



American Lithium and Cobalt
CORPORATION

PROJECT
Hombre Muerto
Salt Brine Mining Property

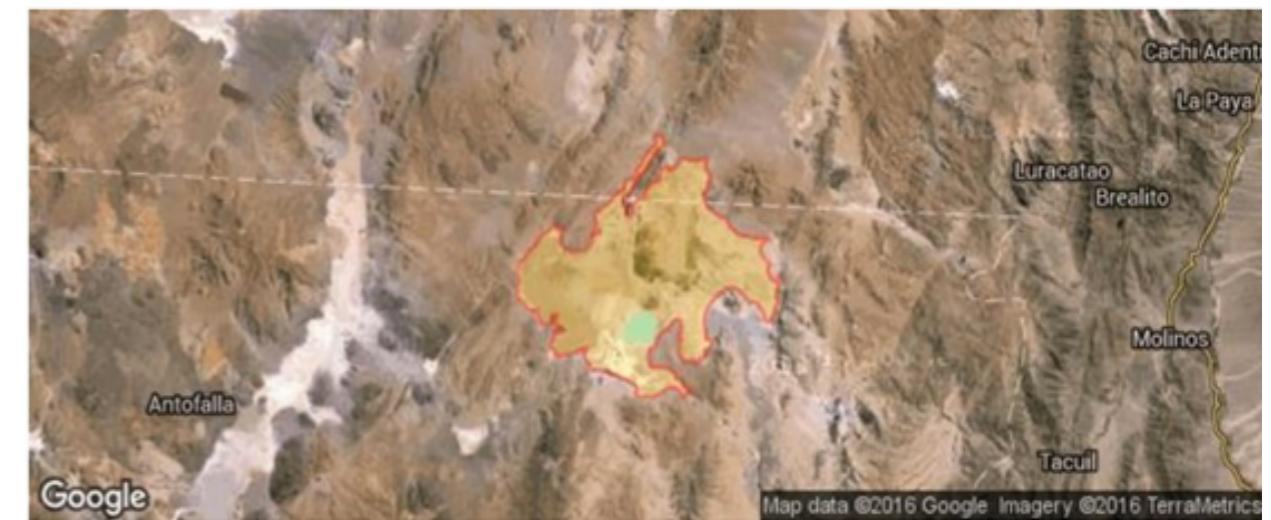
1.1 Location

The salar lies approximately 1400 kilometers northwest of Buenos Aires in the Argentinean Altiplano (Puna) at an altitude of 4,000 meters. The property is accessible from the city of Salta via an all-season road, and there is a major power line and recently installed natural gas terminal 115 kilometers away at Pocitos. The Salar del Hombre Muerto, has an area of 590 km², and is a typical depression of height at 4,000 masl, which makes up a saline deposit saturated with sodium chloride, carrying lithium, potassium, sulfate, borate-borax (Ulexite), and other minor components.

1.2 Geology

Geology The oldest rocks that outcrop in the area are conformed by schist and migmatites interbedded with metamorphic limestone and amphibolites. This metamorphic sequence, Neoproterozoic in age, is known as the Pachamama Formation. Occurrences of these rocks are located along the East flank of the Hombre Muerto salt brine mining property. Metasedimentary rocks assigned to the Lower Paleozoic outcrop in the northwestern border of the salar, are assigned to the Tolillar Formation. This formation is mainly constituted by volcaniclastic sandstone with subordinate sandstone beds. These rocks occur around the northern border of the salar. Overlaying this clastic sequence, the sedimentary sequence of the Falda Cienega Formation is assigned to the Ordovician. The latter is composed of greywacke, tuff and volcaniclastic sandstone. 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 outcrops in the northern limits of the salar. The Geste Formation is overlain by conglomerates, sandstone, and red clays with gypsum assigned to the Vizcachera Formation. Conglomerate with sandstone, and interbedded with ignimbrite flows and volcaniclastic rocks overlie the Vizcachera Formation. This Catal Formation occurs in the central portion of the salar, forming the Farallon Catal hills. Two age dates, one at the bottom and the other at the top of the Catal Formation give 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 (Rio Tinto) 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 outcrop in the southern border of the salar, along the Peninsula de Hombre Muerto. The age of these rocks are reported as 14±5 and 11±1 Ma (Gonzales, 1983). The Ratones Andesite, which occurs in the northeast border of the basin, and constitute the volcano with the same name. It has been dated at 7.1±0.2 Ma (Gonzales, 1984).



The dacitic ignimbrites assigned to the Volcanic Complex Cerro Galan, 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 reported 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 flow with an age of 0.754 ± 0.2 Ma (Alonso et al. 1984b). The basement outcrop known as Farallon Catal (approximately 72 km²), located at the central portion of the salar, divides the basin in two, locally named as Subcuenca Occidental (Western sub-basin) and the Subcuenca Oriental (Eastern sub-basin). The sub-basins differ in their sedimentology: the Subcuenca Oriental is largely clastic with precipitated borates and limited halite, while the Subcuenca Occidental is dominated by halite with little clastic material. Geophysics and drilling and trenching results carried out during the evaluation of the El Fenix Lithium plant (FMC), confirm the asymmetric distribution of the mineral that occurs in the salar surface. Drill results from the Subcuenca Occidental indicate that halite occurs throughout to depths of 30 to 50 m, with one well penetrating 90 m of halite. Geophysical (gravity) studies suggest that the core of the salt body could have a depth of up to 900 m in the Subcuenca Occidental.

1.3 Hombre Muerto Reserves

Hombre Muerto Reserves In the Salar del Hombre Muerto, about 800,000 tons of lithium are covered, and other salts, whose concentrations (% by weight) average brines, in comparison with other natural brines, most of them used in commercial operations in different parts of the world, either as a source of potassium salts (Dead Sea, Great Salt Lake in Utah and Salar de Atacama) or lithium salts (Clayton Valley in Nevada, Salar de Atacama and Maricunga salt brine mining property in Chile), record in the following chart:

Table 9: Comparison between Hombre Muerto and others Salares
Source: Salar del Hombre Muerto, Background review Li-K-B, 2016

	Mar Muerto	Great Salt Lake	Clayton Valley	Salar de Atacama	Hombre Muerto	Salar de Maricunga	Salar de Uyuni
Na	3,210	8,000	6,200	7,600	9,789	6,931	8,800
K	0,600	0,650	0,530	1,950	0,630	0,800	0,970
Li	0,002	0,004	0,023	0,150	0,070	0,088	0,044
Mg	3,330	1,000	0,033	0,960	0,085	0,738	0,650
Ca	1,180	0,016	0,020	0,031	0,053	1,082	0,046
SO ₄	0,070	2,000	0,710	1,650	0,853	0,056	0,850
Cl	17,320	14,000	10,060	16,040	15,800	16,230	15,700
B	0,003	0,006	0,008	0,064	0,035	0,054	0,020
Densidad	1,212	1,218	n.d.	1,223	1,205	1,211	n.d.

The profile of the Salar del Hombre Muerto and characteristics of it is summarized as follows

Illustration 15: Profile Hombre Muerto salt brine mining property
Source: Salar del Hombre Muerto, Background review Li-K-B, 2016

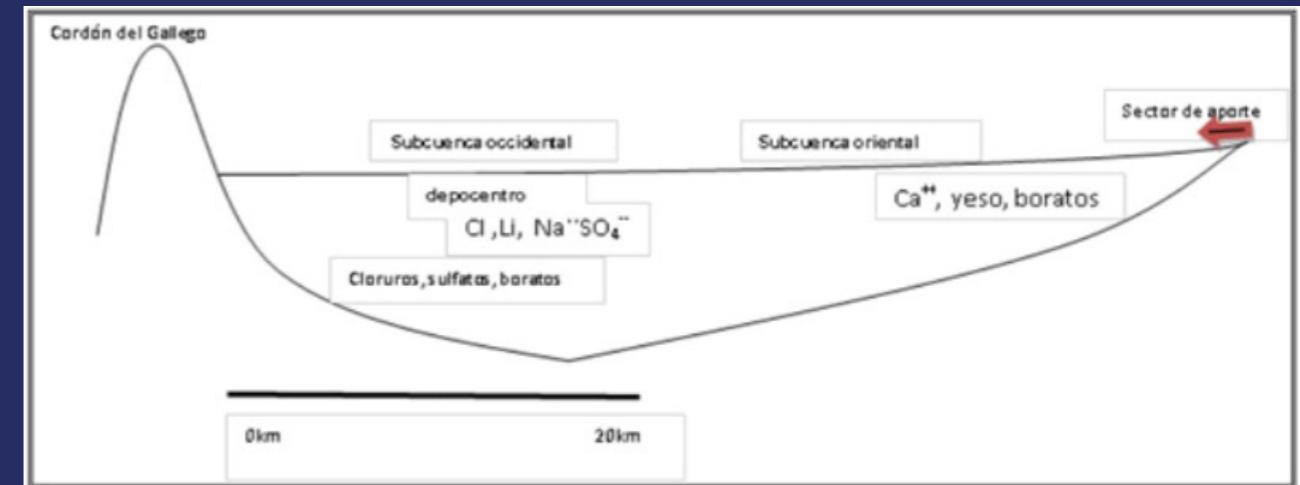


Table 10: Hombre Muerto salt brine mining property Summary
Source: Salar del Hombre Muerto, Background review Li-K-B, 2016

Basin	<u>Salar</u>	<u>Elevation</u>	Lithium	Potassium	<u>Rate</u>	<u>Reserves</u>
Km2	Km2	m.a.s.l.	ppm	%	Lts/m2/day	Ton Li
3.250	590	4.000	700	0,63	7,60	800.000