



Catalogue of Advanced Silver Projects

Argentina **unida**



Ministerio de
Desarrollo Productivo
Argentina

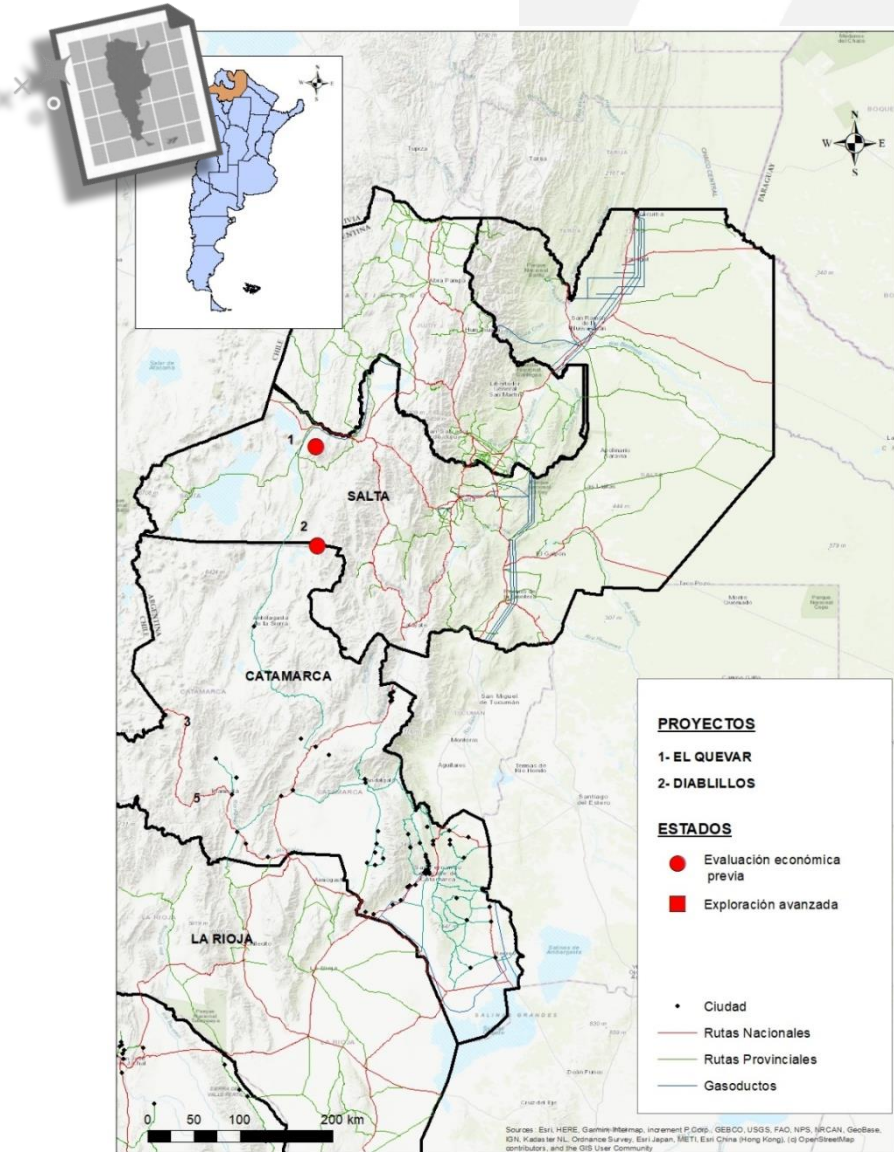


This publication of the National Government aims to display information from third parties on the exploratory results of advanced projects and the mining geological potential of the country. The information is obtained through diverse sources, mainly from public access portals of the operator/controller companies and from technical reports published by them on various websites under international standards aimed at guaranteeing a greater degree of reliability. In some cases the data are estimates, when this is the case, it is pointed out and indicated in the footer.

For more information on the legal, social and / or environmental status of the projects, the interested parties should consult the corresponding provincial authorities since the mines are private assets of the Nation or of the Provinces, depending on the territory in which they are located (according to Articles 124 and 75 subsection 12 of the NATIONAL CONSTITUTION, and Article 7 and concordant of the NATION MINING CODE, approved by Law No. 1919).

The SECRETARY OF MINING is not responsible for the misuse of this information.

Catalogue of ADVANCED SILVER PROJECTS



Northern region:

1- El Quevar

2- Diablillos

Ag

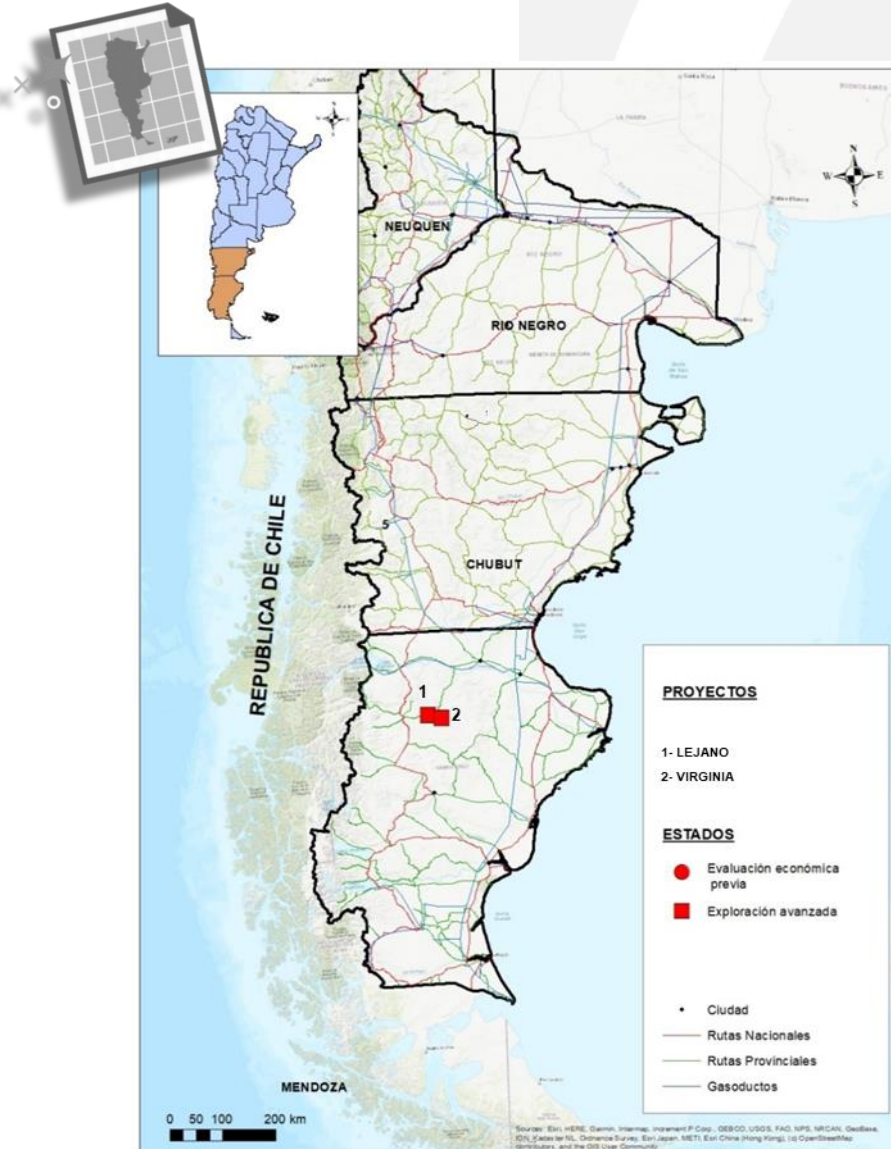
Ident. Res. **928.1 Moz Ag**
CAPEX **1,150 M USD**

4 Mines

3 PEA

**2 Advanced
Exploration**

Catalogue of ADVANCED SILVER PROJECTS



Southern region:

1- Lejano

2- Virginia

Ag

Ident. Res. **928.1 Moz Ag**
CAPEX **1,150 M USD**

4 Mines

3 PEA

**2 Advanced
Exploration**

EL QUEVAR



Los Andes
Salta



4800
m.a.s.l.



24° 20' 08"
66° 46' 57"

Latitude South

Longitude West



COMMODITY



MINERALIZATION TYPE

High Sulphidation
Epithermal



LOCAL OPERATOR

Silex
Argentina S.A.



COMPANY

Barrick Gold
Corp., Golden
Minerals Co.

RESERVES



Proven
Probable

GRADE (%)

MINERAL CONTENT (Tons)

- -
- -

RESOURCES

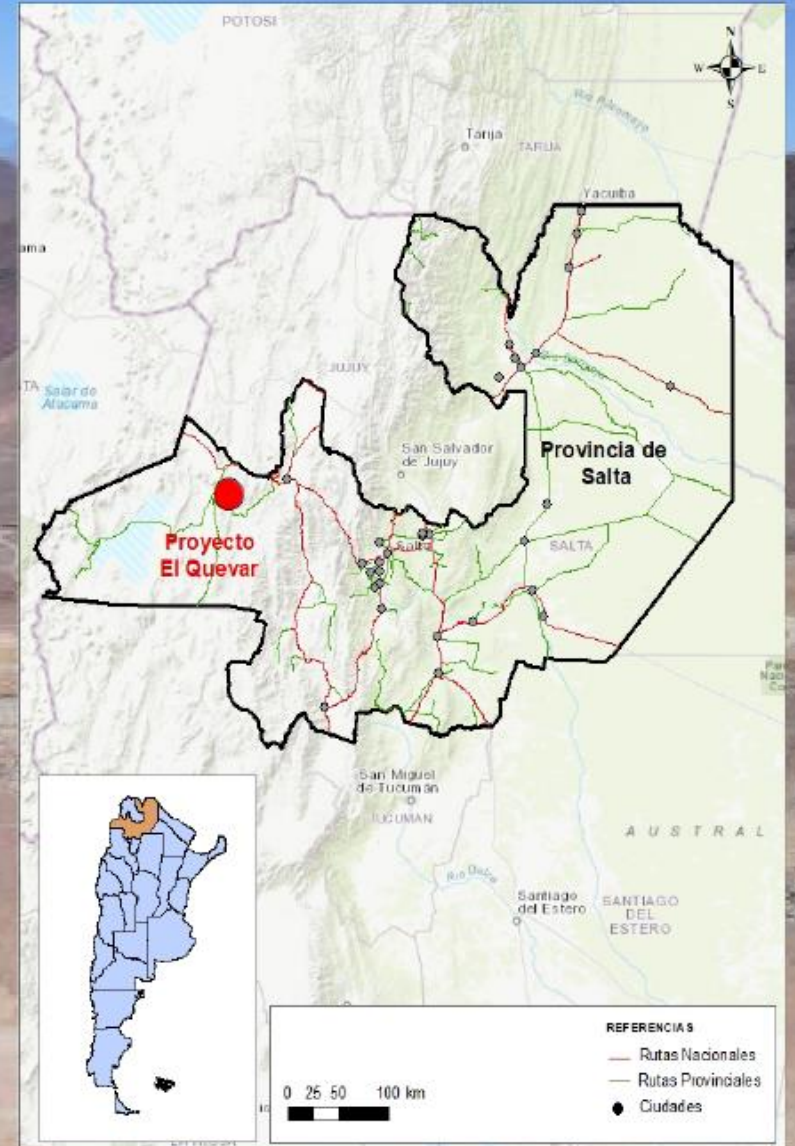


Measured
Indicated
Inferred

GRADE (%)

MINERAL CONTENT (Tons)

- -
482 45,300,000
417 4,100,000



EL QUEVAR

LOCATION (24° 20' 08" Lat. S; 66° 46' 57" Long. W)



The project is located in the department of Los Andes, 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. Driving time from Salta city is approximately 4 - 5 hours.

PROPERTY DATA



- **OWNER / CONTROLLER: Barrick Gold Corp. - Golden Minerals Company**
- **OPERATOR: Silex Argentina S.A.**
- **AREA: 57.000 ha.**

PROJECT STATUS

LAST PUBLIC TECHNICAL REPORT

LAST PUBLIC TECHNICAL REPORT



- PROSPECTING
- INITIAL EXPLORATION
- ADVANCED EXPLORATION
- **PREL. ECON. ASSES. (PEA)**
- PREFEASIBILITY
- FEASIBILITY
- CONSTRUCTION
- OPERATION



NI 43-101 Technical Report on Updated Mineral Resource Estimate, Feb. 26, 2018

PROJECT GEOLOGY

TYPE OF DEPOSIT:

Intermediate Sulphidation epithermal style

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-Olapato-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 rhyolitic 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 haematetic 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.

EL QUEVAR

TECHNICAL / ECONOMIC INFORMATION OF THE PROJECT



AVERAGE ANNUAL PRODUCTION

Silver



4.800.000 Oz

PRODUCT TO OBTAIN: Silver concentrate



CAPEX: 96,8 MUSD



Estimated annual employment in operation: 1.630
Estimated annual employment in construction stage:
n/a



Estimated LOM: 6 years



Mining Method: Underground

SOURCES CONSULTED



NI 43-101 Technical Report on Updated Mineral Resource Estimate, Feb. 26, 2018

http://www.goldenminerlas.com/projects/el_quevar/

RESOURCES AND RESERVES - ESTIMATION



RESOURCES	Tonnage (Mt)	Grade	Metallic Content
		Ag (g/t)	Ag (Oz)
Indicated	2,93	482	45.300.000
Inferred	0,31	417	4.100.000

CONTACT

Gral Alvarado 1185 Salta
information@goldenminerals.com

DIABLILLOS



Los Andes
Salta



4000
m.a.s.l.



LOCATION

25° 16' 29"
66° 47' 23"

Latitude South

Longitude West



COMMODITY



MINERALIZATION TYPE
High Sulphidation
Epithermal



LOCAL OPERATOR

Pacific
Rim Mining
Corporation
Argentina S.A.



COMPANY

AbraPlata
Resources
Corp.

RESERVES



Proven
Probable

GRADE (%) MINERAL CONTENT (Tons)

- -
- -

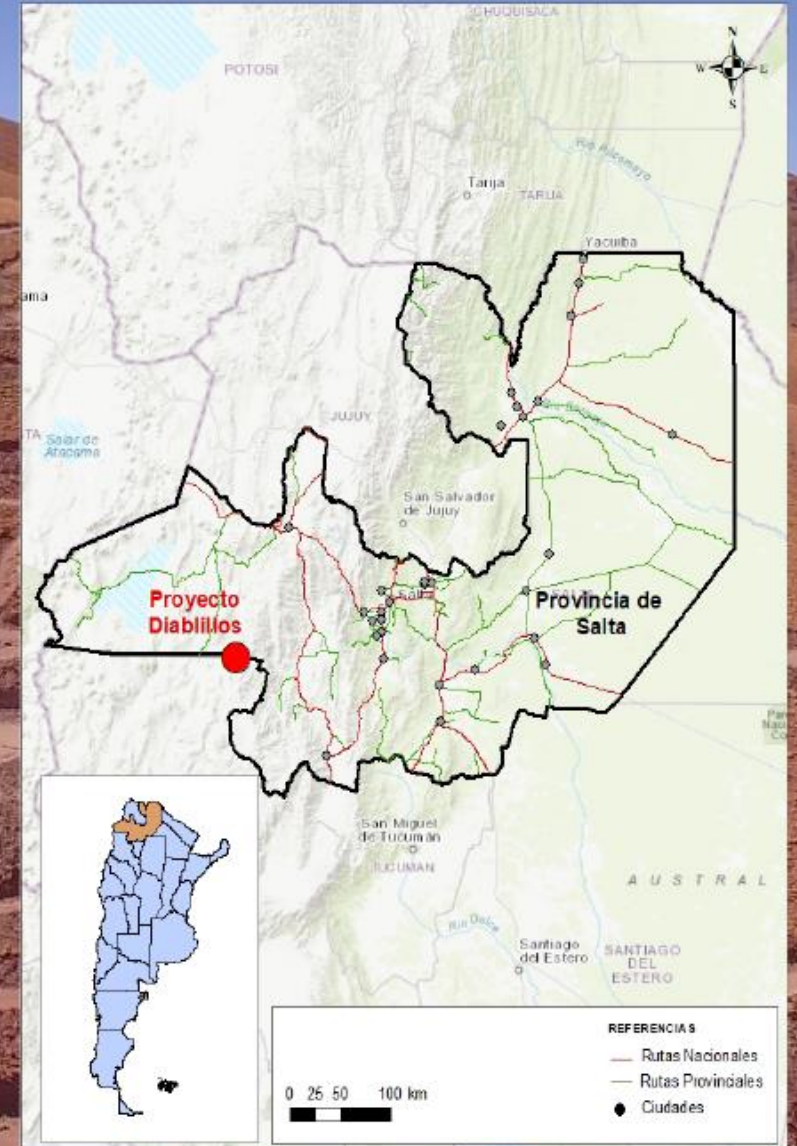
RESOURCES



Measured
Indicated
Inferred

GRADE (g/t) MINERAL CONTENT (Tons)

- -
93.1 80,940,000
48.4 1,690,000



DIABLILLOS

LOCATION (25° 16' 29" Lat. S; 66° 47' 23" Long. W)



The Diablillos project is located 150 km southwest of the city of Salta, at 4,000 meters above sea level, immediately southwest of the Diablillos Volcano.

Access is easy from the city of Salta to the northwest to the city of San Antonio de los Cobres along the RN 51.

PROPERTY DATA



- **OWNER / CONTROLLER:** AbraPlata Resource Corp.
- **OPERATOR:** Pacific Rim Mining Corp. Arg. S.A. - AbraPlata Argentina S.A
- **AREA:** 4.500 ha.

PROJECT STATUS

LAST PUBLIC TECHNICAL REPORT



- PROSPECTING
- INITIAL EXPLORATION
- ADVANCED EXPLORATION
- **PREL. ECON. ASSES. (PEA)**
- PREFEASIBILITY
- FEASIBILITY
- CONSTRUCTION
- OPERATION

LAST PUBLIC TECHNICAL REPORT



Technical Report on the Diablillos Project, Salta Province. 16-04-2018

PROJECT GEOLOGY

TYPE OF DEPOSIT:

High Sulphidation Epithermal style



REGIONAL GEOLOGY

The project is located in the Postaccretionary 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 Alumbreira 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 are 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 tuffa and pelitic 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.

DIABLILLOS

TECHNICAL / ECONOMIC INFORMATION OF THE PROJECT



AVERAGE ANNUAL PRODUCTION

Silver



9.800.000 Oz Ag eq

PRODUCT TO OBTAIN: Doré



CAPEX: 293 MUSD



Estimated annual employment in operation: 1.630
Estimated annual employment in construction stage:

n/a



Estimated LOM: 8 years



Mining Method: OPEN PIT

SOURCES CONSULTED



News Release - AbraPlata Announces Diablillos PEA Results with 30.2% IRR Production of 9.8 Million Silver Equivalent Ounces Per Year. 2018-03-02. TECHNICAL REPORT ON THE DIABLILLOS PROJECT, SALTA PROVINCE, ARGENTINA

RESOURCES AND RESERVES - ESTIMATION



RESOURCES	Tonnage (Mt)	Grade		Metal Content	
		Ag (g/t)	Au (g/t)	Ag (Oz)	Au (Oz)
Indicated	27,1	93,1	0,84	80.940.000	732.000
Inferred	1,1	48,4	0,83	1.690.000	29.000

CONTACT

Entre Ríos 850 - Salta/ Paraguay 1132 5° Piso – C.A.B.A.
— Cod. Postal: 4400 —
<http://www.abrapalta.com>
willem@abrapalta.com

VIRGINIA



Deseado
Santa Cruz



300
m.a.s.l.



LOCATION

47° 28' 43"
69° 57' 19"

Latitude South

Longitude West



COMMODITY



MINERALIZATION TYPE
Low Sulphidation
Epithermal



LOCAL OPERATOR

Minera del
Sol S.A.



COMPANY

Mirasol
Resources

RESERVES



Proven
Probable

GRADE (%) MINERAL CONTENT (Tons)

- -
- -

RESOURCES



Measured
Indicated
Inferred

GRADE (g/t) MINERAL CONTENT (Tons)

- -
310 11,927,000
207 3,062,000



VIRGINIA

LOCATION (47° 28' 43" Lat. S; 69° 57' 19" Long. W)



The project is located 150 km SW of the town of Las Heras (Santa Cruz province). The outcrops are located approximately 10 km from the exploration base at Estancia La Patricia through 2 km of gravel roads and 8 km of exploratory roads.

PROPERTY DATA



- **OWNER / CONTROLLER:** Mirasol Resources
- **OPERATOR:** Minera del Sol S.A.
- **AREA:** 32.625 ha.

PROJECT STATUS

LAST PUBLIC TECHNICAL REPORT



- PROSPECTING
- INITIAL EXPLORATION
- **ADVANCED EXPLORATION**
- EVAL. ECON. PREVIA (PEA)
- PREFEASIBILITY
- FEASIBILITY
- CONSTRUCTION
- OPERATION

LAST PUBLIC TECHNICAL REPORT



- Mirasol Identifies High-Grade Silver Mineralization at Virginia. 2018-05-10.
- Updating Resources and Reserves. 2016-03-29

PROJECT GEOLOGY

TYPE OF DEPOSIT:

Low Sulphidation epithermal style



REGIONAL GEOLOGY

The Virginia Project is located in the Deseado Massif, which consists mostly of mid-Jurassic and Cretaceous/Tertiary sedimentary and volcanic rock sequences. From the base of the sequence, this unit is dominated by volcanic and sedimentary rocks of the Bahía Laura Group, consisting of the Chon Aike Formation and the Suprajacent Bajo Pobre Formation, although according to some authors the age relationships between these formations is questionable due to multiple cycles of volcanic deposition. These units contain important deposits of precious metals, predominantly low-sulphur epithermal style.



DEPOSIT GEOLOGY

The area around the veins containing the mineral resource is covered by a volcanic sequence consisting of felsic lava flows, tuffs and volcanic breccias which have overlying ignimbritic ash flow clearly different, exhibiting strong sub-vertical - vertical fracturing related to cooling, and separating the main area of Santa Rita from the Virginia vein outcrop. Associated with the felsic flows are some circular domes-like structures of rhyolitic composition. The stratigraphy in the main area of Santa Rita is different from that found near the Virginia veins. The main lithologies at Santa Rita are felsic ignimbrites with outcrops of rhyolite flows. However, some circular structures are evident, and these may have helped to control the distribution of certain volcanic units.

VIRGINIA

TECHNICAL / ECONOMIC INFORMATION OF THE PROJECT



AVERAGE ANNUAL PRODUCTION

Silver



N/A

PRODUCT TO OBTAIN: N/A



CAPEX: N/A



Estimated annual employment in operation: N/A
Estimated annual employment in construction stage:
n/a



Estimated LOM: N/A



Mining Method: N/A

SOURCES CONSULTED



<http://mirasolresources.com/project/santa-rita-virginia-silver-project/>
Mirasol Identifies High-Grade Silver Mineralization at Virginia. 2018-05-10.
2016-03-29. 43-101 Updating Resources and Reserves Virginia Project

RESOURCES AND RESERVES - ESTIMATION



RESOURCES	Tonnage (Mt)	Grade	Metal Content
		Ag (g/t)	Ag (Oz)
Indicated	1,19	310	11.927.000
Inferred	0,46	207	3.062.000

CONTACT

Liniers 370, Bombal Sur
Godoy Cruz, Mendoza
Contact@mirasolresources.com

LEJANO



Río Chico
Santa Cruz



300
m.a.s.l.



LOCATION

47° 25' 55"
70° 16' 08"

Latitude South
Longitude West



COMMODITY



MINERALIZATION TYPE
Low Sulphidation
Epithermal



LOCAL OPERATOR

Coeur
D'Alene Mines
Corporation



COMPANY

Coeur
D'Alene Mines
Corporation

RESERVES

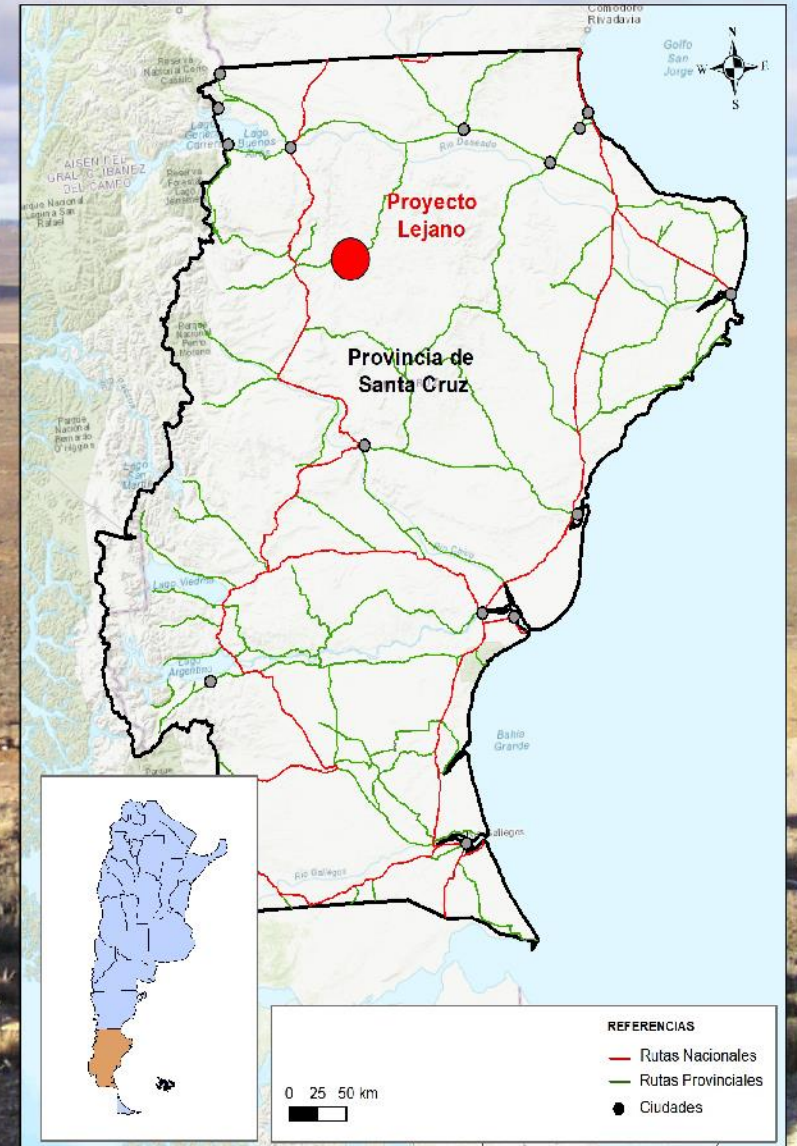


	GRADE (%)	MINERAL CONTENT (Tons)
Proven	-	-
Probable	-	-

RESOURCES



	GRADE (g/t)	MINERAL CONTENT (Tons)
Measured	-	-
Indicated	105.9	1,950,000
Inferred	96.3	1,950,000



LEJANO

LOCATION (47° 25' 55" Lat. S; 70° 16' 08" Long. W)



The Project is located about 190 km southwest of the city of Pico Truncado. Vehicle access to the property is from the coastal city of Comodoro Rivadavia, which is a two and a half hour flight south of Buenos Aires. From Comodoro Rivadavia, vehicular access to the Project takes approximately five hours.

PROPERTY DATA



- **OWNER / CONTROLLER: Coeur Dálene Mines Corporation**
- **OPERATOR: Coeur Dálene Mines Corporation**
- **AREA: 33.282 ha.**

PROJECT STATUS

LAST PUBLIC TECHNICAL REPORT

LAST PUBLIC TECHNICAL REPORT



- PROSPECTING
- INITIAL EXPLORATION
- **ADVANCED EXPLORATION**
- EVAL. ECON. PREVIA (PEA)
- PREFEASIBILITY
- FEASIBILITY
- CONSTRUCTION
- OPERATION



Coeur Mining Resources and Reserves Report. 2013

PROJECT GEOLOGY

TYPE OF DEPOSIT:

Low Sulphidation epithermal style



REGIONAL GEOLOGY

The Project is located in the Deseado Massif, which is dominated by mid to upper Jurassic volcanic-felic and volcanic-clastic rocks. Regional faults affect the sequence as a consequence of reactivation of NW-SSE basement structures forming granbens and elevated horst blocks. In the Jurassic, normal NW-SE and NE-SW faults acted. Deformation processes were relatively low and the deposits are subhorst to weakly inclined. Near failures there are exceptions where the deformation is greater and subvolcanic dome type bodies were hosted. Jurassic deposits are covered by continental sediments (Cretaceous) and basaltic lavas from the Tertiary and Quaternary. The youngest deposits are Quaternary gravels.



DEPOSIT GEOLOGY

The deposits are distributed within and to the east of a volcanic-subvolcanic complex that is surrounded and covered by a series of rhyolite domes. The eruptive product of the rhyolite domes forms an ignimbrite platform, more recent than the mineralization, and gives rise to large outcrops to the north and south of the volcanic-subvolcanic complex. These post-mineralization ignimbrites have preserved the epithermal systems, as well as lake, travertine and intertidal sediments deposited on the paleo-surface from the late Jurassic period. The mineralogy of the veins seems to depend on their location in relation to the Eureka Volcanic-Subvolcanic Complex. Typical vein textures of low-sulphidation epithermal systems include colloidal and crustiform banding, cocarda, and manganese/iron oxide matrix breccias.

TECHNICAL / ECONOMIC INFORMATION OF THE PROJECT

AVERAGE ANNUAL PRODUCTION



Silver



N/A

PRODUCT TO OBTAIN: N/A



CAPEX: N/A



Estimated annual employment in operation: N/A
Estimated annual employment in construction stage:
n/a



Estimated LOM: N/A



Mining Method: N/A

SOURCES CONSULTED



2013-02-15 Coeur Reports Healthy Increases in Combined Reserves and Measured and Indicated Resources. Coeur Mining.
2014-02-26. Annual Report Coeur Mining 2013

RESOURCES AND RESERVES - ESTIMATION



RESOURCES	Tonnage (Mt)	Grade		Metal Content	
		Ag (g/t)	Au (g/t)	Ag (Oz)	Au (Oz)
Indicated	0,63	105,94	0,01	1.952.000	7.000
Inferred	0,7	96,34	0,93	1.972.000	1.000

CONTACT