

31st December 2024

## 10 km of mineralisation confirmed at Cerro Chacon and multiple RC drill targets are being prepared

#### **HIGHLIGHTS**

- Completion of extensive geophysics and geochemical sampling programmes has confirmed the potential for gold-silver mineralisation and identified multiple target areas at Cerro Chacon.
- ➤ Six specific targets at La Javiela and Chacon Grid prospects are now ready for drilling on approval of the Environmental Impact Assessment (EIA). Drill pad preparation and access tracks have been identified and will be initiated early January following the approval.
- The epithermal vein system at Cerro Chacon has been confirmed using signature pathfinder element analysis over a strike length exceeding 10km and remains open to the north and south.
- ➤ Geochemical sampling has identified multiple pathfinder elements coincident with geophysical anomalies from the recent magnetic and induced polarization surveys.
- The Cerro Chacon Project represents one of Argentina's unexplored gold-silver rich mineralised systems, offering tremendous untapped synergies with several of the large precious metal mines in the region.
- Further updates will be provided to the market in due course following the commencement of drilling activities on the two key target areas.

Piche Resources Limited (ASX: PR2) ("Piche" or the "Company"), is pleased to announce the completion of detailed geochemical sampling along outcropping epithermal veins and breccias where geophysical anomalies have been identified by the ground magnetic and induced polarisation (IP)/resistivity surveys (see Figure 1). Piche has combined surface mapping, geophysics and multielement geochemistry to prioritise numerous drill targets.



#### **The Geochemical Sampling Programme**

A total of 1313 geochemical samples have now been collected from the structural corridor extending from the Chacon grid prospect to the La Javiela prospect, 10km to the south. Geological mapping has also identified a third extensively veined prospect (Don Abel) linking Chacon and La Javiela.

Samples have been collected along outcropping epithermal breccias and quartz/chalcedony veins over the La Javiela prospect, the Chacon Grid prospect and the newly identified Don Abel prospect which lies between but adjoins both. Additionally, samples were collected over many of the magnetic and IP geophysical targets highlighted in the surveys completed by Piche along the structural corridor. The geophysical anomalies at La Javiela were reported by Piche in its news release on 10 October 2024, entitled "Geophysical data and field reconnaissance greatly enhance exploration potential at Cerro Chacon".

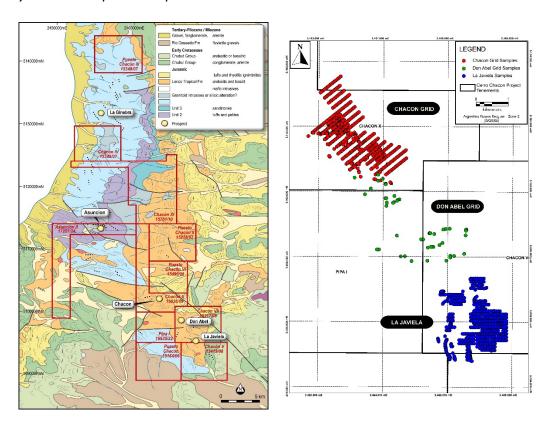


Figure 1: Piche tenement holding at Cerro Chacon Project, highlighting the areas of geochemical sampling.



#### The Epithermal Model

Mineralisation in low sulphidation epithermal systems in southern Argentina are typically controlled by N/S, NW/SE, E/W and NE/SW oriented structures. The mineralisation is also often associated with structurally controlled magnetic lows, as the mineralised hydrothermal fluids destroy magnetite and cause demagnetisation anomalies. Additionally, mineralisation can be found in circular magnetic highs where later magnetite rich mineralising fluids have formed Au/ Ag deposits. The geochemical results returned from the Chacon Grid prospect are generally related circular magnetic features, whilst the geochemistry from La Javiela prospect clearly demonstrates a close correlation between the structures, particularly the magnetic lows, and the pathfinder elements. **Figure 2** highlights the relationship between the magnetic highs (red/orange colours) on the Chacon Grid and the magnetic lows (blue/green colours) at La Javiela.

As well as breccias, and the classification of quartz/ chalcedony vein textures, epithermal gold-silver deposits characteristically have a zonation of indicator or pathfinder elements forming a halo around the mineralisation. Although gold always remains the main pathfinder when exploring for gold deposits, other important pathfinders are arsenic (As), mercury (Hg), and antimony (Sb), whilst barium (Ba) and the suite of base metals, copper (Cu), lead (Pb) and zinc (Zn) can also be important indicators of the presence of economic gold mineralisation.

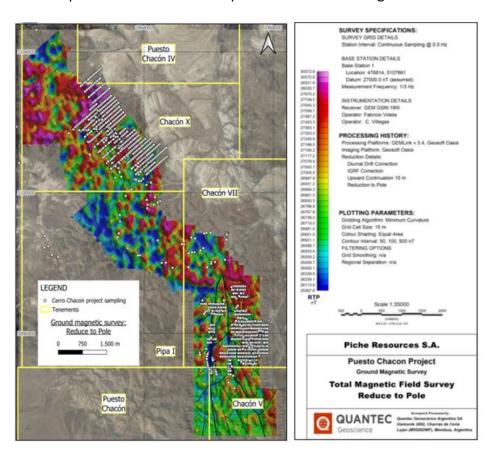


Figure 2: location of all samples collected from the Chacon Grid and La Javiela prospects.



#### The Geochemical Results

All rock chip and soil samples collected by Piche were submitted to Alex Stewart International Argentina SA, based in Mendoza, for analyses of 42 elements using ICP-MA and gold (Au) by AA method. Piche also inserted field duplicates and field blanks for QA/QC.

A review of the gold (Au) and silver (Ag) assay results and the main pathfinder elements, specifically mercury (Hg), arsenic (As), antimony (Sb), barium (Ba) and a range of base metals including copper (Cu), lead (Pb) and zinc (Zn), highlight the close relationship between the structures identified from surface mapping, the ground based magnetic and IP surveys and the pathfinder element geochemistry. The results are included in the following figures: (figure 3 for Au, figure 4 for Ag, figure 5 for As, figure 6 for Sb, figure 7 for Hg, figure 8 for Ba). It is noted that the main geochemical anomalies at La Javiela are associated with structures with magnetite depletion and oriented north/south and northeast/southwest. The anomalies on the Chacon Grid are associated with magnetic highs adjacent to magnetic lows.

Of the 1313 rock chip and soil samples collected along the 10-kilometre strike length, Piche has received all but 272 sample results. These 1041 samples highlight the close relationship between the structures identified from the completed magnetic surveys and the geochemical pathfinder elements. As can be seen in figures 5-8, the main structures have significantly anomalous Hg, As, Sb and Ba consistent with existing large, high grade gold-silver systems in southern Argentina.

The series of images below highlight the location of the main pathfinder elements.

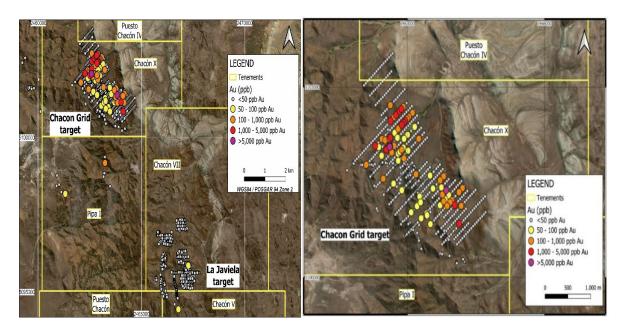


Figure 3: Gold geochemistry results over the Chacon prospect.



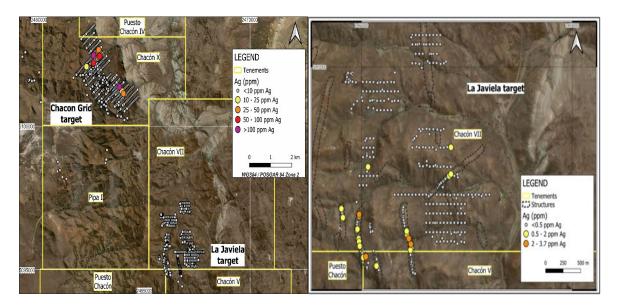
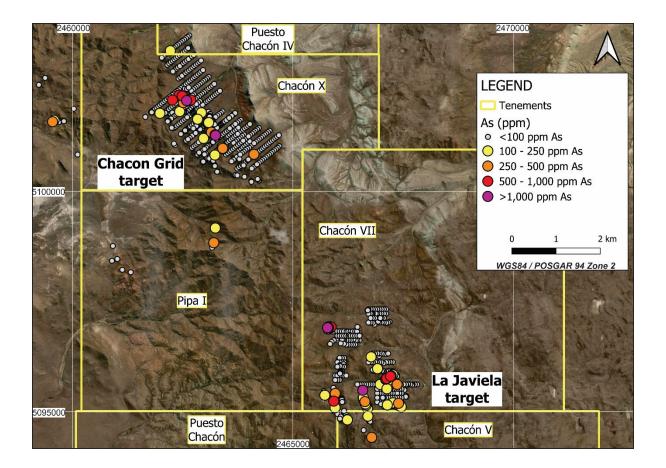


Figure 4: Silver geochemistry results over the Chacon Grid and La Javiela prospects.





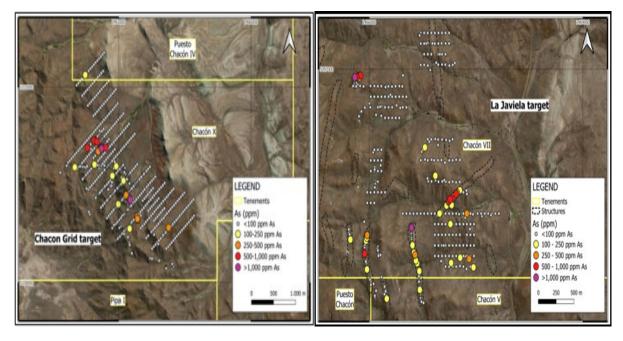


Figure 5: Arsenic geochemistry results over the Chacon Grid and La Javiela prospects.

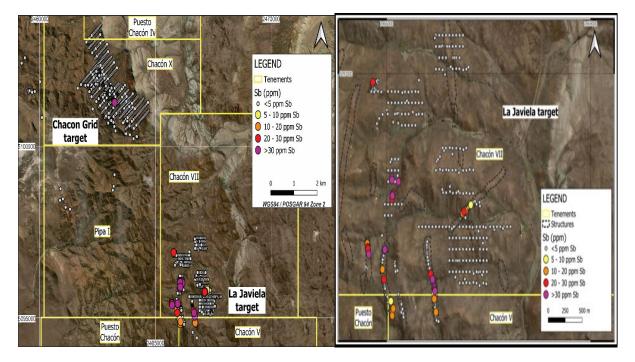


Figure 6: Antimony geochemistry results over the Chacon Grid and La Javiela prospects.



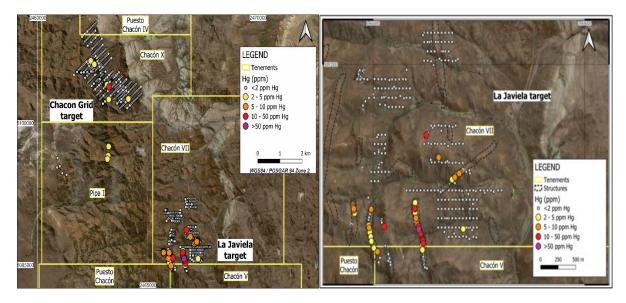


Figure 7: Mercury geochemistry results over the Chacon Grid and La Javiela prospects.

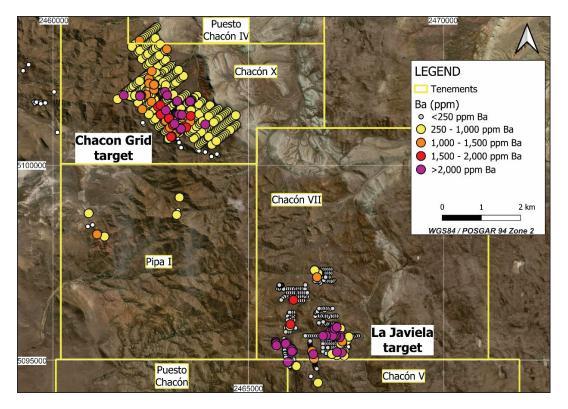


Figure 8: Barium anomalies over Chacon Grid and La Javiela prospects. More extensive barium anomalies on the Chacon prospect may highlight the wider, stockwork nature of the mineralisation at Chacon, rather than the more discrete breccias and vein system at La Javiela.



#### **Cerro Chacon - Regional Setting**

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, (Figure 9), with many 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 up to 50 meters in width.

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

The Jurassic 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.

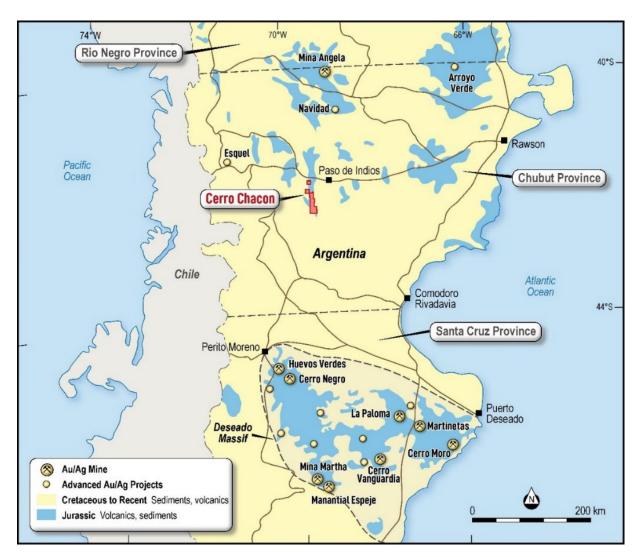
Table 1: Gold-silver mines and advanced exploration projects in Southern Argentina.

1. <a href="https://www.cerradogold.com/minera-don-nicolas/#geology">https://portergeo.com.au/database/</a>
(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 evident at Cerro Chacon. Regionally, the mineralisation is controlled by large north to northwest striking rift-related faults with less prominent, but significantly mineralised north-east 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 the vein systems extend from a few hundred meters up to ten 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 Javiela and Chacon Grid prospects.





#### **2025 Exploration Programme**

The results of Piche's exploration in 2024 have established a solid foundation for exploration activities in 2025. Surface mapping and ground geophysics have reinforced the potential of the Chacon Grid and La Javiela prospects. Rock chip and soil geochemistry have enabled the Company to focus on particular vein sets and breccias significantly anomalous in gold, silver, and a range of pathfinder elements. The Company is awaiting final approval of its EIAs by the provincial regulator and will focus on these anomalous epithermal breccias and veins for its first phase of drilling in early 2025.

Piche is the process of finalising an extensive drilling programme at Cerro Chacon; in excess of 5000m of reverse circulation (RC) drilling has been planned for the initial programme with angled hole depth ranging from 140m to 290m.

Flora, fauna and archaeological clearances are included in the EIA studies, surface property owners are supportive of the Company's exploration plans, access tracks and drill pads have been prepared and ground disturbance will commence on EIA approval flagged for early January.

#### **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:

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**Executive Chairman** 

Piche Resources Limited

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

#### **Cerro Chacon Project**

#### Section 1 Sampling Techniques and Data

#### Criteria

#### **JORC Code explanation**

### Sampling 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 information.

#### Commentary

- No drilling has been completed on the project.
- Soil and rock chip samples were collected from local grids over the Chacon prospect and the La Javiela prospect. Further samples were collected between those two prospects. Where outcrop existed, rock chip samples were collected. Samples were collected at variable intervals, but generally as 50m spacing along traverse lines. Rock chip samples were collected over a radius of about 10m around the sample locality.
- Soil samples were collected where no outcrop existed. The upper layers of soil was scraped away, and the underlying soils and weathered bedrock was sieved to -2mm and placed in plastic bags. Each sample was geologically logged, located, and labelled with a unique number.
- Piche has collected 1313 samples.
- Samples were then begged into large polyweave bags, sealed and sent to Alex Stewart Laboratory International Argentina S.A. in Meddoza for analysis of 42 elements using ICP-MA and gold analyses using AA.



P	ICHE	
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, facesampling 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 was completed on the project area.
		Soil and rock chip sampling has been undertaken. Each sample was recorded with a unique number and geologically logged by the project geologist in site. Each
	Whether logging is qualitative or quantitative in nature. Core (or	sample had its GPS coordinated recorded.

whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.

The total length and percentage of the relevant intersections logged.

Sub-sampling If core, whether cut or sawn and techniques whether quarter, half or all core

No drilling has been conducted to date.

taken.

and sample

preparation



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.

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

■ Samples were submitted to Alex Stewart International Argentina S.A. for analysis of 42 elements using ICP-MA. Piche inserted field duplicates every 20 samples and field blanks every 20 samples for QA/QC.

GMAG was acquired by Quantec 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 base unit for the diurnal correction of the data was used. All data were processed and imaged by Southern Geoscience in Perth. The magnetic data were of good quality however an upward continuation was applied in an effort to remove highfrequency 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 a-spacing 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.

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.

Specification of the grid system used.

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.

Gridlines of geophysical data were surveyed using a GPS.

GPS coordinates are collected for every rock chip and soil sample.



#### JORC Code explanation

#### Commentary

Quality and adequacy of topographic control.

Data spacing and distribution

Data spacing for reporting of **Exploration Results.** 

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 been applied.

Ground based geophysical surveys have been commented on in this report. The ground magnetic surveys completed have been previously reported. Traverses were 100m apart, and oriented east/west, whilst the ground IP/ resistivity survey was carried out on traverses 200m apart on lines oriented 060 degrees.

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.

In the Project area, north/south, NE and NW trending and subvertical 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.

Each individual sample was sealed on site immediately after collection. Each sample had a unique identifier. Samples were then placed in large polyweave bags (approximately 10 in each bag). The polyweave bag was then sealed with cable ties. Sample collection was overseen by the Managing Director or Project Manager for gold for Piche

Audits or reviews

The results of any audits or reviews of sampling techniques and data.

The Managing Director for Piche reviewed sampling techniques and



deemed it suitable for the type of mineralisation targeted.

Section 2 Re	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 413.55 km².
	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 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:

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 from the understanding of the report, the Competent Person should clearly explain why this is the case.

No drilling has been conducted to date.



#### JORC Code explanation

# 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.

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.

#### Commentary

No data aggregation has been applied to any available exploration results.

No metal equivalent values are reported from the work undertaken by Piche.

#### 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.

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').

No drilling has been conducted, so the relationship between mineralisation widths and intercept lengths is yet to be determined.

#### 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.



#### JORC Code explanation

#### Commentary

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 Chacon, 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 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 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.



areas, provided this information is not commercially sensitive.