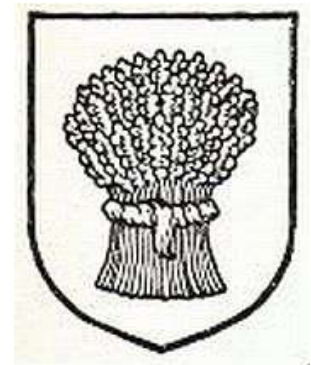


Tuesday, August 29, 2023



# HALLGARTEN + COMPANY

## Mine Visits

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## Salta: The Booming Altiplano

### Visit to Various Lithium Salares & Abra Silver

# Salta

## The Hotspot on the Altiplano

- + Chile's political woes (and general indecisiveness) have refocused attention on alternative venues for Lithium mine development
- + The provincial administration in Salta is vigorously pro-mining
- + A plethora of heavyweight names have positioned themselves in the province
- + Most mining players in the province are cooperative and supportive of each other, particularly as regards access issues and cooperation on clinic and airstrip usage
- ✗ The Lithium projects are in the high Andes, strung along the border with Chile, and this presents great challenges in providing access and infrastructure
- ✗ Copper mining has been slow to get going with First Quantum having a rather "dog in the manger" grip on Taca Taca
- ✗ We expect that labour/"talent" shortages may become an issue
- ✗ There is still an aspect of "Argentine discount" to any mining undertaking, which adds an extra layer of uncertainty, particularly when the projects are largely in the capex category with many exceeding US\$500mn

### On Top of the World – A Mine Trip

In mid-July, we undertook a visit to the Andean *altiplano* in the northern Argentine province of Salta. Despite having spent all the 1990s in Argentina, we had never been as far north as Salta. The northernmost mining activity in those days was the Bajo de la Alumbrera mine in Catamarca, which had been a key turning point in the history of Argentine mining activities. Now mining activity has spread far and wide in the country and Salta finds itself the epicentre of the boom in Lithium mining as well as the pursuit of more traditional metals.

The most recent mine trip was orchestrated by Abra Silver and involved an extensive journey to their mine, in the process passing through a series of the "name" *salares* that were long left to the flamingos and llamas and are now crisscrossed by fleets of trucks bearing capital goods and taking out Lithium concentrates.

In this note, we shall offer our observations on what we witnessed there.

### Salta

For most of the period since Independence, the colonial-era city of Salta was a relative backwater. As Argentina's beef and grain businesses boomed it was left becalmed as a zone of small-scale agriculture and largely artisanal mining efforts (excepting those of the CNEA in uranium extraction between the

1950s and the 1980s).

The longest established ongoing mining effort was the low-profile borates business (to be discussed anon) and in recent decades the similarly low-profile and largely unexciting Lithium *salar* activities of FMC Corp (now Livent).

Then oil production began, Salta's wine attractions came to attention and tourism started up in earnest. The city of Salta has taken on the look of a minor league boom town with a surging population and building flourishing. Now the Lithium surge is icing upon this cake with a massive influx of external investment, a rising tide of workers/contractors associated with the industry and a reformation of the demographics that comes with this reorientation to the long deserted altiplano above 3,000 metres above sea level.

### **Ministerial Dream Team?**

The Federal Secretary of Energy, Flavia Royon, was formerly the mining of mines and energy in Salta, thus clearly connected with what is going on in her former patch.

The impressive current mining secretary at the Federal level is Fernanda Avila, who was formerly the secretary of mining in Catamarca province. In her international appearances (a contrast to previous stay-at-home secretaries) have left a trail of goodwill and good vibes at mining events around the world, most recently in Riyadh where Argentina had the largest presence of ANY country. We met both when they conducted a mining roundtable at the Argentine embassy in London early in 2022.

### **On Argentina & Mining**

Despite the fact that the country's president is Alberto Fernandez, he is widely regarded as a creature of his vice president, Cristina Kirchner. The Kirchner grouping has largely ruled the country for twenty years, except for a short 4-year interregnum by a centre-right administration mid-last decade. The Kirchnerite political style is not everyone's cup of tea. However, even the detractors of Cristina Kirchner find it impossible to claim that she, or her various governments, have been anti-mining. Coming as she does from the strong mining province of Santa Cruz, in Patagonia, her approach has been very softly, softly.

The main bugbears of the mining industry have been the issues of the *reintegros de IVA* (rebates of VAT) and the on-going idiocy of the parallel exchange rates, and exemptions thereto, that create an enormously distortive effect on the flow of funds into capex and the flow of dividends and profits out of the country. The peso is all over the place at the moment due to the fallout from the upset Presidential primaries held in mid-August. The current official dollar rate is around \$365 to the USD (double the level of reigning at the time we wrote our San Juan trip note), while the unofficial rate (the Dollar Blue) is around twice that at \$738 to the USD. This requires CFOs and financial controllers of foreign miners to perfect their skills as contortionists to effect transfers at the most attractive rates.

Generally though, this situation has not been enough to discourage exploration or development. It is worth noting (and the miners are *sotto voce* on this) that the “cheapness” of Argentina at the unofficial rate is a big attraction. Normal petrol/gasoline is at US\$1 per litre and salaries are basically low at the official rate for domestically employed staff. Rents are low and hotels cheap, as are many basic camp supplies (food, cleaning products etc). Methinks, they complaineth too much.....

### **Imminent Political Change?**

On the broader front, one might note the Fernandez/Kirchner Administration faces deep dissatisfaction from the public at this point due to the eternally troubled economy, falling living standards and romping inflation. There are primaries due in the middle of this year and then presidential elections in October of 2023. It is felt that the opposition stands a strong chance but, as yet, does not have a candidate. It is also not clear whether Fernandez will be trotted out by the Kirchnerites (or go it alone), but it looks highly unlikely that he will be on the Kirchnerite ticket again.

It should be remembered that aside from some minor positive initiatives from the centre-right regime of Mauricio Macri last decade, that Administration is best recalled for having all the effect of a damp firecracker. Hence its brief duration and its unfond memory in the minds of the general public and the business community.

### **Lithium Feeding Frenzy**

Our presence at the Lithium Forum in Buenos Aires in late July of 2022 showed that global doomsters in the equity markets have left the lights in the marquee of the Battery Metals Boom undimmed. The event bordered on a feeding frenzy and the local politics raised nary an eyebrow for participants, which is more than one can say about Chile or Mexico these days.

### **A Mining Centre?**

Some would argue that San Antonio de los Cobres is the capital of the Altiplano (at least the Salteña part) but we remain unconvinced. While it is located on the storied Tren de la Nubes rail connection (which is not fully functional due to track damage) between Salta and Antofagasta in Chile, it is far from being the geographical centre of where the Lithium action is going on (or more conventional mining, for that matter).

In its NI43-101, Abra Silver notes that the Salta government has expressed an interest in building a “Mining Logistic Centre” in the town of Olacapato. This project seeks to improve the local mining infrastructure. The scope has been noted to include an airport, industrial area, transportation, processing, service facilities, commercial premises, accommodation, parking facilities and a health center.

The town(let) of Santa Rosa scarcely passes muster as a mining logistics centre but might also be upgradable.

Abra Silver notes that while the Diablillos project does not rely on this infrastructure there would be considerable benefits if it progresses. It would also be a good sign of the commitment to mining projects by regional authorities.

In the absence of such a centre, companies developing Lithium projects are cobbling together their own mine camps, with quite a few having airstrips for access. This involves quite a degree of duplication, but these camps springing up have *ad hoc* cooperative arrangements amongst themselves on sharing, in the short term, their facilities. For example, Abra Silver has had access to some landing strips of neighbours and upon our return to Salta we took a worker from POSCO's project back to the city with us.

## **Labour**

As they do, the Chinese tried early on to pull a fast one on the Argentines by implementing FiFo with a massive overweighting towards Chinese *gastarbeiters*, shipped in by the plane load. This is not Zambia, folks... They were swiftly informed of the local "content" rules relating to the workforce and were forced to then ship out the bulk of the workers they had brought in.

The way it was explained to us the workforce must now be 70% Salta-based (that is based in Salta, not necessarily born-and-bred Salteños). And that also 70% of contractors' employees must be Salteños.

At the current time, with a heavy bias towards technical staff over miners/labourers/drivers the local content rules are met by subcontracting transport, catering, cleaning/maintenance and other non-mining functions to companies established by the local residents. This is something we had noted also on our San Juan mine trip earlier this year. One advantage the local "locals" have is their acclimatization to the altitude and local conditions.

With Lithium projects having 500 to over 1,000 employees each (POSCO is mentioned as having potentially 1,000 workers) the net will have to be cast wide for talent. FIFO (but by bus) seems to be the reigning ideology, which we are on record as opposing (in avoidable circumstances) with the operators are opting for seven days on and seven days off... but from our conversations the more desirable format is fourteen days on, fourteen days off. The latter is preferable for all concerned because scarcely anyone is flying in and in fact the "commute" is one day in either direction in a bus to the city of Salta, or farther afield.

At some point in the next few years, we see an escalation in pay rates, such has occurred in the Patagonian oil provinces of Chubut and Neuquen. However, the amount of people involved in Lithium extraction will be a quantum higher than in oil & gas production.

## **Access**

Road maintenance is performed by the *Dirección de Vialidad de Salta* (Salta Province Highway Authority). Notably a plan was recently announced to the Pastos Grandes community that a permanent base was being considered there to handle maintenance of provincial road N°129. This road connects San Antonio de Los Cobres with the Salar del Hombre Muerto.

Good quality airstrips exist at the Salar del Hombre Muerto, 10 Km southwest of the property, at the Livent's Salar del Hombre Muerto lithium mine operations, approximately 40 km west of the Diablillos property and at the POSCO lithium project approximately 15 Km to the Northwest of the properties.

## **Gas Supplies**

There is a massive surge of construction going on in the Altiplano. The chief component of this is the Gasoducto de la Puna which originates at the intersection of Provincial Routes No. 38 and N° 52, in the place known as Río Las Burras, where it interconnects with the Atacama gas pipeline and extends to the town of Salar de Pocitos, located on the Provincial No. 27, approximately 100 km from the town of San Antonio de los Cobres.

The pipeline's course runs very close to the towns of Cobres, San Antonio de los Cobres, Alto Chorrillos, Olacapato and Cauchari. The length of the gas pipeline is approximately 185 kms. In altitude terms, the pipeline runs between 3,496 masl, at the junction with Atacama gas pipeline, up to 4,900 masl in Alto Chorrillos, to finish at 3,699 masl at the Salar de Pocitos.

The Fénix gas pipeline begins in the municipality of Salar de Pocitos, where it connects with the aforementioned Gasoducto de la Puna and extends parallel to Provincial Route 17 to Camp Fénix, belonging to Livent at its plant on the Salar de Hombre Muerto.

The length of this Fenix pipeline is approximately 133kms, its elevation above sea-level is between 3,699 masl at the Salar de Pocitos, up to 4,200 masl at the border between Salta and Catamarca, to finish at 4002 masl at Livent's Fénix camp.

## **Mine Trip Notes – What they Are & Are Not**

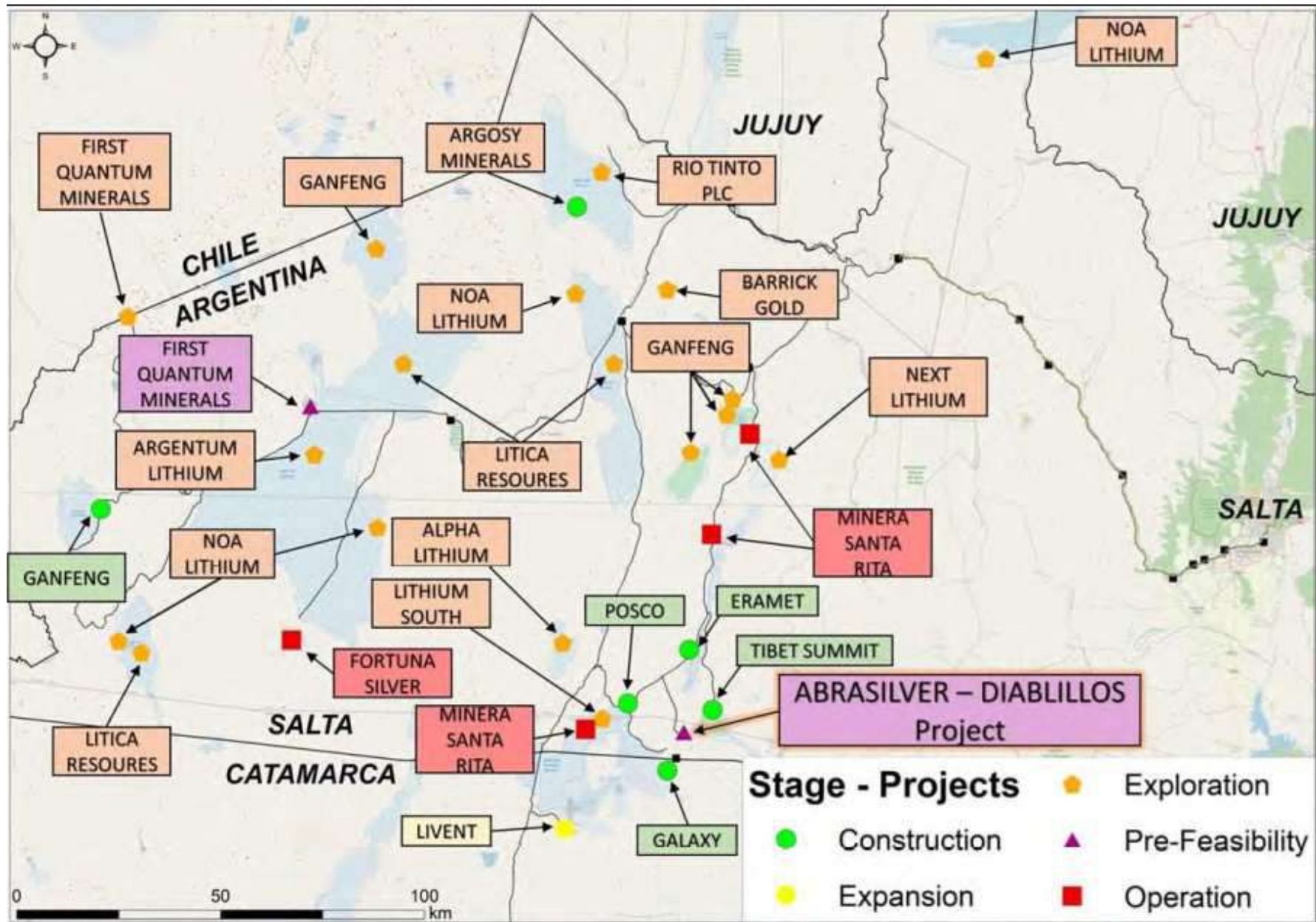
These notes are one of our lesser-known products. Double-bill notes are somewhat rare, with the last one being our writeup of our February 2023 expedition to the Altar project of Aldebaran Resources and the Los Azules project of McEwen Copper in Argentina's San Juan province. Previously we had written up the trip to Nevada in late 2011 to Quaterra Resources' Yerrington project and Entrée Gold's nearby Anne Mason project. These can be found at our website at [www.hallgartenco.com](http://www.hallgartenco.com).

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Abra Silver's Coipita project adjoins Los Azules and shares road access so that note is worth referencing for the general dynamics of copper exploration in San Juan and details of the jurisdiction and its attractiveness.

These are intended to focus upon the big context of the metals in question and the jurisdiction and then the facts of the trip and observations upon the project site. They are **NOT** initiations of coverage, and do not contain revenue projections, management bios or even the risks involved/envisaged in the projects visited.







# The Salares

## All Go

- + A distant history of working in copper has been augmented in recent decades by the presence of borate mining and a prominent Lithium mine so the region is well acquainted with the benefits of mining
- + NIMBYs are in short supply in the part of the world
- + The application of provincial and “local” worker rules are frustrating the Chinese tendency to use their own *gastarbeiters*
- + The zone is heaving with activity as projects move into development, with non-serious promotorial types languishing unloved by investors
- + It’s still early days but the surge of activity will bring significant economic benefits to the region via salaries and supply contracts
- + Eventually when royalties start to flow the provincial governments will be flush with cash for infrastructure and other quality of life improvements
- ✗ The lack of a mining “centre” on the altiplano is resulting in much duplication of effort/settlement with a resort to the notorious Australian practice of FiFo being an undesirable necessity
- ✗ The altiplano is challenging from an access point of view which will add substantially to capex when building begins
- ✗ The parlous state of the Salta-Antofagasta rail connection means the resort to excessive traffic utilizing trucks

### On Salares

Lithium *salares* occur in closed (endorheic) basins without external drainage in dry desert regions, where evaporation rates exceed stream and groundwater recharge rates, preventing lakes from reaching the size necessary to form outlet streams or rivers. Evaporative concentration of surface water over time in these basins leads to residual concentration of dissolved salts to develop saline brines enriched in one or more of the following constituents: sodium, potassium, chloride, sulphate, carbonate species, and, in some basins, minerals such as boron and lithium.

### San Antonio de Los Cobres

It’s difficult to believe upon first glance that this hardscrabble town is the “capital” of the altiplano. With a population of a few thousand people, its low-slung largely adobe houses scarcely set the tone for a boomtown by any definition.

After its mining attractions faded a long-time it was the main town on the, sometime, Tren de las Nubes

tourist route where a train ran from Salta in Argentina to Antofagasta in Chile. It was the main extant rail connection across the Andes since the demise of the connection from Mendoza to Santiago in Chile over half a century ago. San Antonio thus was essentially a railway town with few attractions as even tourists did not stay there as it lacked facilities.

The image that follows shows part of the town at dawn on the day we headed to site. The tall cacti that are symbolic of the region are evident even in the town.



San Antonio is the antithesis of what one would expect a boom town to look like. Interestingly, a few weeks after our visit the presidential primaries were held and reportedly the highest percentage vote in the country for the libertarian “third-way” candidate, Javier Milei, was gleaned in this town.



However, the rail connection here has also fallen victim to natural disasters with the section between Salta and San Antonio being essentially inoperative since storms swept away part of the track. This means that the connection is only functioning between Antofagasta and San Antonio.

Below can be seen a bridge on the currently inoperable part of the line.



The ownership and responsibility for operating/repairing the line lies with the Federal government. The failure to repair the line crimps significantly its usage for transport of materials in and product/concentrates out, particularly to Argentine port destinations. It also detracts from the enormous tourist potential of the line.

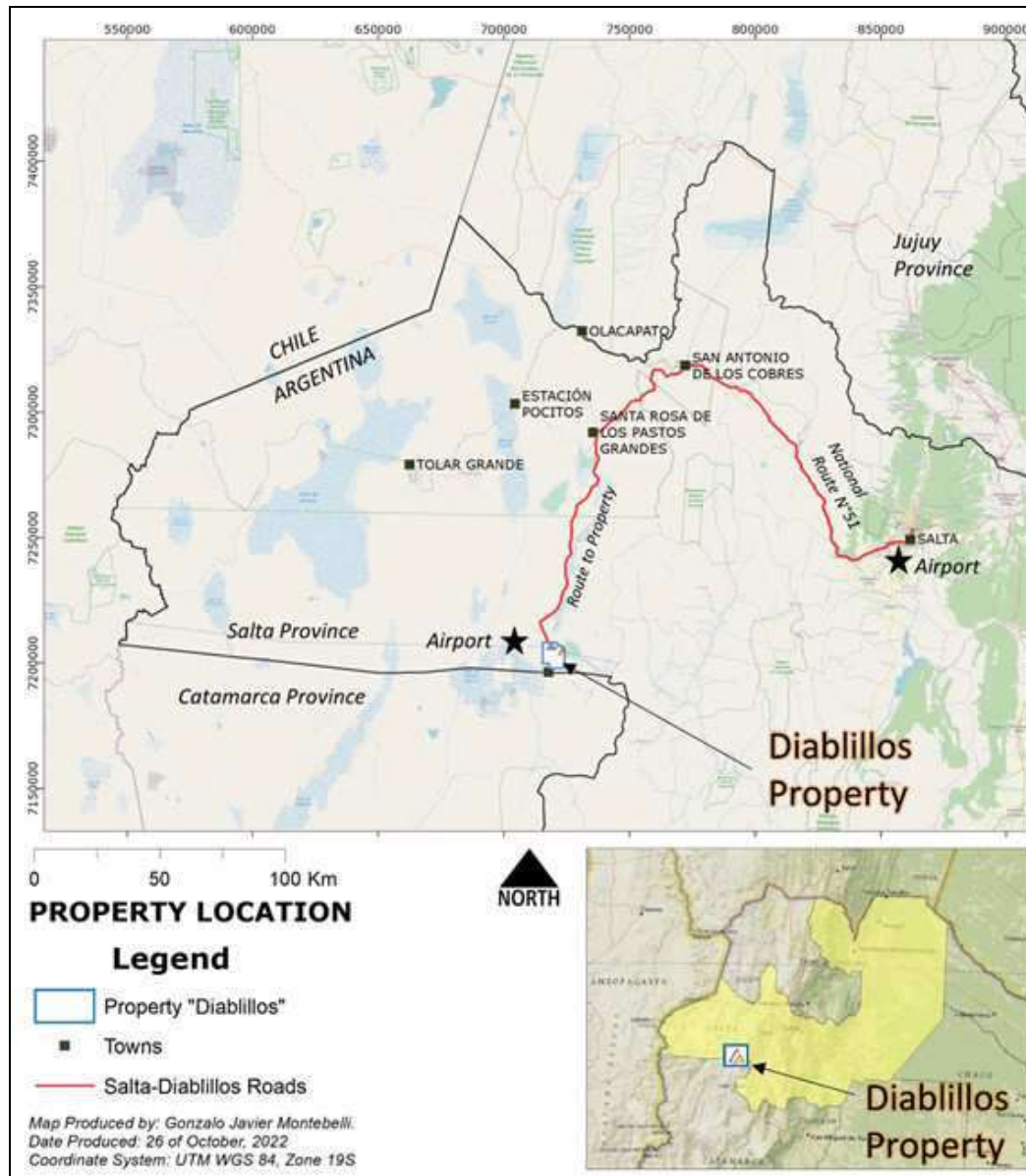
### **To the Altiplano**

It is just outside San Antonio de los Cobres that the road southwards towards the *salares* and Diablillos becomes unpaved.

The name suggests what the Altiplano is, a high plain. Starting at over 3,000 masl, the altiplano consists of a series of wide valleys. The contrast here to San Juan is key. The mountains here are high, but do not seem as high, because they begin from a high base and the valleys are not as narrow and precipitous as San Juan.

Our journey took us to the following *salares*, in order, Pastos Grandes, Centenario/Ratones, Diablillos and Hombre Muerto.

The route from Salta to Diablillos is shown below:



### Santa Rosa de los Pastos Grandes

One might be tempted to call this settlement a one-llama town if it wasn't for the fact that it has llamas in abundance and indeed holds something of a beauty pageant of the animals once a year when the tribes/families of the altiplano gather there to show off their llama-flesh. When not focused on these camelids the locals are oriented towards mining, primarily the activities of the borates mining complex

at the other end of the Salar de Pastos Grandes.

The population is sometimes estimated as high as 250, but we have seen estimates of quite a lot less.

The *salar* runs roughly north-south with the townlet, at the northern end not being all that near the long-established mining operations, which are in the middle and south of the *salar*. As borates were never sexy, the town never experienced any growth surge, or moreover, money surge. Its positioning seems to be due to the proximity to the pass that gives access to San Antonio, a paved road and the connection to Chile.

It is the type of town that the *altiplano* needs, but it would serve such a purpose if it was 50kms more to the south, now that the epicentre of mine development has shifted to the south of the borax operations.

### **Borax – Pass the Parcel**

There is more to the *salaes* than just Lithium and, except for Livent's operation, the only fully formed mining operation on the altiplano (and one with extensive heritage) is the borates mine of Borax Argentina S.A.. For many decades this was the property of RTZ, and indeed was one of the few non-state-owned mining operations in the country.

Orocobre acquired Borax Argentina S.A. in August 2012 from RTZ. At the time we hailed the deal because it gave Orocobre revenues in the short-term while it was advancing its still nascent Lithium efforts. Their assets purchased included, at the time, three open pit mines in Tincalayu, Sijes, and Porvenir, concentration plants in Tincalayu, Sijes and Porvenir (at the time unused), and refinery facilities in Campo Quijano. Additionally, there were undeveloped deposits at Diablillos and Ratones.

The consideration for the purchase was US\$8.5mn. The consideration comprised US\$3.7mn for all of the issued shares of Borax Argentina and US\$4.8mn paid to an RTZ subsidiary as consideration for the assignment of a loan made by it to Borax Argentina.

Borax Argentina has operated in the Salta-Jujuy region for over 50 years and its operations include two open pit mines, concentrators, refining capacity and significant land holdings. The mining operations are located in Tincalayu (the open-pit is shown on the following page) and Sijes. Interestingly while working on our Boron Miners Review we noted many sources don't even mention this operation.

Under both RTZ and Orocobre the company evolved (and sustained) a reputation as a reliable supplier of high-quality products, with long-term customer relationships based on a track record in reliably meeting their needs within both the industrial and agricultural sectors.





Borax's products can be divided into three groups; minerals, refined products and boric acid. The minerals historically produced are ulexite, colemanite and hydroboracite. Ulexite has traditionally been used as a feedstock to produce boric acid, however hydroboracite is now the primary feedstock allowing for a lower cost of production and a product with a lower chloride content. Hydroboracite and colemanite are supplied into the ceramic market with hydroboracite also supplied into agricultural and oil and gas markets.

The refined products are comprised of borax decahydrate, borax pentahydrate and borax anhydrous. These refined products have applications in a wide range of markets from agriculture, ceramics, glass, insulation fibreglass, textile fibreglass, smelting fluxes and various other specialty applications.

### **Expansion**

An expansion study continues to evaluate a potential expansion of the Tincalayu refined borates operation from its current production capacity of 30,000 tpa to 100-120,000 tpa borax decahydrate equivalent and a 40,000 tpa boric acid plant. It was anticipated that the potential expansion will significantly increase efficiencies in the production of refined borates at Tincalayu and contribute to providing a step-change improvement in unit costs.

### **Then... Surprise!**

In late December of 2022, Allkem (the merged entity created by combining with Galaxy Resources) surprised many when it announced that it had sold Borax Argentina S.A. to Golden Wattle Springs Pty Ltd and had acquired the María Victoria lithium tenement from Minera Santa Rita S.R.L (MSR). The transaction consisted of:

- Allkem transferring to Golden Wattle (a group associated with MSR) all of the issued shares in the two Borax holding companies and US\$14mn cash for employee and rehabilitation liabilities
- MSR selling to an Allkem subsidiary 100% ownership of the Maria Victoria Tenement, which covers approximately 1,800 ha and is located in the northern part of the Salar de Olaroz, approximately 10km from Allkem's Olaroz Lithium Facility in the Jujuy Province

According to our sources, MSR is an entity owned by the Haddad family of Salta, a locally powerful economic grouping.

Was this Allkem waving the white flag on borates? Or was it a case of moving on now that it wanted to be seen as all-lithium, all the time?

Another of the Borax facilities can be seen in our photo below:



In any case, operations seem to be moving ahead full steam at the existing operations. Whether the Haddad family will pursue the expansion plan remains to be seen.

### **Tussles on the Salar**

Beyond the assets of Borax Argentina, the Pastos Grandes basin includes Lithium America's 100%-owned Pastos Grandes project and the adjacent 65%-owned Sal de la Puna project.

The Pastos Grandes lithium project (under Millennial) covered an area of approximately 14,093 hectares and was located on and surrounding the Salar de los Pastos Grandes. The planned annual production capacity (according to Millennial's plans) was to be 24,000 tonnes.

This was subject to a bid by Ganfeng when, in July 2021, it made an offer for Millennial Lithium (TSX-V: ML), a Canadian exploration and development company, for approximately CAD\$353mn (then US\$280mn). At the time, Millennial had two *salar*es under development or exploration (one in Salta and



a less advanced asset, the Cauchari East project located on the east side of the Cauchari-Olaroz Salar in Jujuy). Millenium owned 100% of these two projects and had invested over CAD\$40mn to explore and develop the main project.

Later that year, in December 2021, Lithium Americas (TSX: LAC, NYSE: LAC) acquired Pastos Grandes via an offer for Millennial Lithium. The offer was CAD\$4.70 per ML share, payable in common shares of Lithium Americas and CAD\$0.001 in cash per ML Share, representing total consideration of around US\$400mn. Based on Lithium Americas' closing price at the time this consideration resulted in Millennial shareholders owning approximately 9.1% of Lithium Americas.

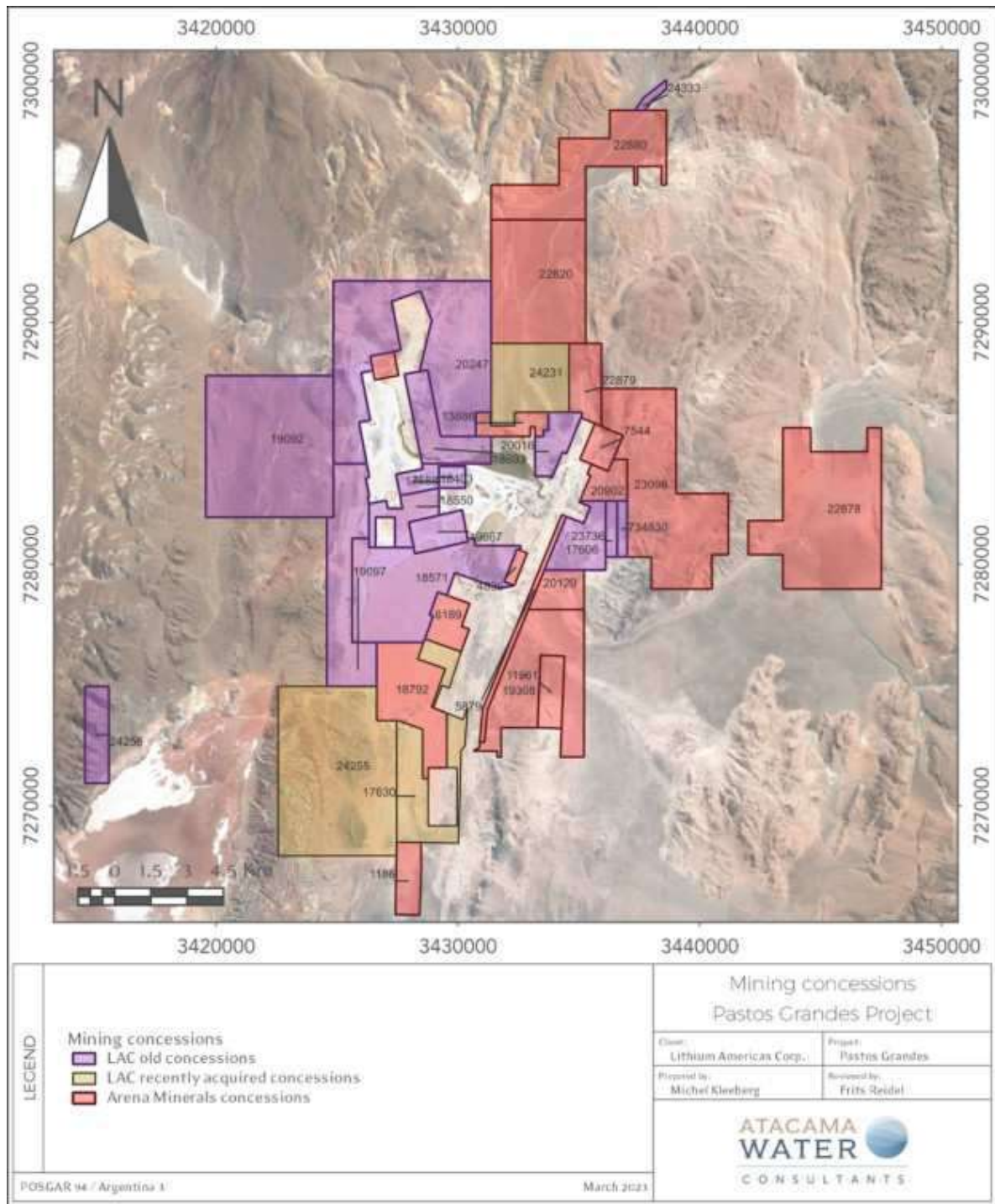
In April 2023, Lithium Americas acquired 100% of Arena Minerals for around \$227mn issuing approximately 8.4 million Lithium Americas common shares to former Arena securityholders.

This brought into the fold its 65%-owned Sal de la Puna project, which covers approximately 13,200 hectares of the Pastos Grandes basin.

The Pastos Grandes project is currently under construction. Below can be seen part of the *salar* being developed.



The map that follows shows the extent of the tenements, picked up through the takeover spree, on the *salar*. As is evident these do not cover the whole *salar* by any means.



## Centenario/Ratones

The French mining group, Eramine (part of the Eramet group), has been the driving force for development of the Centenario Lithium project. The site is located at 3,800 masl and spans a total

surface area of 500 km<sup>2</sup>. This *salar* is occasionally inhabited by around 15 people, the Puesteros. The *salar* is located around 50 km from the nearest settlement, the aforementioned Santa Rosa de Pastos Grandes.

Eramet spent two years of mining exploration before its teams identified the *salar* in 2012 in Centenario-Ratones. After obtaining the concession and the mining rights in 2014, the mining license was granted in 2019 following the approval of the environmental and societal impact study.

A pilot plant was installed in early 2020 to produce a Lithium carbonate end product and displayed a very high level of direct Lithium extraction efficiency (90%).

In November 2021, Eramet launched the construction of its production plant with the signing of a partnership with Chinese steel group Tsingshan, the world's leading producer of stainless steels. Tsingshan and Eramet were already partners within Weda Bay Nickel, a project developed in Indonesia. The construction of the plant at Centenario began in early 2022.



*Source: Reuters*

In June of 2023, Tsingshan and Eramet announced that they intended to invest more than US\$1.7bn in two stages of a lithium production project in Argentina. Reuters reported that the project is due to start producing lithium next year under a first phase that Eramet has estimated will represent around US\$550mn in capital expenditure. They are working on a feasibility study for the possible second phase

to increase capacity to about 75,000 tonnes of lithium carbonate equivalent annually compared with 24,000 tonnes planned in the initial phase.

The capital works were evident in all directions while driving along the length of the substantial *salar*. Most curious of these though was the sloping airfield, which instead of being in the flat portion of the *salar playas*, was on the side of some steep mountains. This has intrigued many, including a technician who had worked with Eramine that we had spoken with afterwards.

While some of the *salares* are separated from others by steep defining ridges, it seemed like the Centenario/Ratones and Diablillos and Salar de Hombre Muerto *salares* were more of a complex than Salara de Pastos Grandes, for example.

### **Salar de Diablillos**

Right up against (and overlooked by) Abra Silver's Diablillos project is the Lithium *salar* of the same name. While the bulk of the *salar* is being developed by a Chinese company called Tibet Summit, a section of the *salar* on the western side is under the ownership of Abra Silver. We crossed this section of *salar* as part of our review of the Abra Silver asset.

This part, while not large (amounting to only 500 hectares), is a key playing piece. Abra Silver have not conducted any exploratory work upon their portion beyond testing for ground water for other applications. This is a sleeper asset at Abra Silver.

The Diablillos lithium-potash brine project of Tibet Summit covers over 95% of the Salar de Diablillos at an average elevation of approximately 4,050 metres above sea level and is comprised of 32 mining claims covering approximately 8,156 hectares.

The bulk of the *salar* was originally proven up and explored by Rodinia Lithium, a company we wrote about in the first Lithium boom. Rodinia had picked up not only Diablillos, but also Centenario/Ratones from Rio Tinto's then subsidiary Borax Argentina. Rodinia then disposed of Diablillos asset in probably the most poignant case ever of the "fish that got away" in the Lithium mining space.

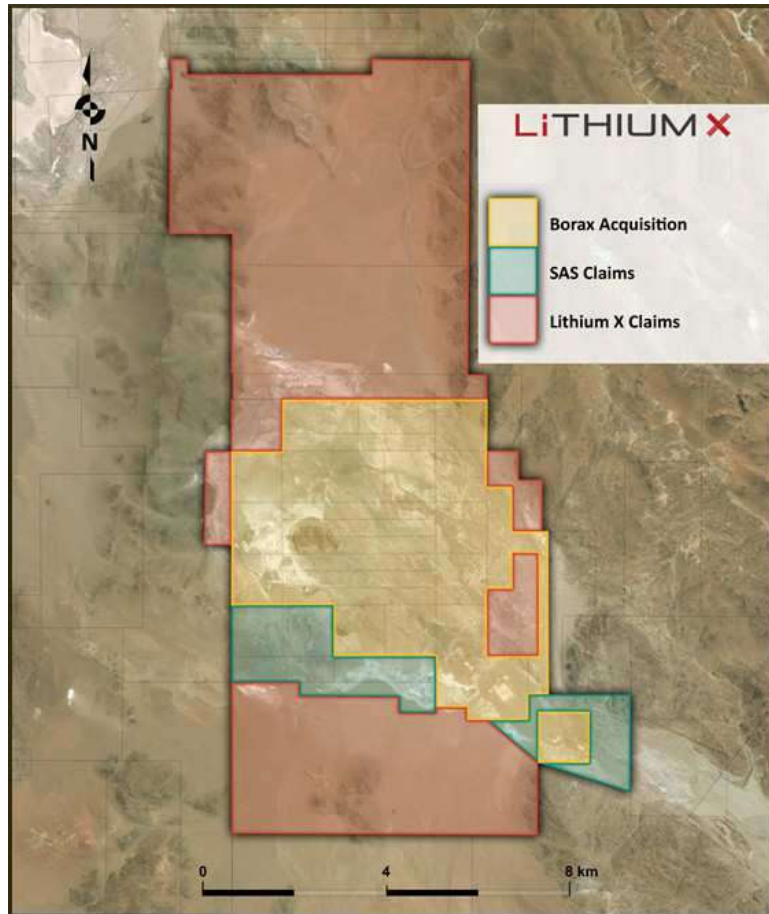
Rodinia claimed to have spent over CAD\$19mn on the project by the time they sold it (for \$5mn) to another TSX-V listed entity, Aberdeen International in 2016. This work included extensive exploration and definition drilling, pump tests, seismic & gravity geophysical surveys, basin and solute transport models. They had even created a PEA as far back as 2011.

Along the way the project was renamed Sal de los Angeles and was picked up in 2017 by Lithium X Energy. In a pretty quick flip, redolent of the fevered mini-boom of 2017, in March of 2018, Lithium X completed a plan of arrangement with NextView New Energy Lion Hong Kong Limited. This entity was incorporated by Shanghai NextView Xiangjin Investment Partnership and Tibet Summit Co., Ltd.

Each shareholder of Lithium X received cash consideration of CAD\$2.61 for each share held for a total of around CAD\$265mn. The project had an NI 43-101 mineral resource estimate of 1.037 million tonnes of

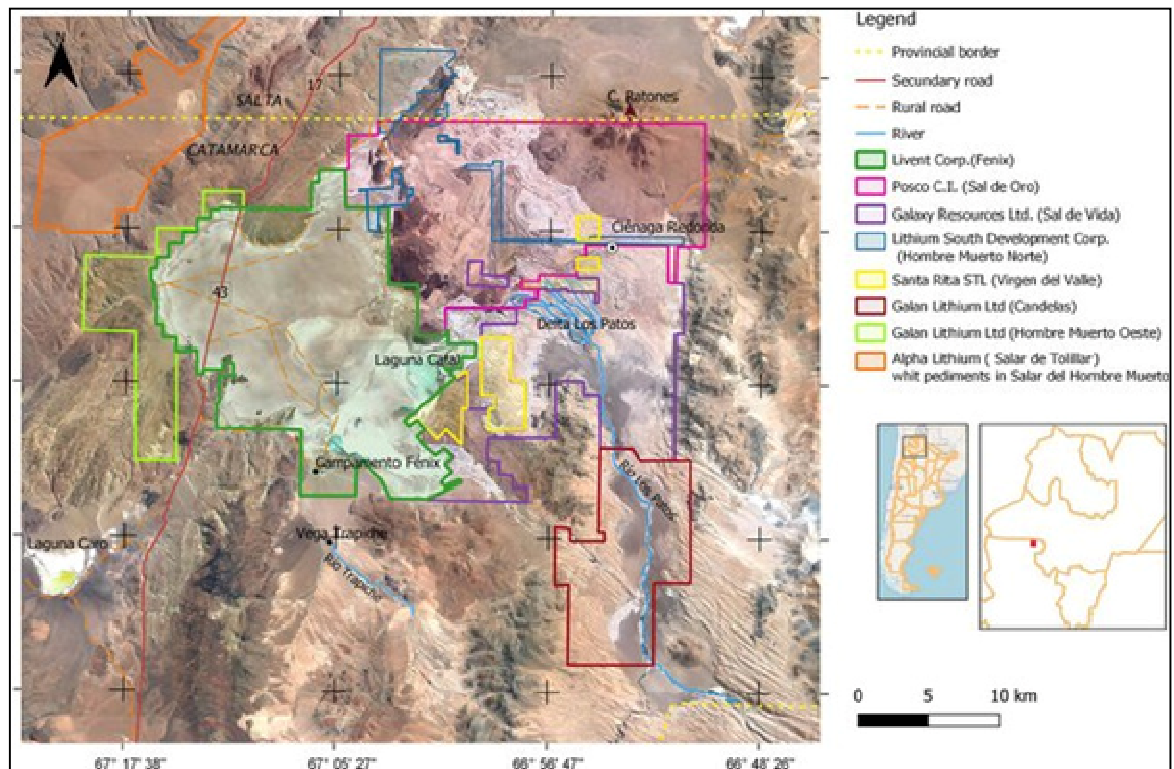


lithium carbonate equivalent in the indicated category and 1.007 million tonnes of lithium carbonate equivalent in the inferred category.



### Salar de Hombre Muerto

The most storied *salar* in Argentina (from the mining point of view) is the Salar de Hombre Muerto. Its evocative name is supposedly due to a solitary prospector having become stranded there many moons ago and later being found preserved in salt. Let that be a lesson to solitary prospectors. Needless to say, he did not live to enjoy his discovery.



The *salar* has a total area of 588 km<sup>2</sup> and straddles the frontier between the provinces of Catamarca and Salta, a subject of controversy in recent decades. For many decades it was the solitary preserve of FMC Corp (later devolved into Livent). Now it is the stamping ground of a herd of heavyweight Lithium

players. Their many and varied concession pieces are shown in the map on the preceding page.

Below can be seen the operations of Livent and part of this *salar* from the vantage point of the top of the Oculito deposit of the Diablillos project of Abra Silver. In the foreground is an extension of the *salar* which includes the portion held by Abra Silver (to be discussed anon).



On our return journey to Salta we stopped to pick up a worker from the POSCO facility that required a lift back to the city.

We took photo, shown on the following page, of the processing hall under construction, a small part of the complex, which already is of vast dimensions.





Then we retraced our tracks back to Salta, a drive of six hours, with a brief stop in San Antonio de los Cobres.

### **Sharing the Prosperity**

As mentioned, Salta was long relegated to the status of a small-holder agricultural province, with some limited mining and little industry. The mining and industrial parts have been changing in recent times and rising wine production has lifted agricultural revenues.

However, there is far to go and the revenues from the Lithium boom have largely been going to the subset of the population servicing the construction and development. In five years from now maybe 5,000-10,000 people will be directly employed by the mines and the contractors thereof/thereat. Over and above this there will be a trickle-down effect creating three or four times more additional posts.

Profits taxes, export taxes (if any) and VAT on activities will go to the Federal government in Buenos Aires and be placed in general revenues for disbursement across the country.

It should be remembered that the Argentine federal government regulates ownership of mineral resources, although mineral properties are administered by the provinces. In 1993 the federal government established a limit of 3% on mining royalties to be paid to the provinces as a percentage of the “pit head” value of extracted minerals. Thus, Lithium operators in Salta are expecting a 3% royalty to be payable to the province based on earnings before income tax if a brine mining operation is established.

All well and good, but precious little has been seen in previous decades from the longer-established Lithium plays within the country. Some attribute this to transfer pricing. We would also note that Lithium was NOT a very profitable endeavour for many decades, when prices were low and the Lithium Cartel ruled the marketplace.

## Transfer Pricing

The space was roiled in mid-2022 when stories appeared that the Federal government was going to go after Livent for supposed long-term underestimation of the value of its exports.

To quote from the 10Q of Livent for the quarterly period ended March 31, 2023:

“Minera del Altiplano SA, our subsidiary in Argentina ("MdA"), has received notices from the Argentine Customs Authorities that they are conducting customs audits in Salta (for 2015 to 2019, 2021 and 2022), Rosario (for 2016 and 2017), Buenos Aires and Ezeiza (for 2018, 2019, 2021 and 2022) regarding the export of Lithium Carbonate by MdA from each of those locations.

MdA was also notified from the Argentine Tax Authority of the start of transfer pricing audits for the periods 2017 and 2018.

During a part of this period, MdA was a subsidiary of FMC. However, the Company (i.e. Livent) agreed to bear any possible liability for these types of matters under the terms of the Tax Matters Agreement that it entered into with FMC in connection with the Separation. A range of reasonably possible liabilities, if any, cannot be currently estimated by the Company”.

As we noted in our monthly at the time, the Argentine government introduced a reference price of US\$53/kg for Argentine lithium, and that this appeared to us to be a shot across the bows of the cartel (and others) playing in the Argentine *salares* space. Transfer pricing has been rife in the mining industry for several decades and the government was finally moving in to stymie the practice.

Allkem (AKE.ax) stated that the new measure was merely a reference price to be used by regulatory authorities when reviewing Lithium export data to counter under-invoicing and improve price transparency. Allkem stated that the price was not to be used as a basis to calculate taxes, royalties, duties, nor was it a price cap (as has been suggested in some recent media).

For some perspective, in China, the CIF price for Lithium Carbonate was way above those levels. Clearly the Argentine government needs to tighten up its controls over all the new players.

Operators will now need to be much more cognizant of how they are accounting/billing their exports. The 3% royalty (et al.) is too juicy a revenue source for them to be ignored in Federal and provincial government calculations of their shares of the output.

## NOA Lithium

While we did not get near to the *salares* in the portfolio of NOA Lithium, we would note that it is a sister-company of Abra Silver, sharing several directors and founders in common. We had a meeting with NOA Lithium upon our return to Buenos Aires. One of the prime drivers of the development has been Hernan Zaballa, a veteran mining lawyer in Buenos Aires and Gabriel Robucha. The assets were vended into a CSE-listed CPC, called Navion Capital, in January of 2023, and Taj Singh (with whom we

have had several briefings) was appointed CEO.

As can be noted on the map on page 7, NOA Lithium has three Lithium projects in Salta.

### **Summary**

With Lithium in short supply, at least for now, the investment and development dollars are heading for the jurisdiction that provides most opportunities at the least degree of hassle. Perversely, this is Argentina at the current time. It's not perfect, and the foreign exchange issues are a nightmare, but these pale in comparisons to the stones that the Chileans and Mexicans are putting in the way of developers.

The upcoming Presidential elections in October are already producing winds of change as the likely groupings from which the winner will come are not the current Kirchnerite administration, headed by Alberto Fernandez (who is not running again – neither is his VP, Christina Kirchner). The exchange rate oddities will not survive long beyond an administration change, but neither is it likely that any new incumbent will have a smooth ride. Buckle your seatbelts for a bumpy ride.

# Abra Silver

(TSX-v: ABRA, OTCQX: ABBRF)

Precious Metals in the Midst of a Sea of Lithium

## Key Metrics

Price (CAD)	\$0.345
12mth high-low	\$0.25 to \$0.465
Market Cap CAD mn)	\$194.24
<b>Shares Outstanding (mns)</b>	563.0
<b>Fully diluted</b>	609.0

- + Silver, in our perception, is a more attractive proposition than gold and the tightening silver/gold ratio would seem to indicate we are not alone in this thought
- + Diablillos is the major precious metals in northern Argentina at this time
- + Management is dedicated to eventual production and is run, primarily, by mine engineers
- + The Diablillos project has potential beyond its current silver/gold mix with the tenements including significant copper potential and parts of two renowned *salares*
- + There is no doubt that the team see themselves as mine-builders rather than blushing maidens waiting for a suitors
- + Impressive ratio of female employees, 21.4% female of which 100% are technical
- + 100% of employees on project are Salteños
- ✗ The presence of so many Lithium projects in the region sets up a pretty ferocious battle for labour for the eventual plethora of mines in the *altiplano*
- ✗ The location is challenging from an access point of view which will add substantially to capex when building begins
- ✗ The environment for funding sizeable precious metals projects is not as strong as it was in 2020-21 but remains, as ever, subject to the whims of the marketplace

## On to Diablillos

A loose translation of this project's name is "small devil" or "wicked spirit". It's not clear why it should have earned this name back in the dim dark past for, as a precious metals project, it is definitely not small and neither qualifies as devilishly difficult.

The main part of the deposit is called Oculito (meaning “hidden”) but it neither eluded its original discoverers from *Fabricaciones Militares* nor the team of Abra Silver. Below can be seen the Oculito target:



### Access

The Diablillos property is approximately 160 km southwest of the city of Salta as the crow flies, but by road the distance from Salta to the property is approximately 320 km (a driving time of five to six hours). The project is accessible from the city of Salta via the town of San Antonio de Los Cobres along National Highway 51. It is on the border with the province of Catamarca.

There is a secondary all-weather gravel road (Provincial route N°129) that starts near San Antonio de los Cobres and then south to Santa Rosa de Los Pastos Grandes and then on to the Salar del Hombre Muerto and the property. The Diablillos project is approximately 19 Km to the south-east of this road. If this project comes to fruition, it will improve site access and reduce the length of the road that will have to be considered for maintenance.

An alternate route is via the town of Pocitos on Provincial route N°17, which is the main road to Antofagasta, Chile. This is the primary road access to the aforementioned Tincalayu borate operation of Borax Argentina, located a few kilometers southwest of the Diablillos property on the northeastern margin of the Salar del Hombre Muerto.

Most of the local roads are gravel and can be traversed by two-wheel drive vehicles with high clearances, however, during rainy periods, sections of the access road are subject to flooding and small landslides. Four-wheel drive vehicles are required for access within the property.

Abra Silver has good relations with neighbours and thus access to the airstrips at the Salar del Hombre Muerto, 10 Km southwest of the property, of Livent (approximately 40 km west of the Diablillos property) and at the Sal de Vida lithium project of POSCO (approximately 15 Km to the Northwest of the properties).

The property encompasses an area of 7,919 ha (79 km<sup>2</sup>).

### **The Diablillos Project**

The Diablillos tenements are located along the border between the Provinces of Salta and Catamarca. The property is located in Argentina's Puna region, which is the southern extension of the Altiplano of southern Peru, Bolivia, and northern Chile. This is a high plateau, separating the Cordillera Oriental to the east from the Andean Cordillera (Cordillera Occidental) to the west.

The project was initially identified over 50 years ago by the exploration arm of *Dirección General de Fabricaciones Militares* the once-omnipotent industrial arm of the Argentine military. The state entity had been seeking porphyry-style deposits of copper and/or molybdenum.

### **The Ownership History of Diablillos**

The history of Diablillos has seen an A-list of players in the global mining & exploration scene pass through ownership or work on the property over the decades.

Exploration directed specifically at Diablillos began around 1971, when the Secretaría de Minería de la Nación undertook geological and geochemical reconnaissance work in the area at a scale of 1:50,000. In December of 1971, the property was included in a federal government mineral reserve area for copper-molybdenum porphyry deposits, but this status expired in 1984.

The asset passed through various local hands until Shell C.A.R.S.A, a joint venture between Shell and Billiton, explored in the area from 1984 to 1987. A subsidiary of BHP began preliminary reconnaissance exploration in the late 1980s and they held the property until September 1991.

In 1992, Pacific Rim optioned the property from Abra de Mina and then acquired 100% of the property in mid-1997. Pacific Rim conducted exploration work until 1996, when a subsidiary of Barrick Gold obtained an option on the shares of Pacific Rim Mining Corporation Argentina S.A. Barrick continued



exploration and initiated preliminary environmental impact and metallurgical studies.

SSR Mining Inc. (the once-mighty Silver Standard) acquired all assets of Pacific Rim Mining Corporation Argentina S.A. in December 2001, for a staged total of US\$3.4mn. Then in 2017, Abra Silver completed an RTO with Huayra Minerals, which had acquired the project from SSR Mining in 2016.

There is a 1% NSR on the Diablillos project, payable to EMX Royalties, as well as the remaining US\$7mn payment which is due in 2025 (or upon commercial production).

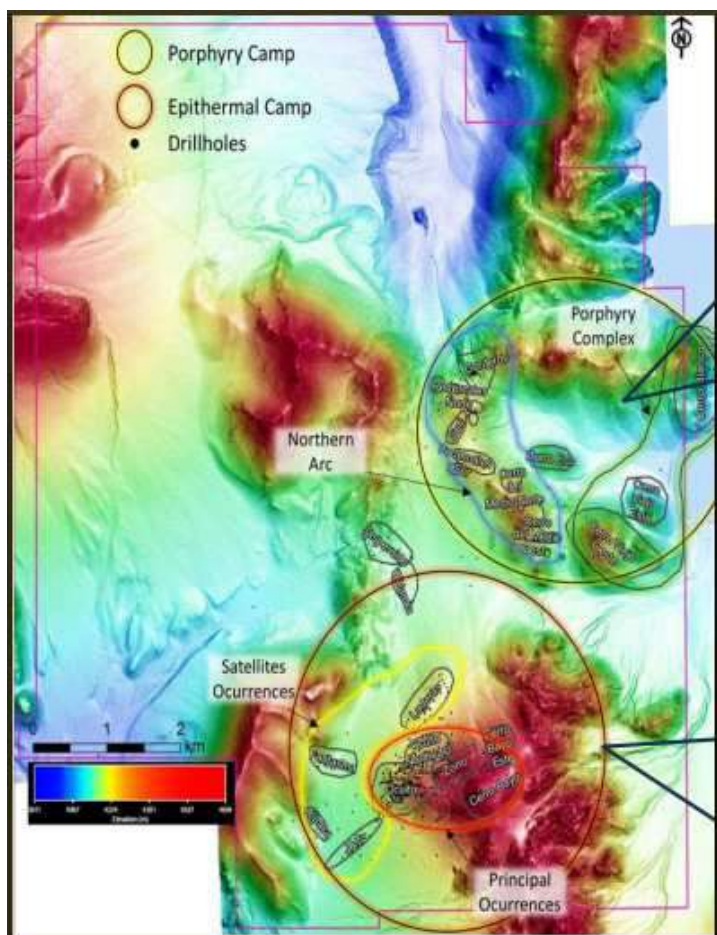
## Geology

The Diablillos project lies near the eastern margin of the Puna, near the intersection of the north-south trending Diablillos-Cerro Galán fault zone with the north-westerly trending Cerro Ratones lineament. The Diablillos-Cerro Galán fault structure is one of several major north-south shear zones in the Puna that were formed during neoproterozoic and lower paleozoic tectonism, and then reactivated during the Mesozoic and Cenozoic. These zones are reportedly hundreds of kilometres long and several kilometres wide.

There are currently multiple known mineralized zones on the Diablillos property, with the Oculito zone being the most advanced-stage, and the new high-grade JAC zone being the focus of the current drill campaign. Diablillos is a high-sulphidation epithermal silver-gold deposit derived from remnant hot springs activity following Tertiary-age local magmatic and volcanic activity with strong supergene overprinting.

## The Camp

Abra Silver currently has a camp at sight that can house around 60 people, but there are usually around 30 there at any given time. This will be re-sited and house several hundred into development/ production mode.





At the current time, 100% of the employees are Salteños, with 21.4% being from local communities and around 20% being female. Impressively, the entirety of the female contingent are technical staff.

### **Infrastructure**

The most important advantage the project has received is access to the Fénix gasoducto (mentioned earlier in this note), the cost of which is being footed by Livent. A derivation valve has been placed on its trace at a distance 24kms from the Diablillos property.

Abra also envisages that its electricity supply will be provided by a solar panel farm of 20 MW, such as that already in operation at Cauchari (pictured below).



Between the benefits from the pipeline and the solar generation facility, the company saves around US\$340mn that otherwise it would have had to finance.

Water supply is a hot topic on the altiplano. Abra Silver has secured water rights from the Rio Barranquillas to the east of the project area, that is upstream of another river that empties into the Salar de Diablillos.

### **Oculto & Its Geology**

The main component of the project is the Oculto (meaning “Hidden”) target and contains most of the present Mineral Resource.

It is a high-sulphidation epithermal silver-gold deposit derived from remnant hot springs activity following Tertiary-age local magmatic and volcanic activity. It is evidenced at surface by a broad zone of intense acid leaching located on the flank of Cerro Bayo, although the economic mineralization does not outcrop.

Host rocks at surface are hornblende porphyritic andesite which has been intruded by a dacite porphyry body (or bodies) which are hypothesized to be the thermal driver(s) for the mineralization.

The andesites overlie a basement assemblage of phyllites and granitic rocks. At the contact of the andesite with the basement, there is a paleo-surface occupied by unit of widely ranging thickness.

A review of drilling results suggested that a discontinuous conglomerate appears to thicken along a trend corresponding to one of the predominant controlling structures to mineralization and that this zone is coincident with broader lateral extent of the mineralization. One author suggested that the conglomerate filled a paleo-trough related to that structure, which later reactivated and provided a conduit for ore-forming fluids.

The deposit is strongly oxidized down to depths in the order of 300 m to 400 m below surface.

### **Exploration Work**

Throughout the Diablillos property, several prospecting and exploration works were developed by the *Secretaría de Minería de la Nación* and Shell C.A.R.S.A, which included geochemical rock sampling work and surface recognition of the geology of the project.

The main exploration efforts were made by Ophir Partnership, BHP, Pacific Rim Mining, Barrick Gold and Silver Standard Resources Inc between 1987 until 2012. This exploration work consisted of:

- Geological mapping
- Rock chip samples
- Trenching
- Induced polarization (IP) survey, ground magnetic survey, CSAMT survey, mag survey
- Drilling with diamond drill holes and rotary drill holes
- Mineral Resource Estimation and metallurgical test work

The work is summarized in the table that follows:

Diablillos Project History		
Year	Operator	Description
Pre 1983	Secretaría de Minería de la Nación	1,409 rock chip samples (includes 190 outcrop and 271 slope debris samples from Diablillos Sur)
1984-1987	Shell C.A.R.S.A	Rock geochemical survey; three Winkie drill holes
1987	Ophir Partnership	34 rotary drill holes (approximately 30 m deep) in the Corderos, Pedernales, Laderas, and Jasperoide areas
1988-1991	BHP	Geological mapping (1:1,000 to 1:7,500 scale); 380 rock chip samples; 1,200 m of bulldozer trenches; 56 air RC holes (6,972m)
1991	BHP	"Reserve" estimate (see below)
1992-1993	Pacific Rim Mining Corporation	Five diamond drill holes (1,001.8 m) in the Oculito Zone
1994	Pacific Rim Mining Corporation	148 km of chain and compass grid; geological mapping; 122 line-km of ground magnetic survey; 34 line-km of induced polarization (IP) survey; 213 hand auger samples; 2.5 km of trenching; 250+ rock chip samples; 12 diamond drill holes (2,016 m)
1996-1999	Barrick Gold Corp.	Geological mapping; surface sampling; RC drilling; CSAMT survey; mag survey; environmental impact study; metallurgical test work
1999	Pacific Rim Mining Corporation	Mineral Resource estimate
2001	D. M. Stein (Barrick)	MSc thesis
2001	Pacific Rim Mining Corporation	Mineral Resource estimate (see below)
2003	Pacific Rim Mining Corporation (for Silver Standard)	20 diamond drill holes (3,046 m)
2005	Pacific Rim Mining Corporation (for Silver Standard)	Five diamond drill holes each at Renacuajo and Alpaca, with a total of 10 diamond drill holes with 1,772m
2007	Pacific Rim Mining Corporation (for Silver Standard)	54 diamond drill holes (10,324 m) on Oculito; one hole (203 m) at Laderos; three holes (unknown length) at Pedernales; five holes (unknown length) at Los Corderos; four HQ-size diamond drill holes sampled for metallurgical tests
2008	Pacific Rim Mining Corporation (for Silver Standard)	52 diamond drill holes (7,971 m), three of these for geotechnical studies; additional metallurgical studies
2009	Silver Standard Resources Inc.	Mineral Resource estimate
2011-2012	Silver Standard Resources Inc.	Internal Preliminary Economic Assessment, rock chip sampling, 1,679 m diamond drilling (19 holes)
2017	AbraSilver	28 drillholes and a total of 3,148.5m (Fantasma). Nick Tate visit redefining the geology and mineralization concepts
2018	AbraSilver	Preliminary Economic Assessment (PEA 2018) including Resource estimate
2019	AbraSilver	Phase I Drilling Campaign with 2 diamond drill holes (844 m) (Oculito deposit)
2020 - 2021	AbraSilver	Fase II Drilling campaign of 55 drillholes and a total of 15,143 m expanding Oculito to North, West and East
2021	AbraSilver	Preliminary Economic Assessment (MP PEA 2021) including Resource estimate
2021-2022	AbraSilver	Phase II - Part B - Drilling Campaign of 84 drillholes and a re-logging campaign total of 106 drillholes. Extending West and north breccias. Infill drilling to convert to measured resources

## The Resource

In November of 2022 the company published a revised NI43-101 on the Diablillos project. This was prepared by Luis Rodrigo Peralta and Joseph M. Keane.

This was based on ~105,000 metres of drilling in 457 holes at Oculito deposit. The main features

of note were:

- An open pit M&I Resources at Oculito of +109mn oz Ag & 1.3mn oz Au
- a high-grade Measured resource containing 19.3mn tonnes @ 98 g/t Ag and 0.88 g/t Au

Below can be seen the Diablillos resource calculated inside a conceptual Whittle open pit shell derived using US\$25/oz Ag price and US\$1750/oz Au price.

<b>Diablillos Project</b>						
<b>Zone</b>	<b>Category</b>	<b>Tonnes mns</b>	<b>Ag g/t</b>	<b>Au g/t</b>	<b>Contained Silver mns ozs</b>	<b>Contained Gold ozs</b>
<b>Oxides</b>	<b>Measured</b>	18092	101	0.85	58,655,000	496,000
	<b>Indicated</b>	30226	49	0.71	47,502,000	688,000
	<b>M&amp;I Total</b>	48318	68	0.76	106,157,000	1,184,000
	<b>Inferred</b>	2090	31.00	0.5	2,085,000	33,000
<b>Transition Zone</b>	<b>Measured</b>	1244	50	1.21	1,979,000	49,000
	<b>Indicated</b>	1752	22	1.13	1,235,000	64,000
	<b>M&amp;I Total</b>	2996	33	1.17	3,214,000	113,000
	<b>Inferred</b>	127	7.00	0.8	29,000	3,000
<b>Total</b>	<b>Measured</b>	19336	98	0.88	60,634,000	544,000
	<b>Indicated</b>	31978	47	0.73	48,737,000	752,000
	<b>M&amp;I Total</b>	51314	66	0.79	109,370,000	1,297,000
	<b>Inferred</b>	2216	30.00	0.51	2,114,000	37,000

Other considerations were a 73.5% process recovery for Ag, and 86% process recovery for Au. The constraining open pit optimization parameters used were:

- a \$3.00/t mining cost
- a \$24.45/t processing cost
- a \$2.90/t G&A cost
- an average 54-degree open pit slope on the open pit





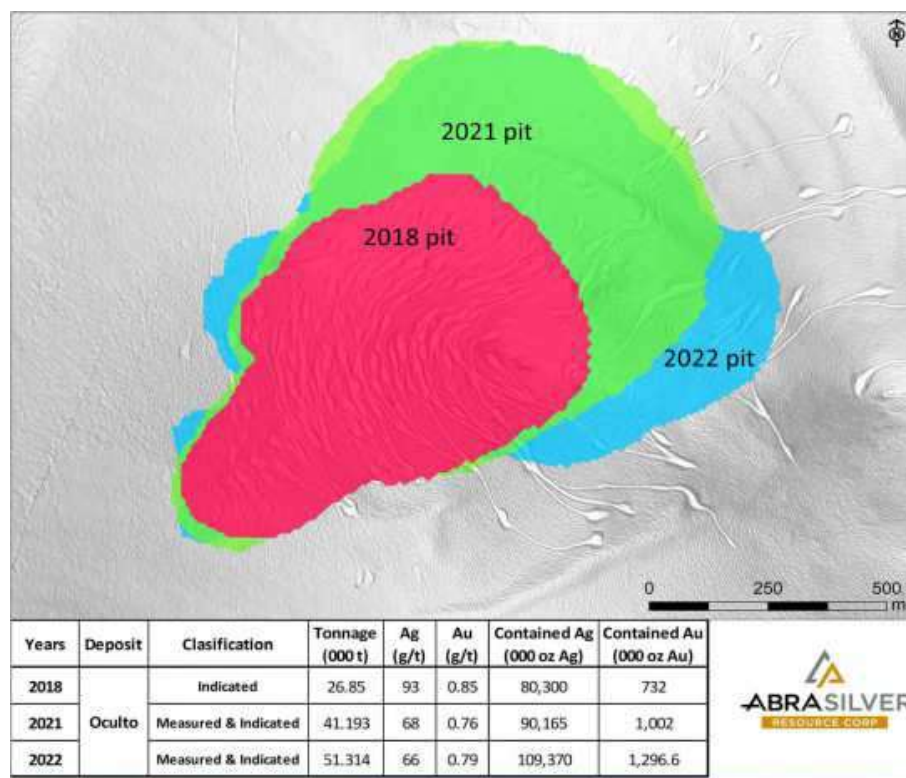
## Mine Studies

We found reference to an unpublished Preliminary Economic Assessment (PEA) that was commissioned, in 2010, by Silver Standard from M3 Engineering. This was completed in June 2011.

There is expected to be a new resource out in early October 2023 which will encompass JAC. Then work will focus on the completion of a Pre-Feasibility Study. This is likely to see processing of ore rise from the previously considered 7.5k tpd to around 9k tpd. This PFS will include a Proven & Probable Resource estimation.

## The Pit Shell

Below can be seen the proposed pitshell evolution, but this is about to undergo a further evolution with JAC likely to become the new Phase 1 pit when it is brought into the equation by the upcoming PFS. This will extend the narrow southwest end of the below pit designs by several hundred metres in that direction.



The strip ratio projection for this Oculito pit at the current time is 3.5:1, however with the addition of JAC this is expected to decline significantly to more like 2:1. Moreover, the material

covering the JAC target is mainly colluvium (which is 50-60 metres deep there), hence its choice as a starter pit.

The Life of Mine (LOM) is initially projected as 16 years at Oculito, however with the addition of JAC this would rise to more like 21 years.

### **The JAC Zone**

This target area is named in honour of Jose Antonio Cires, an Ecuadorian geologist long associated with the project who died during the pandemic. Infill-drilling was underway at JAC during our visit.

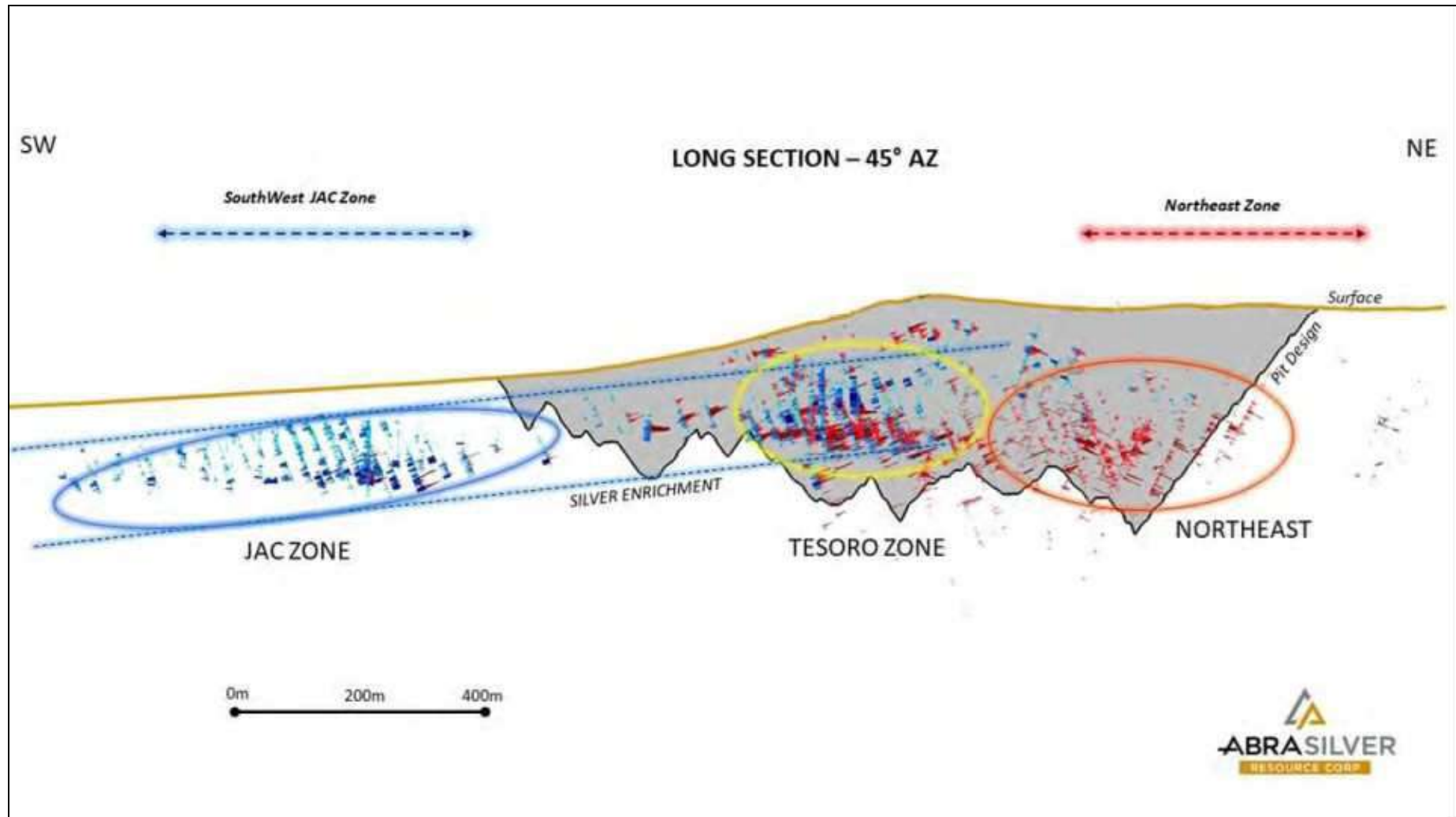
Here is a view of the rig at work from the top of the Oculito target.

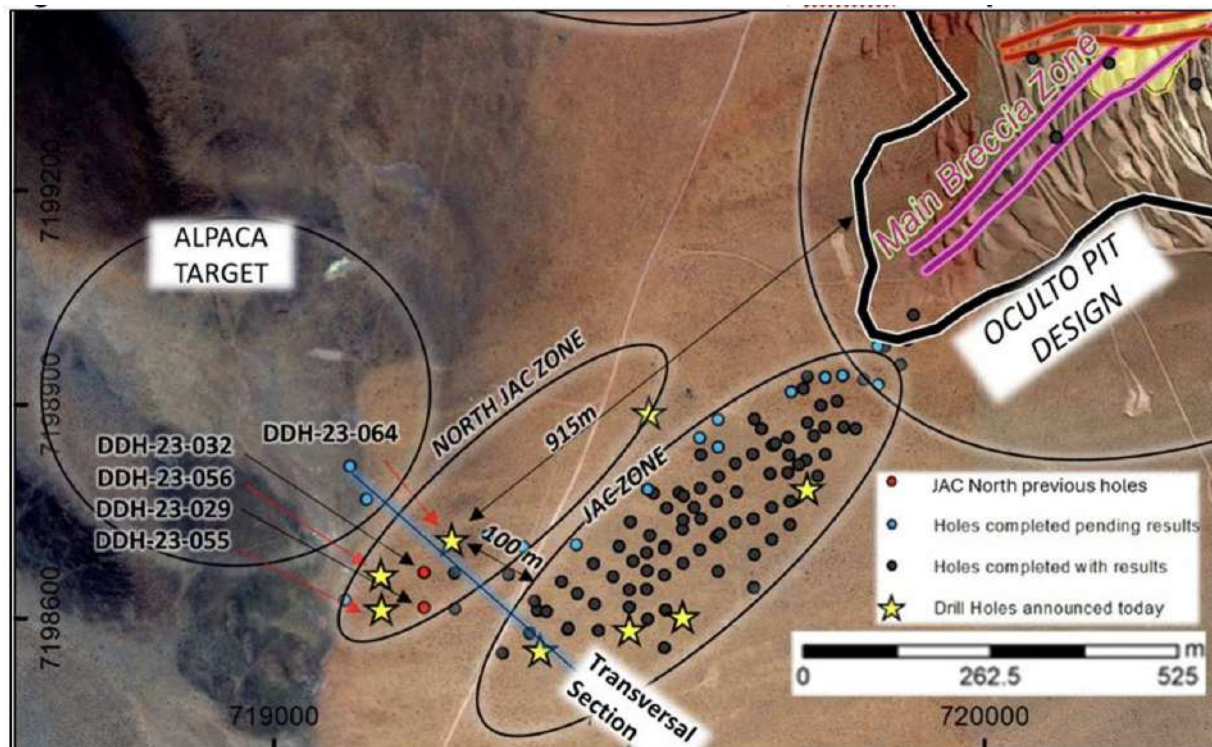
Drilling currently and in the recent past at the JAC zone has consistently intersected high-grade silver oxide mineralization, with associated gold in some areas, at shallow depths.

Drilling to date at the JAC zone has defined oxide mineralization extending approximately 800 metres along strike, up to 150 metres wide and extending to a depth of 200 metres. The zone continues to remain open along strike towards the southwest and in other directions.









Subsequent to our site visit, the company confirmed the results of the drilling we had seen underway. These are the yellow starred holes in the map above. This has extended the JAC zone into a new territory denominated the North JAC zone.

The highest-grade core is shown in the box at the left while the stacks in the new core shed are shown at the right. Such is the amount of historical core that several new sheds will shortly be constructed.



After an extensive briefing at the camp, we drove to the very top of the Oculito target (Cerro Bayo) from where 360-degree views were afforded to the west there was the Salar de Hombre Muerto, to the north and northeast, the camp, the Salar de Diablillos (with the operations of Tibet Summit) and the copper porphyry target, while to the east and south the view was into Catamarca.

After another medical checkup at the camp, we left for a drive onto the Salar de Diablillos, where Abra Silver holds a sliver of territory at the western end. It would be reasonable to say that Abra Silver holds around 500 hectares of the *salar*, between actual *salar* and *playa*. One should bear in mind that the salar pre-dates both subsequent andesitic flows as well as colluvium, so there are probably *salar* type aquifers buried under cover, particularly in the southwest part of Abra's concessions. This may be a conservative guess.





View to Oculito from the camp



The camp at Diablillos



One of the new core sheds at Diablillos



View from Oculito to the Salar de Hombre Muerto

We also drove around the sites for the likely overburden and tailings storage facility and circumnavigated the porphyry target.

After this we headed over to POSCO's operations and then headed back to the city of Salta.

### **Next Steps**

Things we will be watching out for in the near future will be:

- Ongoing assay results from the remaining 14 holes from the Phase III program
- Submission of Environmental Impact Assessment (EIA) for Diablillos in August 2023
- Updated Mineral Resource estimate for the Diablillos project, most likely in October 2023
- Undertaking a CSAMT geophysical survey at Diablillos and prioritize exploration targets (JAC North, Alpaca, Fantasma, etc.) for the upcoming Phase IV drill campaign to be launched in 4Q23
- Pre-Feasibility Study completion for Diablillos project in December 2023

### **The Copper Angle**

It will be recalled that in the first week of February 2023, we had been to visit the Altar project of Aldebaran Resources and the Los Azules project of McEwen Copper, both in San Juan. This was written up as an extensive Mine Trip Note, which we published in March of this year.

The relevance here is that the second asset of Abra Silver is the La Coipita copper porphyry project which is contiguous to Los Azules (to the north) and stretches along the Chilean border for a distance of around 90 kms.

This project shares the road access with Los Azules to the town of Calingasta. While we shall not discuss the project here as the focus of this review is Salta, we did have extensive discussions on La Coipita, the strategy and its potential. This could be the subject for a future coverage piece dealing with Abra Silver in detail.





## Investment Thesis

It is clear from looking at Abra Silver and having seen two of its projects that there are three quite different companies trapped within the current structure. The most important for now is clearly Diablillos, which offers what might be the largest precious metals project currently available in Argentina. Silver is having a moment (at gold's expense), but neither has the fervour around them that they did two years ago. However, as we all know, the furore for precious metals ebbs and flows but never goes away and always comes back with strength at some point. Diablillos is advancing irrespective and is a prime candidate for the attention of larger predators that have not restocked their pipeline of projects during the down times, then wake up and scramble to acquire a position (hopefully at a handsome premium for Abra holders. In any case the management are not Waiting for Godot and are looking to develop the project under their own steam

The second asset is the copper position in San Juan which could do with significantly more work but with

its proximity, and being contiguous to, Los Azules, its potential is joined at the hip with that of McEwen Copper. As we wrote after our San Juan mine trip in February, San Juan is the new Chile and Abra is on board for the evolution of the copper mining boom there. Whether the creation of an Abra Copper is the next step to maximise this potential remains to be seen. Hopefully the wait will not be long.

The least of these, though possibly the most exciting for some, is the Lithium assets. While not standalone pieces as projects, the slice of the pie at Hombre Muerto is definitely a chess piece that calls for a canny opening move.

The fleshing out of these projects and their perspectives awaits a dedicated initiation of coverage on Abra Silver at this point.



# Appendix I:

## The Legal Context

During the Golden Years of the Menem regime of economic liberalization in the 1990s the administration created a major shift away from the ossified historical legacy that had choked off most mining since the Second World War. Most importantly Carlos Menem, originating from the long forgotten and ignored Andean provinces, swung the pendulum of control of bureaucrats in the capital, Buenos Aires, towards provincial control of their own mining destinies.

Between 1993 and 1995, the Federal government implemented a new Mining Investment Law, a Mining Reorganization Law, a Mining Modernization Law, a Mining Federal Agreement, and Financing and Refund of IVA. Decree 456/97 implemented a unified text of the Mining Code with all amendments made by the aforementioned legislation. These amendments offered attractive incentives for exploration and mining to foreigners, and include both financial and tax guarantees, such as import duty exemptions, unrestricted repatriation of capital and profits and a 3% cap on Provincial royalties. This group of laws also created the basis for federal-provincial harmonization of the procedural regulations.

In 2001, Law 25.429 “Update of the Mining Investment Law” was passed, and in March 2004 approval was reached for a key provision of the Law allowing refund of the IVA (Value added tax) for exploration related expenses incurred by companies registered under the Mining Investment Law.

The Mining Secretariats of the provinces are commissioned to foster mining investment, participate in cooperation between international and inter-jurisdictional departments, and to oversee environmental, labor and hygiene issues related to mining. Importantly, they respond to and govern initiatives of the National Mining Commission (which supervises the country’s mining policy) and oversee the National Geological Service Board (SEGEMAR, which functions as a national Geological Survey).

Despite perennial concerns about the Argentina political direction, the metaphorical road to the Argentine *salares* opportunity has become more like a Los Angeles expressway in peak hour, of late.

Argentina has been in the Lithium game for decades, so is no newbie, but was always perceived as playing second fiddle to Chile.

Chile is merely focused on expansion of existing facilities these days. Chile’s attachment to an ancient Pinochet regulatory system, that required nuclear regulators (CCHEN) to clear Lithium projects, just showed that Chile could not get out of its own way. This reinforces the view that Chile is not the mining paradise that many would have us believe. Its arcane regulations make it look like they are trying to keep new kids out of the game, and that is just resulting in Argentina making all the running.

## Important disclosures

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