

10th October 2024

# Geophysical data and field reconnaissance greatly enhance exploration potential at Cerro Chacon

#### **HIGHLIGHTS**

- Detailed magnetic and IP/resistivity surveys at the Chacon Grid and La Javiela prospects at Piche's Cerro Chacon project have identified multiple high priority targets in complex fault arrays that typically host high grade Au/Ag mineralisation.
- Interpretation of La Javiela survey data has identified five high priority drill targets.
- Southern Argentina contains numerous large, high-grade Au/Ag deposits located in Jurassic aged volcanics. Mineralisation is typically focused in structurally complex areas, particularly at the intersections of north-south faults and secondary eastwest, northeast or northwest striking faults.
- Piche's Cerro Chacon project area hosts several occurrences of gold/silver and pathfinder geochemistry with coincident structural and geophysical anomalies which typically reflect deposition of significant mineralisation in southern Argentina.
- The extent of the surface expression, the corresponding geophysical signatures, geochemistry and structural regime has led Piche to believe that the two prospects may be part of a mineralised structural corridor up to 10km in length.
- The Cerro Chacon project represents one of Argentina's unexplored gold-rich mineralised systems, offering tremendous untapped potential and synergies with several of the large precious metal mines in the region.

**Piche Resources Limited (ASX: PR2)** ("**Piche**" or the "**Company**"), is pleased to announce the completion of ground magnetic and induced polarisation (IP)/resistivity surveys over the La Javiela prospect on its Cerro Chacon project in the Chubut Province of Argentina (Figure 1). The surveys interpretation was undertaken by Southern Geoscience in Perth, Western Australia and has identified five additional high priority targets.



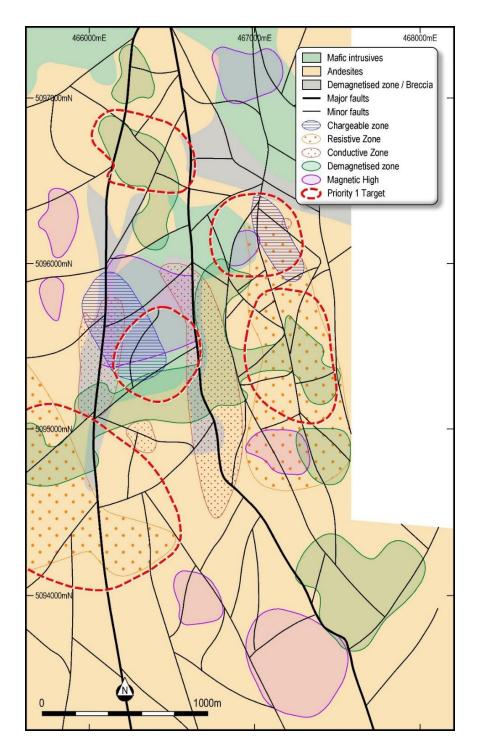


Figure 1: Geophysical interpretation has identified five high priority targets.



This survey complements the previous magnetic and IP/resistivity surveys completed over the Chacon grid, some 5km to the north-west. Both surveys highlight the strong structural controls, the intense alteration, and the coincident geophysical signatures.

Previously the Chacon Grid had been mapped and sampled over a strike length of two kilometres, but recent reconnaissance has indicated the structure may extend for a strike length of up to six kilometres. It is expected that further mapping, geochemistry, geophysics and drilling along strike and between both the Chacon Grid and the La Javiela vein systems will highlight a mineralised structural corridor up to 10km in length.

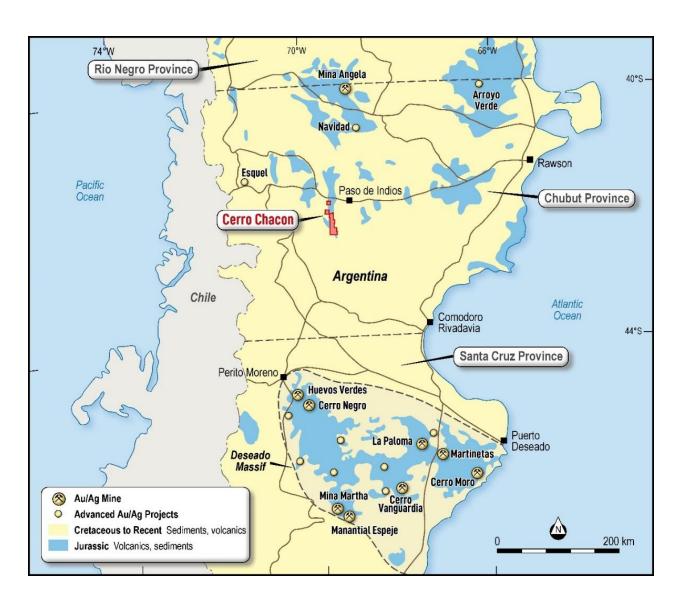


Figure 2: Location of Piche's Cerro Chacon Project

Southern Argentina – one of the great low sulphidation epithermal districts



The Jurassic rocks of southern Argentina hosts eight gold/silver mines, several of which constitute world class deposits (Figure 2). The two largest operations are Cerro Vanguardia (6.6 million ounces of gold and 121.33 million ounces of silver) and Cerro Negro (5.36 million ounces of gold and 43.67 million ounces of silver)<sup>1</sup>. Other projects of similar age have yet to be exploited, for example; Navidad with a resource of 752 million oz of silver and 1.6 million tonnes of lead, and Esquel with 4.16 million oz of gold and 7.65 million oz silver<sup>2</sup> (Table 1).

Name of project	Owner	status	Mineral endowment <sup>1</sup>
Cerro Vanguardia	AngloGold Ashanti	operation	6.6m oz Au, 121.33m oz Ag
Cerro Negro	Gold Corp	operation	5.36m oz Au, 43.67m oz Ag
Navidad	Pan American Silver	resource	752m oz Ag, 1.6 million
			tonnes Pb
Esquel	Yamana Gold	resource	4.16m oz Au, 7.65m oz Ag
Cerro Moro	Yamana Gold	operation	1.35m oz Au Equiv.
Mina Martha	Coeur	operation	28m oz Ag Equiv.
Manantial Espejo	Pan American Silver	operation	400k oz Au, 45.8m oz Ag
Huevos Verdes	Hochschild	operation	570k oz Au, 33.4m oz Ag
Don Nicolas	Cerrado Gold	operation	490.3k oz Au, 6.6m oz Ag
El Tranquilo	Patagonia Gold	advanced	907k oz Au Equiv.
Las Calandrias	Mariana Resources	advanced	519k oz Au Equiv.

Table 1: Gold/silver mines and advanced exploration projects in Southern Argentina.

1. https://www.cerradogold.com/minera-don-nicolas/#geology; 2. https://portergeo.com.au/database/

(The Company has included the above as examples of operations in the area to show the prospectivity of the region. Investors should not compare these examples to the Company which is in a different stage of development)

Importantly, the structural complexity seen in other gold/silver mineralised systems in southern Argentina is clearly evident at Cerro Chacon. Regionally, the mineralisation is controlled by large north to northwest striking rift related faults with less prominent, but significantly mineralised northeast and east/west striking secondary structures common.

Many of the deposits have several kilometres of accumulated vein strike lengths.

This is also evident at Cerro Chacon where individual vein systems extend from a few hundred meters up to six kilometres in length. The vein systems commonly have a significant surface morphology, with resistant, silicified features surrounded by strong argillic alteration rising to several meters above the landscape. This is the case at Cerro Chacon prospects, particularly La Javelia and Chacon grid. (Figure 3).







Figure 3: Silicified, mineralised vein exposures throughout the Cerro Chacon project area can outcrop for over 2km in length and vary from 1m to 50m wide. **Examples are the Chacon vein** system (top and bottom left), and La Javelia vein system (top right). Mineralised stockwork vein mineralisation can occur over widths of up to 50m, and lengths varying from hundreds of meters to several kilometres on the Chacon project. Demagnetised zones are commonly associated with the surface expression of these vein systems due to the intense alteration assemblage.



In all, forty-six survey lines of ground magnetics were completed on a 100m line spaced east/west grid for a total advance of 99-line kilometres. Additionally, nine traverses spaced 200m apart were surveyed for a total of 21.5-line km of IP/resistivity survey.

The key features identified from the interpretation of the geophysical surveys reported here include:

- A series of faults controlling the mineralisation.
- Geological lithological boundaries.
- Anomalous magnetic zones (high, low, or reversed) potentially representing areas
  of magnetite destruction or enrichment due to alteration.
   Zones of anomalous resistivity, conductivity or chargeability requiring further
  geophysics, mapping and geochemical follow-up.

The geophysical interpretation has highlighted two major primary north-south orientated faults which are characterised by broad demagnetised zones with associated increases in conductivity, likely due to alteration zones. Cross-cutting these primary structures are swarms of northeast, northwest and east/west oriented secondary structures, which invariably host gold/silver mineralisation in low sulphidation deposits in southern Argentina (Figure 1). These target areas will be followed up with further geochemistry, geophysics and mapping prior to drilling.

The Cerro Chacon Project represents a very large, low sulphidation epithermal gold/silver system, with similar geological characteristics to many of the world class deposits in the region. The mineralized system extends the length of Piche's 365km² tenement area (Figure 4), with numerous prospects already identified by the Piche team. Highly silicified quartz and chalcedony vein systems outcrop throughout. Some of the vein swarms have been interpreted to extend for up to six kilometers in strike, and from one to 50 meters in width.

The alteration associated with the outcropping veins is significant and supports the belief that this represents a major mineralized system. The evident magnetite destruction and associated adularia and illite alteration along the structures has produced linear demagnetised zones, while the quartz veins with silica alteration often result in highly resistive zones surrounded by conductive zones.

IP responses have possibly been produced by sulphides within the quartz veining. Thin potassium responses are visible from the adularia and illite alteration. Similarly, several large circular features with magnetic cores suggests the potential for porphyry systems beneath the epithermal targets.

Further geophysics, mapping and soil and rock chip sampling over the outcrops and their extensions, followed by drilling is anticipated to reap considerable rewards.



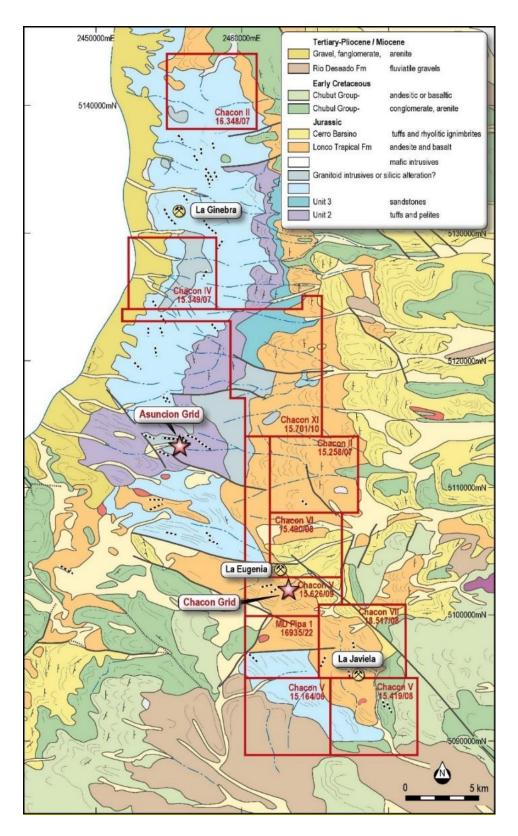


Figure 4: Piche Resources Cerro Chacon Project tenements with La Javiela and Chacon Grid prospects highlighted.



#### **Competent Persons Statement**

The information in this announcement that relates to exploration results, interpretations and conclusions, is based on and fairly represents information and supporting documentation reviewed by Mr Stephen Mann, who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Mann, who is an employee of the Company, has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken to qualify as a Competent Person, as defined in the JORC 2012 edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves". Mr Mann consents to the inclusion of this information in the form and context in which it appears.

This announcement has been approved by the Board of Directors.

#### For further information, please contact:

John (Gus) Simpson

**Executive Chairman** 

Piche Resources Limited

P: +61 (0) 414 384 220



#### JORC Code, 2012 Edition – Table 1

#### **Cerro Chacon Project**

#### Section 1 Sampling Techniques and Data

## Criteria JORC Code explanation Communication Sampling Nature and quality of sampling No di

techniques

Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.

Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.

Aspects of the determination of mineralisation that are Material to the Public Report.

In cases where 'industry standard' work has been done, this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed

### Commentary

No drilling, soil or rock chip sampling has been undertaken in this news release

information.



Criteria	JORC Code explanation	Commentary
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	No drilling has been conducted to date.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	No drilling has been conducted to date.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	No drilling, soil or rock chip sampling has been undertaken
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	
	The total length and percentage of the relevant intersections logged.	



Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	No drilling has been conducted to date.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	
	Whether sample sizes are appropriate to the grain size of the material being sampled.	
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	No recent sampling has been undertaken.  GMAG was acquired by Quantec
	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.  Nature of quality control procedures adopted (e.g.	Geoscience in Argentina at 100 m line spacing, across the La Javelia prospect area. Two Overhauser GSM-19 v7.0 walking magnetometer units and one bas unit for the diurnal correction of the data was used. All data were processed and imaged by Southern Geoscience in Perth. Th magnetic data were of good quality however an upward



#### Criteria

#### **JORC Code explanation**

### Commentary

standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.

continuation was applied in an effort to remove high-frequency noise. Grid filtering, image processing, and enhancements were conducted on the final grid and a standard suite of raster GeoTIFFs were generated. The corrected TMI channel was then used in Geosoft Oasis Montai VOXI Earth Modelling algorithm to perform standard 3D susceptibility and magnetic vectorisation (MVI) modelling. An electrical resistive tomography (ERT) and induced polarisation (IP) survey was completed by ALH Geofisica in Argentina over the central portion of the La Javelia prospect area. The measurements were conducted using the IRIS SYSCAL SWITCH PRO 72 equipment over nine 060° orientated profiles, on 200m line spacings, using a Pole-Pole configuration with an aspacing of 10 m.

Verification of sampling and assaying

The verification of significant intersections by either independent or alternative company personnel.

The use of twinned holes.

Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.

Discuss any adjustment to assay data.

No drilling has been completed on the prospect area. No drilling or sampling verification has been required by Piche to date.

No data adjustments have been made.



Criteria	JORC Code explanation	Commentary
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Gridlines of geophysical data were surveyed using a GPS.
	Specification of the grid system used.	
	Quality and adequacy of topographic control.	
Data spacing and	Data spacing for reporting of Exploration Results.	Two ground based geophysical surveys have been documented in
distribution	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.  Whether sample compositing has	this report. The ground magnetic survey was completed using two walking magnetometer units and one base unit for the diurnal correction of the data. Traverses were 100m apart, and oriented east/west, whilst the ground IP/resistivity survey was carried out on traverses 200m apart on lines
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.  If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	oriented 060 degrees.  In the Project area, north/south, NE and NW trending and sub- vertical dipping structures are present. Networks of veins were identified by satellite image interpretation and surface mapping.  No drilling has been conducted to date.
Sample security	The measures taken to ensure sample security.	No sampling has been undertaken



Criteria	JORC Code explanation	Commentary
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No sampling has been undertaken
Section 2 R	eporting of Exploration Results	
Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Cerro Chacon Project consists of ten tenements (as either 'Statements of Discovery' or 'Mining Concessions') registered in the name of Piche's Argentinian subsidiary, Piche Resources S.A. These tenements cover a total area of 364.29 km <sup>2</sup> .
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	MHA and U3O8 Limited had conducted historical exploration in the Project region, which included interpretation of hyperspectral imagery, regional and local geological mapping, surface sampling, and geophysical surveys (IP/resistivity/magnetic).
Geology	Deposit type, geological setting and style of mineralisation.	The Cerro Chacon Project is considered prospective for low-sulfidation epithermal gold-silver mineralisation.
		The oldest rocks of the area are represented by the Early Jurassic El Cordoba Formation sedimentary rocks. These rocks are unconformably overlain by the Middle Jurassic Lonco Trapial



Criteria	JORC Code explanation	Commentary
		Formation, composed of andesite and basalt. This passes into the Cerro Barcino Formation tuffaceous rocks and rhyolitic ignimbrites. These formations are further covered by Early Cretaceous Chubut Group volcaniclastic and fluviatile sedimentary rocks and Tertiary fluvial sediments and mafic volcanic rocks.
		A network of epithermal veins, mostly trending north—northwest, is primarily hosted by the Early Jurassic El Cordoba Formation and the overlying Lonco Trapical Formation. These veins are the target gold-silver mineralisation.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:	No drilling has been conducted to date.
	easting and northing of the drillhole collar	
	elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar	
	dip and azimuth of the hole	
	downhole length and interception depth	
	hole length.	
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract	



Criteria	JORC Code explanation	Commentary
	from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	No data aggregation has been applied to any available exploration results.  No metal equivalent values are reported from the work undertaken by Piche.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.  If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.	No drilling has been conducted, so the relationship between mineralisation widths and intercept lengths is yet to be determined.
	If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	



Criteria	JORC Code explanation	Commentary
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.	Appropriate maps and diagrams are included attached to this news release.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.	No drilling or geochemistry has been completed in this report. Geophysical results reported here represent the first exploration programme completed by Piche on this prospect.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Numerous gold prospects in the Project region, including La Eugenia, La Javiela and Asuncion, were identified through satellite image interpretation, field mapping and surface sampling.  Very little previous exploration has been completed.  A ground-based magnetic survey and induced polarisation (IP) / resistivity surveys have previously been conducted on the La Eugenia prospect. The results indicate a NW trending structural control of mineralisation which coincided with a chargeability/resistivity anomaly at shallow depth.
		Surface mapping revealed a dense network of veins which are potential locations of mineralisation. Soil and rock samples returned anomalous Au and Ag values, which were



Criteria	JORC Code explanation	Commentary
		strongly correlated with As, Hg, Pb, Sb, Ba and Cd.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).  Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Geological mapping, surface sampling and follow up geophysical surveys have been planned to extend those target areas already identified. Drilling targeting the geophysical, geochemical and geological anomalies will be undertaken in due course.