Portfolio of

ADVANCED PROJECTS

Silver



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ADVANCED SILVER PROJECTS

OPERATION

PREFEASIBILITY

CAPEX

1,415.8 e M USD*

1 - LA PROVIDENCIA 2 - PUNA OPERATION

3 - SAN JOSÉ

4 - DIABLILLOS



RESERVES AND RESOURCES**

3,216 Moz Ag

PEA (Prel. Econ. Asses.)

INITIAL EXPLORATION

5 - CAÑADÓN DEL MORO

6 - EL OUEVAR

7 - NAVIDAD

8 - PINGÜINO

9 - VIRGINIA

- 10 ARROYO PILAHUE 11 - CALTRUNA
- 12 CERRO BLANCO
- 13 CO. LA MINA
- 14 CUYA
- 15 DOS LAGUNAS
- 16 EL BAGUAL
- 17 EL FIERRO
- 18 EL MORRO
- 19 EL ROSILLO
- 20 ESCONDIDO
- 21 LA ESPERANZA
- 22 ESPERANZA
- 23 LAGUNA AMARILLA
- 24 MAQUINCHAO
- 25 TAMARISCOS
- 26 TERESITA
- 27 TORUEL

ADVANCED EXPLORATION

^{*} This CAPEX estimated number includes projects in different stages of progress that are not described in this portfolio. **S&P 2025



^{*} Mt: millions of tons- Moz: million of ounces kt: thousands of tons- koz: thousand of ounces - M USD: Million of dollars.

La Providencia

OPERATION



LOCATION

(23° 15' 41" S -66° 48' 2,9" W)

The Providencia project is located in the northwestern of Argentina. It is located in the Puna, an extension of the Bolivian altiplano at elevations varying from 4,200 to 4,700 meters. Access is by road from either San Salvador de Jujuy (260 Kilometers) or Salta (370 kilometers).



MINERALIZATION TYPE

Sulphidation Epithermal Style



PROPERTY DATA OWNER / CONTROLLER

Hanaq Group.



OPERATOR

Hanaq Argentina S.A.



ÁREA

12,843 ha



La Providencia

PROJECT GEOLOGY

Regional Geology

The geological province of the Puna was described by Turner (1970). It forms the southern end of the Bolivian Altiplano and corresponds to a belt, morphologically between the "Cordillera Oriental" to the east and passing transitionally into the "Sierras Pampeanas Septentrionales" to the south. The Puna is characterized by an elevated plateau with an average altitude of 4,000 meters above sea level. The border between Argentina and Chile forms the western boundary, defined by volcanoes of the upper Cenozoic volcanic arc.

The basement is composed of marine sediments and low-grade metamorphic rocks, which are Ordovician in age and are highly deformed along the western margin. These sediments overlie a metamorphic basement, which is identified in the north by the presence of xenoliths brought to surface by Tertiary volcanics, while in the south these metamorphic rocks are found in outcrop.

The geological province of the Puna has been subdivided into two sectors (Alonso et al. 1984) according to their regional geological characteristics, namely the Puna Septentrional or Puna Jujena and the Puna Austral or Puna Salto catamarqueña. The oldest rocks outcropping in the Puna Jujena are Ordovician in age, while those in the Puna Saltocatamarquena are Proterozoic metamorphic rocks. The Calama-Olacapato-El Toro lineament forms the boundary between the two sub-provinces. Other differences are an Ordovician eruptive belt in the south and the development of lower Quaternary basaltic volcanism related to an extensional event.

Deposit Geology

The properties are located within a basin-and-range type terrane with north-trending linear blocks bounded by high angle reverse faults separating Tertiary-age strike-slip (pull-apart) basins, many of which have developed salt flats or salars. All lithologies in the vicinity of La Providencia have been altered to a varying degree both locally and on a property scale. Pervasive hematization has resulted in the red hue evident in the Dark Red Conglomerate and the Eocene sandstones.

Approaching the mineralized zones, carbonate content in the rocks becomes higher and, as mineralization increases, there is an increase in the abundance of sericite until, in the core of the higher grade zone, sericite appears to replace biotite and plagioclase. Calcite, on the other hand, appears depleted in the higher grade core zones.

Project Status OPERATION

Contact

Dr Jorge Moreno 2077 San Salvador de Jujuy +54 387-2429683

Sources Consulted

HANAQ Group. Providencia Project. https://hanaggroup.com/es/2023/08/providencia-2/



Puna Operation

OPERATION



LOCATION

(22° 30' 13" S - 66° 15' 39" W)

The Puna Operations are comprised of the Chinchillas mine and the Pirquitas property, which includes the Pirquitas processing facilities. The project is located in the Rinconada department, in the Jujuy province. The mine has been operated since 2,009.



MINERALIZATION TYPE

Sulphidation Epithermal Style



PROPERTY DATA
OWNER / CONTROLLER

SSR Mining Inc.



OPERATOR

Mina Pirquitas S.A



ÁREA

9,742 ha



Puna Operation

PROJECT GEOLOGY

Regional Geology

The Chinchillas and Pirquitas deposits occur within the Bolivian tin-silver-zinc belt which occupies the back-arc portion of the central Andes and extends from southern Peru to northern Argentina.

Northwestern Argentina geology consists of three main geological belts, or terranes, that together trend north-northeast: the Sub-Andean Range (Sierras Subandinas), the Eastern Cordillera (Cordillera Oriental), and the Argentine Altiplano or Puna belt. The Pirquitas and Chinchillas deposits are located in the Puna belt and are hosted in the Ordovician Acoite Formation. The Acoite Formation is an interbedded sandstone, siltstone, and mudstone turbidite sequence deposited in a back-arc basin.

Deposit Geology

The Chinchillas deposit occurs within a 13±1 Ma dacitic volcanic center and is the product of a phreatomagmatic diatreme. The deposit is controlled by an east-west trending regional scale fault where dilatation accommodated magma to intrude through the Acoite Formation.

Significant silver-lead-zinc mineralization occurs in four main areas at Chinchillas: the Silver Mantos and Basement Mantos zones in the west part of the caldera and the Socavon del Diablo and Socavon Basement/Melina zones in the east part. Mineralization is dominated by silver, with lesser amounts of lead and zinc. Mineralization occurs as disseminated sulfides, matrix infilling within the volcanic tuffs, and as matrix and fracture filling in breccias within the metasedimentary rocks.

The Pirquitas mine consists of exposures of the Acoite and Tiomayo formations. Folding plays an important role in vein formation and geometry; at the San Miguel pit, veins are intimately related to the San Miguel anticline, occurring proximal to the fold apex and most commonly striking perpendicular to the fold planes. West-northwest striking regional faults are also observed throughout the property. This structural fabric is interpreted to control the geometry and location of the Cortaderas breccia body. There are two types of mineralization at Pirquitas: (1) polymetallic veins with peripheral disseminated mineralization; and (2) mineralized hydrothermal breccia. Vein type is the dominant mineralization style and has been the main source of extracted ore.

Project Status OPERATION

Puna Operation

Reserves (2023)

CATEGORY	Ag (g/t)	Pb (%)	Zn (%)	Contained Ag (000 kOz Ag)
Proven - Ex-pit	164.70	1.42	0.21	5,980
Probable - Ex-pit	160.44	1.23	0.20	12,469
Probable - Stockpiles	111.80	0.88	0.32	2,228
Total	4,166	1.23	0.22	20,677

Technical and Economic Information

Estimated average annual production: Silver: 7,7 Moz

Product to obtain: Doré Estimated LOM: 2.5 years Mining Method: Open pit

Company's Announcement

March 27, 2023. SSR Mining announces positive exploration results at Puna.

Contact

San Martin 116 - Piso #1 San Salvador de Jujuy, Argentina +54 388 483-0440

Sources Consulted

SSR Mining Inc., Puna Project. https://www.ssrmining.com/operations/production/puna/
SSR Mining Inc., Technical Report Summary on the Puna Operations, Argentina. February 2024. https://s22.q4cdn.com/546540291/files/doc_financials/2023/q4/slr-ssr-mining-puna-trs-final-feb-11-2024.pdf?v=012307
SSR Mining Inc., News. https://ir.ssrmining.com/investors/default.aspx



San José

OPERATION



LOCATION

(46° 41' S - 70° 17' W)

The San José project is located the Santa Cruz province. The mine is situated 350 kilometers southwest of Comodoro Rivadavia. In production since 2007.



MINERALIZATION TYPE

Low Sulphidation Epithermal Style



PROPERTY DATA OWNER / CONTROLLER

Hochschild Mining Plc (51%) McEwen Mining Inc. (49%)



OPERATOR

Minera Santa Cruz S.A.



ÁREA

50,491 ha



San José

PROJECT GEOLOGY

Regional Geology

The San José mine is located in Deseado Massif of the Santa Cruz province. The massif consists of the Paleozoic metamorphic basement unconformably overlain by Middle to Upper Jurassic bimodal andesitic and rhyolitic volcanics and volcaniclastics. Cretaceous sediments and Tertiary to Quaternary basalt overlie the Jurassic volcanic.

Deposit Geology

The San José mine is located in the northwest corner of the Deseado Massiff, where Jurassic bimodal volcanics host numerous quartz veins bearing gold and silver. Low sulphidation silver-gold and polymetallic mineralization accompanied Jurassic magmatism and deformation in the Deseado Massif

The Jurassic rocks are divided into the Bajo Pobre Formation, predominantly of intermediate composition, and the felsic Bahía Laura Group. The Jurassic units are overlain by Cretaceous sedimentary rocks and Tertiary flood basalts. The Bajo Pobre Formation is the main host for gold and silver mineralization, where veins are typically developed in competent andesite flows at the Huevos Verdes, Frea and Kospi deposits on the San José Property and to a lesser extent in volcaniclastic units. The San José deposits are considered to be typical LS Ag-Au epithermal vein deposits.

The main structural trend of fault and vein systems is north-west to north-northwest. Less prominent are east-striking faults and veins and those north to northeast striking. Mineralization in the San José area occurs as low sulfidation epithermal quartz veins, breccias and stockwork systems accompanying normal-sinistral faults. The main structural trend of fault and vein systems on the property is northwest to north-northwest, together with less prominent east striking and north to northeast striking faults and veins.

Project Status OPERATION

San José

Reserves (2023)

CATEGORY	Ag (g/t)	Au (g/t)	Contained Ag (Moz Ag)	Contained Au koz Au)
Proven	283	5.1	2.7	49.0
Probable	312	5.7	2.4	43.7

Technical and Economic Information

Estimated average annual production (2024): Silver: 4,150 Moz | Gold: 73.73 koz

Estimated LOM: 3.5 years Mining Method: Underground

Contact

Minera Santa Cruz SA Av. Santa Fe 2755 piso 9 Capital Federal, Argentina +54 11 41327900

Sources Consulted

McEwen Mining, San Jose Project. https://www.mcewenmining.com/operations/reserves-and-resources/default.aspx Hochs Child, San Jose Project. https://www.hochschildmining.com/where-we-operate/current-operations/san-jose/ McEwen Mining Inc. Technical Report on the San Jose silver-gold mine Santa Cruz, Argentina. August 15, 2014. https://s2l.q4cdn.com/390685383/files/technical reports/san jose/San Jose aug 2014-43-101.pdf McEwen Mining Inc., AU & AG production enhancing productivity developing large cu asset significant insider ownership. December 12, 2024. https://s2l.q4cdn.com/390685383/files/doc_presentations/mcewen-factsheet.pdf



Diablillos

PREFEASIBILITY



LOCATION

(25° 18' 00" S - 66° 50' 00" W)

The Diablillos property is located in the high Puna and Altiplano region of north-western Argentina. It is approximately 160 km southwest of the city of Salta and 375 km northwest of the city of Catamarca, along the border between the Provinces of Salta and Catamarca, Argentina. Access is easy from the city of Salta to the northwest to the city of San Antonio de los Cobres along the RN 51.



MINERALIZATION TYPE

High Sulphidation Epithermal Style



PROPERTY DATA OWNER / CONTROLLER

AbraSilver Resource Corp.



OPERATOR

Abra Plata Argentina S.A.



ÁREA

7,919 ha



Diablillos

PROJECT GEOLOGY

Regional Geology

The project is located in the Postacretionary Metalogenetic Belt associated with the Neogene magmatic arc, linked to NE-SO transtensional zones. It is characterized by a vulcanism that has not evolved much in the Miocene period. It includes corridors to the NE that control the magmatic and hydrothermal activity, where polymetallic mineralizations in the N (Farallón Negro) and porphyries with subtypes linked to the characteristics of magmatism such as Agua Rica and Alumbrera are located.

The dissected volcanoes of the upper Miocene in the Puna usually host areas with intermediate argillic alteration and silicification. In the highest levels of these systems, in their final episodes, golden manifestations such as Diablillos and Organullo were recognized.

Deposit Geology

In the vicinity of the project, the Diablillos-Cerro Galán fault zone is approximately 10 km wide. Magmatism and hydrothermal activity often occur at the intersection of the faults with shear structures, such as the Cerro Ratones line. Tertiary andesitic flows and flow breccias develop with intermediate tufa and pelic units, and subvolcanic porphyry rocks. Precambrian granitic and granodioritic rocks underlie most of the volcanic sequence. Drilling by Silver Standard Resources identified a highly permeable erosive discordance that would control hydrothermal fluids.

The recognized alteration contains silica clay-alunite-jarosite, indicative of strong acid leaching, which is related to the presence of gold in silica.

Project Status PREFEASIBILITY

Company's Announcement

December 03, 2024. Announces Updated Diablillos PFS With CAD\$1,046M (USD\$747M) After-Tax Base-Case NPV.

November 12, 2024. Announces Additional High-Grade Drill Results from Diablillos; Including 62 Metres at 175 g/t Silver in JAC Step-out Drilling.

April 2024. The company announced the Pre-feasibility Study Technical Report for its Diablillos project.



Diablillos

Resources and Reserves (2024)

RESOURCES	Ag (g/t)	Au (g/t)	Contained Ag (000 koz Ag)	Contained Au (000 koz Au)
M&I	87	0.79	148,275	1,360
Inferred	23	0.66	2,415	70

RESERVES	Ag (g/t)	Au (g/t)	Contained Ag (000 oz Ag)	Contained Au (000 oz Au)	
Proven	118	0.86	46,796	341	
Probable	80	0.80	76,684	766	

Technical and Economic Information

Estimated average annual production: Silver: 7,6 Moz | Gold: 72 koz

Product to obtain: Doré CAPEX: 544 M USD Estimated LOM: 14 years Mining Method: Open pit

Contact

AbraSilver Resource Corp.

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Sources Consulted

AbraSilver Source Corp., Diablillos Project. https://www.abrasilver.com/projects/diablillos/

Corporate presentation, December 2024. https://www.abrasilver.com/investors/presentations/ Abra Silver Resource Corp., New Releases. https://www.abrasilver.com/news-releases/

NI 43-101 Technical Report, pre-feasibility study for the Diablillos Ag-Au Project. Salta Province, Argentina. May 29, 2024. https://www.abrasilver.com/_resources/tech-reports/Diablillos-Tech-Report-April-2024.pdf?v=010202

AbraSilver Resource Corp., NI 43-101 Pre-feasibility study Technical Report- Diablillos project, Salta Province, Argentina. April 30, 2024.

Abrasilver Resource Corp., NI 43-101 Preliminary economic assessment technical report - Diablillos Project, Salta Province, Argentina. January 13. 2022. https://minedocs.com/22/Diablillos-PEA-01132022.pdf

NI 43-101 Technical report mineral resource estimate Diablillos Project Salta Province, Argentina Prepared for AbraSilver Resource Corp. Report Date – November 28th, 2022

https://www.abrasilver.com/_resources/tech-reports/Diablillos-Tech-Report-Dec-2022-Final.pdf



Cañadón del Moro

PFΔ



LOCATION

(40° 49' 59.98" S - 69° 39' 00" W)

The project is located in Cerro Mesa, 25 de Mayo department, 75 kilometers from the town of Ingeniero Jacobacci. The project is located in the North Patagonian Massif.



MINERALIZATION TYPE

Low Sulphidation Epithermal Style



PROPERTY DATA OWNER / CONTROLLER

Southern Copper Corp.



OPERATOR

Southern Copper Argentina S.R.L.



ÁREA

5,000 ha



Cañadón del Moro

PROJECT GEOLOGY

Regional Geology

The project is located in the geological province called the Norpatagonian Massif. The mineralization is located in veins that accumulate a total of 7.6 kilometers, hosted in felsic-intermediate volcanic rocks of Upper Triassic age of the Garamilla Formation, which present silicic and argillic alteration.

Project Status PRELIMINARY ECONOMIC ASSESSMENT

Sources Consulted

Americas Mining Corporation, Growth project. https://www.americasmining.com/inversiones/ Gobierno de Río Negro,Realizan muestreo participativo de agua en un nuevo proyecto metalífero. Noviembre 15, 2024. https://rionegro.gov.ar/articulo/51933/realizan-muestreo-participativo-de-agua-en-un-nuevo-proyecto-metalifero SEGEMAR, Database of minerals deposits of the Argentine Republic, Cañadón del Moro Este Project. https://sigam.segemar.gov.ar/segedoc/res/img/sigam_vacimientos/dp24562.html



El Quevar

PEA





LOCATION

(24° 20' 08" S - 66° 46' 57" W)

The project is located in the department of Los Andes, at 4,800 m.a.s.l, about 300 km NW of the city of Salta. It can be accessed from Salta city through RN 51 to the detour with RP 27, continuing for 30 km.



MINERALIZATION TYPE

High Sulphidation Epithermal Style



PROPERTY DATA OWNER / CONTROLLER

Argenta Silver Corp.



OPERATOR

SILEX Argentina S.A.



ÁREA

56,700 ha

El Quevar

PROJECT GEOLOGY

Regional Geology

The project is located at the eastern end of the Puna unit in Argentina. Dominated by tertiary rocks of the El Quevar volcanic complex, these Shoshone rocks result from a rift basin during the Cretaceous to the Paleocene. It is bounded by structural lines (120° heading) to the north (Calama-Olacapato-Toro) and another parallel to the south. An older, secondary lineament system of 25° heading is interpreted to be associated with folding of the basement rocks during the Palaeozoic. The El Quevar volcanic complex was formed from the Miocene to the early Quaternary in several events. The dominant product was ignimbritic flows covered by rhyolithic flows and followed by andesitic flows and dacitic intrusions (domes). The latter related to alteration and mineralization events. Erosion windows expose the intrusive and extensive areas of alteration. The southern window includes the mineralized areas of El Quevar. And to the North the Campo Viejo target.

Deposit Geology

The geology of the project is characterized by the presence of dacite domes associated with breccia complexes. These cover hematetic breccias and slope to the southwest. The ensemble is overprinted by argillic alteration and silicification controlled by E-W structures and later NE-SW faults. Along the earlier structures mineralization is associated with Vuggy Silica and Silico Pyrite alteration in brecciated rock (auto-breccia). In the Yaxtché deposit the mineralization is associated with intensely altered and structurally controlled zones within the older volcanic rocks. Silver-bearing sulfides are mostly in gap-filling veins and less frequently disseminated.

Project Status PRELIMINARY ECONOMIC ASSESSMENT

Company's Announcement

October 2024, Argenta Silver Closes El Quevar Project Acquisition

El Quevar

Resources (2024)

RESOURCES	Tonnage (Mt)	GRADE Ag (g/t)	Metal Content Ag (MOz)
Indicated	2.93	482	45.3
Inferred	0.31	417	4.1

Technical and Economic Information

Estimated average annual production: Silver: 4.8 MOz

Product to obtain: Silver concentrate

CAPEX: 96.8 M USD Estimated LOM: 6 years

Mining Method: Underground

Contact

information@goldenminerals.com

Sources Consulted

Argenta Silver Corp., El Quevar Project. https://argentasilver.com/el-quevar-project/

Argenta Silver Corp., News. https://argentasilver.com/news/

Argenta Silver Corp., NI 43-101 Technical Report on the Mineral Resource Estimate of the El Quevar Project Salta Province, Argentina. September 30, 2024.

https://argentasilver.com/wp-content/uploads/2024/10/262996_El-Quevar-Compiled-Report_FINAL_16.10.2024.pdf

Golden Minerals Company, Golden Minerals Reports Third Quarter 2022 Results. November 10, 2022 https://www.goldenminerals.com/news/2022/golden-minerals-reports-third-guarter-2022-results

Golden Minerals Company. NI 43-101 Technical Report on Updated Mineral Resource. February 28, 2018.

https://www.goldenminerals.com/ resources/reports/El Ouevar 43101 TR 20180226.pdf?v=0.561



Navidad

PEA



LOCATION

(42° 24' 54" S - 68° 49' 12" W)

The Navidad Project is located about 35 km from the town of Gastre, in the department of the same name, in the north of the province of Chubut.



MINERALIZATION TYPE

Intermediate Sulphidation Epithermal Style



PROPERTY DATA OWNER / CONTROLLER

Pan American Silver Corp.



OPERATOR

Minera Argenta S.A.



ÁREA

10,000 ha



Navidad

PROJECT GEOLOGY

Regional Geology

The Navidad Project is located on the southwest edge of the Northern Patagonia Massif in southern Argentina. This boundary of the massif is coincident with the "Gastre Fault System", a mega-structural feature believed to be the result of continental-scale northeast to southwest extension that produced through down-faulting a series of northwest to southeast trending half grabens and tectonic basins (von Gosen et. al. 2004). Granitoid rocks of the basement in northern Chubut Province belong to the Palaeozoic age Mail Choique and Lipetren formations. Locally these rocks were exposed at surface in windows through the overlying Mesozoic age volcanic and sedimentary rocks. At Navidad the Mesozoic sequence consists of the Lonco Trapial Formation and overlying Cañadón Asfalto Formation. The latter of these formations hosts the Navidad mineralisation.

Deposit Geology

Navidad mineralisation is epithermal, as demonstrated by widespread open space-filling crustiform and cockade textures in the gangue minerals (carbonate, barite) and sulphide assemblages. The abundance of base metals, combined with carbonate-rich gangue, suggests that the deposit is intermediate, rather than low, sulphidation in style. Typical high sulphidation sulphides and gangue minerals are absent, but there is rare late stage kaolinite and minor hydrothermal alunite that implies late ingress of a hypogene acid fluid.

Project Status PRELIMINARY ECONOMIC ASSESSMENT

Company's Announcement

Aug. 2022. The company reported Mineral Reserves and Mineral Resources.

Navidad

Resources (2024)

RESOURCES	Tonnage (Mt)	ge (Mt) Ag (Moz)		Metal Content		
KL30 CK023	Tomiage (Mt)	Ag (MOZ)	Ag (g/t)	Pb (%)	Cu (%)	
M&I	155.2	632.3	131	1.12	0.70	
Inferred	45.9	119.4	81	0.57	0.02	

Technical and Economic Information

Estimated average production (Year 1-5): Silver: 19.8 MOz

Product to obtain: Concentrate

CAPEX: 760 M USD Estimated LOM: 17 years Mining Method: Open pit

Contact

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Sources Consulted

Pan American Silver Corp., Navidad Project. https://panamericansilver.com/es/operations/silver-segment/navidad/
Pan American Silver. Reports Mineral Reserves and Mineral Resources as at June 30, 2024. November 09, 2024. https://panamericansilver.com/operations/reserves-and-resources/
Pan America Silver Corp., Navidad Project, Chubut Province, Argentina: Preliminary Assessment. January 14, 2010.









Secretaría de Minería