Lithium Americas

Independent Technical Report for the Thacker Pass Project, Humboldt County, Nevada, USA

Effective Date: 15 February 2018

Filing Date: 17 May 2018

Prepared by:

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These forward-looking statements relate to, among other things, mineral reserve and resource estimates, grades and recoveries, development plans, mining methods and metrics including strip ratio, recovery process and the expected performance of the equipment, mining and production expectations including expected cash flows, capital cost estimates and expected life of mine operating costs, the expected payback period, receipt of government approvals and licenses including the timing for submitting a response to the EIS/EA, time frame for construction, financial forecasts including net present value and internal rate of return estimates, tax and royalty rates, and other expected costs.

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Important Notice

This Report, following National Instrument 43-101 rules and guidelines, was prepared for Lithium Nevada Corp., a wholly owned subsidiary of Lithium Americas Corp. ("LAC") by Advisian Americas ("Advisian"), a division of the WorleyParsons Group.

The quality of information, conclusions and estimates contained herein, is consistent with the level of effort involved in Advisian' services, and is based on the:

- *Information available at the time of preparation.*
- *Data supplied by outside sources.*
- *Assumptions, conditions, and qualifications set forth in this Report.*

This Report can be filed as a Technical Report with Canadian Securities Regulatory Authorities pursuant to National Instrument 43 101, Standards of Disclosure for Mineral Projects.

Except for the purposes legislated under Canadian securities laws, any other uses of this Report by any third party are at that party's sole risk.

Prepared and Signed by the following Qualified Persons

This Report titled "Independent Technical Report for the Thacker Pass Project, Humboldt County, Nevada, USA", with effective date of February 15, 2018, and filing date of May 17, 2018, was prepared and signed by the following qualified persons:

Fourie, Louis F., P.Geo, Pri.Sci.Nat

Resource Geologist

Signature Date: May 17, 2018

Peldiak, Daniel, P. Eng.

Principal Metallurgical Engineer

Signature Date: May 17, 2018

Certificate of Qualified Person

To Accompany the Report titled "Independent Technical Report for the Thacker Pass Project, Humboldt, County, Nevada, USA".

Effective Date: February 15, 2018

Filing Date: May 17, 2018

I, Louis F. Fourie, P.Geo., Pri. Sci. Nat., do hereby certify that:

1. I am a Geologist at Terra Modelling Services Inc. with an office at 438 - 165 3rd Avenue South, Saskatoon, SK, Canada.
2. I graduated from the University of Johannesburg with a Bachelor's of Science in Geology, in 1996.
3. I am a registered member of the Association of Professional Engineers and Geoscientists of Saskatchewan, under Registration No. 22198.
4. I have practiced as a geologist for 19 years.
5. I have read the definition of "qualified person" set out in the National Instrument 43-101 and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be an independent qualified person for the purposes of NI 43-101.
6. I am responsible for Sections 1 to 12 and 14 to 17 of this Technical Report.
7. I have had no prior involvement with the properties that are the subject of the Technical Report.
8. I have visited the site on November 14, 2017 for a duration of one day.
9. I have no personal knowledge as of the date of this certificate of any material fact or change, which is not reflected in this report.
10. Neither I, nor any affiliated entity of mine, is at present under an agreement, arrangement or understanding or expects to become an insider, associate, affiliated entity or employee of Lithium Americas Corp. or Lithium Nevada Corp., or any associated or affiliated entities.
11. Neither I, nor any affiliated entity of mine, own directly or indirectly, nor expect to receive, any interest in the properties or securities of Lithium Nevada Corp., or any associated or affiliated companies.
12. I have read NI 43-101 and Form 43-101F1 and have prepared the technical report in compliance with NI 43-101 and Form 43-101F1.
13. I have prepared the report in conformity with the generally accepted Canadian Mining Industry practices and, as of the date of the 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 ensure the technical report is not misleading.

Dated this 17th day of May 2018.

X

Louis F. Fourie, Pri.Sci.Nat
Resource Geologist

PROFESSIONAL GEOSCIENTIST SASKATCHEWAN
L.F. FOURIE
MEMBER 22198
18 05 17
YR. MN. DAY

Certificate of Qualified Person

To Accompany the Report titled "Independent Technical Report for the Thacker Pass Project, Humboldt, County, Nevada, USA".

Effective Date: February 15, 2018

Filing Date: May 17, 2018

I, Daniel Peldiak, P.Eng., do hereby certify that:

1. I am Metallurgical Engineer with WorleyParsons with an office at 8133 Warden Avenue, Markham, Ontario Canada.
2. I graduated from the Technical University of Nova Scotia with a Bachelor's of Engineering Degree, in Metallurgy, in 1998.
3. I am a registered member of Professional Engineers of Ontario, under Registration No. 100103328.
4. I have worked as a Metallurgical Engineer continuously since my graduation from university.
5. I have read the definition of "qualified person" set out in the National Instrument 43-101 and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be an independent qualified person for the purposes of NI 43-101.
6. I am responsible for Section 13 of this Technical Report.
7. I have had no prior involvement with the properties that are the subject of the Technical Report.
8. I have not visited the site.
9. I have no personal knowledge as of the date of this certificate of any material fact or change, which is not reflected in this report.
10. Neither I, nor any affiliated entity of mine, is at present under an agreement, arrangement or understanding or expects to become an insider, associate, affiliated entity or employee of Lithium Americas Corp. or Lithium Nevada Corp., or any associated or affiliated entities.
11. Neither I, nor any affiliated entity of mine, own directly or indirectly, nor expect to receive, any interest in the properties or securities of Lithium Nevada Corp., or any associated or affiliated companies.
12. I have read NI 43-101 and Form 43-101F1 and have prepared the technical report in compliance with NI 43-101 and Form 43-101F1.
13. I have prepared the report in conformity with the generally accepted Canadian Mining Industry practices and, as of the date of the 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 ensure the technical report is not misleading.

This 17th day of May 2018.

LICENSED PROFESSIONAL ENGINEER
D. J. M. PELDIAK
100103328
PROVINCE OF ONTARIO

X [signature]

Daniel Peldiak, P.Eng., Principle Metallurgical Engineer

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Abbreviations and Acronyms

Abbreviation/Acronym	Description
'	feet, minutes (Longitude/Latitude)
"	inches, seconds (Longitude/Latitude)
%	Percent
<	Less Than
>	Greater Than
°	Degrees of Arc
µm	Micrometer (10^{-6} meter)
2D	Two-Dimensional
3D	Three-Dimensional
AACE	Association for the Advancement of Cost Engineering
AAL	American Assay Labs
ABA	Acid/Base Accounting
ActLabs	Activation Laboratories
AFWR	Adjusted Formula Weight Recovery
AIP	Agreement-in-Principle
ALS	ALS Minerals
ANFO	Ammonium Nitrate - Fuel Oil
asl	Above Sea Level
bgs	Below Ground Surface
BLM	Bureau of Land Management
CAD$	Canadian Dollar

Abbreviation/Acronym	Description
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
Chevron	Chevron USA
deg. C	Degrees Celsius
DTM	Digital Terrain Model
EA	Environmental Assessment
GPS	Global Positioning System
Hazen	Hazen Research
HG	High-Grade
Huber	J. M. Huber Corporation
HPZ	Hot Pond Zone
ICP-MS	Inductively Coupled Plasma Mass Spectroscopy
KCA	Kappes Cassiday & Associates
LAC	Lithium Americas Corporation
LCE	Lithium Carbonate Equivalent
Li	Lithium
LNC	Lithium Nevada Corporation
LG	Low-Grade
Mining Act	Mining Act of the United States of America
MLLA	Mineral Lands Leasing Act
PoO	Plan of Operations and Reclamation Plan
ppm	parts per million
QA/QC	Quality Assurance and Quality Control
Qal	Quaternary Alluvium

Abbreviation/Acronym	Description
QP	Qualified Person
RC	Reverse Circulation
ROM	Run of Mine
Sample ID	Sample Tags
Torque	Hexagon Mining Torque
TSF	Tailing Storage Facility
TV	Tertiary Volcanics
UM	Unpatented Mining
UM Claim	Unpatented Mining Claim
US$	US Dollars
USBM	United States Bureau of Mines
USGS	United States Geological Survey
UTM	Universal Transverse Mercator
WEDC	Western Energy Development Corporation
WLC	Western Lithium USA Corporation
XRD	X-Ray Diffraction
XRF	X-Ray Fluorescence

1. Summary

1.1 Introduction

Lithium Nevada Corp. (LNC), a wholly owned subsidiary of Lithium Americas Corp. (LAC), is advancing the Thacker Pass Project. The Thacker Pass Deposit is part of the Thacker Pass Project (formerly known as Lithium Nevada Project or Stage I of Kings Valley Project), which is a first-of-its-kind, lithium claystone mining project. The Thacker Pass Project encompasses the mineral claims that were formerly referred to as the Stage 1 area of the Lithium Nevada Project. The claims owned by LNC that are north of the Thacker Pass Project no longer form part of this mineral project.

This Technical Report follows a News Release (dated April 5, 2018) detailing an updated Resource Estimate based on further exploration, in accordance with the *National Instrument 43-101 for the Standards of Disclosure for Mineral Projects* requirements. A Prefeasibility Study is currently in progress and completion is expected by the end of the second quarter 2018.

1.2 Property Location, Description, and Ownership

The Thacker Pass Project (the Project) is located within the McDermitt Caldera in Humboldt County in northern Nevada, approximately 100 km north-northwest of Winnemucca, approximately 33 km west-northwest of Orovada, Nevada, and 33 km due south of the Oregon border. It is situated at the southern end of the McDermitt Caldera in T44N, R35E, within Sections 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 15, 16, and 17, and encompasses approximately 3,367 ha.

1.3 Previous Work

The project has been in active development since 2008, and was operated by WLC until 2015 when it merged with LAC.

In March 2016, WLC adopted the LAC name and renamed the Nevada-based subsidiary LNC.

Previous NI 43-101 compliant Technical Reports for the Thacker Pass Project were issued in 2014 and 2016 (the 2014 Prefeasibility Study was prepared by Tetra Tech[1] and the 2016 Technical Report prepared by SRK[10]).

The Technical Report, based on a 2,000 ppm (parts per million) Li cut off, issued in 2016 identified 51 million metric tonnes of Measured Resource and 164 million metric tonnes of Indicated Resource for the Thacker Pass Project. An additional 125 million metric tonnes of Inferred Resource was also identified for the Thacker Pass Project.

1.4 Geology and Mineralization

The Thacker Pass Deposit is located within an extinct super-volcano (30 km by 40 km) named McDermitt Caldera, which was formed 16.3 million years ago and is associated with the Yellowstone hotspot. For a few hundred thousand years following the volcanic eruption, water percolated through nearby volcanic rocks resulting in the leaching of lithium. The lithium was then deposited in the caldera basin, forming a large caldera lake and a thick sequence of associated lacustrine deposits.

Renewed volcanism uplifted the center of the caldera, draining the lake and bringing the lithium-rich sediments to the surface of the earth in the vicinity of the present-day Montana Mountains.

Recent drilling confirms that the lithium mineralization is extensive, which suggests that the formation of lithium-rich clays is not associated with hydrothermal activity. The lithium mineralization is due to burial diagenesis and/or primary erosional processes.

In the immediate project area, lithium-rich clays are typically overlain by alluvium with an average thickness of approximately 5 m and underlain by rhyolitic volcanics. Interbedded basaltic beds also occur deepening from the northwest to the southeast. The clay itself is interbedded with ash. Mineralogically, the upper clay horizons are dominated by smectite-type clay, while the deeper horizons are dominated by illite-type clay, with the latter showing mineralization of up to 9,000 ppm, and the former up to 4,000 ppm. This differentiation supports the diagenesis hypothesis.

Vertical drilling indicates that the clay intersections range from a few meters up to 90 m.

1.5 Resource Estimate

Based on all drilling results received by December 21, 2017, a Resource Estimate for the Thacker Pass Project was compiled as shown in Table 1-1 and is based on drilling results obtained prior to December 21, 2017.

Table 1-1 Resource Estimate for the Thacker Pass Project, Based on Drilled Data Collected Up Until December 21, 2017

Category	Tonnage ('000 metric tonnes)	Average Li (ppm)	Lithium Carbonate Equivalent (LCE) ('000 metric tonnes)
Measured	242,150	2,948	3,800
Indicated	143,110	2,864	2,182
Measured and Indicated	**385,260**	**2,917**	**5,982**
Inferred	147,440	2,932	2,301

Notes:

1. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserves.
2. Resources presented at 2,000 ppm Li cut-off grade.
3. The conversion factor for lithium metal (100%) to LCE is 5.323.
4. Applied density for the ore is 1.79.
5. Data from 275 drill holes was used to develop a geological model for development of the Resource Estimate. The geological model encoded all relevant lithologies, with the clay-horizon being the sole mineralized horizon and other lithologies (alluvium, basalt, rhyolite) being barren. In addition, six major fault blocks were encoded within the model.

1.6 Conclusions and Recommendations

Based on the resource and other project parameters presented in this report, it is recommended that the Prefeasibility Study currently in progress be completed. In addition, further exploration work in Thacker Pass should be conducted to delineate the distribution of lithium-bearing claystone. The boundaries of the deposit have yet to be discovered.

2. Introduction

This report provides a revised resource update of LNC's Thacker Pass Project. LNC is a wholly owned subsidiary of LAC, formerly known as WLC. This report focuses on the Thacker Pass Deposit (formerly Stage I of the Kings Valley Project or Lithium Nevada Project) resource statement.

Excluded from this report are resource statements from the Montana Mountains deposit (formerly Stage II deposit of the Lithium Nevada Project), as LNC's focus is on developing a project of scale in Thacker Pass. The claims owned by LNC that are north of the Thacker Pass Project in the Montana Mountains no longer form part of this mineral project.

This report meets the requirements for NI 43-101 and the resource and reserve definition is as set forth in the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (2014).

2.1 Terms of Reference

This technical report is based on an exploration drilling program conducted in 2017, and builds on these previously filed technical reports:

- *Independent Technical Report for the Lithium Nevada Property, Nevada, USA; Stage I and Stage II Resource Estimate*; Effective Date: May 31, 2016[10] (SRK Technical Report).
- *Preliminary Feasibility Study, Lithium Nevada Project, Humboldt County, Nevada, Effective Date of Stage 1 Resource Estimate*; Effective Date: June 28, 2014[1] (Tetra Tech Prefeasibility Study).

Advisian was commissioned by LNC to prepare a NI 43-101 compliant report of the revised resource estimate for the Thacker Pass Deposit (formerly Stage I) for the project. This report provides information and results on the 2017 drilling campaign, and a new metallurgical process.

Advisian is an independent company and not an associate or affiliate of LNC or any associated company of LAC.

In preparing this report, Advisian has relied upon input from LNC, particularly regarding regional geology, geological mapping, and exploration.

In addition, Advisian has relied upon results of the metallurgical test work undertaken by LNC and their affiliates as a basis for its metallurgical and process development.

2.2 Scope of Work

Advisian was assigned by LNC the scope of updating the mineral resource statement for the Thacker Pass Deposit.

Table 2-1 presents the list of authors and their responsibilities. The QP's reviewed all sections not written by them.

Table 2-1 List of Qualified Persons and Area of Responsibilities

Qualified Persons[1]	Company	Area of Responsibility
Louis Fourie	WorleyParsons/Advisian	Sections 1 to 12, 14 to 17
Daniel Peldiak	WorleyParsons/Advisian	Section 13

Note:
[1]Qualified Person as defined by National Instrument 43-101.

2.3 Property Inspection by Qualified Persons

The resource estimate qualified person (QP) for the Thacker Pass Project is Louis Fourie, Advisian. He conducted a site visit on the project property on November 14, 2017.

Dan Peldiak, Metallurgical Engineer for Advisian has not visited the site.

2.4 Effective Date

The effective date of the mineral resource statement in this report is February 15, 2018.

3. Reliance on Other Experts

3.1 Mineral Tenure Property

In respect of the discussion regarding mineral tenure to the property set forth in Section 3, the QPs have relied entirely, and without independent investigation, on the title opinion of Richard Harris, an attorney with Harris & Thompson (now Harris, Thompson and Faillers), dated February 6, 2013. The title opinion was updated and supplemented by the updated title opinion of Mr. Harris, dated July 27, 2017. The relevant sections of the report to which this applies are included in Section 4.

3.2 Metallurgical Testing

Several laboratories have been involved in the recent test work program. Their expertise and test results provide a foundation for the process design. Size reduction tests have been performed in ALS Geochemistry in Reno, Nevada. Leaching, filtration, precipitation, and neutralization tests have been carried out in SRC (Canada), LAC and its affiliates (Reno and elsewhere).

4. Property Description and Location

Information on the purchase of past royalties and land titles was verified by Richard Harris, an attorney with Harris, Thompson and Faillers, dated February 6, 2013, as updated and supplemented by the updated title opinion of Mr. Harris, dated July 27, 2017.

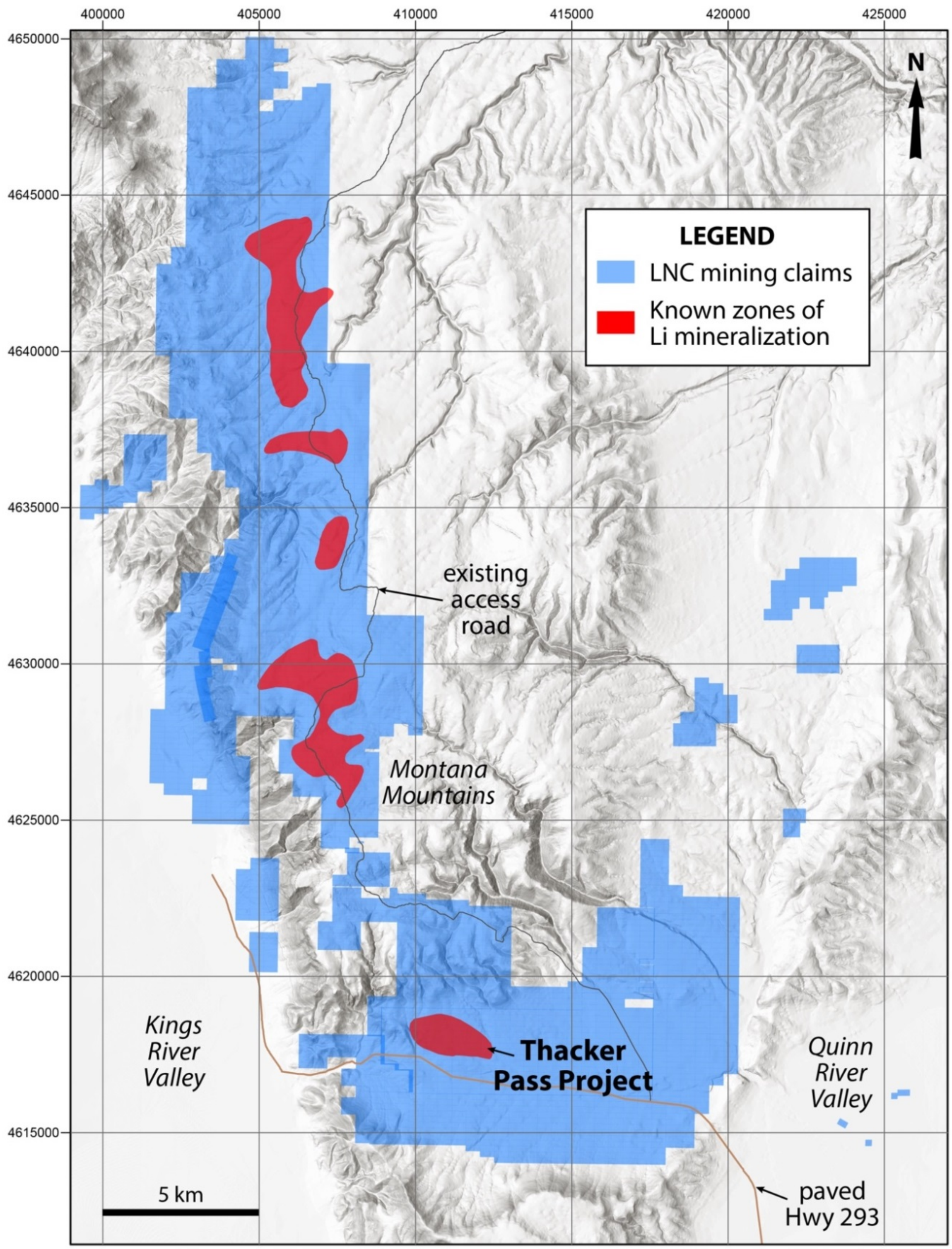
4.1 Property Description

The Thacker Pass Project is located in Humboldt County in northern Nevada approximately 100 km north-northwest of Winnemucca, about 33 km west-northwest of Orovada, Nevada and 33 km due south of the Oregon border. The area is sparsely populated and used primarily for ranching and farming. A total of 155 people live in Orovada, Nevada, according to the 2010 US Census.

More specifically, the Thacker Pass Project is situated at the southern end of the McDermitt Caldera in T44N, R35E within Sections 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 15, 16, and 17. The project area is located on the United States Geological Survey (USGS) Thacker Pass 7.5-minute quadrangle at an approximate elevation of 1,500 m.

The 2016 Technical Report indicated that Stage 1 of the Lithium Nevada Project encompassed an area totaling 1,468 ha. The Thacker Pass Project area now encompasses approximately 3,367 ha. Figure 4-1 shows a map of the Thacker Pass Project and other known mineralized zones within the McDermitt Caldera. The property lies within and is surrounded by federally owned lands administered by the Bureau of Land Management (BLM).

Figure 4-1 Location Map of the McDermitt Caldera, Thacker Pass Project, and Other Known Mineralized Zones



Source: Lithium Nevada Corp. (2018)

4.2 Mineral Tenure

There was a change to rights to the mineral tenure in 2016 when LNC acquired the Thacker Pass Project, and all associated unpatented mining claims (UM Claims), from WLC. A list of the UM Claims encompassing the Thacker Pass Project is presented in Table 4-1.

Table 4-1 Thacker Pass Project UM Claims Owned by LNC

Claim Name	Claim Number	NMC Number
Beta	18	894738
Beta	16	894736
Beta	14	894734
Beta	21-51	894741-894771
BPE	1-194	1018964-1019157
BPE	253-301	1019216-1019264
BPE	337-378	1019300-1019341
BPE	413	1019376
BPE	415-452	1019378-1019415
BPE	499-531	1030193-1030225
Neutron	31-45	919267-919281
Neutron	353-366	900226-900239
Neutron	379-400	900252-900273
Neutron	402	900275
Neutron	427-448	900300-900321
Neutron	475-494	900348-900367
Neutron	523-538	900396-900411
Neutron	540	900413

Claim Name	Claim Number	NMC Number
Neutron	555-566	900428-900439
Neutron	568	900441
Neutron	579-584	900452-900457
Neutron	586-627	982465-982506
Neutron	76-105	919282-919311
Neutron	166-189	919342-919365
---	190	894562
Neutron	192	894564
Neutron	194	894566
Neutron	196-202	894568-919368
Neutron Plus	1	1020688
Neutron R	25-30	1049235-1049240
Neutron R	70-75	1049241-1049246
Neutron R	195	1049253
Neutron R	160-165	1049247-1049252
Neutron R	240,242,244,246, 248, 250,252,254,256,258,260,262,264, 268	1049255-1049267
Neutron R	348	1029479
Longhorn	1-12	1170693-1170704
Basin	1-30	1170660-1170689
Rock	1-20	1164758-1164777

Further details on the history and ownership of the Tacker Pass Project, and the associated claims, are in Section 6.

4.2.1 UM Claims

The underlying title to the Lithium Nevada properties is held through a series of UM Claims. UM Claims provide the holder with the rights to all locatable minerals on the relevant property, which includes lithium. However, this interest remains subject to the paramount title of the US federal government, who maintains a simple title fee on the land. The holder of an UM Claim maintains a perpetual entitlement to the UM Claim, provided it meets the obligations for UM Claims as required by the *Mining Act of the United States of America* (the *Mining Act*).

At this time, the principal obligation imposed on the holders of UM Claims is to pay an annual fee, which represents payment in lieu of the assessment work required under the *Mining Act*. The annual fee of US$155.00 per claim is payable to the BLM, Department of the Interior, Nevada, in addition to a fee of US$10.50 per claim paid to the county recorder of the relevant county in Nevada where the UM Claim is located. All obligations for Lithium Nevada's UM Claims in Nevada, including annual fees to the BLM and Humboldt County, have been fulfilled.

A UM Claim does not, on its own, give the holder the right to extract and sell locatable minerals. There are numerous other regulatory approvals and permits required as part of this process. In Nevada, such approvals and permits include approval of a plan of operations by the BLM and environmental approvals. The *Mining Act* also does not explicitly authorize the owner of a UM Claim to sell minerals that are leasable under the *Mineral Lands Leasing Act of 1920, USA*, as amended (the MLLA).

The BLM is vested with a great deal of discretion in the management of the right to sell minerals governed by the MLLA, particularly where they represent a potential by-product to an economically viable mineral deposit governed by the *Mining Act*. At this time, the only mineral contemplated for mining and processing is lithium.

4.3 Nature and Extent of Interest and Title

LNC is a Nevada corporation that is currently a wholly-owned subsidiary of the Canadian-based LAC (formerly WLC). Pursuant to an agreement signed on December 20, 2007, between Western Energy Development Corporation (WEDC), a subsidiary of Western Uranium Corporation, and WLC (which was then also a subsidiary of Western Uranium Corporation), WEDC leased to WLC the Lith and neutron claims for the purpose of lithium exploration and exploitation (the Lease).

On March 22, 2016, the company announced a name change from Western Lithium USA Corp. to Lithium Americas Corp. and the name of its Nevada-based wholly owned subsidiary was changed to Western Lithium Corp. to Lithium Nevada Corp. The name of the project was changed to the Thacker Pass Project in 2018 and now excludes UM Claims in the Montana Mountains.

The agreement granted LNC exclusive rights to explore, develop, and mine or otherwise produce any and all lithium deposits discovered on the claims, subject to royalty payments. The leased area, at that time, included the entirety of the mineralized zones in Thacker Pass and the Montana Mountains (formerly Stage 2 to Stage 5), and included 1,378 claims that covered more than 11,000 ha lithium deposits to be exploited included, but not limited to, were deposits of amblygonite, eucryptite, hectorite, lepidolite, petalite, spodumene, and bentonitic clays. Rights to all other mineral types, including base and precious metals, uranium, vanadium, and uranium-bearing or vanadium-bearing materials or ores were expressly reserved by WEDC.

The term of that lease agreement was 30 years. The lease granted LNC the exclusive right to purchase the UM Claims comprising a designated discovery, subject to the royalty and other rights to be reserved by WEDC and subject to LNC obligations under the deed to be executed and delivered by WEDC on the closing of the option. In July 2008, LNC ceased to be wholly owned by Western Uranium Corporation and became an independent publicly traded company.

Effective February 4, 2011, Western Uranium Corporation, WEDC, LAC, and LNC entered into an agreement for the purchase by LNC from WEDC of the royalties and titles for the Lithium Nevada Property.

In March 2011, the parties completed the transaction for the sale by WEDC to LNC of the royalties and titles constituting all of the Lithium Nevada Property. As a result of this transaction, the existing lease and royalty arrangements between the two companies on the Lithium Nevada Property, including the net smelter returns and net profits royalties on any lithium project that the company developed, were terminated. LNC holds, indirectly, control and full ownership of the Lithium Nevada Property mining claims and leases, excluding a gold exploration target (on the Albisu property) and a 20% royalty granted by WEDC to Cameco Global Exploration II Ltd. solely in respect of uranium (the Uranium Royalty).

The UM Claims subject to the Lease authorize LNC to develop and mine minerals, which are subject to location under the *Mining Law of 1872*, as amended (*Mining Law*). The *Mining Law* does not explicitly authorize the owner of a UM Claim to sell minerals, which are minerals that are leasable under the *Mineral Lands Leasing Act of 1920*, as amended. The sale of by-products, produced as a result of mining and processing lithium products from the Lithium Nevada Property, are not being considered at this time.

Legal access to the UM Claims is provided directly by State Route 293.

4.4 Royalties, Rights and Payments

In addition to the Uranium Royalty and those national, state and local rates identified in Section 4.3 of this report, the Thacker Pass Property is subject to a royalty with the Orion Mine Finance Fund I (f.n.a. RK Mine Finance (Master) Fund II L.P.) (Orion). It is a gross revenue royalty on the Thacker Pass Property in the amount of 8% of gross revenue until aggregate royalty payments equal US$22 Million have been paid, at which time the royalty will be reduced to 4.0% of the gross revenue on all minerals mined, produced or otherwise recovered. LNC can at any time elect to reduce the rate of the royalty to 1.75% on notice and payment of US$22 Million to Orion.

4.5 Environmental Liabilities

LNC has reclamation obligations for a small hectorite clay mine located within the project area. The financial liability for this reclamation obligation, as stipulated by the BLM, is US$572,590. LNC's other environmental liabilities from existing mineral exploration projects in the vicinity of the project area have a reclamation obligation totaling approximately US$364,159. LNC currently holds a US$1,007,520 reclamation bond with the BLM Nevada State Office.

There are no other known environmental liabilities associated with the project.

4.6 Permitting for Exploration

Based on information provided to, or researched and reviewed by, Advisian as part of this technical study, there are not any federal, state or local regulatory or permitting issues identified at this time that could preclude overall approval of the proposed Thacker Pass Project.

Since 2008, LNC has performed extensive exploration activities at the Thacker Pass Project site under existing approved agency permits. LNC has all necessary federal and state permits and approvals to conduct mineral exploration activities within active target areas of the Thacker Pass Project site.

LNC is in the process of amending existing US federal and state permits and approvals to further expand exploration activities at and in the vicinity of the Thacker Pass Project site. All amended permits are anticipated to be received in the summer of 2018.

A Plan of Operations and Reclamation Plan (PoO)—Plan of Operations No. N85255—for mineral exploration activities, including drilling and trenching for bulk sampling, was submitted to the BLM and the NDEP BMRR in May 2008. This PoO was analyzed by an Environmental Assessment (EA), DOI-BLM-NV-W010-2010-001-EA, in accordance with the *United States National Environmental Policy Act of 1969*. It was subsequently approved in January 2010 under the BLM's *Surface Management Regulations* contained in Title 43 of the *Code of Federal Regulations, Chapter 3809*.

As requested by the BLM, appropriate baseline studies that included a cultural resource assessment were completed to support the finalization of the EA process and the approval of the PoO.

The NDEP BMRR issued concurrent approval for the exploration PoO, including the approval of the reclamation financial guarantee, and issued State of Nevada Reclamation Permit No. 0301 for the exploration project. LNC has initiated the process to obtain all necessary federal, state, and local regulatory agency permits and approvals for the proposed Thacker Pass Project. This process, which includes the completion of environmental and natural resource baseline studies, will be described further in the Prefeasibility Study.

4.7 Other Factors or Risks

Advisian is not aware of any other significant factors or risks that may affect access, title, or the right or ability to perform work on the property.

4.8 Conclusions

Based on information provided to, or researched and reviewed by, Advisian as a part of this Technical Report, LNC is approved by the BLM and the NDEP BMRR to conduct mineral exploration activities at the Thacker Pass Project site in accordance with PoO No. N85255.

LNC has initiated the process to obtain all necessary federal, state, and local regulatory agency permits and approvals for the further advancement of the Thacker Pass Project.

5. Accessibility, Climate, Local Resources, Infrastructure, and Physiography

5.1 Accessibility

Access to the project is via the paved US Highway 95 and paved State Highway 293; travel north on US-95 from Winnemucca, Nevada, for approximately 70 km to Orovada and then travel west-northwest on State Route 293 for 33 km toward Thacker Pass to the project site entrance. On-site access is via several gravel and dirt roads established during the exploration phase.

5.2 Climate

The meteorological station in Figure 5-1 has continuously operated at the project site since 2011. The station collects temperature, precipitation, wind speed and direction, solar radiation, and relative humidity data.

Figure 5-1 Photograph of the On-Site Meteorological Station, Including Tower, Solar Power Station, and Security Fence

5.2.1 Temperature

Northern Nevada has a high-desert climate with cold winters and hot summers. The average minimum temperature in January is -3°C. The summer temperatures reach up to 35°C to 40°C. Snow can occur from October to May, although it often melts quickly. Nearby mining operations operate continuously through the winter and it is expected that the length of the operating season at the Thacker Pass Project would be year-round.

The temperature recorded in the LNC station from 2011 to 2017 ranges from is -18°C to +37°C. The frost depth for the project is 0.635 m (24 in.) based on Humboldt County Basic Design Requirements.

5.2.2 Precipitation

The area is generally dry, with annual precipitation ranging from 218 mm in 2013 to 399 mm in 2015 (Table 5-1). Winter precipitation (December to February) is higher with total precipitation ranging from 0.3 in. to 3.7 in. Summer (June to August) precipitation is lower, ranging from 0 in. to 1.3 in.

Table 5-1 Annual Precipitation at the Thacker Pass Project Site (in inches)

Month	2011	2012	2013	2014	2015	2016	2017
January	---	1.7	1.0	0.4	0.4	2.5	3.0
February	---	0.3	0.2	2.1	0.8	0.2	1.6
March	---	1.1	0.3	3.0	0.5	1.4	0.9
April	---	1.2	0.3	1.4	1.2	0.8	2.1
May	---	0.3	2.2	0.6	3.5	---	0.9
June	---	0.4	0.4	0.1	0.4	---	1.3
July	---	0.4	0.4	0.6	0.8	0.0	0.0
August	0.4	0.5	0.7	1.1	0.1	0.0	0.4
September	0.0	0.7	1.2	2.9	0.2	0.9	0.3
October	1.2	1.1	1.0	0.5	1.8	1.3	---
November	0.6	1.1	0.8	1.2	0.6	0.7	---
December	0.0	2.7	0.3	1.8	3.7	2.7	---
Annual Total	**---**	**11.5**	**8.6**	**15.7**	**13.8**	**---**	**---**
Maximum Monthly	**---**	**2.7**	**2.2**	**3.0**	**3.7**	**---**	**---**
Minimum Monthly	**---**	**0.3**	**0.2**	**0.1**	**0.1**	**---**	**---**

5.2.3 Wind Speed and Direction

In general, wind predominantly blows from the westerly directions (Figure 5-2). In the summer (June to August), wind also often blows from the north with wind speeds mostly stronger than 5 m/s (Figure 5-3). Hourly average wind speeds were higher in the spring (March to May) and summer (June to August). Wind speeds are summarized in Table 5-2.

Figure 5-2 Annual Wind Roses Developed Using Data Collected from the On-Site Meteorological Station, 2011 to 2015

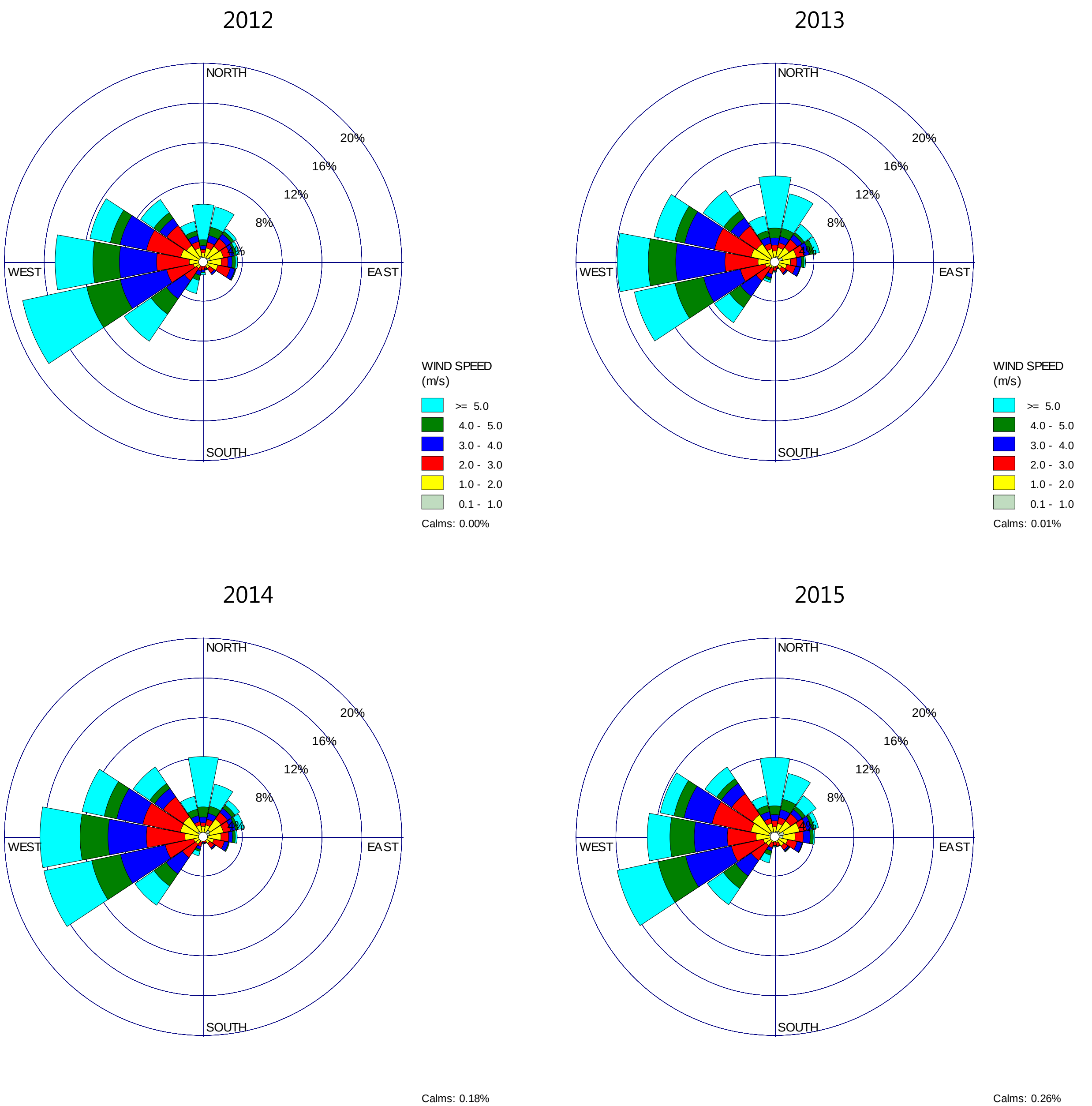
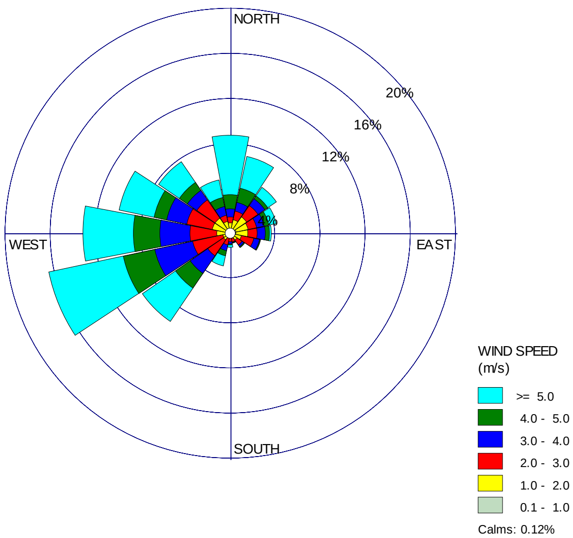
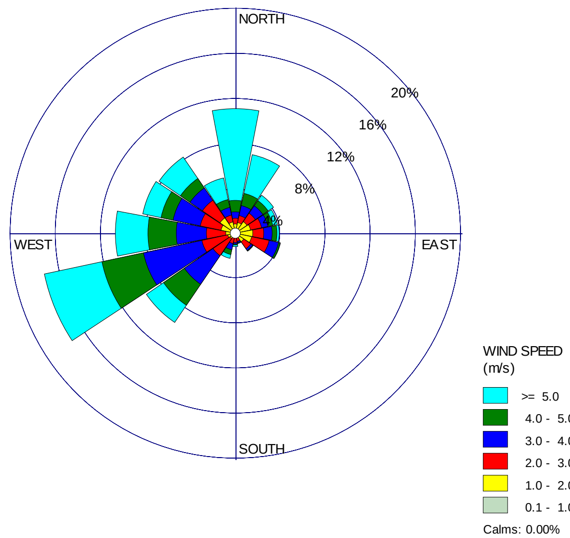


Figure 5-3 Average Seasonal Wind Roses Developed Using Wind Data Collected from the On-Site Meteorological Station

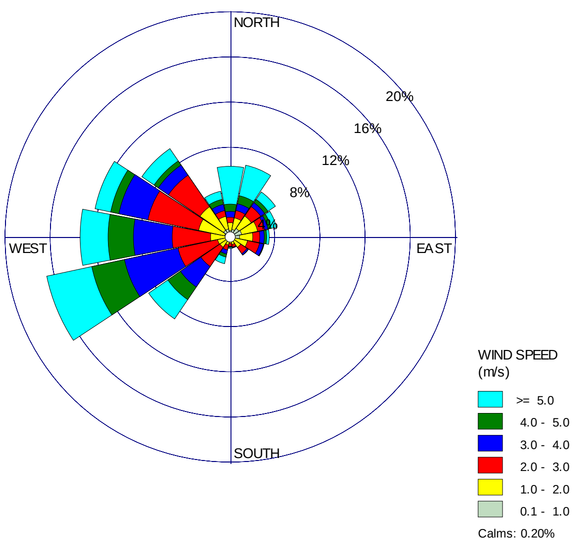
Spring (March to May)



Summer (June to August)



Fall (September to November)



Winter (December to February)

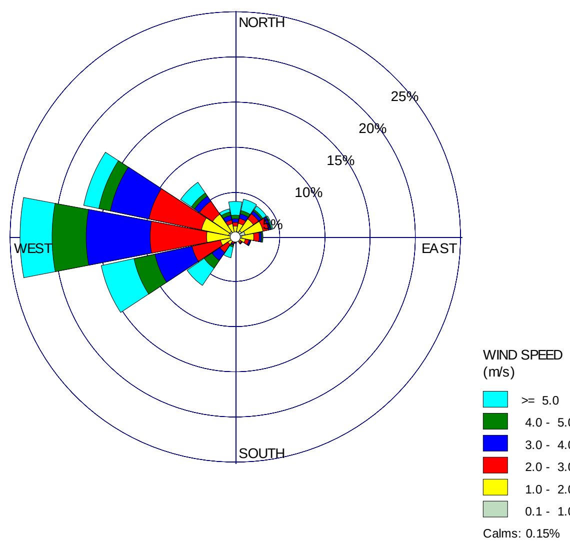


Table 5-2 Wind Speed from 2011 to 2017 (m/s)

Month	2011	2012	2013	2014	2015	2016	2017
January	---	3.4	2.9	3.2	2.4	2.8	3.5
February	---	3.4	3.4	3.7	3.9	3.0	4.4
March	---	5.1	3.8	4.1	3.2	4.3	3.9
April	---	3.9	5.0	3.8	4.1	4.1	4.2
May	---	4.5	4.3	4.7	3.6	---	4.1
June	---	4.7	4.3	4.2	4.3	---	4.2
July	---	3.8	4.2	4.0	3.9	4.3	3.9
August	3.8	3.7	3.7	3.7	3.9	3.9	3.8
September	3.3	3.2	4.5	3.9	3.1	3.8	3.7
October	3.1	3.3	3.3	3.0	3.2	3.6	---
November	3.5	3.2	3.7	3.5	3.4	2.8	---
December	3.3	3.8	3.2	3.4	4.2	3.0	---
Average Daily	**---**	**3.9**	**3.8**	**3.8**	**3.6**	**---**	**---**
Maximum Monthly	**---**	**5.1**	**5.0**	**4.7**	**4.3**	**---**	**---**
Minimum Monthly	**---**	**3.2**	**2.9**	**3.0**	**2.4**	**---**	**---**

5.2.4 Evaporation

Open water evaporation estimates are based on data from Rye Patch Reservoir, located approximately 90 km to the south at an elevation of 1,260 m. Using a pan coefficient of 0.7, the estimated open-water evaporation rate is 1.07 m per year.

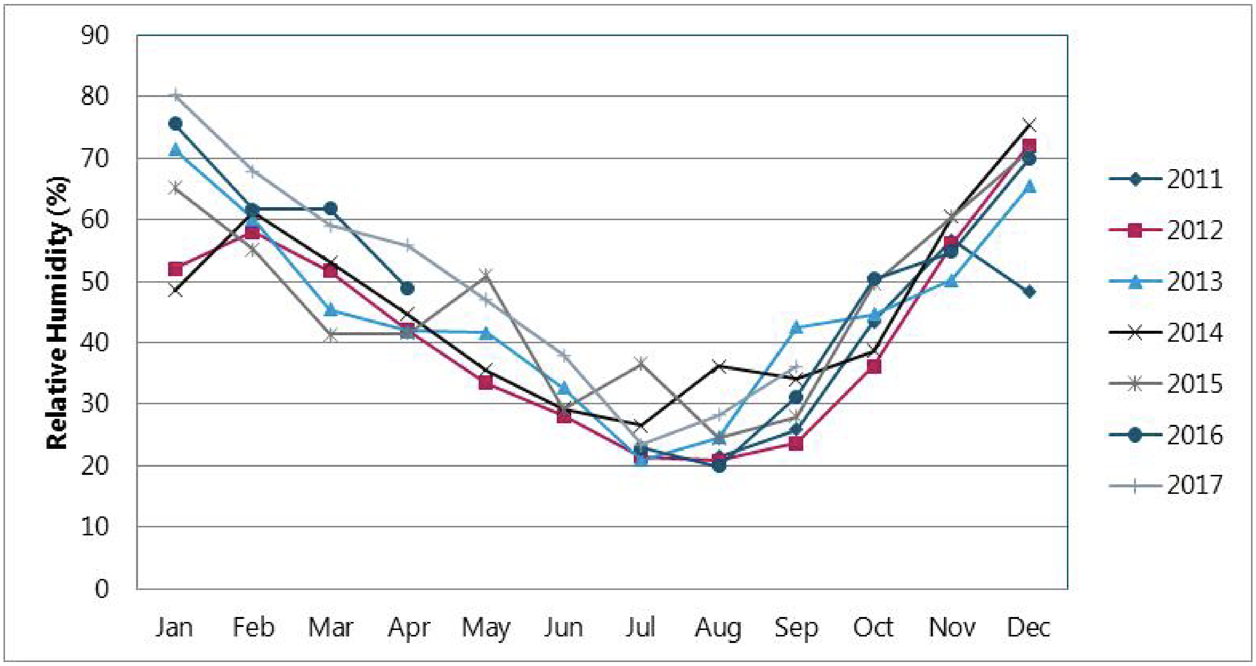
The region is characterized by a water deficit, with estimated evaporation notably greater than recorded precipitation (Table 5-1).

5.2.5 Barometric Pressure and Relative Humidity

The barometric pressure measured ranged from 24.7 in Hg to 25.0 in Hg at the proposed project location.

The average monthly relative humidity ranges from 20% to 80% (Figure 5-4). In the winter, relative humidity is higher. In the summer months, relative humidity is lower (less than 40%).

Figure 5-4 Monthly Average Relative Humidity



5.2.6 Solar Radiation

Solar radiation is the total frequency spectrum of electromagnetic energy emanating from the sun. Table 5-3 summarizes the maximum and minimum daily solar radiation recorded. The minimum daily average solar radiation occurred in the winter between November and December. The maximum daily average solar radiation mostly occurred in June, except the incomplete data years.

Table 5-3 Daily Average Solar Radiation from 2011 to 2017

Year	Maximum Daily Average Solar Radiation (W/m^2)	Date	Minimum Daily Average Solar Radiation (W/m^2)	Date
2011*	338	August 12	22	October 10
2012	392	June 9	9	November 30
2013	391	June 15	19	December 2
2014	388	June 5	9	December 20
2015	383	June 11, 12, and 22	16	December 21
2016*	392	June 20	9	December 10
2017*	385	June 29	8	September 20

Note:

*Indicates partial years.

5.3 Local Resources

A long-established mining industry exists in the Winnemucca area. Local resources include all of the facilities and services required for large-scale mining, including an experienced workforce. The area is about 50 km north of the Sleeper gold mine (currently under care and maintenance) and 100 km northwest of the Twin Creeks, Turquoise Ridge, and Getchell gold mines.

Additionally, there are several other gold and copper mines in the area which rely on the experienced workforce and support for mining operations. Most of the workforce for this project is expected to originate from Winnemucca’s population.

There are several chemical processing operations (mostly pyrometallurgy and gold processing) in the local area. Experienced operations staffing may have to be brought in to the area to operate the lithium recovery plant.

5.4 Infrastructure

The existing roads are maintained by the Nevada Department of Transportation. All are paved and in good repair. The roads are all-season roads, but may be closed for short periods due to extreme weather during the winter season.

The nearest railroad access is in Winnemucca. This railroad is active, and owned and maintained by Union Pacific.

A 115 kV transmission line runs adjacent to State Route 293 through the project site. The line has adequate capacity for construction, start-up, and operations for the project. The project plan includes the construction of a large cogeneration power facility with a capacity that will exceed the project's electricity requirements. Excess electricity is expected to be sold via the existing 115 kV transmission line. This transmission line will be able to provide back-up electricity for operations during planned and emergency shut-down of the cogeneration facility.

There is sufficient space within the Thacker Pass site to accommodate a prospective processing plant and mine support facilities, overburden placement site, anticipated tailing storage facility (TSF), water diversions, and containments (Figure 4-1). Further condemnation drilling is planned for those sites.

Although a natural gas transport line is located near site, natural gas is not required for the project.

5.5 Water Rights

LNC has existing, fully certificated water rights within the Quinn River Valley (located 25 km east of the proposed mine site) totaling nearly 1,000 acre-feet annually. The point of diversion and use of the water rights will need to be transferred to the mine through a well-defined administrative process specified under *Nevada State Water Law*. Additional water rights, if required, can be obtained through land acquisition (with appurtenant water rights) in Quinn Valley.

Water is available near the mine. A test well was successfully drilled in 2017 and indicated sufficient flow rates for the process water requirements. Water quality was also deemed to be good.

An independent groundwater study was completed by Schlumberger Water Services in 2012. An updated study has commenced in 2018 by Piteau and Associates, which includes the drilling of a water supply well, additional groundwater monitoring wells and piezometers, and the installation of creek/spring monitoring gauges.

5.6 Physiography

The Thacker Pass Project is located in the southern portion of the McDermitt Caldera. The Project site sits at the southern end of the Montana Mountains, with its western border occurring just east of Thacker Creek. Elevation at the project site is approximately 1,500 m above sea level. Physiography is characterized by rolling topography trending eastward, with slopes generally ranging from 1% to 5%.

Lands within the project footprint primarily drain eastward to Quinn River. A small portion of the proposed pit area drains west to Kings River via Thacker Creek. There are no perennially active watercourses on the project site. A few of small seeps/springs have been identified on the project footprint, none of which are regionally significant.

Soils consist primarily of low-permeability clays intermixed with periodic shallow alluvial deposits.

Vegetation consists of low lying sagebrush and grasslands. The area is heavily infested with cheatgrass, an unwanted invasive species in Nevada.

6. History

On March 22, 2016, the Company announced a name change from WLC to LAC and the name of its Nevada-based wholly owned subsidiary was changed to LNC from WLC. The name of the Kings Valley Project was changed to the Lithium Nevada Project, and was changed again in 2018 to the Thacker Pass Project (includes only the former Stage 1). The reader is reminded that in this report any reference to WLC or the Kings Valley Project is in fact now LNC and the Thacker Pass Project.

6.1 Ownership History

Chevron USA (Chevron) leased many of the claims that comprised the lithium project to the J. M. Huber Corporation (Huber) in 1986. In 1991, Chevron sold its interest in the claims to Cyprus Gold Exploration Corporation. In 1992, Huber terminated the lease. Cyprus Gold Exploration Corporation allowed the claims to lapse and provided much of the exploration data to Jim LaBret, one of the claim owners from which they had leased claims. WEDC, a Nevada corporation, leased LaBret's claims in 2005, at which time LaBret provided WEDC access to the Chevron data and to core and other samples that were available.

Pursuant to an agreement signed on December 20, 2007, between WEDC, a subsidiary of Western Uranium Corporation, and WLC (which was then a subsidiary of Western Uranium Corporation), WEDC leased to WLC claims for the purpose of lithium exploration and exploitation. This agreement granted WLC exclusive rights to explore, develop, and mine or otherwise produce any and all lithium deposits discovered on the claims, subject to royalty payments. The leased area, at that time, included the entirety of the Thacker Pass Deposit and included 1,378 claims that covered over 11,000 ha.

Lithium deposits to be exploited included, but were not limited to, deposits of amblygonite, eucryptite, hectorite, lepidolite, petalite, spodumene, and bentonitic clays. Rights to all other mineral types, including base and precious metals, uranium, vanadium, and uranium-bearing or vanadium-bearing materials or ores were expressly reserved by WEDC. The term of that lease agreement was 30 years. The lease granted WLC the exclusive right to purchase the UM Claims comprising a designated discovery, subject to the royalty and other rights to be reserved by WEDC and subject to WLC's obligations under the deed to be executed and delivered by WEDC on the closing of the option.

In July 2008, WLC ceased to be wholly owned by Western Uranium Corporation and became an independent publicly traded company.

Effective February 4, 2011, Western Uranium Corporation, WEDC, Western Lithium Corporation, and WLC entered into an agreement for the purchase by Western Lithium Corporation from WEDC of the royalties and titles for the then-named Kings Valley mineral property.

In March 2011, the parties completed the transaction for the sale by WEDC to Western Lithium Corporation of the royalties and titles constituting all of the Kings Valley mineral property. As a result of this transaction, the existing lease and royalty arrangements between the two companies on the Kings Valley property, including the Net Smelter Returns and Net Profits Royalties on any lithium project that the company developed, were terminated. Western Lithium Corporation held control and full ownership of the then-named Kings Valley property mining claims and leases, excluding a gold exploration target (on the Albisu property) and a 20% royalty granted by WEDC to Cameco Global Exploration II Ltd. solely in respect of uranium.

6.2 Exploration History

In 1975, Chevron began an exploration program for uranium in the sediments located throughout the McDermitt Caldera. Early in Chevron's program, the USGS (who had been investigating lithium sources) alerted Chevron to the presence of anomalous concentrations of lithium associated with the caldera. Because of this, Chevron added lithium to its assays in 1978 and 1979, began a clay analysis program, and obtained samples for engineering work, though uranium remained the primary focus of exploration.

Results confirmed the high lithium concentrations contained in clays. From 1980 to 1987, Chevron began a drilling program that focused on lithium targets and conducted extensive metallurgical testing of the clays to determine the viability of lithium extraction. In 1985, Chevron undertook a resource estimate for a 0.25% Li cutoff. This estimate is not considered NI 43-101 compliant.

In 2007, WLC commenced an exploration drilling program focused in the southern portion of the caldera. Over a period of four years, WLC drilled 232 exploration holes in the vicinity of Thacker Pass. 198 of these exploration holes were assayed, totaling approximately 20,000 m of core. This program identified an anomalously High-Grade (HG) lithium deposit. As a result of this drilling program, WLC completed an NI 43-101 pre-feasibility study in 2011, updated in 2014. In 2016, LAC rescinded the study on the basis that the underlying technical and economic basis of the study were no longer current.

The resource was updated in May 2016 in the SRK Technical Report[10] using a cutoff of 2,000 ppm, which resulted in a Measured Resource of 843,000 metric tonnes LCE, Indicated Resource of 2,489,000 metric tonnes LCE and an Inferred Resource of 1,954,000 metric tonnes LCE.

LNC conducted an exploration program in 2017. The objective of the 2017 exploration program was to identify a resource of scale in the Thacker Pass area (formerly Zone 1 or Stage I of the Kings Valley Project), where habitat quality is substantially lower than in the Montana Mountains to the north. In Thacker Pass, a total of 77 exploration holes totaling 6,653 m were drilled, a seismic survey was conducted, and the surface geology of the project was remapped. The results indicated a larger lithium deposit than was previously identified, and the data were used to update the Indicated, Measured and Inferred Resource (as presented in Section 14).

6.3 Metallurgical Test Work History

In 2008, LNC performed a mineralogical study on samples collected during a drilling program that started in late 2007 and ended in May 2008 (Hudson, 2008). That study identified the presence of hectorite as well as bitumen in the deposit. LNC determined the density of six samples from the Thacker Pass Deposit.

Metallurgical test work was performed on samples from the Thacker Pass Project deposit by investigators, including the Chevron Research Company, United States Bureau of Mines (USBM), and Hazen Research (Hazen). Bench-scale laboratory studies were performed by Hazen to examine lithium extraction from a composite ore sample with about 0.35% lithium prepared from drill core samples supplied by LNC. Most of the work completed was derived from the work conducted by Chevron. Hazen found that wet attritioning is effective in liberating the clay fines from the ore. Hazen also developed methods to separate lithium-rich fines from gangue and to reduce carbonate concentration to less than 0.5% by weight. Acid plugging, curing, and water leaching were then used to extract lithium from the clay fines, with an acid dose of approximately 473.21 kg per tonne of ore required for 95% extraction. The results obtained by Hazen were consistent with those found by Chevron.

In late 2008, metallurgical test work was performed by Kappes Cassiday & Associates (KCA) on samples from the Thacker Pass Deposit by various researchers, based in principle on the USBM report, Lithium and Its Recovery from Low-Grade (LG) Nevada Clays (USBM Bulletin 691, 1988). USBM investigated several extraction techniques and pursued two options, gypsum-limestone roast and chlorinating roast. Selecting samples from two different areas of the McDermitt Caldera, USBM performed successful preliminary tests of gypsum-limestone roasting. This led to extensive batch-roast studies and further to larger-scale roasting in a rotary furnace. Chlorination was also tested, but proved to be lower yield and economically unfeasible.

The KCA test work was based on the prior work completed by USBM. Samples obtained in August 2008 and October 2008 from recent drilling campaigns included both oxidized ore (comprising an estimated 15% to 20% of the deposit) and unoxidized ore (comprising 80% to 85% of the deposit). An analysis of possible ore upgrading techniques resulted in selecting wet attritioning followed by wet screening. Subsequent calcining of the ore with a mixture of limestone and gypsum was performed, followed by water leaching to recover soluble lithium and other alkali sulfates. Results confirmed that the USBM process for recovery of lithium from this ore was technically viable.

Development work undertaken since 2015 has focused on an alternative process, based on a lower mass and energy consumption footprint that is more robust and less dependent on ore grade. The testing and analysis of results of this alternative process is in progress, and will be discussed further in the upcoming Prefeasibility Study.

6.4 Historic Production from the Property

There has been no commercial lithium production from the property. Through a subsidiary company, LAC does operate a hectorite clay mine on the property that produces hectorite clays for industrial purposes. The facility consists of a small open pit and small outbuilding.

6.5 Historical Resource Estimates

The information in this section was excerpted from the URS report titled "*NI 43-101 Technical Report Preliminary Assessment and Economic Evaluation, Kings Valley Project*, *Humboldt County, Nevada, USA*", effective date December 31, 2009. In 1985, Chevron (Glanzman and Winsor, 1982) produced polygonal estimates of the Li resources on their properties at Lithium Nevada (Table 5.1). A cut-off grade of 0.25% lithium, minimum thickness of 1.52 m, and a minimum 9.0 ft% Grade x Thickness (GT) were used for the estimate. The tonnage factor used was 1.8 g/cm^3.

Note that there is insufficient information available with respect to the classification of this resource estimate to enable comparison with the current CIM Definition Standards for Mineral Resources and Mineral Reserves (2014). This estimate is not, therefore, considered to be reliable, or to be relevant in terms of the amended report. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources, and LNC is not treating this historical estimate as current mineral resources. The estimate is included here for historical purposes only.

In 2010[1], and as identified in the 2016[10] technical report, the Company reported an inferred resource for Stage 2 in the Montana Mountains. LNC has determined that this estimate is no longer current.

7. Geological Setting and Mineralization

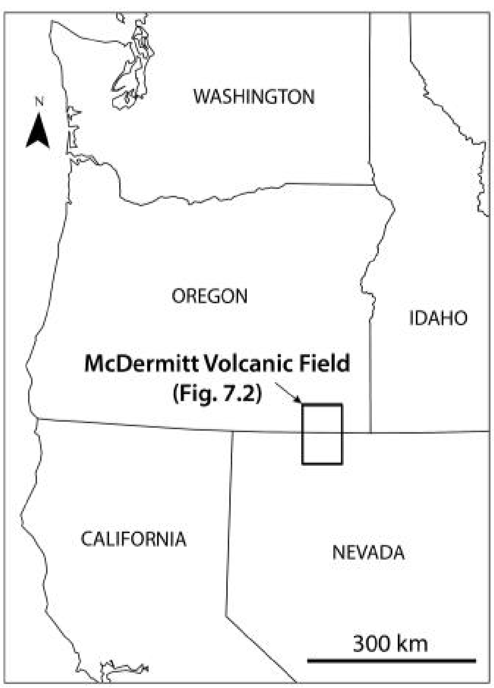
The Thacker Pass Project is located within an extinct super-volcano named McDermitt Caldera, which is 30 km by 45 km. The caldera was formed approximately 16.3 million years ago from a hotspot that has since migrated to the Yellowstone area of Wyoming and Montana. Following an initial eruption at the McDermitt Caldera, water leached lithium from nearby volcanic rocks and deposited it in the caldera basin over hundreds of thousands of years.

A large caldera lake formed and a thick sequence of associated lacustrine deposits settled. Renewed volcanic activity uplifted the center of the caldera, draining the lake and bringing the lithium-rich sediments to the surface of the earth in the vicinity of the present-day Montana Mountains. The result of these geological processes is a high-grade (HG), large and near-surface lithium deposit called the Thacker Pass Project.

7.1 Regional Geology

The Thacker Pass Project is located within the McDermitt Volcanic Field (Figure 7-1), a volcanic complex with four large rhyolitic calderas that formed in the middle Miocene. Volcanic activity in the McDermitt Volcanic Field occurred simultaneously with voluminous outflow of the earliest stages of the approximately 16.6 Ma to 15 Ma Columbia River flood basalt lavas. This volcanic activity was associated with impingement of the Yellowstone plume head (Coble and Mahood, 2012; Benson et al., 2017a). Plume head expansion underneath the lithosphere resulted in crustal melting and surficial volcanism along four distinct radial swarms (Benson et al., 2017a).

Figure 7-1 Regional Map Showing the Location of the McDermitt Caldera Field in the Western US



Source: Lithium Nevada Corp. (2018)

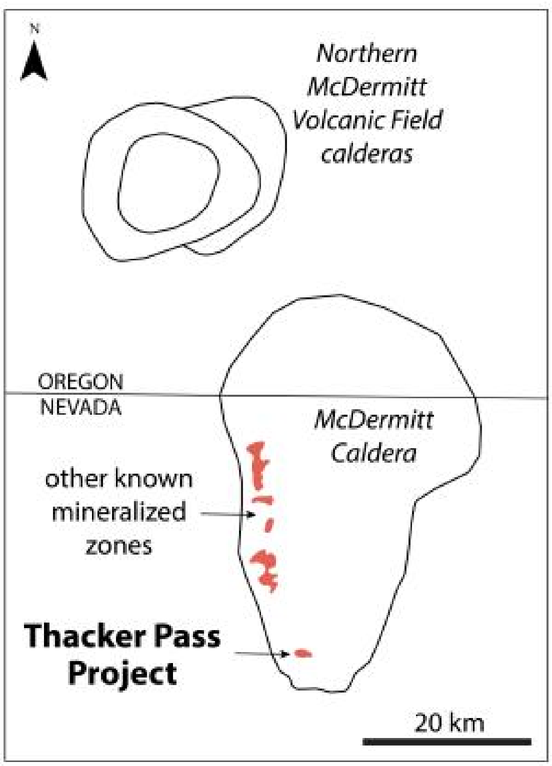
The McDermitt Volcanic Field is located within the southeastern-propagating swarm of volcanism from Steens Mountain into north-central Nevada. The Thacker Pass Project is located within the largest and southeastern most caldera of the McDermitt Volcanic Field, the McDermitt Caldera.

7.2 Geologic History of the McDermitt Caldera

7.2.1 Pre-Caldera Volcanism

Prior to collapse of the McDermitt Caldera at 16.33 Ma, volcanism in the northern portion of the McDermitt Volcanic Field and locally small volumes of trachytic to rhyolitic lavas erupted near the present-day Oregon-Nevada border (Figure 7-2). These lavas and the flood basalts are exposed along walls of the McDermitt Caldera and are approximately 16.5 Ma to approximately 16.3 Ma years old (Benson et al., 2017a; Henry et al., 2017).

Figure 7-2 Simplified Map of the McDermitt Volcanic Field Showing the Approximate Locations of Caldera Margins and Known Zones Mineralized with Lithium



Source: Lithium Nevada Corp.

7.2.2 Eruption of the Tuff of Long Ridge and Collapse of the McDermitt Caldera

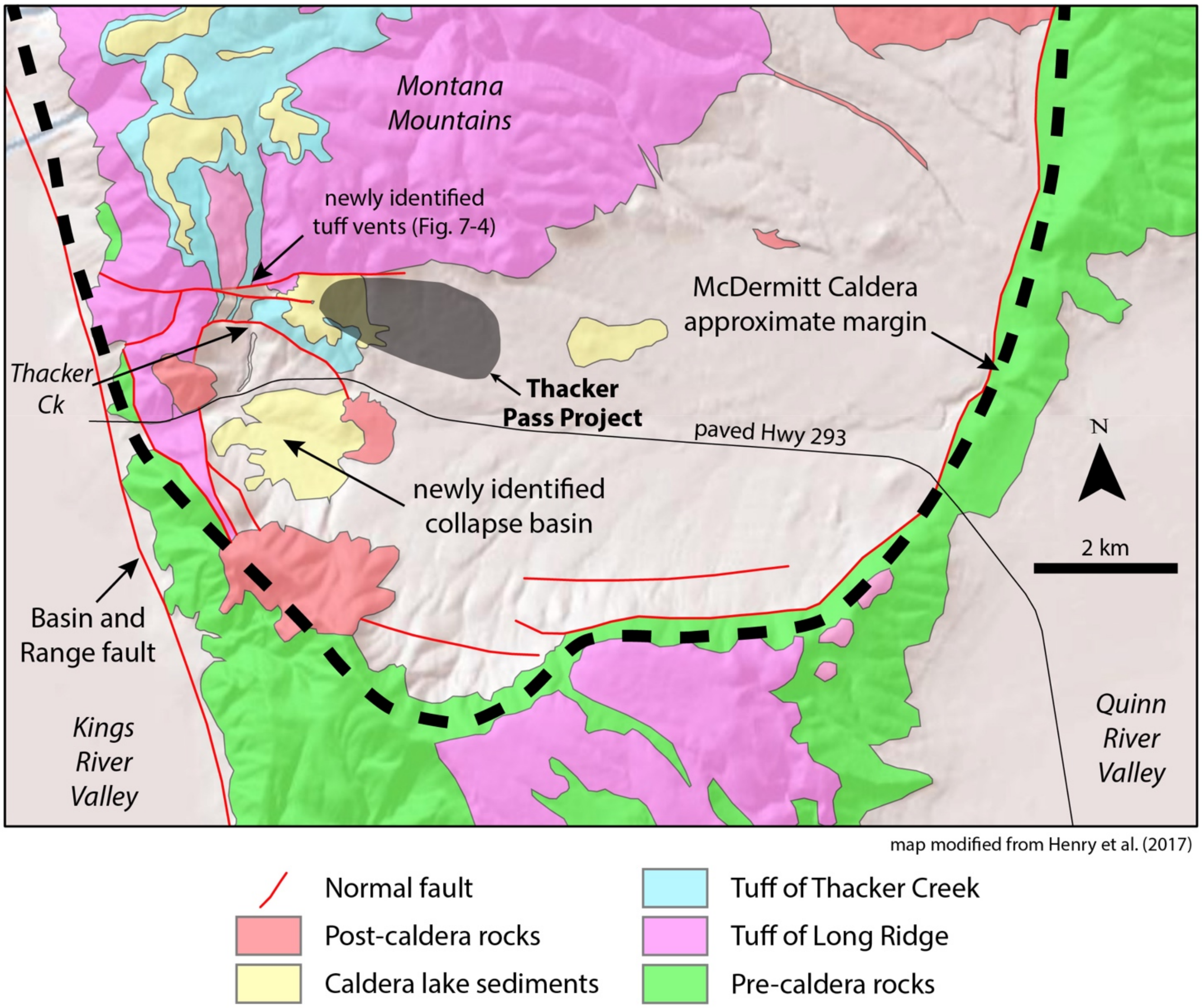
The trachytic to rhyolitic Tuff of Long Ridge erupted at approximately 16.33 Ma and formed the 30 km by 45 km keyhole-shaped McDermitt Caldera (Figure 7-2) that straddles the Oregon-Nevada border. Rytuba and McKee (1984) and Conrad (1984) initially interpreted the McDermitt Caldera as a composite collapse structure formed on piecewise eruption of four different ignimbrites from a single magma chamber. Recently, Henry et al. (2017) refined the stratigraphy to a singular ignimbrite they call the McDermitt Tuff (herein called the Tuff of Long Ridge to avoid confusion).

Regional reconnaissance work by Benson et al. (2017a) indicates that there was one large laterally extensive and crystal-poor (<3% feldspar) caldera-forming eruption (Tuff of Long Ridge) though other smaller-volume tuffs are exposed close to the vent and their eruptions and concomitant collapses may have contributed to the peculiar shape of the caldera. An estimated approximately 500 km^3 of ignimbrite ponded within the caldera during the eruption, with approximately 500 km^3 spreading out across the horizon up to 60 km from the caldera (Benson et al., 2017a).

7.2.3 Post-Caldera Activity

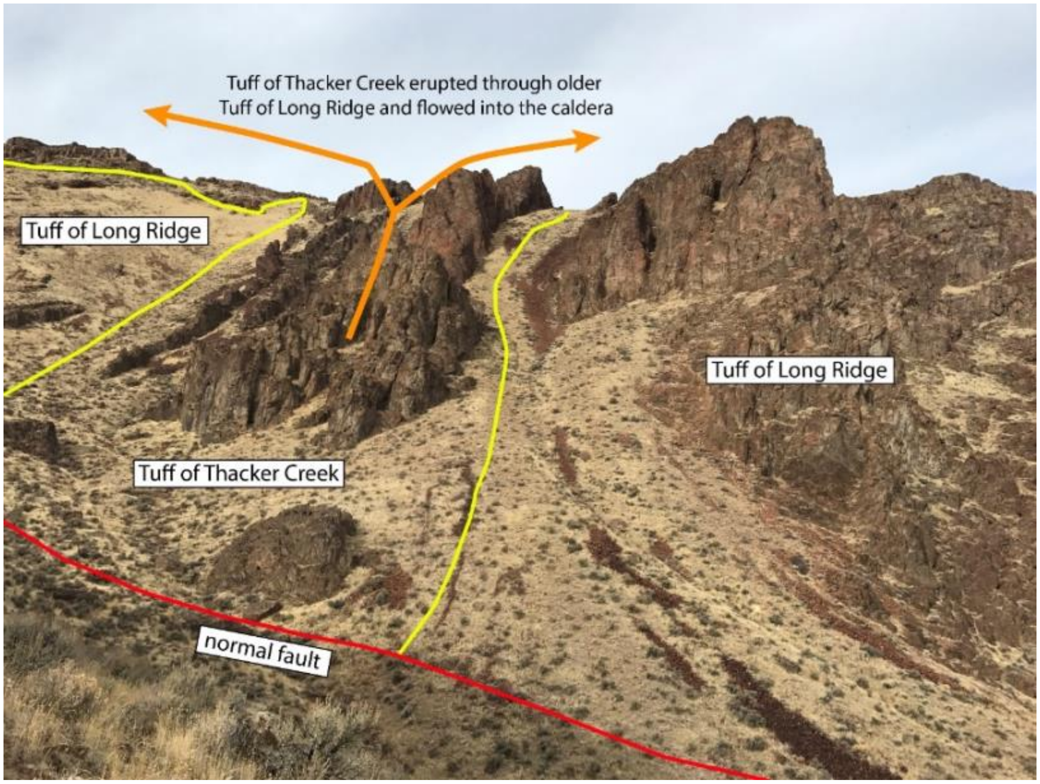
Following eruption of the Tuff of Long Ridge, a large lake formed in the caldera depression. The lake captured sediments that were eroded from the surrounding drainage areas. Though no ash layers have been dated within the associated lacustrine sediments, sedimentation was likely active for approximately 100,000 years given that nearby Miocene caldera lakes lasted approximately this long (Coble and Mahood, 2016; Benson et al., 2017a). During this interval, the caldera underwent a period of resurgence similar to that of the Valles Caldera in New Mexico (Smith and Bailey, 1978). This resurgence uplifted a large volume of intracaldera ignimbrite and caldera lake sediments (Figure 7-3) that form the present-day Montana Mountains.

Figure 7-3 Simplified Geological Map of the Southern Portion of the McDermitt Caldera and the Thacker Pass Project - the Lithium Resource is Hosted within the Caldera Lake Sediments



Volcanic features associated with this resurgence are exposed along Thacker Creek (Figure 7-3), where tuff dikes of the newly identified crystal-rich (approximately 15% feldspar and quartz) Tuff of Thacker Creek crosscut the intra-caldera facies of the Tuff of Long Ridge (Figure 7-4). From this vent area, the Tuff of Thacker Creek mostly flowed north atop intra-caldera Tuff of Long Ridge. Minor arcuate normal faults are associated with this eruption, forming a 2 km graben to the west of the Thacker Pass Deposit (Figure 7-3). The Tuff of Thacker Creek ponded and welded along the fault scarps during its eruption and formed the large ridge that bounds the southwest of the Thacker Pass Deposit (Figure 7-3).

Figure 7-4 Photograph Looking North Showing One of the Source Vents for the Newly Identified Tuff of Thacker Creek Cutting Through the Tuff of Long Ridge - Location of Photograph is Shown in Figure 7-3



Following eruption of the Tuff of Thacker Creek, minor-volume rhyolitic and basaltic lavas erupted along the normal faults associated with this event (Figure 7-3). Around this time, icelanditic, rhyolitic, and basaltic lavas erupted from vents in the northern and eastern part of in the caldera (Henry et al., 2017). Thin basaltic lava flows are intercalated with caldera lake sediments in drill cores and show evidence for interaction with wet sediments, suggesting that caldera lake sedimentation occurred for the duration of post-caldera volcanism.

Beginning around 12 Ma, Basin and Range normal faulting associated with the extending North American lithosphere (Colgan et al., 2006; Lerch et al., 2008) caused uplift of the western half of the McDermitt Caldera and subsidence of Kings River Valley. Faults formed along reactivated ring fractures of the western McDermitt Caldera, and the Tuff of Thacker Creek. This uplift sped up the weathering and erosion of rocks within the caldera.

7.3 Mineralization

7.3.1 Thacker Pass Deposit

The Thacker Pass Deposit sits sub-horizontally beneath a thin alluvial cover at Thacker Pass and is partially exposed at the surface (Figure 7-3). The Thacker Pass Deposit contains the targeted multi-phase mining development of the Thacker Pass Project. It lies at relatively low elevations (between 1,500 m and 1,300 m) in moat caldera lake sediments that have been separated from the topographically higher deposits to the north. Exposures of the sedimentary rocks at Thacker Pass are limited to a few drainages and isolated road cuts. Therefore, the stratigraphic sequence in the deposit is primarily derived from core drilling.

The sedimentary section, which has a maximum drilled thickness of about 160 m, consists of alternating layers of thick claystone and thin volcanic ash. The claystone comprises 40% to 90% of the section. In many intervals, the claystone and ash are intimately intermixed. The claystones are variably brown, tan, gray, bluish-gray and black, whereas the ash is generally white or very light gray. Individual claystone-rich units may laterally reach distances of more than 152 m; though unit thickness can vary by as much as 20%. Ash-rich layers are more variable and appear to have some textures that suggest reworking. All units exhibit finely graded bedding and laminar textures that imply a shallow lacustrine (lake) depositional environment.

Surficial oxidation persists to depths of 15 m to 30 m in the moat sedimentary rock. Oxidized claystone is brown, tan, or light greenish-tan and contains iron oxide, whereas ash is white with some orange-brown iron oxide. The transition from oxidized to unoxidized rock occurs over intervals as much as 4.5 m thick.

The moat sedimentary section at Thacker Pass overlies the intra-caldera Tuff of Long Ridge. A zone of weakly to strongly silicified sedimentary rock, the Hot Pond Zone (HPZ), occurs at the base of the sedimentary section above the Tuff of Long Ridge in most of the cores retrieved from the Thacker Pass Deposit. Both the HPZ and the underlying Tuff of Long Ridge are generally oxidized.

Core from each drill hole has been examined and drill logs have been prepared that record rock type, color, accessory minerals, textures and other features of significance. On the basis of core examination, 14 lithologic codes have been recognized (Table 7-1). The core has mostly been divided into sample intervals for chemical analyses delineated on the basis of lithology. Figure 7-5 shows a generalized interpretation of the lithology for core hole WLC-43 which is located roughly in the middle of the proposed mine pit area. For the purpose of this interpretation, all the claystones (lithologic units 1-6) are combined into one lithologic unit.

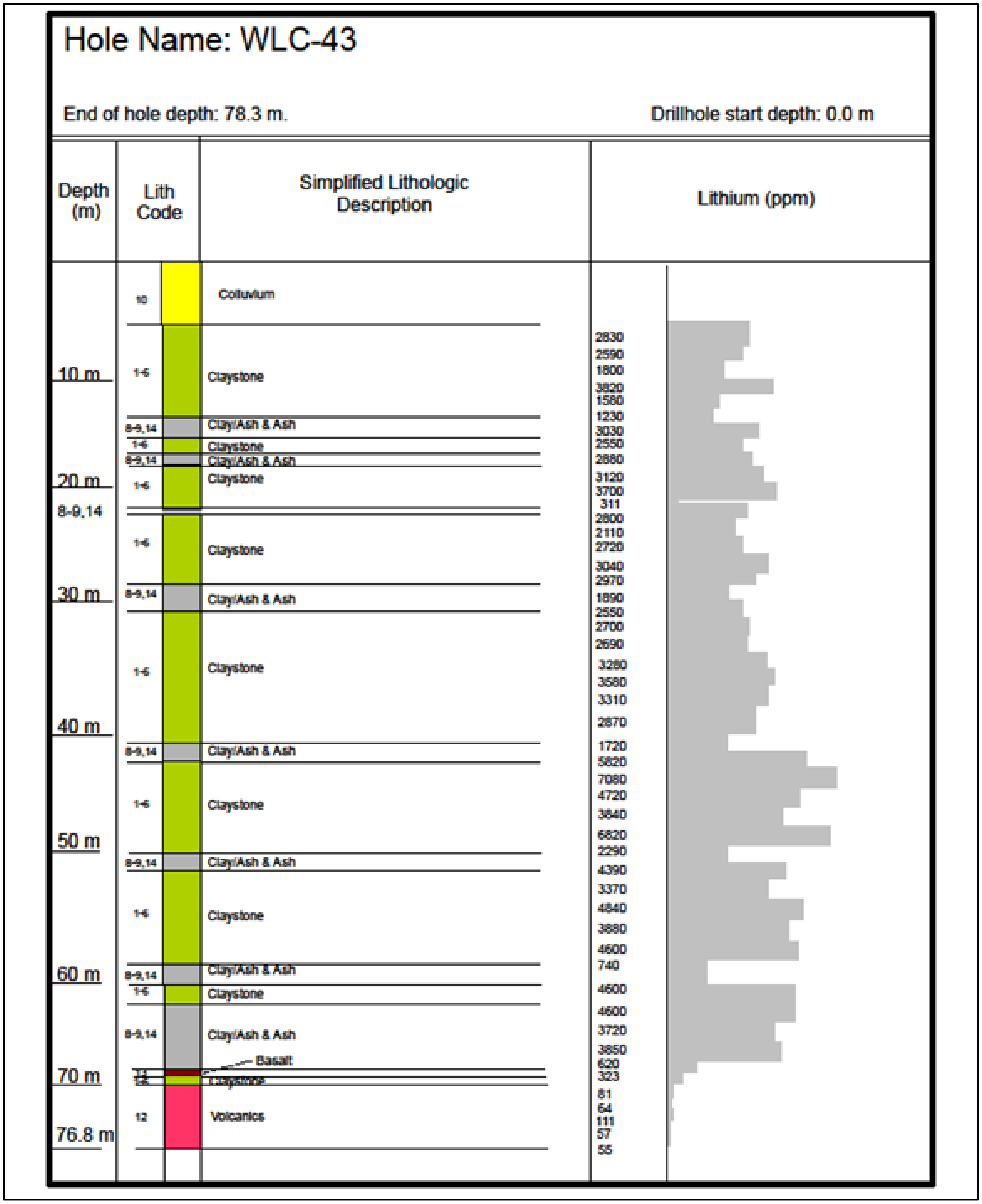
Table 7-1 Summary of Lithologic Units

Lithologic Code	Geology	Dominant Characteristic	Secondary Characteristic
1	Green Claystone	Greenish gray claystone.	With or without iron oxidation, may or may not be massive, may or may not contain thin ash layers.
2	Tan Claystone	Tan to light brown claystone.	
3	Light Gray Claystone	Light gray to medium gray claystone.	
4	Gray Claystone	Medium gray to dark gray claystone.	
5	Carbon Claystone	Dark gray claystone.	Minimal to moderate carbon, may have <20% white or gray-white ash.
6	Bluish Claystone	Bluish gray claystone.	May be massive.
7	Ash/Claystone	>60% gray or white ash or arkose with claystone.	Ash may be layered or intermixed with claystone and may have iron oxide coatings.
8	Claystone/Ash	>60% green, tan, gray, dark, gray, black or blue claystone with white, tan or gray ash.	Claystone may be layered or intermixed with ash.
9	Laminated	Laminated claystone and ash, usually small thin layers.	Not applicable.
10	Qal (Quaternary Alluvium)	Light brown to tan alluvium, ranges between 0 m and 8.2 m thick.	Not applicable.
11	HPZ	Laminated, silicic and oxidized.	Has to have all three dominant characteristics.
12	TV (Tertiary Volcanics)	Vuggy orange brown volcanics.	May contain lithic fragments up to 4 in. in diameter, includes, voids, mudflows, breccias.
13	Basalt	Brown to black basalt.	May or may not be oxidized.
14	Ash	>80% gray, light tan, white or yellow-brown ash.	Minor arkose may be present.

Notes:

1. Lithologic codes were provided by LNC.
2. Codes are based on drill hole descriptions for WLC 1-37 and WLC 40-200.

Figure 7-5 Interpreted and Simplified Sample Log for Drill Hole WLC-43



Source: Tetra Tech, 2014

Most of the moat sedimentary rocks drilled in the Thacker Pass basin contain high levels of lithium (>100 ppm). Intervals that consist mostly of ash have lithium contents of less than 800 ppm whereas intervals dominated by claystone contain more lithium (>1,000 ppm). Many intervals have very high lithium contents (>4,000 ppm). Intervals with extreme lithium contents (>8,000 ppm) occur sporadically in the deposit.

There is no obvious change in lithium content across the boundary between oxidized and unoxidized rock. The highest lithium grades generally occur in the middle and lower parts of the sedimentary rock section.

The lithium content of the Thacker Pass Deposit claystone can generally be correlated to the color and texture of the rock, as well as the amount of mixed-in ash. Intervals with the highest lithium grades (>4,000 ppm) generally contain gray to dark-gray or black claystone with less than 10% ash. Intervals of bluish-gray claystone with low ash content have moderate lithium content (generally 2,500 ppm to 3,000 ppm). Intervals of light colored claystone (e.g. tan, light gray, greenish-tan) have lower lithium grades (generally 1,500 ppm to 2,500 ppm). Intervals of mixed claystone and ash are common and have variable lithium contents (generally 1,500 ppm to 3,000 ppm) depending on the type of claystone and proportion of ash present.

7.3.2 Mineralogy

Clay in the Thacker Pass Deposit includes two distinctly different mineral types, smectite and illite, based on chemistry and X-ray diffraction (XRD) spectra. Clay with XRD spectra that are indicative of smectite occurs at relatively shallow depths (less than 30 m bgs) in the deposit (Castor, 2010). Confirmed hectorite clay, a subtype of smectite, occurs elsewhere in the McDermitt Caldera and has been documented by several authors (e.g. Odom, 1992; Rytuba and Glanzman, 1979).

Drill intervals with high lithium contents (commonly >4,000 ppm) contain clay that yields XRD spectra that are more typical for illite than smectite (Castor, 2010). An illite-type clay occurs at relative moderate to deep depths in the moat sedimentary section and sporadically occurs in intervals that contain as much as 8,000 ppm lithium, higher than what a hectorite crystal can accommodate. A relatively thin layer of interstratified smectite-illite clay is found between the smectite and illite-type clay (Castor, 2010).

Other minerals in the Thacker Pass Deposit claystone include calcite, quartz, K-feldspar, plagioclase, dolomite, and fluorite. Pyrite and bitumen occur in the claystone below near-surface oxidized rock. Ash beds in the Thacker Pass Deposit contain quartz and feldspar with local analcime, and minor clay and pyrite. Zeolite minerals are typically present in the north part of the caldera, but analcime is the only zeolite present in the Thacker Pass Deposit (Glanzman and Rytuba, 1979).

7.3.3 Discussion

The regional geological setting of this deposit is well-known and understood. The lithium bearing clays are contained within the moat sediments that are bounded by the caldera's outer wall and inner resurgent dome. The Thacker Pass Deposit area is 5 km north-south by 10 km east-west with lithium bearing zones up to 160 m thick. The LNC drilling and resource estimation has focused on the west end of the deposit in an area measuring 2.4 km north-south by 4 km east-west. The local geological setting and degree of local lithium grade variations, within the modeled area, are adequately known for the Thacker Pass Deposit to allow for NI 43-101 compliant resources estimation. Reserve estimates will be presented in the upcoming Prefeasibility Study.

8. Deposit Types

8.1 Lithium Mineralization

Lithium enrichment in the Thacker Pass Deposit and deposits of the Montana Mountains occur in the lowest portions of the caldera lake sedimentary sequence, just above the intra-caldera Tuff of Long Ridge. The uplift of the Montana Mountains during both caldera resurgence and Basin and Range faulting led to increased rates of weathering and erosion of a large volume of caldera lake sediments. As a result, the deposits of the Montana Mountains have minimal overburden and the Li-enriched interval occurs close to the surface. Along the southern and eastern margins of the Montana Mountains, caldera lake sediments dip slightly away from the center of resurgence.

Dips on the sediments in the vicinity of the Thacker Pass Deposit were slightly restored during the collapse event associated with the Tuff of Thacker Creek; most of the sediments within this deposit are sub-horizontal. Because of the lower elevations in Thacker Pass, a smaller volume of the overburden eroded south of the Montana Mountains. As a result, the amount of overburden increases with distance from the Montana Mountains. The proposed pit mining activity is concentrated along the southern margin of the Montana Mountains in Thacker Pass where lithium enrichment is close to the surface with minimal overburden.

The exact cause for the Li enrichment in the caldera lake sediments is still up for debate. Benson et al. (2017b) demonstrated that the parent rhyolitic magmas of the McDermitt Volcanic Field were enriched in lithium due to assimilation of approximately 50% continental crust during magma genesis. In their model, eruption of the Tuff of Long Ridge and the collapse of the McDermitt Caldera resulted in a large volume of Li-enriched glass, pumice, and ash on the surface of the earth near the caldera. Subsequent weathering transported much of this lithium into the caldera which served as a structurally controlled catchment basin. Benson et al. (2017b) further hypothesize that Li-enriched clays then formed under low-temperature and low-pH hydrothermal conditions primarily along the ring fractures of the caldera.

New assay data from the 2017 exploration drilling program indicates that the Li-enriched interval is laterally extensive throughout the southern portion of the caldera, just above the intra-caldera Tuff of Long Ridge. This suggests that the formation of the Li clays is not associated with hydrothermal activity, but rather due to burial diagenesis and/or primary erosional processes. Burial diagenesis is consistent with XRD data that show a transition from smectite to illite with depth in the caldera lake sequence. The smectite-illite diagenetic transformation is well-documented in sedimentary basin literature and occurs at temperatures expected within a caldera lake sequence (e.g. Pytte and Reynolds, 1989).

Because the sub-horizontal deposit occurs just above the intra-caldera tuff, it is also possible that immediately following collapse, a large volume of loose Li-enriched glass and pumice was sitting within and near the edge of the caldera. This material would have had a relatively high surface area from which Li could be easily leached by meteoric fluids and deposited into the caldera lake. In this scenario, as the Li-enriched glass and pumice eroded away with time, the resulting Li enrichment in the caldera lake would decrease up-section, towards the edges of the lake.

Additional work is required to understand the exact origin of this deposit. It is likely that a combination of hydrothermal (Benson et al, 2017b), diagenetic, and erosional processes played a role in the formation of the HG Li deposits in the McDermitt Caldera.

8.2 Basis of Exploration

Caldera lake sediments of the McDermitt Caldera contain elevated Li concentrations compared to other sedimentary basins. Although the exact genesis of the Li enrichment processes is not fully understood, exploration activities have been based on the caldera lake model described above. Exploration results support the proposed model and have advanced the understanding of the geology of the Thacker Pass Deposit. As a result, Measured, Indicated, and Inferred Resources have been identified to form the basis of the Thacker Pass Project.

9. Exploration

9.1 Thacker Pass

Prior to the 2010 drilling campaign, exploration consisted of:

a) geological mapping to delineate the limits of the McDermitt Caldera moat sedimentary rocks, and

b) drilling to determine grade and location of mineralization.

Survey work was completed prior to 1980 under Chevron's exploration program. Most of the project area has been surveyed by airborne gamma ray spectrometry, in search of minerals such as uranium. Lithium became the primary focus of exploration from 2007 onward.

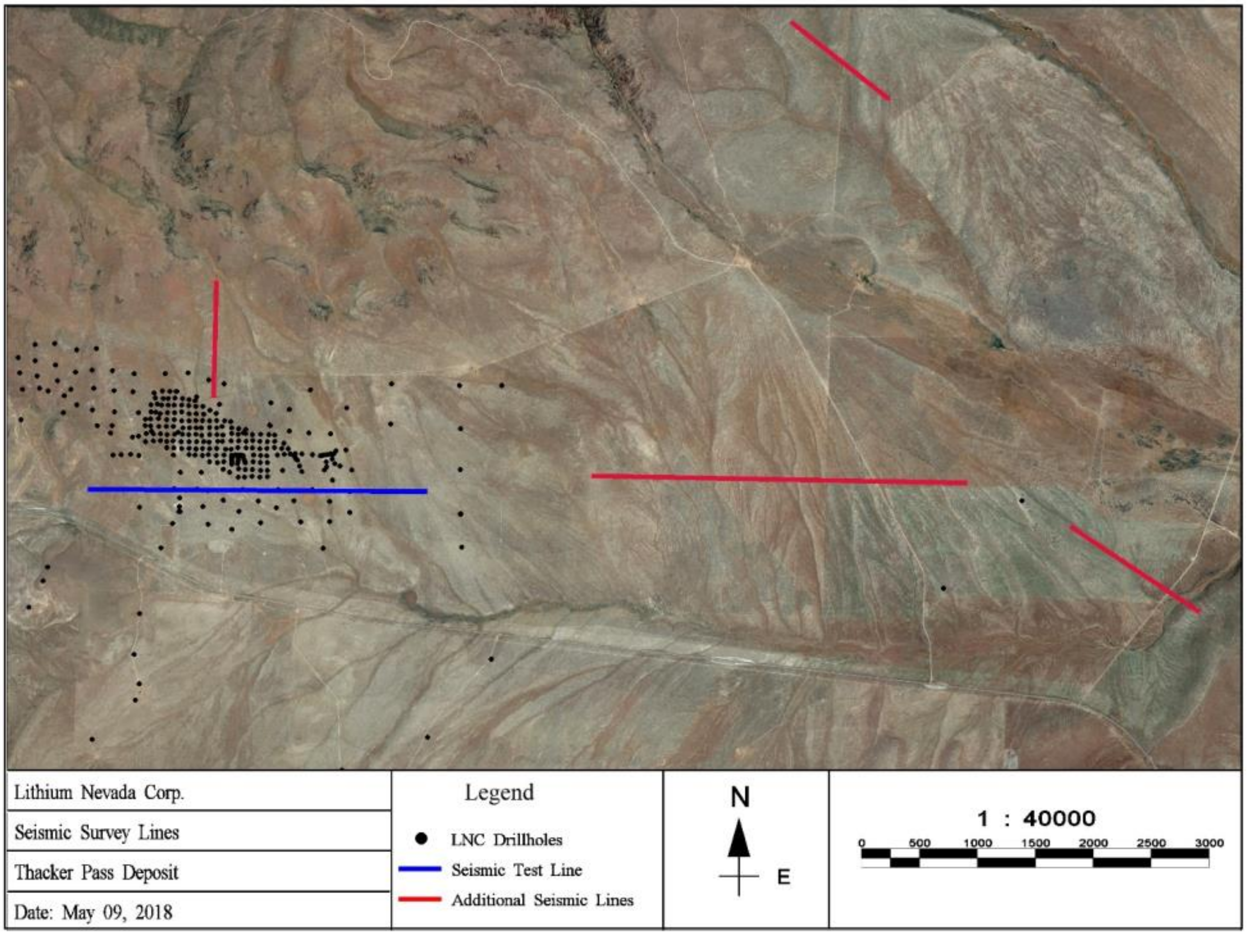
A collar survey was completed by LNC for the 2007-2008 drilling program using a Trimble GPS (Global Positioning System). At that time the NAD 83 global reference system was used. Comparing LNC's survey work with that done by Chevron showed near-identical results for the easting and northings, elevations were off by approximately 3 m and were corrected in order to conform with earlier Chevron work.

The topographic surface of the project area was mapped by aerial photography dated July 6, 2010. This information was obtained by MXS, Inc. for LNC. The flyover resolution was 0.35 m. Ground control was established by Desert-Mountain Surveying, a Nevada licensed land surveyor, using Trimble equipment. Field surveys of drill hole collars, spot-heights and ground-truthing were conducted by Mr. Dave Rowe, MXS, Inc., a Nevada licensed land surveyor, using Trimble equipment.

In addition to drilling in 2017, LNC conducted five seismic survey lines (Figure 9-1). A seismic test line was completed in July 2017 along a series of historic drill holes to test the survey method's accuracy and resolution in identifying clay interfaces. The seismic results compared favorably with drill logs. As illustrated in Figure 9-2, the green line represents the base of the clay deposit and the yellow line shows the general dip direction to the east. Four more seismic survey lines were commissioned in the Thacker Pass Project area (Figure 9-1). The additional seismic lines provide a more complete picture of the distribution, depth, and dip of clay horizons around the edge and center of the moat basin.

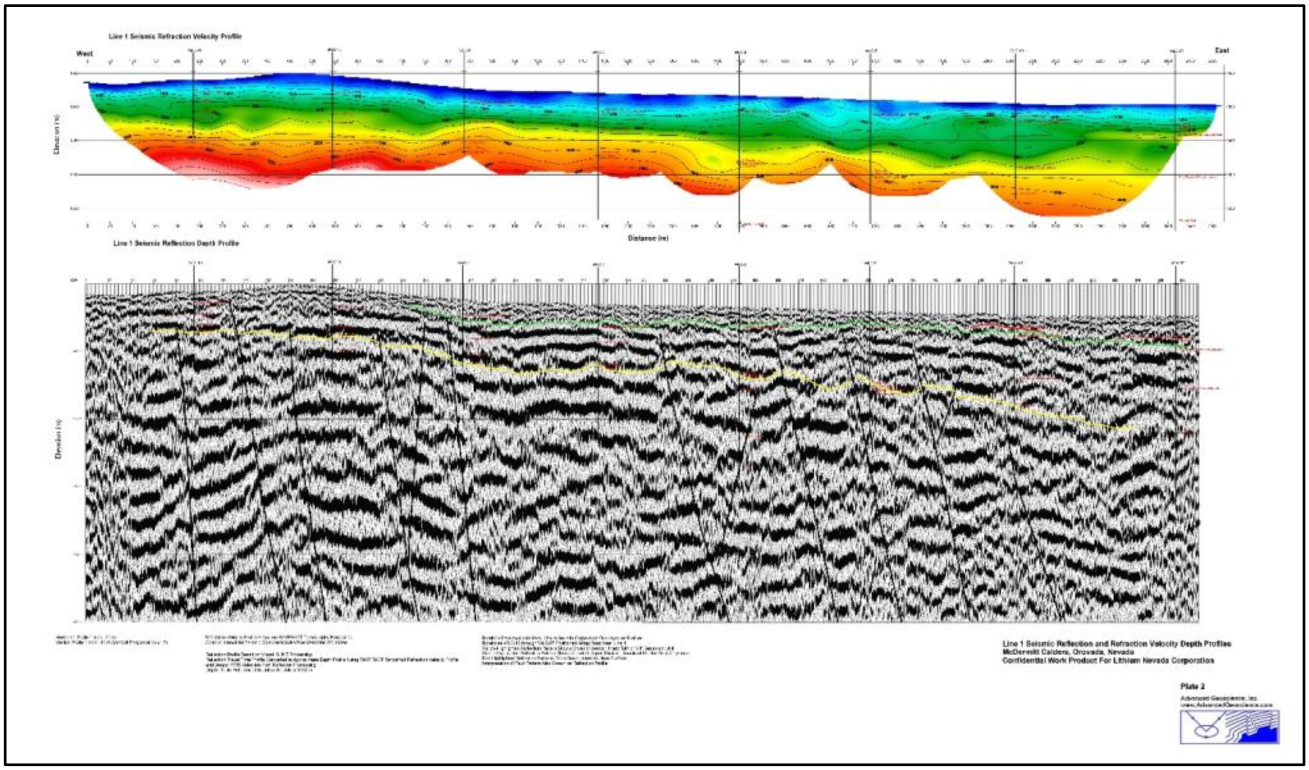
Drilling methods were compared to test for sample bias, using core drilling as the standard. Rotary, sonic, and reverse circulation drilling all showed slight sample biases when compared to core drilling. Only core holes were used for resource modeling to minimize the chance of sample bias. Mr. Randal Burns believes that the drilling, logging, and sampling techniques procedures used are of reasonable quality and representative of the deposit. In the Thacker Pass Deposit, sample assays, geologic logging and area domains by structural faults were incorporated into the block model. This dataset is adequate for resource grade estimation.

Figure 9-1 Locations of Seismic Surveys Conducted in 2017



Source: Lithium Nevada Corp. (2018)

Figure 9-2 Results from the Seismic Test Line (Blue Line in Figure 9-1)



Source: Lithium Nevada Corp. (2017)

9.2 Lithium Deposits in the Montana Mountains

Exploration of areas north of the Thacker Pass Deposit in the Montana Mountains have consisted of geological mapping and drilling. Some, if not most, of the area has been covered by airborne gamma ray spectrometry. However, that data is not directly relevant to lithium exploration. Chevron drilled 234 holes in the 1970s and 1980s that broadly outlined the lithium deposit. In 2009, LNC drilled 38 HQ core holes (SP-001 through SP-038) in the southern part of the Montana Mountains to better define a known lithium area for resource estimation. Although this data is useful in understanding the regional geology and exploration model, this report only focuses on the Thacker Pass Deposit as a target for development.

9.3 Additional Exploration

Regional mapping of the McDermitt Caldera has been conducted by the Nevada Bureau of Mines. This mapping has been used to outline the McDermitt Caldera moat sediments that host the lithium bearing claystone. LNC exploration geologist, Dr. Thomas Benson, has also conducted mapping and analytical work within the southern area of the McDermitt Caldera.

10. Drilling

10.1 Type and Extent of Drilling by LNC

The Thacker Pass Deposit area has been explored for minerals since the 1970s. Exploration began with a focus on uranium, but switched to lithium in the late 1980s when Chevron still controlled the mineral interest. LNC drilled 54 core holes between 2007 and 2009 to expand on the work Chevron had done.

These holes were drilled with the primary aim of defining the lithium occurrences within the known deposit area. Table 10-1 lists a summary of holes drilled. Thirty-seven core holes (WLC-001 through WLC-037) were drilled specifically for assay and lithologic information. Eight RC holes were drilled to compare drilling techniques.

The RC drilling method biased assay results so the method was abandoned. Seven PQ-sized core holes were drilled with the intent to provide samples for metallurgical test work. Two sonic holes were drilled to test the drilling method; it was determined that the lithologic sample quality was not comparable to traditional core drilling and therefore sonic drilling was abandoned.

Table 10-1 LNC Drill Holes Provided in Current Database for the Thacker Pass Deposit

Drilling Campaign	Number Drilled	Type	Hole IDs in Database
Chevron	24	Rotary	PC-84-001 through PC-84-012, PC-84-015 through PC-84-026
	1	Core	PC-84-014c
LNC 2007-2010	230	HQ Core	WLC-001 through WLC-037, WLC-040 through WLC-232
	7	PQ Core	WPQ-001 through WPQ-007
	8	RC	TP-001 through TP-008
	2	Sonic	WSH-001 through WSH-002
LNC 2017	77	HQ Core	LNC-001 through LNC-048, LNC-057 through LNC-85

Notes:

*Assay results were not available from the lab for LNC-057 through LNC-085 at the time of resource estimation.

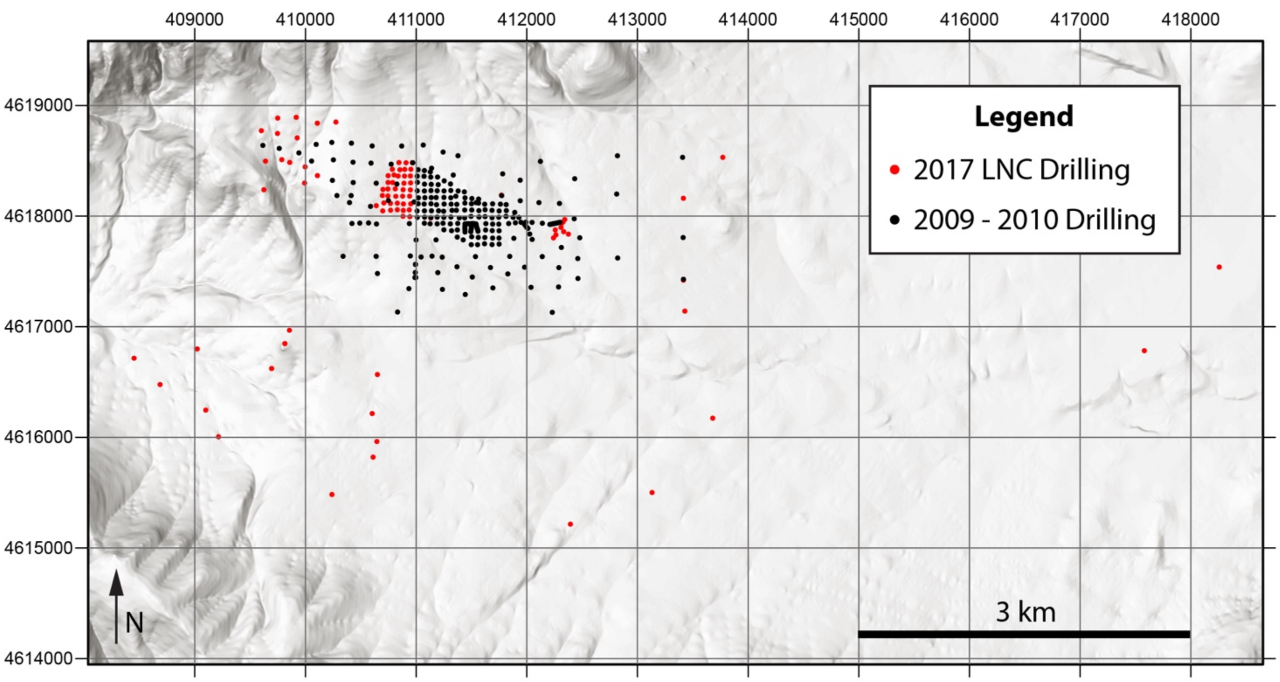
Holes LNC-049 through LNC-056, which were drilled to target shallow industrial clay resources for Lithium Americas' subsidiary, RheoMinerals Inc., were not tested for lithium, and therefore were not used in the Resource Estimate.

In 2008, LNC drilled five confirmation HQ core drill holes (Li-001 through Li-005) to validate the Chevron drilling results. Five historic Chevron drill holes that are broadly distributed across the Montana Mountains were selected to twin. Results demonstrated that the Chevron assay data was reliable enough to guide further exploration work.

From January 2010 through June 2011, and again from August 2017 through December 2017, LNC initiated a definition drilling campaign to define a Measured and Indicated Resource for lithium (Figure 10-1). All cores were logged by geologists on-site who recorded the hold ID, easting, northing, elevation, total depth, and lithologic description.

LNC conducted exploration drilling in June 2017, drilling 22 widely spaced HQ core holes. Results of this work help expand the known resource to the northwest of the 2009-2010 drilling, identify a target south of the highway in an area designated the Southwest Basin (SW Basin), and further understand the local geology across Thacker Pass. All anomalous amounts of lithium occurred in clay horizons.

Figure 10-1 Drill Hole Map of Thacker Pass Deposit



Source: Lithium Nevada Corp. (2018)

Assays for drill holes prior to January 2010 (WLC-001 through WLC-037) had analytical work done by American Assay Labs (AAL) in Nevada. The AAL results failed multiple quality control checks and was determined unfit to use in the resource model. As a remedy, these holes had assays repeated in 2010 by ALS Minerals (ALS) in Reno, Nevada who now perform all assay work for LNC. The re-assayed samples only reported lithium grade while all other results include ALS' entire ME-MS61 ICP suite of 48 elements. Assay interval length was chosen by the geologist based on lithology and claystone color.

Optimal drill hole spacing for Inferred, Indicated, and Measured categories was determined by geostatistical methods based on the results of the first 37 drill holes (WLC-001 through WLC-037). The core of the drill holes used in the geologic and grade model are shown in Figure 10-2. The Chevron drill holes were excluded from consideration in the grade model due to unknown sample quality controls at the time of drilling.

Figure 10-2 Photograph of Core after Geologic Logging

10.1.1 Logging

During Chevron's exploration tenure, core was collected from the drills twice a day and descriptively logged by geologists at Chevron's field camp. Chip samples from rotary drills were logged at the drill site. Two composite samples were collected every 5 ft. and bagged. The geologist logging the hole made a chip board at the drill site. The chipboards consisted of drill cuttings glued to a 25.4 mm by 101.6 mm board whose vertical scale was 25.4 mm = 3.48 m. Lithological logging of both core and chip samples highlighted lithologic units, contacts, mineralization, alteration, and brecciation.

LNC core was collected once a day and transported back to the LNC secure core shed outside Orovada, Nevada. Core was cleaned and logged for lithology, oxidation, alteration and core recovery. All cores were photographed with high resolution digital cameras and samples were stored in locked buildings accessible by LNC personnel or contractors.

10.2 Additional Drilling in Thacker Pass Deposit

10.2.1 Clay Properties Drilling

In 2017, eight drill holes (LNC-049 through LNC-056 and LNC-086) were drilled to depths less than 50 ft. to collect samples for LNC's subsidiary RheoMinerals Inc. for exploration of industrial clay. These samples were not geologically logged nor assayed. These samples are not included in the resource estimation.

10.2.2 Geotechnical Drilling

In 2017, three drill holes (LNC-083 through LNC-085) were drilled to collect geotechnical information. The majority of the drill holes were drilled using normal HQ core drilling practices. Each hole had samples collected by a contract geotechnical engineer at the drill rig. After the geotechnical samples were collected, the drill hole was logged and sampled by LNC employees or contractors. The geotechnical samples were not assayed for lithium, and were recorded as such in the database. The geotechnical samples were sent to Solum Consultants Ltd. for geotechnical testing. The results of their work determined the safety factors to use on the engineered mine pit wall slopes.

In April 2017, two auger holes were drilled down 15 m to characterize the ground strength for infrastructure support. The geotechnical samples were sent to Solum Consultants ltd. for geotechnical characterization. No samples were collected for assay.

10.3 Surveying

Claim surveying for Chevron was performed by Tyree Surveying Company, Albuquerque, New Mexico and Desert Mountain Surveying Company, Winnemucca, Nevada. According to Chevron (1980), both companies used theodolites and laser source electronic distance meters to survey the claims. Records show that both companies were contracted to survey the drill hole locations. It is presumed that the same instrumentation was used for the collar locations. The reported error was within 0.1515 m horizontally and 0.303 m vertically. The survey coordinates were reported in UTM NAD 27.

Collar surveying for LNC for the 2007-2008 drilling program used a Trimble GPS using the UTM NAD83, Zone 11 coordinate system. The collar locations for the Chevron drill holes were updated to the NAD83 coordinate system at that time. Comparing LNC survey work with that done by Chevron showed near identical results for the easting and northings; elevations were off by approximately 3 m and were corrected in order to conform to earlier Chevron work.

Collar surveying for the 2017 LNC drilling campaign was conducted using a handheld Garmin 62S GPS set to UTM NAD83 Zone 11 with accuracy of ±3 m. In December 2017, a high-resolution LiDAR and aerial photo survey of Thacker Pass was conducted in November of 2017 by US Geomatics with a reported accuracy of ±0.08 m. The collar elevations of the 2017 drill holes were then corrected in the drill hole database to the surveyed surface elevation. The average change was an increased elevation of 0.286 m.

From 2009 to 2010, gyroscopic downhole surveys were conducted on selected holes to verify the holes were not deviating from vertical. Holes drilled in 2017 were down hole surveyed whenever the depth exceeded 100 ft. All holes were drilled were vertical or nearly vertical with the exception of WLC-058 (Az: 180^{o} Dip: -70^{o}) and LNC-083 (Az: 180^{o} Dip: -60^{o}) which were intentionally drilled at an angle.

10.4 Accuracy and Reliability of Drilling Results

The Thacker Pass Project is known for significant amounts of lithium contained in sub-horizontal clay beds in the McDermitt Caldera. Historic and modern drilling results show continuous lithium grade ranging from 2,000 ppm to 8,000 ppm lithium over great lateral extents. There is a continuous high grade sub-horizontal clay horizon that exceeds 5,000 ppm lithium across the project area. This horizon averages 1.47 m thick with an average depth of 56 m down hole. The lithium grade for several meters above and below the HG horizon typically ranges from 3,000 ppm to 5,000 ppm lithium. The bottom of the deposit is well defined by an hydrothermally altered oxidized ash that contains less than 500 ppm lithium, and often sub-100 ppm lithium. All drill holes, except WLC-058 and LNC-083, are vertical which represent the down hole lithium grades as true-thickness and allows for accurate resource estimation.

The drilling techniques, core recovery, and sample collection procedures provided results that are compliant with NI 43-101 standards. There are no drilling, sample, or recovery factors that materially impact the accuracy and reliability of results. The data is acceptable for NI 43-101 compliant resource estimation.

11. Sample Preparation, Analyses, and Security

11.1 Quality Program Development

The QA/QC protocols used during the Thacker Pass Deposit sampling and analytical program were developed by Dr. Barry Smee of Smee & Associates Consulting Ltd., an international specialist in QA/QC procedures who is familiar with the requirements of NI 43-101. LNC (Mr. Randal Burns, Senior Geologist) evaluated the QA/QC procedures used prior to 2017 and adopted the same procedures for the 2017 drilling campaign.

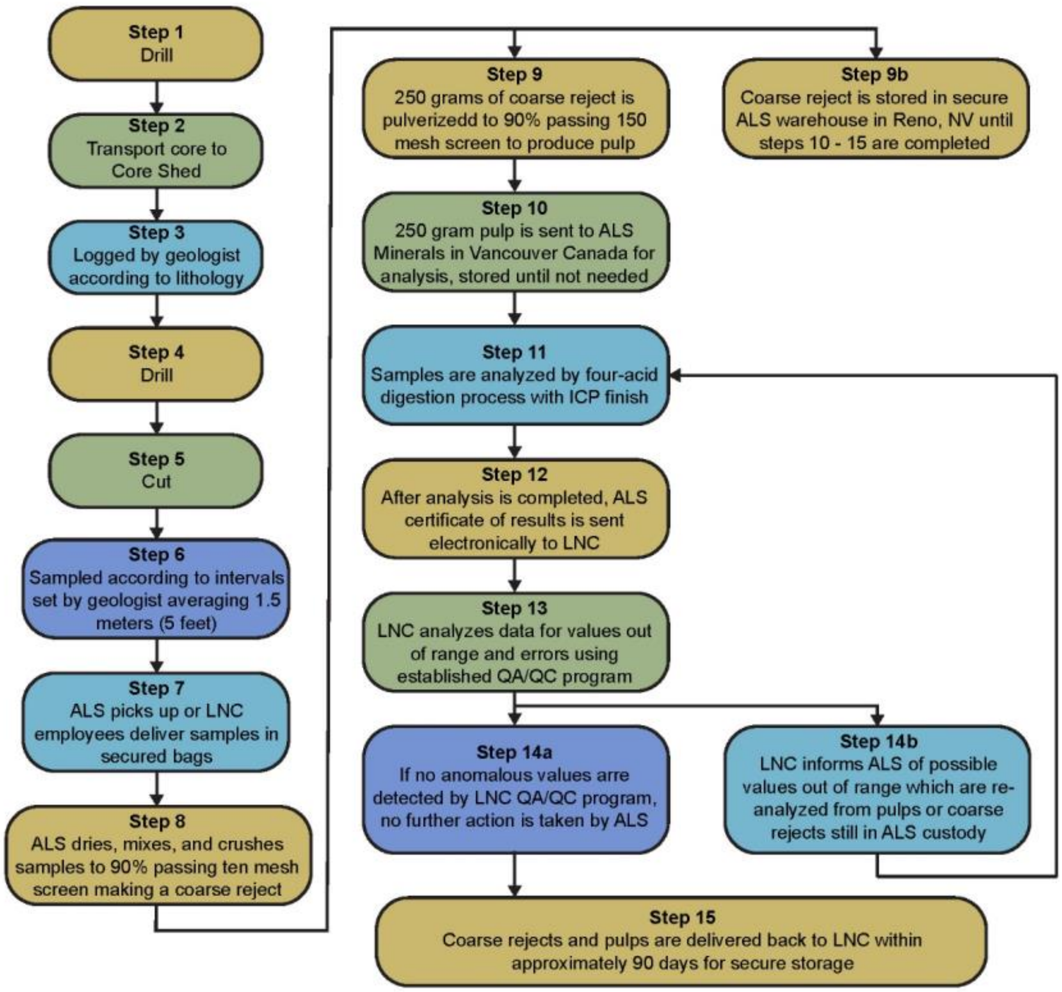
ALS of Reno, Nevada, was used as the primary assay laboratory for the LNC Thacker Pass drill program. ALS is an ISO 9001:2000-certified laboratory and an ISO/IEC 17025-certified Quality Systems Laboratory. ALS participates in the Society of Mineral Analysts round-robin testing.

ALS is an independent laboratory without affiliation to LNC.

The QA/QC program employed by Chevron is uncertain, and therefore data collected by Chevron are not used for resource estimation.

A sample work flow diagram is presented in Figure 11-1.

Figure 11-1 Work Flow Diagram for Geological Samples



11.2 Sample Preparation

After the drilled core was brought to the secure LNC logging and sampling facility in Orovada, Nevada, the boxes of core were lithologically logged, photographed, cut, and sampled by LNC employees and contractors. The length of the assay samples were determined by the geologist based on lithology. Average assay sample length is 1.52 m. The core was cut in half using a diamond blade saw and fresh water (Figure 11-2). Half the core was placed in a sample bag.

Figure 11-2 Half Core Sawed by a Diamond Blade

For duplicate samples, one half of the core would be cut in half again, and the two quarters would be bagged separately. Each sample was assigned a unique blinded sample identification number to ensure security and anonymity. The samples were either picked up by ALS by truck or delivered to ALS in Reno, Nevada by LNC employees.

Once at ALS, the samples were dried at a maximum temperature of 60 deg. C. The entire sample was then crushed with a jaw crusher to 90% passing a 10 mesh screen. Nominal 250-gram splits were taken for each sample using a riffle splitter. This split is pulverized using a ring mill to 90% passing a 150 mesh screen.

11.3 Analysis

LNC used ALS' standard ME-MS61 analytical package. This provides analytical results for 48 elements, including lithium. The method used a standard four-acid digestion followed by an atomic emission plasma spectroscopy (ICP-AES) analysis to ensure that elevation metal concentrations would not interfere with a conventional inductively coupled plasma mass spectroscopy (ICP-MS) analysis. Certified analytical results are reported on the ICP-MS determinations.

11.4 Density

LNC submitted 25 core samples from the Thacker Pass Deposit to ALS for density determinations. Density was measured by two methods: 24 samples were tested using the paraffin-coated method (ASTM Designation C914-95), while one sample was tested using the method described by ASTM C127-04 for bulk handling. The material was weighed and recorded, and then the samples were dried at 75 deg. C for 24 hours. The dry material was then weighed again with the weight recorded. A rock density test was then performed on the dry material using a wax immersion procedure. Table 11-1 shows the dry density values that were used in the resource model.

Table 11-1 Average Density Values Used in the Resource Model

Lithology	Average of Density Determination (tonnes per m^3)
Alluvium	1.52
Claystone	1.79
Basalt	2.51
Volcanic Rocks	1.96

11.5 Quality Control

11.5.1 Methods

In 2010, LNC contracted Dr. Smee to develop a QA/QC program. The program included inserting blank, LG standard, HG standard, and duplicate samples into the drill core sample assay sets. At least 10% of the assays were quality control samples to ensure precision and accuracy in the sampling and assaying method.

In 2010, for every 34 half core samples, LNC randomly inserted two standard samples (one LG lithium and one HG lithium), one duplicate sample, and one blank sample. The 2017 quality program was slightly modified to include a random blank or standard sample within every 30.48 m interval and taking a duplicate split of the core (¼ core) every 30.48 m.

The total number of blank, duplicate, and standard samples analyzed by the laboratory during LNC's drilling campaign in Thacker Pass from the 2010 exploration campaign was 12% of the total samples assayed. LNC's 2017 drilling campaign averaged 10.1% of the total samples assayed. This does not include ALS internal check and duplicate samples.

11.5.2 Blank Samples

Blank samples were used to check for cross-contamination between samples at the lab. Blank samples were composed of dolomite sourced from a mine near Winnemucca, Nevada. Dolomite was chosen because it is known to have low lithium content and was, therefore, a good indicator of contamination. A bulk sample was collected and sent to Dr. Smee to be homogenized and certified. A warning limit for lithium was set at 100 ppm by Dr. Smee, which is five times higher than the certified value of 20 ppm lithium. The results of the blank sample checks are presented in Figure 11-3 and Figure 11-4.

Figure 11-3 2010-2011 LNC Drilling Blank Results

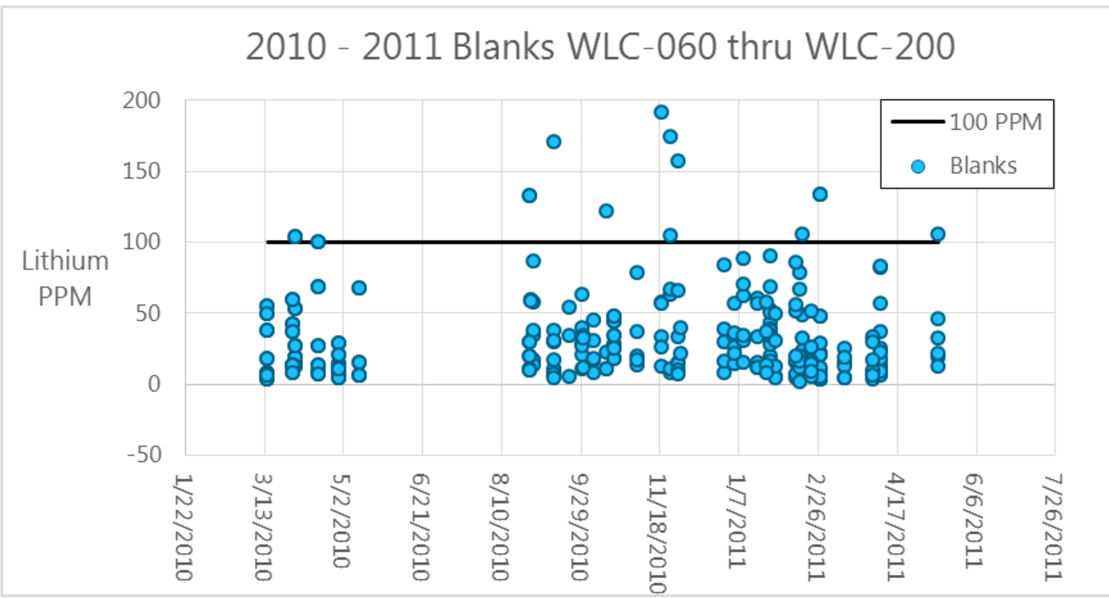
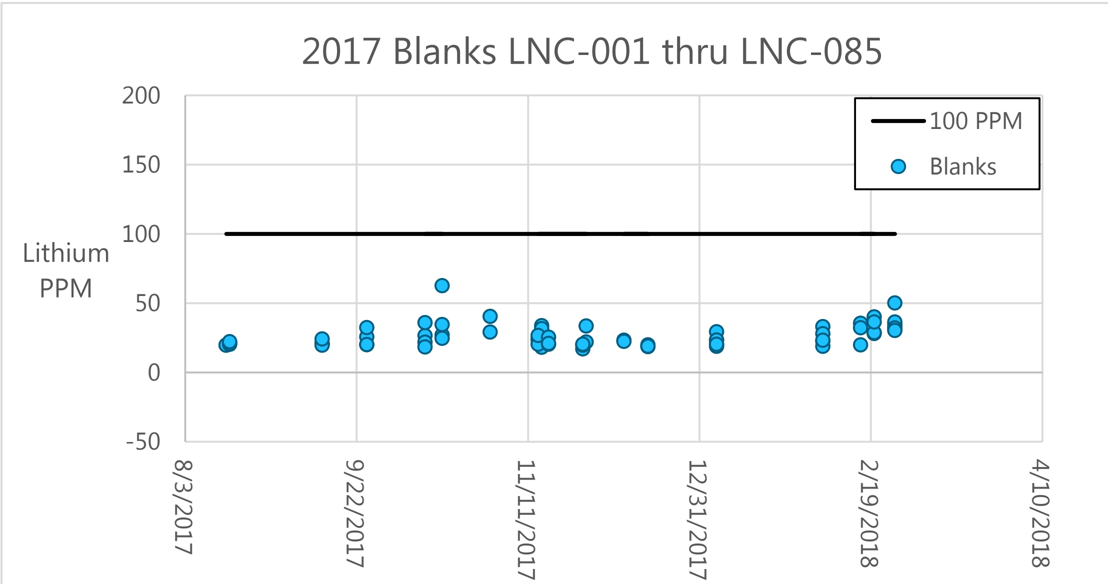


Figure 11-4 2017 LNC Drilling Blank Results



In 2010-2011, LNC identified several blank standards that exceeded the 100 ppm lithium set by Dr. Smee. These samples were submitted for re-assay and their values were confirmed. It is likely that the high values indicate contamination in the crushing or prepping process. The frequency and lithium content amount is not high enough to be concerned about the overall assay results. The LNC 2017 exploration program did not experience any failures of the blank standards, and confirms that cross-contamination at the lab did not occur.

11.6 Standard Samples

Standards consisting of a HG and a LG lithium bearing claystone from the project area were used to test the accuracy and precision of the analytical methods used at the lab.

To create the LG and HG standards, a round robin of assays was completed in June 2010 in which 10 standards of each type were sent to six labs for testing. The resulting assays were evaluated by Dr. Smee to determine an average lithium, potassium, sodium, and fluorine value for each. The results from two of the labs were discarded because the analytical results were substantially different as compared to the other four labs, and therefore thought to be erroneous. Dr. Smee certified each standard with a lithium grade and confidence range of two standard deviations. The LG standard is certified at 3,378 ppm ±511 ppm lithium and GH standard 4,230 ppm ±850 ppm lithium.

Due to the wide grade tolerance each standard is certified for, LNC focused on the repeatability of ALS' assay work for each drilling campaign using the same two standard deviation tolerance set by Dr. Smee. For each batch of certified assays ALS reported, LNC checked that the standards fell within two standard deviations of the median reported lithium grade. Figure 11-5 and Figure 11-6 show the results for the standards at the end of each drilling campaign. The LNC 2010-2011 drilling experienced a number of samples falling outside two standard deviations; however, remained within the tolerance range set by Dr. Smee. During this time, ALS changed their internal lithium HG standard used to calibrate the ICP machine in an effort to improve their consistency. The LNC 2017 drilling campaign showed a much tighter two-standard deviation bracket indicating ALS had improved their lithium assay quality.

Figure 11-5 2010/2011 LNC Drilling QA/QC Results (Black Lines Indicate Two Standard Deviations)

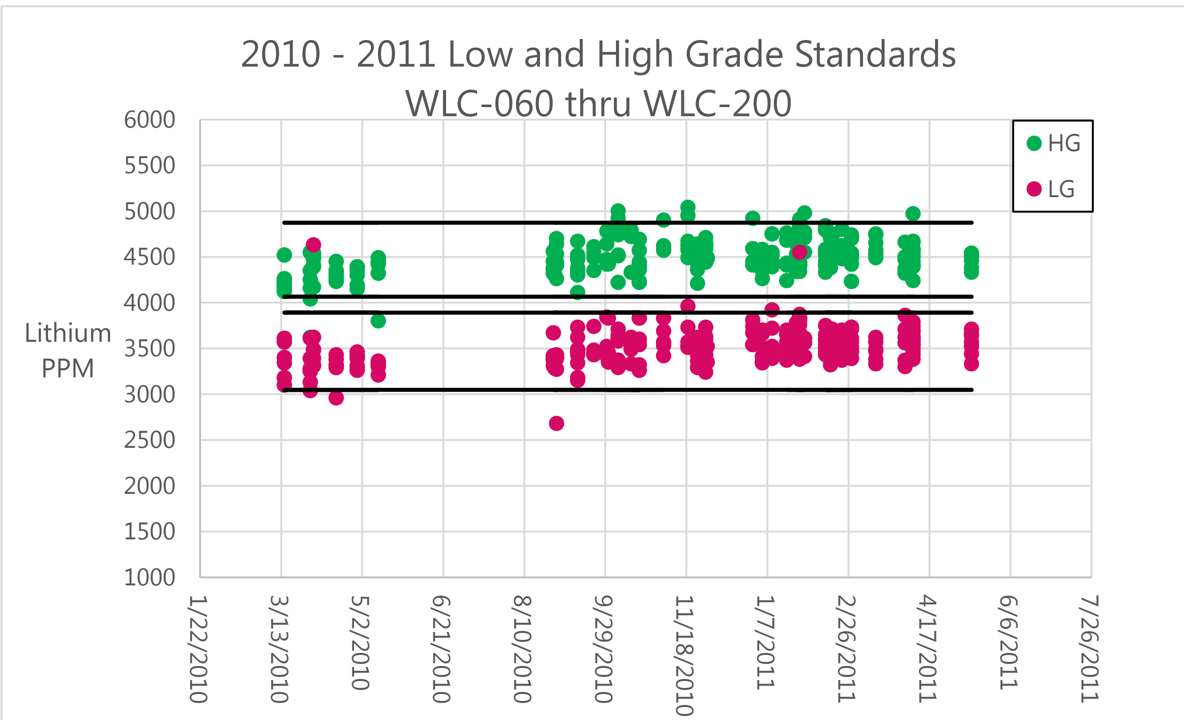
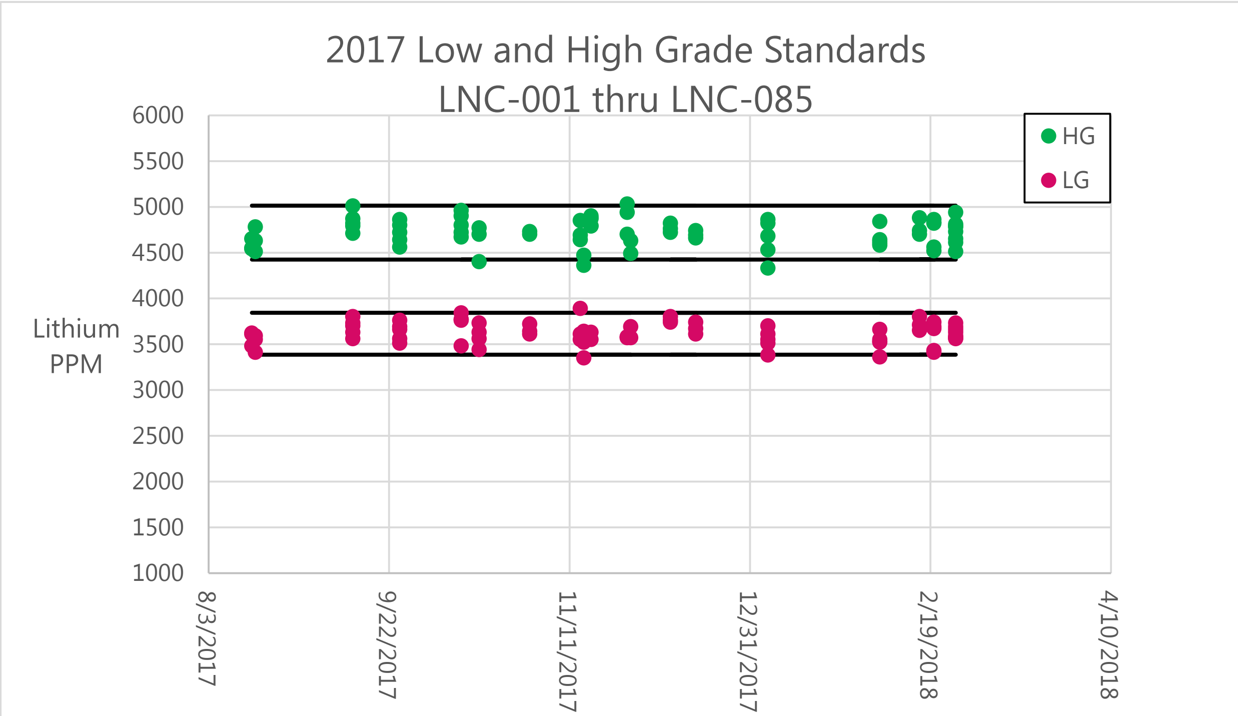


Figure 11-6 LNC Drilling QA/QC Results (Black Lines Indicate Two Standard Deviations)



The HG and LG quality testing was effective in ensuring quality of the results. From 2010 to 2011, samples that fell outside the ranges set by Dr. Smee were re-assayed and new assay certificates issued. No samples were required to be submitted for re-assay by LNC in 2017. However, ALS did re-run some assays that failed their internal checks before a certificate was issued.

11.6.1 Duplicate Samples

Duplicate samples are used to check the precision of the analytical methods of the lab, and were taken every 100 ft. (100 ft., approximately 30 m) of core. The duplicate samples earmarked for analysis were prepared in an identical manner as the non-duplicate samples, beginning with the cut half core being cut in half again (¼ core sampling). The quartered core was bagged and given a blinded sample identification number for characterization at the lab. The results were un-blinded and paired up with the corresponding data in Microsoft Excel. The results of the duplicate sample tests are shown in Figure 11-7 and Figure 11-8.

Figure 11-7 2010-2011 LNC Drilling Duplicate Results

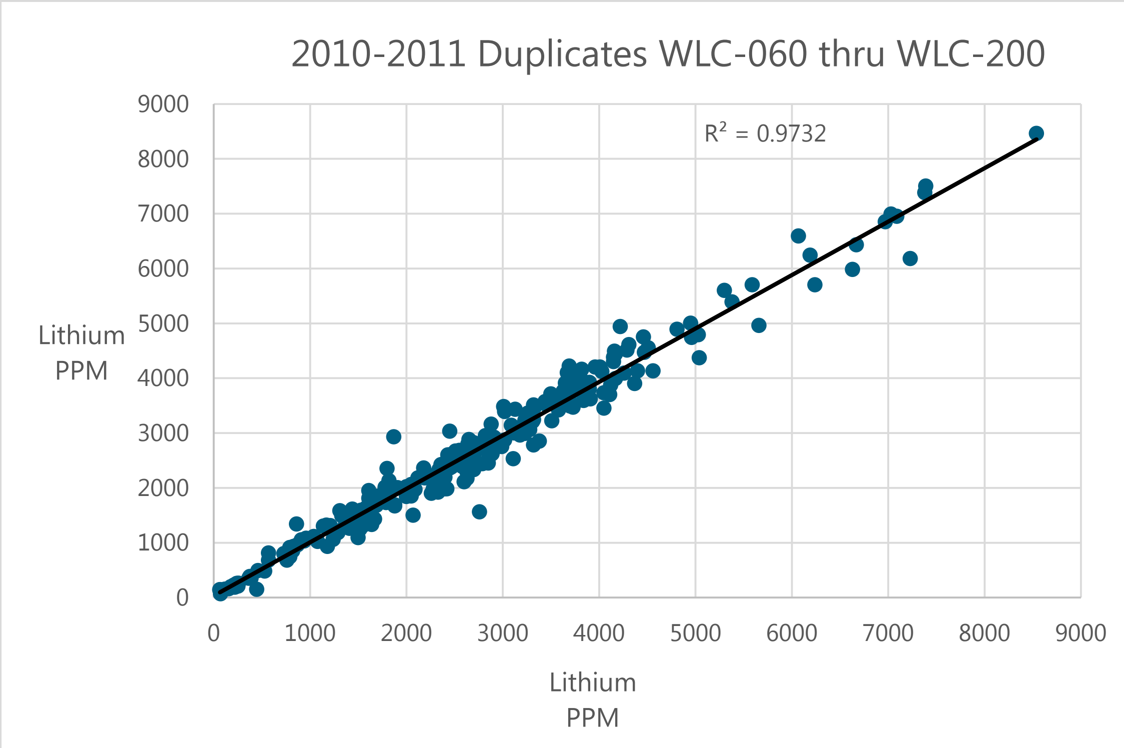
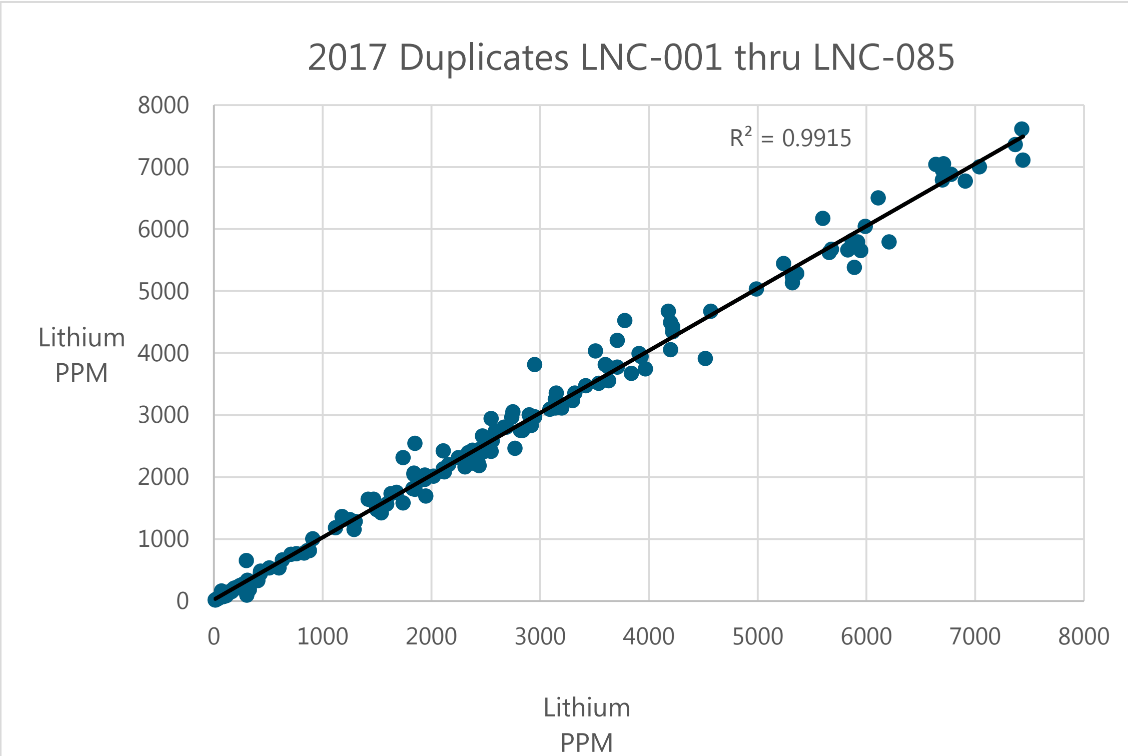


Figure 11-8 2017 LNC Drilling Duplicate Results



The results from the duplicate samples indicate a high level of precision in the sampling and laboratory techniques, and confirm the quality of data and analysis process. Only one sample pair in 178 duplicate pairs was withdrawn from the data set with an assay difference of 3,000 ppm lithium. The lithium grade of these samples ranges from low to very high, demonstrating that there is no grade bias. A R^2 value of 1 is a perfect correlation of every value, and anything above 0.95 is considered by the QP to provide results that are compliant with NI 43-101 standards.

11.7 Discussion of QA/QC Results

The 2010 LNC sampling program was initially seeing a 6% failure rate of the QA/QC samples. 17% of the HG standards were returning lithium grades exceeding three standard deviations of their tested median grade. ALS began using a new higher-grade lithium standard to better calibrate their ICP. LNC then choose the 16 highest lithium values from drill holes WLC-001 through WLC-037 and WLC-040 through WLC-200 to have re-assayed. The samples were sent to both ALS and Activation Laboratories (ActLabs), Ancaster, Ontario Canada for lithium assays. The re-assay grade for ALS and ActLabs was 5% and 3% lower than the original assay, respectively. Dr. Smee concluded that the overall deposit estimate may be lower by at most 2% to 3%, i.e. within industry standards. For further assurance, ActLabs was chosen to run lithium assays on 112 random duplicate pulps generated by ALS in April 2011. The results were within 3% of ALS certified lithium grade.

The 2017 LNC sampling program had consistent quality control results for the duration of the campaign. Duplicate samples returned with an R^2 value of .9915, indicating a high-level of precision in the sampling and laboratory techniques and confirming the validity of QA/QC protocols. The duplicate grades extend from 13 ppm lithium to 7,500 ppm lithium. In addition, the blank and standards sample quality programs indicated that the accuracy and precision of the analytical process provides results that are compliant with NI 43-101 standards.

11.8 Sample Security

At the time of the Chevron drilling, it is unlikely there were any formal sample security measures in place. Therefore, Chevron drilling data are not used in resource estimation by LNC.

Sample security was a priority during the LNC drilling campaigns. Core from the drill site was collected daily and placed in a lockable and secure core logging/sampling facility (steel-clad building) for processing. All logging and sampling was conducted in the secured facility. The facilities were locked when no one was present.

11.9 Qualified Person Statement

The QP is of the opinion that the sample preparation, security, and analytical procedures for the drill data for the Thacker Pass Deposit are adequate for use in a NI 43-101 complaint resource estimation.

12. Data Verification

12.1 Data Verification Procedures

In November 2016, LNC assembled a fully digitized geological database from the original paper drill logs, assay certificates, and relevant data archived on LNC's network drive. This data was compiled into Microsoft Excel spreadsheets and imported into a central Hexagon Mining Torque (Torque) database software, providing a robust method for resource estimation.

LNC maintains a tracking chart in an Excel spreadsheet that is used to match analytical data from ALS (which is provided electronically in the form of both Excel spreadsheets and secured PDF assay certificates) to the intervals logged by the geologists, and referenced to duplicate sample tags (Sample ID) in the core boxes. LNC also maintains a master chart to track and manage QA/QC samples.

Mr. Randal Burns, LNC Senior Geologist, maintains the LNC master blinded sample identification spreadsheet. Blinded sample numbers are paired up with the original assay samples identifications using MS Excel. Both the drill hole samples and QA/QC samples were decoded and paired with the digital assay certificates provided by ALS. The QA/QC samples were parsed out and re-plotted, verifying the QA/QC work done in 2010-2011.

No inconsistency in the assay data was found and only a small number of inconsistencies with lithologic coding was found as the resolution of the geologic data was significantly improved from LNC's 2010-2011 work. These differences were well below 1% of the total interval data reviewed and therefore are not considered significant. However, all have been corrected in the Torque database.

12.2 Drill Core and Geologic Logs

Geologic logs were consolidated from paper archives and scanned PDFs on the LNC network drives. In 2016, each drill log was transcribed into a spreadsheet using the smallest lithologic interval identified in the log to create the highest resolution dataset possible.

During the review of the paper logs, several drill holes were selected at random to compare the core samples to the logs. The logging detail identified small lithologic intervals and structures, but was inconsistent in describing the colors of the clay beds. While the clay color description by the geologist was maintained in the database and in current logging methods, the statistical evidence indicates color is not a marker unit or grade indicator. Clay types are not easily determined visually by a logging geologist. Identifying a color change is simply to identify a condition change during formation not necessarily a clay type change that could indicate grade or otherwise influence lithium extraction processing factors.

In 2017, LNC began systematically estimating the amount of ash as a percentage in each lithologic interval. Previous logging typically recorded an ash percent, but not consistently. Knowing the approximate percentage of ash in a given interval may be of future use; for example, in quantifying lithium grade dilution as a function of ash content.

12.3 Topography

The topographic surface utilized in the estimate was provided by LNC in 3D Digital Terrain Model (DTM) and contour format (DWG file), and was based on aerial photography dated July 6, 2010. The flyover resolution was 0.35 m. Ground control was established by Desert-Mountain Surveying, a Nevada licensed land surveyor, using Trimble equipment. Field surveys of drill hole collars, spot-heights, and ground truthing was conducted by Mr. Dave Rowe, MXS, Inc., a Nevada licensed land surveyor, using Trimble equipment. A comparison of surveyed collars to the topography DTM highlighted inconsistencies for a small number of collars, which were investigated and rectified in conjunction with Mr. Rowe.

Collar surveying for the 2017 LNC drilling campaign was conducted using a handheld Garmin 62S GPS set to UTM NAD83 Zone 11 with accuracy of ±3 m. In December 2017, a high-resolution LiDAR and aerial photo survey of Thacker Pass was conducted in November of 2017 by US Geomatics with a reported accuracy of ±0.08 m. The collar elevations of the 2017 drill holes were then corrected in the drill hole database to the surveyed surface elevation. The average change was an increased elevation of 0.286 m.

12.4 Verification of Analytical Data

All assays used for resource modeling were imported into the Torque database from original assay lab digital certificates. If the digital certificate was not located on the LNC network drives, a certified copy was downloaded from the ALS Webtrieve site. At no time was assay data entered manually into the database.

12.5 Data Adequacy

Based on the various reviews, validation exercises and remedies outlined above, the QP concluded that the data is adequate for use in a NI 43-101 compliant resource estimate.

13. Mineral Processing and Metallurgical Testing

The recent metallurgical test work program undertaken on the Thacker Pass Project was conducted with the objective of developing a viable and robust process flowsheet for the production of HG lithium carbonate.

Information generated from the current test work program was used to define the process variables which in turn were used as a basis in the design of the process flowsheet.

Metallurgical testing of the ore deposit has been performed by various organizations since 2010. The results have been disclosed in a previous technical report[1]. The previous process flow sheet adopted an approach that is based on conventional lithium hard rock processing. Hard rock lithium ore behaves very differently than lithium claystone, primarily because of its genesis. Lithium hard rock ores, such as pegmatite, are formed deep in the Earth's crust under high temperature and pressure, and therefore they must be attacked aggressively with high temperature and strong reagents to liberate the lithium. Claystone is a result of weathering processes and is formed in a less hostile, sedimentary environment. Therefore, a less aggressive, and more cost-effective, process to extract the lithium from claystone is possible.

In 2017, LAC decided to pursue an alternative approach that would reduce overall operational and capital costs, and leverage the physical properties of the soft claystone. To this end, a new process flow sheet that uses conventional leaching and industry-proven purification technology has been developed. Technical indicators obtained from tests so far are encouraging and support continued optimization, pilot testing, and engineering.

Key findings of previous research related to the current project, technical fundamentals of the new process and results are presented in this Section. The data presented herein have been used to validate and design the process flow sheet, as well as the chemical process model (ASPEN®). The test work is categorized and summarized in three Sections 13.1, 13.2, and 13.3.

13.1 Run of Mine (ROM) Clay Comminution and Upgrading

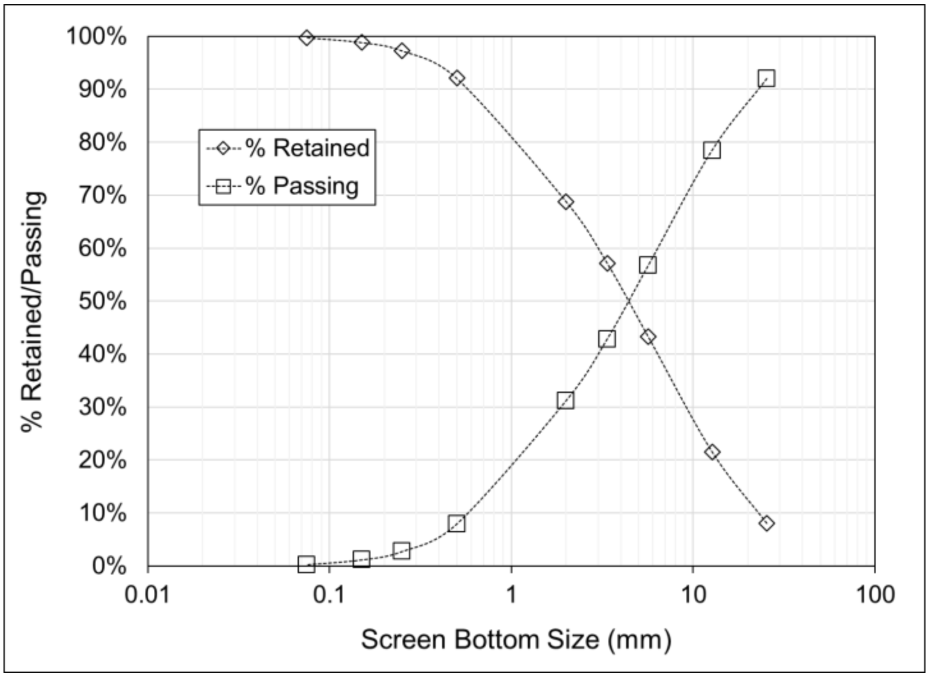
The ROM claystone ore is a unique sedimentary material. It does not behave like traditional hard rock ores that are successfully mined today. Therefore, understanding how to handle the ROM ore and prepare it into feed to the processing plant is necessary for the commercial development of this project.

13.1.1 ROM Clay Ore Characterization

ROM ore was collected from five separate locations around a stockpile located in Winnemucca, Nevada[2]. The stockpile material was collected from a small production pit approximately 300 m east of the current designed economic pit. The pit location was chosen for its low overburden and 10 m to 15 m thick horizon of oxidized hectorite clay. The physical properties of the clay and ash material removed from the production pit are representative of the material within the economic pit shell. A total of 30 kg of material was submitted to ALS Geochemistry in Reno, Nevada for screening and size fraction analysis in February 2018. The samples were dry screened at the following sizes (all in mm): 25.4, 12.7, 5.66, 3.36, 2.0, 0.5, 0.25, 0.15, and 0.075. All size fractions were then analyzed for lithium and other elements via ICP-MS.

The average ROM size distribution via dry screening is shown in Figure 13-1.

Figure 13-1 ROM Size Distribution via Dry Screening[2]



From this data, the ROM P80 size is approximately 13 mm, which indicates that 80% of the measured particles are $\leq$13 mm in size. Also, 8% of the ore was retained on the 25.4 mm screen. ICP results reveal that lithium and other elements of interest are distributed homogeneously throughout the size fractions[2]. More discussion of the clay mineralogy is detailed in Section 7. This information was used to define the design criteria of the size reduction circuit.

13.1.2 Milling/Grinding

Traditional ball or rod mill circuit was considered for milling. However, this technology is challenging for claystone-based ore because:

- Claystone can behave like an adhesive when wet, making it difficult to move when slurried at high percent solids. It would therefore require a large circulating load and low percent solids slurry which results in diminished throughput.
- Claystone is not as structurally competent as traditional hard rock ores. It has unique and unpredictable breakage behavior.

Based on discussions with experienced clay processors and equipment vendors, it was decided that a tooth roll sizer be used as the initial means of particle reduction to effectively deal with the unique qualities of claystone ore.

13.1.3 Alternative Size Reduction Methods

Test observations suggest that further reduction can be easily and cost-effectively achieved via other methods besides traditional milling. The claystone ROM ore exhibits interesting behavior when submerged in water. It visibly swells and readily dissociates into smaller particles. By simply soaking the ore and agitating in water, large particles are reduced in size and the slurry separates into very distinct layers (Figure 13-2).

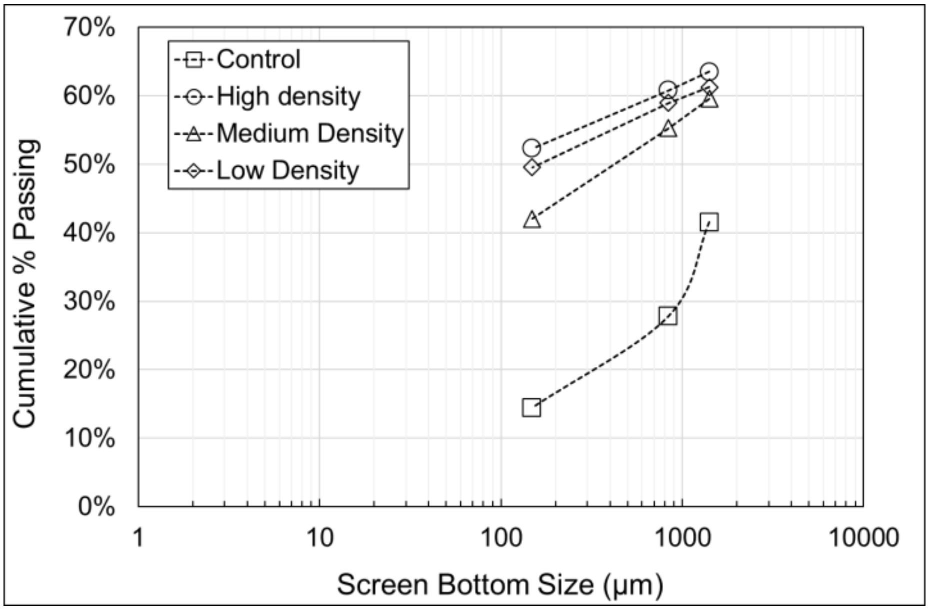
Figure 13-2 Images of Typical ROM Ore (Left) and After Soaking/Agitating in Water (Right)

Based on the ore behavior in water, alternative methods of size reduction were investigated. For these experiments, samples of ROM ore were riffle split into sub-samples.

The sub-samples were then mixed with water to different solids densities to produce slurries with different solids concentrations (high, medium, and low all on a dry basis) and processed. The ROM ore had a native moisture content of 24.72% as measured by a moisture balance. Each slurry was then wet screened at US-standard mesh sizes 14M, 20M, and 100M (1.41, 0.841, and 0.149 mm, respectively). A control sample was wet screened over the same stack. Each screen fraction was dried in an oven at 80 deg. C for two days prior to weighing. The material that passed 100M was calculated by mass balance.

The size distributions of each test sample and the control are shown in Figure 13-3. The wet screen control had 14.5% of the mass passing 0.149 mm, while the treated samples had between 42% to 52% passing 0.149 mm. This demonstrates that the alternative methods had a significant impact on the ore size.

Figure 13-3 Size Distributions of Size Reduction Test Samples



13.1.4 Upgrading

The current process flow sheet does not include any form of traditional ore upgrading.

However, ore upgrading by various methods has been previously studied, including wet light attrition followed by wet screening, wet sonication followed by screening, optical sorting, column elutriation, and wet heavy attrition followed by wet screening[3]. Some of the results were promising, indicating potential to separate a more lithium rich fraction from the ROM ore. Further investigation is recommended to fully understand the impact on the process design and reagent consumption.

13.2 Leaching and Neutralization

Acid leaching is the primary processing circuit step that removes lithium, along with other constituents, from the claystone ore. The leaching conditions can have a dramatic effect on the overall processing cost. Consequently, much work has been performed to identify optimum processing conditions. Following acid leach, a downstream neutralization step purifies the solution and prepares it for further separations.

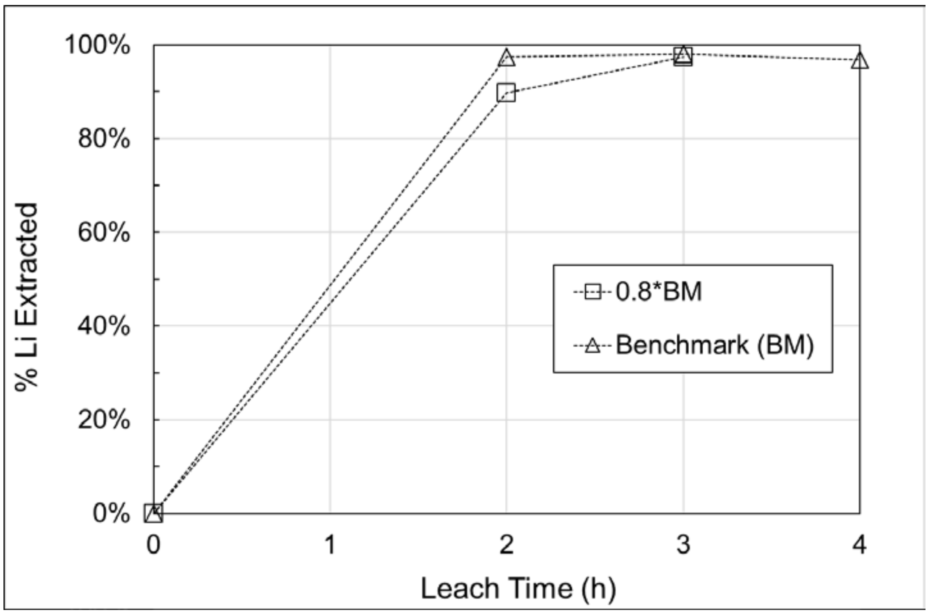
13.2.1 Acid Tank Leaching

13.2.1.1 Acid Concentration and Time

Previous testing campaigns investigated acid concentration effect on lithium extraction[3]. The results showed that increasing the acid concentration increases the rate at which lithium is leached into solution. Acid concentrations of 2 %w to 30 %w were tested and all acid concentrations returned reasonably high lithium extractions after extended time except for the 2 %w case.

Subsequent leaching studies were performed at the laboratories of a large lithium production facility in the winter of 2017[4]. A benchmark H_2SO_4 concentration and a reduced concentration (80% of benchmark) were used to leach clay for two to four hours. The total leachable lithium was measured for extraction efficiency (both in filtrate and wash water). The overall effect of time and acid concentration are shown below in Figure 13-4.

Figure 13-4 Li Leaching Results for Two Acid Concentrations



The results indicate that leaching with the reduced acid concentration for three hours gives the same lithium yield as using higher concentration acid. Using more dilute acid is preferable as it reduces total acid consumption, these results were incorporated into the leaching circuit design.

13.2.1.2 Slurry Density (Percent Solids)

The effect of slurry density, or weight percent solids, on leaching kinetics was investigated[3]. The results showed that a high relative slurry density provides excellent leaching results. Running at higher densities is advantageous from a mass throughput perspective because it reduces operating costs. A high density was assumed for the process flow sheet; however, optimization testing to determine the upper limit of slurry density is recommended.

13.2.1.3 Ore Type

Four different grades of lithium claystone, which combined are representative of the entire ore body, were leached at the process conditions established by previous tests[5]. The solids were filtered then washed with water. The total leachable lithium was measured for extraction efficiency (both in filtrate and wash water). The results are summarized in Table 13-1.

Table 13-1 Summary of Leaching of Different Clay Samples

Trade Name	Li (%)	Li Recovery (%)	Acid Consumption (g H_2SO_4/g LCE)
LG Type 1	0.280	95.75	20.21
LG Type 2	0.281	80.80	30.69
HG Type 2	0.349	91.75	24.49
HG Type 1	0.392	96.95	17.23

The data shows that leach recovery and acid consumption can be dependent on ore type. This information was used in the process model.

13.2.1.4 Acid Recycle

Experiments were performed to examine the potential for recycling the leach solution, which would work towards improving recoveries and reducing the operating costs[6]. Using identical leach conditions as described in Section 13.2.1.1, the recycled leach solution was readjusted to the target acid concentration and the required volume by adding more acid before injection to the next successive leach. Each test was run in triplicate to verify reproducibility.

The results demonstrated that the leach solution could be effectively recycled to improve recoveries and reduce processing costs. The concentration of elements in solution, including lithium, increased as the number of leaches increased. After the second recycle, the solution formed a precipitate ($MgSO_4*7H_2O$) as it cooled, which is advantageous for removing unwanted magnesium in the solution. The amount of acid consumed over the recycle experiments was 22.82 g H_2SO_4/g LCE. These tests demonstrate that a major benefit of recycling the leach solution is generation of a liquor that is more concentrated in lithium, and uses less acid overall per unit lithium, than a single pass leach.

The filtrate of the final recycle leach liquor was saved and used as the 'mother liquor' for further testing (see Section 13.3.2).

13.2.2 Neutralization with $CaCO_3$

Once the clay ore is leached, the pH of the acidic liquor must be raised (neutralized) to remove key contaminants and prepare the solution for subsequent processing steps. Leach liquors generated by the experiments detailed above were neutralized with $CaCO_3$ to identify reagent consumption and kinetic information[7]. The results demonstrated optimum neutralization conditions, such as reagent addition, temperature and residence time.

13.3 Crystallization and Precipitation

Separation of the lithium from other components in post-neutralization solution is critical to obtaining high purity Li_2CO_3 product. Commercially proven crystallization and precipitation technology is a viable option based on the experiments detailed below.

13.3.1 $MgSO_4$ Crystallization

This step of the process purifies the lithium product by using crystallization to remove magnesium (an unwanted element in any final HG lithium product). Solutions representative of process streams were prepared and tested for crystallization/precipitation of $MgSO_4$[8]. A range of crystallization parameters were tested until the optimum conditions were found, where lithium recovery reached ≥98% and half of the magnesium was removed from solution. Important process variables such as Li-Mg concentration ratio, boiling temperature, crystallization temperature, and final liquor concentrations were identified.

13.3.2 Three-Step Purification

The acid recycle "mother liquor" (see Section 13.2.1.4) was used to test stepwise crystallization and precipitation for lithium purification[9]. The experimental work flow is provided Figure 13-5 and can be considered a three-step purification. The first is neutralization ($CaSO_4$ removal), the second is crystallization ($MgSO_4$ removal), and the third is precipitation ($MgOH_2$ and $CaSO_4$). Table 13-2 shows the lithium recoveries of each successive step of the process and the overall lithium recovery.

Figure 13-5 Outline of the Three-Step Purification Work Flow

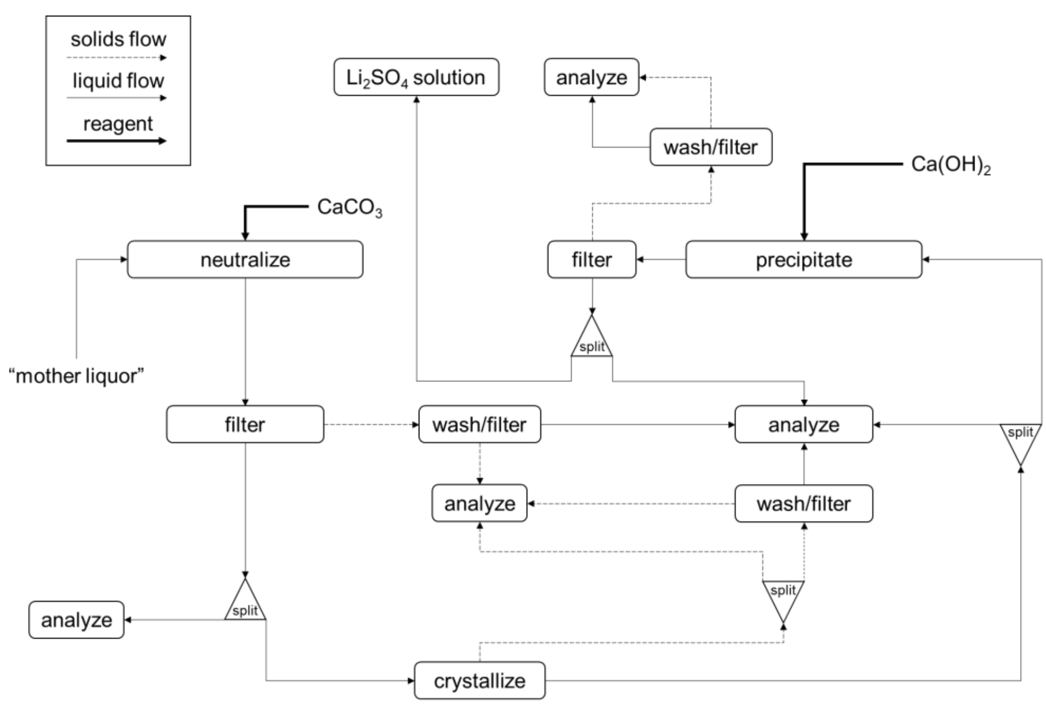


Table 13-2 Recoveries Obtained from Three-Step Purification

Description	Neutralization	Crystallization	Precipitation	Overall
Recoveries	89.3%	99.6%	98.6%	87.7%

A striking difference was observed in the liquid before and after precipitation with $CaOH_2$ (Figure 13-6). The clear lithium sulfate solution obtained after precipitation is readily amenable to lithium carbonate production. The reagent consumptions were estimated from these preliminary experiments and are in good agreement with those predicted in the chemical process model.

Figure 13-6 The Liquid Before (Left) and After (Right) Mg Removal with $CaOH_2$

These results show that a crystallization/precipitation process can be used to isolate a pure Li_2SO_4 product at around 88% recovery and served as a basis for the process design. Conversion of Li_2SO_4 to Li_2CO_3 is achievable with commercially proven and reliable methods.

13.4 Conclusions

All the test work to date has provided valuable information used to validate and design the process flow sheet and the chemical process model, applicable for all grades claystones. Section 13.1 highlights background results used in the comminution and classification circuit design. In Section 13.2, the acid leach and neutralization test work used to design the circuits is described. This information has proved critical in defining the process variables, e.g. reagent volumes and concentrations, physical operating conditions and control parameters. The crystallization and precipitation test work discussed in Section 13.3 has aided in defining design criteria for these separations.

14. Mineral Resource Estimates

14.1 Thacker Pass Deposit

The updated resource discussed in this Technical Report is relevant to the Thacker Pass Deposit only of the Lithium Nevada Project. The UM Claims owned by LNC in the Montana Mountains are not part of the Thacker Pass Project.

Only HQ core samples subject to the QA/QCs outlined in Section 11 of this report and assayed by ALS in Reno, Nevada, were used to estimate the resource.

LNC concluded drilling December 13, 2017 (a mild winter allowed for a long drilling season). To maintain schedule for the Prefeasibility Study (to be completed in Q2/18), a cutoff date of December 21, 2017, was established for reported assays that would make it into the resource estimation. Any assay data received after that were not utilized for this estimate. The grade estimation model relied on the drill holes outlined in Table 14-1.

A map of all drill holes used in the resource estimation is presented in Figure 14-1.

Table 14-1 Drill Holes Used in the Grade Estimation Model

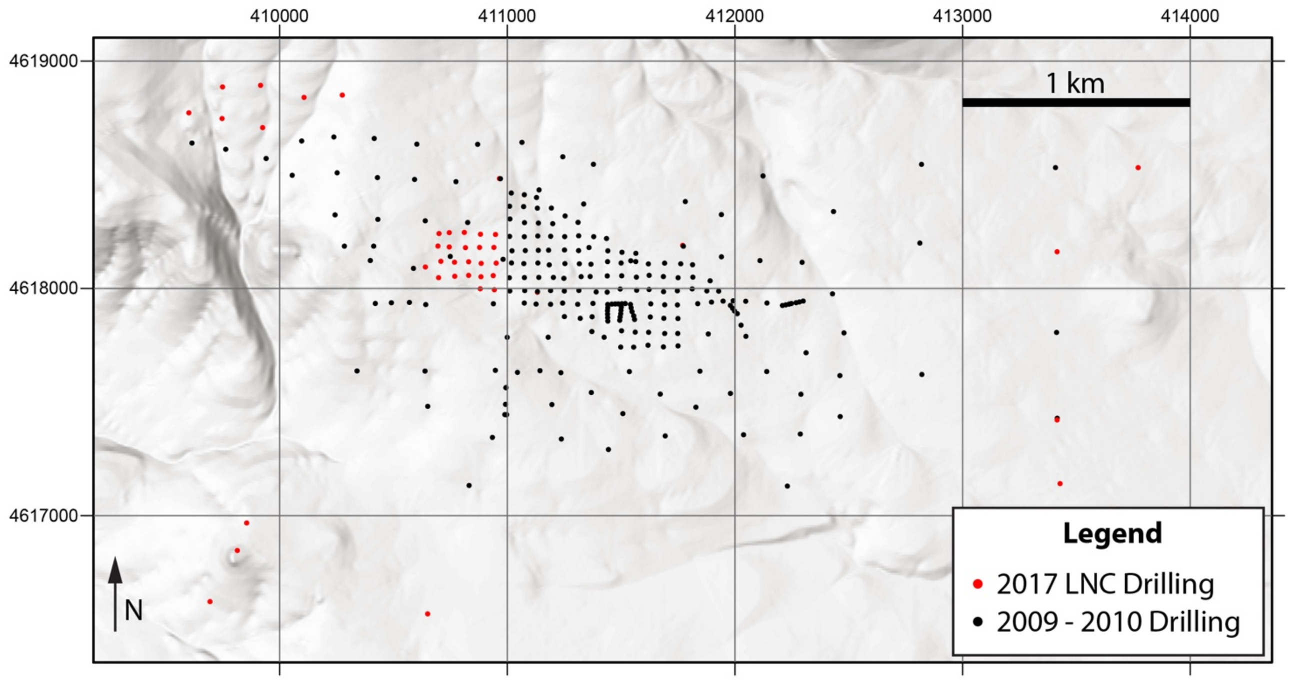
Drilling Campaign	Number Drilled	Type	Hole IDs in Database
LNC 2007-2010	228	HQ Core	WLC-001 through WLC-037, WLC-040 through WLC-215, WLC-218 through WLC-232
LNC 2017	47	HQ Core	LNC-001 through LNC-048*

Note:

*Assay results were not available from the lab for LNC-057 through LNC-085 at the time of resource estimation.

Holes LNC-049 through LNC-056, which were drilled to target shallow industrial clay resources for Lithium Americas' subsidiary, RheoMinerals Inc., were not tested for lithium, and therefore were not used in the Resource Estimate.

Figure 14-1 Drilling Utilized for the Resource Estimate



Source: Lithium Nevada Corp. (2018)

All drill holes used for the grade model except one (WLC-058) are essentially vertical (88.8 degrees to 90 degrees). Regular downhole gyro surveys were conducted to verify this. All mineralization thicknesses recorded are treated as true thicknesses.

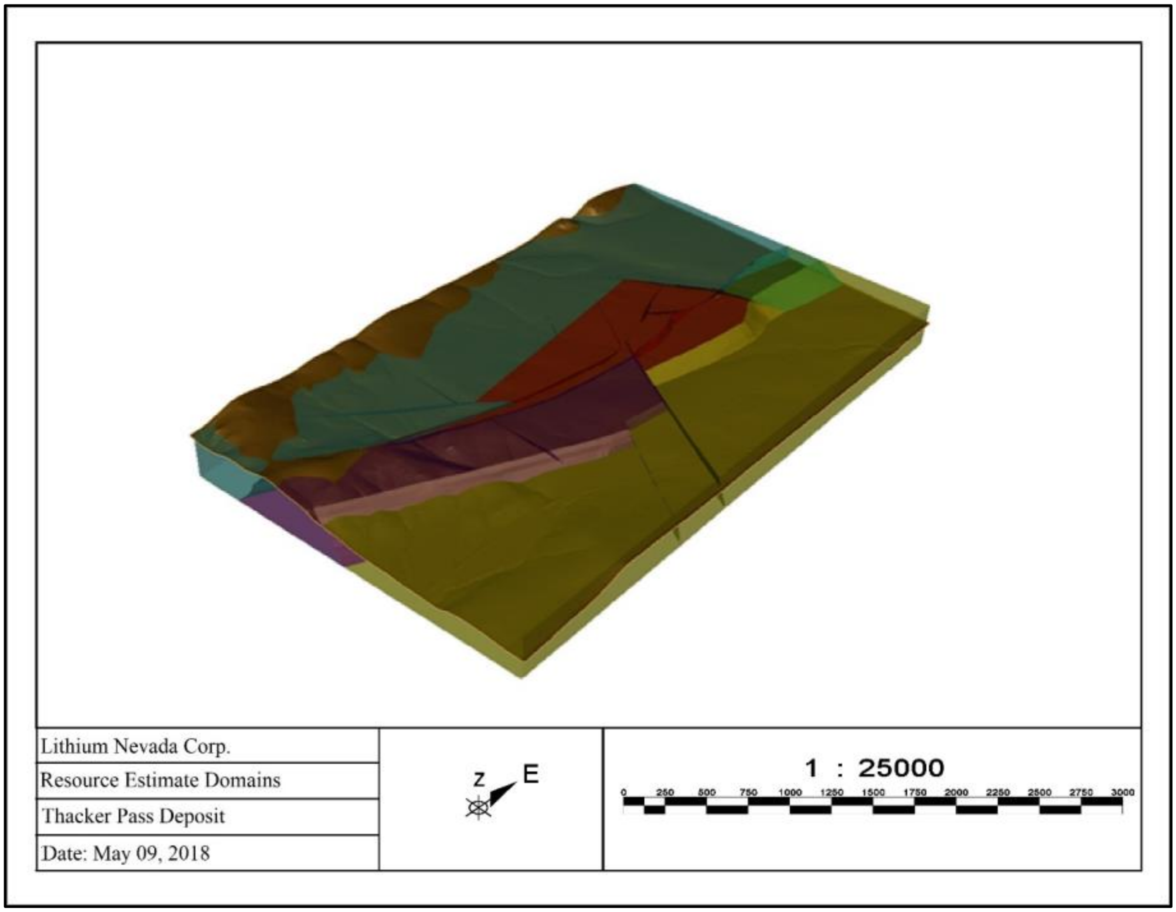
All drill holes used for grade estimation were standard HQ core, drilled using standard techniques by Marcus & Marcus Exploration Inc., now known as Idea Drilling Inc. Core is stored at a secure logging facility while being processed, then locked in CONEX containers or a warehouse after sampling was completed.

14.1.1 Geological Model

A block model was created by LNC geologists. The blocks are tagged through nearest-neighbor interpolation with the relevant lithology, and are 30 m by 30 m by 5 m in size. The block model is not rotated. Due to the complex nature of the horizontal interlayering features, especially in the shallower areas of the deposit (such as crater sediments, alluvium and basalt); no wireframes were utilized in the model construction. This block model was imported into Geovia GEMS and examined for veracity by the QP and found to be a good representation of the logged lithology. This model was subsequently limited by the topography, which was constructed from detailed contour lines and borehole survey data.

As seen in Section 7.2.3, several faults are present in the deposit. After examination of strike and dip of the sediments, six major fault blocks were identified. All modelling was subsequently confined and limited to the fault blocks. In addition, only the core area of the deposit has been modeled, the outer limits of the deposit being undefined. Figure 14-2 illustrates the core modelled area, and the six major fault blocks.

Figure 14-2 Six Fault Blocks Were Modeled for the Thacker Pass Deposit - Block A (Red), Block B (Light Blue), Block C (Purple), Block D (Green), Block E (Yellow) - View from the Southwest



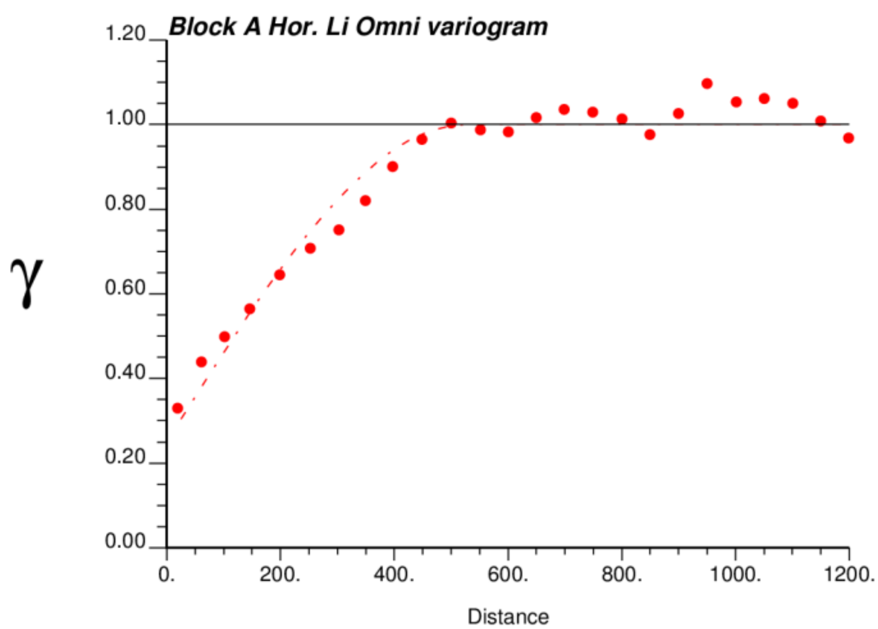
14.1.2 Grade and Mineralogical Interpolation

Variograms were constructed for the Li grade for all fault blocks. A summary of the variography is given in Table 14-2, and an example of one of the variograms in Figure 14-3.

Table 14-2 Variogram Summary

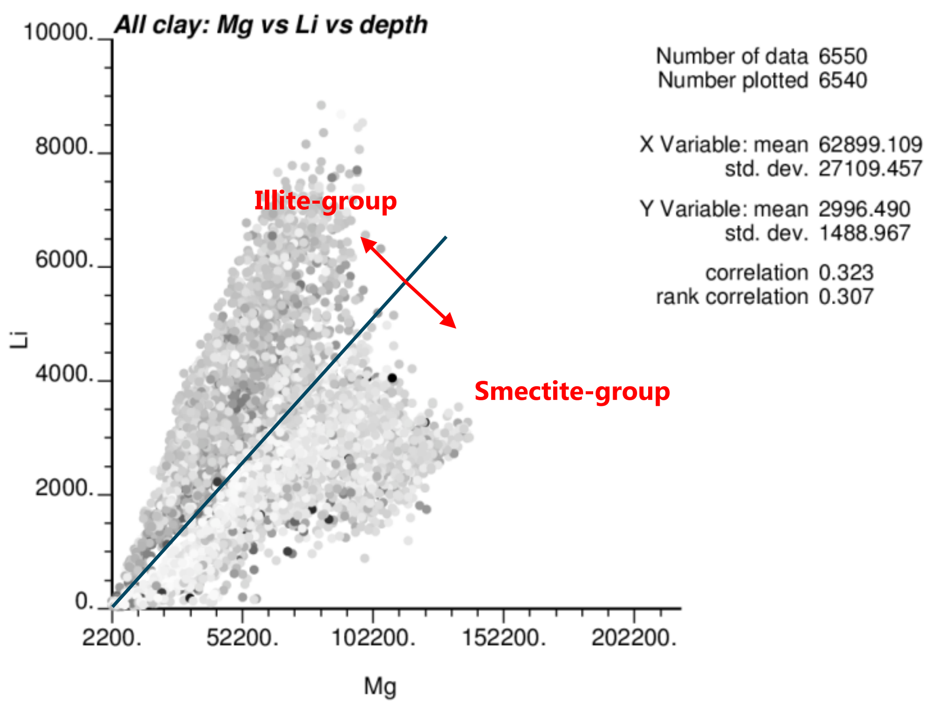
Structural Block	Nugget	Omnidirectional Sub-Horizontal Plane (X - Y)						Vertical (Z)			
		Principal Azimuth	Principal Dip	First Structure		Second Structure		First Structure		Second Structure	
				Component	Range	Component	Range	Component	Range	Component	Range
Block A	0.25	180°	3°	---	---	0.75	525	---	---	0.75	30
Block B	0.2	170°	2.5°	0.6	500	0.2	1,600	0.6	37	0.2	42
Block C	0	152.5 °	6.5°	0.55	120	0.45	320	0.55	5	0.45	22
Block D	---	---	---	---	---	---	---	---	---	---	---
Block E	0.3	122°	6°	0.7	800	---	---	0.7	30	---	---

Figure 14-3 Block A Omnidirectional Variogram in the Sub-Horizontal Plane



In addition, the interpreted distribution of illite versus smectite claystones was modeled to support the design needs of downstream processing facilities. The background to the illite/smectite differentiation is given in Section 7.3.2. Initial statistical analysis indicated that a strong differentiation exists between the illite and smectite mineralized group (Figure 14-4). A Li:Mg ratio of 0.048 is used to define the illite and smectite ores, illite having a Li:Mg ratio higher than 0.048, and smectite lower than 0.048.

Figure 14-4 Li versus Mg versus Depth (Grey Shading, Shading Increasing with Depth from 0 m to 220 m) for All Mineralized Clay Samples



Composites of 5 m, within lithological units, were calculated for all interpolation purposes.

Interpolation for non-grade elements as well as the clay ore characterization was by Inverse Distance Squared Interpolation.

14.1.3 Resource Classification

With Block A having the shortest range, as well as the greatest drill hole and data concentration, the variogram ranges of this block was used to define the Inferred, Indicated and Measured Resource categories throughout the deposit.

Following Parker & Dohm (2014), the category ranges were defined as 50% of range for Measured, 75% for Indicated, and 100% for Inferred. A summary is given in Table 14-3.

The definition of these categories is per the CIM 2014 standards:

> *"An Inferred Mineral Resource is based on limited information and sampling gathered through appropriate sampling techniques from locations such as outcrops, trenches, pits, workings and drill holes. Inferred Mineral Resources must not be included in the economic analysis, production schedules, or estimated mine life in publicly disclosed Pre-Feasibility or Feasibility Studies, or in the Life of Mine plans and cash flow models of developed mines. Inferred Mineral Resources can only be used in economic studies as provided under NI 43-101.*

There may be circumstances, where appropriate sampling, testing, and other measurements are sufficient to demonstrate data integrity, geological and grade/quality continuity of a Measured or Indicated Mineral Resource; however, quality assurance and quality control, or other information may not meet all industry norms for the disclosure of an Indicated or Measured Mineral Resource. Under these circumstances, it may be reasonable for the Qualified Person to report an Inferred Mineral Resource if the Qualified Person has taken steps to verify the information meets the requirements of an Inferred Mineral Resource.

Mineralization may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralization. The Qualified Person must recognize the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated Mineral Resource estimate is of sufficient quality to support a Pre-Feasibility Study which can serve as the basis for major development decisions.

A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.

Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation.

A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve."

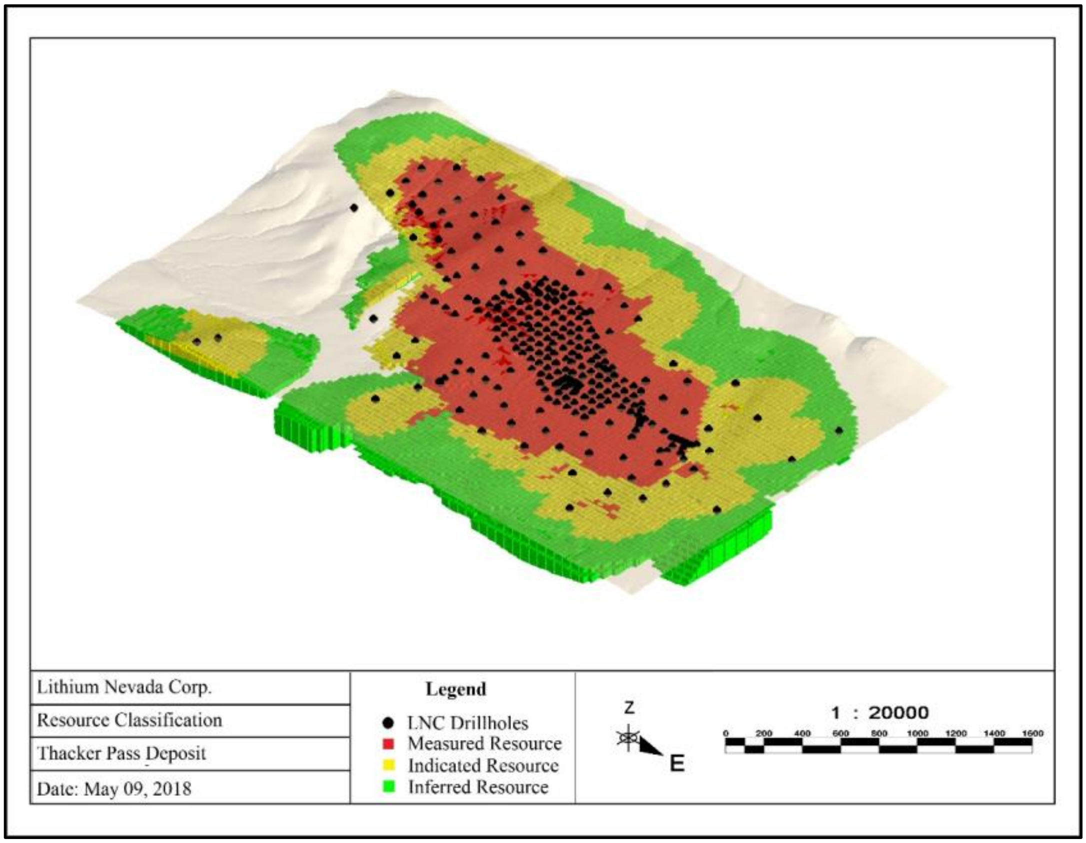
Table 14-3 Resource Classification

Category	X (m)	Y (m)	Z (m)	Sampling
Measured	262.5	262.5	15	5-16 samples, 3+ drill holes, 2 samples maximum per hole.
Indicated	393.75	393.75	22.5	3-16 samples, 2+ drill holes, 2 samples maximum per hole.
Inferred	525	525	30	2-16 samples, 1+ drill holes, 2 samples maximum per hole.

Grade interpolation proceeded using Ordinary Kriging, utilizing the variograms indicated above and the classification listed in Table 14-3.

A view of the classified block model is presented in Figure 14-5.

Figure 14-5 Classified Block Model, View from the Southwest



The classified resource is presented in Table 14-4. Note that this resource estimate uses a cut-off grade of 2,000 ppm Li. This cut-off was applied to the 2016 Resource Estimate (Carew & Rossi, 2016). That report stated:

> *SRK is of the opinion that, at a 2,000 ppm (0.20%) lithium cut-off, the Stage I Lens (now known as Thacker Pass Deposit) has reasonable prospects for economic extraction by open-pit mining.*

The QP agrees with this above statement as the basis for the cut-off limit determination.

Table 14-4 Resource Tonnage and Grade

Category	Tonnage ('000 metric tonnes)	Average Li (ppm)	LCE ('000 metric tonnes)
Measured	242,150	2,948	3,800
Indicated	143,110	2,864	2,182
Measured and Indicated	**385,260**	**2,917**	**5,982**
Inferred	147,440	2,932	2,301

Notes:

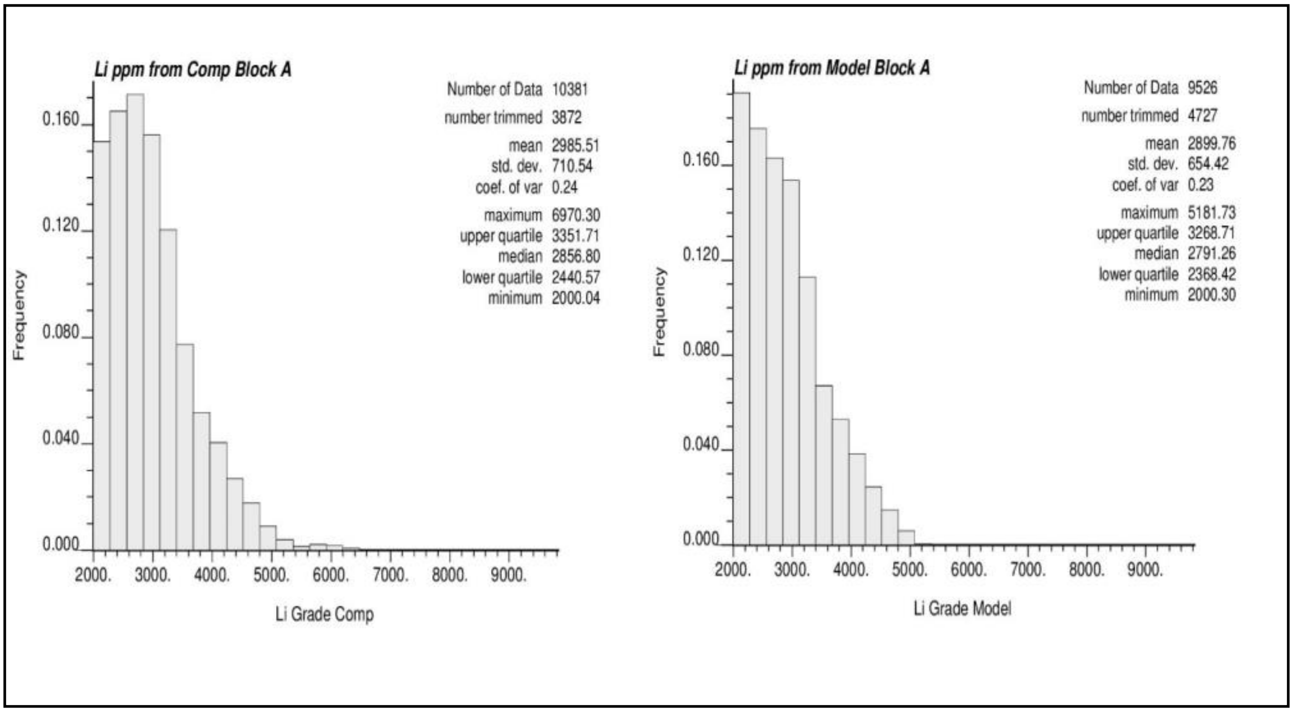
1. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserves.
2. Resources presented at a 2,000 ppm Li cut-off grade.
3. The conversion factor for lithium metal (100%) to LCE is 5.323.
4. Applied density for the ore is 1.79 (Section 11.2).

14.1.4 Reconciliation

An independent grade interpolation and Resource Estimation was run independently in MineSight3D by LNC geologist, Mr. Randal Burns, with resulting tonnages and grade less than 1% different from the figures outlined in Table 14-4. Reconciliation between assays, composites, and modeled grades have also been completed, and deemed satisfactory.

In addition, grade histograms comparing input data, composite data and interpolated block data were compiled. Note that these histograms have a 2,000 Li ppm cut-off applied. The variation of less than 3% is satisfactory to the QP, given the complexity of the deposit. An example of this reconciliation is given in Figure 14-6, for Block A.

Figure 14-6 Composite and Model Grades for Block A



14.2 Comments

The QP is of the opinion that the resource estimation methodology complies with the 2014 CIM standards for the classification of Mineral Resources. The QP has not been made aware of any factors, including property and/or lease ownership, mineral processing, environmental, socio-economic or legal exclusions that would affect this Resource Estimate.

15. Adjacent Properties

Apart from the other mineralized lenses on the Lithium Nevada Project, there are not any adjacent properties that bear on the lithium properties and there are not nearby operating mines. Several goldmines are in operation well to the southeast, indicating the viability of mining permitting.

16. Interpretation and Conclusions

16.1 Interpretation

The data presented here favors the presence of consistent mineralization of lithium within the volcanogenic clays in the Thacker Pass Project area that is of potentially economic grade. This mineralization would appear to be suited to open-pit mining operations.

16.2 Risks

1. As this project would be the first of its kind, unforeseen technical challenges could occur, both in terms of mining and processing.

2. Leading from Point 1, the project is likely to be sensitive to processing costs.

3. While lithium has enjoyed a spectacular rise in price over the last decade, project economics might be sensitive to the normal boom-and-bust cycle, which is entering a new and unknown paradigm for lithium after the increase in new demand over the last decade.

4. Environmental permitting risks related to prospective processing methodologies.

16.3 Conclusions

The project seem viable based on the findings in this report, provided that the above-mentioned risks are mitigated. The successful completion of the current Prefeasibility Study is vital for the further advancement of the project.

17. Recommendations

Based on the resource and other project parameters presented here, it is recommended that the Prefeasibility Study currently in progress be completed and include full metallurgical testing to confirm the economics of such processes.

Recommendations on next steps for further exploration development include:

- Exploration Drilling:
  - Additional exploration drilling is required to determine the boundaries of the deposit in Thacker Pass.
  - Estimated Cost: minimum US$500,000.
- Condemnation Drilling:
  - Additional condemnation drilling is required to ensure the location of future processing and tailings facilities do not sterilize future ore opportunities. It is recommended that 15 holes are drilled.
  - Estimated Cost: US$275,000.
- Geotechnical Drilling:
  - Additional geotechnical drilling is required to better characterize all potential pit wall slopes and faults. It is recommended that 10 holes are drilled in pertinent modeled structural domains as well as seven angle holes to better characterize modeled faults.
  - Estimated Cost: US$450,000.

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