**October 9, 2017**

# TECHNICAL REPORT FOR THE HOMBRE MUERTO NORTH PROJECT SALTA AND CATAMARCA PROVINCES, ARGENTINA

**Prepared for:**

**NRG Metals Inc.**
**750 West Pender Street, Suite 804**
**Vancouver BC, Canada V6C-2T7**

**Prepared by:**

**MONTGOMERY & ASSOCIATES CONSULTORES LIMITADA**
**Michael Rosko, MS PG**
**SME Registered Member #4064687**

**MONTGOMERY & ASSOCIATES CONSULTORES LIMITADA**
CONSULTORES EN RECURSOS HÍDRICOS

Avenida Vitacura Nº 2771 OF. 404. LAS CONDES
SANTIAGO. CHILE
**(56-2) 2896 92 50**

**EFFECTIVE DATE: October 9, 2017**

# TABLE OF CONTENTS

Table of Contents numbers refer to NI 43-101 guidelines.

**Page**

# TABLES

**Table**

# ILLUSTRATIONS

## Figures

## ILLUSTRATIONS (continued)

**Figures**



**APPENDICES**

**October 9, 2017**

# TECHNICAL REPORT FOR THE HOMBRE MUERTO NORTH PROJECT SALTA AND CATAMARCA PROVINCES, ARGENTINA

## 1. SUMMARY

This Technical Report (the Report) for the "Hombre Muerto North Project" (the Project) is largely based on a preliminary report prepared for One Borax S.A., a private Argentinian company owned by Mr. Jorge Moreno of Salta, Argentina (One Borax and formerly the "New Brine Lithium Project"). The Report has been prepared for NRG Metals Inc. (NRG) to conform with the regulatory requirements of Canadian National Instrument (NI) 43-101 using the form 43-101 F1 Standards of Disclosure for Mineral Projects.

The Project area straddles the northern edge of the Salar del Hombre Muerto basin (the Salar), near Salta and Catamarca provincial boundaries in the Puna Region of northwest Argentina. The Salar is a large evaporite basin comprising enriched lithium brine concentrations and within the Central Andes of Argentina and the so called "Lithium Triangle" of Argentina, Bolivia and Chile.

Much of this Report was initially prepared by Nivaldo Rojas, Mining Engineer of the Universidad de Atacama in Chile; Member of the Institute of Mining Engineers of Chile and Fellow of the Australasian Institute of Mining and Metallurgy (FausiMM), which qualifications confer him the conditions of being a Qualified Person (QP) under the requirements of Canadian Institute of Mining (CIM) National Instrument (NI) 43-101. Unfortunately, at the time of the filing of this report, Sr. Rojas had died. Sr. Rojas was familiar with the geology and operation of lithium deposits, and visited the Property on October 3 to 5, 2016.

Michael Rosko of Montgomery & Associates Consultores Limitada (M&A) subsequently took the initial report prepared by Nivaldo Rojas and modified it to conform more closely with the NI 43-101 guidelines. Mr. Rosko is a Registered member of Society for Mining, Metallurgy, and Exploration (SME), and has many years of experience designing and evaluating lithium brine exploration and development projects, and has visited the NRG property on July 7, 2017; previously, during the period from 2011 through 2013, Mr. Rosko had visited Salar de Hombre Muerto multiple times while working for Lithium One Inc. and Galaxy Resources Limited. Mr. Rosko is directly responsible for Sections 1, 2, 3, 8, 25, 26, 27, 28, and 29, and for non-technical modification of all other sections of the report. In addition, due to the death of Sr. Rojas, Mr. Rosko has also reviewed those sections previously prepared by Sr. Rojas and approves those sections and takes responsibility for them.

### Reliance on Other Experts

For the purposes of the Report, Mr. Rosko relied on: 1) Jorge Enrique Moreno, President of One Borax S.A., and José Hector Isa, Counsel of One Borax, for control of the standing of property in the Salta Mining Court; 2) the expertise of geologists Sergio Lopez and Pedro Ruiz, geologists engaged by One Borax to conduct brine sampling and geological mapping; 3) the work completed by geophysicist Sascha Bolling (GEC), for performance of a CSAMT survey and interpretation of respective geophysical data, and; 4) the opinion of lawyer Jorge Vargas of Vargas Galíndez Abogados on the mining rights covering the "zone of overlapping jurisdiction" between Salta and Catamarca provinces.

### Location and Description

The Project is located northern portion of the Salar del Hombre Muerto, at the boundary zone of the Catamarca and Salta provinces, 170 km southeast of the city of Salta. The area of the Project area comprises a collection of properties or concessions acquired under purchase options from the existing owner. The properties are held as "minas" (full mining licenses not subject to further area reduction requirements) by Mr. Jorge Moreno, a private borate producer focused on the exploration, exploitation and marketing of ulexite. The Project comprises six properties distributed over the Salar for a total of 3,237 hectares. The area of the Property is not subject to any known environmental liabilities.

**Table 1.1. Summary of Property Concessions for the Hombre Muerto North Project**

| Concession Identifier | Concession File Identifier | Area (hectares) |
|---|---|---|
| Alba Sabrina | 18.823 | 2,089 |
| Tramo | 18.993 | 383 |
| Natalia Maria | 18.830 | 115 |
| Gaston Enrique | 18.824 | 55 |
| Norma Edit | 18.829 | 285 |
| Viamonte | 13.408 | 310 |
| | TOTAL | 3,237 |

## Accessibility, Physiography, Climate, Local Resources and Infrastructure

The most common access is from Salta along national route RN-51 for 230 km, northwest to Cauchari, and then south along routes RP-27 and RP-17 for 170 km. The climate is characterized as a cold, high elevation, desert environment with very little precipitation and extreme evaporation rates. Main infrastructure includes a 600 megawatt/375 kilovolt (KV) power line between Salta and Mejillones, Chile passing about 160 km north of the Property. A natural gas pipeline, connecting mine operations in the Puna, passes 10 km from the Property area. A railroad is being reactivated between Salta and the Antofagasta sea port in Chile, passing 100 km north of the property.

## History

No significant past mining exploration on the Property has occurred, although One Borax has mined minor amounts of borates (ulexite). Since 1996, the Fenix Mine (FMC Lithium) in the Salar has been producing 10,000 tonnes per annum (tpa) of lithium carbonate. The Tincalayu borate mine initiated operations in 1954 and continues producing through Orocobre Ltd. In 1979, the Argentinean Government conducted exploration for lithium covering a number of salars in the Puna including the Salar del Hombre Muerto. More recently Galaxy Resources Limited (Galaxy) defined a lithium and potassium brine resource and reserve at their Sal de Vida project, near the Property.

## Geological Setting

The Puna region has a complex geological history tracing back to the Precambrian. Starting in the Jurassic, the area became a new and active plate margin, with associated volcanic arc and basin development. By the Oligocene to Miocene (25 to 20 Ma), the region was consolidated as an uplifted terrain, with basin and range geomorphological positioning and endorheic drainages. Leaching of favorable lithologies and repeated seasonal precipitation and extreme evaporation rates in the closed basins resulted in large accumulations of lithium and potassium bearing brines.

Local geology at the Salar del Hombre Muerto includes a basement built up of Precambrian and Early Paleozoic intrusive sedimentary and metamorphic events, thick sequences of Ordovician marine sedimentary rocks topped by continental Mesozoic sedimentary units. These are overlain by Miocene to Pliocene volcanic developments, which are common characteristics of the salars within the sedimentary basins of the region.

MONTGOMERY & ASSOCIATES

## Deposit Types and Dimensions

The lithium bearing brines are liquid mineral deposits accumulated at depth in the basins and defined by: the volume and transmissibility of the brine aquifers, the effective porosity of the sediments, the amenability for circulation brines to extraction wells as a mining method, and the salar geometry in lateral and vertical extensions. No volumes of brine are defined in the Property boundary at this early stage of the Project, although mineral resources and reserves have been estimated to a depth of 300 meters at the neighboring Sal de Vida project (Galaxy Resources). The western part of the Salar del Hombre Muerto is host to FMC Lithium's Fenix Mine (approximately 20 km south of the Property), which has been producing lithium brine for over 20 years.

## Exploration

Exploration completed in October 2016 and January 2017 at the Project includes surface geochemical sampling totaling 20 brine samples with anomalous high values of lithium and potassium. Sample results range from 48 to 1,064 mg/L lithium concentration and averaged 587 mg/L lithium concentration. Magnesium to lithium ratios range from 1.1:1 to 10.2:1, averaging 4.6:1. Averages for three areas of the Project are provided as follows.

**Table 1.2. Averages of sample assays for the Hombre Muerto North Project**

| Sample Set | Li (mg/L) | K (mg/L) | Mg (mg/L) | Mg/Li |
|---|---|---|---|---|
| Tramo Group | 655 | 4,791 | 2,337 | 3.9 |
| Alba Sabrina Group | 310 | 2,482 | 2,345 | 8.2 |
| Salar Group[a] | 741 | 6,788 | 1,224 | 1.6 |

a) combined salar properties: Natalie Maria, Gaston Enrique, Norma Edit, and Viamonte

A 10-station CSAMT geophysical survey completed by GEC indicates a shallow, low resistivity anomaly along the "Tincalayu Gulf" on the Alba Sabrina property. The anomaly extends up to 250 m in vertical expression. Additionally, a well-defined low resistivity anomaly is developed over the Tramo and Natalia Maria properties, showing vertical extensions potentially up to 250 m or more over approximately 6 km. The low resistivity anomalies detected by the CSAMT survey are considered to be indicative of the presence of brine.

## Sample Collection, Preparation, Analysis and Security

Brine samples collected to depths up to 2.4 m below the salar surface were collected in 1-liter, appropriately labeled plastic bottles. Samples were kept in a secured storage area by geologists in-charge and subsequently delivered to an analytical laboratory. Four QA/QC control brine samples were included in the sample batches and in the analytical results.

## Adjacent Properties

Adjacent properties to The Project include the following land positions at the Salar del Hombre Muerto:

- Galaxy Resources holding large lithium and potassium brine tenements to the southeast and south of the Project.
- Orocobre Limited, holding borate exploration operations at Tincalayu mine, nearby and in between the Project properties.
- FMC Lithium producing and processing lithium brine southwest of the Project.
- Santa Rita and Maktub Group holding borate properties and ulexite production south of the Project.

## Conclusions

The geochemical sampling results for the Project reveal large concentrations of lithium when compared with other projects in the salars of the Puna region. The current geophysical data outlines large, deep resistivity target areas amenable to be drilled and tested for lithium-enriched brine. Given these factors, and the acknowledgement of long-term lithium brine production in the salar by FMC Lithium at their Fenix Mine and the brine mineral Resource and Reserve estimates by Galaxy Resources, the authors judge the Project as a property of

MONTGOMERY & ASSOCIATES

merit and warrants additional investigations in order to advance to a phase of exploration drilling, testing, and sampling and a level for Preliminary Economic Assessment (PEA).

## Recommendations

An exploration and development program is recommended for the Hombre Muerto North Lithium Project and should include drilling and sampling of eight diamond core holes, and construction and testing of as many as eight production wells. Anticipated depths for the core holes will range from about 30 to 400 meters. However, during exploration coring, depths may be extended depending on the conditions encountered in the field during drilling. Depths for the production wells will be determined after analyzing the results from the core hole program. The total estimated cost for the proposed diamond core exploration drilling program is about US$ 750,600 if all holes are drilled to target depths. If all of the holes are extended, the estimated cost would increase to US$ 1,162,000.

## 2. INTRODUCTION

This Technical Report was requested by NRG to support its exploration program to advance the Hombre Muerto North Project to development and lithium brine production. The mining concessions of the Project total 3,246 hectares. NRG has recently entered into an option agreement to purchase the Project from Mr. Jorge Moreno, a private businessman from Salta, Argentina. The Project is located in the northern part of the Salar del Hombre Muerto, in the vicinity of Salta and Catamarca provincial boundary and within in the Argentinean Puna geological environment.

The Salars in the Argentinean Puna have been studied for its lithium and potassium content since the 1970's when the *Dirección General de Fabricaciones Militares* (DGFM) began extensive exploration through the Andean Salars. This governmental effort resulted in the definition of the Salar del Hombre Muerto West as a mineable lithium deposit, where the Fenix Mine operation started production in 1997.

A new wave of exploration for lithium began during the period 2007 through 2012, when international players applied new exploration techniques over sedimentary basins such as: Salar de Olaroz (Orocobre, Australian); Salinas Grandes (Orocobre & others); Salar de Cauchari (Western Lithium JV, American-Chilean); Salar del Rincon (Ady Resources, Australian); Salar de Pastos Grandes, Salar de Centenario, and Salar de Ratones (Eramine Sudamerica S.A., French); Salar de Pozuelos (POSCO, Korean); Salar de Diablillos (Rodinia, Canadian), Salar del Hombre Muerto East (Galaxy Resources, Australian); and Salar de Llullaillaco (International Lithium Corp, Canadian).

Exploration for lithium brine deposits increased dramatically in 2016 as new companies and various joint ventures showed renewed interest in the already known salars and other less explored areas, including the Salar de Arizaro, Salar de Incahuasi, Salar de Pastos Grandes, Salar de Pocitos in the province of Salta; Carachi Pampa Basin, Salar de Antofalla and Tres

Quebrada lakes in the province of Catamarca, and; Salar de Jama, Laguna de Vilama, and Laguna de Guayatayoc basin, in the province of Jujuy.

## 2.1 AUTHORSHIP AND TERMS OF REFERENCE

Mr. Michael Rosko, through Montgomery & Associates (M&A) is responsible for compiling, editing, and verifying the Report for regulatory compliance. The Report is based upon a private report initially prepared by Mr. Nivaldo Rojas for Mr. Jorge Moreno (Rojas, 2017). Mr. Rosko also prepared supporting Report sections regarding conceptual hydrogeologic framework and exploration drilling and testing program. Mr. Rosko visited the Property on July 7, 2017.

Mr. Rosko and M&A hydrogeologists have been historically involved in drilling, testing, and sampling activities in Salar del Hombre Muerto, as well as in other salar basins in the Puna. Mr. Rosko has managed projects in The United States, Bolivia, Chile, Colombia, Argentina, Perú, and Mexico and serves as General Manager for M&A's Santiago de Chile office. During his 30-year career at M&A, he has developed new water supplies and assessed aquifer conditions for mining operations in arid environments, both in the southwestern U.S. and in the desert "salar" regions of South America. Mr. Rosko's responsibilities have included designing wells and wellfields, characterizing regional hydrogeologic systems, analyzing groundwater chemistry, designing and implementing monitoring programs, integrating satellite image analysis into water supply, lithium and potassium salar brine characterization and resource and reserve estimation, and environmental projects. Mr. Rosko co-authored a Canadian National Instrument (NI) 43-101 Technical Report for Galaxy Resources' Sal de Vida project in Salar del Hombre Muerto (Montgomery & Associates and Geochemical Applications International, 2012). Mr. Rosko is a Qualified Person (QP) and independent within the context of the NI 43-101.

Mr. Rosko and associated staff of M&A modified and prepared the Report using the format NI 43-101 Technical Report– Standards of Disclosure for Mineral Projects including Form 43-101F1 – Technical Report and Companion Policy 43-101CP.

Much of this Report was initially prepared by Nivaldo Rojas, Mining Engineer of the Universidad de Atacama in Chile; Member of the Institute of Mining Engineers of Chile and Fellow of the Australasian Institute of Mining and Metallurgy (FausiMM), which qualifications confer him the conditions of being a QP under the requirements of Canadian Institute of Mining and Petroleum (CIM) National Instrument (NI) 43-101. Unfortunately, at the time of the filing of this report, Sr. Rojas had died. Sr. Rojas was familiar with the geology and operation of lithium deposits, and visited the Property on October 3 to 5, 2016. Consequently, Mr. Rosko has reviewed and verified the work done my Sr. Rojas and assumes responsibility for its accuracy.

## 2.2 STATEMENT FOR BRINE MINERAL PROSPECTS & RELATED TERMS

Brine Mineral Resource and Reserve estimates are not "solid mineral deposits" as defined under the CIM (2003, 2010, and 2012) standards. However, there are sufficient similarities to mineral deposits that the guidelines published by the CIM are followed for this Report. Brine is a fluid and hosted in an aquifer and thus has the ability to move and mix with adjacent fluids once extraction starts using production wells as a mining method. Resource estimation is based on knowledge of the geometry of the aquifer, and the variation in drainable porosity and brine grade within the aquifer. In order to assess the potential reserve, further information on the permeability and flow regime in the aquifer, and its surroundings are necessary in order to predict how the resource will change over the life of mine. No mineral resources or reserves have been estimated at this early stage of the Project.

MONTGOMERY & ASSOCIATES

# 3. RELIANCE ON OTHER EXPERTS

The preparation of the initial report was by Nivaldo Rojas, Mining Engineer of the Universidad de Atacama in Chile; member of the Institute of Mining Engineers of Chile and Fellow of the Australasian Institute of Mining and Metallurgy. Sr. Rojas was familiar with the geology and operation of lithium brine deposits and visited the Property on October 3 to 5, 2016.

The expertise and professional skills of Sergio Ramon Lopez and Pedro Stewart Ruiz, senior geologists and graduates of the Universidad Nacional de Salta was relied on to conduct geological mapping, geochemical brine sampling and supervision of exploration tasks. The QP also relied on expertise and extensive experience of Mr. Sascha Bolling, who is Senior Geophysicist and Managing Director of Geophysical Exploration & Consulting S.A. of Mendoza, Argentina (GEC). GEC completed the Controlled-source Audio-frequency Magnetotellurics (CSAMT) survey for the Project.

For the purpose of this Report, the QP relied on the Legal and Title Opinion regarding the Property dated June 28, 2017 by Sr. Jorge Vargas Gei of the law firm Vargas-Galíndez Abogados of Mendoza, Argentina. Sr. Vargas Gei is a graduate of Universidad de Mendoza School of Law, Argentina, and holds a Master of Law Degree and a Master's in Business Administration degrees both from University of Wales, Aberystwyth, United Kingdom, and he has completed the Program for General Management at the IAE Management and the Business School of the Universidad Austral, Buenos Aires, Argentina. Sr. Vargas' title opinion is relied upon for the material covered in Sections 4.3, 4.5, and 4.6 of this report.

Finally, information regarding property locations, acquisitions, and finances, was provided by Mr. Jim Duff of NRG Metals Inc.

# 4. PROPERTY LOCATION AND DESCRIPTION

## 4.1 LOCATION

The Project is located in the north part of the Salar del Hombre Muerto, close to the boundary of the Catamarca and Salta provinces, in northwest Argentina. The Project is in the Argentinean Puna, at an elevation of approximately 4,000 meters above sea level (masl) and lies approximately 1,400 km northwest of the capital of Buenos Aires. Straight-line distance from Salta's provincial capital is 170 km WSW; from the city of Catamarca, the Project is 380 km NNW; and from Antofagasta, Chile the Project is 390 km SE (**Figure 4.1**).

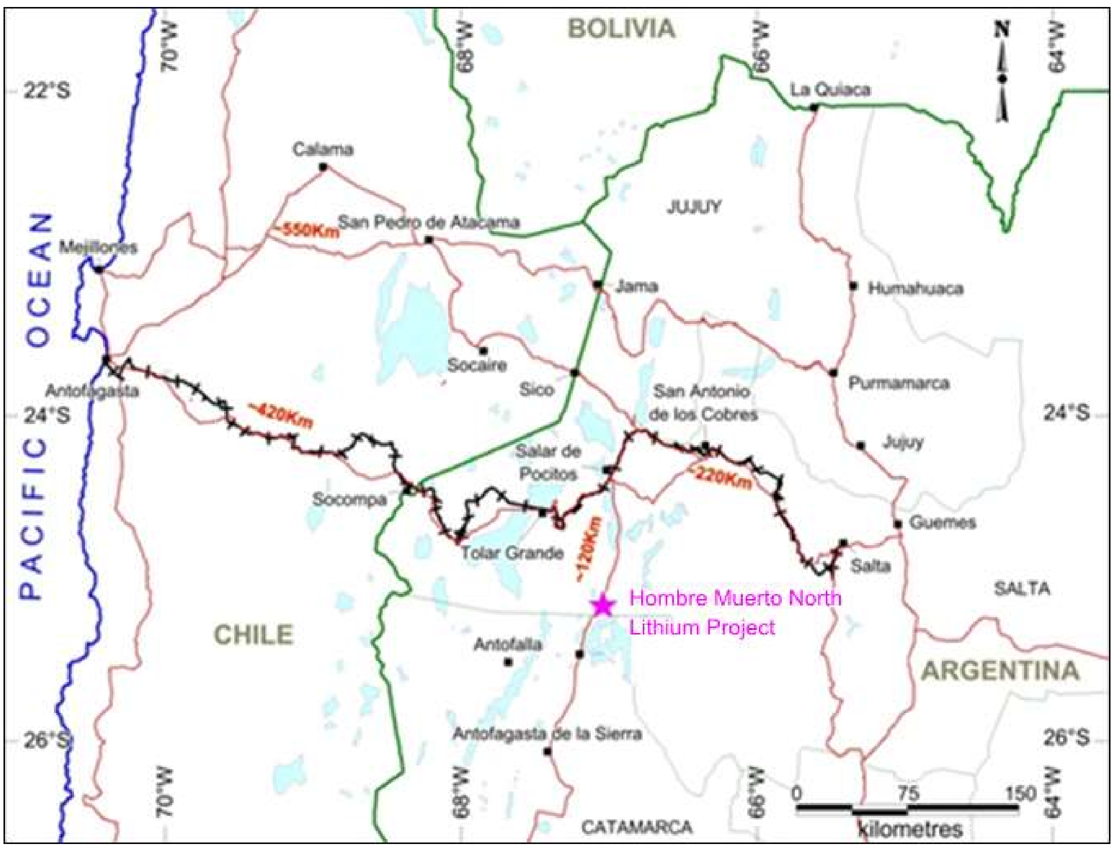



**Figure 4.1. Location and access to the Project, Salar del Hombre Muerto, Argentina**

MONTGOMERY
& ASSOCIATES

## 4.2 DESCRIPTION OF PROPERTY

The Hombre Muerto North Project (formerly the "New Brine Lithium Project") comprises six Exploitation Concessions (minas) totaling 3,237 hectares registered by One Borax S.A. and distributed at the north part of the Salar del Hombre Muerto. One Borax S.A. is a private Argentinian company owned by Mr. Jorge Moreno of Salta, Argentina. The concessions are registered at Salta Mining Court as Alba Sabrina (File 18.823), Tramo (File 18.993), Natalia Maria (File 18.830), Gaston Enrique (File 18.824), Viamonte (File 13.408), and Norma Edit (File 18.829). Location and coordinates of the properties are shown in **Figure 4.2** and summarized in **Table 4.1**.

On May 17, 2017, NRG Metals Inc. of Vancouver, British Columbia, Canada entered into a purchase option agreement to acquire the Project from Mr. Jorge Moreno, who is a private borate producer from Salta, Argentina. Terms of the agreement are itemized as follows:

1. US $50,000 on signing for a 90-day due diligence period and for the completion of a NI 43-101 Technical Report on the project. The due diligence period may be extended to 120 days, if necessary.
2. Upon acceptance of the NI 43-101 report by the TSX, NRG will pay Mr. Moreno US $100,000 and issue one million common shares of NRG common stock. At that time, Mr. Moreno will join the board of NRG Metals Inc.'s Argentine subsidiary.
3. At six months from Item 2, US $250,000 and one million common shares of NRG.
4. At 12 months from Item 2, US $250,000 and one million common shares of NRG.
5. At 18 months from Item 2, US $1,000,000 and one million common shares of NRG.
6. At 30 months from Item 2, US $1,000,000 and two million common shares of NRG.
7. At 42 months from Item 2, US $1,000,000 and two million common shares of NRG.
8. At 54 months from Item 2, US $2,000,000 and two million common shares of NRG.

The project will be subject to a 3% Net Production Royalty, of which 50% may be purchased for US$3,000,000 within 36 months of Item 2.

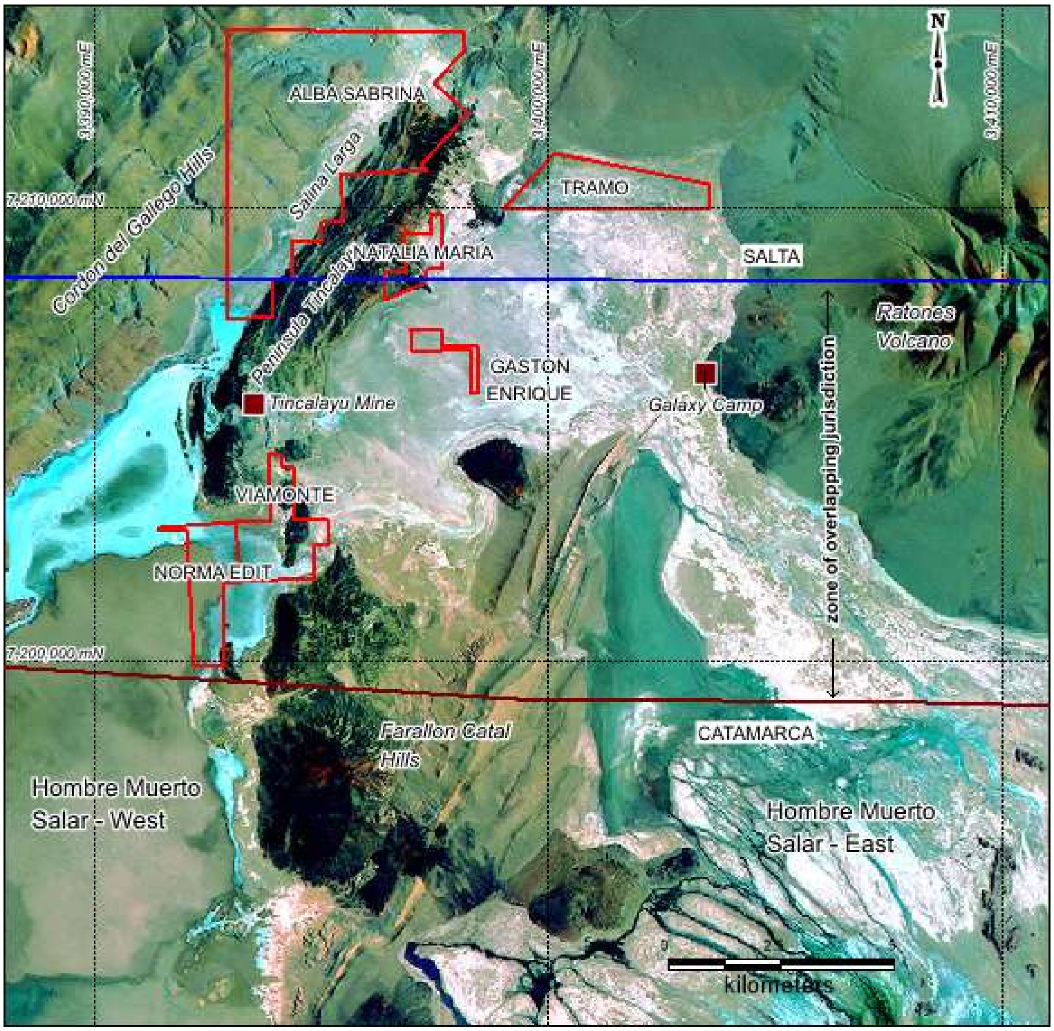



**Figure 4.2. Location of the Project property areas**

**Table 4.1. Gauss Kruger - Posgar coordinates for the Project properties**

| Name | File # | Application Year | Area (has) | Property Coordinates Y | X |
|---|---|---|---|---|---|
| Tramo | 18.993 | 2007 | 383 | 3,400,153.49 | 7,211,193.41 |
| | | | | 3,403,581.75 | 7,210,496.92 |
| | | | | 3,403,582.30 | 7,209,935.26 |
| | | | | 3,399,000.83 | 7,209,940.11 |

MONTGOMERY & ASSOCIATES

**Table 4.1. Gauss Kruger - Posgar coordinates for the Project (continued)**

| Name | File # | Application Year | Area (has) | Property Coordinates | |
|---|---|---|---|---|---|
| | | | | Y | X |
| Alba Sabrina | 18.823 | 2007 | 2.089 | 3,396,745.63 | 7,213,857.40 |
| | | | | 3,398,151.06 | 7,213,830.65 |
| | | | | 3,398,150.81 | 7,213,456.32 |
| | | | | 3,397,478.55 | 7,212,728.84 |
| | | | | 3,398,215.08 | 7,212,048.20 |
| | | | | 3,397,204.42 | 7,210,940.69 |
| | | | | 3,397,334.99 | 7,210,820.12 |
| | | | | 3,395,420.09 | 7,210,685.04 |
| | | | | 3,395,488.53 | 7,209,689.37 |
| | | | | 3,394,990.70 | 7,209,655.15 |
| | | | | 3,395,017.65 | 7,209,256.85 |
| | | | | 3,394,319.62 | 7,209,210.33 |
| | | | | 3,394,372.76 | 7,208,412.21 |
| | | | | 3,393,873.83 | 7,208,379.09 |
| | | | | 3,393,926.71 | 7,207,581.42 |
| | | | | 3,392,926.74 | 7,207,514.94 |
| | | | | 3,392,926.74 | 7,213,929.36 |
| Natalia Maria | 18.83 | 2007 | 115 | 3,396,365.98 | 7,208,544.74 |
| | | | | 3,396,865.67 | 7,208,578.22 |
| | | | | 3,396,812.76 | 7,209,376.47 |
| | | | | 3,397,428.68 | 7,209,417.55 |
| | | | | 3,397,401.69 | 7,209,822.28 |
| | | | | 3,397,663.94 | 7,209,839.76 |
| | | | | 3,397,663.91 | 7,208,655.67 |
| | | | | 3,397,303.47 | 7,208,642.43 |
| | | | | 3,397,242.42 | 7,208,295.88 |
| | | | | 3,396,406.25 | 7,207,939.52 |
| | | | | 3,396,392.58 | 7,208,145.31 |

Table 4.1. Gauss Kruger - Posgar coordinates for the Project (continued)

| Name | File # | Application Year | Area (has) | Property Coordinates Y | X |
|---|---|---|---|---|---|
| Gaston Enrique | 18.824 | 2007 | 55 | 3,396,950.52 | 7,207,289.71 |
| | | | | 3,397,663.94 | 7,207,298.43 |
| | | | | 3,397,663.94 | 7,206,923.60 |
| | | | | 3,398,454.95 | 7,206,923.60 |
| | | | | 3,398,454.95 | 7,205,885.50 |
| | | | | 3,398,321.79 | 7,205,887.17 |
| | | | | 3,398,304.10 | 7,206,195.77 |
| | | | | 3,398,259.97 | 7,206,866.22 |
| | | | | 3,396,984.09 | 7,206,781.87 |
| Viamonte | 13.408 | 1988 | 310 | 3,393,107.85 | 7,203,055.41 |
| | | | | 3,393,207.30 | 7,201,730.86 |
| | | | | 3,394,832.45 | 7,201,826.53 |
| | | | | 3,394,788.32 | 7,202,557.72 |
| | | | | 3,395,170.12 | 7,202,578.18 |
| | | | | 3,395,150.66 | 7,203,102.78 |
| | | | | 3,394,425.41 | 7,203,094.14 |
| | | | | 3,394,411.39 | 7,204,270.76 |
| | | | | 3,394,111.53 | 7,204,251.49 |
| | | | | 3,394,091.79 | 7,204,550.80 |

## 4.3 EXPLORATION AND MINING PERMITTING

In Argentina, mineral resources belong to the provinces where the resource is located. The provinces control property mineral resources and have authority to grant mining rights to private applicant entities. Provinces have the authority to implement the National Mining Code and to regulate its procedural aspects and to organize each enforcement authority within its territory. There are two types of mineral tenure granted by provinces according to Argentina mining laws: Exploitation Concessions and Exploration Permits.

MONTGOMERY
& ASSOCIATES

- Exploitation Concessions sometimes referred to as “Minas” or “Mining Permits” are licenses that allow the property holder to exploit the mineral resources of the property, providing environmental approval is obtained. These permits have no time limit as long as obligations in the National Mining Code are abided.
- Exploration Permits referred to as “Cateos” have time limits that allow the property holder to explore the property for a period of time that is related to the size of the property. Exploration Permits also require environmental permitting.

Depending on the province, Exploitation Concessions are granted by either a judicial or administrative decision. An Exploration Permit can be transformed into an Exploitation Concession any time before its expiration period by filing a report and paying a canon fee. The condition under which Exploitation Concessions are held is indefinite providing that annual payments are made.

Exploitation or Exploration cannot start without obtaining the environmental impact assessment (EIA) permit. In mining-friendly provinces of Argentina (which include Salta and Catamarca), the content and approval of EIA reporting is straightforward. Permitting for drilling in areas of both types of mineral tenure must specify the type of mineral the holder is seeking to explore and exploit. Claims cannot be over-staked by new claims specifying different minerals, however adding mineral species to a claim file is relatively straightforward (e.g., the owner of borate claims can add lithium to the claim).

The Exploitation Concessions of the Project are secured by NRG under a purchase option from Mr. Jorge Moreno **(Section 4.2)**, a private borate producer focused on the exploration, exploitation and marketing of ulexite, a sodium-calcium borate mineral mainly used for the production of boric acid. Ulexite is produced from shallow surface mining, not by extraction of brines. For future exploration drilling, an EIA will be required, as well as adding the mineral species lithium to the claim file.

There are no private owners of the surface rights in the area of the project, and the surface area is therefore owned by the province in which each concession is located.

## 4.4 PROVINCIAL JURISDICTION

The mining claims listed on **Table 4.1** are partially located within a zone of overlapping jurisdiction between Salta and Catamarca provinces. The northern border of Catamarca province overlaps the southern border of Salta province, and both provinces claim this area as part of their territory. As indicated by Vargas (2017) and in **Appendix A**, in this area, the mining claims applied for earlier prevail with respect to newer applications, regardless of which province the mining claims are requested in. According to Vargas (2017) in the latest ruling of the Supreme Court of Justice of the Republic of Argentina ("Supreme Court"), in 2015, in the case "Catamarca, Provincia de c/ Salta, Provincia de p/ ordinario", the Supreme Court ruled that this dispute must be resolved by a law of the National Congress, pursuant to Article 75, Section 15 of the National Constitution.

As of the date of this legal opinion, both provincial governments are trying to resolve this issue in order to promote mineral development within the zone. Currently other companies are operating in the area.

## 4.5 LEGAL TITLE OPINION

NRG has requested a legal title regarding the concessions that comprise the Hombre Muerto North Project from Sr. Jorge Vargas Gei of the Vargas-Galíndez law firm of Mendoza, Argentina. The full legal opinion by Sr. Vargas is attached as **Appendix A**. A summary of the title opinion is as follows:

Some of the mining claims listed on **Table 4.1** are partially located within a zone of overlapping jurisdiction between Salta and Catamarca provinces. The northern border of Catamarca province overlaps the southern border of Salta province, and both provinces claim this area as part of their territory. In this area, the mining claims applied for earlier prevail with respect to newer applications, regardless of which province the mining claims are requested in.

- The Tramo concession is located entirely within Salta province,
- The Gaston Enrique, Viamonte and Norma Edit concessions are located within a zone of overlapping jurisdiction between Salta and Catamarca.
- The Alba Sabrina and Natalia Maria concessions are located mainly in Salta and partially within the zone of overlapping jurisdiction.

Vargas (2017) concludes that:

- Mr. Jorge E. Moreno and Ms. Alba Silvia Sala have good and valid, legal and beneficial title to the mining claims listed on **Table 4.1.**
- The mining claims listed on **Exhibit A** (**Appendix A**) are in good standing and comply with applicable regulations. Property coordinates (corners) are found on **Exhibit A** (**Appendix A)**.
- The mining claims listed on **Exhibit A (Appendix A)** are subject to the Moreno Option Agreement between NRG Metals Argentina S.A. and Mr. Moreno and Ms. Sala dated May 17, 2017 (**Exhibit B, Appendix A**). Other than the obligations arising out of the Moreno Option Agreement, the mining claims listed on Exhibit A are free and clear from any liens, charges or encumbrances, recorded in the relevant registries.
- The mining "fees" ("*canon")* of the mining claims listed on **Exhibit A** (**Appendix A**) are up to date.
- Upon exercise of the purchase option by NRG Metals Argentina S.A. under the Moreno Option Agreement*,* Mr. Moreno and Ms. Sala have the obligation to transfer the mining claims to NRG Metals Argentina S.A.

MONTGOMERY & ASSOCIATES

# 5. ACCESSIBILITY, PHYSIOGRAPHY, CLIMATE, LOCAL RESOURCES AND INFRASTRUCTURE

## 5.1 ACCESSIBILITY AND LOCAL RESOURCES

The Project area straddles the provincial limits of Catamarca and Salta. The nearest large city is Salta (608,000 inhabitants), located 170 km to the northeast of the Project area. The closest town is Antofagasta de La Sierra, which is 100 km south in Catamarca province. It has a population of 1,200 inhabitants with services such as a hospital, lodging facilities, and a school. The town can be reached following the unpaved Provincial routes RP-17 (Salta) and RP-43 (Catamarca).

Local resources in the area are very basic. Most supplies are brought from Salta or San Antonio de los Cobres (210 km). Several mine camps and a small village are powered locally by diesel generators; fuel is transported to mine camps by truck. These centers are: Tincalayu Mine (borate mine owned by Orocobre); Fenix Mine (production of lithium carbonate from brine by FMC Lithium); Galaxy's Sal de Vida camp (with little current activity); El Martillo camp (a borate operation owned by Santa Rita SRL); and the Diablillos camp (a currently unused silver-gold exploration project). Ciénaga Redonda village has some 20 permanent residents dedicated to llama and sheep herding. The local population in the Project area is very limited, estimated to be 10 to 20 people, scattered over a 1,000 $km^2$ area. A 3-km long airstrip, certified by the Argentina Air Force is located at the Fénix Mine camp. Workers employed at these existing mines are transported from the nearest towns (e.g., Antofagasta de La Sierra, San Antonio de Los Cobres and Salta).

The most common access to the area is from the city of Salta, along national route RN-51 for 230 km to Cauchari, passing through the towns of Campo Quijano and San Antonio de los Cobres. About 70% of Route 51 is paved and the remainder in fairly good condition. From

Cauchari, RP-70 is a wide and well maintained route leading south to Salar de Pocitos (50 km) and then RP-17, a gravel road leading to access road to the Tincalayu mine and the Alba Sabrina property. Access from the city of Antofagasta, Chile on the Pacific Coast is 330 km to the Sico Pass on the border between Chile and Argentina and then 220 km to the Project area **(Figure 4.1)**.

## 5.2 PHYSIOGRAPHY

The Altiplano (Bolivia) or Puna (Argentina) region is a high elevated plateau within the Central Andes **(Figure 5.1)**. The average elevation of the Puna is 3,700 masl and the Puna covers parts of the Argentinean provinces of Jujuy, Salta and Catamarca.

The Altiplano-Puna magmatic volcanic arc complex (commonly APVC in literature) is located between the Altiplano and Puna. It is associated with numerous stratovolcanoes and calderas. Recent studies have shown that the APVC is underlain by an extensive magma chamber at 4 to 8 km deep (de Silva et al., 2006) and potentially the ultimate source of anomalously high values of lithium in the region.

The physiography of the region is characterized by basins separated by mountain ranges, with marginal canyons cutting through the Western and Eastern Cordilleras and numerous volcanic centers, particularly in the Western Cordillera. Abundant dry salt lakes (salars) fill many basins **(Figure 5.2)**.

MONTGOMERY & ASSOCIATES

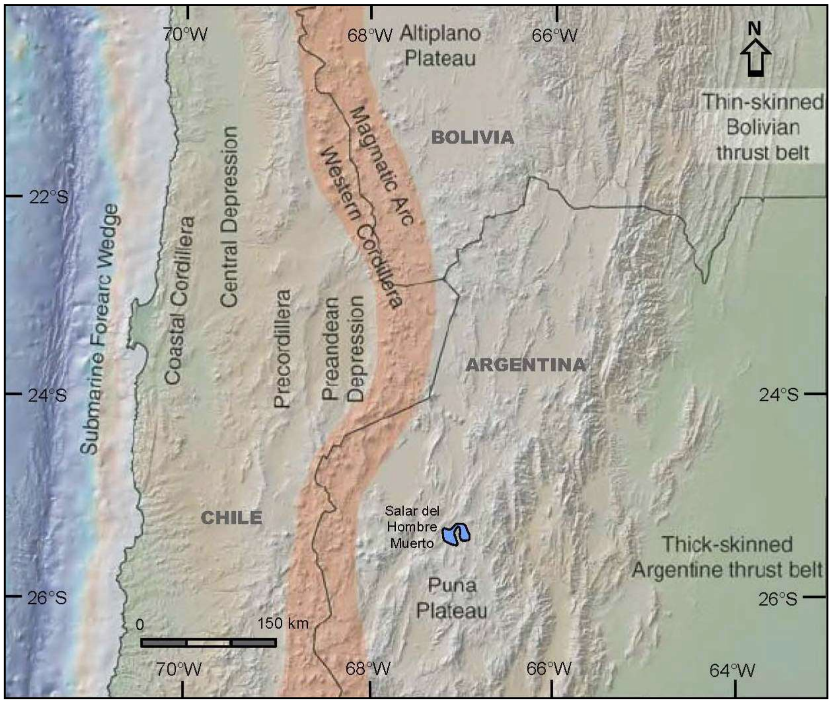
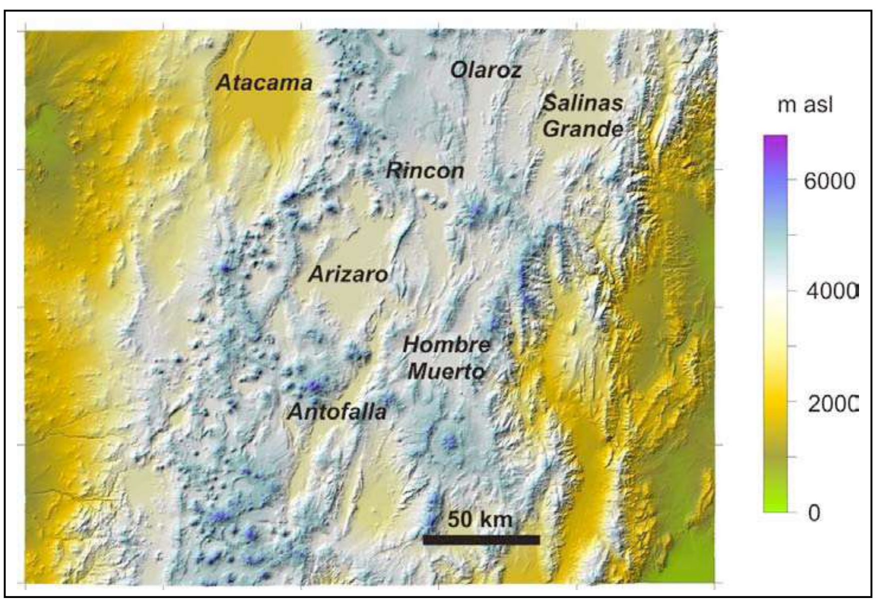



**Figure 5.1. Physiographic and morphotectonic units of the Central Andes, showing the Altiplano-Puna plateau, and the magmatic arc**




**(Source - Houston and Jaacks, 2010)**

**Figure 5.2. Digital elevation model of the Puna showing several salar locations**

The Project is located at the north part of the Salar del Hombre Muerto **(Figure 5.3)**. The elevation at the surface of the salar is approximately 4,000 masl. The highest point near the Project is the Ratones volcano, located east of the properties at an elevation is 5,252 masl. The salar is fairly flat, disrupted at its center by hills of the Farallon Catal volcano reaching an elevation of 4,350 masl, and the Tincalayu peninsula located at the northern border with an elevation of 4,035 masl. The salar is located within a closed basin, with internal (endorheic) surface water drainage. Surface water inflow to the salar is marked by seasonal precipitation events, mainly in summer, and surface water mostly drains through the Rio Trapiche and Rio Los Patos located in the south and south-east part of the salar. Alluvial fans are developed in the area where these streams flow into the salar. The total area of the Salar del Hombre Muerto basin is 3,929 $km^2$ (Houston and Jaacks, 2010). The drainage within the salar is towards the interior where two lagoons are formed: Laguna Catal and Laguna Verde (Houston and Jaacks, 2010).

MONTGOMERY & ASSOCIATES

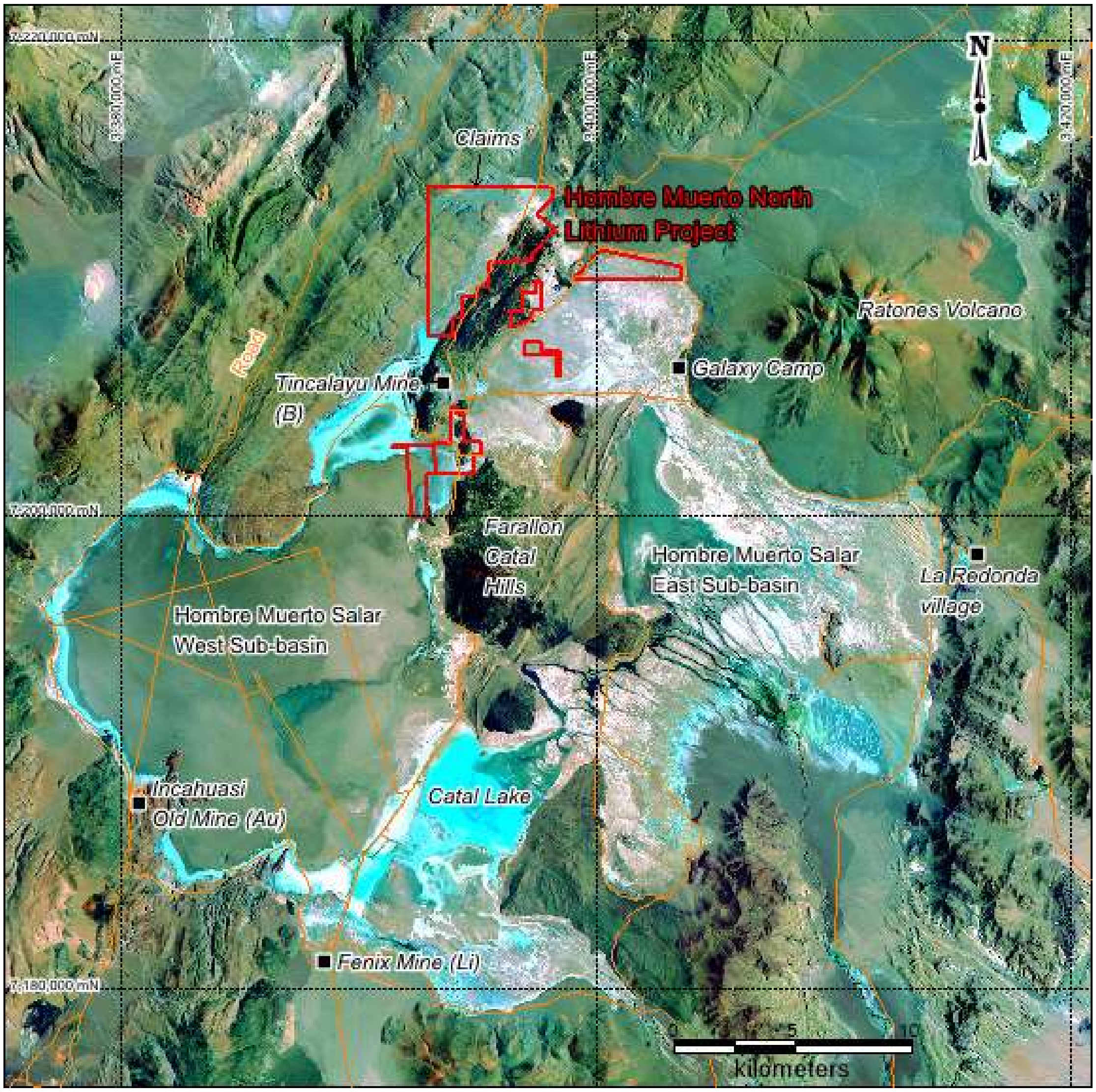



**Figure 5.3. Salar del Hombre Muerto and the Project properties**

## 5.3 CLIMATE

The climate in the Project area is characterized as a cold, high altitude desert with sparse vegetation. Solar radiation is intense, particularly during the summer months of October through March, leading to extremely high evaporation rates. Strong winds are frequent in the Puna adding to rates to evaporation, reaching speeds of up to 80 km/hour during the dry season. During summer, warm to cool winds are generally pronounced after midday and winds are usually calm during the night. Based on data from the meteorological station located at the Fenix Mine Camp (Conhidro, 2001), the mean annual precipitation in the area is 77.4 mm for the period between 1992 and 2001. The main rainy season is between December through March, when 82% of the annual rainfall occurs. The period between April and November is typically dry. Annual temperature average is about 5°C (**Table 5.1**).

**Table 5.1. Mean daily temperatures - Fenix Mine Camp meteorological station**

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1992 | 10.9 | 10.3 | 8.3 | 3.9 | 1.8 | -0.6 | -2.8 | -.05 | 1.1 | 5.9 | 7.8 | 9.9 | 4.7 |
| 1993 | 11.5 | 9.1 | 9.2 | 5.6 | 1.9 | 0.9 | -0.6 | 1.3 | 2.6 | 7.1 | 8.9 | 11.3 | 5.7 |
| 1994 | 12.1 | 10.7 | 8.7 | 5.8 | 2.9 | 0.7 | 0.1 | 1.7 | 5.7 | 5.7 | 8.5 | 12.4 | 6.3 |
| 1995 | 13.0 | 9.8 | 8.8 | 5.2 | 2.5 | 0.9 | -1.0 | 2.7 | 5.1 | 6.7 | 9.9 | 8.9 | 6.0 |
| 1996 | 11.1 | 11.8 | 8.3 | 5.7 | 2.0 | -1.2 | -1.5 | 1.1 | 2.6 | 6.3 | 8.6 | 10.8 | 5.5 |
| 1997 | 13.6 | 12.1 | 7.9 | 6.6 | 0.6 | -1.4 | .02 | 1.6 | 4.7 | 4.5 | 8.2 | 9.4 | 5.7 |
| 1998 | 13.8 | 11.6 | 9.5 | 6.6 | 1.2 | -0.4 | -.09 | -1.5 | 0.6 | 3.6 | 6.4 | 8.5 | 4.9 |
| 199 | 8.9 | 11.1 | 10.7 | 5.0 | 1.4 | -3.0 | -4.6 | -1.0 | 1.6 | 5.0 | 4.6 | 7.5 | 3.9 |
| 2000 | 11.2 | 11.2 | 8.1 | 5.2 | 1.1 | -2.0 | -3.8 | -1.8 | 0.2 | 4.4 | 4.4 | 9.0 | 3.9 |
| 2001 | 10.6 | 12.0 | 11.2 | 5.9 | 1.0 | -1.6 | -1.5 | -0.3 | 2.8 | 4.8 | 7.0 | 8.6 | 5.0 |
| **Mean** | **11.6** | **10.9** | **9.0** | **5.5** | **1.6** | **-0.8** | **-1.6** | **0.3** | **2.7** | **5.4** | **7.4** | **9.6** | **5.2** |

(Source: Conhidro, 2001)

## 5.4 VEGETATION

Due the extreme weather conditions in the region, the predominant vegetation is high-altitude xerophytic type plants, dominated by woody herbs of low height from 0.40 to 1.5 m, grasses, and cushion plants. Due to the high salinity on the salar surface, the core area of the salar is devoid of vegetation.

A study carried out in the project area by de la Fuente in 2008 identified three main vegetation zones, which he described as follows:

**High Soil Moisture Zone**: Areas near flowing streams, lakes and springs where increased humidity favors plant growth and increased volume and number of plant species. Plant species detected in this zone include: añagua (Adesmia horridiuscula), tolilla (Fabiana densa), rica-rica (Acantholippia hastulata), suriyanta (Nardophyllum armatum) and grass-like "iro" or "paja iru" (Festuca orthopylla). Approximately 35% of the area in this zone is currently covered by vegetation.

**Salar Surface Zone**: (currently being mined for ulexite). Areas containing sparse and sporadic occurrences of vegetation, including yaretilla (*Frankenia triand*ra). Approximately 0.5% of this area is covered by vegetation.

**Foothills Zone**: (in the vicinity of current ulexite mining). Approximately 20% of the area in the Hombre Muerto and Farallon Catal area is covered by vegetation and consists of añagua (*Adesmia horridiuscula*) and tola (*Parastrephia phyliciformis*).

## 5.5 FAUNA

The fauna of the Puna is characterized by adaptation to extreme living conditions as a result of the severe aridity, intense sunlight during the day and very low temperatures at night. Many animals have nocturnal habits and live sheltered by rocks. Others live below the surface or acquire certain physiological behavior allowing them to withstand the harsh environment.

Cabrera and Willink (1980) describe the animal species in the Puneña biogeographic province. In the Salar del Hombre Muerto region, camelids exist such as vicuña (*Vicugna vicugna*) and llama (*Lama glama*), the latter domesticated. Fox (*Dusicyon Lycalopex*) representing a carnivorous species is also present in the area.

Among the rodent family common to the Project location is the mole, Oculto or Tuco-Tuco (*Ctenomys opimus*), which can contribute to desertification as it feeds on roots of local flora. Additionally, and the Puna mouse (*Auliscomys sublimis*) live in the region.

Birds found in the region include the Parina or Pink Flamingo (*Andean flamingo*), which live in moist and saline lagoons, and the Andean Goose, Guayata or Huallata (*Chloephaga melanoptera*). The queu or quevo (*Tinamotis pentlandi*) inhabits the highlands and is similar to a large partridge. The ñandú enano, comparable to the species *Pterocnemia pennata* (classification is questioned) and similar to the ostrich, inhabits the lower plains of the region. Small parrots, pigeons and owls exist as sporadic inhabitants.

The donkey (*donEquus africanus asinus*) is a species introduced by inhabitants of the area. Although domesticated, it competes for food with llamas and vicuñas.

## 5.6 INFRASTRUCTURE

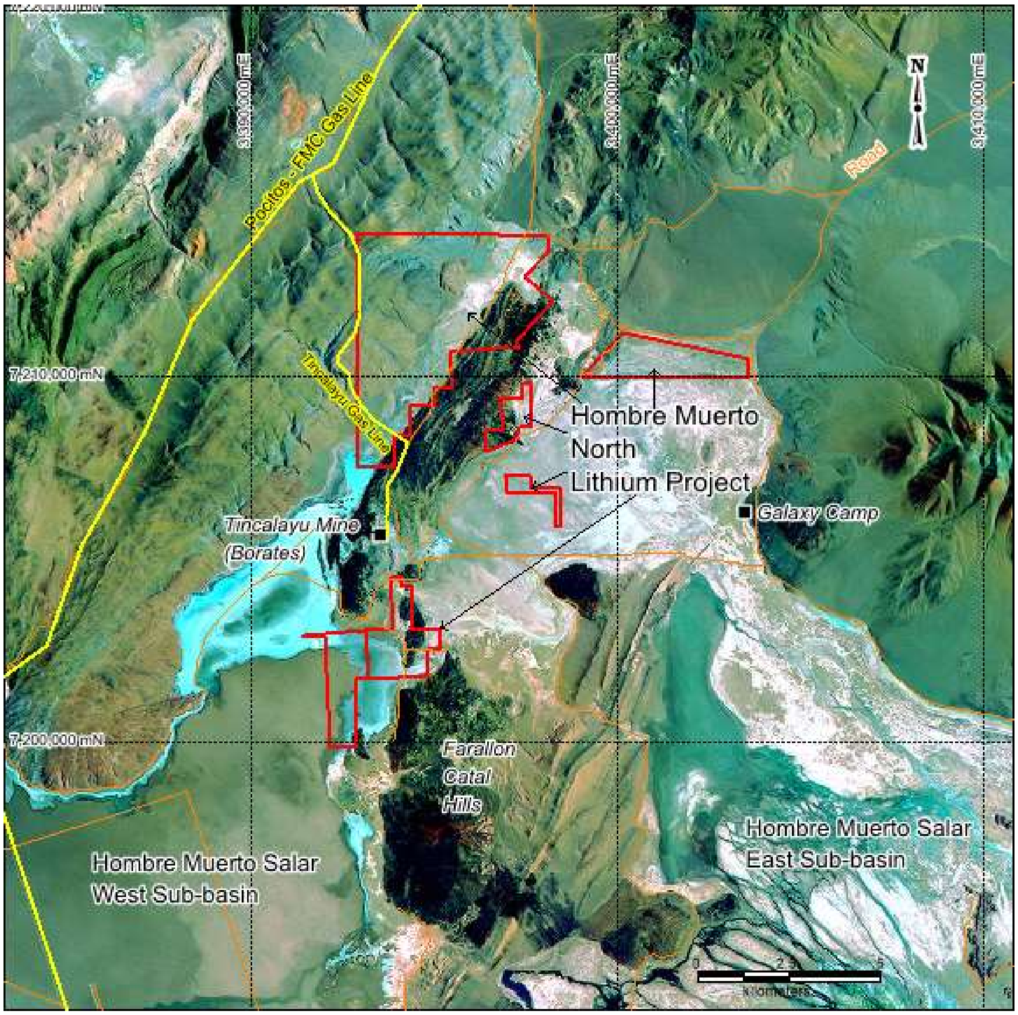
### 5.6.1 Electrical Power

The 600 megawatt (Mw), 375 kilovolt (Kv) power line between Salta and Mejillones in Chile passes about 160 km north of the Property. The line was built in the 1990´s with the aim of transporting energy from Argentina to Chile, but it was out of service by 2009 due to difficulties with the energy policy of previous local governments. In February, 2016, the line resumed operation and reportedly transmits 110 Mw from Mejillones to the Argentinean Interconnected System. In the event that a power supply for mining operations is required, a special line must be constructed for service (Rojas, 2017).

MONTGOMERY
& ASSOCIATES

## 5.6.2 Natural Gas Pipeline

A natural gas line (Gasoducto de la Puna), passes through San Antonio de los Cobres and Estación Salar de Pocitos, and it is connected to Orocobre's Tincalayu borate mine via a 5-inch diameter pipeline. This pipeline crosses over the Alba Sabrina property **(Figure 5.4)**.




**(Source – SEGEMAR and REMSA)**

**Figure 5.4. Map showing gas pipeline connection to Tincalayu Mine in the vicinity of the Project properties**

### 5.6.3 Railway Antofagasta-Salta

An existing railroad between Salta, Argentina and Antofagasta, Chile is administrated by two companies: the Chilean *Ferrocarril Antofagasta – Bolivia* (Chilean Luksic Group) and the Argentinean state owned *Ferrocarril General Belgrano* (Rojas, 2017). It consists of a narrow-gauge railway connecting Antofagasta, Chile on the Pacific coast to northern Argentina in addition to connections to Buenos Aires on the Atlantic coast (**Figure 4.1**). The railway presently is being reactivated with agreements between the regional governments. The Chilean part has been used for hauling copper cathodes and providing general supplies for the Escondida and Zaldivar mines in Chile. More recently, it has worked intermittently transporting borates, fruit, cattle and grains between Salta and Antofagasta. Transportation costs to the Pacific coast and the port of Antofagasta using this link would undoubtedly benefit a lithium operation at the Project, as well as other projects in the Puna.

### 5.6.4 Road Connections

The Project is connected to Salta, Salar de Pocitos and San Antonio de los Cobres by the way of a well maintained, paved and unpaved road network. Provincial Route 17, which is a gravel and dirt road, passes within 10 km of the Project.

### 5.6.5 General Services

**Water Supply:** Fresh water in the area near the Project is scarce. Water for human consumption is brought from Salta; water for general use and camp needs can be provided by a spring managed by Orocobre’s Tincalayu operations, some 5 km north of the Project property areas. Depending on Project requirements for brine processing, additional freshwater sources may be required from freshwater wells on Project properties.

**Camp:** There are no camp facilities on site at this time. As the Project evolves, a camp will be required to support basic needs for exploration activities. Communications by satellite phone is available in the area; communication and internet systems have been used by nearby camps and is possible.

# 6. HISTORY

There has been no past exploration or mining for lithium brines on the Project properties, although the nearby Fenix Mine (FMC Lithium) has been reportedly producing about 10,000 tonnes of lithium carbonate per year since 1996; and the company is reportedly planning to increase output to 30,000 tonnes per year in 2017.

In 1954, Rio Tinto through its subsidiary Boroquimica SAMICAF (more recently Borax Argentina S.A.) initiated industrial production of borates (tincal or borax) at the Tincalayu mine in Salar del Hombre Muerto. The Tincalayu mine is located approximately halfway between the Alba Sabrina and Viamonte concessions (**Figure 4.2**). The mine is presently operated by Borax Argentina S.A., which is a local subsidiary of Orocobre Limited.

In 1979, the Dirección General de Fabricaciones Militares conducted an exploration program covering a number of salars in the Puna region, including Salar del Hombre Muerto East and Salar del Hombre Muerto West. The work included mapping and surface sampling, and collection of brine samples from the salar surface and from hand-dug pits.

One Borax S.A., a private company owned by Jorge Moreno of Salta, Argentina, has mined borates (ulexite) at the Project Tramo property area on the northeastern border since 2007.

# 7. GEOLOGICAL SETTING

## 7.1 REGIONAL GEOLOGY

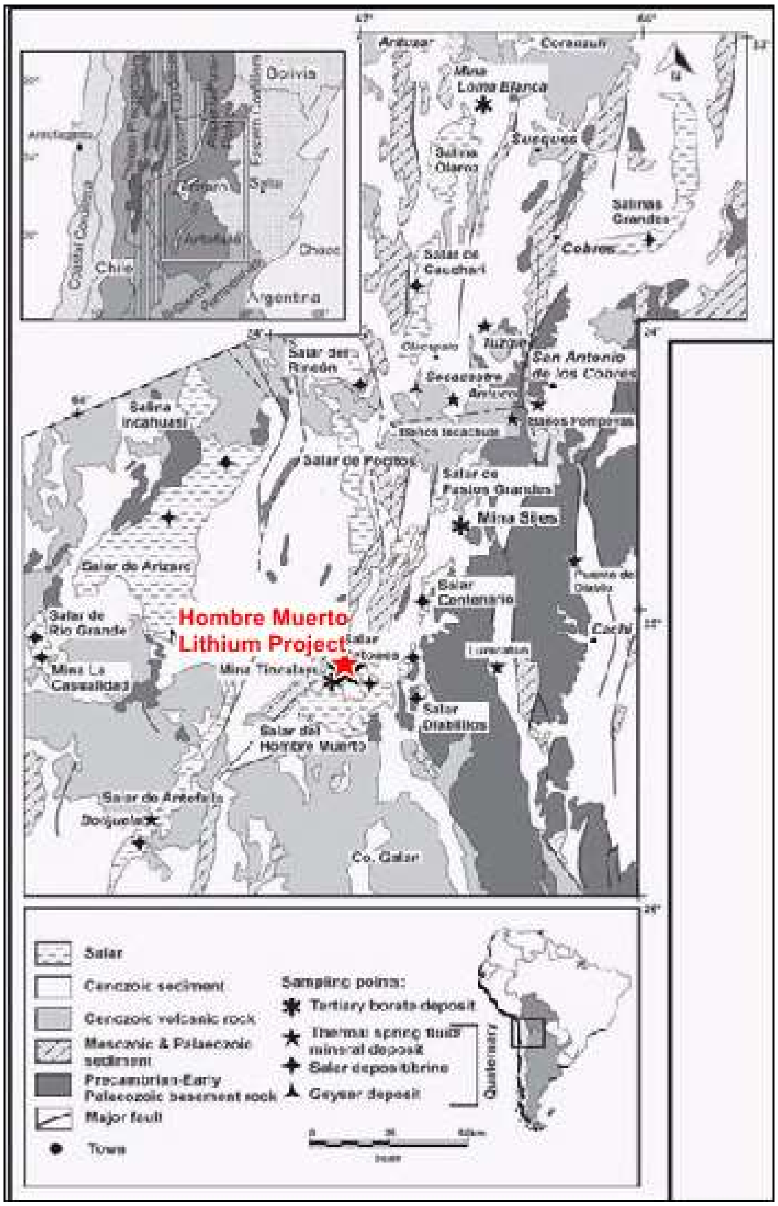
The geological evolution of the Puna region includes a long history as summarized by Kasemann et al., 2004 **(Figure 7.1**). For the purpose of this report, the geological evolution is presented from Jurassic to Recent, as this time span is considered the relevant period for discussion of the salar brine evolution in the Puna.

### 7.1.1 Jurassic and Cretaceous

The Andes have been part of a convergent plate margin since early Jurassic, and both the volcanic arc and the associated sedimentary basins developed as a result of subduction processes. An island arc formed up along the western coast of South America during all the Jurassic (195 to 130 Ma). During mid-Cretaceous (125 to 90 Ma), the magmatic arc moved eastward (Coira et al., 1982). An extensional regime persisted through the late Cretaceous generating back-arc rifting and grabens (Salfity and Marquillas, 1994). Marine sediments covering most of the Central Andean region indicate an extensive back-arc seaway with little land above sea level (Lamb et al., 1997; Scotese, 2002).

### 7.1.2 Paleogene

During the late Cretaceous to Eocene (78 to 37 Ma), the arc shifted farther east to the location of the current Precordillera (Allmendinger et al., 1997; Lamb et al., 1997). Significant shortening commenced during the Incaic Phase (44-37 Ma) mainly in the west, with associated uplift to perhaps 1,000 m (Gregory and Wodzicki, 2000) creating a major north-south watershed. Coarse clastic continental sediments eroded from the uplifted ridge indicate eastward transport in Chile and Argentina (Jordan and Alonso, 1987). The subsequent initiation of shortening and uplift in the Eastern Cordillera of Argentina (approximately 38 Ma), led to the development of a second north-south watershed with coarse continental sediment accumulating throughout the Puna (Allmendinger et al., 1997; Coutand et al., 2001).




**(from Kasemann et. al., 2004)**

**Figure 7.1. Simplified geological map of the Puna Plateau showing locations of boron-bearing deposits and salar basins**

MONTGOMERY & ASSOCIATES

### 7.1.3 Neogene

By the late Oligocene to early Miocene (20 to 25 Ma), the volcanic arc switched to its current location in the Western Cordillera. At the same time, significant shortening across the Puna on reversed thrusts led to the initiation of separated depositional centers. Major uplift of the Altiplano-Puna plateau began during the middle to late Miocene (10 to 15 Ma), perhaps reaching 2,500 masl by 10 Ma, and 3,500 masl by 6 Ma (Garzione et al., 2006). The late Miocene volcanic flare-up (5 to 10 Ma), centered on the Altiplano-Puna magmatic volcanic arc complex (APVC) between 21$^{o}$ to 24$^{o}$ S latitude (de Silva, 1989), produced large concentrations of both caldera subsidence and associated extensive ignimbrite sheets, as well as andesitic-dacitic stratovolcanoes.

The Puna volcanic activity was frequently constrained by major NW-SE crustal megafractures (Chernicoff et al., 2002). During the early to middle Miocene, redbed sedimentation is found throughout the Puna, Altiplano and Chilean Pre-Andean Depression (Jordan and Alonso, 1987). As thrust faulting, uplift and volcanism intensified during the middle to late Miocene, the sedimentary basins became isolated, developing internal drainages, with major watersheds (the Cordilleras) bounding the Puna to the west and east. Sedimentation in these basins initiated with alluvial fans being shed from the uplifted ranges and continued with playa sand and mud-flat facies.

Northern Argentina has experienced a semi-arid to arid climate since at least 150 Ma as a result of its stable location relative to the Hadley circulation pattern, a global scale tropical atmospheric circulation that features air rising near the equator (Hartley et al., 2005), and the Andean uplift where all flow of moisture from Amazonia to the southwest has been blocked, leading to increased aridity since at least 10 to 15 Ma. The combination of internal drainage and hyper-arid climate led to the deposition of evaporite precipitates in many of the Puna and Altiplano basins.

MONTGOMERY & ASSOCIATES

### 7.1.3 Late Neogene and Quaternary

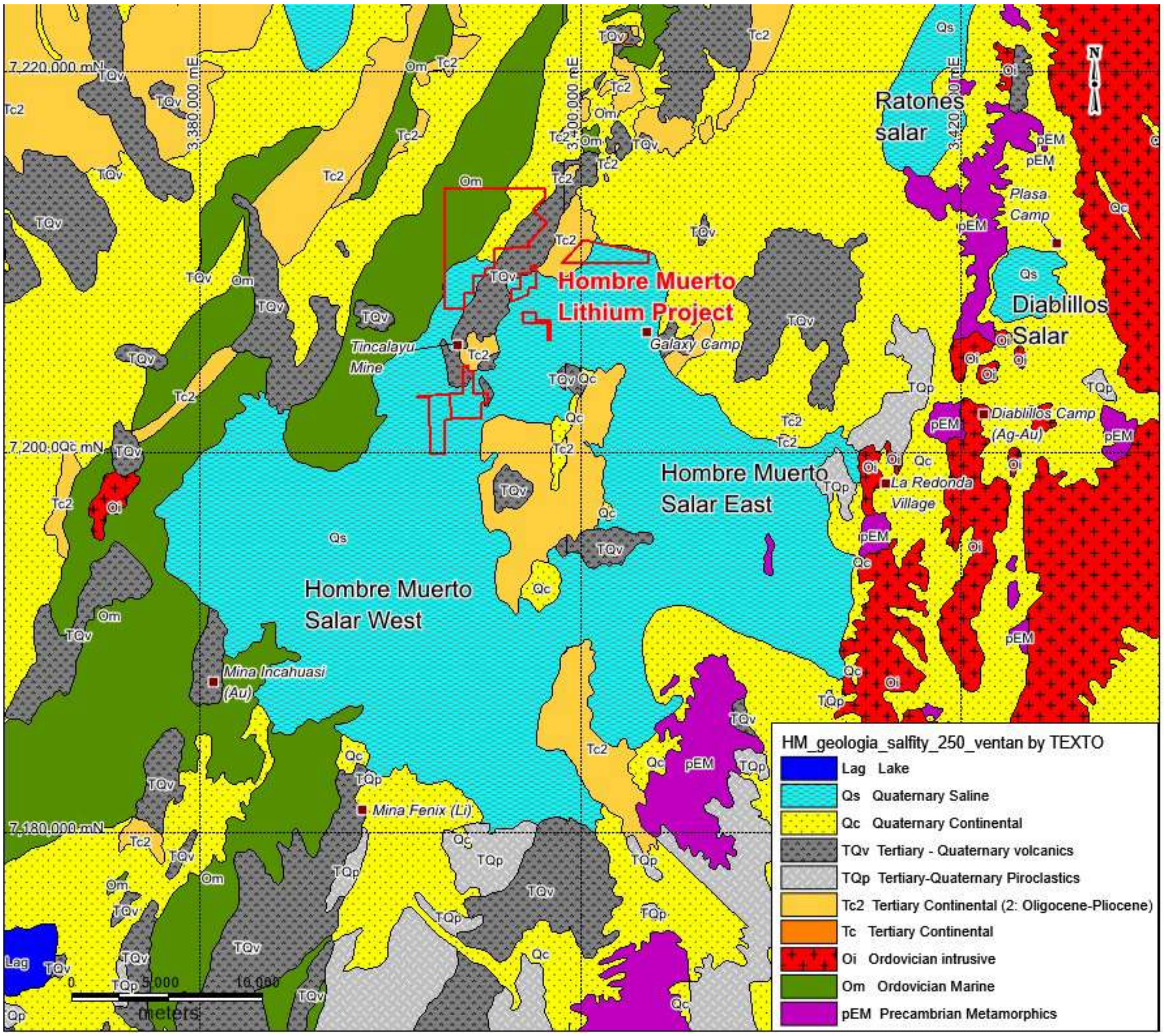
During the Pliocene to Pleistocene, deformation occurred as a result of shortening, and the once humid environment moved out of the Puna and into the Santa Barbara system (eastwards). The Santa Barbara system is a 400 km long segment of the Sub-Andean foreland thrust belt. At the same time, a fluctuating climate regime initiated with short periods of wetter conditions alternating with drier ones. As a result of both reduced tectonic activity and frequent aridity, a reduction in erosion and accommodation space meant that sediment accumulation in the isolated basins was limited. Nevertheless, solute dissolution of basin sediments continued, eventually concentrating brine in aquifers comprising salar centers where evaporative flux drives outflow from the basin. Evaporite minerals occur both disseminated within clastic sequences and as discrete beds. The earliest record of evaporite formation is middle Miocene, with frequency and magnitude tending to increase during the Late Neogene to Quaternary (Alonso et al., 1991; Vandervoort et al., 1995; Kraemer et al., 1999). The thick halite sequences in the Salares del Hombre Muerto and Atacama suggest that they have mostly formed since 100 Ka (Lowenstein, 2000; Lowenstein et al., 2001).

## 7.2 GEOLOGY OF SALAR DEL HOMBRE MUERTO BASIN

The oldest rocks cropping out at the Salar del Hombre Muerto basin envelope are schist and migmatites interbedded with metamorphic limestone and amphibolites **(Figure 7.2)**. This metamorphic sequence, which is Neoproterozoic in age, is known as the Pachamama Formation. Occurrences of these rocks stand along the east flank of the Hombre Muerto salar. Metasedimentary rocks assigned to the lower Paleozoic outcrop at the northwest border of the salar and are assigned to the Tolillar Formation. This formation, mainly volcaniclastic sandstone with subordinate sandstone beds, occurs over the northern border of the salar. Overlaying this clastic sequence is the Ordovician sedimentary sequence of the Falda Ciénaga Formation composed of greywacke, tuff and volcaniclastic sandstones. Rocks of this formation are widespread along the eastern flank of the salar. Conglomerates and red sandstones assigned to the middle Eocene lie unconformably over the Ordovician sediments. These rocks are assigned to the Geste Formation, which crops out in the northern limits of

MONTGOMERY & ASSOCIATES

the salar. The Geste Formation is overlain by conglomerates, sandstone, and red clays with gypsum assigned to the Vizcachera Formation.




(Source: Salfity, 2009)

**Figure 7.2. Generalized geological map showing Salar del Hombre Muerto**

The Catal Formation, conglomerates with sandstones interbedded with ignimbrite flows and volcaniclastic rocks, overly the Vizcachera Formation. This formation occurs in the central portion of the Salar and forms the Farallon Catal hills. Two age dates, one at the bottom and the other at the top of the Catal Formation show 15.0±0.2 Ma and 7.2±1.4 Ma respectively (Donato and Vergani, 1985; Hongn and Seggiaro, 2001).

The clastic sediments and evaporitic rocks of the Sijes Formation occur along the Peninsula de Tincalayu, located in the northern portion of the salar. The sequence contains the borate deposit currently being exploited in the Tincalayu Mine. The age of this sequence is reported at 5.86±0.14 Ma (Watson, in Alonso et al. 1984a).

Dacites and andesites of the Tebenquicho Formation crop out in the southern border of the salar, along the Hombre Muerto peninsula. The age of these rocks is reported as 14±5 and 11±1 Ma (Gonzales, 1983). The Ratones Andesite, which occurs in the northeast border of the basin, and constitutes the volcano of the same name, has been dated at 7.1±0.2 Ma (Gonzales, 1984). The dacitic ignimbrites assigned to the Cerro Galan Volcanic Complex, have a widespread occurrence in the area, and constitute the eastern border of the salar. A radiometric age date obtained by the K-Ar method is reported as 2.56±0.14 Ma, with an Rb-Sr isochrons reports at 2.03±0.07 Ma (Francis et al. 1983; Sparks et al. 1985). The Quaternary deposits are represented by clastic sediments, evaporites and basaltic lava flows with an age of 0.754±0.2 Ma (Alonso et al. 1984b).

The basement outcrop known as Farallon Catal (approximately 72 $km^2$), located at the central portion of the salar, divides the basin in two parts, locally named as *Subcuenca Occidental* (Western sub-basin) and the *Subcuenca Oriental* (Eastern sub-basin). The sub-basins differ in their sedimentology: the Eastern Sub-basin consists largely of clastic sediments, borate precipitates and limited halite, while the Western Sub-basin is dominated by halite with little clastic material.

Geophysics, drilling and trenching results carried out during the evaluation of the Fenix Lithium plant (FMC Lithium) confirm the asymmetric distribution of the minerals that occurs in the salar surface. Drilling results from the Western Sub-basin indicate that halite occurs throughout to depths of 30 to 50 m, with one well penetrating 90 m of halite. Gravity geophysics suggests that the core of the salt body could have a depth of up to 900 m in the Western Sub-basin.

## 7.3 GEOLOGY OF THE PROJECT AREA

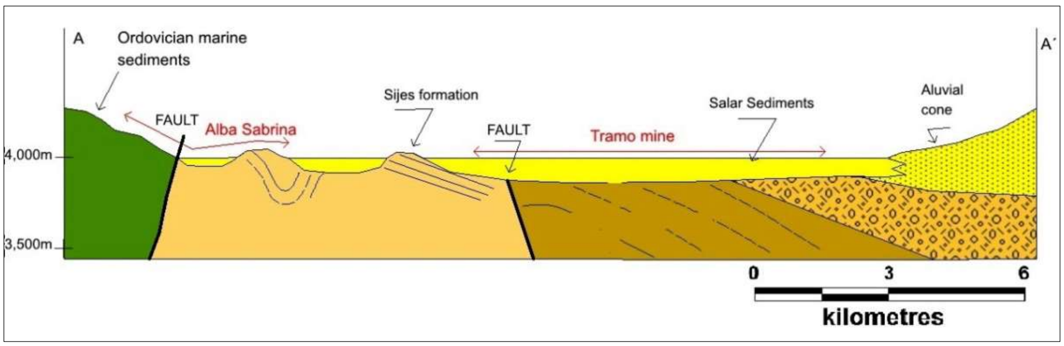
The following describes the geological units cropping out in the Project property areas, listed from the oldest to youngest **(Figures 7.2 and 7.3)**:

**Cordon del Gallego Range:** located in the western part of the Project, it consists of Ordovician marine sediments (shales and quartzites) assigned to the Falda Ciénaga Formation. This unit constitutes the basement in this region of the Puna. Bedding strikes NNE-SSW, appears folded and typically dips west.

**Farallón Catal Range**: located in the central part of the Salar, these rock outcrops are assigned to the middle Miocene Farallón Catal Formation, which is composed of a Lower Member (Tfc1) of pale brown sandstones with abundant muscovite, red claystones and intercalated gypsum beds, and an Upper Member (Tfc2) built up of a basal welded tuff and ignimbrite dating, 11.3 Ma (K/Ar method), followed by dominant conglomerate, sandstone and red clays dominating towards the top. This unit has a NNE-SSW strike and dips 40° to 50° east.

**Peninsula Tincalayu**: these rocks are assigned to the Sijes formation (TSi), 5.8Ma in age, and are sandstones, red and green argillites, tuffs, borates, gypsum and halite. The inferred thickness is over 300 m. This unit was described in detail at the Tincalayu borate mine; the beds are faulted and folded and have a general NNE-SSW strike.

At the western slope of Ratones Volcano, black to black-grey andesitic lava flows are outlined as Ratones Formation (Tva, 7 to 4 Ma). In the Tincalayu peninsula and in the western sector of the Farallón Catal Range, dark grey lava flows crop out and are assigned to the Carahuasi Formation with an estimated age of 1.0 to 0.1 Ma. In some salar areas, horizontal Quaternary terraces are evident with layers of argillite, sandstone and travertine.




(Source: Rojas, 2017)

**Figure 7.3. West-East interpretive section of the north part of the Project**

Outside of the Salar del Hombre Muerto, extensive outcrops of unconsolidated gravel and sand correspond to alluvial fan sequences. Finally, unconsolidated sediments developed over the salar surface consisting of red, green and black clay (mixed with black organic matter), silt, fine red to brown sand with small crystals of gypsum, and borates (ulexite). Layers of ulexite occur as material up to 0.5 m thick or nodules several centimeters in diameter (locally referred to as "cotton balls"). Towards the edges of the salar, an extensive plateau of cream-colored travertine is present with more than 1.0 m thickness. To the south of the Tincalayu peninsula a saline crust crops out; however, it may be temporary as characteristics of the salar surface can change annually due to seasonal flooding.

# 8. DEPOSIT TYPE AND CONCEPTUAL MODEL

The deposit type is a brine aquifer within a salar basin.

## 8.1 CONCEPTUAL MODEL OF SALAR BASINS

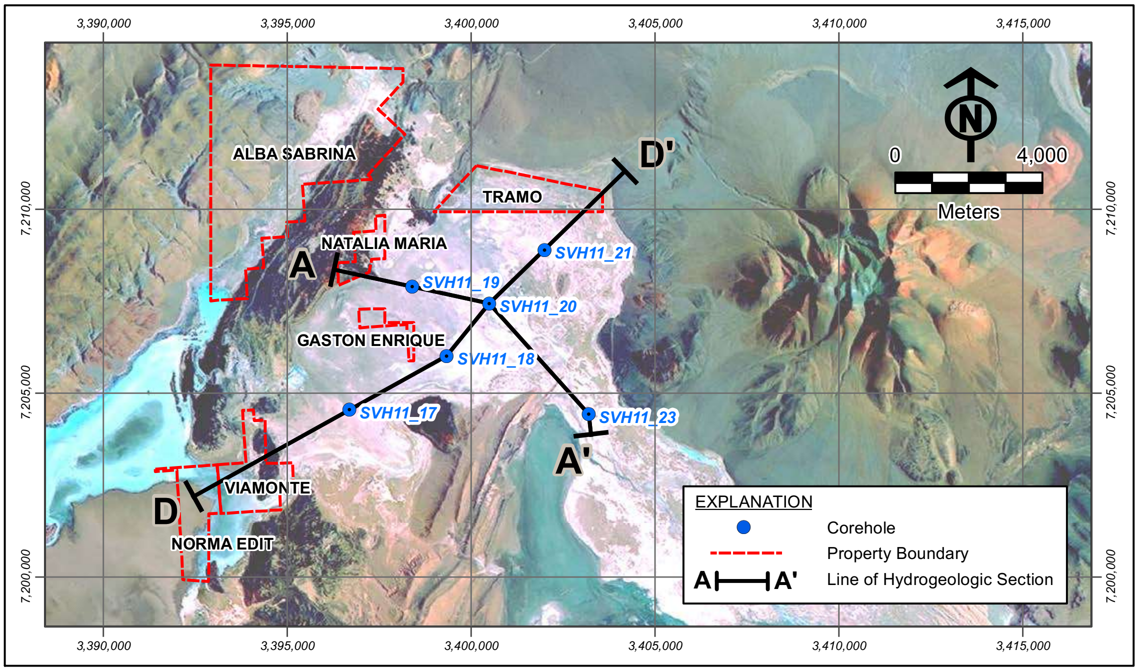
The conceptual model for the Hombre Muerto basin, and for its brine aquifer, is based on exploration of similar salar basins in Chile, Argentina, and Bolivia. Salar basins are characterized by closed topography and interior drainage. The lowest exposed portions of these basins may contain salt encrusted playas, or "salars". Typically, no significant groundwater discharges from these basins as underflow. All groundwater discharge that occurs within the basin is evaporated. All surface water that flows into the basin is either evaporated directly, or enters the groundwater circulation system and is evaporated at a later time.

Salar basin locations and basin depths are typically structurally controlled, but may be influenced by volcanism that may alter drainage patterns. Basin-fill deposits within salar basins typically contain thin to thickly bedded evaporite deposits in the deeper, low-energy portion of the basin, together with thin to thickly bedded low-permeability lacustrine clays. Coarser-grained, higher permeability deposits associated with active alluvial fans can typically be observed along the edges of the salar. Similar alluvial fan deposits, associated with ancient drainages, may occur buried within the basin-fill deposits. Other permeable basin-fill deposits which may occur within salar basins include pyroclastic deposits, ignimbrite flows, lava-flow rocks, and spring deposits.

## 8.2 CONCEPTUAL MODEL OF HOMBRE MUERTO BASIN

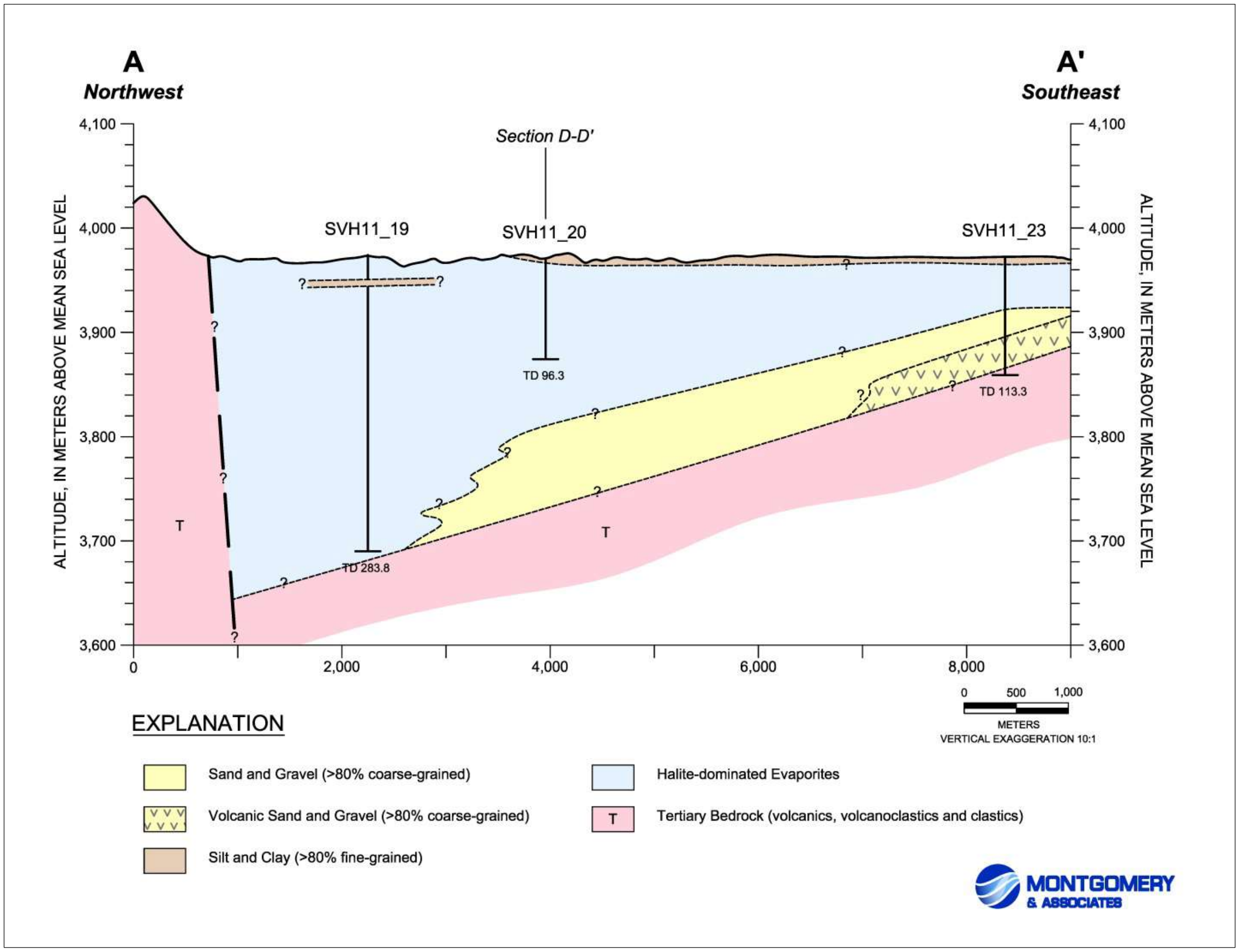
Conceptual hydrogeologic sections were prepared incorporating results of exploration drilling at the Sal de Vida project (M&A and GAI, 2012). Location of sections are shown on **Figure 8.1**; sections are shown on **Figures 8.2 and 8.3.**

MONTGOMERY & ASSOCIATES



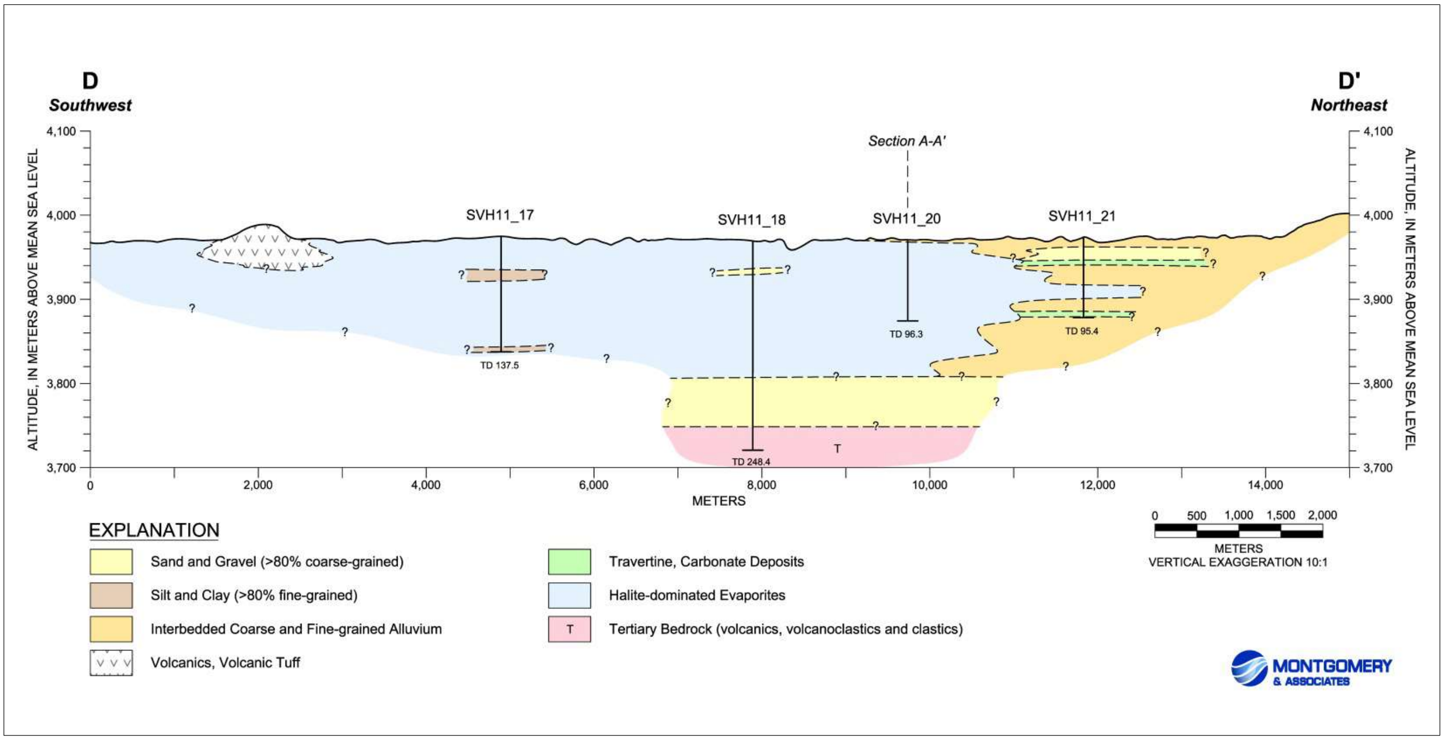

**(Source: M&A and GAI, 2012)**

**Figure 8.1. Map of showing location of hydrogeologic sections**




**(Source: M&A and GAI, 2012)**

**Figure 8.2. Hydrogeologic section A-A’**




**(Source: M&A and GAI, 2012)**

**Figure 8.3. Hydrogeologic section D-D'**

The Hombre Muerto basin has an evaporite core that is dominated by halite. Basin margins are steep and are interpreted to be fault controlled. The east basin margin is dominated by Precambrian metamorphic and crystalline rocks. Volcanic tuff and reworked tuffaceous sediments, together with tilted Tertiary rocks, are common along western and northern basin margins. In the Sal de Vida project area, dip angle of Tertiary sandstone is commonly about 45 degrees to the southeast. Porous travertine and associated calcareous sediments can occur in the subsurface and are flat lying. These sediments form a marker unit that is encountered in some locations. Five boreholes located near basin margins have completely penetrated the flat-lying basin-fill deposits. These boreholes have bottomed in either tilted Tertiary sandstone, volcanic tuff, or micaceous schist.

Metamorphic and crystalline bedrock along the east basin margin are expected to have low hydraulic conductivity and should approximate a "no-flow" groundwater boundary during extraction of brine from basin fill deposit aquifers by pumping wells. Tertiary sediments along the west and north basin boundaries exhibit drainable porosity, and conceptually approximate "low-flow" boundaries that are expected to contribute brine to the basin fill deposit aquifers.

Fine-grained lacustrine deposits are common throughout the exposed basin floor of Salar del Hombre Muerto. These deposits are interpreted to have low hydraulic conductivity. In many parts of the basin, this surface is believed to restrict downward flow of freshwater from the Rio de los Patos that enters the basin from the southeast and flows across the salar toward the north and west. In addition, hydraulic conductivity in the vertical direction of groundwater flow (Kz) is typically less than hydraulic conductivity in the horizontal direction (Kh). For layered sediments, such as occur in Salar del Hombre Muerto, the ratio Kz/Kh is commonly 0.01 or less (Freeze and Cherry, 1979, p. 34). The low vertical permeability of the salar sediments, combined with the density difference between surface water inflow and deep brine, restrict the vertical circulation of fresh water entering the salar from Rio de los Patos.

The principal sources of water entering the Hombre Muerto basin are the surface water inflows, and groundwater inflow from natural recharge along the mountain fronts via alluvial fans. Drill results, indications from vertical electrical soundings, and density relations interpreted in previous studies for the Sal de Vida project suggest restricted vertical circulation of lower density water entering the basin and diluting brine mineral resources.

## 8.3 ASSIGNMENT OF HYDROGEOLOGIC UNITS

Results of diamond drilling at the Sal de Vida project indicate that basin-fill deposits in Salar del Hombre Muerto can be divided into hydrogeologic units that are dominated by six lithologies. Except for the micaceous schist unit, all of have been sampled and analyzed for

MONTGOMERY & ASSOCIATES

both drainable porosity and brine chemistry by Lithium One Inc. or Galaxy Resources Ltd. (M&A and GAI, 2012). No brine samples were obtained from the micaceous schist. Predominant lithologies, meters drilled, and number of analyses are given in **Table 8.1** (M&A and GAI, 2012).

**Table 8.1. Sample data for hydrogeologic units**

| PREDOMINANT LITHOLOGY OF HYDROGEOLOGIC UNIT | METERS DESCRIBED OF LITHOLOGIC UNIT | NUMBER OF DRAINABLE POROSITY ANALYSES | NUMBER OF BRINE CHEMISTRY ANALYSES |
|---|---|---|---|
| Clay | 285.2 | 24 | 15 |
| Halite, gypsum, or other evaporites | 1,127.1 | 100 | 130 |
| Silt and sandy or clayey silt, and siltstone | 449.6 | 50 | 48 |
| Sand, silty sand, and sandstone | 1,072.2 | 109 | 129 |
| Travertine, tuff, and dacitic gravel | 238.8 | 25 | 30 |
| Micaceous schist | 10 | 1 | 0 |
| TOTAL = | 3,182.9 | 309 | 352 |

For purpose of computing in situ brine resources, travertine, tuff, and dacitic gravel are grouped together based on drainable porosity and expected similar hydraulic conductivity, but not based on geologic similarity.

# 9. EXPLORATION

Historically, exploration was carried out by Lithium One (Galaxy Resources) in the area eastern and southern parts of the Tramo concession and is available in public reporting (M&A and GAI, 2012). This includes sporadic surface brine samples over some Project properties, however, these are not considered as part of this Report. For this Report, exploration work completed to date by the Project includes 20 geochemical brine samples and the completion of a 10-station CSAMT survey along two section lines.

## 9.1 GEOCHEMICAL SAMPLING

Locations and geological descriptions for each of the samples collected on Project properties are shown in **Figure 9.1** and **Table 9.1**. Geochemical results for main anions, density and conductivity values are given in **Table 9.2**. Results of laboratory analyses for lithium concentrations are shown on **Figure 9.2**. Analytical results from the laboratory are provided in **Appendix B**.

The first brine sampling round was completed on October 3 and 4, 2016, in dry salar conditions by Sergio Lopez a consulting geologist contracted by Jorge Moreno and Nivaldo Rojas, a consulting mining engineer and QP contracted by Jorge Moreno. The first round of sampling comprised 10, 1-liter samples collected from pits excavated using shovel and manual auger drilling methods; samples NS_001, to NS_010 were obtained (**Tables 9.1 and 9.2**). These samples returned positive lithium results and led to a second round of sampling.

The second round of sampling was conducted by Pedro Ruiz on January 31 through February 2, 2017, during the rainy season, and included collection of 10 samples, NS_015 to NS_20 and NS_022 to NS_025 (**Tables 9.1 and 9.2**). Mr. Ruiz is a consulting geologist contracted by Jorge Moreno. The second round of sampling was only partially completed due the incidence of heavy rains flooding the salar area which prevented sampling at the south properties (Gaston Enrique, Viamonte and Norma Edit).

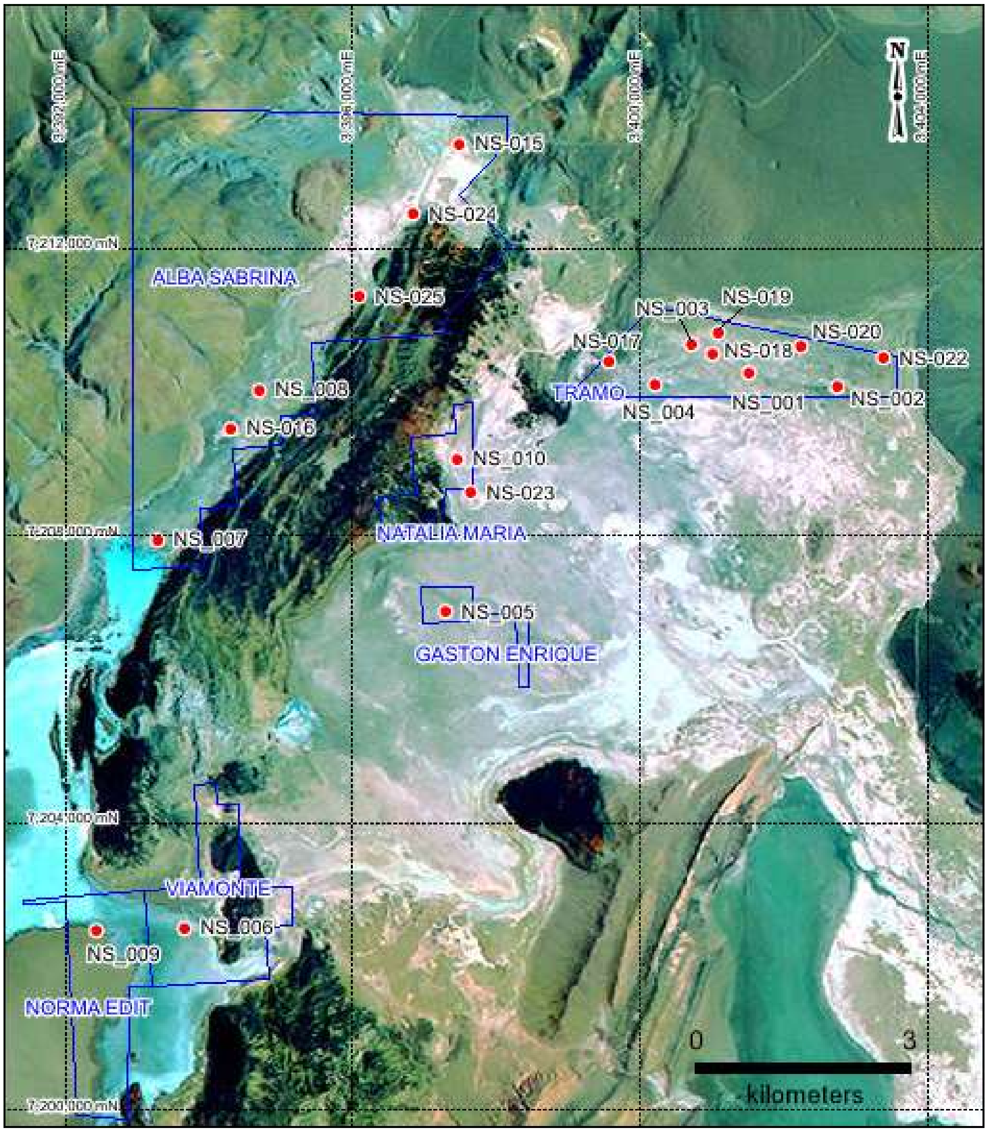



**Figure 9.1. Location of geochemical brine samples collected on Hombre Muerto North Project properties**

MONTGOMERY
& ASSOCIATES

**Table 9.1. Summary of brine samples collected on Project properties**

| Sample ID | Longitude wgs84 | Latitude wgs84 | Elevation (masl) | Depth to Water (m) | Brine Sample Description | Lithology | Claim Identifier |
|---|---|---|---|---|---|---|---|
| **1st Round** | | | | | | | |
| NS_001 | -66.97728 | -25.22792 | 3979 | 1.4 | Brown, muddy | Clay; green-black; ab. organic matter | Tramo |
| NS_002 | -66.96498 | -25.22961 | 3979 | 1.35 | Light grey | Clay, reddish on top & dark green at the bottom | Tramo |
| NS_003 | -66.96498 | -25.22414 | 3980 | 1.3 | Light grey | Clay, reddish on top & dark green at the bottom | Tramo |
| NS_004 | -66.99033 | -25.22937 | 3974 | 0.6 | Reddish | Sand, red, coarse to medium grain size "cotton balls of ulexite". | Tramo |
| NS_005 | -67.01957 | -25.25759 | 3973 | 1.25 | Brown | Sand, red with minor ulexite "cotton" balls | Gaston Enrique |
| NS_006 | -67.05588 | -25.29700 | 3975 | 1.2 | Brown | Sand with quartz grains, red color with halite crystals- gypsum. | Viamonte |
| NS_007 | -67.05914 | -25.24833 | 3978 | 1.1 | Reddish | Sand, red, coarse grain; sand, red color, quartz. | Alba Sabrina |
| NS_008 | -67.04492 | -25.22953 | 3980 | 1.3 | Reddish | Sand brown-reddish, quartz &lithic fragments. | Alba Sabrina |
| NS_009 | -67.06819 | -25.29725 | 3975 | 1.2 | Brown | Red sand with gypsum rosettes, halite crystals. | Norma Edit |
| NS_010 | -69.01777 | -25.23841 | 3979 | 1.1 | Light grey | red sand on top & dark grey to the bottom | Natalia María |
| **2nd Round** | | | | | | | |
| NS_015 | -67.01702 | -25.19892 | 3989 | 1.2 | Brown, muddy | 0-20 cm: brownish calcareous cap; 20-80 cm: green clay; 80-90cm: Black organic matter | Alba Sabrina |
| NS_016 | -67.04891 | -25.23439 | 3988 | 1 | Brown, muddy | 0-40: Brown-reddish medium grained sand; 40cm: green clay; 40-140 cm: brown, medium grained sand with halite crystals | Alba Sabrina |
| NS_017 | -66.99666 | -25.22627 | 3984 | 0.8 | Brown, muddy | 0-40 cm: medium grained sand; 40-120 cm: black sand | Tramo |
| NS_018 | -66.98243 | 25.22543 | 3983 | 1.4 | Dark grey, muddy | 0-40 cm: brown-reddish, medium grained sand; 40-100 cm: greenish green clay and coarse grained sand; 100-190 cm: black clay with organic matter | Tramo |
| NS_019 | -66.98152 | -25.22284 | 3989 | 0.7 | Brown, muddy | 0-30 cm: brown, reddish, coarse grained sand; 30-80 cm: conglomerate cemented by carbonate | Tramo |
| NS_020 | -66.96998 | -25.22447 | 3990 | 0.8 | Brown, muddy | 0-30 cm: brown, reddish, coarse grained sand; 30-80 cm: conglomerate cemented by carbonate | Tramo |
| NS_22 | -66.95884 | -25.22614 | 3979 | 0.7 | Brown, muddy | 0 – 120 cm: brown reddish coarse grained sand; 120 - 140 cm: conglomerate tightly cemented by carbonate. | Tramo |
| NS_23 | -67.01594 | -25.24262 | 3981 | 1.1 | Brown. muddy | 0 - 80 cm: dark brown reddish coarse grained sand with a 5 cm ulexite layer on the top; 80 - 150 cm: dark brown coarse grained sand. | Natalia Maria |
| NS_24 | -67.02355 | -25.20761 | 3991 | 1.1 | Brown, muddy | 0 - 40 cm: brown reddish, coarse grained sand. 40 - 80 cm: pale grey, pale brown tightly cemented conglomerate; 80 - 110 cm: dark brown sand and conglomerate. 110- 130 cm: pale grey, pale brown strongly cemented conglomerate. | Alba Sabrina |
| NS_25 | -67.03114 | -25.21795 | 3991 | 2.4 | Brown, muddy | 0-240 cm pale grey, pale brown strongly cemented conglomerate; 240 - 270 cm brown reddish sand and clay. | Alba Sabrina |

MONTGOMERY & ASSOCIATES

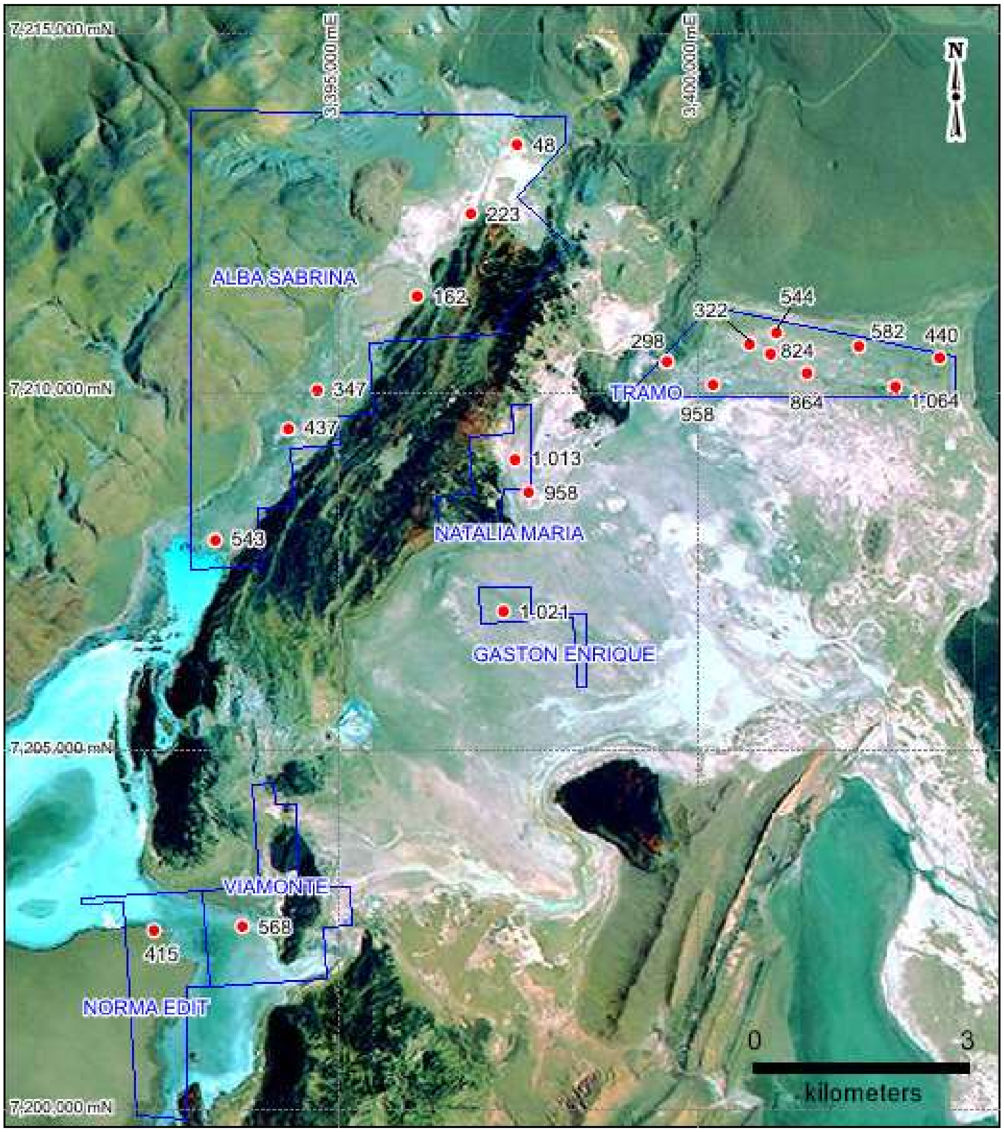



**Figure 9.2. Distribution of lithium concentration results (mg/L) for Project properties**

MONTGOMERY
& ASSOCIATES

**Table 9.2. Summary of geochemical results**

| Sample | Type | Li | Ca | Mg | B | Na | K | Density g/mL | Conductivity mS/cm | Mg/Li |
|---|---|---|---|---|---|---|---|---|---|---|
| | | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | | | |
| **1st Round** | | | | | | | | | | |
| NS_001 | Brine | 864 | 1,042 | 2,515 | 311 | 98,485 | 5,866 | 1.18 | 229 | 2.91 |
| NS_002 | Brine | 1,064 | 2,594 | 4,385 | 216 | 92,559 | 6,727 | 1.18 | 237 | 4.12 |
| NS_003 | Brine | 322 | 1,084 | 1,537 | 212 | 71,389 | 2,451 | 1.13 | 188 | 4.77 |
| NS_004 | Brine | 958 | 986 | 2,038 | 589 | 106,339 | 7,314 | 1.2 | 227 | 2.13 |
| NS_005 | Brine | 1,021 | 676 | 1,549 | 646 | 116,588 | 7,758 | 1.21 | 240 | 1.52 |
| NS_006 | Brine | 568 | 778 | 1,112 | 503 | 124,940 | 4,912 | 1.22 | 242 | 1.96 |
| NS_007 | Brine | 543 | 534 | 3,432 | 381 | 106,382 | 3,758 | 1.19 | 225 | 6.32 |
| NS_008 | Brine | 347 | 569 | 3,087 | 248 | 88,023 | 2,559 | 1.16 | 208 | 8.9 |
| NS_009 | Brine | 415 | 912 | 861 | 432 | 128,409 | 3,391 | 1.22 | 230 | 2.07 |
| NS_010 | Brine | 1,013 | 897 | 1,155 | 438 | 113,437 | 8,593 | 1.2 | 193 | 1.14 |
| **2nd Round** | | | | | | | | | | |
| NS_015 | Brine | 48 | 407 | 490 | 14 | 10,846 | 427 | 1.03 | 40 | 10.21 |
| NS_016 | Brine | 537 | 544 | 3,952 | 69 | 89,573 | 4,644 | 1.19 | 187 | 7.36 |
| NS_017 | Brine | 298 | 1,636 | 2,008 | 97 | 83,817 | 1,486 | 1.17 | 184 | 6.74 |
| NS_018 | Brine | 824 | 1,091 | 2,666 | 67 | 89,280 | 7,057 | 1.19 | 193 | 3.24 |
| NS_019 | Brine | 544 | 1,008 | 1,856 | 67 | 77,486 | 4,276 | 1.16 | 176 | 3.41 |
| NS_020 | Brine | 582 | 652 | 1,932 | 76 | 76,214 | 4,803 | 1.15 | 173 | 3.32 |
| NS_021 | Brine | 575 | 661 | 1,841 | 75 | 74,326 | 4,481 | 1.15 | 174 | 3.20 |
| NS_022 | Brine | 440 | 882 | 2,098 | 55 | 56,538 | 3,142 | 1.12 | 150 | 4.77 |
| NS_023 | Brine | 958 | 686 | 1,441 | 129 | 106,491 | 9,288 | 1.21 | 184 | 1.5 |
| NS_024 | Brine | 223 | 604 | 1,794 | 50 | 44,507 | 2,106 | 1.1 | 123 | 8.04 |
| NS_25 | Brine | 162 | 411 | 1,317 | 38 | 32,423 | 1,400 | 1.08 | 97 | 8.13 |

Inspection of **Tables 9.1 and 9.2** supports the thought that elevated concentrations of lithium are located in the brine, including brine at the surface of the salar. The Tramo, Gaston Enrique, and Natalia Maria areas contain the largest concentrations of lithium. These areas are located in the principal east sub-basin area (**Figures 9.1 and 9.2**).

As can be seen in **Table 9.2** and on **Figure 9.2**, three samples, NS_015, NS_024 and NS_025, contain significantly lower values of lithium (48, 223 and 162 mg/l, respectively) compared to the other samples in the salar. As can be seen on **Figure 9.2**, all three samples are in the north part of the Alba Sabrina area and suggest that this area is more affected by shallow surface water associated with precipitation runoff. Near-surface brine samples at the edges of the salar (where fresh water enters the system and is believed to dilute the brine) may not be representative of deeper groundwater chemistry.

Finally, a comparison between samples obtained for the two different sampling rounds in the Tramo and Alba Sabrina areas suggests that near-surface samples obtained during the dry period have more dense brine and higher lithium concentrations than samples obtained during the rainy season. This is believed to be solely the result of near surface brine dilution from precipitation. Based on the author's experience in salar basins, precipitation dilution does not extend deeper than several meters into the aquifer. Averages for each sampling round in these two areas are as follows:

TRAMO:
Average Li content during dry season is 802 mg/l (4 samples, October 2016)
Average Li content during rainy season is 538 mg/l (5 samples, January 2017)

ALBA SABRINA:
Average Li content during dry season is 445 mg/l (2 samples, October 2016)
Average Li content during rainy season is 242 mg/l (4 samples, January 2017)

## 9.2 PROPERTIES AND TARGET SAMPLING AREAS

**The Alba Sabrina Property**: The target sampling area is a "gulf" of saline crust between the Cordon del Gallego range and the Tincalayu peninsula morphological features. The Cordon del Gallego is made up dominantly of Ordovician marine sediments with interbedded of sandstone and shale with indications of regional low grade metamorphism. The Tincalayu peninsula consists of mostly Tertiary sedimentary rocks and evaporites of Late Miocene overlapped by basaltic lava flows of 0.1 to 1 Ma. The surface crust along the "Gulf" is well-developed to the southwest, changing into calcareous travertine to the northeast. Sample averages for the Alba Sabrina target area are as follows.

| Property | Samples | Li (mg/L) | K (mg/L) | Mg (mg/L) | Mg/Li |
|---|---|---|---|---|---|
| Alba Sabrina | 6 | 310 | 2482 | 2345 | 8.2 |

**The Tramo Property:** The target sampling area is on the northern edge of the salar. The Tramo property shows a fairly uniform saline crust composed of red clay, green-grey organic matter layers and minor beds of ulexite and gypsum. Sample averages for the property are as follows:

| Property | Samples | Li (mg/L) | K (mg/L) | Mg (mg/L) | Mg/Li |
|---|---|---|---|---|---|
| Tramo | 9 | 655 | 4791 | 2337 | 3.9 |

**The Southern Properties:** This group includes the properties of Natalia María, Gaston Enrique, Viamonte and Norma Edit, which are located a part of the salar characterized by the presence of saline crust at the surface. Conditions are characteristically muddy to the east (Natalia Maria) and more saline westwards (Viamonte and Norma Edit). Five samples in these areas average:

| Property | Samples | Li (mg/L) | K (mg/L) | Mg (mg/L) | Mg/Li |
|---|---|---|---|---|---|
| Salar Group[a] | 5 | 741 | 6788 | 1224 | 1.6 |

a) combined salar properties: Natalie Maria, Gaston Enrique, Norma Edit, and Viamonte

## 9.3 GEOPHYSICAL SURVEY

A program to complete a CSAMT survey covering all of the properties of the Project was planned for early January 2017. The original plan included 14 CSAMT stations, of which 10 were surveyed in the field. The CSAMT survey was conducted by Geophysical and Exploration Consultants S.A., Mendoza, Argentina (GEC), under the supervision of Sascha Bolling, Senior Geophysicist and Managing Director of GEC. The survey defined two section lines **(Figure 9.3)**.

MONTGOMERY
& ASSOCIATES

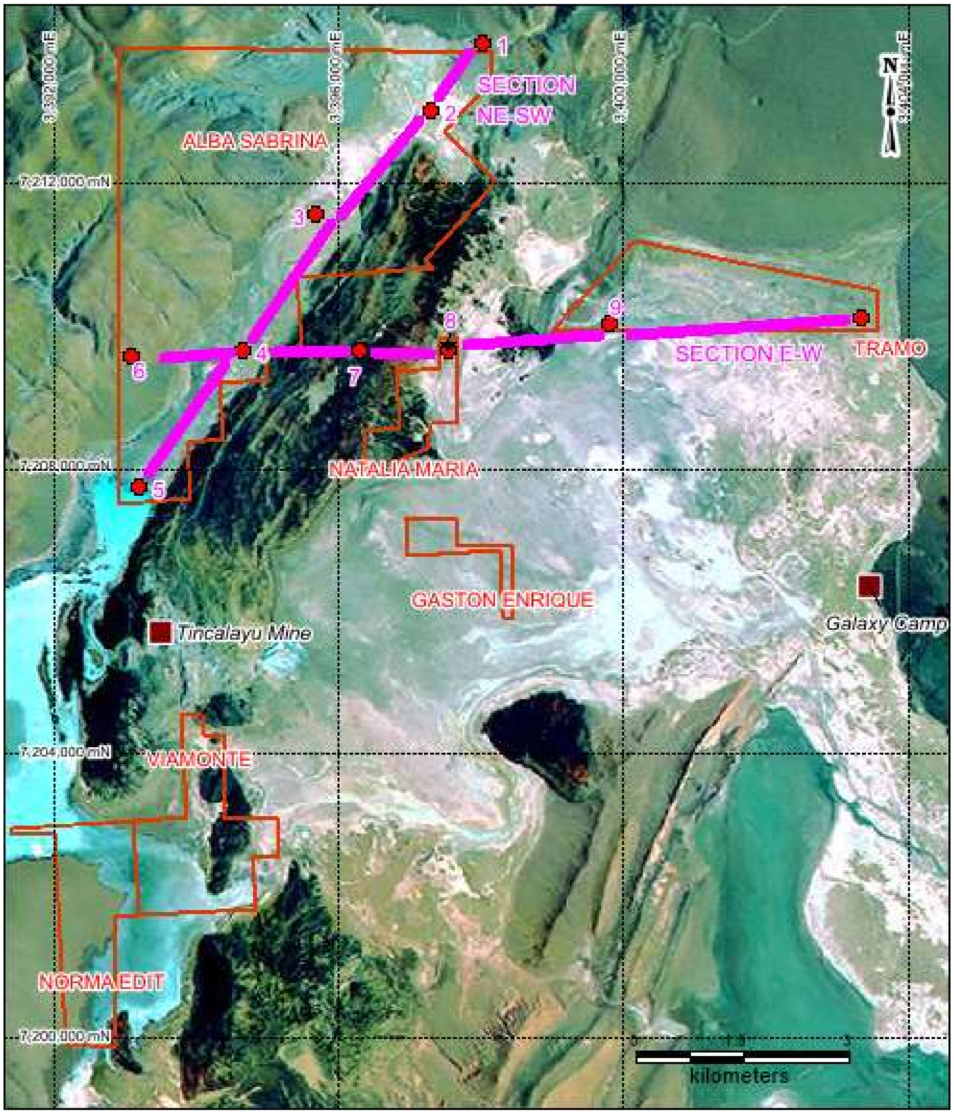
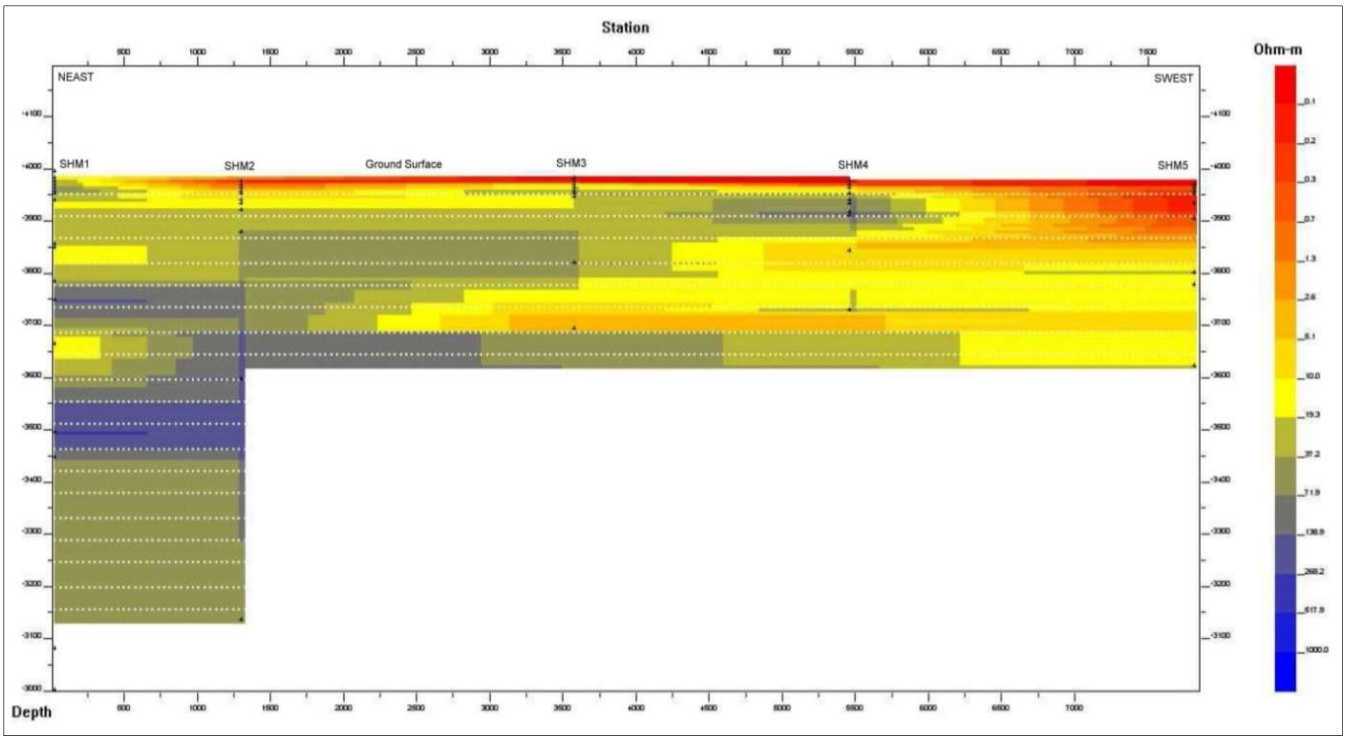



**Figure 9.3. Distribution of CSAMT stations**

## 9.3.1 CSAMT Section SHM1 –SHM5 (Alba Sabrina Property)

The Alba Sabrina CSAMT section line included stations SCM1 through SCM5 for a total length of approximately 7,800 meters along a NE – SW orientation. For 6,000 m southwest along the "Gulf" a near-surface, highly conductive layer, up to 60 m thick in depth (with resistivity values of 0.01 to 10 ohm/meter), is interpreted as a dominant low resistive brine close to surface. From this point to end of the section, the interpreted low-resistivity layer increases in thickness to approximately 150 to potentially 250 m. Some semi-resistive (10 to 70 ohm/m) layers are shown below the less resistive layer over 40 to 200 meters in depth. Stronger resistive horizons, interpreted as freshwater water or diluted brine, are seen in the northeast part of the section, which vary southwest to moderately less resistive levels and then to clearly less resistive layers **(Figure 9.4)**.



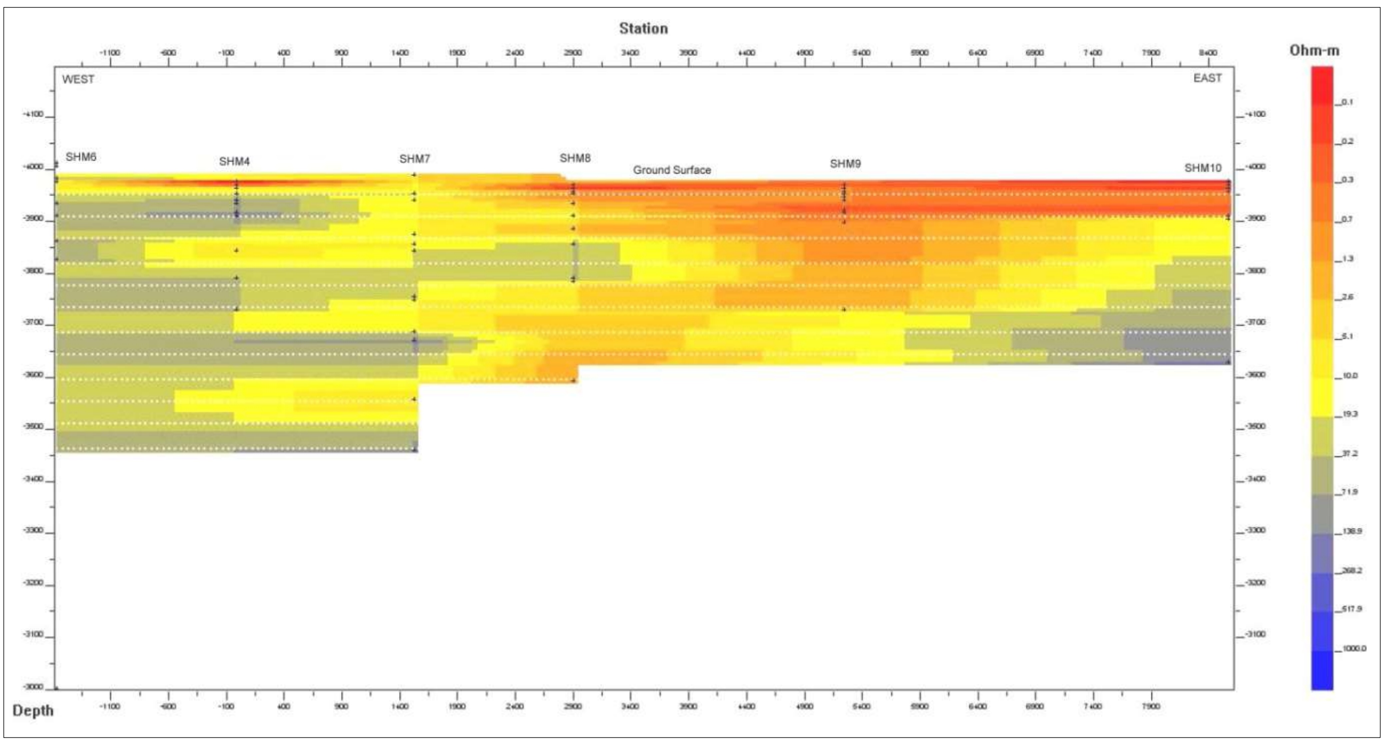

**(Source: GEC, 2017)**

**Figure 9.4. CSAMT results for NE-SW section from SHM1 to SHM5**

The near surface brine occurrence along the peninsula widens as brine from the Salar is incorporated to the system. It is likely that the Sijes formation (an early evaporite facies within the evolution of the basin) remains active and is being selectively re-invaded by brines circulating through the Salar. The Ordovician shales and sandstones may represent the bottom of the system below 250 m. The anomaly is clearly open to the southwest and apparently to be open at depth.

## 9.3.2 Section SHM6 –SHM10 (Alba Sabrina-Natalia María-Tramo Properties)

This section shows CSAMT survey results over 9,600 meters from west to east (**Figure 9.5**). The section confirms the peninsula "Gulf" anomaly, begins to define the Sijes Formation and clearly outlines the east part of the sedimentary brine-bearing basin. A long, low-resistive anomaly is seen along the Salar between SHM8 (Natalia Maria) to SHM10 (east border of Tramo) for about 6 km. A low resistivity 60 to 70 m thick upper horizon, with resistivity values of 0.2 to 1.3 ohm/m, is interpreted over the length of 6,000 meters. This continues to a depth of 250 m through the central sector at station SHM9 to the west and the border of the Tramo property. The anomaly remains open at depth in the central part of the section.




**(Source: GEC, 2017**

**Figure 9.5. CSAMT results for W-E section from SHM6 to SHM10**

# 10. DRILLING

Exploration drilling has not yet been realized for the Project.

MONTGOMERY & ASSOCIATES

# 11. SAMPLE COLLECTION, PREPARATION ANALYSES AND SECURITY

## 11.1 SAMPLE COLLECTION AND PREPARATION

A surface brine sampling program covering the Project properties was completed during the period October 3 and 4, 2016. A second sampling round was completed during the period January 31 to February 2, 2017. Sampling was conducted by means of shallow, hand dug pits and manual auger drilling **(Figures 11.1 and 11.2)**. The first sampling round was conducted by consulting geologist Sergio Lopez and Nivaldo Rojas and the second sampling round was completed by consulting geologist Pedro Ruiz, in coordination with Rojas y Asociados (2017).

**Figure 11.1. Sample pit/auger hole excavated on the salar at Tramo property; the auger tool is about 3 m long**

**Figure 11.2. Hand dug pit excavated on the salar surface, auger borehole and shallow depth to brine level in auger hole**

A total of 20 brine samples were collected and prepared according protocols for standard brine sample collection along with lithologic descriptions. Additionally, four samples of a blank and four samples representing field duplicates were inserted in the sample batch.

Brine samples were collected from hand dug pits and an auger to depths of 2 to 3 m. Samples collected correspond to natural brine encountered in the auger hole. At some locations, augering to 6 m depth did not encounter brine.

The brine samples were collected by means of 500 mL plastic bottles weighted on the bottom and open at the top to allow filling of brine. The bottles were deployed and retrieved using a cord. Once at the surface, the brine in the bottle was poured into a clean collecting container and solids were allowed to settle. Typically, the operation was repeated four to five times for filling of the container. After settling, the brine was decanted into a 1-liter, clean plastic bottle using a funnel. The bottles were properly labeled at both the side and the cap. Samples were kept within controlled temperature containers with a maximum of 12 bottles. Sample containers were stored in secure places while in the field and transported to the assay laboratory by the project geologists.

## 11.2 ANALYSES BY ALEX STEWART ASSAYERS INC.

Norlab Laboratory (Jujuy, Argentina) is operated by Alex Stewart Assayers Inc. (ASA) with main offices in Mendoza, Argentina and corporate offices in Great Britain. ASA has extensive experience analyzing lithium-bearing brines. The ASA laboratories are ISO 9001 accredited and operate according to Alex Stewart Group international standards, consistent with ISO 17025 standards. Samples were analyzed for metals at the ASA laboratory using the Inductively Coupled Plasma (ICP) spectrometry analytical method.

Results of assays reported by ASA are provided in **Table 9.2**, and **Figure 9.2** shows the lithium distribution. ASA laboratory results and certificates are provided in **Appendix B**.

## 11.3 SAMPLE SECURITY

All samples were labeled with permanent marker, sealed with tape and stored at a secure site, both in the field, and in Salta, Argentina, until transported to the laboratory for analysis. Samples were packed into secured boxes with chain of custody forms and then shipped to the laboratory.

# 12. DATA VERIFICATION

The Laboratory performance was controlled by means of six samples. All control samples were assayed in the ASA's Norlab Laboratory (Jujuy). These control samples include:

- one field duplicate sample collected from a known surface pool at the Salar de Pocitos (NS_11)
- one laboratory self-control duplicate run by (ASA DUPNS_10)
- one blank lithium sample inserted by the consulting geologist
- one field duplicate of the samples being assayed inserted by geologists
- one laboratory duplicate inserted as self-control by ASA
- one lithium blank sample

These control samples confirm expected lithium, potassium, magnesium, calcium, boron, sodium as well as other cations, fluid density, and conductivity. Results are given in **Table 12.1** and show that similar results were obtained between the original sample and the duplicate.

**Table 12.1. Results of control samples**

| Sample | Li mg/L | Ca mg/L | Mg mg/L | B mg/L | Na mg/L | K mg/L | Density | Conductivity (mS/cm) | Observations |
|---|---|---|---|---|---|---|---|---|---|
| **NS_ 010** | **1013** | **897** | **1155** | **438** | **11343** | **8593** | **1.201** | **193** | **Original** |
| DUPNS_010 | 1010 | 891 | 1099 | 442 | 11370 | 8710 | 1.201 | 194 | NS_10 Duplicate run by ASA |
| NS_011 | 80 | 466 | 883 | 200 | 131626 | 2325 | 1.219 | 228 | Field control of know pool |
| NS_012 | < 1 | 44 | 25 | 1 | 20751 | 10 | 1.042 | 72 | Blank prepared by geos |
| **NS_20** | **582** | **652** | **1932** | **76** | **76214** | **4803** | **1.15** | **173** | **Original** |
| NS_21 | 575 | 661 | 1841 | 75 | 74328 | 4481 | 1.151 | 174 | NS_20 Dup by One Borax |
| **NS_24** | **223** | **604** | **1794** | **50** | **44507** | **2106** | **1.101** | **123** | **Original** |
| DUP_NS24 | 221 | 597 | 1805 | 48 | 44525 | 2096 | 1.1 | 124 | NS_24 Duplicate run by ASA |
| NS26 | < 1 | 47 | 14 | <1 | 4416 | 6 | 1.014 | 16 | Blank ordered by One Borax |

External controls for the ASA Laboratory (e.g., round robin analytics) have not yet been conducted at this early stage of the project.

# 13. MINERAL PROCESSING AND METALLURGICAL TESTING

Mineral processing and metallurgical testing has not been done at this early stage of the Project.

# 14. MINERAL RESOURCE ESTIMATES

No mineral resources have been estimated at this early stage of the Project.

# 15. MINERAL RESERVE ESTIMATES

No mineral reserves have been estimated at this early stage of the Project.

# 16. MINING METHODS

Mining methods have not been established at this early stage of the Project.

# 17. RECOVERY METHODS

Recovery methods have not been established at this early stage of the Project.

# 18. PROJECT INFRASTRUCTURE

Project infrastructure has not been designed at this early stage of the Project.

# 19. MARKET STUDIES AND CONTRACTS

Market studies and contracts have not yet been realized at this early stage of the Project.

## 20. ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

On July 4, 2017, NRG submitted an Environmental Impact Study to the provincial mining authorities for its exploration activities on the Project. The report was prepared by EC & Associados of Salta, Argentina. According to the Title Opinion dated June 28, 2017 issued by Sr. Jorge Vargas of the Vargas-Galíndez law firm of Mendoza, Argentina (**Appendix A**), the properties of the Project are not subject to known environmental liabilities, nor legal or administrative encumbrances.

Permitting and social or community studies have not yet been conducted.

## 21. CAPITAL AND OPERATING COSTS

No capital costs or operating costs have been established at this early stage of the Project.

## 22. ECONOMIC ANALYSIS

No economic analyses have been realized at this early stage of the Project.

# 23. ADJACENT PROPERTIES

Adjacent properties to the Hombre Muerto North Lithium Project include the following:

- Galaxy Resources Ltd. holds large tenements in both Catamarca and Salta provinces (Sal de Vida Project). These areas are mainly south and southeast of the Project properties.
- Orocobre Ltd. conducts borate mining operations at Tincalayu mine, between the Alba Sabrina and Viamonte properties.
- Santa Rita and Maktub operate ulexite production for borates south of the Project properties.
- FMC Lithium Corp. operates lithium brine production and processing southwest of Project properties at the Fenix mine.

Despite the proximity of these projects to the Hombre Muerto North Project, the size and other characteristics of the Project, which is at an early stage, are different, and there is no assurance that the Project will be similar.

## 23.1 GALAXY RESOURCES SAL DE VIDA PROJECT

According to Galaxy Resources, the Sal de Vida Project is reported as “one of the world’s largest and highest quality undeveloped lithium brine deposits with significant expansion potential”. It covers approximately 38,500 hectares over most of the eastern part of the Salar del Hombre Muerto in Catamarca and Salta provinces. The Sal de Vida brines average about 780 mg/L lithium and 8,700 mg/L potassium. Among impurities, magnesium (Mg:Li ratio of 2.2) and sulfate ($SO_4$:Li ratio of 11.5) are considered low by industry standards.

In April 2013, Galaxy prepared a Definitive Feasibility Study (DFS) for the Sal de Vida Project. According to the DFS, Galaxy estimates a pre-tax net present value of US$645 Million (US$380 Million post tax) at 10% discount rate. Sal de Vida reportedly has the

MONTGOMERY & ASSOCIATES

potential to generate total annual revenues in the region of US$215 million and operating cash flow before interest and tax of US$118 Million per annum at full production rates. The DFS supports the development of Sal de Vida, which when completed will include evaporation ponds, a battery grade lithium carbonate plant and a potash plant.

A maiden JORC-compliant Reserve estimate of 1.1 Million tonnes of retrievable lithium carbonate equivalent and 4.2 million tonnes of potassium chloride (potash or KCl) equivalent supports total annual production over a 40-year period (**Tables 23.1 and 23.2**) (M&A and GAI, 2012).

**Table 23.1. Summary of 2012 Mineral Resource Estimate, Sal de Vida Project**

| Phase II Resource Category | Brine Volume ($m^3$) | Avg. Li (mg/L) | KCl Equivalent (tonnes) | $Li_2CO_3$ Equivalent (tonnes) | Avg. K (mg/l) | In situ K (tonnes) | KCl Equivalent (tonnes) |
|---|---|---|---|---|---|---|---|
| Measured | $7.2 \times 10^8$ | 787 | 565,000 | 3,005,000 | 8,695 | 6,241,000 | 11,902,000 |
| Indicated | $2.6 \times 10^8$ | 768 | 197,000 | 1,048,000 | 8,534 | 2,186,000 | 4,169,000 |
| Measured + Indicated | $9.8 \times 10^8$ | 782 | 762,000 | 4,053,000 | 8,653 | 8,427,000 | 16,071,000 |
| Inferred | $8.3 \times 10^8$ | 718 | 597,000 | 3,180,000 | 8,051 | 6,692,000 | 12,762,000 |
| **Total** | **$18.1 \times 10^8$** | **753** | **1,359,000** | **7,233,000** | **8,377** | **15,119,000** | **28,833,000** |

assumes cutoff grade of 500 mg/L Lithium

Total tonnages for the economic reserve values account for anticipated leakage and process losses of lithium and potassium and provide Proven and Probable Reserve estimates from Southwest and East brine production wellfields. With percent estimated processing losses factored in, the average brine extraction rate is assumed to be on the order of 30,000 $m^3$/d.

**Table 23.2. Summary of Probable and Proven Reserve Statement (April 2013), Sal de Vida Project**

| Reserve Category | Time Period (Years) | Tonnes Li Total Mass | Tonnes Equivalent $Li_2CO_3$ | Tonnes Equivalent KCl | Tonnes K Total Mass |
|---|---|---|---|---|---|
| Proven | 1 - 6 | 34,000 | 181,000 | 633,000 | 322,000 |
| Probable | 7 - 40 | 180,000 | 985,000 | 3,564,000 | 1,869,000 |
| Total | 40 years total | 214,000 | 1,139,000 | 4,197,000 | 2,201,000 |

assumes cutoff grade of 500 mg/L Lithium

MONTGOMERY
& ASSOCIATES

## 23.2 TINCALAYU OROCOBRE BORATE OPERATION

Tincalayu is an uplifted and structurally folded borate deposit, where mineralization is predominantly hosted in sandy units that were deposited in a Miocene salt lake formed approximately 6 million years before present. Borate mineralization is predominantly hosted within the middle member of the Sijes Formation. The principal borate mineral at Tincalayu is Tincal (Borax), with lesser amounts of ulexite and kernite.

Exploration includes 462 diamond holes drilled at the deposit with an average of 75 m at hole spacing of approximately 42 m. **Table 23.3** shows ore resources (Brooker, 2014).

**Table 23.3. Ore Resources at Tincalayu, effective date 12/31/2014**

| | Current production 30 Ktpa | | | Expanded Production 100 Ktpa | | |
|---|---|---|---|---|---|---|
| | Cut-off | Tonnes (Mt) | Soluble B2O3 (%) | Cut-off | Tonnes (Mt) | Soluble B2O3 (%) |
| Global Resource (not limited to a pit shell) - with Marginal Cut-off | | | | | | |
| Indicated | 5.6 | 6.9 | 13.9 | 2.8 | 6.9 | 13.8 |
| Inferred | 5.6 | 9.9 | 10.2 | 2.8 | 13.8 | 8.5 |
| Indicated + Inferred | 5.6 | 16.8 | 11.7 | 2.8 | 20.7 | 10.3 |
| Maximum DCF In-pit Resource - with Marginal Cut-off | | | | | | |
| Indicated | 5.6 | 5.1 | 14.7 | 2.8 | 6.8 | 13.8 |
| Inferred | 5.6 | 1.4 | 11.0 | 2.8 | 11.0 | 9.3 |
| Indicated + Inferred | **5.6** | **6.5** | **13.9** | **2.8** | **17.8** | **11.0** |

Source: (Orocobre Ltd., from Brooker 2014)

## 23.3 MAKTUB-SANTA RITA VENTURE

South of the Sal de Vida property, several mining concessions in the Salar del Hombre Muerto have been producing borates for the Maktub-Minera Santa Rita venture. Santa Rita is a local company from Salta dedicated to borax mining and boric and sulfuric acid production.

## 23.4 FMC LITHIUM FENIX MINE

The western part of the Salar del Hombre Muerto is occupied by large concessions on lithium-potash resources held by FMC Lithium's Fenix Mine. This operation has been producing lithium from brine since from 1997. According to the FMC Lithium website, the lithium brine deposit has a mine life over 75 years.

Lithium production in Argentina significantly increased in 2016, reaching 5,700 metric tonnes, an increase from 3,600 metric tonnes in 2015 (USGS, 2017). The USGS notes that the increase was largely due to a new brine operations and increased production at the Fenix Mine.

## 24. OTHER RELEVANT DATA AND INFORMATION

No other relevant data are known to exist.

## 25. INTERPRETATION AND CONCLUSIONS

The Hombre Muerto North Lithium Project is at an early stage of exploration. It shares the same hydrogeological basin as the existing FMC Lithium Fenix Mine that has been producing lithium carbonate during the past 20 years. It is also adjacent to the Galaxy Resources' Sal de Vida Project, referred by Galaxy Resources as the "*best lithium - potassium undeveloped project in brines through the Argentinean Puna*".

The results of lithium and potassium concentrations from the shallow brine sampling rounds are favorable when compared with FMC Lithium and Galaxy Resources projects concentrations, as well as other on-going projects in the Puna. Except for the Alba Sabrina property samples, the results of magnesium to lithium ratios (Mg/Li) are comparatively low for the region, and thus should be favorable for traditional processing treatment.

Geophysical CSAMT sections covering the Alba Sabrina, Natalia Maria and Tramo properties define two large resistivity anomalies that may represent deep lithium-bearing brine zones.

**The Tramo Anomaly**: This is the largest low resistivity anomaly (0.1 to 10 ohm/m), extending over the Tramo and Natalia Maria properties along a distance of at least 6,000 m in an east-west direction. The vertical extensions, measured over the eastern and the central parts of the anomaly, are between 150 and 250 m in depth and are open at depth.

**The Alba Sabrina Anomaly**: This low resistivity anomaly (0.1 to 19 ohm/m) is 700 to 1,000 m wide and extends along a length of 8,000 m in a northeast-southwest direction along the "Tincalayu Gulf". The northeast part of the anomaly has a length of over 6,000 m, a width of 700 to 1,000 m and thicknesses of 20 to 60 m. Over the southwest border of the

Alba Sabrina property, the anomaly thickens to as much as 280 m and it remains open to the southwest towards the salar.

No geophysical measurements have been completed to date over the southern properties (Gaston Enrique, Viamonte and Norma Edit).

In summary, the surface brine chemistry sampling results for the Project reveal high values of lithium when compared with other projects in the salars of the Puna region, and are consistent with previously-reported results for the Sal de Vida project (Houston and Jaacks, 2010; M&A and GAI, 2012). At depth, the interpreted CSAMT results outline large, deep resistivity target areas that should be drilled and tested for lithium enriched brine. Given these factors, and the acknowledgement of long-term lithium brine production in the salar by FMC Lithium at their Fenix Mine and the brine mineral Resource and Reserve estimates by Galaxy Resources, M&A judges the Project as a property of merit and warrants additional investigations in order to advance to a phase of exploration drilling, testing, and sampling and a level for Preliminary Economic Assessment (PEA).

# 26. RECOMMENDATIONS

NRG plans to conduct an exploration program to support a mineral resource estimate for lithium on its properties in the northern part of the Hombre Muerto salar and rapidly move to a development and production phase. NRG's technical team (consisting of Sergio Lopez, Pedro Ruiz and José Luis Martin) has designed a drilling program to accomplish NRG's objective; planned drill locations are shown on **Figure 26.1**; details are given in **Tables 26.1** and **26.2**. The target depth for each hole is given in **Table 26.1**; depending on the results obtained at each hole, individual holes may be extended to the possible depth shown in the table. The author has reviewed these plans as in agreement with NRG's program and approach.

Diamond drill holes will be drilled at each one of the eight sites shown on **Figure 26.1**. Following coring operations, large-diameter (10- to 16-inch borehole diameter) rotary-drilled production wells (PW) will be installed at the same locations as the diamond drill holes for conducting pumping tests and estimating brine extraction rates for wellfield development. Anticipated depths for the core holes will range from about 30 to 400 meters, with 400 meters as a maximum. The depth of the production wells will be determined based upon the results obtained from the diamond drilling.

A vertical electrical sounding (VES) survey may be conducted at the Alba Sabrina property prior to drilling ASH17_2 in order to confirm if the hole will be drilled.

MONTGOMERY & ASSOCIATES

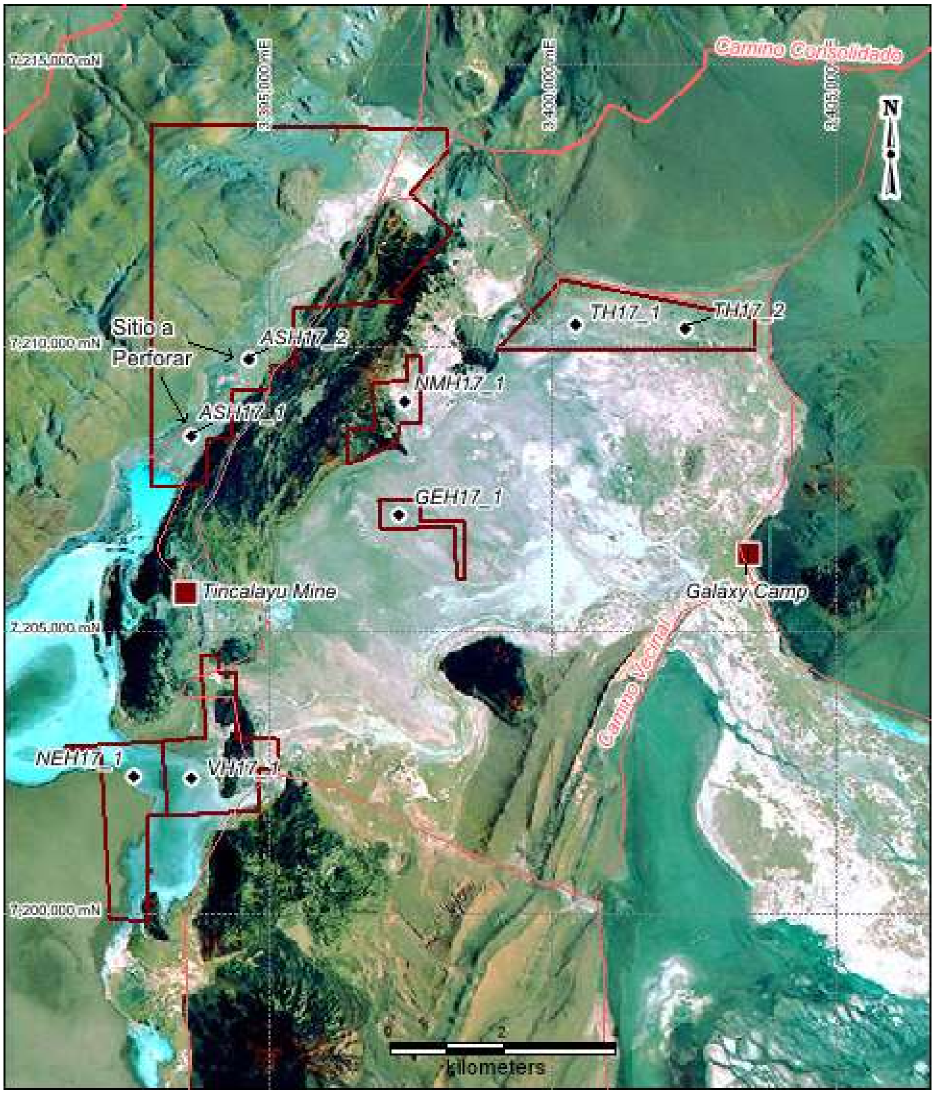



**Figure 26.1. Hombre Muerto North Lithium Project Drill Hole Location Map**

## 26.1 DIAMOND DRILLING

Conventional vertical diamond drill holes will be initiated with HQ3 tools and will be reduced down the hole if needed. Drilling would be done with light equipment that can access the drilling sites without construction of extensive roads or drill pads. Data on lithology, porosity and permeability will be obtained from the core, and samples of the brine solution will be collected using double packers. Together with information available in the public domain, the lithologic units and mineral potential in the areas surrounding the drill holes can be defined. The drilling contractor and equipment to be utilized remain to be determined. After the boreholes are completed, 2-inch diameter PVC casing with 1 mm slot size will be installed in the holes and the holes will be capped.

**Table 26.1. Estimated drilling contractor costs for proposed exploration borehole program**

| Drill Hole Identifier | Easting | Northing | Diameter | Target Depth (m) | Possible Depth (m) | Cost/m (US$)* | Target Cost US$ Without VAT tax |
|---|---|---|---|---|---|---|---|
| TH17_1 | 3,400,377 | 7.210.452 | HQ3 | 250 | 400 | 400 | 100,000 |
| TH17_2 | 3,402,339 | 7,210,380 | HQ3 | 250 | 400 | 400 | 100,000 |
| NMH17_1 | 3,397,373 | 7,209,072 | HQ3 | 50 | 250 | 400 | 20,000 |
| ASH17_1 | 3,393,605 | 7,208,489 | HQ3 | 100 | 200 | 400 | 40,000 |
| ASH17_2 | 3,394,629 | 7,209,829 | HQ3 | 30 | 150 | 400 | 12,000 |
| GEH17_1 | 3,397,264 | 7,207,073 | HQ3 | 400 | 400 | 400 | 160,000 |
| NEH17_1 | 3,392,582 | 7,202,490 | HQ3 | 100 | 300 | 400 | 40,000 |
| VH17_1 | 3,393,605 | 7,202,455 | HQ3 | 100 | 300 | 400 | 40,000 |
| **TOTAL** | | | | **1,280** | **2,400** | | **512,000** |

*Cost includes food, lodging, fuel and transportation for the drilling contractor.

**Table 26.2. Estimated non-contractor costs for proposed exploration borehole program**

| NRG Manpower contracts (including taxes) | Per Month (US$) |
|---|---|
| *Senior Geologist* | 7,500 |
| *Semi senior geologist (2)* | 9,500 |
| *Junior helper (3)* | 8,500 |
| Clothing | 2,200 |
| Truck rental | 5,000 |
| Food and lodging at (AR$650/day/person) | 6,500 |
| Core storage facility | 1,200 |
| Fuel & supply | 1,000 |
| Environmental auditing | 1,000 |
| First aid | 600 |
| Satellite telephone | 500 |
| Chemical toilet | 500 |
| **TOTAL** | **44,000** |

Total estimated cost for drilling to the target depths, with Argentine Value Added Tax (VAT) tax of 21% included, is US$ 620,000. Total estimated cost including taxes for the targeted depths (1,280 m combined) for supervision, vehicles, fuel, camp, etc. for 2 months is US$ 88,000. In addition, the cost of the chemical brine analysis including VAT would be US$ 26,600 for 128 samples (one sample every 10 m). The cost of core analyses for drainable porosity would be US$ 250/sample, or about US$ 16,000 for 64 samples (one sample every 20 m). Total cost for both chemical analyses and core testing would be approximately US $42,600.

The total cost of the diamond program to drill to the planned depths would be approximately US$ 750,600. If the holes are extended to the possible maximum depths (2,400 m total), the total estimated cost would be US$ 1,162,000.

## 26.2 PRODUCTION WELLS

Production wells will be drilled with conventional tricone drilling equipment with a borehole diameter of 10 to 16 inches. The optimum diameter will be decided upon based on discussions with the drilling contractor, who remains to be selected. These wells will be drilled at the same locations as the diamond drill holes. Hole depths will be determined based on the results of the diamond drilling. Roads and drilling pads will need to be constructed at the site of each production well. Pumping tests will be conducted at each well. Depending on results, the wells may eventually be used as production wells as part of a lithium brine extraction wellfield.

The cost of the production wells and road construction will be determined after results from the diamond drilling have been obtained.

MONTGOMERY & ASSOCIATES

# 27. REFERENCES

**References specifically cited in text**

Allmendinger, R.W., Jordan, T.E., Kay, S.M., and Isacks, B.L., 1997. The Evolution of the Altiplano-Puna Plateau of the Central Andes: Annual Review of Earth and Planetary Science, v. 25, pp. 139-174.

Alonzo, R.N., Gutíerrez, R. y Viramonte, J., 1984a. Puna Austral bases para el subprovincialismo geológico de la Puna Argentina. Actas IX Congreso Geológico Argentino, Actas1: 43-63, Bariloche.

_____, 1984b. Megacuerpos salinos cenozoicos en La Puna Argentina. IX Congreso Geológico Argentino, Actas 1: 25-42, BarilocheAlonso, R.N., Jordan, T.E., Tabbutt, K.T. and Vandevoort, D.S. 1991, Giant evaporate belts of the Neogene central Andes. Geology, 19: 401-404.

Alonso, R. N. 1991. Evaporitas Neogenas de los Andes Centrales. En Pueyo, J. J. (coord.) Genesis de formaciones evaporiticas. Modelos andinos e Ibericos. Universidad de Barcelona, Estudios Generales, Publicacion: 267-332.

Brooker, M.R., 2014. Technical Report on the Tincalayu Borax Mine, Salta Province, Argentina. Prepared for Orocobre Limited. December 31, 2014.

Cabrera, A. L., and A. Willink. 1980. Biogeografía de América Latina. O.E.A. Serie de Biología, Monografía 13. Washington, D.C.: General Secretariat of the Organization of American States.

Canadian Institute of Mining, Metallurgy and Petroleum (CIM), 2003. Estimation of Mineral Resources and Mineral Reserves, Best Practice Guidelines: Canadian Institute of Mining, Metallurgy and Petroleum, 23 November 2003.

Canadian Institute of Mining, Metallurgy and Petroleum (CIM), 2010. Definition Standards on Mineral Resources and Mineral Reserves, Resources and Reserves Definitions: Canadian Institute of Mining, Metallurgy and Petroleum, 27 November 2010.

Canadian Institute of Mining, Metallurgy and Petroleum (CIM), 2012. Best Practice Guidelines for Resource and Reserve Estimation for Lithium Brines.

Chernicoff, C.J., Richards, J.P., and Zappettini, E.O., 2002. Crustal lineament control on magmatism and mineralization in northwestern Argentina: geological, geophysical, and remote sensing evidence: Ore Geology Reviews, v. 21, p. 127-155.

Coira, B., Davidson, J., Mpodozis, C., and Ramos, V., 1982. Tectonic and Magmatic Evolution of the Andes of Northern Argentina and Chile: Earth Science Reviews, v. 18, pp. 303-332.

Conhidro S.R.L., 2001. Estudio de Impacto Ambiental. Projecto de Litio Fénix. FMC. Minera del Altiplano S.A. Equipo Interdisciplinario de estudios ambientales. Salta.

Coutand, I., Cobbold, P.R., Urreiztieta, M., Gautier, P., Chauvin, A., Gapais, D., Rossello, E.A. and Lopez, O. 2001. Style and history of Andean deformation, Puna Plateau, NW Argentina. Tectonics, 20: 210-234.

de la Fuente, R., 2008. Informe de Impacto Ambiental. Grupo Minero Meme, Salar del Hombre Muerto, Provincia de Catamarca. Study prepared to Maktub Compañía, S.R.L de Silva, S.L., 1989, Altiplano-Puna volcanic complex of the central Andes: Geology, v.17, pp. 1102-1106.

de Silva, S.L., 1989. Altiplano-Puna volcanic complex of the Central Andes: Geology, v. 17, pp. 1102-1106

de Silva, S.L., Zandt, G., Trumbull, R., Viramonte, J.G., Salas, G., Jiménez, N., 2006. Large ignimbrite eruptions and volcano-tectonic depressions in the Central Andes: a thermomechanical perspective. In: Troise, C., de Natale, G., Kilburn, C.R.J. (Eds.), Mechanisms of Activity and Unrest at Large Calderas. Geol. Soc. (London). Spec. Publ. 269, 47–63. http://dx.doi.org/10.1144/GSL.SP.2006.269.01.04.

Donato, E. and Vergani, G., 1985. Geología del Devónico y Neopaleozoico de la zona del cerro Rincón, Salta, Argentina. IV Congreso Geológico Chileno, 1:1-262/1-283.

Francis, P.W., O'Callaghan, L., Kretzchmar, G.A., Thorpe, R.S., Sparks, R., Page, R., De Barrio, R., Guillou, J., y Gonzales, O. 1983. The Cerro Galan ignimbrite. Nature 301(1): 51-53, London.

Freeze, R.A., and Cherry, J.A., 1979. Groundwater: Englewood Cliffs, NJ, Prentice-Hall, 604 p.

Garzione, C.N., Molnar, P., Libarkin, J.C., and MacFadden, B.J., 2006. Rapid late Miocene rise of the Bolivian Altiplano: Evidence for removal of mantle lithosphere: Earth and Planetary Science Letters, v. 241, pp. 543-556.

GEC, 2017. Project SA.00916, Greenfield CSAMT Exploration Survey, Salar Del Hombre Muerto 2017, Salta / Catamarca Province, Argentina. Prepared for One Borax, SA, 33p

Gonzales, O. 1983. Geología, Alteración hidrotermal y edad del Cerro Tabenquincho, Departamento de Antofagasta de La Sierra, Catamarca. Revista de la Asociación Geológica Argentina, 38: 49-59.

_____, 1984. Las ignimbritas Ojo de Ratones y sus relaciones regionales, Provincia de Salta. 9° Congreso Geológico Argentino, Actas 1: 206-220, Bariloche.

Gregory-Wodzicki, K.M., 2000, Uplift history of the Central and Northern Andes: A review: Geological Society of America Bulletin, v. 112, pp. 1091-1105.

Hartley, A.J., Chong, G., Houston, J. and Mather, A. 2005. 150 million years of climatic stability: evidence from the Atacama Desert, northern Chile. Journal of the Geological Society, London, 162: 421-424.

Hongn, F., and Seggiaro, R.E., 2001. Hoja geológica 2566-III Cachi, provincias de Salta y Catamarca, scale 1:250,000: Servicio Geológico Min. Argentino, Bulletin 248, p. 1–87.

Houston, J., and Jaacks, J., 2010. Technical report on the Sal de Vida lithium project, Salar del Hombre Muerto, Catamarca, Argentina: Report for NI 43-101 prepared on behalf of Lithium One, Inc. 62 p.

Jordan, T.E., Alonso, R.N. 1987. Cenozoic stratigraphy and basin tectonics of the Andes Mountains, 20- 28oS latitude. American Association of Petroleum Geologists Bulletin, 71:49-64.

Kasemann, S.A., Meixner, A., Erzinger, J., Viramonte, J.G., Alonso, R.N., Franz, G., 2004. Boron isotope composition of geothermal fluids and borate minerals from salar deposits (central Andes/NW Argentina). J. S. Am. Earth Sci. 16, 685–697.

Kraemer, B., Adelmann, D., Alten, M., Schnurr, W., Erpenstein, K., Kiefer, E., van den Bogaard, P. and Gorler, K. 1999. Incorporation of the Palaeogene foreland into the Neogene Puna plateau: The Salar de Antofalla area, NW Argentina. Journal of South American Earth Sciences, 12: 157-182.

Lamb, S., Hoke, L., Kennan, L., and Dewey, J., 1997. Cenozoic evolution of the Central Andes in Bolivia and northern Chile *in* Burg, J.P., and Ford, M., eds., Orogeny Through Time: Geological Society, London, Special Publication 121, pp. 237-264.

Lowenstein, T., 2000. 80 ka Paleoclimate Record from Salar del Hombre Muerto, Argentina, www.geol.binghamton.edu/faculty/lowenstein/hm/hombremuerto.html

Lowenstein, T., Hein, M.C., Bobst, A.L., Jordan, T.E., Godfrey, L.V., Ku, T.L. and S. Luo, 2001. A 106Kyr paleoclimate record from the Salar de Atacama, Chile: Evidence for wet Late Glacial climates. in: Betancourt, J., Quade, J. and Seltzer, G. (editors) Paleoclimatology of the Central Andes. PEPI USGS Workshop Abstracts, Tucson, Arizona.

Minera El Altiplano (FMC), 1997. Estudio de Impacto Ambiental, Proyecto El Fénix.

Montgomery & Associates, Inc., and Geochemical Applications International, Inc., 2012. Measured, indicated, and inferred lithium and potassium resource, Sal de Vida project, Salar del Hombre Muerto, Catamarca-Salta: March 7, 2012. Report for NI-43101 prepared on behalf of Lithium One Inc.

Rojas y Asociados, 2017. Hombre Muerto North Project, Salta and Catamarca Provinces, Argentina. Technical report prepared for One Borax S.A., 102 p.

Salfity, J.A., and Marquillas, R.A. 1994. Tectonic and sedimentary evolution of the Cretaceous-Eocene Salta Group basin, Argentina. In Salfity, J.A. (ed) Cretaceous tectonics of the Andes, Earth Evolution Series, Vieweg, Weisbaden.

Salfity, J.A. 2009. evolución geológica de las cuencas cenozoicas posincaicas de la Puna argentina. Internal report prepared for Lithium One.

Scotese, C.R. 2002. Atlas of Earth History. PALEOMAP Project website, http://www.scotese.com.

Sparks, R.J.S., Francis, P.W., Hammer, R., Pankhurst, R., O'Callaghan, L., Thorpe R. and Page, R. 1985. Ignimbrites of Cerro Galan Caldera, NW de Argentina. Journal of Volcanology and Geothermal Research 24: 205-48.

U.S. Geological Survey, 2017. Mineral commodity summaries 2017: U.S. Geological Survey, 202 p., https://doi.org/10.3133/70180197.

Vandervoort, D.S., Jordan, T.E., Zeitler, P.K. and Alonso, R.N. 1995. Chronology of internal drainage development and uplift, southern Puna plateau, Argentine central Andes. Geology, 23: 145-148.

Vargas, J. 2017. Title opinion of mining claims of Hombre Muerto Norte project. Legal document prepared for NRG Metals, Inc.

**General References not specifically cited in text**

Bradley, D., Munk, L.A., Jochens, H., Hynek, S., and Labay, K., 2013. A preliminary deposit model for lithium brines: U.S. Geological Survey Open-File Report 2013–1006, 6 p.

Christian, V., 2008. Informe de monitoreo Arqueológico Bianual, Proyecto Maktub, Salar del Hombre Muerto, Provincia de Catamarca.

Garrett, D., 2004. Handbook of lithium and natural calcium chloride: their deposits, processing, uses and properties.

Houston, J. 2006. Evaporation in the Atacama desert: An empirical study of spatio-temporal variations and their causes. Journal of Hydrology, 330: 402-412.

Houston, J, Butcher, A., Ehren, P., Evans, K., and Godfrey, L., 2011. The evaluation of brine prospects and the requirement for modifications to filing standards. Economic Geology, 106 (7). 1225-1239. 10.2113/econgeo.106.7.1225.

Igarzábal, A. P., 1984. Estudio geológico de los recursos mineros en salares del NOA (Puna Argentina).

Kunasz, I., 2005. Global Lithium Dynamics. In Symposium 2005 Window to the World, Volume II.

Munk, L.A. and Hynek, S.A., Bradley, D., Boutt, D., Labay, K., and Jochens, H., 2016. Lithium brines: A Global Perspective, Reviews in Economic Geology, v. 18, p. 339-365.

Ovejero-Toledo, A., 2007. Estudio geológico de sondeos en la transecta E-O de las evapofacies halíticas en el Salar del Rincón (Salta).

Quantec Ltda., 2010. Results of gravity surveys across the eastern sub-basin of the Salar del Hombre Muerto: prepared for Lithium One.

Vinante, D. y Alonso, R. N.., 2006. Evapofacies del Salar del Hombre Muerto, Puna Argentina: Distribución y Génesis.

## 28. ABBREVIATIONS IN THE TEXT

| Abbreviation | Meaning |
|---|---|
| % | Percentage, per cent |
| ° | Degrees |
| °C | Degrees Celsius |
| APVC | Altiplano-Puna magmatic volcanic arc complex |
| CIM | Canadian Institute of Mining |
| CSAMT | Controlled Source Audiofrequency Magnetotellurics |
| DGFM | Dirección General de Fabricaciones Militares |
| E | East |
| FAusIMM | Fellow of the Australasian Institute of Mining and Metallurgy |
| EIA | Environmental Impact Assessment |
| K/Ar | Potassium/Argon |
| Ka | Thousand years (annum) |
| Kh | Hydraulic conductivity (horizontal) |
| Kv | Hydraulic conductivity (vertical) |
| ICP | Inductively coupled plasma |
| km | Kilometers |
| $km^2$ | Square kilometers |
| Kv | Kilovolts |
| Ma | Million years (annum) |
| m | Meters |
| $m^3/d$ | Cubic meters per day |
| masl | Meters above sea level |
| mg/L | Milligrams per liter |
| Mw | Megawatts |
| N | North |
| NI | National Instrument |
| PEA | Preliminary Economic Assessment |
| QA/QC | Quality Assurance/Quality Control |
| QP | Qualified Person |
| Rb-Sr | Rubidium-Strontium |
| S | South |
| tpa | Tonnes per year (annum) |
| US$ | US dollar |
| W | West |

MONTGOMERY
& ASSOCIATES

# 29. CERTIFICATE OF AUTHOR

**Certificate of Qualified Person: Michael J. Rosko**

As an author and reviewer of the Technical Report, dated October 9, 2017, with an effective date of October 9, 2017, I, Michael J. Rosko, MSc., P.G., do hereby certify that:

- I am a principal hydrogeologist and general manager with Montgomery & Associates, Consultores, Ltda., Avenida Vitacura 2771, Of. 404, Las Condes, Santiago de Chile.
- I graduated with a Bachelor of Science degree in Geology from University of Illinois in 1983.
- I graduated with a Master of Science in Geology (Sedimentary Petrology focus) from University of Arizona in 1986.
- I am a registered professional geologist in the states of Arizona (25065), California (5236), and Texas (6359).
- I am a registered member of Society for Mining, Metallurgy, and Exploration (#4064687), and a member of the National Ground Water Association, Arizona Hydrological Society, and International Association of Hydrogeologists.
- I have practiced hydrogeology for 30 years, with much of this time working in salar basins in Chile and Argentina similar to the Project.
- I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101. This Technical Report is based on my personal review of information provided by Rojas y Asociados and NRG Metals, Inc..
- I have previously visited the Salar de Hombre Muerto basin during the period 2011 to 2013 and recently visited the Property on July 7, 2017.
- As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
- I am directly responsible for Sections 1, 2, 3, 8, 25, 26, 27, 28, and 29 and for non-technical modification of all other sections of the report. In addition, due to the death of Sr. Rojas, I have reviewed those sections previously prepared by Sr. Rojas and take responsibility for them.
- I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101. I am independent of NRG Metals Inc, and independent of any current or past groups associated with the Property.
- I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

Dated the 9th day of October, 2017.

Signature of Qualified Person

Michael J. Rosko
Print name of Qualified Person

# 30. APPENDICES

## APPENDIX A. Legal Opinion by Vargas (2017)

Mendoza, June 28, 2017

**BY E-MAIL ONLY**

NRG Metals Inc.
Att.: Mr. Adrian Hobkirk

**Re: Title opinion of mining claims of Hombre Muerto Norte project.**

Dear Sirs:

We have been asked to provide a title opinion regarding good standing of the mining claims optioned from Mr. Jorge Moreno and Ms. Alba Silvia Sala, listed on Exhibit A, named Hombre Muerto Norte project.

We are attorneys duly licensed to practice law in Argentina. Our opinion contained herein is limited to the laws of Argentina, and we are expressing no opinion as to the effect of the laws of any other jurisdiction.

We have based our analysis of the legal status of the mining claims on the following documents:

- Original Dossier #18.993, mining claim “Tramo” currently under process before the Juzgado de Minas y Comercial de Registro, province of Salta (provincial mining authority).
- Original Dossier #18.830, mining claim “Natalia María” currently under process before the Juzgado de Minas y Comercial de Registro, province of Salta (provincial mining authority).
- Original Dossier #18.824, mining claim “Gastón Enrique” currently under process before the Juzgado de Minas y Comercial de Registro, province of Salta (provincial mining authority).
- Original Dossier #18.829, mining claim “Norma Edit” currently under process before the Juzgado de Minas y Comercial de Registro, province of Salta (provincial mining authority).

- Original Dossier #18.823, mining claim “Alba Sabrina” currently under process before the Juzgado de Minas y Comercial de Registro, province of Salta (provincial mining authority).
- Original Dossier #13.408, mining claim “Viamonte” currently under process before the Juzgado de Minas y Comercial de Registro, province of Salta (provincial mining authority).
- Original Dossier #13.849, Easement of Camp in favor of mining claim “Viamonte” currently under process before the Juzgado de Minas y Comercial de Registro, province of Salta (provincial mining authority).

Background on Tenure

There are two types of tenure under Argentine mining regulations; *Cateos* (Exploration Claims) and *Minas* (Mining Claims). Exploration Claims are licenses which allow the property holder to explore the property for a period of time following grant that is proportional to the size of the property. The basis of the timeframe is that an Exploration Claim for 1 unit (500 hectares) has a period of 150 days. For each additional unit (500 hectares) the period is extended by 50 days. The largest Claim is 20 units (10,000 hectares) and has a period of 1,100 days. The period starts 30 days after the grant of the claim. The canon rent payable is AR$3,200 per 100 hectares starting three years after grant.

Mining Claims are licenses which allow the holder to exploit the property subject to regulatory environmental approval. Only the Exploration Claim holder may apply for a Mining Claim as a consequence of a discovery made within an Exploration Claim area but anyone can apply for a Mining Claim over vacant ground. New mining claims may also be awarded for mines that were abandoned or for which their original mining claims were declared to have expired. In such cases, the first person claiming an interest in the property will have priority. If more than one person claims at the same time for such claim, the provincial mining authority has to grant it by a drawing.

Mining Claims are unlimited in duration so long as the holder meets its obligations under the Mining Code (“MC”) which includes paying the annual canon payments, completing the survey and submitting a mining investment plan (which is equal to 300 times the annual canon payment spent over a period of five years payable within five years of the filing of a capital investment plan). The canon varies according to mineral occurrence.

The type of mineral the holder is seeking to explore and exploit must be specified for both types of tenure. Claims cannot be over-staked by new applications specifying different minerals, but adding mineral species to a claim file is relatively straightforward.

It is worth mentioning that under the *MC* anyone is allowed to explore, even if an exploration right is not granted. The main condition to explore is to have an environmental impact report (“EIR”) approved. Approval of the EIR is not a condition to maintain the claim title in good standing but is a pre-requisite to carrying out activities on the properties. An EIR must be submitted for every type of mining activity (prospecting, exploration, exploitation, development, extraction, etc.) and must be updated every two years. In addition, specific registrations and authorizations must be applied for depending on the activities to be carried out on the claims (for example, water usage and waste disposal).

Surface Access

Pursuant to Argentina legislation, except for a few minerals that belong to the surface owner, most minerals belong to the Provinces which grant exploration and exploitation claims to the applicants.

Due to the likely coexistence of two different rights within the same area, and in order to solve likely problems between the surface owner and the owner of an exploration or exploitation claim, article 13 of the MC states that *“the exploitation of mines, their exploration, concession and other consequent acts, have the nature of public benefit”*. Based on this principle, the Exploration and Mining Claims have primacy over the surface rights provided certain legal requirements are met, basically consisting of due compensation for damages or the posting of a bond when the amount of the compensation is not agreed with the surface owner or when the works to be done are urgent.

The owner of an Exploration Claim has the right to explore and therefore to access the area from the moment that the Exploration Permit has been granted subject to approval of an Environment Impact report. The Exploration Claim guarantees its owner the access and exclusivity of the area that has been granted even to the extent of obligating the police to enforce the miner’s rights[1].

---

[1] Pigretti, Eduardo, “Codigo de Mineria y Legislación de Hidrocarburos”, ed la ley, pag 46). Date??

Similarly, the owner of a Mining Claim has the right to start works and to access the mining property from the moment that the mining concession has been granted.

Regarding surface owners, they have the right to require either from the licensor due compensation for the damages caused by the exploration and mining activities and the occupation of the land or request to the Mining Judge that the licensor post a bond guarantying that likely damages will be compensated. None of these claims or requirements could stop the exploration or exploitation works if the licensor agrees to pay the compensation or damages claimed by the surface owner or, if there is no agreement, if the explorer/miner posts a bond with the mining authorities.

Zone of Overlapping Jurisdiction

The mining claims listed on Exhibit A are partially located within a zone of overlapping jurisdiction between Salta and Catamarca provinces. The northern border of Catamarca province overlaps the southern border of Salta province, and both provinces claim this area as part of their territory. In this area, the mining claims applied for earlier prevail with respect to newer applications, regardless of which province the mining claims are requested in.

In the latest ruling of the Supreme Court of Justice of the Republic of Argentina ("Supreme Court"), in 2015, in the case "Catamarca, Provincia de c/ Salta, Provincia de p/ ordinario", the Supreme Court ruled that this dispute must be resolved by a law of the National Congress, pursuant to Article 75, Section 15 of the National Constitution.

As of the date of this legal opinion, both provincial governments are trying to resolve this issue in order to promote mineral development within the zone. Currently other companies are operating in the area.

In consideration of the aforementioned we can conclude that:

*a)* Mr. Jorge E. Moreno and Ms. Alba Silvia Sala have good and valid, legal and beneficial title to the mining claims listed on Exhibit A.

*b)* The mining claims listed on Exhibit A are in good standing and comply with applicable regulations. Property coordinates (corners) are found on Exhibit A.

*c)* The mining claims listed on Exhibit A are subject to the Moreno Option Agreement between NRG Metals Argentina S.A. and Mr. Moreno and Ms.

Sala dated May 17, 2017 (Exhibit B). Other than the obligations arising out of the Moreno Option Agreement, the mining claims listed on Exhibit A are free and clear from any liens, charges or encumbrances, recorded in the relevant registries.

*d)* The mining “fees” (“*canon”)* of the mining claims listed on Exhibit A are up to date.

*e)* Upon exercise of the purchase option by NRG Metals Argentina S.A. under the Moreno Option Agreement, Mr. Moreno and Ms. Sala have the obligation to transfer the mining claims to NRG Metals Argentina S.A.

Please do not hesitate to contact us should you require any further information.

Regards,

JORGE VARGAS GEI
ABOGADO
MAT. 5448
MAT. FED. Tº 77 Fº 612

Jorge Vargas Gei
Vargas Galíndez Abogados

# Exhibit A

| Name | File # | Application Year | Area (has) | Property Coordinates | |
|---|---|---|---|---|---|
| | | | | Y | X |
| Alba Sabrina | 18.823 | 2007 | 2.089 | 3396745.63 | 7213857.40 |
| | | | | 3398151.06 | 7213830.65 |
| | | | | 3398150.81 | 7213456.32 |
| | | | | 3397478.55 | 7212728.84 |
| | | | | 3398215.08 | 7212048.20 |
| | | | | 3397204.42 | 7210940.69 |
| | | | | 3397334.99 | 7210820.12 |
| | | | | 3395420.09 | 7210685.04 |
| | | | | 3395488.53 | 7209689.37 |
| | | | | 3394990.70 | 7209655.15 |
| | | | | 3395017.65 | 7209256.85 |
| | | | | 3394319.62 | 7209210.33 |
| | | | | 3394372.76 | 7208412.21 |
| | | | | 3393873.83 | 7208379.09 |
| | | | | 3393926.71 | 7207581.42 |
| | | | | 3392926.74 | 7207514.94 |
| | | | | 3392926.74 | 7213929.36 |
| Tramo | 18.993 | 2007 | 383 | 3400153.49 | 7211193.41 |
| | | | | 3403581.75 | 7210496.92 |
| | | | | 3403582.30 | 7209935.26 |
| | | | | 3399000.83 | 7209940.11 |
| Natalia Maria | 18.830 | 2007 | 115 | 3396365.98 | 7208544.74 |
| | | | | 3396865.67 | 7208578.22 |
| | | | | 3396812.76 | 7209376.47 |
| | | | | 3397428.68 | 7209417.55 |
| | | | | 3397401.69 | 7209822.28 |
| | | | | 3397663.94 | 7209839.76 |
| | | | | 3397663.91 | 7208655.67 |
| | | | | 3397303.47 | 7208642.43 |
| | | | | 3397242.42 | 7208295.88 |
| | | | | 3396406.25 | 7207939.52 |
| | | | | 3396392.58 | 7208145.31 |
| Gastón Enrique | 18.824 | 2007 | 55 | 3396950.52 | 7207289.71 |
| | | | | 3397663.94 | 7207298.43 |
| | | | | 3397663.94 | 7206923.60 |
| | | | | 3398454.95 | 7206923.60 |
| | | | | 3398454.95 | 7205885.50 |
| | | | | 3398321.79 | 7205887.17 |
| | | | | 3398304.10 | 7206195.77 |
| | | | | 3398259.97 | 7206866.22 |
| | | | | 3396984.09 | 7206781.87 |
| Viamonte | 13.408 | 1988 | 310 | 3393107.85 | 7203055.41 |
| | | | | 3393207.30 | 7201730.86 |
| | | | | 3394832.45 | 7201826.53 |
| | | | | 3394788.32 | 7202557.72 |
| | | | | 3395170.12 | 7202578.18 |
| | | | | 3395150.66 | 7203102.78 |
| | | | | 3394425.41 | 7203094.14 |
| | | | | 3394411.39 | 7204270.76 |
| | | | | 3394111.53 | 7204251.49 |
| | | | | 3394091.79 | 7204550.80 |

| | | | | | |
|---|---|---|---|---|---|
| | | | | 3393792.46 | 7204531.16 |
| | | | | 3393886.00 | 7203108.57 |
| Norma Edit | 18.829 | 2007 | 285 | 3391416.63 | 7202939.87 |
| | | | | 3393107.85 | 7203055.41 |
| | | | | 3393207.11 | 7201733.38 |
| | | | | 3392874.00 | 7201718.00 |
| | | | | 3392869.78 | 7199877.59 |
| | | | | 3392174.46 | 7199930.59 |
| | | | | 3392004.94 | 7202910.55 |
| | | | | 3391421.20 | 7202872.27 |

**Exhibit B**

Main terms of the Moreno Option Agreement

- The Moreno Option Agreement was entered into on May 17, 2017, between Mr. Jorge Enrique Moreno, Ms. Alba Silvia Sala and NRG Metals Argentina S.A.
- NRG Metals Argentina S.A. has the exclusive right to explore on the mining claims.
- The Moreno Option Agreement has the following payment schedule. In addition, NRG Metals Inc. will issue shares according to the following schedule:

| | Cash payments | Shares issued |
|---|---|---|
| On signing | US$ 50,000 | nil |
| On approval of NI 43-101 by TSX-V | US$100,000 | 1,000,000 |
| 6 months after approval of NI 43-101 | US$250,000 | 1,000,000 |
| 12 months after approval of NI 43-101 | US$250,000 | 1,000,000 |
| 18 months after approval of NI 43-101 | US$1,000,000 | 1,000,000 |
| 30 months after approval of NI 43-101 | US$1,000,000 | 2,000,000 |
| 42 months after approval of NI 43-101 | US$1,000,000 | 2,000,000 |
| 54 months after approval of NI 43-101 | US$2,000,000 | 2,000,000 |
| Total cash payments and shares issued | US$5,650,000 | 10,000,000 |

- On completion of payment schedule by NRG Metals Argentina S.A., Mr. Moreno and Ms. Sala have the obligation to transfer the mining claims to NRG Metals Argentina S.A.
- Mr. Moreno and Ms. Sala retain a 3% royalty on the production of lithium carbonate. Fifty percent (50%) of this royalty can be purchased by NRG Metals Argentina S.A. for the amount of USD3,000,000 for a period of six months after approval of NI 43-101 by TSX Venture Exchange.
- Upon the first issuance of shares, Mr. Moreno will be appointed to the board of directors of NRG Metals Argentina S.A.
- Upon approval of NI 43-101 by TSX Venture Exchange, NRG Metals Argentina S.A. has a priority in the negotiation of all the mining claims that Mr. Moreno and Ms. Sala currently own, or may own in the future, in the province of Jujuy, Argentina.

MONTGOMERY
& ASSOCIATES

## APPENDIX B. Alex Stewart Assayers Reports

### Report NOA 1688333

Alex Stewart
Argentina S.A.
Official ASIC Member

Rodriguez Peña 1140
(M5516BBX) Luzuriaga, Maipú, Mendoza:
T: +54 261 4932253
F: +54 261 4931603
E: atencion.cliente.mza@alexstewart.com.ar
W: www.alexstewart.com.ar

**INFORME DE ANALISIS**

**SECCION GENERAL**

**Nº DE INFORME:** NOA168633

**ANALISIS:** 0002NLMCI28_NOA LMFQ19_NOA LMFQ01_NOA LMFQ16_NOA LMMT03_NOA DFR_NOA 0002NLMCI01_NOA

**CLIENTE:** JORGE MORENO
**DIRECCION:** RUTA 68 KM 173 CERRILLOS SALTA
**SOLICITANTE:** JORGE MORENO
**PROYECTO:** Nueva Sal
**N° DE ENVIO:**

**N° DE COTIZACION:** QE-449-1
**TOTAL DE MUESTRAS:** 12
**PREPARACION DE MUESTRA:**

**FECHA RECEPCION DE MUESTRAS:**
**FECHA RECEPCION DE INSTRUCCIONES:**
**FECHA INGRESO AL LABORATORIO:**
**FECHA EMISION DE INFORME:**

**OBSERVACIONES**

**ABREVIATURAS**

| BLANCOS | ESTANDARES | TIPO DE MUESTRA | | OTRAS | |
|---|---|---|---|---|---|
| BL: Blanco de limpieza de cuarzo | STD: Standard | Pun: puntual | Tri: Triplicado | BIS: Nuevo informe | ID: Identificación |
| BK M: Blanco de muestra | VN: Valor nominal | Dup: Duplicado | Rep: Repetición | LCS: Límite de cuantificacion superior | COD: Código |
| BK R: Blanco de reactivo | SD: Desviacion standard | Dup C: Duplicado de cuarteo | Com: Compuesta | LC: Límite de cuantificación | LD: Límite de Detección |

**NOTAS**

Muestreo
- Alex Stewart Argentina no se hace responsable por cualquier aspecto vinculado a las muestras antes de su entrega al laboratorio, en caso de que Alex Stewart no sea el extractor de las mismas.
- Los resultados de los análisis de las muestras extraídas por el cliente, pertenecen solo a las muestras en el estado de las mismas al momento de su ingreso a Alex Stewart Argentina y a partir de la fecha de recepción de las instrucciones.

Almacenaje
- Los rechazos de muestras sólidas recibidas en ASA Argentina serán almacenadas sin costo durante 3 meses. Para muestras líquidas de salmueras al cabo de 45 días de reportadas las muestras se devolverán al cliente a costo de este.
- Para muestras sólidas, a partir de esa fecha se cobrará el almacenaje (precios de P-40), salvo que se reciban instrucciones contrarias.
- El cliente puede retirar las muestras de nuestras instalaciones o solicitar su eliminación según procedimientos ambientales aceptados a costo al cliente, siendo él responsable absoluto de la disposición final de las muestras devueltas.
- Alex Stewart Argentina no se responsabiliza por alteraciones o daños que naturalmente puedan ocurrirle a las muestras. Las muestras devueltas al clientes carecen de la adición de cualquier substancia o material que atente al medio ambiente

Informe
- Alex Stewart Argentina no se hace cargo por el uso que se de a los resultados obtenidos de nuestros servicios.
- El Cliente puede publicar los informes solo en forma completa y aclarando quien es el emisor de los mismos. Para su reproducción parcial deberá solicitar autorizacion a Alex Stewart Argentina.
- Alex Stewart Argentina podrá usar para fines estadisticos los resultados de los informes de análisis.
- Escapa a la responsabilidad de Alex Stewart Argentina la evaluación que pueda surgir sobre la aplicación de los resultados emitidos en nuestros Informes de Ensayos.
- Los informes preliminares previamente emitidos bajo este mismo número de informe quedan reemplazados por el presente informe analítico final.
- Se procede a informar solamente los resultados que estén enmarcados dentro del rango de validación o entre el LD y el LCS y a los destinatarios que él explícitamente autorice.
- Para Au4-30 el Limite de Cuantificación es: LC = 0.06 mg/kg
- Los valores informados por debajo del LC tienen estadisticamente un grado de confiabilidad menor.
- Para lecturas de Cr, Cu, Fe, Mn, Mo y Ni por ICP: Los limites de detección declarados son solo instrumentales, no involucran el tratamiento de la muestra.

QA / QC
- Aspectos concernientes a las validaciones metodológicas, sesgo, precisión e incertidumbres asociadas, pueden ser solicitados por el cliente a Alex Stewart Argentina.
- Los Limites de cuantificación informados corresponden a los obtenidos en los procesos de validación del método, pueden variar según la matriz y concentración de la muestra.
- Las Curvas de Calibración empleadas en las metodologias de análisis tienen coeficientes $R^2$ superiores a 0.99.

Your Global Network of Inspection & Analytical Laboratory Services

CDN Resource Labs. Ltd.

SECCION GENERAL (1 de 3) - Página 1 de 2 N° Orden: NOA168633 (3)

MONTGOMERY & ASSOCIATES

SECCION RESULTADOS

| Nº MUESTRA (Interna) | Nº MUESTRA (Cliente) | Tipo de Muestra | Area Interna | DETERMINACION / UNIDAD / COD. DE ANALISIS / TECNICA / LD | Li mg/L LMMT03 ICP 0.05 | Ca mg/L LMMT03 ICP 0.025 | Mg mg/L LMMT03 ICP 0.05 | B mg/L LMMT03 ICP 0.05 | Na mg/L LMMT03 ICP 0.1 | K mg/L LMMT03 ICP 0.25 | Ba mg/L LMMT03 ICP 0.01 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 345652 | NS001 | Salmuera (líq.) | Ambiental | | 864 | 1042 | 2515 | 311 | 98485 | 5866 | <0,2 |
| 345653 | NS002 | Salmuera (líq.) | Ambiental | | 1064 | 2594 | 4385 | 216 | 92559 | 6727 | <0,2 |
| 345654 | NS003 | Salmuera (líq.) | Ambiental | | 322 | 1084 | 1537 | 212 | 71389 | 2451 | <0,2 |
| 345655 | NS004 | Salmuera (líq.) | Ambiental | | 958 | 986 | 2038 | 589 | 106339 | 7314 | <0,2 |
| 345656 | NS005 | Salmuera (líq.) | Ambiental | | 1021 | 676 | 1549 | 646 | 116588 | 7758 | <0,2 |
| 345657 | NS006 | Salmuera (líq.) | Ambiental | | 568 | 778 | 1112 | 503 | 124940 | 4912 | <0,2 |
| 345658 | NS007 | Salmuera (líq.) | Ambiental | | 543 | 534 | 3432 | 381 | 106382 | 3758 | <0,2 |
| 345659 | NS008 | Salmuera (líq.) | Ambiental | | 347 | 569 | 3087 | 248 | 88023 | 2559 | <0,2 |
| 345660 | NS009 | Salmuera (líq.) | Ambiental | | 415 | 912 | 861 | 432 | 128409 | 3391 | <0,2 |
| 345661 | NS010 | Salmuera (líq.) | Ambiental | | 1013 | 897 | 1155 | 438 | 113437 | 8593 | <0,2 |
| 345662 | NS011 | Salmuera (líq.) | Ambiental | | 80 | 466 | 883 | 200 | 131626 | 2325 | <0,2 |
| 345663 | NS012 | Salmuera (líq.) | Ambiental | SOC | < 1 | 44 | 25 | 1 | 20751 | 10 | <0,2 |

SECCION RESULTADOS

| Nº MUESTRA (Interna) | Nº MUESTRA (Cliente) | Tipo de Muestra | Area Interna | DETERMINACION / UNIDAD / COD. DE ANALISIS / TECNICA / LD | Sr mg/L LMMT03 ICP 0.005 | Cu mg/L LMMT03 ICP 0.01 | Mn mg/L LMMT03 ICP 0.05 | Cl- mg/L LMCI01 Argentometria 250 | CO3= mg/L LMFQ16 Volumetría 10 | pH UpH LMCI28 Potenciómetria | Densidad g/mL LMFQ19 Picnometria |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 345652 | NS001 | Salmuera (líq.) | Ambiental | | 27 | 0.33 | 3.2 | 159545 | N.D. | 6.73 | 1.180 |
| 345653 | NS002 | Salmuera (líq.) | Ambiental | | 40 | 0.28 | 1.7 | 169427 | N.D. | 6.33 | 1.183 |
| 345654 | NS003 | Salmuera (líq.) | Ambiental | | 26 | 0.32 | 6.5 | 114574 | N.D. | 7.16 | 1.134 |
| 345655 | NS004 | Salmuera (líq.) | Ambiental | | 26 | 0.28 | <1,0 | 173723 | N.D. | 7.55 | 1.196 |
| 345656 | NS005 | Salmuera (líq.) | Ambiental | | 15 | 0.27 | <1,0 | 190194 | N.D. | 7.51 | 1.211 |
| 345657 | NS006 | Salmuera (líq.) | Ambiental | | 18 | 0.31 | <1,0 | 195636 | N.D. | 7.36 | 1.216 |
| 345658 | NS007 | Salmuera (líq.) | Ambiental | | 21 | 0.34 | <1,0 | 164128 | N.D. | 7.35 | 1.194 |
| 345659 | NS008 | Salmuera (líq.) | Ambiental | | 22 | 0.33 | <1,0 | 136057 | N.D. | 7.40 | 1.163 |
| 345660 | NS009 | Salmuera (líq.) | Ambiental | | 26 | 0.32 | <1,0 | 192199 | N.D. | 7.75 | 1.216 |
| 345661 | NS010 | Salmuera (líq.) | Ambiental | | 29 | 0.27 | 3.8 | 180311 | N.D. | 7.79 | 1.201 |
| 345662 | NS011 | Salmuera (líq.) | Ambiental | | 13 | <0,2 | <1,0 | 190050 | N.D. | 7.63 | 1.219 |
| 345663 | NS012 | Salmuera (líq.) | Ambiental | SOC | 5 | <0,2 | <1,0 | 34802 | N.D. | 7.56 | 1.042 |

MONTGOMERY
& ASSOCIATES

# SECCION RESULTADOS

| Nº MUESTRA (Interna) | Nº MUESTRA (Cliente) | Tipo de Muestra | Area Interna | DETERMINACION / UNIDAD / COD. DE ANALISIS / TECNICA / LD | Conductividad mS/cm LMFQ01 Potenciómetria |
|---|---|---|---|---|---|
| 345652 | NS001 | Salmuera (líq.) | Ambiental | | 229 |
| 345653 | NS002 | Salmuera (líq.) | Ambiental | | 237 |
| 345654 | NS003 | Salmuera (líq.) | Ambiental | | 188 |
| 345655 | NS004 | Salmuera (líq.) | Ambiental | | 227 |
| 345656 | NS005 | Salmuera (líq.) | Ambiental | | 240 |
| 345657 | NS006 | Salmuera (líq.) | Ambiental | | 242 |
| 345658 | NS007 | Salmuera (líq.) | Ambiental | | 225 |
| 345659 | NS008 | Salmuera (líq.) | Ambiental | | 208 |
| 345660 | NS009 | Salmuera (líq.) | Ambiental | | 230 |
| 345661 | NS010 | Salmuera (líq.) | Ambiental | | 193 |
| 345662 | NS011 | Salmuera (líq.) | Ambiental | | 228 |
| 345663 | NS012 | Salmuera (líq.) | Ambiental | | 72 |

# SECCION QA-QC

| Prefijo (M&A) | Identificación | DETERMINACION / UNIDAD / COD. DE ANALISIS / TECNICA / LD | Sr mg/L LMMT03 ICP 0.005 | Cu mg/L LMMT03 ICP 0.01 | Mn mg/L LMMT03 ICP 0.05 | Cl- mg/L LMCI01 Argentometria 250 | CO3= mg/L LMFQ16 Volumetria 10 | pH UpH LMCI28 Potenciómetria | Densidad g/mL LMFQ19 Picnometria |
|---|---|---|---|---|---|---|---|---|---|
| | | RESULTADO | | | | | | | |
| DUP-NS010 | NS010 | | 28 | 0.27 | 3.8 | 180890 | N.D. | 7.7 | 1.2012 |

MONTGOMERY & ASSOCIATES

SECCION QA - QC

| Prefijo (HUA) | Identificación | DETERMINACION | Li | Ca | Mg | B | Na | K | Ba |
|---|---|---|---|---|---|---|---|---|---|
| | | UNIDAD | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| | | COD. DE ANALISIS | LMMT03 | LMMT03 | LMMT03 | LMMT03 | LMMT03 | LMMT03 | LMMT03 |
| | | TECNICA | ICP | ICP | ICP | ICP | ICP | ICP | ICP |
| | | LD | 0.05 | 0.025 | 0.05 | 0.05 | 0.1 | 0.25 | 0.01 |
| | | RESULTADO | | | | | | | |
| DUP-NS010 | NS010 | | 1010 | 891 | 1099 | 420 | 113700 | 8710 | <0,2 |

SECCION QA - QC

| DETERMINACION | Conductividad |
|---|---|
| UNIDAD | mS/cm |
| COD. DE ANALISIS | LMFQ01 |
| TECNICA | Potenciometria |
| LD | - |

| Prefijo (aux) | Identificación | |
|---|---|---|
| DUP-NS010 | NS010 | 194 |

MONTGOMERY & ASSOCIATES

## Report NOA 179224

**Alex Stewart Argentina S.A.**
Official ASIC Member

# INFORME DE ANALISIS

**SECCION GENERAL**

**Nº DE INFORME:** NOA179224

**ANALISIS:** LMFQ19_NOA LMFQ01_NOA LMCI13_NOA LMMT03_NOA LMFQ20_NOA LMFQ38_NOA 0002NLMCI01_NOA LMCI22_NOA DFR-17_NOA

| | | | | | |
|---|---|---|---|---|---|
| **CLIENTE:** | Ona Borax S.A. | **Nº DE COTIZACION:** | QE-607-1 | **FECHA RECEPCION DE MUESTRAS:** | 06/02/2017 |
| **DIRECCION:** | Ruta Nacional 68, Km 173. Cerrillos (CP-4403) Salta | **TOTAL DE MUESTRAS:** | 12 | **FECHA RECEPCION DE INSTRUCCIONES:** | 09/02/2017 |
| **SOLICITANTE:** | Jorge Moreno | **PREPARACION DE MUESTRA:** | | **FECHA INGRESO AL LABORATORIO:** | 09/02/2017 |
| **PROYECTO:** | sa | | | **FECHA EMISION DE INFORME:** | 24/02/2017 |
| **Nº DE ENVIO:** | salar del hombre muerto | | | | |

**OBSERVACIONES**

**ABREVIATURAS**

| BLANCOS | ESTANDARES | TIPO DE MUESTRA | | OTRAS | |
|---|---|---|---|---|---|
| BL: Blanco de limpieza de cuarzo | STD: Standard | Pul: pulpas | Trl: Triplicado | N.D.: No Detecta | ID: Identificación |
| BK M: Blanco de muestra | VN: Valor nominal | Dup: Duplicado | Rep: Repetición | LCS: Límite de cuantificación superior | COD: Código |
| BK R: Blanco de reactivo | SD: Desviación standard | Dup C: Duplicado de cuarteo | Com: Compuesta | LC: Límite de cuantificación | LD: Límite de Detección |

**NOTAS**

Muestreo
- Alex Stewart Argentina no se hace responsable por cualquier aspecto vinculado a las muestras antes de su entrega al laboratorio, en caso de que Alex Stewart no sea el extractor de las mismas.
- Los resultados de los análisis de las muestras extraídas por el cliente, pertenecen solo a las muestras en el estado de las mismas al momento de su ingreso a Alex Stewart Argentina y a partir de la fecha de recepción de las instrucciones.

Almacenaje
- Los rechazos de muestras sólidas recibidas en ASA Argentina serán almacenadas sin costo durante 3 meses. Para muestras líquidas de salmueras al cabo de 45 días de reportadas las muestras se devolverán al cliente a costo de este.
- Para muestras sólidas, a partir de esa fecha se cobrará el almacenaje (precios de P-40), salvo que se reciban instrucciones contrarias.
- El cliente puede retirar las muestras de nuestras instalaciones o solicitar su eliminación según procedimientos ambientales aceptados a costo al cliente, siendo él responsable absoluto de la disposición final de las muestras devueltas.
- Alex Stewart Argentina no se responsabiliza por alteraciones o daños que naturalmente puedan ocurrir a las muestras. Las muestras devueltas al clientes carecen de la adición de cualquier substancia o material que atente al medio ambiente.

Informe
- Alex Stewart Argentina no se hace cargo por el uso que se de a los resultados obtenidos de nuestros servicios.
- El Cliente puede publicar los informes solo en forma completa y aclarando quien es el emisor de los mismos. Para su reproducción parcial deberá solicitar autorizacion a Alex Stewart Argentina
- Alex Stewart Argentina podrá usar para fines estadísticos los resultados de los informes de análisis.
- Escapa a la responsabilidad de Alex Stewart Argentina la evaluación que pueda surgir sobre la aplicación de los resultados emitidos en nuestros Informes de Ensayos.
- Los informes preliminares previamente emitidos bajo este mismo número de informe quedan reemplazados por el presente informe analítico final.
- Se procede a informar solamente los resultados que estén enmarcados dentro del rango de validación o entre el LD y el LCS y a los destinatarios que él explícitamente autorice.
- Para Au4-30 el Límite de Cuantificación es: LC = 0.06 mg/kg
- Los valores informados por debajo del LC tienen estadísticamente un grado de confiabilidad menor.
- Para lecturas de Cr, Cu, Fe, Mn, Mo y Ni por ICP: Los límites de detección declarados son solo instrumentales, no involucran el tratamiento de la muestra.

QA / QC
- Aspectos concernientes a las validaciones metodológicas, sesgo, precisión e incertidumbres asociadas, pueden ser solicitados por el cliente a Alex Stewart Argentina.
- Los Límites de cuantificación informados corresponden a los obtenidos en los procesos de validación del método, pueden variar según la matriz y concentración de la muestra.
- Las Curvas de Calibración empleadas en las metodologías de análisis tienen coeficientes $R^2$ superiores a 0.99.

Ing. María de las Mercedes Otazo
Directora Técnica
Alex Stewart NOA

CDW Resource Labs. Ltd. mmta

SECCION GENERAL (1 de 3) - Página 1 de 6 Nº Orden: NOA179224

MONTGOMERY & ASSOCIATES

SECCION RESULTADOS

| Nº MUESTRA (Interna) | Nº MUESTRA (Cliente) | Tipo de Muestra | Area Interna | DETERMINACION | Li | Ca | Mg | B | Na | K | Ba |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | UNIDAD | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| | | | | COD. DE ANALISIS | LMMT03 | LMMT03 | LMMT03 | LMMT03 | LMMT03 | LMMT03 | LMMT03 |
| | | | | TECNICA | ICP | ICP | ICP | ICP | ICP | ICP | ICP |
| | | | | LD | 0,05 | 0,025 | 0,05 | 0,05 | 0,1 | 0,25 | 0,01 |
| 367201 | NS15 | Salmuera | Ambiental | RESULTADOS | 48 | 407 | 490 | 14 | 10846 | 427 | <0,2 |
| 367202 | NS16 | Salmuera | Ambiental | | 537 | 544 | 3952 | 69 | 89573 | 4644 | <0,2 |
| 367203 | NS17 | Salmuera | Ambiental | | 298 | 1636 | 2008 | 97 | 83817 | 1486 | <0,2 |
| 367204 | NS18 | Salmuera | Ambiental | | 824 | 1091 | 2666 | 67 | 89280 | 7057 | <0,2 |
| 367205 | NS19 | Salmuera | Ambiental | | 544 | 1008 | 1856 | 67 | 77486 | 4276 | <0,2 |
| 367206 | NS20 | Salmuera | Ambiental | | 582 | 652 | 1932 | 76 | 76214 | 4803 | <0,2 |
| 367207 | NS21 | Salmuera | Ambiental | | 575 | 661 | 1841 | 75 | 74328 | 4481 | <0,2 |
| 367208 | NS22 | Salmuera | Ambiental | | 440 | 882 | 2098 | 55 | 56538 | 3142 | <0,2 |
| 367209 | NS23 | Salmuera | Ambiental | | 956 | 686 | 1441 | 129 | 106491 | 9288 | <0,2 |
| 367210 | NS24 | Salmuera | Ambiental | | 223 | 604 | 1794 | 50 | 44507 | 2106 | <0,2 |
| 367211 | NS25 | Salmuera | Ambiental | | 162 | 411 | 1317 | 38 | 32423 | 1400 | <0,2 |
| 367212 | NS26 | Salmuera | Ambiental | | < 1 | 47 | 14 | <1 | 4416 | 6 | <0,2 |

SECCION RESULTADOS

| Nº MUESTRA (Interna) | Nº MUESTRA (Cliente) | Tipo de Muestra | Area Interna | DETERMINACION | Sr | Fe | Mn | Cl- | SO4= | Densidad | Conductividad |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | UNIDAD | mg/L | mg/L | mg/L | mg/L | mg/L | g/mL | mS/cm |
| | | | | COD. DE ANALISIS | LMMT03 | LMMT03 | LMMT03 | LMCI01 | LMCI22 | LMFQ19 | LMFQ01 |
| | | | | TECNICA | ICP | ICP | ICP | Argentometria | Gravimetria | Picnometria | Potenciometria |
| | | | | LD | 0,005 | 0,01 | 0,05 | 250 | 10 | | |
| 367201 | NS15 | Salmuera | Ambiental | RESULTADOS | 13 | <0,2 | <1 | 17284 | 2046 | 1,033 | 40 |
| 367202 | NS16 | Salmuera | Ambiental | | 29 | <0,2 | <1 | 148701 | 14385 | 1,187 | 187 |
| 367203 | NS17 | Salmuera | Ambiental | | 76 | 1,2 | <1 | 135029 | 3992 | 1,165 | 184 |
| 367204 | NS18 | Salmuera | Ambiental | | 39 | 1,6 | <1 | 152084 | 7939 | 1,185 | 193 |
| 367205 | NS19 | Salmuera | Ambiental | | 43 | 2,7 | <1 | 123753 | 8944 | 1,157 | 176 |
| 367206 | NS20 | Salmuera | Ambiental | | 34 | 1,6 | <1 | 121357 | 9034 | 1,150 | 173 |
| 367207 | NS21 | Salmuera | Ambiental | | 35 | 1,1 | <1 | 117129 | 9108 | 1,151 | 174 |
| 367208 | NS22 | Salmuera | Ambiental | | 38 | 0,8 | <1 | 91899 | 5717 | 1,119 | 150 |
| 367209 | NS23 | Salmuera | Ambiental | | 23 | <0,2 | <1 | 171676 | 10532 | 1,206 | 184 |
| 367210 | NS24 | Salmuera | Ambiental | | 35 | <0,2 | <1 | 72377 | 7141 | 1,101 | 123 |
| 367211 | NS25 | Salmuera | Ambiental | | 20 | 3,4 | <1 | 53913 | 5239 | 1,078 | 97 |
| 367212 | NS26 | Salmuera | Ambiental | | 0,5 | <0,2 | <1 | 6909 | 46 | 1,014 | 16 |

MONTGOMERY & ASSOCIATES

## SECCION RESULTADOS

| | | | | DETERMINACION | NO3- |
|---|---|---|---|---|---|
| | | | | UNIDAD | mg/L |
| | | | | COD. DE ANALISIS | LMCI13 |
| | | | | TECNICA | UV-VIS |
| | | | | LD | 0,02 |
| Nº MUESTRA (Interna) | Nº MUESTRA (Cliente) | Tipo de Muestra | Area Interna | RESULTADOS | |
| 367201 | NS15 | Salmuera | Ambiental | | 1 |
| 367202 | NS16 | Salmuera | Ambiental | | 2 |
| 367203 | NS17 | Salmuera | Ambiental | | 3 |
| 367204 | NS18 | Salmuera | Ambiental | | 2 |
| 367205 | NS19 | Salmuera | Ambiental | | 3 |
| 367206 | NS20 | Salmuera | Ambiental | | 9 |
| 367207 | NS21 | Salmuera | Ambiental | | 9 |
| 367208 | NS22 | Salmuera | Ambiental | | 7 |
| 367209 | NS23 | Salmuera | Ambiental | | 2 |
| 367210 | NS24 | Salmuera | Ambiental | | 2 |
| 367211 | NS25 | Salmuera | Ambiental | | 3 |
| 367212 | NS26 | Salmuera | Ambiental | | 1 |

## SECCION QA - QC

| | | DETERMINACION | Fe | Mn | Cl- | SO4= | Densidad | Conductividad | NO3- |
|---|---|---|---|---|---|---|---|---|---|
| | | UNIDAD | mg/L | mg/L | mg/L | mg/L | g/mL | mS/cm | mg/L |
| | | COD. DE ANALISIS | LMMT03 | LMMT03 | LMCI01 | LMCI22 | LMFQ19 | LMFQ01 | LMCI13 |
| | | TECNICA | ICP | ICP | Argentometria | Gravimetria | Picnometria | Potenciometria | UV-VIS |
| | | LD | 0,01 | 0,05 | 250 | 10 | | | 0,02 |
| Prefijo (ASA) | Identificación | | RESULTADO | | | | | | |
| DUP | NS24 | | <0,2 | <1 | 72589 | 7174 | 1,100 | 124 | 2 |

## SECCION QA - QC

| | | DETERMINACION | Li | Ca | Mg | B | Na | K | Ba | Sr |
|---|---|---|---|---|---|---|---|---|---|---|
| | | UNIDAD | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| | | COD. DE ANALISIS | LMMT03 | LMMT03 | LMMT03 | LMMT03 | LMMT03 | LMMT03 | LMMT03 | LMMT03 |
| | | TECNICA | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP |
| | | LD | 0,05 | 0,025 | 0,05 | 0,05 | 0,1 | 0,25 | 0,01 | 0,005 |
| Prefijo (ASA) | Identificación | | RESULTADO | | | | | | | |
| DUP | NS24 | | 221 | 597 | 1805 | 48 | 44525 | 2096 | <0,2 | 36 |