

## **Mirasol Advances New Altazor High Sulfidation Epithermal Gold Project, in the Miocene Mineral Belt of Northern Chile**

**VANCOUVER, BC – October 11, 2017 -- Mirasol Resources Ltd. (TSX-V: MRZ, OTCQK: MRZLF, “Mirasol”, the “Company”)** is pleased to report initial exploration results from its new 100% owned Altazor high sulfidation epithermal (HSE) gold project located in the prolifically mineralized Mio-Pliocene age mineral belt of Northern Chile. Altazor comprises approximately 22,900 ha of contiguous exploration claims, and was staked by Mirasol as an outcome of the Company’s Atacama-Puna Generative program, which is targeting the discovery of large-scale Au+Ag and Cu deposits in the prolifically mineralized, Tertiary age mineral belts of this region.

Mirasol’s CEO Stephen Nano stated “We are pleased to have added another large scale, quality HSE gold project to our Chilean portfolio that now establishes Mirasol as one of the leading explorers in this prospective mineral belt. Altazor has attracted the attention of major gold producers who have expressed interest in a potential joint venture (JV) on the project”.

Altazor has favourable logistics, situated just 20 km south of 345 kV powerlines that follow International Highway Route 23, a paved road connecting northern Chile and Argentina ([Figure 1](#)). In common with other Mio-Pliocene mines and projects, Altazor is located at high altitudes of between 4000 and 5200 m; however, Altazor has good “drive up access” via an open valley and a network of easily passable gravel tracks.

Altazor is situated in an underexplored 860 km long section of the Mio-Pliocene age mineral belt located between Mirasol’s Yamana Gold - Gorbea Joint Venture (see news release September 11, 2017 on Atlas drill results) and the historic, now idled, Choquelimpie HSE gold mine in far northern Chile. Mirasol believes the Chilean and Argentine section of the Mio-Pliocene age mineral belt is highly prospective for the discovery of new world class Au+Ag deposits as exemplified by the recent discoveries of the 3.8 million-ounce Salares Norte<sup>1</sup> by Gold Fields and Barrick Gold’s 6.8 million ounce Alturas<sup>2</sup> HSE gold deposits.

Mirasol has used radiometric age-dating on the alteration system at Altazor, which returned a late-Miocene age of 7.8 Ma. This age falls within the key mineralization window of 6.4 to 13.1 Ma that “brackets” the formation of the large to giant Mio-Pliocene age HSE gold deposits in Chile and Argentina ([Figure 1](#)), and suggests that the alteration system at Altazor was formed during this key period for gold deposit formation in this belt. As such, it may have the potential of being a productive mineral system.

Altazor is centred within a dacite to andesite composition volcanic complex hosting a very large-scale advanced argillic alteration system (the alteration “cap”) that appears to extend beneath thin post mineral lavas and may cover an area of up to 75 sq-km ([Figure 2](#)). These caps are characteristically barren of ore grade precious metal mineralization and can therefore conceal significant gold and silver ore bodies at depth, as is the case at Salares Norte and Alturas. Mirasol has developed significant in-house knowledge of these systems, including their geochemical signature, alteration mineral associations, and changes in mineral chemistry and crystallinity, which the Company uses to vector exploration and target drilling within these extensive HSE alteration caps.

At Altazor, Aster satellite ([Figure 2](#)) and in-field pIR-Spec alteration mapping ([click on this link to learn more about pIR-Spec in mineral exploration](#)) show that the current outcrop level of the alteration system correlates to the steam heated cap portion of the system, and at lower altitudes in the project the top of the silica-alunite zone may be also exposed ([click on this link to learn more about alteration patterns in HSE systems](#)). Steam heated and silica-alunite

alteration at Altazor is focused on an extensive multiphase phreatomagmatic to hydrothermal breccia complex currently mapped as a series of discrete bodies over approximately a 5.0 by 1.8 km area ([Figure 2](#) and [Figure 3](#)). Breccia bodies play an important role in large HSE gold systems acting as both channel ways for hydrothermal fluid flow and a rock preparation mechanism to host mineralization. The presence of multiple, highly altered breccia bodies at Altazor, individually up to 700 by 350 m, are interpreted as positive features of the project.

Mirasol's first pass reconnaissance sampling has been completed over approximately 50% of the project area during the recent exploration season. A total of 216 stream sediment, 395 soil ("talus/lag" material), and 933 rock chip samples have been collected and returned low-level but significantly anomalous Au, Ag, Cu, Pb, Zn and epithermal path finder element assays, from sampling of the mapped breccia bodies ([Figure 4](#)). Select rock chip samples of silica-alunite and vuggy silica altered breccia, and veinlets that cross cut the breccia bodies have assayed up to 562 ppb Au, and 650 ppb Ag. Soil (talus/lag) samples assayed up to 18 ppb Au and 1,080 ppb Ag. The Altazor surface results show comparable ppb level anomalous gold assay in soils and rock chips to those recorded at surface at the Salares Norte Project ([Table 1](#)). At Salares Norte broad spaced soil (lag) samples assayed typically less than detection limit (5 ppb Au), with some samples assaying up to 24 ppb Au and an isolated peak soil sample with 628 ppb Au<sup>3</sup>. The highest assay for a pre-drill surface rock chip sample at Salares Norte was 53 ppb<sup>3</sup>.

Mirasol is seeking a JV partner to advance the exploration and drill testing of the Altazor project during this field season (October 2017 to approximately April 2018). The next stage of exploration at the project is anticipated to include systematic soil sampling, geological mapping and rock chip sampling, as well as magnetic and electrical geophysical surveys. These data sets will be used to drive integrated analysis for drill target selection.

To follow the Altazor story, please visit Mirasol's website at [www.mirasolresources.com](http://www.mirasolresources.com)

Stephen Nano, President and CEO of Mirasol, has approved the technical content of this news release and is a Qualified Person under NI 43 -101.

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<sup>1</sup> Gold Fields. (2016). *The Gold Fields Mineral Resource and Mineral Reserve Supplement to the Integrated Annual Report 2016*.

<sup>2</sup> Barrick Gold Corporation. (2016). *Annual Report 2016*.

<sup>3</sup> Azevedo, F., Brewer, N., Santos, A., Huete Verdugo, D., Baumgartner, R., Roncal, L., Trueman, A. & Foley, A. (2015). The discovery and geology of the Salares Norte epithermal gold-silver deposit, northern Chile. In *NewGenGold 2015* (p145-157). Perth, Australia.

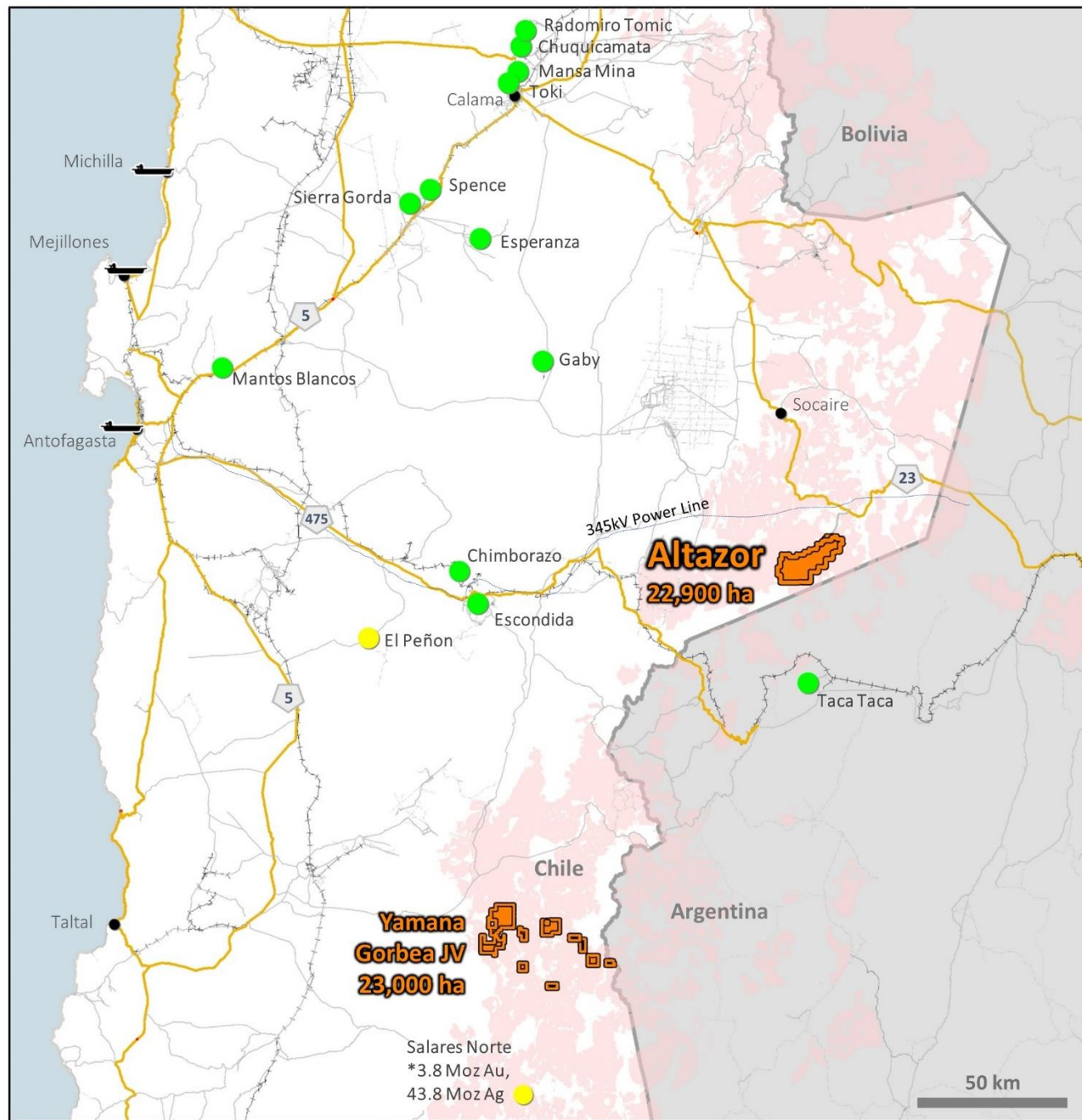
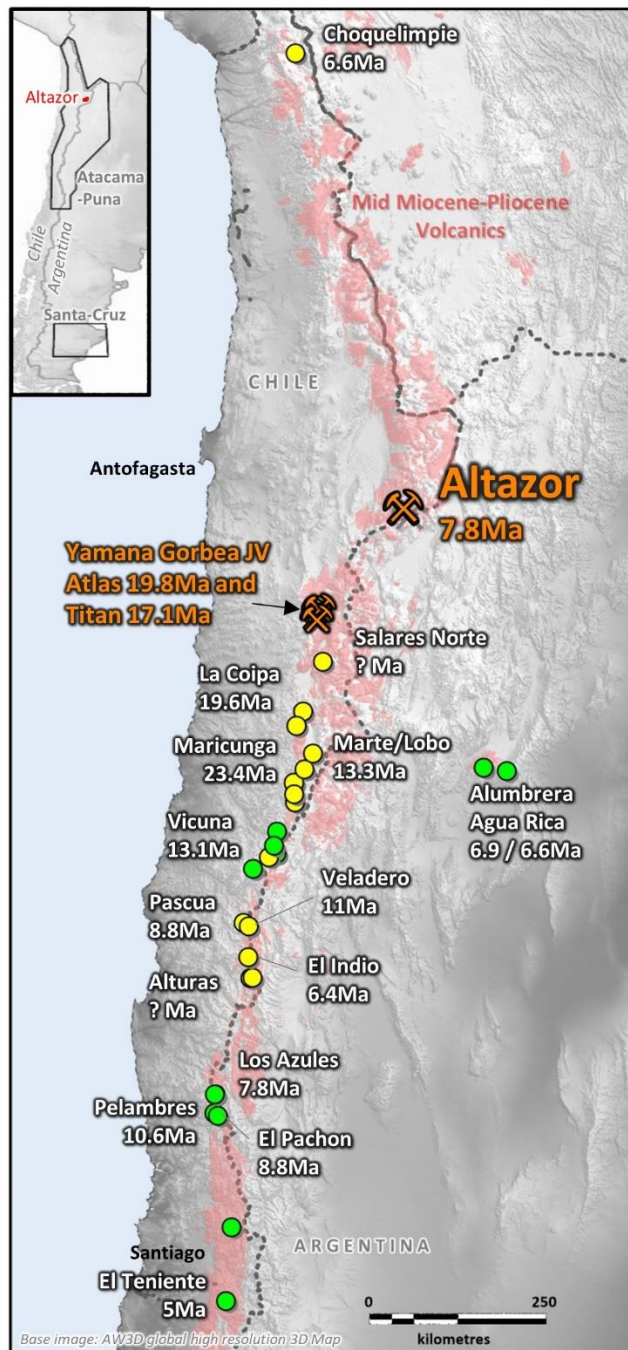
Quality Assurance/Quality Control of the Altazor exploration program:

All exploration on the project was supervised by Mirasol CEO Stephen C. Nano, who is the Qualified Person under NI 43-101.

Mirasol applies industry standard exploration sampling methodologies and techniques. All geochemical soil, stream, rock and drill samples are collected under the supervision of the company's geologists in accordance with industry practice. Geochemical assays are obtained and reported under a quality assurance and quality control (QA/QC) program. Samples are dispatched to an ISO 9001:2008 accredited laboratory in Chile for analysis. Assay results from surface rock, channel, trench, and drill core samples may be higher, lower or similar to results obtained from surface samples due to surficial oxidation and enrichment processes or due to natural geological grade variations in the primary mineralization.

Forward Looking Statements: The information in this news release contains forward looking statements that are subject to a number of known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those anticipated in our forward-looking statements. Factors that could cause such differences include: changes in world commodity markets, equity markets, costs and supply of materials relevant to the mining industry, change in government and changes to regulations affecting the mining industry. Forward-looking statements in this release include statements regarding future exploration programs, operation plans, geological interpretations, mineral tenure issues and mineral recovery processes. Although we believe the expectations reflected in our forward-looking statements are reasonable, results may vary, and we cannot guarantee future results, levels of activity, performance or achievements. Mirasol disclaims any obligations to update or revise any forward-looking statements whether as a result of new information, future events or otherwise, except as may be required by applicable law.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.



- Legend**
- Town
  - ← Port
  - Major Cu Deposit *labeled with radiometric age date*
  - Major Au Deposit *labeled with radiometric age date*
  - ⚡ MRZ Au Project

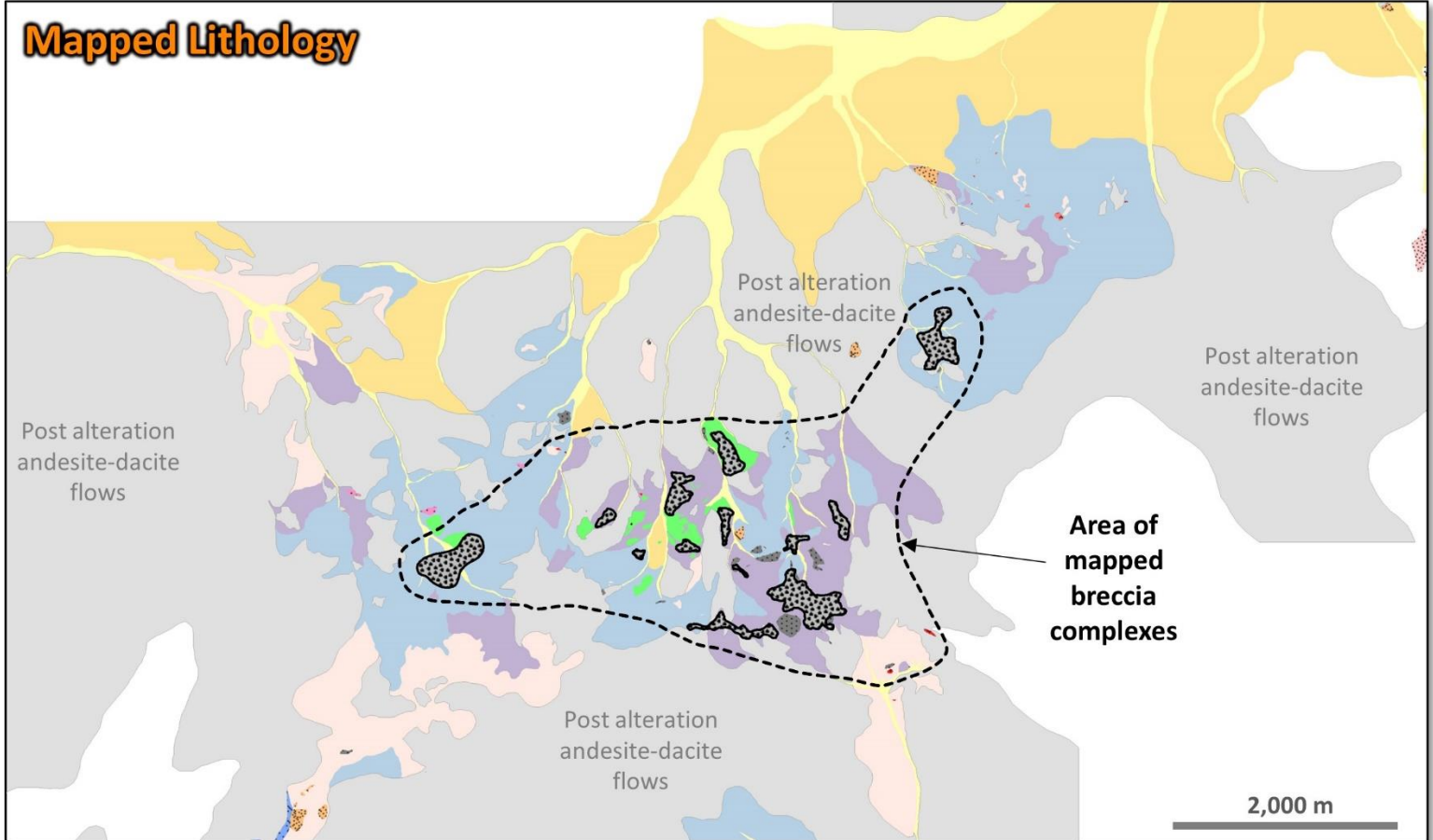
- ++++ Railway
- Major Road
- Minor Road
- Miocene-Pliocene Age Volcanics
- ▭ MRZ Property Outline

\*Gold Fields Mineral Resource and Mineral Reserve Supplement to the Integrated Annual Report, 2016



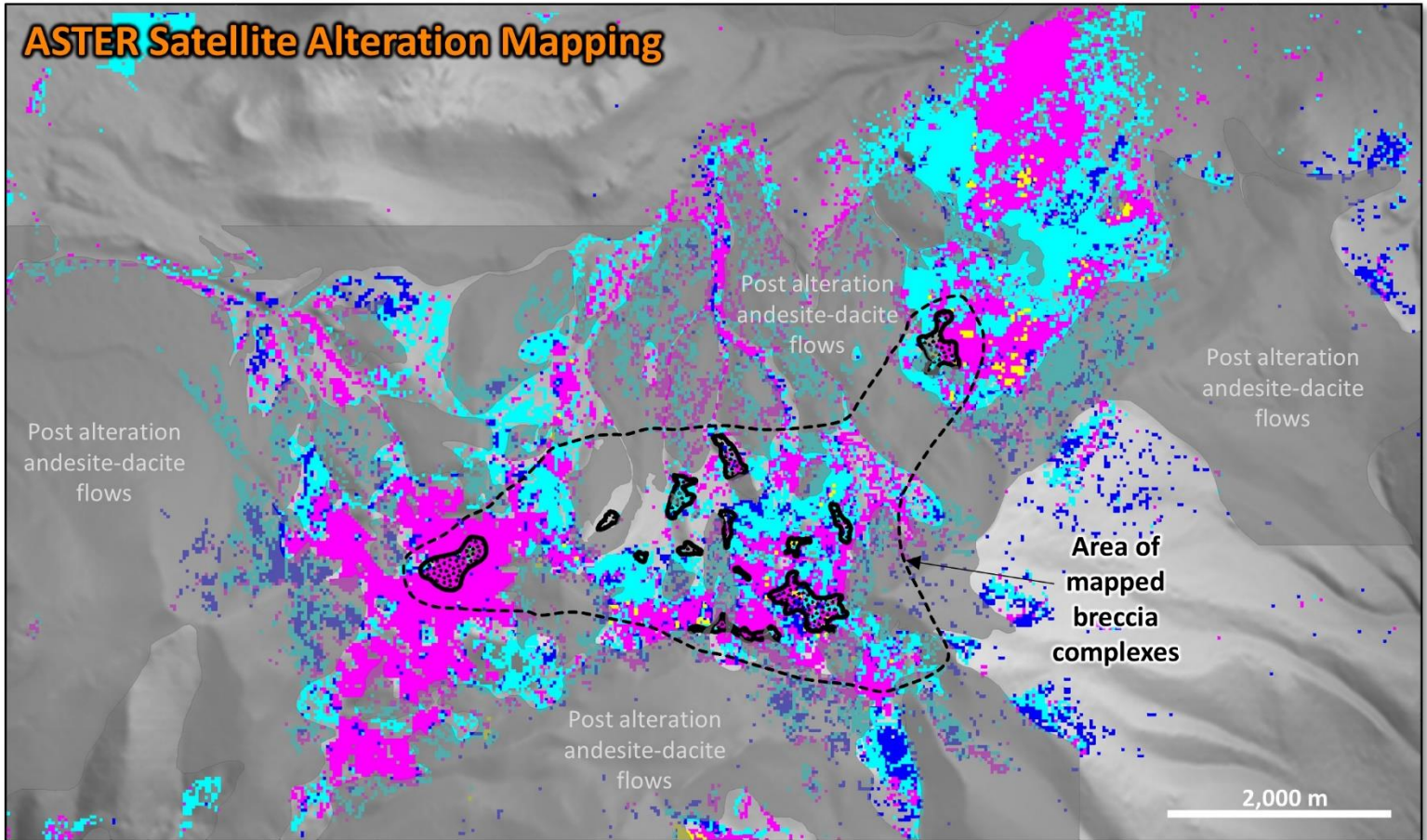
Figure 1: Mirasol Altazor Project – Location and Infrastructure. October 2017

# Mapped Lithology



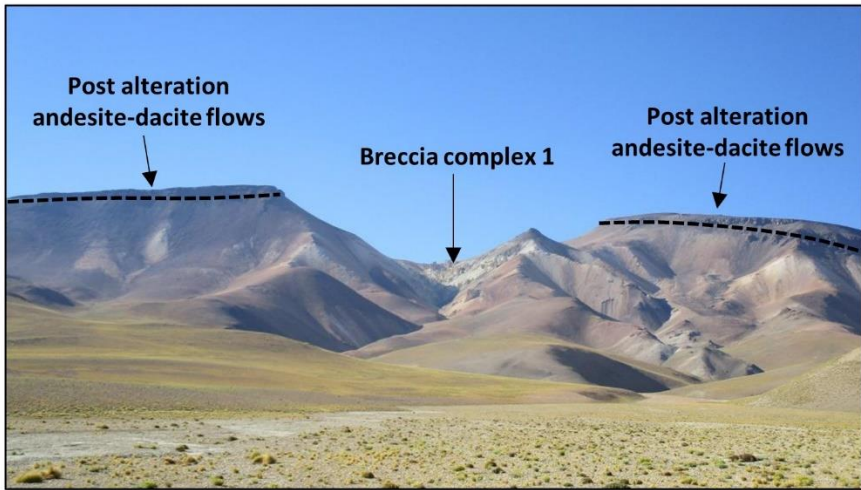
Lithology				Post Alteration Lithologies				Breccia- Alteration host Lithologies					
	Alluvium		Post Alteration And./Dac. Flows		Dacitic Dome		Tuff		Pyroclastic Breccia and Tuff		Dacitic Volcanics		Interpreted Breccia Complex
	Colluvium		Mafic Dyke		Porphyritic Andesite								

# ASTER Satellite Alteration Mapping



ASTER Alteration Mapping							
	Alunite		Kaolinite		Illite		Pyrophyllite

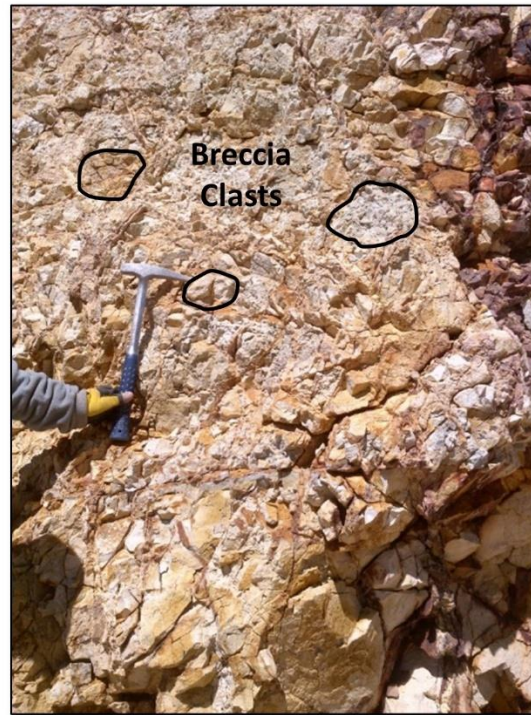
Figure 2: Mirasol Altazor Project – Lithology and Satellite Alteration. October 2017



**Altazor Project view from the North**



**Breccia Complex 1  
Steam heated sulphur and gypsum terraces**



**Polymictic hydrothermal breccia**



**Polymictic 'black' breccia, Na Alunite (steam heated overprint)- Silica alteration, fine Fe sulphides, Fe poor sphalerite (613 ppm Zn) and gypsum**



**Polymictic breccia, vuggy texture**



**Vuggy andesitic lava, fe-ox, disseminated sulphide fill. 189 ppb Au**

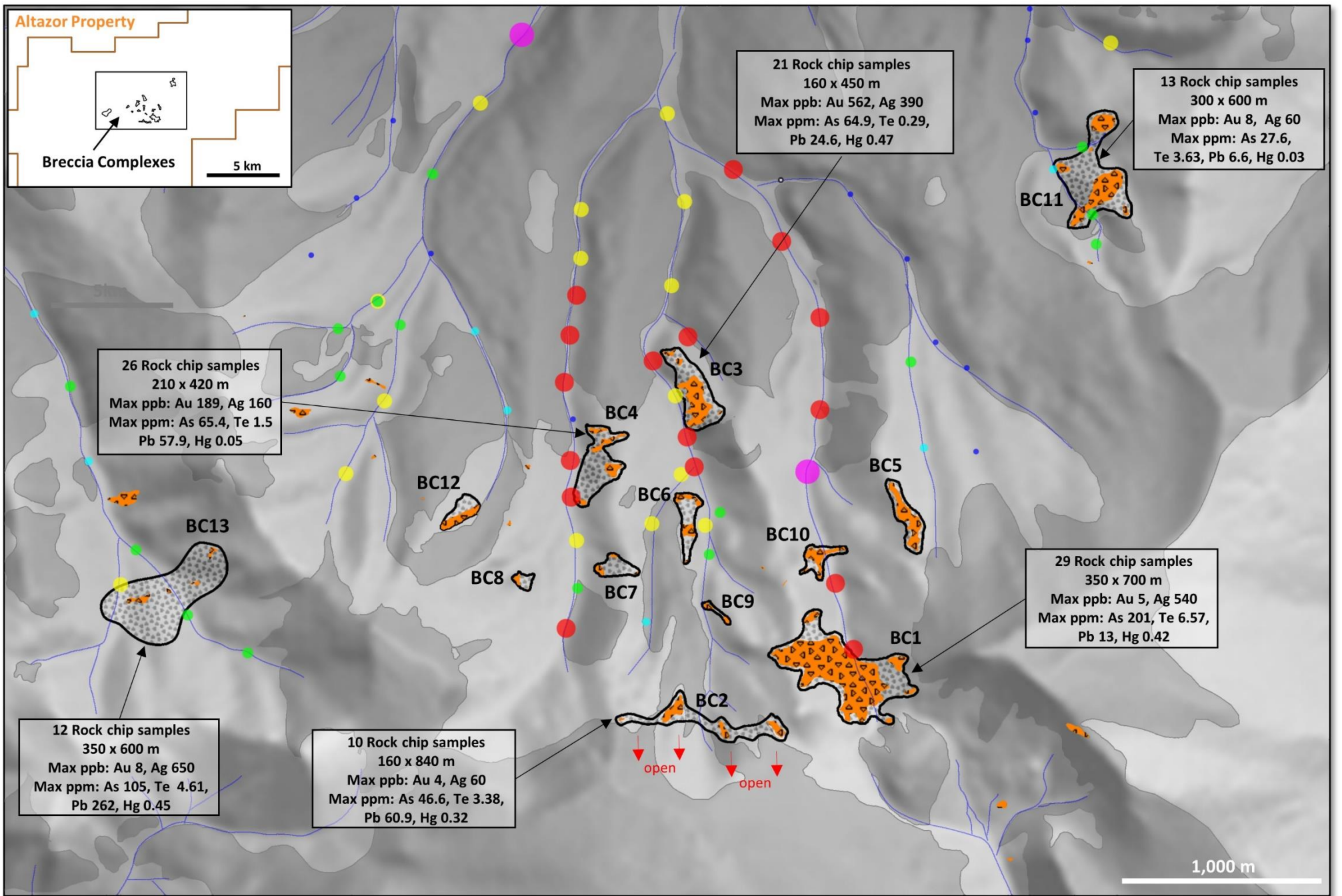


**Siliceous vein, iron and copper oxides. 122 ppb Au, 228 ppb Ag, 0.67 % Cu**



**Multiphase silica, banded textured vein. 240 ppb Au, 390 ppb Ag**

Figure 3: Mirasol Altazor Project – Breccia and Vein Mineralization Textures. October 2017



**Lithology**

- Post Alteration And./Dac. Flows
- Altered And./Dac. Flows
- Hydrothermal Breccias
- Interpreted Breccia Complex & Name

**Breccia Complex Rock chip Results**

- Number of Rock chip samples in complex**  
**Breccia Complex Dimensions (metres)**  
Max ppb: Au, Ag  
Max ppm: As, Te, Pb, Hg

**Stream Sediment Sampling BLEG \*Au Equiv Levels**

- Anomalous
  - ↓
  - Weakly anomalous
  - Detection limit
  - Drainage
- \* Au Equivalent is calculated by Au + (Ag/60)

Base Image: ALOS DEM



Figure 4: Mirasol Altazor Project – Summary Breccia, Rock Chip and Stream Sediment Geochemistry Association. October 2017

<b><u>Altazor (Mirasol)</u></b>	<b><u>Salares Norte (Gold Fields)*</u></b>
<b><u>Surface</u></b>	<b><u>Surface</u></b>
Large, approximate 18 sq km outcropping, advanced argillic alteration system. Potential for up to 75 sq km system, concealed under post alteration cover.	Large, approximate 33 sq km exposed, advanced argillic alteration system. Potential for up to 87 sq km system, concealed under post alteration cover.
Mirasol K-Ar radiometric age date of hydrothermal alunite from a clast in a phreatic breccia, returned an age of 7.8 Ma, (late Miocene). Key age for larger Chilean HSE 6.4 – 13.1 Ma.	No public alteration age dates, Interpreted mid-late Miocene age.
Hydrothermal alteration includes; Steam heated cap, argillic and advanced argillic alteration, silicification and local vuggy quartz.	Hydrothermal alteration includes; Steam heated cap, argillic and advanced argillic alteration, silicification and local vuggy quartz.
Late Miocene andesitic-dacitic volcanic sequence, including dacitic domes. Post mineral andesitic-dacitic dykes and lava flows.	Upper Miocene, Early? andesitic to later? dacitic volcanic sequence and domes.
13 breccia complexes developed over 5 x 1.8 km area, ranging up to 700 x 350 m. Phreatic to hydrothermal brecciation at surface with strong adv. argillic alteration. (Potential for further mapping to extend breccia bodies and define new breccia complexes).	5 primary breccia targets developed over 1.8 x 1.3 km area, Principal Breccia 260 x 150 m, Humilde Breccia 385 x 150 m, Agua Amarga Breccia approx. 560 x 210 m, Sureste and Nueva. Phreatic to hydrothermal brecciation at surface with strong adv. argillic alteration.
Most soil (“talus/lag material”) samples were below detection limit for gold (1 ppb), 36% returned detectable values of up to 14 ppb Au, while 22% returned values of greater than 50 ppb Ag up to 543 ppb Ag. A single sample located down-slope from a mapped breccia outcrop, contained 18 ppb Au, while another sample located down-slope from a different breccia contained 1,080 ppb Ag.	Most soil samples were below detection limit for gold (5 ppb), several returned detectable values of up to 24 ppb Au and a single soil sample located down-slope from breccia outcrop contained 628 ppb Au.
Anomalous trace elements in talus/lag (As, Bi, Pb, Hg, Sb, Te).	Anomalous trace elements in “soil” (As, Sb, Pb, Bi, Hg).
The highest gold value from rock chip sampling of an outcropping breccia was 71 ppb Au and 650 ppb Ag. Sampling of vuggy silica altered, andesitic lava with iron oxides and disseminated sulphide fill returned 189 ppb Au. Sampling from narrow late-stage veins, hosted in hydrothermal breccia’s returned up to 562 ppb Au.	The highest gold value from rock chip sampling was 53 ppb gold at the Principal Breccia.
<b><u>Sub-Surface</u></b>	<b><u>Sub-Surface</u></b>
<i>No geophysical surveys completed.</i>	Large scale CSAMT resistors indicated at depth, spatially related to surface geochemistry, brecciation and alteration.
<i>No drilling data to confirm, limited sampling in steam heated cap to 0.005 g/t Au &amp; 1.49 g/t Ag.</i>	100-200m thick steam heated zone above main mineralization, with low level geochemistry (0.05-0.25 g/t Au, 1-5g/t Ag).
<i>No drilling data to confirm.</i>	Mineralization is associated with advanced argillic, quartz-alunite alteration and silicification.
<i>No drilling data to confirm.</i>	Oxidation is best developed within quartz-alunite, advanced argillic alteration and extends to ~300 m below surface.

\* References

- Azevedo, F., Brewer, N., Santos, A., Huete Verdugo, D., Baumgartner, R., Roncal, L., Trueman, A. & Foley, A. (2015). The discovery and geology of the Salares Norte epithermal gold-silver deposit, northern Chile. In *NewGenGold 2015* (p145-157). Perth, Australia.
- Gold Fields. (2016). *The Gold Fields Mineral Resource and Mineral Reserve Supplement to the Integrated Annual Report 2016*.



Table 1: Mirasol Altazor Project – HSE Characteristics Comparison with Salares Norte. October 2017