NI 43-101 TECHNICAL REPORT

LITHIUM CLAYSTONE MINERAL RESOURCE ESTIMATE

CLAYTON VALLEY

ESMERALDA COUNTY, NEVADA, USA

Prepared for

Enertopia Corporation
OTC: ENRT

Effective Date: March 30, 2020

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1 Summary

This Technical Report is prepared for Enertopia Corporation (Enertopia or the Company). Enertopia is a publicly traded Nevada corporation with corporate offices in Kelowna, British Columbia, Canada. The company's stock is traded over the OTC Markets (Symbol: ENRT).

Enertopia acquired a land position in the Clayton Valley of Nevada by staking 8 placer mining claims (the Steve claims) and 9 lode mining claims (the Dan claims). The claims were staked by McKay Mineral Exploration of Ogden, Utah for the U. S. subsidiary of Enertopia, Enertopia Corporation of Reno, Nevada. The land package covers 160 acres (65 hectares). The claims were staked in July of 2017 in a strategic location between Noram Ventures Incorporated's Zeus claims and Cypress Development Corporation's Dean claims. Enertopia holds the claims free and clear with the exception of a 1% NSR royalty held by a third party.

The perimeter of Enertopia's claims are located within 1.3 miles (2.1 km) of Albemarle Corporation's (Albemarle's) Silver Peak lithium brine operations. Lithium is produced at Albemarle's plant from deep wells that pump brines from the basin beneath the Clayton Valley playa. The plant is the only lithium producer in the United States and has been producing lithium at this location continuously for more than 50 years.

The Enertopia claim block and surrounding area are part of a much larger area that drains the adjacent mountain range to the southeast. The area gently slopes toward the northwest. The drainages, or washes, cut through the Tertiary Esmeralda Formation. The Esmeralda in this area is made up of fine grained sedimentary and tuffaceous units which generally dip to the northwest, but while the strike and dip can be quite varied locally, most of the sediments dip at less than 5°.

The targeted mineralization investigated by Enertopia occurs at surface in the form of sedimentary layers within the Esmeralda Formation enriched in lithium to the extent that the lithium appears to be extractable from them economically, although this has only been partially demonstrated through economic analysis at competitor properties. The lithium claystone deposit type involves the production of lithium from playa lakebed sediments that have been raised to surface through block faulting. The sediments are generally flat lying with large aerial extent and considerable thickness.

On August 30, 2017 the Company announced the staking of lode and placer claims over a strategic portion of Clayton Valley between and abutting two competitor companies. The parcel had apparently been overlooked by the other companies during their respective land acquisition programs. At the same time as the staking announcement, the company also reported the analytical results from 16 surface samples collected during its first round of sampling. The sample results triggered a long program of chemical and physical testing with the aim of discovering an economical process to extract the lithium from the Clayton Valley sediments.

Drilling commenced on Enertopia's initial drilling program on December 8, 2018 and was completed on December 18, 2018. Five core holes were drilled with BQ-size core. Four of the holes were for exploration and the fifth one was to be used for metallurgical testing.

Enertopia has been conducting lithium extraction testing since 2016, beginning with bench tests on lithium-bearing sediments from Clayton Valley and other sources. Soon after the claim staking and initial sampling on their claims in 2017, the Company began bench testing extraction methods using surface samples from their Clayton Valley property.

There are 5 known lithium clay projects that are advancing toward potential commercial production. Some of the projects have completed extensive metallurgical testing. Two of those projects occur adjacent to and abut the Enertopia Clayton Valley property.

This mineral resource estimate is an early stage deposit definition effort. It is the maiden resource estimate for Enertopia's property in Clayton Valley. The mineral resource estimate, herein, is defined by 4 core drill holes (TOP-01 through TOP-04) for a total of 383.4 meters of drilling and an average hole depth of 95.9 meters. A total of 119 lithium assay results from core, not including QA/QC samples, nor TOP-02M samples (the metallurgical drill hole), were used for the model.

The result of the mineral resource estimate returned approximately 82 million tonnes at a grade of 1121 ppm Li for the indicated mineral resource and 18 million tonnes at a grade of 1131 ppm Li for the inferred mineral resource, both at a cutoff grade of 400 ppm Li. The last assays at the bottoms of all 4 of the drill holes used in the model were greater than 1000 ppm Li, so there is room for expansion of the resource at depth.

The primary recommendation of this report is to follow the first phase of drilling with a second phase of exploratory drilling. Infill drill holes are recommended to upgrade the level of confidence in the deposit so that at least some of the resources may be reclassified as mineral reserves. This recommended program has a budget of US$190,000.

Simultaneous with the drilling program, but not contingent upon its results, work should be continued on the metallurgical properties of the lithium clays. The budget for the continued metallurgical testing would be approximately US$100,000.

2 Introduction

This Technical Report is prepared for Enertopia Corporation (Enertopia or the Company). Enertopia is a publicly traded Nevada corporation with corporate offices in Kelowna, British Columbia, Canada. The company's stock is traded over the OTC Markets (Symbol: ENRT).

This report is the first NI 43-101 compliant report produced for Enertopia's Clayton Valley, Nevada lithium claystone property and includes its maiden resource estimate.

The majority of information for this report was supplied by Enertopia from the Company's project files. Other information was gleaned from various sources and, when possible, verified by the author. These other sources include:

- Published and unpublished literature
- Enertopia.com website
- U. S. Bureau of Land Management LR2000 website for verification of claim status
- Websites and NI43-101 reports of competitor companies

Sources are also referenced in the text of this document, where appropriate.

The author has made eleven trips to the Clayton Valley of Nevada and has visited the Company's claims on several of those occasions. The Clayton Valley visits were on the following dates and were made for competitor companies operating in the Valley (Noram Ventures Inc. and Alba Minerals Ltd.):

1. May 5 – 7, July 21 – 25, August 3 – 6 and December 12 – 22, 2016
2. January 8 – 27, 2017
3. April 22 – May 15 and November 17 – December 12, 2018
4. January 9, September 16 – 17, October 19 – 29 and November 6 – 15, 2019

During the visits, the author supervised core drilling, collected samples for assay, noted some aspects of the geology and took photographs.

Table 2.1 - Abbreviations and Acronyms Used in Report

BLM	U. S. Bureau of Land Management
Km	Kilometer
LCE	Lithium Carbonate Equivalent (Li_2CO_3)
Li	Chemical symbol for lithium
M	Meter
Mg	Chemical symbol for magnesium
NSR	Net Smelter Return
PEA	Preliminary Economic Assessment
PLS	Pregnant leach solution
PPM	Parts per million
RQD	Rock quality designation

3 Reliance on Other Experts

The author relied on statements, reports and news releases provided by Enertopia and on the Enertoia.com website for relevant information regarding Sections 9, 10, 11, 12 and 13 of this report. Section 14 was generated by the author using data supplied by Enertopia.

The author met representatives of Enertopia in the field as the drilling stage of the project was beginning but did not participate in any of the field operations or office work of the project.

The author did not conduct a title search to determine the status of the Dan and Steve mining claims but did review the status of the claims on the Bureau of Land Management (BLM) LR2000 website. The author was supplied by Enertopia with a copy of the Net Smelter Return Royalty Agreement between Enertopia and a third party.

The remainder of the report is the sole responsibility of the author.

4 Property Description and Location

The property is located in Clayton Valley, Nevada, which is along the eastern border with California about halfway between Reno and Las Vegas, Nevada (Figure 4.1).

Enertopia acquired a land position in the Clayton Valley of Nevada by staking 8 placer mining claims (the Steve claims) and 9 lode mining claims (the Dan claims). Both the placer and the lode claims cover approximately the same area. The claims were staked by McKay Mineral Exploration of Ogden, Utah for Enertopia Corporation of Reno, Nevada. The claims were located using handheld Garmin 64 ST units (Stephen McKay, personal communication). The land package covers 160 acres (65 hectares). The claims were staked in July of 2017 in a strategic location between Noram Ventures Incorporated's Zeus claims and Cypress Development Corporation's Dean and Clay claims.

The perimeter of Enertopia's claims are located within 1.3 miles (2.1 km) of Albemarle Corporation's (Albemarle's) Silver Peak lithium brine operations. Lithium is produced at Albemarle's plant from deep wells that pump brines from the basin beneath the Clayton Valley playa. The plant is the only lithium producer in the United States and has been producing lithium at this location continuously for more than 50 years.

The claims are staked on U. S. Government land administered by the U. S. Bureau of Land Management (BLM). Each claim covers an area of 20 acres (8.1 hectares). The claims are in one contiguous group. These claims cover the E/2, W/2 of Section 14 of township T2S, R40E, Mt. Diablo Principal Meridian. The location of the claim block is shown in blue in Figure 4.2. Also shown in the northwest corner of Figure 4.2 are some of the evaporation ponds for the Albemarle lithium operation is Clayton Valley.

The claims are subject to a 1% NSR royalty as specified in an agreement between Enertopia and a third party.

Figure 4.1 - Property location map within Nevada.

Figure 4.2 – Google Earth image showing the Enertopia property position in Clayton Valley.

All 8 placer claims and 9 lode claims are owned by Enertopia Corporation of Reno, Nevada. Table 4.1 is a listing of the claim names and BLM NMC numbers for the claims. A check of BLM's LR2000 website showed that the claims are listed as active through the 2020 mining claim assessment year.

Table 4.1 - Claims with BLM NMC numbers.

Claim Type	Claim No. From	Claim No. To	BLM No. From	BLM No. To
Lode	Dan 1	Dan 9	NMC1148760	NMC1148768
Placer	Steve 1	Steve 8	NMC1148769	NMC1148776

All claims are located on unencumbered (except for the 1% NSR royalty stated above) public land managed by the BLM. Annual holding costs for the claims are $165 per claim per year to the BLM, due August 31st. There is also an approximate $4 per claim annual document fee to be paid to Esmeralda County each year, due November 1st. There is no set expiration of the claims as long as these payments are made annually.

Currently, there are no known significant factors or risks that may affect access, title or the right or ability to perform work on the Enertopia claim areas.

The land under claim contains no buildings or other structures. There are no known mineralized zones on or below the surface of Enertopia's staked land, other than those defined by the exploration efforts described in this report. To the author's knowledge there are no environmental liabilities associated with the property position, nor any mine workings or development of any sort.

An exploration Notice of Intent to drill 5 core holes was submitted on behalf of Enertopia to the Tonopah, Nevada office of the BLM. The BLM in Nevada works in conjunction with the Nevada Bureau of Mines and Geology for the permitting processes on public lands. Since the surface disturbance for the drilling for the program was held to less than 5 acres (2.02 hectares), only a Notice of Intent was required. The BLM responded with determinations of the amounts of the bonds that would be required prior to commencement of operations. The bonds were submitted and accepted by the BLM prior to the commencement of drilling. Subsequent to the drilling program, the drill sites were reclaimed and the BLM has refunded the bond to Enertopia.

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Enertopia claims fall between elevations of 4400 and 4550 feet (1340 and 1390 meters) above sea level. The topography is mostly gently sloping basin margins consisting of unconsolidated to poorly consolidated sediments. These sediments are cut by typical desert washes, which can be steep sided. The area can mostly be traversed by 4-wheel drive vehicles, but often with some difficulty. There are no maintained roads crossing the property, however there are desert tracks that lead to the property and cross it in places and the Silver Peak Road (maintained gravel) is 0.7 miles (1.1 km) north of the claims.

The vegetation of the region is sparse, mostly consisting of widely spaced low brush. No trees are present. The area lies in the eastern rain shadow of the Sierra Nevada and is high desert. Tonopah, the nearest town of any size has average annual precipitation of 5.14 inches (130.6 mm). In July, the hottest month, it has an average high temperature of 91.9°F (33.3°C) and an average low temperature of 57.5°F (14.2°C). In December, the coldest month, it has an average high temperature of 44.3°F (6.8°C) and an average low of 19.4°F (-7°C) (Source: Wikipedia.com).

Silver Peak, Nevada is located in Clayton Valley about 6 miles (10 km) west of the property. Figure 5.1 below is a graphic representation of the Silver Peak average monthly temperatures and rainfall (Source: usclimatedata.com).

The mild climatic conditions allow for field work to continue throughout the year, however drilling can be temporarily limited in winter by the problem of freezing water lines.

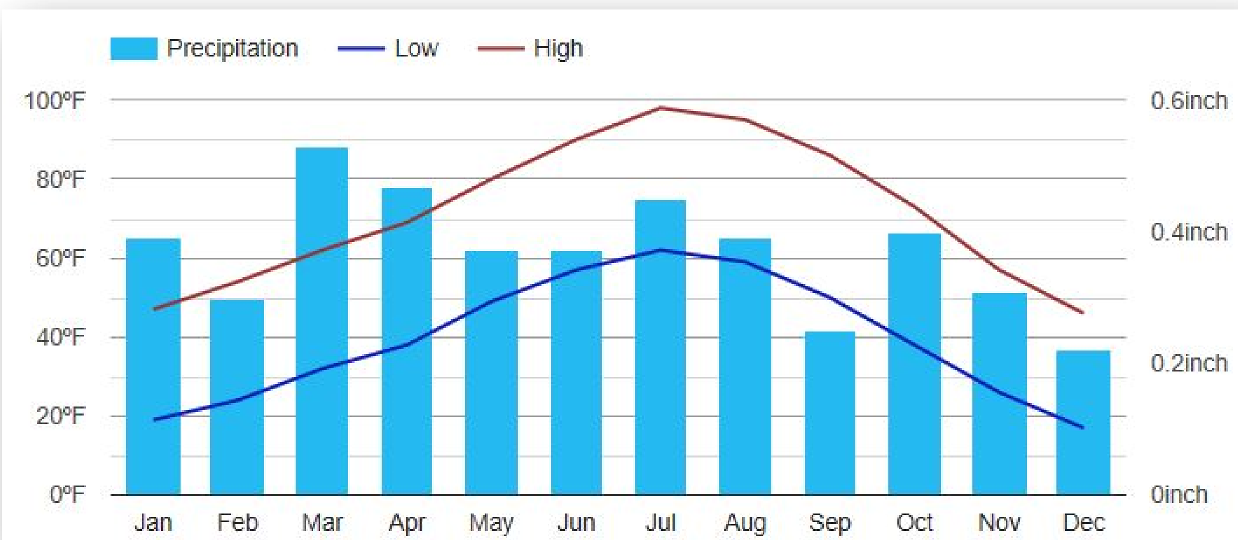


Figure 5.1 – Monthly high and low temperatures and rainfall for Silver Peak, Nevada.

The property can be accessed from Tonopah by driving south on U. S. Highway 95 for 7 miles (11 kilometers) and then southwest on the Silver Peak gravel road for 20 miles (32 kilometers). Both roads underwent upgrades during the summer of 2016. It is now possible to drive within 1.7 miles (2.7 km) of the property entirely on paved roads by driving south 21 miles (34 km) on Highway 95 and then driving 11 miles west on the newly paved Silver Peak Road. The Silver Peak Road continues as a well-maintained gravel road to within miles 0.7 (1.1 km) of the property.

Power lines that supply electricity to the town of Silver Peak and to the Albemarle lithium operations lie within 0.4 miles (0.6 km) of the northern edge of the Enertopia claim group.

6 History

The Albemarle Corporation operation at Silver Peak, Nevada, within the Clayton Valley, is the site of the only lithium brine production in North America. Brines containing lithium are pumped from wells that penetrate the playa sediments. The brines are concentrated through a series of evaporation ponds and the resulting salts are processed to extract lithium at the plant at Silver Peak.

Following the lithium price rise in recent years, several exploration companies became interested in the Clayton Valley resulting in several thousand new claims being staked, surrounding the Albemarle land holdings. In 2017 Enertopia became aware of some unstaked land in a strategic location in the valley. Enertopia contracted with McKay Mineral Exploration to stake the parcel, resulting in their current claim position. Successful surface sampling for lithium and considerable metallurgical work has provided the impetus to hold the claims and continue exploration of the area. Adjacent claim holders, Cypress Development Corporation and Noram Ventures Inc., have both completed extensive drilling and have both announced large indicated and inferred lithium resources (Additional information about Cypress and Noram can be found in Section 23, Adjacent Properties).

The claims that comprise the properties have been staked on U. S. Government land that was open to staking. There have been no previous owners, nor has there been previous production from the properties.

7 Geologic Setting and Mineralization

The Clayton Valley is a closed basin playa surrounded by mountains. Figure 7.1 (from Davis and Vine, 1979) shows the physiographic features in the Clayton Valley area.

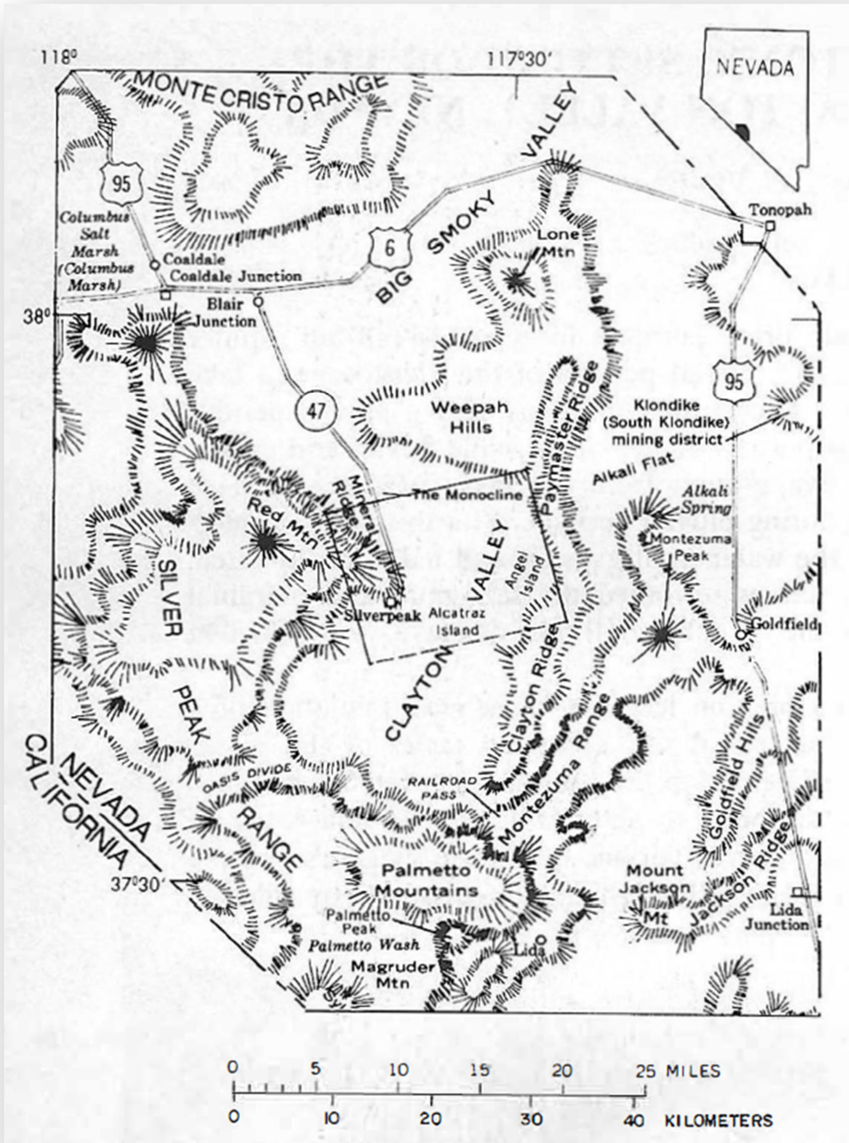


Figure 7.1 – Physiographic features surrounding Clayton Valley, Nevada.

Clayton Valley is flanked on the north by the Weepah Hills, on the east by Clayton and Paymaster Ridges and on the west and south by the Silver Peak Range and the Palmetto Mountains. The playa floor is approximately 40 square miles (100 square kilometers). Altitudes range from 4,265 feet (1300 meters) on the playa floor to 9,450 feet (2,880 meters) at Piper Peak (Davis and Vine, 1979).

Tectonically, the Clayton Valley occurs in the Basin and Range Province. Figure 7.2, from Zampirro (2005) is a generalized geologic map of the Clayton Valley area with the Enertopia land position superimposed. The province is dominated by horst and graben faulting and some right lateral motion since Tertiary time, which continues to the present (Foy, 2011). The basement is made up of Neoproterozoic to Ordovician carbonate and clastic rocks that were deposited along the ancient western passive margin of North America. The basin is bounded to the east by a steep normal fault system toward which basin strata thicken (Munk, 2011). Structural and stratigraphic controls have divided the playa into six economic, yet potentially interconnected, aquifer systems (Zampirro, 2005). The sediments deposited in the basin are primarily silt, sand and gravel interbedded with illite, smectite and kaolinite clays (Kunasz, 1970 and Zampirro, 2005). These Miocene to Pliocene Esmeralda Formation sediments include a substantial component of volcaniclastics. Green and tan tuffaceous claystones and mudstones on the eastern margin and above the current playa sediments, best described by Davis (1981), have been the primary objective of Enertopia's exploration effort and are considered by Kunasz (1979) and Munk (2011) to be the primary source of the lithium for the basin brines.

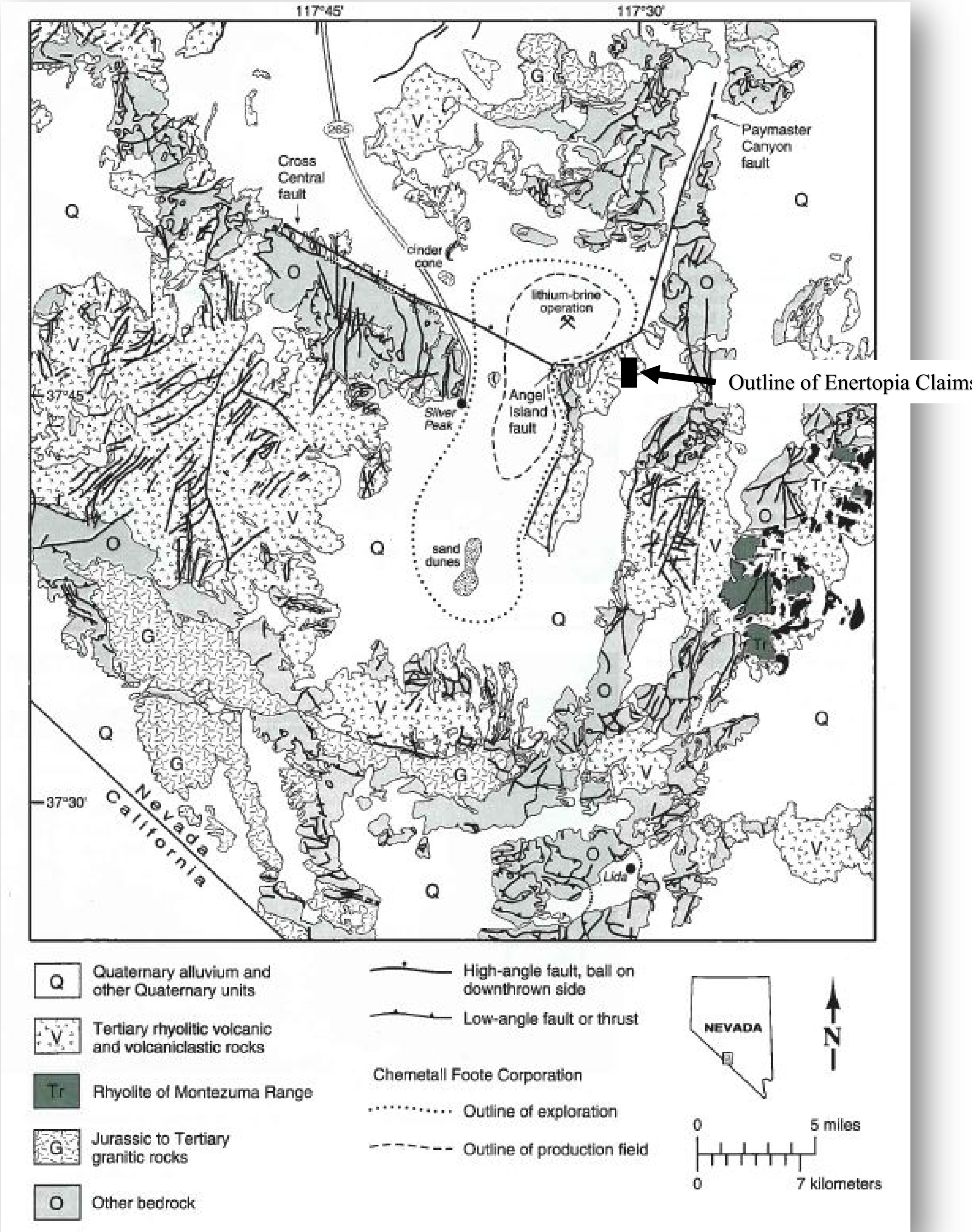


Figure 7.2 – Generalized geologic map from Zampirro (2005) with the Enertopia claim outline added.

7.1 Local Geology

The Enertopia claim block and surrounding area are part of a much larger area that drains the adjacent mountain range to the southeast. The area gently slopes toward the northwest. The drainages, or washes, cut through the Tertiary Esmeralda Formation. The Esmeralda in this area is made up of fine grained sedimentary and tuffaceous units which generally dip to the northwest, but while the strike and dip can be quite varied locally, most of the sediments dip at less than 5°. Some local bedding undulations have been noted, possibly caused by differential compaction.

Faulting was also noted in some zones, mostly in the area north of the claims. The faults appear to trend at N30ºE to N45ºE, approximately parallel to the edge of the playa in this part of Clayton Valley. Faulting can be difficult to trace on surface in most areas due to the homogeneity and semi-consolidated nature of the sediments. Figure 7.3 shows one of the relatively rare instances where faulting is evident at surface on an adjacent property holder's claims. In addition to ancient faulting, recent faults are in evidence around the basin that have formed as a result of subsidence from pumping brines from the aquifers over the past 50+ years to produce lithium.

Figure 7.3 - Obvious fault trace with drag folding in Esmeralda Formation sediments.

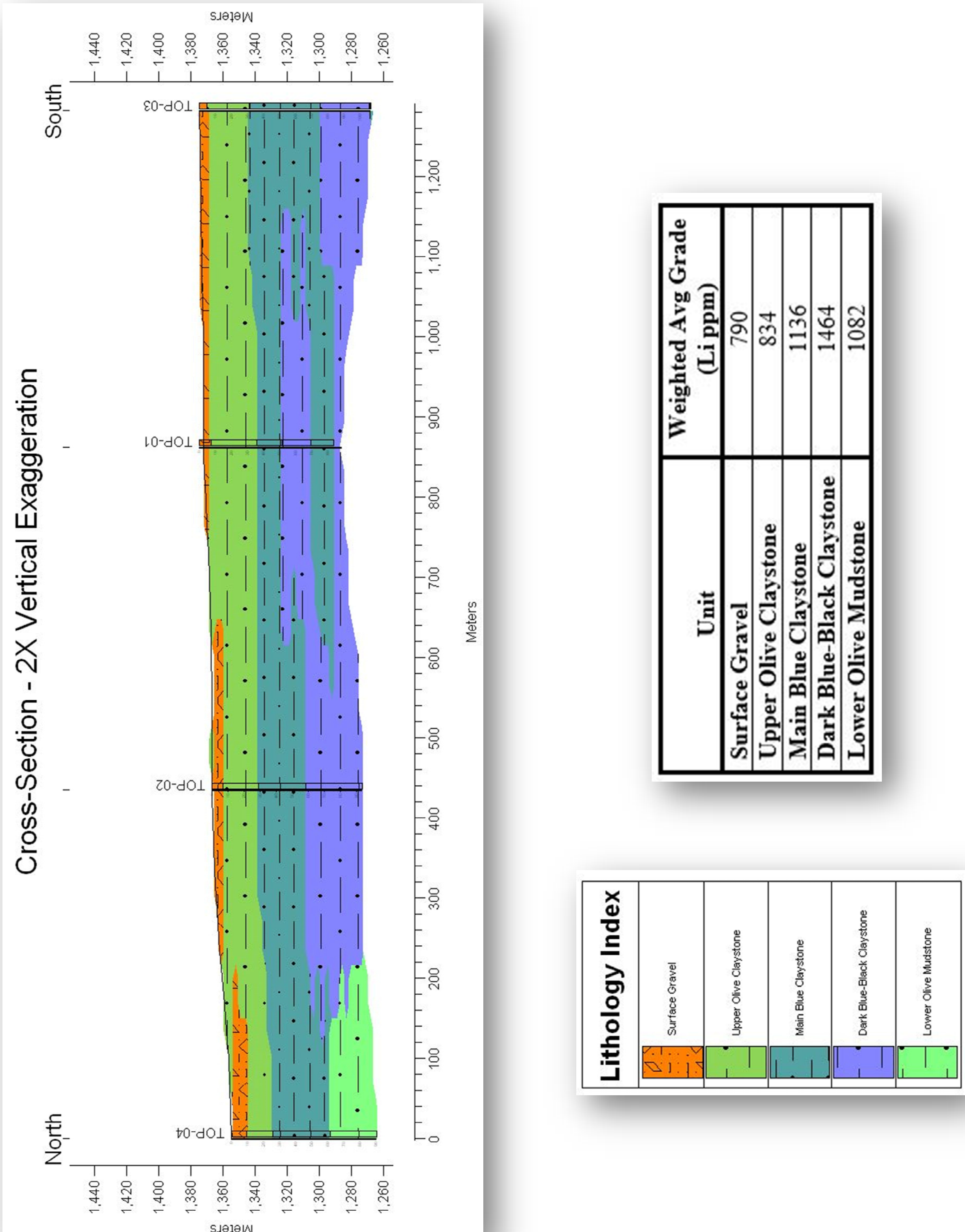
The resulting topographic configuration consists of long rounded "ridges" of Esmeralda Formation separated by gravel filled washes. The ridges were generally 50 feet (15 meters) to 100 feet (30 meters) wide and had lengths of a few hundred to a few thousand feet and trend northwest. These geomorphic features have been described by some authors (Davis, 1981 and Kunasz, 1974) as a "badlands" type topography. Figure 7.4 is an example of such topography.

The thickness of the Esmeralda Formation was not determined by the author, since the base of the formation was not seen in any of the washes and it is unclear whether any of the drill holes by any of the companies working in the Clayton Valley reached the base of the formation. Davis (1981) measured this section at approximately 100 meters (330 feet) thick and Kunasz (1974) described it as being approximately 350 feet (110 m) thick. In some areas exposures of Esmeralda are in excess of 100 feet (30 m) thick on the surface where washes cut through the thicker sections. Drilling by Enertopia, Noram Ventures and Cypress have drilled more than 300 feet (91 m) of the Esmeralda.

The ridges are topped with weathered remnants of rock washed down from the surrounding mountainous areas; a weathering phenomenon typical of the desert terranes. These weathered rock remnants give the ridges a hard, often flat surface. On the Company's claims the surface gravel has a thickness that varies from 0 to 30 feet (0 – 9 m). Note in Figure 7.4 that some of the ridges are topped with hard weathered remnants, while others are not.

Figure 7.4 - Example of the ridges and washes in the vicinity of the claim group.

The Esmeralda Formation on the Enertopia claims was mostly weathered, soft and crumbly siltstones, mudstones and claystones, but contained several thin beds of harder, more consolidated sediments. Most beds were tuffaceous, as evidenced by fine crystal shards. Nearly all of the sediments are calcareous, indicating lakebed deposition. As further evidence of a lakebed origin for the sediments, algal features have been reported on the adjacent property to the east of the Company's claim block. Figure 7.5 shows a generalized cross section through the 4 drill holes with the main lithologic types displayed. In the cross section it appears that there could be some faulting between drill holes, but this has not been verified.



Unit	Weighted Avg Grade (Li ppm)
Surface Gravel	790
Upper Olive Claystone	834
Main Blue Claystone	1136
Dark Blue-Black Claystone	1464
Lower Olive Mudstone	1082

Figure 7.5 - Figure 7.5 - N-S cross section showing the main lithologic units along with their respective grades (See Section 14).

During the drilling "reduced" clay units were encountered. These units have a distinctive blue or black coloration. It was noted on adjacent properties that after exposing the core to air the reduced core quickly began to oxidize to the olive coloration seen in the oxidized sediments.

7.2 Mineralization

The brine mineralization within the Clayton Valley has been documented by numerous studies spanning several decades. Brine targets have not yet been investigated on Enertopia's claims.

The targeted mineralization investigated by Enertopia occurs at surface in the form of sedimentary layers enriched in lithium to the extent that the lithium appears to be extractable from them economically, although this has only been partially demonstrated through economic analysis at competitor properties. The relationship of these targeted lithium-bearing sedimentary layers with respect to brine-related Li-extraction evaporation ponds is illustrated schematically in Figure 7.6.

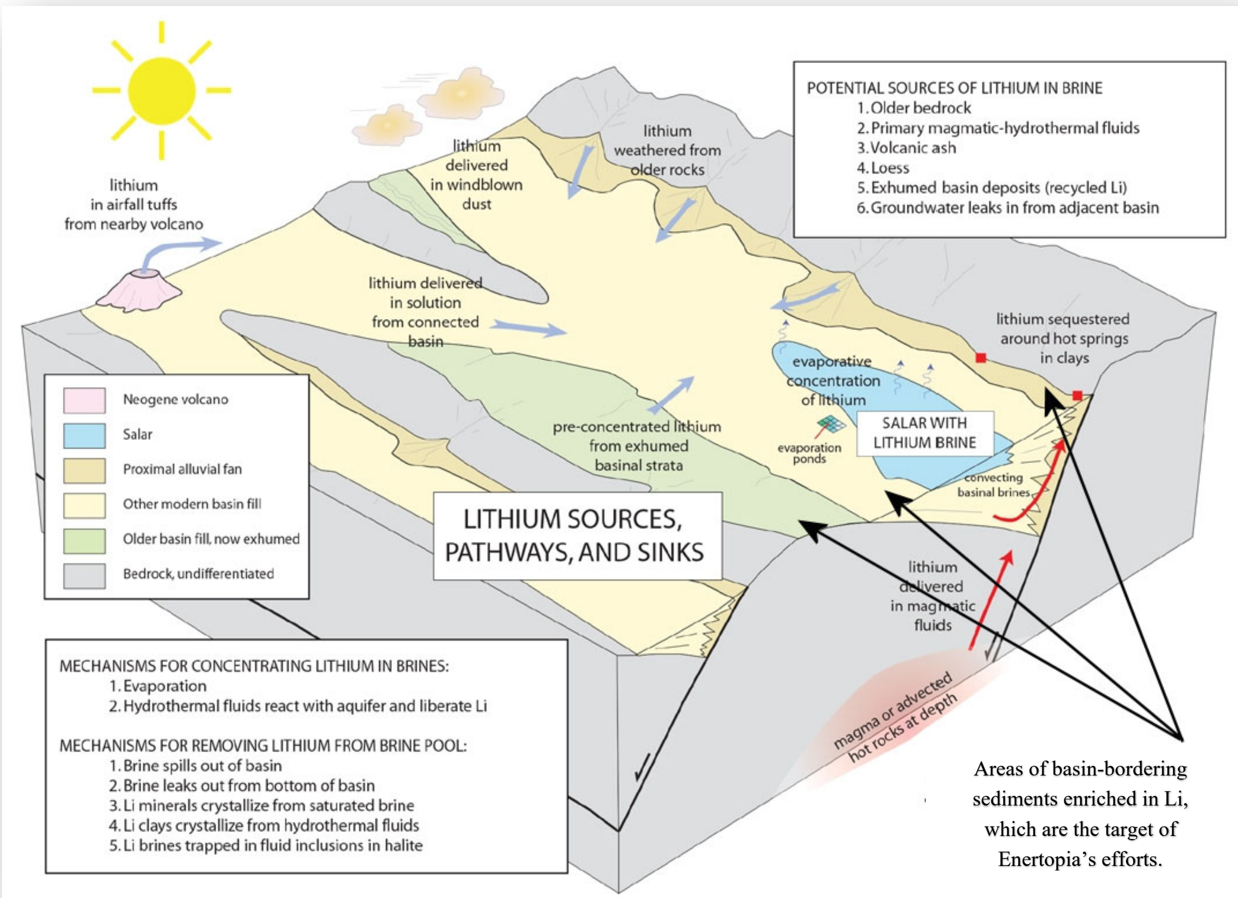


Figure 7.6 - Schematic deposit model for lithium brines (Bradley, 2013).

The targeted layers occur primarily as light green, interbedded tuffaceous mudstones and claystones. The beds are nearly always calcareous and most often salty. The mudstones are usually poorly consolidated, whereas the thin claystone beds can be well consolidated and commonly form nodules. The units contain sandy beds locally.

The units occur as lakebed sediments that have been mapped (Albers and Stewart, 1972; Davis, 1981) as Miocene or Pliocene Esmeralda Formation. Algal mats and even digitate algal features have been noted locally, but these are generally not well preserved. The beds are gently dipping, usually to the northwest, but with local undulations. These units have been shown by Kunasz (1970) to be the probable source of lithium for the basin brines. Exploration for this mineralization, which confirmed the existence of anomalously high levels of lithium within sediments on Enertopia's claims is documented in Section 9 – Exploration, below. The deposit that is the subject of this report is part of a section of ancient lakebed sediments that were raised above the current Clayton Valley playa by Basin and Range faulting, which is present throughout the region.

8 Deposit Types

The lithium claystone deposit type involves the production of lithium from playa lakebed sediments that have been raised to surface through block faulting. The sediments are generally flat lying with large aerial extent and considerable thickness. While there are a few similar deposits that are currently moving toward production, no other lithium claystone deposit is known to be in commercial production at this time.

The economic extraction of the lithium from the sediments relies on the development of a process that has not yet been used at an actual mining operation. Several companies, Enertopia among them, are currently conducting testing and have achieved encouraging results (See Section 13 – Mineral Processing and Metallurgical Testing). Unlike traditional processes that extract lithium from brines pumped from beneath playa lakebeds (or salars), the processes now being tested would extract lithium from lithium-rich mudstones and claystones.

9 Exploration

Exploration activities by Enertopia have thus far been limited to surface sampling of the mudstones/claystones during 2017 and the drilling of 5 core holes in December of 2018. The Company has also conducted extensive research into methods to extract the lithium from the sediments, which will be explained in more detail in Section 13 – Mineral Processing and Metallurgical Testing.

On August 30, 2017 the Company announced the staking of lode and placer claims over a strategic portion of Clayton Valley between and abutting two competitor companies. The parcel had apparently been overlooked by the other companies during their respective land acquisition programs. At the same time as the staking announcement, the company also reported the analytical results from 16 surface samples collected during its initial sampling. The samples were analyzed by ALS Laboratories in Reno, Nevada by 3 different methods to determine the best analytical method. The results are shown below in Table 9.1.

Table 9.1 - Initial surface sampling results.

SAMPLE #	ME-ICP61 (1) PPM Li	ME-MS41W (2) PPM Li	ME-MS03 (3) PPM Li
CV-001001	620	640	216
CV-001002	1,150	1,140	197
CV-001003	1,030	1,040	80
CV-001004A	920	900	592
CV-001004B	960	950	642
CV001005	2,050	2,070	>1,000
CV001005A	1,940	1,930	568
CV001006	4,120	4,160	>1,000
CV001007A	630	530	302
CV001007B	910	870	86
CV001007C	670	630	473
CV001008	560	490	130
CV001009	990	960	627
CV001010A	1,160	1,130	870
CV001010B	2,040	2,210	>1,000
CV001011	340	324	96

(1) ME-ICP61 is a four-acid digestion that will extract lithium from any mineral, including silicates.
(2) ME-MS41W is a highly dilute version of aqua regia that will dissolve carbonate minerals.
(3) ME-MS03 is a leach method that uses deionized water to extract lithium in the sample.
Note samples CV001005, CV001006 and CV001010B returned over limit values under the ME- MSO3 deionized water leach test.

The sample results triggered a long program of chemical and physical testing with the aim of discovering an economical process to extract the lithium from the Clayton Valley sediments. This will be discussed further in Section 13 - Mineral Processing and Metallurgical Testing.

The only other exploration completed by the Company on the claims was the drilling of five core holes during December 2018. The drilling is explained in Section 10 - Drilling.

10 Drilling

Drilling commenced on Enertopia's initial drilling program on December 8, 2018 and was completed on December 18, 2018. Five core holes were drilled with BQ-size core. Four of the holes were for exploration and the fifth one was to be used for metallurgical testing. Figure 10.1 shows the locations of the drill holes within the Enertopia land position. The figure also gives the coordinates of each drill hole. Drill hole TOP-02M is the hole drilled to use for metallurgical testing. TOP-02M is located approximately 20 feet (6 m) to the northeast of TOP-02.

Table 10.1 contains the coordinates, depths and core recovery of the 4 drill holes. The horizontal coordinates were obtained using a Garmin handheld GPS unit (Sincere, 2018). The collar elevations were taken from Google Earth at the coordinate locations. No downhole surveys for hole deviation were taken because of the relatively shallow drilling depths.

The holes were drilled using a combination of a track mounted Longyear 44 and a custom-built drill rig attached to a small Caterpillar track loader (Cat rig). In some cases, the Cat rig would begin the hole and the Longyear 44 would finish it. Core was recovered in 5-foot intervals. The core was logged by the onsite geologist for rock quality designation (RQD), percent recovery and lithology. The core was photographed and then sampled (Sincere, 2018).

Because of the soft nature of the core the catch spring at the bottom of the core barrel was sometimes not able to secure the core in the barrel, resulting in loss of core in some zones. The percent recovery is summarized in Table 10.1.

Table 10.1 – Drill hole locations and percent core recovery.

Hole ID	UTM East	UTM North	Collar Elev. (m)	Depth (m)	Recovery (%)
TOP-01	455076	4179522	1375	89.0	69.7
TOP-02	455046	4179949	1367	93.6	65.0
TOP-03	454874	4179154	1375	110.3	78.5
TOP-04	454805	4180310	1355	90.5	85.2
Average				95.9	74.7

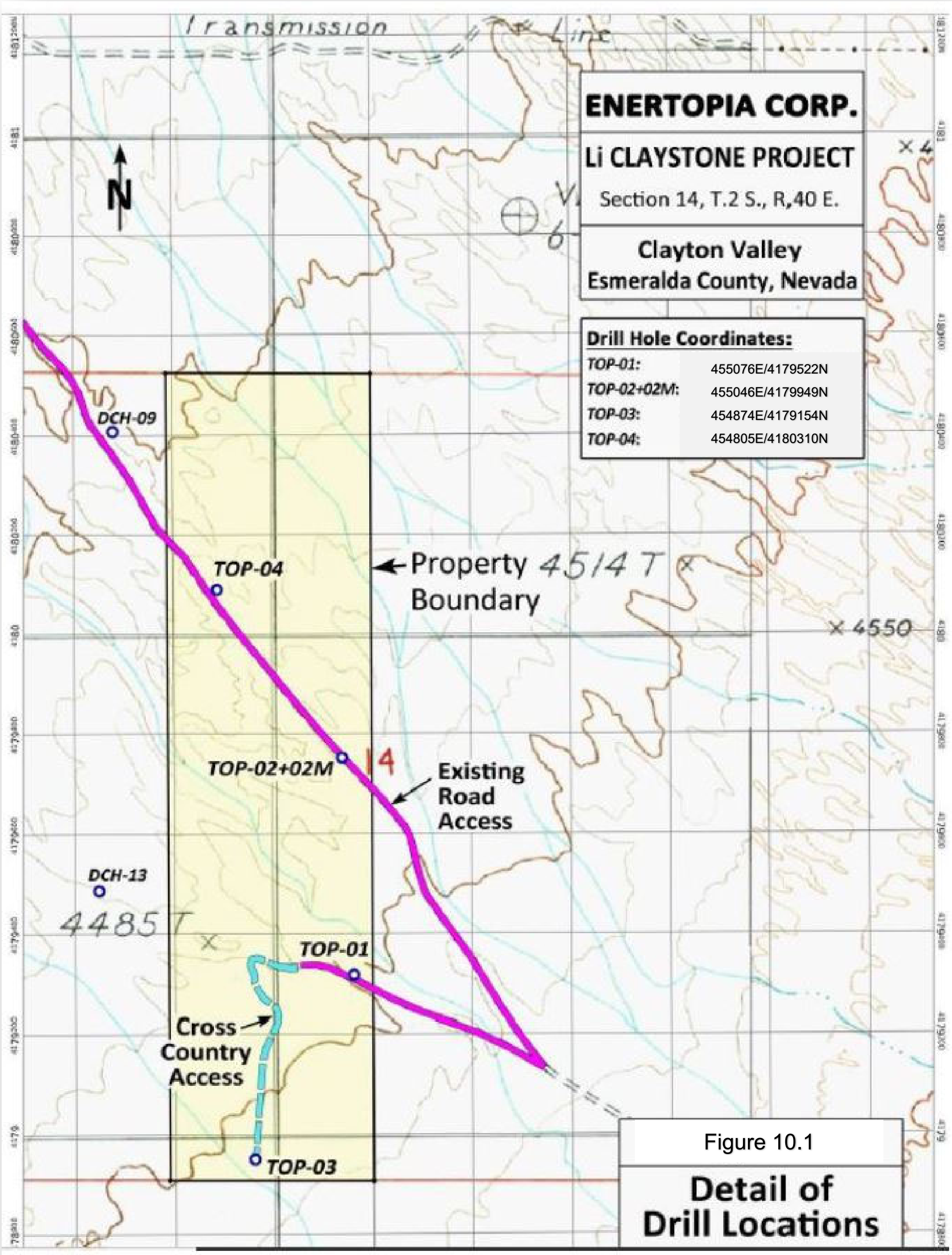


Figure 10.1 - Drill hole location map with hole coordinates (Sincere, 2018).

11 Sample Preparation, Analyses and Security

The core was transported to a motel room in Tonopah, Nevada for daily processing. The core was kept under lock and key at all times.

The core was split for sampling using a 2” putty knife or 3” chisel, depending on hardness. Most of the core was split using the putty knife due to the semi-lithified nature of the mudstones/claystones. Half of the core taken for analysis was placed in cloth bags in 10-foot intervals. The remaining core was stored in the core boxes for future reference or sampling. The samples were transported to Reno, Nevada by Robert McAllister, President and CEO of Enertopia (Sincere, 2018).

The samples were taken to the Mineral Exploration Geochemistry (MEG) laboratory in Reno where lithium standards, blanks and duplicates were inserted into the sample stream for QA/QC purposes. In all, including 11 QA/QC samples, but not including samples from TOP-02M, there were 130 samples submitted. The samples underwent the preparation stage of analysis at MEG Labs. The samples were dried, weighed and crushed to pass -10 mesh. They were then riffle split. A 150-gram split was then pulverized and delivered to ALS Laboratories in Reno for analysis using the ALS method ME-ICP61. This method provided analyses for 33 elements with lithium added as the 34^{th} element. The method has a limit of detection of 10 ppm for Li.

The samples from TOP-02M were submitted separately for preparation and analysis. There were 26 samples submitted for TOP-02M, including 4 QA/QC samples.

12 Data Verification

The data from the Enertopia drilling program was supplied to the author from the Company's files and was verified by the author, where possible. Assay data used in the mineral resource model was cross-checked against the original assay certificates after the data had been imported into the model. Assay values were also checked against those displayed in cross sections. Cross sections of the model were generated and volumetrics were checked by the cross-sectional method to verify the model's accuracy. Lithium values generated from the Enertopia model are consistent with lithium values provided by announced NI 43-101 resource estimates for the two adjoining properties.

The author is of the opinion that there have been no limitations on his verification of any of the data presented in this report. The author has verified the resources for the adjacent Noram Ventures property (Peek, 2016)(Peek, 2017)(Peek and Spanjers, 2017)(Peek and Barrie, 2019) but has not verified the resources reported on the neighboring Cypress Development property or the similar clay-based lithium properties reported in the various news releases and NI 43-101 reports. The author is of the opinion that all data presented in this report are adequate for the purposes of this report.

13 Mineral Processing and Metallurgical Testing

13.1 Enertopia

Enertopia has been conducting lithium extraction testing since 2016, beginning with bench tests on lithium-bearing sediments from Clayton Valley and other sources. Soon after the claim staking and initial sampling on their claims in 2017, the Company began bench testing extraction methods using surface samples from their Clayton Valley property.

Testing in late 2017 and early 2018 on samples from the property was able to remove nearly all of the magnesium from synthetic brines using high pH (11.0) solutions. The removal of magnesium from the solutions at relatively low cost could be a significant step toward commercial lithium production from claystone deposits. But the testing was not able to achieve the 99.5% $LiCO_3$ purity necessary for use in lithium ion battery production.

In 2019 the Company focused on testing materials obtained from the December 2018 drilling program (Section 10 - Drilling), testing the oxidized and reduced zones found in the core. Much of the testing involved determining how beneficial it would be to remove coarser grain sizes from the material prior to processing. It was found that the coarser fraction contained very little lithium as opposed to the finer fraction. Sorting of the materials was also found to be enhanced by sorting wet fractions, rather than dry. Further testing using techniques to pre-strip the material of impurities prior to processing has yielded significant results without significantly affecting the lithium levels in the test material.

For the water to be used in processing the material, Enertopia has looked into obtaining water rights in Clayton Valley and has also investigated the possibility of trucking water to the site or possibly locating the processing plant near Tonopah and using Tonopah city water. No decision has yet been made in this regard.

13.2 Other Projects

There are 5 known lithium clay projects that are advancing toward potential commercial production. Some of the projects have completed extensive metallurgical testing. Two of those projects occur adjacent to and abut the Enertopia Clayton Valley property. The 5 are:

1. Cypress Development's Clayton Valley Lithium Project located to the west and south of Enertopia's claims.
2. Noram Ventures' Zeus Project in Clayton Valley to the north, east and south of Enertopia's property.
3. Ioneer Resources' Rhyolite Ridge Project in Nevada, approximately 30 km west of Enertopia.
4. Lithium America's Thacker Pass Project in northern Nevada.
5. Bacanora Lithium's Sonora Project in Sonora, Mexico.

13.2.1 Cypress Development – Clayton Valley Lithium

Cypress Development completed a Preliminary Economic Assessment (PEA) (Lane, et al, 2018) on their project in October 2018 and are currently working on a Prefeasibility Study (PFS). The project is located directly adjacent to the Enertopia claims, so their extraction process testing has a direct bearing on the metallurgical properties of the Enertopia deposit.

In their PEA report Cypress reported an initial pit resource estimate of 365 million tonnes Indicated and 160 million tonnes Inferred at a 300 ppm Li cutoff grade. Drilling has indicated that the resource is much larger than the initial pit area. They have conducted numerous tests which involve varying process temperatures, varying pH levels with differing acid types, mineralogical studies, effects of agitation leaching, membrane precipitation and ion exchange (Lane, et al, 2018). The test work has allowed Cypress to identify a commercially viable process, based on filtration (Cypress Development News Release, dated August 29, 2019). Testing on the downstream portion of the process is ongoing and Cypress is making adjustments to the process flowsheet in preparation for the finalization of their PFS. Their design is based on mining 15,000 tonnes per day of material to produce 25,000 tonnes of lithium carbonate per year (Cypress Development News Release, dated February 27, 2020).

13.2.2 Noram Ventures – Zeus Claims

Noram Ventures has conducted X-ray diffraction mineralogical studies and leach tests using H_2SO_4 and varying leach temperatures (Barrie, et al, 2018)(Peek and Barrie, 2019). Noram's primary focus has been on the definition of the resource. Latest announcements report a resource of 213 million tonnes Indicated and 193 million tonnes Inferred at a 300 ppm Li cutoff (Noram Ventures News Release, dated February 5, 2020).

13.2.3 Ioneer Ltd. – Rhyolite Ridge

Ioneer completed a Pre-feasibility study in October 2018 and plans to have a Definitive Feasibility Study completed during the first quarter of 2020. They have a forecast annual production of 20,200 tonnes of lithium carbonate and 173,000 tonnes of boric acid (Ioneer News Release, dated October 1, 2019). The size of the deposit was recently upgraded to 154 million tonnes at 1,650 ppm Li and 14,100 ppm B (Ioneer News Release, dated June 26, 2019). The borate component of the deposit is somewhat different from other lithium clay deposits but shares many of the processing methods. Ioneer has used Kemetco Research in Vancouver, BC to develop a pilot plant which has processed an initial 30 tonnes of material, producing high quality lithium carbonate and boric acid (Ioneer News Release, dated October 1, 2019).

13.2.4 Lithium Americas – Thacker Pass

The Thacker Pass lithium clay deposit consists of lacustrine clay deposits within the McDermitt Caldera which contain 179 million tonnes at 3283 ppm Li as Proven and Probable Mineral Reserves with a 2000 ppm Li cut-off as stated in the Pre-Feasibility Study (Ehsani et al., 2018). Lithium Americas expects to have a Definitive Feasibility Study completed by mid-2020.

The deposit has many similarities to the Clayton Valley lithium clay deposit(s) with regard to its metallurgical properties but is much higher grade than the Clayton Valley resources. Lithium Americas has performed extensive extractive process testing at their Process Testing Facility in Reno, Nevada.

The following is an excerpt from a Lithium Americas News Release, dated September 25, 2019:

> The Thacker Pass process optimizes and reconfigures several commercially-proven techniques in extractive metallurgy designed specifically for the processing of lithium bearing clays. To date, Lithium Nevada's process testing facility located in Reno, Nevada has produced over 3,000 kg of high-quality lithium sulfate brine ("lithium sulfate") from Thacker Pass ore. The process has been optimized by upgrading the ore through a wet attrition process followed by a hydrocyclone to remove coarse material with relatively low lithium content. The process test work has demonstrated an increase in lithium concentration by over 25% which results in reduced acid consumption per tonne of LCE.

The Plan of Operations accepted by the BLM in September 2019 includes the production of battery-grade lithium hydroxide and lithium carbonate up to 60,000 tons per year of lithium carbonate equivalent (LCE) (Lithium Americas News Release, dated January 21, 2020).

13.2.5 Bacanora Lithium – Sonora Project

Bacanora Lithium has an open pit mineable deposit of lithium-rich clays in Sonora State, Mexico with a considerable tuffaceous component. The feasibility study (Pittuck, et al, 2018) shows Proven and Probable Reserves of 244 million tonnes with a grade of 3480 ppm Li at a 1500 ppm cutoff.

Their pilot plant has been operating for approximately 4 years and is producing battery-grade lithium carbonate to distribute to potential customers in Asia. The flowsheet for their plant is somewhat different than those anticipated for the Nevada lithium claystone operations in that it involves a pre-concentration stage followed by a sodium sulfate roasting. The material then goes to the hydrometallurgical section where the roast product is repulped in water to form an impure lithium sulfate pregnant leach solution (PLS). Impurities are then removed from the PLS using precipitation and ion exchange prior to evaporation and precipitation of battery grade lithium carbonate (Bacanoralithium.com website).

14 Mineral Resource Estimates

14.1 General

This mineral resource estimate is the maiden resource estimate for Enertopia's property in Clayton Valley. While the economic factors listed in this report will be important to the possible viability of the deposit, the deposit has yet to undergo the much more rigorous testing that must be performed before a mining decision can be made. Mineral resources are not mineral reserves, and as such, have not demonstrated economic viability.

The deposit is held by placer and lode mining claims staked on U. S. Government lands administered by the Bureau of Land Management. Therefore, the permitting process for any mining operation is well established and has been tested on many past BLM projects. There are no known unusual legal, environmental, socio-economic, title, taxation or permitting problems associated with the subject claims that would adversely affect the development of the property, other than the possible necessity to develop water rights for the extraction of the lithium.

The mineral resource estimate, herein, is defined by 4 core drill holes (TOP-01 through TOP-04) for a total of 383.4 meters of drilling and an average hole depth of 95.9 meters. A total of 119 lithium assay results from core, not including QA/QC samples, nor TOP-02M samples, were used for the model.

The assays from drill hole TOP-02M, which was drilled adjacent to TOP-02, were not used in the model. Because of low core recovery in some portions of these two holes, it was proposed that the assays from the two holes be combined, using the assays from the hole with the better recovery for any individual interval in the model. For this purpose, the geologists working on the project constructed a "composite" hole from TOP-02 and TOP-02M. Both TOP-02 and TOP-02Composite were tested for the model. It was found that the substitution did not make a significant difference in the outcome of the resource estimate, so TOP-02M was not used in the final model.

The data for the mineral resource estimate were generated using the Rockworks 17 program, sold by Rockware, Inc.

14.2 Economic Factors

For the development of this mineral resource estimate, consideration has been given to economic factors such as mining and processing costs to determine that the deposit has reasonable prospects for economic extraction. The primary factors in favor of the economic extraction determination are:

- The deposit occurs at or very near the surface, greatly reducing mining costs.
- The deposit is almost entirely unconsolidated or semi-consolidated, which will not require drilling and blasting, but could require ripping with a bulldozer (yet to be determined), further lowering mining costs.
- The mining method, which is yet to be determined, is envisioned to be an open pit involving bulldozers (if required) to rip the sediments and front-end loaders to load the sediments into trucks to be hauled to the processing plant. The size and number of pieces

of equipment will be determined by mining engineers once the final size and configuration of the operation is established. The location of the processing plant with regard to the deposit has not been decided.
- Preliminary testing for the extraction of the lithium from the mined material (See Section 13 – Mineral Processing and Metallurgical Testing) has indicated that the material will be relatively inexpensive to process.
- From the preliminary testing, the sediments will not require crushing or grinding prior to processing but may require some preprocessing to upgrade the material by removing the coarser fraction, which has been found to be of lower grade.
- The type of processing envisioned will have a much smaller footprint than lithium brine operations, which now employ large evaporation ponds, making the proposed operation more environmentally friendly.
- The deposit occurs in Nevada, a mining-friendly environment, on BLM land, with nearby producing properties.
- Electric power, developed transportation routes and a mining workforce are located proximally to the deposit.
- Since the deposit model extends to the limits of Enertopia's property holdings, to be able to mine the entire deposit, cooperation among the adjacent property holders will be required.

Estimates of economic parameters are based heavily on other similar projects which are more advanced than Enertopia's Clayton Valley Lithium Project. The other projects and their levels of announced economic analysis are:

- Thacker Pass Project, Humboldt County, Nevada – Pre-feasibility Study August 1, 2018
    - Owner = Lithium Americas
    - Host Rocks = Tuffaceous lithium-rich clays
    - Stripping Ratio = 1.8:1
    - Mining Cost per Tonne of Waste = US$2.80
    - Mining Cost per Tonne Ore = US$2.80
- Sonora Lithium Project, Sonora, Mexico - Feasibility Study October 2018
    - Owner = Bacarona Minerals Ltd.
    - Host Rocks = Tuffaceous lithium-bearing clays
    - Stripping Ratio = 2.85:1
    - Mining Cost per Tonne Overall = US$1.75
- Rhyolite Ridge Project, Esmeralda County, Nevada - Pre-feasibility Study October 22, 2018
    - Owner = Ioneer Ltd.
    - Host Rocks = Finely bedded marls
    - Stripping Ratio = N/A
    - Mining Cost per Tonne of Ore = US$2.70
- Clayton Valley Lithium Project, Esmeralda County, Nevada – Preliminary Economic Assessment October 1, 2018

- Owner = Cypress Development Corporation
- Host Rocks = Tuffaceous lithium-rich clays
- Stripping Ratio = 0.1:1
- Mining Cost per Tonne Overall – US$1.73

Unfortunately, all of these studies were completed in 2018. While some of the companies are in the process of completing more recent studies, none have yet made them public. In the meantime, the price of lithium carbonate and lithium hydroxide have contracted which will change the economics of the projects.

The project most similar to the Enertopia deposit is Cypress Development's Clayton Valley Lithium Project. It occurs on land which abuts Enertopia's claims on the west side and is considered to be a part of the same mineral deposit as Enertopia's. Therefore, many of the economic parameters used by Cypress can reasonably be applied to Enertopia's deposit.

All four of the projects listed above are hosted in similar rock to that of Enertopia's Clayton Valley project. Based on the above information, it is the opinion of the author that using a mining cost of US$2.00 per tonne for the Clayton Valley project would be a reasonable figure and the actual mining cost could be significantly less.

Table 14.1 shows estimates of the mining, processing and other operating costs for the average lithium grade of the deposit, based on the mining cost of US$2.00/tonne, to produce one tonne of lithium carbonate at various cutoff grades.

Table 14.1 - Estimated costs to produce one tonne of lithium carbonate.

1	2	3	4	5	6	7	8
Cutoff Grade (Li ppm)	**Li Metal Per Tonne (kg)**	**Material Required for 1 Tonne Li_2CO_3 (Tonnes)**	**Material Required with 80% Recovery (Tonnes)**	**Mining Cost at US$2.00 per Tonne Material (US$)**	**Processing Cost @ US$13.00 Per Tonne (US$)**	**Total Mining + Processing Cost Per Tonne Li_2CO_3 (US$)**	**Total Mining + Processing + Other Operating (US$)**
400	0.40	470	587	$ 1,175	$ 7,636	$ 8,811	$ 9,398
700	0.70	269	336	$ 671	$ 4,364	$ 5,035	$ 5,371
1000	1.00	188	235	$ 470	$ 3,055	$ 3,524	$ 3,759
1200	1.20	157	196	$ 392	$ 2,545	$ 2,937	$ 3,133

Notes:
Column 1 Average grade of material in the inferred and indicated mineral resource model.
Column 2 Column 1 divided by 1000
Column 3 1 divided by Column 2 divided by 5.32 times 1000 (5.32 is the multiplier to convert Li metal to Li_2CO_3)
Column 4 Column 3 divided by 80% projected recovery rate = approximation from the 4 projects listed above
Column 5 Column 4 times US$ 2.00 = conservative mining cost per tonne
Column 6 Column 4 times US$ 13.00 = from Cypress Development PEA
Column 7 Column 5 plus Column 6
Column 8 Column 7 plus estimated additional operating costs from Cypress Development PEA = $1.00/tonne

Although the numbers in Table 14.1 are preliminary, they indicate that the cost to produce a tonne of lithium carbonate will be approximately US$ 9,398/tonne at a 400 ppm Li cutoff. Current lithium carbonate (99.5% purity) spot prices in the U. S. and Europe are $9,500 - $10,500 per tonne (as of the week of March 9, 2020: www.fastmarkets.com) (see also Section 14.3 – Lithium Pricing). In addition, the Cypress Development PEA indicated that their projected operating cost would be US$3,983 per tonne of lithium carbonate. These economic factors serve to show that there is a reasonable chance that the Enertopia deposit could be economically exploited.

14.3 Lithium Pricing

Pricing for lithium carbonate is a complicated proposition. There was a rapid price rise in 2016 and the price reached a high of nearly US$16,000/short ton in mid-2018 (with some sales well above this figure) before beginning a long price decline that continues into 2020. There appear to be wide variations in the projections of both lithium demand and lithium supply. On top of this, at the time of this writing, the world is going through the Coronavirus scare and the oil price has taken a deep plunge due to a disagreement between Saudi Arabia and Russia over oil production reductions. All of the world markets are in a state of drastic change from day to day and it is unclear whether the world economy will recover from the recent market declines.

The projected high future demand for lithium batteries for electric vehicles and other storage devices are expected to cause lithium market to rise over the long term (Figure 14.1). Because of the price rise between 2016 and 2018, companies who were producing lithium increased their production. The increased production caused the price of lithium to decline from its highs in mid-2018 (Figure 14.2). With both supply and demand in a state of flux, there are many competing scenarios as to how quickly the new production will come onstream and how rapidly demand will rise. Figure 14.3 is a projection of supply and demand by Orocobre, one of the world's leading producers of lithium.

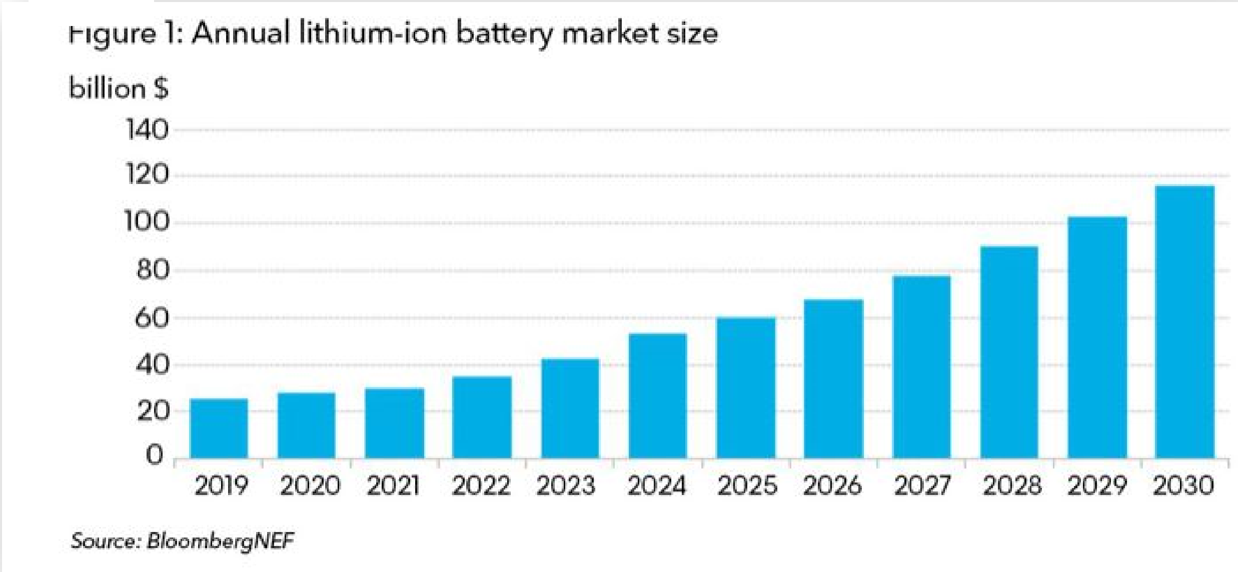


Figure 14.1 - Lithium battery market increase projection (Source: Bloomberg NEF).

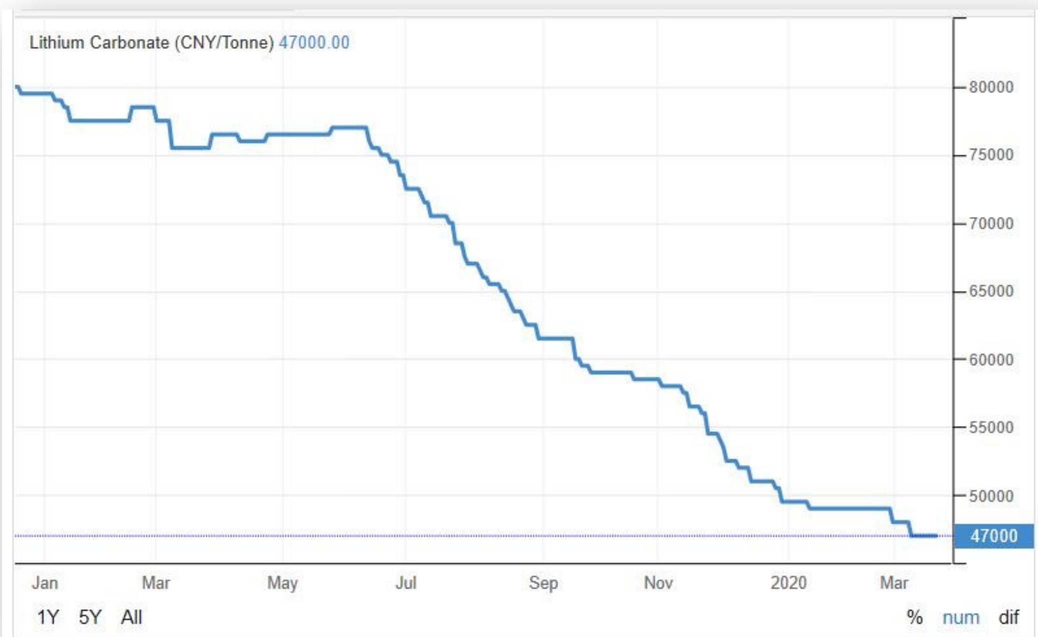


Figure 14.2 - Lithium carbonate price for 2019 and 2020 (Vertical axis in Chinese Yuan).

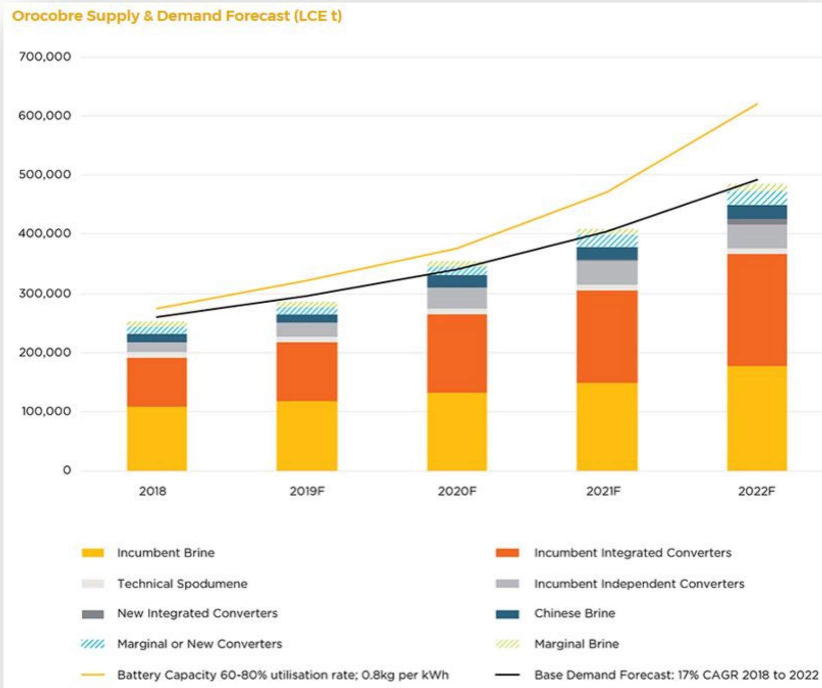


Figure 14.3 - Projected supply and demand chart for LCE (Source: Orocobre.com)

Until recently, lithium was mostly sold by private contracts, the terms of which were generally not published. The London Metals Exchange (LME) has now added lithium carbonate and lithium hydroxide quotes to their system. LME has partnered with Fastmarkets to promote market acceptance of Fastmarket's lithium reference prices. An example from the LME.com website is given in Figure 14.4.

FASTMARKETS MB LITHIUM CARBONATE: MIN 99.5% LI2CO3 BATTERY GRADE, SPOT PRICES CIF CHINA, JAPAN & KOREA, $/KG

(MIDPOINT)

DATE	PRICE (US$ PER KILOGRAM)
12 March 2020	8.75
05 March 2020	8.75
27 February 2020	8.75
20 February 2020	8.75

Figure 14.4 - LME.com lithium carbonate price quotes from March 19, 2020.

For this study "Consensus Pricing", or the recent price projections of peer companies as yardsticks, was used to measure the Enertopia deposit's reasonable prospects for eventual economic extraction. Below are examples of "Consensus Pricing" scenarios taken from similar projects with published studies. Unfortunately, all of these studies were completed in 2018, near the peak of the lithium price curve, so the prices they used in the studies are much higher that current lithium carbonate prices. Although updates to the studies for at least 3 of the projects are nearing completion, none have yet been published.

- Thacker Pass Project, Humboldt County, Nevada – Pre-feasibility Study August 1, 2018
    - Owner = Lithium Americas
    - Li_2CO_3 Price = US$12,000/tonne
- Sonora Lithium Project, Sonora, Mexico - Feasibility Study October 2018
    - Owner = Bacarona Minerals Ltd.
    - Li_2CO_3 Price = US$14,300/tonne
- Rhyolite Ridge Project, Esmeralda County, Nevada - Pre-feasibility Study October 22, 2018
    - Owner = Ioneer Ltd.
    - Li_2CO_3 Price = US$10,000/tonne

- Clayton Valley Lithium Project, Esmeralda County, Nevada – Preliminary Economic Assessment October 1, 2018
  - Owner = Cypress Development Corporation
  - Li_2CO_3 Price = US$13,000/tonne

For the current study it will be assumed that the Enertopia project will require at least 3 years to reach production and will probably take longer. If it is assumed that lithium demand will have an annual growth rate of 15%, which seems reasonable considering the current trends in lithium battery usage in electric vehicles and other storage devices, and a concomitant similar price rise of 5% compounded annual growth rate, it can be assumed that the price of lithium carbonate at the time of production will be in the range of US$10,000/Tonne.

14.4 Cut-off Grade

The cut-off grade for the Enertopia deposit was calculated by using the cost to produce a tonne of lithium carbonate (See Section 14.2 – Economic Factors) using various lithium grades in the deposit and comparing those values against the projected lithium carbonate price (See Section 14.3 – Lithium Pricing). In this manner, a lithium value of 400 ppm Li was chosen for a cut-off grade. The calculations used for the 400-ppm figure are shown below:

Grade of Deposit Material = 400 ppm Li

Lithium Metal Per Tonne @ 400 ppm = 0.40 kilograms

Material Required to Produce 1 Tonne of Lithium Carbonate = 470 tonnes (1 ÷ 0.40 ÷ 5.32 X 1000)

Material Required to Produce 1 Tonne of Lithium Carbonate with 80% Recovery = 587 tonnes (470 ÷ 0.8)

Mining Cost at US$2.00/tonne = $1,175 (587 X $2)

Processing Cost (from Cypress Development PEA at US$13.00/tonne) = $7,636 (587 X $13.00)

Total Mining + Processing Cost = US$8,811 ($1,175 + $7,636)

Total Mining + Processing + Other G & A Costs = $9,398 ($8,811 + $1 X 587) ($1/tonne estimated G & A costs from Cypress Development PEA)

Therefore, the total cost of producing a tonne of lithium carbonate from 400 ppm Li deposit material at $9,398 compares reasonably well with the projected price of lithium carbonate of US$10,000 (See Section 14.3 – Lithium Pricing).

In the above scenario, a recovery of 80% of the Li was assumed. This may be the low end of the potential Li extraction rates using evidence from other projects. The Cypress Development Clayton Valley PEA (Lane, et al, 2018) discussed extraction rates in excess of 80%. Bacanora Lithium's Sonora project Feasibility Study (Pittuck, et al, 2018) quoted average lithium recoveries of 83.8% in their testing. The LithiumAmericas Thacker Pass project Pre-Feasibility Study (Ehsani, et al, 2018) used a lithium recovery of 88%.

14.5 Model Parameters

The histogram of all the lithium values from the 4 Enertopia drill holes (intervals were not composited), generated by Rockworks 17 is shown in Figure 14.1. The statistics for the histogram are listed in Table 14.2. The data approaches a log-normal distribution. Very few of the data points can be considered outliers. Only 4 values occur above 2 standard deviations from the mean. From this is was determined that high grade capping was not necessary.

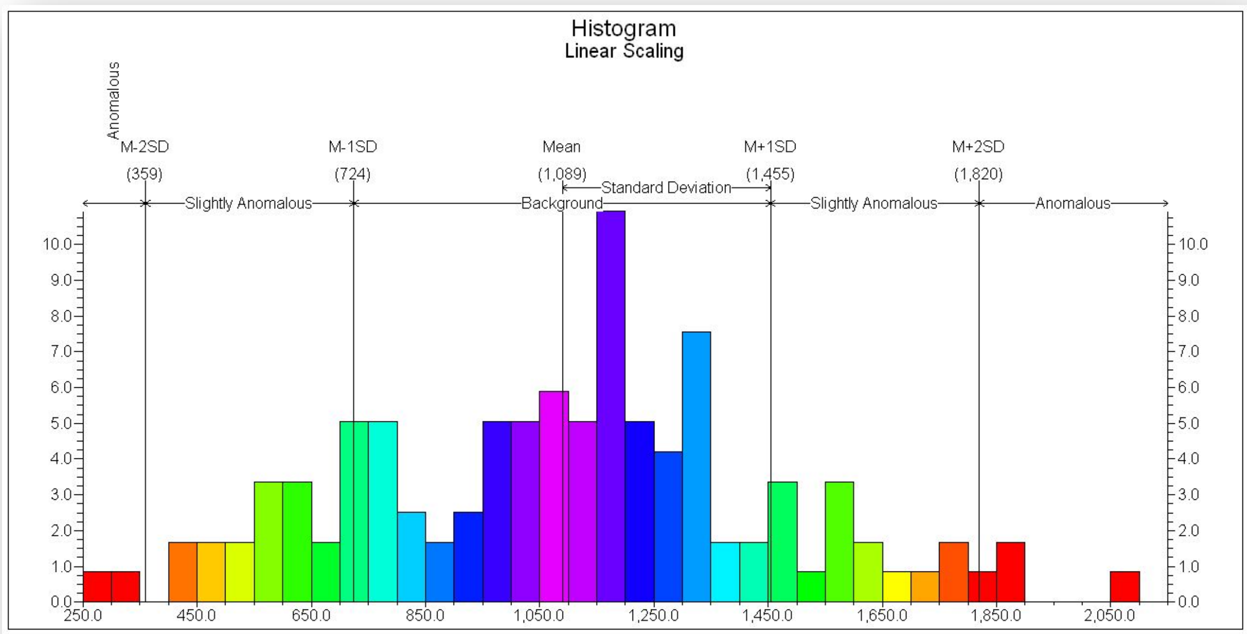


Figure 14.5 - Histogram of all Li values from all drill holes used in resource model.

Statistical Summary	
Population	119
Minimum Value	280.0
Maximum Value	2,080.0
Range	1,800.0
Mean	1,089.4958
Standard Deviation	365.06291
Standard Error	33.46526
Median	1,130.0
Sum	129,650.0
Sum of Squares	156,979,100.0
Variance	133,270.93007
Skewness	0.10938
Kurtosis	-0.25139
Coefficient of Variation	0.33508
Mean - 1 Standard Deviations	724.43289
Mean - 2 Standard Deviations	359.36997
Mean - 3 Standard Deviations	-5.69294
Mean - 4 Standard Deviations	-370.75585
Mean + 1 Standard Deviations	1,454.55871
Mean + 2 Standard Deviations	1,819.62162
Mean + 3 Standard Deviations	2,184.68454
Mean + 4 Standard Deviations	2,549.74745
Background Population	80
Slightly Anomalous Population	33
Moderately Anomalous Population	6
Strongly Anomalous Population	0
Extremely Anomalous Population	0

Table 14.2 - Statistics for all Li values from the 4 drill holes used in the resource model.

The model was constrained vertically on the top by constructing a surface from elevation readings taken at 25-meter spacings from Google Earth. The bottom constraint on the model was constructed from the bottoms of the drill holes. The model was constrained horizontally by the limits of the Enertopia claim block.

The reader should keep in mind that to use the property boundary as a horizontal constraint, it is assumed that agreements between Enertopia and the adjacent claim owners will be struck to allow Enertopia to mine all of the deposit. Otherwise, consideration would need to be given to the slope of the pit walls from the property boundary inward, which would limit the mineable portion of the deposit. As yet, no such agreements are in place, although relations between the companies have been cordial and such agreements would benefit all parties involved.

Figure 14.6 shows the Enertopia land position and the drill holes used in the resource calculation.

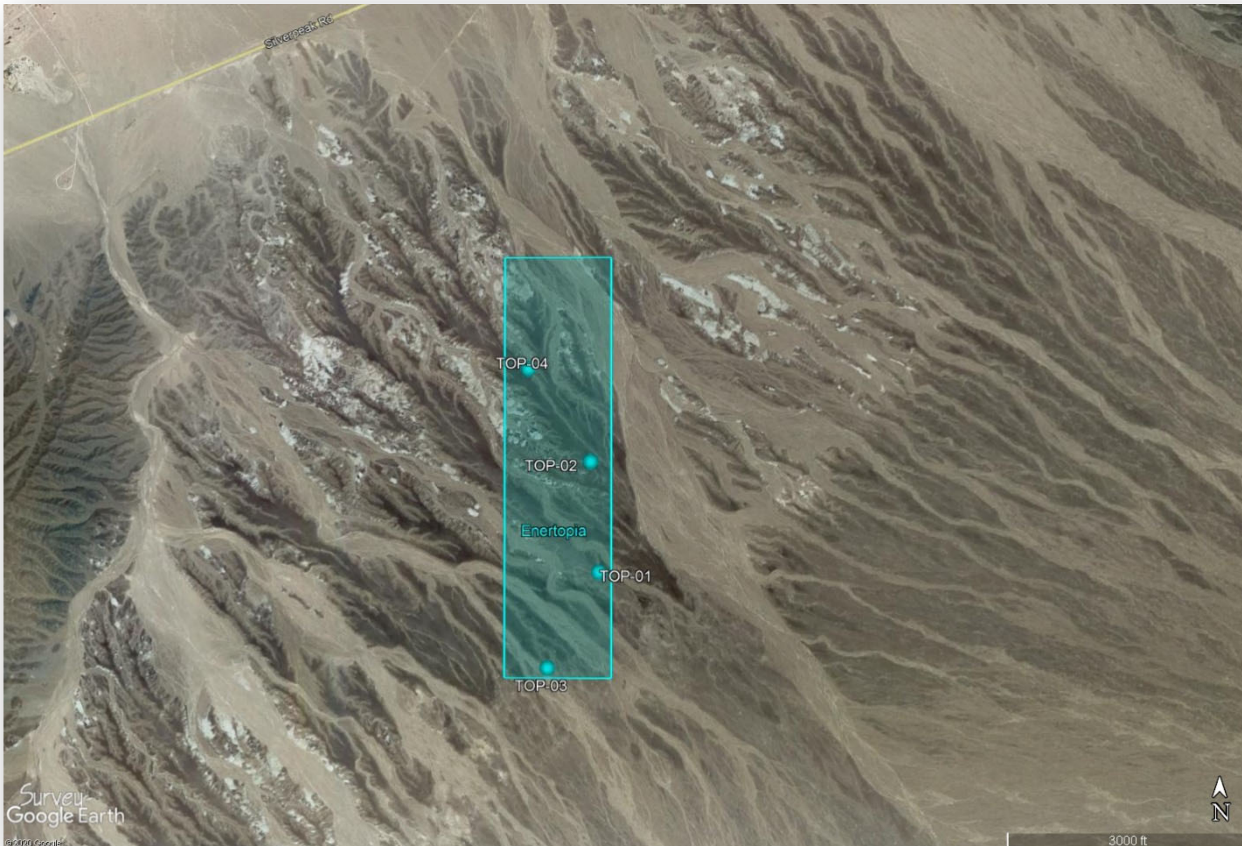


Figure 14.6 – Google Earth image showing Enertopia land position and drill holes.

Figure 14.7 shows the North-South cross section through the resource model. The vertical exaggeration of the cross sections is 2X. Careful examination of the cross section in AutoCAD was used to verify the accuracy of the model.

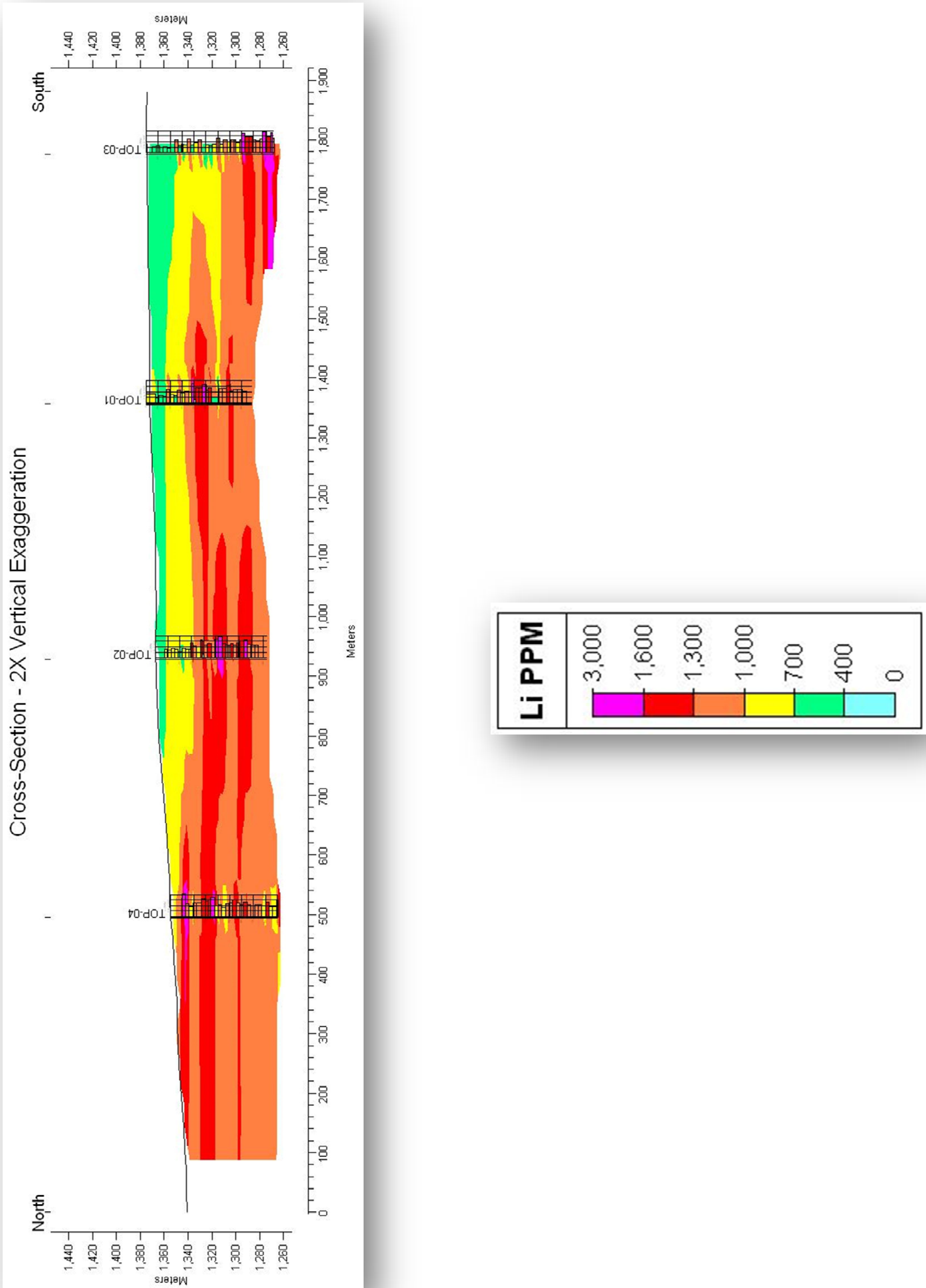


Figure 14.7 – North-South cross section from resource model - 2X vertical exaggeration.

The inverse distance squared model was constructed using voxels with dimensions of 50m X 50m horizontally by 3m vertically, reflecting the relatively thin vertical component and large horizontal extent of the deposit. A mining bench height for such a deposit has not been developed at this point.

Due to the relative simplicity of the deposit, not being complicated by structure or nugget effect, the model chosen was deemed to be adequate for the purposes of this mineral resource estimate.

14.6 Density Determination

There were no density determinations carried out for Enertopia's maiden resource estimate. Therefore, it is necessary to collect data from other lithium clay deposits where the density has been determined. Lithium Americas, Bacarona Lithium, Ioneer and Cypress Development have published results of investigations on their lithium clay properties which were used to derive a reasonable density for Enertopia's deposit. The other companies' density values and the reports in which they appeared are as follows:

- Thacker Pass Project, Humboldt County, Nevada – Pre-feasibility Study August 1, 2018
    - Owner = Lithium Americas
    - Density of Claystones = 1.79 Tonnes/meter^3
- Sonora Lithium Project, Sonora, Mexico - Feasibility Study October 2018
    - Owner = Bacarona Minerals Ltd.
    - Density of Clay Units = 2.23 – 2.32 Tonnes/meter^3
- Rhyolite Ridge Project, Esmeralda County, Nevada - Pre-feasibility Study October 22, 2018
    - Owner = Ioneer Ltd.
    - Density Range = 1.8 – 2.11 Tonnes/meter^3
- Clayton Valley Lithium Project, Esmeralda County, Nevada – Preliminary Economic Assessment October 1, 2018
    - Owner = Cypress Development Corporation
    - Reduced Clays = 1.68 Tonnes/meter^3. Oxidized Clays = 1.76 Tonnes/meter^3

From the above data it was determined that a density of 1.74 Tonnes/meter^3 would be a reasonable density to use for the Enertopia deposit.

14.7 Variography

Only four drill holes were used for the resource model and those holes were distributed more or less along a north-south line. For this small number of holes and this distribution, it is believed that variogram analysis would not provide meaningful data, so no adjustment to the direction of search distances was made to the inverse distance squared model.

14.8 Modeling and Resource Categories

The resource model used the inverse distance squared algorithm. The drill holes were sampled at 10-foot (±3-meter) intervals which was reflected in the voxel size of 3 meters vertical and 50X50 meters horizontal. No compositing of assay intervals was used.

Within 300 meters of each drill hole the material was classified as Indicated with the Inferred material being greater than 300 meters. This convention was used for the Cypress Development PEA resource modeling (Lane, et al, 2018). The rationale was that 300 meters represents 1/5 of the overall variogram range and that the parameters are more conservative than typical industry practice. Without the benefit of variography for the Enertopia data and considering that the Cypress and Enertopia resources are part of the same lakebed sedimentary mineral deposit separated only by a property boundary, the author finds it realistic to accept the Cypress indicated resource definition as reasonable.

14.9 Model Results

The reader of this report should be aware that the deposit being defined is for an indicated mineral resource and an inferred mineral resource and does not include any other classifications of mineral resource or mineral reserve. Mineral resources are not mineral reserves, and as such, have not demonstrated economic viability. An inferred mineral resource is the lowest level of confidence for mineral resource categories as defined by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM). An indicated mineral resource represents an increasing level of geological knowledge and confidence above an inferred mineral resource (CIM Definition Standards, adopted May 10, 2014).

Table 14.3 lists the final tonnage and grade of the indicated and inferred mineral resources. The result of the resource estimate is approximately 82 million tonnes at a grade of 1121 ppm Li for the indicated mineral resource and 18 million tonnes at a grade of 1131 ppm Li for the inferred mineral resource, both at a cutoff grade of 400 ppm Li. These values are considered to be a reasonable estimate for the deposit, having been checked using other computer-generated and manual methods. The last assays at the bottoms of all 4 of the drill holes used in the model were greater than 1000 ppm Li, so there is room for expansion of the resource at depth.

Table 14.3 - Enertopia Indicated and Inferred Mineral Resources.

Indicated Mineral Resource				
	400 ppm Li Cutoff	700 ppm Li Cutoff	1000 ppm Li Cutoff	1200 ppm Li Cutoff
Tonnage	**81,732,150**	75,951,000	59,534,100	34,478,100
Average Grade	**1121**	1160	1247	1346
Contained Li (kg)	**91,656,383**	88,129,744	74,225,389	46,424,369
LCE (Tonnes)	**487,887**	469,115	395,102	247,117

Inferred Mineral Resource				
	400 ppm Li Cutoff	700 ppm Li Cutoff	1000 ppm Li Cutoff	1200 ppm Li Cutoff
Tonnage	**18,165,600**	17,252,100	15,999,300	8,913,150
Average Grade	**1131**	1156	1170	1196
Contained Li (kg)	**20,554,207**	19,948,516	18,719,880	10,664,088
LCE (Tonnes)	**109,410**	106,186	99,646	56,765

As an additional exercise a calculation was made to determine the average grade of each major lithologic unit within the model. Table 14.4 shows the results of the calculation. It is interesting to note that the reduced sediments tend to be higher grade than the oxidized units. This was also noted by Cypress Development in their adjacent deposit.

Table 14.4 – The average grade of the major lithologic units.

Unit	Weighted Avg Grade (Li ppm)
Surface Gravel	790
Upper Olive Claystone	834
Main Blue Claystone	1136
Dark Blue-Black Claystone	1464
Lower Olive Mudstone	1082

23 Adjacent Properties

The perimeter of Enertopia's claims are located within 1.3 miles (2.1 km) of Albemarle's lithium brine operations. Lithium is produced at Albemarle's plant from deep wells that pump brines from the basin beneath the Clayton Valley playa (Kunasz, 1970; Zampirro, 2005 and Munk, 2011). The Albemarle operations have been producing lithium for more than 50 years.

Between Albemarle's operation and Enertopia's land position lies Pure Energy Minerals' Clayton Valley South project. Pure Energy has announced in a revised Preliminary Economic Assessment (PEA) dated March 23, 2018 an inferred resource of 200,000 metric tonnes of lithium hydroxide monohydrate to be extracted over a 20-year period (Molnar, et al, 2018), with a Net Present Value of US$264.1 million (after tax at 8% discount rate) and an estimated Internal Rate of Return of 21.0% (after tax). The Pure Energy resource occurs as basinal subsurface brines similar to those at Albemarle's project.

East of Pure Energy's claims and adjacent to the west and south of Enertopia's holdings, Cypress Development has completed a PEA with an effective date of September 4, 2018 (Lane, et al, 2018). The results of the economic analysis from the PEA reports:

> "at a lithium carbonate price of $13,000/tonne of lithium carbonate, over the 40-year schedule, projects an after-tax Net Present Value @ 6% (NPV@6%) of $1.97 billion, NPV@8% of $1.45 billion, and NPV@10% of $773 million, and Internal Rate of Return (IRR) of 32.7%. The expected maximum negative cash flow is $488 million."

In their PEA report Cypress reported an initial pit resource estimate of 365 million tonnes Indicated and 160 million tonnes Inferred at a 300 ppm Li cutoff grade. Drilling has indicated that the resource is much larger than the initial pit area. Cypress is currently working on a prefeasibility study and announced in a press release dated November 14, 2019 that they expect the complete the PFS in early 2020.

On February 5, 2020 Noram Ventures Inc., which holds claims that border Enertopia on the east, north and south, announced an updated mineral resource that included an indicated mineral resource of 213 million tonnes at a grade of 976 ppm Li and an inferred mineral resource of 194 million tonnes at 807 ppm Li, both at a cutoff grade of 300 ppm Li.

The mineralization reported for these adjacent properties has not been verified by the author, with the exception of the Noram Ventures deposit, and is not necessarily indicative of mineralization that may be found on Enertopia's property.

24 Other Relevant Data and Information

No other relevant data or information is known to exist that would make the report understandable and not misleading.

25 Interpretation and Conclusions

One phase of core drilling in 2018 has provided a basis for lithium resource estimate for Enertopia's property in Clayton Valley, Nevada. The lithium assays from the drilling provide results that are reasonably consistent over the Enertopia claim group. The model generated for the indicated and inferred mineral resource estimate extend to the property boundaries on all sides.

Within the model that was generated from the drilling, the potential exists for a viable mining operation. The model herein reports an indicated mineral resource of approximately 82 million tonnes at a grade of 1121 ppm Li and an inferred mineral resource of approximately 18 million tonnes at a grade of 1131 ppm Li, both at a cutoff grade of 400 ppm Li. The last assays at the bottoms of all 4 of the drill holes used in the model were greater than 1000 ppm Li, so there is room for expansion of the resource at depth.

Preliminary economic indicators are that the deposit may be economically extractable at some point. The levels of confidence, i.e., the categories, of the resource estimates may change with additional exploratory work, such as sampling, drilling and metallurgical testing.

Great strides have been made over the past 3 years regarding the economic extraction of lithium from clay sediments. Several companies, including Enertopia, have been active in testing metallurgical techniques to this end. It now appears assured from the published studies that methods are available to economically extract the lithium with relatively few impurities to make a battery grade lithium carbonate or lithium hydroxide from lithium-rich claystone deposits.

26 Recommendations

Enertopia has successfully completed the early phases of exploration including surface exploration and the first phase of drilling, along with metallurgical testing. The drilling was highly successful in defining very significant mineral resources.

The primary recommendation of this report is to follow the first phase of drilling with a second phase of exploratory drilling. Infill drill holes are recommended to upgrade the level of confidence in the deposit so that at least some of the resources may be reclassified as mineral reserves. This recommended program has a budget of US$190,000, as explained in Table 26.1.

Table 26.1 – Recommended Drilling Budget.

Item			Total
Drill 12 core holes to depths of approximately 100m (300ft)	3600ft	$40/ft	US$144,000
Assays of core samples	400 samples	$40/sample	US$16,000
Geological & Sampling Consumables			US$30,000
Total			US$190,000

Simultaneous with the drilling program, but not contingent upon its results, work should be continued on the metallurgical properties of the lithium clays. Testing of bulk samples is advised to determine the most economical method of processing the clay and sandy clay materials with emphasis on optimal temperature, acid concentration and the most economic methods for removing the coarse detrital matter prior to processing the clays with acid. The budget for the continued metallurgical testing would be approximately US$100,000.

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Certificate of the Author

I, Bradley C. Peek, MSc., CPG do hereby certify that:

1. I am currently employed as a Consulting Geologist at 438 Stage Coach Lane, New Castle, Colorado 81647, USA
2. This certificate applies to the Technical Report titled "Lithium Claystone Mineral Resource Estimate, Clayton Valley, Esmeralda County, Nevada, USA" with the effective date March 30, 2020 (the "Technical Report").
3. I graduated in 1970 from the University of Nebraska with Bachelor of Science degree in Geology and in 1975 from the University of Alaska with Master of Science degree in Geology.
4. I am a member in good standing with the Society of Economic Geologists and the American Institute of Professional Geologists (Certified Professional Geologist #11299).
5. I have continuously practiced my profession for 50 years in the areas of mineral exploration and geology. I have explored for copper, lead, zinc, silver and gold in 10 states of the USA and 8 foreign countries. I have spent most of 2016 through 2019 exploring for lithium deposits in the Clayton Valley, Nevada and other areas of the USA. I have more than 5 years' experience generating open pit resource estimates for approximately 20 mineral deposits for precious and base metals and lithium using GEMCOM and Rockworks software.
6. I visited the Enertopia Clayton Valley Lithium property on May 5-7, 2016, July 21-25, 2016, August 3-6, 2016, December 12-22, 2016, January 8-27, 2017, April 22-May 15, 2018, November 17-December 12, 2018, January 9, 2019, September 16 – 17, 2019, October 19 – 29, 2019 and November 6 – 15, 2019.
7. I authored the report entitled "Lithium Claystone Mineral Resource Estimate, Clayton Valley, Esmeralda County, Nevada, USA" with the effective date March 30, 2020, including the conclusions reached and the recommendations made, with the exception of those portions indicated under the heading, "Reliance on Other Experts".
8. I am independent of Enertopia Corporation, applying all of the tests in Section 5.1.1, Part 1.5 of NI 43-101.
9. I have had no prior involvement with the property that is the subject of the Technical Report other than that which is stated in this report.
10. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, professional affiliation, and past relevant work experience, I fulfill the requirement to be an independent qualified person for the purposes of this NI 43-101 report.
11. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, this Technical Report contains all of the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
12. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them of the Technical Report for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public.

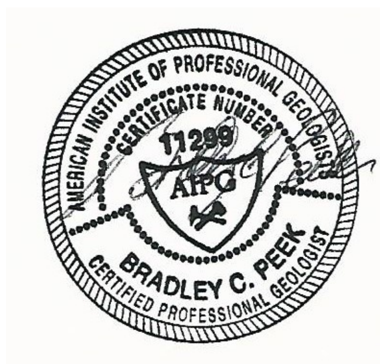
Dated: March 30, 2020

Bradley C. Peek, CPG

Date and Signature Page

The report herein, entitled "Lithium Claystone Mineral Resource Estimate, Clayton Valley, Esmeralda County, Nevada, USA" has an effective date of March 30, 2020.

Bradley C. Peek, MSc., CPG



Consent of Qualified Person:

To: Securities Regulatory Authority

Alberta
British Columbia
Ontario

I, Bradley C. Peek, do hereby consent to the public filing of the technical report entitled "Lithium Claystone Mineral Resource Estimate, Clayton Valley, Esmeralda County, Nevada, USA" with the effective date of 30 March, 2020 (the "Technical Report") by Enertopia Corporation (the "Issuer"), and I acknowledge that the Technical Report will become part of the Issuer's public record. I also consent to the use of extracts from, or a summary of, the technical report.

Signed

Dated

March 30, 2020 .