91.44	300	0	-90	RC	2022
NN22-03	NNL-003	702949.20	4618245.47	1906.8	6255.92	91.44	300	0	-90	RC	2022
NN22-04	NNL-004	702949.10	4618376.13	1910.32	6267.44	91.44	300	0	-90	RC	2022
NN22-05	NNL-005	702918.18	4618493.96	1918.95	6295.76	91.44	300	0	-90	RC	2022
NN22-06	NNL-006	703096.11	4618458.63	1904.12	6247.1	76.2	250	0	-90	RC	2022
NN22-07	NNL-007	703330.92	4617249.57	1857.64	6094.62	160.02	525	0	-90	RC	2022
NN22-08	NNL-008	703200.19	4616916.10	1820.37	5972.33	91.44	300	0	-90	RC	2022
NN23-01	NNL-009	702954.91	4617422.53	1891.21	6204.77	98.298	322.5	0	-90	sonic	2023
NN23-02	NNL-010	702728.13	4618573.42	1915.75	6285.27	84.582	277.5	0	-90	sonic	2023
NN23-03	NNL-011	701942.23	4619679.22	1894.03	6214.01	107.442	352.5	0	-90	sonic	2023
NN23-04	NNL-012	702533.44	4618808.04	1908.04	6259.97	91.44	300	0	-90	sonic	2023
NN23-05	NNL-013	703334.75	4617887.50	1875.48	6153.13	79.248	260	0	-90	sonic	2023
NN23-06	NNL-014	703010.83	4616967.84	1837.14	6027.37	198.7296	652	0	-90	core	2023
NN23-07	NNL-015	702342.96	4618214.47	1929.15	6329.24	235.3056	772	0	-90	core	2023
NN23-08	NNL-016	702949.69	4617417.51	1891.24	6204.87	242.9256	797	0	-90	core	2023
NN23-09	NNL-017	703208.26	4616915.21	1820.22	5971.86	131.9784	433	0	-90	core	2023
NN23-10	NNL-018	702340.76	4618221.52	1929.24	6329.54	303.8856	997	90	-50	core	2023
NN23-11	NNL-019	702717.55	4618580.79	1915.7	6285.1	207.8736	682	0	-90	core	2023
NN23-12	NNL-020	701541.59	4620136.24	1904.85	6249.5	199.0344	653	0	-90	core	2023
NNL-021	NNL-021	704267.11	4616900.97	1792.73	5881.66	85.344	280	0	-90	RC	2024
NNL-022	NNL-022	703905.51	4616147.58	1825.91	5990.51	121.92	400	0	-90	RC	2024
NNL-023	NNL-023	701998.10	4616667.06	1881.34	6172.38	152.4	500	0	-90	RC	2024
NNL-024	NNL-024	702935.56	4615959.03	1850.57	6071.41	121.92	400	0	-90	RC	2024
NNL-025	NNL-025	700706.94	4618433.25	1934.74	6347.57	243.84	800	0	-90	RC	2024
NNL-026	NNL-026	701019.04	4614987.51	2044.42	6707.42	243.84	800	0	-90	RC	2024
NNL-027	NNL-027	702425.72	4615261.36	1897.07	6223.99	137.16	450	0	-90	RC	2024
NNL-028	NNL-028	703579.87	4615670.15	1863.24	6112.99	167.64	550	0	-90	RC	2024

Surveyed July 25, 2024 by DOWL engineering services. Source: Surge Battery Metals



Source: Surge Battery Metals.

Figure 10-1: Drill Hole Locations for the Nevada North Lithium Project

10.2 ANALYSIS OF DRILL HOLE PAIRS

As part of the drilling program in 2023, Surge undertook to compare results of different drilling methods by twinning combinations of reverse circulation, sonic core, and diamond core holes (Figure 10-1, black arrows). Comparisons of mineralized intercepts greater than 2,500 ppm lithium for these drill hole pairs are presented in Table 10-2. Observations from this test include:

- The uppermost mineralized claystone (rock code Cu3) showed essentially nil variation in thickness over short lateral distances for multiple drill hole pairs. Differences in lithium grade for these intercepts are less than 10%. Reverse circulation drilling can provide the same basic thickness and grade data as core.
- Thinner intercepts (generally less than 20 m) demonstrate increased variations in thickness (including being absent in holes NNL-010 and NNL-015). Both structural and depositional causes are being considered by Surge geologists.
- The pair represented by holes NNL-015 and NNL-018 is a special case in which two diamond core holes are completed from the same pad. While NNL-015 is vertical, hole NNL-018 is an angle hole at -50 degrees at azimuth 090 (east). The two intercepts of mineralized claystone Cu2 are +100 m apart at depth and have a 12.5 m difference in drill length. After correcting for geometrical exaggeration of vertical thickness in hole NNL-018, the difference in claystone true thickness is approximately 3 m while the difference in average lithium grade is 12.9%. These differences are a first approximation for the degree of variability to be expected near basin centers over moderate distances.

Table 10-2: Comparison of Mineralized Thickness and Average Lithium Grade for Drill Hole Twins

Hole ID		Drill	Δ Plan	Δ Elev.	Drill Interval (ft)		Drill Interval (m)		Drill Interval Length		Δ Interval	Average	Δ Lithium	Average	Δ Boron	Rock Unit
Original	Updated	Type	(m)	(m)	From	To	From	To	(m)	(ft)	Length (m)	Li (ppm)	(%)	B (ppm)	(%)	Code
NN22-08	NNL-008	RC	8.12	0.15	5.00	70.00	1.52	21.34	19.81	65.00	0.00	3878	-9.4	203	5	Cu3
NN23-09	NNL-017	DDH			7.00	72.00	2.13	21.95	19.81	65.00		3513		212		
NN22-08	NNL-008	RC	8.12	0.15	90.00	235.00	27.43	71.63	44.20	145.00	0.15	3394	8.8	242	16	Cu2
NN23-09	NNL-017	DDH			91.50	237.00	27.89	72.24	44.35	145.50		3693		280		
NN22-08	NNL-008	RC	8.12	0.15	275.00	280.00	83.82	85.35	1.52	5.00	0.00	2660	29.7	90	56	Cu1
NN23-09	NNL-017	DDH			277.00	282.00	84.43	85.95	1.52	5.00		3450		140		
NN23-01	NNL-009	Sonic	7.25	0.03	27.50	107.50	8.38	32.77	24.38	80.00	0.61	4939	-3.1	236	-6	Cu3
NN23-08	NNL-016	DDH			25.00	107.00	7.62	32.61	24.99	82.00		4785		223		
NN23-01	NNL-009	Sonic	7.25	0.03	147.50	177.50	44.96	54.10	9.14	30.00	0.00	3758	1.4	282	-5	Cu2
NN23-08	NNL-016	DDH			147.00	177.00	44.81	53.95	9.14	30.00		3812		268		
NN23-01	NNL-009	Sonic	7.25	0.03	207.50	222.50	63.25	67.82	4.57	15.00	0.30	2033	-19.3	135	4	Cu1
NN23-08	NNL-016	DDH			207.00	223.00	63.09	67.97	4.88	16.00		1640		140		
NN23-01	NNL-009	Sonic	7.25	0.03	227.50	245.00	69.34	74.68	5.33	17.50	0.46	2591	-25.0	193	-27	Cu1
NN23-08	NNL-016	DDH			227.00	243.00	69.19	74.07	4.88	16.00		1943		140		
NN23-07	NNL-015	DDH	7.39	0.09	357.00	417.00	108.81	127.10	18.29	60.00	12.50	3518	12.9	132	10	Cu2
NN23-10	NNL-018	DDH			357.00	458.00	108.81	139.60	30.79	101.00		4040		144		
NN23-07	NNL-015	DDH	7.39	0.09	660.50	686.50	201.32	209.25	7.92	26.00	0.30	2962	-88.8	104	-87	Cu1
NN23-10	NNL-018	DDH			662.00	687.00	201.78	209.40	7.62	25.00		332		14		Tu1
NN23-02	NNL-010	Sonic	12.90	0.05	67.50	177.50	20.57	54.10	33.53	110.00	1.52	4044	-4.9	147	12	Cu3
NN23-11	NNL-019	DDH			67.00	172.00	20.42	52.43	32.00	105.00		3847		164		
NN23-02	NNL-010	Sonic	12.90	0.05	202.50	207.50	61.72	63.25	1.52	5.00	0.00	135	2203.7	10	1900	Tu2
NN23-11	NNL-019	DDH			202.00	207.00	61.57	63.09	1.52	5.00		3110		200		Cu2
NN23-02	NNL-010	Sonic	12.90	0.05	237.50	255.00	72.39	77.72	5.33	17.50	0.76	2669	-95.0	273	-94.5	Cu2
NN23-11	NNL-019	DDH			237.00	257.00	72.24	78.33	6.10	20.00		134		15		Tm

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

To date, ALS Global is the sole provider of chemical analyses for the NNLP. ALS Global is an internationally recognized analytical laboratory serving the exploration and mining industry. Interlaboratory testing and routine internal audits are routinely conducted to meet ISO/IEC 17025:2017 and ISO 9001:2015 standards. ALS Global is independent of both Surge Battery Metals and the NNLP.

11.1 SAMPLE PREPARATION, ANALYSIS, AND SECURITY - SOILS

Soil samples were collected by a contract crew provided by Rangefront Mining Services of Elko, Nevada. After collection, samples were stored in locked vehicles until they were delivered to the Rangefront office in Elko. The Surge project geologist inserted standards into the sample stream and transported the samples from the Rangefront office to the ALS Global preparation laboratory in Elko. ALS Global shipped the samples to their Twin Falls laboratory for sieving. After preparation, aliquots of the samples were shipped to the ALS Global analytical laboratory in North Vancouver. B.C. for analysis. One batch of the fall 2022 soil samples was taken to the ALS Global preparation lab in Reno, NV where they were screened, and a sample aliquot sent to the North Vancouver, B.C. facility for analysis.

Soil samples were sieved to -80 mesh (0.180 mm) and run via the ALS Global ME MS-61 method. This method uses a 0.5-gram aliquot leached in a 4-acid solution (HNO_3, HCL, HF, $HClO_4$) and analyzed using mass spectroscopy. This extraction method is very aggressive for soil samples in that it will strip most elements from the crystal lattice of clays and silicates along with more easily leached iron oxides, sulfates, and halides. It is a partial extraction method for elements bound in resistant minerals such as the rare earth oxides, zircon, and others. Since lithium and other metals of interest at the NNLP are likely in clays or partially weathered feldspars, this method is effective for the purposes of this investigation.

11.2 SAMPLE PREPARATION, ANALYSIS, AND SECURITY – 2022 DRILLING PROGRAM

The 2022 reverse circulation drilling program utilized a buggy-mounted system provided by O'Keefe Drilling Company of Butte, Montana. Site preparation and water handling was provided by Legarza Exploration of Elko, Nevada. Drill cuttings were collected on 5-ft intervals and bagged at the drill site by O'Keefe staff. Samples were collected from the site by the Surge Project geologist and delivered to the ALS Global sample preparation facility in Twin Falls, Idaho. Samples were dried, crushed, and pulverized at the Twin Falls facility and sent to the North Vancouver ALS Global laboratories for analysis. Samples were assayed using the ALS ICP-41 method using an aqua regia leach followed by ICP optical emission spectroscopy. The analytical range for lithium by this method is 10 ppm – 10,000 ppm.

11.3 SAMPLE PREPARATION, ANALYSIS, AND SECURITY – 2023 DRILLING PROGRAM

All samples from the 2023 sonic drilling program were collected in plastic bags for every 2.5-ft (76.2 cm) interval. Surge workers at the rig retained a representative sample in chip trays and core boxes for each interval and sealed the bags with wire ties. Samples were transported by Surge workers to a locked warehouse in Elko, Nevada where they were stored for sub-sampling. The sample bags were opened at the warehouse, a sub-sample of approximately 25% of the material was bagged for assay and the original sample bags were overwrapped for storage. Samples were then submitted to the ALS Global facility in Elko, Nevada for analysis.

Core samples from the 2023 diamond drilling program were placed in standard waxed cardboard core boxes by the drillers who delivered the core to the Surge field office. The core samples were logged at the camp and sample intervals marked with the sample number tags. The core was then driven by Surge workers to a locked warehouse in Elko, Nevada where they were stored for splitting. At the warehouse, the core samples were split or sawn, depending on the rock composition and half of the core samples were placed in cloth bags. Samples were then submitted to the ALS Global facility in Elko, Nevada for analysis.

Samples were assayed using the ALS ICP-41 method as in 2022.

11.4 SAMPLE PREPARATION, ANALYSIS, AND SECURITY – 2024 DRILLING PROGRAM

Samples from the 2024 RC drilling program were placed directly into 20” x 24” polyester Heavy Sentry Bags from the cyclone separator outlet of the drill rig while carefully following a schedule on a cut sheet for one sample every five feet. The sample bag is fitted over a 5-gallon bucket which is hung from the cyclone outlet for the duration of the 5-foot interval drilled. Once collected, the bag is placed on the side of the pad, in sequential order, and allowed to dry for 2 or 3 days. Once dry, a Surge project geologist collected all samples by hand into a supersack in the bed of a pickup truck, while carefully double-checking with the sample cut-sheet which is a copy of what was provided to the drillers. Once all samples were accounted for, a submittal and chain of custody form was completed, and the samples were delivered to the ALS Global prep lab in Twin Falls, ID in the same day. Samples were assayed using the ALS ME MS-41 method using an aqua regia leach and ICP-MS finish.

11.5 QUALITY ASSURANCE AND QUALITY CONTROL

The reference samples used by Surge for soil sample submittals and for the 2022-2024 drilling programs were purchased from Moment Exploration Geochemistry (MEG) of Lamoille, NV. MEG specializes in certifying geochemical reference samples. Standard MEG-Li.10.11 has a lithium analytical mean value of 719.5 ppm and a standard deviation of 28.9 ppm. For the 2024 drilling program, standard MEG-Li.10.15 was used in conjunction with MEG-Li.10-11. Standard MEG-Li.10.15 has a lithium analytical mean value of 1,606.4 ppm and a standard deviation of 104.8 ppm.

11.5.1 Quality Assurance and Quality Control - Soils

The soil database includes 72 analyses of the MEG-Li.10.11 certified reference material, approximately 3.4% of the inventory of 2,141 soil samples. Analytical values for lithium range from 720 ppm to 830 ppm with a mean of 773.9 ppm, approximately 7.5% above the published mean for MEG-Li.10.11.

11.5.2 Quality Assurance and Quality Control – 2022 and 2023 Drilling Programs

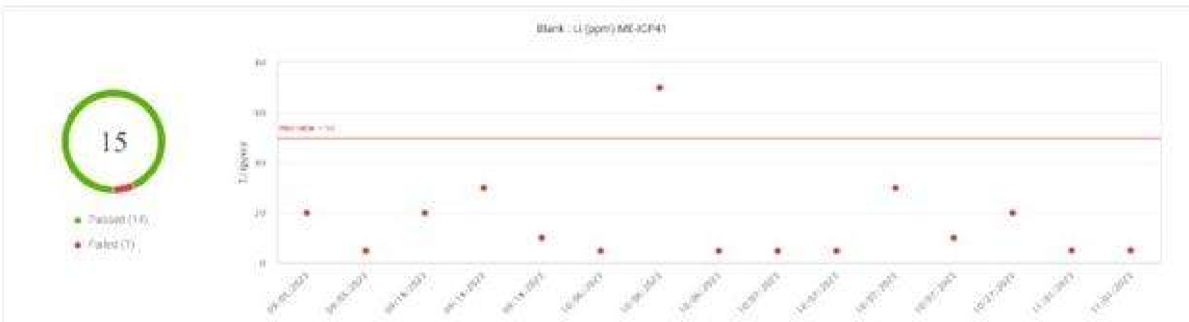
The drill hole database for the 2022 reverse circulation drilling program and the 2023 sonic and diamond core drilling programs includes 105 analyses of the MEG-Li.10.11 certified reference material (approx. 5.1% of submittal totals) and 15 blank samples (Figure 11-1):

- A total of 94 of these analyses (89.5%) fall within two standard deviations of the published mean value for MEG-Li.10-11.
- A total of 11 samples (10.5%) falls between two and three standard deviations of the mean value for MEG-Li.10.11.
- Of the fifteen blanks analyzed, one returned a value greater than 50 ppm lithium.
- Seven duplicate pairs represent both the low and the very high end of the range of lithium values, with variability in lithium content well within 10%. ALS Global reported satisfactory performance for laboratory internal standards and blanks.

2022 and 2023 Drill Programs – Standards Chart for MEG-Li.10.11

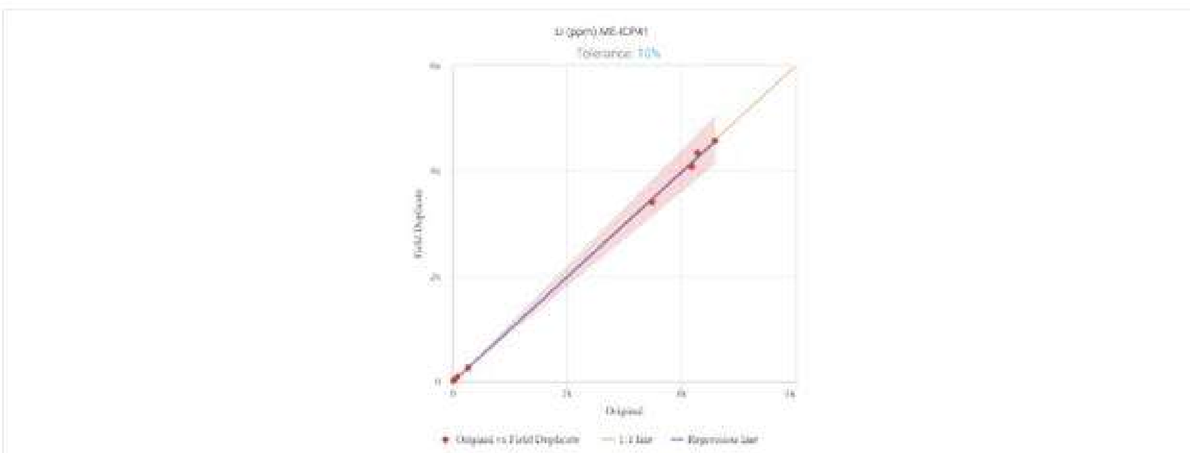
Source: Surge Battery Metals, October 31, 2024.

2022 and 2023 Drill Programs – Blanks Chart



Source: Surge Battery Metals, October 31, 2024.

2022 and 2023 Drill Programs – Duplicates Chart



Source: Surge Battery Metals, October 31, 2024.

Figure 11-1: QA-QC Performance - 2022 and 2023 Drill Programs

11.5.3 Quality Assurance and Quality Control – 2024 Drilling Program

The 2024 reverse circulation drilling program comprises 641 drill samples, 36 samples total of certified reference material samples MEG-Li.10.11 and MEG-Li.10.15, and 39 blank samples (Figure 11-2):

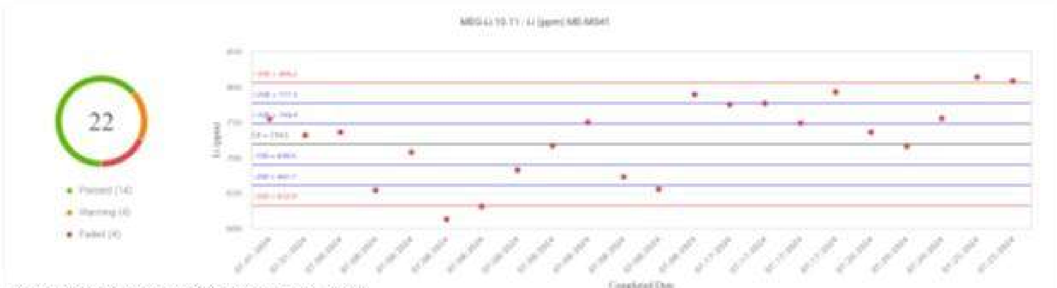
- A total of 26 blank samples reported less than 10 ppm lithium, 12 reported between 10 and 50 ppm lithium, and one reported 85.4 ppm lithium, at the end of a mineralized zone.
- Of 22 samples of MEG-Li.10.11 included in submittals, four samples from the submittal of July 8, 2024 exceeded three standard deviations from the mean for lithium.
- Of 14 samples of MEG-Li.10.15 included in submittals, none exceeded two standard deviations from the mean value for lithium.
- A total of 34 duplicates covers a broad range of lithium values for the NNLP. Variation in lithium values for all mineralized pairs fell within a 10% tolerance.

The failed standards from the July 8, 2024 submittal were re-analyzed along with flanking samples for a batch of 48 samples. The results were returned within 5% tolerance. Two failed standards from the July 25, 2024 submittal were not in mineralized zones and re-analysis for the flanking intervals was not requested.

11.6 SUMMARY STATEMENT

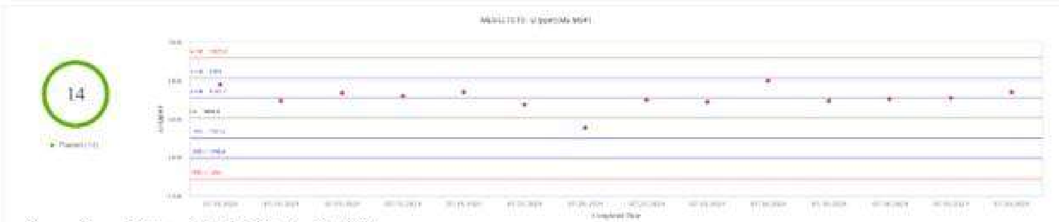
It is the QP's opinion that the sample collection, preparation, security, and analytical procedures as described are sufficient for this Technical Report.

2024 Drill Program – Standards Chart for MEG-Li.10.11



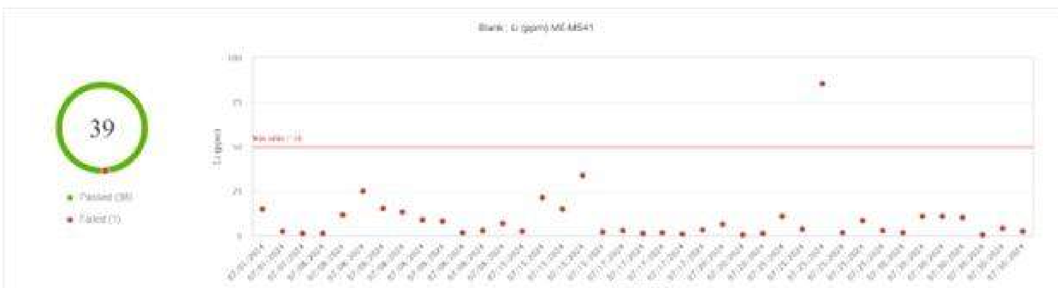
Source: Surge Battery Metals, October 31, 2024.

2024 Drill Program – Standards Chart for MEG-Li.110.15



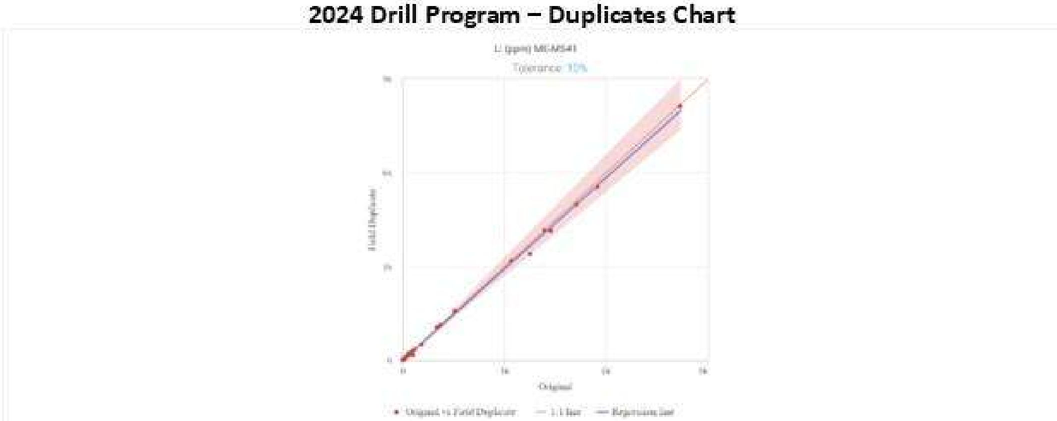
Source: Surge Battery Metals, October 31, 2024.

2024 Drill Program – Blanks Chart



Source: Surge Battery Metals, October 31, 2024.

2024 Drill Program – Duplicates Chart



Source: Surge Battery Metals, October 31, 2024.

Figure 11-2: QA-QC Performance - 2024 Drill Program

12 DATA VERIFICATION

Jeffrey Phinisey completed a site visit to NNLP on October 8, 2024. The site visits confirmed the location and access routes of previous and current exploration activities. Mr. Phinisey was able to observe the geologic setting and view a few of the limited exposures on the property, as well as visiting numerous drill sites. During the site visit, photographs and GPS coordinates were taken at drill sites and outcrops that were later compared to coordinates in the drilling databases and maps provided by Surge. Mr. Phinisey also visited the storage facility in Elko where he was able to examine drill core and cuttings, discuss procedures used in logging, archiving information, and sample preparation.

12.1 DATABASE VERIFICATION

There is a significant amount of data available for this Project, it is recent, and the database is complete. Assay certificates are available for all analytical work and the values that have been spot-checked against the working data tables are accurate. Geologic, metallurgical, and modeling work has been performed by experienced and reliable workers.

12.2 DRILL MONUMENTATION

Except for the four reverse circulation holes completed as piezometer wells, drill holes are monumented with surveyor caps on lengths of rebar anchored in cement to grade. Surveyor caps are stamped with hole number and these were determined to coincide with the drill hole database (Figure 12-1). For the four piezometer holes, the larger casing standing above grade and hole number welding bead on the steel lid serve as prominent monuments (Figure 12-2).

Figure 12-1: Monument for Drill Hole NNL-025

Figure 12-2: Reverse Circulation Drill Hole NNL-021 Completed as a Piezometer Well

12.3 DRILL HOLE COORDINATES

Within the approximate 10 m accuracy of the QP's handheld Garmin GPS unit, coordinates were found to be in agreement with the professionally surveyed data for three drill sites visited on October 8, 2024 shown in Table 12-1.

Table 12-1: Comparison of Handheld GPS and Professionally Surveyed Drill Hole Coordinates

Hole ID		DOWL engineering services UTM NAD83 Z11		Handheld Garmin GPS field check UTM NAD83 Z11	
Original	Updated	Easting	Northing	Easting	Northing
NN23-11	NNL-019	702717.55	4618580.79	702717.10	4618584.31
NNL-021	NNL-021	704267.11	4616900.97	704268.13	4616907.05
NNL-025	NNL-025	700706.94	4618433.25	700706.44	4618438.36

12.4 CONFIRMATION OF ELEVATED LITHIUM VALUES IN CLAYSTONE

A SciAps Model Z900 laser-induced breakdown spectroscopy (LIBS) analyzer was used in the field to spot check pieces of claystone found in float and dozer spoils. In multiple areas known from soil and drill samples to be enriched in lithium at surface, qualitative but strongly elevated lithium values were determined by LIBS (Figure 7-11).

In the same manner as used in the field, the LIBS analyzer was used in the core shed in Elko to provide qualitative confirmation of elevated lithium values for multiple pieces of mineralized claystone from sonic core (Figure 7-10).

12.5 INSPECTION OF THE NNLP DRILL SAMPLE ARCHIVE

Inspection of the NNLP drill sample archive was conducted in Elko, NV on October 9, 2024 with the assistance of Surge Senior Geologist, Daniel Chafetz. Observations include:

- The archive consists of a recreational vehicle-sized and weather-tight storage unit with padlock situated behind a pass code protected security fence (Figure 12-3a).
- The archive was well-organized with good housekeeping. No safety concerns were identified (Figure 12-3b).
- Diamond core, skeletonized sonic core pieces, and RC chip trays are clearly labeled and well organized (Figure 12-3c, d, and e, respectively).
- Drill sample rejects for both lithium mineralized and unmineralized intervals are well-organized (Figure 12-3f, g, and h).
- Analytical pulp samples as returned by ALS Global are boxed by submittal, palletized, and wrapped in plastic sheeting (Figure 12-3i).

Photos: J. Phinisey October 9, 2024

Figure 12-3: Inspection of Drill Sample Archive, Elko, NV October 9, 2024

12.6 SUMMARY STATEMENT ON DATA VERIFICATION

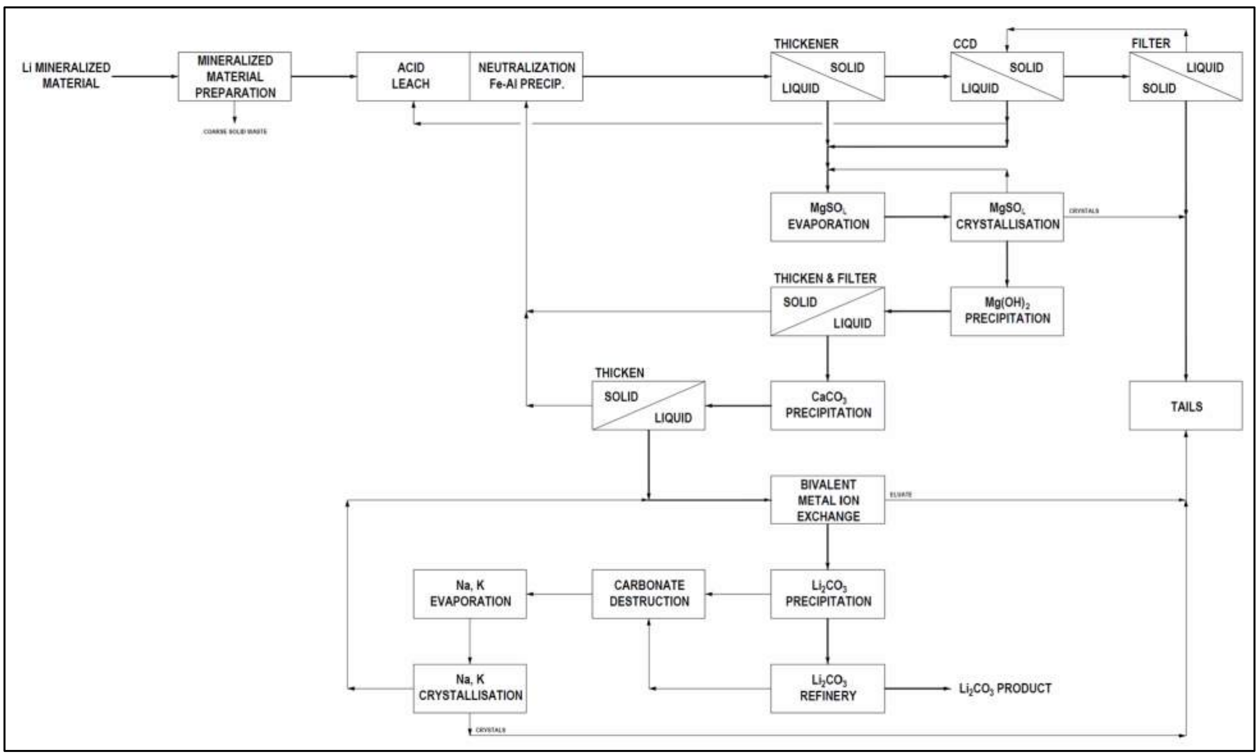
The QP conducted a site visit and data verification that included examination of claystone surface geology, review of access and infrastructure, and LIBS analysis for lithium for field and core samples. The QP concludes that the NNLP data are acceptable as used in this Technical Report and to support the planning of further exploration activities.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

Lithium occurs in a variety of deposits, including brine, pegmatite, and sedimentary deposits. Lithium bearing spodumene mineral is present in pegmatite and clay-based lithium mineral is present in sedimentary deposits. The Nevada North deposit is a claystone hosted lithium that can be recovered using a sulfuric acid leach followed by solution purification and precipitation to produce a lithium carbonate product.

The metallurgical test program for the Nevada North deposit aimed to develop a viable process flowsheet, as depicted in Figure 13-1 for the production of technical-grade lithium carbonate. The test program generated critical data to define the key process variables. Metallurgical testing commenced in 2023 at Kappes, Cassiday & Associates (KCA) in Reno, Nevada, with additional attrition and beneficiation tests performed at Florida Engineering and Design, Inc. (FEDINC) in Bartow, Florida, and Sepro Laboratories (Sepro) in Langley, British Columbia.

This Preliminary Economic Assessment (PEA) report also includes the extensive metallurgical test work conducted by Kemetco Research Inc. (Kemetco) in Richmond, British Columbia, during 2023 and 2024, in collaboration with M3 Engineering & Technology Corp. The primary focus of Kemetco's work was on characterizing the claystone material, evaluating beneficiation potential, optimizing lithium extraction processes, conducting scoping impurity removal tests, and producing lithium carbonate. This program provided the necessary foundation for process optimization and demonstrated the potential for achieving technical-grade lithium carbonate production.



Source: M3, 2025

Figure 13-1: Potential Flowsheet for the NNLP

13.1 BENEFICIATION

In March 2023, Kappes, Cassiday & Associates (KCA) reported results for screen analysis and scoping acid leach testing on four composited reverse circulation drill samples from holes NN-2205 and NN-2207 (updated as NNL-05 and NNL-07, respectively). Wet screening tests on the four samples showed that the fine fraction (-75 µm or 200 mesh) consistently comprised the majority of the material weight (87-88%) and exhibited significantly higher lithium grades, with values reaching up to 4,534 mg/kg. This established the fine fraction as the primary carrier of lithium. Conversely, the coarse fraction (+75 µm) accounted for only 12-16% of the total mass, with lower lithium grades. The coarse material was enriched in carbonate content, as indicated by higher HCl-soluble carbon measurements. These results confirmed that lithium is predominantly associated with fine particles, whereas calcium and carbonates are more concentrated in the coarser fraction. This finding supports the potential for beneficiation through particle-size classification. Initial testing indicated that lithium grades in the fine fraction could be improved by 10-20% through wet screening, and 98% of the lithium was retained in the fine clay mineral fraction. The calculated lithium grades across the four samples ranged from 2,444 mg/kg (Composite 2 – 96509 A) to 4,396 mg/kg (Composite 3 – 96510 A) (Table 13-1).

Table 13-1: KCA Beneficiation Test Summary

KCA Sample No.	Description	Size Fraction	Wt. (grams)	Wt. Fraction	Li (mg/kg)	Li Wt. Fraction	Carbon HCl Sol %	Carbon HCl Sol Wt. Fraction
96508 A		+0.075 mm	13.1	13%	497	2%	8.11	48%
		-0.075 mm	86.9	87%	4,199	98%	1.35	52%
		Total	100	100%	3714	100%	2.24	100%
96509 A	Comp 2	+0.075 mm	15.5	16%	270	2%	6.59	46%
		-0.075 mm	84.5	85%	2502	96%	1.42	54%
		Total	100	100%	2156	100%	2.22	100%
965010 A	Comp 3	+0.075 mm	12.3	12%	211	1%	8.18	57%
		-0.075 mm	87.7	88%	4534	99%	0.86	43%
		Total	100	100%	4002	100%	1.76	100%
96511 A	Comp 4	+0.075 mm	13.4	13%	151	1%	8.97	62%
		-0.075 mm	86.6	87%	3799	99%	0.86	38%
		Total	100	100%	3310	100%	1.95	100%

Scoping scrubbing and screening tests conducted by Florida Engineering and Design, Inc. (FEDINC) in 2024 demonstrated that a three-stage scrubbing process—comprising one mild and two intensive scrubbing stages—was effective for clay liberation and evaluating the potential for beneficiation. The process achieved a lithium recovery rate of 94.7% at a product grade of 4,822 mg/kg Li, with 76.8% of calcium removed. Although no leach testing was conducted, the significant reduction in calcium (assumed to be largely carbonate) suggests a potential for lower acid consumption in downstream leaching. Optimal conditions included a pulp density of 40 wt% solids, with scrub times of 5, 5, and 10 minutes for the three stages, respectively. Testing also confirmed that lithium was concentrated in the finer fractions (-37 µm), consistent with the intended beneficiation concept. The conceptual flowsheet developed from this work incorporated log washers for mild scrubbing, vertical attrition scrubbers for intensive scrubbing, and cyclones for particle-size classification.

Kemetco Research Inc. confirmed the beneficiation potential through extensive testing conducted in 2023 and 2024. Mild attrition followed by screening was performed on three lithium-grade composites (low, medium, and high) as well as on the bulk composite denoted K05. In all cases, lithium was successfully enriched in the fine fraction (-20 µm). The lithium grades of the three lithium grade composites ranged from 1,544 mg/kg to 4,051 mg/kg. Mineralogical analysis identified calcite, montmorillonite, feldspar, and quartz as dominant phases, with the low-grade composite containing a higher proportion of calcite (50.3% by mass) compared to 14.9% and 18.3% in the medium- and high-grade composites, respectively.

After mild attrition and wet screening of the three lithium grade composites, on average, 18.7% of the mass and only 6% of the lithium were retained in the +106 µm fraction, while 73.9% of the mass and more than 90% of the lithium was concentrated in the -20 µm fraction. The carbonate content was predominantly retained in the +106 µm coarse fraction, with carbonate proportions of 67.1%, 49.6%, and 32.3% for the high-, medium-, and low-grade composites, respectively. A summary of the average distribution of solid mass, calcium, carbonate (as a proxy for calcite), lithium, and other elements across the size fractions is shown in Figure 13-2.

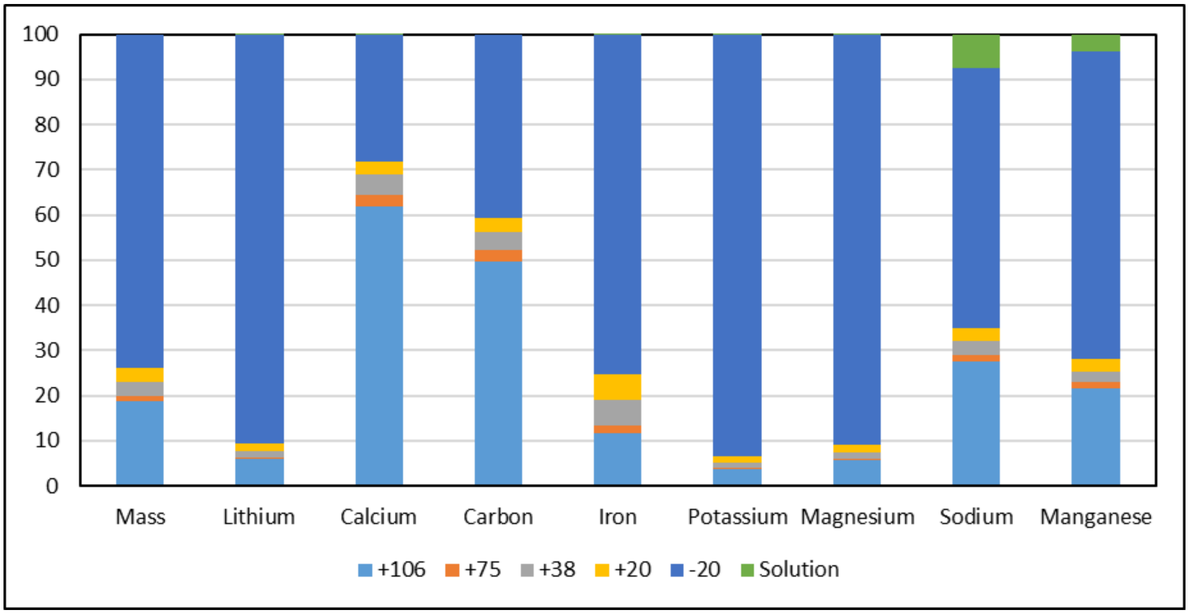


Figure 13-2: Screening Beneficiation Test Summary from Kemetco

Similar results were observed when testing the larger composite K05. Screening and attrition revealed that 49% of the carbonates (primarily $CaCO_3$) were concentrated in the +106 µm fraction, while 38% were found in the -20 µm fraction. In contrast, 87% of the lithium was concentrated in the -20 µm fraction, with only 1.2% present in the +106 µm fraction. The coarse fraction contained less than 400 mg/kg Li, representing a significant reduction compared to the 4,376 mg/kg Li present in the feed. Particle size analysis showed that the -106 µm material was extremely fine, with a D50 of 8.2 µm and a D90 of 50.5 µm. A summary of the distribution of solid mass, calcium, carbonate (as a proxy for calcite), lithium, and other elements across the size fractions is shown in Figure 13-3.

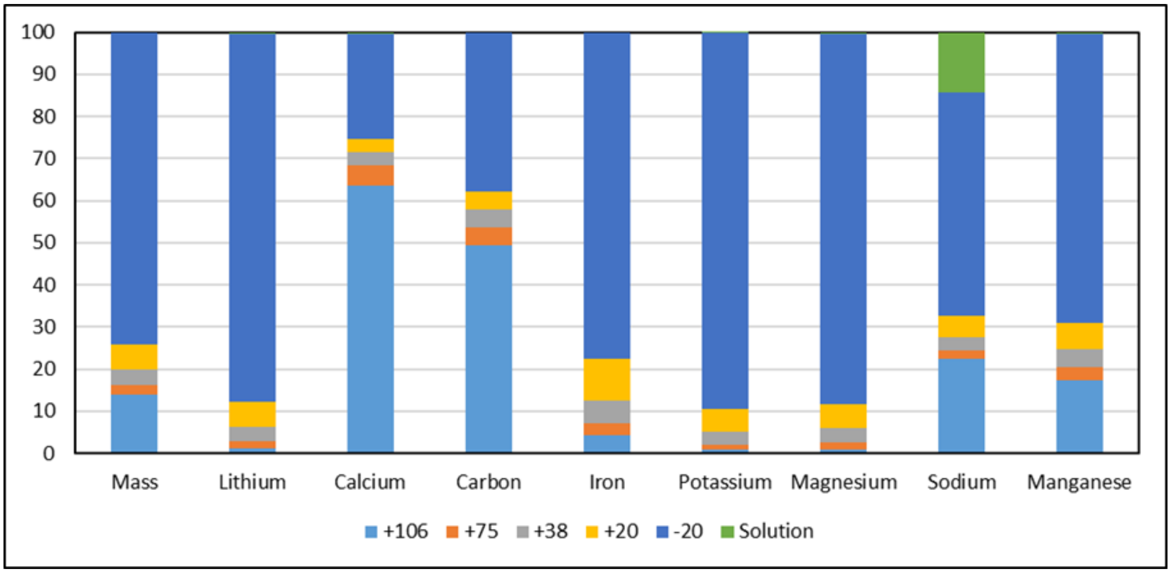


Figure 13-3: Screening Beneficiation Test on Sample K05 from Kemetco

Additional beneficiation testing at Sepro Laboratories in 2024 involved a twelve-stage scoping rougher Falcon test on a composite sample (denoted K05) with an initial calculated lithium grade of 4,105 mg/kg. Overall, 81.3% of the lithium was recovered in 63.5% of the overall mass by screening at 1 mm, followed by Falcon concentration on the undersize. The lithium grade in the concentrate was upgraded to 5,254 mg/kg. Scoping elutriation tests showed promise for recovering lithium from the heavy material rejected by the Falcon process, reducing lithium in the rejects to an average of 886 mg/kg. A summary of the gravity test results is illustrated in Figure 13-4.

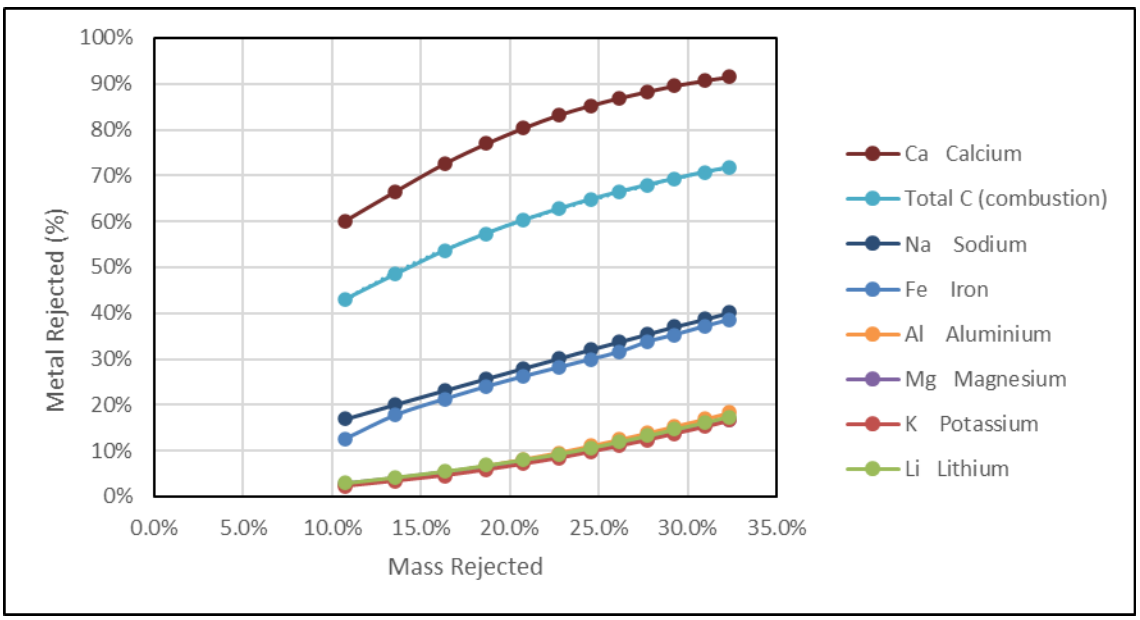


Figure 13-4: Scoping Falcon Testing Metal vs Mass Rejection Relationship

13.2 LEACHING

Scoping leach tests carried out at KCA on four composites with lithium grades between 2,444 mg/kg and 4,396 mg/kg showed that acid addition of 850–1,300 g/kg was effective for achieving lithium to extractions exceeding 90% across all samples.

A more extensive leach study performed at Kemetco on lithium grade composites achieved consistently high lithium extractions exceeding 89%, using the calculated head basis (calculated head), across all tests. For low-grade lithium composites, acid additions of 700 g/kg were sufficient, while medium- and high-grade composites required only 500 g/kg acid additions to achieve similarly high extraction rates. This is likely related to the higher carbonate content of the low-grade lithium sample as indicated by the beneficiation work.

The study further established that free acid levels in the final solution of 21–28 g/L were needed for lithium extraction above 90% in low-grade composites, whereas medium- and high-grade composites required higher free acid levels of 50–60 g/L to maintain optimal extraction efficiency. Optimization tests with mid- and high-grade composite samples demonstrated that nearly complete lithium extraction could be achieved at 500 g/kg acid addition. However, when acid addition was reduced to 450 g/kg, extractions fell below 90%, underscoring the critical role of maintaining adequate acid concentrations. The removal of calcite-rich coarse fractions further reduced acid consumption for mid- and high-grade composites, lowering average acid consumption from 399 g/kg to 318 g/kg.

Additional confirmatory leach tests performed on Falcon fines concentrates produced by Sepro confirmed high lithium extraction rates. Extractions exceeded 95% at an acid addition rate of 500 g/kg concentrate, though they declined to 90% and 85% when acid addition was reduced to 475 g/kg and 450 g/kg, respectively, due to lower free acid levels. These tests again demonstrated the importance of maintaining sufficient free acid concentration for maximizing lithium recovery.

In all cases the lithium extraction was fast, occurring within the first 30 minutes. Magnesium exhibited similar behavior, while other impurities (iron, aluminum) extracted at slightly slower rates.

A single scoping leach test, followed by direct neutralization using calcium carbonate, was conducted on a 50/50 mid/high-grade lithium composite to assess the feasibility of simplifying solid-liquid separation. For this test, the beneficiated composite underwent leaching with 475 g/kg of acid, after which the leach slurry was directly neutralized with limestone ($CaCO_3$). The neutralization step aimed to reduce free acid and precipitate dissolved impurities such as aluminum and iron. Following leaching, the acidic pregnant leach solution contained 2,035 mg/L lithium, along with aluminum, iron, potassium, magnesium, and fluoride concentrations of 5,710 mg/L, 4,481 mg/L, 6,207 mg/L, 23.6 g/L, and 7,078 mg/L, respectively. The free acid concentration at the end of leaching was measured at 66 g/L. After neutralization with a 20% limestone slurry, the pregnant leach solution exhibited reduced impurity levels, with lithium concentration at 1,335 mg/L, while aluminum, iron, potassium, magnesium, and fluoride levels were reduced to 21 mg/L, 874 mg/L, 3,048 mg/L, 14.2 g/L, and 320 mg/L, respectively. The brine composition before and after neutralization is shown in Table 13-2. The calculated lithium recovery after the combined leach and neutralization stages was 88.8%, demonstrating the viability of combining these steps to streamline processing and reduce operational complexity.

Table 13-2: Solution Composition after Leach and Neutralization

	Units	Al	Ca	Fe	K	Li	Mg	Mn	Na	Si	Zn	F	Free acid
Leach PLS	g/L	5.71	0.57	4.48	6.21	2.03	23.65	0.20	0.09	0.13	0.02	7.08	66.15
Final PLS	g/L	0.02	0.58	0.87	3.05	1.34	14.19	0.13	0.01	0.04	0.01	0.32	-

13.3 LITHIUM CARBONATE PRODUCTION

In April 2024, Kemetco reported the results of lithium extraction flowsheet testing on composited reverse circulation drill samples. The testing began with the leaching of 40 kg of mineralized material under conditions of 30% pulp density, 90°C, a residence time of two hours, and a sulfuric acid addition rate of 500 g/kg. The resulting slurry filtered well, producing a 50 mm filter cake, as shown in Figure 13-5.

Figure 13-5: Filtration Equipment and Leach Residue Cake

The multi-step process evaluated for upgrading and purifying the lithium pregnant leach solution (PLS) and producing lithium carbonate with greater than 99% purity included:

- Aluminum and Iron Removal – Aluminum and iron were effectively removed from solution at 85°C, with less than 1% lithium co-precipitating.
- Bulk Evaporation – The evaporation process concentrated lithium in solution to an endpoint of 5.5 g/kg
- Magnesium sulphate crystallization – after crystallizing $MgSO_4 \cdot 7H_2O$ to 5°C, the lithium tenor in solution increased to 7.75 g/kg, At the conclusion of evaporation and cooling crystallization, 55.2% of magnesium was removed and a lithium concentration factor of 5.4 was achieved.
- Magnesium hydroxide precipitation with lime slurry successfully reduced the magnesium concentration in solution to below 2 mg/kg
- Calcium removal using sodium carbonate reduced the calcium concentration from 646 mg/kg to 52 mg/kg

- Polishing with ion exchange further reduced total solution hardness to below 10 mg/kg
- Lithium carbonate precipitation was conducted by adding sodium carbonate to the purified leach solution

The lithium brine analysis across the process stages is presented in Table 13-3, highlighting the progressive increase in lithium concentration and the effective removal of impurities such as aluminum, iron, magnesium, and calcium at each stage.

Table 13-3: Solution Analysis through Purification and Li Carbonate Testwork

		Leach (mg/kg)	Al-Fe Removal (mg/kg)	Evaporation (mg/kg)	Cooling Crystallization (mg/kg)	IX Polishing (mg/kg)
Ag	Silver	<0.5	<0.5	<1	<1	<0.5
Al	Aluminum	4632	37	147	193	<1
As	Arsenic	<2	<2	<4	<4	<2
B	Boron	35	32	126	178	58.5
Ba	Barium	<0.4	0.4	<0.4	<0.4	<0.2
Be	Beryllium	<0.2	0.2	0.7	1.0	<0.2
Bi	Bismuth	<2	<2	<4	<4	<2
Ca	Calcium	673	537	117	57.4	6.4
Cd	Cadmium	0.3	0.2	0.7	0.4	<0.2
Co	Cobalt	6.4	5.6	19.0	13.4	<0.5
Cr	Chromium	3.1	<0.5	<1	<1	<0.5
Cu	Copper	6.8	<1	<2	<2	<1
Fe	Iron	3370	167	375	334	<1
K	Potassium	5086	4542	14629	20196	19455
Li	Lithium	1448	1450	5517	7751	7361
Mg	Magnesium	16779	16340	57910	39402	<1.
Mn	Manganese	343	351	1416	1510	0.7
Mo	Molybdenum	4.0	<1	<2	<2	<1
Na	Sodium	104	38	127	179	824
Ni	Nickel	39	30	97	58	<0.5
* P	Phosphorus	54	<5	<10	<10	<5
Pb	Lead	<2	<2	<4	<4	<2
* S	Sulfur	46477	25319	93153	76685	24566
Sb	Antimony	<2	<2	<4	<4	<2
Se	Selenium	<2	<2	<4	<4	<2
Si	Silicon	112	60	211	191	8.2
Sn	Tin	<2	<2	<4	<4	<2
Sr	Strontium	26	2.0	<0.4	<0.4	<0.2
Ti	Titanium	395	<1	<2	<2	<1
Tl	Thallium	<2	<2	<4	<4	<2
U	Uranium	<5	<5	<10	<10	<5

		Leach (mg/kg)	Al-Fe Removal (mg/kg)	Evaporation (mg/kg)	Cooling Crystallization (mg/kg)	IX Polishing (mg/kg)
V	Vanadium	9	<1	<2	<2	<1
Zn	Zinc	29	21	77.5	63.7	<0.5
F	Fluoride	5193	101	351	573	17

The final lithium carbonate product, depicted in Figure 13-6, was calculated to have a purity of approximately 99.3%. Additional refining would be required to reduce the sulfate content to meet battery-grade specifications.

Figure 13-6: Lithium Carbonate Produced at Kemetco

13.4 SOLID-LIQUID SEPARATION

Scoping static settling tests carried out at FEDINC on flocculated -37 µm clay material diluted to 2-4% solids, simulating cyclone overflow, achieved a terminal pulp density of 20% after 24 hours.

Solid-liquid separation testing conducted at Kemetco consisted of a series of flocculant screening tests carried out on two types of slurry. The first set of tests was carried out using the screened -106 µm fraction from feed attritioning, while the second set of tests was conducted at elevated temperature using process slurry after sulfuric acid leaching and neutralization to pH 6. Both slurry types were derived from bulk composite K05.

For the beneficiation product, initial flocculant screening tests identified FO 4808 SSH and FO 4990 SH as the most effective reagents for improving settling rates in beneficiation slurries. Despite improvements in settling rates, static settling alone was insufficient to achieve the target pulp density (≥30%) for direct feed to the leaching circuit. Further thickening using a centrifuge increased pulp densities from 17-18% after static settling to 28% (FO 4990 SH) and 30% (FO 4808 SSH).

Flocculant screening for neutralized leach slurries identified FA 920 VHM (a non-ionic, ultra-high molecular weight reagent) as the most effective option, achieving an initial settling rate of 37 mm/min and a final pulp density of 23% solids by weight. The addition of a cationic flocculant further improved clarity of the supernatant and marginally enhanced final densities, achieving up to 24.5% pulp density.

13.5 FUTURE TESTING

Further development work is required as the Project moves forward. Areas of focus should include:

- Validation of the beneficiation process and variability testing.
- Validation of the leach acid demand after beneficiation and variability testing.
- Confirmation of required solid-liquid separation after beneficiation.
- Development of a solid liquid separation strategy after leach or leach neutralisation to ensure high recovery of the dissolved lithium.
- Determine potential to use beneficiation rejects as a source of limestone for neutralisation.
- Understand the deportment of impurities throughout the purification process and develop strategies to optimize their removal.
- Perform testing on the sodium/potassium crystallisation (after lithium carbonate production) and develop a strategy to recycle the remining dissolved lithium.
- Understand limits for sodium and potassium in the lithium carbonate precipitation feed.
- Lithium carbonate refining to produce a battery grade product.

14 MINERAL RESOURCE ESTIMATES

14.1 INTRODUCTION

The mineral resource estimate was prepared under the direction of Bruce M. Davis, PhD, FAusIMM, with the assistance of Susan Lomas, P.Geo. of Lions Gate Geological Consulting (LGGC). This section of the technical report describes the resource estimation methodology and summarizes the key assumptions considered by the Qualified Persons to prepare the resource model for the lithium mineralization at the Nevada North Lithium Project (NNLP) in Nevada, USA.

This is the second mineral resource estimate completed on the NNLP, and it has been estimated in conformity with generally accepted CIM Estimation of Mineral Resources and Mineral Reserves Best Practices Guidelines (November 2019). Mineral resources are not mineral reserves and they do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into a mineral reserve upon application of modifying factors.

The initial mineral resource for this Project was issued in a report entitled "Technical Report, Nevada North Lithium Project, Elko County, Nevada, USA" with an effective date of February 16, 2024.

Estimations are made from 3D block models based on geostatistical applications using commercial mine planning software (HxGN MinePlan™ 3D). The project limits are based in the UTM coordinate system using a nominal block size measuring 50 m x 50 m x 5 m. The drill holes intersect the lithium mineralization of the NNLP vertically to depths not exceeding 300 m below surface. The resource estimate was generated using drill hole sample assay results and the interpretation of clay beds hosting elevated lithium mineralization. Interpolation characteristics were defined based on geology, drill hole spacing, and geostatistical analysis of the data. The resources were classified according to their proximity to the sample data locations and are reported, as required by NI 43-101, according to the CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014).

14.2 DATA

Surge provided the final drill hole sample data for the NNLP in August 2024. This comprised a series of Excel® (spreadsheet) files containing collar locations, down-hole survey results, geologic information, and assay results for 28 drill holes representing 4,039 m of drilling. The distribution of the drill holes is shown in plan view in Figure 14-1. Surge drilled 8 new drill holes in 2024 south of 4,617,000 northing.

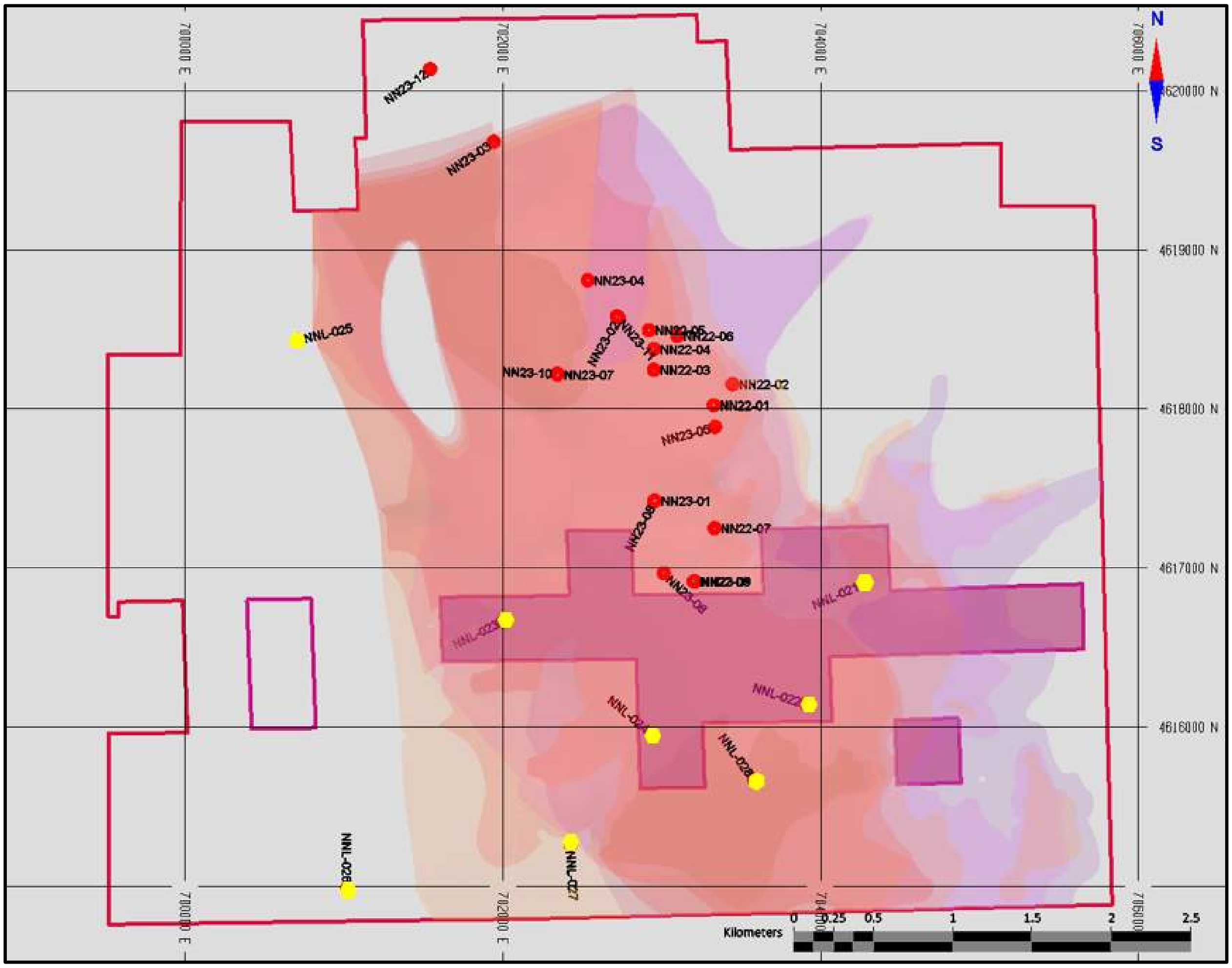


Figure 14-1: Plan Map of the Drill Hole Locations and Limits of the Modelled Lithium Clay Beds (New Drillholes are Highlighted with Yellow)

There are 2,743 samples in the project database and 1,010 of them intersected the lithium clay horizons. The downhole drilling data was originally captured in imperial units and converted to metric measurements. Samples were taken every 5 ft (1.52 m) down the drill holes. A LIDAR based topographic surface was provided, that covers the project limits. Geologic information, derived from observations during drill sample logging, provides lithology code designations for the various rock units present on the property.

14.3 GEOLOGICAL MODEL, DOMAINS, AND CODING

The lithium mineralization is hosted in multiple shallowly-dipping and laterally-extensive clay beds separated by tuff units. Surge modeled the lithology units using Leapfrog™ software; the wireframes were reviewed by the QP and are reasonable representations of the underlying geology. The solids are appropriate for inclusion in the resource estimation. A North-South section through the long axis of the deposit is shown in Figure 14-2.

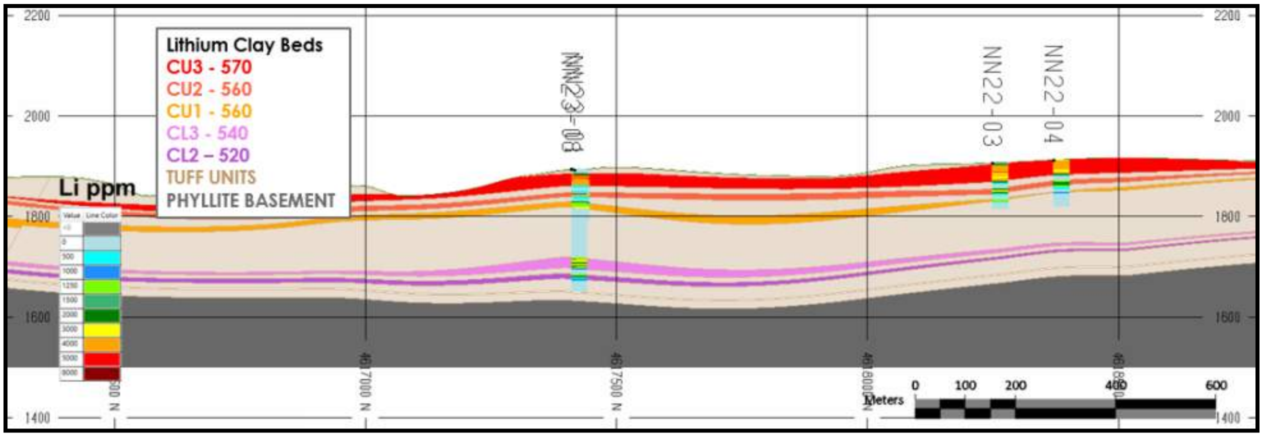


Figure 14-2: Section 702950E, View of Interpreted Lithium Clay Horizons with Tuff and Phyllite Basement units, Lithium (ppm) Grades on the Drill Holes

All but one drill hole (NN23-10) was drilled vertically so the drill hole intersections of the lithium clay horizons reasonably approximate the true thickness of the mineralization. Table 14-1 summarizes the drill hole intersections through each lithium clay horizon and the average thickness of the unit from the vertical drill holes.

Table 14-1: Summary of Drill Hole Intersections and Average Thickness of the Lithium Clay Horizons

Zone	Clay ID	No. DH	No. Comps	Average Thickness (m)
580	CY1	4	19	5.72
570	CU3	21	371	25.38
560	CU2	23	260	15.61
550	CU1	20	244	16.96
540	CL3	7	45	8.27
530	CL2N	1	3	Not estimated
520	CL2	3	19	7.92
510	CL1	1	3	Not estimated

14.4 COMPOSITING

All assay samples were composited to 1.5 m lengths.

14.5 EXPLORATORY DATA ANALYSIS

Exploratory data analysis (EDA) involves the statistical summarization of the database to better understand the characteristics of the data that may control grade. One of the main purposes of this exercise is to determine if there is evidence of spatial distinctions in grade which may require separation and isolation of domains during interpolation. The application of separate domains prevents unwanted mixing of data during interpolation and, therefore, the resulting grade model will better reflect the unique properties of the deposit. However, applying domain boundaries in areas where the data is not statistically unique may impose a bias in the distribution of grades in the model.

A domain boundary, which segregates the data during interpolation, is typically applied if the average grade in one domain is significantly different from that of another domain. A boundary may also be applied if there is evidence that a significant change in the grade distribution has occurred across the contact. There are six lithium clay horizons (CY1, CU3, CU2, CU1, CL3 and CL2) that have distinctly elevated grade distributions. A hard boundary was placed between them and the tuff horizons during grade interpolation.

14.5.1 Basic Statistics by Domain

The summary statistics for the lithium assay data, included in the resource estimate, are shown in Table 14-2. Additional elements were interpolated into the model for geometallurgical purposes and are not considered economic elements. The data shows the CU3 clay horizon, the nearest to surface, has the highest lithium grades. Clay horizons CL2N (530) and CL1 (510) were not included in the resource estimate as there were only two and one composite respectively intersecting the domains.

Table 14-2: Summary of Basic Statistics for Composites Included in the Resource Estimate

Zone	Element	No.	Mean	Coef Var	Minimum	Q 25	Q50	Q75	Maximum
All 500	Li ppm	929	3428	0.37	610	2610	3510	4260	8190
580/CY1	Li ppm	19	1113	0.31	465	761	1088	1380	1702
570/CU3	Li ppm	371	3827	0.32	139	3205	3885	4612	7879
560/CU2	Li ppm	259	2971	0.42	198	2068	3142	3867	6180
550/CU1	Li ppm	240	2579	0.47	370	1374	2635	3597	5160
540/CL3	Li ppm	45	2100	0.45	331	1404	2048	2667	4099
520/CL2	Li ppm	19	1480	0.49	146	1050	1323	1826	2918
All 500	Na%	953	0.078	1.25	0.004	0.045	0.060	0.083	1.600
570/CU3	Na%	371	0.056	0.49	0.005	0.040	0.054	0.070	0.223
560/CU2	Na%	259	0.078	0.75	0.008	0.048	0.066	0.100	0.694
550/CU1	Na%	240	0.103	1.55	0.012	0.044	0.061	0.098	1.600
All 500	Ca %	953	6.56	0.44	0.30	4.73	6.21	8.29	22.22
570/CU3	Ca %	371	6.90	0.42	0.78	5.00	6.61	8.80	18.85
560/CU2	Ca %	259	6.02	0.40	0.54	4.22	5.73	7.86	13.98
550/CU1	Ca %	240	6.65	0.51	0.30	4.84	6.23	7.78	22.22
All 500	Mg %	953	3.19	0.42	0.33	2.13	3.36	4.15	7.20
570/CU3	Mg %	371	3.52	0.29	0.39	3.01	3.71	4.22	6.24
560/CU2	Mg %	259	3.28	0.43	0.40	2.17	3.50	4.17	7.20
550/CU1	Mg %	240	2.93	0.50	0.33	1.67	2.68	4.17	6.33
All 500	Fe %	953	1.35	0.25	0.32	1.12	1.34	1.53	3.35
570/CU3	Fe %	371	1.17	0.22	0.50	0.99	1.12	1.36	2.35
560/CU2	Fe %	259	1.41	0.19	0.32	1.24	1.40	1.57	2.31
550/CU1	Fe %	240	1.54	0.24	0.60	1.30	1.49	1.73	3.35
All 500	Al %	953	1.81	0.32	0.17	1.47	1.85	2.16	4.52
570/CU3	Al %	371	1.94	0.29	0.37	1.63	1.90	2.25	4.50
560/CU2	Al %	259	1.86	0.30	0.17	1.56	1.93	2.18	4.52
550/CU1	Al %	240	1.66	0.34	0.49	1.23	1.71	2.06	4.32
All 500	K %	953	2.22	0.43	0.12	1.51	2.24	2.94	5.04
570/CU3	K %	371	2.31	0.31	0.34	1.89	2.30	2.77	4.17

Zone	Element	No.	Mean	Coef Var	Minimum	Q 25	Q50	Q75	Maximum
560/CU2	K %	259	2.38	0.44	0.13	1.55	2.48	3.17	5.04
550/CU1	K %	240	2.21	0.47	0.25	1.26	2.19	3.14	4.36
All 500	B ppm	953	174	0.63	4	87	160	250	567
570/CU3	B ppm	371	172	0.43	10	127	165	217	434
560/CU2	B ppm	259	196	0.63	4	84	189	305	489
550/CU1	B ppm	240	185	0.69	11	70	158	296	567

14.5.2 Contact Profiles

Contact profiles evaluate the nature of grade trends between two domains: they graphically display the average grades at increasing distances from the contact boundary. Those contact profiles that show a marked difference in grade across a domain boundary indicate that the two datasets should be isolated during interpolation. Conversely, if a more gradual change in grade occurs across a contact, the introduction of a hard boundary (e.g., segregation during interpolation) may result in a much different trend in the grade model; in this case, the change in grade between domains in the model is often more abrupt than the trends seen in the raw data. Finally, a flat contact profile indicates no grade changes across the boundary; in this case, hard or soft domain boundaries will produce similar results in the model.

A contact profile was generated to evaluate the nature of lithium mineralization across the lithium-rich clay horizon and the tuff horizon boundaries. Abrupt changes in lithium grade occur at the domain boundaries (Figure 14-3).

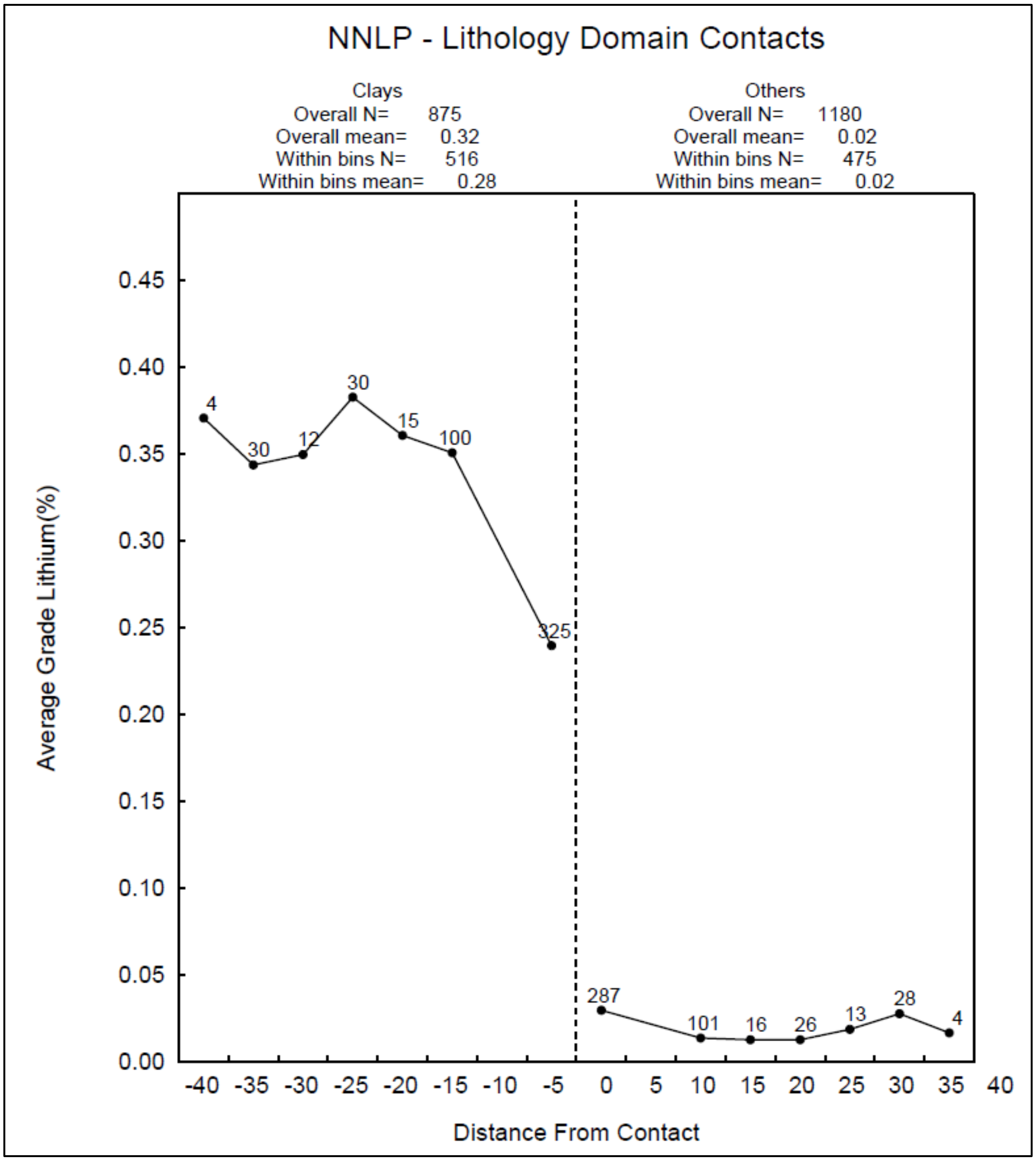


Figure 14-3: Contact Profiles for Samples Inside vs. Outside the Lithium Clay Horizons

14.5.3 Conclusions and Modelling Implications

The results of the EDA indicate that the lithium grades within the lithium clay horizon solids are significantly different than those in the surrounding area, and that the lithium solids should be treated as distinct or hard domains during block grade estimations.

14.6 EVALUATION OF OUTLIER GRADES

Histograms and probability plots for the distribution of lithium, calcium, magnesium, and sodium were reviewed to identify the presence of anomalous outlier grades in the assay database. Following a review of the physical location of potentially erratic samples in relation to the surrounding sample data, it was decided that these would be controlled during block grade interpolations using an outlier limitation strategy. An outlier limitation controls the distance of influence of samples above a defined grade threshold. During grade interpolations, samples above the outlier thresholds are limited to a maximum distance-of-influence of 150 m. The grade thresholds for interpolated elements are shown in Table 14-3. Overall, these measures result in a 1% reduction in contained lithium in all the interpolated clay horizons combined. These measures are considered appropriate for a deposit with this distribution of delineation drilling.

Table 14-3: Outlier Limitation Strategy

Element	Grade Threshold	Range (m)
Li ppm	0.60	150
Na %	0.40	150
Mg %	No Restriction	
Ca %	15.50	150
Fe %	No Restriction	
Al %	No Restriction	
K %	No Restriction	
B ppm	445	150

14.7 VARIOGRAPHY

The degree of spatial variability in a mineral deposit depends on both the distance and direction between points of comparison. Typically, the variability between samples increases as the distance between those samples increases. If the degree of variability is related to the direction of comparison, then the deposit is said to exhibit anisotropic tendencies which can be summarized with the search ellipse. The semi-variogram is a common function used to measure the spatial variability within a deposit.

The components of the variogram include the nugget, the sill, and the range. Often samples compared over very short distances, even samples compared from the same location, show some degree of variability. As a result, the curve of the variogram often begins at some point on the y-axis above the origin: this point is called the nugget. The nugget is a measure of not only the natural variability of the data over very short distances but also a measure of the variability which can be introduced due to errors during sample collection, preparation, and the assay process.

The amount of variability between samples typically increases as the distance between the samples increases. Eventually, the degree of variability between samples reaches a constant, maximum value: this is called the sill, and the distance between samples at which this occurs is called the range.

In this technical report, the spatial evaluation of the data was conducted using a correlogram rather than the traditional variogram. The correlogram is normalized to the variance of the data and is less sensitive to outlier values, generally giving better results.

Correlograms were generated using the commercial software package Sage 2001©, developed by Isaaks & Co. Omnidirectional variograms for lithium were generated from the distributions of data located inside the CU3 (570), CU2 (560), and CU1 (550) lithium clay horizons. The remaining interpolated domains had too few data points to generate reliable correlograms. The variogram trends are summarized in Table 14-4.

Table 14-4: Variogram Parameters used for Lithium Interpolation

Element	Nugget	Sill	Direction	Range (m)	Azimuth (°)	Dip (°)
Li	0.275	0.725	Z	22.4	273	63
			X	188.2	87	27
			Y	853	358	-3
Na	0.294	0.706	Z	49.5	90	90
			X	435	114	0
			Y	201	24	0
Mg	0.226	0.774	Z	19	90	90
			X	948	24	0
			Y	119	114	0
Ca	0.418	0.582	Z	22	90	90
			X	676	55	0
			Y	173	325	0
K	0.205	0.795	Z	24	90	90
			X	618	14	0
			Y	46	284	0
B	0.137	0.863	Z	25	90	90
			X	37	99	0
			Y	595	9	0
Al	0.303	0.697	Z	16	252	85
			X	311	3	2
			Y	230	273	0
Fe	0.453	0.574	X	17.9	90	90
			Y	254	125	0
			Z	1891	35	0

14.8 MODEL SETUP AND LIMITS

A block model was initialized, and the dimensions are defined in Table 14-5. The selection of a nominal block size measuring 50 x 50 x 5 m is considered appropriate with respect to the current drill hole spacing as well as the selective mining unit size typical of a deposit of this type and scale.

Table 14-5: Block Model Limits

Direction	Minimum	Maximum	Block Size (m)	# of Blocks
X (East)	700,500	705,000	50	90
Y (North)	4,614,000	4,620,800	50	136
Z (Elevation)	1,500	2,200	5	140

Block items were created for each lithium clay domain and were tagged by domain code, and a percent of the block inside each domain was captured.

14.9 INTERPOLATION PARAMETERS

The block model grades for lithium inside domains 570, 560 and 550 were estimated using ordinary kriging (OK) and blocks within domains 580, 540 and 520 were estimated using inverse distance squared (ID2) as the main method. Additional runs using ID2 and nearest neighbor (NN) methods were run for validation purposes. Block values for Ca, Na, Mg, Fe, Al, K and B were estimated using OK and ID2 methods with an additional run using NN for validation purposes. The estimation parameters for the various elements in the resource block model are shown in Table 14-6.

Table 14-6: Block Grade Interpolation Parameters

Element	Method	Zone	Search Ellipse[1] Range (m)			Number of Composites		
			X	Y	Z	Min/block	Max/block	Max/hole
Lithium	ID2/NN	580	700	700	400	2	15	5
	OK/ID2/NN	570	700	700	400	2	15	5
	OK/ID2/NN	560	700	700	400	2	15	5
	OK/ID2/NN	550	700	700	400	2	15	5
	ID2/NN	540	700	700	400	2	15	5
	ID2/NN	520	700	700	400	2	15	5
Calcium	ID2/NN	580	700	700	400	2	15	5
	OK/ID2/NN	570	700	700	400	2	15	5
	OK/ID2/NN	560	700	700	400	2	15	5
	OK/ID2/NN	550	700	700	400	2	15	5
	ID2/NN	540	700	700	400	2	15	5
	ID2/NN	520	700	700	400	2	15	5
Sodium	ID2/NN	580	700	700	400	2	15	5
	OK/ID2/NN	570	700	700	400	2	15	5
	OK/ID2/NN	560	700	700	400	2	15	5
	OK/ID2/NN	550	700	700	400	2	15	5
	ID2/NN	540	700	700	400	2	15	5
	ID2/NN	520	700	700	400	2	15	5
Magnesium	ID2/NN	580	700	700	400	2	15	5
	OK/ID2/NN	570	700	700	400	2	15	5
	OK/ID2/NN	560	700	700	400	2	15	5
	OK/ID2/NN	550	700	700	400	2	15	5
	ID2/NN	540	700	700	400	2	15	5
	ID2/NN	520	700	700	400	2	15	5

Element	Method	Zone	Search Ellipse[1] Range (m)			Number of Composites		
			X	Y	Z	Min/block	Max/block	Max/hole
Potassium	ID2/NN	580	700	700	400	2	15	5
	OK/ID2/NN	570	700	700	400	2	15	5
	OK/ID2/NN	560	700	700	400	2	15	5
	OK/ID2/NN	550	700	700	400	2	15	5
	ID2/NN	540	700	700	400	2	15	5
	ID2/NN	520	700	700	400	2	15	5
Boron	ID2/NN	580	700	700	400	2	15	5
	OK/ID2/NN	570	700	700	400	2	15	5
	OK/ID2/NN	560	700	700	400	2	15	5
	OK/ID2/NN	550	700	700	400	2	15	5
	ID2/NN	540	700	700	400	2	15	5
	ID2/NN	520	700	700	400	2	15	5
Aluminum	ID2/NN	580	700	700	400	2	15	5
	OK/ID2/NN	570	700	700	400	2	15	5
	OK/ID2/NN	560	700	700	400	2	15	5
	OK/ID2/NN	550	700	700	400	2	15	5
	ID2/NN	540	700	700	400	2	15	5
	ID2/NN	520	700	700	400	2	15	5
Iron	ID2/NN	580	700	700	400	2	15	5
	OK/ID2/NN	570	700	700	400	2	15	5
	OK/ID2/NN	560	700	700	400	2	15	5
	OK/ID2/NN	550	700	700	400	2	15	5
	ID2/NN	540	700	700	400	2	15	5
	ID2/NN	520	700	700	400	2	15	5

[1] Ellipse orientation with long axes N-S and W-E and vertical short axis.

14.10 VALIDATION

The results of the modelling process were validated using several methods. These include a thorough visual review of the model grades in relation to the underlying drill hole sample grades, comparisons with the change of support model, comparisons with other estimation methods, and grade distribution comparisons using swath plots.

14.10.1 Visual Inspection

A detailed visual inspection of the block model was conducted in both section and plan to ensure the desired results following interpolation. This includes confirmation of the proper coding of blocks within the upper and lower shell domains. The estimated lithium grades in the model appear to be a valid representation of the underlying drill hole sample data. A section view for clay layer CU3 (570) are included in Figure 14-4.

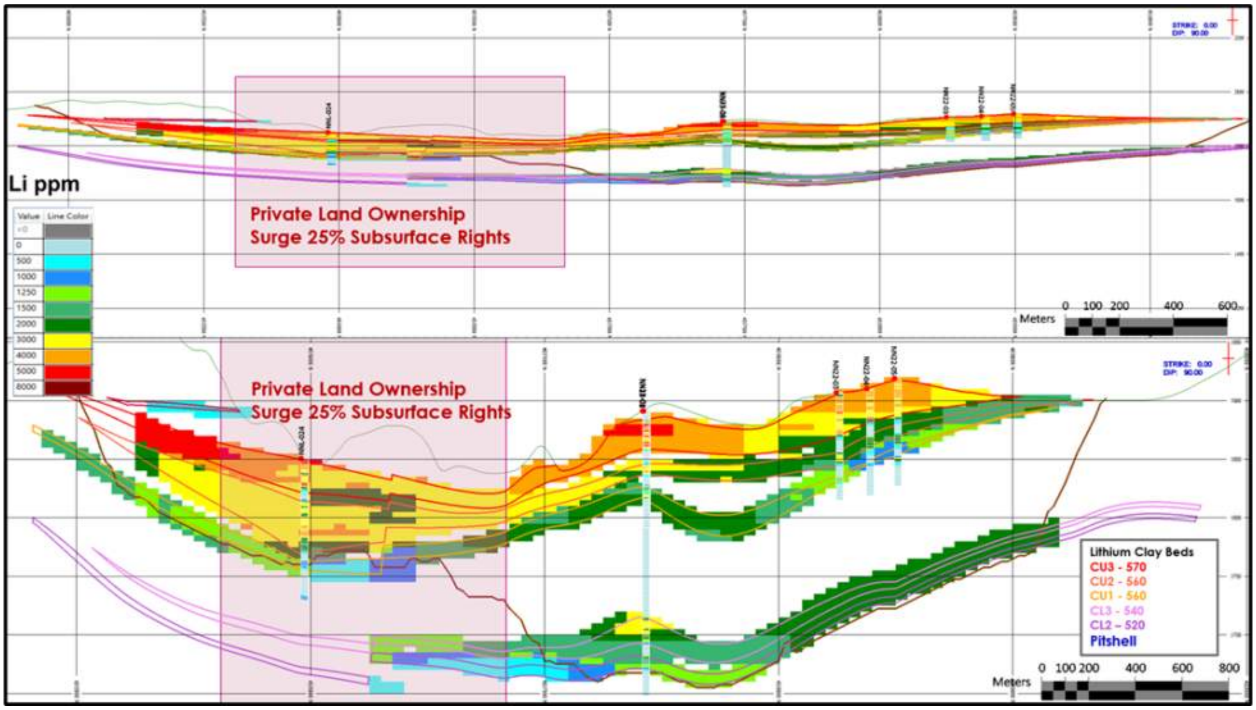


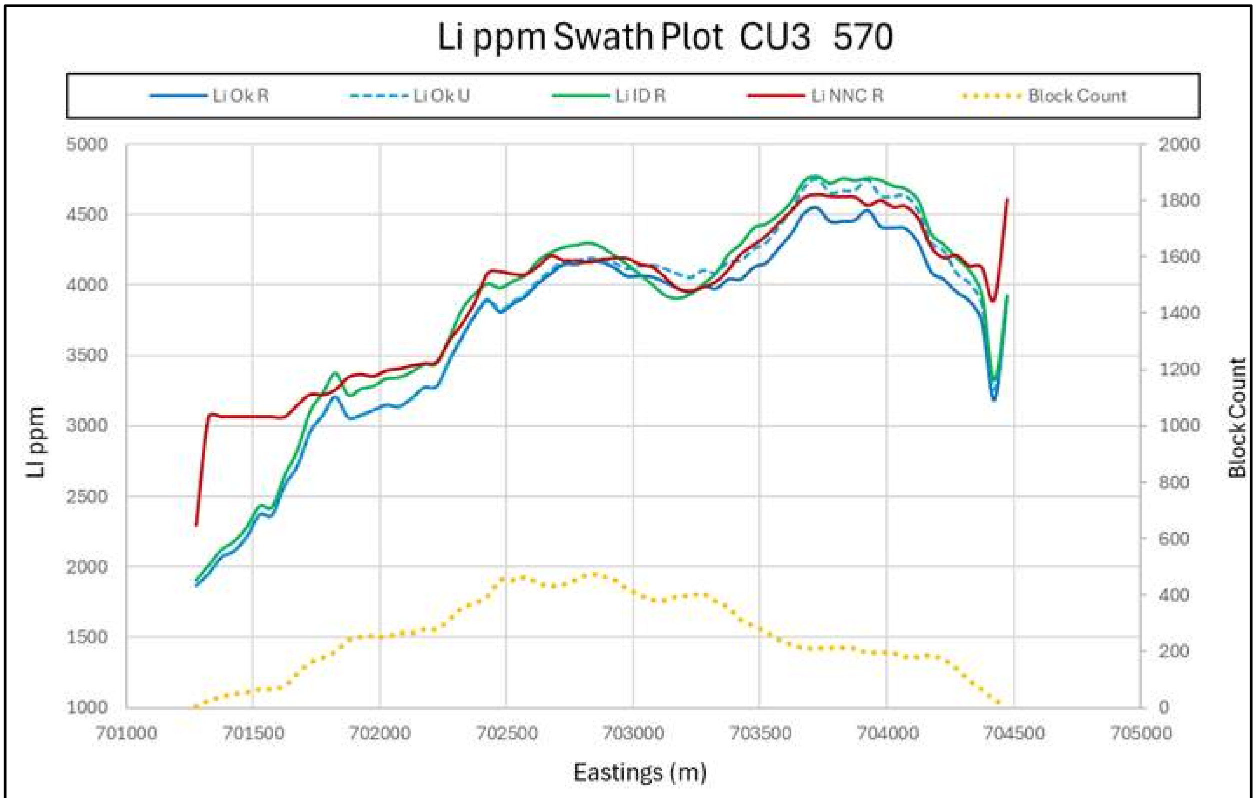
Figure 14-4: Section of Li ppm Block Grades in Section View (with vertical exaggeration view in lower image of 5x)

14.10.2 Swath Plots (Drift Analysis)

A swath plot is a graphical display of the grade distribution derived from a series of bands, or swaths, generated in several directions through the deposit. Grade variations from the OK model are compared using the swath plot to the distribution derived from the ID2 and the declustered NN grade model.

On a local scale, the NN model does not provide reliable estimations of grade but on a much larger scale, it represents an unbiased estimation of the grade distribution based on the underlying data. Therefore, if the OK model is unbiased, the grade trends may show local fluctuations on a swath plot, but the overall trend should be similar to the NN distribution of grade.

Swath plots have been generated in three orthogonal directions for all models. An example of the lithium distribution in east-west swaths is shown in Figure 14-5 for clay horizon CU3 (570). There is good correspondence between the OK and ID2 models in most areas. The NN model correlates well with the other models in the central portion of the model. The degree of smoothing in the OK model is evident in the peaks and valleys shown in the swath plots. Areas where there are large differences between the models tend to be the result of “edge” effects, where there is less available data to support a comparison. The validation results indicate that the OK model is a reasonable reflection of the underlying sample data.



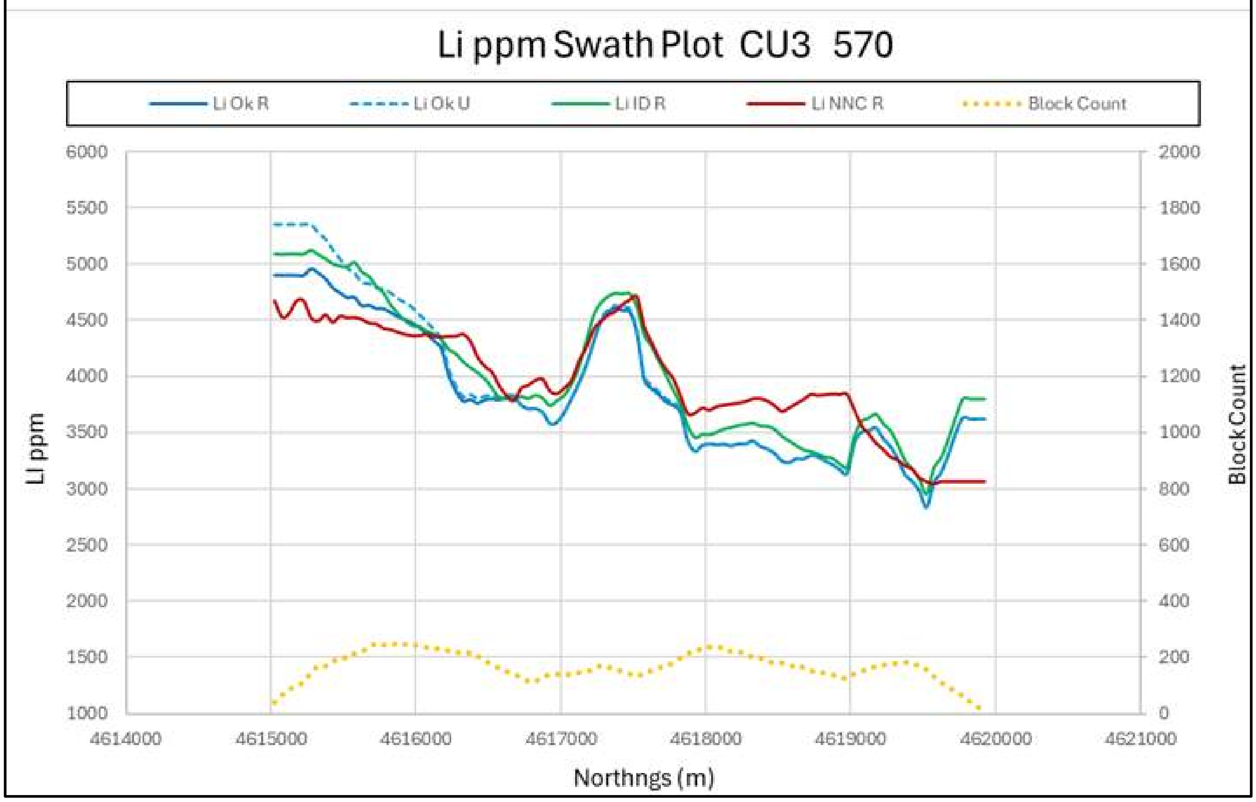


Figure 14-5: Swath Plot of Domain 570 (CU3), Lithium Grades (ppm) by Eastings

14.11 RESOURCE CLASSIFICATION

The mineral resources for the NNLP were classified in accordance with the CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014). The classification parameters are defined relative to the distance between lithium sample data and are intended to encompass zones of reasonably continuous mineralization that exhibit the desired degree of confidence. These parameters are based on visual observations and statistical studies. Classification parameters are based primarily on the nature of the distribution of lithium data as it is the main contributor to the relative value of the deposit. At this stage of project evaluation, the data supports resources in the Inferred category. There are no mineral resources included in the Indicated or Measured categories.

14.11.1 Inferred Mineral Resources

Mineral resources in the Inferred category include blocks that are located within a maximum distance of 600 m from a drill hole. CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014) define a mineral resource as: *"[A] concentration or occurrence of solid material of economic interest, in or on the Earth's crust in such form, grade or quality and quantity, that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated, or interpreted from specific geological evidence and knowledge, including sampling*." The "reasonable prospects for eventual economic extraction" requirement generally implies that quantity and grade estimates meet certain economic thresholds and that mineral resources are reported at an appropriate cut-off grade that takes into account extraction scenarios and processing recovery.

After a review of professional LCE price forecasts and costs and prices used for comparable projects, a resource-limiting pit shell was generated using the following technical and economic parameters:

- Mining, Processing and G&A Operating Costs: 88.50 US$/t
- Pit slope: 27 degrees
- LCE Price: 20,000 US$/t
- Li to LCE conversion factor: 5.323
- Metallurgical recoveries: 73.5%

The estimate of Inferred Mineral Resources is presented in Table 14-7 and assumes open pit mining methods and is reported in accordance with CIM Definition Standards. Based on the long-term LCE price of 20,000 US$/t, operating cost of 88.50 US$/t and process recovery of 73.5%, the base case cut-off grade is 1,250 ppm lithium. As described in Section 4.2.2, Surge owns 25% of the mineral rights in a block of private land in the middle of the block model. The mineral resource estimate within the pit boundary in this area is reported on a 25% basis attributable to Surge.

The distribution of the base case mineral resource is shown plan view for CU3 in Figure 14-6.

The QPs are not aware of factors related to environmental, permitting, legal, title, taxation, socio-economic, marketing, or political issues which could materially affect the mineral resource.

Table 14-7: Estimate of Inferred Mineral Resource reported at 1,250 ppm Lithium Cut-off within $20,000 LCE Price Pit Shell

Zone	Li ppm Cut-off	Tonnes	Li (ppm)	LCE (Mt)
580 CY1	1,250	4,600,000	1,276	0.03
570 CU3	1,250	195,200,000	3,872	4.02
560 CU2	1,250	127,000,000	2,814	1.90
550 CU1	1,250	159,200,000	2,412	2.04
540 CL3	1,250	44,500,000	1,937	0.46
520 CL2	1,250	19,500,000	1,862	0.19
Total	**1,250**	**550,000,000**	**2,956**	**8.65**

1. The effective date of the mineral resource estimation is August 7, 2024.
2. The MRE has been prepared by Bruce M. Davis, in conformity with CIM "Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines and are reported in accordance with the Canadian Securities Administrators NI 43-101 requirements. Mineral resources are not mineral reserves and have not demonstrated economic viability. There is no certainty that any mineral resource will be converted into a mineral reserve.
3. Resources are constrained by a pit shell using Hexagon MinePlan™ 3D software.
4. The pit shell defined uses a 27° pit slope and assumes a US$88.50/t operating cost, 73.5% recovery and a US$20,000/t LCE price resulting in a reporting cut-off grade of 1,250 ppm Li.
5. A Li to Li_2Co_3 factor of 5.323 was used.
6. A fixed density of 1.79 t/m^3 was used.

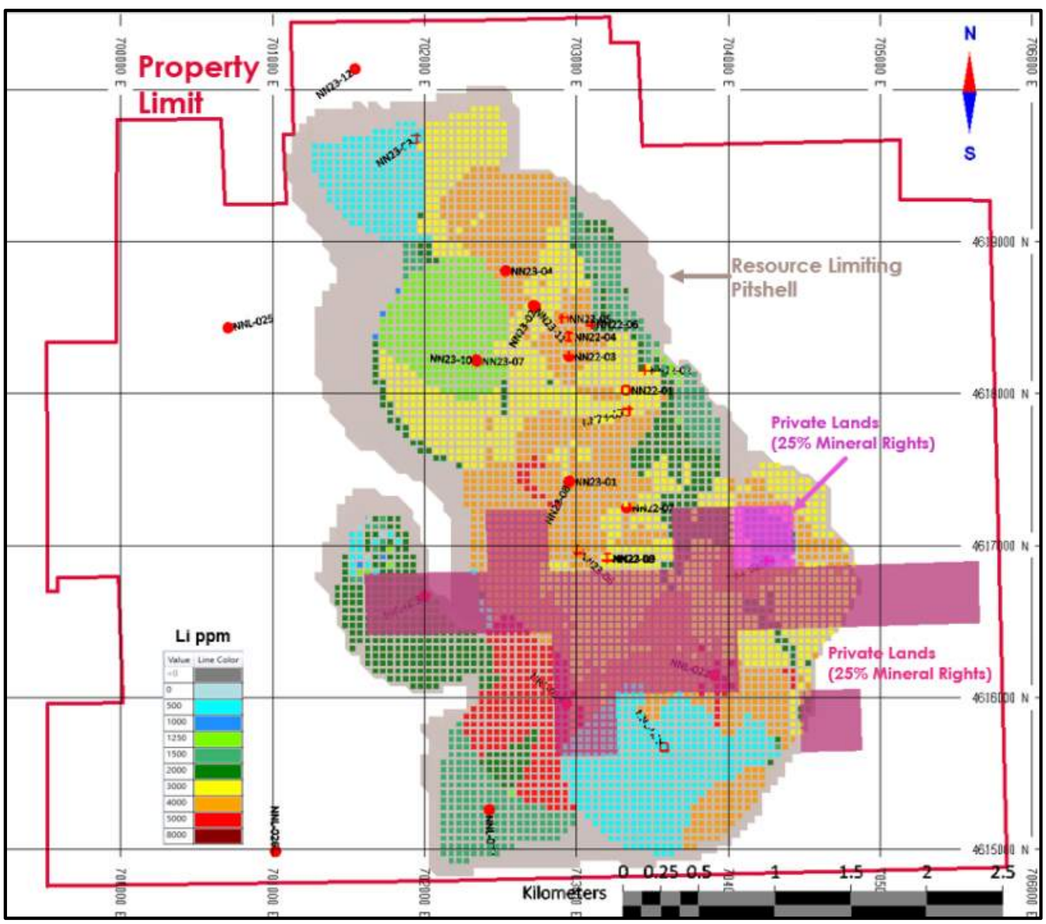


Figure 14-6: Plan View of Base Case Inferred Mineral Resource within the CU3 Clay Horizon (570), Block Grades Lithium ppm with Drill Holes that Intersect the Zone

14.12 SENSITIVITY OF MINERAL RESOURCES

The sensitivity of mineral resources is demonstrated by listing resources at a series of cut-off thresholds as shown in Table 14-8 and different pit shells at variable LCE prices.

Table 14-8: Mineral Resources Declared at 1,250 ppm Lithium Cut-off and Additional Grade Cut-offs and LCE Pit Shell Price for Comparative and Sensitivity Purposes

Zone	Pit Shell LCE price	Cut-off	Tonnes	Li (ppm)	LCE (Mt)
All	$22,000	0	572,000,000	2,885	8.78
		1,000	561,800,000	2,923	8.74
		1,250	555,300,000	2,943	8.70
		1,500	513,700,000	3,070	8.39
		1,750	473,900,000	3,189	8.04
		2,000	437,300,000	3,298	7.68
		3,000	263,300,000	3,880	5.44
		4,000	92,600,000	4,583	2.26
All	$18,000	-	550,100,000	2,941	8.61
		1,000	540,900,000	2,977	8.57
		1,250	539,400,000	2,982	8.56
		1,500	504,600,000	3,093	8.31
		1,750	468,700,000	3,203	7.99
		2,000	435,700,000	3,302	7.66
		3,000	263,300,000	3,880	5.44
		4,000	92,600,000	4,583	2.26
All	$15,000	-	514,300,000	3,028	8.29
		1,000	505,500,000	3,067	8.25
		1,250	504,600,000	3,070	8.25
		1,500	483,800,000	3,142	8.09
		1,750	455,400,000	3,236	7.84
		2,000	427,400,000	3,323	7.56
		3,000	263,100,000	3,881	5.43
		4,000	92,600,000	4,583	2.26
All	$10,000	-	371,400,000	3,442	6.80
		1,000	363,700,000	3,498	6.77
		1,250	363,700,000	3,498	6.77
		1,500	359,000,000	3,526	6.74
		1,750	359,000,000	3,527	6.74
		2,000	356,200,000	3,539	6.71
		3,000	261,400,000	3,884	5.40
		4,000	92,500,000	4,583	2.26

Zone	Pit Shell LCE price	Cut-off	Tonnes	Li (ppm)	LCE (Mt)
All	$5,000	-	43,400,000	4,630	1.07
		1,000	41,400,000	4,818	1.06
		1,250	41,400,000	4,818	1.06
		1,500	41,400,000	4,818	1.06
		1,750	41,400,000	4,818	1.06
		2,000	41,300,000	4,819	1.06
		3,000	41,100,000	4,833	1.06
		4,000	41,000,000	4,837	1.06

14.13 SUMMARY AND CONCLUSIONS

Based on the current level of exploration, the NNLP Deposit contains Inferred Mineral Resources of 550 Mt at a grade of 2,956 ppm lithium and 8.65 Mt LCE.

15 MINERAL RESERVE ESTIMATES

The Nevada North Lithium Project does not currently have mineral reserves.

16 MINING METHODS

The North Nevada Lithium Project (NNLP) is currently planned to be an open pit operation using backhoes, and front loaders to load the mineralized material and waste into ridged frame haul trucks. Blasting is not expected to be required in the pit. The mineralized material will be hauled directly to the processing facility, and the sub-grade and waste material will be hauled to a waste storage facility located northeast of the open pit.

There are no mineral reserves at NNLP at this time. All of the mineralization within the mineral resource block model is classified as inferred category. The use of the term “ore” will be avoided throughout this Technical Report because there is insufficient confidence to establish a mineral reserve. The terms mineralized material or process feed will be used to discuss the component of mineral resource that is planned for processing within this PEA.

References to the grade of process feed within this section of the report means the diluted in-situ grade of material fed to the process plant from the mine. One should understand that the first stage of the process facility will remove a coarse fraction from the initial process feed in order to send an upgraded feed to the later stages of the process. The mine plan presented in this section reports the initial feed grade and does not incorporate the results of the early stage of process upgrade.

The mine planning process applies modifying factors to the mineral resource block values in order to provide the best estimate of the grade of material delivered to the front end of the process plant. The procedures to develop those modifying factors are described within the text of this section.

Table 16-1 summarizes the mine production schedule that was developed for NNLP. The procedures used to develop that schedule are discussed in the following sub-sections.

The column titled “Percentage of Process Ktonnes on Land Owned by Surge” in Table 16-1 is required for royalty calculations that are included within the financial analysis.

The grades reported on Table 16-1 include mining dilution and reflect the estimated grade of the material that will be delivered to the process plant.

Table 16-1: NNLP Production Schedule – Inferred Mineralization

Year	Li Cut-off (ppm)	Process Feed (kt)	Grade Li (ppm)	Percentage of Process Ktonnes on Land Owned by Surge	Waste (kt)	Total (kt)
Preprod	1,250	0	0		565	565
1	1,250	1,288	4,620	67.5%	8,712	10,000
2	1,250	2,575	4,781	70.0%	10,425	13,000
3	1,250	3,863	4,790	68.0%	9,137	13,000
4	1,250	5,150	4,783	89.7%	7,897	13,047
5	1,250	5,150	4,598	87.0%	7,400	12,550
6	1,250	5,150	4,807	74.1%	7,400	12,550
7	1,250	5,150	4,702	70.5%	7,400	12,550
8	1,250	5,150	4,531	93.6%	7,400	12,550
9	1,250	5,150	4,162	76.4%	7,400	12,550
10	1,250	5,150	4,418	84.4%	7,400	12,550
11	1,250	5,150	4,381	38.8%	7,400	12,550

Year	Li Cut-off (ppm)	Process Feed (kt)	Grade Li (ppm)	Percentage of Process Ktonnes on Land Owned by Surge	Waste (kt)	Total (kt)
12	1,250	5,150	4,546	42.4%	7,400	12,550
13	1,250	5,150	3,960	51.0%	7,400	12,550
14	1,250	5,150	4,053	90.4%	7,400	12,550
15	1,250	5,150	3,992	40.2%	7,400	12,550
16	1,250	5,150	4,028	17.5%	7,400	12,550
17	1,250	5,150	4,061	49.2%	7,400	12,550
18	1,250	5,150	3,797	88.6%	7,400	12,550
19	1,250	5,150	3,906	95.2%	7,400	12,550
20	1,250	5,150	3,982	92.7%	7,400	12,550
21	1,250	5,150	4,092	89.8%	7,400	12,550
22	1,250	5,150	4,292	70.6%	7,400	12,550
23	1,250	5,150	4,215	72.7%	4,850	10,000
24	1,250	5,150	3,736	85.3%	4,850	10,000
25	1,250	5,150	3,558	72.5%	4,850	10,000
26	1,250	5,150	3,429	57.3%	4,850	10,000
27	1,250	5,150	3,366	51.5%	4,850	10,000
28	1,250	5,150	3,560	43.0%	4,850	10,000
29	1,250	5,150	3,559	35.6%	4,850	10,000
30	1,250	5,150	3,551	43.7%	4,850	10,000
31	1,250	5,150	3,529	43.6%	4,850	10,000
32	1,250	5,150	3,782	34.8%	4,850	10,000
33	1,250	5,150	3,955	28.6%	4,850	10,000
34	1,250	5,150	3,848	20.8%	4,850	10,000
35	1,250	5,150	3,612	36.4%	4,850	10,000
36	1,250	5,150	3,678	19.9%	1,419	6,569
37	1,250	5,150	3,742	30.9%	1,189	6,339
38	1,250	5,150	3,908	33.0%	652	5,802
39	1,250	5,150	3,907	35.2%	636	5,786
40	1,250	5,150	3,842	33.8%	872	6,022
41	1,250	5,150	3,696	25.8%	647	5,797
42	1,250	1,418	3,846	0.0%	14	1,432
Total		**204,844**	**4,017**	**56.5%**	**238,415**	**443,259**

16.1 RESOURCE MODEL MODIFYING FACTORS FOR MINE PLANNING

The mineral resource model was developed by Mr. Bruce Davis and was described in Section 14 of this technical report. The deposit is a series of eight nearly horizontal lithium bearing clay beds. Six of those beds were modeled within the block model. Three of which were included within the mine plan based on their grade and thickness.

The beds that are included in the mine plan are:

1. Clay ID CU3, Model Zone 570
2. Clay ID CU2, Model Zone 560
3. Clay ID CU1, Model Zone 550

The other beds were not of sufficient grade or thickness, or lacked sufficient drilling and sampling to be incorporated into the PEA mine plan.

The parameters in Table 16-2 defined the size of the block model as provided to IMC.

Table 16-2: Model Parameters

Parameter	Minimum	Maximum	Block Count	Block Size (meters)
Northing Range	4,614,000	4,620,800	136	50
Easting Range	700,500	705,000	90	50
Elevation Range	2,200	1,500	140	5
Model Coordinates	Nad83, UTM Zone 11, meters			

Blocks were coded with the lithium bed, and fraction of the bed contained in the block, as well as the inter-burden rock unit, and the fraction of the block that was inter-burden.

Each block in each bed was assigned a grade of Lithium in ppm as well as calcium, magnesium, sodium, iron, boron, potassium and aluminum. The lithium grade was the only variable used within the PEA mine plan.

The mineralized bed fractions that were assigned to the blocks within the resource model were based on the geologic interpretation. The mining process cannot precisely match the interpreted surfaces, so a procedure to estimate mining dilution was applied.

The following dilution procedure was applied to beds 570, 560, and 550.

1. The block containing the contact of the top of each bed was identified. The grade of that top block was adjusted assuming the addition of 0.5m of interbed waste with the mineralized bed.
2. The block containing the contact of the bottom of each bed was identified. The grade of that bottom block was adjusted assuming addition of 0.5m of interbed waste with the mineralized bed.
3. The fraction of each upper and lower boundary block in the bed was adjusted upward to reflect the dilution waste that was included.
4. The waste grades that were used for the dilution process were based on the modeled grades of the interbeds. The lithium dilution grades were:
    a. 570 Upper = 144.7 ppm, 570 Lower = 268.7 ppm
    b. 560 Upper = 268.7 ppm, 570 Lower = 304.1 ppm
    c. 570 Upper = 304.1 ppm, 570 Lower = 133.7 ppm
5. The new grade and mineralized fraction were stored in new calculated variables for each block that were used for mine planning. The fraction of mineralized material and the diluted grades will be referred to as diluted variables or diluted grades within this text.

In summary, the dilution increases the process feed tonnage by about 6% with a grade decrease of about 3 to 4%. The density of the mineralized beds was set at 1.79 tonnes/m^3. Interbed waste density was stored in the model and averaged about 2.17 tonnes/m^3.

All mine planning going forward utilized the diluted block fractions and grades. The production schedule as shown on Table 16-1 reports the estimated diluted grades as they would appear at the process facility.

16.2 PIT PHASE DESIGNS

Mine pushback or phase designs were developed based on guidance from pit optimization software that suggested the best extraction sequence and the final pit target. The pit optimization routines were run several times to generate a series of nested theoretical pit geometries. The theoretical pit geometries did not include haul roads or proper operating room for mining.

The multiple pit geometries were generated by running the software at a range of LCE prices, from $4,000/tonne LCE to $12,000/tonne LCE. Price increments as small as $100/tonne LCE were utilized.

Table 16-3 summarizes the input parameters to the pit guidance routine that were applied by IMC. Note that these are not the final project costs or recoveries, but were used as an initial starting point for mine design.

Each of the pits was tabulated at a range of LCE cut-offs. However, there was very minor change in tonnage and grade versus cut-off grade. The resource model indicates that the lithium grade within the 3 major mineralized material beds is consistent within the bed.

Table 16-4 summarizes the results of the nested pits at a cut-off of 1,250 ppm Li. The highlighted line at the LCE price of $6,000/tonne illustrates the target pit used to define the final pit design for the 42-year life of the Project.

Changing the cut-off grade of the $6,000 pit from 2,500 ppm to 800 ppm Li resulted in a change of 0.5% in process feed tonnage.

Table 16-3: Input Parameters to Develop the Mine Extraction Sequence

Parameter	Estimate for Mine Plan
Mining Costs per Tonne Material	$3.00/tonne of Material
Process Cost per Tonne Run Of Mine (ROM) Mineralized Material (*Initial Value used in Mineral Resource*)	$88.50/tonne of Feed
Process Recovery of Run Of Mine Mineralized Material (*Initial Value used in Mineral Resource*)	80.1%
First Pass Estimate of Design LCE Price per Metric Tonne	LCE Prices Varied from $4,000 to $12,000/ tonne LCE
Slope Angles	27 Degrees

Table 16-4: Summary of Nested Theoretical Pits at the Mineral Resource Cut-off of 1,250 ppm Li

LCE Price ($/t)	Process (kt)	Dilute Li (ppm)	Waste (kt)	Total Material (kt)
4000	158	5,398	29	187
4100	246	5,306	46	292
4200	454	5,212	152	606
4300	1,223	5,158	940	2,163
4400	2,905	5,049	2,510	5,415
4500	5,740	4,932	4,932	10,672
4600	9,107	4,874	8,833	17,940
4700	16,312	4,834	18,794	35,106
4800	26,290	4,786	32,697	58,987
4900	35,905	4,714	45,390	81,295
5000	45,241	4,635	56,458	101,699
5100	50,965	4,606	64,667	115,632
5200	56,850	4,579	74,556	131,406
5300	63,019	4,546	82,164	145,183
5400	72,277	4,497	94,654	166,931
5500	83,050	4,456	117,430	200,480
5600	89,978	4,422	126,264	216,242
5700	112,367	4,303	155,715	268,082
5800	164,063	4,143	211,080	375,143
5900	185,613	4,081	221,937	407,550
6000	**204,827**	**4,032**	**235,349**	**440,176**
7000	322,466	3,767	308,082	630,548
8000	393,462	3,628	422,831	816,293
9000	446,409	3,517	575,276	1,021,685
10000	496,275	3,401	693,949	1,190,224
11000	531,134	3,319	745,478	1,276,612
12000	560,273	3,251	811,426	1,371,699

The purpose of the nested pits was to determine the best place to start mining and the sequence of extraction to follow. Cut-off grade did not have a measurable impact on the amount or grade of process feed material. The mineral resource cut-off of 1,250 ppm Li was used consistently throughout the mine plan.

The nested pits suggested starting in the southern portion of the property, with several small pits. Then expand northward and combine the small pits into one larger pit. The annual mine illustrations provided in Section 16.7 illustrate the general mine extraction sequence.

Phase designs utilized interramp slopes of 27 degrees everywhere. Haul roads are 25 m wide with a maximum grade of 10%. A minimum operating width of about 300 ft was applied to the phase designs. Some phases are significantly wider based on the mineralized material released in the phase.

The size of the final pit was limited to just over 40 years (41.3 yrs) of process feed. Developing a longer mine life plan would not have a significant impact on the time value of money within the financial analysis. However, additional mineral resources exist after the 41.3-year life of the mine plan summarized on Table 16-1.

16.3 MINE PRODUCTION SCHEDULES

A number of alternative mine production schedules with different process feed rates were developed in conjunction with the process team at M3 Engineering. The plan throughput rate and the throughput expansion in year 4 are based on evaluating alternative mine schedules on an economic basis including process plant capital and operating costs for each case.

The total material rate was established with two goals in mind:

1. Assure release of sufficient process feed mineralization, and
2. Select a total material rate that provided efficient use of mine capital equipment.

A review of Table 16-1 shows the continuous increase in processing rate for the first 4 years of operation. The total material rate ramps up quickly and sustains that total rate for many years. The mine plan and waste removal are designed to assure release of the Phase 2 process feed without having to capitalize additional mine equipment.

Cut-off grade optimization was not applied to this Project because of the flat response of the grade tonnage curve which indicated there would be no benefit to cut-off optimization.

16.4 MINE WASTE ROCK STORAGE

A single mine waste storage facility was located east-northeast of the mine. This facility will hold all of the mine waste rock for the planned 41.3-year life. The waste storage design remains on land controlled by Surge. The material on the waste storage facility was estimated to be 1.50 tonnes/m^3 which assumes a swell factor of roughly 1.45.

16.5 AGGREGATE REQUIREMENTS

The mineralization at NNLP is clay. The expectation is that it will be difficult to operate once there is rain or snow on the exposed clay. In order to assure solid footing for the equipment, an aggregate quarry and crushing facility was included in the plan.

Discussion with the geologists at site indicate that a location north of the planned lithium pit would be the best source for aggregate where there is an outcrop of Rhyolite. A detailed plan of the quarry has not been developed, however, the cost for drilling, blasting, loading, hauling and crushing of the quarry material are included within the estimated mine operating costs and equipment capacities.

Estimating the amount of aggregate required is a challenge and is based on the weather conditions that will be incurred at the mine. During dry weather conditions, aggregate will not be required in most areas of the mine.

The total area of exposed clay mineralization was calculated from the mine plan on an annual basis. That value becomes constant once the mineralized material rate is established in Year 4.

A review of the weather data in northern Nevada suggested the following judgement. For ¼ of the time, the exposed clay mineralization in the active mine area will require 0.5 m of aggregate cover to allow a reasonably efficient operation of the mine equipment. Loading of the mineralized clay is planned to be done with backhoes. Those same backhoes will attempt to minimize the amount of dilution from the aggregate by segregating it during the loading process.

The above calculation resulted in the following estimates of aggregate tonnage required by year:

Year 1	25.7 Ktonnes /year
Year 2	51.4 Ktonnes /year
Year 3	77.1 Ktonnes, /year
Years 4 to 42	102.8 Ktonnes /year

The aggregate will be loaded with the mine's front end loaders and hauled with the mine's haul trucks. Blasting will only be required occasionally due to the small tonnage and is assumed to be completed by a blasting contractor. Once the aggregate is delivered to the mine, it will be spread with the mine graders or backhoes as required.

16.6 MINE EQUIPMENT AND MANPOWER REQUIREMENTS

IMC has included two different types of loading units within the equipment list at NNLP. Front end loaders with 10 cubic meter (m^3) buckets will operate along with hydraulic backhoes with 5.2 m^3 buckets. The intent of the mixed fleet is for the front end loaders to load waste, aggregate, and occasional process feed material. The flexibility of the rubber tired units allow for their deployment anywhere required on the project site. The backhoe's will primarily load the process feed material. Their selectivity will be conducive to minimizing dilution, and being track mounted, they can maintain process feed during wet periods. Typical loaders of the class are the Cat 990K and typical backhoe's are Cat 395's.

IMC has assumed the mine will operate with two, 12-hour shifts per day, around the clock for all but the preproduction period. IMC has assumed 10 lost shifts due to weather or other occurrences during the year for a total of 720 scheduled operating shifts/year.

Haul trucks are rigid frame units with a bed capacity of 60 m^3 or roughly 50 tonnes. The IMC calculations are based on the Cat 773(07) that is typical of the size and class under consideration.

Haul truck fleet requirements were determined by haul time simulation. Haul profiles were measured for several time periods of the mine life for both process feed and waste material. The rimpull data for the Cat 773 was applied along with practical constraints on top speed, and rolling resistance. The resulting truck productivities in tonnes per truck shift were applied to determine the truck feet requirements shown on Table 16-5.

Drilling equipment is not included for the main pit because the process feed material and the mine waste are expected to be free digging. A small drill is provided for drilling blast holes in the quarry.

Auxiliary equipment includes dozers, graders, and water trucks in the main pit. In addition, the quarry will have a small blast hole drill, and a portable crushing plant throughout the mine life. Minor equipment are included to support the mine operations.

Table 16-5 summarizes the major mine equipment requirements for the Project.

Table 16-5: Major Equipment for Mine and Quarry Operations

Equipment Type	Years											
	Preprod	1	2	3	4	5	6-7	8-10	11-15	16-20	21-30	30-41.3
5.2 Cu Meter Backhoe	1	2	2	2	2	2	2	2	2	2	2	2
10 Cu Meter Front Loader	1	1	2	2	2	2	2	2	2	2	1	1
50 Tonne Haul Truck	2	14	18	18	18	18	18	18	18	18	16	10
D9 Dozer	1	2	2	2	2	2	2	2	2	2	2	2
D7 Dozer	1	2	2	2	2	2	2	2	2	2	2	2
16 ft Moldboard Grader	2	2	2	2	2	2	2	2	2	2	2	2
10,000 gal Water Truck	2	2	2	2	2	2	2	2	2	2	2	2
Rock Drill	1	1	1	1	1	1	1	1	1	1	1	1
Portable Crushing Plant	1	1	1	1	1	1	1	1	1	1	1	1
Total	**12**	**27**	**32**	**32**	**32**	**32**	**32**	**32**	**32**	**32**	**29**	**23**

In addition to the major equipment in Table 16-5, minor equipment is included to support mine operations. Table 16-6 summarizes the minor equipment requirements.

Table 16-6: Minor Equipment Required in the Mine and Mine Shops

Minor Equipment Type	Number
Lube Fuel Truck	1
Flatbed Truck (8 - 10 ton)	1
Tire Handler	1
Mechanics Truck	1
Welding Truck	1
Shop Forklift	1
Man Van	2
Pickup Truck (4x4)	10
Light Plants	6
Mine Radios	1
Tire Press	1
Shop Jacks	1
Mine Pumps	1
Engineering, Geology, Safety	1
Total	**29**

Manpower requirements to operate and maintain the mine equipment are summarized on Table 16-7 along with their estimated annual cost inclusive of benefits. Table 16-8 summaries the estimated mine supervisor staff and their annual costs inclusive of benefits.

Labor rates are based on other projects IMC has worked on in northern Nevada in the last few years. Those historic rates have been inflated to reflect approximate 2025 labor costs.

In addition to the mine fleet, M3 requested IMC to estimate the equipment requirements and cost to load and haul coarse reject material from the process plant to the coarse gangue storage facility. Trucks that are identical to the mine trucks are planned for commonality of maintenance. The front loader at the plant is estimated to be a 5.7 m^3 loader. The loader and two trucks will be required from Year 4 onward. These units are accounted for separately and are not included in the mine CAPEX or equipment fleets on Table 16-5.

Table 16-7: Mine Hourly Labor Personnel

Job Title	Annual Cost	Years											
		Preprod	1	2	3	4	5	6-7	8-10	11-15	16-20	21-30	31-42
Mine Operations:													
Shovel Operator	158,591	1	7	7	7	7	7	7	7	7	7	6	6
Loader Operator	158,591	1	2	4	4	5	4	5	5	5	5	3	2
Haul Truck Driver	137,710	2	45	58	57	51	47	50	58	54	58	49	33
Track Dozer Operator	137,710	1	6	6	6	6	6	6	6	6	6	6	6
Small Track Dozer Operator	137,710	1	6	6	6	6	6	6	6	6	6	6	6
Grader Operator	137,710	2	5	5	5	5	5	5	5	5	5	5	5
Laborer	114,239	8	8	8	8	8	8	8	8	8	8	8	8
Operations Total		16	79	94	93	88	83	87	95	91	95	83	66
Mine Maintenance:													
Mechanic	158,834	2	12	15	15	16	15	16	15	16	15	14	11
Mechanic's Helper	148,313	1	6	8	8	8	8	8	8	8	8	7	6
Welder	148,313	1	5	6	6	6	6	6	6	6	6	5	4
Fuel & Lube Man	137,710	1	4	4	4	4	4	4	4	4	4	4	4
Tire Man	137,710	0	2	2	2	2	2	2	2	2	2	2	2
Laborer	114,239	1	4	4	4	4	4	4	4	4	4	4	4
Maintenance Total		6	33	39	39	40	39	40	39	40	39	36	31
VS&A at 10%		2	11	13	13	13	12	13	13	13	13	12	10
Total Labor Requirement		**24**	**123**	**146**	**145**	**141**	**134**	**140**	**147**	**144**	**147**	**131**	**107**
Maint/Operations Ratio		0.38	0.42	0.41	0.42	0.45	0.47	0.46	0.41	0.44	0.41	0.43	0.47

Table 16-8: Mine Salaried Labor Personnel

Job Title	Annual Cost ($US)	Preprod	1	2	3	4	5	6-7	8-10	11-15	16-20	21-30	30-41.3
Mine Operations:													
Mine Superintendent	242,996	1	1	1	1	1	1	1	1	1	1	1	1
General Foreman	214,344	1	1	1	1	1	1	1	1	1	1	1	1
Mine Shift Supervisor	161,218	4	4	4	4	4	4	4	4	4	4	4	4
Mine Clerk	103,455	1	1	1	1	1	1	1	1	1	1	1	1
Mine Trainer	154,746	1	1										
Mine Operations Total		8	8	7	7	7	7	7	7	7	7	7	7
Mine Maintenance:													
Maint. Superintendent	273,687	1	1	1	1	1	1	1	1	1	1	1	1
Maint. General Foreman	202,589	1	1	1	1	1	1	1	1	1	1	1	1
Maint. Shift Supervisor	162,909	4	4	4	4	4	4	4	4	4	4	4	4
Maintenance Planner	171,471	1	1	1	1	1	1	1	1	1	1	1	1
Maintenance Trainer	159,377	1	1										
Mine Maintenance Total		8	8	7	7	7	7	7	7	7	7	7	7
Mine Engineering:													
Supervising Mine Engineer	247,678	1	1	1	1	1	1	1	1	1	1	1	1
Mining Engineer	191,078	1	1	1	1	1	1	1	1	1	1	1	1
Sr. Surveyor	165,060	1	1	1	1	1	1	1	1	1	1	1	1
Surveyor	133,028	1	1	1	1	1	1	1	1	1	1	1	1
Mineralized Material Control	126,285	2	2	2	2	2	2	2	2	2	2	2	2
Mine Engineering Total		6	6	6	6	6	6	6	6	6	6	6	6
Mine Geology:													
Senior Mine Geologist	216,484	1	1	1	1	1	1	1	1	1	1	1	1
Mine Geologist	177,772	1	1	1	1	1	1	1	1	1	1	1	1
Sr. Geotechnical Engineer	177,772	1	1	1	1	1	1	1	1	1	1	1	1
Sampler	116,282	2	2	2	2	2	2	2	2	2	2	2	2
Clerk	103,455	1	1	1	1	1	1	1	1	1	1	1	1
Mine Geology Total		6	6	6	6	6	6	6	6	6	6	6	6
Total Personnel		**28**	**28**	**26**	**26**	**26**	**26**	**26**	**26**	**26**	**26**	**26**	**26**

16.7 ILLUSTRATIVE DRAWINGS

Figure 16-1 to Figure 16-5 illustrate the mine and waste storage drawings for Years 1, 5, 10, 25, and 42 that provide a general indication of the mine plan.

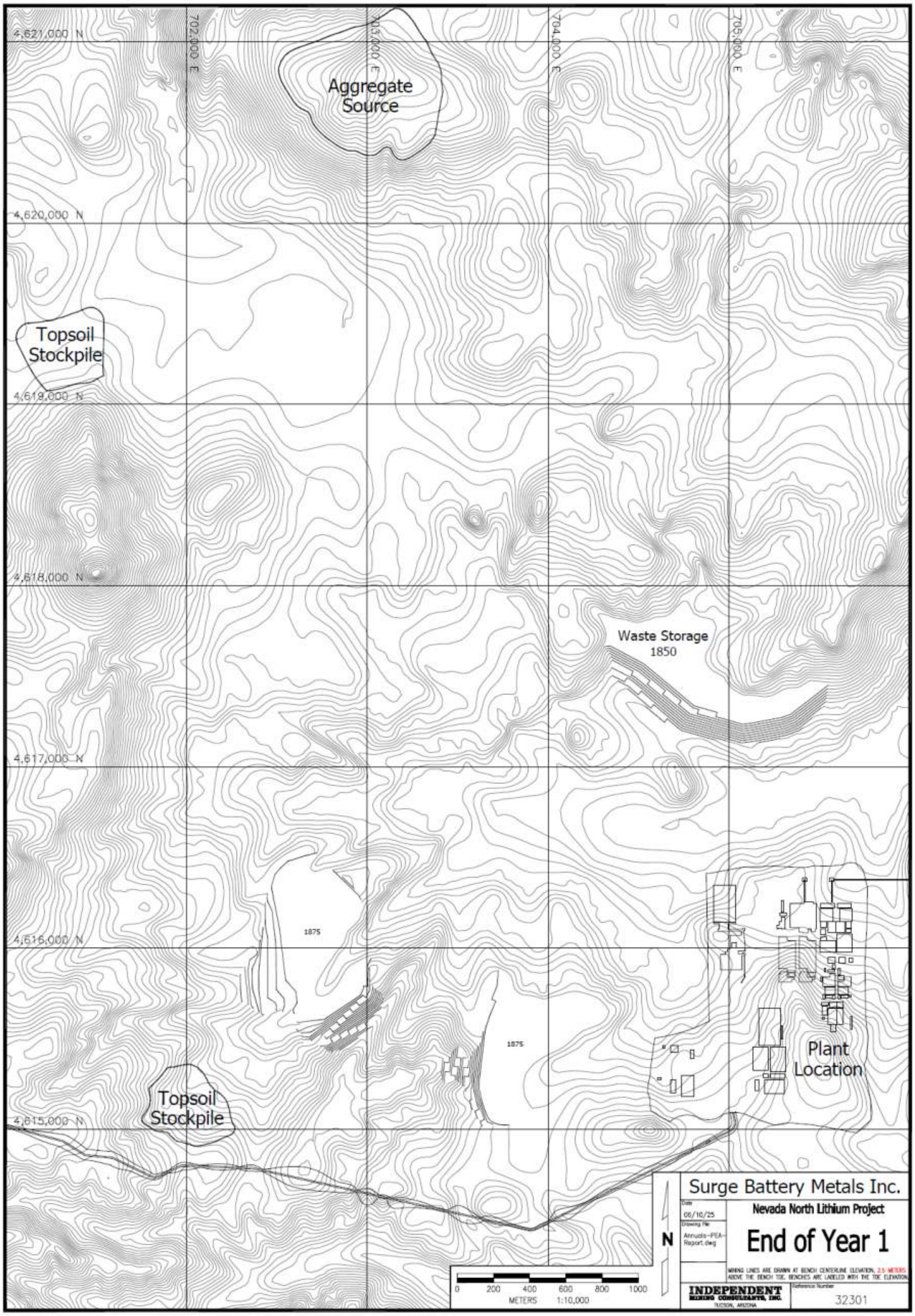


Figure 16-1: Year 1

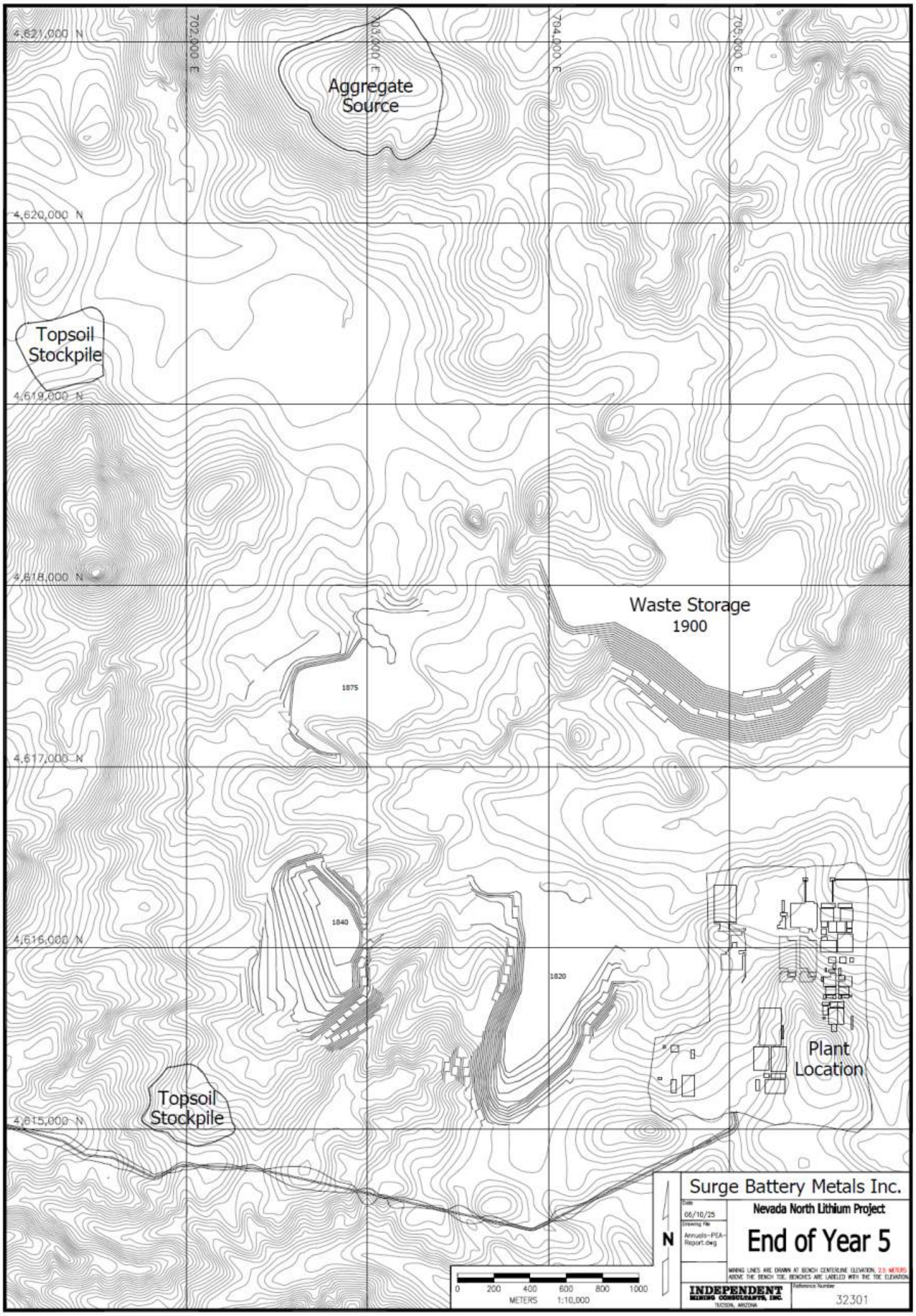


Figure 16-2: Year 5

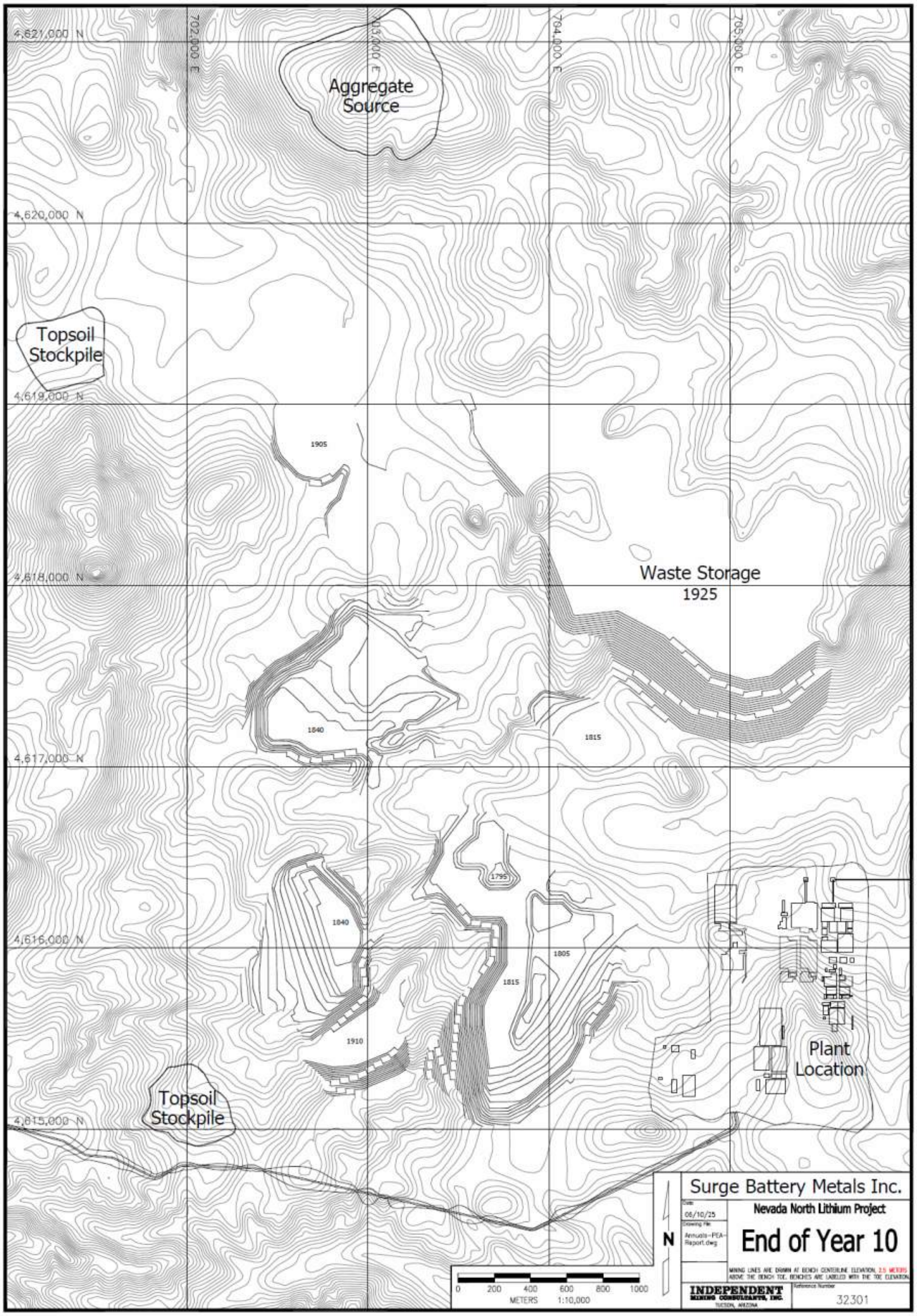


Figure 16-3: Year 10

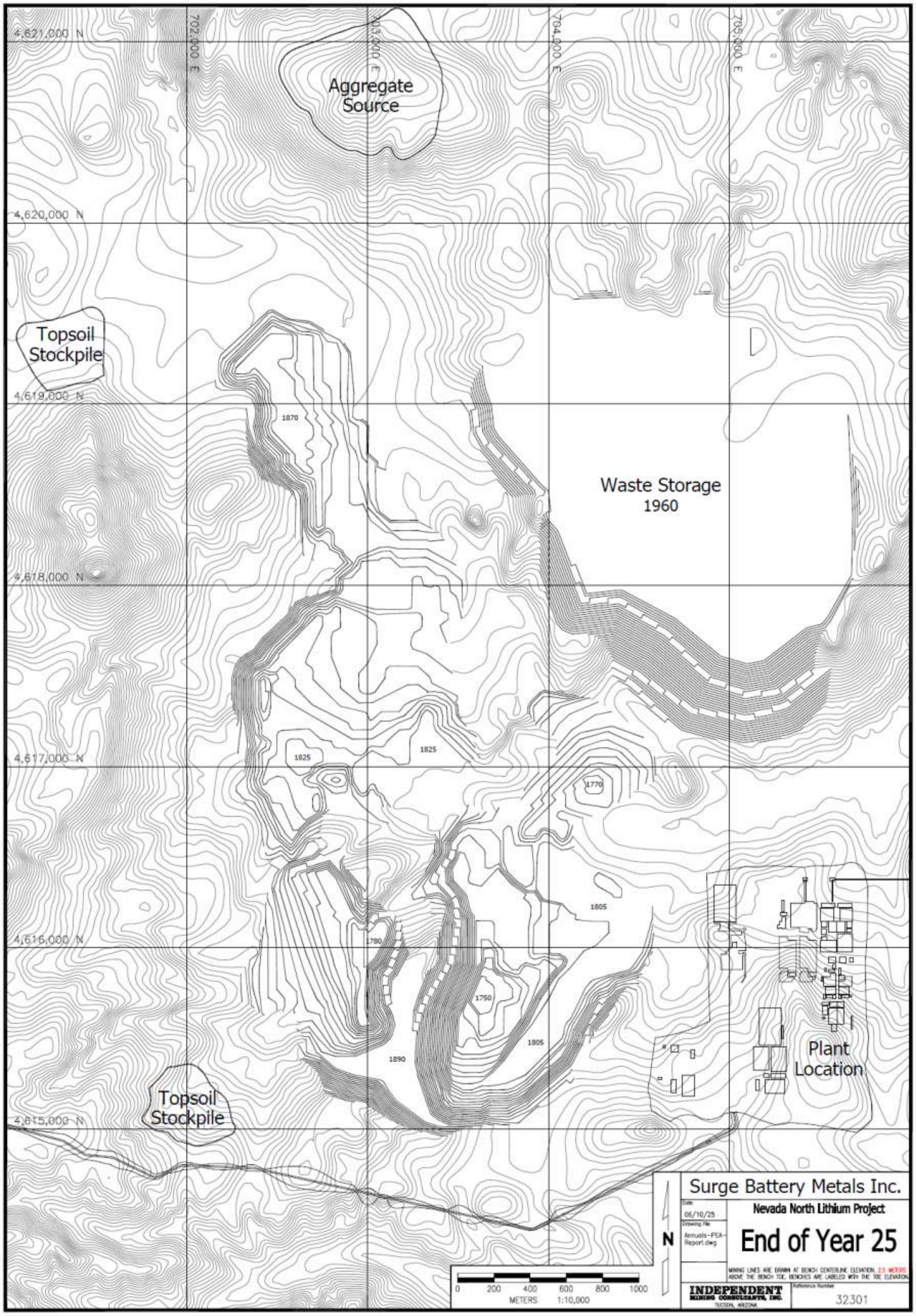


Figure 16-4: Year 25

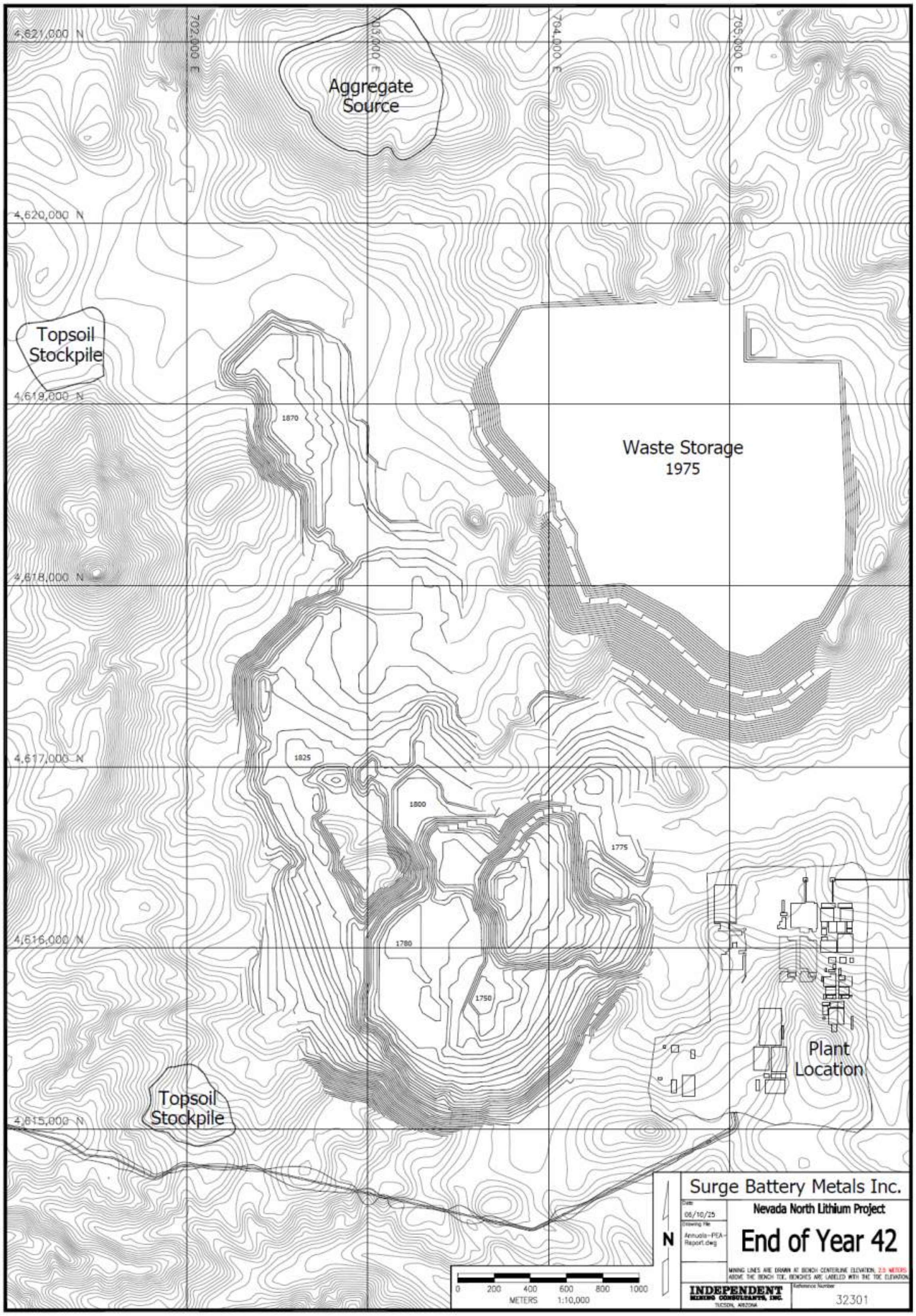


Figure 16-5: Year 42, End of Mine Plan

17 RECOVERY METHODS

17.1 GENERAL DESCRIPTION

This Section describes the major processing areas of the operation that will recover lithium from the mineralized material. The proposed flowsheet is based on metallurgical test results described in Section 13. The process employs industry-standard, commercially available equipment. This information serves as the basis for the development of the capital and operating costs presented in Section 21.

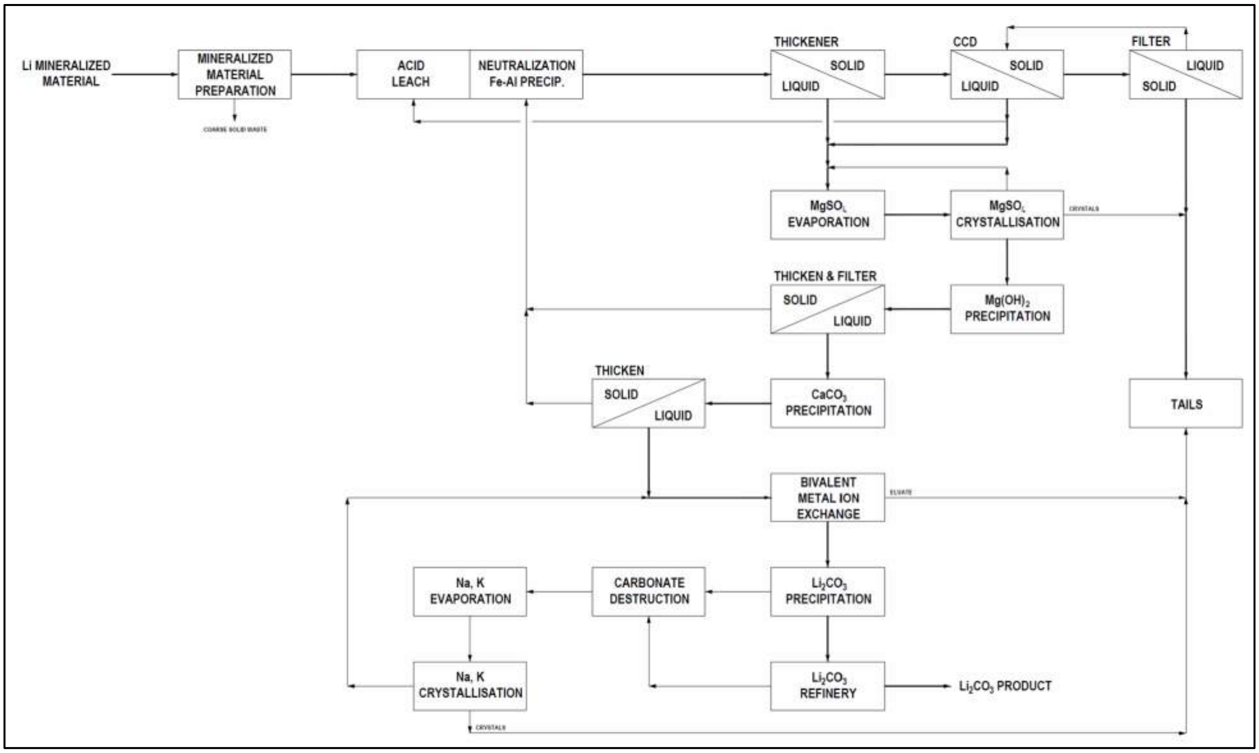
Multiple types of clay will be processed simultaneously, with a plant feed blend maintained from two separate stockpiles for different clay type. The mineralized material will be upgraded using a wet attrition scrubbing process followed by multi-stage classification to remove coarse material with low lithium content, referred to as coarse gangue. The upgraded mineralized material slurry will be processed in a leach circuit using sulfuric acid to extract the lithium from the lithium-bearing clay. The lithium-bearing solution will then be purified primarily by using crystallizers and precipitation reagents to produce battery grade lithium carbonate. Leach residue will be washed, filtered, and stacked in a tailing facility.

The Project will be constructed in two phases. Lithium carbonate production during Phase 1 is designed for a nominal 43,000 t per annum capacity while Phase 2 will double design capacity to a nominal 86,000 t per annum. Peak production of 109,100 t per annum LCE occurs in Year 6. The process plant will operate 24 hours/day, 365 days/year with an overall availability of 92% and a mine life of 42 years. The total amount of material processed in the mine plan is 443.3 Mt (dry) (204.8 Mt processed, 238.4 Mt waste). The most tonnes planned for a single year are 13.0 Mt (dry) (4.78 Mt processed, 7.90 Mt waste) in Year 4.

The recovery process consists of the following primary circuits:

- Beneficiation
  - Comminution
  - Attrition Scrubbing
  - Classification
  - Solid-Liquid Separation (Thickening and Dewatering)
- Leaching
- Neutralization
- Counter Current Decantation (CCD) and Filtration
- Magnesium and Calcium Removal
- Lithium Carbonate (Li_2CO_3) Production
  - 1st Stage Lithium Carbonate Crystallization
  - Bicarbonation
  - 2nd Stage Lithium Carbonate Crystallization
  - Sodium Sulfate and Potassium Sulfate Crystallization (ZLD)

A simplified process block flow diagram is provided in Figure 17-1.



Source: M3, 2025

Figure 17-1: Overall Simplified Process Flowsheet

In beneficiation, ROM mineralized material is crushed then mixed with water and fed to unit operations designed to liberate lithium bearing clay from gangue material. The clay is separated from coarse gangue in a multi-stage classification, with coarse gangue being separately stockpiled. The clay fines are then sent to the first dewatering (thickening) stage and second dewatering stage (decanter centrifuging). The resulting slurry is fed to the processing plant.

The dewatered slurry is mixed with sulfuric acid (H_2SO_4) from the acid plant, leaching lithium and other constituents into pregnant leach solution (PLS). Acid availability primarily determines leach feed rates, which in turn determines mineralized material mining rates. Acid consumption variability has been low among mineralized material tested to date, so mineralized material tonnage adjustments beyond this are minor. The free acid contained in the resultant leached residue is progressively neutralized with a slurry of ground limestone, lime, and a magnesium hydroxide slurry from the magnesium precipitation circuit. The neutralized slurry is sent to a CCD circuit to recover residual lithium bearing solution and then fed to recessed chamber filter presses. The filter cake is then conveyed to the CTFS (Clay Tailings Filter Stack) as waste material for stacking.

The PLS overflow/filtrate is sent to magnesium and calcium removal circuits where first it is concentrated via removal of water. The bulk of the magnesium is then crystallized as $MgSO_4$*xH_2O salts, removed via centrifugation, and conveyed to the CTFS. Any remaining magnesium in the brine is then precipitated with milk-of-lime and separated by recessed chamber membrane filter presses. The precipitated solids are repulped and recycled back to neutralization (as stated above), eventually leaving the process with neutralized filter cake. The calcium in the liquor is removed via soda ash addition, and an ion exchange polishing step brings the divalent cation concentration to very low levels. This lithium-bearing brine is fed to the Li_2CO_3 production circuit where soda ash is used to precipitate lithium carbonate. A bicarbonation step is used to further remove impurities from the Li_2CO_3 crystals.

The final Li_2CO_3 crystal product is separated via centrifugation then sent to drying, micronization, cooling, dry vibrating magnetic filtration and packaging. Mother liquor from the Li_2CO_3 crystallizers is sent to the Zero Liquid Discharge (ZLD) crystallizer to remove Na and K as sulfate salts. The salts are sent to the CTFS while lithium remaining in the centrate is recycled back to the front of the Li_2CO_3 circuit and recovered.

17.2 PROCESS DESIGN CRITERIA

Process design criteria were based on metallurgical lab and vendor test results that were incorporated into the MetSim process modelling software to generate a steady-state material and energy balance. Turnstone Metallurgical Services conducted MetSim modeling under the review of Surge and M3. Turnstone additionally provided several OPEX inputs as further discussed in Section 21.2.1.2. This data and criteria shown below were used as nominal values for equipment design/sizing. The design basis for the beneficiation facility is to process an average ROM throughput rate during Phase 1 of about 2.6 M dry tonnes per year (including a 99% beneficiation plant availability). Equipment in beneficiation has enough redundancy and extra capacity that there will be no interruptions requiring turndown of the acid plant.

Throughput from the mine to the crushing plant is targeted based on an average rejection rate of 25% of the ROM material based on low lithium content in coarse material. With approximately 5,800 dry t/d per phase feed rate (including a 90% plant availability) to the leach plant and recoveries for the Project, the design basis results in an estimated production rate of approximately 43,000 t/a per phase of battery grade Lithium Carbonate.

Table 17-1 and Table 17-2 summarize the main process design parameters used for each phase of this study. Flow rates, based on process mass balance, Rev. 10 HMB, are nominal for a single phase for design purposes. Table 17-1 summarizes the major process equipment used for a single phase.

Table 17-1: Process Design Criteria – Beneficiation through Neutralized Tailing

Parameter	Units	Value[1,2]
Plant Availability		
Operating Schedule	days/year	365
Beneficiation	%	99
Process Plant	%	90
Acid Plant (not including turnarounds)	%	95
Throughput		
Run of Mine Feed to Plant (dry)	kt/a	2,575
Feed to Leach (dry)	kt/a	1,927
CTFS Total Tailing (neutralized filter cake, sulfate salts) (dry)	kt/a	2,366
LCE Produced (dry)	kt/a	43.2
ROM		
ROM Li Content	ppm	3,366 – 4,807
Mineralized Material Moisture Total (loose)	wt%	22
Crushed Particle Size (P_{80})	mm	25
Discharge Screen Oversize (% ROM)	wt%	Negligible
Classification		
Coarse Material Rejection (dry)	wt%	25
Thickener Underflow Pulp Density	wt%	22

Parameter	Units	Value[1,2]
Decanter Centrifuge Cake Density	wt%	50
Leach		
Feed Solids Li Content	g/t	5891
Feed Pulp Density	wt%	30
Leach Residence Time	h	4
Leach Acid Dosage (per tonne mineralized material)	kg	481
Neutralization		
Neutralization Tanks (limestone) Residence Time	h	1
Neutralization Tanks ($CaO/Mg(OH)_2$) Residence Time	h	1
pH in Final Neutralization Tank	pH	6.5
CCD and Filtration		
No. of CCD Stages	ea	7 (post clarifier)
Flocculant Consumption (Beneficiation Total)	NA	(Allowance - Note 3)
Filtration Residual Moisture in Cake	wt%	39
CCD/Filtration Losses (soluble + residue)	%	7.7

NOTE: 1) Flow rates based on process mass balance, Rev. 10 HMB, are nominal for a single phase for equipment design/sizing purposes.
2) Values rounded to the nearest thousand where appropriate.
3) Flocculant costs benchmarked off of Thacker Pass 2022 43-101 reported costs, scaled by leach tonnage, and escalated based on polyacralymide index. Further testwork will be done to validate consumption and negotiate costs with flocculant suppliers at a later phase of design.

Table 17-2: Process Design Criteria – Purification Plant

Parameter	Units	Value
Magnesium Sulfate Crystallization		
No. of Stages (Evaporation)	Ea	TBD
No. of Stages (Crystallization)	Ea	TBD
% of Mg removed via Crystallizer	wt%	47
Centrifuge Cake Moisture	wt%	5
Magnesium Precipitation		
Residual Magnesium Content (after chemical precipitation)	ppm	4
$Mg(OH)_2$ Recycle Stream Pulp Density	wt%	20
Calcium Precipitation		
Residual Calcium Content	ppm	49
Underflow Solids Density	wt%	32
Ion Exchange		
Residual Calcium Content	ppm	<<1
Residual Magnesium Content	ppm	<<1
Lithium Carbonate Plant		
No. of Stages (crystallization)	Ea	2
No. of Stages (bicarbonation)	Ea	1

Parameter	Units	Value
ZLD Tailings Cake Moisture	wt%	10

17.2.1 Production

Recovery of lithium during operations will fluctuate with varying mineralization, and process chemistries, but this has not yet been quantified at this time. An LOM lithium recovery of 82.8% is used in this study, based on leach tests of composite CU3/CU2clay horizon material samples, which accounts for 89% of the mine plan presented in this report. CU3 clay horizon samples (representing 70% of the mine plan presented in this Technical Report) were processed using conditions representative of the assumed attrition scrubbing and multi-stage classification flowsheet, and leached to compare against other tests. Current process modeling assumes this recovery for all years of the mine life. There are five major areas contributing to lithium losses in the process plant:

- Beneficiation: lithium associated with rejected coarse gangue mineralization, loss is estimated at 7.2%
- Leach: lithium not leached from the mineralized material; loss is estimated at 6.5%
- CCD and filtration: lithium lost in entrained moisture within the filter cake, lithium loss is approximately 1.2%
- Magnesium sulfate ($MgSO_4$) and sodium and potassium sulfate salts: lithium is lost in residual mother liquor remaining on the crystals. Based on typical separation and wash efficiencies, the loss estimates are modeled as follows:
    - Magnesium crystallization: 1.2%
    - Bivalent IX Elution: 0.3%
    - ZLD crystallization circuit: 0.8%

17.3 PROCESS DESCRIPTION

17.3.1 ROM Stockpile/Feed

Mineralized material will be delivered to two separate but connected ROM stockpiles from the mining operation using haul trucks. The mineralized material will be segregated into stockpiles to facilitate desired mineralized material blending. The mineralized material types will be fed into the variable speed feeders allowing the system operator to maintain the desired ratio.

17.3.2 Beneficiation

The purpose of mineral beneficiation is to liberate the clay from the gangue and then concentrate lithium-bearing clay by rejecting coarse, low lithium grade gangue material.

17.3.2.1 Comminution

Material of various mineralized material types will be pushed via dozer to separate feeder breakers to reduce the top size to about 150 mm, then be conveyed to a mineral sizer (toothed roll crusher) for reduction to about minus 25 mm. Blend ratios may be controlled via belt speeds and weightometers on the multiple sizing lines.

17.3.2.2 Attrition Scrubbing

Crushed mineralized material will be conveyed to a classifying, spiral paddle mixer, commonly referred to as a log-washer, operating at 40 wt% solids to provide hydration time and an initial scalping of already-liberated clay from coarse material. The fine material will report to a downstream pump box. The coarse material will be transported up the inclined log-washer, where it will discharge to an attrition scrubber with four cells, operating at 30 wt% solids. The attrition scrubber will impart a high degree of agitation resulting in aggressive particle-on-particle contact, or scrubbing, to liberate the majority of the remaining clay from coarse material. Recycled water from the downstream dewatering circuit will be used for density control in both the log washer and attrition scrubber. Slurry discharging from the attrition scrubbers will pass through a vibrating screen into a pump box. The screen will remove any remaining material coarser than 25 mm for recycle via manual loader rehandling to the sizing lines feed. Alternatively, this screen oversize may be combined with classification dewatering screen oversize and conveyed to an intermediate coarse gangue stockpile. The fine clay material passing through the screen will combine with the log washer fine material and will be pumped to the classification circuit. A standby log-washer, attrition scrubber, and vibrating screen will be operated at all times to ensure availability near 100% (i.e. more than 100% total installed capacity, running at lower rates during normal operation, and at design rate when one line is down).

17.3.2.3 Classification

Separation of clay is achieved by a combination of hydroclassifier and a multistage gravity concentration circuit. Gravity concentrator fines from various stages will either be sent to another gravity concentrator (for cleaning) or to thickening. The final overflow fines from both the gravity concentrators and the hydraulic classifier will flow by gravity to classification thickener feed box.

Coarse solids from the various stages of the gravity concentrator are either fed in series to tails or the hydraulic classifier (for fines scavenging). The hydraulic classifier rejects material primarily greater than 75 micron particles in the underflow. This plus 75 micron underflow will be dewatered by a vibrating screen. The screen oversize (coarse gangue) will be conveyed to an intermediate coarse gangue stockpile and then reclaimed by a front-end loader and trucked to the coarse gangue stockpile. The screen undersize will report to the classification thickener with the streams mentioned previously. Present testwork shows an estimated 25.5% of the mineralized material fed to the process will be rejected during classification while still maintaining good recovery. Standby gravity concentrators (one per stage) and a standby hydraulic classifier and vibrating screen will be installed to ensure high availability.

17.3.2.4 Solid Liquid Separation (Thickening and Dewatering)

The fine clay material from the classification circuit (minus 75 microns) will be thickened to approximately 20–25 wt% solids in a high-rate thickener. The thickener overflow will be collected in a recycle water tank from which it will be distributed to the various users in the classification circuit, as well as a portion being returned to the mineral beneficiation circuit. The thickener underflow will be pumped to a classification centrifuges feed tank. The underflow will be dewatered to an estimated 55 wt% solids by multiple horizontal decanter centrifuges. The centrate will be pumped back to the classification recycle water tank while the cake will be repulped primarily with downstream neutralization filter wash water and then pumped to the acid leach circuit at about 34 wt% solids.

17.3.3 Leaching and Neutralization

17.3.3.1 Acid Leaching

Solids feed rate to the leach circuit will be largely dictated by sulfuric acid plant capacity, and only minor adjustments made according to mineralized material-specific acid consumption or residual acid after leach. The leach temperature of 75-90°C will be governed by heat generated from the dilution of the sulfuric acid and acid-clay reactions.

Continuous leaching will be performed in four agitated tanks in series. Acid addition will be 481 kg of 100% H_2SO_4 per tonne of leach feed solids. On average for the LOM, an estimated 93.0% of the lithium will be dissolved from the clay. Due to the non-selective acid leaching, other elements leached in appreciable amounts include magnesium, calcium, potassium, sodium, iron, and aluminum. Some fluorides are present, while boron and other halides have not been measured in high concentrations of the samples tested. These would leach, where present. The tanks will be vented to a caustic scrubber to remove entrained acid mist from the vapor streams (primarily carbon dioxide and water) generated in the leach tanks. The scrubber effluent will be pumped to the downstream neutralization circuit. The leached clay slurry at 10-60 g/L H_2SO_4 will flow by gravity to the neutralization circuit.

17.3.3.2 Neutralization/Precipitation

A six-stage neutralization/precipitation will be performed in agitated tanks. In the initial stages, a 36 wt% slurry of ground limestone (P_{80} = 44 microns) will be combined with the acidic slurry to achieve a pH of 3-4. The first stages of neutralization will neutralize most of the residual acid from acid leach. The intermediate stages will be air sparged to precipitate most of the iron and aluminum. Milk of lime and magnesium hydroxide recycled from the downstream magnesium precipitation circuit will be used to complete the neutralization/precipitation to a pH of approximately 6.5 in the final stages. The neutralization product slurry will contain residual clay, gypsum, and metal hydroxides. Calcium borate is not anticipated to be formed in appreciable amounts, but calcium fluoride is expected to precipitate the majority of the fluoride from the leach solution. Caustic effluents from the sulfuric acid plant tail gas scrubber, liquid sulfur tank scrubbers and transloading scrubber will be combined in an agitated tank from which it will report to the first stage neutralization tank.

Neutralized slurry will be thickened to approximately 33% solids in a high-density thickener. The overflow solution will be pumped to the magnesium sulfate evaporator feed tank. Underflow from the clarifier will be pumped to the CCD circuit for recovery of lithium in solution.

17.3.4 Countercurrent Decantation and Filtration

17.3.4.1 CCD

Clarifier underflow from the neutralization clarifier is diluted with overflow from the second stage CCD in an agitated tank that feeds the first CCD thickener. Slurry will be thickened to approximately 33% in a high-density thickener. The overflow from the first CCD thickener is distributed to various locations in the process plant with the excess being pumped to the magnesium sulfate evaporator feed tank. Underflow from the n-1 CCD thickener is pumped to the n-th stage CCD feed tank, where it is diluted with overflow from the n+1th stage CCD. This is typical for CCD stages two through six where the underflow is pumped to the next stage CCD. Overflow from the second through the seventh stage CCD is pumped to the preceding stage CCD feed tank for dilution. Underflow from the seventh stage CCD is pumped to the filter feed tank.

Neutralization filtrate is pumped to the sixth stage CCD feed tank, to be combined with seventh stage CCD overflow and fifth stage CCD neutralization residue. Process recycle water and cooled process condensate are pumped to the seventh stage CCD feed tank for washing. Flocculant solution will be added to each stage of the CCD and neutralization clarifier to facilitate solids settling.

17.3.4.2 Filtration

Washed slurry will be pumped from the filter feed tank to recessed chamber filter presses to produce a 61 wt% solids filter cake which will be conveyed to an intermediate stockpile near the Clay Tailings Filter Stack (CTFS). The filtrate, comprised of a dilute sulfate solution with lithium, magnesium, potassium, and sodium cations will be sent to the sixth stage CCD feed tank. The filters are the final stage of lithium recovery in solution.

17.3.5 Magnesium and Calcium Removal

17.3.5.1 Brine Concentration

The neutralized filtrate will be concentrated by falling film evaporators prior to crystallization. Exact design for this circuit will involve optimization of PLS grade and soluble losses to tails relative to the CAPEX/OPEX of this system. The lithium concentration will be held below a target concentration leaving the evaporator to avoid crystallizing a lithium-potassium double salt. The current mass balance assumes concentration of magnesium to 65 g/kg discharge solution.

17.3.5.2 Magnesium Sulfate Crystallization

Magnesium will be removed from the concentrated liquor as a salt predominantly in the form of magnesium sulfate heptahydrate ($MgSO_4.7H_2O$) in a multi-stage stages crystallization. Operating conditions will be controlled in each stage to crystallize the maximum amount of magnesium possible without crystallizing lithium. Crystals fed to pusher centrifuges will be dewatered and washed. The centrifuge cakes at 95 wt% solids will be conveyed to an intermediate stockpile near the Clay Tailings Filter Stack (CTFS).

17.3.5.3 Magnesium Precipitation and Filtration

Liquor from the magnesium sulfate crystallizer circuit will be mixed with a 25 wt% milk-of-lime slurry to adjust the pH to approximately 11 to precipitate magnesium as magnesium hydroxide while a corresponding amount of sulfate is removed as coprecipitated gypsum. Magnesium will be precipitated to about 5 ppm in a single agitated tank. Calcium will remain at the gypsum saturation level. Final dewatering of the discharge will be via recessed chamber membrane magnesium precipitation filters. The magnesium hydroxide/gypsum cake will be repulped with CCD wash solution and routed to the acid leach neutralization. The filtrate will be sent to the downstream calcium precipitation circuit.

17.3.5.4 Calcium Precipitation

Filtrate from the magnesium precipitation step is mixed with a 28 wt% soda ash (Na_2CO_3) solution to precipitate calcium carbonate ($CaCO_3$). Calcium will be precipitated to approximately 100 ppm in a combination reaction tank, followed by a reactor clarifier. Soda ash will be delivered to the reactor tank where ferric sulfate may be added as coagulant. The reaction tank will recycle seed material from the clarifier underflow. The calcium precipitation product will be dewatered and clarifier overflow from the clarifier will be pumped through multimedia filters for further clarification prior to IX feed. Solids will be combined with magnesium precipitation filter feed.

17.3.5.5 Ion Exchange

Filtrate from the calcium precipitation circuit as well as recycled centrate from the Zero Liquid Discharge (ZLD) crystallization circuit (see Section 17.3.6.2) will be fed to an ion exchange (IX) system for the removal of bivalent ions, primarily calcium and magnesium. The regeneration sequence will include steps for brine displacement, hydrochloric acid stripping of the adsorbed cations, rinsing and conditioning of the resin with sodium hydroxide. Calcium and magnesium in the purified solution will be reduced below the acceptable limit for downstream lithium recovery.

The soda ash solution used for lithium carbonate crystallization will be treated via ion exchange to remove iron, calcium, and magnesium to below the target levels. As with the other cation IX system, the stripping of the resin will be done with hydrochloric acid and the conditioning of the resin will be done using sodium hydroxide.

17.3.6 Lithium Carbonate Production

17.3.6.1 Lithium Carbonate Circuit

The lithium carbonate crystallization will receive concentrated lithium sulfate solution from the ion exchange circuit. Battery grade lithium carbonate will be produced by a re-precipitation process. In the first stage, lithium carbonate will be crystallized by reacting the concentrated lithium sulfate solutions with a 28 wt% soda ash solution. Lithium carbonate crystals will be dewatered, washed, then repulped and fed to the lithium bicarbonate reactor. The centrate from the primary lithium carbonate crystallizer will report to the sodium/potassium sulfate salts crystallization circuit, or zero liquid discharge (ZLD) circuit.

The repulped lithium carbonate and recycled lithium carbonate in solution will be converted to soluble lithium bicarbonate ($LiHCO_3$) by reaction with carbon dioxide in a forced circulation reactor. The lithium bicarbonate liquor will be filtered to remove insoluble material prior to feeding the second stage lithium carbonate crystallizer.

The second stage lithium carbonate crystallizer will re-precipitate the lithium bicarbonate back to lithium carbonate. CO2 capture system design detail is not yet finalized. Lithium carbonate crystals withdrawn from the crystallizer will be dewatered and washed using warm, demineralized water. A portion of the centrate will recycle to the lithium bicarbonate reactor feed for repulping and the remaining portion will report to the magnesium evaporator feed for reprocessing.

17.3.6.2 ZLD Crystallizers

Centrate from the first stage lithium carbonate crystallizers will pass through a decarbonation step in which sulfuric acid will be added to convert the lithium carbonate to lithium sulfate while also driving off any dissolved carbon dioxide. The low-lithium, sodium and potassium-rich sulfate solution will be pumped to the ZLD crystallizers for removal of sodium and potassium sulfate salts.

Sodium and potassium sulfate salts will be crystallized and removed from the decarbonated lithium sulfate solution. Lithium will be concentrated to near the point of crystallizing the lithium-potassium double salt. Crystals will be dewatered, washed, and conveyed to an intermediate stockpile near the Clay Tailings Filter Stack (CTFS).

17.3.6.3 Final Product Handling

Washed centrifuge cake from the 2nd stage Li_2CO_3 crystallizer will be dried, de-agglomerated, and sent to final product milling, cooling, QA/QC, and packaging. Jet milling is anticipated for size reduction.

17.3.7 Clay Tailings Filter Stack

Neutralized clay tailings filter cake will be radially stacked in an intermediate stockpile within the lined area of the Clay Tailings Filter Stack (CTFS) storage facility. These tailings will be hauled by loader and truck to a designated location on the CTFS. Salt tailings from the magnesium sulfate crystallization circuit and the sodium/potassium sulfate salts from the ZLD circuit will be radially stacked in an intermediate stockpile separate from the neutralized clay tailings. The salt tailings will be hauled by loader and truck to a designated location on the CTFS.

Tailings will be scarified as needed using a motor grader, disc, rotovator or similar equipment to increase the surface area and to promote drying of the material. Once determined that the material is within the specified moisture content limits, the tailings will be compacted using a vibrating and/or pad foot compactor. The CTFS will be progressively expanded and reclaimed during the life of the Project.

17.4 REAGENTS

17.4.1 Sulfur

Sulfuric acid will be primarily used for leaching and will be generated on-site at the sulfuric acid plant from solid prilled sulfur sourced from Canada. During summer months, the product will be 98.5 wt% H_2SO_4, and in winter it will be diluted to 93.0 wt% to avoid freezing complications.

Solid prilled sulfur will be delivered by truck from a transload facility at a location to be determined within 150 miles of the project site, where it is transferred from railcars to prill barns, for reloading to trucks. Once transported to site, it will be fed to a melter prior to feeding the acid plant. There will be approximately a month’s worth of total solid/liquid sulfur storage capacity at the sulfuric acid plant. A caustic scrubber will be installed near the sulfur storage tanks to capture H_2S that can potentially off-gas during unloading and storage.

17.4.2 Limestone

Limestone will be used as a neutralizing reagent to react with any residual acid remaining after leach. It is presently assumed that crushed limestone will be sourced from the market. It will be ground at the limestone preparation plant at site. The limestone plant capacity is 90 t/h (both phases) with a target P_{80} grind size of 44 µm. Ground limestone will be mixed with a slip stream of neutralization wash filtrate to make a 35 wt% slurry for addition to the neutralization circuit.

17.4.3 Quicklime

Quicklime (CaO) will be the primary reagent for magnesium precipitation. It will be delivered in pebble form to the site by bulk trucks and transferred to a storage silo (1000-t capacity). It will be unloaded pneumatically from the trucks, with dedicated stationary blowers, for unloading two trucks simultaneously. The quicklime will then be slaked with water in a vertical mill type slaker to produce milk-of-lime (MOL or $Ca(OH)_2$) at 25 wt% solids and transferred to a tank with a 24-hr storage capacity.

17.4.4 Sodium Hydroxide

NaOH solution (caustic soda) will be used for off-gas scrubbers and ion exchange resin regeneration. It will be delivered via tanker truck as a 50 wt% liquid and offloaded to a storage tank.

17.4.5 Soda Ash

Na_2CO_3 (soda ash) will be the main reagent for Li_2CO_3 production and will be also used for calcium precipitation. It will be delivered by bulk truck and offloaded to a silo. Soda ash will be mixed with reverse osmosis (RO) water to produce a 28 wt% solution.

17.4.6 Flocculant

Flocculant will be used in the classification area for the thickener. Dry flocculant will be delivered by truck (shipment container size will be determined at the next phase) and transferred to a flocculant makeup system located near the thickener to create approximately a 0.5% solution prior to use in the plant.

Flocculant will also be used in the classification area for the centrifuges, neutralization clarifier, and CCD thickeners and is also used in the calcium precipitation reactor clarifier. Flocculant will be delivered by truck (shipment format container size will be determined at the next phase) and transferred to a flocculant makeup system located near the centrifuge building to create a 0.5% solution prior to use in the plant.

17.4.7 Carbon Dioxide

Carbon dioxide (CO_2) will be solely used in the lithium bicarbonate reactor as part of Li_2CO_3 production. A significant amount of CO_2 will be captured in the 2nd Stage Li_2CO_3 crystallizers and recycled back to the bicarbonate reactor, but makeup is needed for any losses. It will be recaptured from the process or delivered to site in liquid form by tanker truck and stored in a pressurized vessel. The liquid will be vaporized for use in the plant.

17.4.8 Ferric Sulfate

Ferric sulfate ($Fe_2(SO4)_3$) solution at 12% Fe will be used as a coagulant in calcium precipitation. It will be delivered by tanker truck in liquid form and pumped to a storage tank for use in the plant.

17.4.9 Hydrochloric Acid

HCl (hydrochloric acid) at about 35 wt% will be used to regenerate ion exchange resin used to remove hardness from process solutions. It will be delivered by tanker truck in liquid form and transferred to a storage tank for use in the plant. A scrubber will capture acid vapors generated during the filling of the storage tank.

17.4.10 Miscellaneous

Other miscellaneous chemicals will be used including dust suppressants, chemicals for RO/water treatment, antiscalants, cleaning agents, etc. Acids and other chemicals will be used in the main assay laboratory for sample analysis.

17.4.11 Raw Materials Consumptions

Sulfuric acid and flocculant consumption estimates for process plant reagents are based on initial test work on composite leach samples from clay horizons CU2 and CU3 (89% of mine plan) and CU3 sample (70% of mine plan) after the beneficiation process assumed for this study. Soda ash demand is assumed to scale linearly with yearly LCE tonnage. Sulfuric acid (by way of sulfur) and all other reagent demands are assumed to be fixed based on leach solids tonnage for all years (these may be adjusted in more detail as further drilling and mine planning provides higher resolution of mineralized material blocks and further met testing is conducted on such). Mining fuel consumption is estimated by phase based on approximate haul distances, and plant vehicle fuel usage is allocated based on industry standard allowances.

In the case where test work is not available, consumption rates for other reagents are estimated based on vendor provided information or best practices. Consumption rates in Table 17-3 are based upon expected mine plan production rates during the 42-yr life of the Project.

Table 17-3: Reagent Consumption (42-Year LOM)

Raw Materials	Units	Per Annum	Units	Per Basis
Quicklime (CaO)	Tonne	192,336	kg/mt mineralized material	39.4
Limestone	Tonne	650,406	kg/mt mineralized material	133.4
Soda Ash (Sodium Carbonate)	Tonne	165,981	kg/mt LCE	1,922.4
Hydrochloric Acid 35%	Tonne	2,048	kg/mt LCE	23.7
Caustic Soda (Sodium Hydroxide)	Tonne	1,458	kg/mt LCE	16.9
Sulphur	Tonne	597,584	kg/mt mineralized material	122.5
Flocculant	$/Year (2Ph)	17,429,925	NA	(Escalated Benchmarks)
Ferric Sulfate	$/Year (2Ph)	161,773	NA	

17.5 PLANT WATER

The plant site will have several water systems including raw water, potable water, demineralized water, and fire water. Site water systems are described in Section 18 of this Technical Report.

17.5.1 Water Supply

Raw water is able to be introduced to various locations within the process including the mine facilities raw water tank, the mine water truck fill stand, the sulfuric acid plant, and various locations in the process plant. All make-up water for the process plant is added in the beneficiation circuit. Makeup water for the process plant accounts primarily for water lost in tails. Water evaporated during crystallization is collected as condensate and recycled for use in the process. Water estimated to be used in the plant, based on process mass balance Rev. 10 HMB, and for mining operations, is shown in Table 17-4.

Table 17-4: Plant Water Use

Site Demand	Units	Phase 1 Value	Phase 2 Value
Raw Water	AFA	2,961	2,961
Potable	AFA	<1	<1
Mine Operations	AFA	497	0
Total Water Consumption	AFA	3,458	2,961
	Cumulative:	6,420	

17.5.2 Steam

High pressure steam is generated in the sulfuric acid plant from the conversion of liquid sulfur to sulfuric acid. This steam reports to a steam turbine generator for the production of power. To meet the steam demands of the process plant, both medium pressure (10 barg) and low pressure (4.8 barg) steams are extracted from the generator and exported to the process plant. Exact steam balance will be finalized after acid plant and other process equipment selection.

Only a small portion of the steam is assumed to be condensed in heat exchangers that allows it to be returned to the sulfuric acid plant for boiler feed water.

The majority of the steam is used in either steam jet ejectors ($MgSO_4$ crystallization system) where it is condensed and combined with cooling tower water, or directly injected into a crystallizer (Li_2CO_3 crystallization system) where it partially condenses into the process fluid and partially evaporates water which reports to the process condensate system. The process condensate is cooled using air-to-liquid coolers and a cooling tower. The condensate is distributed to various users including filter cloth wash, CCD washing, solids repulping, ion exchange, RO feed, reagent systems, tail gas scrubber and cooling towers for make-up.

17.6 POWER

The estimated average running load demand for the site is benchmarked based on analogous lithium claystone projects, with acid plant power consumption/production further benchmarked against other acid plants of comparable scale, adjusted per capacity. Electrical power supply is discussed in Section 18.

17.7 AIR SERVICE

Compressed air CAPEX/OPEX is assumed to be from centralized system(s) but has not yet been designed. Filter press air is assumed to be delivered by dedicated systems which do not include any treatment (drying, filtration, etc.).

17.8 QUALITY CONTROL

An onsite laboratory will be used to support mine and process plant operations. The analytical laboratory will consist of a full set of assay instruments for lithium analysis, including an Inductively Coupled Plasma Spectrometer (ICP), and other instruments such as moisture balance, pH, and redox potential meters. Quality control costs as calculated in this study are based on lab CAPEX, lab staffing plan, and generalized allowances for consumables and special services.

17.9 SAMPLING

Samplers will be installed in locations that are required for metallurgical accounting and process control purposes. Installation location and type of major sampling equipment related to the plant metallurgical balance is listed in Table 17-5. Sampling points for process control are listed in Table 17-6.

Table 17-5: Metallurgical Accounting Sampler Summary, Major Process Inlets/Outlets

Location	Sampler Type	Purpose	Information
Log Washer Feed Belt	Cross-cut sampler	Metallurgical Balance	Mass and elemental feed to plant
Classification-Coarse Gangue	Cross-cut sampler	Metallurgical Balance	Mass and elemental loss to coarse gangue
Clay Tails Filter Cake	Cross-cut sampler	Metallurgical Balance	Mass and elemental loss to filter cake
Salt Tailings Conveyor	Cross-cut sampler	Metallurgical Balance	Mass and elemental loss to salts
Li_2CO_3 production	In-line composite	Metallurgical Balance, QA/QC	Mass Li_2CO_3 produced, quality assurance

Table 17-6: Process Control Sampler Summary

Location		
Attrition Scrubber Discharge	$MgSO_4$ Evaporator Feed	Li Carbonate Feed
Classification Cyclone Feed	$MgSO_4$ Precipitation Feed	Li Carbonate Dryer Discharge
Classification Cyclone Overflow	IX Feed	Na/K Sulfate Salts Feed
Acid Leach Feed	IX Discharge	Na/K Sulfate Salts Crystals
Neutralization Filtrate	IX Product	Na/K Sulfate Salts Purge

17.10 AUXILIARY SYSTEMS

Auxiliary systems such as reagent mixing and storage, maintenance, and office facilities, laboratory, etc. are discussed in Section 18 of this Technical Report.

17.11 PROCESS CONTROL PHILOSOPHY

The control philosophy for the plant is for all unit operations to be controlled by a Plant Control System (PCS) from a single central control room, with various satellite observation locations provided for operator use on a rotating basis. These observation locations would not include any specific control infrastructure. Local controls will be minimized, but options for wireless tablet-based field control stations to provide operator flexibility may be included. The plant central control room will be access-controlled and continuously manned.

A site wide process control network will be established in a ring architecture wherever feasible. This will be a combination of CAT6a and fiber optic where appropriate.

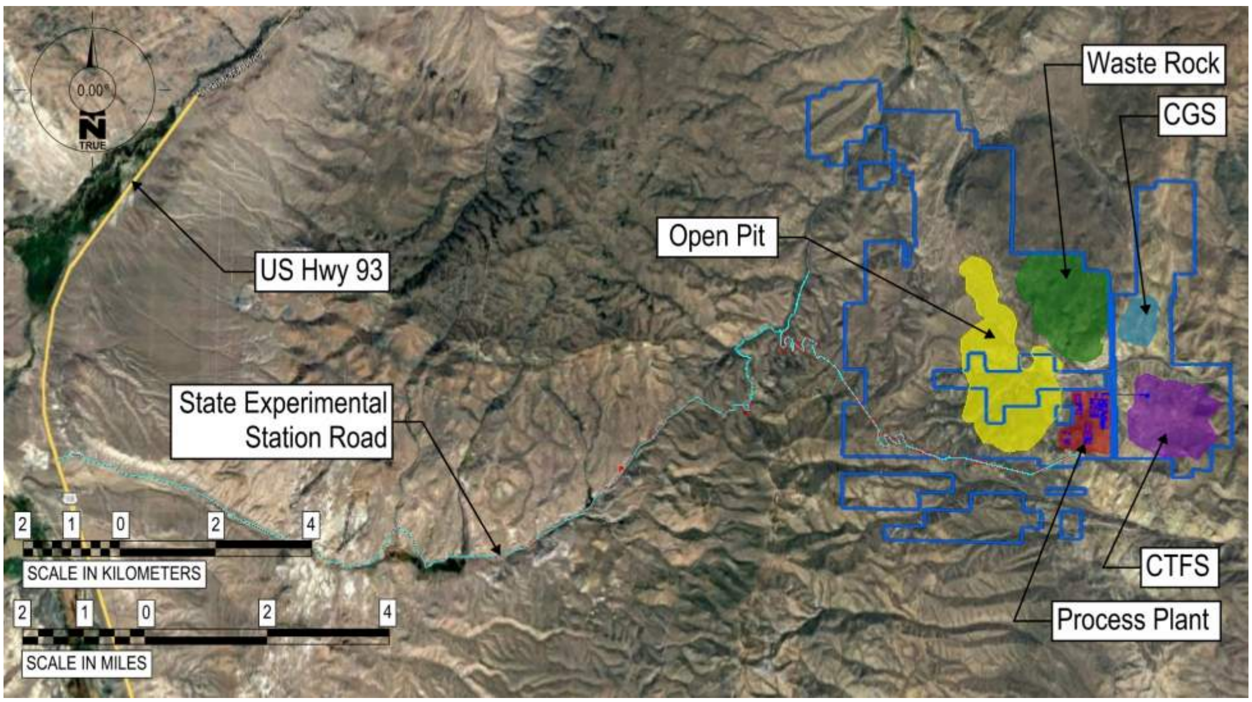
18 PROJECT INFRASTRUCTURE

18.1 SITE ACCESS AND GENERAL ARRANGEMENT

The Project envisions improving the junction of US Hwy 93and State Experimental Station Rd, which lies 38.5 km (24.0 mi) south of Jackpot, NV and 68.4 km (42.5 mi) north of Wells, NV on US Hwy 93. Approximately 22.8 km (14.2 mi) of State Experimental Station Rd and paralleling Knoll Creek will be upgraded as this section is presently for high clearance four-wheel drive vehicles in fair weather and dry road conditions. A new 11.3 km (7.0 mi) road will be constructed from State Experimental Station Rd, skirting the south side of the open pit to access the process plant.

The 34.1 km (21.2 mi) access road from US Hwy 93will allow for legal haul tractor-trailers for construction and operations, including flatbed deliveries for bulk materials and wide load transports delivering plant facility equipment.

See overall site general arrangement including the process plant, open pit, waste rock, coarse gangue storage (CGS) and clay tailings filter stack (CTFS) in Figure 18-1.



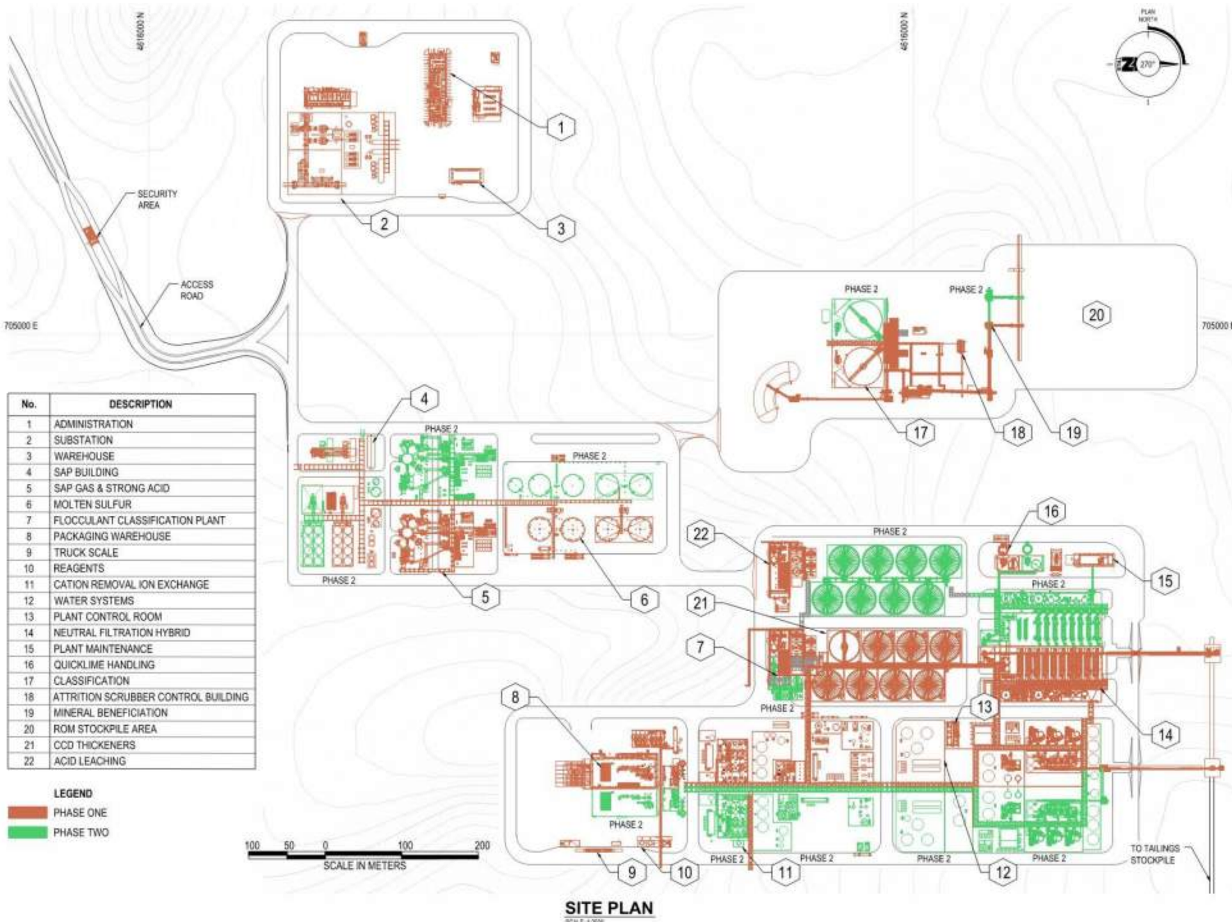
Source: M3, 2025

Figure 18-1: Overall Site General Arrangement

18.2 PROCESS PLANT GENERAL ARRANGEMENT

The front-end portion of the process facilities encompass mineral beneficiation and classification. This area includes the ROM pad, feeder breakers and mineral sizers, log washing and attrition scrubbing. Additionally, the front end of the classification circuit is located on this pad and consists of the gravity concentrators, hydraulic classifiers, thickening and coarse gangue discharge and stacking system.

The remainder of the process plant is located in immediate proximity to the classification. The slurry is transferred to the downstream plant via a pipeline. See Figure 18-2 for the general arrangement layout of the process facilities. The remainder of the classification (centrifuges), leach, and neutralization circuits begin the process flow on this site. Next the solution is sent to the counter current decantation (CCD) circuit before being sent to the filtration area. Magnesium remo val continues to the central section of the plant before flowing to calcium precipitation, multivalent ion exchange, evaporation, and lithium carbonate production followed by ZLD crystallization. The packaging system, along with the warehouse, are in the vicinity of the lithium carbonate plant to minimize product transfer distance. The sulfuric acid plant is situated in the central portion of the layout.



Source: M3, 2025

Figure 18-2: Process Plant Site General Arrangement

18.3 RAW MATERIAL LOGISTICS

Raw materials for the Project are to be delivered to the site by over highway trucks during the life of mine. A local rail-to-truck transload facility will allow for transfer of most raw materials for delivery to the Project site. The transload facility will be located between Wells and Jackpot, Nevada. A summary of the primary raw materials to be used during operations, and their logistics, is below in Table 18-1. The cost per tonne of the raw material is included in the OPEX for the consumables.

Table 18-1: Primary Raw Material Logistics Scheme

Raw Material	Description
Formed Prill Sulfur	Includes unloading, storage, and delivery to the plant via truck tanker from the transload facility.
Soda Ash	Includes unloading, storage, and direct delivery to the plant via 24-short ton truck trailer from a producer in Green River, WY.

Raw Material	Description
Quicklime	Includes unloading, storage, and direct delivery to the plant via truck trailer from a producer in West Wendover, NV.
Limestone	Includes unloading, storage, and direct delivery to the plant via truck trailer from a producer in West Wendover, NV.

18.4 ELECTRICAL POWER SUPPLY

Electrical power for the Project will be primarily supplied by on-site power generation from the waste heat produced by the sulfuric acid plant through a steam turbine generator. The balance of electricity will be supplied by the Wells Rural Electric Company, who are the electrical utility providers in the area of the NNLP, through one of the nearby high voltage transmission lines.

The source of the external electricity will be via either the 138 kV or 345 kV transmission lines that run parallel to US Hwy 93. The 138 kV line is owned by Idaho Power while the 345 kV line is owned by NV Energy. Consultations with Wells Rural Electric Company are ongoing.

18.4.1 In-Plant Power Generation

The acid plant produces steam during the production of sulfuric acid. Steam generated by the acid plants will be used in the lithium processing plants and to generate approximately 90 MW of electricity.

The in-plant power generation will consist of two approximately 45 MW Steam Turbine Generators, one each on Phase 1 and Phase 2, that provide normal power to the plant and Stand-by Diesel Generators that provide power for the plant black start operation and critical loads that require backup power upon loss of normal power.

Power will not be exported from in-plant generation to the grid.

18.4.2 Electrical Loads

Power was benchmarked using the Thacker Pass Project 2022 NI 43-101 Technical Report. The total power generation and import is summarized in Table 18-2.

Table 18-2: Electrical Load Generation vs Import

Power	Phase 1 (MW)	Phase 2 (MW)	Total Phase 1 & Phase 2 (MW)
Generation	44.9	44.9	89.9
Import	30.5	21.4	51.9

18.5 SULFURIC ACID PRODUCTION

The sulfuric acid plants for the Project are Double Contact Double Absorption (DCDA) sulfur burning sulfuric acid plants with heat recovery systems (HRS). The sizing of the plants is commensurate with other industry standard installations and represents favorable production versus capital. Future work may be done to further optimize sizing based on project-specific economics.

Phase 1 and Phase 2 will each have a single dedicated sulfuric acid plant capable of producing a nominal 3,000 t/d (100 wt% H_2SO_4 basis) of sulfuric acid by burning liquid elemental sulfur. Solid, prilled sulfur is delivered to site by truck and is stored under cover prior to being fed to the melter. The sulfuric acid generated from each plant is used in the process plant for the chemical production of lithium carbonate. The total annual operating days is based upon expected scheduled and unscheduled maintenance. Acid production is a function of the plant's nominal capacity and production over Design Capacity with production efficiency of the equipment decreasing over a three-year period until scheduled maintenance occurs. Each sulfuric acid plant has dry prill storage and liquid sulfur tankage providing a combined capacity of approximately 1 month. The sulfur is transferred from the prill barn to the melter and from there to the sulfur furnace.

The chemical processes in the sulfuric acid plant include combustion of sulfur to produce SO_2, catalytic conversion of SO_2 to SO_3 and absorption of SO_3 in acid, all of which generate large amounts of excess heat. This excess heat is captured via economizers, a waste heat boiler, and super-heaters to produce steam which, in turn, is used to generate electrical power via the acid plant steam turbine generator (STG) set. Energy recovery from the absorption reaction is maximized through the use of the HRS system which generates saturated intermediate pressure steam for internal process users with the balance superheated for injection into the STG set. Low pressure steam is extracted from the STG set for use in the lithium processing plant. Individual STG power output from other benchmark plants is 45.2 MW, and each sulfuric acid internal consumption is 13.0 MW, leaving a net export of 32.2 MW from each turbine for use by the lithium processing plant. Future engineering efforts will optimize capital cost and production capacity of the acid plants heat recovery systems based on downstream process steam requirements and electrical infrastructure capacity.

A separate Tail Gas Scrubber is provided for each sulfuric acid plant where residual SO_2 and acid mist in the tail gas is removed to less than US Environmental Protection Agency (US EPA) Prevention of Significant Deterioration (PSD) emission limits before the gas is expelled to atmosphere via a tail gas stack. Sodium hydroxide solution is used as the scrubbing medium and the effluent is consumed in the lithium processing plant.

Selective Catalyst Reduction (SCR)'s will be installed on both sulfuric acid plants to minimize nitrogen oxides (NOx) emissions when the second plant is built for Phase 2.

Water use in the sulfuric acid plants is pending optimization during future engineering. Site climate conditions are generally favorable to using a combination of fin fan air coolers and cooling towers for the dissipating head loads from the strong acid system, turbine generator, product acid cooling, and lube oil systems.

Liquid effluents are minimized in the plant design. Reverse osmosis rejects from the Water Demineralizer are returned to a common process water system for re-use. Storm Water is also collected and recycled.

18.6 WATER SUPPLY

Water required for Phase 1 mining and milling operations is estimated at 3,458 acre-feet per annum (AFA). Water required for Phase 2 mining and milling operations is estimated at an additional 2,961 AFA.

To the extent that open pit dewatering occurs in Phase 1 and Phase 2 mining and milling operations, the water produced during dewatering will offset production well pumping and be consumed in the mining and milling process. As the mineralized material is comprised of claystone, the volumes of dewatering water are estimated to be modest.

Infrastructure to supply water will include well drilling and equipping with pumps, extension of power to the wells, transmission pipeline from the wells to the mill facilities, and a booster pump to convey well water up to the mill facilities. Preliminary pipeline distances are up to approximately 2 to 7 miles from the proposed well locations to the mill facilities. Pipeline routes will primarily follow existing county roads.

18.7 TAILINGS

Lithium processing will produce tailings comprised of acid leach residue filter cake (clay material), magnesium sulfate salt and sodium/potassium sulfate salts, which is collectively referred to as clay tailings.

Placement of clay tailings, otherwise termed as “filtered tailings”, differs from conventional slurry tailings methodology and typically has higher operating costs but with the benefit of improved stability and reduced water consumption. At the tailings storage site, it is possible to reduce the tailings to a moisture content amenable to placement in the Clay Tailings Filter Stack (CTFS).

At the end of the leach neutralization process cycle, water from the clay tailings is recovered by solid-liquid separation (dewatering), utilizing filter presses. The filtered tailings are then transported by conveyor to the CTFS facility. In this state, the filtered tailings can be spread, scarified, air dried (if required) and compacted in lifts similar to the practice for typical earth embankment construction. The CTFS will be designed to store 195 Mt dry of leach tails and 109 Mt dry of salt tails. The CTFS will have a compacted perimeter structural zone to enhance stability and an HDPE liner for containment and environmental protection.

The footprint outlined on the overall site general arrangement assumes 3H:1V side slopes and a dry unit weight of leach tailing at 1.6 t/m^3 and salt tailing at 1.8 t/m^3.

18.8 COARSE GANGUE STOCKPILE

Coarse gangue is produced in the classification stage of the mineral processing unit operation and temporarily stacked by radial conveyors. The coarse gangue reject will be loaded and hauled from the process facility to the coarse gangue storage (CGS) facility located northeast of the process plant.

The CGS will be designed to store approximately 53.6 Mt dry of material and lined with a low hydraulic conductivity layer.

The footprint outlined on the overall site general arrangement assumes 3H:1V side slopes and a dry unit weight of coarse gangue at 1.6 t/m^3.

18.9 GROWTH MEDIA STOCKPILES

Several growth media stockpiles will store topsoil salvaged from proposed disturbance.

19 MARKET STUDIES AND CONTRACTS

Lithium market information presented in this section is gathered from a variety of sources, including industry studies and public commodity forecasts. The information presented here is current as of the fourth quarter of 2024. All pricing in this section is in US dollars.

19.1 RECENT HISTORICAL PRICING

Lithium demand displayed significant growth in 2021 and 2022 due to strong consumer demand for electric vehicles, increased product offerings and government policies to encourage electrification. This demand drove lithium prices to all time highs in the spot market. Battery Grade Lithium Carbonate reached prices into the $70,000 to $78,000 per tonne range and Lithium Hydroxide prices exceeded $80,000 per tonne in the 4th quarter of 2022.

Chinese electric vehicle production in 2023 and 2024 resulted in excess inventory of vehicles and batteries suppressing demand while cathode producers were increasing supply due to the supply growth spurred by previously high prices. The difference between supply and demand resulted in a drop of Lithium Carbonate prices to around $10,500 per tonne by the 2nd quarter of 2024. Mine supply dropped as the marginal producers slowed or shutdown production while the market rebalances between supply and demand. Such supply and demand shocks demonstrate that current pricing within China is not sustainable to maintain either existing production, nor production growth to reach the requirements of forecast market growth.

19.2 LITHIUM DEMAND 2025 AND BEYOND

The lithium market is forecast to grow beyond 2025 due to:

- Growth of electric vehicles in the consumer and commercial transportation markets;
- Growth of large battery storage systems, especially in light of increased power requirements from AI driven data centres.

Demand growth in portable electronics is forecast to be limited due to maturity of this segment but that growth still represents 2% of the total battery market, following the same growth curve as the other battery systems.

Figure 19-1 presents the battery demand by application projected to 2040.

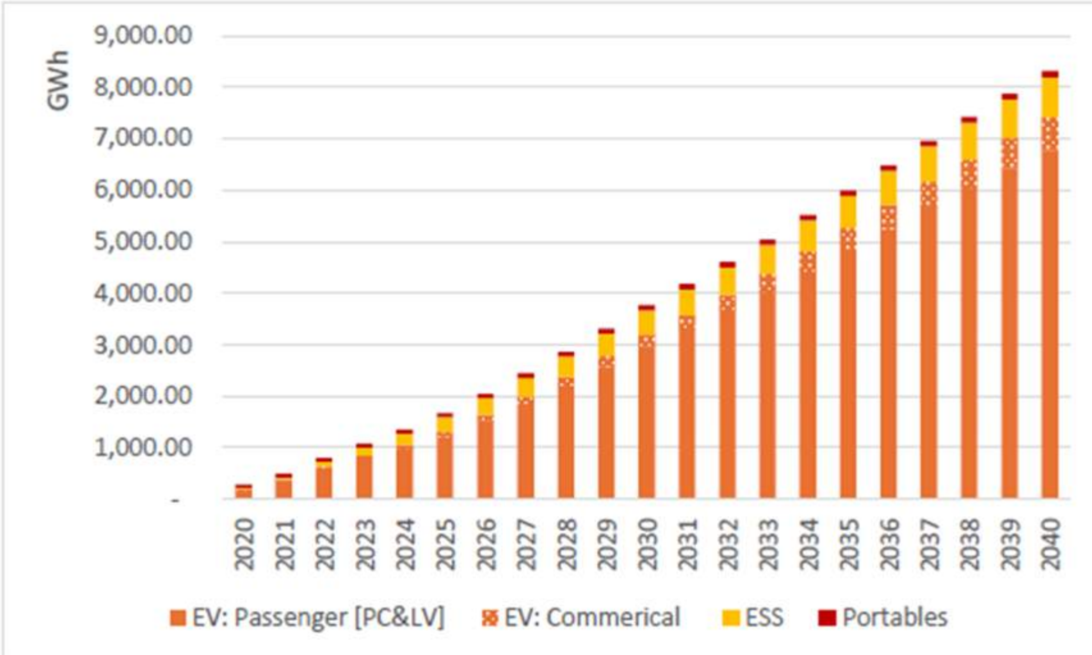


Figure 19-1: Forecast Power Battery Capacity Growth

Both Passenger and Commercial EVs are expected to increase penetration of vehicle markets over the next 15 years to 2040. In the larger volume market of passenger vehicles, EV penetration is expected to grow from 12.6% in 2024 to 27.0% in 2030 and 65.3% by 2040. Battery demand from passenger vehicles is further bolstered by Plug-in hybrid (PHEV) sales, with expected market share expansion from 7% in 2024 to 12.7% by 2030. Across both Passenger and Commercial segments, and accounting for both BEVs and PHEVs, sales are expected to continue to rise at 10+% CAGR to 2040 with a combined market share increasing from 20% in 2024 to 44% by 2030. By 2040, Benchmark forecasts that 75% of all road vehicle sales will be electric vehicles, either battery only or plug in hybrid.

In recent years, Energy Storage System (ESS) have leapfrogged portables to become the second largest market for lithium-ion batteries, spurred on by renewable energy infrastructure build out, bolstered by policy support, and low cell prices. ESS demand will continue to experience growth across the major markets and will come mostly from grid applications (2024-2040 CAGR of 8%) and behind-the-meter (2024-2040 CAGR of 10%). Combined, by 2040 demand for lithium-ion batteries from the ESS segment will be 4x the demand in 2024.

19.3 LITHIUM-ION BATTERY CATHODE ACTIVE MATERIAL

After EV adoption rates and EV type (which defines the battery pack size), battery chemistry (i.e., the chemistry of the cathode active material [CAM] used in the cell), is the second key driver for lithium demand. While lithium intensity is not materially different for the two dominant cathode chemistries - namely nickel-cobalt-manganese (NCM) and lithium-iron-phosphate (LFP) - the input chemical is: high-nickel NCM variants require the use of lithium hydroxide, while lithium carbonate is favoured for LFP production and mid-nickel NCM (particularly NCM 523).

Selection of CAM chemistry is the result of a trade-off between cost, energy density (which defines the driving range) and safety. LFP delivers the lowest cost but also the lower energy density limiting its application. By contrast, NCM and nickel-cobalt-aluminium (NCA) cathodes provide a higher energy density (and range), but a higher cost meaning that these CAM variants tend to dominate for premium EV ranges.

The middle range mass-market EV segment is where the trade-off between cost and range is more complex. In this segment, mid-nickel chemistries are dominant, for example, LG Energy Solution announced in 2024 that it intends to mass produce high voltage mid-nickel batteries by 2025, that chemistry faces competition from upcoming manganese-rich chemistries. The emerging LMFP (LFP with manganese) promises a larger range for a modest cost increase; while the nickel-manganese-rich NMx is premised on lowering the cost of nickel-rich batteries for a modest reduction in range.

The split between the main cathode types is expected to stay largely consistent for the forecast period - with NCM and LFP at around 40% and 50%, respectively.

The key uncertainties for the chemistry split forecast are the emergence of new chemistries, in particular the aforementioned manganese rich cathodes – NMx (categorized under LMNO in this Technical Report) substituting NCM and LMFP substituted for LFP. These new chemistries are expected to remain comparatively niche segments of demand. Their impact on lithium demand will also be minimal, however as all chemistries have relatively similar lithium intensities.

19.4 LITHIUM CHEMICAL DEMAND

The resulting demand outlook for refined lithium is presented in Figure 19-2 below. Battery applications are the only significant growth driver over the forecast period at 18% CAGR to 2030 and then at 7% CAGR from 2031-2040. Legacy non-battery applications (mostly glass & ceramics, lubricants and metallurgy) are forecast to grow at low pace. From an estimated 1.1 million tonnes LCE in 2024, global demand for refined lithium is expected to reach 2.7 million tonnes LCE by 2030 and 5.1 million tonnes LCE by 2040.

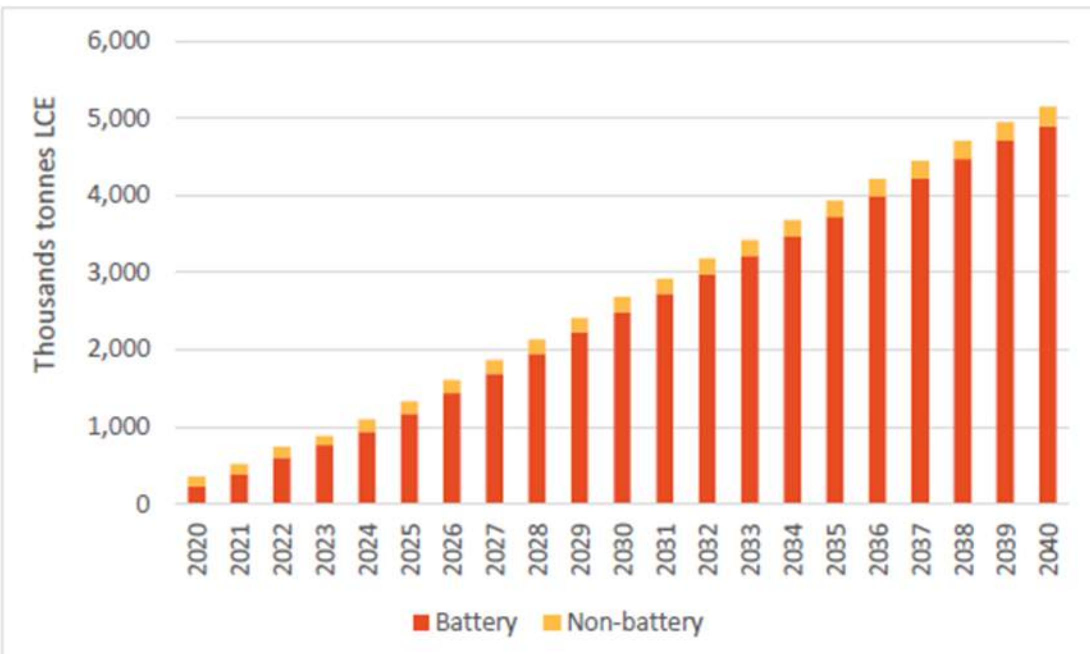


Figure 19-2: Global Demand for Refined Lithium to 2040

As discussed, refined lithium for battery applications is consumed in two chemical forms depending on the target chemistry of the cell. LFP, mid-nickel and emerging manganese based chemistries prefer lithium carbonate (low nickel NCM can also consume carbonate) while high nickel NCM and NCA require lithium hydroxide. Lithium carbonate demand contribution is estimated at 65% in 2024 primarily driven by China's LFP battery fleet (the largest in the world).

It is expected to diminish over time, albeit only slightly, to 62% in the early 2030s as hydroxide demand from higher energy density nickel-rich batteries grows in the ex-China regions.

It should be noted that while battery grade (BG, >99.5% LC) is usually what is being referred to, there are various grades of LC. Technical grade (TG, 99.2% LC) is usually referred to, but a number of different specs have been seen in the market (e.g. battery-ready grade). It should be emphasized that lithium chemicals are not a commodity; the only grade that really matters is the one that the customer demands and for which the supplier must qualify. Some LFP battery manufacturers, particularly in China, utilize TG lithium carbonate instead of BG material. Unlike NCM, the chemical structure of LFP can be largely maintained with technical grade carbonate, enabling cost savings in the production of batteries targeting ESS, E-Mobility and tier-2 and tier 3 EVs. It should also be noted that more often than not, users in China will reprocess lithium carbonate into a higher-grade LC or into LHM to suit their needs. This flexibility is another factor contributing to the apparent convergence of TG and BG pricing. This dynamic may present quite differently outside of China however, where there is little in the way of chemistry-conversion (e.g. Rio Tinto's plan in France) and upgrading, and strict qualification and specification requirements.

On a regional basis, China's share of global lithium chemical demand is forecast to have peaked in 2024 at 52% and is anticipated to gradually decline towards 33% by 2040. China is the dominant producer of the lithium ion battery industry and associated supply chains. Other regions are now playing catch-up and are entering faster phases of growth. This particularly applies to Europe and North America, both of which forecast 12% CAGR growth in lithium chemical demand through to 2040, compared to 7% in China.

19.5 LITHIUM RAW MATERIAL SUPPLY

Lithium can be present in economically significant quantities in igneous & sedimentary rocks (often generalised as "hard-rock"), lithium brines and unlithified clay deposits.

Lithium exists in most regions, and the resource base is not the limiting factor on higher rates of supply. Table 19-1 demonstrates that in all regions there are tens, if not hundreds, of years' worth of recorded reserves at the maximum rate of production currently proposed by existing and prospective lithium producers. However, most of these "reserves" according to TSX or ASX definitions are merely resources, exacerbating the limiting factor that is the time to fully develop certifiable reserves, and to finance, permit and build mines, scale up production and meet customer specific battery grade specifications.

Table 19-1: Recorded Resources and Supply Potential

Region	Total Reserves Mt LCE	2024 Production t LCE	2040 Unweighted Supply t LCE	Years of Supply Potential at Maximum Company Plans
Africa	25.89	100,700	486,759	53
China	35.49	264,461	891,620	40
Europe	40.96	2,000	274,000	149
North America	109.2	35,200	1,101,625	99
Oceania	47.65	465,000	801,000	59
South America	208.43	380,900	1,519,800	137

The global primary supply of lithium more than doubled between 2020 and 2023, from 370 kt LCE to 895 kt LCE. Amidst depressed prices in 2024, 11 new mines and five expansion projects began operation and global lithium supply reached almost 1.2 Mt LCE. Global growth is set to continue, propelled by new assets (USA, Australia, Africa and Argentina) and expansions (Chile), however the low price environment has resulted in the marginal producers shutting down or reducing output and modifying production plans, and underinvestment in developing the additional capacity required to meet the projected consumption.

19.6 LITHIUM PRICE FORECAST

Lithium prices have pulled back from recent highs in the market, as discussed above.

An analysis of quarterly market studies from various sources shows a high degree of variability from one forecast to the next. Forecasts for the 4th quarter 2024 had the long term lithium carbonate price at $29,000 per tonne, while the next quarterly forecast showed the long term price dropping to $23,000 per tonne. Earlier forecasts showed prices peaking at 36,000 per tonne, but those have recently pulled back.

The lithium market is still in it's infancy as a valued commodity, unlike precious and base metals where long term averages are applied for value estimates. As the lithium market matures, there will be more data that may be used to assess 1-year, 2-year and 3-year averages in financial models. Due to the disparity between forecasts and realized pricing over the last few years, a more prudent approach is to compare the 5-year trailing average price and project that concurrently with the forecasted long term prices.

Quarterly market studies also assess the impact of influencing factors from shorter term geopolitical conditions, which have an effect on the statistical analyses used for the longer term prices.

Long term market demand projections still indicate growth in the market, and supply will be dictated by realized market prices.

Table 19-2 presents lithium carbonate and lithium hydroxide historical and weighted average forecast prices collected from various studies and market reports. These weighted averages are calculated based on base, conservative and high price cases.

Recently published studies have considered long-term pricing up to $29,000 per tonne for lithium carbonate and lithium hydroxide.

The historical and forecast weighted averages of lithium hydroxide and lithium carbonate show an overall long-term weighted average price of $24,832 and $24,110 respectively per tonne.

For the purposes of this PEA, is the author of this section recommends using a price of $24,000 for lithium carbonate and lithium hydroxide. Sensitivity analyses conducted in Section 22 present the impact of variations in price to a range of +/-40%.

Table 19-2: Historical and Long Term Forecast Pricing

Price Forecast	Lithium Carbonate Market Estimates			Historical and Forecast Weighted Averages	Lithium Hydroxide Market Estimates			Historical and Forecast Weighted Averages
Year	Base	Conservative	High		Base	Conservative	High	
2020	10,179	10,179	10,179	10,179	12,631	12,631	12,631	12,631
2021	14,288	14,288	14,288	12,233	15,876	15,876	15,876	13,442
2022	72,076	72,076	2,076	32,181	74,336	74,336	74,336	20,388
2023	41,822	41,822	1,822	34,591	46,010	46,010	46,010	24,595
2024	14,126	11,708	5,334	30,417	14,232	11,796	15,450	26,199
2025	14,100	11,985	6,074	27,690	14,100	11,985	16,074	26,754
2026	14,000	11,760	6,100	25,728	14,000	11,760	16,100	26,834
2027	17,500	14,525	0,300	24,692	19,500	16,185	22,620	26,772
2028	25,000	20,500	9,250	24,717	25,000	20,500	29,250	26,731
2029	25,000	20,000	9,500	24,729	25,000	20,000	29,500	26,705
2030	25,000	18,750	29,750	24,708	25,000	18,750	29,750	26,688
2031	21,000	14,700	25,200	24,340	23,000	16,100	27,600	26,649
2032	21,000	14,700	25,410	24,035	23,000	16,100	27,830	26,597
2033	21,000	14,700	25,410	23,773	23,000	16,100	27,830	26,538
2034	21,000	21,000	21,000	23,588	23,000	23,000	23,000	26,474
2035	21,000	21,000	21,000	23,427	23,000	23,000	23,000	26,408
2036	21,000	21,000	21,000	23,284	23,000	23,000	23,000	26,341
2037	21,000	21,000	21,000	23,157	23,000	23,000	23,000	26,275
2038	21,000	21,000	21,000	23,043	23,000	23,000	23,000	26,210
2039	21,000	21,000	21,000	22,941	23,000	23,000	23,000	26,146
2040	21,000	21,000	21,000	22,849	23,000	23,000	23,000	26,084

19.7 CONTRACTS

There are no existing contracts on the Project.

20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

This Section of the PEA presents information on the permitting and regulatory requirements of the Project, environmental, social and community considerations, general management plans and monitoring, and conceptual mine closure and reclamation planning.

20.1 ENVIRONMENTAL PERMITTING STATUS

Since 2022, Surge has been conducting lithium mineral exploration activities under a Notice-level 5-acre limit of disturbance (Texas Spring Notice NVNV105861474).

Surge submitted an Exploration Plan of Operations # NVNV106332440 to the Bureau of Land Management (BLM) Wells Field Office and the Nevada Division of Environmental Protection (NDEP) Bureau of Mining Regulation and Reclamation (BMRR) for the Nevada North Lithium Exploration Project on November 14, 2023 in accordance with BLM Surface Management Regulations 43 Code of Federal Regulations (CFR) 3809, as amended, and Nevada reclamation regulations at Nevada Administrative Code (NAC) 519A. The BLM provided comments to Surge on December 13, 2023. Surge submitted the revised Exploration Plan of Operations (Surge, 2024a), which incorporated BLM comments, on January 31, 2024. Consistent with the surface management regulations at 43 CFR 3809.411(a), the BLM reviewed the revised Exploration Plan of Operations and determined that the plan meets the content requirements of 43 CFR 3809.401(b) on February 28, 2024.

In accordance with BLM Nevada's Instruction Memorandum (NV-IM) 2024-019, Surge prepared supporting documentation required for BLM to analyze the exploration project under the National Environmental Protection Act (NEPA). The BLM determined that the exploration project should be analyzed under an Environmental Assessment (EA) level review. All baseline reports, Supplemental Environmental Reports (SERs), and Supplemental Information Report (SIR) have been prepared and deemed complete and approved by BLM. BLM posted the Preliminary EA for a 30-day public comment review on December 20, 2024. BLM finalized the EA and issued a Finding of No Significant Impact (FONSI) and Decision Record for the Nevada North Lithium Exploration Project on March 5, 2025.

20.2 REGULATORY, LEGAL, AND POLICE FRAMEWORK

Surge will need to secure permits and authorizations from several Federal, State, and local agencies to construct, operate, and close/reclaim the Nevada North Lithium Project. Table 20-1 provides a preliminary list of anticipated Project-related approvals and authorizations. The subsequent subsections provide a description of the critical path permits. Surge anticipates securing the required Federal, State, and local permits required to construct, operate, and reclaim the mine operations within a reasonable timeframe in line with other similar open pit mine operations in Nevada recently permitted.

Table 20-1: Anticipated Federal, State, and Local Permits and Authorizations

Anticipated Permit / Authorization	Regulatory Agency	Purpose
Federal		
Plan of Operations/ Record of Decision (ROD)	BLM Wells Field Office	Describe how Surge will develop the Project in accordance with BLM Surface Management Regulations under 43 CFR 3809, Surface Occupancy regulations under 43 CFR 3715 to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. The BLM approves the Plan of Operations and determines the required environmental studies (assumed to be an Environmental Impact Statement [EIS] for a mining operation) based on the requirements outlined in NEPA. A ROD explains the agency's decision, describes the alternatives the agency considered, and discusses the agency's plans for mitigation and monitoring, if necessary.
Jurisdictional Determination	US Army Corps of Engineers (USACE)	Determines that jurisdictional waters of the United States are either present or absent on a particular site and if the resources are regulated by the Clean Water Act under Section 404.
404 Permit	USACE	Authorization for placement of fill materials into Waters of the United States (WOTUS), including wetlands under the Clean Water Act under Section 404.
Biological Opinion	U.S. Fish and Wildlife Services (USFWS)	Provides a means to conserve the ecosystems upon which endangered and threatened species depend and provides a program for the conservation of such species under the Endangered Species Act (ESA) Section 7 Consultation.
Incidental Take Permit (ITP)	USFWS	Protection of bald and golden eagles under the Bald and Golden Eagle Protection Act, including seeking an ITP pursuant to Section 7 of the ESA, if necessary.
Cultural Resources Assessment	Nevada State Historic Preservation Office (SHPO)	Consultation with the Nevada SHPO required to initiate Section 106 review under the National Historic Preservation Act.
Explosives Permit	U.S. Department of Treasury, Bureau of Alcohol, Tobacco, Firearms, and Explosives	Permits are required for transport, storage, and use of explosives.
Mine Identification Number	Mine Safety and Health Administration (MSHA)	An MSHA Mine ID is a unique identifying number required for each underground and surface mine site before any operations may begin.
Hazardous Waste Identification Number	Environmental Protection Agency (EPA)	The EPA Hazardous Waste Identification number is a unique 12-character number that identifies the operator and the physical site where hazardous waste is handled.
State		
Reclamation Permit	NDEP - BMRR	NDEP - BMRR works in coordination with the BLM for projects on public land to establish reclamation guidelines and a reclamation cost estimate to support project bonding. This permit and associated bond ensure land disturbed by mining activities is reclaimed to safe and stable conditions to promote post-mining land uses. NDEP-BMRR will issue a Reclamation Permit to an operator prior to construction of any exploration, mining, milling, or other beneficiation process activity that proposes to create disturbance over

Anticipated Permit / Authorization	Regulatory Agency	Purpose
		5 acres. Reclamation is regulated in Nevada under the authority of the Nevada Revised Statutes (NRS) 519A.010 - NRS 519A.280 and NAC 519A.010 - NAC 519A.415.
Water Pollution Control Permit (WPCP)	NDEP - BMRR	Mines operating in the State of Nevada are required to have a WPCP to ensure protection of Waters of the State (WOTS) during mining activities. Mining in Nevada is regulated under the authority of the NRS 445A.300-NRS 445A.730 and NAC 445A.350-NAC 445A.447. NDEP-BMRR will issue a WPCP to an operator prior to the construction of any mining, milling, or other beneficiation process activity.
Surface Area Disturbance Permit and Air Quality Permit to Construct/Permit to Operate	NDEP - Bureau of Air Pollution Control (BAPC)	A Surface Area Disturbance Permit is required for any project that disturbs more than 5 acres. An operator of any proposed stationary source must apply for and obtain an appropriate operating permit before commencing construction or operation. Class II Air Permit - Typically for facilities that emit less than 100 tons per year for any one regulated pollutant and emit less than 25 tons per year of total Hazardous Air Pollutants (HAPs) and emit less than 10 tons per year of any one HAP. Any process/activity that is an emission source requires an Air Quality Permit. It is the public policy of the State of Nevada and the purpose of NRS 445B.100 to 445B.640, inclusive, to achieve and maintain levels of air quality which will protect human health and safety, prevent injury to plant and animal life, prevent damage to property, and preserve visibility and scenic, esthetic and historic values of the State.
Stormwater National Pollutant Discharge Elimination System (NPDES) Multi-Sector General Permit (MSGP) for Stormwater/ Stormwater Pollution Prevention Plan (SWPPP)	NDEP - Bureau of Water Pollution Control (BWPC)	The BWPC protects the WOTS from the discharge of pollutants and regulates all discharges to WOTS through issuing permits and enforcing the State's water pollution control laws and regulations. Discharges to surface water bodies are permitted under the NPDES Program pursuant to Section 402 of the Federal Clean Water Act as amended and the State of Nevada Water Pollution Control Law (NRS 445A.300-445A.730).
Section 401 Certification	NDEP - BWPC	If a permit under Section 404 of the Clean Water Act is required from the USACE, a Section 401 Certification is also required. Projects requiring water quality certification from the State of Nevada must comply with the Clean Water Act Section 401 Certification regulations that EPA promulgated in 2023, codified as 40 CFR 121.
Working in Waterways Permit	NDEP - BWPC	Required for work in surface waters or any water conveyance feature of the State using equipment even if they are dry. This permit is required even if 404/401 permitting is not needed and expires after 180 days. A project may obtain up to two temporary permits and if construction in waterways is expected to last beyond 360 days, then an individual permit would be required.
Permit to Appropriate Water	Nevada Division of Water Resources (NDWR)	Water rights are issued by NDWR and the State Engineer based on Nevada water law which allocated rights based on appropriation and beneficial use within the water basin. Any person who wishes to appropriate any of the public waters, or to change the place of diversion, manner of use or place of use of water already appropriated, shall, before performing any work in connection with such appropriation, change in place of

Anticipated Permit / Authorization	Regulatory Agency	Purpose
		diversion or change in manner or place of use, apply to the State Engineer for a permit to do so (NRS 533.325).
Dam Safety Permit	NDWR	Construction, reconstruction, alteration and decommissioning of dams requires filing an application with the State Engineer in accordance with NAC 535.210. The goal of Nevada's dam safety program is to avoid dam failure and prevent loss of life and destruction of property.
Industrial Artificial Pond Permit	Nevada Department of Wildlife (NDOW)	Required for an operator that develops or maintains an artificial body of water containing chemicals directly associated with the processing of mineralized material must first obtain a permit from the NDOW authorizing the development or maintenance of the body of water under NRS 502.390.
Highway Encroachment Permit	Nevada Department of Transportation (NDOT)	NDOT grants permits for permanent installations within State Right-of-Way (ROW) and in areas maintained by the State. An encroachment permit and an NDOT-approved traffic control plan must be secured before performing this type of work within NDOT ROW.
Certificate of Public Convenience and Necessity (CPC) for Power Generation	Public Utilities Commission of Nevada (PUCN)	Pursuant to NRS 704.330, a CPC is an authorization issued by the PUCN to own, control or operate a public utility within Nevada, which designates the area to be served and the type of utility service to be provided.
Hazardous Waste Management Permit	NDEP - Bureau of Sustainable Materials Management	As prescribed in NRS 459.400, the purpose of the hazardous waste program is to protect human health, public safety and the environment from the effects of improper, inadequate or unsound management of hazardous waste. This is accomplished by establishing programs that regulate the storage, generation, transportation, treatment and disposal of hazardous waste. The hazardous waste program is responsible for permitting and inspecting hazardous waste generators and disposal, transfer, storage and recycling facilities.
Class III Solid Waste Landfill	NDEP - Bureau of Sustainable Materials Management	As prescribed in NAC 444.733, an operator must apply for a permit to operate a Class III site to the solid waste management authority. Class III means a disposal site that accepts only industrial solid waste.
Hazardous Materials Storage Permit	Nevada Department of Public Safety, State Fire Marshal's Division (SFM)	As stated in NAC Code 477.323, a person shall not store hazardous material more than the amount set forth in the International Fire Code, 2018 Edition as adopted pursuant to NAC 477.281, unless he has been issued an operational permit by the State Fire Marshal to store that material. A hazardous materials permit must be renewed annually through the SFM.
Septic System Permit	Department of Health and Human Services Nevada Division of Public and Behavioral Health (DPBH)	Approval must be obtained from the DPBH prior to constructing, altering or extending an individual sewage disposal system. This approval for new construction is required before any building permit may be issued for any structure which requires an individual sewage disposal system.
Local		
Building Permit	Elko County Building and Safety Division	The proponent needs to secure a building permit following the Commercial \ Industrial Application Requirements.
Conditional Use Permit	Elko County Planning and Zoning Division	This permit ensures that the standards applied to a project will comply with Elko County Code Title 4, Chapter 9.

20.3 FEDERAL PERMITTING

20.3.1 Plan of Operations /Record of Decision

The NNLP is located on unpatented Federal mining claims administered by BLM. Surge will submit a Plan of Operations and Reclamation Plan to develop the mining project in accordance with BLM Surface Management Regulations under 43 CFR 3809, Surface Occupancy regulations under 43 CFR 3715, and Nevada reclamation regulations under NAC 519A. The BLM and NDEP-BMRR will concurrently review the Plan of Operations (including the Reclamation Plan that serves as the Reclamation Permit Application) under a Memorandum of Understanding between these two agencies.

The Plan of Operations will comply with BLM regulations associated with preparation of Plan of Operations and Reclamation Plan (43 CFR 3809.401 and 43 CFR 3809.420); and Nevada guidance for Preparation of Operating Plans for Mining Facilities (NAC 445A.398) including all associated drawings/figures, maps, and attachments.

Instruction Memorandum (NV-IM) 2024-019 provides guidance to all BLM Nevada offices on the NEPA project management process including review and publication of Environmental Impact Statements (EISs) and EAs that cover major projects and other applicable Federal actions subject to compliance with NEPA. Surge assumes that the BLM will determine an EIS-level review will be required to assess the environmental effects of the Project under NEPA.

NV-IM-2024-019 describes the protocol all Nevada BLM offices must follow for processing and approving Federal actions, including:

- Implementation and procedural guidance for project initiation and pre-planning.
- Project management associated with NEPA compliance analysis.
- Consistency within BLM Nevada in complying with applicable regulations when authorizing Federal actions.

The initial project review process under NV-IM-2024-019 includes the initial project review process (pre-NEPA) including the submittal of a project proposal (Pre-Plan of Operations), multi-agency/stakeholder baseline kickoff meeting, and determination of baseline surveys requirements. The Baseline Needs Assessment Form (BNAF) identifies the required environmental baseline work plans and data collection needed for the Project along with associated survey protocols. The BNAF also identifies absence or presence of affected resources to support the effects analysis under NEPA.

Under this NV-IM, all baseline reports as determined by the BNAF, the Plan of Operations, Supplemental Information Report (SIR), and Supplemental Environmental Reports (SERs) need to be completed and approved by BLM prior to initiating the NEPA process. The SIR provides a detailed description of the proposed action, no action, and alternatives considered. An SER provides a summary of the proposed action and alternatives considered, a detailed description of the affected environment, and detailed effect analysis. For an EIS, the NEPA process begins on the date that the Notice of Intent (NOI) is published in the Federal Register.

NV-IM-2024-019 also outlines the typical process by which BLM will complete an EIS and issue a ROD and describes procedures that ensure all EISs do not exceed 150 pages (or 300 pages for unusually complex projects), and that RODs are approved within one year of the publication of the NOI. Upon completion of the analysis under NEPA (issuance of the ROD), the Plan of Operations (including the Reclamation Plan) may be subject to changes necessary to meet the performance standards of 43 CFR 3809.420 and to prevent unnecessary and undue degradation.

The Project's permitting schedule may benefit from implementation of the Executive Order (EO) 14241 titled Immediate Measures to Increase American Mineral Production issued in March 2025 to streamline permitting processes for mining projects, particularly those focused on critical minerals. In addition to specific this EO and BLM Nevada direction, Surge also recognizes recent changes made to NEPA and assumes BLM will comply with the Department of Interior's (DOI's)

July 3, 2025 Interim Final Rule, including adherence to 516 DM 1 – US DOI Handbook of NEPA Implementing Procedures.

Surge is committed to completing all required baseline characterization studies and analysis as required by the BLM and cooperating agencies. No major issues or challenges have been identified to date that would affect the preparation and submittal of the Plan of Operations and Reclamation Plan, and all documents required to complete the effect analysis under NEPA.

20.3.2 404 Permit

The USACE will issue a Jurisdictional Determination to establish whether a specific area of water is considered Waters of the United States (WOTUS) under the Clean Water Act. Mining activities including operations that may discharge dredged or fill material into WOTUS, including wetlands, require a Section 404 Permit. If a permit under Section 404 of the Clean Water Act is required from the USACE, a Section 401 Water Quality Certification from NDEP is also required (see Section 20.4).

Surge will complete the relevant field studies and characterization work to provide the USACE the required information to issue a Jurisdictional Determination for the Project.

20.4 STATE PERMITTING

NDEP-BMRR is the primary State agency regulating mining and is responsible for administering Nevada's mining laws and regulations, designed primarily to protect water resources, and ensuring that disturbed lands are reclaimed to a productive post-mining land use. NDEP- BAPC is responsible for compliance and enforcement of all applicable Federal and State air quality rules and regulations to prevent deterioration of the air quality.

The State of Nevada requires permits for all mineral exploration and mining operations regardless of the land status. Most State permits and authorizations require public notice and a comment period (before a permit is approved) following the completion of an administrative and technical review of the proposed facilities permit application.

The subsections below describe the most comprehensive State operational permits that will likely be required for the Project.

20.4.1 Reclamation Permit

An operator must secure a Reclamation Permit prior to development of any exploration, mining, milling, or other beneficiation process activity that would create disturbance over 5 acres. NDEP-BMRR Reclamation Branch regulates mining and mineral exploration through the Reclamation Permit and under the authority of NRS 519A.010-NRS 519A.280 and NAC 519A.010-NAC 519A.415. A permit issued for a mining operation is valid for the life of the operation unless it is suspended or revoked by NDEP.

The application for a Reclamation Permit must include a detailed description (including maps and supporting technical data) of the measures that will be employed to reclaim each facility to be constructed and operated during the mine life. The Reclamation Plan for the Project will be included as part of the Plan of Operations submittal to BLM and NDEP-BMRR.

20.4.2 Water Pollution Control Permit

Any mining operation, including, but not limited to, the mine, overburden and mineralized material stockpiles, beneficiation process components, processed mineralized material disposal sites, and all associated buildings and structures that have the potential to degrade WOTS is required to secure a Water Pollution Control Permit (WPCP).

NDEP-BMRR Regulation Branch administers the WPCP application process in accordance with NAC 445A.350 through NAC 445A.447. The WPCP describes the requirements for the management and monitoring of the mine and mineralized material processing operations, including the fluid management system, to prevent the degradation of WOTS. The permit also includes procedures for temporary, seasonal, and tentative permanent closure of mine and mineralized material processing operations. The mine operator is required to submit a tentative permanent closure plan as part of the application for a WPCP. A final permanent closure plan must be submitted to the NDEP-BMRR 2 years prior to the anticipated mine closure.

Surge will complete the required level of engineering to meet the requirements of the WPCP application. Preparation of the WPCP application may be completed concurrently with effect analysis under NEPA.

20.4.3 Air Quality Permit

The NDEP - BAPC issues air quality operating permits to stationary and temporary mobile sources that emit regulated pollutants to ensure that these emissions do not harm public health or cause significant deterioration in areas that presently have clean air. The type of Air Quality Permit required is based on emissions for any one regulated pollutant, total Hazardous Air Pollutants (HAP) emissions, type of emission sources, and proposed surface disturbance. Permits are issued in accordance with NAC 445B.001 through NAC 445B.3689. NDEP-BAPC has primacy for air quality activities in Elko County under the Federal Clean Air Act of 1970, as amended.

The Project is expected to generate HAP and Greenhouse Gas (GHG) emissions from fuel combustion by process sources and mobile mining equipment. The Project is also expected to generate hydrogen sulfide (H_2S) and sulfuric acid mist (H_2SO_4) emissions from the sulfuric acid plant and lithium processing sources. Surge will complete a project emissions inventory to determine the emissions threshold applicable to the Project and regulatory requirements.

20.4.4 401 Certification

The State of Nevada defines Waters of the State (WOTS) in Nevada Revised Statute (NRS) 445A.415 to mean all waters situated wholly or partly within or bordering upon this State, including but not limited to:

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

Given this definition, some aquatic resources may not be a federally jurisdictional WOTUS but still be regulated by Nevada as a WOTS. In those cases, although no Federal permit may be required, State permitting for work occurring in, over, or near WOTS may still be required.

Surge will develop the mine plan to protect the WOTS including management of process, contact, and non-contact water through development of adequate engineered control measures and best management practices, in accordance with applicable permits and regulations.

20.4.5 Water Rights

NDWR issues approvals to use groundwater for mining, milling, and domestic purposes. In Nevada, pit dewatering is considered a beneficial use of water, requiring water rights. Consumptive use, which is water that is withdrawn or diverted and not returned to the water source, is a key consideration in water rights and pit dewatering permitting. Surge anticipates water supply requirements for Phase 1 at 3,200 AFA and an additional 3,200 AFA during Phase 2, for a total of 6,400 AFA.

The primary source of water supply to support the construction period and Phase 1 is proposed to consist of groundwater wells located east of the Project area in the Thousand Springs Valley (NDWR Hydrographic Basin No. 189B). Surge estimates that a minimum of two water supply wells could produce 2,250 AFA. The number of production wells will be determined by the production rate capabilities of the wells, including some contingency to ensure uninterrupted water supply. Surge intends to secure water rights from both new appropriation filings, including pending application 92745, and future leases of existing permitted water rights in the hydrographic basin.

Surge has filed for a new water rights appropriation for mining and milling of 600 AFA within the Salmon Falls Creek Valley (NDWR Hydrographic Basin No. 040). Surge intends to install one or more water supply wells on the western side of the Project area to supplement the primary water supply wells during construction and Phase 1. The preliminary well location for this production is the point of diversion for water right application 92746.

To the extent that open pit dewatering occurs in Phase 1 and Phase 2, the water produced during dewatering will offset production well pumping and be consumed in the mining and milling process. Based on information available to date, Surge estimates that the pit dewatering volume will be relatively modest (approximately 161 AFA or 100 gpm on a continuous long-term basis).

To fulfil the water supply requirements during Phase 2, Surge intends to secure water rights through acquisition or lease of existing permitted water rights in the Salmon Fall Creek Valley, with additional water supply wells drilled on the valley floor and water conveyed up to the process facility.

20.5 ENVIRONMENTAL STUDIES

20.5.1 Existing Studies

Surge completed environmental baseline characterization studies in 2023 and 2024 over a 7,819-acre project area to support permitting of the Nevada North Lithium Exploration Project. Survey areas for specific resources included an additional spatial buffer from the exploration project area. Baseline field surveys included the following:

- A water resources desktop survey was conducted within the 7,819-acre project area and the surrounding area extending 5 miles from the boundary. Field inspections of springs and stream channels within 0.5 miles of the exploration project area were completed in September 2023 and expanded to cover a 1-mile buffer from the project area in May 2024 (UES Consulting Services, Inc. [UES], 2024a). Field surveys were conducted in fall 2024 for streams, seeps, and springs including a 5-mile buffer (UES, 2025). Surveys included flow measurements and sampling for water quality analysis.
- Wetland and riparian areas desktop and field investigations were completed within the 7,819-acre exploration project area plus a 1-mile buffer from the boundary (UES, 2024b) to determine if there are any indicators of potential aquatic resources within the survey area, and to delineate existing riparian areas.
- General wildlife and vegetation field surveys, including special status species and noxious weeds and other invasive species were conducted from June to September 2023 (Western Biological [WB], 2024) within the exploration project area.
- Greater sage-grouse lek surveys were performed in 2023 and 2024 (WB, 2024;2025a) within an area including the 7,819-acre project area and a 4-mile buffer.
- Raptor and eagle nest monitoring aerial surveys were conducted April and May of 2023 and 2024 (WB, 2024; WB, 2025b) within an area including the 7,819-acre project area and a 4-mile buffer.
- Migratory bird surveys were conducted concurrently with pedestrian general wildlife surveys conducted between June and September 2023 (WB, 2024).

- A Class III cultural resources inventory was conducted between August and November 2023 over an Area of Potential Effect of approximately 7,956 acres including the entire exploration project area and associated access routes (Harmon and LeBlanc, 2024).

Based on the environmental baseline studies completed to date to support the exploration project, Surge does not anticipate issues that would significantly affect mine planning or preclude securing required permit and development and operations of the Project.

20.5.2 Ongoing and Future Studies

Surge anticipates continuing, and as necessary expanding the surveys or survey area boundaries for the resources listed above and characterizing other resources through additional baseline studies and field surveys to further document existing environmental and social conditions in and around the mine operation Project area. These studies will be used to both support the development of a Plan of Operations and subsequent NEPA analysis as outlined below.

As part of the established process under NV IM-2024-019, Surge will engage with the BLM Wells Field Office and submit a draft proposed action or conceptual mine plan in the form of a Pre-Plan of Operations for informal review and guidance by the agency. BLM will then complete the BNAF with input from the BLM interdisciplinary team and appropriate Federal, State, local, and Tribal entities. Surge anticipates engaging with BLM and presenting the Pre-Plan of Operations in the second half of 2025 and expanding/initiating additional baseline data collection efforts in 2026 to support the multi-Federal and State agency permitting processes, and the environmental documentation process required under NEPA.

Surge anticipates that the studies and analyses presented in Table 20-2 will be required to support permitting the Project. The complete list of surveys and studies required will be described in the BNAF. Surge will ensure that the breadth and depth of the environmental and social studies are adequate to characterize the existing conditions and to support studies and analyses as determined necessary by the BLM. Surge may expand these surveys and/or perform additional baseline characterization studies and analyses on other resources as deemed necessary by the agencies to support State and Federal permitting processes, including BLM's effect analysis under NEPA.

Table 20-2: Anticipated Baseline Studies and Analyses

Resources / Resources Use	Anticipated Studies/Analyses[1]
Water Resources	• Surface water, seeps, and springs field surveys (water flow and water quality sampling) • Groundwater (groundwater level and water quality sampling) • Aquifer testing • Numerical regional groundwater model and fate and transport model • Water balance / dewatering analysis • Pit lake modeling (solute transport modeling)
Wetlands and WOTUS	• WOTUS Delineation • Assessment of characteristics and indicators of hydrophytic vegetation, hydric soils, and wetland hydrology • Proper functioning conditions of riparian and wetland areas • Aquatic resources survey (e.g., spring snails and macroinvertebrates) • USACE Jurisdictional Determination

Resources / Resources Use	Anticipated Studies/Analyses[1]
Geochemistry Characterization	• Mineralized material, waste rock, coarse gangue, tailings geochemical characterization testing • Static testing and specialized testing (discrete and composite) on mineralized material, waste rock, gangue, and tailings: Acid Base Accounting and paste pH, elemental composition, mineralogical analyses, Meteoric Water Mobility Procedure, Net Acid Generation (NAGpH and NAGpH extract testing) • Kinetic testing on mineralized material, waste rock, coarse gangue, and tailings: Humidity Cell Testing and leach column testing
Biological Resources	• Annual migratory bird and raptor nest surveys • General wildlife • Vegetation • Noxious weeds and invasive species • Special status species • Annual lek surveys • Pinyon Jays surveys
Air Quality and Climate Change	• Meteorological and ambient air quality monitoring • Emissions rate estimates (i.e., Particular Matter less than 10 Microns in Diameter [PM_{10}], $PM_{2.5}$, carbon monoxide, sulfur dioxide, nitrogen oxides, lead, ozone, and Volatile Organic Compounds, and Greenhouse Gases) • Air dispersion modeling
Soil	• Soil map units and characteristics • Soil profile and landscape descriptions • Soil properties and suitability for reclamation use • Material balance for reclamation use • Laboratory analysis of soil samples for selected physical (i.e., soil texture, organic matter content, coarse fragment content) and chemical characteristics (i.e., pH and metals)
Cultural Resources	• Class III cultural resources inventory (in areas not previously surveyed)
Native American Traditional Values	• Ethnographic study to document the cultural practices, beliefs, and customs of a Tribe or community
Paleontological Resources	• Pre-disturbance field surveys within specific Potential Fossil Yield Classification areas
Geotechnical	• Drilling and test pits sampling to characterize the engineering properties of subsurface soil and identify other soil/material properties that will support mine facility siting and design • Stability analysis for pit wall, overburden and coarse gangue stockpiles, filtered tailings facility
Socioeconomic Studies	• Literature review of publicly available information on land ownership, population and demography, economy and employment, income, housing, community facility and services, education and social values
Aesthetics – Visual Resources	• Visual simulations of proposed mine facilities from selected Key Observation Points
Land Use and Transportation	• Literature review of publicly available information on land use authorizations • Traffic study • Desktop review of public access, transportation, and traffic patterns in the Project area
Recreation	• Review of Federal, State, and local laws, regulations, and guidelines for recreation and wilderness resources management to describe recreational use

Resources / Resources Use	Anticipated Studies/Analyses[1]
Noise	• Ambient noise baseline data collection • Noise modeling
Livestock Grazing	• Livestock grazing allotment literature review

[1] Some of these baseline studies have already been completed to support the Nevada North Lithium Exploration Project. Some surveys may continue or be expanded, including expanded survey areas, to support the mine operation.

20.6 POTENTIAL ENVIRONMENTAL ISSUES

At this early stage, the QP is not aware of any known environmental issues that would preclude development of a mine operation based on environmental studies conducted in and around the exploration project area. There are no identified issues that are expected to prevent Surge from securing all permits and authorizations required to commence construction and operation of the Project based on the data that has been collected to date.

20.7 WASTE ROCK, COARSE GANGUE, AND TAILINGS MANAGEMENT

BLM requires that mining and processing operations on public lands prevent unnecessary or undue degradation of the land through source control or capture and treatment (43 CFR 3809.1(a)). State requirements mandate that mine, material processing, and fluid management system operations do not degrade waters of the State (NAC 445A.424). Surge will design and construct the overburden stockpile and filtered tailings facility as required by Federal and State regulations.

BLM IM NV-2013-046, Nevada Bureau of Land Management Rock Characterization Resources and Water Analysis Guidance for Mining Activities (BLM, 2013) outlines the rock and water resources data information that needs to be collected under 43 CFR 3809.401(b)(2) and 3809.401(c)(1) for Plans of Operation. Additional guidance on material characterization and evaluation was issued by NDEP-BMRR (NDEP BMRR, 2025) pursuant to the WPCP program and associated NAC 445A.396 and NAC 445A.414.

Surge will develop the mineralized material, waste rock, coarse gangue, and tailings geochemical characterization program following these guidelines. Based on the results of the characterization studies, Surge will prepare a Waste Rock Management Plan describing how the Company will manage rock that may require special handling or management and guide design criteria for storage facilities (e.g., liner requirement, underdrain collection system, etc.) based on the potential to generate acid or deleterious leachate in accordance with 43 CFR 3809.401(b)(2)(iv).

Surge will submit a WPCP to NDEP-BMRR for the Project that will describe the requirements for the management and monitoring of the mining and processing operations and include a Fluid Management Plan describing management of process fluids and operational parameters for the filtered tailings facility. The WPCP will also describe the methods used for monitoring and controlling process fluids including evaluating the available storage for meteoric water.

All waste rock, coarse gangue, and tailings management will follow the regulatory requirements and permit conditions for the Project.

20.8 SITE MONITORING

Federal and State agencies require monitoring of mine and processing operations including the fluid management system to ensure compliance with the project permits and authorizations. As part of both the BLM Plan of Operations and the State WPCP, Surge will submit a Monitoring Plan that meets the following objectives:

- Demonstrate compliance with the approved Plan of Operations, WPCP, and other Federal or State environmental laws and regulations.

- Provide early detection of potential problems, and supply information that will assist in directing corrective actions should they become necessary.
- Provide details on type and location of monitoring devices, sampling parameters and frequency, analytical methods, reporting procedures, and procedures to respond to adverse monitoring results.

Typical monitoring programs include surface water (including seeps and springs), groundwater quality and quantity, air quality, presence of noxious weeds, wildlife mortality, and reclamation monitoring (i.e., water resources, revegetation success, and slope stability).

BLM will include monitoring requirements as part of the ROD and NDEP will establish monitoring requirements as part of the Project's WPCP, the Air Quality Permit, and other required permits.

20.9 SOCIAL CONSIDERATIONS

Surge will develop a Stakeholder Engagement Plan to seek input and feedback from community members, Native American Tribes, local community organizations and business, elected officials, and non-governmental organizations. Surge will consider feedback shared by the participants during these engagements (to the extent feasible) in the development of the Plan of Operations to avoid, minimize, or mitigate potential negative effects on the communities and enhance project benefits.

20.10 CLOSURE AND RECLAMATION

Surge will complete closure and reclamation of disturbed areas resulting from Project's activities in accordance with BLM and NDEP regulations. Surge will reclaim disturbed areas in accordance with the performance standards under BLM 43 CFR 3809.420(b)(3) and NAC 445A.350 through 447 that include the State of Nevada's regulations governing design, construction, operation, and closure of mining operations.

Surge will perform reclamation earthwork to establish stable surface contours and hydrologic conditions that are compatible with the surrounding landscape and reduce the potential for erosion. Surge will salvage growth media and suitable soil within the footprints of proposed land disturbance and place in growth media stockpiles for use in future reclamation. Surge plans to perform concurrent reclamation and initiate reclamation at the earliest economically and technically feasible time on those portions of the disturbed areas that are no longer required for operations (i.e., outer slopes of an overburden stockpile).

Surge will prepare revegetation plans for the Project to promote establishment of diverse plant communities, stabilization of soil cover through minimizing wind and water erosion, and restoration of land to sustainable post-mining land uses. The Reclamation Plan will also include post-closure monitoring including water resources, revegetation success, noxious weeds, and slope stability.

General conceptual closure and reclamation activities associated with the Project will include the following:

- Based on data available to date, a pit lake will likely form in the open pit during the post-closure phase of the mining operation.
- Surge will regrade and recontour the exterior slopes of the overburden stockpile to establish structurally stable conditions, blend with surrounding landscape, and reduce potential for erosion.
- Surge will regrade and recontour the outer slopes of the filtered tailings facility to a landform that provides long-term stability and generally mimics the surrounding topography. Surge will seed the area using the approved seed mix following placement of a soil cover.
- Surge will regrade and recontour the coarse gangue stockpile to ensure structurally stable conditions.

- Surge will demolish and remove all buildings, including the process plant. Salvageable equipment will be removed and shipped offsite to an approved disposal facility.
- Surge will reclaim project roads that are not required for post-closure use (i.e., post-closure monitoring and maintenance).

Surge will ensure the reclamation surety is adequate before authorization to proceed with the Project. Surge expects to provide a bond equivalent to the actual cost of performing the agreed-upon reclamation measures. BLM and NDEP-BMRR will approve the bond prior to approving the Plan of Operations. Closure costs were estimated to total approximately $60 million.

21 CAPITAL AND OPERATING COSTS

21.1 CAPITAL AND SUSTAINING CAPITAL COST ESTIMATE

21.1.1 Summary

The capital cost estimate for the NNLP has been prepared by M3 and IMC and covers early works, mine development, mining, the process plant, the transload facility, commissioning and all associated infrastructure required to allow for successful construction and operations.

Process, Infrastructure and Mine capital costs are based on Q1-Q2 2025 pricing and in US dollars. The CAPEX is a Class 5 Association for the Advancement of Cost Engineering (AACE) estimate and includes offsite infrastructure, owner's cost and contingency. Note that the tables in this section were rounded to a limited number of significant figures and therefore some summation errors may be present. Table 21-1 summarizes the capital cost estimate developed for the Project.

Table 21-1: Summary of Capital Cost Estimate

Area	Phase 1 CAPEX ($M)	Phase 2 CAPEX ($M)	Sustaining Capital ($M)	LoM ($M)
Mine	$23		$142	$165
Process Plant & Infrastructure	$2,950	$2,350	$1,371	$6,671
Total	**$2,973**	**$2,350**	**$1,514**	**$6,836**

The total Phase 1 construction period, including early works, commissioning and start-up is expected to be 3.5 years. Phase 2 is expected to be a 3-year construction and commissioning schedule.

Closure costs are estimated to be $60M and are not included in Table 21-1.

21.1.2 Process Plant and Infrastructure

M3 obtained proposal updates on 43 bids spanning 22 key equipment packages and developed a project-specific equipment escalation factor comparing the Thacker Pass 2022 design and Nevada North Lithium Project 2025 design. This factor was applied outside of the key subplant quotes.

A 138 kV 5-bay Switchyard, 20-mile 138 kV transmission line and substation are estimated to cost $50M.

A 22-mile access road is estimated to cost $15M.

The capital costs for years after commencement of production are carried as sustaining capital which includes process plant and sulfuric acid plant equipment replacement, mobile equipment and clay tailings facility storage lining expansions. Sustaining capital for process plant and sulfuric acid plant equipment replacement is based on 5% per year of Phase 1 capital equipment costs.

Closure costs are conceptual and based upon necessary reclamation, remediation, and closure of the facilities.

The yearly summarized spend schedule, including sustaining and closure capital, is provided in Table 21-2.

Table 21-2: Capital Cost Spend Schedule

Year	Phase 1 CAPEX ($M)	Phase 2 CAPEX ($M)	Sustaining CAPEX ($M)	Closure ($M)	Annual Capital ($M)
-4	$118.0				$118.0
-3	$442.5				$442.5
-2	$1209.5				$1209.5
-1	$1180.0	$470.0			$1650.0
1		$940.0	$31.7		$971.7
2		$940.0	$29.6		$969.6
3			$30.9		$30.9
4			$29.6		$29.6
5			$33.6		$33.6
6			$36.6		$36.6
7			$36.6		$36.6
8			$36.6		$36.6
9			$36.6		$36.6
10			$36.6		$36.6
11-15			$186.3		$186.3
16-20			$168.0		$168.0
21-25			$171.3		$171.3
26-30			$168.0		$168.0
31-35			$171.3		$171.3
36-40			$168.0		$168.0
41-43				$60.0	$60.0
Total	**$2950.0**	**$2350.0**	**$1371.3**	**$60.0**	**$6731.3**

Phase 1 and Phase 2 capital costs include Owner's costs and a 30% contingency. Owner's costs include items such as permitting, legal, temporary site services, community relations and operational readiness.

21.1.3 Mine

IMC calculated mine capital costs on a first principals basis using the mine schedule, equipment requirements, and manpower requirements summarized in Section 16.

Capital costs are summarized on Table 21-3. Equipment purchase costs are based on information on file at IMC from other projects or from Cost Mine Intelligence publications for 2024 escalated to 2025 costs.

Sustaining CAPEX is based on equipment fleet ramp up and long-term equipment replacement.

Table 21-3: Summary of Mine Capital and Sustaining Capital Costs

Year	Mine Equipment		Mine Preproduction Development ($000)	Total Mine Capital ($000)
	Initial Capital Cost ($000)	Sustaining Capital Cost ($000)		
Preprod	$19,795		$2,809	$22,604
1		$22,205		$22,205
2		$7,614		$7,614
3				
4				
5		$3,510		$3,510
6		$2,714		$2,714
7		$2,714		$2,714
8				
9				
10				
11-15*		$4,030*		$4,030*
16-20*		$5,597*		$5,597*
21-30*		$2,245*		$2,245*
31-38*		$3,668*		$3,668*
39		$3,663*		$3,663*
40-42*				
Total	**$19,795**	**$142,349**	**$2,809**	**$164,953**

*Values shown are per production year.

21.2 OPERATING COST ESTIMATE

21.2.1 Basis of Estimate

21.2.1.1 Estimating Base Date and Accuracy Range

Cost inputs into the model ranged from Q1-Q2 2025 pricing. The estimate is prepared on an annual basis and includes all site-related operating costs associated with the production of lithium carbonate.

For the purposes of this study, all operating costs incurred up to but excluding commissioning, are deemed preproduction costs and have been included in the CAPEX, as they are considered part of construction.

21.2.1.2 Responsibilities

The responsibilities for developing the operating costs are as follows:

- Mining operating costs were developed by IMC.
- Tailings and coarse gangue placement costs were developed by M3 in conjunction with IMC.
- Sulfuric acid plant operating costs were developed by Turnstone in conjunction with M3.
- Process plant, infrastructure operating costs were developed by Turnstone in conjunction with M3.

  - Process plant raw materials pricing was confirmed by M3.
- General/administrative operating costs were developed by Turnstone in conjunction with M3.

21.2.1.3 Data Sources

The following data sources were used to prepare the OPEX estimate:

- **Mine plan (IMC):** Includes annual mine operating costs as well as the mining production rates and material movement over the life of the mine.
- **Process Design Criteria (M3) and Mass Balance (Turnstone)**: Used to define process variables and production rates, the consumption rates of raw materials, lithium extraction and recovery.
- **Financial Cost Model (M3):** Includes a consolidated model that estimates and summarizes annual production rates from mining, mineral and chemical processing operating costs, process plant production profiles, and raw material consumption among others. The model applies rates/costs to all categories outside of mining to the quantities of materials, labor, and utilities indicated by year. The financial model is used to adjust mass balance outputs per year to accommodate yearly differences in production under the mine plan.
- **Capital Cost Estimate (M3):** For estimation of development capital, sustaining capital, as well as maintenance, supplies, and services based on installed equipment values
- **Staffing Plan (Turnstone/M3):** The Project's staffing plan and labor rates by period.
- **Raw Material Pricing (Surge/M3):** Provided by Surge based on quotations from various suppliers or market sources for the logistics, handling, storage, and preparation of the reagents such as soda ash, limestone, sulfur, quicklime, and others
- **Assumptions:** Allowances were made based on recent similar projects and studies for minor items where no analysis or detail was available.
- **Electrical Load List (M3)**: Used to estimate total annual electrical demand and consumption. An overall benchmark of the Thacker Pass 2022 43-101 values are assumed rather than an itemized list.

21.2.2 Elements of Costs

21.2.2.1 Plant Labor

Labor for the Project will require staffing for a 24 hour per day, seven day per week operation. All 24-hour operations are based on a four (4) shift rotation of 12-hour shifts. Non-shift labor is based on a 40-hour work week. No provision is made for a camp or busing at this time. Twin Falls, ID; Elko, NV, and Wendover, UT are within a 75 mile radius of the Project and have lodging. Wells, NV; and Jackpot, NV are within a 40 mile radius of the Project and have limited lodging.

The labor costs for this Project were estimated based on the expected salaries in the region along with a payroll burdens allowance of 40% and no overtime allowance for hourly labor. A master labor list was compiled by M3 with input from Turnstone and Surge all positions including process plant, sulfuric acid plant, management, and support staff. A labor study has not yet been completed for this Project.

The labor requirements and average annual cost are summarized by OPEX area in Table 21-4. Management includes shift supervisor through General Manager. Labor includes hourly staff.

Table 21-4: Labor Requirements and Average Annual Cost Summary (40-Year Base Case)

	Phase 1 Headcount	Phase 1 Annual Average Cost ($M)	Ph1 + Ph2 Headcount	Ph 1 + Ph 2 Annual Average Cost ($M)
Operations - Process Plant and Acid Plant	144	$11,038	187	$14,112
Operations – Acid Plant	30	$2,964	49	$4,615
Maintenance	36	$2,821	47	$3,606
Maintenance Admin	2	$245	3	$313
Total	**212**	**$17,067**	**285**	**$22,647**

21.2.2.2 Raw Materials

Materials consumed by the process are estimated using unit consumption rates or are consumed at a fixed rate each year. The reagent consumption rates are sourced from the process design criteria. Reagent usage rates for leaching were based on test work, and other reagent demands were calculated by the mass balance largely using industry standard processing parameters and first-principles methods.

Mine truck fuel is captured in mining OPEX, but is not itemized in this section. Consumption rates of haul truck fuel were estimated from mobile equipment fleet, expected hours of operation, utilization, and fuel burn rates. Mine equipment fleet was based upon approximate site-specific haulage distances and tonnages.

Other raw materials and consumables under 1% of the OPEX are not itemized in all tables and/or figures below.

All other plant fleet fuels are captured under the category of supplies and services. Consumption rates of fuel for all other mobile and fixed equipment were benchmarked off of yearly plant fleet fuel costs presented in Thacker Pass 2022 43-101 report, escalated based on EIA.gov regional fuel price indices. Raw materials not used on a continuous basis (i.e. reagents/fuels for startups, first fills, resin/catalyst replacement) are captured in other categories, such as owner's cost, sustaining capital, maintenance, or others. Usage rates of sulfuric acid were assumed to be equal to the yearly estimated maximum produced from the sulfuric acid plant.

Unit pricing for raw materials was based on discussions with suppliers, recent quotes, and industry published reference data. Table 21-5 represents the purchase price and delivered price for each major raw material and Table 21-6 represents the expected annual consumption rates.

Table 21-5: Raw Material Purchase and Delivered Pricing

Raw Materials	Unit	Purchase and Delivery to Project Site Price
Quicklime	$/tonne	234
Limestone	$/tonne	69
Soda Ash	$/tonne	265
Hydrochloric Acid 35%	$/tonne	377
Caustic Soda 50%	$/tonne	689
Sulphur	$/tonne	233
Sulfuric Acid (H2SO4)	$/tonne	267
Sizer (750, 4t, 10r)	$/tonne mineralized material	48

Raw Materials	Unit	Purchase and Delivery to Project Site Price
Flocculant	$/tonne	4309
Ferric Sulfate	$/tonne	492
Propane	NA	(Allowance)
Diesel Off Road	$/gal	3.7825
Diesel Highway	NA	(Allowance)
Gasoline	NA	(Allowance)
Water Treatment	$/L	5

Table 21-6: Reagent Annual Consumption (40-Year LOM Base Case)

Raw Materials	Unit	Average Annual Consumption	Average unit tonne per tonne of Lithium Carbonate product
Quicklime	tonne	192,336	2.23
Limestone	tonne	650,406	7.53
Soda Ash	tonne	165,981	1.92
Hydrochloric Acid 35%	tonne	2,048	0.02
Caustic Soda 50%	tonne	1,458	0.02
Sulphur	tonne	597,584	6.92
Flocculant	kg	3,900	0.045
Ferric Sulfate	kg	317	0.004

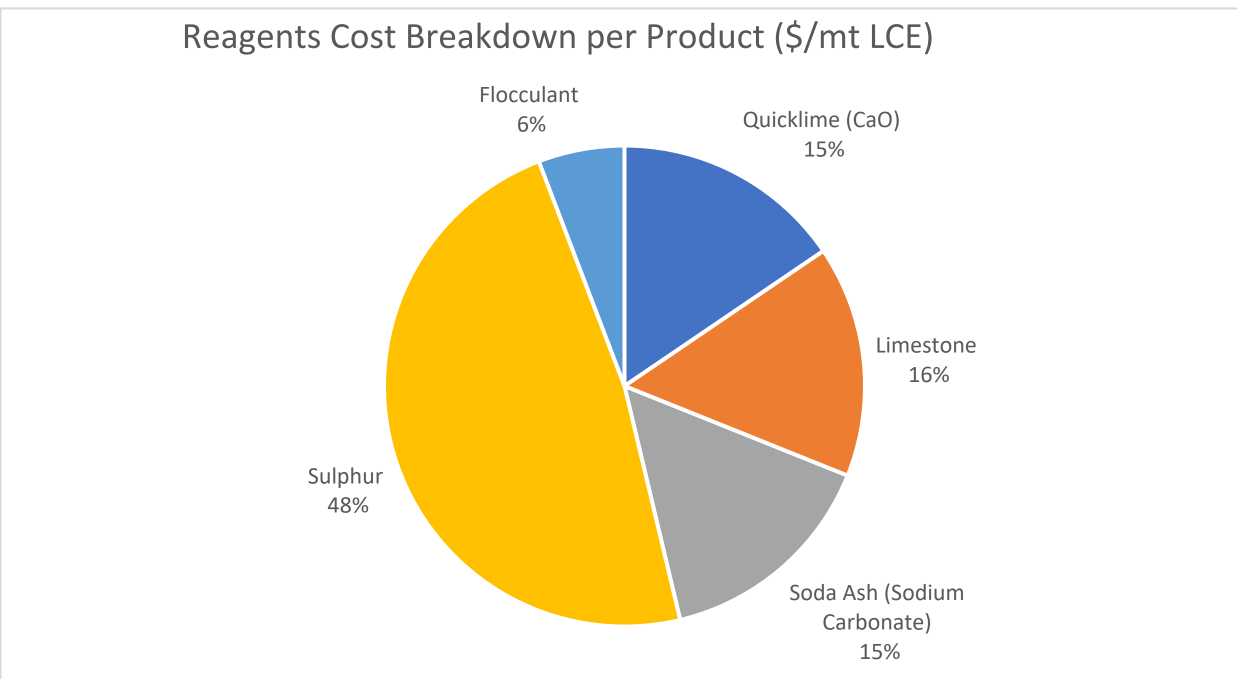


Figure 21-1: Reagents Cost (42-Year LOM – Base Case)

21.2.2.3 Power

Electrical power costs are based on a rate schedule provided by Wells Rural Electric and assumed at $59.8/MW-hr for the life of mine. Power consumption at this phase of design is benchmarked off of Thacker Pass 2022 43-101 published net power demand. Table 21-7 presents the annual nominal power cost for Phase 1 and Phase 2 over the 42-year life of mine.

Table 21-7: Electrical Load Generation vs Import

Power	Phase 1 (MW)	Phase 2 (MW)	Total Phase 1 & Phase 2 (MW)
Generation	44.9	44.9	89.9
Import	30.5	21.4	51.9

21.2.2.4 Maintenance and Supplies

Lithium Processing and Sulfuric Acid Plant maintenance allowances and outside services include supplies, such as spare parts, repair materials, miscellaneous consumables, and third-party support required for general maintenance from operating activities. The allowances for fixed mechanical equipment, electrical, instrumentation, mobile equipment (non-mining) are based on a factored percentage of installed mechanical and electrical equipment capital values. Outside Services are a factor of total maintenance cost.

All plant areas and equipment types assume a maintenance factor of 3% of installed equipment cost year by year for the life of mine.

21.2.2.5 General and Administrative

General and administrative costs beyond labor are not yet itemized at this phase of design. Allocation of indirect corporate overheads has not yet been determined for this Project.

21.2.3 Operating Cost Areas

21.2.3.1 Mining

IMC calculated mine operating costs on a first principals basis using the mine schedule, equipment requirements, and manpower requirements summarized in Section 16. Diesel fuel costs were estimated to be US$0.80/L. Labor rates are escalated from previous projects completed by IMC in Nevada.

The mine operating costs are summarized on Table 21-8. The mine operating costs include:

- Loading of lithium process feed and waste material.
- Haulage and delivery of lithium process feed to the process plant.
- Haulage and delivery of waste material to the waste storage facility.
- All auxiliary mine equipment to maintain the mine in good working order.
- Operation of an aggregate quarry located north of the lithium pit.
- Drilling of aggregate.
- Blasting of aggregate by a blasting contractor.

- Loading of aggregate and tramming to a portable crushing plant.
- Crushing of the aggregate.
- Loading of the crushed product.
- Haulage of the crushed aggregate to the pit during wet conditions.
- Maintenance of all mine mobile equipment.
- Mine supervisory staff.
- Mine engineering and geology staff.

These mine costs do not include:

- Mine shops
- Mine office buildings

Table 21-8: Summary of Mine Operating Costs

Year	Operating Cost ($000)	Process Feed (kt)	Total Material (kt)
Preprod		0	565
1	$34,748	1,288	10,000
2	$40,711	2,575	13,000
3	$40,448	3,863	13,000
4	$38,957	5,150	13,047
5	$37,161	5,150	12,550
6	$38,506	5,150	12,550
7	$38,506	5,150	12,550
8	$40,909	5,150	12,550
9	$40,909	5,150	12,550
10	$40,909	5,150	12,550
11	$39,790	5,150	12,550
12	$39,790	5,150	12,550
13	$39,790	5,150	12,550
14	$39,790	5,150	12,550
15	$39,790	5,150	12,550
16	$40,896	5,150	12,550
17	$40,896	5,150	12,550
18	$40,896	5,150	12,550
19	$40,896	5,150	12,550
20	$40,896	5,150	12,550
21	$43,672	5,150	12,550
22	$43,672	5,150	12,550
23	$34,799	5,150	10,000

Year	Operating Cost ($000)	Process Feed (kt)	Total Material (kt)
24	$34,799	5,150	10,000
25	$34,799	5,150	10,000
26	$34,799	5,150	10,000
27	$34,799	5,150	10,000
28	$34,799	5,150	10,000
29	$34,799	5,150	10,000
30	$34,799	5,150	10,000
31	$38,447	5,150	10,000
32	$38,447	5,150	10,000
33	$38,447	5,150	10,000
34	$38,447	5,150	10,000
35	$38,447	5,150	10,000
36	$25,256	5,150	6,569
37	$24,372	5,150	6,339
38	$22,307	5,150	5,802
39	$22,246	5,150	5,786
40	$23,153	5,150	6,022
41	$22,288	5,150	5,797
42	$5,506	1,418	1,432
Total	**$1,498,292**	**204,844**	**443,259**

21.2.3.2 Tailings and Coarse Gangue Placement

The tailings placement cost is $3.63/tonne of leached tails. The salt tails disposal placement cost is $2.11/tonne of salt tails. The coarse gangue placement cost $2.58/tonne of coarse gangue.

21.2.3.3 Sulfuric Acid Plant

Sulfuric acid plant OPEX is captured in the same manner as the rest of the process plant (i.e. heat and mass balance simulation, staffing plan, factored maintenance costs) with the exception that cogeneration power is assumed based on benchmarked acid plants of similar size. As such, modeled cooling loads for the acid plant are only indicative at this point.

21.2.3.4 Process Plant and Infrastructure

Process operating costs were estimated based upon steady-state operation for Phase 1 and Phase 2 facility expansions, with a 1 year 50% capacity ramp up period assumed for each. The plant design data includes the use of the METSIM heat and material balance based on steady-state conditions. Lithium carbonate annual production rate was estimated based on mine plan data for that year.

The labor roster and mobile equipment fleet for the process areas are fixed per phase. Consumption of raw materials, power and other items that are considered variable, are factored separately each year from the material balance based on the tonnes of mineralized material processed and lithium carbonate produced, as applicable.

21.2.4 Summary of Operating Costs

Table 21-9 presents a summary of the Project operating costs.

Table 21-9: Project Operating Cost Summary (Years 1-42 Life of Mine – Base Case)

Area	Annual Average ($M)	$/tonne Product	Percent of Total
Mine	$35.67	$413.17	7.88%
Lithium Process and Acid Plant	$380.43	$4,406.18	84.03%
Tailings and Gangue	$24.75	$286.65	5.47%
General & Administrative	$11.85	$137.30	2.62%
Total	**$452.71**	**$5,243.31**	**100.00%**

21.2.5 Exclusions

The following items are excluded from the OPEX estimate:

- Cost escalation (for expenses or revenues)
- Currency fluctuations
- All costs incurred prior to commercial operations
- Corporate office costs
- G&A costs other than labor (overhead)
- First fills (included in CAPEX)
- Closure and reclamation costs post operations (concurrent reclamation is included)
- Salvage value of equipment and infrastructure

The following items were also excluded from the OPEX estimate, but are included in the financial model:

- Initial and sustaining capital costs
- Working capital
- Taxes
- Royalties
- Revenues
- Closure and reclamation costs post operations
- Salvage value of equipment and infrastructure

22 ECONOMIC ANALYSIS

22.1 INTRODUCTION

An economic analysis was conducted to assess the economic feasibility of constructing and operating the Nevada North Lithium Project. The analysis was based on the April 30, 2025 mine plan and production schedule prepared by Independent Mining Consultants, Inc. (IMC) and capital and operating expenditures prepared by M3 Engineering & Technology Corp. (M3). This mine plan's cut-off grades were provided by IMC and extraction assumptions were provided by Turnstone Metallurgical Services Inc.'s (Turnstone) Rev 10 heat and mass balance.

Based on Q1-Q2 2025 pricing, the economic evaluation presents the after-tax net present value (NPV), payback period, and the after-tax internal rate of return (IRR) for the Project based on annual cash flow projections.

This economic analysis includes sensitivities to variations in selling prices, total operating costs, initial and total capital costs, and overall lithium production recovery. NPV is also provided at a range of discount rates. All cases assume maximum utilization of the acid plant's available acid and power, with lithium production fluctuating by year according to mine plan and plant performance as predicted by yearly heat/mass balance simulations in METSIM, conducted by Turnstone. Note that the tables in this section were rounded to a limited number of significant figures and therefore some summation errors may be present.

It should also be noted that the results of the economic analysis discussed in this Technical Report represent forward-looking information as defined under AACE. The results are dependent upon 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 herein. Forward looking information includes the following:

- Estimates of Mineral Resources,
- Assumed commodity prices (and exchange rates, where applicable),
- Mine production plans,
- Proposed plant throughput,
- Projected process recovery rates,
- Assumed raw material and process supplies unit prices,
- Assumed labor wage and salary rates,
- Assumed closure costs, and
- Estimates of sustaining, capital and operating costs.

Additional risks to the forward-looking information include:

- Unexpected variations in process throughput, grade, or recovery rates,
- Changes to costs of production from what is assumed specific to the Project such as: raw material and supplies availability, vendor pricing and estimated escalation of vendor pricing,
- Changes to costs of production due to general economic factors such as: recession, inflation, deflation, and financial instability,
- Unexpected variations in quantity of mineralized material or recovery rates,
- Failure of plant, equipment, or processes to operate as intended,
- Accidents, labor disputes, climate change risks and other risks of the industry,
- Unanticipated environmental risks and reclamation expenses, and
- Changes to regulatory or governmental royalty and tax rates.

22.2 METHODOLOGY

The analysis was carried out using a discounted cash flow (DCF) model, which was prepared by M3, with input primarily from Turnstone, IMC, and Surge. Full detail regarding contributions from all entities are noted in Section 22.3.1. Annual cash flow projections were estimated for forty-two years based on the mine plan, estimates of capital expenditures, production costs, taxes, royalties and sales.

Cash flows for each year are totaled and discounted based on the assumption of even distribution of cash flow over the forty-two-year mine life. The project timeline starts with “Year -4” for construction and “Year 1” being the start of production.

The only revenue stream is sales of lithium carbonate.

Cost inputs into the model are based on Q1-Q2 2025 pricing, and the discount period commences Q3 2025.

22.3 INPUT DATA

22.3.1 Sources of Information

Details of the scope and assumptions of the CAPEX and OPEX are defined in the basis of estimate, which is provided in Section 21 of this Technical Report.

Tax assumptions and royalty obligation estimates were provided by M3. The structure of existing royalties for privately owned lands/claims within the NNLP mine plan imply development capital sharing, which has not yet been negotiated. For simplicity, current financial modeling assumes a royalty applied to revenues, commensurate with other mining industry comps. The market analysis in Section 19 was used to set realistic lithium carbonate pricing.

The model includes a financial analysis to estimate the annual tax burden, including indicative earnings and cash flow statements for the Project.

Financial model inputs were received from multiple sources, as outlined in the following sections. M3 compiled info provided by each contributing party for the data contributing to the final financial metrics of the Project and against guiding documents (process design criteria, heat and mass balance, etc.) into the discounted cash flow model.

22.3.1.1 Development CAPEX

Capital costs are based on Q1-Q2 2025 pricing and meet the accuracy of a Class 5 AACE estimate.

22.3.1.2 Reagent Pricing

Reagent quotes were solicited and received by Surge from Q1-Q2 2025 Fuels, sulfur, and ammonia pricing are based on commodity rolling averages or cost projections. Surge has obtained a letter of intent for supply of prilled sulfur by rail from a Canadian source to Northern Nevada rail at a rate of Tampa sulfur spot price plus $85 per long ton.

22.3.1.3 Closure Costs

Closure costs were benchmarked off of Thacker Pass 2022 43-101. These are applied to the model in Year 43.

22.3.1.4 CGS & CTFS Costs

CAPEX and OPEX costs for plant-generated coarse gangue and tailings were estimated by M3 based on equipment spread, haul distance and disposal technique. These costs were manually inputted into the financial model yearly cash flow.

22.3.1.5 Mine Plan and Mining OPEX

Yearly mining CAPEX, OPEX, strip ratio, water demand, and contained lithium values were provided by IMC.

22.3.1.6 Sulfuric Acid Plant SUSEX, Labor, and Maintenance

Acid plant sustaining capital and maintenance are factored in similar fashion to that of the processing plant. Acid plant labor is separately accounted for in plant staffing plan.

22.3.1.7 Labor

The QP reviewed and augmented the salaries and staffing plan provided in December 2024 by Surge and Turnstone against historical projects of similar scope and size. Phase 2 headcount was provided by M3.

22.3.1.8 Power

Project power usage is benchmarked at this phase of design, with details discussed in Section 18.4.2.

22.3.1.9 Mobile Equipment

Mining fleet equipment was quantified by IMC, and is reported in mining capital by year.

Mobile Equipment fleet quantity and costs are benchmarked at this phase of design, and are presented in plant sustaining capital.

22.3.1.10 Maintenance and Supplies

Maintenance parts and labor costs are calculated using standard industry factors based on process equipment value. Grinding media, lube, other wear components, and all other costs are not separately quantified beyond this factor.

Sizer liner wear is estimated on a per-tonne of mineralized material basis.

22.3.1.11 Manual Reagent Inputs

CO2 and ammonia costs are negligible and not presently considered in the model, and will be quantified by equipment suppliers in later phases of design.

22.3.1.12 Process Modeling Software Outputs (METSIM)

METSim process modeling outputs determined mineralized material tonnage, reagent usage, water usage, and utility steam/cooling demand used in the financial model. A single process model file was compiled to represent a mid to high-grade mineralized material case, from which LCE recovery and the above parameters were determined. These were then applied on a per-tonne of mineralized material or per tonne of LCE basis, as outlined in Section 17. Yearly numbers for lithium sales were determined by the mine plan and the LCE recovery calculated in this single heat mass balance simulation.

The QP contributed during the 10 iterations of the heat and mass balance work done by Turnstone, and audited the final mass balance stream tables and associated input/output analysis file. M3 is satisfied that Turnstone's model's inputs and architecture are an appropriate interpretation of the test work data and process design criteria.

22.3.1.13 General Accounting and Figures

Model architecture, inputs, and estimation methodology was reconstructed, verified, or augmented by the QP for standard financial outputs (sensitivity analysis, depreciation, yearly cash flow organization, financial metrics, taxes, displayed discount rates, etc.). Royalty and transportation costs were estimated by M3, with input from Surge.

22.3.2 Sunk Costs

Investments in the Project to date were not included in the economic analysis (and are not amortized in the model).

22.3.3 Initial Capital

Initial capital costs are divided among the two construction phases: Phase 1 and Phase 2. The totals for each phase are presented in Table 22-1. Phase 1 has been optimized to exclude all Phase 2 pre-investment possible, though it inherently includes the majority of civil earth works and site infrastructure to support Phase 2, mineralized material and reagent feed systems shared with Phase 2, construction of one acid plant, and construction of the mineral and chemical processing facility to produce nominally 43,000 t of lithium carbonate per year. Phase 2 includes the addition of a second acid plant and construction of the mineral and chemical processing facility to produce an additional nominal 43,000 t of lithium carbonate per year.

Table 22-1: Initial Capital Costs Summary

Area	Phase 1 CAPEX ($M)	Phase 2 CAPEX ($M)	Total
Total	$2,973	$2,350	$5,323
% of Total	56%	44%	100%

22.3.4 Sustaining Capital

Sustaining capital is provided for the mining, plant equipment and infrastructure, sulfuric acid plants, rail transload terminal (location to be determined during the next phase), stockpile and tailings areas of the Project over the 42-year mine life. The tailings costs (estimated by M3) include future expansions of the facility over the life of the Project when additional liner capacity is required. Mining sustaining capital (provided by IMC) supports equipment replacement at scheduled intervals after the equipment has reached its useful operational life. The sulfuric acid plant requires regular scheduled capital maintenance every three years (to be confirmed by acid plant supplier), but presently is considered as a fixed, yearly, factored allowance. Sustaining capital for the general plant is factored from the Project equipment list based on an average service life of 20 years. Sustaining capital for each area is presented in Table 22-2.

Table 22-2: Sustaining Capital Summary

Sustaining Capital Category	LOM Cost ($M)
Mine Equipment	$142.4
Mobile Equipment	$40.0
Process Plant & SAP	$1144.0
CTFS & CGS	$187.3

22.3.5 Operating Costs

The estimated total annual operating expenditures (OPEX) over the 42-year mine life is US$452.71 million, or US$5,243/t of lithium carbonate produced. Table 22-3 presents the Operating Costs for each area for the 42-year Life of Mine – Base Case.

Table 22-3: Operating Costs Summary (42-Year LOM – Base Case)

Area	Annual Average ($M)	$/tonne Product	Percent of Total
Mine	$35.67	$413.17	7.88%
Lithium Process and Acid Plant	$380.43	$4,406.18	84.03%
Tailings and Gangue	$24.75	$286.65	5.47%
General & Administrative	$11.85	$137.30	2.62%
Total	**$452.71**	**$5,243.31**	**100.00%**

22.3.6 Escalation

The economic analysis excludes cost escalation and accordingly, also excludes revenue escalation (see Section 22.3.8).

22.3.7 Production

Phase 1 Project is designed for a nominal production rate of 43,000 t/y of lithium carbonate and begins production in year 1. Phase 2 production is anticipated to begin in Year 3 and includes the addition of a second acid plant and processing infrastructure to double production with a nominal production rate of 86,000 t/y of lithium carbonate. Actual production varies with the grade of mineralized material mined in each year with an expected mine life of 42 years.

Regarding ramp-up, a lower tonnage is expected for the first year in each of Phase 1 and Phase 2. See the financial model in Table 22-7 regarding the expected yearly cash flow.

The production and financial outcomes are summarized in Table 22-4.

Table 22-4: Average Production Values (42-Year/Base Case)

Item	Units	Value
Lithium Carbonate Plant Production		
Operational Life	years	42
Average Annual Lithium Carbonate Production	kt	86.3
Average Metallurgical Recovery	%	82.80
Mine Production		
Mineralized Material Production Scenario	years	42
Annual Mineralized Material Mined*	kt	5,150

*Nominal for 2 phases

22.3.8 Revenues

Product selling prices have been forecasted over the study period (See Section 19). The base case value for price selling was set at $24,000/t LCE. Sensitivities are discussed in Section 22.5.

Total annual revenues by year are summarized in Table 22-5.

Table 22-5: Total Annual Production and Revenue (42 Year LOM – Base Case)

Production and Revenue	Annual Average	Total
Lithium Carbonate Production (kt)	86.3	3,626
Lithium Carbonate Revenue ($M)	$2,072	$87,032
Annual Lithium Carbonate Selling Price ($/t)	$24,000	

22.3.9 Financing

Present financial modeling assumes a cash flow based on direct-investment capital funding. Project financing costs are excluded from the model. Surge is, however, pursuing multiple options for funding the construction and operation of the Project

22.3.10 Discount Rate

A discount rate of 8% per year has been applied to the model, though other levels from 5-10% are also included for Project assessment at various risk profiles and financing options.

22.3.11 Taxes

The modeling is broken into the following categories: Operational Taxes (which are eligible deductions to arrive at taxable income) and Corporate Net Income Taxes. The 10% operating cost tax credit under the US Inflation Reduction Act for “Advanced Manufacturing Production” has been applied during the first 10 years of Project operation. The legislation specifies phase-out of this credit after 10 years. Future legislation may extend the duration allowable to claim this credit.

22.3.11.1 Operational Taxes

Payroll taxes are included in salary burdens applied in the OPEX. These include social security, Medicare, federal and state unemployment, Nevada modified business tax, workers compensation and health insurance.

Property tax is assessed by the Nevada Centrally Assessed Properties group on any property operating a mine and/or mill supporting a mine. Tax is 3% to 3.5% of the assessed value, which is estimated at 35% of the taxable value of the property. The property tax owed each year is estimated as 1.1% of the net book value at the close of the prior year plus current year expenditures with no depreciation.

No business license costs are included. These will be quantified during subsequent design phases of the Project.

22.3.11.2 Corporate Net Income Taxes

In Nevada, lithium mining activities are taxed at 2-5% of net proceeds, depending on the ratio of net proceeds to gross proceeds. Net proceeds are estimated as equal to gross profit for purposes of this study. A tax rate of 5% is applicable to the NNLP.

Revenue subject to a net proceeds of minerals tax is exempt from the Nevada Commerce tax; therefore, the Nevada Commerce tax is excluded from the study.

The current corporate income tax rate applicable to the Project under the Tax Cut and Jobs Act is 21% of taxable income.

22.3.12 Royalties

Economic modeling presently assumes a 2% royalty on gross revenues for all LCE mined on private land. The fraction of LCE from private land varies by year in the mine plan. No buy-down expenses are presently assumed in the model. No capital offset/sharing has been assumed in the model. At US$24,000/t lithium carbonate the ongoing annual royalty payments will average $203/t lithium carbonate sold over the 42-year LOM, when considering the split between LCE produced on and off private lands.

Current private land royalty is structured according to joint development of the site/plant and stands at 25% of gross revenue. Details of development capital sharing or provisions for buy-down rights have not yet been negotiated.

22.4 CASH FLOW

Undiscounted annual cash flows, including CAPEX, OPEX, and net revenues (pre-tax) are presented in Figure 22-1.

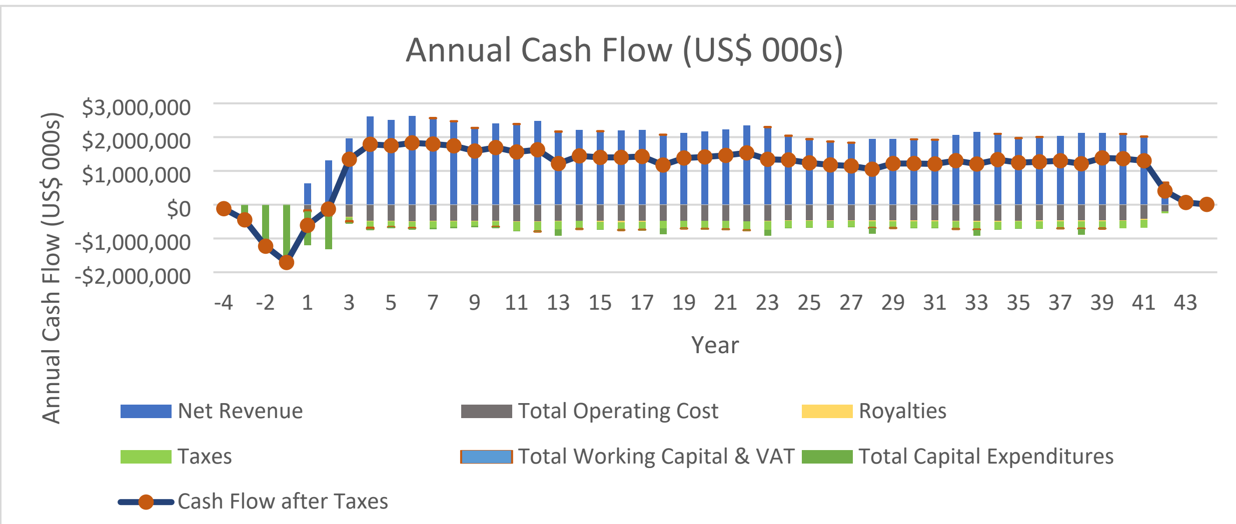


Figure 22-1: Undiscounted Cash Flow

For the Base Case financial assumptions outlined in Section 22.3, the Project financial performance is measured through Net Present value, Internal Rate of Return and Payback periods. The after-tax financial model results are summarized in Table 22-6.

Table 22-6: After-Tax Financial Model Results (42-Year LOM – Base Case)

Production Scenario	Units	Values
Operational Life	Years	42
Mine and Process Plant Operational Life	Years	42
Mineralized Material Life	Years	42
Average annual EBITDA	$M / y	1,478
After-tax Net Present Value (“NPV”) @ 8% Discount Rate	$M	$9,165
After-tax Internal Rate of Return	%	22.8
Payback (After-tax, undiscounted)	Years	4.64
*includes capital investments in years up to production		

Table 22-7: Financial Model

240118 North Nevada Lithium — LCE Price: $24,000
Financial Model and Operating Cost — Ph 2 Timing: Year 4
SUMMARY

Project Year>>				0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Operating Year>>				-4	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Calendar Year>>		Total - LoM		-4	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Mining Summary																														
TOTAL DIRECT FEED from MINE	kt	204,844			0	0	0	1,288	2,575	3,863	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150
TOTAL FROM STOCKPILE	kt	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL ORE TO PROCESS PLANT	**kt**	**204,844**		**0**	**0**	**0**	**0**	**1,288**	**2,575**	**3,863**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**
*Contained Metal - **Direct Feed***																														
Li Grade	**ppm**	4,016.6				0.0	0.0	4,620.0	4,781.0	4,790.0	4,783.0	4,598.0	4,807.0	4,702.0	4,531.0	4,162.0	4,418.0	4,381.0	4,546.0	3,960.0	4,053.0	3,992.0	4,028.0	4,061.0	3,797.0	3,906.0	3,982.0	4,092.0	4,292.0	4,215.0
*Contained Metal - **Direct Feed***																														
Li	kt	4,380				0	0	32	66	98	131	126	132	129	124	114	121	120	125	109	111	109	110	111	104	107	109	112	118	116
Waste	kt	238,415				0	565	8,712	10,425	9,137	7,897	7,400	7,400	7,400	7,400	7,400	7,400	7,400	7,400	7,400	7,400	7,400	7,400	7,400	7,400	7,400	7,400	7,400	7,400	4,850
Total Material Mined	kt	**443,259**				0	565	10,000	13,000	13,000	13,047	12,550	12,550	12,550	12,550	12,550	12,550	12,550	12,550	12,550	12,550	12,550	12,550	12,550	12,550	12,550	12,550	12,550	12,550	10,000
Process Plant Summary																														
Total Ore Processed	**kt**	**204,844**				0	0	1,288	2,575	3,863	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150
Contained Metal Processed																														
Li	kt	4,380				0	0	32	66	98	131	126	132	129	124	114	121	120	125	109	111	109	110	111	104	107	109	112	118	116
Recovery																														
Li	%	82.8%				0.0%	0.0%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%
Recovered Metal																														
Li	kt	3,626				0	0	26	54	82	109	104	109	107	103	94	100	99	103	90	92	91	91	92	86	89	90	93	97	96
Revenues																														
Payable Metals																														
LCE	kt	3,626				0	0	26	54	82	109	104	109	107	103	94	100	99	103	90	92	91	91	92	86	89	90	93	97	96
Metal Prices																														
LCE	$/mt	$24,000				$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000
Revenues																														
LCE	US $000	$87,031,889				$0	$0	$629,442	$1,302,249	$1,957,304	$2,605,587	$2,504,807	$2,618,662	$2,561,462	$2,468,308	$2,267,291	$2,406,750	$2,386,594	$2,476,479	$2,157,250	$2,207,913	$2,174,682	$2,194,294	$2,212,271	$2,068,454	$2,127,833	$2,169,235	$2,229,158	$2,338,110	$2,296,164
Total Revenues (Gross)	**US $000**	**$87,031,889**		**$0**	**$0**	**$0**	**$0**	**$629,442**	**$1,302,249**	**$1,957,304**	**$2,605,587**	**$2,504,807**	**$2,618,662**	**$2,561,462**	**$2,468,308**	**$2,267,291**	**$2,406,750**	**$2,386,594**	**$2,476,479**	**$2,157,250**	**$2,207,913**	**$2,174,682**	**$2,194,294**	**$2,212,271**	**$2,068,454**	**$2,127,833**	**$2,169,235**	**$2,229,158**	**$2,338,110**	**$2,296,164**
Operating & Production Cost (US$ 000)			$/mt Ore processed																											
Mining (Owner Mining)	US $000	$1,498,292	$7.31			$0	$0	$34,748	$40,711	$40,448	$38,957	$37,161	$38,506	$38,506	$40,909	$40,909	$40,909	$39,790	$39,790	$39,790	$39,790	$39,790	$40,896	$40,896	$40,896	$40,896	$40,896	$43,672	$43,672	$34,799
Process Plant	US $000	$15,978,251	$78.00			$0	$0	$105,899	$195,317	$286,146	$411,044	$408,814	$411,333	$410,068	$408,007	$403,560	$406,645	$406,199	$408,188	$401,126	$402,247	$401,512	$401,945	$402,343	$399,162	$400,475	$401,391	$402,717	$405,127	$404,199
Tailings/Salt/Coarse gangue management	US $000	$1,039,500	$5.07			$0	$0	$6,524	$12,516	$19,567	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086
General Administration	US $000	$497,907	$2.43			$0	$0	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855
Treatment & Refining Charges																														
Treatment Charges	US $000	$0	$0.00			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Penalties	US $000	$0	$0.00			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Refining Charges	US $000	$0	$0.00			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Selling Expenses	US $000	$0	$0.00			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Transportation	US $000	$0	$0.00			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Cash Operating Cost	US $000	**$19,013,951**	$92.82	**$0**	**$0**	**$0**	**$0**	**$159,026**	**$260,398**	**$358,016**	**$487,942**	**$483,916**	**$487,780**	**$486,515**	**$486,857**	**$482,410**	**$485,495**	**$483,931**	**$485,919**	**$478,857**	**$479,978**	**$479,243**	**$480,783**	**$481,180**	**$477,999**	**$479,312**	**$480,228**	**$484,330**	**$486,740**	**$476,939**
			$5,243.3																											
Salvage Value	US $000	-$75,712	-$0.37			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Reclamation & Closure	US $000	$60,000	$0.29			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Production Cost	US $000	**$18,998,239**	$92.74	**$0**	**$0**	**$0**	**$0**	**$159,026**	**$260,398**	**$358,016**	**$487,942**	**$483,916**	**$487,780**	**$486,515**	**$486,857**	**$482,410**	**$485,495**	**$483,931**	**$485,919**	**$478,857**	**$479,978**	**$479,243**	**$480,783**	**$481,180**	**$477,999**	**$479,312**	**$480,228**	**$484,330**	**$486,740**	**$476,939**
Operating Income	US $000	**$68,033,650**		**$0**	**$0**	**$0**	**$0**	**$470,416**	**$1,041,851**	**$1,599,288**	**$2,117,645**	**$2,020,891**	**$2,130,882**	**$2,074,947**	**$1,981,451**	**$1,784,881**	**$1,921,255**	**$1,902,663**	**$1,990,560**	**$1,678,393**	**$1,727,935**	**$1,695,439**	**$1,713,511**	**$1,731,090**	**$1,590,455**	**$1,648,520**	**$1,689,006**	**$1,744,828**	**$1,851,370**	**$1,819,225**
Royalty (placeholder)	US $000	$737,360	$3.60			$0	$0	$4,089	$7,827	$12,519	$5,388	$6,497	$13,570	$15,133	$3,154	$10,697	$7,514	$29,226	$28,524	$21,154	$4,257	$26,018	$36,228	$22,499	$4,720	$2,034	$3,184	$4,561	$13,753	$12,542
Total Royalties & Fees	US $000	$737,360	$3.60	$0	$0	$0	$0	$4,089	$7,827	$12,519	$5,388	$6,497	$13,570	$15,133	$3,154	$10,697	$7,514	$29,226	$28,524	$21,154	$4,257	$26,018	$36,228	$22,499	$4,720	$2,034	$3,184	$4,561	$13,753	$12,542
Initial Capital Depreciation	US $000	$5,322,604			$0	$0	$0	$533,229	$533,229	$533,229	$533,229	$533,229	$533,229	$533,229	$530,000	$530,000	$530,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sustaining Capital Depreciation	US $000	$1,513,619			$0	$0	$0	$5,386	$9,107	$12,193	$15,153	$18,864	$22,795	$26,727	$30,387	$34,047	$37,707	$32,724	$29,406	$45,355	$42,798	$39,490	$36,118	$32,746	$46,446	$43,346	$40,246	$40,067	$39,889	$38,210
Total Depreciation	US $000	$6,836,223		$0	$0	$0	$0	$538,615	$542,336	$545,422	$548,382	$552,093	$556,024	$559,956	$560,387	$564,047	$567,707	$32,724	$29,406	$45,355	$42,798	$39,490	$36,118	$32,746	$46,446	$43,346	$40,246	$40,067	$39,889	$38,210
Net Income after Depreciation & Royalty	US $000	**$60,460,067**		**$0**	**$0**	**$0**	**$0**	**-$72,288**	**$491,688**	**$1,041,347**	**$1,563,875**	**$1,462,300**	**$1,561,287**	**$1,499,858**	**$1,417,910**	**$1,210,137**	**$1,346,034**	**$1,840,713**	**$1,932,630**	**$1,611,884**	**$1,680,880**	**$1,629,932**	**$1,641,165**	**$1,675,845**	**$1,539,289**	**$1,603,140**	**$1,645,576**	**$1,700,201**	**$1,797,729**	**$1,768,473**
Net Income before NOL	**US $000**	**$60,460,067**		**$0**	**$0**	**$0**	**$0**	**-$72,288**	**$491,688**	**$1,041,347**	**$1,563,875**	**$1,462,300**	**$1,561,287**	**$1,499,858**	**$1,417,910**	**$1,210,137**	**$1,346,034**	**$1,840,713**	**$1,932,630**	**$1,611,884**	**$1,680,880**	**$1,629,932**	**$1,641,165**	**$1,675,845**	**$1,539,289**	**$1,603,140**	**$1,645,576**	**$1,700,201**	**$1,797,729**	**$1,768,473**
Net-Operating Loss applied	US $000	-$72,288		$0	$0	$0	$0	$0	-$72,288	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Income after NOL	**US $000**	**$60,387,780**		**$0**	**$0**	**$0**	**$0**	**-$72,288**	**$419,400**	**$1,041,347**	**$1,563,875**	**$1,462,300**	**$1,561,287**	**$1,499,858**	**$1,417,910**	**$1,210,137**	**$1,346,034**	**$1,840,713**	**$1,932,630**	**$1,611,884**	**$1,680,880**	**$1,629,932**	**$1,641,165**	**$1,675,845**	**$1,539,289**	**$1,603,140**	**$1,645,576**	**$1,700,201**	**$1,797,729**	**$1,768,473**
Net Income before Taxes	**US $000**	**$60,387,780**		**$0**	**$0**	**$0**	**$0**	**-$72,288**	**$419,400**	**$1,041,347**	**$1,563,875**	**$1,462,300**	**$1,561,287**	**$1,499,858**	**$1,417,910**	**$1,210,137**	**$1,346,034**	**$1,840,713**	**$1,932,630**	**$1,611,884**	**$1,680,880**	**$1,629,932**	**$1,641,165**	**$1,675,845**	**$1,539,289**	**$1,603,140**	**$1,645,576**	**$1,700,201**	**$1,797,729**	**$1,768,473**
Property Tax	US $000	$382,106		$0	$6,166	$19,470	$37,869	$42,876	$47,660	$42,000	$36,293	$30,628	$24,945	$19,217	$13,456	$7,654	$1,812	$1,496	$1,217	$2,812	$2,385	$1,995	$1,660	$1,361	$2,760	$2,344	$1,963	$1,547	$1,133	$2,622
Net Proceeds of Mineral Tax	US $000	$3,082,136		$0	$0	$0	$0	$0	$25,236	$53,051	$78,951	$73,924	$79,231	$76,236	$71,540	$61,524	$68,163	$93,981	$98,544	$82,131	$84,737	$83,277	$84,350	$85,398	$77,678	$80,738	$82,918	$85,722	$91,061	$89,528
Income Taxes	US $000	$8,161,372		$0	$0	$0	$0	$0	$21,960	$110,924	$184,966	$170,769	$187,861	$179,763	$166,538	$137,099	$158,359	$262,376	$276,479	$225,435	$233,578	$229,372	$232,814	$236,226	$211,787	$221,333	$228,196	$236,686	$253,030	$248,579
Adv Manufacturing Production Credit	US $000	-$1,881,413		$0	$0	$0	$0	$0	-$21,960	-$35,802	-$48,794	-$48,392	-$48,778	-$48,651	-$48,686	-$48,241	-$48,550	-$48,393	-$48,592	-$47,886	-$47,998	-$47,924	-$48,078	-$48,118	-$47,800	-$47,931	-$48,023	-$48,433	-$48,674	-$47,694
Net Income after Taxes	US $000	**$50,643,579**		**$0**	**-$6,166**	**-$19,470**	**-$37,869**	**-$115,164**	**$346,504**	**$871,174**	**$1,312,459**	**$1,235,370**	**$1,318,029**	**$1,273,293**	**$1,215,061**	**$1,052,101**	**$1,166,250**	**$1,531,253**	**$1,604,982**	**$1,349,392**	**$1,408,178**	**$1,363,212**	**$1,370,419**	**$1,400,978**	**$1,294,863**	**$1,346,656**	**$1,380,522**	**$1,424,678**	**$1,501,179**	**$1,475,438**
Cash Flow (US$ 000)																														
Income before Income Tax	**US $000**	**$60,387,780**		**$0**	**$0**	**$0**	**$0**	**-$72,288**	**$419,400**	**$1,041,347**	**$1,563,875**	**$1,462,300**	**$1,561,287**	**$1,499,858**	**$1,417,910**	**$1,210,137**	**$1,346,034**	**$1,840,713**	**$1,932,630**	**$1,611,884**	**$1,680,880**	**$1,629,932**	**$1,641,165**	**$1,675,845**	**$1,539,289**	**$1,603,140**	**$1,645,576**	**$1,700,201**	**$1,797,729**	**$1,768,473**
Add Back Depreciation	US $000	$6,836,223		$0	$0	$0	$0	$538,615	$542,336	$545,422	$548,382	$552,093	$556,024	$559,956	$560,387	$564,047	$567,707	$32,724	$29,406	$45,355	$42,798	$39,490	$36,118	$32,746	$46,446	$43,346	$40,246	$40,067	$39,889	$38,210
Working Capital																														
Accounts Receivable	US $000	$0		$0	$0	$0	$0	-$25,867	-$27,650	-$26,920	-$26,642	$4,142	-$4,679	$2,351	$3,828	$8,261	-$5,731	$828	-$3,694	$13,119	-$2,082	$1,366	-$806	-$739	$5,910	-$2,440	-$1,701	-$2,463	-$4,477	$1,724
Accounts Payable	US $000	$0		$0	$0	$0	$0	-$13,071	-$8,332	-$8,023	-$10,679	$331	-$318	$104	-$28	$365	-$254	$129	-$163	$580	-$92	$60	-$127	-$33	$261	-$108	-$75	-$337	-$198	$806
Supplies Inventory	US $000	$0		$0	$0	$0	$0	-$1,761	-$6,163	-$5,897	-$5,932	-$7,225	$85	-$173	-$35	$141	$305	-$155	$31	-$136	$484	-$77	-$6	-$30	-$27	$218	-$90	-$203	-$91	$285
Total Working Capital	**US $000**	**$0**		$0	$0	$0	$0	-$40,699	-$42,145	-$40,841	-$43,252	-$2,753	-$4,912	$2,282	$3,765	$8,768	-$5,680	$802	-$3,827	$13,563	-$1,690	$1,349	-$938	-$801	$6,145	-$2,330	-$1,867	-$3,003	-$4,766	$2,814
Capital Expenditures																														
Mine & Pre-Production	US $000	$22,604		$0	$0	$0	$22,604	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Plant - Ph 1	US $000	$2,950,000		$118,000	$442,500	$1,209,500	$1,180,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Plant - Ph 2	US $000	$2,350,000		$0	$0	$0	$470,000	$940,000	$940,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sustaining Capital																														
Mine	US $000	$142,349		$0	$0	$0	$0	$22,205	$7,614	$0	$0	$3,510	$2,714	$2,714	$0	$0	$0	$4,030	$4,030	$4,030	$4,030	$4,030	$5,597	$5,597	$5,597	$5,597	$5,597	$2,245	$2,245	$2,245
Plant	US $000	$1,371,270		$0	$0	$0	$0	$31,650	$29,600	$30,860	$29,600	$33,600	$36,600	$36,600	$36,600	$36,600	$36,600	$0	$0	$186,320	$0	$0	$0	$0	$168,000	$0	$0	$0	$0	$171,320
Total Capital Expenditures	**US $000**	**$6,836,223**		$118,000	$442,500	$1,209,500	$1,672,604	$993,855	$977,214	$30,860	$29,600	$37,110	$39,314	$39,314	$36,600	$36,600	$36,600	$4,030	$4,030	$190,350	$4,030	$4,030	$5,597	$5,597	$173,597	$5,597	$5,597	$2,245	$2,245	$173,565
Cash Flow before Taxes	US $000	**$60,387,780**		**-$118,000**	**-$442,500**	**-$1,209,500**	**-$1,672,604**	**-$568,227**	**-$57,622**	**$1,515,068**	**$2,039,405**	**$1,974,531**	**$2,073,086**	**$2,022,782**	**$1,945,461**	**$1,746,352**	**$1,871,461**	**$1,870,209**	**$1,954,179**	**$1,480,452**	**$1,717,957**	**$1,666,741**	**$1,670,748**	**$1,702,193**	**$1,418,282**	**$1,638,559**	**$1,678,358**	**$1,735,019**	**$1,830,606**	**$1,635,932**
Cumulative Cash Flow before Taxes	US $000			-$118,000	-$560,500	-$1,770,000	-$3,442,604	-$4,010,831	-$4,068,453	-$2,553,386	-$513,981	$1,460,550	$3,533,635	$5,556,418	$7,501,879	$9,248,230	$11,119,691	$12,989,900	$14,944,080	$16,424,532	$18,142,489	$19,809,230	$21,479,978	$23,182,171	$24,600,454	$26,239,013	$27,917,371	$29,652,390	$31,482,997	$33,118,929
Income Taxes	US $000	$9,744,201		$0	$6,166	$19,470	$37,869	$42,876	$72,896	$170,173	$251,416	$226,930	$243,258	$226,565	$202,849	$158,036	$179,784	$309,460	$327,648	$262,492	$272,702	$266,720	$270,746	$274,867	$244,426	$256,485	$265,055	$275,523	$296,550	$293,035
Cash Flow after Taxes	US $000	**$50,643,579**		**-$118,000**	**-$448,666**	**-$1,228,970**	**-$1,710,473**	**-$611,104**	**-$130,518**	**$1,344,895**	**$1,787,989**	**$1,747,601**	**$1,829,828**	**$1,796,217**	**$1,742,613**	**$1,588,316**	**$1,691,677**	**$1,560,749**	**$1,626,531**	**$1,217,960**	**$1,445,255**	**$1,400,021**	**$1,400,002**	**$1,427,326**	**$1,173,857**	**$1,382,074**	**$1,413,303**	**$1,459,497**	**$1,534,056**	**$1,342,897**
Cumulative Cash Flow after Taxes	US $000			-$118,000	-$566,666	-$1,795,636	-$3,506,108	-$4,117,212	-$4,247,730	-$2,902,835	-$1,114,846	$632,754	$2,462,582	$4,258,799	$6,001,411	$7,589,727	$9,281,404	$10,842,153	$12,468,684	$13,686,644	$15,131,900	$16,531,921	$17,931,923	$19,359,249	$20,533,106	$21,915,180	$23,328,483	$24,787,980	$26,322,036	$27,664,934

240118 North Nevada Lithium
Financial Model and Operating Cost
SUMMARY

LCE Price $24,000
Ph 2 Timing Year 4

	Project Year>>			27	28	29	30	31	32	33	34	35	36
	Operating Year>>			24	25	26	27	28	29	30	31	32	33
	Calendar Year>>	Total - LoM		24	25	26	27	28	29	30	31	32	33
Mining Summary													
TOTAL DIRECT FEED from MINE	kt	204,844		5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150
TOTAL FROM STOCKPILE	kt	0		0	0	0	0	0	0	0	0	0	0
TOTAL ORE TO PROCESS PLANT	**kt**	**204,844**		**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**
*Contained Metal - **Direct Feed***													
Li Grade	ppm	4,016.6		3,736.0	3,558.0	3,429.0	3,366.0	3,560.0	3,559.0	3,551.0	3,529.0	3,782.0	3,955.0
*Contained Metal - **Direct Feed***													
Li	kt	4,380		102	98	94	92	98	98	97	97	104	108
Waste	kt	238,415		4,850	4,850	4,850	4,850	4,850	4,850	4,850	4,850	4,850	4,850
Total Material Mined	kt	**443,259**		10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Process Plant Summary													
Total Ore Processed	**kt**	**204,844**		5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150
Contained Metal Processed													
Li	kt	4,380		102	98	94	92	98	98	97	97	104	108
Recovery													
Li	%	82.8%		82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%
Recovered Metal													
Li	kt	3,626		85	81	78	76	81	81	81	80	86	90
Revenues													
Payable Metals													
LCE	kt	3,626		85	81	78	76	81	81	81	80	86	90
Metal Prices													
LCE	$/mt	$24,000		$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000
Revenues													
LCE	US $000	$87,031,889		$2,035,224	$1,938,256	$1,867,982	$1,833,662	$1,939,346	$1,938,801	$1,934,443	$1,922,458	$2,060,283	$2,154,526
Total Revenues (Gross)	**US $000**	**$87,031,889**		**$2,035,224**	**$1,938,256**	**$1,867,982**	**$1,833,662**	**$1,939,346**	**$1,938,801**	**$1,934,443**	**$1,922,458**	**$2,060,283**	**$2,154,526**
Operating & Production Cost (US$ 000)			$/mt Ore processed										
Mining (Owner Mining)	US $000	$1,498,292	$7.31	$34,799	$34,799	$34,799	$34,799	$34,799	$34,799	$34,799	$38,447	$38,447	$38,447
Process Plant	US $000	$15,978,251	$78.00	$398,427	$396,281	$394,727	$393,968	$396,306	$396,294	$396,197	$395,932	$398,981	$401,066
Tailings/Salt/Coarse gangue management	US $000	$1,039,500	$5.07	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086
General Administration	US $000	$497,907	$2.43	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855
Treatment & Refining Charges													
Treatment Charges	US $000	$0	$0.00	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Penalties	US $000	$0	$0.00	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Refining Charges	US $000	$0	$0.00	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Selling Expenses	US $000	$0	$0.00	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Transportation	US $000	$0	$0.00	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Cash Operating Cost	US $000	**$19,013,951**	$92.82	**$471,167**	**$469,022**	**$467,467**	**$466,708**	**$469,046**	**$469,034**	**$468,937**	**$472,320**	**$475,369**	**$477,454**
			$5,243.3										
Salvage Value	US $000	-$75,712	-$0.37	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Reclamation & Closure	US $000	$60,000	$0.29	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Production Cost	US $000	**$18,998,239**	$92.74	**$471,167**	**$469,022**	**$467,467**	**$466,708**	**$469,046**	**$469,034**	**$468,937**	**$472,320**	**$475,369**	**$477,454**
Operating Income	US $000	**$68,033,650**		**$1,564,057**	**$1,469,235**	**$1,400,515**	**$1,366,954**	**$1,470,300**	**$1,469,767**	**$1,465,506**	**$1,450,138**	**$1,584,913**	**$1,677,072**
Royalty (placeholder)	US $000	$737,360	$3.60	$5,979	$10,657	$15,945	$17,783	$22,116	$24,991	$21,774	$21,701	$26,862	$30,749
Total Royalties & Fees	US $000	$737,360	$3.60	$5,979	$10,657	$15,945	$17,783	$22,116	$24,991	$21,774	$21,701	$26,862	$30,749
Initial Capital Depreciation	US $000	$5,322,604		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sustaining Capital Depreciation	US $000	$1,513,619		$38,032	$37,853	$37,518	$37,183	$36,847	$36,512	$36,177	$36,319	$36,502	$41,019
Total Depreciation	US $000	$6,836,223		$38,032	$37,853	$37,518	$37,183	$36,847	$36,512	$36,177	$36,319	$36,502	$41,019
Net Income after Depreciation & Royalty	US $000	**$60,460,067**		**$1,520,046**	**$1,420,725**	**$1,347,052**	**$1,311,989**	**$1,411,336**	**$1,408,264**	**$1,407,555**	**$1,392,118**	**$1,521,549**	**$1,605,303**
Net Income before NOL	**US $000**	**$60,460,067**		**$1,520,046**	**$1,420,725**	**$1,347,052**	**$1,311,989**	**$1,411,336**	**$1,408,264**	**$1,407,555**	**$1,392,118**	**$1,521,549**	**$1,605,303**
Net-Operating Loss applied	US $000	-$72,288		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Income after NOL	**US $000**	**$60,387,780**		**$1,520,046**	**$1,420,725**	**$1,347,052**	**$1,311,989**	**$1,411,336**	**$1,408,264**	**$1,407,555**	**$1,392,118**	**$1,521,549**	**$1,605,303**
Net Income before Taxes	**US $000**	**$60,387,780**		**$1,520,046**	**$1,420,725**	**$1,347,052**	**$1,311,989**	**$1,411,336**	**$1,408,264**	**$1,407,555**	**$1,392,118**	**$1,521,549**	**$1,605,303**
Property Tax	US $000	$382,106		$2,228	$1,837	$1,449	$1,064	$2,532	$2,155	$1,782	$1,422	$1,061	$2,535
Net Proceeds of Mineral Tax	US $000	$3,082,136		$76,772	$72,038	$68,617	$66,955	$72,142	$72,132	$71,935	$71,163	$77,896	$82,280
Income Taxes	US $000	$8,161,372		$209,848	$195,529	$185,215	$180,253	$195,746	$195,811	$195,307	$192,841	$213,400	$226,221
Adv Manufacturing Production Credit	US $000	-$1,881,413		-$47,117	-$46,902	-$46,747	-$46,671	-$46,905	-$46,903	-$46,894	-$47,232	-$47,537	-$47,745
Net Income after Taxes	US $000	**$50,643,579**		**$1,278,314**	**$1,198,223**	**$1,138,518**	**$1,110,387**	**$1,187,822**	**$1,185,070**	**$1,185,424**	**$1,173,923**	**$1,276,729**	**$1,342,013**
Cash Flow (US$ 000)													
Income before Income Tax	**US $000**	**$60,387,780**		**$1,520,046**	**$1,420,725**	**$1,347,052**	**$1,311,989**	**$1,411,336**	**$1,408,264**	**$1,407,555**	**$1,392,118**	**$1,521,549**	**$1,605,303**
Add Back Depreciation	US $000	$6,836,223		$38,032	$37,853	$37,518	$37,183	$36,847	$36,512	$36,177	$36,319	$36,502	$41,019
Working Capital													
Accounts Receivable	US $000	$0		$10,724	$3,985	$2,888	$1,410	-$4,343	$22	$179	$493	-$5,664	-$3,873
Accounts Payable	US $000	$0		$474	$176	$128	$62	-$192	$1	$8	-$278	-$251	-$171
Supplies Inventory	US $000	$0		$64	$395	$147	$106	$52	-$160	$1	-$178	$18	-$209
Total Working Capital	**US $000**	**$0**		$11,262	$4,557	$3,163	$1,579	-$4,483	-$137	$188	$36	-$5,896	-$4,253
Capital Expenditures													
Mine & Pre-Production	US $000	$22,604		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Plant - Ph 1	US $000	$2,950,000		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Plant - Ph 2	US $000	$2,350,000		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sustaining Capital													
Mine	US $000	$142,349		$2,245	$2,245	$2,245	$2,245	$2,245	$2,245	$2,245	$3,668	$3,668	$3,668
Plant	US $000	$1,371,270		$0	$0	$0	$0	$168,000	$0	$0	$0	$0	$171,320
Total Capital Expenditures	**US $000**	**$6,836,223**		$2,245	$2,245	$2,245	$2,245	$170,245	$2,245	$2,245	$3,668	$3,668	$174,988
Cash Flow before Taxes	US $000	**$60,387,780**		**$1,567,094**	**$1,460,890**	**$1,385,488**	**$1,348,506**	**$1,273,455**	**$1,442,394**	**$1,441,674**	**$1,424,806**	**$1,548,487**	**$1,467,082**
Cumulative Cash Flow before Taxes	US $000			$34,686,022	$36,146,912	$37,532,400	$38,880,906	$40,154,361	$41,596,756	$43,038,430	$44,463,236	$46,011,723	$47,478,804
Income Taxes	US $000	$9,744,201		$241,732	$222,502	$208,534	$201,602	$223,515	$223,194	$222,130	$218,195	$244,821	$263,290
Cash Flow after Taxes	US $000	**$50,643,579**		**$1,325,362**	**$1,238,388**	**$1,176,954**	**$1,146,904**	**$1,049,941**	**$1,219,200**	**$1,219,544**	**$1,206,610**	**$1,303,667**	**$1,203,791**
Cumulative Cash Flow after Taxes	US $000			$28,990,295	$30,228,684	$31,405,637	$32,552,541	$33,602,482	$34,821,682	$36,041,226	$37,247,837	$38,551,503	$39,755,294

Project Year>>	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
Operating Year>>	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Calendar Year>>	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Mining Summary																	
TOTAL DIRECT FEED from MINE	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	1,418	0	0	0	0	0	0	0	0
TOTAL FROM STOCKPILE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL ORE TO PROCESS PLANT	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**5,150**	**1,418**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
*Contained Metal - **Direct Feed***																	
Li Grade	3,848.0	3,612.0	3,678.0	3,742.0	3,908.0	3,907.0	3,842.0	3,696.0	3,846.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*Contained Metal - **Direct Feed***																	
Li	105	99	101	103	107	107	105	101	29	0	0	0	0	0	0	0	0
Waste	4,850	4,850	1,419	1,189	652	636	872	647	14	0	0	0	0	0	0	0	0
Total Material Mined	10,000	10,000	6,569	6,339	5,802	5,786	6,022	5,797	1,432	0	0	0	0	0	0	0	0
Process Plant Summary																	
Total Ore Processed	5,150	5,150	5,150	5,150	5,150	5,150	5,150	5,150	1,418	0	0	0	0	0	0	0	0
Contained Metal Processed																	
Li	105	99	101	103	107	107	105	101	29	0	0	0	0	0	0	0	0
Recovery																	
Li	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	82.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Recovered Metal																	
Li	87	82	83	85	89	89	87	84	24	0	0	0	0	0	0	0	0
Revenues																	
Payable Metals																	
LCE	87	82	83	85	89	89	87	84	24	0	0	0	0	0	0	0	0
Metal Prices																	
LCE	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000
Revenues																	
LCE	$2,096,237	$1,967,673	$2,003,628	$2,038,492	$2,128,922	$2,128,378	$2,092,968	$2,013,433	$576,877	$0	$0	$0	$0	$0	$0	$0	$0
Total Revenues (Gross)	**$2,096,237**	**$1,967,673**	**$2,003,628**	**$2,038,492**	**$2,128,922**	**$2,128,378**	**$2,092,968**	**$2,013,433**	**$576,877**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Operating & Production Cost (US$ 000)																	
Mining (Owner Mining)	$38,447	$38,447	$25,256	$24,372	$22,307	$22,246	$23,153	$22,288	$5,506	$0	$0	$0	$0	$0	$0	$0	$0
Process Plant	$399,776	$396,932	$397,728	$398,499	$400,499	$400,487	$399,704	$370,112	$162,875	$0	$0	$0	$0	$0	$0	$0	$0
Tailings/Salt/Coarse gangue management	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$26,086	$9,612	$0	$0	$0	$0	$0	$0	$0	$0
General Administration	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$11,855	$0	$0	$0	$0	$0	$0	$0	$0
Treatment & Refining Charges																	
Treatment Charges	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Penalties	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Refining Charges	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Selling Expenses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Transportation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Cash Operating Cost	**$476,164**	**$473,320**	**$460,925**	**$460,812**	**$460,748**	**$460,674**	**$460,798**	**$430,341**	**$189,848**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Salvage Value	$0	$0	$0	$0	$0	$0	$0	$0	$0	-$75,712	$0	$0	$0	$0	$0	$0	$0
Reclamation & Closure	$0	$0	$0	$0	$0	$0	$0	$0	$0	$60,000	$0	$0	$0	$0	$0	$0	$0
Total Production Cost	**$476,164**	**$473,320**	**$460,925**	**$460,812**	**$460,748**	**$460,674**	**$460,798**	**$430,341**	**$189,848**	**-$15,712**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Operating Income	**$1,620,072**	**$1,494,353**	**$1,542,703**	**$1,577,680**	**$1,668,175**	**$1,667,703**	**$1,632,170**	**$1,583,092**	**$387,030**	**$15,712**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Royalty (placeholder)	$33,217	$25,037	$32,090	$28,160	$28,519	$27,584	$27,707	$29,863	$11,538	$0	$0	$0	$0	$0	$0	$0	$0
Total Royalties & Fees	$33,217	$25,037	$32,090	$28,160	$28,519	$27,584	$27,707	$29,863	$11,538	$0	$0	$0	$0	$0	$0	$0	$0
Initial Capital Depreciation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sustaining Capital Depreciation	$41,319	$41,706	$42,215	$42,907	$83,105	$84,712	$84,488	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Depreciation	$41,319	$41,706	$42,215	$42,907	$83,105	$84,712	$84,488	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Income after Depreciation & Royalty	**$1,545,536**	**$1,427,611**	**$1,468,398**	**$1,506,613**	**$1,556,550**	**$1,555,407**	**$1,519,975**	**$1,553,229**	**$375,492**	**$15,712**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Net Income before NOL	**$1,545,536**	**$1,427,611**	**$1,468,398**	**$1,506,613**	**$1,556,550**	**$1,555,407**	**$1,519,975**	**$1,553,229**	**$375,492**	**$15,712**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Net-Operating Loss applied	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Income after NOL	**$1,545,536**	**$1,427,611**	**$1,468,398**	**$1,506,613**	**$1,556,550**	**$1,555,407**	**$1,519,975**	**$1,553,229**	**$375,492**	**$15,712**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Net Income before Taxes	**$1,545,536**	**$1,427,611**	**$1,468,398**	**$1,506,613**	**$1,556,550**	**$1,555,407**	**$1,519,975**	**$1,553,229**	**$375,492**	**$15,712**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Property Tax	$2,121	$1,702	$1,278	$847	$1,821	$929	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Proceeds of Mineral Tax	$79,414	$73,106	$75,485	$77,199	$79,714	$79,610	$77,845	$79,585	$19,541	$786	$0	$0	$0	$0	$0	$0	$0
Income Taxes	$217,570	$198,440	$206,415	$211,734	$217,386	$217,184	$211,971	$222,716	$50,521	$3,135	$0	$0	$0	$0	$0	$0	$0
Adv Manufacturing Production Credit	-$47,616	-$47,332	-$46,092	-$46,081	-$46,075	-$46,067	-$46,080	-$43,034	-$18,985	$0	$0	$0	$0	$0	$0	$0	$0
Net Income after Taxes	**$1,294,048**	**$1,201,695**	**$1,231,312**	**$1,262,914**	**$1,303,704**	**$1,303,751**	**$1,276,240**	**$1,293,962**	**$324,415**	**$11,792**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Cash Flow (US$ 000)																	
Income before Income Tax	**$1,545,536**	**$1,427,611**	**$1,468,398**	**$1,506,613**	**$1,556,550**	**$1,555,407**	**$1,519,975**	**$1,553,229**	**$375,492**	**$15,712**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Add Back Depreciation	$41,319	$41,706	$42,215	$42,907	$83,105	$84,712	$84,488	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Working Capital																	
Accounts Receivable	$2,395	$5,283	-$1,478	-$1,433	-$3,716	$22	$1,455	$3,269	$59,037	$23,707	$0	$0	$0	$0	$0	$0	$0
Accounts Payable	$106	$234	$1,019	$9	$5	$6	-$10	$2,503	$19,767	$15,604	$0	$0	$0	$0	$0	$0	$0
Supplies Inventory	-$143	$88	$863	-$10	$52	-$134	-$45	$97	$2,277	$14,473	$8,697	$0	$0	$0	$0	$0	$0
Total Working Capital	$2,359	$5,605	$405	-$1,433	-$3,659	-$106	$1,400	$5,869	$81,080	$53,785	$8,697	$0	$0	$0	$0	$0	$0
Capital Expenditures																	
Mine & Pre-Production	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Plant - Ph 1	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Plant - Ph 2	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sustaining Capital																	
Mine	$3,668	$3,668	$3,668	$3,668	$3,668	$3,663	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Plant	$0	$0	$0	$0	$168,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Capital Expenditures	$3,668	$3,668	$3,668	$3,668	$171,668	$3,663	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Cash Flow before Taxes	**$1,585,546**	**$1,471,254**	**$1,507,349**	**$1,544,419**	**$1,464,329**	**$1,636,351**	**$1,605,863**	**$1,559,098**	**$456,572**	**$69,496**	**$8,697**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Cumulative Cash Flow before Taxes	$49,064,350	$50,535,604	$52,042,953	$53,587,372	$55,051,701	$56,688,052	$58,293,915	$59,853,014	$60,309,586	$60,379,082	$60,387,780	$60,387,780	$60,387,780	$60,387,780	$60,387,780	$60,387,780	$60,387,780
Income Taxes	$251,488	$225,916	$237,086	$243,699	$252,846	$251,656	$243,736	$259,267	$51,077	$3,920	$0	$0	$0	$0	$0	$0	$0
Cash Flow after Taxes	**$1,334,058**	**$1,245,338**	**$1,270,264**	**$1,300,720**	**$1,211,482**	**$1,384,695**	**$1,362,127**	**$1,299,832**	**$405,495**	**$65,576**	**$8,697**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Cumulative Cash Flow after Taxes	$41,089,352	$42,334,690	$43,604,954	$44,905,674	$46,117,156	$47,501,851	$48,863,979	$50,163,810	$50,569,305	$50,634,882	$50,643,579	$50,643,579	$50,643,579	$50,643,579	$50,643,579	$50,643,579	$50,643,579

NPV - Mid-Year Cash Flow (US $000)		
Economic Indicators Before Taxes		
NPV @ 5%	5%	$19,846,260
NPV @ 8%	8%	$11,307,889
NPV @ 10%	10%	$7,963,092
IRR		25.5%
Payback (Years)		4.3
Economic Indicators After Taxes		
NPV @ 5%		$16,395,203
NPV @ 8%		$9,165,335
NPV @ 10%		$6,330,167
IRR		22.8%
Payback (Years)		4.64

22.5 SENSITIVITY ANALYSIS

A sensitivity analysis was performed to examine variables in the economic model to understand the impact of the variables on the Project value and economics. The variables examined are lithium carbonate selling price, lithium recovery, total OPEX, and initial/total CAPEX. The change in Project NPV was estimated based on the defined increase or decrease of the particular variable. The results of this sensitivity analysis are presented on an after-tax basis in Figure 22-2 for Project NPV and Figure 22-3 for IRR.

The analysis demonstrates high sensitivity to revenues (i.e. lithium carbonate price, recovery, production) and initial capital costs. It should be noted that project NPV is more sensitive to the former, while project IRR is more sensitive to the latter. The Project's uniquely low operating costs, compared to other lithium claystone projects, makes it relatively insensitive to changes in OPEX.

Table 22-8 presents base case economic indicators. Table 22-9 shows impact to NPV at a range of discount rates. Table 22-10 through Table 22-14 show impacts to both IRR and NPV from various deviations from the base case financial assumptions.

Table 22-8: After-Tax NPV at 8% and IRR

Economic Indicator	Units	Value
NPV @ 8%	US$000	$9,165,335
IRR	%	22.8%
Payback (undiscounted)	Years	4.64

Table 22-9: NPV for Various Discount Rates (42-Year LOM)

Economic Indicators After Taxes	Units	42-Year LoM
NPV @ 5%	$M	$16,395
NPV @ 8%	$M	$9,165
NPV @ 10%	$M	$6,330

Table 22-10: Sensitivity Analysis for LCE Selling Price (42-Year LOM)

LCE Price Sensitivity					
Metal Price	**LCE Price**	**Revenue (US$000)**	**NPV, After Tax @ 5% (US$000)**	**NPV, After Tax @ 8% (US$000)**	**IRR, After Tax**
Base Case	**$24,000**	**$87,031,889**	**$16,395,203**	**$9,165,335**	**22.8%**
-50.0%	$12,000	$43,515,945	$2,817,031	$361,749	8.7%
-37.5%	$15,000	$54,394,931	$6,438,559	$2,736,443	13.0%
-25.0%	$18,000	$65,273,917	$9,827,628	$4,931,479	16.5%
-12.5%	$21,000	$76,152,903	$13,114,579	$7,049,924	19.8%
12.5%	$27,000	$97,910,875	$19,647,775	$11,256,021	25.7%
25.0%	$30,000	$108,789,861	$22,842,287	$13,295,490	28.2%
37.5%	$33,000	$119,668,848	$26,036,800	$15,334,959	30.6%

Note: LCE price sensitivity is analogous for Lithium recovery and plant throughput

Table 22-11: Sensitivity Analysis for Total OPEX (42-Year LOM)

Operating Cost Sensitivity				
	Total LOM OPEX ($000)	NPV, After Tax @ 5% (US$000)	NPV, After Tax @ 8% (US$000)	IRR, After Tax
Base Case	**$19,013,951**	**$16,395,203**	**$9,165,335**	**22.8%**
20%	$22,816,741	$15,453,837	$8,561,223	21.9%
10%	$20,915,346	$15,924,520	$8,863,279	22.4%
-10%	$17,112,556	$16,862,409	$9,464,329	23.2%
-20%	$15,211,161	$17,326,340	$9,760,437	23.7%

Table 22-12: Sensitivity Analysis for Initial CAPEX (42-Year LOM)

Initial Capital Sensitivity				
	Total Development CAPEX ($000)	NPV, After Tax @ 5% (US$000)	NPV, After Tax @ 8% (US$000)	IRR, After Tax
Base Case	**$5,322,604**	**$16,395,203**	**$9,165,335**	**22.8%**
20%	$6,387,125	$15,300,534	$8,184,557	19.5%
10%	$5,854,864	$15,847,869	$8,674,946	21.0%
-10%	$4,790,344	$16,942,537	$9,655,725	24.9%
-20%	$4,258,083	$17,489,871	$10,146,114	27.4%

Table 22-13: Sensitivity Analysis for Total CAPEX (42-Year LOM)

All Capital Sensitivity				
	Total LOM CAPEX + SUSEX ($000)	NPV, After Tax @ 5% (US$000)	NPV, After Tax @ 8% (US$000)	IRR, After Tax
Base Case	**$6,836,223**	**$16,395,203**	**$9,165,335**	**22.8%**
20%	$8,203,468	$15,169,772	$8,101,365	19.4%
10%	$7,519,845	$15,782,488	$8,633,350	21.0%
-10%	$6,152,601	$17,007,918	$9,697,320	25.0%
-20%	$5,468,978	$17,620,634	$10,229,305	27.5%

Table 22-14: Sensitivity Analysis for Lithium Recovery (42-Year LOM)

LCE Recovery				
	LCE Recovery %	NPV, After Tax @ 5% (US$000)	NPV, After Tax @ 8% (US$000)	IRR, After Tax
Base Case	**82.8%**	**$16,395,203**	**$9,165,335**	**22.8%**
5.0%	86.9%	$17,676,204	$9,989,602	24.0%
2.5%	84.9%	$17,037,341	$9,578,911	23.4%
-2.5%	80.7%	$15,751,405	$8,750,298	22.2%
-5.0%	78.7%	$15,107,608	$8,335,260	21.6%

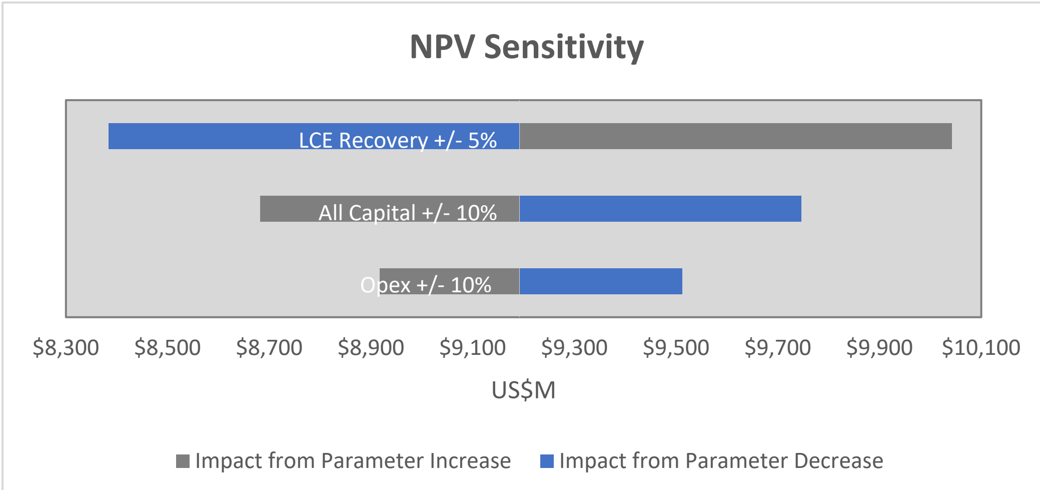


Figure 22-2: NPV Sensitivity Comparison (42-Year LOM)

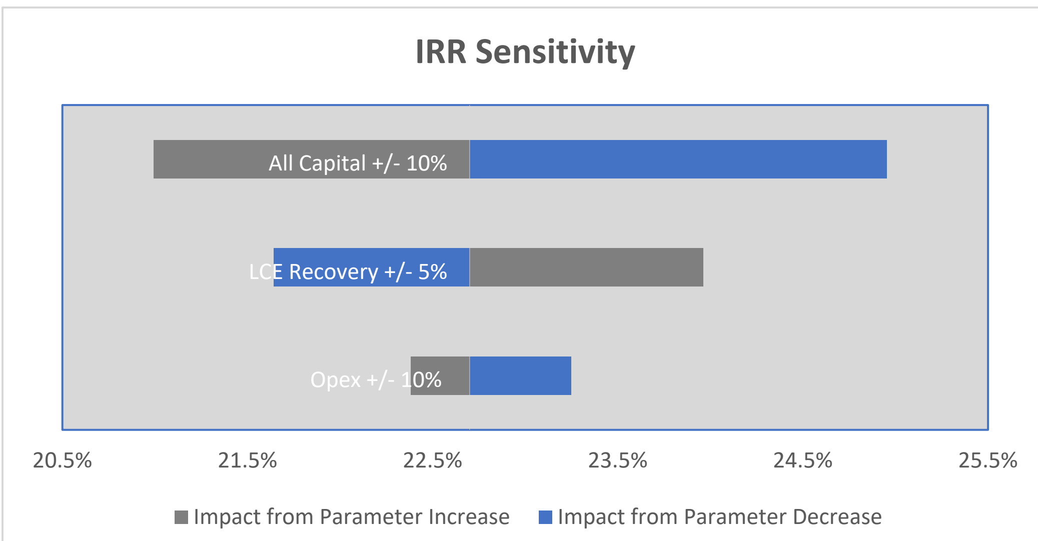


Figure 22-3: IRR Sensitivity Comparison (42-Year LOM)

23 ADJACENT PROPERTIES

The QP has not verified the information presented for the properties discussed below and the information is not necessarily indicative of mineralization at the Nevada North Lithium Project (NNLP). Further, the reader is cautioned that proximity to mineralization at adjacent or nearby properties offers no assurance that the rock types or resources reported by other companies extend onto the NNLP, nor should such proximity be assumed to imply similarity to mineralization and results reported by other companies in the district.

23.1 CONTACT DISTRICT COPPER-SILVER (± GOLD) SKARN AND STRUCTURALLY-CONTROLLED MINERALIZATION

23.1.1 Historical Activity

As described by Schrader (1935), the copper-silver (± gold) endowments of the Contact District manifest as dozens of small historical mines and prospects developed on skarn showings at the contact of the Jurassic-age Contact Stock with Paleozoic sedimentary rocks (Figure 23-1). Chalcopyrite and its weathering products are the main copper minerals with grades sometimes exceeding 10% copper and 20 oz/st silver in certain skarn lenses. Small quantities of lead, zinc, and molybdenum minerals are also documented.

Despite variations in gangue mineralogy, structurally-controlled mineralization within the Contact Stock and structurally-controlled (± carbonate replacement) mineralization within adjacent Paleozoic strata are interpreted to represent respective inboard and outboard portions of the same Jurassic igneous-hydrothermal event. With allowances for the inclusion of the historical Vulcan and Bell Mines in the northern portion of Knoll Mountain, the limit of the Contact District is here defined as a 1500 m buffer to the igneous-sedimentary contact (Figure 23-1, dashed where inferred under Tertiary rock cover). This buffer incorporates a small portion of the NNLP at its northern end.

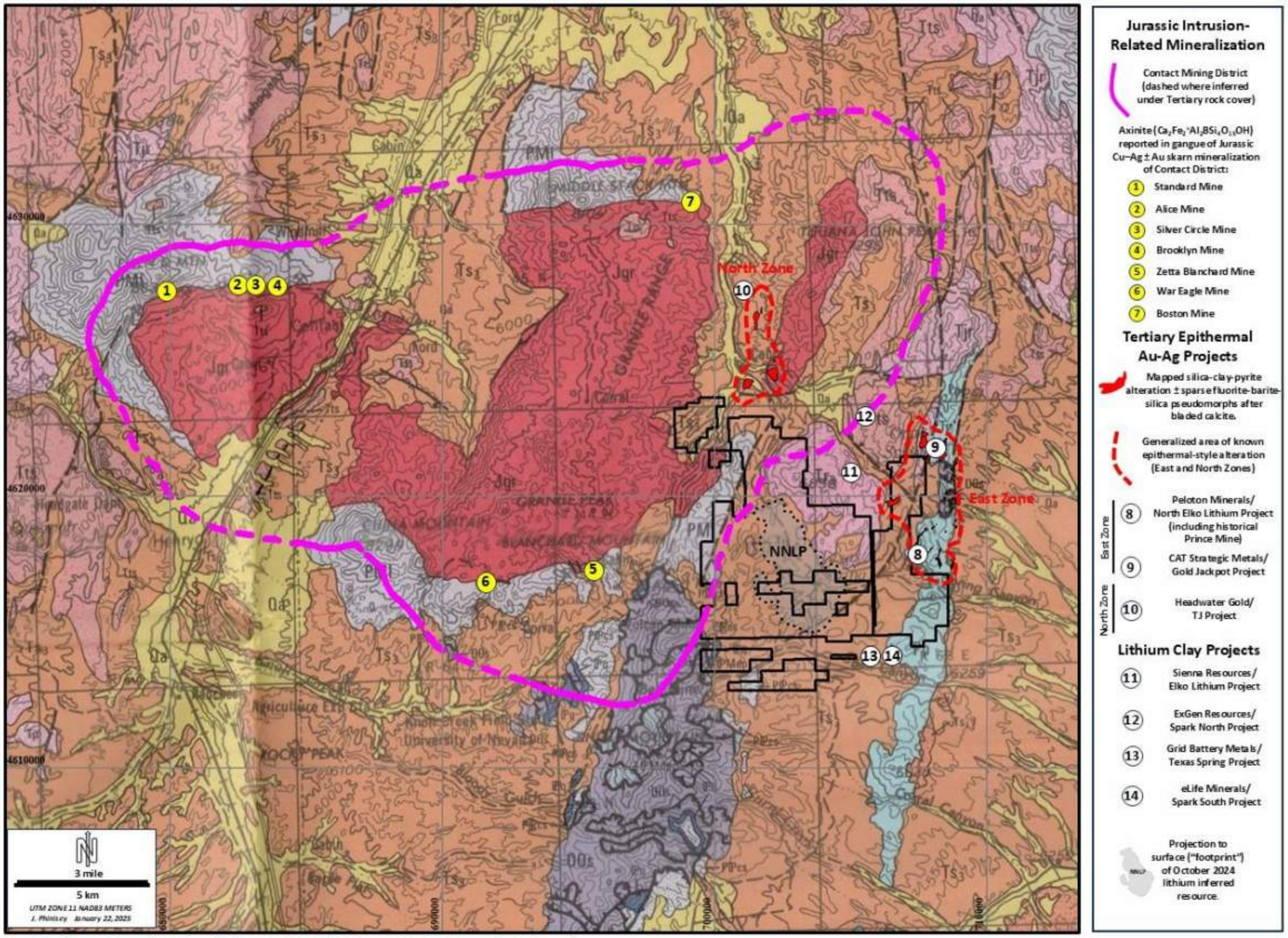
23.1.2 Recent Exploration Activity

Modern exploration known to the QP in the Contact District is limited:

- Faraday Copper Corp. acquired the approximately 2900 ha (approximately 7160 ac) Contact Copper Project from International Enexco, Ltd in 2014. An historical mineral resource estimate of 141 million tonnes grading 0.22% copper using a 0.07% copper cut-off grade was issued by International Enexco in 2013 (Choquette et al., 2013). The Contact Copper Project is located 5.5 km west of the settlement of Contact and incorporates the historical Brooklyn Mine (Figure 23-1, Table 23-1).
- In 2021, Masivo Silver Corp. is known to have taken an option on claims at the historical Boston Mine, 10 km north of the NNLP (Figure 23-1, Table 23-1).

23.1.3 Implications for the NNLP

Of possible consequence to the NNLP, Schrader states that the unusual boron-bearing silicate mineral, axinite ($Ca_2Fe^{2+}Al_2BSi_4O_{15}OH$), is a common gangue mineral in skarn occurrences of the Contact District. Schrader (1935) and LaPointe (1991) provide seven specific axinite locales (Figure 23-1), with specimens from the Brooklyn Mine containing up to 80% of the mineral. With the proximity of the Contact Mining District to the NNLP and the certainty that the Contact Stock has shed some coarse detritus to the Early Basin Fill member at NNLP, it should be considered whether boron that is eroded from Jurassic-age axinite may be a source for the modest boron enrichment identified in mineralized claystone of the NNLP.



Modified from Coats (1987) and Schrader (1935). Refer to Fig. 7-1 for geologic legend.

Figure 23-1: Location of the NNLP with Respect to the Contact Mining Dist. and Tertiary Hydrothermal Activity

23.2 TERTIARY EPITHERMAL GOLD-SILVER (± URANIUM) MINERALIZATION EAST AND NORTH OF THE NNLP

23.2.1 Historical Activity

The historical Prince Mine and nearby prospects represent a late Tertiary hydrothermal system that is responsible for structurally-controlled epithermal gold-silver-arsenic-antimony ± uranium enrichment northeast of and partially overlapping the NNLP (Figure 23-1). Although the Prince Mine is hosted by Paleozoic sedimentary rocks, the larger hydrothermal cell also incorporates a sequence of sedimentary and volcaniclastic rocks of similar age as the NNLP host rocks.

The Prince Mine produced a minor amount of uranium during the 1950's but has been idle since. Alteration at Prince Mine consists of decalcification and silicification along high angle hydrothermal breccias and along thrust planes/replacement zones in the sedimentary package (Capps et al., 2020).

Capps et al. (2020) report a total of 272 rock samples collected and assayed. Gold values greater than 20 ppb are common along the 5.5 km strike length of mapped silicified structures. The highest reported gold value is 300 ppb, located near the Prince Mine. Two dozen rock samples are located within a zone of silicification and prospect pits in Tertiary strata and that lies within the northeastern limit of the NNLP claim perimeter. None of these samples yielded gold values greater than 20 ppb and only two of the samples gave arsenic values greater than 50 ppm.

A second cell of Tertiary hydrothermal alteration and gold mineralization is mapped over a north-south strike length of 3 km, the southern end of which being approx. 1.5 km north of the limit of NNLP claims (Figure 23-1). Silicified Tertiary strata are mapped as tuffs and arkose which host sparse occurrences of fluorite, barite, and silica pseudomorphs after bladed calcite (Limbach, 1991). Gold values in multiple 1980s-era soil surveys range up to 697 ppb. Rock samples from this same era commonly gave gold values greater than 100 ppb with a reported maximum value of 13.9 ppm. A minimum of 25 drill tests are reported to have been drilled by 1991, with depths typically ranging 100-200 m.

23.2.2 Recent Exploration Activity

Prior to discovery by Surge of significant lithium at the NNLP, Peloton Minerals and CAT Strategic Metals acquired claim blocks at and near the Prince Mine with an exploration focus on the gold potential (Figure 23-1, Table 23-1). This focus has now expanded for both companies to include the potential for lithium clay mineralization within their holdings.

Additionally, Headwater Gold acquired a claim position in 2024 along the northern portion of the northern zone of silicification, dubbed the TJ Project (Figure 23-1, Table 23-1). An initial drilling phase was completed in early 2025.

23.2.3 Implications for the NNLP

Given the proximity of these Tertiary-age hydrothermal cells to the NNLP, they should be considered as a possible heat source driving groundwater circulation that may be required for the development of significant lithium mineralization at the NNLP.

23.3 EXPLORATION FOR LITHIUM CLAY MINERALIZATION ON CLAIMS ADJACENT TO NNLP

Four companies are known to have established claim positions over Tertiary rocks adjacent or proximal to the NNLP. Sienna Resources and ExGen Resources hold claims north of the NNLP while eLife Minerals and Grid Battery Metals hold claims south of the NNLP (Figure 23-1, Table 23-1).

Table 23-1: Adjacent Properties with Recent Exploration Activity

Figure 23-1 Index	Project	Company	Latitude NAD83	Longitude NAD83
4	Contact Copper Project	Faraday Copper Corp.	41.74° N	114.78° W
6	Boston Mine	Masivo Silver Corp.	41.81° N	114.61° W
7	North Elko Lithium Project	Peloton Minerals Corp.	41.66° N	114.48° W
8	Gold Jackpot Project	Cat Strategic Metals Corp.	41.70° N	114.49° W
9	TJ Project	Headwater Gold Corp.	41.76° N	114.58° W
10	Elko Lithium Project	Sienna Resources	41.70° N	114.53° W
11	Spark North Project	ExGen Resources Inc.	41.73° N	114.53° W
12	Texas Spring Project	Grid Battery Metals Inc.	41.65° N	114.54° W
13	Spark South Project	eLife Minerals Corp.	41.63° N	114.54° W

Source: J. Phinisey, February 2025

24 OTHER RELEVANT DATA AND INFORMATION

There are no other relevant data for the Nevada North Lithium Project.

25 INTERPRETATION AND CONCLUSIONS

25.1 GEOLOGY-EXPLORATION-DEPOSIT TYPE

It is the opinion of the QP that lithium resource definition drilling at the Nevada North Lithium Project (NNLP) should proceed in a staged manner concurrent with engineering studies and environmental permitting. The risk associated with a novel deposit type may be lessened by gaining from the mine development experiences at the Thacker Pass and Rhyolite Ridge lithium deposits that are nearing mine construction elsewhere in the Great Basin.

25.2 METALLURGICAL TESTING

Metallurgical testing conducted between 2023 and 2024 has demonstrated that the NNLP hosts claystone mineralization amenable to conventional sulfuric acid leaching, following beneficiation through particle-size classification. Lithium is consistently concentrated in fine fractions, while carbonate gangue is effectively rejected in coarser material, supporting acid consumption reduction strategies.

Sulfuric acid leach tests achieved lithium extractions exceeding 90%, with purification and precipitation stages yielding technical-grade lithium carbonate (~99.3% purity). Solid-liquid separation tests provided viable options for thickening and filtration at both beneficiation and post-leach stages.

While the current test work supports the viability of the proposed process flowsheet, further validation and optimization are recommended to address variability, impurity control, and battery-grade product refining. Overall, the results provide a strong technical foundation for advancing the Project to the next phase of development.

25.3 MINERAL RESOURCES

Based on the current level of exploration, the NNLP Deposit contains Inferred Mineral Resources of 550 Mt at a grade of 2,956 ppm lithium and 8.65 Mt LCE. Mineral resources in the Inferred category have a lower level of confidence than that applied to mineral resources in the Indicated category, and, although there is sufficient evidence to imply geologic grade and continuity, these characteristics cannot be verified based on the current data. It is reasonable to expect that the majority of Inferred mineral resources could be upgraded to Indicated mineral resources with continued exploration.

25.4 MINING

Based on the current knowledge of the deposit and its characteristics, mining can be completed using conventional front loaders, backhoes and rigid frame haul trucks. Additional knowledge may modify the planned equipment and mining process.

25.5 INFRASTRUCTURE

Infrastructure required for the execution and operation of the Project can be delivered. The Project resides in a mining jurisdiction where labor, housing, and support is available. Key aspects of the infrastructure include:

- A 34 km (21 mi) access road from US Hwy 93 will allow for legal haul tractor-trailers for construction and operations, including flatbed deliveries for bulk materials and wide load transports delivering plant facility equipment.
- Surge anticipates water supply requirements for Phase 1 at 3,458 AFA and an additional 2,961 AFA during Phase 2. The primary source of water supply proposed consists of groundwater wells located east of the Project area. NDWR issues approvals to use groundwater for mining, milling, and domestic purposes.

- Electrical power for the Project will be primarily supplied by on-site power generation from the waste heat provided by the sulfuric acid plant through a steam turbine generator. The balance of electricity will need to be supplied by an electrical utility provider. Consultations with Well Rural Electric Company, an electrical utility provider in the area with nearby high voltage transmission lines, are ongoing.

25.6 ENVIRONMENTAL

Surge anticipates securing the required Federal, State, and local permits required to construct, operate, and reclaim the mine operations within a reasonable timeframe in line with other similar open pit mine operations in Nevada recently permitted. Surge is committed to completing all required baseline characterization studies and analysis as required by BLM and cooperating agencies. No major issues or challenges have been identified to date that would affect the preparation and submittal of the Plan of Operations and Reclamation Plan, and all documents required to complete the effect analysis under NEPA.

The Project's permitting schedule may benefit from implementation of the EO 14241 titled Immediate Measures to Increase American Mineral Production issued in March 2025 to streamline permitting processes for mining projects, particularly those focused on critical minerals.

26 RECOMMENDATIONS

26.1 GEOLOGY

Conversion of the current inferred resource to indicated and measured categories is the recommended priority for future drilling. Examination of the block model in plan and cross-sectional views suggests that two areas of approximately 220 ha each are priority areas for this effort (Figure 26-1, red). The proposed budget of $4 million permits flexibility in the design of the resource conversion drilling program, including determination of optimal drill hole spacing and percentages of reverse circulation vs. core meterage.

Elevated lithium values in soils point to four areas worthy of reconnaissance drill testing (Figure 9-1 and Figure 26-1, green). The two areas to the northeast of the current inferred resource footprint are particularly interesting in that Surge stream sediment sample 481-AK yielded 708 ppm lithium from a small watershed that is isolated from the footprint of the inferred resource (Figure 6-3). Additionally, it is recommended to commit at least one deeper core hole to test the spatial relationship of the dacite dome and/or flows to possible underlying mineralized claystone strata. Each of the four areas should be tested with 4-6 holes for a total of 20 holes. Exploration drilling has an estimated cost of $1 million.

Given the effectiveness of soil geochemistry, it is recommended to complete reconnaissance soil sampling in four areas of outcropping Tertiary rocks (Figure 26-1, yellow). At line and sample spacing of 200 m, an estimated total of 500 samples will be required. Depending on analytical results, an additional program of 500 in-fill samples at 100 m spacing may be warranted. The recommended geochemical and geophysical surveys have an estimated cost of $350,000.

Drill road construction presents an opportunity to greatly expand coverage of tTEM data acquisition in high priority areas.

It is recommended to determine lithium-hosting clay mineral species and lithium residence(s) within the clay in support of metallurgical studies and optimization of lithium recovery. The clay mineral studies have an estimated cost of $50,000.

Manufacture of certified reference materials from NNLP mineralization across a range of five lithium grades is recommended and has an estimated cost of $25,000.

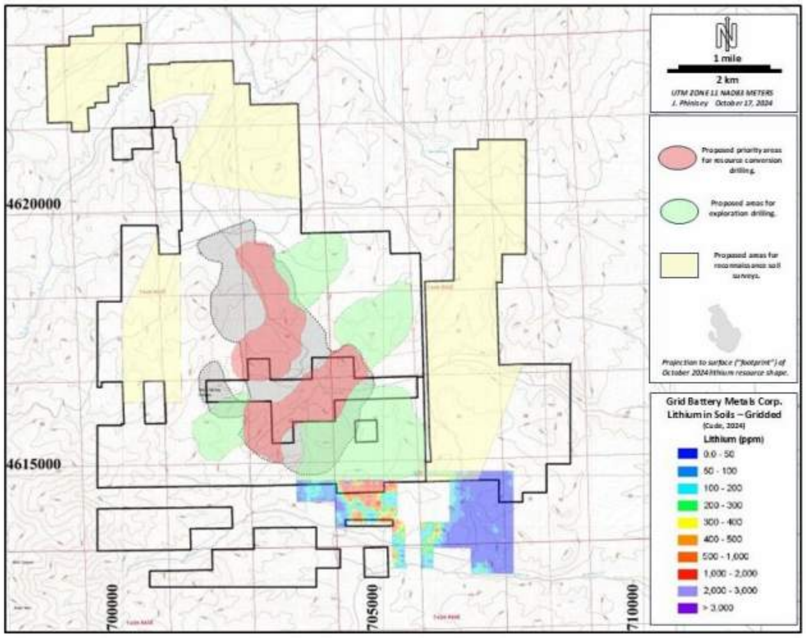


Figure 26-1: Recommended 2025 Work Program Areas

26.2 METALLURGICAL TESTING

Further metallurgical test work is recommended to support the continued advancement of the NNLP toward prefeasibility-level study. The following areas should be prioritized to confirm process viability, optimize reagent consumption, and reduce technical uncertainty:

- **Beneficiation Process Validation**
  Conduct confirmatory and variability testing across a broader range of geological domains to validate the beneficiation flowsheet. This includes assessing the robustness of attrition and particle-size classification for lithium upgrading and carbonate rejection under variable feed conditions.

- **Leach Acid Demand Optimization**
  Validate sulfuric acid consumption rates following beneficiation, including acid requirement sensitivity to changes in carbonate content and composite grade. Establish acid-to-carbonate stoichiometry for improved leach control.

- **Solid-Liquid Separation Post-Beneficiation**
  Confirm the settling and thickening behavior of beneficiated slurries under continuous conditions. This includes evaluation of flocculant performance, pulp density targets, and scaling factors for industrial equipment selection.

- **Post-Leach Solid-Liquid Separation Strategy**
  Develop and optimize a strategy for thickening and/or filtration of leach or neutralized slurries, with the goal of maximizing lithium recovery in solution and achieving stable downstream feed conditions for purification.

- **Neutralization Using Beneficiation Rejects**
  Assess the feasibility of utilizing carbonate-rich beneficiation rejects as an internal source of limestone for acid neutralization, including geochemical compatibility, neutralization efficiency, and potential reagent cost offsets.

- **Impurity Deportment and Control**
  Further define the behavior of key impurities (e.g., boron, fluoride, aluminum, magnesium) throughout the purification circuit. Develop targeted removal strategies to support production of battery-grade lithium carbonate.

- **Sodium and Potassium Crystallization and Recovery**
  Investigate Na/K crystallization behavior after lithium carbonate precipitation. Develop a process for recovering residual dissolved lithium from brine recycle streams and define acceptable sodium/potassium thresholds in precipitation feeds.

- **Battery-Grade Lithium Carbonate Refinement**
  Evaluate additional refining steps (e.g., sulfate removal, polishing techniques) to upgrade technical-grade lithium carbonate to meet international battery-grade specifications.

26.3 MINERAL RESOURCES

- Implement more geologic mapping, geophysical studies, and geological interpretation to improve the geologic model.
- Drilling should be undertaken to define and estimate Indicated Resources.
- Drill outside the present footprint to expand Inferred Resources.

26.4 MINING

- Future planning should include a detailed geotechnical analysis of the pit slopes and material bearing conditions for the operation of heavy equipment.
- Detailed sampling for dry and density and moisture content should also be completed.

26.5 INFRASTRUCTURE

- It is recommended to secure water rights.
- It is recommended to consult with Wells Rural Electric Company and regional utilities to advance power studies. The estimated cost of the initial power study is approximately $50,000 USD.

26.6 MARKET STUDIES

- Updated lithium price projections and market analyses should be conducted at the next stage of study on this Project.

26.7 ENVIRONMENTAL

- Continue annual greater sage-grouse lek surveys and raptor and eagle nest monitoring aerial surveys.
- Expand surface water and seeps and springs surveys including flow measurements and sampling for water quality analysis to cover an area of 5-mile from the Project area.
- Install vibrating wire piezometers and groundwater monitoring wells and perform long-term pumping tests and to support development of a hydrogeological conceptual site model.

- Develop a water balance model to predict the quantity and quality of water available to support mineral processing as well as prediction of effluent quality and quantity.
- Use data collected during mineral exploration to guide planning on the geochemistry characterization program. Consider collecting additional data such as some elemental composition and mineralogy data to characterize overburden/waste rock to optimize the geochemical study.
- Initiate broader community and tribal engagements to introduce the Project to local stakeholders.

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APPENDIX A: PRELIMINARY ECONOMIC ASSESSMENT CONTRIBUTORS AND PROFESSIONAL QUALIFICATIONS

CERTIFICATE OF QUALIFIED PERSON

I, Daniel Roth, PE, P.Eng. do hereby certify that:

1. I am currently employed as a project manager and civil engineer at M3 Engineering & Technology Corp. located at 2051 West Sunset Rd, Suite 101, Tucson, AZ 85704.
2. I graduated with a Bachelor of Science degree in Civil Engineering from The University of Manitoba in 1990.
3. I am a registered professional engineer in good standing in the following jurisdictions:
   - British Columbia, Canada (No. 38037)
   - Alberta, Canada (No. 62310)
   - Ontario, Canada (No. 100156213)
   - Yukon, Canada (No. 1998)
   - New Mexico, USA (No. 17342)
   - Arizona, USA (No. 37319)
   - Alaska, USA (No. 102317)
   - Minnesota, USA (No. 54138)
   - Nevada, USA (No. 029423)
4. I have worked continuously as a design engineer, engineering and project manager since 1990, a period of 35 years. I have worked in the minerals industry as a project manager for M3 Engineering & Technology Corporation since 2003, with extensive experience in hard rock mine process plant and infrastructure design and construction, environmental permitting review, as well as development of capital cost estimates, operating cost estimates, financial analyses, preliminary economic assessments, pre-feasibility and feasibility studies.
5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
6. I am contributing author for the preparation of the technical report titled "Nevada North Lithium Project, NI 43-101 Technical Report, Preliminary Economic Assessment" (the "Technical Report"), dated effective May 19, 2025, prepared for Surge Battery Metals Inc.
7. I am responsible for the preparation of Sections 1.1, 1.13, 1.16, 1.18, 2, 3, 18 (except 18.4 and 18.5), 21.1 (except 21.1.3), 24, 25.5, 26.5, and 27.
8. I visited the Nevada North Lithium property on May 25, 2024.
9. I have no prior involvement with the project or property that is the subject of the Technical Report.
10. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
11. I am independent of Surge Battery Metals Inc. as independence is described in Section 1.5 of NI 43-101.
12. I have read NI 43-101 and Form 43-101F1. The sections of the Technical Report that I am responsible for have been prepared in compliance with that instrument and form.
13. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their website accessible by the public, of the Technical Report.

Dated this 18th day of July 2025.

(Signed and Sealed) "*Daniel Roth*"
Daniel Roth

CERTIFICATE OF QUALIFIED PERSON

Joshua Lewis Huss

I, Joshua L. Huss, P.E., do hereby certify that:

1. I am a process engineer and assistant vice president of:

   M3 Engineering and Technology Corp.
   2051 W. Sunset Rd.
   Tucson, AZ, 85704
   United States

2. I graduated with a Bachelors of Science degree in chemical engineering from Brigham Young University.

3. I am a licensed Professional Engineer in good standing in the state of Arizona in the field of Chemical Engineering, License Number 78235. I am not claiming registration in other applicable fields or locations relative to this project.

4. I have worked continuously as an engineer since 2013 for a total of 12 years. My experience in the minerals industry began with M3 in 2017 and has included design work ranging in scope from preliminary economic assessments to (pre-)feasibility studies and detailed design. My roles on projects vary in nature from process design and development, to project management, technical team review and coordination, and project financial analysis. I have worked with projects involving precious metals, base metals, battery minerals, industrial minerals, energetics, manufacturing, materials science, cryogenics, energy research, and biomedical engineering.

5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.

6. I am a contributing author for the preparation of the technical report titled "Nevada North Lithium Project, NI 43-101 Technical Report, Preliminary Economic Assessment" (the "Technical Report"), dated effective May 19, 2025, prepared for Surge Battery Metals Inc.; and am responsible for Sections 1.12, 1.17, 17, 18.4, 18.5, 21.2 (except 21.2.3.1), and 22.

7. I have not visited the project site.

8. I have not had prior involvement with the property that is the subject of the Technical Report.

9. I have no additional involvement with the project or collaboration with the Client outside of this report to disclose.

10. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

11. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.

12. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

13. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Signed and dated this 21st day of July 2025.

(Signed and Sealed) "*Joshua L. Huss*"
Joshua Lewis Huss

CERTIFICATE OF QUALIFIED PERSON

I, Bruce M. Davis, FAusIMM, of Grand Junction, Colorado, USA, an independent geostatistical consultant, as an author of Section 14 of this report entitled "Nevada North Lithium Project, NI 43-101 Technical Report, Preliminary Economic Assessment Elko, County, Nevada, USA" with an effective date of May 19, 2025, prepared for Surge Battery Metals Inc. do hereby certify that:

1. I am employed as an independent Geostatistical consultant whose address is 2921 Brodick Way, Grand Junction, Colorado 81504, USA.

2. This certificate applies to the report "Nevada North Lithium Project, NI 43-101 Technical Report, Preliminary Economic Assessment Elko, County, Nevada, USA", dated July 9, 2025, and with an effective date of May 19, 2025 (the "**Technical Report**").

3. I am a Fellow of the Australasian Institute of Mining and Metallurgy, number 211185, and my qualifications include experience applicable to the subject matter of the Technical Report. In particular, I am a graduate of the Brigham Young University with a B.S. in Mathematics (1974), an M.S. in Statistics (1975) and a Ph.D. from the University of Wyoming in Geostatistics (1978). I have practiced my profession continuously since 1978. I have conducted geostatistical analyses for lithium resource models for deposits in Nevada and other layered deposits in Arizona, Colorado, and New Mexico.

4. I am familiar with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("**NI 43-101**") and by reason of education, experience and professional registration I fulfill the requirements of a "qualified person" as defined in NI 43-101.

5. I visited the Nevada North Lithium Project property on September 19, 2023.

6. I am responsible for Sections 1.10, 14, 25.3 and 26.3.

7. I am independent of Surge Battery Metals Inc. as described in Section 1.5 of NI 43-101.

8. I have read NI 43-101 and the section of the Technical Report for which I am responsible has been prepared in compliance with NI 43-101.

9. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 18th day of July, 2025
(Signed) "*Bruce M Davis*"
Bruce M. Davis, FAusIMM
Geostatistical Consultant

CERTIFICATE OF QUALIFIED PERSON

Marie-Hélène Paré

I, Marie-Hélène Paré, do hereby certify that:

1. I am a Principal Mining Geologist of:

   GSI Environmental Inc.
   145 W Front Street, Missoula MT 59802

2. I graduated in 1997 from Université Laval, Québec, Canada with a B.Sc. in Geological Engineering.

3. I am a registered member in good standing of the Society for Mining, Metallurgy and Exploration (SME).

4. I have worked as mine geologist for a total of 23 years. My experience includes 7 years in underground and open pit mining operations in Canada and the U.S. and 16 years in environmental consulting focusing on permitting and compliance for exploration and large-scale mining projects.

5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.

6. I am a contributing author for the preparation of the technical report titled "Nevada North Lithium Project, NI 43-101 Technical Report, Preliminary Economic Assessment" (the "Technical Report"), dated effective May 19, 2025, prepared for Surge Battery Metals Inc.; and am responsible for Sections 1.15, 20, 25.6, and 26.7.

7. I have visited the project site on June 11, 2024.

8. I have prior involvement with the property that is the subject of the Technical Report.

9. I was involved in the preparation of the Exploration Plan of Operations for the Nevada North Lithium Exploration Project, including preparation of the Environmental Assessment under the National Environmental Protection Act (NEPA), and associated baseline characterization studies and field surveys.

10. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

11. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.

12. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

13. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Signed and dated this 18th day of July, 2025.

(Signed) "*Marie-Hélène Paré*"
Marie-Hélène Paré

CERTIFICATE OF QUALIFIED PERSON

I, John M. Marek, P.E., do hereby certify that:

1. I am currently employed as the President and a Senior Mining Engineer by:

   Independent Mining Consultants, Inc.
   3560 E. Gas Road
   Tucson, Arizona, USA 85714

2. This certificate is part of the report titled "Nevada North Lithium Project, NI 43-101 Technical Report, Preliminary Economic Assessment" dated effective May 19, 2025 (the "Technical Report") by Surge Battery Metals Inc. (the "Company").

3. I graduated with the following degrees from the Colorado School of Mines:
   - Bachelor of Science, Mineral Engineering – Physics 1974
   - Master of Science, Mining Engineering 1976

4. I am a registered professional engineer in good standing in the following jurisdictions:
   - State of Arizona USA Registration # 12772
   - State of Colorado USA Registration # 16191

   I am a Registered Member of the American Institute of Mining and Metallurgical Engineers, Society of Mining Engineers # 2021600.

5. I have worked as a mining engineer, geoscientist, and reserve estimation specialist for more than 48 years. I have managed drill programs, overseen sampling programs, and interpreted geologic occurrences in both precious metals and base metals for numerous projects over that time frame. My advanced training at the university included geostatistics, and I have built upon that initial training as a resource modeler and reserve estimation specialist in base and precious metals for my entire career. I have acted as the Qualified Person on these topics for numerous Technical Reports.

   My work experience includes mine planning, equipment selection, mine cost estimation and mine feasibility studies for base and precious metals projects worldwide for over 45 years.

6. I have not visited the Nevada North Lithium Project site.

7. I am responsible for Sections 1.11, 15, 16, 21.1.3, 21.2.3.1, 25.4 and 26.4.

8. I am independent of Surge Battery Metals, Inc. applying all the test of Section 1.5 of National Instrument 43-101.

9. Independent Mining Consultants, Inc. and John Marek have not worked on the Nevada North Lithium Project in the past.

10. I have read National Instrument 43-101 and Form 43-101F1, and to my knowledge, the Technical Report has been prepared in compliance with that instrument and form.

11. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated: 18 July 2025

(Signed and Sealed) "*John M. Marek*"
John M. Marek
Registered Member of the American Institute of Mining and Metallurgical Engineers, Society of Mining Engineers

CERTIFICATE OF QUALIFIED PERSON

Willam van Breugel, P.Eng.

I, William van Breugel, P.Eng., do hereby certify that:

1. I am an Associate Mining Engineer for SGS Canada Inc, with an office located at 235 Ajawan Street, Christopher Lake, Saskatchewan, Canada.

2. I graduated from the University of Waterloo in 1990 (BASc (Hons). Geological Engineering). I am a member in good standing of the Association of Professional Engineers and Geoscientists of Saskatchewan (License #22452). I am also a member of Engineers and Geoscientists British Columbia, as well as the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists. I have worked as a mining engineer for over 35 years since my graduation from university. I have worked on precious metals, base metals, industrial commodities, and diamond projects including mine operations and property evaluations. I am a "Qualified Person" for purposes of National Instrument 43-101 (the "Instrument").

3. I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.

4. I am a contributing author for the preparation of the technical report titled “Nevada North Lithium Project, NI 43-101 Technical Report, Preliminary Economic Assessment” (the “Technical Report”), dated effective May 19, 2025, prepared for Surge Battery Metals Inc.; and am responsible for Sections 1.14, 19 and 26.6.

5. I have not conducted a site visit.

6. I have not had prior involvement with the property that is the subject of the Technical Report.

7. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

8. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.

9. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

10. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Signed and dated this 18th day of July 2025.

(Signed and Sealed) “*William van Breugel*”
William van Breugel, P. Eng.

CERTIFICATE OF QUALIFIED PERSON

I, Jeffrey D. Phinisey, do hereby certify that:

1. I am employed as an independent Consulting Geologist and Managing Member of TAG Resources LLC whose address is 424 Needleseye Rd., Fayetteville, West Virginia, USA.
2. This certificate applies to the technical report "Nevada North Lithium Project, NI 43-101Technical Report, Preliminary Economic Assessment" with an effective date of May 19, 2025 (the "Technical Report").
3. I am a Registered Member of the Society for Mining, Metallurgy, & Exploration (#4030404) and a Certified Petroleum Geologist by the American Association of Petroleum Geologists (#6368) and my qualifications include experience applicable to the subject matter of the Technical Report. I am a graduate of the College of William & Mary with a B.S. in Geology (1977) and of the Mackay School of Mines, University of Nevada, Reno with an M.S. in Geology (1995). I have practiced my profession continuously since 1977, working on exploration and resource development projects for coal, coalbed methane, precious and base metals, uranium, and lithium in North America and Europe.
4. I am familiar with National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and by reason of education, experience, and professional registration I fulfill the requirements of a "Qualified Person" as defined in NI 43-101.
5. I visited the Nevada North Lithium Project property on October 8, 2024 and the Surge Battery Metals core processing facility in Elko, NV on October 9, 2024.
6. I am responsible for Sections 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 4, 5, 6, 7, 8, 9, 10, 11, 12, 23, 25.1, 26.1 and Appendix B.
7. I am independent of Surge Battery Metals Inc. as described in Section 1.5 of NI 43-101.
8. My prior involvement with the property that is the subject of the Technical Report is limited to co-authorship of "Technical Report on Mineral Resource Estimate for the Nevada North Lithium Project, Elko County, Nevada, USA", the 43-101 Technical Report prepared for and issued by Surge Battery Metals in October, 2024.
9. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with NI 43-101.
10. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed and dated this 18th day of July, 2025.

(Signed and Sealed) "*Jeffrey D. Phinisey*"

Jeffrey D. Phinisey, M.Sc.
SME Registered Member (#4030404)
424 Needleseye Rd., Fayetteville, WV, USA

CERTIFICATE OF QUALIFIED PERSON

Norman Chow, P.Eng.

I, Norman Chow, P.Eng., do hereby certify that:

1. I am President of Kemetco Research Inc., #150 – 13260 Delf Place, Richmond, BC V6V 2A2 Canada

2. I graduated with a B.A.Sc. in Metals and Materials Engineering from the University of British Columbia in 1991 and an M.A.Sc. in Metals and Materials Engineering from the University of British Columbia in 1997.

3. I am a Professional Engineer in good standing in the Province of British Columbia, Canada in the areas of Metallurgical Engineering, License Number 29340.

4. I have worked as a Professional Engineer for a total of 20 years. My experience includes overseeing multi-commodities metallurgical test programs.

5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.

6. I am a contributing author for the preparation of the technical report titled "Nevada North Lithium Project, NI 43-101 Technical Report, Preliminary Economic Assessment" (the "Technical Report"), dated effective May 19, 2025, prepared for Surge Battery Metals Inc.; and am responsible for Sections 1.9, 13, 25.2, and 26.2.

7. I have not visited the project site.

8. I have not had prior involvement with the property that is the subject of the Technical Report.

9. I am independent of Surge Battery Metals Inc. and the Nevada North Lithium Project applying all of the tests in Section 1.5 of National Instrument 43-101.

10. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

11. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

12. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Signed and dated this 18th day of July 2025.

(Signed and Sealed) "*Norman Chow*"

Norman Chow, P.Eng
Kemetco Research Inc.
Permit Number: 1004258
Engineers & Geoscientists British Columbia (EGBC)

APPENDIX B: CLAIMS LIST

Claim	Serial_Number	Location Date	Claimant	Next Fees Due Date
DK 01	NV105234154	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 02	NV105234155	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 03	NV105234156	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 04	NV105234157	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 05	NV105234158	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 06	NV105234159	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 07	NV105234160	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 08	NV105234161	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 09	NV105234162	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 10	NV105234163	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 11	NV105234164	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 12	NV105234165	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 13	NV105234166	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 14	NV105234167	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 15	NV105234168	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 16	NV105234169	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 17	NV105749077	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 18	NV105234170	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 19	NV105749078	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 20	NV105234171	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 21	NV105234172	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 22	NV105234173	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 23	NV105234174	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 24	NV105234175	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 25	NV105234176	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 26	NV105234177	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 27	NV105234178	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 28	NV105234179	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 29	NV105234180	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 30	NV105234181	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 31	NV105234182	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 32	NV105234183	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 33	NV105223625	18/Jan/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 34	NV105223626	18/Jan/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 35	NV105223627	18/Jan/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 36	NV105223628	18/Jan/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 37	NV105234184	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 38	NV105234185	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25

Claim	Serial_Number	Location Date	Claimant	Next Fees Due Date
DK 39	NV105234186	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 40	NV105234187	10/Feb/21	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 41	NV105749079	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 42	NV105749080	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 43	NV105749081	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 44	NV105749082	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 45	NV105749083	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 46	NV105749084	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 47	NV105749085	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 48	NV105749086	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 49	NV105749087	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 50	NV105749088	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 51	NV105749089	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 52	NV105749090	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 53	NV105749091	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 54	NV105749092	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 55	NV105749093	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 56	NV105749094	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 57	NV105749095	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 58	NV105749096	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 59	NV105749097	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 60	NV105749098	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 61	NV105749099	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 62	NV105749100	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 63	NV105749101	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 64	NV105749102	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 65	NV105749103	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 66	NV105749104	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 67	NV105749105	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 68	NV105749106	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 69	NV105749107	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 70	NV105749108	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 71	NV105749109	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 72	NV105749110	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 73	NV105749111	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 74	NV105749112	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 75	NV105749113	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 76	NV105749114	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 77	NV105749115	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 78	NV105749116	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25

Claim	Serial_Number	Location Date	Claimant	Next Fees Due Date
DK 79	NV105749117	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 80	NV105749118	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 81	NV105749119	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 82	NV105749120	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 83	NV105749121	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 84	NV105749122	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 85	NV105749123	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 86	NV105749124	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 87	NV105749125	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 88	NV105749126	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 89	NV105749127	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 90	NV105749128	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 91	NV105749129	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 92	NV105749130	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 93	NV105749131	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 94	NV105749132	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 95	NV105749133	24/Feb/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 096	NV105785190	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 097	NV105785191	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 098	NV105785192	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 099	NV105785193	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 100	NV105785194	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 101	NV105785195	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 102	NV105785196	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 103	NV105785197	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 104	NV105785198	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 105	NV105785199	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 106	NV105785200	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 107	NV105785201	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 108	NV105785202	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 109	NV105785203	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 110	NV105785204	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 111	NV105785205	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 112	NV105785206	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 113	NV105785207	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 114	NV105785208	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 115	NV105785209	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 116	NV105785210	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 117	NV105785211	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 118	NV105785212	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25

Claim	Serial_Number	Location Date	Claimant	Next Fees Due Date
DK 120	NV105785214	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 121	NV105785215	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 122	NV105785216	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 123	NV105785217	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 124	NV105785218	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 125	NV105785219	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 126	NV105785220	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 127	NV105785221	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 128	NV105785222	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 129	NV105785223	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 130	NV105785224	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 131	NV105785225	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 132	NV105785226	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 133	NV105785227	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 134	NV105785228	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 135	NV105785229	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 136	NV105785230	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 137	NV105785231	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 138	NV105785232	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 139	NV105785233	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 140	NV105785234	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 141	NV105785235	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 142	NV105785236	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 143	NV105785237	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 144	NV105785238	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 145	NV105785239	28/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 146	NV105785240	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 147	NV105785241	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 148	NV105785242	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 149	NV105785243	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 150	NV105785244	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 151	NV105785245	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 152	NV105785246	30/Jun/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 153	NV105816091	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 154	NV105816092	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 155	NV105816093	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 156	NV105816094	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 157	NV105816095	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 158	NV105816096	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 159	NV105816097	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25

Claim	Serial_Number	Location Date	Claimant	Next Fees Due Date
DK 160	NV105816098	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 161	NV105816099	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 162	NV105816100	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 163	NV105816101	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 164	NV105816102	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 165	NV105816103	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 166	NV105816104	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 167	NV105816105	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 168	NV105816106	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 169	NV105816107	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 170	NV105816108	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 180	NV105817030	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 181	NV105817031	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 182	NV105817032	29/Nov/22	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 183	NV105817033	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 184	NV105817034	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 185	NV105817035	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 186	NV105817036	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 187	NV105817037	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 188	NV105817038	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 189	NV105817039	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 190	NV105817040	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 191	NV105817041	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 192	NV105817042	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 193	NV105817043	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 194	NV105817044	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 195	NV105817045	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 196	NV105817046	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 197	NV105817047	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 198	NV105817048	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 199	NV105817049	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 200	NV105817050	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 201	NV105817051	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 202	NV105817052	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 203	NV105817053	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 204	NV105817054	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 205	NV105817055	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 206	NV105817056	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 207	NV105817057	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 208	NV105817058	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25

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DK 209	NV105817059	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 210	NV105817060	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 211	NV105817061	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 212	NV105817062	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 213	NV105817063	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 214	NV105817064	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 215	NV105817065	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 216	NV105817066	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 217	NV105817067	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 218	NV105817068	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 219	NV105817069	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 220	NV105817070	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 221	NV105817071	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 222	NV105817072	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 223	NV105817073	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 224	NV105817074	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 225	NV105817075	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 226	NV105817076	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 227	NV105817077	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 228	NV105817078	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 229	NV105817079	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 230	NV105817080	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 231	NV105817081	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 232	NV105817082	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 233	NV105817083	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 234	NV105817084	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 235	NV105817085	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 236	NV105817086	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 237	NV105817087	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 238	NV105817088	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 239	NV105817089	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 240	NV105817090	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 241	NV105817091	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 242	NV105817092	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 243	NV105817093	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 244	NV105817094	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 245	NV105817095	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 246	NV105817096	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 247	NV105817097	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 248	NV105817098	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25

Claim	Serial_Number	Location Date	Claimant	Next Fees Due Date
DK 249	NV105817099	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DK 250	NV105817100	7/Jan/23	SURGE BATTERY METALS USA INC.	1/Sep/25
DKN 01	NV106305004	7/Jun/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 02	NV106305005	7/Jun/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 03	NV106305006	7/Jun/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 04	NV106305007	7/Jun/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 05	NV106305008	7/Jun/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 06	NV106305009	7/Jun/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 07	NV106305010	7/Jun/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 08	NV106305011	7/Jun/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 09	NV106305012	7/Jun/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 10	NV106305013	7/Jun/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 11	NV106305014	7/Jun/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 12	NV106305016	8/Jun/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 14	NV106305017	8/Jun/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 15	NV106323671	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 16	NV106323672	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 17	NV106323673	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 18	NV106323674	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 19	NV106323675	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 20	NV106323676	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 21	NV106323677	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 22	NV106323678	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 23	NV106323679	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 24	NV106323680	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 25	NV106323681	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 26	NV106323682	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 27	NV106323683	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 28	NV106323684	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 29	NV106323685	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 30	NV106323686	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 31	NV106323687	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 32	NV106323688	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 33	NV106323689	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 34	NV106323690	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 35	NV106323691	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 36	NV106323692	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 37	NV106323693	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 38	NV106323694	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 39	NV106323695	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25

Claim	Serial_Number	Location Date	Claimant	Next Fees Due Date
DKN 40	NV106323696	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 41	NV106323697	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 42	NV106323698	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 43	NV106323699	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 44	NV106323700	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 45	NV106323701	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 46	NV106323702	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 47	NV106340596	28/Nov/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 48	NV106340597	28/Nov/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 49	NV106340598	28/Nov/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 50	NV106340599	28/Nov/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 51	NV106340600	28/Nov/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 52	NV106340601	28/Nov/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 53	NV106340602	28/Nov/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 54	NV106340603	28/Nov/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 55	NV106340604	28/Nov/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 56	NV106323602	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 57	NV106323603	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 58	NV106323604	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 59	NV106323605	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 60	NV106323606	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 61	NV106323607	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 62	NV106323608	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 63	NV106323609	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 64	NV106323610	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 65	NV106323611	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 66	NV106323612	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 67	NV106323613	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 68	NV106323614	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 69	NV106323615	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 70	NV106323616	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 71	NV106323617	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 72	NV106323618	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 73	NV106323619	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 74	NV106323620	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 75	NV106323621	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 76	NV106323622	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 77	NV106323623	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 78	NV106323624	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 79	NV106323625	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25

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DKN 80	NV106323626	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 81	NV106323627	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 82	NV106323628	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 83	NV106323629	11/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 84	NV106323630	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 85	NV106323631	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 86	NV106323632	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 87	NV106323633	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 88	NV106323634	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 89	NV106323635	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 90	NV106323636	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 91	NV106323637	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 92	NV106323638	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 93	NV106323639	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 94	NV106323640	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 95	NV106323641	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 96	NV106323642	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 97	NV106323643	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 98	NV106323644	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 99	NV106323645	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 100	NV106323646	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 101	NV106323647	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 102	NV106323648	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 103	NV106323649	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 104	NV106323650	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 105	NV106323651	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 106	NV106323652	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 107	NV106323653	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 108	NV106323654	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 109	NV106323655	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 110	NV106323656	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 111	NV106323657	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 112	NV106323658	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 113	NV106323659	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 114	NV106323660	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKN 115	NV106323661	12/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
DKX 01	NV105775409	22/Jun/22	SURGE BATTERY METALS USA INC	1/Sep/25
DKX 02	NV105796673	24/Sep/22	SURGE BATTERY METALS USA INC	1/Sep/25
LIT 1	NV105821890	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 2	NV105821891	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25

Claim	Serial_Number	Location Date	Claimant	Next Fees Due Date
LIT 3	NV105821892	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 4	NV105821893	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 5	NV105821894	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 6	NV105821895	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 7	NV105821896	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 8	NV105821897	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 9	NV105821898	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 10	NV105821899	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 11	NV105821900	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 12	NV105821901	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 13	NV105821902	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 14	NV105821903	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 15	NV105821904	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 16	NV105821905	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 17	NV105821906	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 18	NV105821907	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 19	NV105821908	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 20	NV105821909	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 21	NV105821910	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 22	NV105821911	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 23	NV105821912	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 24	NV105821913	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 25	NV105821914	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 26	NV105821915	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 27	NV105821916	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 28	NV105821917	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 29	NV105821918	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 30	NV105821919	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 31	NV105821920	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 32	NV105821921	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 33	NV105821922	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 34	NV105821923	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 35	NV105821924	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 36	NV105821925	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 37	NV105821926	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 38	NV105821927	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 39	NV105821928	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 40	NV105821929	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 41	NV105821930	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 42	NV105821931	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25

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LIT 43	NV105821932	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 44	NV105821933	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 45	NV105821934	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 46	NV105821935	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 47	NV105821936	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 48	NV105821937	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 49	NV105821938	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 50	NV105821939	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 51	NV105821940	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 52	NV105821941	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 53	NV105821942	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 54	NV105821943	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 55	NV105821944	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 56	NV105821945	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 57	NV105821946	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 58	NV105821947	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 59	NV105821948	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 60	NV105821949	14/Dec/22	SURGE BATTERY METALS USA INC.	1/Sep/25
LIT 61	NV106305020	25/Apr/23	SURGE BATTERY METALS USA INC	1/Sep/25
LIT 66	NV106305021	25/Apr/23	SURGE BATTERY METALS USA INC	1/Sep/25
LIT 81	NV106305022	25/Apr/23	SURGE BATTERY METALS USA INC	1/Sep/25
LIT 87	NV106305023	25/Apr/23	SURGE BATTERY METALS USA INC	1/Sep/25
LIT 93	NV106305024	25/Apr/23	SURGE BATTERY METALS USA INC	1/Sep/25
LIT 99	NV106305025	25/Apr/23	SURGE BATTERY METALS USA INC	1/Sep/25
LIT 100	NV106323662	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
LIT 101	NV106323663	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
LIT 102	NV106323664	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
LIT 103	NV106323665	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
LIT 104	NV106323666	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
LIT 105	NV106323667	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
LIT 106	NV106323668	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
LIT 107	NV106323669	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
LIT 108	NV106323670	8/Jul/23	SURGE BATTERY METALS USA INC	1/Sep/25
TX 001	NV105837039	19/May/23	ML NEVADA CORP	1/Sep/25
TX 002	NV105837040	19/May/23	ML NEVADA CORP	1/Sep/25
TX 003	NV105837041	19/May/23	ML NEVADA CORP	1/Sep/25
TX 004	NV105837042	19/May/23	ML NEVADA CORP	1/Sep/25
TX 005	NV105837043	19/May/23	ML NEVADA CORP	1/Sep/25
TX 006	NV105837044	19/May/23	ML NEVADA CORP	1/Sep/25
TX 007	NV105837045	19/May/23	ML NEVADA CORP	1/Sep/25

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TX 008	NV105837046	19/May/23	ML NEVADA CORP	1/Sep/25
TX 009	NV105837047	19/May/23	ML NEVADA CORP	1/Sep/25
TX 010	NV105837048	19/May/23	ML NEVADA CORP	1/Sep/25
TX 011	NV105837049	19/May/23	ML NEVADA CORP	1/Sep/25
TX 012	NV105837050	19/May/23	ML NEVADA CORP	1/Sep/25
TX 013	NV105837051	19/May/23	ML NEVADA CORP	1/Sep/25
TX 014	NV105837052	19/May/23	ML NEVADA CORP	1/Sep/25
TX 015	NV105837053	19/May/23	ML NEVADA CORP	1/Sep/25
TX 016	NV105837054	19/May/23	ML NEVADA CORP	1/Sep/25
TX 017	NV105837055	19/May/23	ML NEVADA CORP	1/Sep/25
TX 018	NV105837056	19/May/23	ML NEVADA CORP	1/Sep/25
TX 019	NV105837057	19/May/23	ML NEVADA CORP	1/Sep/25
TX 020	NV105837058	19/May/23	ML NEVADA CORP	1/Sep/25
TX 021	NV105837059	19/May/23	ML NEVADA CORP	1/Sep/25
TX 022	NV105837060	19/May/23	ML NEVADA CORP	1/Sep/25
TX 023	NV105837061	19/May/23	ML NEVADA CORP	1/Sep/25
TX 024	NV105837062	19/May/23	ML NEVADA CORP	1/Sep/25
TX 025	NV105837063	19/May/23	ML NEVADA CORP	1/Sep/25
TX 026	NV105837064	19/May/23	ML NEVADA CORP	1/Sep/25
TX 027	NV105837065	19/May/23	ML NEVADA CORP	1/Sep/25
TX 028	NV105837066	19/May/23	ML NEVADA CORP	1/Sep/25
TX 029	NV105837067	19/May/23	ML NEVADA CORP	1/Sep/25
TX 030	NV105837068	19/May/23	ML NEVADA CORP	1/Sep/25
TX 031	NV105837069	19/May/23	ML NEVADA CORP	1/Sep/25
TX 032	NV105837070	19/May/23	ML NEVADA CORP	1/Sep/25
TX 033	NV105837071	19/May/23	ML NEVADA CORP	1/Sep/25
TX 034	NV105837072	19/May/23	ML NEVADA CORP	1/Sep/25
TX 035	NV105837073	19/May/23	ML NEVADA CORP	1/Sep/25
TX 036	NV105837074	19/May/23	ML NEVADA CORP	1/Sep/25
TX 037	NV105837075	19/May/23	ML NEVADA CORP	1/Sep/25
TX 038	NV105837076	19/May/23	ML NEVADA CORP	1/Sep/25
TX 039	NV105837077	19/May/23	ML NEVADA CORP	1/Sep/25
TX 040	NV105837078	19/May/23	ML NEVADA CORP	1/Sep/25
TX 041	NV105837079	19/May/23	ML NEVADA CORP	1/Sep/25
TX 042	NV105837080	19/May/23	ML NEVADA CORP	1/Sep/25
TX 043	NV105837081	19/May/23	ML NEVADA CORP	1/Sep/25
TX 044	NV105837082	19/May/23	ML NEVADA CORP	1/Sep/25
TX 045	NV105837083	19/May/23	ML NEVADA CORP	1/Sep/25
TX 046	NV105837084	19/May/23	ML NEVADA CORP	1/Sep/25
TX 047	NV105837085	19/May/23	ML NEVADA CORP	1/Sep/25

Claim	Serial_Number	Location Date	Claimant	Next Fees Due Date
TX 048	NV105837086	19/May/23	ML NEVADA CORP	1/Sep/25
TX 049	NV105837087	19/May/23	ML NEVADA CORP	1/Sep/25
TX 050	NV105837088	19/May/23	ML NEVADA CORP	1/Sep/25
TX 051	NV105837089	19/May/23	ML NEVADA CORP	1/Sep/25
TX 052	NV105837090	19/May/23	ML NEVADA CORP	1/Sep/25
TX 053	NV105837091	19/May/23	ML NEVADA CORP	1/Sep/25
TX 054	NV105837092	19/May/23	ML NEVADA CORP	1/Sep/25
TX 055	NV105837093	19/May/23	ML NEVADA CORP	1/Sep/25
TX 056	NV105837094	19/May/23	ML NEVADA CORP	1/Sep/25
TX 057	NV105837095	19/May/23	ML NEVADA CORP	1/Sep/25
TX 058	NV105837096	19/May/23	ML NEVADA CORP	1/Sep/25
TX 059	NV105837097	19/May/23	ML NEVADA CORP	1/Sep/25
TX 060	NV105837098	19/May/23	ML NEVADA CORP	1/Sep/25
TX 061	NV105837099	19/May/23	ML NEVADA CORP	1/Sep/25
TX 062	NV105837100	19/May/23	ML NEVADA CORP	1/Sep/25
TX 063	NV105837101	19/May/23	ML NEVADA CORP	1/Sep/25
TX 064	NV105837102	19/May/23	ML NEVADA CORP	1/Sep/25
TX 065	NV105837103	19/May/23	ML NEVADA CORP	1/Sep/25
TX 066	NV105837104	19/May/23	ML NEVADA CORP	1/Sep/25
TX 067	NV105837105	19/May/23	ML NEVADA CORP	1/Sep/25
TX 068	NV105837106	19/May/23	ML NEVADA CORP	1/Sep/25
TX 069	NV105837107	19/May/23	ML NEVADA CORP	1/Sep/25
TX 070	NV105837108	19/May/23	ML NEVADA CORP	1/Sep/25
TX 071	NV105837109	19/May/23	ML NEVADA CORP	1/Sep/25
TX 072	NV105837110	19/May/23	ML NEVADA CORP	1/Sep/25
TX 073	NV105837111	19/May/23	ML NEVADA CORP	1/Sep/25
TX 074	NV105837112	19/May/23	ML NEVADA CORP	1/Sep/25
TX 075	NV105837113	19/May/23	ML NEVADA CORP	1/Sep/25
TX 076	NV105837114	19/May/23	ML NEVADA CORP	1/Sep/25
TX 077	NV105837115	19/May/23	ML NEVADA CORP	1/Sep/25
TX 078	NV105837116	19/May/23	ML NEVADA CORP	1/Sep/25
TX 079	NV105837117	19/May/23	ML NEVADA CORP	1/Sep/25
TX 080	NV105837118	19/May/23	ML NEVADA CORP	1/Sep/25
TX 081	NV105837119	19/May/23	ML NEVADA CORP	1/Sep/25
TX 082	NV105837120	19/May/23	ML NEVADA CORP	1/Sep/25
TX 083	NV105837121	19/May/23	ML NEVADA CORP	1/Sep/25
TX 084	NV105837122	19/May/23	ML NEVADA CORP	1/Sep/25
TX 085	NV105837123	19/May/23	ML NEVADA CORP	1/Sep/25
TX 086	NV105837124	19/May/23	ML NEVADA CORP	1/Sep/25
TX 087	NV105837125	19/May/23	ML NEVADA CORP	1/Sep/25

Claim	Serial_Number	Location Date	Claimant	Next Fees Due Date
TX 088	NV105837126	19/May/23	ML NEVADA CORP	1/Sep/25
TX 089	NV105837127	19/May/23	ML NEVADA CORP	1/Sep/25
TX 090	NV105837128	19/May/23	ML NEVADA CORP	1/Sep/25
TX 091	NV105837129	19/May/23	ML NEVADA CORP	1/Sep/25
TX 092	NV105837130	19/May/23	ML NEVADA CORP	1/Sep/25
TX 093	NV105837131	19/May/23	ML NEVADA CORP	1/Sep/25
TX 094	NV105837132	19/May/23	ML NEVADA CORP	1/Sep/25
TX 095	NV105837133	19/May/23	ML NEVADA CORP	1/Sep/25
TX 096	NV105837134	19/May/23	ML NEVADA CORP	1/Sep/25
TX 097	NV105837135	19/May/23	ML NEVADA CORP	1/Sep/25
TX 098	NV105837136	19/May/23	ML NEVADA CORP	1/Sep/25
TX 099	NV105837137	19/May/23	ML NEVADA CORP	1/Sep/25
TX 100	NV105837138	19/May/23	ML NEVADA CORP	1/Sep/25
TX 101	NV105837139	19/May/23	ML NEVADA CORP	1/Sep/25
TX 102	NV105837140	19/May/23	ML NEVADA CORP	1/Sep/25
TX 103	NV105837141	19/May/23	ML NEVADA CORP	1/Sep/25
TX 104	NV105837142	19/May/23	ML NEVADA CORP	1/Sep/25
TX 105	NV105837143	19/May/23	ML NEVADA CORP	1/Sep/25
TX 106	NV105837144	19/May/23	ML NEVADA CORP	1/Sep/25
TX 107	NV105837145	19/May/23	ML NEVADA CORP	1/Sep/25
TX 108	NV105837146	19/May/23	ML NEVADA CORP	1/Sep/25
TX 109	NV105837147	19/May/23	ML NEVADA CORP	1/Sep/25
TX 110	NV105837148	19/May/23	ML NEVADA CORP	1/Sep/25
TX 111	NV105837149	19/May/23	ML NEVADA CORP	1/Sep/25
TX 112	NV105837150	19/May/23	ML NEVADA CORP	1/Sep/25
TX 113	NV105837151	19/May/23	ML NEVADA CORP	1/Sep/25
TX 114	NV105837152	19/May/23	ML NEVADA CORP	1/Sep/25
TX 115	NV105837153	19/May/23	ML NEVADA CORP	1/Sep/25
TX 116	NV105837154	19/May/23	ML NEVADA CORP	1/Sep/25
TX 117	NV105837155	19/May/23	ML NEVADA CORP	1/Sep/25
TX 118	NV105837156	19/May/23	ML NEVADA CORP	1/Sep/25
TX 119	NV105837157	19/May/23	ML NEVADA CORP	1/Sep/25
TX 120	NV105837158	19/May/23	ML NEVADA CORP	1/Sep/25
TX 121	NV105837159	19/May/23	ML NEVADA CORP	1/Sep/25
TX 122	NV105837160	19/May/23	ML NEVADA CORP	1/Sep/25
TX 123	NV105837161	19/May/23	ML NEVADA CORP	1/Sep/25
TX 124	NV105837162	19/May/23	ML NEVADA CORP	1/Sep/25
TX 125	NV105837163	19/May/23	ML NEVADA CORP	1/Sep/25
TX 126	NV105837164	9/May/23	ML NEVADA CORP	1/Sep/25
TX 127	NV105837165	9/May/23	ML NEVADA CORP	1/Sep/25

Claim	Serial_Number	Location Date	Claimant	Next Fees Due Date
TX 128	NV105837166	9/May/23	ML NEVADA CORP	1/Sep/25
TX 129	NV105837167	9/May/23	ML NEVADA CORP	1/Sep/25
TX 130	NV105837168	9/May/23	ML NEVADA CORP	1/Sep/25
TX 131	NV105837169	9/May/23	ML NEVADA CORP	1/Sep/25
TX 142	NV105837180	11/May/23	ML NEVADA CORP	1/Sep/25
TX 143	NV105837181	11/May/23	ML NEVADA CORP	1/Sep/25
TX 144	NV105837182	9/May/23	ML NEVADA CORP	1/Sep/25
TX 145	NV105837183	9/May/23	ML NEVADA CORP	1/Sep/25
TX 146	NV105837184	9/May/23	ML NEVADA CORP	1/Sep/25
TX 147	NV105837185	9/May/23	ML NEVADA CORP	1/Sep/25
TX 148	NV105837186	9/May/23	ML NEVADA CORP	1/Sep/25
TX 149	NV105837187	9/May/23	ML NEVADA CORP	1/Sep/25
TX 150	NV105837188	9/May/23	ML NEVADA CORP	1/Sep/25
TX 151	NV105837189	9/May/23	ML NEVADA CORP	1/Sep/25
TX 152	NV105837190	9/May/23	ML NEVADA CORP	1/Sep/25
TX 153	NV105837191	9/May/23	ML NEVADA CORP	1/Sep/25
TX 154	NV105837192	9/May/23	ML NEVADA CORP	1/Sep/25
TX 155	NV105837193	9/May/23	ML NEVADA CORP	1/Sep/25
TX 156	NV105837194	8/May/23	ML NEVADA CORP	1/Sep/25
TX 157	NV105837195	8/May/23	ML NEVADA CORP	1/Sep/25
TX 158	NV105837196	8/May/23	ML NEVADA CORP	1/Sep/25
TX 159	NV105837197	8/May/23	ML NEVADA CORP	1/Sep/25
TX 160	NV105837198	8/May/23	ML NEVADA CORP	1/Sep/25
TX 161	NV105837199	8/May/23	ML NEVADA CORP	1/Sep/25
TX 162	NV105837200	8/May/23	ML NEVADA CORP	1/Sep/25
TX 163	NV105837201	8/May/23	ML NEVADA CORP	1/Sep/25
TX 164	NV105837202	8/May/23	ML NEVADA CORP	1/Sep/25
TX 165	NV105837203	8/May/23	ML NEVADA CORP	1/Sep/25
TX 166	NV105837204	8/May/23	ML NEVADA CORP	1/Sep/25
TX 167	NV105837205	8/May/23	ML NEVADA CORP	1/Sep/25
TX 168	NV105837206	8/May/23	ML NEVADA CORP	1/Sep/25
TX 169	NV105837207	8/May/23	ML NEVADA CORP	1/Sep/25
TX 170	NV105837208	9/May/23	ML NEVADA CORP	1/Sep/25
TX 171	NV105837209	9/May/23	ML NEVADA CORP	1/Sep/25
TX 172	NV105837210	9/May/23	ML NEVADA CORP	1/Sep/25
TX 173	NV105837211	9/May/23	ML NEVADA CORP	1/Sep/25
TX 174	NV105837212	9/May/23	ML NEVADA CORP	1/Sep/25
TX 175	NV105837213	9/May/23	ML NEVADA CORP	1/Sep/25
TX 176	NV105837214	9/May/23	ML NEVADA CORP	1/Sep/25
TX 177	NV105837215	9/May/23	ML NEVADA CORP	1/Sep/25

Claim	Serial_Number	Location Date	Claimant	Next Fees Due Date
TX 179	NV105837217	9/May/23	ML NEVADA CORP	1/Sep/25
TX 182	NV106318714	4/Aug/23	ML NEVADA CORP	1/Sep/25
TX 184	NV106318715	4/Aug/23	ML NEVADA CORP	1/Sep/25
TX 186	NV106318716	4/Aug/23	ML NEVADA CORP	1/Sep/25
TX 188	NV106318717	4/Aug/23	ML NEVADA CORP	1/Sep/25
TX 212	NV105837250	18/May/23	ML NEVADA CORP	1/Sep/25
TX 213	NV105837251	18/May/23	ML NEVADA CORP	1/Sep/25
TX 214	NV105837252	18/May/23	ML NEVADA CORP	1/Sep/25
TX 215	NV105837253	18/May/23	ML NEVADA CORP	1/Sep/25
TX 216	NV105837254	18/May/23	ML NEVADA CORP	1/Sep/25
TX 217	NV105837255	18/May/23	ML NEVADA CORP	1/Sep/25
TX 218	NV105837256	18/May/23	ML NEVADA CORP	1/Sep/25
TX 219	NV105837257	18/May/23	ML NEVADA CORP	1/Sep/25
TX 220	NV105837258	18/May/23	ML NEVADA CORP	1/Sep/25
TX 221	NV105837259	18/May/23	ML NEVADA CORP	1/Sep/25
TX 222	NV105837260	18/May/23	ML NEVADA CORP	1/Sep/25
TX 223	NV105837261	18/May/23	ML NEVADA CORP	1/Sep/25
TX 224	NV105837262	18/May/23	ML NEVADA CORP	1/Sep/25
TX 225	NV105837263	18/May/23	ML NEVADA CORP	1/Sep/25
TX 226	NV105837264	18/May/23	ML NEVADA CORP	1/Sep/25
TX 227	NV105837265	18/May/23	ML NEVADA CORP	1/Sep/25
TX 228	NV105837266	18/May/23	ML NEVADA CORP	1/Sep/25
TX 229	NV105837267	18/May/23	ML NEVADA CORP	1/Sep/25
TX 230	NV105837268	18/May/23	ML NEVADA CORP	1/Sep/25
TX 231	NV105837269	18/May/23	ML NEVADA CORP	1/Sep/25
TX 232	NV105837270	18/May/23	ML NEVADA CORP	1/Sep/25
TX 233	NV105837271	18/May/23	ML NEVADA CORP	1/Sep/25
TX 234	NV105837272	18/May/23	ML NEVADA CORP	1/Sep/25
TX 235	NV105837273	18/May/23	ML NEVADA CORP	1/Sep/25
TX 236	NV105837274	18/May/23	ML NEVADA CORP	1/Sep/25
TX 237	NV105837275	18/May/23	ML NEVADA CORP	1/Sep/25
TX 238	NV105837276	18/May/23	ML NEVADA CORP	1/Sep/25
TX 239	NV105837277	18/May/23	ML NEVADA CORP	1/Sep/25
TX 240	NV105837278	18/May/23	ML NEVADA CORP	1/Sep/25
TX 241	NV105837279	18/May/23	ML NEVADA CORP	1/Sep/25
TX 242	NV105837280	18/May/23	ML NEVADA CORP	1/Sep/25
TX 243	NV105837281	18/May/23	ML NEVADA CORP	1/Sep/25
TX 244	NV105837282	18/May/23	ML NEVADA CORP	1/Sep/25
TX 245	NV105837283	18/May/23	ML NEVADA CORP	1/Sep/25
TX 246	NV105837284	18/May/23	ML NEVADA CORP	1/Sep/25

Claim	Serial_Number	Location Date	Claimant	Next Fees Due Date
TX 247	NV105837285	18/May/23	ML NEVADA CORP	1/Sep/25
TX 248	NV105837286	18/May/23	ML NEVADA CORP	1/Sep/25
TX 249	NV105837287	18/May/23	ML NEVADA CORP	1/Sep/25
TX 250	NV105837288	18/May/23	ML NEVADA CORP	1/Sep/25
TX 251	NV105837289	18/May/23	ML NEVADA CORP	1/Sep/25
TX 252	NV105837290	18/May/23	ML NEVADA CORP	1/Sep/25
TX 253	NV105837291	10/May/23	ML NEVADA CORP	1/Sep/25
TX 254	NV105837292	10/May/23	ML NEVADA CORP	1/Sep/25
TX 255	NV105837293	10/May/23	ML NEVADA CORP	1/Sep/25
TX 256	NV105837294	10/May/23	ML NEVADA CORP	1/Sep/25
TX 257	NV105837295	10/May/23	ML NEVADA CORP	1/Sep/25
TX 258	NV105837296	10/May/23	ML NEVADA CORP	1/Sep/25
TX 259	NV105837297	10/May/23	ML NEVADA CORP	1/Sep/25
TX 260	NV105837298	10/May/23	ML NEVADA CORP	1/Sep/25
TX 261	NV105837299	10/May/23	ML NEVADA CORP	1/Sep/25
TX 262	NV105837300	10/May/23	ML NEVADA CORP	1/Sep/25
TX 263	NV105837301	10/May/23	ML NEVADA CORP	1/Sep/25
TX 264	NV105837302	10/May/23	ML NEVADA CORP	1/Sep/25
TX 265	NV105837303	10/May/23	ML NEVADA CORP	1/Sep/25
TX 266	NV105837304	10/May/23	ML NEVADA CORP	1/Sep/25
TX 267	NV105837305	10/May/23	ML NEVADA CORP	1/Sep/25
TX 268	NV105837306	10/May/23	ML NEVADA CORP	1/Sep/25
TX 269	NV105837307	10/May/23	ML NEVADA CORP	1/Sep/25
TX 270	NV105837308	10/May/23	ML NEVADA CORP	1/Sep/25
TX 271	NV105837309	10/May/23	ML NEVADA CORP	1/Sep/25
TX 272	NV105837310	10/May/23	ML NEVADA CORP	1/Sep/25
TX 273	NV105837311	10/May/23	ML NEVADA CORP	1/Sep/25
TX 274	NV105837312	10/May/23	ML NEVADA CORP	1/Sep/25
TX 275	NV105837313	10/May/23	ML NEVADA CORP	1/Sep/25
TX 276	NV105837314	10/May/23	ML NEVADA CORP	1/Sep/25
TX 277	NV105837315	10/May/23	ML NEVADA CORP	1/Sep/25
TX 278	NV105837316	10/May/23	ML NEVADA CORP	1/Sep/25
TX 279	NV105837317	10/May/23	ML NEVADA CORP	1/Sep/25
TX 280	NV105837318	10/May/23	ML NEVADA CORP	1/Sep/25
TX 281	NV105837319	10/May/23	ML NEVADA CORP	1/Sep/25
TX 282	NV105837320	10/May/23	ML NEVADA CORP	1/Sep/25
TX 283	NV105837321	10/May/23	ML NEVADA CORP	1/Sep/25
TX 284	NV105837322	10/May/23	ML NEVADA CORP	1/Sep/25
TX 285	NV105837323	10/May/23	ML NEVADA CORP	1/Sep/25
TX 286	NV105837324	10/May/23	ML NEVADA CORP	1/Sep/25

Claim	Serial_Number	Location Date	Claimant	Next Fees Due Date
TX 287	NV105837325	10/May/23	ML NEVADA CORP	1/Sep/25
TX 288	NV105837326	10/May/23	ML NEVADA CORP	1/Sep/25
TX 289	NV105837327	10/May/23	ML NEVADA CORP	1/Sep/25
TX 290	NV105837328	10/May/23	ML NEVADA CORP	1/Sep/25
TX 291	NV105837329	10/May/23	ML NEVADA CORP	1/Sep/25
TX 292	NV105837330	10/May/23	ML NEVADA CORP	1/Sep/25