



11 September 2019

POSITIVE RESULTS MOUNTING AT RIQUEZA - PROJECT UPDATE

IN THIS ANNOUNCEMENT

- *Status of Inca grid soil sample geochemical program*
- *Status of WorldView3 imagery program*
- *Further regional review of the recent magnetic bodies identified in recent 3D magnetic modelling*
- *Significance of the recent results at Riqueza*
- *General update of the Australian projects*
- *Key words and ASX JORC 2012 compliance tables – Appendix 1*

HIGHLIGHTS

- Grid soil sampling geochemical survey is $\pm 80\%$ complete
- WorldView3 imagery program is complete
- Orientation of new 3D magnetic bodies show similarities with known gold-copper porphyries
- Field trip to MaCauley Creek to inspect historic mineralisation starts next week
- General meeting held with all three directors electing to salary sacrifice

Inca Minerals Limited's (**Inca** or the **Company**) wishes to update the market about Riqueza and other recent project developments. A project-wide grid soil sample geochemical mapping program (**geochemical mapping program**) is 80% complete with approximately 1,000 samples of 1269 now taken. The Company is also pleased to announce that a WorldView3 satellite imagery mapping program (**satellite mapping program**) is now completed.

South32-funded exploration now conducted at Riqueza includes:

- Airborne magnetics and radiometrics geophysical survey (pre-Earn-in Agreement) *identifying +40 geophysical targets, including 29 priority targets;*
- Expert reconnaissance geological mapping identifying *an intermediate sulphidation epithermal system;*
- Reconnaissance rockchip sampling (in conjunction with expert reconnaissance mapping) *identifying 919g/t silver and >3% copper;*
- 3D magnetic modelling, *identifying several large unexplained magnetic bodies;*
- Project-wide grid soil sample geochemical mapping program (80% complete); and
- WorldView3 satellite mapping program.

This exploration has significantly progressed the understanding of Riqueza in terms of its potential for hosting a Tier-1 deposit. A large 7km x 5km intermediate sulphidation epithermal system has been identified (ASX announcement 20 June 2019) and new mineralisation at the Cuncayoc Copper Prospect (peak results: 919g/t silver; 3.31% copper) has been discovered (ASX announcement 4 July 2019). More recently, several large unexplained magnetic bodies extending below surface geophysical targets have been identified (ASX announcement 19 August 2019). Just one of these magnetic bodies, Huasijaja, is estimated to be 1,000m long, 400m wide and 500m thick, some 200million cubic metres.

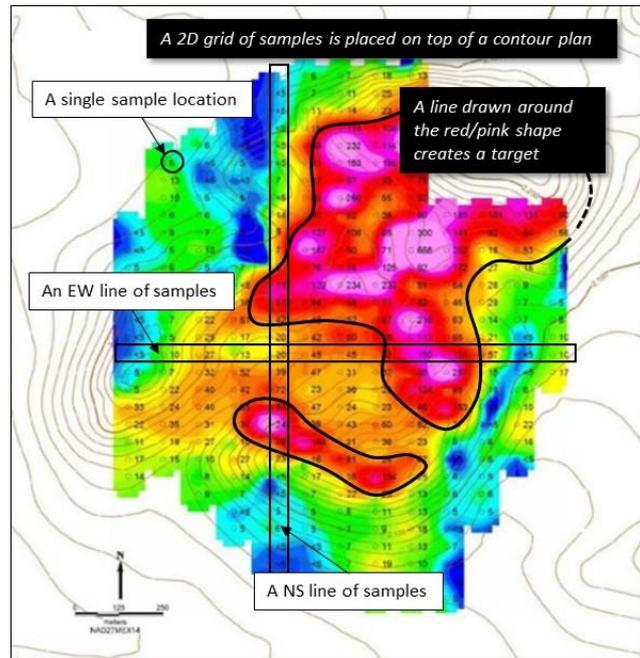


Geochemical Mapping Program

The geochemical mapping program comprising 1,269 samples commenced in early-mid July this year and is nearing completion. Approximately 1,000 samples (or 80%) of the samples have been taken to date. The sample collection rates during July were slower than anticipated due to thick soil profiles, but since July, the sample rates have improved. The remaining samples will take approximately 12 to 15 days to complete.

Each soil sample will be assayed for 36 elements, including but not limited to gold, copper, silver, zinc and lead. A total of approximately 46,000 geochemical data points will be generated and analysed in terms of an indication of porphyry and skarn-related mineralisation. The principal use of the geochemical data is in a generation of geochemical heat maps (Figure 1). The results of a particular element(s) for each sample location are plotted on a map with high values typically assigned hot colours (reds and pinks) and low values typically assigned cool/cold colours (greens and blues). Gold and copper values would be expected to be high in proximity to a gold-copper porphyry deposit, for example. Copper and zinc values would be expected to be high in proximity to a copper-zinc skarn deposit.

Figure 1 RIGHT: *This image is not generated from data produced in related to the Riqueza geochemical mapping program and is only included in this announcement to illustrate the appearance and format of a typical geochemical heat map.* An example of a geochemical heat map that shows gold values as a colour grade. High values are pink, low grades are dark blue. The image shows a NS-EW grid system reporting gold values as a two-dimension colour grade on a topographic map as background. Two red-pink areas are highlighted which may be considered gold anomalies and therefore gold mineralisation target areas.



The heat map method of representing geochemical results is highly effective in identifying “hidden” zones of mineralisation. Interpretative powers may be enhanced by using element combinations, element ratios and/or pathfinder elements. In the case of soil geochemistry, elements might be used that are preferentially enriched in the soil profile so that buried mineral deposits may become more apparent. Through its partnership with South32, Inca has access to experts in this field of interpretation.

Analysis of the soil geochemical data will commence upon receipt of all sample assay data. Sampling is expected to be completed within about two weeks and the assays completed in about six weeks.

Satellite Mapping Program

The satellite mapping program is now complete. It involved the acquisition WorldView3 satellite data over a 100 square kilometre area, correcting the data for geographical location and generating subsequent two-dimensional imagery including a very high-resolution (HR) digital terrain model (DTM) (Appendix 1) and multispectral alteration mapping images.

HR-DTM's are particularly useful in identifying features at surface that in some instances relate to mineralisation and/or mineralised systems. Mineralised epithermal systems are typically associated with volcanic events and volcanic events very typically have a topographic expression. Additionally, mineralisation is very commonly



associated with geological structures, such as faults, or thrusts or shear zones. HR-DTM's are particularly useful in identify these types of features.

In addition to the HR-DTM, multispectral imagery is also very useful in identifying alteration minerals that maybe associated with mineralisation. Manipulating short wave infrared band data, captured by the satellite, alunite/pyrophyllite, kaolinite group minerals and illite group minerals may be plotted (Figure 2) (Appendix 2). This work has been completed on a project-wide scale. Targets have been generated by Resource Potentials.

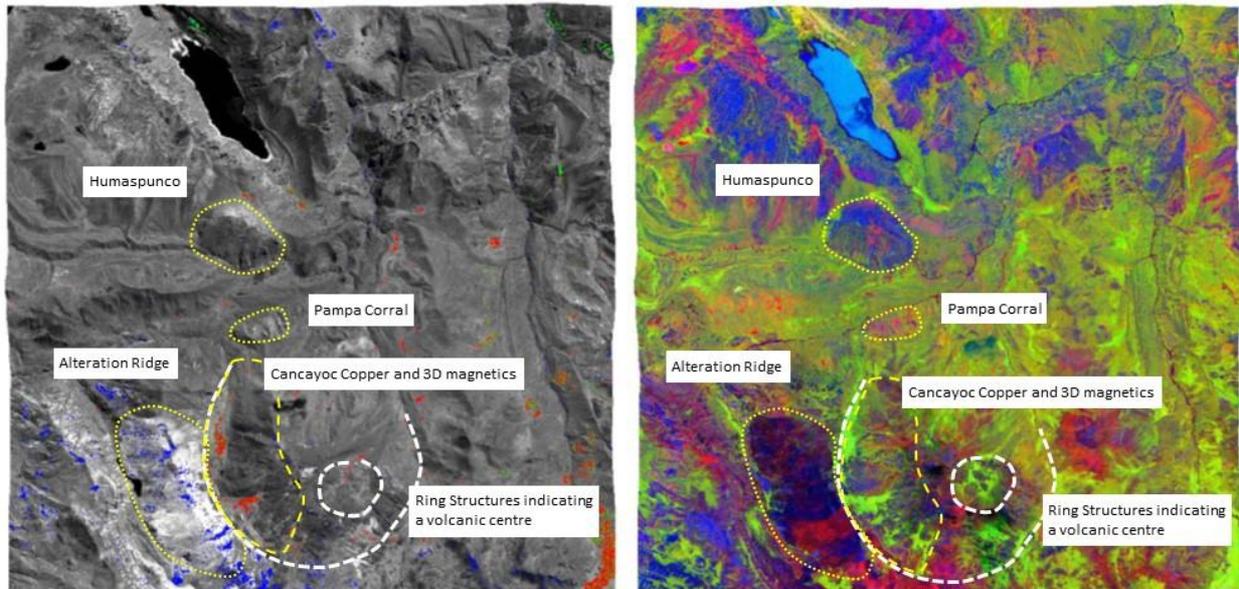


Figure 2 **ABOVE LEFT:** An example of a multispectral image (grey scale) showing the clay mineral alunite in red and illite in blue. **ABOVE RIGHT:** Another example of a multispectral image (false colour) showing VNIR and SWIR data (iron ratio enhancement), where red areas are rich in Fe-oxides. On both images various prospects are located. The black shape (left image) and blue shape (right image) is a lake (also refer to Figure 4). No interpretations have been applied to these images other than two white dashed lines indicating ring structures. These may relate to a volcanic centre.

The WorldView3 images and interpretations are currently the subject of review and assessment. Once the evaluation is complete, the images and interpretations will be integrated with the other datasets already available or soon to be available (geochemical data) for drill target generation.

Further Review of the Recent 3D Magnetic Bodies Identified at the Greater Alteration Ridge Area

The recently identified 3D magnetic bodies in the greater Alteration Ridge area (ASX announcement 19 August 2019) were reviewed in the context of shape, size and orientation is discussed in the context of known epithermal and gold-copper porphyry deposits in the immediate vicinity of Riqueza. Discussion concerning size is constrained by the limitations of the model as outlined in the 19 August 2019 announcement.

The largest of the new magnetic bodies, Huasijaja, has an estimated length of 1,000m, a width of 400m and a thickness of 500m. It forms of roughly cylindrical solid shape with an estimated volume is therefore 200million cubic metres. This is similar in size to the Huaculio gold-copper porphyry 5km to the southeast of Riqueza¹. The other 3D magnetic bodies, Cunayhuasi and Cunayoc E&W are smaller and more compound, comprising several small magnetic bodies.

¹ By comparing the size of the Huasijaja magnetic body to the Huaculio gold-copper porphyry, the Company does not make any assertions that Huasijaja is a mineralised gold-copper porphyry. The comparison is nevertheless important to indicate that Huasijaja is of a similar size to Huaculio which may be considered a positive comparison.

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This review also shows that the 3D magnetic bodies are located within the northwest-southeast (NW-SE) corridor and that they are individually orientated in a northwest-southeast (NE-SW) direction (Figure 3). These regional directions/trends are important in the placement and location of epithermal and gold-copper porphyry deposits in the vicinity of Riqueza. The NW-SE trend is defined by long sinuous anastomosing faults and thrusts and is believed to control the regional placement of epithermal and gold-copper porphyry deposits. The NE-SW trend is defined by transverse faults and is believed to control the location placement of epithermal and gold-copper porphyry deposits.

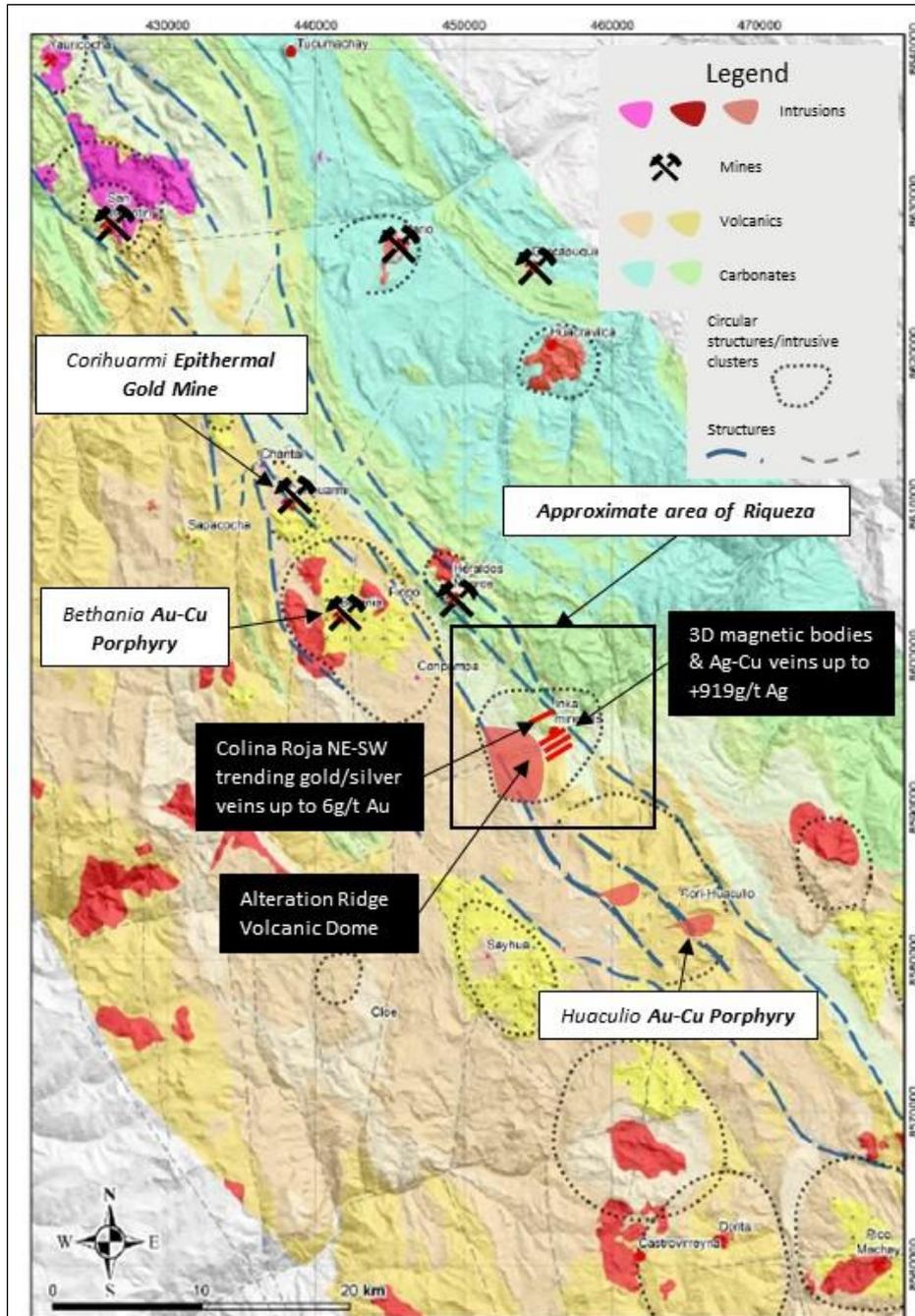


Figure 3 **LEFT:** Geological map of the Riqueza area showing the approximate position of Riqueza. The diagram highlights several mines in the area, intrusive bodies (pink and red shapes), intrusive clusters and/or circular structures (black dotted lines) and various features of Riqueza, including the rhyolite dome, the gold-silver veins of the Colina Roja Prospect, the copper-silver veins and 3D magnetic bodies of the Cuncayoc Copper Prospect. A major NW-SE trend is defined by a swarm of anastomosing structures (blue dashed lines). A cross NE-SW trend is defined by shorter structures (pale grey dashed lines). The mines and porphyries are located along these trends, as is the Colina Roja and Cuncayoc Copper veins and 3D bodies. Importantly, gold and copper epithermal and porphyry deposits are located northwest and southeast of Riqueza.

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Significance of Recent Results

The South32-funded exploration completed to date has generated very significant results. These are discussed immediately below. The overarching purpose of this exploration is to “map” the entire project area for the purpose of identifying possible drill targets. Each exploration discipline provides a layer of information that can be overlain to generate a sense of priority. These exploration disciplines include: **Geophysics** (the air magnetic and radiometrics survey); **Geology** (the ongoing mapping program recording rock type, mineralisation, alteration); **Geochemistry** (the nearly completed soil program); **Satellite imagery** (the completed WorldView3 program). Each of these disciplines can be seen as different forms of “mapping”.

Geophysical Mapping: Airborne magnetics and radiometrics geophysical survey (pre-Earn-in Agreement)

This program generated 40 geophysics targets of which 29 were prioritised into three categories resulting in the generation of twelve priority-1 (P-1) targets, thirteen P-2 targets and four P-3 targets.

Geological Mapping: Reconnaissance mapping program (conducted by independent expert geologists)

This 10-day reconnaissance geological mapping program identified an intermediate sulphidation epithermal system at Riqueza. A review of this program concluded that detailed mapping is required to better cover the northeast skarn target area and to identify possible mineralisation associated with the intermediate sulphidation epithermal system. Detailed rockchip mapping and sampling subsequently identified the Cuncayoc Copper Prospect and strongly mineralised fault-related veins with up to 919g/t silver and >3% copper.

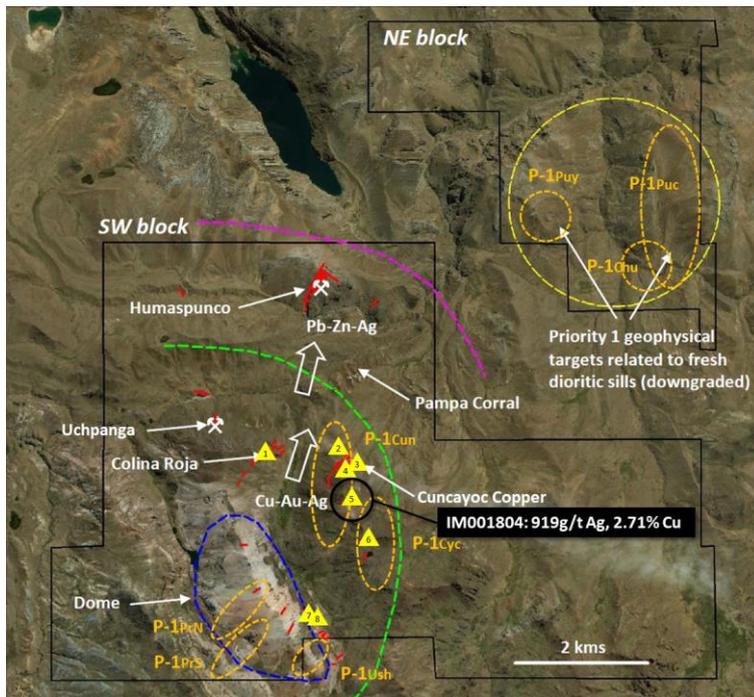


Figure 4 LEFT: A satellite image of the Riqueza Project area. The SW block (also referred to as the south-central area) encapsulates the greater Alteration Ridge Area and hosts five P-1 geophysical targets. The reconnaissance sample locations are indicated by solid yellow triangles (I1: IM-001801; I2: 08-09,11-13; I3: 14-19, 21-24; I4: 28; I5: 04; I6: 03; I7: 05; I8: 06-07). The diagram also highlights the metal zoning of the IS epithermal system with distal Pb-Zn-Ag mineralisation associated with Humaspunco and Cu-Au-Ag (\pm Pb/Zn) mineralisation associated with Uchpanga, Colina Roja and Cuncayoc Copper. This metal zoning is entirely consistent with epithermal and porphyry models and with polymetallic epithermal systems in central Peru. The NE block encapsulates the Yanacolipa Geophysical Target Area and hosts three P-1 geophysical targets (orange dashed shapes). This figure appears in ASX announcement of 4 June 2019.

Sub-surface Mapping: Sub-surface 3D modelling of Airborne magnetics and radiometrics geophysical survey

3D magnetic modelling has been conducted at five of the 29 prioritised surface geophysical mapping targets to date. completed to date has generated sub-surface 3D magnetic targets below. Of the 29 prioritised geophysical targets. Several large unexplained magnetic targets have subsequently been generated, the largest of which is 200 million cubic metres in size located below the P-2 Huasijaja surface geophysics target. The Huasijaja 3D target and the adjacent Cunayhuasi and Cuncayoc 3D targets are all orientated NE-SW, which is the same orientation as the Huaculio gold-copper porphyry 5km to the southeast.



Geochemical Mapping: Grid soil sampling program generating >45,000 data points (80% completed)

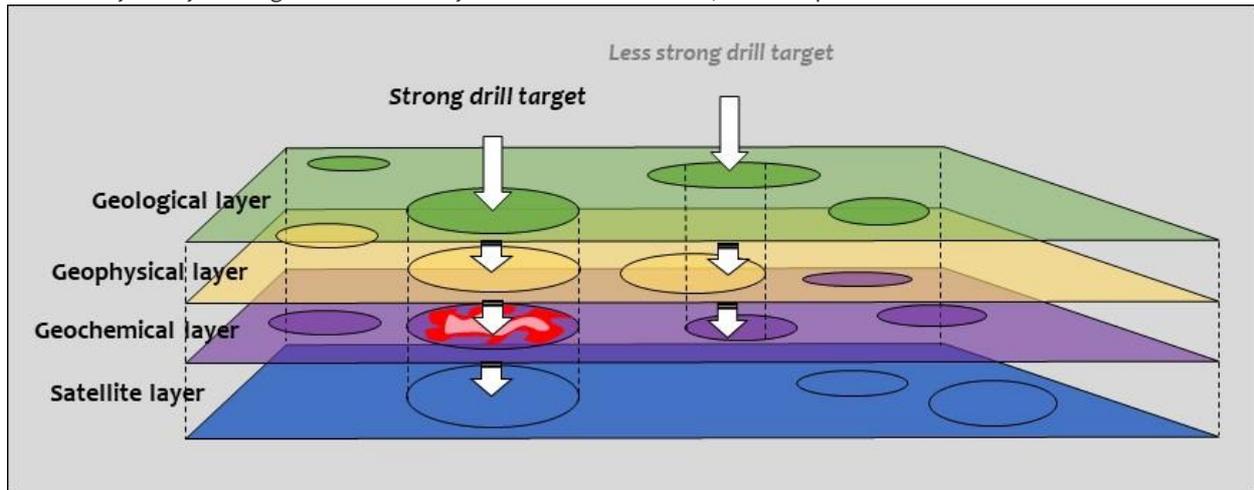
This project-wide grid soil sample geochemical mapping program, comprising 1,269 samples, is now approximately 80% complete. Once the assay data is available, geochemical heat maps will be produced to potentially further delineate drill targets.

Satellite Imagery Mapping: WorldView3 satellite HR-DTM/multispectral imagery program (recently completed).

The satellite HR-DTM/multispectral imagery has now been received by the Company. The HR-DTM and multispectral imagery will be used in conjunction with all of the above-mentioned layers of information to better geo-reference drill targets.

Each program described above has contributed considerable knowledge in the exploration evaluation of Riqueza. The net result of which will be a comprehensive assessment of possible drill targets across the entire project area. Several very important targets have already been identified. This target generation phase of the program is nearing completion.

Figure 5 **BELOW:** The concept of data layers and the generation of drill targets. Areas with an anomaly on each layer of data may become strong drill targets. As geochemical data is a direct measure of element concentrations, anomalies associated with this layer may be weighted more heavily than satellite anomalies, for example.



What's Next

The completion of geochemical mapping and integration of all datasets (layers) is the immediate objective at Riqueza. The technical committee (comprising representatives of Inca and South32) will determine the details of remaining year-1 program which will be based on results to date. Certain ongoing programs, such as detailed mapping and sampling to follow-up on new mineralisation (Cuncayoc Copper for example) will continue. Based on the success of the 3D modelling program, where the Huasijaja 200 million cubic metre magnetic shape was identified under a P-2 surface geophysical target, further 3D modelling is planned for Riqueza. The P-3 anomalies in the southwest corner of Riqueza are adjacent to Alteration Ridge have been earmarked for modelling. Ground geophysics over certain target area may be considered by the technical committee for additional target definition.

General Update on the Australian Projects

A field trip the Company's MaCauley Creek Gold-Copper Porphyry Project is currently underway. The two main objectives of this trip are to visit the historic mines to investigate known porphyry-related copper-silver mineralisation; and secondly, to locate past drill sites (and possible preserved drill cuttings) to investigate and re-sample down-hole mineralisation.

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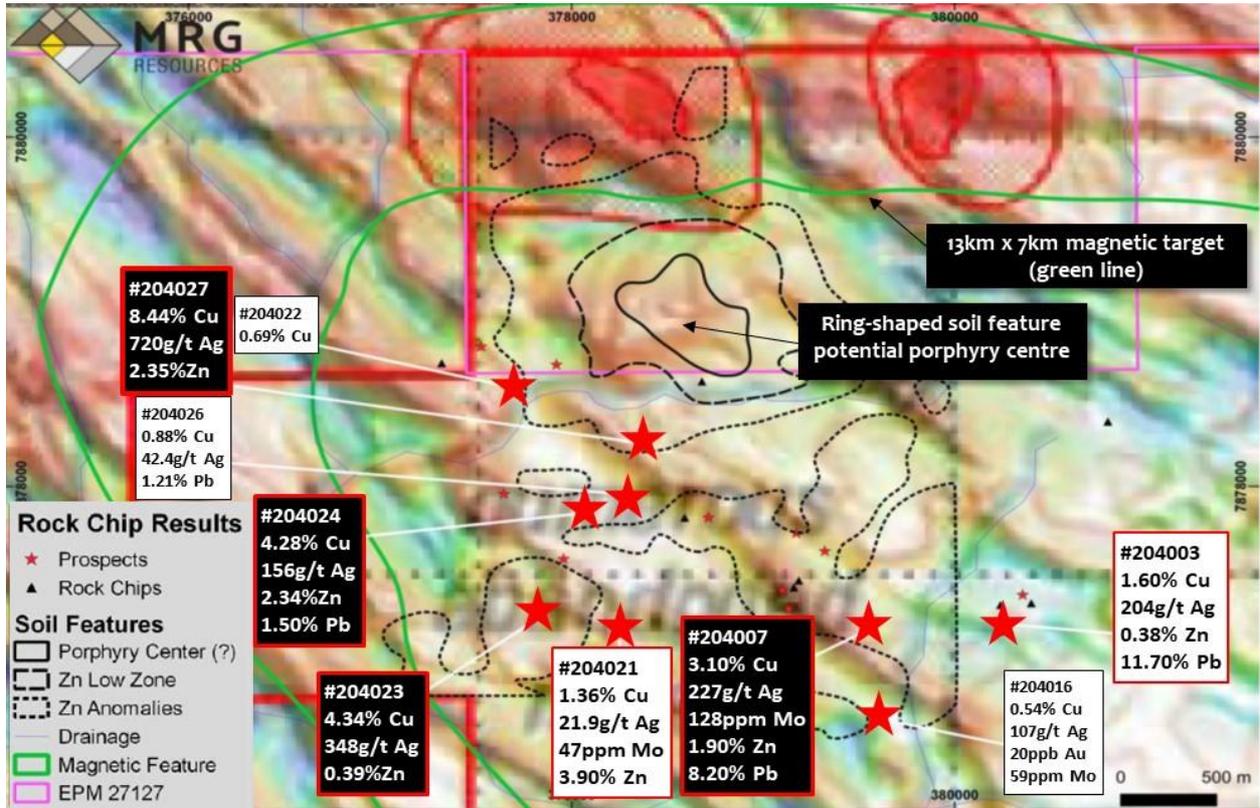


Figure 6 ABOVE: Rockchip sample locations and selected assay results overlain on a RMA Energy magnetic image. The large magnetic feature (solid green lines) and the soil sampling Zn ring-shaped target (solid black line) are also shown. The area of this diagram covers the northern central part of EPM27124, which is now granted (solid pink line). This Figure appears in an ASX announcement dated 30 July 2019. The silver values are particularly strong, including 720g/t Ag (Refer to Table 1 for coordinates).

The second EPM comprising the MaCauley Creek Project (EPM27163) is due to be granted this month.

A field trip to Inca’s Frewena Fable IOCG Project is scheduled for November this year.

It is interesting to note the rise in silver prices over the past few months. In mid-May 2019, the silver price was US\$14.50/oz. At the time of writing, the silver price is US\$17.20/oz. Over the past 12 months, the silver price has risen approximately 35%. Inca has recently reported strong silver grades at MaCauley Creek (ASX announcement 30 July 2019) and at Riqueza (ASX announcement 4 July 2019). Silver commonly occurs in porphyry and IOCG deposit orebodies.

Competent Person Statement

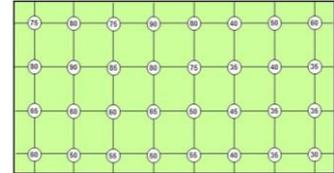
The information in this report that relates to exploration results and mineralisation for the Greater Riqueza project area, located in Peru, and MaCauley Creek project area, located in Queensland, is based on information compiled by Mr Ross Brown BSc (Hons), MAusIMM, SEG, MAICD Managing Director, Inca 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.

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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</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.
<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>Mineralisation</u>	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 <i>vein</i> , fault, etc...). In the strictest sense, <i>mineralisation</i> does not necessarily involve a process or processes involving <i>ore-forming minerals</i> . Nevertheless, <i>mineralisation</i> is very commonly use to describe a process or processes in which <i>ore-forming minerals</i> are introduced into a rock at concentrations that are economically valuable or potentially valuable.
<u>Ore-forming Minerals</u>	Minerals which are economically desirable.
<u>Deposit</u>	A [mineral] <i>deposit</i> is a naturally occurring accumulation or concentration of metals or minerals of sufficient size and concentration that might, under favourable circumstances, have economic value (Geoscience Australia). It is not a defined term in the JORC Code 2012 for Australasian Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC 2012).
<u>Reconnaissance Sampling</u>	Refers to very early-stage, in some cases, first-pass, [often rock] sampling recording location, rock type, <i>structure</i> , <i>alteration</i> and <i>mineralisation</i> (if present).
<u>Radiometric Survey</u>	Or gamma-ray spectrometric survey measures concentrations of radio-elements potassium (K), uranium (U) and thorium (Th), specifically the gamma rays emitted by isotopes of these elements. All rocks and soils contain radioactive isotopes and almost all gamma-rays detected at surface are the result of radioactive decay of K, U and Th. <i>Radiometrics</i> is therefore capable of directly detecting potassic alteration which is associated with hydrothermal processing and formation of deposits.
<u>Intermediate Epithermal</u>	Please refer below, from Andrew Jackson (Sprott International). Said of <i>hydrothermal</i> processes occurring at temperatures ranging from 50°C to 200°C, and within 1,000m of the Earth's surface.
<u>Hydrothermal</u>	Pertaining to "hot water" usually used in the context of ore-forming processes.



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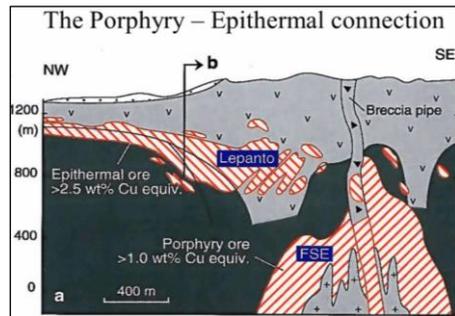
Selected Key Words Used in this Announcement (order of appearance and cross reference) cont...

Sulphidation (IS)

Intermediate-sulphidation

Characteristics

- Generally veins and breccias, like Low-sulphidation epithermals but coarser banding
- But may contain alunite like High-sulphidation epithermals
- In addition to gold, usually contain significant silver, lead (galena), zinc (sphalerite) at depth
- Gold and silver deposition is controlled by boiling. Base metals mainly by fluid mixing/cooling.

Porphyry (Deposit)

A type of deposit 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 Deposits* are economically very significant.

Skarn (Deposit)

A type of deposit that forms as a result of alteration which occurs when hydrothermal fluids interact either igneous or sedimentary rocks. In many cases, skarns are associated with the intrusion of granitic rocks, especially *Porphyry* intrusions, in and around faults that intrude into a limestone.

IOCG (Deposit)

A type of *deposit* containing *ore-forming minerals* occurring as *disseminations* and *veinlets* in a large volume of rock. The rock is typically iron rich (a distinction from *porphyry* deposits). *IOCG deposits* are economically very significant.

Structure

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.

Fault

A surface or zone of rock fracture along which there has been displacement.

Vein

A tabular or sheet-like form of mineralisation, often resulting from in-filling a vertical or near-vertical fracture. They often cut across *Country Rock*.

Country Rock

Rock that encloses or is cut by *mineralisation*. And more broadly, rock that makes up the geology of an area.

Thrust

A break in the Earth's crust, across which older rocks are pushed above younger rocks.

Shear zone

A tabular to sheet-like, planar or curvilinear zone composed of rocks that are more highly strained than rocks adjacent to the zone. Typically this is a type of *fault*, but it may be difficult to place a distinct *fault* plane into the *shear zone*. *Shear zones* may form zones of much more intense foliation, deformation, and folding. En echelon *veins* or fractures may be observed within *shear zones*.

Alunite

A hydrated aluminium potassium sulphate mineral, formula $KAl_3(SO_4)_2(OH)_6$.

Pyrophyllite

A phyllosilicate mineral composed of aluminium silicate hydroxide: $Al_2Si_4O_{12}$.

Kaolinite

A clay mineral, part of the group of minerals with the chemical composition $Al_2Si_2O_4$.

Illite

A clay minerals. The presence of *illite* can indicate the occurrence of *hydrothermal alteration*.

VNIR

Visible and **n**ear-**i**nfrared (VNIR) portion of the electromagnetic spectrum has wavelengths between approximately 400 and 1100 nanometers (nm). It combines the full visible spectrum with an adjacent portion of the infrared spectrum up to the water absorption band between 1400 and 1500 nm.



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

- SWIR Adjacent to NIR in electromagnetic spectrum and refers to non-visible light falling roughly between 1400 and 3000 nanometers (nm) in wavelength.
- 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.
- Fe-oxides A group of oxide minerals containing iron (Fe), including but not limited to haematite, limonite and goethite.

Table 1: RMA Energy Rockchip Assay Results (Cu, Ag, Mo, Pb, Zn) (Figure 6)

Sample Number	Sample Location Coordinates				Assay Results							
	Amg_N	Amg_E	Latitude (South)	Longitude (East)	Cu		Ag	Mo	Pb		Zn	
					ppm	%	g/t	ppm	ppm	%	ppm	%
204003	7877224	380236	-19.195	145.861	16000	1.6	204	1	117000	11.7	3800	0.38
204007	7877200	379550	-19.195	145.854	31000	3.1	227	128	82000	8.2	19000	1.9
204008	7877420	379160	-19.193	145.851	122	0.01	1.6	2	467	0.05	216	0.02
204009	7877460	379186	-19.193	145.851	129	0.01	21.4	5	429	0.04	489	0.05
204016	7876670	379600	-19.200	145.855	5390	0.54	107	59	29000	2.9	535	0.05
204017	7878600	378680	-19.182	145.846	38	0	<0.5	4	60	0.01	155	0.02
204020	7877820	378590	-19.189	145.845	2	0	<0.5	<1	26	0	674	0.07
204021	7877170	378240	-19.195	145.842	13600	1.36	21.9	47	15000	1.5	39000	3.9
204022	7878550	377690	-19.183	145.837	6870	0.69	<0.5	2	122	0.01	313	0.03
204023	7877270	377830	-19.194	145.838	43400	4.34	348	5	551	0.06	3910	0.39
204024	7877850	378075	-19.189	145.840	42800	4.28	156	12	15000	1.5	23400	2.34
204025	7878705	377321	-19.181	145.833	3	0	<0.5	<1	22	0	24	0
204026	7877960	378270	-19.188	145.842	8770	0.88	42.4	1	12100	1.21	628	0.06
204027	7878250	378350	-19.185	145.843	84400	8.44	720	10	3440	0.34	23800	2.38
204037	7877170	380235	-19.195	145.861	369	0.04	0.9	11	52	0.01	1310	0.13
204038	7877170	380235	-19.195	145.861	14	0	<0.5	<1	26	0	136	0.01
204039	7877170	380235	-19.195	145.861	89	0.01	1.5	10	78	0.01	362	0.04
204040	7875920	380400	-19.207	145.862	227	0.02	1	<1	98	0.01	175	0.02
204041	7877320	380240	-19.194	145.861	9	0	<0.5	<1	14	0	34	0
204042	7877320	380240	-19.194	145.861	3	0	<0.5	<1	10	0	37	0
204043	7877330	380400	-19.194	145.862	6	0	<0.5	10	5	0	27	0
204044	7877980	382240	-19.188	145.880	5	0	<0.5	<1	11	0	18	0
204123	7878370	380800	-19.184	145.866	13	0	0.03	0.6	77	0.01	61	0.01
204124	7878370	380800	-19.184	145.866	9	0	0.06	6	26	0	191	0.02

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Appendix 1

Specifications of the Digital Surface Model (DTM) generation, orthorectification and pan-sharpening of stereo WorldView-3 imagery.

Raw data includes:

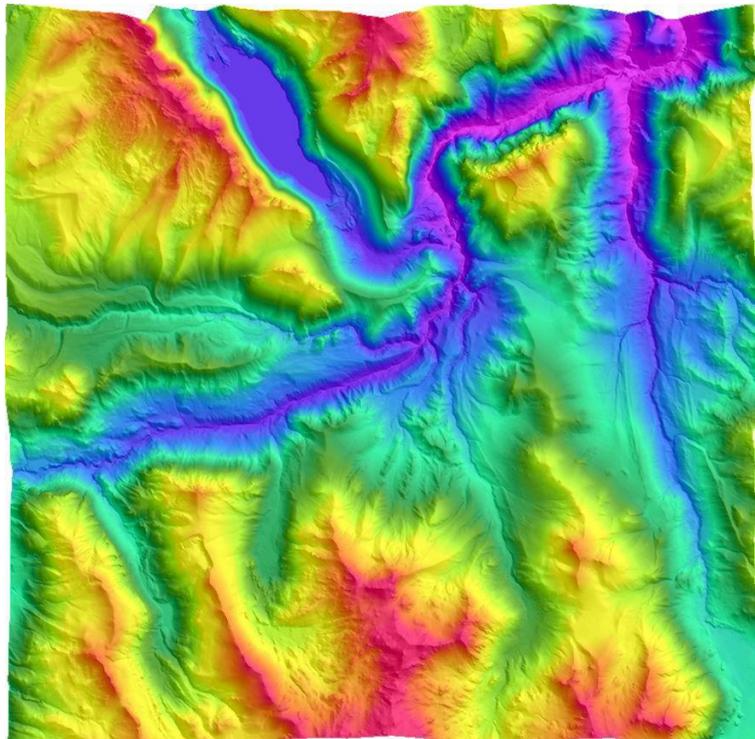
- Fresh Capture Ortho-Ready Standard Level 2A Worldview-3 Stereo imagery
- 30cm resolution panchromatic, 1.2m resolution 8-band multispectral bundle
- 1 Swathe; stereo capture acquired 16 May 2019

Imagery Processing:

- Systematically orthorectified the panchromatic and multispectral imagery using rational polynomial coefficients (RPCs) for XY control and the produced DTM for Z control.
- Pan-sharpened the multispectral imagery with the panchromatic data using PCI GXL 2018.
- Contrast enhanced, ECW format images of the pan-sharpened dataset prepared in ER Mapper o Natural Colour (NC) – visible red, visible green and visible blue in RGB
 - False Colour (FC) – near infrared (NIR) band 1, visible red and visible green in RGB
 - FC2 – A darker version of the above to increase contrast in high contrast areas
 - Enhanced Natural Colour (ENC) – visible red, visible green + NIR, and visible blue in RGB
 - N2ReC – NIR band 2, red edge and coastal in RGB
 - N2ReY – NIR band 2, red edge and yellow in RGB
 - N2YC - NIR band 2, yellow and coastal in RGB
 - YGC – yellow, visible green and coastal in RGB
- Opacity layers added to ECW format enhancements

Digital Terrain Model (DTM **right**) Generation:

- 50cm resolution Digital Surface Model (DSM) generated using PCI GXL 2018
- Interpolated any poorly correlated pixels and/or null cells using proprietary Geomage techniques
- Translated the DSM dataset into a bare-earth model DTM using semi-automated algorithms in PCI Geomatica
- Exported the final 50cm DTM to ER Mapper BIL, GeoTIFF and ASCII XYZ (with and without nulls) formats
- 50cm tagged contours generated from the final 50cm DTM





Appendix 2

Specifications of Multispectral image suite of WorldView-3 data.

Introduction

The spectral suite of enhancements using WorldView-3 data attempts to highlight features due to the reflectance characteristics of certain basic materials. The smallest spatial unit is a single pixel with an area of 0.09sqm to 0.25sqm (30cm by 30cm to 50cm by 50cm for the panchromatic/pan-sharpened multispectral), 1.44sqm to 4sqm (1.2m by 1.2m to 2m by 2m for the multispectral) and 56.25sqm (7.5m by 7.5m for the SWIR), and the response measured by the satellite is an integration of the reflectance of all of the materials within these areas. However, the higher resolution of the WorldView-3 imagery in comparison with other VNIR and SWIR datasets (e.g. ASTER) promises less mixing of spectral responses from different materials.

Vegetation, shadows derived from surface features, surface attitude, cloud and cloud shadow will all affect the returned signal measured by the sensors on-board the spacecraft and hence the materials of interest may be only a small part of the total area covered by each pixel. It is the cumulative effect measured over many pixels that give an indication of the likelihood (or otherwise) of a particular material being present.

In addition, the reflectance signals of different materials may interfere with each other and result in ambiguous identification. At best, enhanced images should be taken as an indication of a possible occurrence of the target mineralogy. Some of the enhancements presented here are a variation on the useful and proven techniques and band combinations that utilize the spectral responses of the outcrop or ground cover to the VNIR and SWIR modules on the ASTER sensor. Not all of the enhancements available for the ASTER modules are available on WorldView-3 e.g. there is no equivalent band to ASTER SWIR band 9 nor to ASTER TIR bands 10 to 14 on WorldView-3. With the above in mind, WorldView-3 imagery provides high resolution, ground cover and lithological information useful in geological mapping and in the identification of alteration associated with mineralisation.

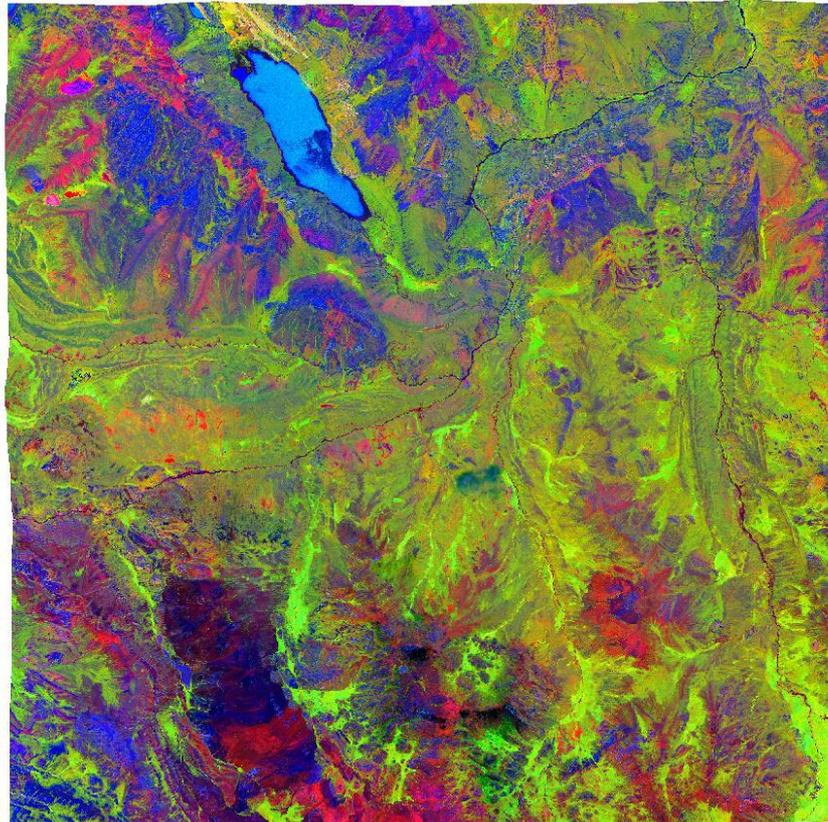
Spectral Suite

- Colour composite images commonly used are (bands in RGB order):
 - For Pan-sharpened BGRN Multispectral:
 - NC Natural colour scheme utilizing the visible bands (red, green, blue)
 - FC Near infrared false colour scheme with vegetation in red (near infrared band 1, red, green)
 - ENC Enhanced natural colour scheme utilizing the visible bands with the addition of the near infrared to the green band to further enhance vegetation
 - For Pan-sharpened 8-Band Multispectral:
 - NC Natural colour scheme utilizing the visible bands (red, green, blue) \
 - FC Near infrared false colour scheme with vegetation in red (near infrared band 1, red, green)
 - ENC Enhanced natural colour scheme utilizing the visible bands with the addition of the near infrared to the green band to further enhance vegetation
 - N2ReY Near infrared band 2 (NIR2), Red Edge (RE) and yellow
 - N2ReC NIR2, RE and coastal
 - N2YC NIR2, yellow and coastal
 - YGC Yellow, green and coastal
- Vegetation Indices:
 - NDVI Normalised difference vegetation index

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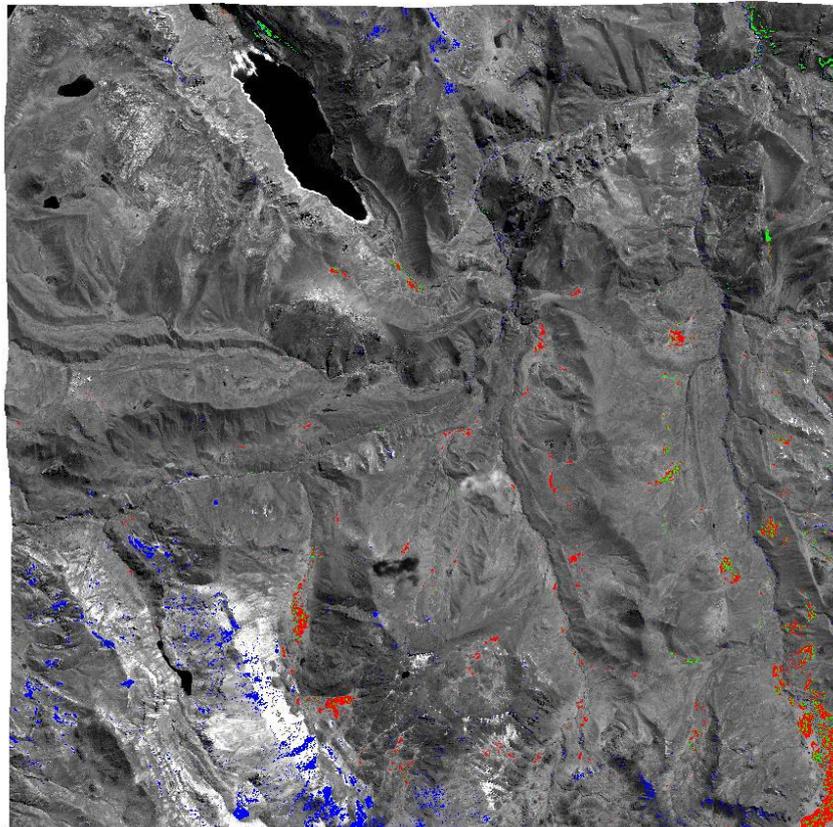
- Iron oxides:
 - Ferric iron is predicted with a red/blue ratio.
 - Ferrous iron is predicted by a summation of the ratios of green/red and SWIR B5/NIR.
 - Iron Ratios Ferric iron in red, NDVI in green and ferrous iron in blue (refer below and to Figure 2).



- SWIR Colour Composites:
 - Decorrelation stretching (DS) is a method of enhancing multispectral image data, typically in an attempt to improve it visually. The basic concept is to force the variance between multispectral image channels to be maximized using a principal component transform. The “colours” of the resulting imagery are (usually) quite similar to the original imagery, maintaining the average grey level and dynamic range, except that details have been improved, especially in areas that were 'uniform' in colour (i.e. correlated).
 - There are three groups of alteration minerals that produce absorptions in SWIR bands 5, 6 and 7 i.e. alunite/pyrophyllite, kaolinite group minerals and illite group minerals.
 - Decorrelation stretches (only) of bands 765 and 876 in RGB are provided.
 - DS765 Decorrelation stretched image of SWIR bands 765 - the following colours are normally associated with the main -OH bearing clay minerals
 - Red to magenta - kaolinite group minerals
 - Yellow to brown to orange - alunite/pyrophyllite
 - Blue to cyan - illite group minerals
 - DS876 Decorrelation stretched image of SWIR bands 876



- The Relative Band Depth (RBD) attempts to identify the clay bearing groups of minerals by a technique based on the location and depth of the absorptions. In this technique, the alunite and kaolinite groups cannot be separated, resulting in three ratios that are defined by
 - Red - Kaolinite/Alunite Group (ASTER equivalent $(B_4+B_7)/(B_5+B_6)$)
 - Green - Illite Group (ASTER equivalent $(B_5+B_7)/B_6$)
 - Blue - Chlorite Group (ASTER equivalent $(B_7+B_9)/B_8$)
- As there is no WorldView-3 band equivalent to ASTER SWIR band 9, the RBD enhancement is not provided. However, the following greyscale enhancements extracted from the RBD image are:
 - Alun+Kaol Greyscale alunite+kaolinite groups enhancement
 - Illite Greyscale illite group enhancement
- In an attempt to separate the alunite and kaolinite mineral groups (for the threshold vectors described below) an algorithm was devised that uses the RBD algorithm to initially define the alunite+kaolinite group minerals and then this grouping is separated by assuming that $B_5 \leq B_6$ for the alunite group minerals and that $B_5 > B_6$ for kaolinite group minerals. This method is not a theoretically rigorous model and the results should be seen as indicative and not quantitative.
- The top 1% threshold of the greyscale alunite, kaolinite and illite enhancements are presented as red, green and blue respectively as solid vector regions in DXF, MapInfo TAB and Arc Shape formats, as coloured regions on a white background and as coloured regions overlaying a greyscale albedo image (created from the panchromatic band) (refer below and to Figure 2).



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Appendix 3

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

SECTION 1 SAMPLING TECHNIQUES AND DATA

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 completion of WorldView3 satellite imagery acquisitions, desktop geophysical (magnetic) modelling of geophysical data from an airborne (by helicopter) magnetics-radiometrics survey previously announced to the market (2018) and to selected past rockchip sample results, previously announced to the market (2019). This announcement also details the status of a current soil sampling program. No new sampling or assay results 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

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

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

No new sampling or assay results 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.

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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 new sampling or assay results are 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.

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Company Commentary

No new sampling or assay results 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

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

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

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

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 new sampling or assay results are 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

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

Criteria: Verification of sampling and assaying

JORC CODE Explanation

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

Company Commentary

No new sampling or assay results 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

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

JORC CODE Explanation

Discuss any adjustment to assay data.

Company Commentary

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

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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

No results pertaining to a Minerals Resource estimate are included in this announcement. The locations of the geophysical targets as part of the original geophysical survey were determined by a NovAtel OEM628 GPS board used for both helicopter flight path and data recovery. The locations of the previously released assay results were determined by handheld GPS.

JORC CODE Explanation

Specification of the 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. The WorldView3 satellite program, the subject of this announcement has generated a high resolution DTM. This is presented in Appendix 2.

Criteria: Data spacing and distribution

JORC CODE Explanation

Data spacing for reporting of Exploration Results.

Company Commentary

Pertaining to the original geophysical survey, line spacing was 50 metres at a sensor height of 50 metres. Pertaining to the previously recorded assay data, the channel sampling were spaced so as to form a continuous line of sampling within each trench, or across each outcrop perpendicularly across the known mineralisation with individual samples taken 1.5m to <1m lengths along each channel.

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 new sampling or assay results are referred to in this announcement.

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

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

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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

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

Criteria: Audits and reviews

JORC CODE Explanation

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

Company Commentary

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

SECTION 2 REPORTING OF EXPLORATION RESULTS

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 refers to exploration conducted a previous party, RMA Energy Limited. This information pertains to rockchip sample results (contained in Figure 6 of this announcement) with a magnetics image as background The coordinates of this work were provided in a previous announcement dated 30 July 2019 and also in this announcement as Table 1.

Criteria: Geology

JORC CODE Explanation

Deposit type, geological setting and style of mineralisation.

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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

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

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 new sampling or assay results, intersections, mineralisation 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

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Company Commentary

A plan with coordinates is provided showing the position of the Riqueza Project in relation to regional structures and other mines/mineral deposits in the vicinity.

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 four previous ASX announcements dated: 20 June 2019, 4 July 2019, 30 July 2019 and 19 August 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 presents desk-top magnetic models using data of a previously announced geophysical survey, past selected rockchip assay results and satellite imagery. By the early nature of this exploration work, further work, in relation to these magnetic targets and other areas of the project, is necessary to progress each.

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

A plan with coordinates are provided showing the position of the Riqueza Project in relation to regional structures and other mines/mineral deposits in the vicinity.

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