NI 43-101 Technical Report Resource Estimate for Gemini Lithium Project

3/8/2024

Esmeralda County, Nevada

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1 Executive Summary

1.1 Introduction

This Technical Report is prepared for the Gemini Lithium Project, owned by Nevada Sunrise Metals Corporation (Nevada Sunrise) by ABH Engineering Inc. Nevada Sunrise is a resource exploration company based out of Vancouver, B.C., Canada. The company is listed on the TSX Venture Exchange (TSX-V:NEV), and in the United States (OTC: NVSGF).

The Gemini Lithium Project is in the Lida Valley, halfway between Reno and Las Vegas. Nevada Sunrise's property consists of 2,343 hectares (5,790 acres) of claims (placer and lode) on U.S. public lands administered by the Bureau of Land Management (BLM). The claims are owned 100% by Nevada Sunrise and are not subject to any royalties or net smelter return (NSR) agreement.

Nevada Sunrise has conducted exploration for lithium-rich clays on the property since the spring of 2016. Exploration to date has included two TDEM surveys, and two phases of reverse circulation drilling. Only a small portion, 15% of the area of Nevada Sunrise's Gemini Lithium Project claim block has been drill-tested. The property shows potential for expanding resources to the west in the West Deep Basin, over the horst, to the east and in the far east side of the project, in the East Deep Basin.

1.2 Reliance on Other Experts

The location of the Gemini claims was provided by Nevada Sunrise and is assumed to be correct. It is outside the scope of the author's expertise to validate tenure information.

Metallurgical studies were conducted by Willem Duyvesteyn, of Extractive Metallurgy Consultancy LLC, based in Reno, Nevada, contracted directly by Nevada Sunrise. Therefore, the results that are presented in Chapter 13, Mineral Processing and Metallurgical Testing are assumed to be correct and outside the scope of the author's expertise.

1.3 Property Description and Location

The Gemini Project is located in Esmeralda County, Nevada. The site lies within Township 6 south, and Ranges 41 and 41.5 east, Mt. Diablo Principal Meridian. The site is 271 miles southeast of Reno. The property can be accessed by either Tonopah, which is located 57 miles northeast of the site, or Big Pine which is located 70.6 miles west. The County seat is 29.8 miles Northeast of the site.

The Gemini Lithium Project is 100% owned by Nevada Sunrise. Currently there are no known significant factors or risks that may affect access, title, or the right or ability to perform work on the Gemini property.

1.4 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Gemini Lithium Project site is road accessible from Tonopah, Nevada, by driving 42 miles (68 km) south on US Highway 95 and then 13 miles (21 km) west on State Highway 266. Alternatively, the claims can be accessed from Beatty, Nevada.

Lida Valley is classified as a semi-arid climate with hot, dry summers and cold winters. On average, July is the hottest month, and December is the coldest month. The mild climatic conditions allow exploration to be conducted year-round.

The project is situated near Tonopah, Beatty and Gold Point. Some of the essential labour, equipment, services, and supplies for exploration are available locally. Equipment for mine development and operations can be acquired elsewhere in Nevada. Services available in Tonopah and Beatty include food, accommodation, fuel and banking. The Esmeralda Couty seat is located in Goldfield.

There are many mining operations, both historic and active within Esmeralda County and the surrounding Counties.

The project site is connected via well maintained roads and highways. A network of unpaved roads and trails provide access throughout the Gemini claims area. There is a rail station located in Hawthorne, Nevada. There are nearby powerlines which could be connected the property to provide sufficient power for mining operations. There is also the BLM Gold Point Exclusion Zone, reserved for planning and development of solar power generation fields which would be able to provide all or a substantial part of the power needs of a mine.

Nevada Sunrise has obtained water rights sufficient for both exploration, and for mining and processing needs.

The Nevada Sunrise claims lie between elevations of 4,880 and 5,340 feet (1,490 and 1,630 m) above sea level. Regionally, Lida Valley lies East of the Sierra Nevada Mountains within the Basin and Range Province of the Walker Lane Trend. The region is considered a high desert environment. The local vegetation is sparse and comprised of widely spaced low desert brush, classified as Inter-Mountain Basins Mixed Salt Desert Scrub.

The topography is nearly flat and is a result of basin and fill of unconsolidated and poorly consolidated sediments and alluvial fans, generally very shallowly sloping from west to east.

1.5 History

The history of the Gemini Lithium Project is brief. Prior to the property being staked by Nevada Sunrise, there were no other mining claims known to have been staked on the current property area.

Prior work on the Gemini Lithium Project and surrounding areas consisted of wide-spaced gravity surveys conducted by the government, a geological study by Dr. John Oldow of the University of Texas which collected 500 gravity data points in the region, geological mapping by academic team from the University of Texas, as well as geological mapping of Esmeralda County by the Nevada Bureau of Mines.

1.6 Geological Setting and Mineralization

The Lida Valley is a closed basin playa surrounded by mountains which is flanked by Jackson Valley to the North, Stonewall Flat to the east, and Palmetto and Slate Ridge to the west and the south. The area of the Gemini Lithium Project is in a structural zone where concentration of displacement created an extensional environment and horst-and-graben features resulted.

Lithology of the hills and mountains flanking the basin include Precambrian metasediments and Paleozoic sediments, separated by Jurassic granites on the south and similar metasediment and sediments separated by Tertiary rhyolitic dome intrusives on the north.

The basin, where the Gemini Lithium Project is located, comprises generally unconsolidated to poorly consolidated sedimentary units, rich in clays with varying amounts of tuffaceous materials.

Mineralization, defined by the five drilled RC holes spans 2.7km N-S and 950m E-W; thickness is variable, in excess of 177m at GEM22-01 (ended in a fault zone and did not reach bedrock) to 439.02 m at hole GEM23-04. Trend of the mineralization follows the basin axis at 5^{O} – geologic continuity is observed throughout all holes as thick intercepts of mineralization above cutoff of 400ppm Li. The observed continuity of mineralization led to a single domain being deemed to be appropriate for geologic modelling, with normal faults forming hard boundaries, while mineralization continued across the strike-slip fault.

No significant correlation was observed between individual sub-units in the deposit and the lithium grades. Most lithologic variations were attributable to sub-units forming lensoidal zones. A conclusion was drawn that a single domain would thus be appropriate for modelling the mineralization, regardless of the individual sub-type of lithology, except for basement rocks at the bottom of the basin, and the alluvial fan deposits at the top of the deposit, both unmineralized.

1.7 Deposit Types

Two types of deposit models were considered at Nevada Sunrise's Gemini Lithium Project, lithium clay deposit and lithium brine. The more consistent lithium values found in the clays, directed focus to the lithium clay model. A caveat exists for recovery of lithium from clays since there is currently no current commercial operation extracting lithium from clays; metallurgical testing is being carried out at numerous projects.

1.8 Exploration

At Gemini Lithium Project, Nevada Sunrise has performed two phases of time domain electromagnetic (TDEM) surveys, totalling 25.1km in length; one was completed in 2016 and the other in 2022, each preceding the two phases of drilling. TDEM surveys were successful in delineating high conductivity zones, forming targets for drilling.

1.9 Drilling

Two phases of reverse-circulation drilling, comprising five holes have been completed on the Gemini Lithium Project: Phase I in March and April, 2022; Phase II in October 2022 to March 2023. Drill hole locations and total depths:

Table 1-1: Phase I and II Drill Holes

Drill Hole	Easting [UTM]	Northing [UTM]	Elev (m)	Depth (m)	Depth (ft)	Drilling Phase
GEM22-01	464656	4143240	1558.59	273.71	898	Phase I
GEM22-02	464540	4142145	1552.59	341.38	1120	Phase I
GEM22-03	464759	4143960	1558.59	493.78	1620	Phase II
GEM23-04	463656	4142716	1562.59	594.36	1950	Phase II
GEM23-05	464443	4141238	1588.59	530.35	1740	Phase II

All holes intercepted significant mineralization; the intercepts were true-width or approximately so:

Table 1-2: Mineralized Intervals, All Drill Holes

Depth Interval					Thickness		Lithium Weighted Average (ppm)
Hole Number	**From (feet)**	**To (feet)**	**From (m)**	**To (m)**	**Feet**	**Metres**	
GEM22-01	**320**	**900**	97.54	274.32	**580**	176.78	**1164.48**
including	*480*	*780*	*146.30*	*237.744*	*300*	*91.44*	*1531.25*
GEM22-02	**390**	**1120**	118.87	341.376	**730**	222.50	**1060.96**
including:	*490*	*560*	*149.35*	*170.688*	*70*	*21.34*	*1156.25*
and including	*990*	*1120*	*301.75*	*341.376*	*130*	*39.62*	*2159.23*
and:	*1070*	*1120*	*326.14*	*341.376*	*50*	*15.24*	*3244.00*
GEM22-03	**280**	**1,410**	85.37	429.88	**1,130**	344.51	**929.80**
including:	*280*	*630*	*85.37*	*192.07*	*350*	*106.71*	*1,342.20*
and:	*470*	*500*	*143.29*	*152.44*	*30*	*9.15*	*1,955.73*
GEM23-04	**510**	**1,950**	155.49	594.51	**1,440**	439.02	**1,412.38**
including:	*1,270*	*1,380*	*387.20*	*420.73*	*110*	*33.54*	*3,556.82*
and:	*1,350*	*1,380*	*411.59*	*420.73*	*30*	*9.15*	*4,329.60*
GEM23-05	**440**	**1,575**	134.15	480.18	**1,135**	346.04	**635.21**
including:	*850*	*1,210*	*259.15*	*368.90*	*360*	*109.76*	*1,096.16*
and:	*950*	*1,130*	*289.63*	*344.51*	*180*	*54.88*	*1,308.42*

1.10 Sample Preparation, Analyses and Security

Sampling of RC cuttings was achieved at the drill, utilizing a cyclone feeding undersize to the rotary splitter, where 5 to 10kg samples were bagged labelled and sealed. The geological team kept chain of custody throughout, storing the samples in a locked container. Logging was done on site, and lithologic logs as well as water characteristics were recorded. Except for the 6.096m sample lengths of GEM22-01, all other holes were sampled with 3.048m interval. Waer samples, below the water table were every 6.096m.

Preparation of sediment samples was at ALS Reno, with crushing followed with 250 g split sample passing 75-micron screen; analysis was conducted at ALS North Vancouver utilizing method ME-ICP41, after aqua regia digestion.

Independent QAQC samples were regularly inserted into the sample sequence, duplicates, blanks and standards, and shown in Table 1-3 below:

Table 1-3:QA/QC Sample Count

Sample Type	Number of Samples
MEG-Li.10.11	44
OREAS Coarse Silica Blank	59
Duplicate samples	116

All but one of the standards passed acceptance (certified value +/- 3SD); 85% of duplicates passed; all blanks passed. Data collection, sampling, analysis and QAQC procedures are deemed to have been up to NI 43-101 standards.

1.11 Data Verification

Drill collar verification during the author's site visit confirmed adequate positional accuracy of drill hole collars for purposes of resource estimation. The suite of 28 validation samples collected and analyzed at an independent check-lab correlated extremely well with analyses of the samples.

1.12 Mineral Processing and Metallurgical Testing

Lithium is the lowest-density alkali metal in the periodic table with properties that make it highly reactive chemically, and highly conductive, both electrically and thermally. Historic uses were in ceramics paints and pharmaceuticals; however, lithium-battery manufacturing is rapidly increasing use of the metal. Lithium does not occur in its natural state, therefore, the commercial product is commonly converted to stable forms of lithium carbonate (LCE) or lithium hydroxide.

The main deposit types for lithium are hardrock pegmatite deposits, lithium-clay deposits, salars, in geothermal fluid and occasionally as accompanying element in petroleum deposits. The Gemini Lithium Project is a lithium clay type deposit as the montmorillonite subtype. The montmorillonite is a swelling clay and lithium ions are found adsorbed onto the crystal faces of the clay particles. Sulphuric acid has been shown to be highly effective in extracting lithium from Gemini Lithium Project clays.

There were 2 types of leach extraction tests that were carried out on six samples that were collected from RC cuttings that were stored at ALS Reno.

The tests are preliminary in nature and the sample sizes are smaller than conventional. However, only two holes were available at the time of the initiation of testing. Future metallurgical tests should use material from a wider area of the deposit and samples should be zoned by depth. Lithological sub-types will require further consideration.

1.13 Mineral Resource Estimate

This is the first Mineral Resource estimate of the project, indicating the initial assessment phase of the deposit's potential economic viability. Mineral Resources do not equate to Mineral Reserves and have not yet been proven to be economically viable.

The deposit is situated on the U.S. Government land under the jurisdiction of the Bureau of Land Management (BLM), secured by both placer and lode mining claims. There are no recognized extraordinary legal, environmental, socio-economic, ownership, tax, or permitting, challenges tied to the claims in question that could negatively affect the property's development, with the exception of water rights for lithium extraction.

The estimated resource for the Gemini Lithium Project has been defined as Inferred for the purpose of the current assessment due to the requirement for an increase density of drilling within the area to tighten the spacing and enhance the confidence in the geological continuity.

The Inferred mineral resource is defined by 5 reverse circulation drill holes (GEM22-01 to GEM23-05) for a total of 2,236.02 meters of drilling and an average hole depth of 447.204 meters. A total of 607 lithium assays from the RC chips, not including QA/QC samples, were used for the model.

The cut-off grade for the Nevada Sunrise Gemini Lithium Project's deposit was calculated by using the cost to produce a tonne of lithium carbonate with various lithium grades in respect to the deposit and comparing those values against the project lithium carbonate price. In this manner, a lithium value of 400 ppm Li was chosen for a cut-off grade.

The model was constructed in Leapfrog 2023.1. Each block, or voxel, measured 50 meters by 50 meters horizontally and 5 meters vertically. The result as a nearly square block of voxels in plan view comprised of 46 voxels in the east-west direction, 82 voxels in the north-south direction and 138 voxels in elevation for a total of 520,536 voxels.

A topographic survey from the USGS was employed to provide accurate surface delineation for the upper boundary of the model. The lower boundary was informed by TDEM survey results. However, within the model, the creation of resource blocks was confined to the depth indicated by the drill holes. The model's horizontal extent was defined by the Gemini Claim boundaries.

The resultant data set follows a normal distribution with a noticeable trend towards higher-grade values in the less-explored deeper areas of the lithium deposit. However, the statistical analysis supports a decision not to implement grade capping at this phase.

During the geological assessment, three contrasting lithologies were identified that played a significant role in the delineation of mineral domains. These 3 lithologies were composed of alluvial deposits, low-grade transition zone, and tertiary tuffaceous clays. These lithologies have contributed to a more refined understanding of mineralization controls and have been instrumental in guiding the development of the mining claims.

The block model was constructed using voxels with dimensions of 50m X 50m horizontally by 5m vertically, reflecting the relatively thin vertical component and large horizontal extent of the deposit. Ordinary Krieging was employed as the resource estimation technique.

No density measurements have been made on the Gemini Lithium Project due to RC drilling methods employed in Phase I and Phase II. Benchmarking of density measurements made on similar sediments in other clay deposits nearby determined that an average density of 1.7 g/cm^3 is an appropriate and representative value for the tuffaceous clays in the deposit.

Variography was performed on the lithium grades of composites within the domain defined by mineralized sediments, composites in unmineralized alluvial fan sediments and the basement lithological units were excluded.

The delineation of the resource was further constrained by the implementation of hard boundaries, which were essential in defining the limits of the mineralized zones.

Table 1-4 represents the final tonnages and grades which were calculated using a 400 ppm Li cut-off grade.

Table 1-4: Final tonnages and grades of Inferred Mineral Resources

Inferred				
Li Cutoff (ppm)	Tonnes (x1,000,000)	Li Grade (ppm)	Contained Li (tonnes)	LCE (tonnes)
400	**1183.26**	**1132**	**1,338,996**	**7,127,476**
600	1065.35	1202	1,280,136	6,814,164
800	835.34	1336	1,116,219	5,941,634
1000	589.75	1520	896,148	4,770,196

1.14 Mineral Reserve Estimates

This item does not apply to this report.

1.15 Mining Methods

This item does not apply to this report.

1.16 Recovery Methods

This item does not apply to this report.

1.17 Project Infrastructure

This item does not apply to this report.

1.18 Market Studies and Contracts

This item does not apply to this report.

1.19 Environmental Studies, Permitting and Social or Community Impact

Nevada Sunrise will be responsible for attaining all required permits for exploration as per the laws and regulations set forth by Esmeralda County, the State of Nevada, and US federal departments.

Nevada Sunrise has not completed any studies with respect to environmental, social, or community impacts. All work, past and present is compliant with all requirements set forth by the relevant regulatory bodies.

Nevada Sunrise is currently operating under a Notice of Intent with the Bureau of Land Management (BLM).

1.20 Capital and Operating Costs

This item does not apply to this report.

1.21 Economic Analysis

This item does not apply to this report.

1.22 Adjacent Properties

Three other companies have staked properties in the Lida Valley, Lida Valley Lithium LLC, Chariot Corporation and T2 Metals Corp.

1.23 Other Relevant Data and Information

Chapter 27 provides a list of references that were used to support the Maiden Mineral Resource Estimate on Nevada Sunrise's Gemini Lithium Project.

1.24 Interpretation and Conclusions

The initial two phases of drilling have yielded an Inferred resource estimate of approximately 1.2 billion tonnes of lithium mineral resource with a grade of 1132 ppm Li and containing approximately 7.1 million tonnes of LCE at a base-case cutoff 400 ppm Li.

Only 15% of the project area has been drilled and large target area remain to the west and to the east of the drilled area.

Lithium mineralization has been shown to be amenable to sulphuric acid leaching.

1.25 Recommendations

ABH recommends a Phase III 7-hole diamond drilling program, more metallurgical test work and a PEA following the Phase III drilling and metallurgical test work. A Phase IV drilling program is recommended to advance the current mineral resources in Indicated and Inferred. The total recommended work is estimated to cost approximately $5,800,000.

2 Introduction

This Technical Report is prepared for Gemini Lithium Project, owned by Nevada Sunrise Metals Corporation (Nevada Sunrise) by ABH Engineering Inc. Nevada Sunrise is a resource exploration company based out of Vancouver, B.C., Canada. The company is a publicly traded Canadian corporation listed in Canada on the TSX Venture Exchange (TSX-V:NEV), and in the United States as over-the-counter securities (OTC: NVSGF).

This is the first Technical Report on the Gemini Lithium Project and comprises the maiden resource estimate and recommendations for exploration work towards a future Preliminary Economic Assessment.

The effective date of this report is January 15, 2024.

2.1 Qualifications and Experience

Damir Cukor is the Qualified Person (QP) responsible for this report.

Table 2-1 identifies the QP responsible for each section of this report.

Table 2-1: List of Contributing Authors

Section	Section Name	Qualified Person
1	Summary	Damir Cukor
2	Introduction	Damir Cukor
3	Reliance on Other Experts	Damir Cukor
4	Property Description and Location	Damir Cukor
5	Accessibility, Climate, Local Resources, Infrastructure, and Physiography	Damir Cukor
6	History	Damir Cukor
7	Geological Setting and Mineralization	Damir Cukor
8	Deposit Types	Damir Cukor
9	Exploration	Damir Cukor
10	Drilling	Damir Cukor
11	Sample Preparation, Analyses and Mineralization	Damir Cukor
12	Data Verification	Damir Cukor
13	Mineral Processing and Metallurgical Testing	Damir Cukor
14	Mineral Resource Estimates	Damir Cukor
15	Mineral Reserve Estimates	N/A
16	Mining Methods	N/A
17	Recovery Methods	N/A
18	Project Infrastructure	N/A
19	Market Studies and Contracts	N/A
20	Environmental Studies, Permitting and Social or Community Impact	N/A
21	Capital and Operating Costs	N/A
22	Economic Analysis	N/A
23	Adjacent Properties	Damir Cukor
24	Other Relevant Data and Information	Damir Cukor
25	Interpretation and Conclusions	Damir Cukor
26	Recommendations	Damir Cukor
27	References	Damir Cukor

2.2 Abbreviations and Units of Measure

BLM	U. S. Bureau of Land Management
clyst	Claystone
cm^3	Cubic centimeter
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
EA	Environmental Assessment
EIS	Environmental Impact Statement
g	Gram
gal	Gallons
H_2SO_4	Sulfuric Acid
hP	horsepower
HVAC	Heating, ventilation, and air conditioning
IRR	Internal Rate of Return
k	thousand
kg	Kilogram
km	Kilometres
LCE	Lithium Carbonate Equivalent
Li	Chemical symbol for lithium
Li_2CO_3	Lithium carbonate chemical formula
m^3	Cubic meters
mdst	Mudstone
Mg	Chemical symbol for magnesium
NI 43-101	National Instrument 43-101 Technical Report
NOI	Notice of Intent
NVC	Nevada Mining Claims
NVP	Net Present Value
ORP	Oxidation-Reduction Potential
PEA	Preliminary Economic Assessment
PFS	Preliminary Feasibility Study
PoO	Mine Plan of Operations
PPM	Parts per million
QA/QC	Quality Assurance/Quality Control
ROM	Run of Mine
RQD	Rock quality designation
sq. kms	Square kilometres
tpd	Tonnes per day
wt%	Weight Percentage
XRD	X-Ray Diffraction
yr	years

All dollar amounts are in U.S. dollars, unless stated otherwise.

All resource measurements are in metric units. Tonnages are in metric tonnes and grade is in parts per million (ppm) unless stated otherwise.

3 Reliance on Other Experts

Claims locations and their validity information has been supplied by Nevada Sunrise; it is assumed to be correct, however, it is outside of the author’s area of expertise to validate tenure information.

The metallurgy studies were conducted by Willem Duyvesteyn, of Extractive Metallurgy Consultancy LLC, based in Reno, Nevada, contracted directly by Nevada Sunrise. The results in section 13 Mineral Processing and Metallurgical Testing are assumed to be correct, however metallurgical testing is outside of the author’s expertise.

4 Property Description and Location

4.1 Location

The Gemini Lithium Project is located in south-central Nevada, in Esmeralda County, approximately halfway between Las Vegas and Reno. The project site is centered at 465,160 E and 4,142,690N (UTM NAD83, zone 11W; EPSG:26911) as shown in Figure 4-1. Distances to the regional towns of Beatty: 66 miles to the southeast; Tonopah: 57 miles northeast; the small town of Gold Point is 4.5 miles south of the project.

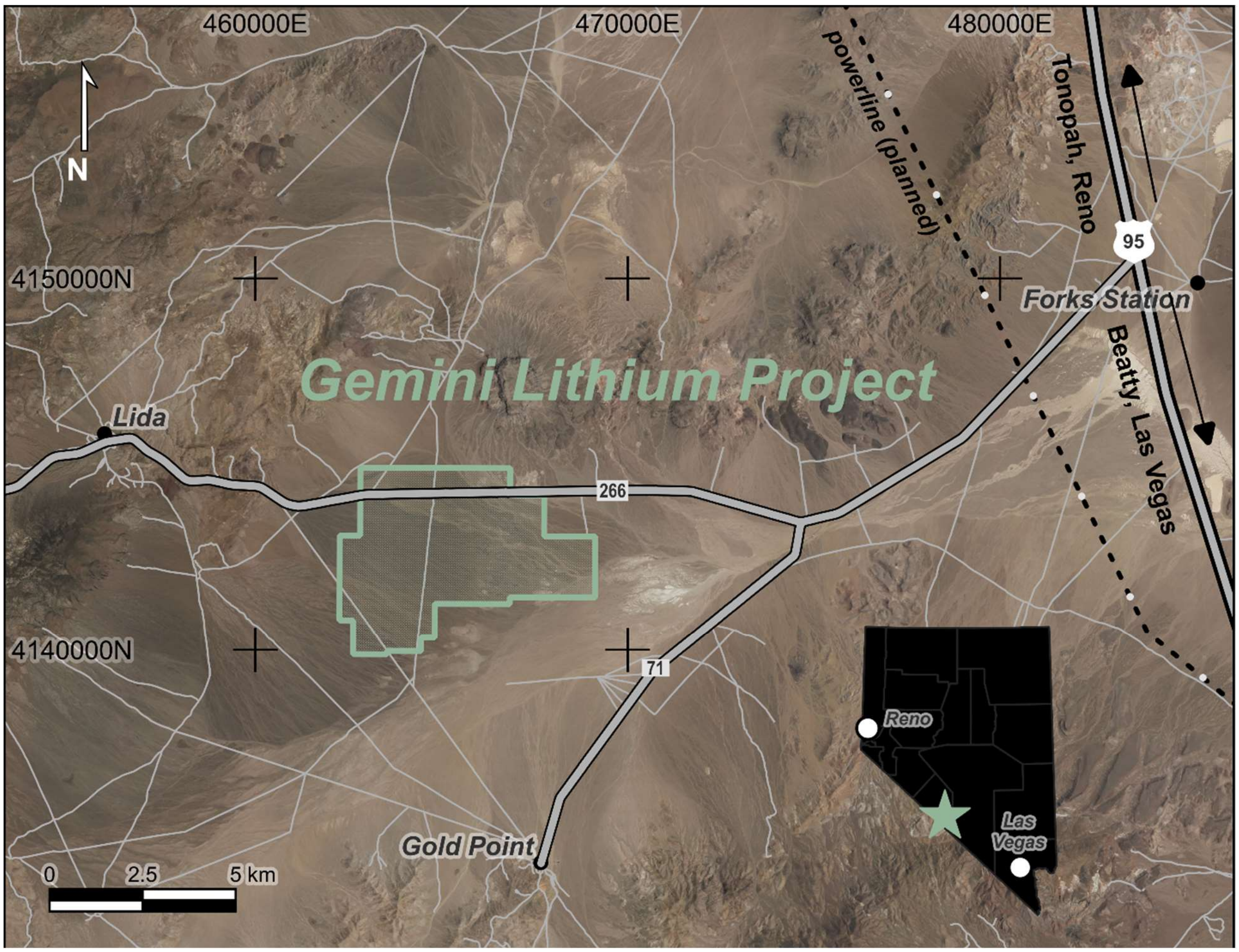


Figure 4-1: Genesis Lithium Property Location Map

4.2 Mineral Rights & Tenures

The property position consists of a total of 11 unpatented placer claims and 280 unpatented lode claims. Lode claims cover approximately 2,343 hectares (5,790 acres) in size; within the lode claims footprint, an additional 11 non-contiguous placer claims are held by Nevada Sunrise. The claims were staked on the U.S. public lands administered by the U.S. Bureau of Land Management (BLM). Each lode claim covers an area of 20.66 acres (8.36 hectares); placer claims are defined as portions of sections, each approximately 20 acres in area.

The site lies within Township 6 south, and Ranges 41 and 41.5 east, Mt. Diablo Principal Meridian. Nevada Sunrise's Gemini Lithium Project lode claims are denoted in blue and placer claims in yellow in Figure 4-2.

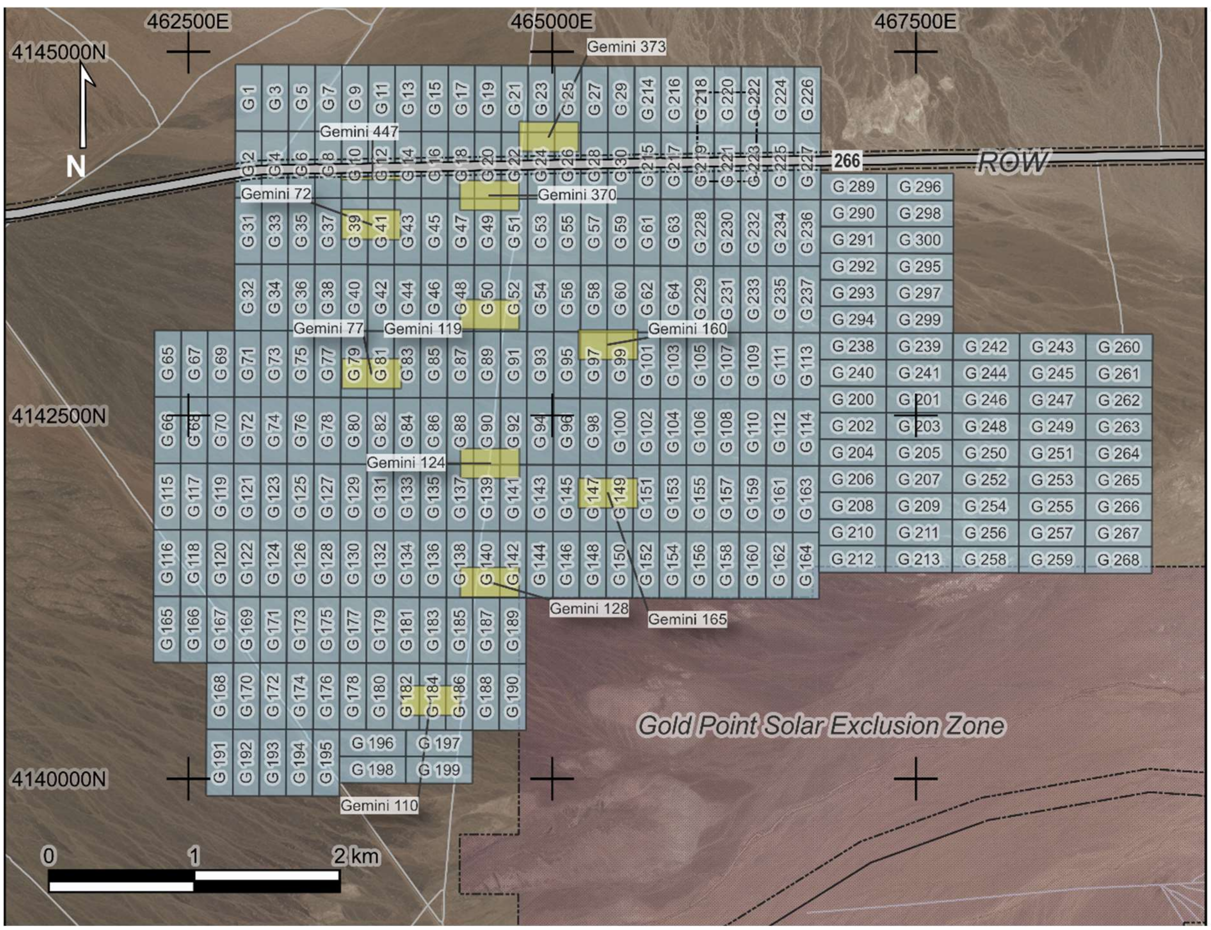


Figure 4-2: Overview of Nevada Sunrise's Gemini Project Claims in the Lida Valley

All claim corners and location monuments were located using handheld Garmin GPS units.

The claims are owned 100% by Nevada Sunrise and are not subject to any royalties or net smelter return (NSR) agreement. Table 4-1 lists all the claim names and the BLM Nevada Mining Claim (NV) numbers for each claim.

Table 4-1: Claims with BLM NVC numbers

Claim	Claim No.	Claim No.	BLM No.	BLM No.
Type	From	To	From	To
Lode	G 1	G 300	NV105767479	NV105767766
Placer	Gemini 72		NV105236989	
Placer	Gemini 77		NV105236994	
Placer	Gemini 110		NV105767368	
Placer	Gemini 119		NV101332360	
Placer	Gemini 124		NV101332365	
Placer	Gemini 128		NV101332369	
Placer	Gemini 160		NV105767386	
Placer	Gemini 165		NV105767391	
Placer	Gemini 370		NV105781949	
Placer	Gemini 373		NV105781952	
Placer	Gemini 447		NV105782026	

All claims are located on unencumbered public land managed by the BLM. Annual holding cost is $165 per claim per year, paid to the BLM. There is also a $4 per claim annual document fee, paid to Esmeralda County each year (currency: USD). There is no set expiration date of the claims if the payments are made annually.

The Gemini Lithium Project area is traversed by the State Route 266 just south of the north Gemini Lithium Project claims boundary; the highway is situated within a 122 metre (400 feet) wide right-of-way (ROW). As well, there is a 50-acre materials site for sands and gravels for road maintenance, straddling the highway ROW, at the northeast corner of the lode claims block. The road and ROW will need to be considered in the future plans for development of the north area. Bordering the claims to the southeast, the BLM has placed a land reserve, the Gold Point Solar Exclusion Zone, valid until 2033.

There are no known environmental liabilities associated with the property position nor any mine workings to the author's knowledge. Also, there are no other significant factors or risk known to the author that may affect access, title or the right or ability to work on the claim.

Surface disturbance permits are in hand for the drilling programs completed, and for anticipated future drilling. After successful Phase I drilling at Gemini, Nevada Sunrise has obtained a revised exploration permit, allowing the expansion of drilling operations to twelve total boreholes.

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

The Gemini Lithium Project site is road-accessible from Tonopah, Nevada, by driving 42 miles (68 km) south on US Highway 95 and then 21 kilometres (13 miles) west on State Highway 266.

5.2 Climate

Lida Valley has a semi-arid climate characterized by hot, dry summers and cold winters. This climate is influenced by the Sierra Nevada Mountains located to the west of the valley. July is the hottest month with an average high temperature of 88°F (31.1°C) and average low temperature of 68°F (20°C). December, the coldest month, has an average high temperature of 40°F (4.4°C) and average low temperature of 26°F (-3.3 °C). The Lida Valley receives an average annual precipitation of 4.96” (125.98 mm) precipitation, usually in the form of thunderstorms which can be strong and cause extreme flooding. Snowfall is a rare event and year-round low humidity aids in evaporation. Windstorms occur predominantly in the summer and fall but can be common all year round. Figure 5-1 gives a graphic representation of the Lida average temperatures and precipitation (Climate Lida - Nevada, 2014 - 2024). The mild climatic conditions allow exploration work to continue throughout the year.

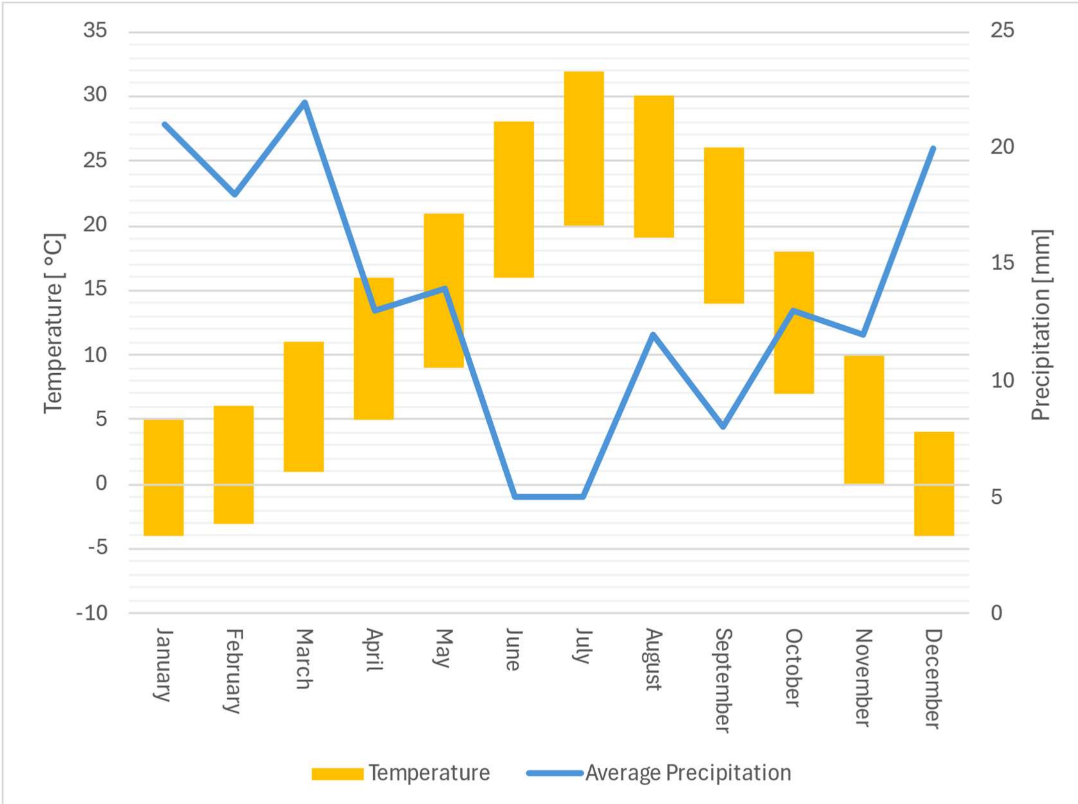


Figure 5-1: Monthly High-low Temperatures and Precipitation for Lida, Nevada

5.3 Local Resources

The Gemini Lithium Project is situated in the vicinity of Tonopah, Beatty, and Gold Point. Some of the essential labour, equipment, services, and supplies for exploration are available locally; for mine development and operations, labour and services can be found stateside in Nevada. Services in Tonopah and Beatty include food, accommodation, fuel and banking. Tonopah, with a population of roughly 2,200 people, has a BLM field office in charge of reclamation. The Esmeralda County seat is located in Goldfield.

There are many mining operations, historical and active, within Esmeralda County and the surrounding counties. These include the Silver Peak Lithium Brine operations of Albemarle Corporation and the Mineral Ridge open-pit gold mine of Scorpio Resources.

5.4 Infrastructure

The project site is connected to the nearby towns via a series of well-maintained Nevada State highways which in turn connect to the main interstate highway system. Locally, a network of unpaved roads and trails provide access throughout the Gemini claims area. The nearest rail system is in Hawthorne, Nevada, which is approximately 103 miles (165.76 km) by road to the north of the site. The closest powerlines (120 kV), running to Silver Point are located some 38 kilomertes to the Northwest of the claims; the 525 kV Greenlink West proposed powerline is to run 13 kilometres (8 miles) to the east of the property, between Highway 95 and the Gemini Project site; the powerline is slated to be completed by the end of 2026, providing sufficient capacity for mine operation. Adjacent to the Gemini property, to the south is the BLM Gold Point Solar Exclusion Zone, reserved for planning and development of solar power generation fields until 2032; the size of the potential solar installation would provide all or a substantial portion of the power needs of a mine.

Nevada Sunrise has obtained water rights (98.79k cubic metres/year or 80.09 acre/feet/year), sufficient for both exploration, and for mining and processing needs.

5.5 Physiography

The Nevada Sunrise claims lie between elevations of 4,880 and 5,340 feet (1,490 and 1,630 meters) above sea level. Regionally, Lida Valley lies east of the Sierra Nevada Mountains, within the Basin and Range Province. The Gemini Lithium Project lies within the Walker Lane Trend - a complex zone of disrupted topography. The Sierra Nevada Mountains create a rain-shadow to the east of them, resulting in the high desert environment with sparse vegetation, completely devoid of trees. The ground is partially covered by widely-spaced low desert brush, classified as Inter-Mountain Basins Mixed Salt Desert Scrub. The dominant species found in the area are: shadscale, greasewood, fourwing saltbush, winterfat, spiny horsebrush, and Indian ricegrass. The individual dominance and of the set of species varies over the project area.

The nearly flat topography is a result of basin fill of unconsolidated and poorly consolidated sediments and alluvial fans, generally very shallowly sloping from west to east. The alluvial fans, originating from the west side of the claims, are cut by eastwardly radiating desert washes, which can be steep sided. The alluvial fans end in the central part of the property, and the desert washes subsequently follow a dendritic pattern, converging at Jackson Wash, at the eastern claim boundary.

6 History

The Gemini Lithium Project history is rather brief. Prior to the property being staked by Nevada Sunrise, there were no other mining claims known to have been staked on the current property area. Thus, there are no previous historical mineral resources or reserves for this project.

Prior work on the Gemini Lithium Project and surrounding area:

- Historic wide-spaced gravity surveys conducted by the US government in cooperation with academia.
- In 2012 and 2013, Dr. John Oldow from the University of Texas, Dallas, spearheaded a geological research group that gathered around 500 gravity data points across 7 transects in the Lida Valley. This detailed survey recorded notable gravity lows in two faulted sub-basins about 7 kilometers (4.5 miles) from each other, both presumed to be several hundred meters deep.
- Geologic mapping by University of Texas by an academic team: Sarah B. Dunn, John S. Oldow, and Nicholas J. Mueller, published in 2015: “Late Cenozoic Displacement Transfer in The Eastern Sylvania Mountain Fault System and Lida Valley Pull-Apart Basin, Southwestern Nevada, Based on Three-Dimensional Gravity Depth Inversion and Forward Models”.
- Geological mapping of Esmeralda County by Nevada Bureau of Mines and geology, map printed at 1:250,000 scale in 1994 (John P Albers and John H. Stewart)

For exploration and drilling work conducted by Nevada Sunrise, see section 9 Exploration, and section 10 Drilling.

7 Geological Setting and Mineralization

The Lida Valley is a closed basin playa surrounded by mountains. Figure 7-1 shows the physiographic features in the Lida Valley area with the Gemini Lithium Project outlined in light blue.

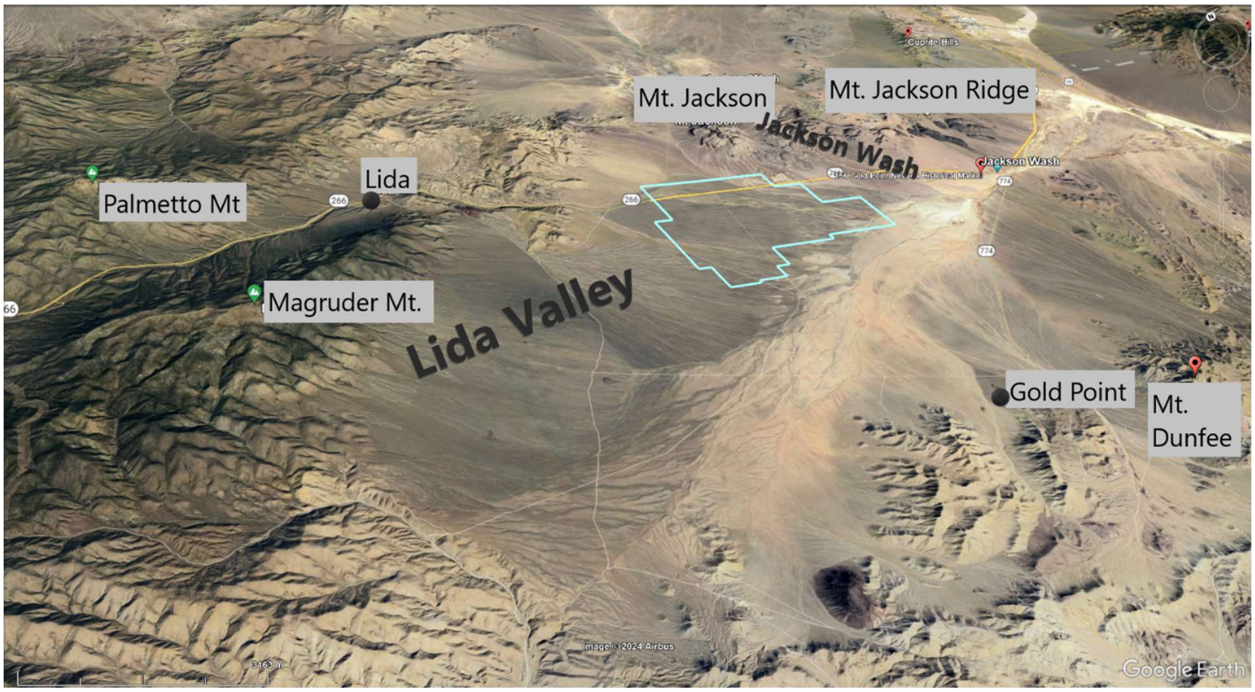


Figure 7-1: Physiographic features Surrounding Lida Valley, Nevada

Lida Valley is flanked on the north by Jackson Valley, on the east by Stonewall Flat, on the west and south by the Palmetto Mountain and the Slate Ridge. The playa floor is approximately 65 sq. miles (170 sq. kms). Altitudes in this area range from 5,085 feet (1550 meters) on the playa floor to 8,330 feet (2,540 meters) at Palmetto Mountain.

From a tectonic perspective, the Lida Valley basin is intricately divided by a complex fault system. The subsurface morphology of the basin varies from the northern to the southern parts. In the north, primary extensional faults concentrated the displacement, leading to the creation of deep basins. Conversely, in the south, the displacement spread across a broader array of structures, each with minimal displacement.

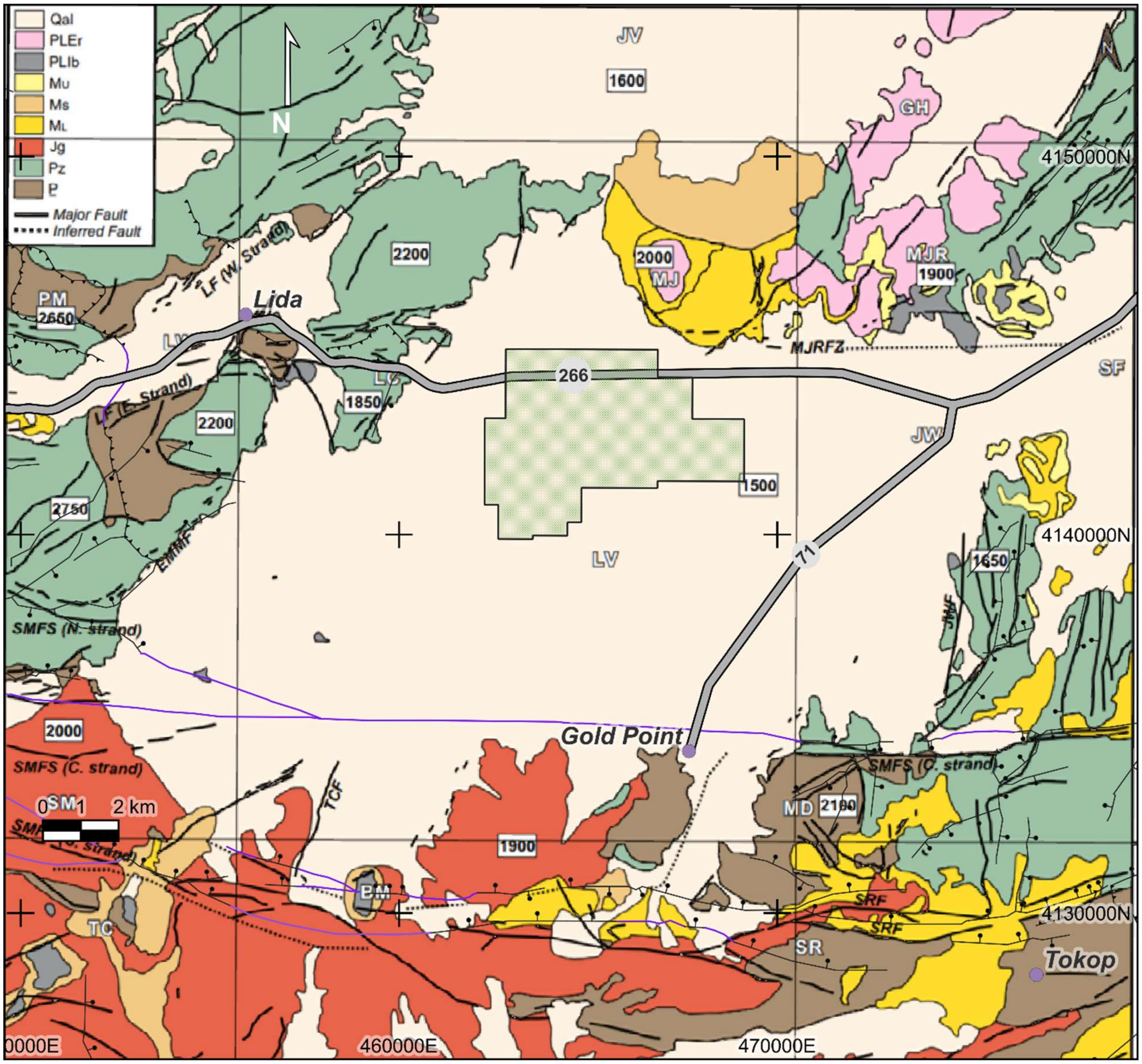


Figure 7-2: General geology map of Lida Valley, after Dunn et al, 2015

The basement generally comprises Neoproterozoic to Ordovician carbonate and clastic rocks deposited along the ancient western passive margin of North America. The Lida Valley basin is bounded to the south by a complex sequence of rocks, the oldest being the Precambrian metasediments outcropping at Mount Dunfee and surrounding area, to the south of Gold Point. A package of Paleozoic carbonates and clastics form ridges to the southeast of the basin and also to the northwest. A Jurassic granitic batholith lies between, bordering the basin to the southwest. At

Mount Jackson, Pleistocene rhyolites form dome intrusions, with accessory basalt flows. The basin fill comprises sediments of Tertiary to Quaternary sediments.

7.1 Geology – Gemini Claims

The Gemini Lithium Project has been the focus of 2 phases of drilling and covers a large area that gently slopes toward the east. The drainages, or washes, cut into the surface of the quaternary alluvial fans. The Lida Valley area is made up of fine grained sedimentary and tuffaceous units which generally dip to the west. The strike and dip can be quite varied locally but on average most of the sediments dip at less than 5°. Some bedding undulations were noted, possibly caused by differential compaction or local faulting.

The basin is bounded by a rectilinear array of extensional and left-oblique faults with north-northeast and west-northwest strikes, respectively. The transition between north-northeast extensional faults and west-northwest left-oblique faults is well exposed in several locales where the faults merge through curved arrays of structures with intermediate orientations. The Lida Valley basin is separated from the surrounding highlands by these faults with west-northwest structures defining the north and south boundaries and north-northeast structures defining the west and east boundaries.

In the geological setting of the studied area, the identification of lateral structures, as shown in Figure 7-3, attributed to the lateral-extensional regime, plays a critical role in shaping the lithium deposit. These lateral structures are closely connected to the normal faults depicted in Figure 7-4, which have resulted in a horst-and-graben system. This structural configuration outlines the deposit's physical boundaries on the east and west sides and influences its distribution and positioning. The interaction between the lateral structures and normal faults indicates a complex tectonic environment, where lateral displacements have been vital in creating spaces that accommodate lithium deposits by forming extensional structures. This geological process has aided in concentrating lithium minerals, potentially in association with rhyolitic volcanic activity in the deposit's northern region. Significantly, an exhumation event preceding the lateral-extensional regime is suggested to have exposed Paleozoic and Proterozoic rocks at the surface. This context suggests that the dynamics between extensional forces and lateral movements have critically influenced the lithium deposit's formation and location, showcasing the structural intricacy that has defined the geology of the area under investigation.

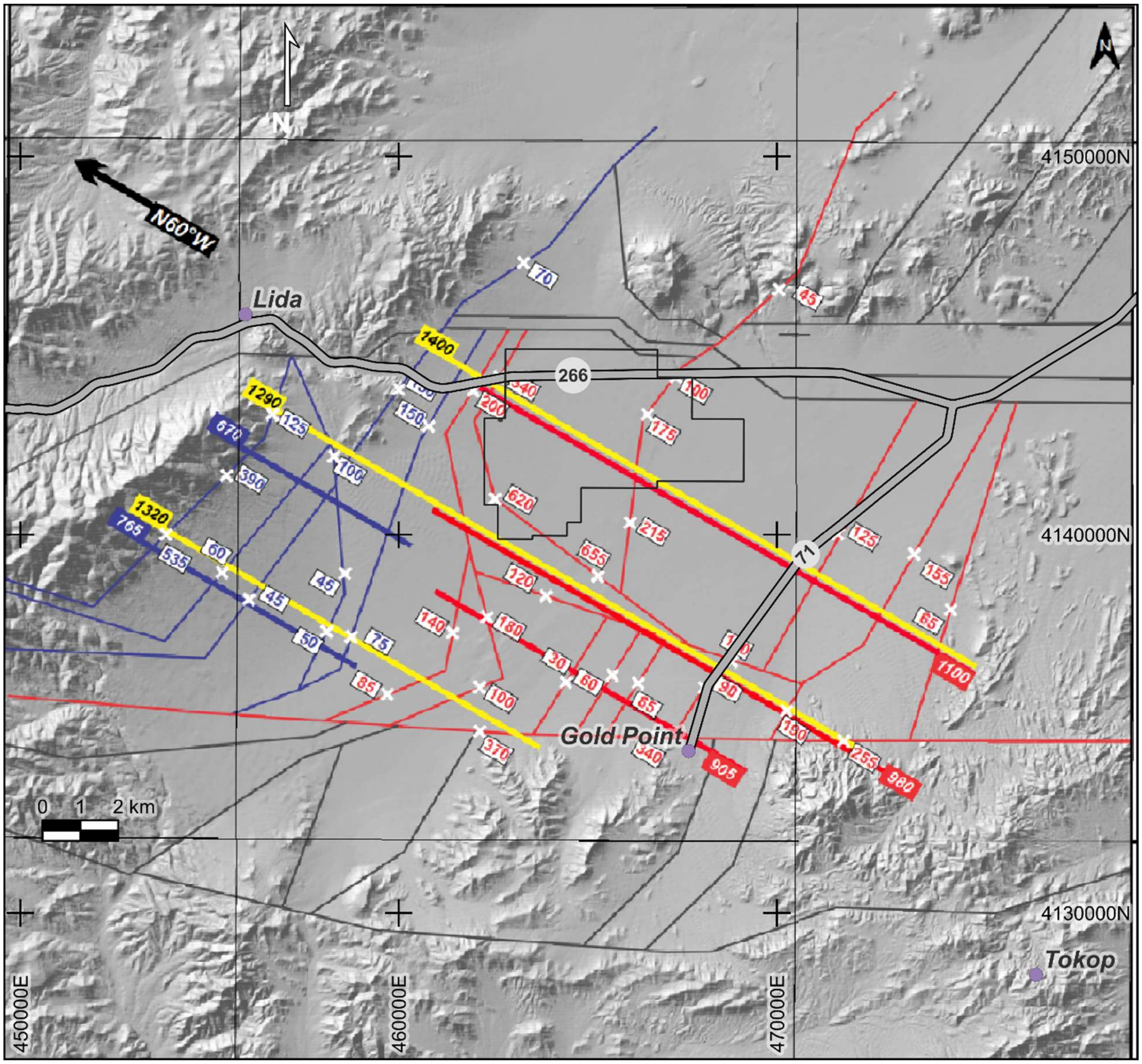


Figure 7-3: Horizontal Strike-slip faulting, Lida Valley, after Dunn et al, 2015

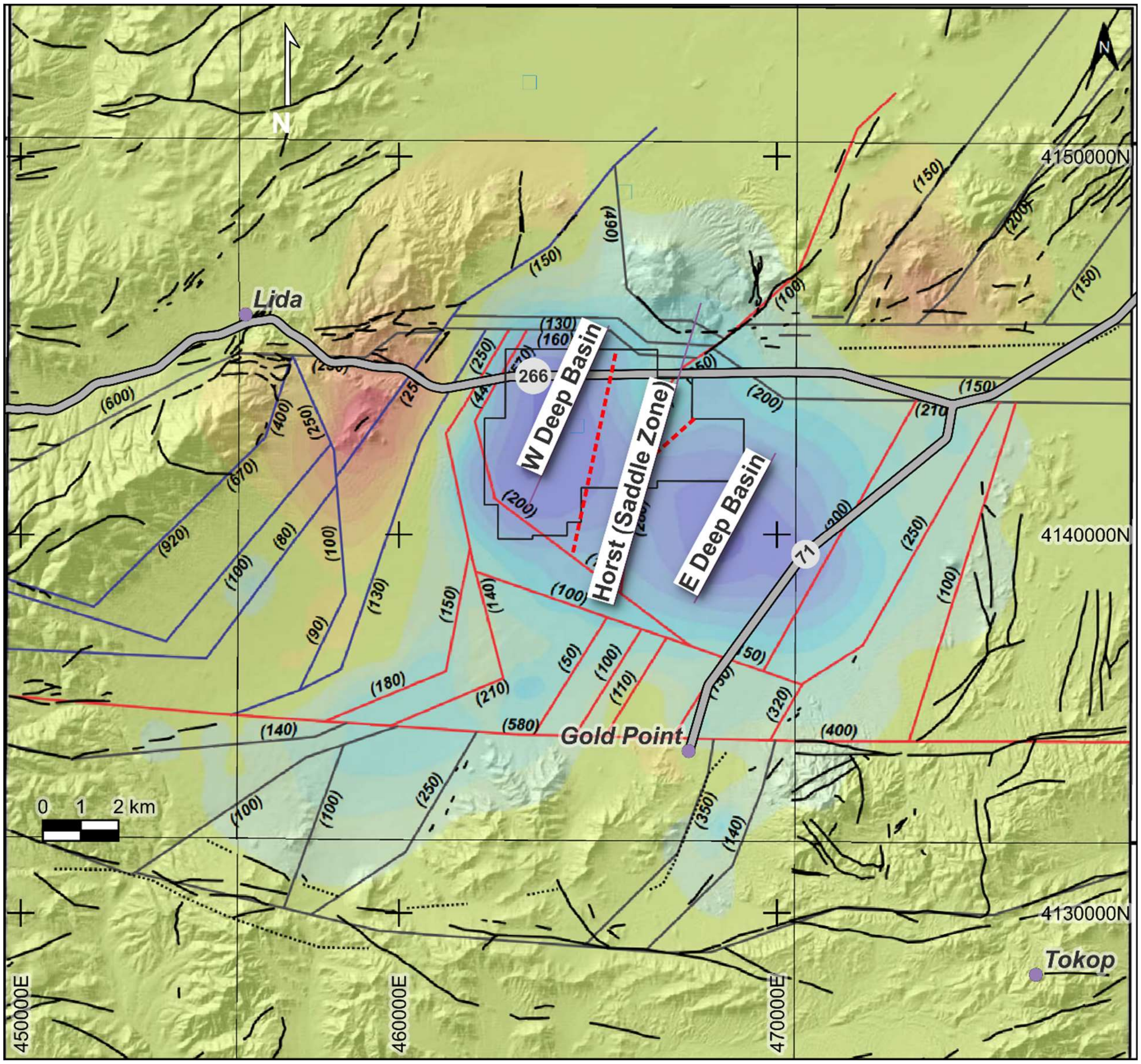


Figure 7-4: Normal Faults, with amplitude of motion is labelled on down-dropped blocks

On the Gemini Lithium Project, the mineralized zone occurs within strata occurring at depths from approximately 150 to 600 metres; mineralization is hosted by a locally varying succession of sedimentary rocks, ash-flow tuff, and basalt. Most beds were categorized as tuffaceous, due to the observed presence of fine crystal shards.

Figure 7.5 shows the generalized lithology and lithium values (bar charts, along the drillhole trace), with the main normal and strike-slip faults also shown. These faults are not evident at the surface, but the normal faults showed offsets (downwards to the southeast) in geophysical study interpretations.

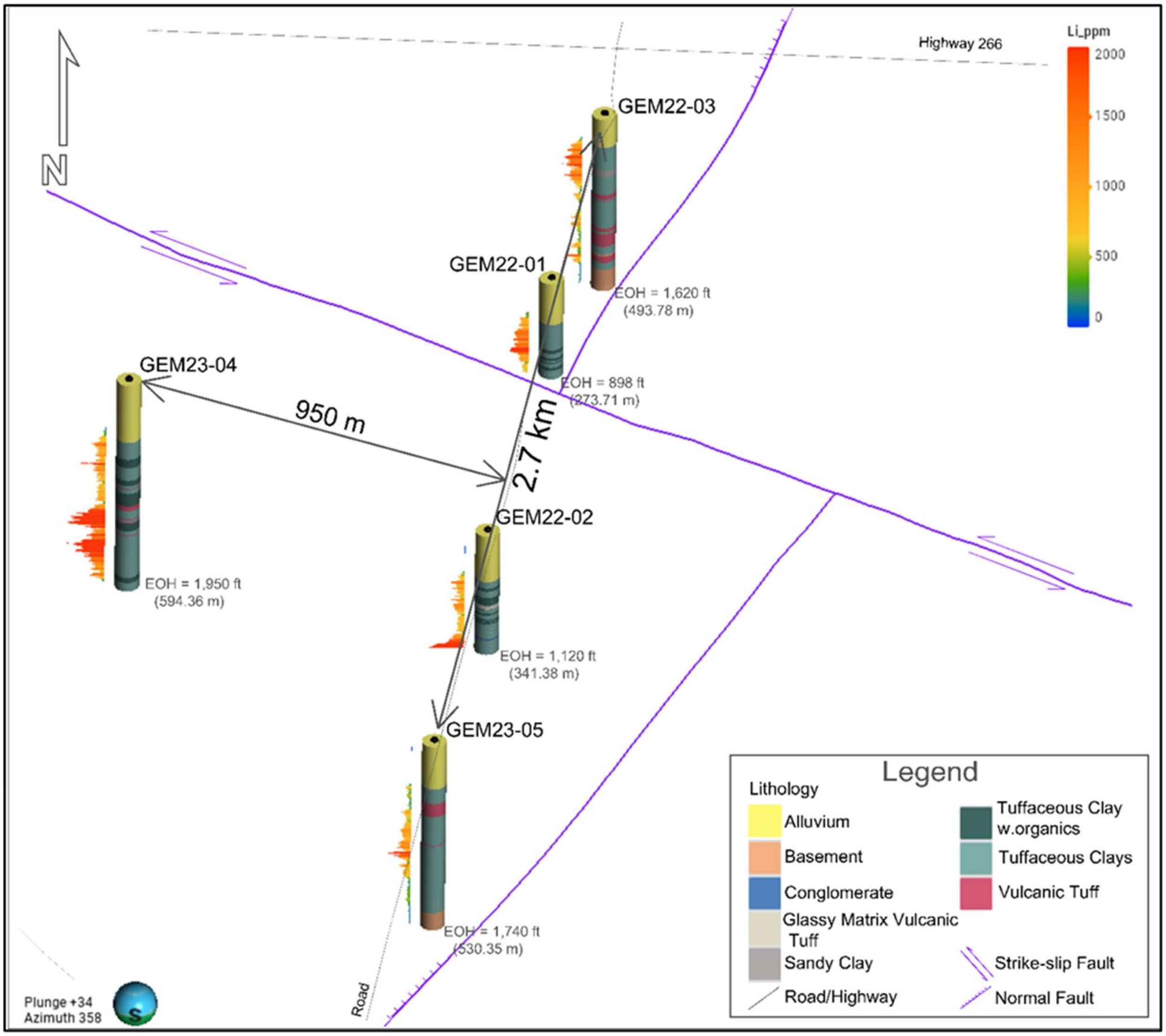


Figure 7-5: Drill holes with lithology and lithium grades

7.2 Mineralization

Mineralization on Nevada Sunrise's Gemini Lithium Project has been traced through reverse circulation drilling. All five holes from the two phases of drilling have intercepted lithium mineralization in unconsolidated to poorly consolidated clay sediments with significant grades and intercept lengths. The spatial extents of the mineralized zone measure approximately 2.7 km north to south from hole GEM22-03 to GEM23-05 and east-west approximately 950 metres, from GEM23-04 eastwards. The thickness of the deposit varies from a minimum of 176.78 metres in GEM22-01 to a maximum of 439.02 metres in GEM23-04; note that hole GEM22-01 was stopped short, having encountered a fault zone (see Table 10-2 in section 10 Drilling, for a listing of individual mineralized intervals with thicknesses). The trend of the mineralization follows the deep basin orientation, striking at approximately 5^{O}; geological continuity of the mineralization is observed to be maintained between all five holes. It is expected that the deep basin (interpreted to be a graben feature) will be bounded to the west by bounding faults (normal faults) forming the absolute westward possible extent of mineralization. The eastern bound of the deep basin is formed by opposite-dipping normal faults, against a horst feature. A dextral strike-slip fault runs through the mineralized zone, with an apparent throw of 700m. Despite the offset, mineralization shows continuity across the fault, suggesting that it may be a post-mineralization feature. Normal faults in lithium clay basins tend to disrupt the continuity. Based on this criterion, it was concluded to treat the whole mineralized zone as one domain (see Section 14, Resource Estimate).

A study of the lithology of the mineralized zone did not bear out any significant correlations between minor lithological units within the basin-fill sediments and lithium grades. Basement rocks forming the bottom of the basin, and the Quaternary alluvial fan sediments covering the top appear to be unmineralized. It has been observed that the sediments towards the bottom of the basin are richer in volcanic ash; RC drill cuttings sampling has revealed a trend of significantly increasing lithium grades towards deeper parts of drillholes GEM23-04, GEM22-01 and GEM23-05. The correlation may be incidental, indicative of higher igneous and hydrothermal activity at the beginning stages of basin development. Regardless, the increase in grades is gradual, leading to the conclusion to treat the whole thickness of the deposit as a single domain.

8 Deposit Types

Nevada Sunrise's Lida Valley claims present two potential deposit types for exploration, lithium brine and lithium clay.

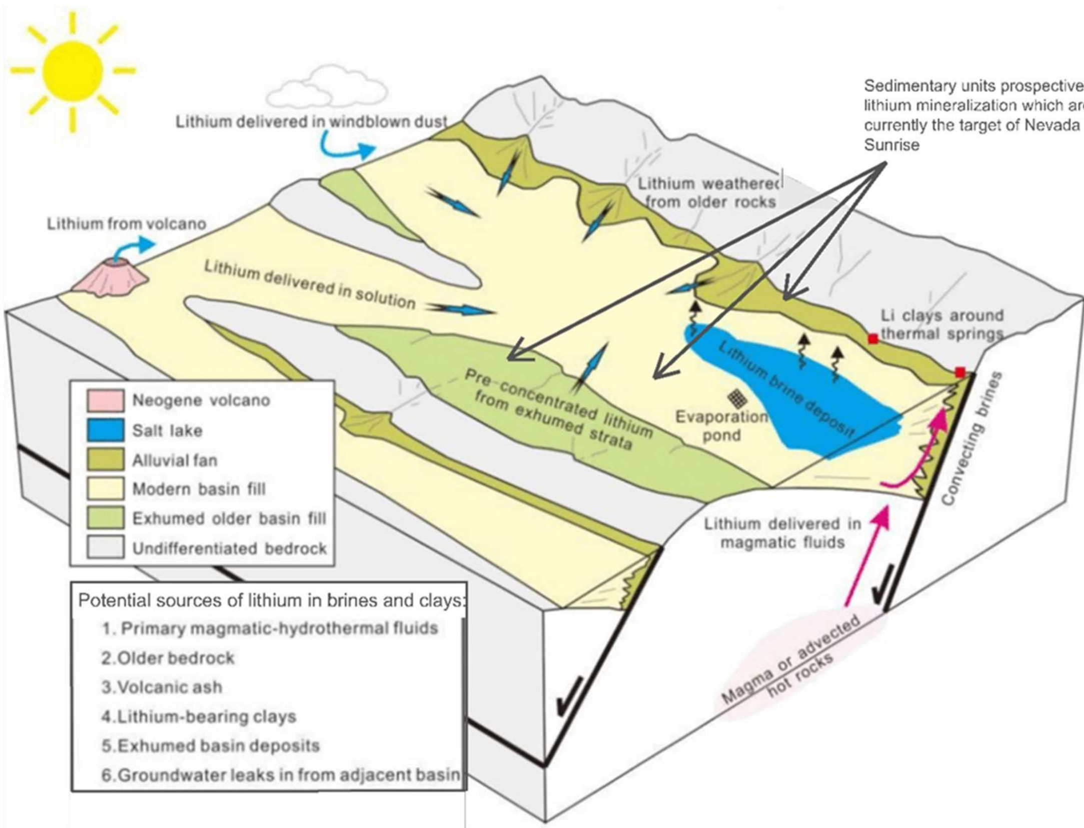


Figure 8-1: Schematic Deposit Model for Lithium Brines (Bradley, 2013)

8.1 Lithium Brines Deposit Type

Water chemistry testing of the first five holes of exploration drilling suggest that waters intercepted at depth probably correspond to a water table rather than actual brines, However, the lithium brine potential of Nevada Sunrise's Gemini Lithium Project remains to be thoroughly investigated, and it is still uncertain whether true brines exist in the sediments beneath the Gemini project area. Preliminary water flow testing indicates low flows, although a pumping test has not been performed. No resources have been estimated on the Nevada Sunrise based on the Lithium Brines Deposit Type Model.

8.2 Lithium Clay Deposit Type

The exploration and potential exploitation of lithium from playa lakebed sediments, because of block faulting, represent the second category of deposit under consideration. This category necessitates the formulation and optimization of novel lithium extraction methodologies, which are in various stages of research and development by several competing entities. Preliminary tests have been carried out by Nevada Sunrise on substantial sample quantities from the Gemini claims. The proposed extraction techniques aim to recover lithium directly from the abundant lithium-enriched mudstones and claystones that are present at or near the surface across the extensive Gemini claim area. To date, there are no known commercial operations worldwide that extract lithium from clay-based deposits, although numerous companies are actively pursuing the advancement of such technologies.

9 Exploration

Exploration activities in the Lida Valley predating Nevada Sunrise's acquisition of the Gemini Project comprised both regional and detailed seismic surveys and geologic mapping by government and academic geological teams (see 6. History).

Nevada Sunrise's exploration of the Gemini Lithium Project comprises two separate time-domain electromagnetic geophysical surveys (TDEM), one in 2016, and the other in 2022 and the completion of two phases of drilling on the Gemini claim group (see 10 Drilling for details of the drilling campaigns).

Figure 9-1: TDEM Survey on the Gemini Lithium Project

The two TDEM surveys totalled 25.1 km, with the 2016 survey comprising three lines, totalling 12.7 km; the 2022 survey also comprised three lines, totalling 12.4 km. Figure 9-1 shows the TDEM survey measurements being collected.

Following the first TDEM survey, Phase I drilling, commencing on March 15, 2022, was directed towards the zones of highest conductivity (see Figure 9-2) combined with low gravity anomalous zones from the U of T gravity surveys; the success in the lithium grades received from this initial drilling, led to the phase 2 TDEM survey and then to the subsequent Phase II drilling.

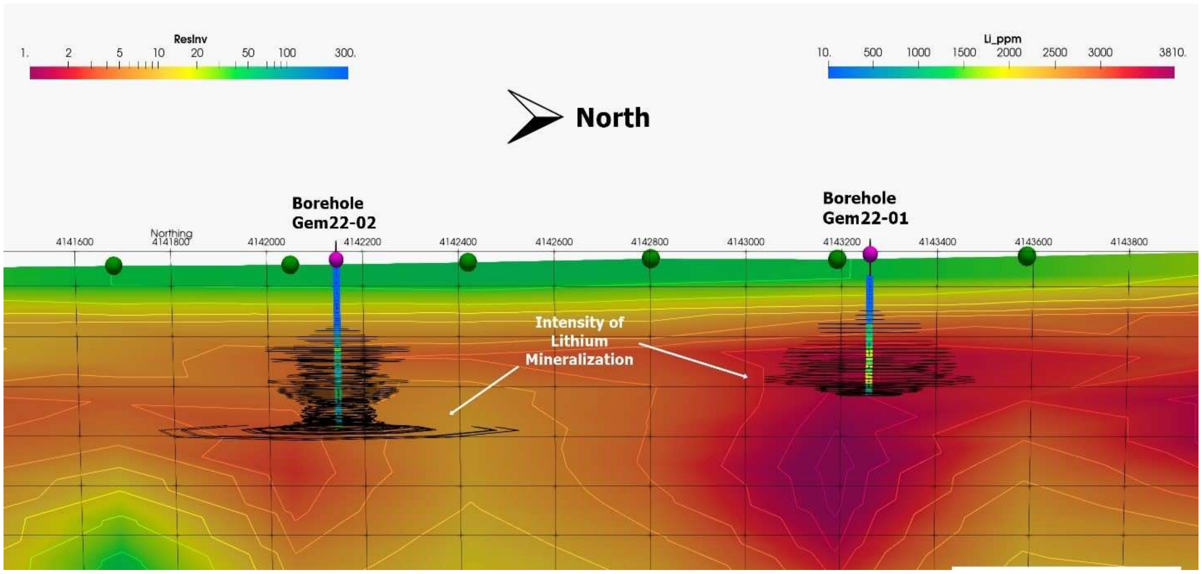


Figure 9-2: TDEM section with Li grades in RC holes GEM 22-01 and GEM22-02

The TDEM surveys detected anomalies within the sub-basins, interpreted to represent conductive zones at depths located well below the overlying non-conductive alluvium strata. Interpretations of the results indicate a conductive layer 150-250 metres deep, appearing to cover most of the project area; additionally, several isolated strong conductive zones were interpreted at depths from 400 to 600 metres (see Figure 9-3).

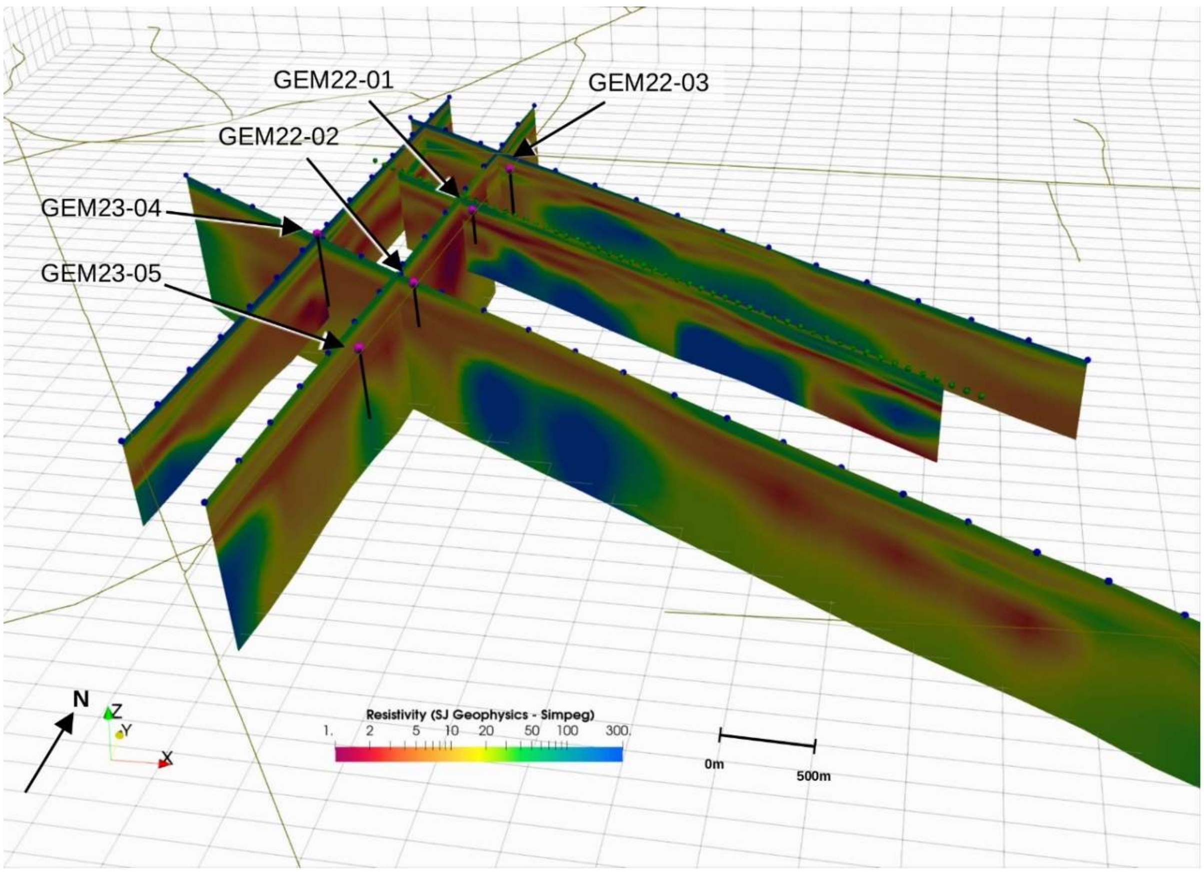


Figure 9-3: TDEM sections, with RC drill hole locations

10 Drilling

To date, there have been two phases of drilling encompassing 5 drill holes by Nevada Sunrise at its Lida Valley Gemini Lithium Project for a total of 2,233.58 meters with total depths ranging between the shortest, GEM22-01 at 273.71 metres and the longest, GEM23-04 at 594.36 metres; the holes all have been reverse circulation holes, drilled vertically. Both phases of drilling were contracted to O'Keefe Drilling Company of Butte, Montana. Table 10-1 is a complete list of the drill holes to date, with coordinates (in UTM NAD83, Zone 11) and the drilling phases in which they were completed. Figure 10.1 is a plot of the drill holes, color-coded by phase.

Table 10-1: Drill Hole Collar Coordinates and Drilling Phases

Drill Hole	Easting [UTM]	Northing [UTM]	Elev (m)	Depth (m)	Depth (ft)	Drilling Phase
GEM22-01	464656	4143240	1558.59	273.71	898	Phase I
GEM22-02	464540	4142145	1552.59	341.38	1120	Phase I
GEM22-03	464759	4143960	1558.59	493.78	1620	Phase II
GEM23-04	463656	4142716	1562.59	594.36	1950	Phase II
GEM23-05	464443	4141238	1588.59	530.35	1740	Phase II

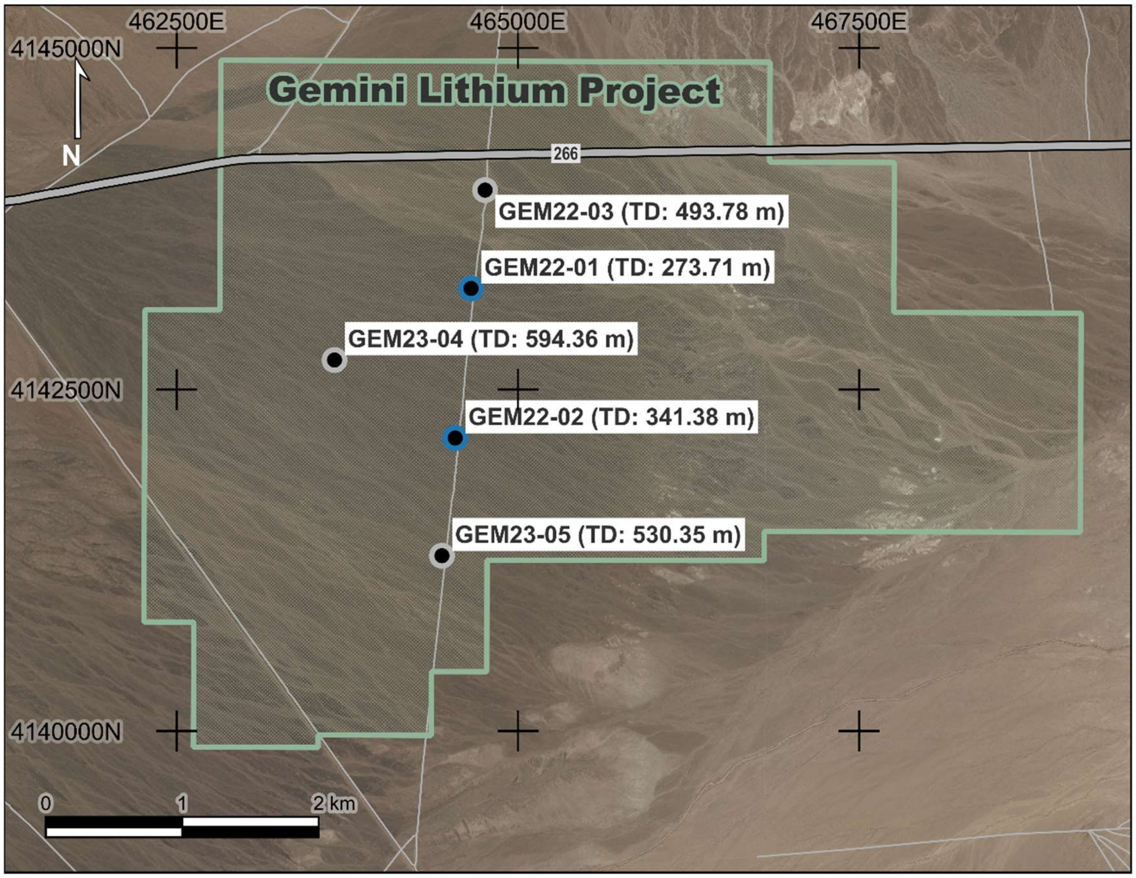


Figure 10-1: Phase I and Phase II Drill Collar Locations

10.1 Summary – First 2 Drilling Phases

Phase I drilling occurred in March 2022 and April 2022. Two holes were drilled using reverse-circulation for a total of 615.09 metres, with the hole depths of 273.71 and 341.38 meters. Samples of the RC cuttings returned significant lithium values (up to 3810ppm Li) from both holes, and the mineralized intercepts were several hundreds of metres thick. The sample interval for GEM22-01 was 6.10 metres (20 ft); sample interval was reduced to 3.05 metres (10 ft) for CEM22-02.

Figure 10-2: RC drilling, sampling with rotary splitter, geological logging of cuttings

Phase II drilling was completed in October 2022 through March 2023 by O'Keefe Drilling Company of Butte, Montana. Phase II comprised three holes, drilled using reverse-circulation, for a total of 1,618.49 metres. The drillholes total depths ranged between 493.78 and 594.36 metres. Phase II drilling expanded the lithium deposit towards the west as well as increasing the depth. The Maiden Mineral Resource Estimate, contained in this report, was based on all five holes, drilled in Phases I and II.

Mineralized Intervals from the five RC drillholes are listed in Table 10-2, below:

Table 10-2: Phase I & Phase II Drilling Results: Lithium-in-Sediments

Depth Interval					Thickness		Lithium Weighted Average (ppm)
Hole Number	**From (feet)**	**To (feet)**	**From (m)**	**To (m)**	**Feet**	**Metres**	
GEM22-01	**320**	**900**	97.54	274.32	**580**	176.78	**1164.48**
including	*480*	*780*	*146.30*	*237.744*	*300*	*91.44*	*1531.25*
GEM22-02	**390**	**1120**	118.87	341.376	**730**	222.50	**1060.96**
including:	*490*	*560*	*149.35*	*170.688*	*70*	*21.34*	*1156.25*
and including	*990*	*1120*	*301.75*	*341.376*	*130*	*39.62*	*2159.23*
and:	*1070*	*1120*	*326.14*	*341.376*	*50*	*15.24*	*3244.00*
GEM22-03	**280**	**1,410**	85.37	429.88	**1,130**	344.51	**929.80**
including:	*280*	*630*	*85.37*	*192.07*	*350*	*106.71*	*1,342.20*
and:	*470*	*500*	*143.29*	*152.44*	*30*	*9.15*	*1,955.73*
GEM23-04	**510**	**1,950**	155.49	594.51	**1,440**	439.02	**1,412.38**
including:	*1,270*	*1,380*	*387.20*	*420.73*	*110*	*33.54*	*3,556.82*
and:	*1,350*	*1,380*	*411.59*	*420.73*	*30*	*9.15*	*4,329.60*
GEM23-05	**440**	**1,575**	134.15	480.18	**1,135**	346.04	**635.21**
including:	*850*	*1,210*	*259.15*	*368.90*	*360*	*109.76*	*1,096.16*
and:	*950*	*1,130*	*289.63*	*344.51*	*180*	*54.88*	*1,308.42*

Note: Sediment samples are a composite of material collected from the rotary splitter in the RC drilling rig, which produces a continuous, representative 3 to 5 kilogram sample for each sample interval.

The intercepts and mineralized intervals listed in Table 10-2 are true-thickness, or very nearly so, with the sedimentary layers nearly horizontal and the drill holes all oriented at vertical (-90 deg).

The table lists the main mineralized intervals, in excess of a hundred metres, as well as the included intervals of higher-grade mineralization.

11 Sample Preparation, Analyses and Security

11.1 Sampling and Sample Handling

All five holes from the Gemini Lithium Project were drilled by reverse circulation method. The holes were started in dry sediments, with the holes encountering the water table at depth. Sampling of the RC cuttings was conducted at the drill, the cuttings passing through a cyclone and then through a rotary splitter; sample sizes were generally between 5 and 10 kg. All samples were packed in mesh poly bags, labelled, sealed and taken to a locked and secured container at Gold Point. Periodically, the samples were delivered by either the exploration manager or geological staff directly to ALS Laboratories in Reno, Nevada. The chain of custody was thus maintained from the drill to the laboratory. Sample intervals for sediments was every 3.048m for all holes, with the exception of GEM22-01, which was 6.096 m intervals. Sampling was conducted from the collar to the end of hole.

Samples were also taken of water, at 6.096 m intervals, after the hole was blown clear for several minutes. Water flow rates, temperature, pH, solids concentrations and salinity measurements were also made at the drill.

Logging of RC cuttings was performed at the site by the exploration manager and geological staff. Logs were kept of the samples (sample intervals and sample numbers); lithology sub-unit classification, colour of RC cuttings, and a textual description of lithology observations. Also water measurements were entered into the same log.

11.2 Laboratory and Analytical Procedures

All samples were delivered to ISO-17025 accredited ALS Laboratories in Reno, Nevada for sample preparation; analysis was performed at ALS Laboratories, North Vancouver, BC for analysis. ALS is a public company listed on the Australian stock exchange and is entirely independent of Nevada Sunrise.

Upon delivery of sediment samples at Reno, ALS would perform sample logging-in procedures, assigning unique lab sample numbers to individual samples, with unique barcodes. Samples are dried (with a maximum temperature of 60ºC and weighed. Crushing is to 70% or more of the sample passing 2mm screen; a 250-gram sample is split through a rotary splitter at this stage. The whole of the 250-gram subsample is pulverized to 85% of pulverized sample passing 75-micron screen.

All sub-samples are transferred by ALS to their North Vancouver laboratory for analysis. Lab method ME-ICP41 was used; samples are digested in aqua regia, then analysed by ICP for 35 elements.

The sampling, chain of custody, methods of preparation and analysis employed were up to industry standard and are considered adequate for resource estimation.

11.3 QA/QC

For Phases I and II, three types of QA/QC samples were used and are listed in Table 11.1:

Table 11-1: QA/QC Samples used for Drilling Phases I and II

Sample Type	Number of Samples
MEG-Li.10.11	44
OREAS Coarse Silica Blank	59
Duplicate samples	116

The MEG geochemical standards were purchased from Minerals Exploration & Environmental Geochemistry of Reno, Nevada, for all 2 drilling phases. Figure 11.2 shows the distributions of the assay results for the MEG lithium standards assayed by Nevada Sunrise for all phases.

All values were within the high and low range values established by MEG based on the standards sent, except for one sample (GEM23-04-219). In total, 44 standards were sent for validation: 40 to ALS Laboratories and 4 to AGAT Laboratories. All samples, including MEG-Li.10.11, were processed using aqua regia digestion. The analyses were conducted at the ALS Laboratory in Reno, Nevada.

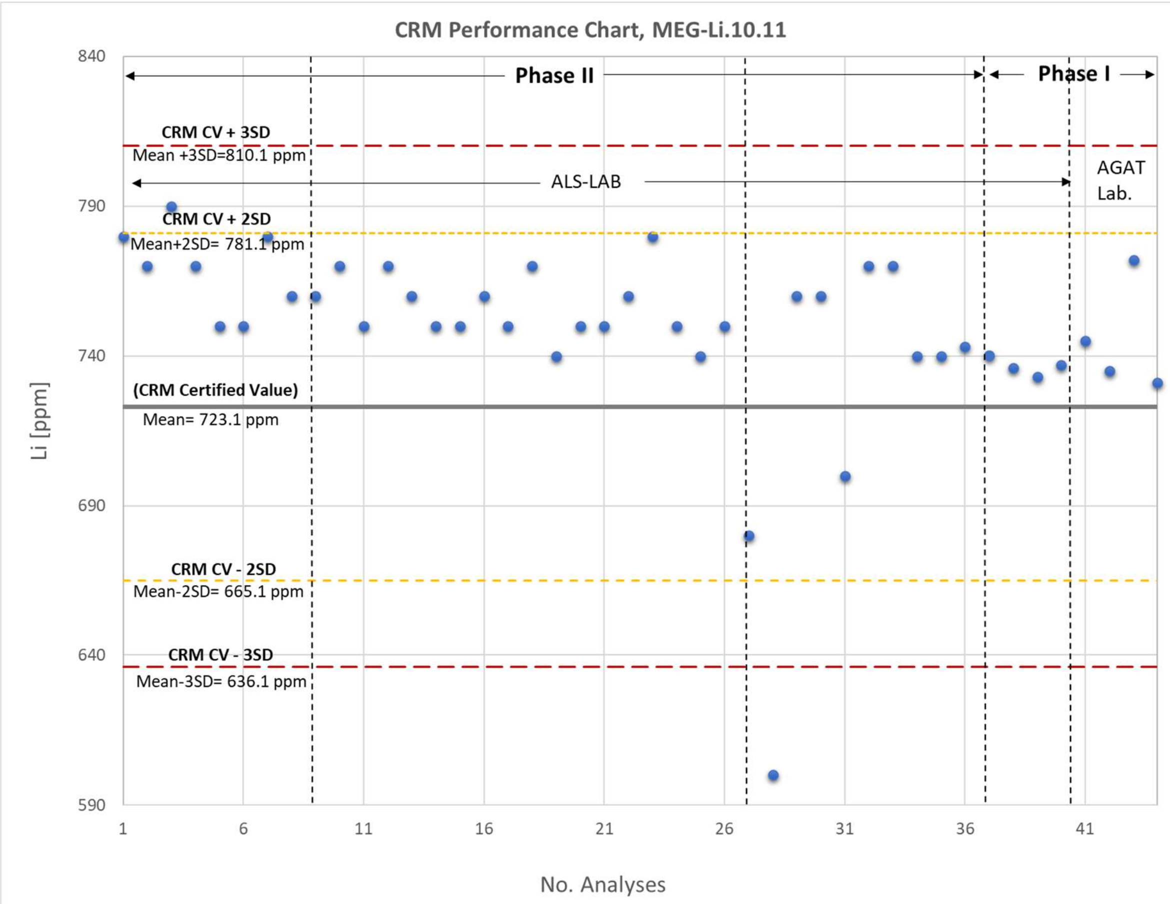


Figure 11-1: Range of Values for MEG-Li.10.11 for all 2 Drilling Phases

Fifty-nine OREAS Coarse Silica Blank Material packets were employed in the QA/QC (Quality Assurance/Quality Control) procedures, exclusively during the milling stage, and all were deemed within an acceptable range. This suggests negligible contamination at this specific phase of sample processing, as corroborated by the consistent lithium values depicted in Figure 11.3. Additionally, five samples underwent analysis via mass spectrometry (MS), providing a lower detection limit essential for the precise quantification of trace lithium levels. It is important to note, however, that since these blanks did not proceed through the entire sample preparation process, such as quartering or sample division, the assessment of contamination is limited to the milling phase.

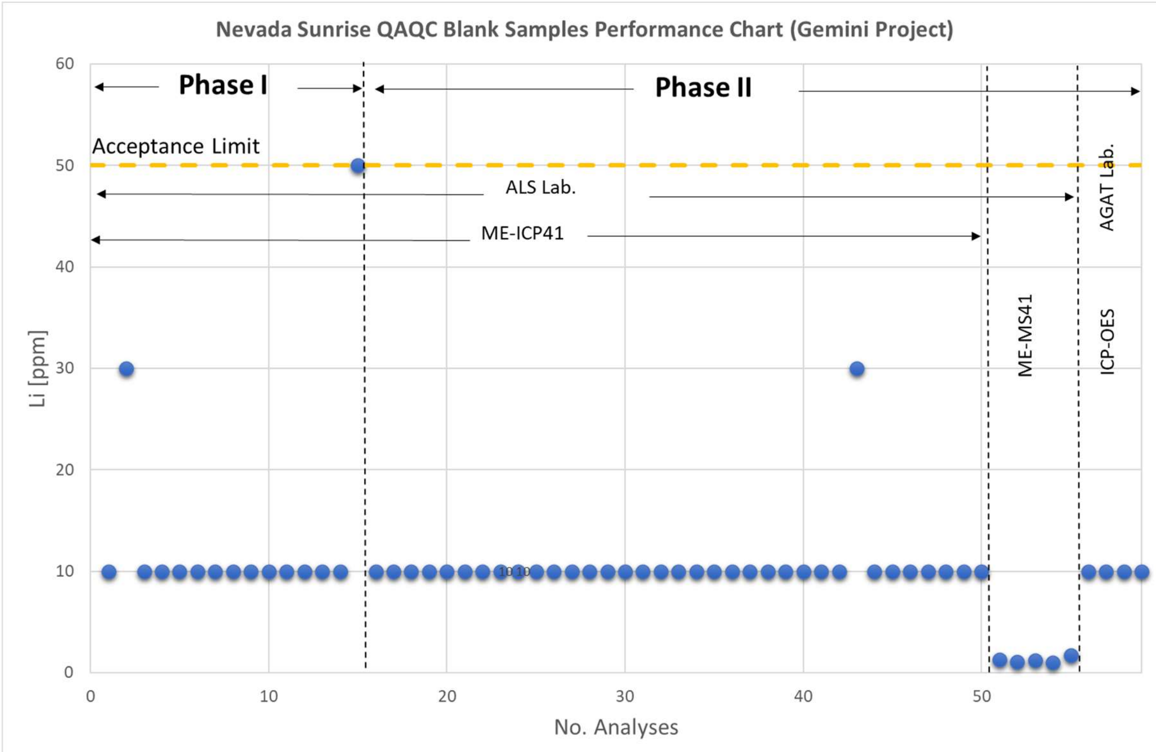


Figure 11-3: Distribution of all MEG Blank Standard Results

The QA/QC duplicate pairs chart for the Gemini Project, as shown in Figure 11-4, indicates that a total of 116 duplicate samples were analyzed for lithium content. The results show a strong correlation along the 1:1 line, reflecting consistent sampling and analytical precision. However, about 15% of the duplicates were outside the acceptable variance range of ±10%, with this deviation mainly observed within the 500 to 1000 ppm concentration range. This suggests a possible concentration-dependent bias or analytical issue within this range that merits further investigation. Moreover, it was noted that borehole 3, with the certificate number RE22321053, had the most duplicates falling outside the specified range. This could indicate a need for resampling or a more thorough review of the preparation and analytical processes for the samples from this particular borehole in subsequent stages of the report. The absence of data clustering near the origin further confirms that the analytical method's detection and quantification limits are well-suited for the range of lithium concentrations present, thus verifying the method's capability for low-level lithium detection. Since the CRM standards for the same certificate were in the acceptable, it is deemed that the duplicates issue is not critical.

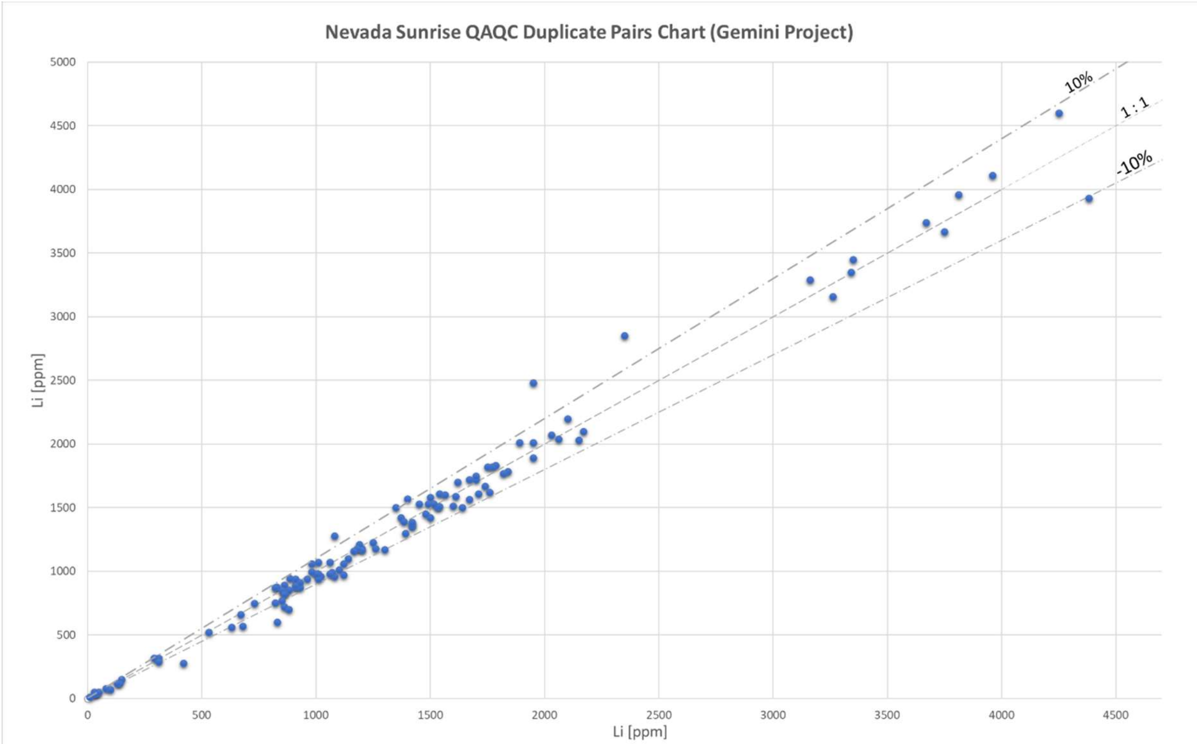


Figure 11-4: Duplicate Sample Pairs Chart

Overall, the nature, extent, and results of quality control procedures employed and quality assurance actions taken provide adequate confidence in the data collection and processing for further use of the database for resource estimation purposes. As well, the sample preparation, security, and analytical procedures are within accepted industry standards and comply with NI 43-101 regulations.

12 Data Verification

The author was able to confirm the accuracy of locations of drill holes by checking them with his own handheld GPS unit (see Table 12-1, below).

Table 12-1 Drillhole collar validation survey

Hole ID	Field Validation GPS		Collar Table GPS		Absolute diff Northing	Absolute diff Easting
	Northing	Easting	Easting	Northing		
GEM22-01	464652.119	4143229.44	464656	4143240	4	11
GEM22-02	464539.282	4142136.56	464540	4142145	1	8
GEM22-03	464767.899	4143955.19	464759	4143960	9	5
GEM23-04	463653.304	4142719.95	463656	4142716	3	4
GEM23-05	464440.593	4141278.61	464443	4141283	2	4
Average					**4**	**6**

The average distance variation between the collar table locations and the validation GPS readings are within expected error – both readings were made with handheld GPS machines and the drill pads for holes GEM22-01 to GEM22-03 had been reclaimed, so the validation positioning of the collar was approximate.

Drilling programs had concluded prior to the site visit to the Gemini Lithium Project; however, the author has reviewed the RC cuttings lithology logs against the validation samples from GEM22-01 and GEM22-02 and has reviewed videos of the drilling and sampling procedures.

A set of 28 validation samples was selected from the mineralized sections of drill holes GEM22-01 and GEM22-02. The coarse crush rejects and the pulp samples are in paid storage at the ALS Reno Laboratory warehouse; ALS was requested by the author to produce and deliver 500-gram splits from coarse crush reject materials. The author inserted CRM standards and blanks, re-tagged the samples and delivered the samples to AGAT Laboratories in Vancouver for analysis at their Calgary laboratory. By utilizing a lab different than ALS, this set of samples double as check assays for holes GEM22-01 and GEM22-02. The two sets of samples, the client's set forming part of the assay database and the author's validation samples compare extremely well, see the chart, Figure12-1, below.

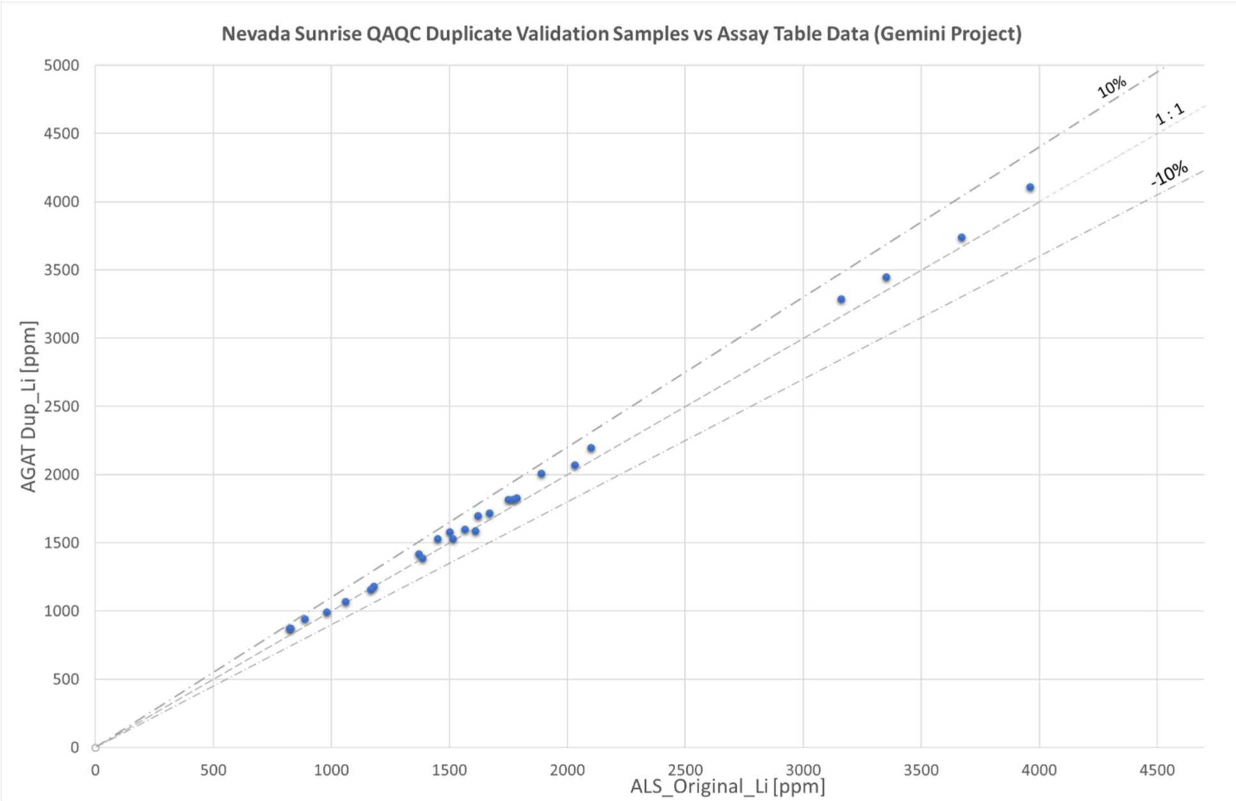


Figure 12-1: Duplicates chart, database samples vs validation samples

Assay data used in the Mineral Resource model were cross-checked against the original assay certificates after the data had been imported into the model. Assay values were also spot checked against those displayed in cross sections. Cross sections of the model were generated, and volumetrics were checked by the cross-sectional method to verify the model's accuracy.

The author is of the opinion that there have been no limitations on verification of any of the data presented in this report. The author is of the opinion that all data presented in this report is adequate for the purposes of this report and is presented so that it is not misleading.

13 Mineral Processing and Metallurgical Testing

Lithium is the lowest-density alkali metal in the periodic table, with properties of being highly reactive chemically, and highly conductive, both electrically and thermally. Initial uses were in ceramics and paints manufacturing and pharmaceutical production; currently lithium-battery manufacturing is a rapidly-increasing use of the metal. Due to the reactive nature of lithium, it does not occur naturally in its elemental state – likewise, the commercial product is commonly in stable forms of lithium carbonate (LCE) or lithium hydroxide.

The main deposit types for lithium are hardrock pegmatite deposits, lithium-clay deposits, salars, in geothermal fluids and occasionally as accompanying element in petroleum deposits. The Gemini Lithium Project is a lithium-clay type of deposit, of the montmorillonite sub-type. Montmorillonite is a swelling clay; lithium ions are found adsorbed onto the crystal faces of the clay particles, thus extraction of these weakly-held ions is usually relatively easy, as compared to the hectorite-clay material, where the lithium ions are bonded inside the crystal lattices of the clay due to higher temperatures of mineralization.

Sulphuric acid has been shown to be highly effective in extracting lithium from Gemini Lithium Project clays.

13.1 Sample Selection

Six samples were collected from RC cuttings stored at ALS Reno for the metallurgical testing, see table 13-1.

Table 13-1: Samples Selected for Metallurgical Testing

Hole ID	Original Sample No.	From (ft)	To (ft)	From (m)	To (m)	Original Li (ppm)
GEM22-02	GEM22-02-45	520	530	158.50	161.54	1140
GEM22-02	GEM22-02-72	730	740	222.50	225.55	1250
GEM22-02	GEM22-02-106	1010	1020	307.85	310.90	1180
GEM22-02	GEM22-02-115	1080	1090	329.18	332.23	2060
GEM22-01	GEM22-01-31	580	600	176.78	182.88	1420
GEM22-01	GEM22-01-40	700	720	213.36	219.46	1740

13.2 Leach Extraction Tests

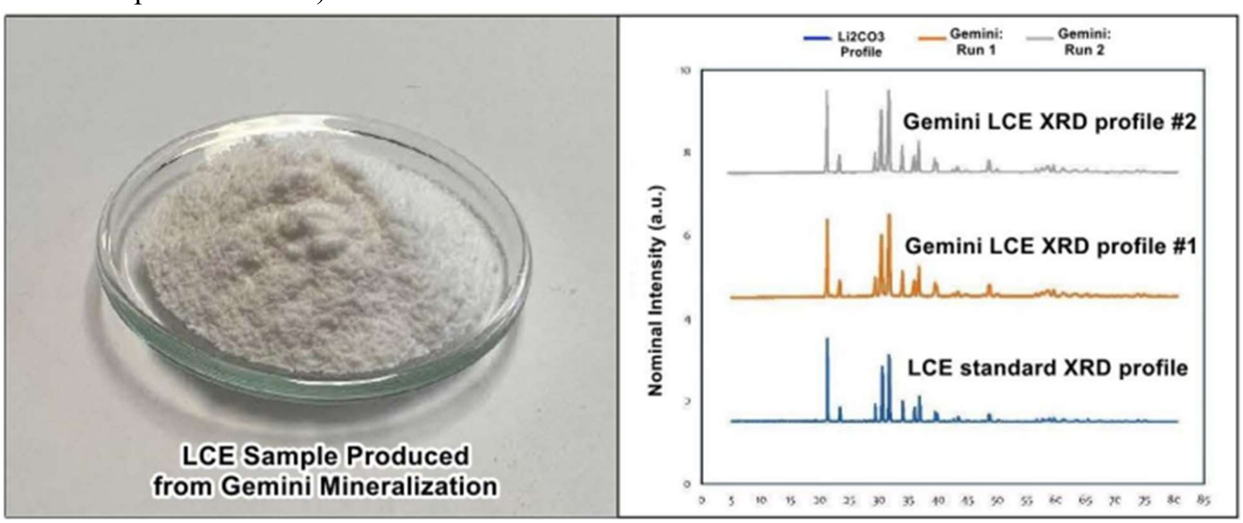
The following are excerpts from news releases reporting the metallurgical testing:

13.2.1 Small-scale column leach test (June 5, 2023):

- Preliminary leaching test work was designed to focus on obtaining a lithium leach extraction of more than 80%. Early tests included a standard sulfuric acid leach, the re-leach of residues, a hot acid beaker leach of low and high-grade mineralization, and a gypsum/lime roast water leach;
- Following the use of various extraction methods an "acid-bake" step was implemented using concentrated sulfuric acid on moist lithium-in-sediment mineralization with average lithium values of approximately 1,100 ppm lithium;
- A one-meter-tall column was loaded with Gemini clay mineralization and an open-circuit system employed a two-step leaching system, which achieved a 90.2% lithium extraction over a 25-day period.

13.2.2 50 kg column-leach test (July 31, 2023):

- A novel method of small-scale column testing achieved a 90.2% lithium extraction rate under the direction of Willem Duyvesteyn, of Extractive Metallurgy Consultancy LLC, based in Reno, Nevada. Mr. Duyvesteyn utilized the facilities of McClelland Laboratories Inc. (McClelland) in Sparks, Nevada for the metallurgical tests.
- From the leach solution provided by the initial extraction, McClelland produced an LCE sample that was near-100% lithium carbonate (Li2CO3);
- Subsequent X-ray diffraction analysis (XRD) matched the standard pattern of lithium carbonate (see Gemini LCE XRD profile comparison to recognized Li2CO3 XRD profile below[1]).



[1] Lithium carbonate precipitation by homogeneous and heterogeneous reactive crystallization, (Han, Bing; Anwar Ul Haq, Rana; Louhi-Kultanen, Marjatta, 2020)

The samples size of the materials used in the tests above is smaller than conventional; these tests are preliminary in nature. The samples were derived from the first two holes – the only two holes available at the time of the initiation of testing. Future metallurgical tests should use material from a wider area of the deposit; samples should be zoned by depth. Lithological sub-types will require further consideration. At this juncture, there are no known processing factors or deleterious elements that could have a significant effect on potential economic extraction.

14 Mineral Resource Estimates

14.1 General

This is the first Mineral Resource estimate of the project, indicating the initial assessment phase of the deposit's potential economic viability. The economic factors presented in this report play a significant role in assessing the prospective feasibility of the deposit. However, it is important to note that the deposit has not undergone the comprehensive and stringent testing that is necessary before a definitive mining decision can be made. It must be understood that Mineral Resources do not equate to Mineral Reserves and have not yet been proven to be economically viable.

The deposit is situated on U.S. Government land under the jurisdiction of the Bureau of Land Management (BLM), secured by both placer and lode mining claims. Consequently, the procedural framework for mining permits is clearly defined, with a proven track record from numerous preceding projects on BLM-managed lands. There are no recognized extraordinary legal, environmental, socio-economic, ownership, tax, or permitting challenges tied to the claims in question that could negatively impact the property's development, with the potential exception of establishing water rights for lithium extraction (refer to Section 18.6 for further details).

In the current assessment of the project, as detailed in Section 14.1, the estimated resource has been classified as 'Inferred'. This preliminary classification is primarily due to the requirement for an increased density of drilling within the area to tighten the spacing and enhance the confidence in the geological continuity. However, it is noteworthy that the semi variogram analyses have yielded promising results, displaying good correlation characteristics. These positive indicators suggest a robust geological continuity and hint at a significant potential for the deposit. The observed spatial relationships within the semi variograms align well with the known mineralization patterns, reinforcing the prospect that with further targeted infill drilling, there is a strong possibility of upgrading the resource classification. This potential is underpinned by the semi variogram's demonstrated ability to predict the mineralization's spatial distribution, thereby bolstering the expectation of delineating a more substantial resource base upon completion of the proposed drilling program.

The Inferred Mineral Resource estimate, herein, is defined by 5 RC drill holes (GEM22-01, GEM 22-02, GEM22-03, GEM23-04 and GEM23-05), for a total of 2,236.02 meters of drilling and an average hole depth of 447.204 meters. A total of 607 lithium assay results from core, not including QA/QC samples, were used for the model.

The data for the Mineral Resource estimate were generated using the Leapfrog 2023.1 program, sold by Seequent, Inc.

14.2 Cut-off Grade

The cut-off grade for the Nevada Sunrise Gemini Lithium Project's deposit was calculated by using the cost to produce a tonne of lithium carbonate with various lithium grades in respect to the deposit and comparing those values against the projected lithium carbonate price. In this manner, a lithium value of 400 ppm Li was chosen for a cut-off grade. The calculations used for the 400-ppm cut-off are shown below (minor rounding errors may be present):

- Grade of Deposit Material = 400 ppm Li
- Lithium Metal per Ton of Material @ 400 ppm = 0.4 kilograms
- Material Required to Produce 1 Ton of Lithium Carbonate: $470\ tonnes = \frac{1}{0.4}/5.32 * 1000$
- Material Required to Produce 1 Ton of Lithium Carbonate with 80% Recovery: $587\ tonnes = {}^{470}/_{0.8}$
- Mining Cost at \$2.00/ton: $\$1{,}175 = 587 * \$2$
- Processing Cost (from Cypress Development PFS at \$14.27/ton): $\$8{,}382 = 587 * \$14.27 =$
- Total Mining + Processing Cost: $\$9{,}557\ Dlls = \$1{,}175 + \$8{,}382$
- Total Mining + Processing + Other G & A Costs: $\$10{,}145 = \$9{,}557 + (\$1 * 587)$ (\$1/tonne estimated G & A costs from Cypress Development PFS, rounded)

Therefore, the total cost of producing a tonne of lithium carbonate from 400 ppm Li deposit material compares reasonably well with the projected price of lithium carbonate of \$12,206.

14.3 Model Parameters

The model was constructed in Leapfrog 2023.1. Each block, or voxel, measured 50 meters by 50 meters horizontally and 5 meters vertically. The result was a nearly square block of voxels in plan view comprised of 46 voxels in the east-west direction, 82 voxels in the north-south direction and 138 voxels in elevation for a total of 520,536 voxels.

A topographic survey obtained from the USGS on November 25, 2023, was employed to provide accurate surface delineation for the upper boundary of the model. The lower boundary was informed by TDEM survey results. However, within the model, the creation of resource blocks was confined to the depth indicated by the drill holes. The model's horizontal extent was defined by the Gemini property boundaries. Within these confines, the deposit exhibits a notable continuity, hinting at extensive mineralization potentially stretching beyond the established boundaries.

The histogram of all the lithium values in all 2 phases of drilling (not composited) generated by Leapfrog Edge 2023.1 is shown in Figure 14-1. The statistics for the histogram are listed in Table 14-1.

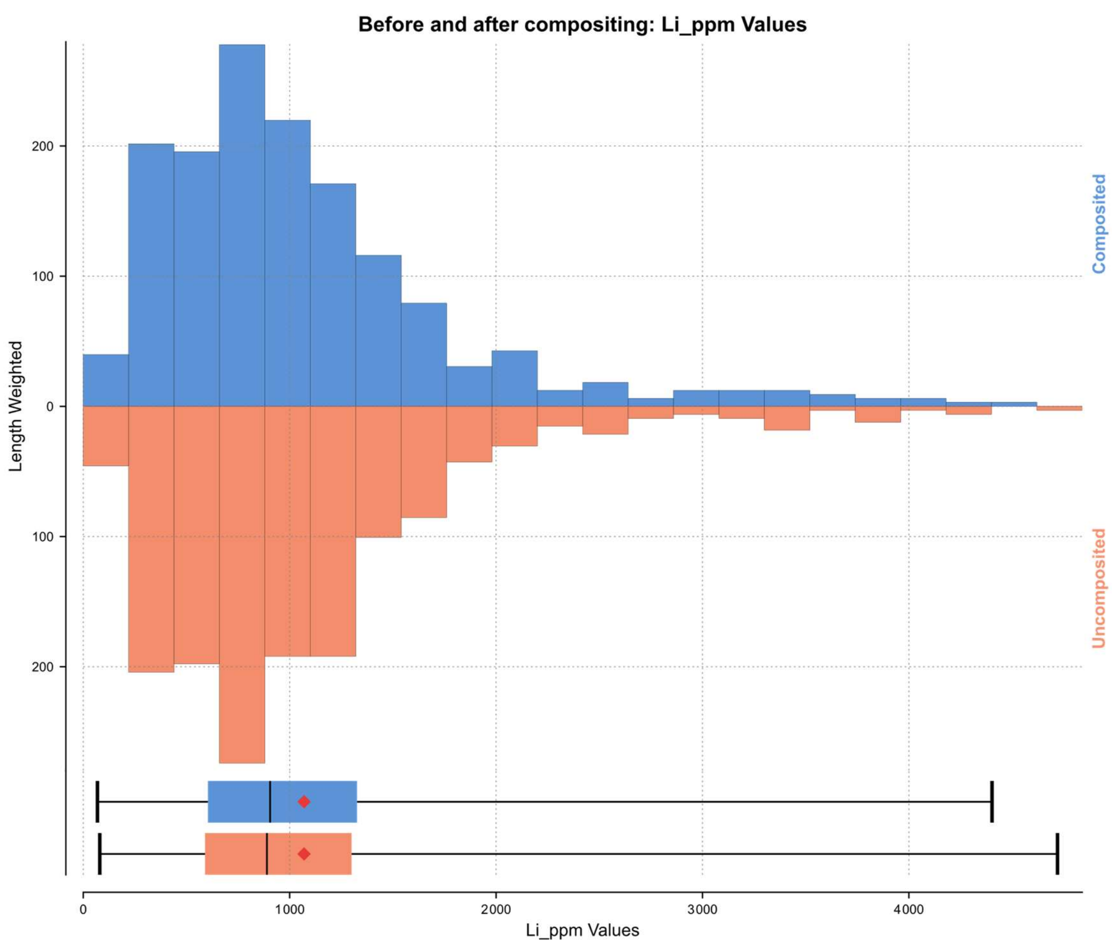


Figure 14-1: 3.048m Composites vs. Original Samples

For modelling, the data was composited into 10-foot intervals. The composite samples were standardized to a length of 10 feet, selected based on the most common sampling interval observed across the dataset. This consistent length was chosen to ensure statistical reliability and comparability across the samples. The histogram and statistics for the composited data are in Figure 14-1 and Table 14-1, respectively.

Table 14-1: Histogram Statistics, 3.048m Composites vs. Original Samples

	Composited	Uncomposited
Count	483	449
Length	1,474.4	1,471.9
Mean	1,069.61	1,069.75
SD	738.627	753.146
CV	0.6905595	0.7040369
Variance	545,570	567,230
Minimum	68.5803	80
Q1	603.861	590
Q2	905.298	890
Q3	1,326.413	1,300
Maximum	4,402.71	4,720

The data set follows a normal distribution with a noticeable trend towards higher-grade values in the less-explored deeper areas of the lithium deposit. Despite this trend, statistical analysis supports the decision not to implement high-grade capping at this phase. This is informed by the geological perspective that the trend towards higher grades is a natural attribute of the deposit's deep-seated regions, and not an irregularity.

Statistical analysis of the lithium grades within the various lithologic units indicates that there is no direct correlation between specific lithologies, and the lithium grades encountered. Despite this lack of direct correlation, the graphical representation clearly shows that the Tertiary Tuffaceous Clay exhibits the highest lithium content among the units analyzed, see Figure 14-2.

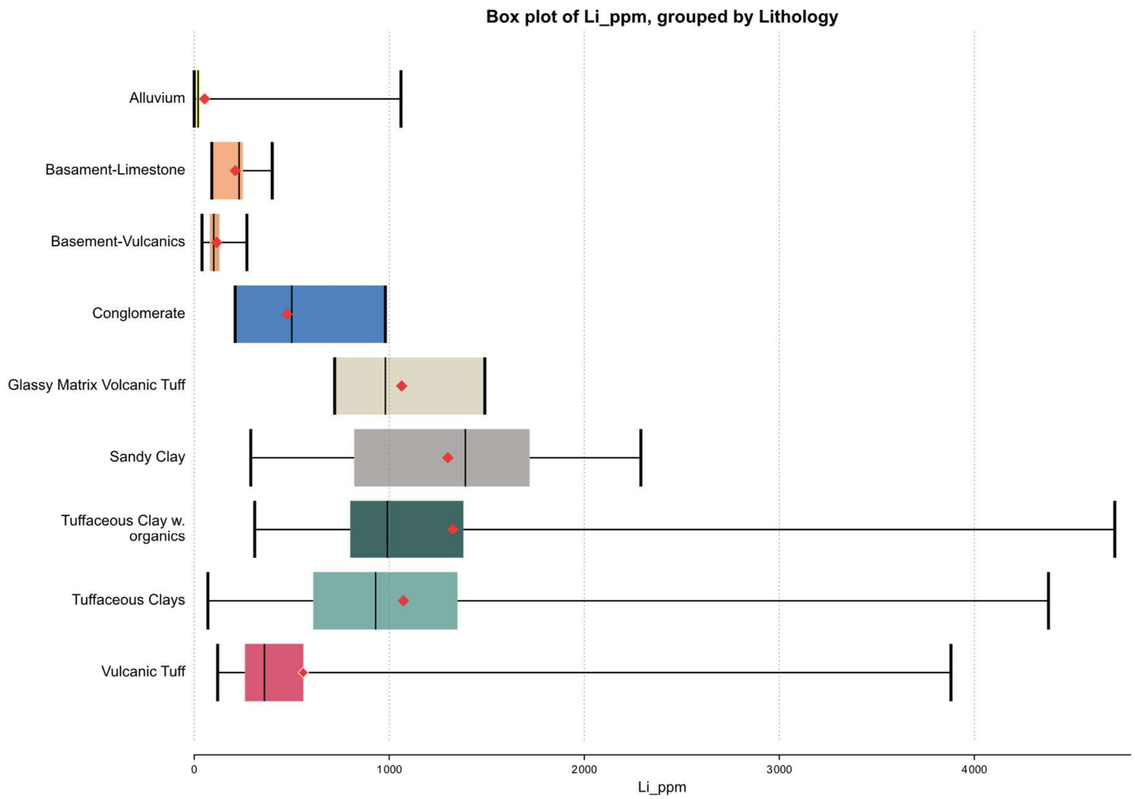


Figure 14-2: Box -and-whisker plots of grades vs lithologic sub-units

In the development of the geological model for the subject property, the decision was made to not constrain the model by sub-unit lithological boundaries due to the observed variability of grades within those lithologic sub-units.

However, during the geological assessment, three contrasting lithologies were identified that played a significant role in the delineation of mineral domains:

1. **Alluvial Deposits**: Recent sedimentary deposits primarily composed of unconsolidated material such as gravel, sand, and silt. These have been encountered in river channels, beach environments, and floodplain settings. Generally, these are unmineralized.
2. **Low-Grade Transition Zone**: This zone is characterized by a mix of sands and clays, representing a transitional environment of deposition with lower mineral grade profiles.

3. **Tertiary Tuffaceous Clays**: Higher-grade zones, primarily within the tertiary tuffaceous clays, have been identified as the primary mineralized bodies of economic interest.

These lithological distinctions, while not restricting the overall geological model, have contributed to a more refined understanding of the mineralization controls and have been instrumental in guiding the development of the mining domains. The geological modeling takes into consideration the complex nature of the deposit, and the model is therefore not lithology-driven but is supported by lithological information where it contributes to the understanding of mineral distribution.

The vertical boundaries of the model are informed by preceding geophysical studies, which reveal a variable depth across the deposit. Notably, geophysical interpretations suggest that the deposit's western section extends to greater depths, while the eastern section is characterized by shallower depths. This pattern aligns with the horst and graben geological system that demarcates the ore body. This structural complexity is typical in horst and graben environments, where tectonic stress has created elevated blocks (horsts) and sunken blocks (grabens). Such a structure can significantly influence the distribution and concentration of minerals, as the geological processes forming these systems often involve the circulation of mineral-rich fluids through the associated fractures and faults. The visual representation of these findings, indicated as present in Figure 14-3, is crucial for understanding the spatial distribution of the mineral deposit and effectively planning exploration and exploitation. The figure shows a cross-sectional profile of the study area, highlighting the depth differences between the western and eastern sections and the arrangement of horst and graben.

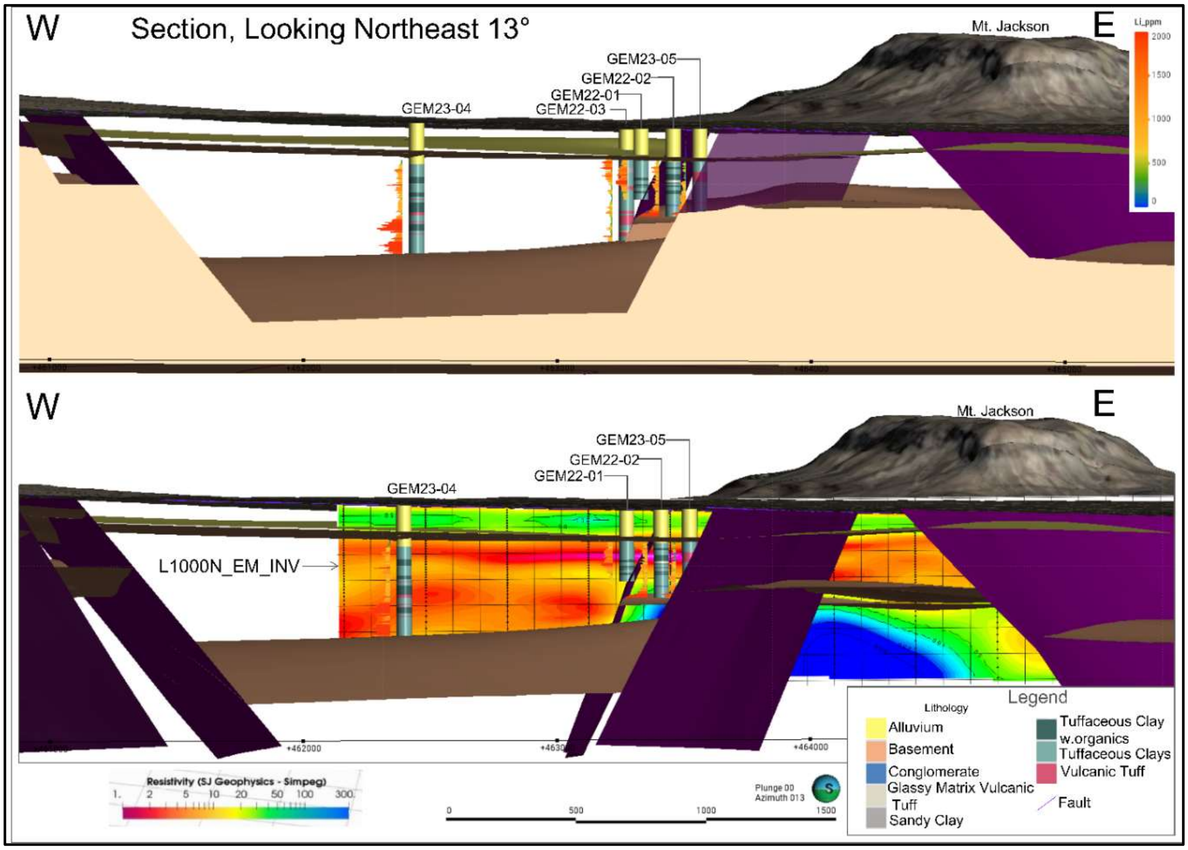


Figure 14-3: Section with Horst and Graben System

Further details can be observed in Figure 14-5 of the report, which highlights key areas for future drilling campaigns. These targeted areas have the potential to significantly expand the resources, potentially more than doubling the currently estimated volumes.

The horizontal extent of the block model is primarily confined within the perimeters of the Gemini property. The deposit demonstrates notable horizontal continuity and is bounded to the north and south by lateral faulting. To the east, it is specifically delimited by Fault 3, which is a normal fault dipping towards the east with an NNE-SSW azimuth. On the western, northern, and southern sides, the deposit's boundaries are defined by a conceptual open pit model with an overall slope angle of 24 degrees. This structural framework establishes a clear geological limit for the current block modeling of the mineralized zones. Figure 14-4 illustrates the two phases of drill holes, the outline of the Gemini claims in green and the faults delineated in purple.

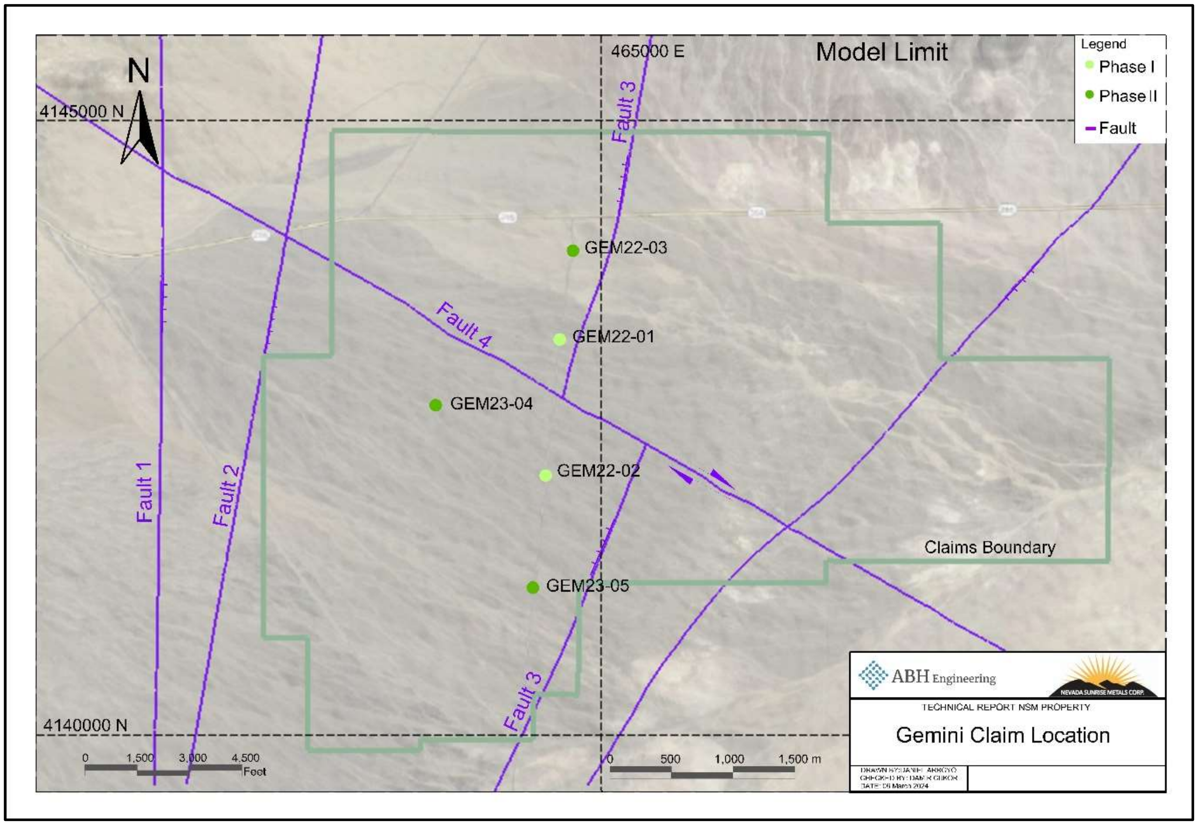


Figure 14-4: Gemini Claim Outline, Interpreted Faults and Drill Holes

Careful examination of detailed cross sections and profiles created at right angles were used to verify the accuracy of the model (see Figure 14-5); the vertical exaggeration of the cross sections is 4X. Figure 14-6 is a fence diagram of the model showing the various lithium cut-off grades in 3D.

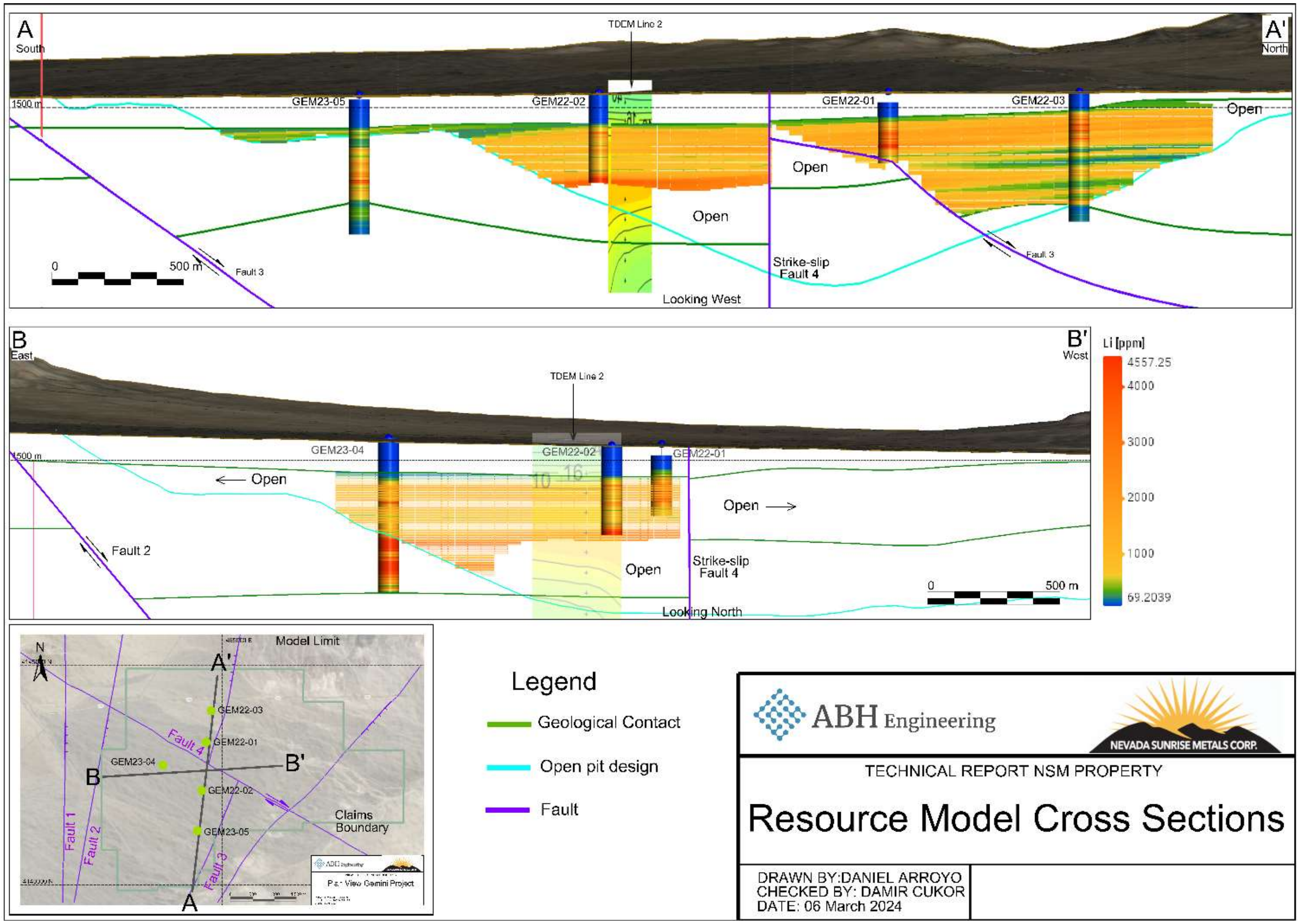


Figure 14-5: Resource Model Cross Sections

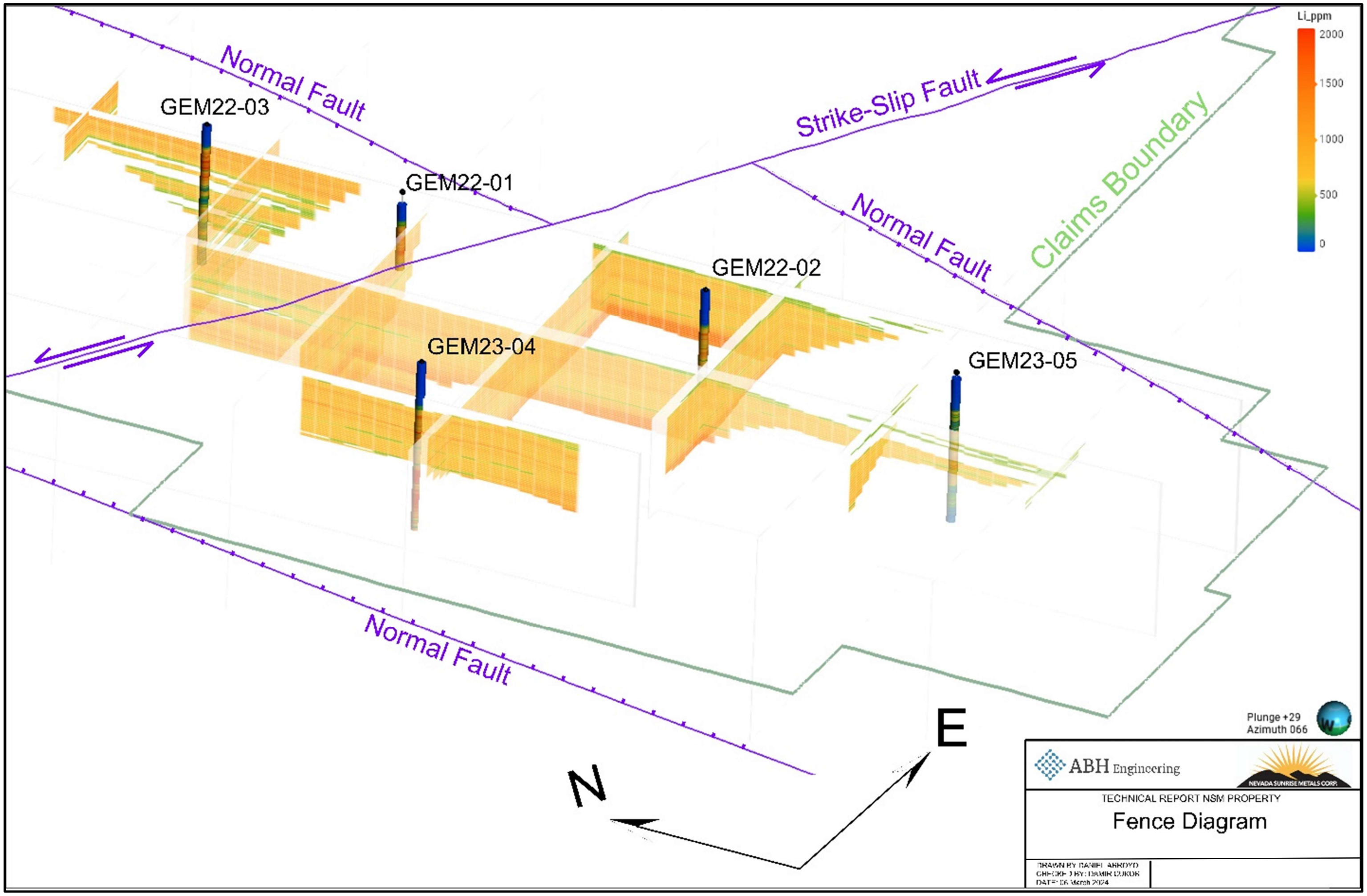


Figure 14-6: Fence Diagram, Colour by Li Grade; vertical exaggeration, 4X

The block model was constructed using voxels with dimensions of 50m X 50m horizontally by 5m vertically, reflecting the relatively thin vertical component and large horizontal extent of the deposit. Ordinary Krieging method was applied as the estimation technique. A variable orientation ellipsoid was chosen as part of the estimation methodology due to encountering broad synformal geometry of high-grade mineralization zones near the top of the deposit.

14.4 Density Determination

No density measurements have yet been made on the Gemini Lithium Project due to RC drilling methods employed in Phase I and Phase II – all density characteristics of the materials are thus lost; there is no known outcropping of mineralized sediments on the property where density sampling could have been conducted.

Benchmarking of density measurements made on similar sediments in other lithium clay deposits nearby to the Gemini Lithium Project determined that an average density of 1.7 g/cm^3 is an appropriate and representative value for the tuffaceous clays in the Lida Valley deposit.

14.5 Variography and Resource Classification

Varoigraphy was performed on the lithium grades of composites within the domain defined by mineralized sediments; composites in unmineralized alluvial fan sediments and the basement rock lithological units were excluded.

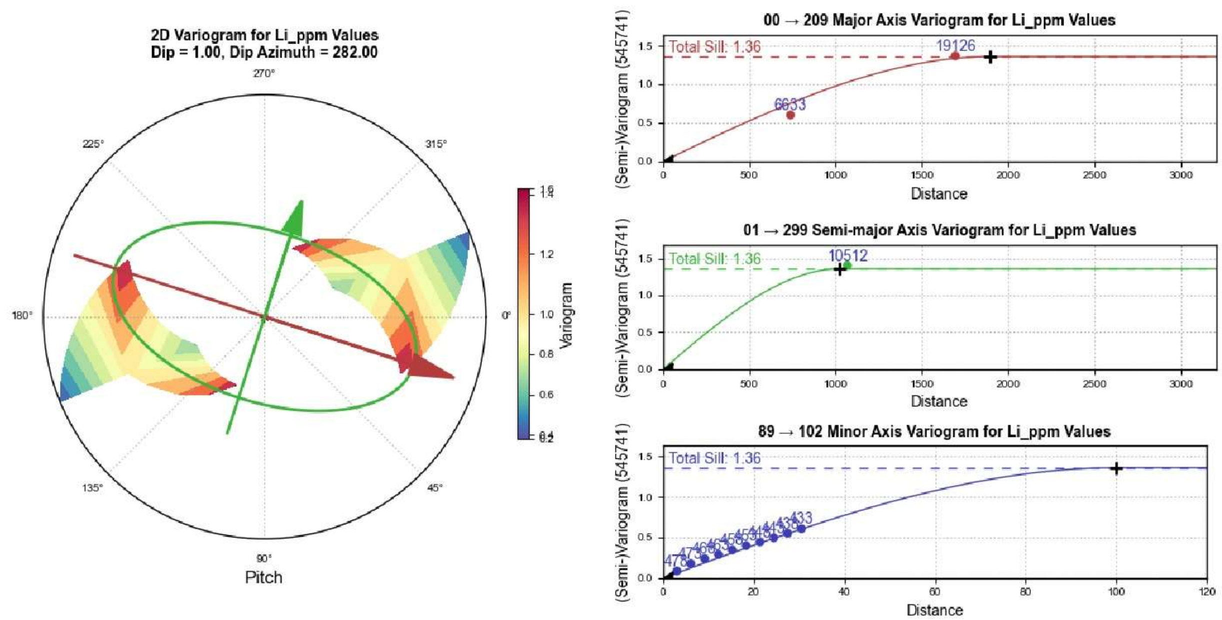


Figure 14-7: Variogram, Composite Data, at 400-ppm Li Cut-Off

The delineation of the resource was further constrained by the implementation of hard boundaries, which were essential in defining the limits of the mineralized zones. These boundaries were applied based on distinct geological and administrative factors, which include:

Eastern Boundary: Along the eastern side, the block is confined by normal faulting. This geological feature presents a natural limit to mineralization, thereby cutting off the continuity of the blocks in this direction.

Northern and Southern Boundaries: The northern and southern extents of the block are confined by the claim boundaries. These administrative limits were strictly adhered to, ensuring that the resource estimation remained within the legally defined area of the mining claim.

Western Boundary: The western limit of the block was determined based on the variance of kriging, which was observed to be less than 1.2, forming a hard boundary beyond which the confidence in the continuity and grade of mineralization was deemed to be insufficient.

The initial approach, as per industry standards, involved establishing search distances for resource classification modeling. This included 450 meters for Measured, 900 meters for Indicated, and 1800 meters for Inferred resources. These distances were intended for use in the major axis of the search ellipsoid, with the orientation specified to align with the attitude of variogram ellipsoids utilized in resource estimation in Leapfrog software. Vertical extents were set at 25 meters for Measured, 50 meters for Indicated, and 100 meters for Inferred resources.

Due to limited data along the semi-major axis, it was determined that a more conservative approach was warranted. Consequently, with the combined factors of limited data along the semi-major axis and the implementation of hard boundaries based on geological and property boundary constraints, the entire mineral resource for this project has been classified as "Inferred." The delineation of these boundaries and the extent of the Inferred classification is graphically illustrated in Figure 14-8.

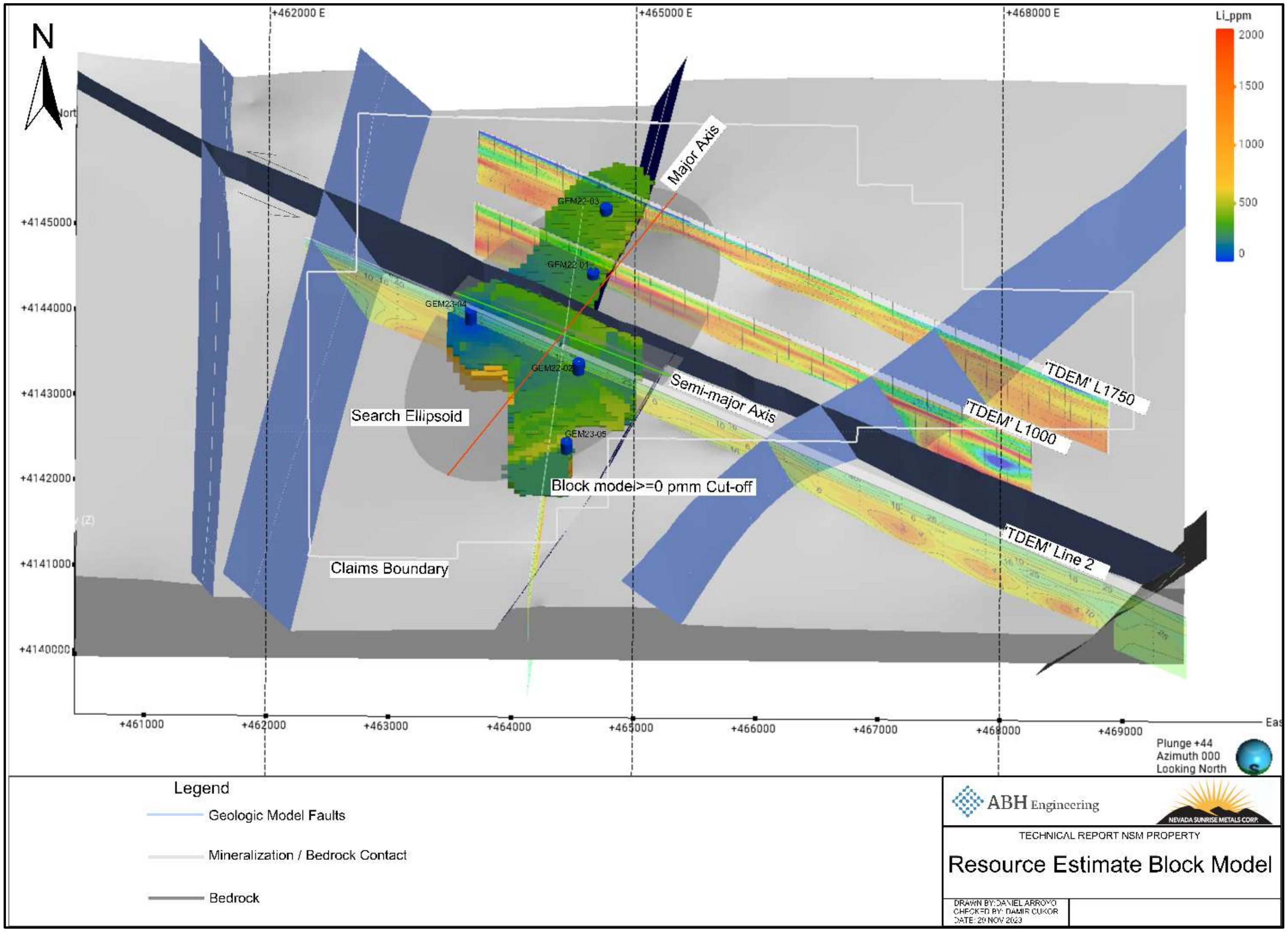


Figure 14-8: 3D Resource Estimate Block Model

14.6 Model Results

This report defines the mineral resources for the Gemini deposit, adhering to the CIM Definition Standards. It is important to note that the deposit being discussed is classified as a Mineral Resource and does not include any Mineral Reserve classifications.

According to CIM standards, Mineral Resources are categorized based on geological confidence into three groups: Inferred, Indicated, and Measured Mineral Resources.

Inferred Mineral Resource: This category has the least geological confidence. The geological evidence is sufficient to imply but not verify geological and grade continuity. It is expected that with continued exploration, most of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources.

Indicated Mineral Resource: This category has more geological confidence than Inferred and is estimated with sufficient detail regarding quantity, grade, densities, shape, and physical characteristics. These estimates are reliable enough to allow the application of Modifying Factors for mine planning and assessing the economic viability of the deposit.

Measured Mineral Resource: This is the category with the highest level of confidence. Estimates of quantity, grade, densities, shape, and physical characteristics are detailed and reliable, allowing for the application of Modifying Factors for detailed mine planning and final economic viability assessment.

The final tonnages and grades for the Gemini deposit are listed in Table 14-1. The base case is calculated at a 400 ppm Li cut-off grade, with sensitivity calculations presented for 600, 800, and 1000 ppm cut-off grades. These values are considered reasonable estimates for the deposit and have been verified through computational and manual methods.

This report, prepared as per NI 43-101 standards, provides a comprehensive assessment of the Gemini deposit's mineral resources, ensuring transparency and reliability in the reporting of mineral exploration data.

Table 14-1: Final Tonnages and Grades of Inferred Mineral Resources

Inferred				
Li Cutoff (ppm)	Tonnes x 1,000,000	Li Grade (ppm)	Contained Li (tonnes)	LCE (tonnes)
400	**1183.26**	**1132**	**1,338,996**	**7,127,476**
600	1065.35	1202	1,280,136	6,814,164
800	835.34	1336	1,116,219	5,941,634
1000	589.75	1520	896,148	4,770,196

The following is the average grades and tonnage curve showing the robust character of this resource estimate.

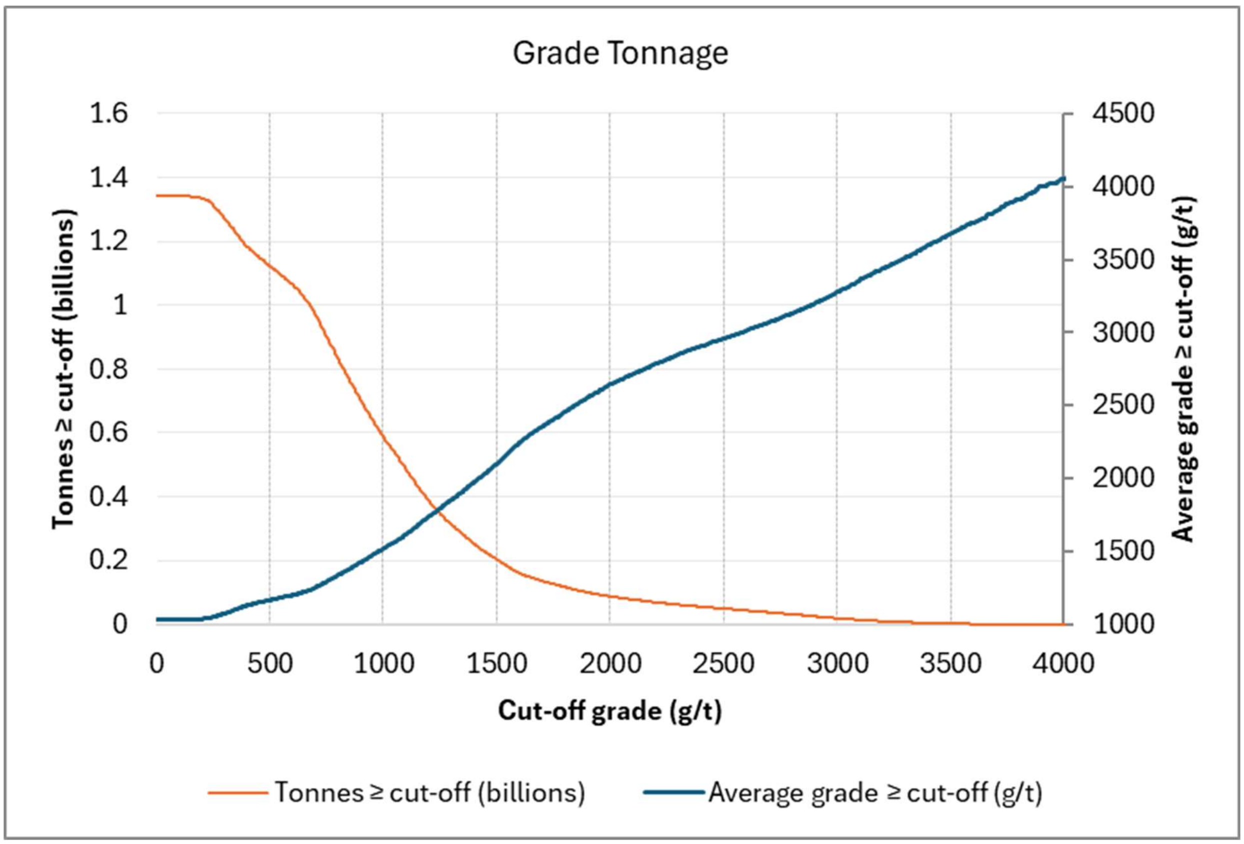


Figure 14-9: Grade - Tonnage Curve

Figures 14-10 through 14-13 are a set of plan views showing the grade distribution of the deposit at 400, 600, 800, and 1000 ppm Li cut offs, respectively.

These figures were generated with the Leapfrog Geo and Edge package.

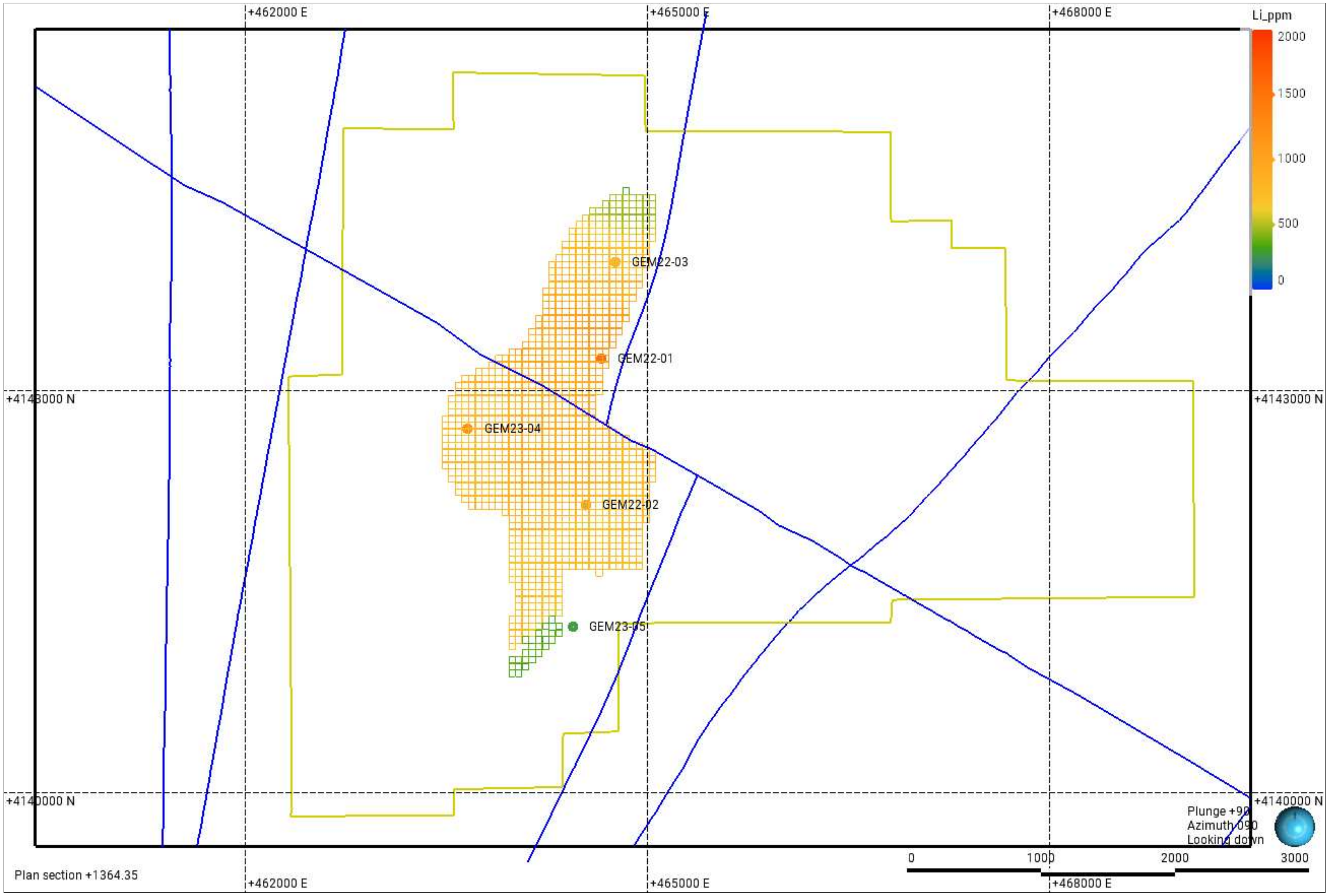


Figure 14-10: Plan View of Block Model at 300 ppm Li Cut-Off

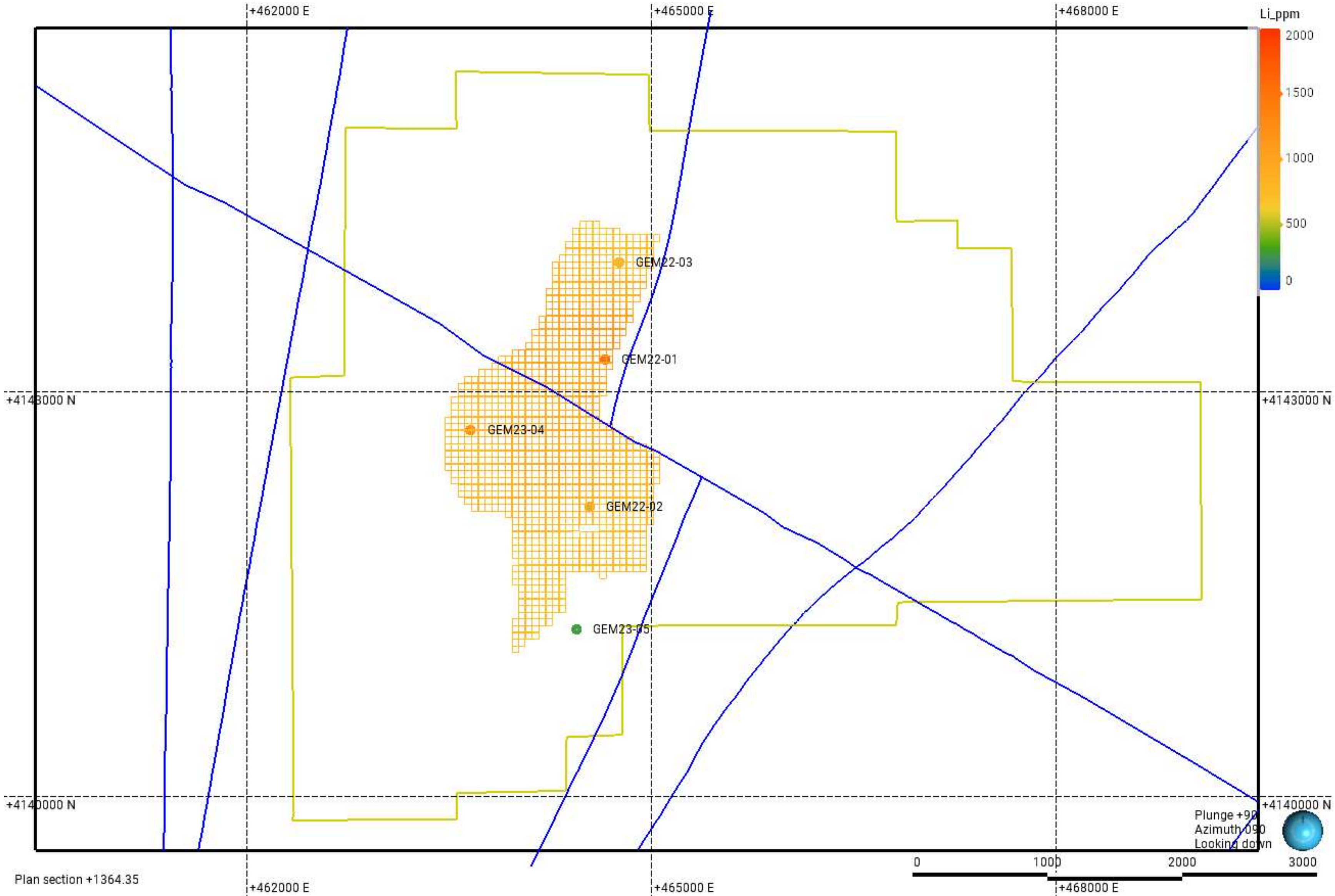


Figure 14-11:Plan View of Block Model at 600-ppm Li Cut-Off

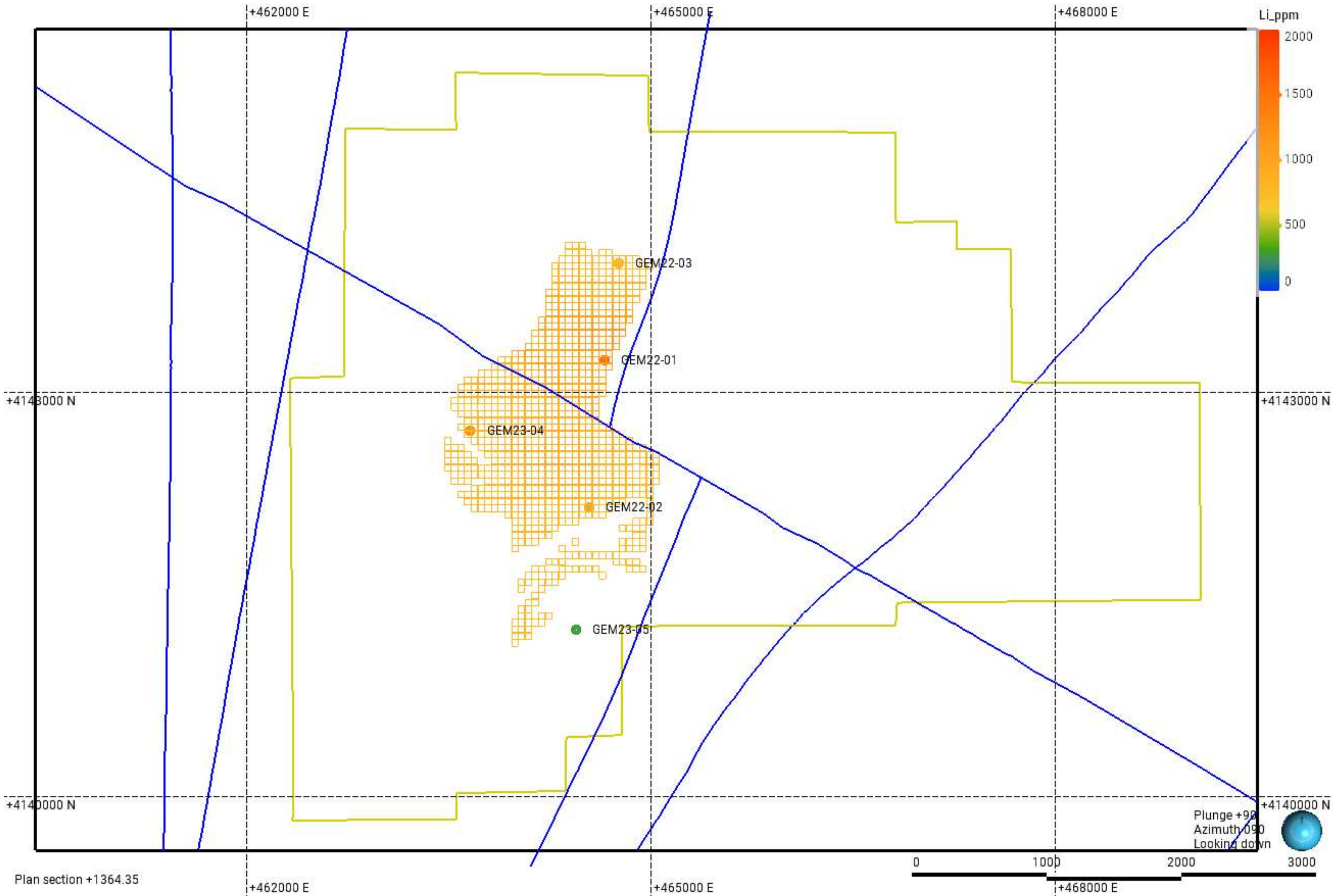


Figure 14-12: Plan View of Block Model at 800-ppm Li Cut-Off

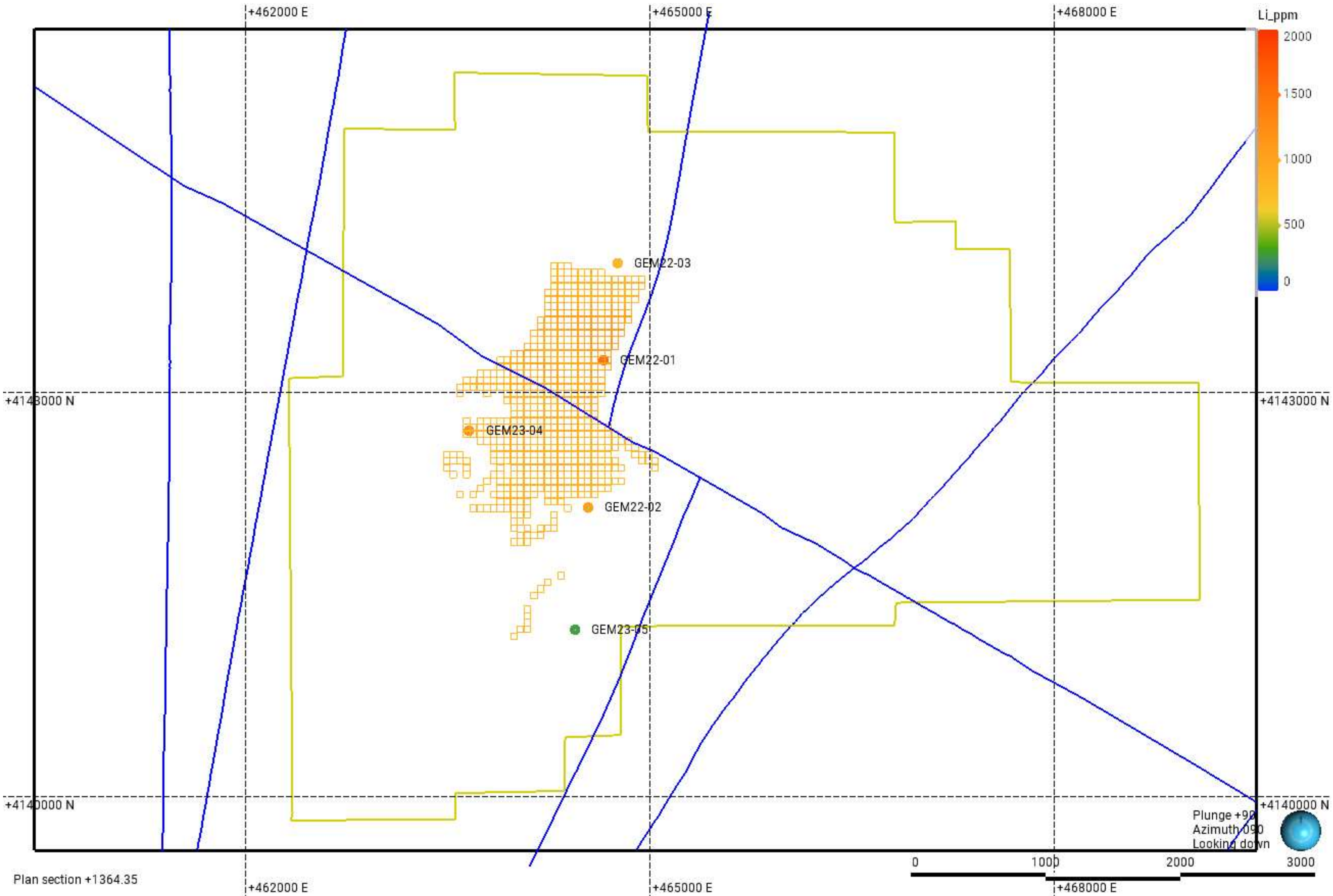


Figure 14-13: Plan View of Block Model at 1000-ppm Li Cut-Off

15 Mineral Reserve Estimates

This item does not apply in this report.

16 Mining Methods

This item does not apply in this report.

17 Recovery Methods

This item does not apply in this report.

18 Project Infrastructure

This item does not apply in this report.

19 Market Studies and Contracts

This item does not apply in this report.

20 Environmental Studies, Permitting and Social or Community Impact

Nevada Sunrise has location and ownership of the Gemini Lithium Project property. Therefore, Nevada Sunrise will be responsible for attaining all required permits for exploration as per the laws and regulations set forth by Esmeralda County, the State of Nevada, and US federal departments. Nevada Sunrise has currently not completed any studies with respect to environmental, social, or community impacts. All work, past and present inclusive, done on the Gemini Lithium Project is compliant with all requirements set forth by the relevant regulatory bodies.

20.1 Permits and Regulations

Nevada Sunrise is currently operating under a Notice of Intent (NOI) with the Bureau of Land Management (BLM). The latest drill program (Phase II) concluded in March 2023 and was completed in compliance with the proposal of work agreed upon between Nevada Sunrise and the Tonopah Field Office of the BLM; the current NOI permit allows for a total of 12 drill holes, of which only five have thus far been drilled.

20.2 Social and Community Impact

The Gemini Lithium Project is in early stages of exploration and development and has yet to assess the social impact it may have on local communities. Nevada Sunrise will work closely with the authorities of Nevada, seeking to attain a mutually beneficial relationship between the company and the nearby communities.

21 Capital and Operating Costs

This item does not apply in this report.

22 Economic Analysis

This item does not apply in this report.

23 Adjacent Properties

Other companies are known to have staked properties in Lida Valley – Lida Valley Lithium LLC, Chariot Corporation and T2 Metals Corp, see Figure 23-3.

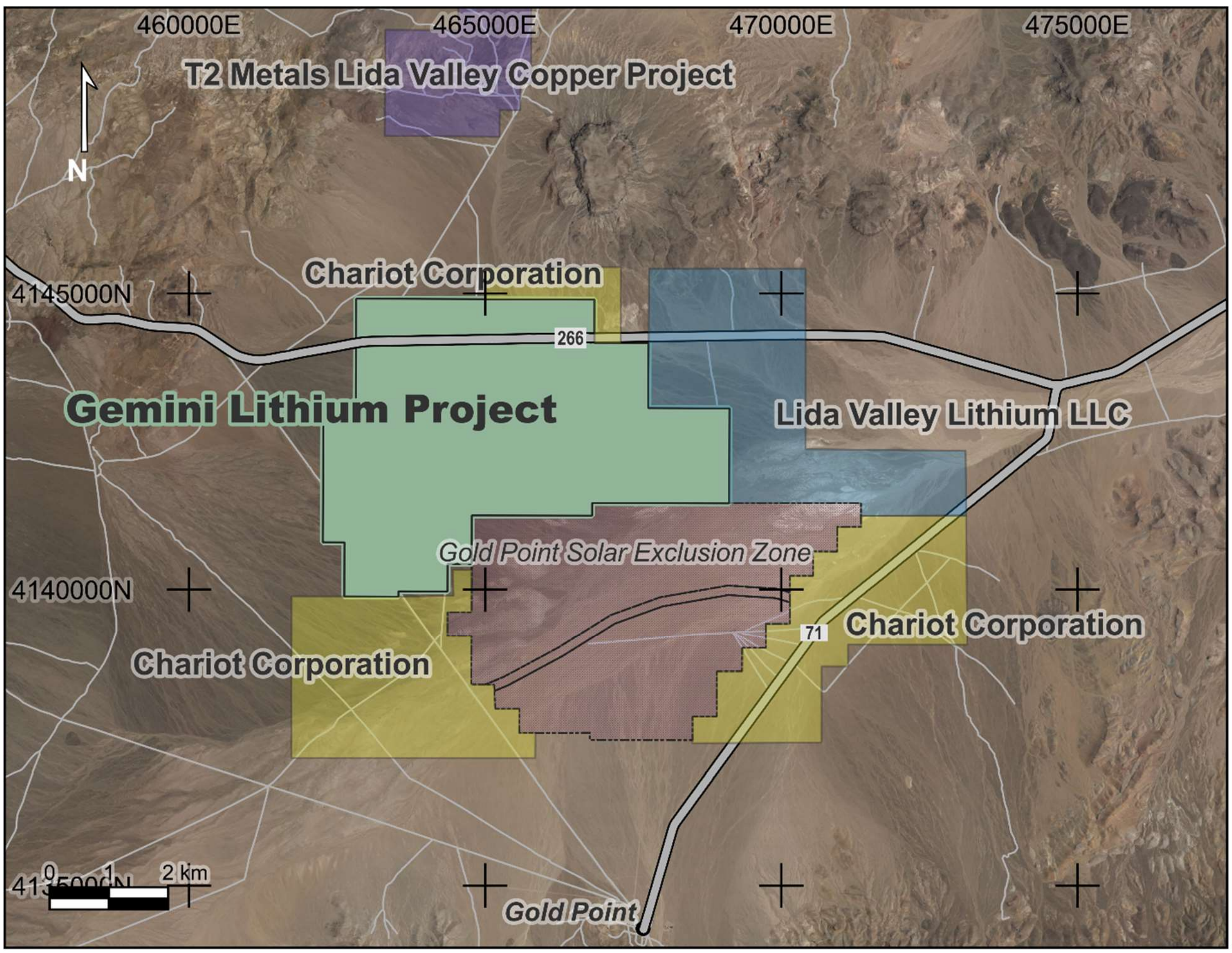


Figure 23-1: Adjacent Projects, Lida Valley

24 Other Relevant Data and Information

Chapter 27 provides a list of documents that were consulted in support of the Maiden Mineral Resource Estimate on Nevada Sunrise's Gemini Lithium Project. No further data or information is necessary, in the opinion of the author, to make the report understandable and not misleading.

25 Interpretation & Conclusions

The initial two phases of drilling on the Gemini Lithium Project have yielded an Inferred resource estimate of approximately 1.2 billion tonnes of lithium mineral resource with a grade of 1132 ppm Li and containing approximately 7.1 million tonnes of LCE at a base-case cutoff of 400ppm Li.

Only 15% of the project area has been drill-tested and large target areas remain to the west and east of the drilled area.

Lithium mineralization has been shown to be amenable to sulphuric acid leaching. Bench-scale metallurgical testing to date by Nevada Sunrise has been encouraging, as has testing by other companies with similar lithium claystone deposits in surrounding sedimentary basins with lithium clays.

26 Recommendations (including costs)

ABH recommends the following work to advance the Gemini Lithium Project:

26.1 Drilling, Phase III

Step-out drilling needs to be undertaken in order to explore for mineralized extension of the current Inferred resources westwards, towards the western bounding fault and to drill test the horst area for lithium mineralization, east of the current drilling (7 holes total). Core diamond-drilling method is recommended for Phase III

The estimated cost for this work is approximately $1,700,000.

26.2 Metallurgical Test Work

Micro-leaching tests have been conducted on RC cuttings, proving that a final lithium product can be produced. Based on core samples from Phase III drilling, and using conventionally-sized samples further metallurgical testing needs be conducted. The tests should comprise: sulphuric acid leaching, hydrochloric acid leaching, roasting, neutralization, impurity removal and solid-liquid separation tests, the production of a final lithium product, and finalization of a flow sheet.

The estimated cost for this work is approximately $250,000.

26.3 Preliminary Economic Assessment (PEA)

Following Phase III drilling and completion of the metallurgical testing and generation of a flow sheet, a PEA is recommended to scope out the potential mining methods and to guide further potential exploration and development.

The estimated cost for this work is approximately $250,000.

26.4 Drilling, Phase IV

Drill hole density needs be increased through infill drilling to advance the current mineral resources into Indicated and Inferred classifications to further de-risk the deposit. (15 holes)

The estimated cost for this work is approximately $3,600,000.

Table 26-1: Estimated Costs for Recommended Work

ITEM ESTIMATED COSTS	
Drilling, Phase III	$1,700,000
Metallurgical Test Work	$250,000
PEA	$250,000
Drilling, Phase IV	$3,600,000
Total:	**$5,800,000**

27 References

Albemarle Corporation. (2021, January). *Albemarle Announces Expansion of Nevada Site to Increase Domestic Production of Lithium* . Retrieved from Cision PR Newswire: https://www.prnewswire.com/news-releases/albemarle-announces-expansion-of-nevada-site-to-increase-domestic-production-of-lithium-301202569.html

Albers, John P; Stewart, John H;. (1965). *Preliminary Geologic Map of Esmeralda County, Nevada: U. S. Geol. Sery. Field Studies Map MF-298.*

Albers, John P; Stewart, John H;. (1972). *Geology and Mineral Deposits of Esmeralda County, Nevada: Nevada Bureau of Mines and Geology Bulletin 78, 80p.*

Ausenco Services;. (n.d.). *Technical report on the Feasibility Study for the Sonora Lithium Project, Mexico, Bacanora Minerals Ltd., 261 p.*

Barrie, C T. (2018). The Inter-relationship between lithium brines and clays in the playa lake environment 1 p. *Resources for Future Generations Conference, Vancouver, B.C.*

Blois, Michael D.S.; Weber, Daniel S.; Sawyer, Valerie;. (2017). *Preliminary Economic Assessment of the Clayton Valley Lithium Project, Esmeralda County, Nevada.* Behalf of Pure Energy Minerals Ltd.

Bradley, Dwight; Munk, LeeAnn; Jochens, Hilary; Hynek, Scott; Labay, Keith;. (2013). *A Preliminary Deposit model for Lithium Brines.* U.S. Geological Survey Open-File 2013-1006 6 p.

Climate Mina - Nevada. (2014 - 2024). Retrieved from WeatherWX: https://www.weatherwx.com/forecast.php?forecast=zandh&maxdays=13&pands=mina%2c+nv%2c+us

Coffey, D. M., Munk, L. A., Ibarra, D. E., Butler, K. L., Boutt, D. F., & Jenckes, J. (2021). Lithium storage and release from lacustrine sediments: Implications for lithium enrichment and sustainability in continental brines. Geochemistry, Geophysics, Geosystems, 22, e2021GC009916

Data USA: Goldfield, NV. (2021). Retrieved from Data USA: https://datausa.io/profile/geo/goldfield-nv

Data USA: Tonopah, NV. (2021). Retrieved from Data USA: https://datausa.io/profile/geo/tonopah-nv

Davis, J. R., & Vine, J. D. (1979). Stratigraphic and Tectonic Setting of the Lithium Brine Field, Clayton valley, Nevada. *RMAG-UGA 1979 Basin and Range Symposium*, (pp. 421-430).

Davis, J. R.;. (1981). *Late Cenozoic Geology of Clayton Valley, Nevada and the Genesis of a Lithium-Enriched Brine.* Ph.D Dissertation, University of Texas, Austin.

Dunn, S.B., Oldow, J.S., and Mueller, N.J., 2015, Late Cenozoic displacement transfer in the eastern Sylvania Mountain fault system and Lida Valley pull-apart basin, southwestern Nevada, based on three-dimensional gravity depth inversion and for ward models: Geosphere v. 11, no. 5, p. 1565–1589

Ehsani, R.; Fourie, L.; Hutson, A.; Peldiak, D.; Spiering, R.; Young, J.; Armstrong, K.;. (2018). *Pre-Feasibility Study for the Thacker Pass Project, Humboldt County, Nevada, for Lithium Americas.* Adbisan Worley Parsons Group.

Fayram, Todd S.; Lane, Terre A.; Brown, J. J.;. (Effective date August 5, 2020, Amended March 15, 2021). *Prefeasibility Study, Clayton Valley Lithium Project, Esmeralda County, Nevada, Prepared for Cypress Development Corp.*

Fluor Enterprises Inc., Primary Contractor. (2020). *Definitive Feasibility Study of the Rhyolite Ridge Project, Esmeralda County, Nevada, prepared for Ioneer Limited.* Summary Report.

Foy, T. A. (2011). *Quaternary Faluting in Clayton Valley, Nevada: Implications for Distributed Deformation in the Eastern California Shear Zone - Walker Lane.* Master's Thesis, Georgia Institue of Technology.

Garside, M. (2017, November). *Distribution of lithium demand worldwide in 2015 and 2025 by end use*. Retrieved from Statista: https://www.statista.com/statistics/215263/current-and-projected-global-demand-of-lithium-carbonate/

Garside, M. (2019, August). *Forecast cost to produce battery-grade lithium carbonate by feedstock in 2025*. Retrieved from Statista:

https://www.statista.com/statistics/1081022/battery-grade-lithium-carbonate-production-cost-by-feedstock/

Garside, M. (2020, August). *Projection of total worldwide lithium demand from 2016 to 2030*. Retrieved from Statista: https://www.statista.com/statistics/452025/projected-total-demand-for-lithium-globally/

Henry, C. (2018). Li-rich claystone in the McDermitt Caldera, NV: Characteristics and possible origin (abstract). *American Geophsyical Union Fall Meeting.* Washington D.C.

Kucks, Robert P.; Hill, Patricia L.; Ponce, David A.; Nevada Magnetic and Gravity Maps and Data: A Website for the Distribution of Data; Nevada Complete Bouguer Gravity Anomaly Map

Kunasz , Ihor A. (1970). *Geology and Geochemistry of the Lithium Deposit in Clayton Valley, Esmeralda County, Nevada.* Ph.D. Thesis, University of Pennsylvania.

Kunasz, I. A. (1974). Lithium Occurrence in the Brines of Clayton Valley, Esmeralda County, Nevada. *Fourth Symposium on Salt - Northern Ohio Geological Society*.

Lane, T.; Harvey, J. T.; Fayram, T.; Samari, H.; Brown, J. J.;. (2018). *Preliminary Economic Assessment Technical Report Clayton Valley Lithium Projecy, Esmeralda County, Nevada, Prepared for Cypress Development Corp.*

Loveday, Derek; Turner, William A.;. (2020). *Technical Report, TLC Property, Nye County, Nevada, Prepared for American Lithium Corporation.* NI 43-101.

Molnar, Ron; Weber, Daniel S.; Burga, Ernie; Sawyer, Valerie; Spanjers, Raymond P.; Jaacks, Jeffrey A.;. (2018). *Preliminary Economic Assessment of the Clayton Valley Lithium Project, Esmeralda County, Nevada, prepared for Pure Energy Minerals.* NI 43-101 Technical Report (Rev. 1).

Munk, L., & Chamberlain, C. P. (2011). *Final Technical Report: G10AP00056 - Lithium Brine Resources: A Predictive Exploration Model.* USGS Mineral Resources External Research Program.

Peek, B. C. (2021). *Updated Lithium Mineral resource Estimate, Clayton Valley, Esmeralday County, Nevada, prepared for Noram ventures Inc.* NI 43-101 Technical Report.

Peek, B. C., & Barrie, C. T. (2019). *Updated Inferred Mineral Resource Estimate, Zeus Project, Clayton Valley, Nevada, prepared for Noram Ventures Inc.* NI 43-101 Technical Report.

Zampirro , D. (2005). Hydrogeology of Clayton Valley Brine Deposits, Esmeralda County, Nevada. *The Professional Geologists, 42*(3), 46-54.

Certificate of Qualified Person

I, Damir Cukor of 12689 Ocean Cliff Drive, Surrey, British Columbia, do hereby certify that:

1) I am Vice President of Geology with ABH Engineering 315 2630 Croydon Drive, Surrey, British Columbia.
2) I am a graduate of the University of British Columbia in 1985 with a BSc. in Geology.
3) I have practiced my profession continuously since 1985. I have had over 39 years of experience in roles of increasing responsibility, from filed geologist to senior resource geologist and exploration manager on large mineral exploration projects.
4) I am a member of good standing of the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
5) I have read the definition of "qualified person" set out in National Instrument 43-101 and certify that by reason of education, experience, independence, and affiliation with a professional association, I meet the requirements of an Independent Qualified Person as defined in National Instrument 43-101.
6) This report titled "Resource Report for Gemini Lithium Project, Esmeralda County, Nevada " dated March 7, 2024, is based on a study of the data, and literature and available on the Gemini Lithium Property. I am responsible for all sections of the report.
7) I have visited the property on November 16, 2023, validating the drill hole collar locations and I have performed independent validation sampling of a set of RC cuttings.
8) As of the date of this certificate, 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.
9) I am independent of the issuer applying all the tests in section 1.5 of National Instrument 43-101.
10) 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.

Dated this day of March 8, 2024

/s/ "Damir Cukor"
Senior Geologist

ABH Engineering
Damir Cukor, P.Geo, BSc.