

**TECHNICAL REPORT**

**On the**

**METRON BIG SMOKEY VALLEY BRINE LITHIUM PROPERTY**

**Esmeralda County,  
Nevada, USA**

**Latitude: 37° 54' 21" - 38° 01' 55" N  
Longitude: 117° 37' 56" - 117° 46' 57" W**

**Prepared for:**

**Metron Capital Corp.**

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**February 8, 2017**

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## 1.0 SUMMARY

Kristian Whitehead, P. Geo. (“the author”) was retained by Metron Capital Corp. (“MCC” or “the Company”) to prepare an independent Technical Report on the Metron Big Smokey Valley (BSV) Brine Lithium Property (“the Property”). The purpose of the report is to meet the Toronto Stock Exchange’s listing requirements and to support future financings.

The Property is located approximately 25 miles (40 kilometres) from Tonopah in Esmeralda County, Nevada, USA and is about 50 kilometres to the west of Goldfield, the County Seat of Esmeralda County. The property consists of 100 placer claims located in Townships 1 and 2, Range 38, and 38 ½ East, Esmeralda County, Nevada, USA. Each claim is approximately 20 acres with a total combined property area of 2,000 acres, configured within two blocks. Metron has an option to acquire 100% interest in the property through cash payments, issuing shares and work commitment.

The South Big Smokey Valley area is a typical internally drained valley hemmed in by mountains, low foothills, and broad alluvial fans. Limestone, quartzite, slate, and schist, aggregating several thousand feet in thickness and ranging in age from Lower Cambrian to Carboniferous which are the oldest rocks found in this region. Since their deposition, they have been extensively deformed, eroded, intruded by lavas, and largely covered by igneous bodies and sedimentary deposits. Originally, they probably covered the entire region, but at present they are found over extensive areas only in the Toyabe, Toquima, Silver Peak, and Lone Mountain ranges. The Quaternary deposits are generally comprised of the soils of uplands and mountains, soils of valley fills, outwash plains and alluvial fans, soils on alluvial fans and aprons, as well as playas and soils on flats and basins. The playas soils are moderate to poorly drained and have a desirable character for potential development of brines and accumulation of lithium.

The Late Miocene to Pliocene tuffaceous lacustrine facies of the Esmeralda Formation is documented to contain up to 1,300 ppm lithium with an overall average of 100 ppm lithium. 2015 surface sampling by Ultra Lithium indicated up to 100 ppm lithium in lake sediments which represent typical soils of Playas on Flats and Basins.

In 1980, United States Geological Survey carried out an investigation for potential lithium bearing brines in and around Clayton Valley as part of regional study related to lithium supply sources. Big Smokey Valley was also part of this study where two reverse circulatory drill holes (BS13 and BS 14) were drilled just outside the current Property. In BS 13, a maximum value of 1.7 ppm Li was reported in a water sample and 364 ppm in sediment samples. Bore-hole 14 was abandoned after drilling 215 feet (66 m) into unconsolidated sand and gravel. A maximum of 1.3 ppm Li was reported in a water sample and 287 ppm in sediment samples.

Ultra Lithium Inc. carried out ground geophysical survey in 2014, as well as a subsequent soil and water sampling program in 2015. The ground geophysical survey consisted of

eight CSAMT survey lines (called Lines A through H) covering 53.8 kilometers. Lines C, D, E and F are partially or fully located on the Property. The survey results indicate that, in northeastern area, the lowest resistivities are indicated south of Line E, in the vicinity of station 6200 on Line F and from station 9400 on Line C to station 2800 on Line D. Evidence for faulting is very tentative in this area, and the depth of investigation does not extend as deeply as on the southwestern lines.

On December 11-18, 2015, a soil and water sampling program completed by Ultra Lithium was aimed at following up on the results of the CSAMT ground geophysical survey, with its purpose to investigate the presence of lithium in shallow soil, and characterize its groundwater system. A total of 48 soil / sediment samples were collected to cover survey lines A to H. Additionally, five water samples were collected from different areas, of which four were collected from surface water / ice and one from a water well, located on adjacent ground to the Property. The results confirmed the presence of lithium in the South Big Smokey hydrogeological system. Of particular interest is the area contained within geophysical survey lines C, D, E and F. Maximum assay values derived from these sediments reported 100 ppm lithium, 480 ppm boron, and 7,600 ppm potassium. Generally, lithium, boron and potassium values correspond well with each other, where samples with higher lithium concentrations yield higher values of other two elements.

In May 2016, Ultra Lithium Inc. completed one HQ diameter diamond core drill hole on the Property. The hole was drilled down to 1,000 feet (305 metres). Drilling was limited to 1,000 feet (305 metres) due to artesian water pressure. The hole was later reamed to a six-inch diameter and a monitoring well was installed to a depth of 500 feet, with 3-inch diameter screen located in the bottom 120 feet. The results of 22 drill core samples collected from the hole BSH16-01 indicate maximum values for lithium of 270 parts per million (ppm), 410 ppm boron, 10,000 ppm potassium, and 12,000 ppm magnesium; whereas the average lithium concentration in all core samples is 131 ppm, 151 ppm boron, 5,575 ppm potassium, and 6,210 ppm magnesium. One sample from a 10-cm gypsum layer yielded a lithium value below the detection limit. These samples were taken at various depth intervals down to 1,000 feet (305 metres) below ground surface. Two rounds of groundwater sampling from this well yielded lithium values of 1 ppm or less. Total exploration expenditures for this drill hole were \$165,394.58 USD (\$215,012.95 CAD) paid by Ultra Lithium Inc.

The author visited the Property on December 3, 2016, and the geological work performed in order to verify the existing data consisted of visiting existing drill hole on the Property (BSH16-01), examining rock outcrops and lake sediments areas of the Big Smokey Valley, taking geological and hydrogeological observations, and observing several claim posts. The drill core for hole BSH16-01 is stored at a locked storage unit located in Tonopah. The author viewed various core sections and collected five representative samples from selected intervals. The sample assay results indicated lithium values in the range of 192 to 357 ppm, boron 97 to 230 ppm, potassium 7200 to 12000 ppm, and magnesium 7200 to 13000 ppm.

Continental brines are the most common type of brine deposits located in saline desert basins (also known as salt lakes, salt flats or salars). They are located near tertiary or recent volcanoes and are made up of sand, minerals with brine and saline water with high concentrations of dissolved salts. A playa is a brine deposit whose surface is composed mostly of silts and clays which contain less salt than a salar. The South Big Smokey Valley brine lithium property has characteristics of a playa type brine deposit model. It shares geological similarities with the Clayton Valley which hosts the only lithium producing brine operation in North America.

The Property is located in an active mining and mineral exploration region where many operators carried out lithium exploration and/ or development work on adjacent properties. The Silver Peak brine lithium mine located on the adjacent Clayton Valley, currently operated by Rockwood is located approximately 25 kilometres to the southeast of the Property. Similarly, Pure Energy Minerals is working on the southern part of Clayton Valley, adjacent to the south extent of the Silver Peak mine.

The Property has good year-round road access from Tonopah Station through highway 6/95. Highway 265 to Silver Peak branches off from 6/95 and crosses the southwestern part of the Property. The source of water is groundwater exclusive and power is readily available locally.

The present report is based on available data in the public domain, reports from Metron Capital Corp., published reports by the US Geological Survey, and personal observations. All consulted sources are listed in the references section. The sources of the maps are noted on the individual figures. All consulted data sources are deemed reliable. The data collected during the course of present study is considered sufficient to provide an opinion about the merit of the Property and deemed a viable exploration target.

Based on the favourable geological, hydrogeological and tectonic setting, presence of anomalous surface lithium values, and the results of present study, it is concluded that the Property is a property of merit and possess a good potential for a discovery of lithium brine mineralization. The Property has good road access, readily available exploration and mining services locally available as well as nearby power and water resources to support mining activities. The author is of the opinion that the present study has met its original objectives.

### ***Recommendations***

In the qualified person's opinion, the character of the South Big Smokey Valley Property is sufficient to merit a follow-up work program. This can be accomplished through a two-phase exploration program, where each phase is contingent upon the results of the previous phase.

### ***Phase 1 – Surface Sampling and Drilling***

A total of 12 samples were collected from the property during 2015 surface soil sampling program. This sampling identified anomalous values of lithium, and requires a follow up detailed surface sampling to get better coverage of the property area.

The ground geophysical CSAMT survey and soil sampling program has identified various distinct potential brine targets for drilling. The lowest resistivities are indicated south of Line E, in the vicinity of station 6200 on Line F and from station 9400 on Line C to station 2800 on Line D. The drill hole BSH16-01 was drilled at location C9700 where core samples indicated anomalous lithium values however groundwater samples reported low lithium values (1 ppm and below). To test the CSAMT target at line D, one single drill hole is proposed at station D2350 down to a depth of 2,200 feet (670 m). All hydrogeological units intercepted during drilling should be sampled via soil and groundwater testing for lithium, boron, potassium and magnesium. A water well should be installed at this borehole location to support water sampling, downhole geophysical logging, pumping tests, permeability tests and other hydrogeological studies.

The estimated cost of this program is USD \$309,334 (CAD \$412,445) and will take an estimated 8 to 12 weeks to complete.

### ***Phase 2 – Detailed Drilling***

Based on the results of Phase 1 program, an additional 5-hole drill program should be completed on the Property. A scope of work, location of drill holes and budget for Phase 2 will be prepared after reviewing the results of Phase 1 drill program.

## **2.0 INTRODUCTION AND TERMS OF REFERENCE**

### **2.1 Purpose of Report**

Kristian Whitehead, P.Geo. (“the author”) was retained by Metron Capital Corp., (“MCC” or the “Company”) to prepare an independent Technical Report on the Metron Big Smokey Valley Brine Lithium Property (“the Property”). The purpose of the report is to meet the Toronto Stock Exchange’s regulatory requirements and to support future financings.

### **2.2 Sources of Information**

The present report is based on publicly available data, reports from Metron Capital Corp., published reports by US Geological Survey and other sources, and personal observations. All consulted sources are listed in the References Section. The sources of the maps are noted on the Figures.

The author carried out a visit of the property on December 3, 2016. The geological work performed in order to verify the existing data consisted of geological observations and measurements, hydrogeological studies, visiting approachable rock outcrops, and taking 5 core samples from suitable intervals. The author also visited Silver Peak property of Rockwood Holdings, the only brine lithium producing project in North America, to compare the geological and hydrogeological conditions of both Clayton Valley and Big Smokey Valley.

At the time of Property visit, the author also confirmed many of the claim posts on ground bearing name of Ultra Lithium Inc., the Optionor of the Property.

The information, opinions and conclusions contained herein are based on:

- Information available to the author at the time of preparation of this report;
- Assumptions, conditions, and qualifications as set forth in this report; and
- Data, reports, and other information supplied by ULI and other third party sources.

The author has no reason to doubt the reliability of the information provided by Metron Capital Corp. The author reserves the right, but will not be obliged; to revise the report and conclusions if additional information becomes known subsequent to the date of this report.

### **3.0 RELIANCE ON OTHER EXPERTS**

The author has relied on the records and copies of records provided by Metron Capital Corp. to verify the claim data. A limited search of tenure data on the Bureau of Land Management (BLM) website LR2000 on December 10, 2016, conforms to the data supplied by Metron Capital Corp. However, the limited research by the author does not express a legal opinion as to the ownership status of the Property. This disclaimer applies to ownership information relating to the Property, and the information is available in Section 1 (Summary) and Section 4 (Property Description and Location) of this report.

### **4.0 PROPERTY DESCRIPTION AND LOCATION**

The Property is located approximately 25 miles (40 kilometres) from Tonopah in Esmeralda County, Nevada, USA (Figure 1). It is about 50 kilometres to the west of Goldfield, the County Seat of Esmeralda County. It consists of 100 placer claims located in Townships 1 and 2, Range 38 and 38 ½ East, Esmeralda County, Nevada. Each claim is approximately 20 acres with a total property area of 2,000 acres, configured in two claim blocks (Metron 1 and 2). Claim data is summarized in Table 1, while map showing the claims is presented in Figures 2 and 3.

The Property was acquired through an option agreement signed on December 2, 2016 between Ultra Lithium Inc. and Metron Capital Corp. Under the terms of the agreement MCC can earn 100% interest on 100 placer claims by paying cash, issuing shares and incurring exploration expenditures as per the following schedule:

#### Year 1:

- Paying \$ 5,000 cash on signing;
- Paying \$ 10,000 cash on approval by the TSX-V;
- Issuing 500,000 common shares of Metron Capital Corp. on approval by the TSX-V; and,
- Exploration expenditures of not less than \$20,000 to be incurred on or before May 31<sup>st</sup>, 2017.

#### Year 2:

- Paying \$ 30,000 cash on anniversary date;
- Issuing 500,000 common shares of Metron Capital; and,
- Exploration expenditures of not less than \$150,000 to be incurred on or before May 31<sup>st</sup>, 2018.

#### Year 3:

- \$ 60,000 on anniversary date;
- 1,000,000 common shares of Metron Capital; and

- Exploration expenditures of not less than \$250,000 to be incurred on or before May 31<sup>st</sup>, 2019.

Metron Capital Corp. will then have earned a 100% interest in the said Claims after completing the 3rd year cash payments, share payments and work commitment. The Optionor will provide Metron Capital Corp. with a fully executed claim transfer following completion of the 3rd year cash and share payments.

Metron Capital Corp. will pay to the Optionor a royalty equal to three percent 3% Gross Overriding Royalty (GOR) from this property with a 5km area of interest around these said claims. The Royalty will be payable for as long as Metron Capital Corp. and/or its successors and assigns hold any interest in the claims. Metron Capital Corp. will have a right to purchase a 1% NSR for \$1,500,000, at any time up to when a production decision is made.

Mineral deposits subject to placer claims include all those deposits not subject to lode claims. Originally, these included only deposits of unconsolidated materials, such as sand and gravel, containing free gold or other minerals. By Congressional acts and judicial interpretations, many nonmetallic bedded or layered deposits, such as gypsum, lithium, and high calcium limestone, are also considered placer deposits.

Placer claims, where practicable, are located by legal subdivision (for example: Township 10 South, Range 11 East, Section 9, SE1/4). The maximum size of a placer claim is 20 acres per locator. An association of two locators may locate 40 acres, and three may locate 60 acres, etc. The maximum area of an association placer claim is 160 acres for eight or more persons. Corporations may not locate association placer claims unless they are in association with other private individuals or other corporations as co-locators.

[http://www.blm.gov/nv/st/en/prog/more\\_programs/geographic\\_sciences/mineral\\_surveyor\\_program/types\\_of\\_claims.html](http://www.blm.gov/nv/st/en/prog/more_programs/geographic_sciences/mineral_surveyor_program/types_of_claims.html)

The following claim maintenance and staking fees is applicable as per BLM schedule.

**Table 1: BLM Claim Fee Schedule**

Claim Type	Payment	Due Date
Existing <b>placer</b> mining claim	USD \$155 for every 20 acres or portion thereof per year	Sept. 1, 2017
Filing a new <b>placer</b> mining claim	USD \$212 (includes \$37.00 Location Fee and \$20.00 Processing Fee), for each new location and you pay \$155 for every 20 acres or portion thereof up to 160 acres' maximum. For example, a 40-acre claim = \$367 (\$212.00 + \$155.00) OR 20-acre claim = \$367.00	Upon filing (within 90 days from date of location)

In addition to filing with the BLM, the claim holder is required to file an Affidavit of Assessment Work or Notice of Intent to Hold with the county recorder's office by September 30<sup>th</sup>. The location of this office will always be in the county seat of the county in which the claims are situated (Esmeralda County office located in Goldfield).

A Notice of Intent permitting process is required to carry out the recommended work program. This process entails providing a short description of the proposed works, plus supporting drawings and accompanying bonding, until such time that the works are complete and the area is reclaimed to its previous condition. A minimum bond required is \$3,000 but the actual bond amount is based upon the type of exploration and the degree of disturbance. A Notice of Intent permit application has been approved by BLM for Phase 1 recommended work program.

The author is not aware of any environmental liabilities which have accrued from some historical exploration activity on the Property.

**Table 2: Claim Data**

<b>Serial No.</b>	<b>Claim Name/Number</b>	<b>Mc Lead Case Ser Nr</b>	<b>Lead Serial No.</b>
NMC1013666	SM 241	NMC1013466	ACTIVE
NMC1013667	SM 242	NMC1013466	ACTIVE
NMC1013668	SM 243	NMC1013466	ACTIVE
NMC1013669	SM 244	NMC1013466	ACTIVE
NMC1013670	SM 245	NMC1013466	ACTIVE
NMC1013671	SM 246	NMC1013466	ACTIVE
NMC1013672	SM 247	NMC1013466	ACTIVE
NMC1013673	SM 248	NMC1013466	ACTIVE
NMC1013674	SM 249	NMC1013466	ACTIVE
NMC1013675	SM 250	NMC1013466	ACTIVE
NMC1013676	SM 251	NMC1013466	ACTIVE
NMC1013677	SM 252	NMC1013466	ACTIVE
NMC1013678	SM 253	NMC1013466	ACTIVE
NMC1013679	SM 254	NMC1013466	ACTIVE
NMC1013680	SM 255	NMC1013466	ACTIVE
NMC1013681	SM 256	NMC1013466	ACTIVE
NMC1013682	SM 257	NMC1013466	ACTIVE
NMC1013683	SM 258	NMC1013466	ACTIVE
NMC1013684	SM 259	NMC1013466	ACTIVE
NMC1013685	SM 260	NMC1013466	ACTIVE
NMC1013686	SM 261	NMC1013466	ACTIVE
NMC1013687	SM 262	NMC1013466	ACTIVE
NMC1013688	SM 263	NMC1013466	ACTIVE
NMC1013689	SM 264	NMC1013466	ACTIVE

<b>Serial No.</b>	<b>Claim Name/Number</b>	<b>Mc Lead Case Ser Nr</b>	<b>Lead Serial No.</b>
NMC1013690	SM 265	NMC1013466	ACTIVE
NMC1013691	SM 266	NMC1013466	ACTIVE
NMC1013692	SM 267	NMC1013466	ACTIVE
NMC1013693	SM 268	NMC1013466	ACTIVE
NMC1013694	SM 269	NMC1013466	ACTIVE
NMC1013695	SM 270	NMC1013466	ACTIVE
NMC1013696	SM 271	NMC1013466	ACTIVE
NMC1013697	SM 272	NMC1013466	ACTIVE
NMC1013763	SM 418	NMC1013466	ACTIVE
NMC1013764	SM 419	NMC1013466	ACTIVE
NMC1013765	SM 420	NMC1013466	ACTIVE
NMC1013775	SM 434	NMC1013466	ACTIVE
NMC1013776	SM 435	NMC1013466	ACTIVE
NMC1013777	SM 436	NMC1013466	ACTIVE
NMC1013791	SM 454	NMC1013466	ACTIVE
NMC1013792	SM 455	NMC1013466	ACTIVE
NMC1013793	SM 456	NMC1013466	ACTIVE
NMC1013807	SM 474	NMC1013466	ACTIVE
NMC1013808	SM 475	NMC1013466	ACTIVE
NMC1013809	SM 476	NMC1013466	ACTIVE
NMC1013827	SM 498	NMC1013466	ACTIVE
NMC1013828	SM 499	NMC1013466	ACTIVE
NMC1013829	SM 500	NMC1013466	ACTIVE
NMC1091414	SM 703	NMC1091392	ACTIVE
NMC1091415	SM 704	NMC1091392	ACTIVE
NMC1091416	SM 705	NMC1091392	ACTIVE
NMC1091417	SM 706	NMC1091392	ACTIVE
NMC1091418	SM 707	NMC1091392	ACTIVE
NMC1091419	SM 708	NMC1091392	ACTIVE
NMC1091420	SM 709	NMC1091392	ACTIVE
NMC1091421	SM 710	NMC1091392	ACTIVE
NMC1091422	SM 711	NMC1091392	ACTIVE
NMC1091423	SM 712	NMC1091392	ACTIVE
NMC1091424	SM 713	NMC1091392	ACTIVE
NMC1091425	SM 714	NMC1091392	ACTIVE
NMC1091426	SM 715	NMC1091392	ACTIVE
NMC1091427	SM 716	NMC1091392	ACTIVE
NMC1091428	SM 717	NMC1091392	ACTIVE
NMC1091429	SM 718	NMC1091392	ACTIVE
NMC1091430	SM 719	NMC1091392	ACTIVE
NMC1091431	SM 720	NMC1091392	ACTIVE

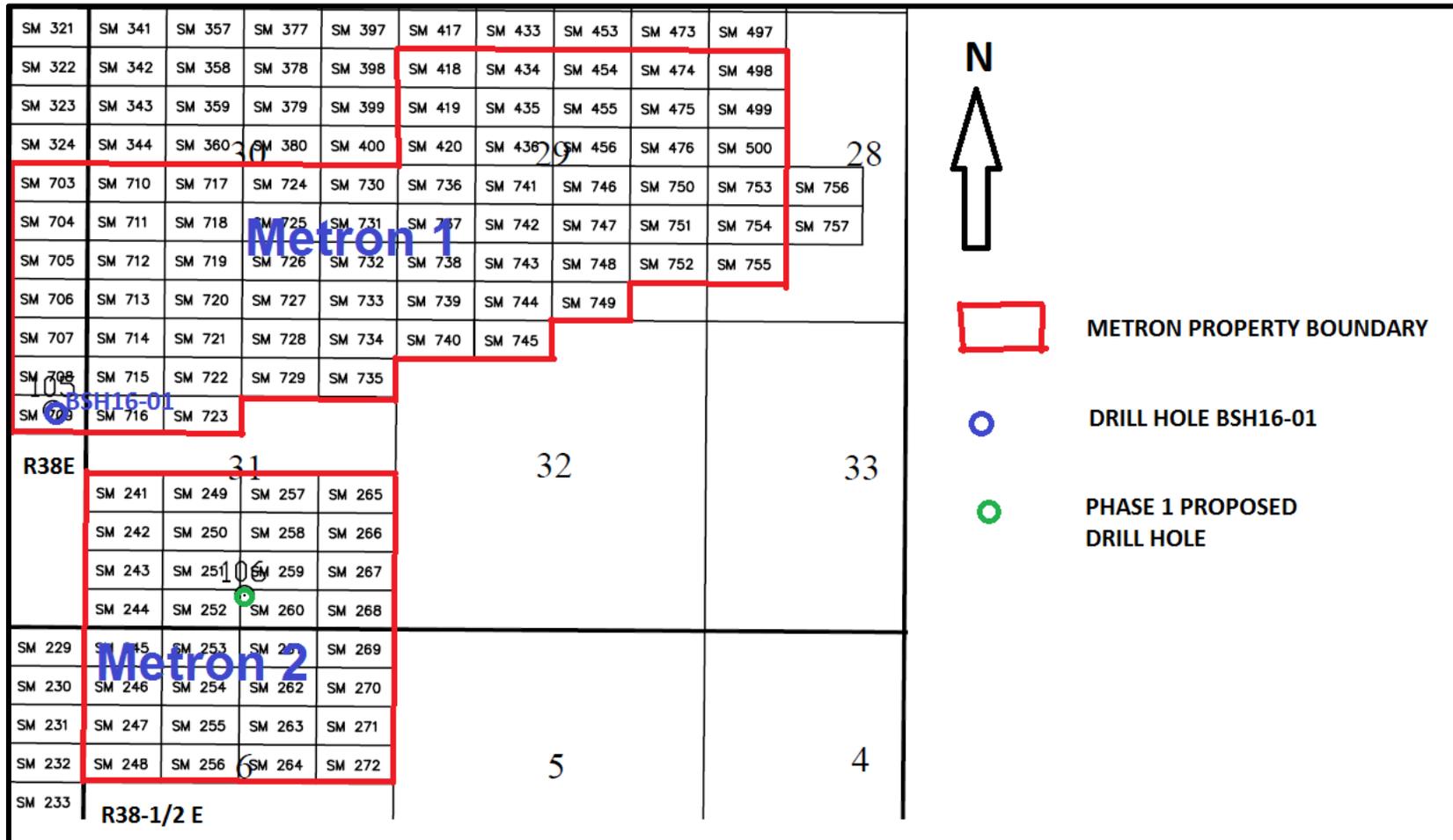
<b>Serial No.</b>	<b>Claim Name/Number</b>	<b>Mc Lead Case Ser Nr</b>	<b>Lead Serial No.</b>
NMC1091432	SM 721	NMC1091392	ACTIVE
NMC1091433	SM 722	NMC1091392	ACTIVE
NMC1091434	SM 723	NMC1091392	ACTIVE
NMC1091435	SM 724	NMC1091392	ACTIVE
NMC1091436	SM 725	NMC1091392	ACTIVE
NMC1091437	SM 726	NMC1091392	ACTIVE
NMC1091438	SM 727	NMC1091392	ACTIVE
NMC1091439	SM 728	NMC1091392	ACTIVE
NMC1091440	SM 729	NMC1091392	ACTIVE
NMC1091441	SM 730	NMC1091392	ACTIVE
NMC1091442	SM 731	NMC1091392	ACTIVE
NMC1091443	SM 732	NMC1091392	ACTIVE
NMC1091444	SM 733	NMC1091392	ACTIVE
NMC1091445	SM 734	NMC1091392	ACTIVE
NMC1091446	SM 735	NMC1091392	ACTIVE
NMC1091447	SM 736	NMC1091392	ACTIVE
NMC1091448	SM 737	NMC1091392	ACTIVE
NMC1091449	SM 738	NMC1091392	ACTIVE
NMC1091450	SM 739	NMC1091392	ACTIVE
NMC1091451	SM 740	NMC1091392	ACTIVE
NMC1091452	SM 741	NMC1091392	ACTIVE
NMC1091453	SM 742	NMC1091392	ACTIVE
NMC1091454	SM 743	NMC1091392	ACTIVE
NMC1091455	SM 744	NMC1091392	ACTIVE
NMC1091456	SM 745	NMC1091392	ACTIVE
NMC1091457	SM 746	NMC1091392	ACTIVE
NMC1091458	SM 747	NMC1091392	ACTIVE
NMC1091459	SM 748	NMC1091392	ACTIVE
NMC1091460	SM 749	NMC1091392	ACTIVE
NMC1091461	SM 750	NMC1091392	ACTIVE
NMC1091462	SM 751	NMC1091392	ACTIVE
NMC1091463	SM 752	NMC1091392	ACTIVE
NMC1091464	SM 753	NMC1091392	ACTIVE
NMC1091465	SM 754	NMC1091392	ACTIVE
NMC1091466	SM 755	NMC1091392	ACTIVE

**Figure 1: Location Map**





Figure 3: Metron property claim map



## **5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY**

### **5.1 Access**

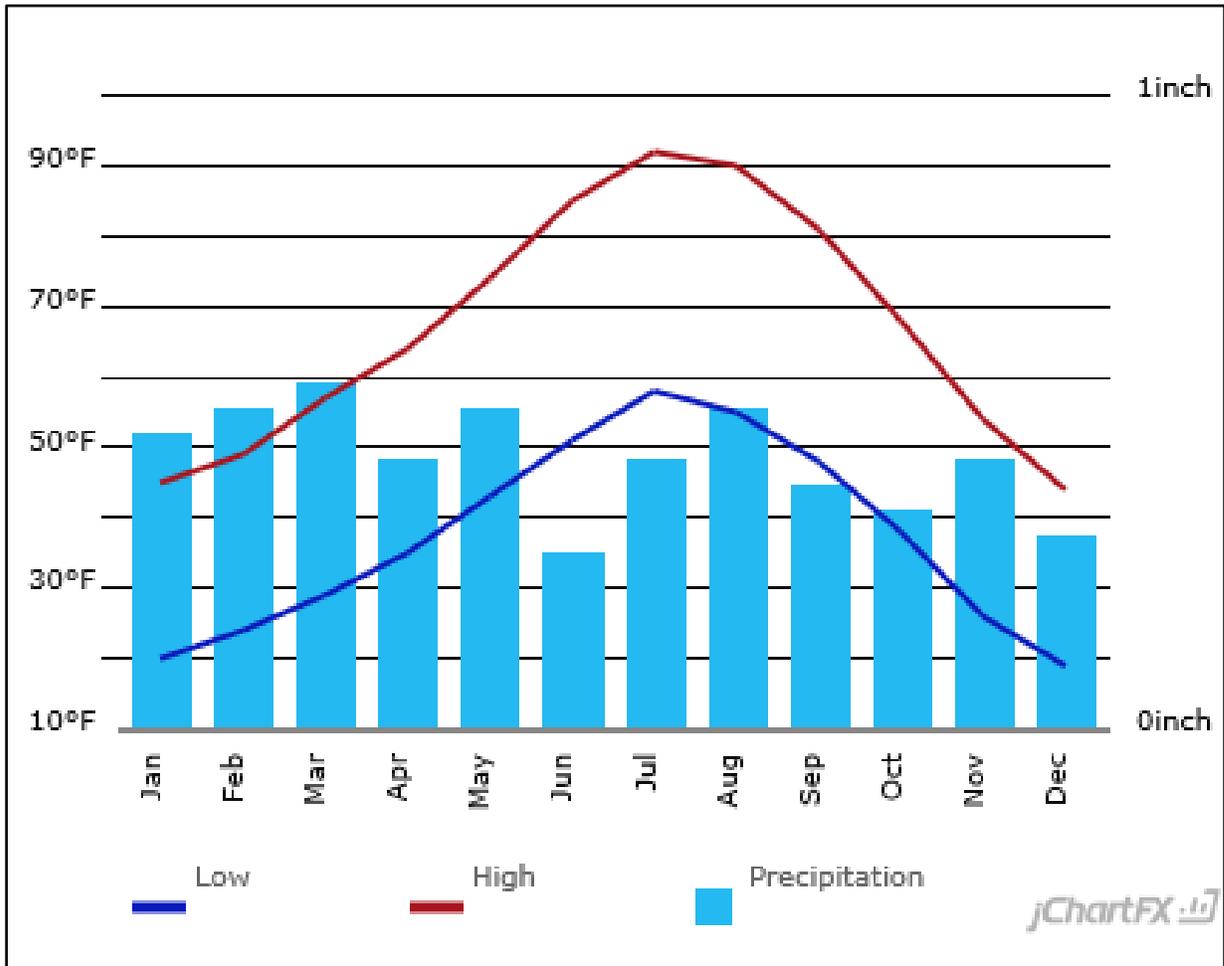
The Property has good year-round road access from Tonopah Station through highway 6/95 (Figure 2). Tonopah Station is a local commercial town located half way between Las Vegas and Reno on US Route 95 which is a major highway traversing north-south the State of Nevada. Highway 265 to Silver Peak branches off from 6/95 and crosses the southwestern part of the Property. Tonopah is connected with Las Vegas through 198-mile-long railroad which is a part of the Union Pacific Railroad and serves as their mainline between Los Angeles and Salt Lake City.

From highways 6/95 and 265, numerous gravel roads traverse through different areas of the Property providing access to various claim blocks.

### **5.2 Climate**

The climate of the Big Smokey Valley, like Nevada's in general, is characterized by bright sunshine, clean and clear air, low, annual rainfall in the valleys and deserts, and variable heavy snow in the higher mountains. Annual average precipitation in the state as a whole is close to 9 inches, about one-half of which falls between December and March. January is the wettest month; August, the driest. Over a 24-year period, precipitation records during the first half of the twentieth century for Millett, a former stage station and town site at the north end of Smokey Valley, show an average of 6 inches per year, ranging from 2.45 to 8.67 inches (McCracken 1997). Maximum summer temperatures can reach over 90°F (32.2 C°) during the months of July and August, whereas the winter temperature can drop below 10°F (-12.2 C°) in December and January. Exploration work can be carried out around the year. Some frozen surface water was observed in parts of the valley during the current field visit in December.

**Figure 4: Tonopah Climate Graph**



Source: <http://www.usclimatedata.com/climate/tonopah/nevada/united-states/usnv0091>

### 5.3 Physiography

The Property is part of the South Big Smokey Valley which is located within the Basin and Range physiographic province of Nevada, an arid region throughout, characterized by numerous disconnected mountain ranges, low foothills, and broad alluvial fans. The ranges are primarily the result of faulting and uplifting of large blocks of the earth's crust.

The South Big Smokey Valley is bordered on the east by the San Antonio Mountains, an irregular mountain mass about 30 miles (48km) long beginning just south of the Toquima; the highest point is 8500 feet (2591 m). The southern terminus of the valley is formed by Lone Mountain, a conspicuous solitary peak with a precipitous slope that rises to 9114 feet (2778 m). The Silver Peak Range, the border on the southwest, is wide and rather high, separating Smokey Valley from Fish Lake Valley to the south; its highest point is Piper Peak, at 9447 feet (2879 m). The Monte Cristo Range, which creates the western border of the 'lower valley', reaches 7997 feet (2437); with little timber or

vegetation, it appears desiccated. Lone Valley, lying west of the southern end of Smokey Valley, has a drainage basin of about 500 square miles (1295 square km) that drains into the South Big Smokey Valley (McCracken 1997).

Streams formed by snowmelt and occasional heavy rains have carved canyons of various sizes in the mountain walls enclosing the Big Smokey Valley, and at the mouth of each canyon that discharges water, a large alluvial fan has formed. Small gravelly fans that end abruptly and have little or no arable land are found at the mouths of the small dry canyons, and expanded, gently sloping fans are found at the mouths of the large canyons.

**Figure 5: Physiographic Map of the Area**

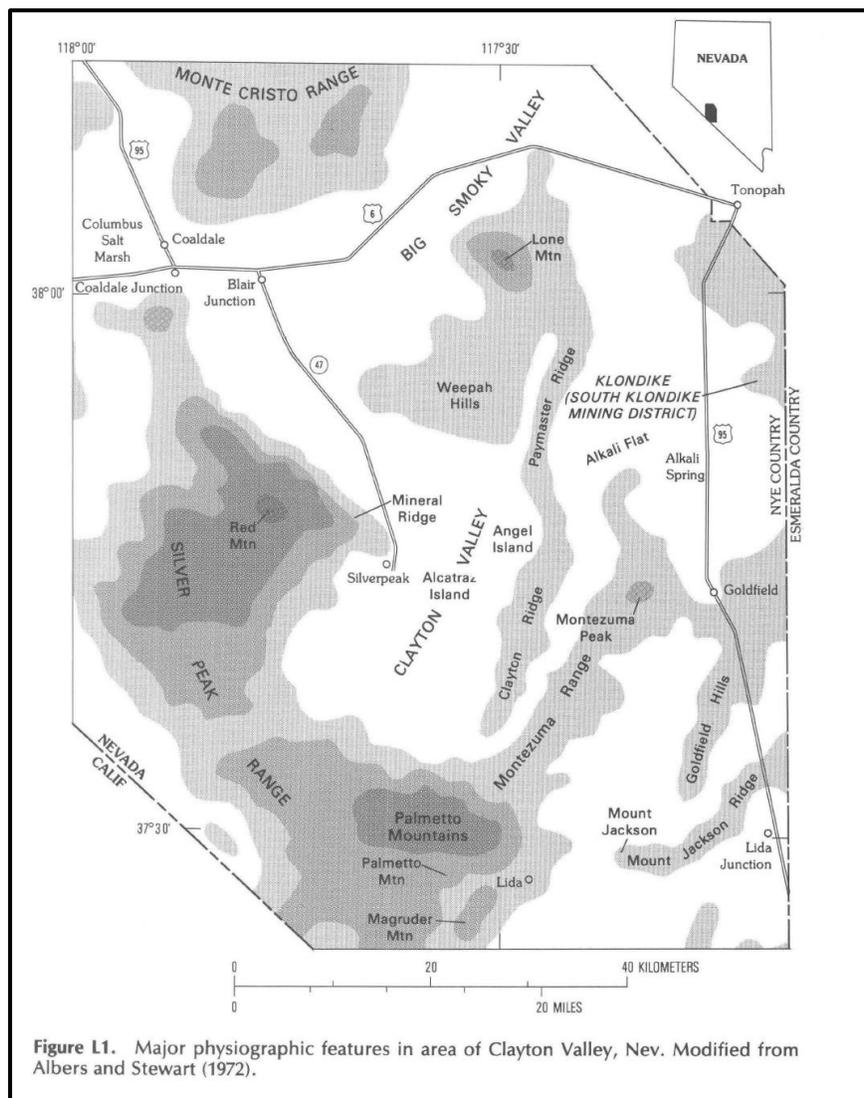




Photo 1 - Looking northeast: General physiography of the South Big Smokey valley

#### **5.4 Local Resources and Infrastructure**

The Property is located approximately 40 kilometers from the town of Tonopah which is also County Seat of Nye County. Tonopah is a historic mining town which experienced a silver rush at the turn of Twentieth Century and was named “Queen of the Silver Camps”. According to 2010 census data, the town had a population of 2,476. There are a few hotels, restaurants, grocery stores, and other businesses to support the needs of an exploration program. The small town of Silver Peak is located approximately 25 kilometers from the Property. Silver Peak lies near Clayton Valley which is currently the only operating source of lithium in the United States.

Mining personnel are available locally, whereas, the other specialized services like ground and airborne geophysical survey and drilling companies normally send their own crews. Groundwater is a potential source of water for any mining operations on the Property. Historical water wells located on adjacent grounds indicate water is available from depths of 14 to over 100 feet. Several powerlines are located on the property and on adjacent areas.

## 6.0 HISTORY

### 6.1 General History

In 1980, the United States Geological Survey carried out an investigation for potential lithium bearing brines in and around the Clayton Valley as part of regional study related to lithium supply sources. The Big Smokey Valley was also part of this study due to the fact that it is one of the largest intermontane valleys in Nevada and was occupied by two large lakes during the Pleistocene. The southern lake was 22 miles (35 km) long by 5.5 miles (9 km) wide and covered an area estimated to be 85 square miles (211 km<sup>2</sup>) to a maximum depth of approximately 70 feet (21 m). A series of gravelly beach ridges encircled the southwestern part of the ancient lake, enclosing a playa characterized by soft, puffy, unconsolidated, silty and clayey lake sediments.

Two reverse circulatory drill holes (BS 13 and BS 14) were drilled in the Big Smokey Valley. Both holes were located outside the Property, where BS 13 was located on a power line right-of-way road, and BS 14 was located on a beach ridge on the southwestern edge of the playa. BS 13 was completed to a depth of 675 feet (206 m), of which 655 feet (199 m) was in alluvial valley fill and the last 20 feet (7 m) was in the consolidated sedimentary rocks of the Esmeralda Formation of Miocene age. This complete penetration of the valley fill was helpful in the interpretation of the results of water analyses. A maximum value of 1.7 ppm Li was found in a water sample with a Li-Cl ratio of 0.0027 at a depth of 395 feet (120 m). BS 14 was abandoned after drilling 215 feet (66 m) into unconsolidated sand and gravel. A maximum of 1.3 ppm Li was found in a water sample with a Li-Cl ratio of 0.0031 at a depth of 135 feet (41 m)(Vine 1980).

**Table 3: Historical Drill Holes**

Hole ID	Location		Surface Elevation		Depth Drilled		Max Lithium Content (ppm)		
	Latitude	Longitude	ft	m	ft	m	water	sediment	
BS 13	38° 02'N	117° 37' W	4735	1443.2	675	205.7	1.7	364	
BS 14	37° 57'N	117° 42' W	4760	1450.8	215	65.5	1.3	287	

### 6.2 Work by Ultra Lithium Inc.

Ultra Lithium Inc. (“ULI”) carried out a ground geophysical survey in 2014, soil and water sampling program in 2015, and a diamond drilling program in 2016. The following sections provide a summary of each work on the Property.

#### 6.2.1 Ground Geophysics

In 2014, ULI contracted Zonge International to complete a CSAMT (Controlled Source Audio-Frequency Magneto-telluric) ground geophysical survey program on the Property.

This geophysical survey is a non-intrusive, low-impact method which is considered suitable for mineral and groundwater exploration purposes.

This survey consisted of eight CSAMT survey lines (named Lines A through H) covering 53.8 kilometers of data. A station spacing and electric-field dipole size of 100 meters was used on all lines except Line E, for which a station spacing and e-field dipole size of 200 m was used. The location of the lines and stations are shown on Figure 2.

CSAMT is a surface-based electromagnetic method that provides subsurface electrical resistivity information, which can often be related to changes in pore space and pore fluids. Bedrock is often high resistivity relative to overlying material, and fractured, saturated bedrock is often lower resistivity than un-fractured bedrock. Areas of high TDS in the groundwater appear more conductive than equivalent areas of low TDS. Variations in depth to bedrock, faulting, and other structural changes are often also evident as changes in resistivity. In nearby Clayton Valley, lithium-bearing brines are known to be very low resistivity. The goal of the CSAMT survey was to delineate the extent and depth of very low resistivities, and to map, if possible, faults that may influence brine accumulation.

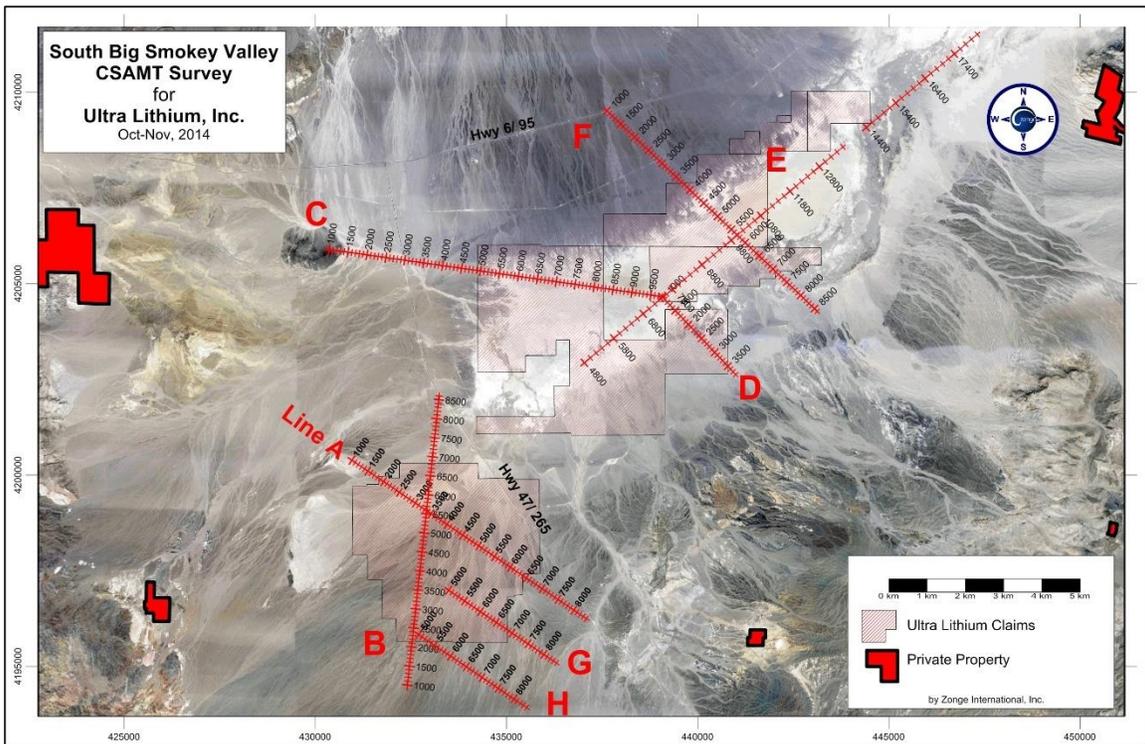


Figure 6: Ground geophysical survey (CSAMT) lines

### Geophysical Survey Results

The survey results are included as cross sections of 2D inversion model results (Figures 7 to 10), with station numbers (in meters) across the top and elevation (in meters) down

the side. Pertinent culture and reference points are shown along the line topography. Resistivity values are shown in ohm-meters, contoured logarithmically, with low resistivities shaded toward the red end of the spectrum and high resistivities shaded toward the blue. All resistivity cross sections are shaded using the same scale for comparison. Transparent black dashed lines indicate possible faults evident in the data.

In general, resistivity values are realistic and consistent with data acquired over other playas in Nevada, ranging from hundreds of ohm-meters to less than one ohm-meter. Moderate and high resistivities are seen in the near surface and toward the edges of the playa, and very low resistivities are seen in some areas, usually as layers rather than as small, localized features. For discussion purposes, the 1.0 ohm-meter contour line is thicker and bold on these cross sections to highlight the areas of lowest resistivities, but this is not intended to necessarily indicate an outline of lithium-bearing brine.

#### **Interpretation of Lines C, D, E, and F:**

The area of geophysical survey lines C, D, E, and F is topographically lower and is visually different at the surface with lighter, fine grained materials as well as sand dunes. Line E runs perpendicular to Line F, moving from darker surface material north of the playa, crossing the very light playa material, and back to darker surface material on the southeast, providing a good cross section of the feature. Line C started at a small outcrop of volcanic material on the west, which ran east-southeast to Line E; following a bend in the line at Line E, the line continues as Line D to the southeast.

The resistivity modeling results for Lines C and D are shown on Figure 7. Roads were crossed on Line C at stations 1750 and 3000, but otherwise no other cultural features were noted by the field crews. Note that due to the overall lower resistivities, bedrock is not evident except on the northwestern end of Line C. Resistivities generally decrease from the northwestern end of the line to the southeast. Surface resistivity are lowest on Line C from station 8600 to station 1300 Line D, but the lowest resistivities at depth are offset further southeast, from station 9400 of Line C to 2800 on Line D. This is consistent with the data from Line F, which also shows the deep lowest resistivities to be south of Line E. It is possible that the zone of lowest resistivities from station 9400 on Line C to station 2800 on Line D is bounded by faults in the vicinity of station 9400 and 2900, but this is difficult to interpret in the absence of any data extending into bedrock.

For Line E, station spacing was 200 meters due to budget constraints. In the presence of low resistivities along most of the line, the depth of investigation is limited to only 600 meters on the southern segment, and approximately 800 meters on the northern segment. From the southwestern end of the line to approximately station 14500 surface resistivities are very low, as would be expected from the playa material. Along this segment of the line, low resistivities extend to the depth of the survey, though a thin moderately resistive layer is evident in the upper 150 m along the line, suggesting a layer of more competent, perhaps dryer material. The data on this line is in good agreement with the data at the intersections with the other lines, although the thin resistive layer is less evident on Line C-D than it is on Line E. Northeast of station 14500,

near-surface resistivities are more moderate, the deep low resistivities weaken and become gradually shallower, underlain by moderately high resistivities, interpreted as bedrock. At the north end of the line a low resistivity layer is of a narrow width, located approximately 300 m deep. In the absence of deeper bedrock information along this line, faults are difficult to interpret, though faults in the vicinity of station 5800, 8500, 12100, and 13300 may be interpreted based on subtle changes seen in the resistivity values collected.

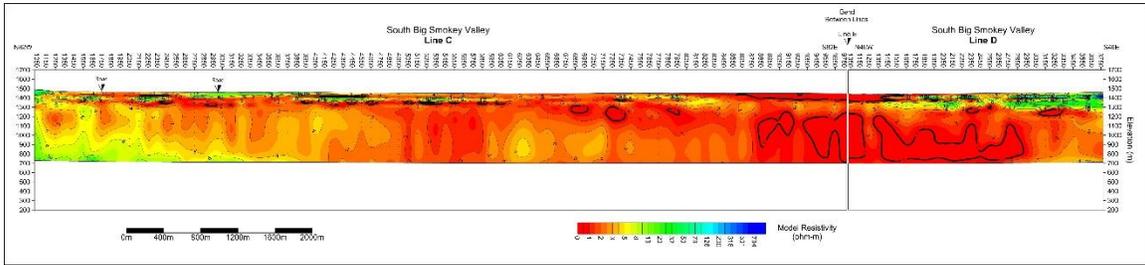


Figure 7: Geophysical lines C and D

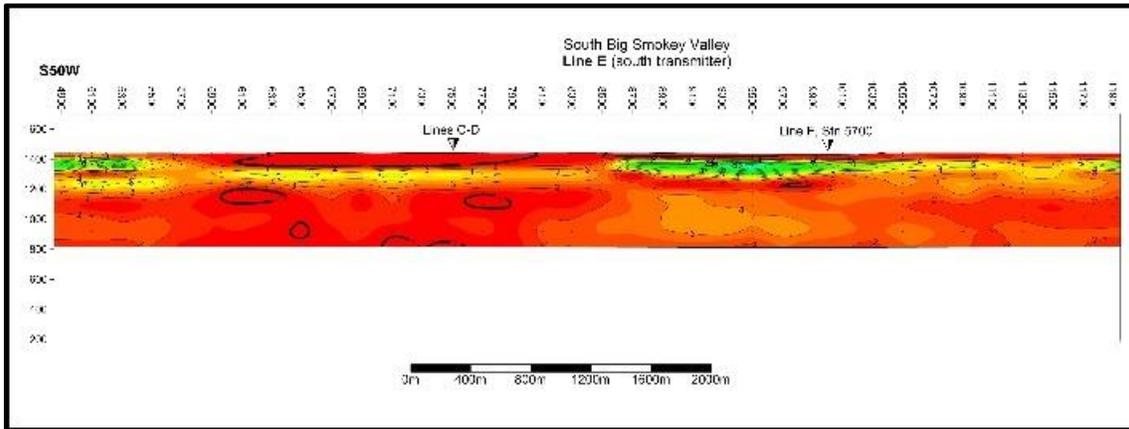


Figure 8: Geophysical line E

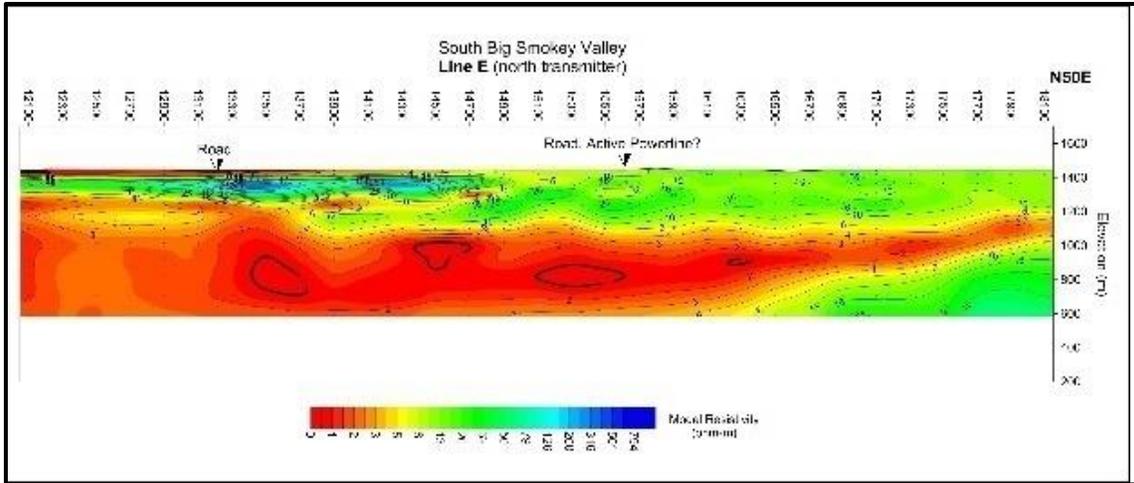


Figure 9: Geophysical line E (Extension)

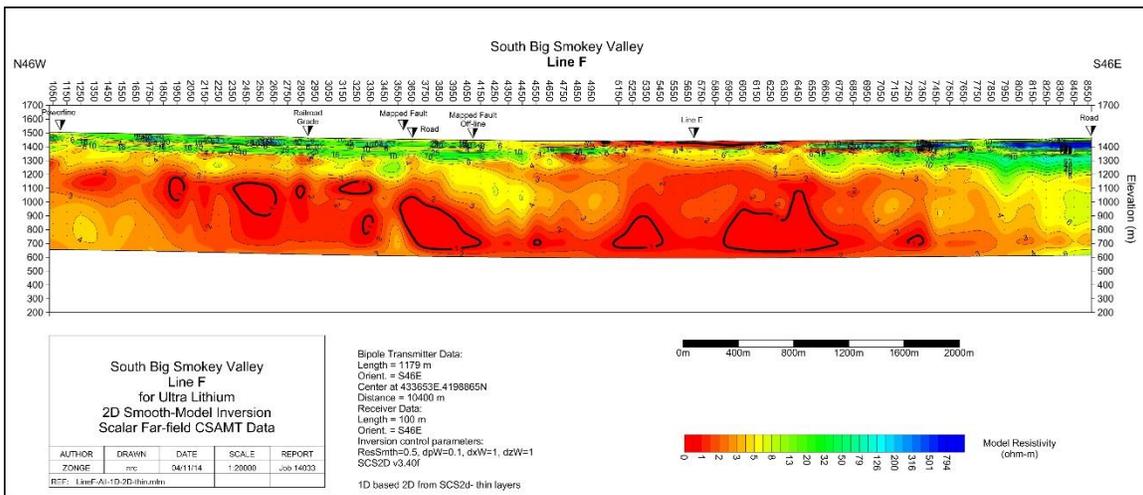


Figure 10: Geophysical line F

Line F ran from northwest to southeast, intersecting Line E at station 10000 (Figure 6). This line crossed a powerline on the northwest end of the line near Highway 6/95, but only minor effects are seen in the data. Low resistivities are seen at the surface as the line crosses the playa from about station 4900 to 7500, and moderate surface resistivities are evident north and south of the playa. Similar to some of the other lines, thin alternating layers of high and low resistivities are seen in the upper 200 meters. A fault is mapped at station 3600, and a second nearby fault would intersect the line at station 4100 if it were extended through interpretation. A very low resistivity zone (< 1 ohm-meter) in the deeper data is bounded by these two mapped faults, however the change in the data is relatively subtle, and the correlation is considered tentative. Additional low, deep resistivities are evident just southwest of the intersection with Line E, from station 5900 to 6600. This zone is consistent with the data seen on Lines C-D, in which low, deep resistivities are seen south of Line E.

## **6.2.2 2015 Soil and Water Sampling**

In December 2015, Afzaal Pirzada, P.Geo. (currently VP Exploration of Ultra Lithium) was contracted by Ultra Lithium to conduct exploration work on the Property which included collecting surface soil samples along 2014 CSAMT geophysical survey lines. The sampling program was aimed at following up on the results of the CSAMT ground geophysical survey, and its purpose was to investigate the presence of lithium in shallow soil, and within its groundwater system. A total of 48 soil / sediment samples were collected to cover survey lines A to H. Additionally, five water samples were collected from different areas, out of which four were from surface water / ice and one from a water well, located on adjacent ground to the Property. The soil samples were collected using hand shovel or a mechanical auger which was able to penetrate 1 to 5 feet below ground surface. The sampling work commenced from December 11-18, 2015. All the samples were shipped to Western Environmental Testing Laboratory (WETLABS) in Sparks, Nevada. Below are the highlights of geological work and field sampling program.

- Conducted traverses around the property and the surrounding areas to get familiar with the overall geological setting of the Big Smokey Valley (BSV), Silver Peak operational area of Rockwood Holdings, and Clayton Valley.
- Carried out detailed traverses along the ground geophysical survey (CSAMT) lines conducted by Zonge International noting general soil, hydrogeology and geotechnical conditions.
- Hydrogeological observations confirming the Property is within an area of the Big Smokey Valley (BSV) which is an enclosed basin which receives its water recharge from the surrounding ranges. The rocks on the southeastern part of BSV were observed to be dipping inwards towards the basin. Overall slope of the basin is to the southwest.
- Traverses along the geophysical survey lines indicated subsurface sediments generally composed of silty clay, silty sand and gravel. The amount of volcanogenic material and salt varies from place to place but overall it was observed in a majority of the claims held by Ultra Lithium. At several locations, the top sections of sediments are covered by pebbles of broken rocks derived of surrounding outcrops.
- During a brief visit to the Clayton Valley and Silver Peak brine lithium mine it was observed that distinct layers of white to light grey colour volcanic ash beds surround the Clayton Valley. These ash beds continued to the north, towards the South Big Smokey Valley (BSV). Volcanic ash material observed in both valleys appeared very similar. Outcrops of rhyolite which were observed in the Clayton Valley were not very prominent in BSV.

### **Geophysical Line A (Not on the Property)**

- A total of nine stations (A 2000, A 2500, A 3000, A 3500, A 4000, A 4500, A 5000, A 5500, and A 6000) were sampled along this line at 500 m spacing. A brown clay

horizon with a mixture of volcanic ash material, considered prospective for lithium was intercepted at station A 2000, A 3500, A 4000, A 5500, and A 6000.

#### **Geophysical Line F (Partly on the Property)**

- Seven stations (F 4000, F 4500, F 5000, F 5500, F 6000, F6500, and F7000) were sampled along these lines at 500 m interval. A light grey clay unit mixed with volcanic ash material, considered an ideal geological marker for lithium exploration was intercepted in all stations except for F 6500 and F7000, located on the east margin of BSV. The clay unit is exposed on surface in the middle of the valley on stations F 4500, F5500, and F 6000. All thin water layers in the central portion of BSV are frozen due to severe winter weather conditions. One ice sample was broken at station F6000 and collected as a water sample.

#### **Geophysical Line E (Partly on the Property)**

- Three stations along this line were sampled (E 7800, E 8400, and E 9000). A grey clay layer with volcanic as material was intercepted at each of the three stations at depths ranging from 0.5 to 2.5 feet, and the top was found to be covered with brown silty sand with some gravel. This clay layer is very sticky and plastic where damp or moist.

#### **Geophysical Line B (Not on the Property)**

- A total of eight stations (B 2500, B 3000, B 3500, B 4000, B 4500, B 5000, B 6000, and B 6500) were sampled along this line at 500 m spacing, except for station B 5500 which was not sampled due to duplication as it was located at intersection with Line A. This line is marked by brown silty sand and gravel from surface to four feet in depth. It does not present a favorable surface horizon in terms of lithium accumulation as very little silt, clay or volcanic ash material was encountered during investigations.

#### **Geophysical Line C (Partly on the Property)**

- Eight stations (C 5000, C 5500, C 6000, C 6500, C 7000, C 7500, C 8000, and C 9600) were sampled along this line at approximately 500 m intervals. The area between station C 8000 and C 9600 was not sampled due to intervening staked claims by a third party. A light grey clay unit mixed with volcanic ash material, considered interesting for lithium exploration was intercepted in all stations. At stations C 5000 and C 9600, this unit was covered by a 1-3 feet layer of brown silty sand and gravel. This accumulation is a result of their locations being at the margins of the central part of BSV. This promising grey clay unit is exposed on surface, within the middle of the valley, as well as, on all the stations except for the two mentioned above.

#### **Geophysical Line D (Partly on the Property)**

- This line is in the southern extension of geophysical line C and runs almost parallel to line F. Five stations (D 1100, D 1500, D 2000, D 2500, and D 3000) were sampled along this line at 500 m or less intervals. A light grey clay unit mixed with volcanic ash material, considered interesting for lithium exploration was intercepted at stations D 1100 and D 1500, whereas the remaining stations intersected brown and grey silty sand with some gravel due to their location on the east margin of BSV.

#### **Geophysical Line E (Partly on the Property)**

- Six stations (E 4800, E 5400, E 5600, E 7800, E 8400, and E 9000) were sampled along this line. A grey clay layer with volcanics was intercepted at two stations (E 5400 and E 4800) down to a depth of 3-5 feet. The surface was covered with brown silty sand with minor gravel. The clay layer is very sticky and plastic where damp or moist. This unit was not encountered at station E 5600 as the auger was not able to penetrate below 3 feet at this location.

#### **Water Sampling**

Four of the five water samples collected represent surface water composition which is essentially a perched water table most likely due to the presence of a grey volcanogenic clay layer starting from surface or a few feet below surface. The water well which was the fifth sample has water table at 14 feet below ground surface (17 feet at top of casing) as measured on December 17, 2015. As there is no lithological data for this well it is not possible to comment on this water table as confined or unconfined.

In conclusion, the shallow surface observations in the immediate area of geophysical lines C, D, E and F appear to be of sound prospect for additional lithium exploration. The area of lines A, B, G and H represents sand and gravel at shallow subsurface at the majority of the locations. A thin layer of volcanic clay was intercepted at few locations.



Photo 2: Soil / sediment sampling 2015

### **Assay Results and Interpretation**

The assay results confirmed the presence of lithium in the South Big Smokey hydrogeological system. Of particular interest is the area of geophysical survey lines C, D, E and F. Maximum values for lithium in sediments is 100 ppm, 480 ppm boron, and 7,600 ppm potassium. Generally, the lithium, boron and potassium values corresponds well with each other, where the samples with higher lithium concentration have higher values of other two elements. A distinct geological similarity with Clayton Valley is the presence of volcanogenic clays in the South Big Smokey Valley. A brief summary of results is provided in the following paragraphs.

The surface and shallow subsurface water samples show less than one mg/L value of lithium and low values of other three elements tested. Average lithium concentration in all soil / sediment samples is 47 mg/kg, boron 142 mg/kg, potassium 4,915 mg/kg, and magnesium 6,685 mg/kg.

The area of lines A, B, G and H represents sand and gravel at shallow subsurface at majority of the sampling locations and represent a low lithium value on surface. Interpreted source of lithium is being contributed from the surrounding rocks as the historical sampling from Esmeralda Formation is documented to contain up to 1,300 mg/kg Li with average 100 mg/kg Li (Munk and Chamberlain 2011).

The present data, especially the water samples corresponds with similar investigations carried out on Clayton Valley by US Geological Survey (Munk and Chamberlain 2011) where the clay / sediment samples show average lithium concentration of 22 mg/kg, snow and fresh water samples have lithium values of less than 1 mg/L (ppm), and one of the brine aquifer (LAS Aquifer) 406.9 mg/L.

The sampling data and results are presented in table 4, concentration of lithium is shown on Figure 11, boron on Figure 12, potassium on Figure 13, and magnesium on Figure 14.

#### **Geophysical Line A (Not on the Property)**

- The results of nine samples show low lithium and boron in soil / sediment samples, with a moderate concentration of potassium and magnesium. Lithium values are in the range of 14 to 48 mg/kg, boron 11 to 37 mg/kg, potassium 3,700 to 7,600 mg/kg, and magnesium 3,300 to 7,900 mg/kg.

#### **Geophysical Line B (Not on the Property)**

- The results of eight samples show lithium in soil samples to be generally low, ranges from 14 mg/kg (ppm) to 45 mg/kg, boron 8.2 mg/kg to 80 mg/kg, potassium 1100 to 7600 mg/kg, and magnesium 2800 to 4400 mg/kg.

#### **Geophysical Line C (Partly on the Property)**

- The results of eight samples show that this line represents the best results for lithium, boron, and potassium. Magnesium level is also higher in samples. The assay results indicate lithium in the range of 50 to 100 mg/kg, boron 160 to 300 mg/kg, potassium 4,000 to 6,400 mg/kg, and magnesium 5,900 to 9,400 mg/kg.

#### **Geophysical Line D (Partly on the Property)**

- This line is in the southern extension of geophysical line and its results represent low to moderate values of lithium, boron, and potassium potentially corresponding with ash layers, whereas magnesium concentration is moderate to higher. Concentration of lithium is in the range of 15 to 71 mg/kg, boron 82 to 330 mg/kg, potassium 2,300 to 6,500 mg/kg, and magnesium 3,000 to 9,700 mg/kg.

#### **Geophysical Line E (Partly on the Property)**

- The assay results yielded the most consistent values in soil / sediments along this line with very little variation. Concentration of lithium is in the range of 65 to 92 mg/kg, boron 160 to 360 mg/kg, potassium 5,100 to 7,600 mg/kg, and magnesium 8,900 to 11,000 mg/kg.

### **Geophysical Line F (Partly on the Property)**

- The soil / sediment samples from this line show a relatively wider range of concentration in all four elements tested. Lithium values are in the range of 16 to 78 mg/kg, boron 34 to 480 mg/kg, potassium 2,400 to 6,300 mg/kg, and magnesium 3,200 to 11,000 mg/kg.

### **Geophysical Line G (Not on the Property)**

- The assay results yielded low values of lithium and boron in soil / sediments. Concentration of lithium is in the range of 16 to 20 mg/kg, boron 16 to 20 mg/kg, potassium 2,900 to 5,000 mg/kg, and magnesium 3,900 to 8,400 mg/kg.

### **Water Sampling (Not on the Property)**

Concentrations of all four elements tested in water samples was generally low representing freshwater conditions on the surface and shallow ground water. Lithium concentration in four surface water / ice samples was less than one mg/L (ppm) and in the water well sample the lithium value was below detection limit, boron 0.51 to 4 mg/L, potassium 27 to 58 mg/L and magnesium reporting 4 to 92 mg/L.

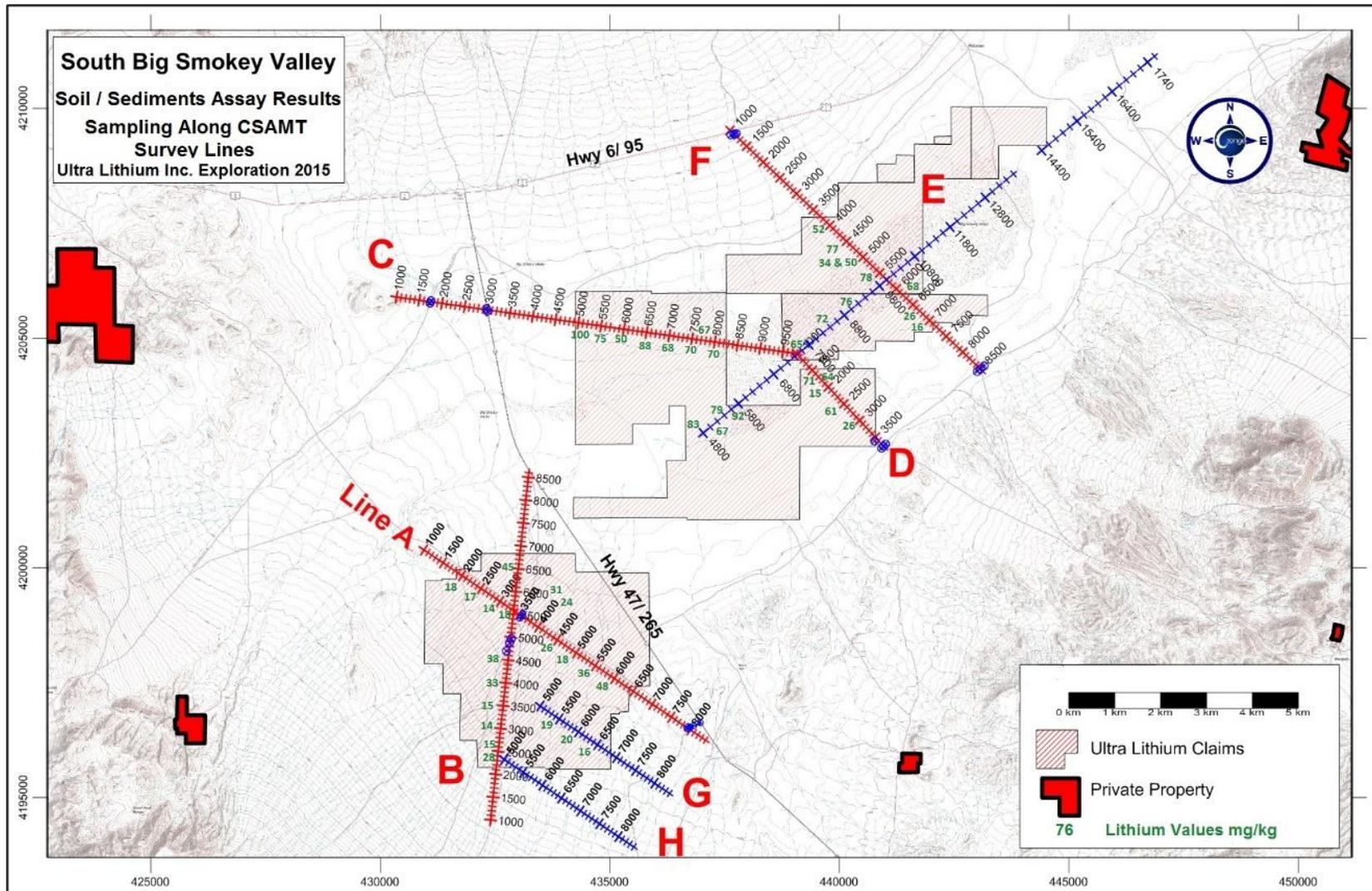


Figure 11. Lithium in soil / sediment samples along CSAMT Survey lines

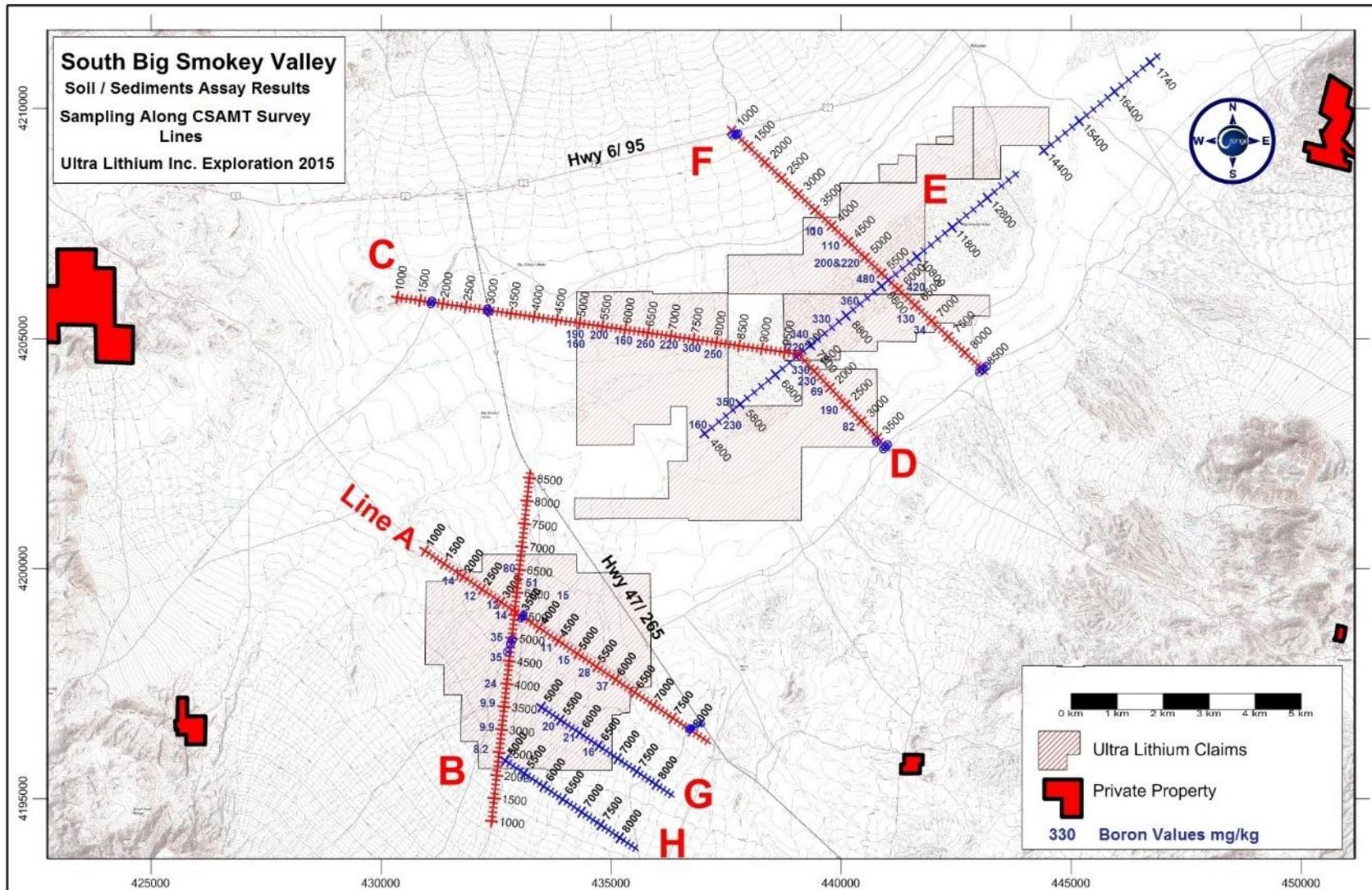


Figure 12: Boron in soil / sediment samples along CSAMT Survey lines

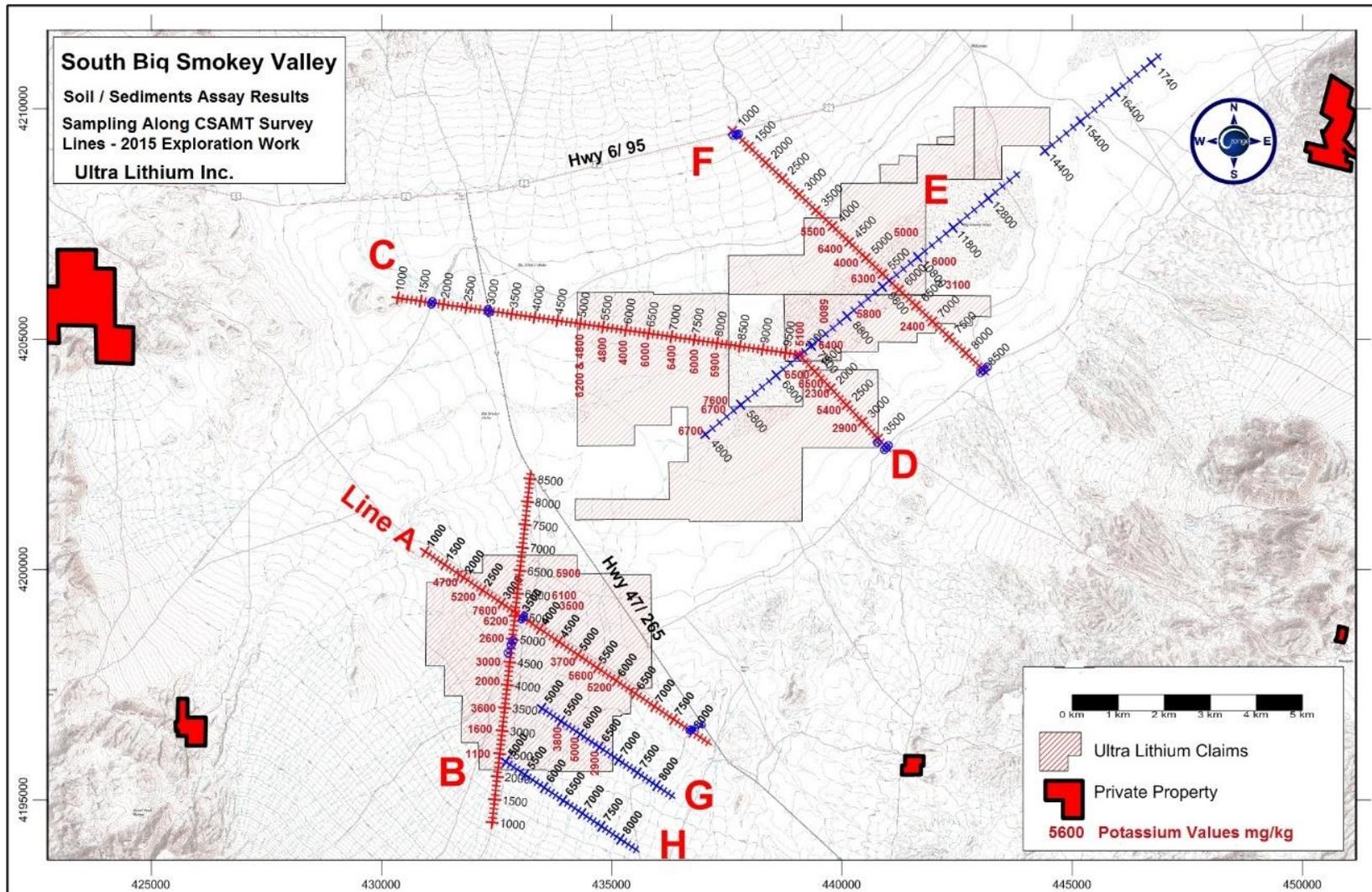


Figure 13: Potassium in soil / sediment samples along CSAMT Survey lines

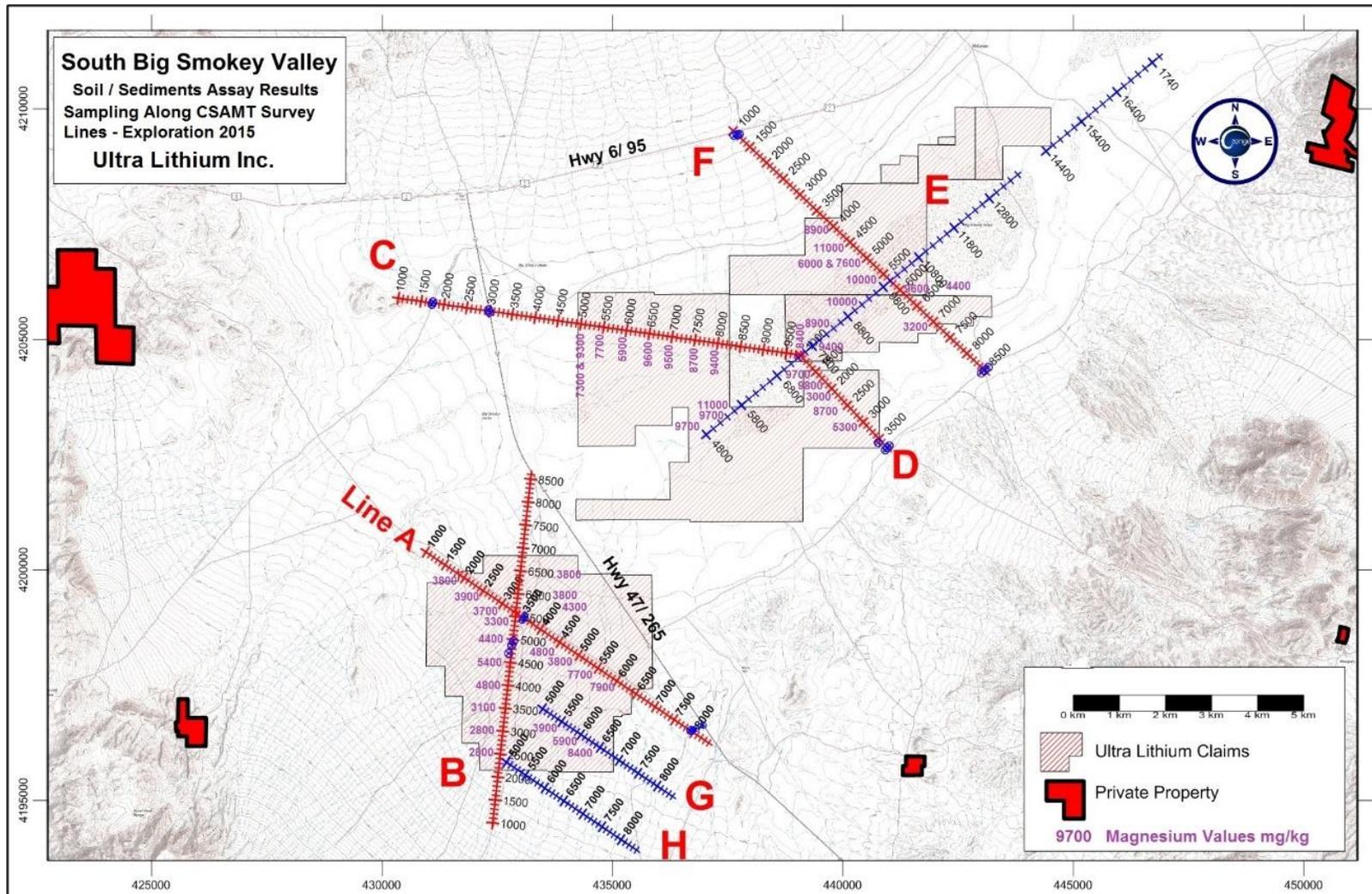


Figure 14: Magnesium in soil / sediment samples along CSAMT Survey lines

**Table 4: Soil / sediment and water samples 2015**

Sample ID	Station ID	Depth	Coordinates NAD 1983		Elevation m	Description	Assays				Date
			Easting	Northing			Li	K	Mg	B	
NP	A6000	0-10	435098	4197591	1484	Brownish grey SILTY SAND AND GRAVEL, damp					14-Dec-15
BSV 15-01		10-20				Brown clay with volcanic material, dry (Sample)	48	5200	7900	37	
NP	A5500	0-15	434684	4197871	1480	Light brown to earthy colour SILTY SAND AND GRAVEL, dry					14-Dec-15
BSV 15-02		15-35				Brown SILTY CLAY, with volcanic material, dry (Sample)	36	5600	7700	28	
NP	A5000	0-15	434264	4198188	1477	Brown GRAVEL, some sand, dry					14-Dec-15
BSV 15-03		15-30				Brown SILTY SAND, some gravel and volcanic material, dry (Sample)	18	3700	3800	15	
NP	A4500	0-10	433855	4198430	1475	Light grey to brown SAND AND GRAVEL, dry					14-Dec-15
BSV 15-04		10-25				Brown SILTY SAND, some clay and gravel, plus volcanic ash material (Sample)	26	6100	4800	11	
NP	A4000	0-10	433440	4198710	1473	Light grey to brownish SAND AND GRAVEL, dry					14-Dec-15
BSV 15-05		10-20				Brown CLAY AND GRAVEL, some sand and volcanic ash / bentonite material, damp (Sample)	24	3500	4300	15	
	A3500	0-10	433026	4195990	1469	Light grey SAND AND GRAVEL, dry					14-Dec-15

Sample ID	Station ID	Depth	Coordinates NAD 1983		Elevation	Description	Assays				Date
BSV 15-06		10-30				Brown CLAY, mixed with volcanic ash / bentonite material and gravel, some silt, damp (Sample)	18	6200	3300	14	
NP	A3000	0-10	432612	4199270	1473	Brown SAND AND GRAVEL, dry					14-Dec-15
BSV 15-07		10-30				Brown SAND AND GRAVEL, damp, active channel material (Sample)	14	7600	3700	12	
NP	A2500	0-10	432196	4199549	1476	Grey to brown SAND AND GRAVEL, dry					14-Dec-15
BSV 15-08		10-30				Light brown SAND, some gravel and volcanic material, damp (Sample)	17	5200	3900	12	
NP	A2000	0-10	431782	4199829	1483	Light brown SAND AND GRAVEL, dry					14-Dec-15
BSV 15-09		10-20				Brown SILTY SAND AND CLAY, mixed with volcanic ash material, damp (Sample)	18	4700	3800	14	
	F4000	0-60	439793	4207452	1450	Light brown SILTY SAND AND GRAVEL, dry					15-Dec-15
NP		60-120				Brown SILTY SAND, some gravel, dry					
BSV 15-10	120-180				Light brown SILTY CLAY, mixed with volcanic ash (bentonite plus hectorite?) material, dry (Sample)	52	5500	8900	100		
NP BSV 15-11	F4500	0-90	440155	4207107	1442	Light brown SILTY CLAY, mixed with volcanic ash (bentonite plus hectorite), trace gravel, dry (Sample)	77	6400	11000	110	15-Dec-15
	F5000	0-90	440516	4206763	1444	Light brown SILTY SAND, trace gravel, dry					15-Dec-15

Sample ID	Station ID	Depth	Coordinates NAD 1983		Elevation	Description	Assays				Date
BSV 15-12		90-120				Light brown SILTY CLAY, mixed with volcanic ash, hard pan refusal at 3 locations to penetrate, success at fourth location, dry (Sample)	34	4000	6000	200	
BSV 15-13		120-150				Light brown SILTY SAND, some silt, trace gravel, damp (Sample)	50	5000	7600	220	
OP BSV 15-14	F5500	0-90	440878	4206418	1440	Light grey to brownish SILTY CLAY, sticky, damp (Sample)	78	6300	10000	480	15-Dec-15
OP BSV 15-15	F6000	0-90	441240	4206073	1440	Light grey SILTY CLAY, mixed with volcanic (B&H) material, damp (Sample <a href="#">plus Ice sample for water BSV 15-01W</a> )	68	6000	9600	420	15-Dec-15
OP		0-90	441604	4205729	1446	Brown SILTY SAND, coarse grained, damp					15-Dec-15
BSV 15-16	F6500	90-150				Same as above but more silty, damp (Sample)	26	3100	4400	130	
		0-15	441965	4205384	1448	Brown SAND AND GRAVEL, dry					15-Dec-15
NP		15-90				Brown SILTY SAND, trace gravel, damp					
BSV 15-17	F7000	90-180				Brown SILTY SAND, becomes clayey and sticky at 150 cm, damp (Sample)	16	2400	3200	34	
		0-45	440261	4205625	1439	Brown SILTY SAND, fine, damp					15-Dec-15
OP BSV 15-18	E9000	45-90				Grey SILTY CLAY, mixed with volcanic ash (bentonite plus hectorite) material, sticky, plastic, damp (Sample)	76	5800	10000	360	
OP		0-60	439799	4205240	1442	Brown SILTY SAND, fine grained mixed with brown clay, damp					15-Dec-15
BSV 15-19	E8400	60-90				Grey to brown CLAY AND SILT, plastic, damp (Sample)	72	5800	8900	330	

Sample ID	Station ID	Depth	Coordinates NAD 1983		Elevation	Description	Assays				Date
OP	E7800	0-75	439339	4204857	1443	Dark brown SANDY SILT, mixed with brown clay, dry					15-Dec-15
BSV 15-20		75-90				Grey SILTY CLAY, plastic, damp (Sample)	67	6400	9400	340	
NP	C5000	0-10	434316	4205334	1452	Brown SILTY SAND AND GRAVEL, dry					16-Dec-15
BSV 15-21		10-90				Light brown to light grey SILT AND CLAY, plastic, damp (Sample)	67	4800	7300	160	
BSV 15-22		90-150				Light grey SILTY CLAY, mixed with volcanic ash material, plastic, damp (Sample)	100	6200	9300	190	
NP	C5500	0-90	434811	4205264	1450	Light brown SILT, some sand, damp					16-Dec-15
BSV 15-23		90-100				Grey SILTY CLAY, hard to drill, bentonitic, dry (Sample)	75	4800	7700	200	
	C6000	0-10	435306	4205194	1448	Light brown SILT AND GRAVEL, dry					16-Dec-15
NP		10-100				Light grey SILT AND CLAY, mixed with volcanic ash material, plastic, damp					
BSV 15-24		100-120				Same as above (Sample)	50	4000	5900	160	
NP BSV 15-25	C6500	0-90	435802	4205124	1447	Light grey SILTY CLAY, mixed with volcanic ash material, dry on top 10 cm, damp (Sample)	88	6000	9600	260	16-Dec-15
NP BSV 15-26	C7000	0-90	436297	4205054	1448	Light grey SILTY CLAY, mixed with volcanic ash and salt, plastic, damp, dry on top 15cm (Sample)	68	6400	9500	220	16-Dec-15
NP	C7500	0-90	436792	4204984	1449	Light grey SILTY CLAY, mixed with volcanic ash and salt, plastic, damp					16-Dec-15
BSV 15-27		90-105				Same as above (Sample)	70	6000	9600	300	
NP	C8000	0-30	437286	4204914	1449	Light brown SILT AND CLAY, dry					16-Dec-15

Sample ID	Station ID	Depth	Coordinates NAD 1983		Elevation	Description	Assays				Date
		30-90				Light grey SILTY CLAY, mixed with volcanic ash and salt, plastic, damp					
BSV 15-28		90-120				Same as above (Sample)	70	5900	9400	250	
		0-30	438870	4204690	1447	Brown SANDY SILT, mixed with clay, damp					16-Dec-15
OP		30-90				Light grey SILTY CLAY, mixed with volcanic ash and salt, plastic, damp, hard to drill, sticky					
BSV 15-29	C9600	90-135				Same as above (Sample)	65	5100	8400	220	
		0-30	439138	4204590	1442	Brown SILT, some sand and clay, damp					16-Dec-15
OP		30-90				Light grey SILTY CLAY, mixed with volcanic ash and salt, plastic, damp					
BSV 15-30	D1100	90-120				Same as above (Sample)	71	6500	9700	330	
OP		0-30	439411	4204299	1439	Brown SILTY CLAY, plastic, damp					16-Dec-15
BSV 15-31	D1500	30-90				Light grey SILTY CLAY, mixed with volcanic ash (bentonite and hectorite) and salt, plastic, damp, sticky (Sample)	64	6500	9800	230	
		0-90	439756	4203935	1444	Brown SILTY SAND, fine to medium grained, trace gravel, dry					16-Dec-15
OP		90-120				Light brown to grey SILTY SAND, fine to medium grained, dry					
BSV 15-32	D2000	120-150				Same as above (Sample)	15	2300	3000	69	
OP		0-90	440098	4203571	1449	Brown SILTY SAND, some gravel and clay, damp, dry on top 30cm					16-Dec-15
BSV 15-33	D2500	90-120				Same as above (Sample)	61	5400	8700	190	

Sample ID	Station ID	Depth	Coordinates NAD 1983		Elevation	Description	Assays				Date
OP BSV 15-34	D3000	0-90	440441	4203208	1452	Brown SILTY SAND, fine to medium grained, some gravel and clay, damp (Sample)	26	2900	5300	82	16-Dec-15
NP BSV 15-35	E5600	0-90	437649	4203447	1443	Brown SILTY SAND, some clay, trace gravel, damp (Sample)	92	7600	11000	350	16-Dec-15
NP		0-90	437496	4203319	1443	Light brown to light grey SILT, some sand, clay and gravel, damp					16-Dec-15
NP BSV 15-36	E5400	90-150				Light grey SILTY CLAY, mixed with volcanic ash (B&H) and salt, plastic, damp, sticky (Sample)	79	6700	9700	230	
NP BSV 15-37	E4800	0-90	437035	4202934	1443	Light brown to light grey SILT, some sand, clay and gravel, damp (Sample)	83	6700	9700	160	16-Dec-15
NP BSV 15-38	B6500	0-90	433007	4199981	1467	Brown SAND AND GRAVEL, coarse, dry (Sample)	45	5900	3800	80	16-Dec-15
NP		0-90	432951	4199483	1471	Brown SILTY SAND AND GRAVEL, dry					16-Dec-15
BSV 15-39	B6000	90-120				Light brown SILTY SAND, some gravel and clay, damp (Sample)	31	6100	3800	51	
NP BSV 15-40	B5000	0-90	432842	4198490	1483	Brown, SAND AND GRAVEL, coarse grained, loose, dry (Sample)	28	2600	4400	35	16-Dec-15
NP BSV 15-41	B4500	0-90	432787	4197993	1492	Brown SILTY SAND AND GRAVEL, dry, loose (Sample)	38	3000	5400	35	16-Dec-15
NP		0-90	432732	4197497	1499	Brown SILTY SAND AND GRAVEL, dry, loose					16-Dec-15
BSV 15-42	B4000	90-120				Same as above (Sample)	33	2000	4800	24	
BSV 15-43	B3500	0-90	432676	4196999	1503	Light brown SILTY SAND AND GRAVEL, dry, loose (Sample)	15	3600	3100	9.9	16-Dec-15

Sample ID	Station ID	Depth	Coordinates NAD 1983		Elevation	Description	Assays				Date
NP BSV 15-44	B3000	0-90	432622	4196503	1513	Light brown SILTY SAND AND GRAVEL, dry, loose (Sample)	14	1600	2800	9.9	16-Dec-15
NP BSV 15-45	B2500	0-90	432568	4196005	1528	Light brown SILTY SAND AND GRAVEL, dry, loose (Sample)	15	1100	2800	8.2	16-Dec-15
NP	G6500	0-90	434730	4196151	1516	Light brown SILTY SAND AND GRAVEL, medium to coarse grained, dry, loose					17-Dec-15
BSV 15-46		90-120				Same as above (Sample)	16	2900	4400	16	
NP	G6000	0-15	434315	4196431	1513	Light brown SILTY SAND AND GRAVEL, dry, loose					17-Dec-15
BSV 15-47		15-30				Grey CLAY, hard, dry, volcanic ash material (Sample)	20	5000	5900	21	
		30-90				Light grey to brown SILT, some sand and gravel, dry					
NP	G5500	0-10	433899	4196710	1509	Light brown SILTY SAND AND GRAVEL, dry, loose					17-Dec-15
BSV 15-48		10-30				Grey CLAY, hard, dry, volcanic ash material (Sample)	19	3800	3900	20	
NP		30-90				Light brown SILTY SAND AND GRAVEL, dry, loose					
BSV 15-01W		F6000	441240	4206073	1440	Ice water sample, brown with sediments (preserved immediately)	0.65	47	79	2	15-Dec-15
BSV 15-02W	NP		435394	4195308	1524	Water well sample, WT TOC 17 feet, ground 14 feet, water has some sediments, hair and murky (preserved immediately)	nd	27	4	0.51	17-Dec-15
BSV 15-03W	NP		443303	4208375	1443	Ice water sample, brown with sediments (preserved immediately)	0.73	58	92	3.8	17-Dec-15

Sample ID	Station ID	Depth	Coordinates NAD 1983		Elevation	Description	Assays				Date
BSV 15-04W	NP		443326	4208371	1443	Ice water sample, brown with sediments (preserved immediately)	0.55	46	68	4.9	17-Dec-15
BSV 15-05W	NP		443379	4208273	1444		0.64	52	78	4	17-Dec-15

**Notes:**  
*NP – Not on the Property*  
*OP – On the Property*

### 6.2.3 Drilling

In the early 2016, Ultra Lithium Inc. applied for drilling permit for three drill holes to the Bureau of Land Management (BLM) and received notice-of-intent exploration work permit from to conduct Phase 1 exploratory drilling. ULI signed a drilling contract with Harris Exploration Drilling to complete one HQ size core drill hole on the Property. The drilling started on May 10, 2016 and the drilling contractor was only able to drill to 1,000 feet (305 metres). The hole was stopped due to artesian water pressure.

Based on (CSAMT) geophysical survey data, two potential brine targets were interpreted at this borehole location. Drilling results confirmed that the first target continues down to approximately 500 feet (152 metres) below surface, whereas the second target begins at 700 feet (213 metres). The second target is expected to continue down to 1,800 feet (549 metres) below surface which was the proposed depth of this hole. The hole was reamed to a six-inch diameter and a monitoring well was installed down to a depth of 500 feet, with 3-inch diameter screen installed at the bottom 120 feet.

The following are the highlights of the data collected from drill hole BSH16-01:

- Results indicate anomalous values of lithium in drill core samples. The drill core logs show the presence of volcanic clays, organic matter and tuff at various depths which are documented to be contributed from Late Miocene to Pliocene tuffaceous lacustrine facies of the Esmeralda Formation. Several geological studies consider the Esmeralda Formation to be the source of lithium brine in the South Big Smokey and Clayton valleys. There are a few gypsum layers within sand and clay layers. The amount of volcanic material and tuffs increases with depth.
- The drill core data shows the presence of multiple sand aquifers down to a drilled depth of 1,000 feet (305 metres) below surface. Water levels as measured on June 04, 2016 was at 2 feet (0.6 meters) below ground surface indicating artesian water pressure from a confined aquifer at 349 to 479 feet (106 to 146 metres). The aquifer is comprised of sand with intervening thin clay layers.
- Assays of groundwater samples taken at various intervals to a depth of 1,000 feet (305 metres) using Harris Exploration's sampling technique indicated anomalous values of lithium. Later sampling after well development and purging indicated lithium values of 1 ppm and lower.

The results of 22 drill core samples from the hole BSH16-01 indicate maximum values for lithium of 270 parts per million (ppm), boron 410 ppm, potassium 10,000 ppm, and magnesium 12,000 ppm; whereas the average lithium concentration in all core samples is 131 ppm, boron 151 ppm, potassium 5,575 ppm, and magnesium 6,210 ppm. One sample from a 10 cm gypsum layer yielded a lithium value below the detection limit. These samples were taken at various depth intervals down to 1,000 feet (305 meters)

below ground surface. Two rounds of groundwater sampling from this well indicated lithium values of 1 ppm or less.

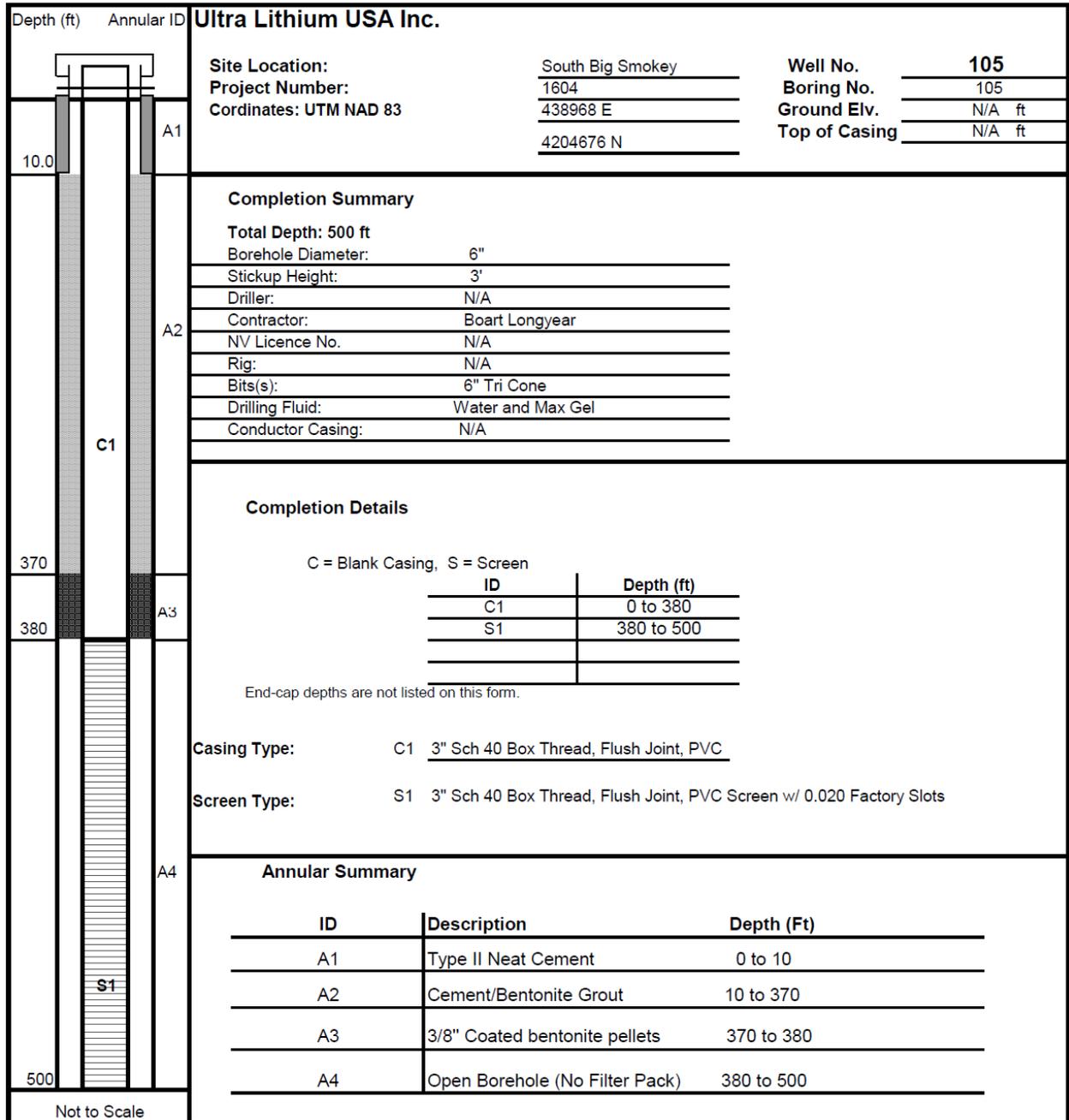


Photo 3: Drilling work in progress



Photo 4: Core samples from BSH 16-01 drill hole

Figure 15: Monitoring well details at BSV 16-01



**Table 5: BSH16-01 log and assay results**

Soil Sample ID	Depth (ft)	Depth (m)	Lithology	Li (ppm)	K (ppm)	B (ppm)	Mg (ppm)
BSH16-01-50'S	50	15.24	Light brown SILTY CLAY, medium plastic, damp, silt patches	100	7100	250	8300
BSH16-01-75'S	75	22.86	Black SHALE with organic matter, peat like appearance, damp	86	7000	230	7700
BSH16-01-104'S	104	31.70	Greenish grey SILTY CLAY, plastic, volcanic nature, wet	96	7800	320	8600
BSH16-01-154'S	154	46.94	Greenish grey SILTY CLAY, plastic, volcanic nature, damp, more greenish at the in some sections, chloritic, peat bog odour and mixing of organic matter at places	250	9600	410	9400
BSH16-01-204'S	204	62.18	Greenish grey SILTY CLAY, plastic, volcanic nature, wet, more greenish in this part due to more chlorite, mixing of organic matter	190	8700	320	8800
BSH16-01-254'S	254	77.42	Greenish grey to dark black SILTY CLAY, volcanic, plastic, damp, some black organic matter	270	10000	330	12000
BSH16-01-300'S	300	91.44	Greenish grey to dark grey and black SILTY CLAY, with organic matter, damp, medium plastic	120	6700	190	7000
BSH16-01-349'S	349	106.37	Greenish grey CLAYEY SILT, with some fine grey sand patches, damp to wet	190	7000	140	7700
BSH16-01-354'S	354	107.89	Same as above	40	1500	27	1600
BSH16-01-435'S	435	132.58	Light grey SAND, medium to coarse grained, quartzitic, rounded to sub rounded to rounded grains, damp to wet, pores are filled with drilling mud showing loose sand dilution, rock fragments including clay, chert, amphibole, limestone and igneous (quartz 50%, rock fragments 20%, 30% voids filled with drilling fluids and clay cement)	24	1300	23	1400
BSH16-01-453'S	453	138.07	Same as above	24	1100	17	1200
BSH16-01-459'S	459	139.90	Same as above	36	1300	19	1900

BSH16-01-500'S	500	152.39	Light grey TUFF, with volcanic ash material, silty, contains <cm to 1cm rock fragments, wet moist, irritatting to hands, bottom 6" more clayey with <1" salt/gypsum layer	250	8200	120	10000
BSH16-01-554'S	554	168.85	Brownish to grey SILTY CLAY, medium plastic damp, more silty at places	260	9200	190	12000
BSH16-01-576'S	576	175.56	Brown and grey SILTSTONE/CLAY, volcanic, core loss in some sandy parts	210	7600	130	10000
BSH16-01-710'S	710	216.40	A 3 inch layer of GYPSUM at 710' within grey silty sand, white powdery, damp	0	540	13	130
BSH16-01-719'S	719	219.14	Grey to greenish grey SILTY CLAY, medium plastic, damp, turns into silt at the bottom	140	7000	89	7700
BSH16-01-730'S	730	222.49	Grey SAND, fine to medium grained, quartzitic, with 30% rock fragments, interstices are filled with drilling mud, wet, subrounded to subangular grains are bind by fluids	44	2200	25	2000
BSH16-01-801'S	801	244.13	Greenish grey SILTY CLAY, volcanic, plastic, damp, some parts are whitish, bentonitic	240	9300	200	9100
BSH16-01-887'S	887	270.34	Light greenish grey TUFF, coarse quartz, amphibole and, chert, clay and other fragments, thin salt layers at places	130	4300	110	4100
BSH16-01-952.5'S	952.5	290.31	SILTY SAND, fine grained, with clay and salt matrix, 3" of gypsum layer at 952.5' (Sample)	92	2600	89	3000
BSH16-01-1000'S	1000	304.79	SILTY SAND, fine grained, with clay and salt matrix, 3" of gypsum layer at 952.5' (Sample)	92	2600	89	3000
Average				131	5575	151	6210

## **7.0 GEOLOGICAL SETTING AND MINERALIZATION**

### **7.1 Regional Geology**

The South Big Smokey Valley area is a typical internally drained valley hemmed in by mountains, low foothills, and broad alluvial fans. Limestone, quartzite, slate, and schist, aggregating several thousand feet in thickness and ranging in age from Lower Cambrian to Carboniferous are the oldest rocks found in this region. Since their deposition, they have been extensively deformed, eroded, intruded by lavas, and largely covered by igneous bodies and sedimentary deposits. Originally, they probably covered the entire region, but at present they are found over extensive areas only in the Toyabe, Toquima, Silver Peak, and Lone Mountain ranges.

Several bodies of granite and associated crystalline rocks occur in this region. Wherever their relations have been determined they are intrusive in the Paleozoic strata and older than the Tertiary eruptive rocks. A large granite mass forms the main part of Lone Mountain, and granite crops out in the ridges farther southwest.

Eruptive formations of Tertiary age, consisting of rhyolite and minor amounts of basalt and rocks of intermediate composition with associated tuffs and breccias, occur over extensive areas in all the ranges bordering the Big Smokey Valley. They lie at the surface in much of the greater part of the San Antonio and Monte Cristo ranges and the hill country north of the Monte Cristo Range, and in considerable areas in the Silver Peak and Lone Mountain ranges.

Tertiary sedimentary rocks of the Esmeralda Formation are developed in the foothill region southwest of Lone Mountain and in the region west and southwest of Blair Junction, but they are widely distributed in the ranges bordering the lower valley and either crop out or lie near the surface over extensive areas in the marginal parts of the lower valley and Lone Valley. There are occurrences of sharp structural unconformities between the Tertiary beds and the overlying Quaternary deposits (O. E. Ivinzer, 1915).

The Quaternary deposits in general are comprised of soils of uplands and mountains, soils of valley fills, outwash plains and alluvial fans, soils on alluvial fans and aprons, and playas and soils on flats and basins, as described in US Department of Agriculture report on Soil Survey of Big Smokey Valley (1980).

## 7.2 Local and Property Geology

The South Big Smokey Valley is located within the Basin and Range Province in southern Nevada. It is a closed-basin that is bounded to the northwest by Monte Cristo Range, the east and northeast by Lone Mountain, and to the southeast by Weepah Hills and to the south by Red Mountain and the Silver Peak Range. The basement rocks consist of late Neoproterozoic to Ordovician carbonate and clastic rocks which were deposited along the ancient western passive margin of North America. During late Paleozoic and Mesozoic orogenies, the region was shortened and subjected to low-grade metamorphism and granitoids were emplaced at ca. 155 and 85 Ma.

Multiple wetting and drying periods during the Pleistocene resulted in the formation of lacustrine deposits, salt beds, in this part of the Big Smokey Valley and cover majority of the property claims. The following types of soils are described in US Department of Agriculture report on Soil Survey of Big Smokey Valley (1980).

**Soils of Uplands and Mountains:** These soils are formed in residuum and colluvium derived from basalt, andesite, rhyolite, and volcanic ash. The surface layer is gravelly and cobbly, medium textured and moderately coarse textured. The soils are well drained, shallow and moderately deep, exposed mostly at the margins of the property claims, and the southwestern claim block.

**Soils of Valley Fills, Outwash Plains and Alluvial Fans:** These soils formed in alluvium mainly derived from volcanic rocks such as basalt, rhyolite, tuffs and latite, and admixtures of limestone and shale. The surface layer is gravelly and coarse, moderately coarse, or medium in texture. The soils are well drained to excessively drained.

**Soils on Alluvial Fans and Aprons:** These soils formed in alluvium mainly derived from volcanics such as basalt, rhyolite, tuffs and andesite, and from limestone and granitic rocks. The surface layer is generally coarse textured or moderately coarse textured. The soils are excessively drained, somewhat excessively drained, and well drained.

**Playas and Soils on Flats and Basins:** The soils formed in silty lacustrine sediment derived from mixed rock sources. The surface layer is generally medium textured, moderately fine textured or fine textured. These soils are somewhat poorly drained to poorly drained and have a desirable character for potential development of brines and accumulation of lithium.

The Late Miocene to Pliocene tuffaceous lacustrine facies of the Esmeralda Formation are documented to contain up to 1,300 ppm lithium and an average of 100 ppm lithium. 2015 surface sampling by Ultra Lithium indicated up to 100 ppm lithium in lake sediments which represent soils of Playas on Flats and Basins.



Photo 5: Soil profile showing volcanic ash



Photo 6: Salts on soil surface



Photo 7: Looking east – outcrop of Esmeralda Formation sediments

### **7.3 Mineralization**

The fine-grained lake sediments in the centre of the South Big Smokey Valley have anomalous values of lithium. Surface and shallow subsurface water samples collected during 2015 fieldwork season did not show anomalous values of lithium.

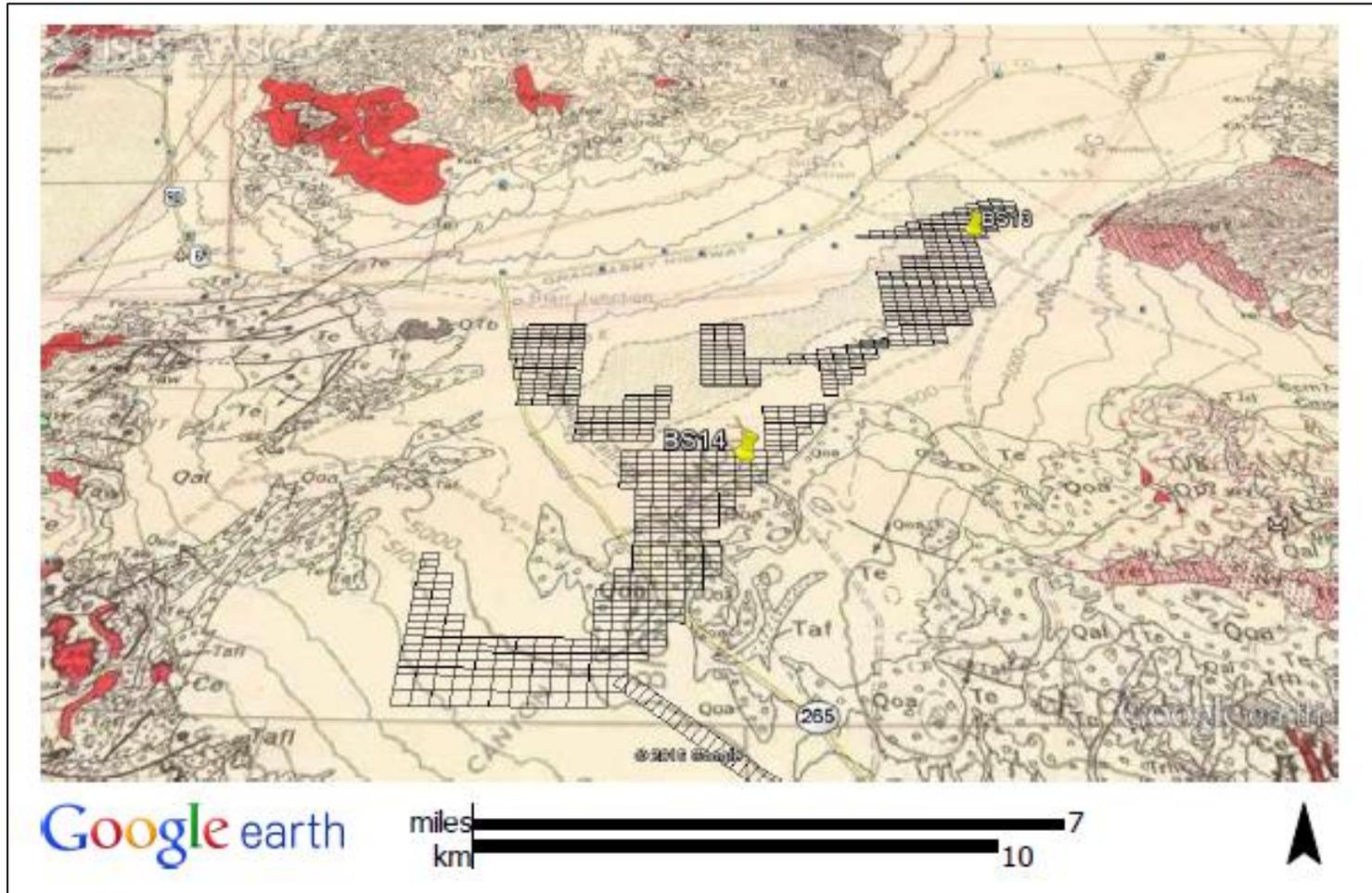
### **7.4 Hydrogeology**

Hydrogeological observations during 2015 fieldwork indicate that the property area which is a part of the South Big Smokey Valley (BSV), is an enclosed basin which receives water recharge from the surrounding ranges. The rocks on the southeastern part of BSV were observed to be dipping inwards towards the basin, whereas the overall slope of the basin is to the southwest. Traverses along geophysical survey lines indicated subsurface sediments were generally composed of silty clay, silty sand and gravel. The amount of volcanogenic material and salt varies from place to place however was generally observed in the majority of the claims held by Ultra Lithium. At several locations, the top portion of sediments was covered by pebbles of broken rocks of surrounding outcrops. The Central part of the Property represents a light grey fine silty clay unit mixed with volcanic ash material which has a puffy appearance due to water action on its soil surface.

The Lithium brine at Clayton Valley is documented to be formed from a complex process of evaporation, mixing, halite and hectorite dissolution, precipitation and ion-exchange/absorption. Mixing of salts and volcanic material is observed within the central part of the South Big Smokey Valley and on the Property indicating a favorable setting for the accumulation of lithium. Numerous sand dunes were observed in the northeastern claim area near geophysical lines E (station 10000) and F (between station 5000 and 6000).

Within the Clayton Valley including the Silver Peak brine lithium project area a display of distinct layers of white to light grey colored volcanic ash beds can be observed. These ash beds can be seen to continue to the north, towards the South Big Smokey Valley. Similarity of the presence of volcanic ash is of note for both valleys. Of contrast, outcrops of rhyolite, observed in Clayton valley are not very prominent in the Big Smokey Valley.

Figure 16: Geological Map of the Property Area



Legend: Taf – Lava flows and ash flows, Te – Esmeralda Formation, Qal – Desert wash alluvium and colluvium, Qoa – Older alluvium chiefly gravel, TafI – Non welded ash flows

## 8.0 DEPOSIT TYPES

### 8.1 Lithium Deposit Types

Global lithium resources are estimated to be 39 million metric tons (MT) and lithium is currently mined from three types of deposits: brines, pegmatites and sedimentary rocks. Continental brines and pegmatites (or hard-rock ore) are the main sources for commercial lithium production. Generally, lithium extraction from brine sources has proven more economical than production from hard-rock ore. While hard-rock lithium production once dominated the market, the majority of lithium carbonate is now produced from continental brines in Latin America, primarily due to the lower cost of production.

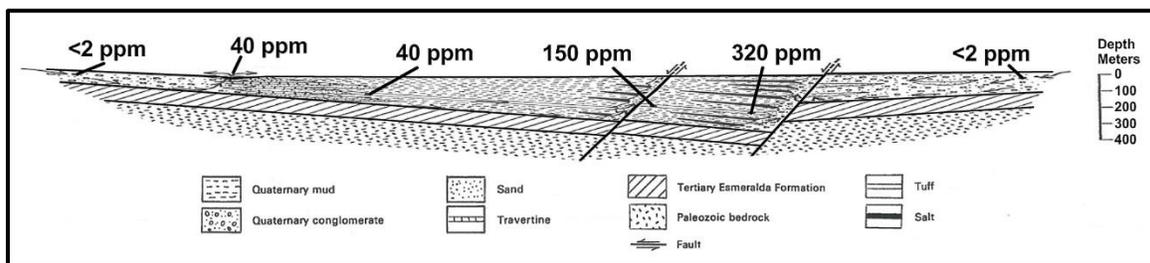
Pegmatite is coarse-grained intrusive igneous rock formed from crystallized magma below the earth's crust. It can contain extractable amounts of a number of elements, including lithium, tin, niobium and tantalum. Lithium in pegmatites is commonly found in the mineral spodumene, but also may be present in petalite, lepidolite, amblygonite and eucryptite. This form of deposit accounts for 26 percent of known global lithium resources.

Sedimentary rock deposits account for 8 percent of known global lithium resources and are found in clay deposits and lacustrine evaporites. In clay deposits, lithium is found in hectorite, which is rich in both magnesium and lithium. The most commonly-known form of lithium-containing lacustrine deposit is found in the Jadar Valley in Serbia for which the lithium- and boron-bearing element jadarite is named.

Brine deposits represent about 66 percent of global lithium resources and are found mainly in the salt flats of Chile, Argentina, Bolivia, China and Tibet. The second half of the 20th century saw a dramatic shift in lithium carbonate (and some lithium chloride) production from the usual pegmatite sources to brines. Today, all lithium carbonate, which is the basis of various downstream lithium chemicals, comes from the brines of the Salar de Atacama, Chile, and Clayton Valley, Nevada (United States). Lithium chloride is also produced from the Salar del Hombre Muerto, Argentina. Various other salars and playas such as those of China, Bolivia, Argentina, and Tibet are being evaluated for future lithium chemical production. The industry was once dominated by two major U.S. producers, until a third producer from Chile started production of various salts, including lithium carbonate. This shift in sources led to the shutdown of both U.S. pegmatite operations. Australia, Canada, and Zimbabwe have continued to supply lithium mineral concentrates for the ceramic and glass industry and other applications. Minor producers in Brazil, Portugal, Russia, and the People's Republic of China mine various lithium minerals. One new U.S. supplier of lithium chemicals came on stream using the depleted lithium hydroxide government stockpile (Kunasz 2004).

## 8.2 Deposit Models

There are three types of brine deposits — continental, geothermal and oil field — with the most common being continental saline desert basins (also known as salt lakes, salt flats or salars). They are located near tertiary or recent volcanoes and are made up of sand, minerals with brine and saline water with high concentrations of dissolved salts. A playa is a brine deposit whose surface is composed mostly of silts and clays; they have less salt than a salar. The South Big Smokey Valley brine lithium property also falls within the playa type brine deposit model. It shares geological similarities with Clayton Valley which is the only lithium producing brine operation in North America. The Lithium brine at Clayton Valley is documented to be formed from a complex process of evaporation, mixing, halite and hectorite dissolution, precipitation and ion-exchange/absorption. The Li-rich brines are currently being produced from six different aquifers in the playa as shown in the following Figure (Munk 2011).



**Figure 17- Generalized cross section of nearby Clayton Valley, after Davis (1986)**

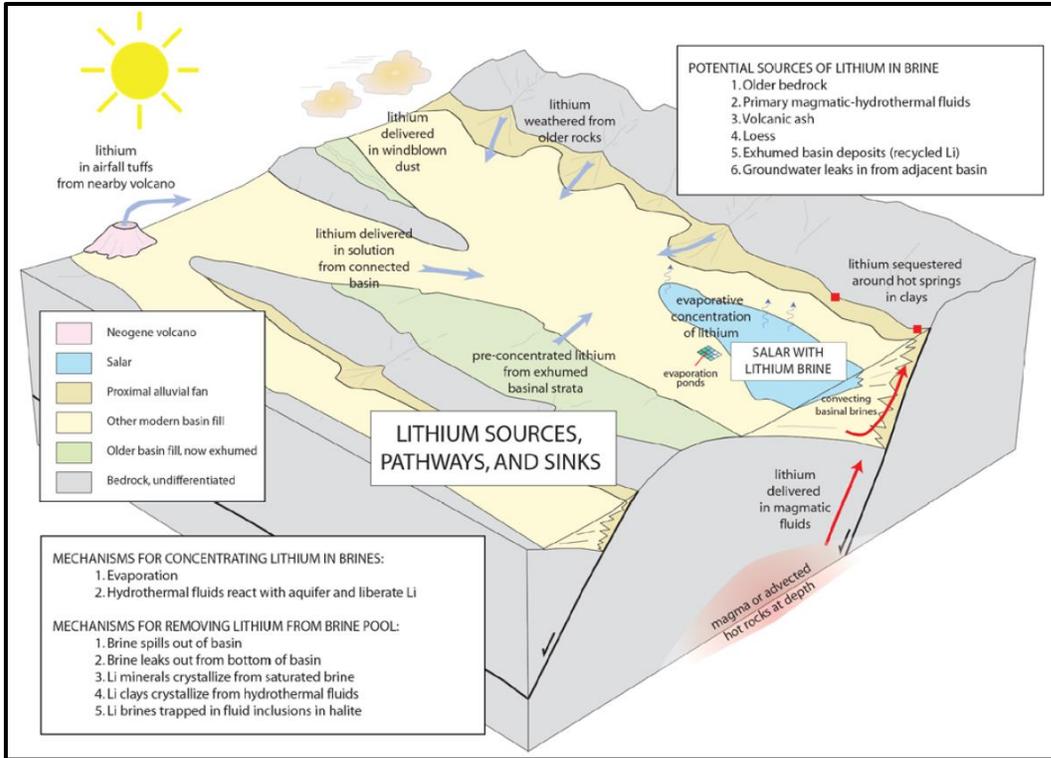
*(Indicating that lithium concentrations (in ppm) increase against faults forming structural traps)*

All producing lithium brine deposits share a number of first-order characteristics: (1) arid climate; (2) closed basin containing a playa or salar; (3) tectonically driven subsidence; (4) associated igneous or geothermal activity; (5) suitable lithium source-rocks; (6) one or more adequate aquifers; and (7) sufficient time to concentrate a brine. Key aspects of the proposed lithium-brine deposit model are shown in Figure 18. In essence, lithium is liberated by weathering or derived from hydrothermal fluids from a variety of rock sources within a closed basin. Circumstantial evidence from the Clayton Valley suggests that felsic vitric tuffs are a particularly favorable primary source. Another potentially important lithium source in the Clayton Valley is uplifted Neogene lake beds from earlier in the basin's history, which had previously been hydrothermally altered to hectorite. Lithium is highly soluble and, unlike sodium (Na), potassium (K), or calcium (Ca), does not readily produce evaporite minerals when concentrated by evaporation. Instead it ends up in residual brines in the shallow subsurface. Economic brines have Li concentrations in the range of 200 to 4,000 milligrams per liter (mg/l). Other elements in solution, such as boron and potassium, may be recovered as byproducts or coproducts; brines can also contain undesirable elements that create problems in processing (magnesium) or toxic elements that require care in waste disposal (Bradley 2013).

The single most important factor determining if a non-marine basin can accumulate lithium brine is whether or not the basin is closed. Closed basins form because of tectonics but they are maintained only where, over longer time-spans, evaporation exceeds precipitation. If the long-term rate of precipitation in a basin increases sufficiently, eventually lake water will overflow at some point along the drainage divide and drain away, carrying with it any dissolved lithium.

Active faulting appears to be a consistent attribute for lithium host basins. Fault-related subsidence creates accommodation space, without such only a thin veneer of basin sediments could accumulate. A thick basin fill is needed to provide an aquifer of sufficient volume to hold a viable brine resource. In contrast, shallow, superficial basins in cratonic regions such as the Sahara Desert lack fault control and are not known to be prospective for lithium brines. Some basins are cut by active intrabasinal faults. Brine pools in the Clayton Valley and Salar de Atacama are localized along active intrabasinal faults that control the distribution of aquifers and also influence groundwater movement patterns. These intrabasinal faults are known from boreholes and have no surface expression (Bradley et.al., 2013).

Because they are contained by aquifers of various geometries, lithium brines are localized in the subsurface rather than being present throughout at depth. At Salar de Atacama, the brine is hosted in the porous, upper 30 meters of the salar's halite nucleus. Little is known about the potential of brine aquifers at depth in Salar de Atacama. At Clayton Valley, brines are pumped from six gently dipping aquifers that are variously composed of ash, conglomerate, tufa, and halite (Bradley et.al., 2013).



**Figure 18: Schematic deposit model for lithium brines**

*Showing part of a closed-basin system consisting of interconnected sub-basins. The sub-basin containing the salar is the lowest (McNutt and Salazar 2013)*

## **9.0 EXPLORATION**

Metron Capital Corp. has not done any exploration work on the Property.

## **10.0 DRILLING**

No drilling was done on the Property by Metron Capital Corp.

## **11.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY**

The samples for this study were shipped directly by the author to Western Environmental Testing Laboratory in Sparks, Nevada, which is an US EPA accredited laboratory. The samples were analyzed for lithium, potassium, boron, and magnesium using Standard Methods for the Examination of Water and Wastewater, online edition, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846), Third Edition. Laboratory used its own quality control and quality assurance protocols for sample analysis. The soil and water samples from Ultra Lithium's exploration work of 2015-16 were also prepared and analyzed from the same laboratory using the above- mentioned methodology.

For the present study, the sample preparation, security and analytical procedures used by the laboratories are considered adequate. No officer, director, employee or associate of Metron Capital Corp. or Ultra Lithium Inc. was involved in sample preparation and analysis.

## **12.0 DATA VERIFICATION**

The author visited the Property on December 3, 2016, and the geological work performed in order to verify the existing data consisted of visiting existing drill hole on the Property (BSH16-01), examining rock outcrops and lake sediments areas of the Big Smokey Valley, taking geological and hydrogeological observations, and observing several claim posts. GPS coordinates using NAD 83 datum were also recorded for several claim posts to confirm the staking process. The drill core for hole BSH16-01 is stored at a locked storage unit located on the Clown Motel property in Tonopah. The author viewed various core sections and collected five representative samples from selected intervals. All samples were under the care and control of the author and are considered representative.

The sample assay results (Table 6) indicated lithium values in the range of 192 to 357 ppm, boron 97 to 230 ppm, potassium 7200 to 12000 ppm, and magnesium 7200 to 13000 ppm. These results are consistent with 22 core sample results of May 2016 from the same drill hole as discussed in Section 6.2.3 of this report.

The data collected during the present study is considered reliable because it was collected by the author. The data quoted from other sources is deemed reliable because it was taken from various geological and engineering reports and technical papers published on the area and the work was conducted by professional engineers and or geologists.

**Table 6: Sample description**

Lithium Sample ID	Drill Hole	From (ft)	To (ft)	Width (ft)	Description	Li (ppm)	B (ppm)	K (ppm)	Mg (ppm)
S195340	BSH16-01	602	606	4	HQ Core Sample, Light Grey Uniform Clay	357	180	9800	13000
S195341	BSH16-01	576	581	5	HQ Core Sample, Light Grey Uniform Clay	313	150	9200	13000
S195342	BSH16-01	710	714	4	HQ Core Sample, Extremely Light white Clay for first 4" remaining sample light grey Clay	226	120	7200	9000
S195343	BSH16-01	719	724	5	HQ Core Sample, Light Grey Uniform Clay	197	97	7900	8300
S195344	BSH16-01	919	924	5	HQ Core Sample, Light Grey Uniform Clay	192	230	12000	7200



Photo 8: Ultra Lithium claim post on the Property



Photo 9: BSH16-01 core box



Photo 10: Well at borehole BSH16-01 location

### **13.0 MINERAL PROCESSING AND METALLURGICAL TESTING**

No mineral processing or metallurgical testing was carried out on the Property by Metron Capital Corp.

*Item 14 to 22 is not applicable.*

### **23.0 ADJACENT PROPERTIES**

The Property is located in an active mining and mineral exploration region where many operators have been carrying out lithium exploration and/ or development work on adjacent properties. The following information is taken from the publicly available sources which are identified in the text and in Section 27. The writer has not independently verified the information referenced however has no reason to doubt the reliability of the information used. The information relied upon is not necessarily indicative of the mineralization on the South Big Smokey Valley Property, which is the subject of this technical report and was utilized solely to provide background and context material for benefit of the reader.

### **23.1 Silver Peak Mine, Clayton Valley, Nevada**

The Clayton Valley is located in Esmeralda County, Nevada, USA approximately 180 km north of Death Valley, California and is the location of the only lithium brine deposit in production in North America (Fig 19). The Clayton Valley is a closed basin with an area of 1,342 km<sup>2</sup> and a playa surface of 72 km<sup>2</sup>. The basin lies in the eastern rain shadow of the Sierra Nevada and is arid with an annual average precipitation of 13 cm, average evaporation rates of 142 cm/yr and an average temperature of 13°C. The elevation of the valley floor is 1298 m, the lowest of than any of neighboring basins in the region (Munk 2011).

Foote Mineral Company traces its origins to A.E. Foote, who founded the company in 1876 as a purveyor of rare minerals. It became a major producer of lithium chemicals when it acquired the right to mine spodumene at Kings Mountain, North Carolina, in the early 1950s. In the 1960s, Foote pioneered the production of lithium carbonate from brine with the opening of the Silver Peak plant (Clayton Valley). It was acquired by Cyprus Minerals Company, then by Chemetall of Germany and more recently by Rockwood Specialties. The Clayton Valley salt marsh was first investigated during the World War II effort to locate sources of strategic minerals, one of which was potash. The salt marsh area was leased by the American Potash Corp., which let the leases lapse. The leases were picked up by the Leprechaun Mining Company (Clyde Kegel), which conducted some exploration on the subsurface brines and identified lithium in addition to potassium. An agreement was later negotiated with Foote Mineral Company, which developed the brines of the basin as a source of lithium carbonate (Barrett and O'Neill 1970). In Clayton Valley, lithium-bearing brines occur in an asymmetric, undrained structural depression filled with Quaternary sediments composed mainly of clay minerals, including hectorite, volcanic sands, and alluvial gravels, and saline minerals consisting of gypsum and halite (Kunasz 1970). The brine that saturates the sediments is chemically simple. It is a concentrated sodium chloride solution containing subordinate amounts of potassium and minor amounts of magnesium and calcium. The lithium concentration is variable and decreases with pumping; the lithium concentration in the brine varies from 100 to 300 ppm Li. The dominant source of lithium has been a volcanic ash that extends across the basin. Exploration has identified additional aquifers which supply additional volumes of lithium-bearing brine.

An extensive well field supplies the brine into some 4,000 acres of solar evaporation ponds. Over 12 to 18 months, the concentration of the brine increases to 6,000 ppm Lithium solely via solar evaporation. When the lithium chloride reaches an optimum concentration, the liquid is pumped to a recovery plant and treated with soda ash, precipitating lithium carbonate, which is then filtrated out, dried, and shipped. At this time, the Silver Peak mine operation is one of the world's leading producers of lithium hydroxide (Kunasz 2004).

## 23.2 Pure Energy Minerals Ltd.

Pure Energy Minerals Ltd. is a publicly traded lithium exploration company listed on the TSX Venture Exchange (TSX:PE) with a total lease area of 3,240 ha (8,004 acres) of public land in the southern Clayton Valley, Nevada, USA. The leases are adjacent to Albemarle's Silver Peak Operations where lithium brines are processed in evaporation ponds and used to produce a variety of lithium chemicals. The operation is unique to North America and has been in operation since 1967. Highways and electric power are in place, and local and regional resources are easily accessible.

Rodinia Minerals, Inc., a previous holder of the claims, completed a geophysical survey surrounding the existing lithium operation and identified a deep northeast-southwest structural trough in the southern Clayton Valley. Rodinia drilled 2 dual wall reverse circulation boreholes in the north section of its claims (now Pure Energy claims) in 2009/10 and identified aquifers that contained lithium up to 400 ppm Li to 488 m (1600 ft) in depth. Rodinia dropped the claims in order to concentrate financial resources on other projects in South America.

Pure Energy completed detailed gravity and seismic reflection surveys during 2014 and 2015 that confirmed a deep structural trough on its claims and identified 19 reflectors from sediment layers that correspond to previously identified Lithium host aquifer horizons. Two exploratory boreholes were completed in the north end of Pure Energy's claims. CV-1 "twinning" the Rodina hole SPD-9, and CV-2 explored new ground further south. Pumping tests completed for 8 hrs. in CV-1 provided positive results of 150 gpm (9.5 L/s) and 225 ppm Li.

An Inferred Resource of 816,000 metric tonnes of Lithium Carbonate Equivalent (LCE) has been calculated based on borehole sample chemistry, seismic and gravity interpretations of basin stratigraphy.



**Figure 19: Adjacent properties**

## **24.0 OTHER RELEVANT DATA AND INFORMATION**

### **24.1 Environmental Concerns**

The author is not aware of any environmental liabilities related to the Property. The company is bound by the federal and the state laws concerning environmental compliance.

## **25.0 INTERPRETATION AND CONCLUSIONS**

The Metron Big Smokey Valley Brine Lithium Property is located approximately 25 miles (40 kilometres) from Tonopah in Esmeralda County, Nevada, USA. It is about 50 kilometres to the west of Goldfield, the County Seat of Esmeralda County. It consists of 100 placer claims located in Townships 1 and 2, Range 38 and 38 ½ East, Esmeralda County, Nevada, USA. Each claim is approximately 20 acres with a total property area of 2,000 acres, configured in two blocks (Metron 1 and 2).

This part of the valley is a typical internally drained basin hemmed in by mountains, low foothills, and broad alluvial fans. Limestone, quartzite, slate, and schist, aggregating several thousand feet in thickness and ranging in age from Lower Cambrian to Carboniferous are the oldest rocks found in this region. Since their deposition, they have been extensively deformed, eroded, intruded by lavas, and largely covered by igneous bodies and sedimentary deposits. Originally, they probably covered the entire region, but at present they are found over extensive areas only in the Toyabe, Toquima, Silver Peak, and Lone Mountain ranges. The Quaternary deposits are generally comprised of the soils of uplands and mountains, soils of valley fills, outwash plains and alluvial fans, soils on alluvial fans and aprons, and playas and soils on flats and basins. The playas soils are somewhat poorly drained to poorly drained and have a desirable character for potential development of brines and accumulation of lithium.

The Late Miocene to Pliocene tuffaceous lacustrine facies of the Esmeralda Formation are documented to contain up to 1,300 ppm lithium and an average of 100 ppm lithium. 2015 surface sampling by Ultra Lithium indicated up to 100 ppm lithium in lake sediments which represent soils of Playas on Flats and Basins.

In 1980, United States Geological Survey carried out an investigation for potential lithium bearing brines in and around Clayton Valley as part of regional study related to lithium supply sources. The Big Smokey Valley was also part of this study where two reverse circulatory drill holes (BS13 and BS14) were drilled outside the current Property. In BS13, a maximum value of 1.7 ppm Li was found in a water sample and 364 ppm in sediment samples. BS14 was abandoned after drilling 215 feet (66 m) into

unconsolidated sand and gravel. A maximum of 1.3 ppm Li was found in a water sample and 287 ppm in sediment samples.

Ultra Lithium Inc. carried out ground geophysical survey in 2014, and a soil and water sampling program in 2015. A ground geophysical survey consisted of eight CSAMT survey lines (called Lines A through H) covering 53.8 kilometers of data. Lines C, D, E and F are partially or fully located on the Property. The survey results indicate that in the northeastern area, the lowest resistivities are south of Line E, in the vicinity of station 6200 on Line F and from station 9400 on Line C to station 2800 on Line D. Evidence for faulting is very tentative in this area, and the depth of investigation does not extend as deep as observed on the southwestern lines.

On December 11-18, 2015, a soil and water sampling program completed by Ultra Lithium was designed to follow up on the results of a CSAMT ground geophysical survey, and its purpose was to investigate the presence of lithium in shallow soil and within its groundwater system. A total of 48 soil / sediment samples were collected to cover survey lines A to H. Additionally, five water samples were collected from different areas, of which four were from surface water / ice with the fifth sample collected from a water well, located on adjacent ground to the Property. The results confirmed the presence of lithium in the Property's hydrogeological system. Of particular interest is the area of geophysical survey lines C, D, E and F. Maximum values for lithium in sediments is 100 ppm, boron 480 ppm, and potassium 7,600 ppm. Generally, the lithium, boron and potassium values correspond well with each other, where samples with higher lithium concentrations tend to have higher values of other two elements. The next exploration phase planned was to a drill hole to a depth which would intersect all potentially brine bearing aquifers identified in the CSAMT geophysical survey interpretation.

In May 2016, Ultra Lithium Inc. completed one HQ size core drill hole on the Property. The hole was drilled down to 1,000 feet (305 metres) and was terminated early due to artesian water pressure. The hole was later reamed to a six-inch diameter and a monitoring well was installed to a depth of 500 feet. A 3-inch diameter screen was installed at the bottom 120 feet of the hole. The results of 22 drill core samples collected from the hole BSH16-01 indicate maximum values for lithium of 270 parts per million (ppm), boron 410 ppm, potassium 10,000 ppm, and magnesium 12,000 ppm; whereas the average lithium concentration in all core samples was 131 ppm, boron 151 ppm, potassium 5,575 ppm, and magnesium 6,210 ppm. One sample from a 10-cm gypsum layer yielded a lithium value below detection limit. These samples were taken at various depth intervals down to 1,000 feet (305 meters). Two rounds of groundwater sampling from this well yielded lithium values of 1 ppm or less. The total exploration expenditures for this drill hole were USD \$165,394.58 (CAD \$215,012.95).

The author visited the Property on December 3, 2016, and the geological work performed in order to verify the existing data consisted of visiting existing drill hole on the Property (BSH16-01), examining rock outcrops and lake sediments areas of the Big Smokey Valley, taking geological and hydrogeological observations, and observing

several claim posts. The drill core for hole BSH16-01 is stored at a locked storage unit located in Tonopah. The author viewed various core sections and collected five representative samples from selected intervals. The sample assay results indicated lithium values in the range of 192 to 357 ppm, boron 97 to 230 ppm, potassium 7200 to 12000 ppm, and magnesium 7200 to 13000 ppm.

Continental brines are the most common type of brine deposits located in saline desert basins (also known as salt lakes, salt flats or salars). They are located near tertiary or recent volcanoes and are made up of sand, minerals with brine and saline water with high concentrations of dissolved salts. A playa is a brine deposit whose surface is composed mostly of silts and clays and have less salt than a salar. The South Big Smokey Valley brine lithium property would be characterized as a playa type brine deposit model. It shares geological similarities with neighboring Clayton Valley.

The Property is located in an active mining and mineral exploration region where many neighboring operators have recently carried out lithium exploration and/ or development work on their adjacent properties. The Silver Peak brine lithium mine on the adjacent Clayton Valley, currently operated by Rockwood is located approximately 25 kilometres to the southeast of the Property. Similarly, Pure Energy Minerals is working on the southern portion of the Clayton Valley, adjacent to the south extent of the Silver Peak mine.

The Property is exposed to certain risks due to gaps in various claim blocks which can create a competition in pumping lithium containing brines from the adjoining claims by other parties. The Company should make arrangements to acquire claims to fill gaps in its claim blocks if the recommended exploration work is successful.

The Property has a good year-round road access from Tonopah Station through highway 6/95. Highway 265 to Silver Peak branches off from 6/95 and crosses the southwestern extent of the Property. The primary source of water is groundwater and power is available locally.

Based on the favourable geological, hydrogeological and tectonic setting, presence of surface lithium anomalous values, and the results of present study, it is concluded that the Property is a property of merit and possess a good potential for discovery of brine lithium mineralization. It has good road access, most of the exploration and mining services are available in the immediate vicinity. The author is of the opinion that the present study has met its original objectives.

## **26.0 RECOMMENDATIONS**

In the qualified person's opinion, the character of the South Big Smokey Valley Property is sufficient to merit for a follow-up work program. This can be accomplished through a two-phase exploration program, where each phase is contingent upon the results of the previous phase.

### ***Phase 1 – Surface Sampling and Drilling***

A total of 12 samples were collected from the property during 2015 surface soil sampling program. This sampling identified anomalous values of lithium, and requires a follow up detailed surface sampling to get better coverage of the property area.

The ground geophysical CSAMT survey and soil sampling program has identified various distinct potential brine targets for drilling. The lowest resistivities are indicated south of Line E, in the vicinity of station 6200 on Line F and from station 9400 on Line C to station 2800 on Line D. The drill hole BSH16-01 was drilled at location C9700 where core samples indicated anomalous lithium values however groundwater samples reported low lithium values (1 ppm and below). To test the CSAMT target at line D, one single drill hole is proposed at station D2350 down to a depth of 2,200 feet (670 m). All hydrogeological units intercepted during drilling should be sampled via soil and groundwater testing for lithium, boron, potassium and magnesium. A water well should be installed at this borehole location to support water sampling, downhole geophysical logging, pumping tests, permeability tests and other hydrogeological studies.

The estimated cost of this program is USD \$309,334 (CAD \$412,445) and will take an estimated 8 to 12 weeks to complete.

### ***Phase 2 – Detailed Drilling***

Based on the results of Phase 1 program, an additional 5-hole drill program should be completed on the Property. A scope of work, location of drill holes and budget for Phase 2 will be prepared after reviewing the results of Phase 1 drill program.

**Table 7: Phase 1 Budget**

Item	Unit	Currency	No. Of Units	Rate	Total CAD	TOTAL USD
Project management	day	CAD	10	\$650	\$6,500	\$4,643
Sampling fieldwork (Geologist)	day	CAD	10	\$650	\$6,500	\$4,643
Sampling fieldwork (2 Helpers)	day	CAD	10	\$700	\$7,000	\$5,000
Sample assaying surface soil samples	sample	CAD	50	\$70	\$3,500	\$2,500
Drilling	feet	CAD	2500	\$50	\$125,000	\$89,286
Mob and Demob	ls	CAD	1	\$12,600	\$12,600	\$9,000
Reaming and well development	hrs	CAD	72	\$525	\$37,800	\$27,000
Drilling overheads and testing	feet	CAD	2500	\$20	\$50,000	\$35,714
Permitting bond	ls	CAD	1	\$36,400	\$36,400	\$26,000
Drill supervision geologist	day	CAD	30	\$650	\$19,500	\$14,625
Hydrogeologist	day	USD	10	\$650	\$8,125	\$6,500
Air ticket	air ticket	CAD	3	\$750	\$2,250	\$1,688
Assaying soil core samples	sample	CAD	100	\$70	\$7,000	\$5,250
Water samples brine	sample	CAD	50	\$70	\$3,500	\$2,625
Accommodation and Meals	day	USD	60	\$300	\$22,500	\$18,000
Vehicle rental and gas	day	USD	50	\$150	\$9,375	\$7,500
Supplies and Rentals	lump sum	CAD	1	\$2,000	\$2,000	\$1,500
Data interpretation	day	CAD	10	\$650	\$6,500	\$4,875
GIS and Maps	hrs	CAD	40	\$60	\$2,400	\$1,800
Reports	day	CAD	10	\$650	\$6,500	\$4,875
<b>TOTAL</b>					<b>\$374,950</b>	<b>\$281,213</b>
Contingency 10%					\$37,495	\$28,121
<b>GRAND TOTAL</b>					<b>\$412,445</b>	<b>\$309,334</b>

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## 28.0 SIGNATURE PAGE

Effective Date: February 8, 2017

A handwritten signature in blue ink, consisting of a stylized 'K' followed by a series of loops and a final flourish.

## 29.0 CERTIFICATE OF AUTHOR

I, Kristian Whitehead, B.Sc., P.Geo. as an author of this report entitled “Technical Report on the South Big Smokey Valley Brine Lithium Property, Esmeralda County, Nevada, USA”, dated February 8, 2017, do hereby certify that:

1. I am a consulting geologist of:  
Infiniti Drilling Corporation. 2763 Panorama Drive, North Vancouver  
British Columbia, Canada, V7G 1V7.
2. This certificate applies to the report entitled ““Technical Report on the South Big Smokey Valley Brine Lithium Property, Esmeralda County, Nevada, USA”, dated February 8, 2017.
3. I have B.Sc. degree in Earth and Ocean Science from the University of Victoria in 2004.
4. I am registered as a Professional Geologist in British Columbia (License #: 34243), Canada.
5. I have been practicing my profession continuously since 2004, and have over twelve years of experience in mineral exploration for base metals, gold, silver, uranium, niobium, iron, lithium and rare earths. In addition, I am the VP of Exploration for Eureka Resources Inc. which own an active lithium brine exploration property in the neighboring Lida Valley in Esmeralda County, Nevada.
6. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI43-101”) and certify that by reason of my education, affiliation with professional associations and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purpose of NI43-101.
7. I visited the property from December 3rd, 2016, and I am the author of the report. To my knowledge, no exploration work has been carried out by Metron Capital Corp. on the property since my last visit to the Property.
8. I am responsible for all items of this report.
9. I have no interest, direct or indirect in the South Big Smokey Valley Brine Lithium Property, nor do I have any interest in any other properties of Metron Capital Corp. or Ultra Lithium Inc.
10. I am independent of Metron Capital Corp., as that term is defined in Section 1.5 of NI 43-101. I do not own any securities of Metron Capital Corp.

11. I have no prior involvement with the Metron Big Smokey Valley Brine Lithium Property other than as disclosed in item 7 of this certificate.
12. I have read National Instrument 43-101 (“NI43-101”), and the Technical Report has been prepared in compliance with NI43-101, and Form 43-101F1.
13. I am not aware of any material fact or material change with respect to Metron Capital Corp.’s Property the omission of which would make this report misleading.
14. As at the date of this certificate, to the best of my knowledge, information and belief the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Dated: February 8, 2017