

# HALLGARTEN & COMPANY

## Initiation of Coverage

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## Southern Silver Exploration (TSX-V: SSV, OTCQB: SSVFF) Strategy: Long

Key Metrics			
Price (CAD)	\$0.64		
12-Month Target Price (CAD)	\$0.94		
Upside to Target	47%		
12mth hi-low CAD	\$ 0.025 -0.64		
Market Cap (CAD mn)	\$50.88		
Shares Outstanding (mns)	79.5		
Fully Diluted	141.5		
Insiders (Electrum 46%, Mgt 10%)	56%		
	FY15	FY16e	FY17e
Hallgarten EPS		(0.07)	(0.04)
Actual EPS	(0.06)		
P/E	n/a	n/a	n/a

# Southern Silver Exploration

## Right Metals, Right Time, Right Place

- + Silver has come roaring back to life with a 50% uplift over a relatively short period of time to peak above \$20 per oz. This has refocused attention on silver miners/explorers
- + Cerro Las Minitas is one of the few advanced silver/zinc projects available in the mining friendly jurisdiction of Mexico
- + Well-funded with cash on hand of \$650,000 at the end of January 2016 followed by an oversubscribed \$1.1mn non-brokered financing in May
- + The recently published resource estimate shows a mélange of metals, all of which are currently in favour, that have an In Situ value of nearly \$1.9bn at current metals prices
- + Partnered with Electrum Global Holdings LP, one of the “smartest guys in the room” with regard to mining projects in the last mining boom
- + Takeover candidate due to bargain price and status as one of the “last men standing” in the Mexican silver mining space
- × Resource is only Indicated & Inferred at this time, so needs to move up to the next level
- × Base metals have now pulled ahead in the value equation at SSV, but Lead & Zinc have had a tendency in recent times to lose their gains as swiftly as they made them

### In the Right Metals at the Right Time

In the recent resurgence of the mining space three metals stand out, Silver, Zinc and Lithium. Even then we would note that Lithium’s resurgence dates back to the second half of last year and was very much a move in isolation for a long while. Silver and Zinc though have been stellar outperformers with Silver pulling sharply ahead of gold in terms of percentage gain while Zinc has similarly advanced more than the rest of the base metals universe.

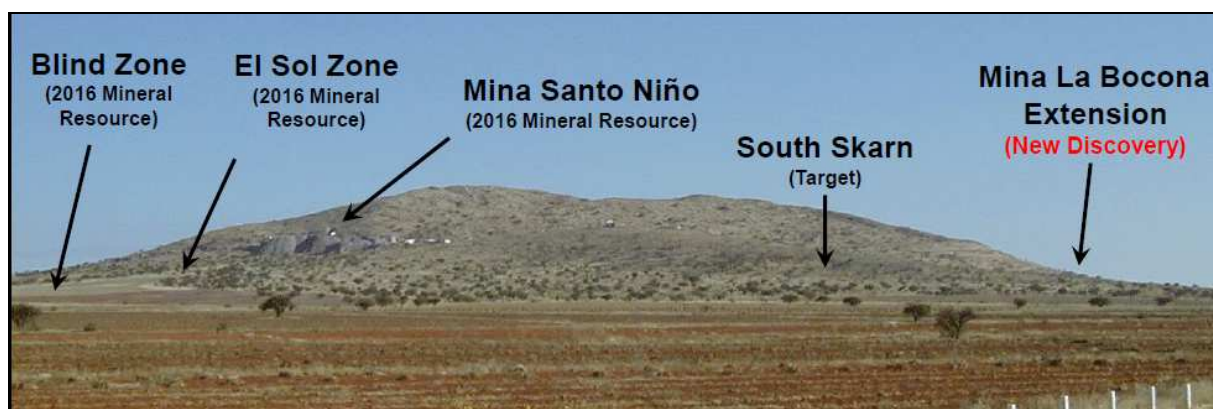
For those companies that persisted through the mining sector’s Ice Age that stretched for nearly half a decade there has finally come a reward. For those that persisted with silver, lead and zinc when they were particularly unattractive and unloved the reward has come in spades.

Southern Silver is one of those companies that persevered. Its main prospect for all of this decade has been the Cerro La Minitas project. For a while it partnered with Freeport McMoran, but that was clearly an unsuitable alliance as copper/gold is more Freeport’s theme in recent times. Now it has a more suitable and cutting edge partner in the form of Electrum, one of the few private equity groups to have shown success and competence in the resources space. Under this new arrangement it has reactivated its exploration program and recently announced a resource estimate which surprised the market by

showing, in addition to the well-known silver nature of the deposit that there is also enormous potential for Zinc exploitation at the Cerro las Minitas deposits.

### Cerro Las Minitas

In Spanish the word “cerro” means hill and it is very appropriate here for the hill arises out of a flat plain that mainly consists of bean fields. Cerro Las Minitas is the main project of SSV and is located about 70 kilometres to the northeast of the city of Durango in Durango State, Mexico, and is accessed easily by road. The property comprises 18 concessions, totaling approximately 13,640 hectares.



The project lies within the Faja de Plata (Belt of Silver) of north central Mexico. The belt is one of the most significant silver producing regions in the world, with current reserves/resources and historic production in excess of 3 billion ounces of silver.

However at Cerro Las Minitas, unlike much of Mexico, there is scant record or evidence of historical mining. In fact local miners and operators report that the mines have been intermittently active only since the early 1960s. The properties have passed from hand to hand without documentation.

The only two areas with significant exploitation in the district are the Santo Niño-Puro Corazón and Mina Piña-La Bocona areas.

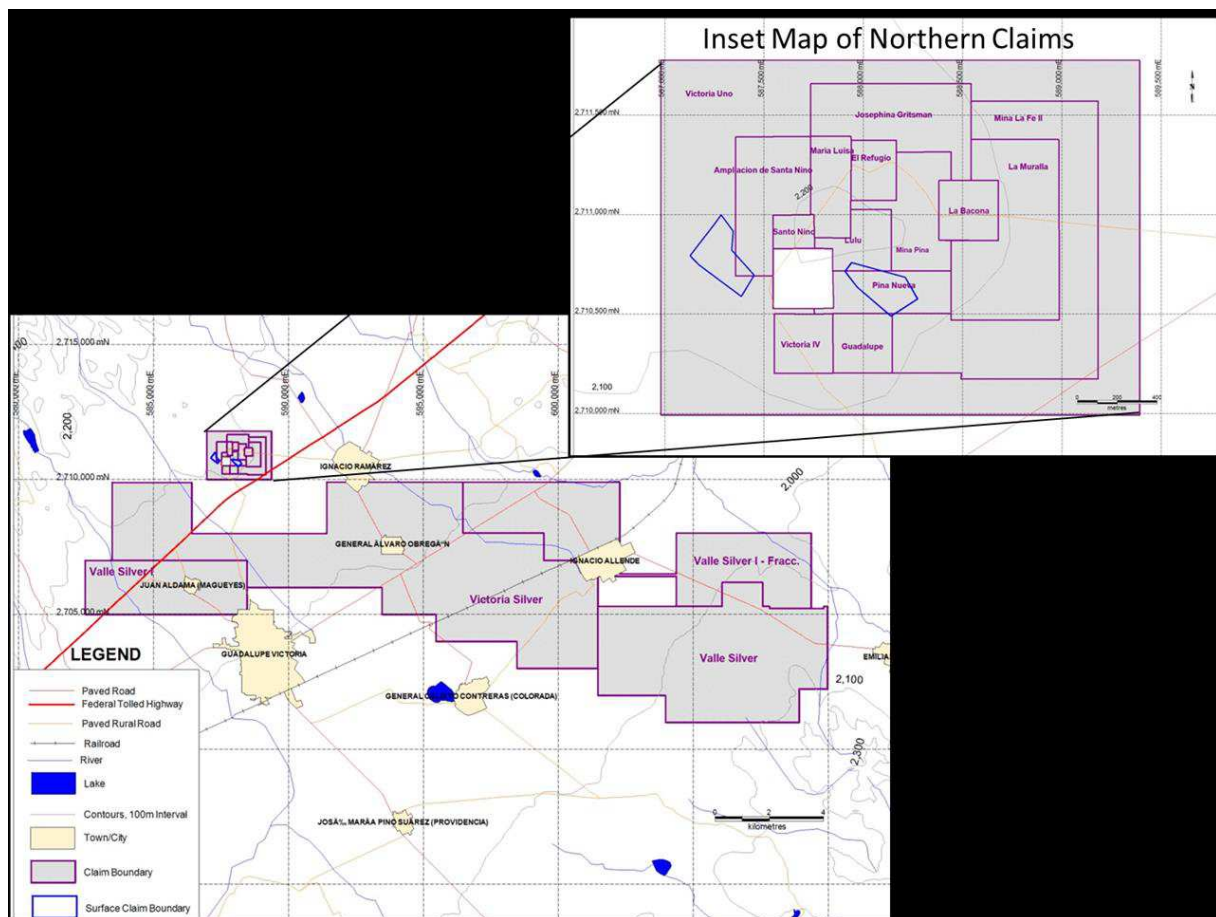
In 1960, Carlos Villaseñor discovered silver-lead-zinc-copper mineralization in the Santo Niño-Puro Corazón area. He explored the deposits and conducted minor exploitation until 1971 when he built a small mill in the Velardeña district. When the mill became operational, mining efforts were stepped up and ore was shipped to the Velardeña mill to be processed. The operations at Villaseñor



generated interest in the area, resulting in the discovery of the deposits in the Mina Piña-La Bocona area to the east.

The majority of the mining at Cerro Las Minitas is reported to have occurred between 1970 and 1981, but intermittent mining continues to this day. From 1997 to 2002, the mines were idle due to problems with mine water and a drop in metal prices.

As can be noted from the map below the concessions consist of two parts. There is the small (relatively-speaking) area of the northern claims which specifically cover the Cerro Las Minitas geographical feature and its immediate surroundings and there is the substantially larger series of claim blocks to the south which stretch for around 25 kms in an east-west direction. The latter have yet to be explored in any depth by the company.



Since acquisition of the property in 2010, Southern Silver, both self-funded and funded by option partners exploration on the property.



## Geology

Cerro Las Minitas occurs within a belt of prolific Au, Ag, Pb, Zn and Cu deposits that stretches from the highly productive vein deposits of Fresnillo in Zacatecas to the south, to the massive manto deposits of Santa Eulalia in Chihuahua to the north. This belt includes the productive replacement deposits of San Martin, Valerdena, Santa Eulalia and Naica as well as the rich vein deposits of Fresnillo, El Bote, San Jose and various others.

In the parlance of our times, Cerro Las Minitas has “closeology” working for it. As the map below shows there are three major mines in the immediate vicinity, two of which are held by silver mining majors. Couer d’Alene and Hecla, with the other owned by Avino Silver.



Recent interpretations as adopted by the *Servicio Geológico Mexicano* have the Cerro Las Minitas property located within the Guerrero Terrane near the regional fault which marks its eastern boundary with the Sierra Madre Occidental Terrane. Basement rocks are not exposed in the area, but are now known to be composed of an assemblage of tectono-stratigraphic terranes. The assemblage includes deformed Pre-Cambrian intrusive and sediments, deformed Lower to Middle Paleozoic sediments and Lower Mesozoic sediments which are all covered with a thick succession of Mesozoic to Cenozoic sedimentary and volcanic strata.

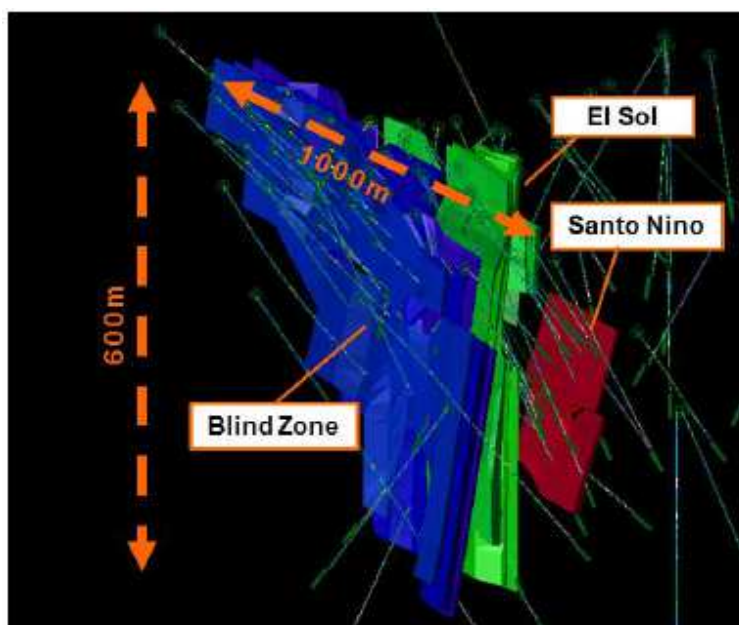
The Cerro Las Minitas property sits within a broad W-NW–trending valley and is covered with a thick succession of Tertiary continental deposits and gravel. The valley is flanked on the north and south by Eocene andesite flows and Oligocene to Miocene felsic volcanic rocks and to the southwest by Miocene – Pliocene basalt flows.

At Cerro Las Minitas near surface mineralization occurs as massive-sulphide pipes, veins and replacement deposits distributed in the skarn-altered margins of a large intrusive body. The company has identified three zones, but the potential for more exists. The main focus has been where Southern Silver identified two high-grade silver-polymetallic deposits, the Blind zone and El Sol zone, which have

been partially delineated and the Santo Niño zone, all of which have been included in the recent resource statement.

Marine sediments of the Lower to Mid Cretaceous Baluarte Formation crop out locally and calcareous and clastic rocks of the this formation have been structurally uplifted around a central intrusive neck at Cerro Las Minitas that rises about 150 meters above the surrounding plain. An aureole of replacement deposits of Ag, Au, Pb, Zn, and Cu formed at the contact of the sediments with the central intrusive complex or larger dikes. These deposits are characterized by substantial pyrite content, higher copper content, zinc levels that are greater than lead levels, and sphalerite with high iron content. The deposits have been exploited mainly for silver, zinc, lead, and copper by artisanal miners at Cerro Las Minitas, especially in the Santo Niño-Puro Corazón area. The mined bodies were very erratic in form and distribution. Typical grades in this skarnoid mineralization were 80–300 g/t silver, 2–8% zinc, 2–4% lead, and 0.5–2% copper. Characteristics of this style of mineralization suggest that it is properly classified as zinc skarn.

The 3D visualization at the right shows the three zones below surface. Geological modeling of the Blind and El Sol deposit used a nominal 80g/t AgEq cut-off and identified multiple distinct mineralized structures with a 1,000 metre strike-length, with depth projections of up to 600 metres below surface.



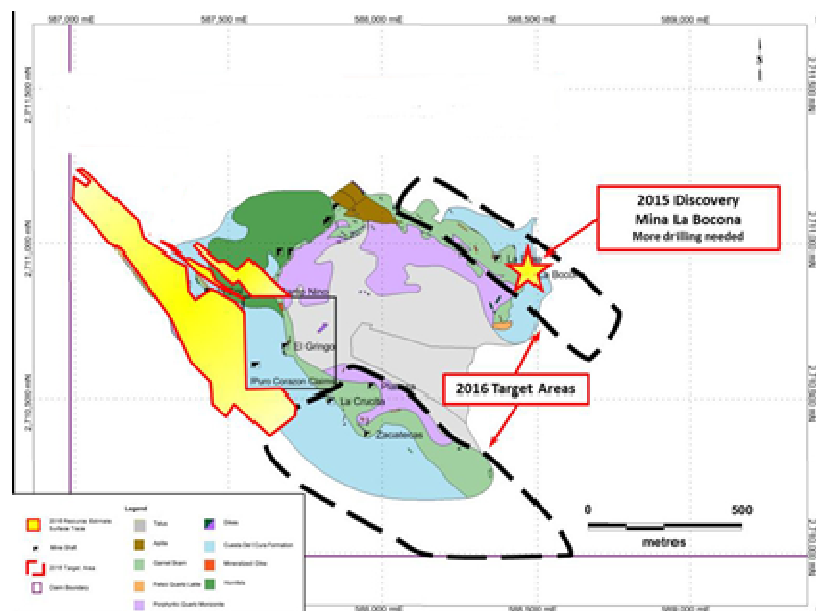
Mineralization appears open to the southeast. Further drillwork could extend the zones in a number of directions, including at depth.

This mineralization in the Santo Niño deposit is hosted within the contact skarn on the western margin of the central intrusion and is hosted in the skarn- and hornfels-altered zones forming on the margins of monzonite to felsite dykes within the Blind and El Sol mineral deposits.

Within each deposit, mineralization may be localized along through-going structures or occur as replacements within stratigraphic units.

Thick and high-grade zones of mineralization were noted in drilling along the southeast margin of the Blind and El Sol deposit in holes CLM-025 and CLM-081. Further expansion of the mineral resources along strike from these holes should focus on the southwest margin of the central intrusion and at depths ranging between 1450m and 1750m elevation.

There are several other high priority targets throughout the property, the main area of future attention being the Minas La Bocona zone, as shown on the map on the following page, which lies to the north-east of the hill. The 2016 target areas include the area directly to the south of the hill, which appears to be on trend with the three already identified zones (in yellow).



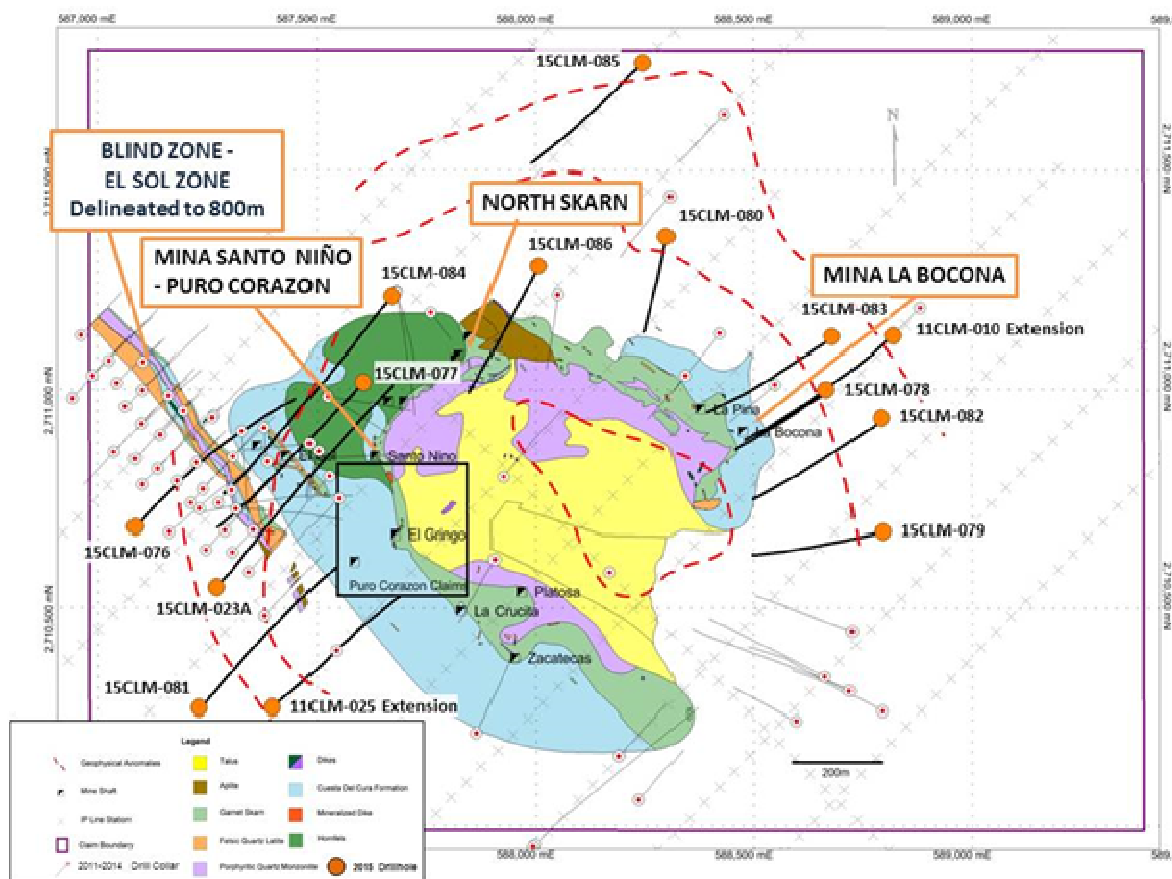
In the Minas La Bocona zone, thick intervals of precious-metal-enriched, polymetallic mineralization have been identified both along the margin and outboard of the Central Intrusion forming a semi-continuous mineralized zone for approximately 250 metres along strike and 500 metres down plunge. Mineralization intersected in the La Bocona area tends to be more gold-enriched than mineralization on the west side of the intrusion and this is a viable target for follow-up. This high-grade mineralized zone was not included in the current resource calculation and was a focus of the 2016 drill program.

The company believes that there exists potential to develop deeper porphyry or skarn targets nearer the contact with the central monzonite intrusion.

## Exploration

Southern Silver explored the property from late 2010 to 2012 and completed airborne and ground geophysics over the project and 15,510 metres of core drilling in 62 drill holes, with Freeport McMoran completing another 7,800m of drilling in 13 holes in 2013/14. As mentioned before mineralization occurs as massive-sulphide pipes, veins and replacement deposits distributed in the skarn-altered margins of a large intrusive body in a similar geological environment to that of major Mexican Carbonate Replacement Deposits such as Santa Eulalia (45mn tonnes of 310g/t Ag, 7.1% Zn and 8.2% Pb) and Skarn deposits such as San Martin (60mn tonnes of 118g/t silver, 0.9% copper and 3.9% zinc).

The Blind Zone was initially discovered with hole 11CLM-008, which intersected a 10.9 metre down hole interval averaging 268g/t Ag, 4.5% Pb and 3.8% Zn of polymetallic mineralization adjacent to an aplite-monzonite dyke complex outboard of the central intrusion. Subsequent drilling resulted in the discovery in hole 11CLM-011 of a similar sub-parallel zone underneath the El Sol surface showing, which soon developed into the El Sol Zone. The majority of the 2011-12 drillholes were designed to offset these discovery holes at 50-100m intervals.



Between 2012 and 2014, Freeport McMoran completed a program of soil and vegetation geochemistry and geophysical surveys over the entire property. They also completed three additional lines of deep-penetrating IP geophysics and a gravity survey over the area of the hill, that have confirmed both the lateral extent of anomalies identified in earlier work by Southern Silver and have significantly extended the projection of several of the existing targets to over 600 metres depth.

In the program for the summer of 2013 the drilling effort targeted the South Skarn area and specifically an offset of drill hole 12CLM-055, which previously identified strongly anomalous gold mineralization over a 20-metre interval within a hematite breccia which averaged 0.8g/t gold and included a 4.3 metre interval averaging 2.8g/t gold and 28g/t silver. A second 4.3 metre interval averaging 1.4g/t gold, 89g/t



silver and 1.8% copper was intersected further down hole in an interval of chlorite-garnet skarn. 4 holes were drilled in this area, which extended the strike length to 250 metres and the depth to 300 metres below surface. One hole was abandoned prior to target depth. Mineralization at the South Skarn is still open along strike to the north-northeast towards the historic La Bocona Mine and at depth.

One hole (13CLM-066) was drilled through the Blind Zone as a test for deep skarn mineralization adjacent to the central intrusion. This hole was successful in intersecting the various horizons of the Blind Zone and also extended the El Sol zone to a depth of over 600m below surface and encountered wide intervals of zinc-rich skarn mineralization.

Additional drilling commenced in November 2013 and targeted deep porphyry style mineralization. Hole 13CLM-073 confirmed the presence of anomalous alteration and mineralization deep within the central intrusion, but did not encounter economic mineralization. Two more deep holes have been drilled in this area, both of which encountered wide areas of anomalous mineralization.

The 2015 drill program identified new high grade mineralization in the area of Mina La Bocona, (hole 15CLM-078) as well as extending the Blind Zone and the El Sol Zone along strike and to depth.

In recent days the results of the 2016 Phase I program have been released to the market. This program consisted of a total of 3,236 metres of core drilling, consisting of three new holes which tested the lateral and depth extensions of the Blind and El Sol deposits on the west side of the Central Intrusion as well as an extension of hole CLM-001 which tested down dip and along strike of the Mina La Bocona zone.

The latest drill results identified a thick interval of continuous polymetallic semi-massive and massive sulphide mineralization in drill hole 16CLM-088 which forms part of a new, previously unrecognized, extension of the Blind and El Sol deposits. The mineralization occurs in skarn at the contact with the Central Intrusion, at depth and well outboard of the known deposits and appears to flatten into a sub-horizontal orientation in this area.

Geological modelling has outlined a 450 metre by 450 metre gently-dipping target area to the west of the main intrusive neck which is partially constrained by thick mineralized intercepts from previously reported holes including:

- a 30.4m down hole interval averaging 107.4g/t Ag, 0.40% Cu, 1.1% Pb and 2.3% Zn (275g/t AgEq) in drill hole 16CLM-088
- a 7.6m down hole interval averaging 43g/t Ag, 1.1g/t Au, 0.3% Cu, 0.5% Pb and 2.8% Zn (270g/t AgEq) in drill hole 15CLM-081
- a 55.2 metre down hole interval averaging 41g/t silver, 0.7% lead and 5.3% zinc (202g/t AgEq) in drill hole 13CLM-066

## Resource

In May of 2016 the company published a new resource for the Cerro Las Minitas deposit, prepared by Kirkham Geosystems, utilising a 150 g/t Ag Equivalent Cu cut-off.

The tables below show the mineral resource estimates for the combined zones.

<b>Cerro Las Minitas - Resource Statement</b>							
<b>Indicated</b>	Tonnes	Ag	Au	Pb	Zn	Cu	Ag Eq
Zone	'000s	g/t	g/t	%	%	%	g/t
Blind Zone	2,641	99	0.07	2.4	2.1	0.1	303
El Sol Zone	1,083	69	0.02	2.1	3.5	0.09	311
<b>Total</b>	<b>3,724</b>	<b>90</b>	<b>0.05</b>	<b>2.3</b>	<b>2.5</b>	<b>0.09</b>	<b>305</b>
<b>Inferred</b>	Tonnes	Ag	Au	Pb	Zn	Cu	Ag Eq
Zone	'000s	g/t	%	%	%	%	g/t
Blind Zone	2,863	91	0.28	1.6	3.9	0.21	364
El Sol Zone	2,909	71	0.09	1.9	4.1	0.11	339
Santo Nino Zone	839	95	0.03	0.9	6.1	0.47	446
<b>Total</b>	<b>6,611</b>	<b>82</b>	<b>0.17</b>	<b>1.6</b>	<b>4.3</b>	<b>0.20</b>	<b>363</b>
<b>Indicated</b>	Tonnes	Ag	Au	Pb	Zn	Cu	AgEq
Zone	'000s	ozs	ozs	mn lbs	mn lbs	mn lbs	ozs
Blind Zone	2,641	8,442,000	5,700	139.4	123.3	5.6	25,720,000
El Sol Zone	1,083	2,392,000	600	49.8	83.6	2.0	10,812,000
<b>Total</b>	<b>3,724</b>	<b>10,834,000</b>	<b>6,300</b>	<b>189.2</b>	<b>206.9</b>	<b>7.6</b>	<b>36,532,000</b>
<b>Inferred</b>	Tonnes	Ag	Au	Pb	Zn	Cu	AgEq
Zone	'000s	ozs	ozs	mn lbs	mn lbs	mn lbs	ozs
Blind Zone	2,863	8,370,000	25,900	98.0	249.0	13.1	33,498,000
El Sol Zone	2,909	6,594,000	8,600	121.8	264.4	7.2	31,719,000
Santo Nino Zone	839	2,568,000	800	17.5	113.0	8.6	12,036,000
<b>Total</b>	<b>6,611</b>	<b>17,532,000</b>	<b>35,300</b>	<b>237.3</b>	<b>626.4</b>	<b>28.9</b>	<b>77,253,000</b>

The task now for the company will be to expand drilling to move a lot of the resource up the category ladder creating a Measured Resource to verify the economics of the eventual mining effort and boost the amount of Indicated by moving up the Inferred parts of the resource estimate. Beyond that task there is the significant potential to add to the total tonnage via work at (so far) lightly worked areas like La Bocona, that show promise. The near term exploration goal is to get to in excess of 20mn tonnes

grading 80-120 g/t Ag and 4-8% Pb/Zn (ergo over 200 mn ozs AgEq). That would imply a near doubling from current levels of Ag Eq.

## Metallurgy

Preliminary metallurgical testing work was performed at Dawson Metallurgical Laboratories of Midvale, Utah with material from the Blind - El Sol Zones.

The results, reported in July 2015 were regarded as encouraging. Testing was done on a composite of 10 samples taken from the high-grade dump at the La Lupita shaft on the Blind zone. The head analyses of the composite returned 225g/t Ag, 0.06g/t Au, 0.11% Cu, 6.6% Pb and 5.4% Zn.

Both lead and zinc concentrates were produced via batch flotation with the following results:

- Approximately 82% of the silver, 86% of the lead and 12% of the zinc was recovered into the lead rougher concentrate assaying 2000ppm Ag, 61.5% Pb and 7.2% Zn. The concentrate was later upgrade to 2300ppm Ag and 71.1% Pb
- Subsequent zinc flotation recovered 79% of the zinc into a rougher concentrate at a grade of 39.5% Zn. Two-stage cleaning of the concentrate increased the grade to 49.7% Zn

## Infrastructure

It is seldom that a mine project anywhere in the world, let alone Latin America can boast of having a freeway run past its gate. Cerro Las Minitas can be reached from the city of Durango via Interstate Highway 40, also called the *Carretera Interoceánica* (Interoceanic Highway), is a toll road, while Highway 40 has free access.

There is no access to Interstate Highway 40 from Cerro Las Minitas, although the highway bisects the property. It would obviously be in the interest of the concessionaire of the freeway to ensure ingress and egress for vehicles attending the mine to maximize their own toll revenues.

A small overpass affords access between the north and southern portions of the property. From Guadalupe Victoria, a graded dirt road leads north to the property. About half of the property is located north of Interstate Highway 40 (a limited-access freeway) and an overpass over the highway affords access between the north and southern portions of the property.

As for power supplies the nearby towns of Guadalupe Victoria and Ignacio Ramirez are serviced by the commercial electrical grid and a regional transmission line of the *Comisión Federal de Electricidad* (CFE) follows Interstate Highway 40. A 33,000 kVA power drop has been extended from the CFE line to the Mina Piña shaft, and it is serviceable but in need of minor repair.

Potable water is readily available in nearby towns, and water for drilling and other exploration activities can be obtained from old workings on the property.

## **The Deal with Electrum Global**

In May 2015, Southern Silver announced an earn-in agreement with Electrum Global Holdings L.P.. The new partner is a US-registered investment adviser that focuses on precious and other metals. Electrum was founded and is majority-owned by the family of Thomas Kaplan, who serves as Electrum's Chairman and Chief Investment Officer. Electrum's holdings include a significant stake in NOVAGOLD Resources, as well as controlling stakes in Electrum-founded vehicles Sunshine Silver Mining & Refining, owner of the historic Sunshine Mine in Idaho and the Los Gatos project in Chihuahua, Mexico. Another vehicle holds a portfolio of gold exploration properties. The Electrum Strategic Opportunities Fund L.P. owned a significant stake in Kaminak Gold (until its recent takeover) which owns the Coffee Gold Project in the Yukon.

The deal with Southern Silver granted Electrum the right to earn an indirect 60% interest in Cerro Las Minitas (via the SSV subsidiary which owns the Mexican company that holds 100% of the project) by funding exploration and development expenditures of US\$5mn on that project over a maximum 48-month period.

To acquire a 60% interest in Cerro las Minitas Electrum needs to:

- complete exploration and development expenditures of US\$2 million on the property in the initial one and one half years of the option term for a 30% interest in the property (this goal has been completed)
- complete exploration and development expenditures of an additional US\$1.5 million on the property in the succeeding two and one half years of the option term for an additional 20% interest in the property (in progress)
- complete exploration and development expenditures of an addition US\$1.5 million on exploration during this same time period for an additional 10% interest in the property

Thus far Electrum has contributed US\$500,000 to fund exploration expenditures and received an indirect 10% interest in the property and completed the first phase of the exploration spend thus earning Electrum an indirect 30% interest in the property. They now have the right to earn an additional 20% by expending US\$1.5 million in exploration expenditures in the succeeding 30 months of the option term with which they are advancing. A final 10% interest may be earned by expending an additional US\$1.5 million in exploration expenditures during this time period.

## **Silver**

It is nothing new to say that silver has been on a tear during 2016. Starting the year around \$14 it rose nearly 50% before staging a slight retreat to where it currently stands just below \$20 per oz. Silver bulls would probably query our use of a chart that doesn't go back as far as the \$50 peak that silver briefly hit several years.



There are good reasons for this as we regard that spike as nearly as much of an aberration as the days of the Hunt Brothers attempt to corner the silver market in the 1980s. Moreover any silver producer that needs a \$50 price or even half that level to justify their project should hang up their shovel now and retire.

### Some Supply Considerations – Investment Drought to Bite

The Silver Institute is the main industry body and their silver surveys (which are prepared by the respected consultants GFMS) give a fairly accurate reflection of what the supply/demand situation is and what it might become. In one of their recent surveys their arguments for a tighter supply situation were primarily:

- Mine supply expected to peak in next 2-3 years
- Current price levels maintaining production but constraining investment in new capacity
- Supply from secondary sources will remain under pressure. Falling from 25% of total supply in 2012 to 16% forecast for 2014
- Hedge book remains at low levels and hedging is not forecast to return to the market in strength
- Government sales are not expected to be a feature of the market in the years ahead

It is important to note on the first point that a significant chunk of production comes not from primary mines but from secondary production at Lead/Zinc mines which has proven to be rather price insensitive. With a swathe of these mines in decline due to underinvestment in these two metals during their dark phase, silver output should be the collateral damage of their imminent closure. Meanwhile it is hard to think of too many new silver mines that have come out of the gate in recent times. Mexico



and Peru have some large known deposits but many projects remained in a sort of limbo from 2011-15, due more to the sick state of mining finance markets rather than \$15-16 per oz being unattractive levels at which to produce. At \$20 per oz and with financing improved, these obstacles are now behind us.

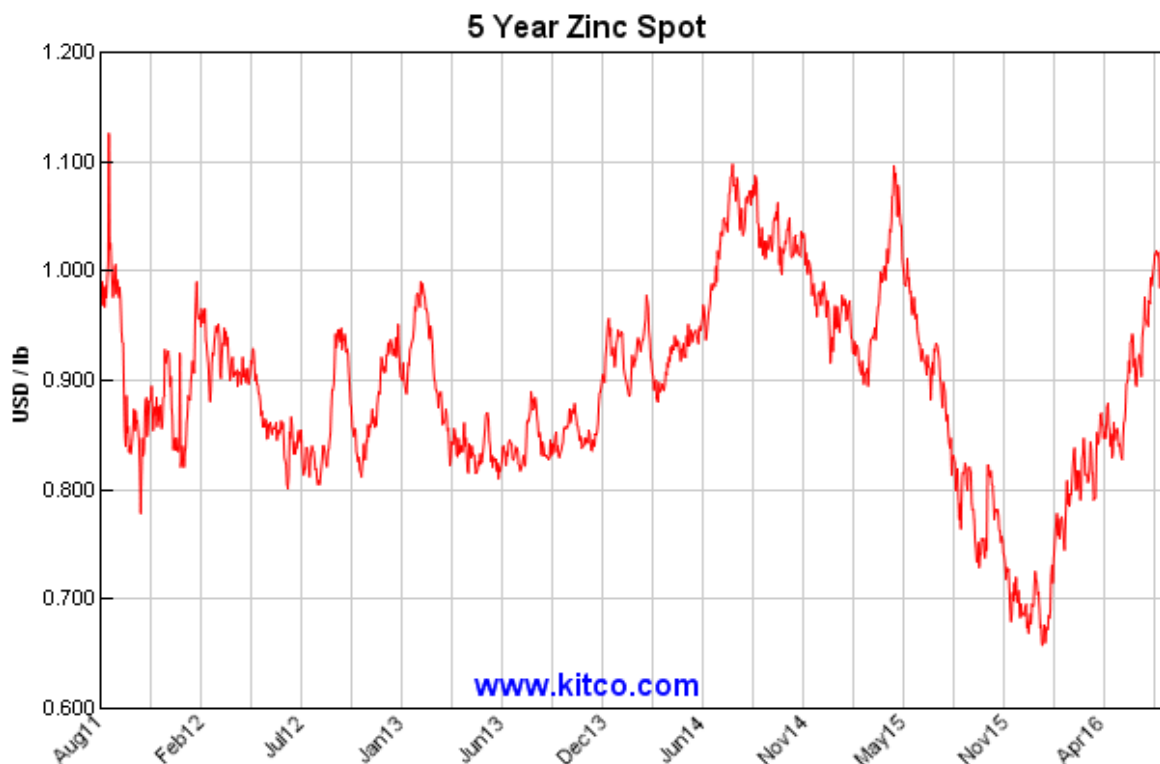
As for government sales, the long slow leakage of silver into the market has come from the Russians. While they have been in financial stress in recent times, they have also been reported as strong gold buyers. With oil not being the “black gold” it was, we would see the Russians selling less silver and instead keeping it for a rainy day.

Therefore at current levels the outlook for all silver producers and most up and coming producers is very encouraging indeed.

### Our View on Zinc

If one enquires of a gold bull as to what the top performing metal of 2016 might be, they will immediately claim their own as the winner when in reality the best performing major metal is in fact Zinc. It was only a couple of weeks ago crossing the US\$1 per lb threshold and it is now a long way from the US\$0.67 at which it bottomed in the second half of last year.

It seems but a distant memory, but last October the obituaries were being written for Glencore, the world’s largest Zinc trader with over 60% of global traded volumes. Now those fears are well in the past and Glencore, like Zinc, has arisen from its grave.



As the chart on the preceding page shows, Zinc has found resistance in previous years around the \$1.10 per lb level and has then retreated. However the supply situation has never been as bad in the last ten years as it is now.

Heavy underinvestment has taken its toll on the pipeline of new projects, to the effect that there aren't any to speak of. Therefore the International Lead and Zinc Study Group have projected shrinkage in supply for 2016, just as prices have started to surge. Here is their projection.

It may not be a large decline but 2016 is the second negative year in a row and reflects declining production from existing mines, exacerbated by mothballing or production cuts as a response to weak prices. The latter two actions can be reversed given time, but exhausted mines are removed permanently from the equation.



#### Zinc capacity closure in 2015

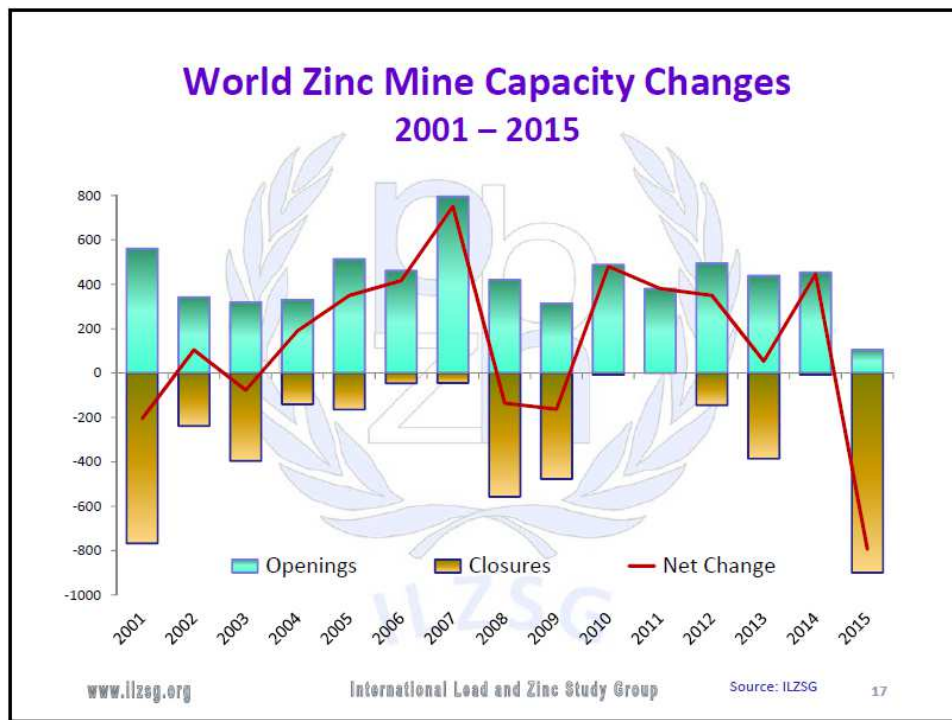
Mine	Closed Annual Capacity (Zinc contained - tonnes)
Century, Australia	-500 000
Duck Pond, Canada	-34 000
Myra Falls, Canada	-27 000
Wolverine, Canada	-53 000
Lisheen, Ireland	-175 000
Campo Morado, Mexico	-10 000
Naica, Mexico	-25 000
Pallca, Peru	-15 000
Gordonsville, USA	-60 000

Then if things couldn't get worse in 2016 we are seeing:

- Glencore has reduced zinc mine output by 500kt/yr in Australia, Kazakhstan and Peru
- Reduced output at HZL's Rampura Agucha operation in India due to technical difficulties

- CBH Resources and Perilya to reduce production at Endeavour and Broken Hill mines in Australia
- Suspension of output at Al Masane in Saudi Arabia

This trend is shown in the chart below:

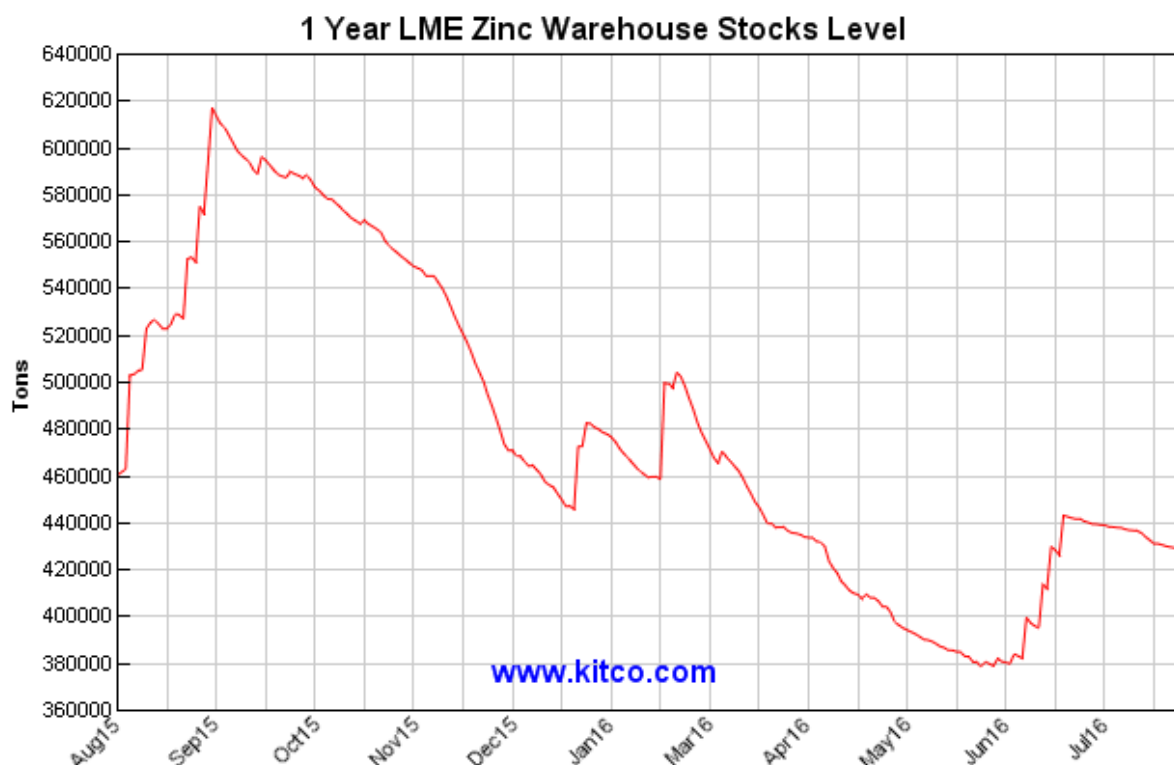


The year to contrast with is 2008, a bad year for every metal where the opening/closing ratio was not even vaguely as unbalanced as now with an even greater accentuation of the closures in 2015.

The industrial end-users of Zinc are now facing the long awaited perfect storm in zinc, where a modicum of demand growth encounters a chasm in the production pipeline. However, we should rephrase that as there is NO production pipeline to speak of. This is the major metal where least money has been spent since 2006 in new discoveries or development than any other metal.

Zinc is of course linked inextricably with the fortunes of Lead, where prices have lagged and production has also been impacted by closures of mines (and repurposing of refineries, such as Nyrstar's actions at Port Pirie).

This trend is feeding through to LME warehouse levels as the chart that follows shows. Statistics (always rubbery out of China) suggest that Shanghai stocks are not what they were either with a considerable shrinkage. LME warehouse stocks returning to a higher trend reflect the insertion of financial players into the mix, as they do not have the "off-exchange" storage options that most conventional traders, off-takers and industrial end-users have at their disposal.



Added to this is the estimate for the trade study group of a 3.5% rise in demand in 2016, we can see a supply crunch that is motoring the price along nicely. With such a tailwind, and end users scrambling to write contracts to guarantee supply, I would expect the price to breach \$1 per lb in the very near future and then head steadily towards the previously impenetrable \$1.10 barrier. What will happen is that no major in the mining industry shall consider new investments until prices breach \$1.20 and even then they would rightly (on previous bad experience) want to see them hold there before getting over-excited about launching projects. This means an ever-worsening supply situation. For existing producers this will be a deeply profitable and long overdue development.

The mood will fire up the hunt for juniors that have respectable projects by investors and by potential predators.

#### **Oro – The Back-Up Project**

In light of the fact that Electrum potentially has the ability to take the steering wheel in SSV's principal project, it is worth considering what pipeline of other work the company has for this eventuality.

In this case, the back-up project is the Oro deposit, which is located in the Eureka district of Southern New Mexico, with geological similarities to highly productive mineral camps at Bismark, located 75km to the southeast, and the Santa Eulalia in Mexico and Bisbee, located in Arizona.



Recent acquisitions of State leases and Federal claims have consolidated a mineralized trend of more than five kilometres in length. The company has undertaken target identification through geophysics.

Low outcrops and float of silicified and oxidized sediments occur in a 150m by 150m window through a thin cover of gravel at the Stockpond target. Grab samples of outcrop and float contain 0.1 to 4.8g/t Au in 15 of the 21 samples collected. The mineralization has characteristics of an intrusion-related, disseminated gold deposit in the outer region of a zoned porphyry-style base and precious metal district.

The company has budgeted US\$300,000 for a staged program consisting of permitting, prospecting and trenching which began in July, followed by drilling in the Fall of 2016 on the Stock Pond gold target.

### Financing

As mentioned earlier the company had around \$650,000 in cash on hand at the end of its latest reported accounting period (the nine months to January 31<sup>st</sup>) then in May it announced that it had closed its non-



brokered private placement by issuing 11mn Units at a price of \$0.10 per unit for gross proceeds of \$1.1mn. Each unit consists of one common share and one share purchase warrant exercisable to purchase one additional common share for a period of five years at an exercise price of \$0.15 per share. The original proposal was 10mn units, but as there was an over-allotment option of up to 10% in additional units the total number issued ended up higher. The warrants are clearly well in the money at current price levels.

## **Board & Management**

**Lawrence Page**, QC, is the President, Director & Corporate Secretary. He obtained his law degree from the University of British Columbia in 1964 and was called to the Bar of British Columbia in 1965 where he has practiced in the areas of natural resource law and corporate and securities law to the present date. Through his experience with natural resource companies and, in particular, precious metals development, he has established a unique relationship with financiers, geologists and consultants and has been counsel for public Companies which have discovered and developed producing mines in North America. Specifically, he has been a Director and Officer of Companies which have discovered and brought into production the David Bell and Page Williams mines in Ontario, the Snip, Calpine/Eskay Creek and Mascot Gold Mines in British Columbia, as well as the discovery of the Peñasquito Mine in Mexico.

He is the principal of the Manex Resource Group of Vancouver which provides services to a number of public companies in the mineral resource sector. He currently serves as a director of Bravo Gold Corporation, Duncastle Gold, Bravada Gold, Quaterra Resources, Southern Silver Exploration. and Valterra Resource Corp.

**Roger Scammell** is a director and has four decades of experience in the mining and exploration industry in North America, México and Guatemala principally with epithermal gold/silver, polymetallic base metal, and nickel and coal deposits. He was the Country Manger in México for Teck from 1992 to 2002. Under his direction, Minera Teck discovered the 72 million tonne San Nicolas VMS deposit in Zacatecas, México and the El Limon gold skarn in Guerrero, México. From 2004 until December 2010, he was initially the Vice President of Exploration and later President of Scorpio Mining, where he was responsible for the exploration, development and initial production of the Nuestra Señora polymetallic silver mine in Sonora, México as well as supervising the construction of the 1,400 tonne per day flotation mill.

**Eugene Spiering**, a director, is an exploration geologist with over 30 years of international experience in mineral exploration and senior level project management in the Americas and Europe. As VP Exploration with Rio Narcea Gold Mines, he was involved in the discovery phase through to project development and production of the El Valle gold and Aguablanca nickel mines in Spain. He is presently VP Exploration for Quaterra Resources and Duncastle Gold.

**Nigel Bunting**, a director, began his career at the in London at the insurance broker CT Bowring & Co in 1979 (which subsequently became Marsh & McLennan). In 1997 he joined Suffolk Life, a start-up insurance company. He became a director in 1998, and over the next 10 years played a pivotal role turning the company into one of the UK's leading self-invested personal pension (SIPP) administrators. By 2008 Suffolk Life had £2.5 billion assets under management and the business was bought by Legal & General for £62.5m.

**Dr Larry Buchanan**, a director, represents Electrum Resources LLC, of which he is both the Chief Geologist and President. He is a noted exploration geologist with a reputation as one of the industry's leading experts on epithermal deposits, on which he has written several definitive texts. He served as the Chief Geologist of Apex Corporation since 1995 where he discovered the San Cristobal Mine in Bolivia, prior to that he served as a Principal Advisor of international operations at Apex Silver Mines. He serves as a Director of Begeyge Minera Ltda. He was previously a Director of TintinaGold Resources Inc. (formerly, Mantra Mining Inc.) from 2009 to 2011. He played a key role in identifying several multi-million ounce gold deposits, and developed implementation programs for numerous currently producing mines. His consulting clients included Cyprus Minerals Company, FMC Corporation, Total Resources and Fischer-Watt Gold Co..

**Peter Cheesbrough**, is another director representing The Electrum Group, where he is President of its Exploration Division. He has more than 30 years of experience as a senior financial executive of public and private companies in various industries including the mining industry, where he was the CFO of Echo Bay Mines. Most recently, he was CFO of ZeaChem, the Executive Vice President and CFO for CIBER, a global information technology consulting, services and outsourcing company listed on the NYSE. He serves on the board of Sunward Resources. He is a chartered accountant.

**Donald Head**, a director, graduated from Arizona State University with a BA in Business and holds a law degree from the University of Arizona. He co-founded Centurian Development and Investments Inc., a company engaged in real estate development. He practiced as an Attorney in Arizona where, for many years, he represented Canadian exploration companies in property acquisitions and equity finance. He has served in an advisory capacity and as a director of Canadian public companies, notably Valterra Resource Corporation, Fortune River Resource Corp. and Duncastle Gold. He currently serves as Officer of Head Management Investments LLC. and formerly served as the founder and Chief Executive Officer of Capital Title Group Inc., a public company providing title insurance services in the USA, since inception in 1981 until its sale in 2006.

### **Takeover Prospects**

With the market largely denuded of Zinc juniors through a brutal process of attrition during the long dark winter for this metal the field is now clear for upcoming miners with Zinc assets to come forward and occupy the space. To a large extent this is true also of silver where very few names have appeared in recent years and many others have been subject to takeovers and roll-ups.

This raises the possibility that up and coming stories will present a mighty temptation to larger players that have no (or minimal) pipeline of new production. Even at multiples of its current price, Southern Silver presents itself as a plug-n-play asset that would solve the immediate problems of quite a number of mid-tier players that have underinvested during the down times and now have to explain to investors why they have nothing coming on-stream from 2018 onwards.

The names one can conjure with as potential buyers include any number of existing players in the Mexican silver space. Beyond this, one might also speculate on the possibilities that companies like Lundin, which has severely run down its Zinc mining assets, could be a party to move on the company (or the asset).

Before one dismisses a company with “silver” in its name as being of interest to base metals majors one should run the In Situ valuation of the current Inferred and Indicated resource at current prices. As mentioned earlier many believe that the Zinc price will hit higher levels in coming years but even using current levels, the Zinc/Lead component of Cerro Las Minitas has an “in the ground” value of over one billion dollars with the silver “chaser” worth more than half a billion dollars more.

In Situ Valuation - Cerro Las Minitas		
Silver	\$20.50	\$581,503,000
Gold	\$1,351.00	\$56,201,600
Lead	\$0.82	\$349,730,000
Copper	\$2.21	\$80,665,000
Zinc	\$1.03	\$858,299,000
		<u>\$1,926,398,600</u>

Investors should be cognizant (and satisfied) that Electrum are no newbies in this space and will drive a hard bargain if any offers do start to surface for Cerro Las Minitas.

### Risks

Amongst the risks at the current time are:

- Silver price risk
- Zinc price risk
- Financing risk for SSV’s part of the development costs at Cerro las Minitas
- Crime/cartel activity appearing in this specific part of Mexico

The issue of prices is more important than anything else. However, in being more than just a silver explorer Southern Silver gets to straddle the potential movements in both precious and base metals.

As for security issues, the company does not feel this is a problem as Durango is one of the better states when it comes to a matter of security. The company has a good working relationship with the locals and the city of Durango is only 70km away.

## Conclusion

It was not that many years ago that some estimates put it that there were around 300 Canadian listed miners working in Mexico on everything from greenfields to large scale mines. In the interim it is not as if mining changed much in Mexico but certainly the dynamic of funding markets did and Toronto/Vancouver in particular became tough going for domestic projects let alone ones in more distant locations.

Southern Silver was around before the mining universe went dark and, now that the lights are coming back on, it is not only still here but has found itself one of the smartest and most committed players in the mining space in North America as its keystone partner in the Cerro Las Minitas mine.

The task now is to upgrade the resource through further infill drilling, while also adding resources in the new areas identified around the “hill”. The stage will then be set for production of a PEA that quantifies the size and method for what will need to be an underground mine at Cerro Las Minitas.

The question is at what point do the fins start to appear in the water? Electrum itself might be the party to initiate the takeout or it might succumb to a tempting offer for its portion of the project. If the resource keeps evolving as it is then Southern Silver’s project will become a “must-have” for a major or mid-tier miner that has not been working through the downtime to maintain its production pipeline.

We have a **Long** call on Southern Silver Exploration with a twelve-month target price of \$0.94.



## Important disclosures

I, Christopher Ecclestone, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers.

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