American Lithium and Cobalt
CORPORATION

PROYECT

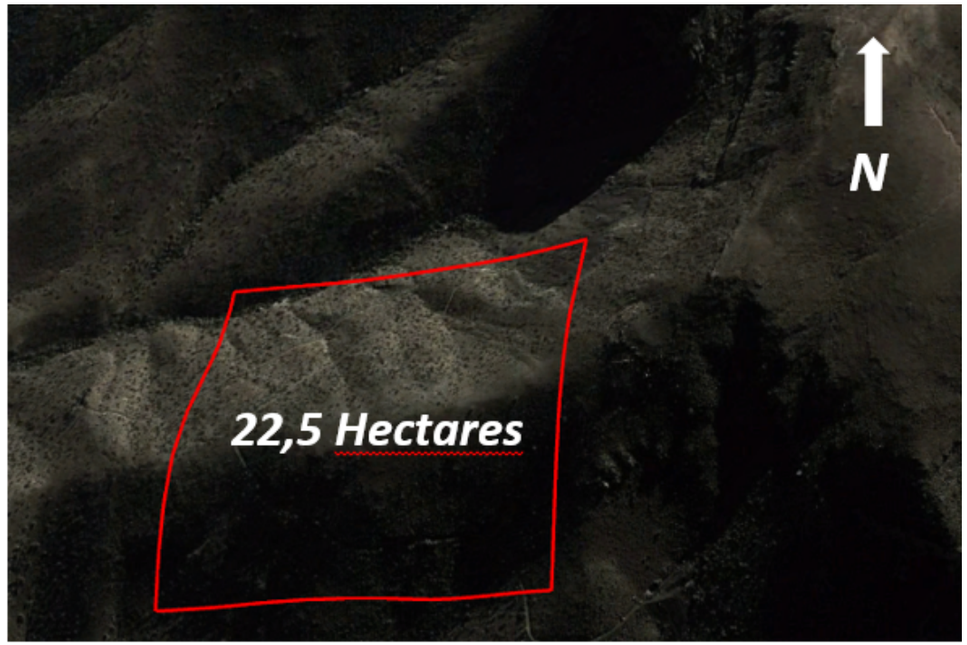
Las Haciendas II Zona Uno
Salt Brine Mining Property

1.1 Location

The mining property is located in the Coquimbo Region, province of Elqui, commune of Vicuña, Sector Quebrada Guairabo, at the point with coordinates UTM (Datum PSAD-56) N 6.660.270 m, E 313.700 m and altitude 893 m.a.s.l. Mining property "Las Haciendas II zona uno", is defined according to the following coordinates:

Coord. UTM North (m)	Coord. UTM East (m)
6.660.500	313.500
6.660.500	314.000
6.660.050	314.000
6.660.050	313.500

Illustration 2:Satelital image of the property "Las Haciendas II Zona Uno".



2.Access to the Property

Access from the city of La Serena the route 41 Vicuña, covering about 24 kms approximately and entering to the South East by the Quebrada El Arrayan, along gravel road in good condition about 26 kms to Corral Quemado sector where it operated the company manganese Atacama, which connects it with the Quebrada Guairabo close to the perimeter where the membership is positioned.

3.Climate and Physiography

La región está comprendida en la denominada Zona de las Estepas Cálidas, de clima seco con baja humedad atmosférica, escasos días nublados, luminosidad prácticamente constante y variaciones de temperatura diaria y entre estaciones. Observaciones de la estación Campex: “Frutícula Elqui” ubicada en las cercanías de Vicuña consignan los siguientes datos estadísticos:
The region is in the so-called zone of the warm steppes, dry climate with low humidity, few cloudy days, nearly constant luminosity and daily temperature variations and between seasons. Campex station observations: "Frutícula Elqui" located in the vicinity of vicuña recorded the following statistics:

Temperature average annual 15.3 ° C, the coldest months are June and July with average of 11 ° and absolute minimum value of-2 °, the warmest January with 20.3 ° and maximum absolute value of 39.0 ° in 2013. The stations average relative humidity is as follows: summer 67%; autumn 72%; winter 68%, and spring, 72%; the annual average is 70%. The average annual rainfall of vicuña is 141 mm. The rains occur in the months of May to August, period in which rainfall about 90% of the total water of the year.

In the surroundings of the mine there are no channels, no rivers, no agricultural plantations. The nearest communities are: Village of La Villa and La Calera, belonging to the commune of vicuña; It is located 20 kms online straight Northwest of property. More relevant and leading is Quebrada Guairabo 300 metres of the property and the secondary streams: broken El Sapo 500 metres to the Southeast and Quebrada Santo Tomas 900 meters to the North, respectively of the property.

Reading No	Time	Type	Units	Co	Co Error
1996	29-09-2012 16:14	Precious Metals	%	1,182	0,161
1997	29-09-2012 16:22	Precious Metals	%	1,532	0,135
1998	29-09-2012 16:24	Precious Metals	%	1,567	0,129
1999	29-09-2012 16:29	Precious Metals	%	1,135	0,085
2002	29-09-2012 16:36	Precious Metals	%	1,044	0,073
2003	29-09-2012 16:40	Precious Metals	%	2,884	0,128
2006	29-09-2012 16:49	Precious Metals	%	2,768	0,132

Table 2: Ore grade analyzed by ENAMI on the property.

6.Economic Analysis

For the economic evaluation of the property Las Haciendas II Zona Uno were considered two hydrometallurgical cobalt extraction processes; one for the production from sulfides and other minerals for oxides. This due to the fact that still does not have clear the type of ore present in the property. Both processes are quite similar, with the exception that for sulfide ores is added a process of grinding and roasting throughout the production cycle.

For this evaluation is not considered the possibility of a pyrometallurgic process, since the extraction rate will be of 4,999 tons per month, cataloging it as small-scale mining, and a pyrometallurgic process is not easily scalable for this level of production. In addition to major difficulties in implementing a plant pyrometallurgic in terms of the environmental permits.

On the other hand, for this evaluation were used the following values base for both hydrometallurgical processes:

Ore content Co [%]	1,73
Mine Recovery [%]	60
Plant Recovery [%]	60
Price Co [US$/lb]	36,96
NPV [%]	10
Tax [%]	27,5

Tabla 3: Initial Data for economic evaluation

6.1 Cost of Investment or Capex

The production process for ores of cobalt is generally quite similar to the production process of copper, so values found by benchmarking of different projects and associated costs were used to calculate the cost of investment or Capex to the extraction of copper. Acquisition of machinery, infrastructure and exploration costs were considered for this Capex.
In regard to machinery it infrastructure used values are as follows:

Machinery and infraestructura oxides			
Equipment	**Quantity**	**Value [US$]**	**Total [US$]**
Drilling Machine*	1	549.000	549.000
Shovel*	2	300.000	600.000
Truck 30 Ton*	2	485.900	971.800
Services Truck*	1	242.000	242.000
Services Pickup*	3	50.000	150.000
Primary Crusher*	1	300.000	300.000
Secundary Crusher*	1	180.000	180.000
Plant LIX-SX-EW[2]	1	2.500	2.595.000
Total Equipment			5.587.800
Infraestructure (0.4 Total Equipment)			2.235.120
Total Investment			7.822.920

Table 4: Machinery and infrastructure cost for oxides

Machinery and infraestructura sulfur			
Equipment	**Quantity**	**Value [US$]**	**Total [US$]**
Drilling Machine*	1	549.000	549.000
Shovel*	2	300.000	600.000
Truck 30 Ton*	2	485.900	971.800
Services Truck*	1	242.000	242.000
Services Pickup*	3	50.000	150.000
Primary Crusher*	1	300.000	300.000
Secundary Crusher*	1	180.000	180.000
Roasting Equipment**	1	70.000	70.000
Mill Ball*	1	250.000	250.000
Plant LIX-SX-EW[3]	1	2.500	2.595.000
Total Equipment			5.907.800
Infraestructure (0.4 Total Equipment)			2.363.120
Total Investment			8.270.920

Table 5: Machinery and infrastructure cost for sulphides.

Probing x Meter Cost [US$]	120
Exploration Capex [US$]	5000000
Meter to Probe	41667
Probing Depth [m]	400
N° Probing	104

Table 6: Costos para exploración y sondajes.

Finally it is important to mention that you due to the amount of information available and the uncertainty generated by the level of engineering can be done with this information; a 1,625 factor was applied to the total value of the Capex:

N° Item	Item	Sulfur Cost [US$]	Oxide Cost [US$]
1	Machinery and infraestructure	8.270.920	7.822.920
2	Exploration	5.000.000	5.000.000
3	Total Item 1 y 2	13.270.920	12.822.920
4	Correction factor	21.565.245	20.837.245
5	Property	10.000.000	10.000.000
6	Total Project Capex	31.565.245	30.837.245

Table 7: Capex Project for sulphides and oxides

6.2 Operational Costs or Opex

As for the calculation of the Capex, operational costs were based on the benchmarking performed for the production of copper cathodes. These costs as well as income, depreciation, tax and annual profit values are summarized in the following tables:

Sulphides			
N° Item	Item	Value US$/Ton	Reviews
1	Income	507,50	1,73%Co x 2204,6 lb/Ton x 0,6 RecM x 0,6 RecP x 36,96 US$/lb
2	Mine Cost	(6,00)	2 US$/Ton with a rate E:M 2:1
3	Crusher and Grinding Cost	(7,00)	
4	Roasting Cost	(6,00)	
5	LX Plant Cost	(7,00)	
6	SX-EW Cost	(5,49)	
7	HHRR Cost	(11,30)	
8	Indirect Cost	(6,42)	507,50 US$/Ton x 0,15
9	Royalty	(7,61)	507,50 US$/Ton x 0,015
10	Incidentals	(5,68)	507,50 US$/Ton x 0,10
11	Amortization	(21,89)	(22.871.495 US$/ 10 years) with a rate of 7% per year
12	Income Before Taxes	423,11	
13	Taxes	(116,34)	27,5% Tax
14	Income After Txes	306,77	
15	Tons Per Month	5000 Ton	
16	Crushed Tons Per Year	60000 Ton	
17	Annual Profit From Operations	18.403.681 US$	

Table 8: Operational costs of the Project for sulphides.

Oxides			
N° Item	Item	Value US$/Ton	Reviews
1	Income	507,50	1,73%Co x 2204,6 lb/Ton x 0,6 RecM x 0,6 RecP x 36,96 US$/lb
2	Mine Cost	(6,00)	2 US$/Ton with rate E:M 2:1
3	Crushing Cost	(3,00)	
4	LX Plant Cost	(7,00)	
5	SX-EW Cost	(5,49)	
6	HHRR Cost	(11,30)	
7	Indirect Cost	(4,92)	507,50 US$/Ton x 0,15
8	Royalty	(7,61)	507,50 US$/Ton x 0,015
9	Incidentals	(4,53)	507,50 US$/Ton x 0,10
10	Amortization	(21,78)	(22.871.495 US$/ 10 years) with a rate of 7% per year
11	Income Before Taxes	435,87	
12	Taxes	(119,85)	27,5% Tax
13	Income After Taxes	316,02	
14	Tons Per Month	5000 Ton	
15	Crushed Tons Per Year	60000 Ton	
16	Annual Profit From Operations	18.958.848 US$	

Table 9: Operational costs of the project for oxides.

6.3 Project NPV

For the calculation of the NPV, operational costs and capex already mentioned above were used. On the other hand, was considered a production of 4,999 tons per month, i.e. 59.988 tonnes of ore a year and all this through 10 years of production. Note that the number of years of production is defined in function of the amount of the deposit's reserves, so the duration of the project could easily be more than 10 years.

Item	Sulfur	Oxide
Annual Profit [US$]	18.403.681	18.958.848
Project PVN [US$]	81.410.411	85.656.671
IRR [%]	43	46
IPVN	2,58	2,78

Table 10: Economic indexes of sulphides and oxides project

6.4 Sensitivity Analysis

A sensitivity analysis was performed by modifying key variables as grade of cobalt, recovery mine and plant, rate discount and price of cobalt. All this is to observe the variation of the NPV project and IRR in different scenarios possible, both favorable and unfavorable.

Sulfur			
Variable	**Variation**	**NPV [US$]**	**IRR [%]**
Grade Co [%]	-20%	54.797.176	30
	Base Case - 1,73	**81.410.411**	**43**
	+20%	107.720.450	56
Mine and Plan Recovery [%]	-10%	41.214.085	23
	Base Case - 60	**81.410.411**	**43**
	+10%	128.912.385	66
Discount Rate [%]	12%	72.321.264	41
	Base Case -10	**81.410.411**	**43**
	8%	91.808.113	46
Price Co [US$/lb]	-20%	54.736.461	30
	Base Case - 36,96	**81.410.411**	**43**
	+20%	108.084.360	56

Table 11: Sensitivity analysis for sulphide

Oxide			
Variable	**Variation**	**NPV [US$]**	**IRR [%]**
Grade Co [%]	-20%	60.751.946	35
	Base Case - 1,73	**81.410.411**	**43**
	+20%	110.564.336	57
Mine and Plant Recovery [%]	-10%	45.459.844	26
	Base Case - 60	**81.410.411**	**43**
	+10%	133.158.270	69
Discount Rate [%]	12%	76.284.477	44
	Base Case - 10	**81.410.411**	**43**
	8%	96.378.171	49
Price Co [US$/lb]	-20%	58.946.022	33
	Base Case - 36,96	**81.410.411**	**43**
	+20%	112.330.621	59

Table 12: Sensitivity analysis for oxides

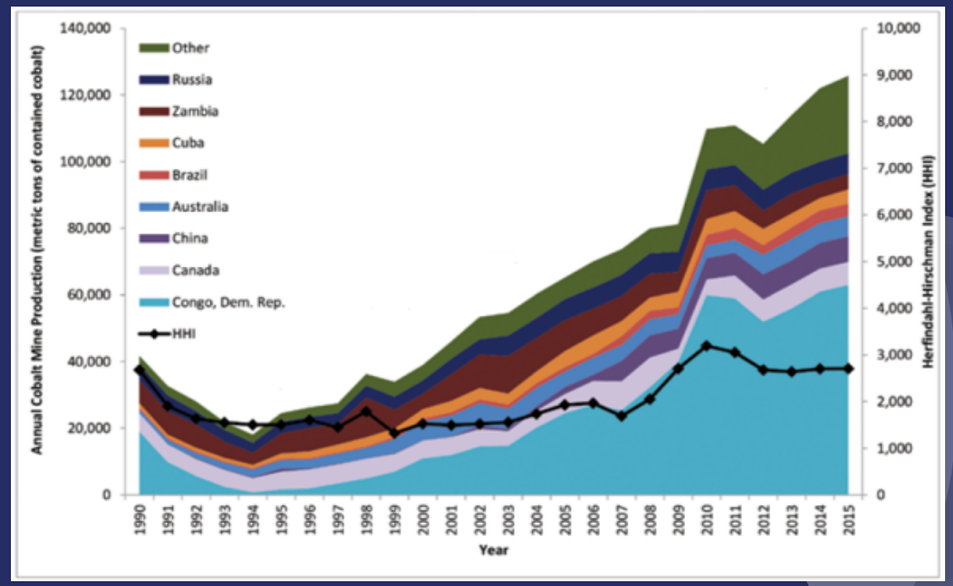
As seen in the previous tables, most notable is the difference that makes the modification of recovery rates mine and plant. Among all the variables view above, this is the only one that can be controlled during the operation of the mine; because in an eventual extraction should be especially careful optimize these recoveries.

7. Cobalt Market

7.1 Production

Históricamente, la producción de cobalto ha estado concentrada principalmente en la República Democrática del Congo (DRC) con un 50% de la producción mundial para el año 2015. Otros países como China, Rusia y Cuba combinados representan un 14% de la producción mundial, mientras que otros países productores no logran una participación mayor a un 6% de la producción de forma individual.

Historically, cobalt production has been concentrated mainly in the Democratic Republic of the Congo (DRC) for 50% of world production by the year 2015. Other countries such as China, Russia and Cuba combined represent 14% of world production, while other producing countries fail to one greater share to 6% of the production of individually.



Source: Minning Engineering Magazine.

World cobalt production has increased from an estimated 39 kt in 2000 to 126 kt in 2015 . This large increase in the production of cobalt is explained due to new applications in batteries that has been granted to this metal, as well as the growing market for electric cars that use lithium batteries for operation.
On the other hand, Glencore is the mining company of greater production of cobalt in the world; which is part mainly made with two copper-cobalt mines in DRC, Mutanda Mining and Katanga Mining, which finally represent a 26 percent share in the cobalt market with a production of 28.3 kt for the year 2016.

Tabla 3: Initial Data for economic evaluation

	Company	Cobalt (tonnes)	Market Share
1	Glencore	28,300	26%
2	China Moly	16,000	15%
3	Sherritt International (JVs)	7,000	8%
4	Vale	5,800	5%
5	Norilsk Nickel	5,500	5%
6	Sumitomo Metal Mining	5,000	5%
7	Jinchuan	4,600	4%
8	Zhejiang Huayou	4,500	4%
9	Groupe de Terill Lubumbashi	3,500	3%
10	ERG	3,500	3%
	Top 10	**80,400**	**73%**
	Global Production	**110,000**	

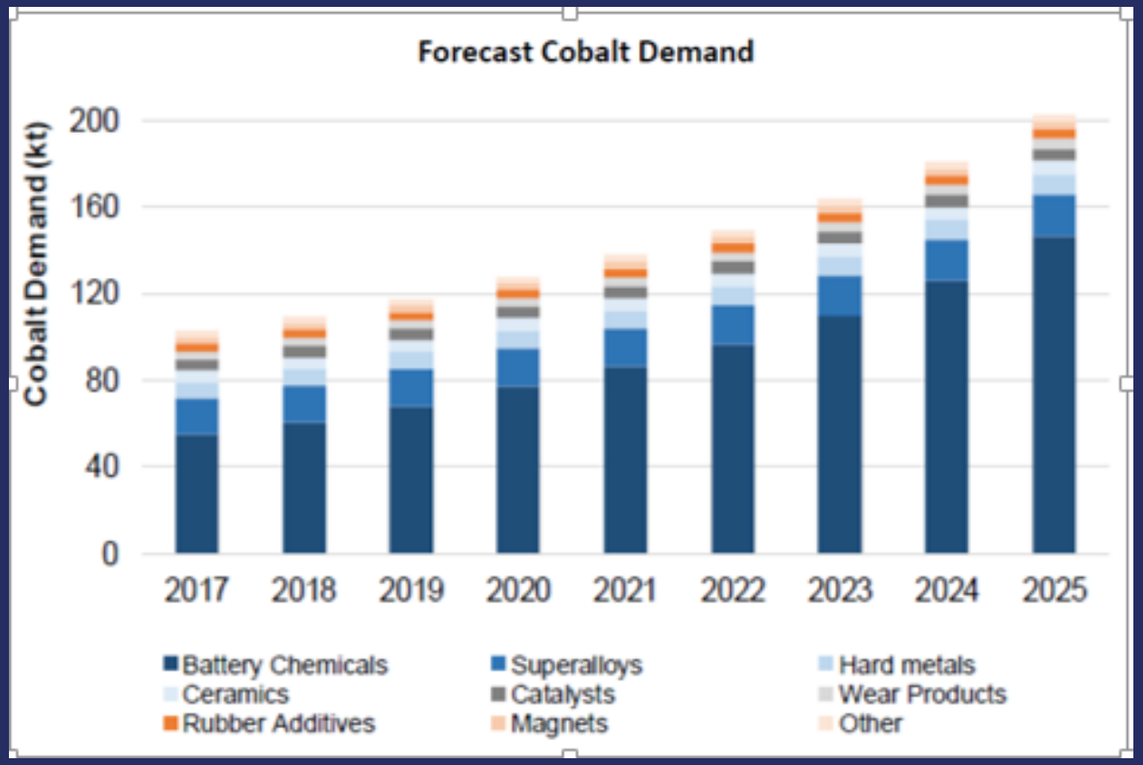
Source: First Cobalt, January 2018.

7.2 Demand

The demand for cobalt can be divided into two main segments, the chemist and metalworker. Cobalt in chemical applications demand focuses primarily on rechargeable batteries, which may be appointed ion batteries lithium for electric cars and batteries for laptops, PCs, smartphones, etc. On the other hand, is the metallurgical application of cobalt, using it for the creation of alloys; which include the Super alloys for use in defense, power generation and aerospace technology; steels and carbon and diamond tools.

Source: Global Energy Metals Corp.

Comparing the demand for the years 2006 and 2016, it becomes evident that the trend in this market is in the use of cobalt for lithium-ion batteries; which is consistent with the growth of the market of electric cars; both in quantity and in technology. The year 2020 is expected to total demand for cobalt to exceed the 120 kt per year, which represents approximately 30% of growth of cobalt consumed during the year 2016 (93.950 tons) . Moreover, projections estimate that by the year 2025, the demand for cobalt exceeds the 200 kt per year, being the main precursor of this the use of electric cars .



Illustración 7: Projection of global demand for cobalt.

7.3 Business Opportunity

As mentioned previously, the cobalt has had a rebound at the level of prices since the entry of lithium ion batteries and electric cars. What has transformed this commodity into a great business opportunity. Currently the price of cobalt is equivalent to approximately US$ 90,000 ton or US$40 the pound, which is a high price if compared for example with the US$ 3,2 pound of copper. These not only pricing allows to make a large profit, but it does represent a lower risk than the extraction of other commodities and therefore a safe investment. In fact, from the year 2015 cobalt price has been on the rise, passed down from the US$ 30,000 in 2015 toUS$ 90,000 ton currently and projections indicate that this price could keep rising.

According to the USGS report highlights of the year 2017 on cobalt, the ability of the market to meet the demand of cobalt has increased at one lower rate that this commodity consumption, it is projected that there is a deficit in the coming years. This is driven mainly by the strong growth of the rechargeable batteries and aerospace industries. In addition, it is worth mentioning that China is a country that consumes more cobalt, with about 80% of its consumption being used for the rechargeable battery industry. Finally, considering the above and noting the cobalt market, cobalt extraction appears as a great business opportunity not only profitable, but that safe in terms of risks and with great odds, not to sat absolute, growth of the industry.