



2 December 2019

## FINAL SOIL ANALYSIS & FURTHER COPPER DISCOVERIES AT RIQUEZA

### IN THIS ANNOUNCEMENT

- *Status report of geochemical soil sampling program*
- *Status report of (follow-up) mapping and sampling program*
- *Description of the geochemical anomalies using recent soil geochemical, mapping and 3D magnetic modelling results*
- *Next Steps at the Riqueza Project*
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- *Key words and ASX JORC 2012 compliancy tables – Appendix 2*

### HIGHLIGHTS

- Geochemical soil sampling program (**Soil Program**) fully completed
- Three multi-element<sup>1</sup> geochemically anomalous areas are recognised:
  - **Yanacolipa** Ag-Pb-Zn±(Cu) area
  - **Pampa Corral-Colina Roja** Au-Ag-Pb-Mo±(Cu) area
  - **Cuncayoc Copper-Ajo Orjo** Cu-Zn-Ag±(Pb±Mo) area
- Mapping delivers several key exploration results including:
  - Visible Cu and Pb mineralisation in Yanacolipa area
  - Discovery of porphyry dyke in Yanacolipa area
  - Further visible Cu, Pb and Zn mineralisation in Cuncayoc Copper area
- 3D magnetic body modelled at recently identified Ajo Orjo target
- Rockchip assay results and mapping interpretations anticipated within 7-10 days
- Soil and rockchip geochemical data to be fully integrated with satellite, geological and geophysical data sets to generate next-phase targets

Inca Minerals Limited's (**Inca** or the **Company**) is pleased to announce that a Soil Program, comprising 1,286 samples, has been completed and assessment reports have now been received. The Company is also pleased to announce that a parallel geological mapping and rockchip sample program has also been completed with 95 rockchip samples collected during this particular phase of work. This geological mapping program is designed to follow-up on outcropping mineralisation observed during the Soil Program, and/or to follow up on previously un-explored airborne geophysical and/or satellite (ASTER) targets.<sup>2</sup>

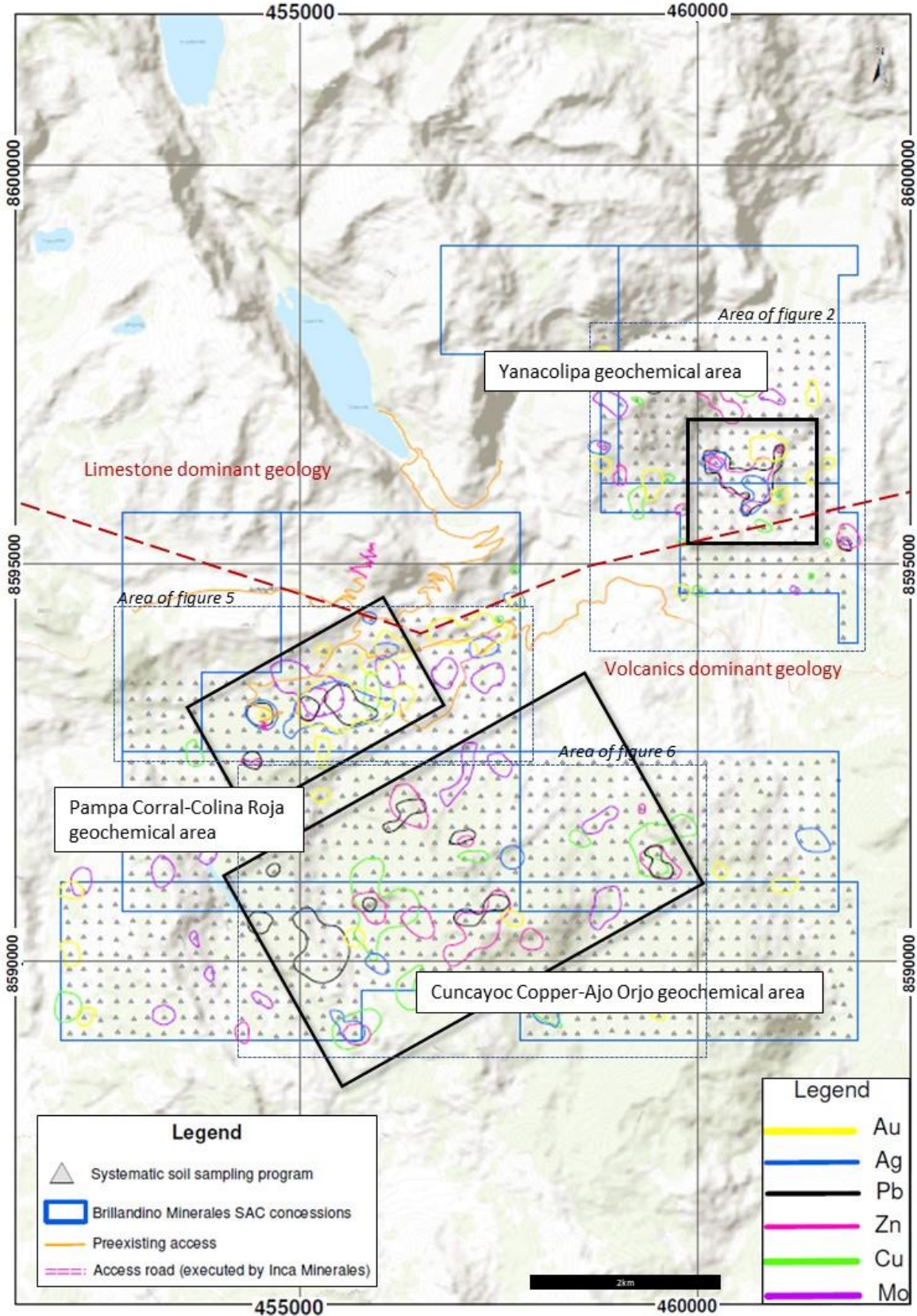
This announcement also highlights the progression of importance of the recently identified Ajo Orjo target which now hosts an unaccounted 3D magnetic body. Ajo Orjo was first recognised as a priority two target after the original airborne geophysical program. Interim soil interpretations then identified soil geochemical anomalism associated with it (ASX announcement 15 October 2019).

<sup>1</sup> Copper = Cu, lead = Pb, molybdenum = Mo, silver = Ag and zinc = Zn

<sup>2</sup> Mapping and sampling are anticipated to continue in areas of interest whilst target prioritisation will continue undelayed.



Figure 1 **BELOW**: Soil geochemical anomaly map of the Riqueza Project area showing Cu, Au, Ag, Pb, Zn, Mo (as per legend). The three geochemical areas are indicated. Each coloured shape represents anomalous levels of that element.







### Soil and Mapping Program Results

The analysis of 52 elements, including metals the Cu, Au, Ag, Mo, Pb, Zn and pathfinder elements, As, Bi, Mn, Sb, Te, Tl, *ex cetera*, of 1,268 samples of the Soil Program is now complete (Refer to Appendix 1: *Extract from an internal report with examples of data treatment*; Appendix 2: *IDW data treatment*). The purpose of the analysis is to identify subtle soil geochemical expressions that may relate to hidden forms of large-scale mineralisation. Three geochemical areas have been recognised that are believed potentially indicative of large-scale intermediate to high-sulphidation epithermal and/or skarn intrusive-related mineralising processes. These include:

- A limestone-hosted Ag-Pb-Zn±(Cu) area in the northeast part of Riqueza at **Yanacolipa**;
- A volcanics-hosted Au-Ag-Pb-Mo±(Cu) area in the central part of Riqueza at **Pampa Corral-Colina Roja**;
- A volcanics-hosted Cu-Zn-Ag±(Pb±Mo) area in the south-central part of Riqueza at **Cuncayoc Copper-Ajo Orjo**.

Mapping conducted at the same time as the Soil Program (and is ongoing) has identified previously unknown mineralisation in outcrop within these geochemical areas. All three geochemical areas host known mineralisation and all geochemical areas host multiple high-priority airborne geophysical targets.

"The results of the Soil Program and the mapping are inseparable in terms of meaning and importance and are discussed below together" says Mr. Brown. "The purpose is to start drawing together different data sets to begin the process of target prioritisation. Compressing each layer, as it were, into a single plan of targets."

### Yanacolipa Geochemical Area

The Yanacolipa geochemical area (Figures 1 & 2) is located in the north-eastern part of Riqueza where the Jumasha Formation limestone is the dominant lithology. This part of Riqueza is prospective for base-metal skarn and porphyry mineralisation. Yanacolipa hosts a bulls-eye shaped soil anomaly comprising elevated levels of Ag, Pb and Zn (Figure 2). This anomaly is surrounded by the Pucamachay P-1, Chuge P-1, Puymanpata P-1 and Yanacolipa P-2 airborne geophysical targets, with Pucamachay also hosting a very large (surface to 1.5km deep) 3D-modelled, unaccounted magnetic body (Figure 2 INSERT). Importantly, the occurrence of mafic sills does not adequately account for the geochemical and geophysical signature of this very large and highly prospective area.

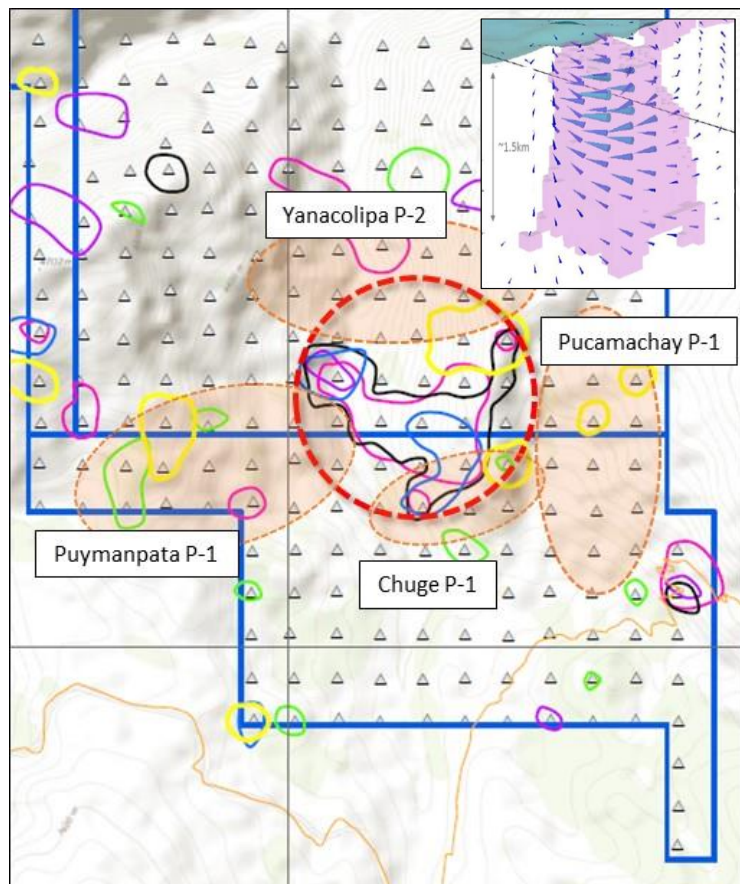


Figure 2 **RIGHT**: Cut and pasted section of Figure 1. The Ag-Pb-Zn anomaly (highlighted within the red dashed circle) is surrounded by airborne magnetics targets, Pucamachay P-1, Chuge P-1, Puymanpata P-1 and Yanacolipa P-2 **INSERT** 3D magnetic model first appearing in ASX announcement dated 31 October 2018.



Recent mapping at Yanacolipa, the subject of this announcement, has identified chalcopyrite (Cu ore-forming mineral) and galena (Pb ore-forming mineral) in limestones and weakly altered andesitic sills. Mapping has also identified multiple localised occurrences of Fe/Mn oxide-rich silicified and decarbonated limestone, breccia structures and a porphyry dyke that appears to cut through the limestone and a sill locally. These are all indications of broader mineralising processes (the prevalence of heat, fluid movement and intrusive activity). It is believed that the Yanacolipa geochemical area has undergone some form of large-scale mineralising event.

Figure 3 **BELOW**: Brecciated sill at Yanacolipa with visible chalcopyrite, galena and pyrite with quartz-calcite stockwork.



Figure 4 **BELOW**: Limestone with calcite veinlets with traces of chalcopyrite, malachite and azurite.



By way of summary, the Yanacolipa geochemical area hosts:

- Three priority 1 and one priority 2 airborne geophysical targets, including Pucamachay P-1, Chuge-1, Puymánpata P-1 and Yanacolipa P-2;
- A large and unexplained 3D magnetic body extending from surface to >1.5km depth;
- A bulls-eye shaped Ag-Pb-Zn soil geochemical anomaly; **NEW**
- Andesitic sills, mineralised breccias and one andesitic porphyry dyke; **NEW**
- Zones of visible Cu (chalcopyrite, malachite, azurite) and Pb (galena) mineralisation. **NEW**

### **Pampa Corral-Colina Roja Geochemical Area**

The Pampa Corral-Colina Roja geochemical area (Figures 1 & 5) is located in the central part of Riqueza where volcanics and marls of the Casapalca Formation border the Jumasha Formation (Figure 1). This part of Riqueza is prospective for base-metal skarn and porphyry mineralisation. The Pampa Corral-Colina Roja geochemical area encompasses the Pampa Corral, Uchpanga and Colina Rojas Prospects which have been mapped in detail in the past and which are all known to host mineralisation, the latter two, including *inter alia* Au and Ag.

The Pampa Corral-Colina Roja geochemical area hosts multiple coincident soil geochemical anomalies that appear to have an overall northeast-southwest orientation. The centre of the strongest part of the geochemical target is located between the Uchpanga, Colina Roja and Pampa Corral Prospect (Figure 5).



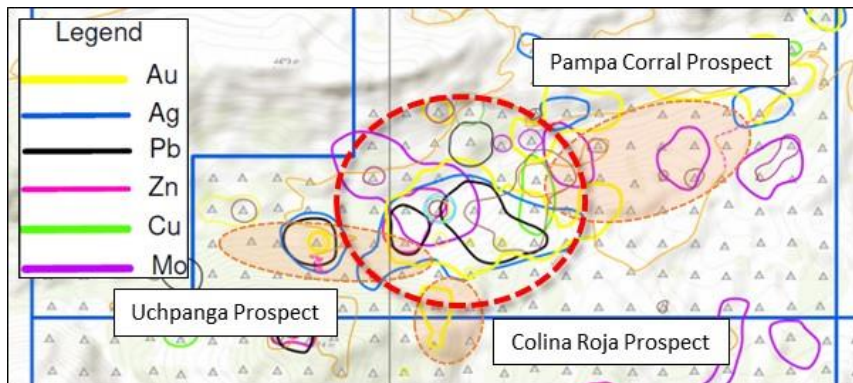


Figure 5 LEFT: Cut and pasted section of Figure 1. The Au-Ag-Pb-Mo±(Cu) soil anomaly (highlighted within a red dashed circle) is surrounded in all directions by known prospects. In rockchip sampling, Uchpanga hosts bonanza grade Ag, strong Au, Pb and Zn. Colina Roja hosts strong Au and Ag mineralisation. Pampa Corral hosts two intrusive stocks and minor Cu skarn mineralisation.

By way of summary, the Pampa Corral-Colina Roja geochemical area hosts:

- One P-2 and one P-3 airborne geophysical targets, including Pampa Corral P-2 and Uchpanga P-3;
- Bonanza-grade Ag mineralisation (920g/t Ag) and strong Au, Pb and Zn mineralisation at the Uchpanga and Colina Roja Prospects in rockchip sampling;
- A bulls-eye shaped Au-Ag-Pb-Mo soil geochemical anomaly; **NEW**
- Known monzodiorite and meta-gabbro intrusive stocks;
- Known, though minor, Cu skarn (malachite, azurite) mineralisation (garnets in a marl adjacent to the monzodiorite).

It is felt that the Pampa Corral-Colina Roja area has undergone a separate mineralising event to that of the Yanacolipa area. Although they are located within the same northeast-southwest regional intrusive corridor, among other reasons, the Pampa Corral-Colina Roja area has relatively more Au, Ag and Mo, distinguishing it from the Yanacolipa geochemical area.

### Cuncayoc Copper -Ajo Orjo Geochemical Area

The Cuncayoc Copper-Ajo Orjo geochemical area (Figures 1 & 6) is located in the south-central part of Riqueza and comprises volcanic units of the Casapalca Formation. Noteworthy in terms of geology, is the rhyolite volcanic dome, that has recently been recognised at Alteration Ridge, located on the western perimeter of the Cuncayoc Copper-Ajo Orjo soil geochemical area. It is believed that the rhyolite dome played some role in the evolution of pervasive epithermal mineralisation at Riqueza and is itself an indication of the intrusive history of Riqueza, a harbinger of related porphyry intrusive activity. There are three known intrusive epithermal and mineralised porphyry systems within a 15km radius of Riqueza, including that which is associated with the Corihuarmi gold mine; a Au-Cu porphyry associated with the base-metals Bethania mine and a Au-Cu porphyry at Huaculio.

Recent 3D magnetic modelling, the subject of this announcement, of the Ajo Orjo East & Ajo Orjo West P-2 airborne geophysical targets has revealed a large unaccounted magnetic body that extends from surface to over 1.4km depth (Figure 7). Based on the final Soil Program, this target now also hosts Cu, Mo and Pb soil geochemical anomalies.

Recent mapping, also the subject of this announcement, has identified several outcrops containing visible azurite and malachite (Cu ore-forming minerals), galena, and smithsonite (Zn ore-forming mineral). The Cu, Pb and Zn mineralisation occurs in Fe/Mn-oxide bearing breccia structures (Figures 8 & 9).

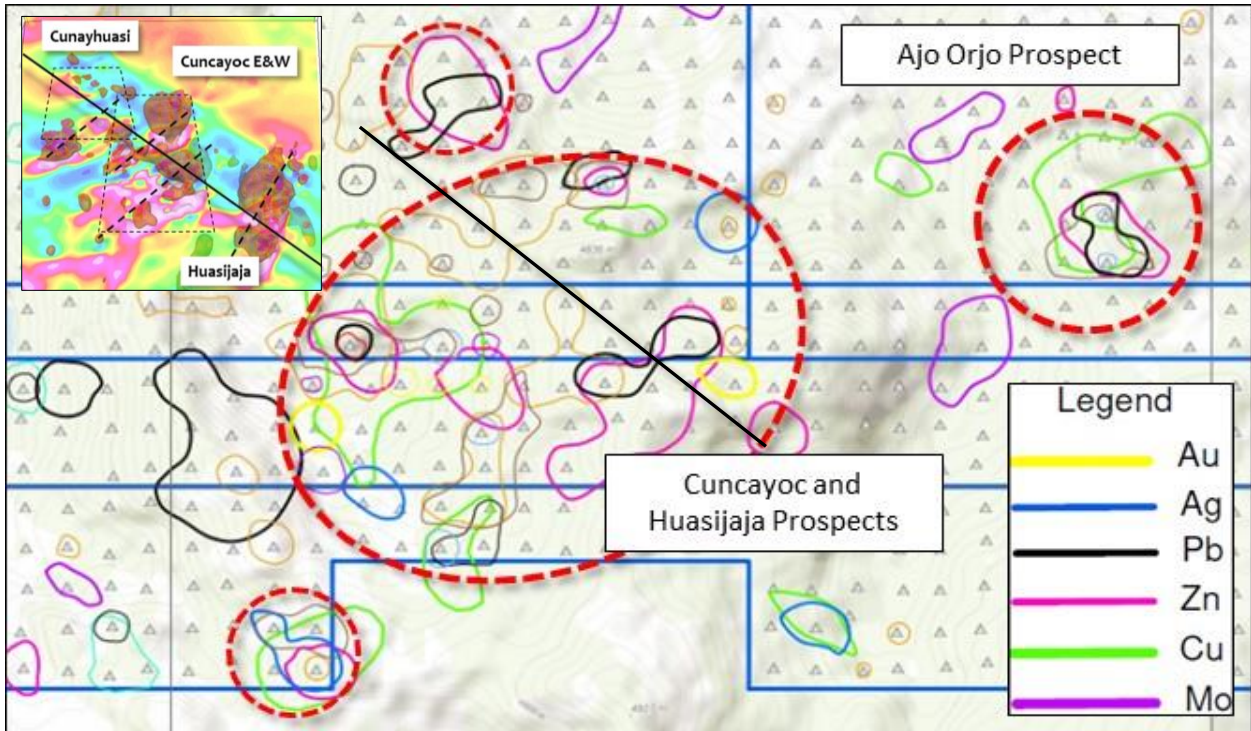


Figure 6 **ABOVE:** Cut and pasted section of Figure 1. Several areas are highlighted. The important areas are the Cuncayoc Copper and Huasijaja Prospects (centred larger red dashed circle) and the Ajo Orjo Prospect (to the right). **INSERT** 3D model of Cunayhuasi P-1, Cuncayoc P-1/2 and Huasijaja P-1 geophysical targets (solid back lines indicate the approx. position), first appearing in ASX announcement dated 19 August 2019.

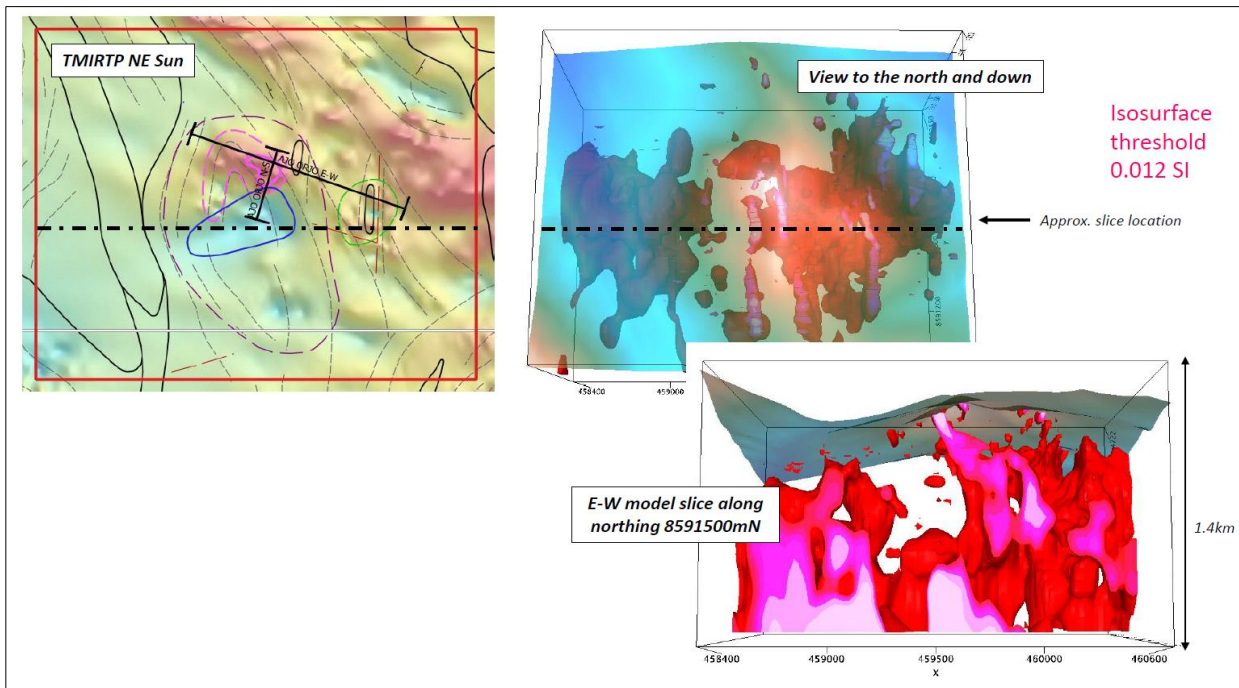


Figure 7 **ABOVE:** 3D modelling of the Ajo Orjo E and Ajo Orjo W P-2 airborne geophysical targets. The top left image shows the Ajo Orjo E and Ajo Orjo W P-2 in plan-view showing a strong magnetic low (blue line) and broad magnetic high possibly intrusive-related (dashed pink line) within a broad phyllic halo (purple dashed line). The top right image shows a large unaccounted magnetic body in plan-view; the bottom image shows the same magnetic body in cross section. This magnetic body extends from surface to over 1.4km depth. Cu, Mo and Pb soil geochemical signatures are now associated with this airborne geophysical target.



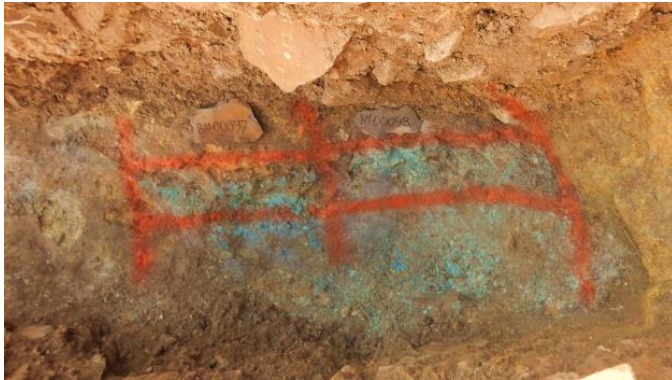


Figure 8 **ABOVE**: Mineralised outcrop at Cuncayoc Copper showing visible malachite (Cu) mineralisation. Mineralisation here is associated with faults that have a NE-SW orientation.



Figure 9 **ABOVE**: Mineralised outcrop at Cuncayoc Copper showing visible malachite, azurite (Cu) mineralisation, galena (Pb) and smithsonite (Zn). Mineralisation here is associated with a breccia body.

By way of summary, the Cuncayoc-Ajo Orjo geochemical area hosts:

- Four P-1 and four P-2 airborne geophysical targets, including Ushpanga P-1, Cunayhuasi P-1, Cuncayoc East P-1, Chojepite P-1, Cuncayoc West P-2, Ajo Orjo W & E P-2's and Cachillusca P-2;
- Bonanza-grade Ag mineralisation (911g/t Ag) and strong Cu mineralisation at the Cuncayoc Copper Prospect in rockchip sampling;
- Several 3D modelled unaccounted magnetic bodies at Cuncayoc Copper, Huasijaja and Ajo Orjo Prospects. **NEW** The Huasijaja 3D magnetic body is  $\pm 200$  million cubic metres in size;
- Multiple other known zones of mineralisation;
- And is flanked by the rhyolite dome at Alteration Ridge.

### Next Steps

The process of compiling and assessing the multiple data sets has begun with the finalisation of the Soil Program. This announcement is an illustration of the assessment process to be deployed—combining airborne geophysical data and recent soil and rockchip geochemical, geological mapping and magnetic 3D imaging data. Further analysis will be considerably more inclusive, using all data sets and will be sufficiently detailed to derive well defined and prioritised target areas. Low-cost mapping and sampling will continue the search for mineralisation, alteration, presence of intrusions, ex cetera, to assist assessments. An Induced Polarisation (IP) ground-geophysical survey is being considered to provide sub-surface information to better define the highest priority targets.

Assays for the 95 rockchip samples and subsequent assessment of results is anticipated within seven to ten days.



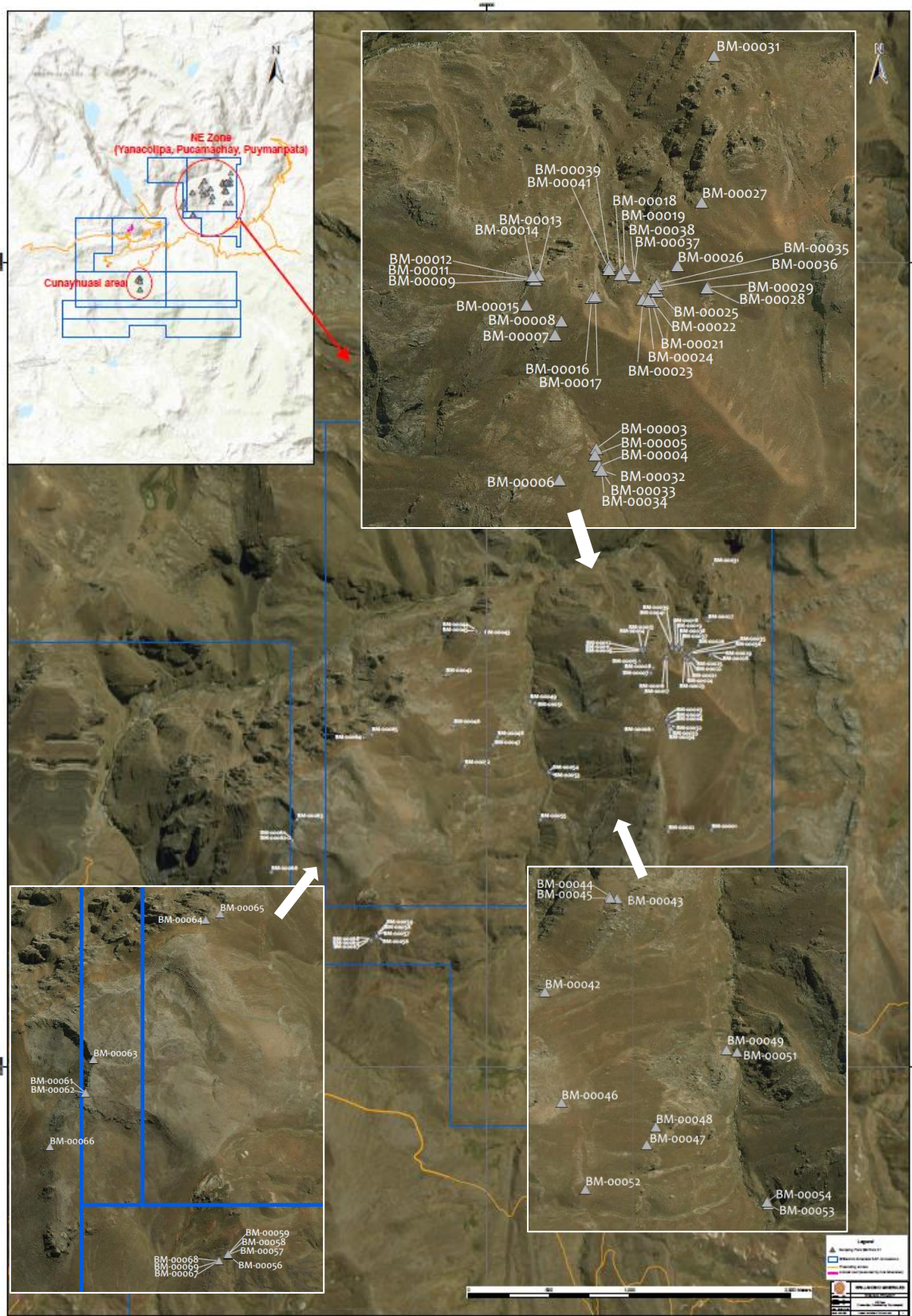


Figure 10 ABOVE: Sample Location Plan – refer also to Table 1.



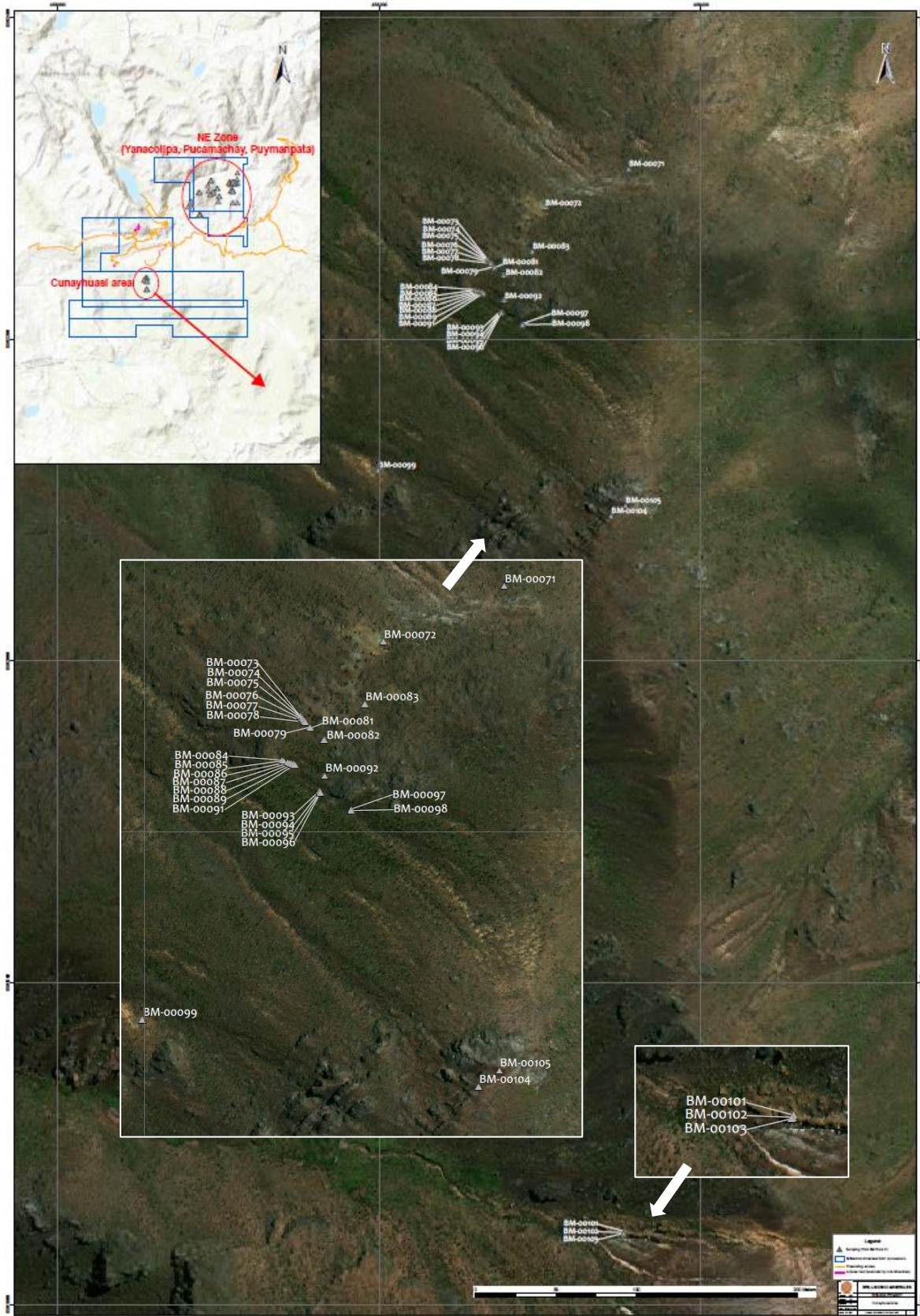


Figure 11 ABOVE: Sample Location Plan – refer also to Table 1.





Table 1 BELOW: Rockchip Sample Locations.

Sample N°	COORDINATES		Elevation (m)	Sample N°	COORDINATES		Elevation (m)
	E_WGS84	N_WGS84			E_WGS84	N_WGS84	
BM-00001	461399	8596473	4457	BM-00054	460386	8596835	4101
BM-00002	461131	8596469	4496	BM-00055	460336	8596538	4110
BM-00003	461121	8597175	4516	BM-00056	459316	8595813	4446
BM-00004	461128	8597133	4515	BM-00057	459313	8595815	4447
BM-00005	461118	8597160	4516	BM-00058	459314	8595816	4447
BM-00006	461032	8597100	4323	BM-00059	459315	8595817	4448
BM-00007	461021	8597451	4484	BM-00061	458792	8596412	4620
BM-00008	461037	8597485	4492	BM-00062	458790	8596411	4628
BM-00009	460973	8597585	4491	BM-00063	458820	8596536	4660
BM-00011	460973	8597585	4491	BM-00064	459232	8597048	4666
BM-00012	460973	8597586	4491	BM-00065	459285	8597072	4643
BM-00013	460981	8597596	4489	BM-00066	458660	8596214	4554
BM-00014	460967	8597595	4485	BM-00067	459281	8595793	4435
BM-00015	460951	8597524	4463	BM-00068	459281	8595793	4435
BM-00016	461110	8597542	4485	BM-00069	459281	8595793	4435
BM-00017	461119	8597546	4473	BM-00071	456355	8592306	4489
BM-00018	461191	8597611	4443	BM-00072	456303	8592282	4578
BM-00019	461180	8597598	4455	BM-00073	456267	8592250	4578
BM-00021	461255	8597534	4482	BM-00074	456268	8592249	4576
BM-00022	461256	8597534	4483	BM-00075	456268	8592248	4575
BM-00023	461234	8597538	4487	BM-00076	456269	8592248	4578
BM-00024	461247	8597536	4488	BM-00077	456269	8592248	4568
BM-00025	461269	8597557	4465	BM-00078	456269	8592247	4567
BM-00026	461318	8597619	4441	BM-00079	456271	8592245	4569
BM-00027	461377	8597773	4423	BM-00081	456272	8592245	4570
BM-00028	461389	8597566	4487	BM-00082	456277	8592240	4573
BM-00029	461390	8597566	4486	BM-00083	456295	8592255	4577
BM-00031	461407	8598128	4276	BM-00084	456259	8592231	4573
BM-00032	461134	8597123	4520	BM-00085	456260	8592231	4576
BM-00033	461134	8597123	4520	BM-00086	456262	8592230	4576
BM-00034	461134	8597123	4520	BM-00087	456262	8592230	4577
BM-00035	461268	8597573	4565	BM-00088	456263	8592229	4577
BM-00036	461261	8597565	4454	BM-00089	456264	8592229	4578
BM-00037	461213	8597591	4440	BM-00091	456265	8592229	4578
BM-00038	461214	8597595	4443	BM-00092	456278	8592224	4583
BM-00039	461153	8597619	4433	BM-00093	456276	8592218	4560
BM-00041	461152	8597610	4469	BM-00094	456276	8592217	4580
BM-00042	459747	8597439	4382	BM-00095	456276	8592217	4579
BM-00043	459954	8597707	4286	BM-00096	456276	8592217	4546
BM-00044	459934	8597714	4294	BM-00097	456289	8592210	4577
BM-00045	459935	8597709	4294	BM-00098	456289	8592209	4580
BM-00046	459795	8597121	4437	BM-00099	456199	8592119	4577
BM-00047	460040	8597001	4260	BM-00101	456353	8591645	4689
BM-00048	460066	8597051	4255	BM-00102	456352	8591645	4688
BM-00049	460269	8597273	4114	BM-00103	456352	8591644	4688
BM-00051	460300	8597266	4099	BM-00104	456344	8592090	4670
BM-00052	459864	8596872	4394	BM-00105	456353	8592097	4660
BM-00053	460390	8596828	4094				

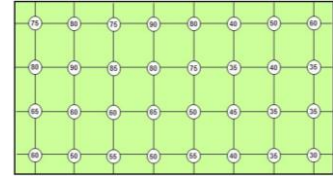
**Competent Person Statement**

The information in this report that relates to exploration results and mineralisation for the Greater Riqueza project area, located in Peru, is based on information compiled by Mr Ross Brown BSc (Hons), MAusIMM, SEG, MAICD Managing Director, Inca Minerals Limited, who is a Member of the Australasian Institute of Mining and Metallurgy. He has sufficient experience, which is relevant to exploration results, the style of mineralisation and types of deposits under consideration, and to the activity which has been undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr Brown is a fulltime employee of Inca Minerals Limited and consents to the report being issued in the form and context in which it appears.



**Selected Key Words Used in this Announcement (order of appearance and cross reference)**

<u>Soil Sampling</u>	An exploration method to obtain <i>geochemical</i> data from the [upper] soil profile. This program type is often deployed over a grid, <i>grid sampling</i> , which may cover very large areas or very small area. It is usually deployed over targets relatively well defined.
<u>Grid Sampling</u>	A method of sampling whereby samples (typically soil samples) are taken from a prescribed grid-location often orientated to the cardinal points NS-EW. The grid spacing is arbitrary but can be from 10m to 10km depending on the purpose and survey area.
<u>Geochemistry(-ical)</u>	The study of the distribution and amounts of the chemical elements in minerals, ores, rocks, soils, water and the atmosphere.
<u>Geophysics(-ical)</u>	An exploration method using instruments to collect and analyse properties as magnetics, radioactivity, gravity, electronic conductivity, etc. Instruments can be located on surface (ground survey) or above the ground ( <i>airborne</i> survey).
<u>Airborne Magnetic 3D Modelling Magnetics</u>	Said of a <i>geophysical</i> survey in which the <i>geophysical</i> tool is above the ground. A desk-top (computer-based) examination of magnetic data to produce three dimensional shapes to represent a magnetic feature/body. A measurement of the intensity of the earth's magnetic field caused by the contrasting content of rock-forming magnetic minerals in the Earth's crust. This allows sub-surface mapping of geology, including <i>structures</i> . An <i>airborne</i> survey is flown either by plane or helicopter with the magnetometer kept at a constant height above the surface.
<u>ASTER</u>	Or <u>A</u> dvanced <u>S</u> paceborne <u>T</u> hermal <u>E</u> mission and <u>R</u> eflection radiometry is satellite-based remote sensing tool that is mounted on the Terra satellite (joint NASA-Japanese Ministry of Economy, Trade and Industry, Japanese Space Systems operated). ASTER is part of the Earth Observing System (EOS) that measures land surface temperature, reflectance and elevation. Through modelling the nature of Earth's reflectance mineral occurrences may be interpreted (all minerals reflect light in a particular wavelength pattern).
<u>Limestone</u>	A calcium carbonate sedimentary rock typically formed of ancient shallow marine deposits such as coral reefs and reef-related deposits.
<u>Alteration</u>	A process that involves the <i>alteration</i> of (change to) a rock, mineral or mineralisation by processes involving, but not limited to, the presence of <i>hydrothermal</i> fluids.
<u>Porphyry (Deposit)</u>	A type of <i>deposit</i> containing ore-forming minerals occurring as disseminations and veinlets in a large volume of rock. The rock is typically porphyritic (a texture of large crystals in a fine groundmass). Porphyry <i>deposits</i> are economically very significant.
<u>Skarn (Deposit)</u>	A type of <i>deposit</i> that forms as a result of <i>alteration</i> which occurs when <i>hydrothermal</i> fluids interact either igneous or sedimentary rocks. In many cases, <i>skarns</i> are associated with the <i>intrusive granitic</i> rocks, especially <i>porphyry intrusions</i> , in and around <i>faults</i> that intrude into <i>limestone</i> .
<u>Structure</u>	A very broad and widely used geological term but used at Riqueza to mean a large linear feature either a geological fault or a lineament.
<u>Vein</u>	A tabular or sheet-like form of mineralisation, often resulting from in-filling a vertical or near-vertical fracture. They often cut across <i>Country Rock</i> .
<u>Sill</u>	A tabular igneous <i>intrusion</i> that parallels the planar structure of the surrounding rock.
<u>Dyke</u>	A tabular igneous <i>intrusion</i> that cuts across the planar structure of the surrounding rock.
<u>Fault</u>	A surface or zone of rock fracture along which there has been displacement.
<u>Breccia</u>	Broken or fragmented rock. <i>Breccia veins</i> are narrow fissures containing numerous rock fragments. The rock fragments are called clasts and the space between the clasts is called the matrix. In <i>Porphyry</i> mineralised <i>breccias</i> can often form a large percentage of the ore.
<u>Monzonite</u>	A classification of an intermediate light/dark <i>intrusive</i> igneous rocks with little amount of quartz.
<u>Gabbro</u>	A classification of a group of dark basic <i>intrusive</i> igneous rocks.
<u>Ore-forming Minerals</u>	Minerals which are economically desirable, as contrasted to <i>gangue minerals</i> .
<u>Gangue Minerals</u>	Valueless minerals in ore.

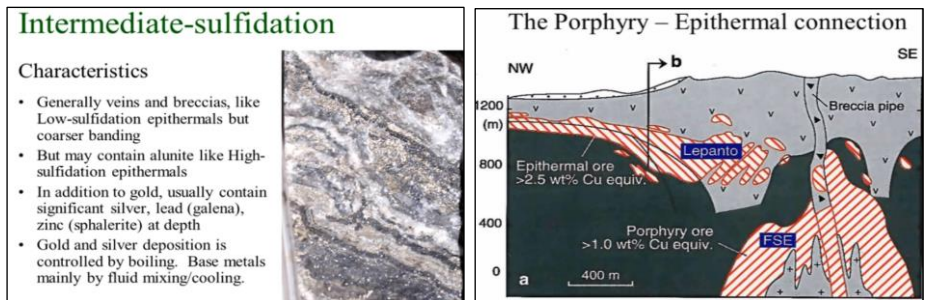






**Selected Key Words Used in this Announcement (order of appearance and cross reference) cont...**

- Chalcopyrite Copper iron sulphide with the chemical formula  $CuFeS_2$  with 34.63% Cu by mol. weight.
- Malachite Copper carbonate with the chemical formula  $Cu_2(CO_3)(OH)_2$  with 57.48% Cu by mol. weight.
- Azurite Copper carbonate with the chemical formula  $Cu_3(CO_3)_2(OH)_2$  with 55.31% Cu by mol. weight.
- Galena Lead sulphide mineral with the chemical formula  $PbS$  with 86.60% Pb by mol. weight.
- Smithsonite Zinc carbonate mineral with the chemical formula  $ZnCO_3$  with 52.15% Zn by mol. weight.
- Alteration A process that involves the alteration of (change to) a rock, mineral or mineralisation by processes involving, but not limited to, the presence of hydrothermal fluids.
- Decarbonation A process where calcium of a limestone, for example, is lost/altered.
- Silicification A process where a rock becomes silica-rich either through alteration during hydrothermal processes and/or weathering processes. In the context of this announcement, limestone is silicified.
- Chlorite A group of phyllosilicate minerals that are/may be associated with the alteration of dark igneous rocks. In the field chlorite is often dark green in colour.
- Epidote A common secondary mineral that is often a product of hydrothermal alteration. In the field epidote is often apple green in colour.
- Quartz One of the most common minerals on Earth. Quartz is often a product of hydrothermal alteration.
- Calcite A common carbonate mineral with the chemical formula  $CaCO_3$ .
- Fe-oxides A group of oxide minerals containing iron (Fe), including but not limited to haematite, limonite and goethite.
- Mn-oxides A group of oxide minerals containing manganese (Mn), including but not limited to pyrolusite, franklinite, jacobsonite.
- Mineralisation A general term describing the process or processes by which a mineral or minerals are introduced into a rock (or geological feature such as a vein, fault, etc...). In the strictest sense, mineralisation does not necessarily involve a process or processes involving ore-forming minerals. Nevertheless, mineralisation is very commonly used to describe a process or processes in which ore-forming minerals are introduced into a rock at concentrations that are economically valuable or potentially valuable. Please refer below, from Andrew Jackson (Sprott International).
- Intermediate Epithermal Said of hydrothermal processes occurring at temperatures ranging from 50°C to 200°C, and within 1,000m of the Earth's surface.
- Hydrothermal Sulphidation (IS) Pertaining to "hot water" usually used in the context of ore-forming processes.



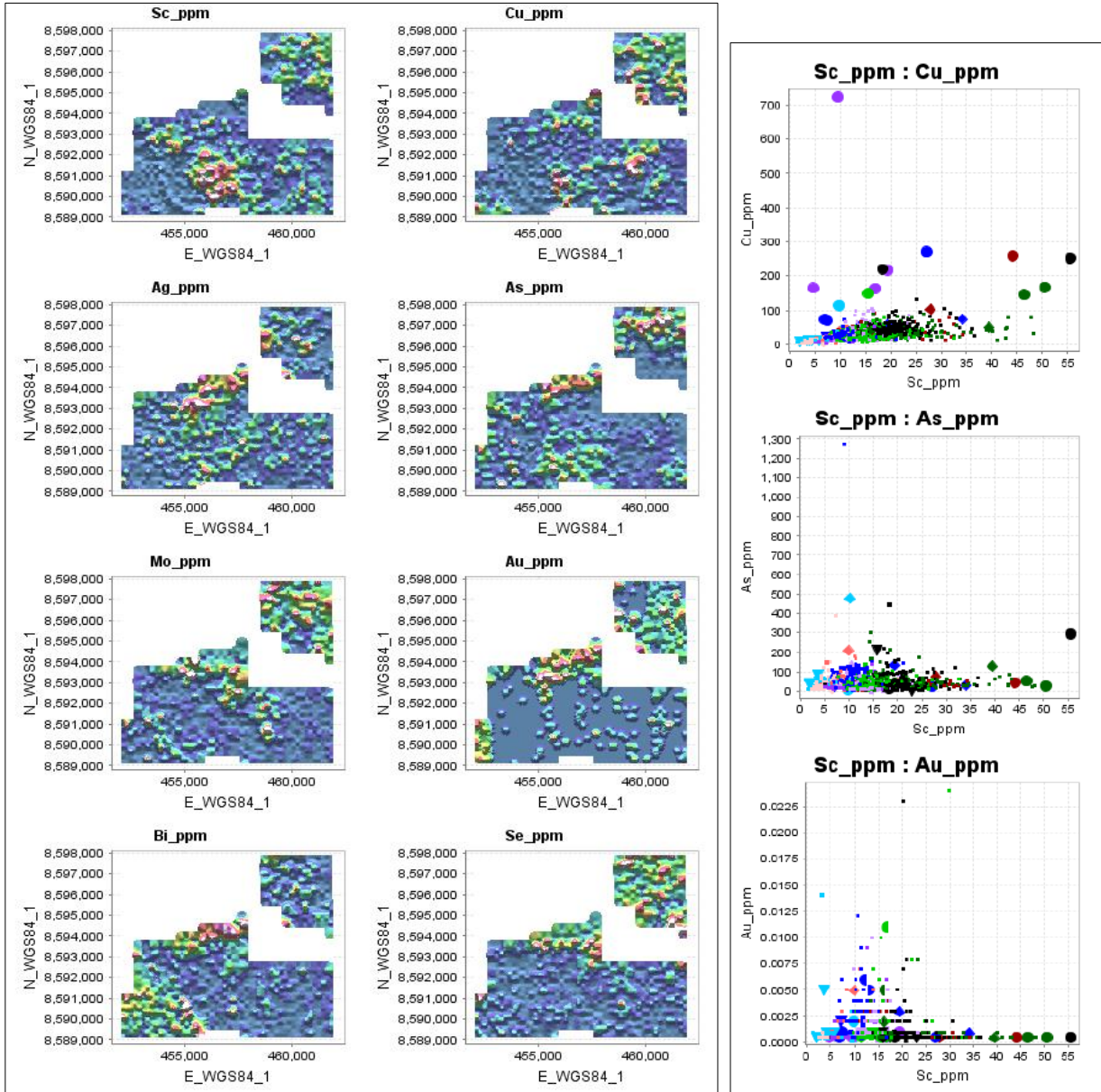
- Country Rock Rock that encloses or is cut by mineralisation. And more broadly, rock that makes up the geology of an area.
- Rhyolite(-ic) A classification of a group of igneous rocks generally porphyritic and exhibiting flow texture. Rhyolitic is term describing rhyolite characteristics.
- Volcanic Dome A step-sided, rounded extrusion (quasi-intrusive) of highly viscous magma erupted from a volcano. The dome often occurs within the volcano's crater, which may be later eroded away leaving a high topographic dome feature.
- Intrusion(-ive) The rock or process of the emplacement of magma in pre-existing rock below the Earth's surface.
- Bonanza Grade An informal term denoting very high-grade ore or mineralisation. Grades in excess of 900g/t Ag reported in this announcement may be considered bonanza grade.

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**Appendix 1**

Surface Geochemistry: **LEFT** Example of analysis **Percentile Grids** in plan-view of the project area; **RIGHT**: Scattergrams determining anomalies (Extract from an internal report).







## Appendix 2

The following information is provided to comply with the JORC Code (2012) exploration reporting requirements.

### SECTION 1 SAMPLING TECHNIQUES AND DATA

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#### Criteria: Sampling techniques

##### JORC CODE Explanation

*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 down hole gamma sondes, or hand-held XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*

##### Company Commentary

This announcement refers to the receipt of geochemical anomaly map (derived from unpublished thematic maps) constructed from 1,286 soil sample assay results (of gold, copper, silver, molybdenum, zinc and lead). This announcement also refers to the collection of 95 rockchip samples and to a 3D magnetic modelling result. With respect to the rockchip samples, the majority are channel samples. No assay results pertaining to these new samples are referred to in this announcement.

##### JORC CODE Explanation

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

##### Company Commentary

Soil sampling protocols were followed for all of the 1,286 samples (inclusive of the 800 data points of this announcement). Each sample is representative of the upper horizons of the soil profile. Rockchip channel sampling protocols were followed for all 95 samples. Channel widths and lengths are considered appropriate for the mineralisation observed in the field.

##### JORC CODE Explanation

*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 1m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases, more explanation may be required, such as where there is a coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*

##### Company Commentary

The 1,286 soil samples (inclusive of the 800 data points of this announcement) were collected as part of the project-wide grid soil sampling program (200m x 200m) involving the collection of 2kg of material from a 30cm x 30cm area at a depth of 5cm to 20cm. The 95 rockchip samples were collected as part of the project-wide grid mapping program involving the collection of 2kg of material from individual sites and from channels. No assay results associated with these 95 samples are referred to in this announcement.

#### Criteria: Drilling techniques

##### JORC CODE Explanation

*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.).*

##### Company Commentary

No drilling or drilling results are referred to in this announcement.

#### Criteria: Drill sample recovery

##### JORC CODE Explanation

*Method of recording and assessing core and chip sample recoveries and results assessed.*

##### Company Commentary

No drilling or drilling results are referred to in this announcement.



**JORC CODE Explanation**

*Measures taken to maximise sample recovery and ensure representative nature of the samples.*

**Company Commentary**

No drilling or drilling results are referred to in this announcement.

**JORC CODE Explanation**

*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.*

**Company Commentary**

No drilling or drilling results are referred to in this announcement.

**Criteria: Logging**

**JORC CODE Explanation**

*Whether core and chip samples have been geologically and geo-technically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*

**Company Commentary**

No drilling or drilling results are referred to in this announcement.

**JORC CODE Explanation**

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

**Company Commentary**

No drilling or drilling results are referred to in this announcement.

**JORC CODE Explanation**

*The total length and percentage of the relevant intersections logged.*

**Company Commentary**

No drilling or drilling results are referred to in this announcement.

**Criteria: Sub-sampling techniques and sample preparation**

**JORC CODE Explanation**

*If core, whether cut or sawn and whether quarter, half or all core taken.*

**Company Commentary**

No drilling or drilling results are referred to in this announcement.

**JORC CODE Explanation**

*If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.*

**Company Commentary**

No drilling or drilling results are referred to in this announcement.

**JORC CODE Explanation**

*For all sample types, the nature, quality and appropriateness of the sample preparation technique.*

**Company Commentary**

No new sampling or assay results are referred to in this announcement.

**JORC CODE Explanation**

*Quality control procedures adopted for all sub-sampling stages to maximise “representivity” of samples.*





**Company Commentary**

No sub-sampling occurred in relation to the 800 data points referred to in this announcement.

**JORC CODE Explanation**

*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.*

**Company Commentary**

The 1,286 soil samples (inclusive of the 800 data points of this announcement) were collected as part of the project-wide grid soil sampling program (200m x 200m) involving the collection of 2kg of material from a 30cm x 30cm area at a depth of 5cm to 20cm. The 30cm x 30cm x 15cm volume of soil was mixed with large pieces of rock/debris removed by hand. A 2kg sample was retained. The 95 rockchip samples were collected as part of the project-wide grid mapping program involving the collection of 2kg of material from individual sites and from channels. Channel widths and lengths are considered appropriate for the mineralisation observed in the field. No assay results associated with these 95 samples are referred to in this announcement.

**JORC CODE Explanation**

*Whether sample sizes are appropriate to the grain size of the material being sampled.*

**Company Commentary**

The soil sample size (2kg) is considered appropriate for the purposes of a grid soil geochemical survey. The rockchip sample size (2kg) is also considered appropriate for the purposes reporting new mineralisation in outcrop.

**Criteria: Quality of assay data and laboratory tests**

**JORC CODE Explanation**

*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*

**Company Commentary**

In the generation of the anomaly map (from unpublished thematic maps that shows numerical assay results in a colour scale) an Inverse Distance Weighting (IDW) method was used. IDW is a type of deterministic method for multivariate interpolation with a known scattered set of points. The assigned values to unknown points are calculated with a weighted average of the values available at the known points. The 1,286 soil samples (inclusive of the 800 data points of this announcement) were subject to: ME-MS61L super trace lowest detection limit four acid digest by ICP-MS (all elements except Au – not reported in this announcement), and 30g Fire Assay ICP-AES finish (for Au). These methods are considered appropriate for soil geochemical orientation programs.

**JORC CODE Explanation**

*For geophysical tools, spectrometers, hand-held XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*

**Company Commentary**

No geophysical tools, spectrometers, hand-held XRF instruments, etc were used in the generation of the assay data and subsequent geochemical heat maps referred to in this announcement.

**JORC CODE Explanation**

*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.*

**Company Commentary**

QAQC samples (standards and blanks) were inserted into both soil and rockchip sample streams prior to submission to the laboratory, at a frequency of 1 QAQC sample per 30 samples.

**Criteria: Verification of sampling and assaying**

**JORC CODE Explanation**

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



**Company Commentary**

No intersections are referred to in this announcement.

**JORC CODE Explanation**

*The use of twinned holes.*

**Company Commentary**

No drilling or drilling results are referred to in this announcement.

**JORC CODE Explanation**

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

**Company Commentary**

Soil and rockchip sample databases for primary data, including *inter alia*, coordinates, elevation, soil type, soil conditions, date, were updated and saved/stored daily.

**JORC CODE Explanation**

*Discuss any adjustment to assay data.*

**Company Commentary**

Assay data was adjusted in the generation of the anomaly map via unpublished geochemical heat maps. The adjustments are described in main body of this announcement, repeated below. Numerical assay data is bracketed in a series of value ranges. Each value range is assigned a colour in a colour scale: from low value-ranges being blue and high value-ranges being red. In the graphic representation of the data, the “heat map”, sample locations are allocated its colour. The thematic heat map display effect is a full colour plan with shades of blue through yellow, orange to red. The subsequent anomaly map was created by reducing the colour variation to a single contour displaying the upper values of the data only.

**Criteria: Location of data points**

**JORC CODE Explanation**

*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.*

**Company Commentary**

This announcement refers to geochemical data of 800 of 1,286 soil samples. The 1,286 soil samples were collected as part of the project-wide grid soil sampling program (200m x 200m). The 95 rockchip sample locations were as according to the location on new mineralisation found during mapping. Handheld GPS's were used to locate each prescribed sample location in the field.

**JORC CODE Explanation**

*Specification of the National grid system used.*

**Company Commentary**

WGS846-18L.

**JORC CODE Explanation**

*Quality and adequacy of topographic control.*

**Company Commentary**

Topographic control is achieved via the use of government topographic maps, in association with GPS and Digital Terrain Maps (DTM's), the latter generated during antecedent detailed geophysical surveys.

**Criteria: Data spacing and distribution**

**JORC CODE Explanation**

*Data spacing for reporting of Exploration Results.*





**Company Commentary**

This announcement refers to geochemical data of 800 of 1,286 soil samples. The 1,286 soil samples were collected as part of the project-wide grid soil sampling program (200m x 200m). The 95 rockchip sample locations were as according to the location on new mineralisation found during mapping. Spacing of individual channels was at all times perpendicular to the mineralisation trend as evident in the field.

**JORC CODE Explanation**

*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.*

**Company Commentary**

No grade continuity, Mineral Resource or Ore Reserve estimations are referred to in this announcement.

**JORC CODE Explanation**

*Whether sample compositing has been applied.*

**Company Commentary**

No sample compositing was applied in the generation of the 1,286 soil samples or 95 rockchip samples.

**Criteria: Orientation of data in relation to geological structure**

**JORC CODE Explanation**

*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*

**Company Commentary**

This announcement refers to geochemical data of 1,286 soil samples. The 1,286 soil samples were collected as part of the project-wide grid soil sampling program (200m x 200m) covering approximately two-thirds of the entire project area. This coverage is considered to be unbiased in terms of location, region structures and known and unknown mineralisation. With respect to the 95 rockchip samples, sampling was at all times perpendicular to the mineralisation trend as evident in the field.

**JORC CODE Explanation**

*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.*

**Company Commentary**

No drilling results are referred to in this announcement.

**Criteria: Sample security**

**JORC CODE Explanation**

*The measures taken to ensure sample security.*

**Company Commentary**

Sampling security followed industry best practice.

**Criteria: Audits and reviews**

**JORC CODE Explanation**

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

**Company Commentary**

An audit sample-set were collected from 20 different sites (collecting geochemical data from the B-soil horizon and 5cm-20cm soil horizon sampled), with the purpose of testing the adequacy of the applied soil protocol (described above). The audit assay results validated the soil protocol.



## SECTION 2 REPORTING OF EXPLORATION RESULTS

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### **Criteria: Mineral tenement and land tenure status**

#### **JORC CODE Explanation**

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.

#### **Company Commentary**

Tenement Type: The Riqueza Project area comprises nine Peruvian mining concessions: Nueva Santa Rita, Antacocha I, Antacocha II, Rita Maria, Maihuasi, Uchpanga, Uchpanga II, Uchpanga III and Picuy.

Nueva Santa Rita ownership: The Company has a 5-year concession transfer option and assignment agreement (“**Agreement**”) whereby the Company may earn 100% outright ownership of the concession.

All other above-named concessions: The Company has direct 100% ownership.

#### **JORC CODE Explanation**

The security of the land tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.

#### **Company Commentary**

The Agreement and all concessions are in good standing at the time of writing.

### **Criteria: Exploration done by other parties**

#### **JORC CODE Explanation**

Acknowledgement and appraisal of exploration by other parties.

#### **Company Commentary**

This announcement does not refer to exploration conducted by previous parties.

### **Criteria: Geology**

#### **JORC CODE Explanation**

Deposit type, geological setting and style of mineralisation.

#### **Company Commentary**

The geological setting of the area is that of a gently SW dipping sequence of Cretaceous limestones, Tertiary “red-beds” and volcanics on a western limb of a NW-SE trending anticline; subsequently affected by an intrusive rhyolite volcanic dome believed responsible for a series of near vertical large scale structures and multiple and pervasive zones of epithermal related Au-Cu-Ag-Mn-Zn-Pb mineralisation.

### **Criteria: Drill hole information**

#### **JORC CODE Explanation**

A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:

- Easting and northing of the drill hole collar
- Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar.
- Dip and azimuth of the hole.
- Down hole length and interception depth.
- Hole length.

#### **Company Commentary**

No drilling or drilling results are referred to in this announcement.

#### **JORC CODE Explanation**

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.

#### **Company Commentary**

No drilling or drilling results are referred to in this announcement.





**Criteria: Data aggregation methods**

**JORC CODE Explanation**

*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 shown in detail*

**Company Commentary**

Assay data was adjusted in the generation of the geochemical heat maps referred to in this announcement. The adjustments are described in main body of this announcement, repeated below. Numerical assay data is bracketed in a series of value ranges. Each value range is assigned a colour in a colour scale: from low value-ranges being blue and high value-ranges being red. In the graphic representation of the data, the “heat map”, sample locations are allocated its colour. The thematic heat map display effect is a full colour plan with shades of blue through yellow, orange to red. The subsequent anomaly map was created by reducing the colour variation to a single contour displaying the upper values of the data only.

**JORC CODE Explanation**

*The assumptions used for any reporting of metal equivalent values should be clearly stated.*

**Company Commentary**

No metal equivalents are referred to in this announcement.

**Criteria: Relationship between mineralisation widths and intercept lengths**

**JORC CODE Explanation**

*These relationships are particularly important in the reporting of Exploration Results.*

*If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*

*If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. ‘down hole length, true width not known.’)*

**Company Commentary**

No mineralisation widths and intercept lengths are referred to in this announcement.

**Criteria: Diagrams**

**JORC CODE Explanation**

*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not limited to a plan view of drill hole collar locations and appropriate sectional views*

**Company Commentary**

An anomaly plan for the soil geochemical data showing the 1,286 data points, and two sample location plans for the rockchip samples are provided in this announcement.

**Criteria: Balanced reporting**

**JORC CODE Explanation**

*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*

**Company Commentary**

The Company believes this ASX announcement provides a balanced report of the status of exploration the subject of this announcement.

**Criteria: Other substantive exploration data**

**JORC CODE Explanation**

*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.*

**Company Commentary**

This announcement makes reference to three previous ASX announcements dated: 31 October 2018, 19 August 2019 and 15 October 2019.

**Criteria: Further work**

**JORC CODE Explanation**

*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*



**Company Commentary**

This announcement refers to geochemical data of 1,286 soil samples as part of the grid soil geochemical survey, and to the collection of 95 rockchip samples. By the nature of this exploration work, further work is necessary to progress the understanding of the project.

**JORC CODE Explanation**

*Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*

**Company Commentary**

An anomaly plan for the soil geochemical data showing the 1,286 data points, and two sample location plans for the 95 rockchip samples are provided in this announcement.

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