

# Independent Technical Report on the Carrizal Cu-Co-Au Property

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Carrizal Alto Mining District, III Region de Atacama, Chile  
Centred: 308750 mE and 6895000 mN  
(PSAD56 /UTM Zone 19 Southern Hemisphere)



Prepared for:

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Effective Date: August 1, 2021  
Report Date: August 30, 2021

## DATE AND SIGNATURE PAGE

The Report, "Independent Technical Report on the Carrizal Cu-Co-Au Property, Chile", with a Report Date of August 30, 2021 and an Effective Date of August 1, 2021, was authored by the following:

*"signed original on file"*

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Scott Jobin-Bevans, P.Geo., Ph.D., PMP  
Principal Geoscientist  
Caracle Creek International Consulting Inc.

Dated: August 30, 2021

## CERTIFICATE OF QUALIFIED PERSON

**Scott Jobin-Bevans (P.Geo.)**

I, Scott Jobin-Bevans, P.Geo., do hereby certify that:

1. I am an independent consultant and Principal Geoscientist with Caracle Creek International Consulting Inc. (Caracle) and have an address at Avenida Hacienda Macul 6047, Penalolen, Santiago, Chile.
2. I graduated from the University of Manitoba (Winnipeg, Manitoba) with a B.Sc. Geosciences (Hons) in 1995 and an M.Sc. Geosciences in 1997, and from the University of Western Ontario (London, Ontario) with a Ph.D. (Geology) in 2004.
3. I am a member, in good standing, of Association of Professional Geoscientists of Ontario, License Number 0183 (since June 2002).
4. I have practiced my profession continuously for more than 20 years, having worked mainly in mineral exploration but also having experience in mine site geology, mineral resource and reserve estimations, preliminary economic assessments, pre-feasibility studies, due diligence, valuation and evaluation reporting. I have authored, co-authored or contributed to numerous NI-43-101 reports on a multitude of commodities including nickel-copper-platinum group elements, base metals, gold, silver, vanadium, and lithium projects in Canada, the United States, China, Central and South America, Europe, Africa, and Australia.
5. I have read the definition of “Qualified Person” set out in National Instrument 43-101 Standards of Disclosure for Mineral Projects (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101), and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.
6. I am the Author solely responsible for all sections in the technical report titled, “NI 43-101 Independent Technical Report on the Carrizal Cu-Co-Au Property, Northern Chile” (the “Technical Report”) prepared for Red Metal Resources Ltd., with an Effective Date of August 1, 2021 and a Report Date of August 30, 2021.
7. I personally visited and inspected the Carrizal Cu-Co-Au Property on 13 January 2018, spending a total of approximately 8 hours on the Property and in discussions with project personnel.
8. I am independent of the Issuer for which the Technical Report has been written, and independent of the Property, applying all of the tests in Section 1.5 of NI 43-101.
9. I have had no prior involvement with the Project that is the subject of the Technical Report.
10. I have read NI 43-101, Form 43-101F1, and Companion Policy 43-101CP, and confirm the Technical Report has been prepared in compliance with that Instrument and Form.
11. As of the Effective Date of the Technical Report, to the best of my knowledge, information and belief, the Sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed at Santiago, Chile this 30<sup>th</sup> day of August 2021.

*“signed”*

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Scott Jobin-Bevans (Ph.D., PMP, P.Geo.)  
Principal Geoscientist  
Caracle Creek International Consulting Inc.

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## 1.0 Summary

### 1.1 Introduction

Dr. Scott Jobin-Bevans (P.Ge.), was engaged by the Issuer, Red Metal Resources Ltd. (“Red Metal” or the “Company”), to prepare an independent National Instrument 43-101 (“NI 43-101”) Technical Report (the “Report”) for its Carrizal Cu-Co-Au Property (the “Carrizal Property” or “Property”), located in the Carrizal Alto Mining District of northern Chile, Atacama III Region. The Report has been prepared in accordance with the disclosure and reporting requirements set forth in the Canadian Securities Administrators’ National Instrument 43-101, Companion Policy 43-101CP, and Form 43-101F1 (June 30, 2011).

### 1.2 Qualifications of Consultant

Dr. Jobin-Bevans (the “Author”) serves as the Independent Qualified Person (“QP”) in accordance with Sections 1.5 and 5.1 of NI 43-101CP (Companion Policy) in that there is no circumstance that, in the opinion of a reasonable person aware of all relevant facts, could interfere with the QP’s judgment regarding the preparation of the Technical Report. Dr. Jobin-Bevans is a member in good standing of the Association of Professional Geoscientists of Ontario (APGO #0183).

### 1.3 Purpose of the Technical Report

The purpose of this Technical Report is to provide an independent review of Red Metal’s Carrizal Cu-Co-Au Property in northern Chile and verify the validity of the historical database. Red Metal Resources Ltd. is applying to be listed on a Canadian stock exchange, and as such, the Report will be used to comply with regulatory requirements.

### 1.4 Effective Date

The Effective Date of the Report is August 1, 2021. The Author is satisfied that no work has been completed on the Property by the Issuer since the personal inspection that was completed by the Author on January 13, 2018.

### 1.5 Previous Technical Reports

This Report replaces the previous technical report filed on SEDAR December 7, 2020 and titled, “Independent Technical Report on the Carrizal Cu-Co-Au Property”, prepared for Red Metal Resources Ltd. by Caracle Creek International Consulting Inc. (Jobin-Bevans, 2020), dated 28 November 2020, and with an effective date 30 June 2019. As such, this Report is the current technical report regarding the Project.

### 1.6 Details of Personal Inspection

Dr. Jobin-Bevans (P.Ge.), Principal Geoscientist from Caracle Creek International Consulting Inc., visited the Carrizal Cu-Co-Au Property in northern Chile, on 13 January 2018. The purpose of this site visit was to review work conducted on the Property since the last work completed by the Issuer in 2014, investigate access, infrastructure, geology, mineralization, environmental and social impact issues, and to meet with representatives of the contract artisanal mining group who had previously been working on the Property. During the site visit, underground exploration workings were examined, photographs and GPS points taken, some property boundary

markers were identified, and a total of 6 grab rock samples (“verification samples”) were collected for analysis. Time on site was spent with Kevin Mitchell Jr., Logistics and Mine Administrator for Minera Farellón, the contract mining artisanal group that worked on the Property from 2014 to 2018. There was no mining or exploration work being conducted on the Property at the time of the Author’s personal inspection, other than the clean-up and demobilization work being conducted by Minera Farellón personnel.

## 1.7 Property Description and Ownership

The Carrizal Cu-Co-Au Property (the “Carrizal Property” or “Property”) is located about 700 km north of Chile’s capital city of Santiago, in Region III, referred to as the “Region de Atacama”. The Property lies within the Carrizal Alto Mining District, straddling the border between Huasco and Copiapo provinces, approximately 75 km northwest of the City of Vallenar, 150 km south of Copiapo, and 20 km west of the Pan-American Highway. The centre of the Property is situated at coordinates 308750 mE and 6895000 mN (PSAD56 / UTM Zone 19, Southern Hemisphere).

The Carrizal Cu-Co-Au Property has historically been subdivided into two separate projects, namely the Perth and Farellón project areas, representing roughly the northern and southern halves of the Carrizal Property, respectively. The Property consists 21 mining concessions (‘mensuras’). The Property covers a total area of 3,278 hectares (2,044ha in the Perth Project and 1,234 ha in the Farellón Project).

Red Metal Resources Ltd. (“Red Metal”) owns all of the concessions in the Carrizal Cu-Co-Au Property through right of title, in Red Metal’s wholly-owned subsidiary, Minera Polymet S.G.A. The surface rights of the Carrizal Property are owned by the Chilean government, however if the Property is developed and mined at a later date, the surface rights will need to be secured as part of the permitting process. Surface rights are rented to mines for the life of the mine by the Chilean government and claim holders have legal unimpeded access to their mensuras.

## 1.8 Geology and Mineralization

The Carrizal Cu-Co-Au Property lies within the Coastal Cordillera physiographic area, on the western margin of Chile. The Coastal Cordillera formed in the Mesozoic Era as major plutonic complexes were emplaced into arc and intra-arc volcanic and underlying Paleozoic metasedimentary rocks (Hitzman, 2000). This time period also saw development of the NW-trending brittle Atacama fault system, followed by widespread extension-induced tilting. Sedimentary sequences accumulated immediately east of the Mesozoic arc terrane in a series of interconnected, predominantly marine, back-arc basins. Early- to mid-Jurassic through mid-Cretaceous volcanism and plutonism throughout the Coastal Cordillera and immediately adjoining regions are generally considered to have taken place under variably extensional conditions in response to retreating subduction boundaries (slab roll-back) and steep, Mariana-type subduction (Hitzman, 2000).

The Property covers two distinct contact zones between Paleozoic metasedimentary rocks (shales, phyllites and quartz-feldspar schists/gneisses) in the central section, and late-Jurassic diorites and monzodiorites to the northwest and southeast. The sedimentary rocks have a strong NNE-striking shallow foliation, dipping ~40° to the southeast. The intrusive rocks towards the southeast corner of the Property, in the Farellón Project area, belong to the Canto del Agua Formation and consist of diorite and gabbro hosting many NE-oriented intermediate-mafic dykes. These diorites are known to host extensive veining with copper and gold

mineralization (Arevalo and Welkner, 2003). The southern contact zone between the metasedimentary rocks and the diorite is expressed as a mylonitic shear zone ranging between 5 m and 15 m in width, striking NNE, and dipping ~65° to the northwest. This shear zone is host to mineralized quartz-calcite veins that splay off to the east into the diorites of the adjacent Carrizal Alto Mine area.

The Perth Project area at the northern end of the Carrizal Property, hosts a significant NS-trending vein swarm. Although these veins pinch and swell, they are generally 2 m wide and have been measured up to 6 m in width. Individual veins can be traced from a few hundred metres to greater than 2 km in length. Most of the surface veins identified thus far lie within the metasedimentary rocks, however several veins have been traced cross-cutting the northern metasediment-granodiorite contact.

The Property occurs within the Central Andean IOCG Province (Sillitoe, 2003). Vein-type, plutonic-hosted iron oxide-copper gold (“IOCG”) deposits such as Carrizal Alto, and by extension the contiguous Carrizal Cu-Co-Au Property, are characterized by a distinct mineralogy that includes not only copper and gold, but also cobalt, nickel, arsenic, molybdenum, and uranium (Sillitoe, 2003; Clark, 1974). All of the IOCG deposits in the region are partially defined by their iron content in the form of either magnetite or hematite (Sillitoe, 2003).

A variety of alteration assemblages has been noted in the Chilean IOCG deposits according to whether or not the deposits are hematite- or magnetite-dominated:

1. Magnetite-rich veins contain appreciable actinolite, biotite and quartz, as well as local apatite, clinopyroxene, garnet, hematite and K-feldspar, and possess narrow alteration haloes containing one or more of actinolite, biotite, albite, K-feldspar, epidote, quartz, chlorite, sericite and scapolite.
2. Hematite-rich veins tend to contain sericite and/or chlorite, with or without K-feldspar or albite, and possess alteration haloes characterised by these same minerals (Sillitoe, 2003). Typically, the vein deposits of the coastal Cordillera are chalcopyrite, actinolite and magnetite deposits (Ruiz, 1962).

Carrizal Alto, the property adjacent to and east of Red Metal’s Carrizal Cu-Co-Au Property, has historically been known as a significant cobalt deposit (Ruiz, 1962; Clark, 1974) and has reported cobalt grades of up to 0.5% Co in the form of cobaltiferous arsenopyrite (Sillitoe, 2003; Ruiz, 1962), carrollite ( $\text{CuCo}_2\text{S}_4$ ), and other cobalt sulphides (Clark, 1974). Copper mineralization on the Carrizal Property consists of malachite and chrysocolla in the oxide zone, and chalcopyrite in the sulphide zone.

The Qualified Person has been unable to verify the information on the adjacent property and the information disclosed is not necessarily indicative of mineralization on the Property that is the subject of the Report.

## 1.9 Status of Exploration

No work is currently being conducted on the Property by the Issuer, with the most recent exploration programs being performed in 2014. Between 2009 and 2014 Red Metal, or companies working on behalf of Red Metal, carried out numerous exploration programs on the Carrizal Property. Exploration programs included three separate drill programs on the Farellón Project in 2009, 2011 and 2013 totalling 3,074 metres. All three drill programs focused on a mineralized trend of approximately 1.5 kilometres. Drilling returned copper results as high as 8.86% Cu, with 0.80 g/t Au over 1.0 m (FA-11-001), and 5.35 g/t Au, 4.77% Cu, and 0.024% Co over a 2.0 m interval (FA-11-006). There was evidence of pinching and swelling in the mineralized vein structures, as significant intercepts ranging in width from 2.0 m to 32.0 metres.

Property wide geological mapping and sampling programs in 2011 and 2012 covered both the Perth and Farellón project areas to identify further mineralized veins and trends on surface. On the Farellón project, 1,270 mapping sites were visited, with information such as major rock type and mineralization recorded. Of these sites, 56 samples were selected and submitted for geochemical analysis. The range of total copper achieved by this sampling program was between 1.17% and 5.78% Cu, with between 50% and 99% of that representing copper sulphide mineralization. These samples also contained from 19-2465 ppm Co, and from 0.02-2.87 g/t Au. On the Perth project, 129 samples were collected and analyzed for total copper, soluble copper, gold, and cobalt. Results show total copper ranging between 0.01% to 11.36% Cu, gold ranging between 0.01 g/t to 29.93 g/t Au, and cobalt ranging between 2 ppm to 6933 ppm Co.

Between 2013 and 2014 surface sampling, stripping and channel sampling and drilling programs were conducted on the Perth project by Minería Activa, a Chilean private mining company who held the property under an option agreement. The surface sampling and stripping program consisted of collecting 762 samples, a combination of grab and chip samples, and analysing them for total copper, soluble copper, gold, and cobalt. Results include a range of copper total results between 0.001% and 7.16% Cu, between 0.005 g/t and 16.5 g/t Au, and between 0.001% and 0.437% Co.

### 1.10 Qualified Person's Conclusions and Recommendations

The Farellón and Perth project areas, collectively making up the Carrizal Cu-Co-Au Property, represent a substantial land holding for Red Metal Resources Ltd. This Property is located within a historical mining district in Chile that was a prolific past-producer, shut down due to economic conditions rather than the exhausting of the deposit. Additionally, the Property has only undergone limited modern exploration, which has so far demonstrated the potential of the Property to host a mineralized deposit.

Red Metal conducted exploration and drilling programs between 2008 and 2013, including 18 drill holes totalling 3,074 metres. Red Metal has not conducted any work on the Property since 2014 and specifically since the site visit by the Author in 2018.

Drilling on the Property has yielded significant Cu-Co-Au mineralization, with Red Metal confirming and extending the mineralization both in the down-dip direction and along strike in their 2011 and 2013-2014 programs.

The Carrizal Property is considered to be a early stage exploration project upon which Red Metal can continue performing exploration and drilling activities in order to further identify the nature and extent of the mineralization in and around the shear zone.

Based on the positive results from Red Metal's multiple exploration programs on the Farellón Project area, it is recommended that Red Metal approach further exploration in two phases with the second phase being contingent on the success and results of the first phase (see Table A below). The first phase would consist of a 3,000 m drilling program to test the primary mineralization at depth that has thus far only been intersected in a few drill holes and determine the potential of the cobalt mineralization in the sulphide zone. If the first phase continues to return positive results, a second phase 20,000 m drilling program (RC and core) would be conducted in order to test down to 400 m depth with enough drill hole intercepts to complete an initial mineral resource estimate.

Table A - Carrizal Property recommended work budget.

Budget Item	Total (US\$)	Comments
<b>Exploration (Phase 1) Sulphide Mineralization Testing</b>		
Drilling	\$240,000	Diamond Drilling @ \$160/metre
Consulting Geologist	\$42,000	Consulting geologists @ \$650/day
Geotechnicians	\$10,000	Geotechnicians @ \$200/day
Heavy Equipment Rental	\$60,000	Drill access road and pad building
Assays	\$50,000	Assaying @ \$50/sample
Room & Board	\$7,000	\$100/day per geo & tech
Travel	\$3,000	flights and travel costs for Geologists
Trucks & Fuel	\$6,000	Approx. \$4,000 fuel, service etc. for two trucks per month
Report Writing/updating 3D Model	\$30,000	
10% contingency for miscellaneous items	\$50,000	field supplies etc.
<b>Subtotal (Phase 1)</b>	<b>\$498,000</b>	
<b>Exploration (Phase 2) Delineation of Deposit</b>		
Geophysical surveys	\$250,000	Magnetics and IP
Consulting Geologist	\$350,000	Consulting geologist @ \$650/day
Geotechnicians	\$150,000	Geotechnician @ \$200/day
Heavy equipment rental	\$200,000	building drill pads and access roads
Assays	\$300,000	Assaying @ \$50/sample
Diamond Drilling	\$3,200,000	Diamond Drilling @ \$160/metre
Room & Board	\$100,000	\$100/day per geo & tech
Travel	\$40,000	flights and travel costs for Geologists
Trucks & Fuel	\$12,000	Approx. \$4,000 fuel, service etc. for two trucks per month
3D Model and initial resource estimation	\$100,000	Consultants to build a 3D model required for future exploration and resource estimation
10% contingency for miscellaneous items	\$500,000	Field supplies etc.
<b>Subtotal (Phase 2)</b>	<b>\$5,202,000</b>	
<b>Total US\$ (Both Phases)</b>	<b>\$5,700,000</b>	

General recommendations that should be considered during future exploration on the Carrizal Property include:

- 1) It is recommended that any assaying that is done for cobalt should employ a sodium peroxide fusion method, rather than the more commonly used 4-acid digestion. This method has the advantage of more completely extracting cobalt from the pulverized sample, by transforming all metal-sulphide bonds into metal-oxide bonds, thereby increasing the amount of cobalt available in solution. It is also faster and safer, as it doesn't require the use of a two-stage process requiring highly corrosive hydrofluoric acid (HF).
- 2) Standard Quality Assurance / Quality Control ("QA/QC") procedures for the minerals industry is that a secondary assay laboratory (referee lab) be used to re-assay a portion of between 5% and 10% of the

samples assayed by the primary lab used. This additional sampling procedure would act as a secondary check on the results produced by the primary laboratory.

- 3) Considering the silver results from the artisanal mining, sampling should be completed for silver mineralization as well as copper, cobalt, and gold.
- 4) It is recommended that if the artisanal mining operation continues, a multi-tonne metallurgical sample be taken to determine any potential issues with the sulphide mineralized rock and the potential recoveries of copper, cobalt, gold and silver.
- 5) It is recommended that Red Metal build a covered facility in which to store its samples on the Carrizal Property, in order to preserve samples from the effects of weather.

## 2.0 Introduction

### 2.1 Issuer for Whom the Technical Report is Written

Dr. Scott Jobin-Bevans (P.Ge.), was engaged by the Issuer, Red Metal Resources Ltd. (“Red Metal” or the “Company”), to prepare an independent National Instrument 43-101 (“NI 43-101”) Technical Report (the “Report”) for its Carrizal Cu-Co-Au Property (the “Carrizal Property” or “Property”), located in the Carrizal Alto Mining District of northern Chile, Atacama III Region. The Report has been prepared in accordance with the disclosure and reporting requirements set forth in the Canadian Securities Administrators’ National Instrument 43-101, Companion Policy 43-101CP, and Form 43-101F1 (June 30, 2011).

### 2.2 Qualifications of the Consultant

Dr. Jobin-Bevans (the “Author”) serves as the Independent Qualified Person (“QP”) in accordance with Sections 1.5 and 5.1 of NI 43-101CP (Companion Policy) in that there is no circumstance that, in the opinion of a reasonable person aware of all relevant facts, could interfere with the QP’s judgment regarding the preparation of the Technical Report. Dr. Jobin-Bevans is a member in good standing of the Association of Professional Geoscientists of Ontario (APGO #0183).

The QP’s scope of work entailed reviewing available historical information, visiting the Property, inspecting underground exploratory workings, verifying the location of historic surface drill holes and current property markers, collecting verification samples, and analysing these samples for Cu, Au, Co, and Ag. The QP also summarized these findings and provided recommendations for future exploration work on the Property.

### 2.3 Purpose of the Technical Report

The purpose of this Technical Report is to provide an independent review of Red Metal’s Carrizal Cu-Co-Au Property in northern Chile and verify the validity of the historical database. Red Metal Resources Ltd. is applying to be listed on a Canadian stock exchange, and as such, the Report will be used to comply with regulatory requirements.

Except for the purposes legislated under provincial securities laws, any other use of the Report, by any third party, is at the party’s sole risk. The data supporting the statements made in the Report have been examined for accuracy and completeness by the Author.

### 2.4 Details of Personal Inspection on the Property by the Qualified Person

Dr. Jobin-Bevans (P.Ge.), Principal Geoscientist from Caracle Creek International Consulting Inc. (“Caracle Creek”), visited the Carrizal Cu-Co-Au Property in northern Chile, on 13 January 2018. The purpose of this site visit was to review work conducted on the Property since the last work completed by the Issuer in 2014, investigate access, infrastructure, geology, mineralization, environmental and social impact issues, and to meet with representatives of the contract artisanal mining group who had previously been working on the Property.

During the site visit, underground exploration workings were examined, photographs and GPS points taken, some property boundary markers were identified, and a total of 6 grab rock samples (“verification samples”) were collected for analysis (Figures 1, 2 and 3).

Time on site was spent with Kevin Mitchell Jr., Logistics and Mine Administrator for Minera Farellón, the contract mining artisanal group that worked on the Property from 2014 to 2018. During this time, Kevin Mitchell, Sr. held a rental agreement to mine on the Farellón Project area from the Issuer, Red Metal Resources Ltd. Mr. Mitchell Sr. paid Red Metal a royalty. Mr. Mitchell Sr. in turn had a contract directly with La Empresa Nacional de Minería (“ENAMI”) to process the mined material. Mr. Mitchell Sr. cancelled the agreement to mine in January 2018. Also, on site was Ramon Delgado, an experienced miner and prospector who has spent most of his life working in the region and in the region of the Property.

It was deemed unnecessary to visit the Perth Project area during the site visit, but highlights were discussed with personnel.



Figure 1 - North Mine portal access with Mr. Delgado (left), the Author and QP, Dr. Jobin-Bevans (centre), and Mr. Mitchell Jr. (right) (photo by Dr. Jobin-Bevans).

There was no mining or exploration work being conducted on the Property at the time of the Author’s personal inspection, other than the clean-up and demobilization work being conducted by Minera Farellón personnel.





Figure 2 - Mineralized rocks from underground at the North Mine, Level 7 (photo by Dr. Jobin-Bevans).



Figure 3 - Main mineralization structure from underground exploratory workings in the South Mine, and the site of rock sample FS-02 (photo by Dr. Jobin-Bevans).

## 2.5 Effective Date

The Effective Date of the Report is August 1, 2021. The Author is satisfied that no work has been completed on the Property by the Issuer since the personal inspection that was completed by the Author on January 13, 2018 (see Section 12).

## 2.6 Previous Technical Reports

This Report replaces the previous technical report filed on SEDAR December 7, 2020 and titled, “Independent Technical Report on the Carrizal Cu-Co-Au Property”, prepared for Red Metal Resources Ltd. by Caracle Creek International Consulting Inc. (Jobin-Bevans, 2020), dated 28 November 2020, and with an effective date 30 June 2019. As such, this Report is the current technical report regarding the Project.

## 2.7 Sources of Information and Data

In conducting this study, the Author consulted and utilized various sources of information and data, including government publications, and historical files provided to him by the Issuer, Red Metal Resources Ltd. A list of the various sources used to prepare the current report is given in Section 27.

## 2.8 Terms of Reference, Units of Measure, Currency

A glossary of terms is provided in Table 1 and units of measure in Table 2. The Metric System or SI System is the primary system of measure and length used in the Report with lengths generally expressed in kilometres, metres and centimetres; volume as cubic metres; mass as metric tonnes (t); area as hectares (ha); and zinc, copper and lead grades as percent (%) or parts per million (ppm). Precious metal grades, such as gold and silver, are generally expressed as gram/tonne (g/t) but may also be in parts per billion (ppb) or parts per million (ppm).

Table 1 - Glossary of Terms.

Term	Meaning	Term	Meaning
<b>AEM</b>	Airborne Electromagnetic	Na	sodium
<b>Ag</b>	Silver	Na <sub>2</sub> O	sodium oxide
<b>Al</b>	Aluminum	NE	northeast
<b>Al<sub>2</sub>O<sub>3</sub></b>	aluminum oxide	NI	National Instrument
<b>AW</b>	apparent width	Ni	nickel
<b>As</b>	Arsenic	NSR	net smelter return
<b>Au</b>	Gold	NTS	National Topographic System
<b>Ba</b>	Barium	P	phosphorous
<b>Be</b>	Beryllium	P <sub>2</sub> O <sub>5</sub>	phosphorous oxide
<b>Bi</b>	Bismuth	Pb	Lead
<b>C</b>	carbon dioxide	Pd	Palladium
<b>Ca</b>	Calcium	pH	Acidity
<b>CaO</b>	calcium oxide	Pt	platinum
<b>Cd</b>	Cadmium	QA/QC	Quality Assurance/Quality Control
<b>Co</b>	Cobalt	S	south
<b>CO<sub>2</sub></b>	carbon dioxide	S	sulfur
<b>Cr</b>	Chromium	Sb	antimony
<b>Cr<sub>2</sub>O<sub>3</sub></b>	chromium oxide	SE	southeast
<b>Cu</b>	Copper	Se	selenium

<b>Term</b>	<b>Meaning</b>	<b>Term</b>	<b>Meaning</b>
<b>DDH</b>	diamond drill hole	SiO <sub>2</sub>	silicon oxide
<b>DW</b>	drilled width	Sn	tin
<b>E</b>	East	SO <sub>2</sub>	sulphur dioxide
<b>EM</b>	electromagnetic	Sr	strontium
<b>Fe</b>	Iron	Sum	summation
<b>Fe<sub>2</sub>O<sub>3</sub></b>	iron oxide (ferric oxide-hematite)	SW	southwest
<b>Fe<sub>3</sub>O<sub>4</sub></b>	iron oxide (ferrous oxide-magnetite)	Ti	titanium
<b>HLEM</b>	horizontal loop electromagnetic	TiO <sub>2</sub>	titanium oxide
<b>H<sub>2</sub>O</b>	hydrogen oxide (water)	Tl	thallium
<b>IP</b>	induced polarization	TW	true width
<b>K</b>	Potassium	U	uranium
<b>K<sub>2</sub>O</b>	potassium oxide	U <sub>3</sub> O <sub>8</sub>	uranium oxide (yellowcake)
<b>Li</b>	Lithium	UTM	Universal Transverse Mercator
<b>LOI</b>	loss on ignition (total H <sub>2</sub> O, CO <sub>2</sub> and SO <sub>2</sub> content)	V	vanadium
<b>Mg</b>	Magnesium	V <sub>2</sub> O <sub>5</sub>	vanadium oxide
<b>MgO</b>	magnesium oxide	VLF	very low frequency
<b>Mn</b>	Manganese	VLF-EM	very low frequency-electromagnetic
<b>MnO</b>	manganese oxide	W	west
<b>Mo</b>	Molybdenum	Y	yttrium
<b>Mt</b>	millions of tonnes	Zn	zinc
<b>N</b>	north		
<b>NE</b>	northeast		
<b>NW</b>	northwest		
<b>S</b>	south		

Table 2 - Units of Measure.

<b>Units of Measure</b>	<b>Abbreviation</b>	<b>Units of Measure</b>	<b>Abbreviation</b>
Above mean sea level	amsl	Litre	L
Ampere	A	Litres per minute	L/m
Annum (year)	a	Megabytes per second	Mb/s
Billion years ago	Ga	Megapascal	MPa
British thermal unit	Btu	Megavolt-ampere	MVA
Candela	cd	Megawatt	MW
Carat	ct	Metre	m
Carats per hundred tonnes	cpht	Metres above sea level	masl
Carats per tonne	cpt	Metres per minute	m/min
Centimetre	cm	Metres per second	m/s
Cubic centimetre	cm <sup>3</sup>	Metric ton (tonne)	t
Cubic feet per second	ft <sup>3</sup> /s or cfs	Micrometre (micron)	µm
Cubic foot	ft <sup>3</sup>	Microsiemens (electrical)	µs
Cubic inch	in <sup>3</sup>	Miles per hour	mph
Cubic metre	m <sup>3</sup>	Milliamperes	mA

Units of Measure	Abbreviation	Units of Measure	Abbreviation
Cubic yard	yd <sup>3</sup>	Milligram	mg
Day	d	Milligrams per litre	mg/L
Days per week	d/wk	Millilitre	mL
Days per year (annum)	d/a	Millimetre	mm
Dead weight tonnes	DWT	Million	M
Decibel adjusted	dBa	Million tonnes	Mt
Decibel	dB	Minute (plane angle)	'
Degree	°	Minute (time)	min
Degrees Celsius	°C	Month	mo
Degrees Fahrenheit	°F	Newton	N
Diameter	∅	Newtons per metre	N/m
Dry metric ton	dmt	Ohm (electrical)	Ω
Foot	ft	Ounce	oz
Gallon	gal	Parts per billion	ppb
Gallons per minute (US)	gpm	Parts per million	ppm
Gigajoule	GJ	Pascal	Pa
Gram	g	Pascals per second	Pa/s
Grams per litre	g/L	Percent	%
Gram per tonne	g/t	Percent moisture (relative humidity)	% RH
Greater than	>	Phase (electrical)	Ph
Hectare (10,000 m <sup>2</sup> )	ha	Pound(s)	lb
Hertz	Hz	Pounds per square inch	psi
Horsepower	hp	Power factor	pF
Hour	h (not hr)	Quart	qt
Hours per day	h/d	Revolutions per minute	rpm
Hours per week	h/wk	Second (plane angle)	"
Hours per year	h/a	Second (time)	s
Inch	"(symbol, not ")	Short ton (2,000 lb)	st
Joule	J	Short ton (US)	t
Joules per kilowatt-hour	J/kWh	Short tons per day (US)	tpd
Kelvin	K	Short tons per hour (US)	tph
Kilo (thousand)	k	Short tons per year (US)	tpy
Kilocalorie	kcal	Specific gravity (g/cm <sup>3</sup> )	SG
Kilogram	kg	Square centimetre	cm <sup>2</sup>
Kilograms per cubic metre	kg/m <sup>3</sup>	Square foot	ft <sup>2</sup>
Kilograms per hour	kg/h	Square inch	in <sup>2</sup>
Kilograms per square metre	kg/m <sup>2</sup>	Square kilometre	km <sup>2</sup>
Kilojoule	kJ	Square metre	m <sup>2</sup>
Kilometre	km	Thousand tonnes	kt
Kilometres per hour	km/h	Tonne (1,000 kg)	t
Kilonewton	kN	Tonnes per day	t/d
Kilopascal	kPa	Tonnes per hour	t/h
Kilovolt	kV	Tonnes per year	t/a
Kilovolt-ampere	kVA	Total dissolved solids	TDS
Kilovolts	kV	Total suspended solids	TSS

<b>Units of Measure</b>	<b>Abbreviation</b>	<b>Units of Measure</b>	<b>Abbreviation</b>
Kilowatt	kW	Volt	V
Kilowatt hour	kWh	Week	wk
Kilowatt hours per short ton (US)	kWh/st	Weight/weight	w/w
Kilowatt hours per tonne (metric ton)	kWh/t	Wet metric ton	wmt
Kilowatt hours per year	kWh/a	Yard	yd
Kilowatts adjusted for motor efficiency	kWe	Year (annum)	a
Less than	<	Year	yr

Dollars are expressed in Canadian currency (CAD\$) unless otherwise noted. Base and certain industrial metal and mineral prices are stated as US\$ per tonne (US\$/t), precious metal prices are stated in US\$ per troy ounce (US\$/oz) and uranium and certain industrial metal, and mineral prices are stated in US\$ per pound (US\$/lb). Unless otherwise noted, Universal Transverse Mercator (“UTM”) coordinates are provided using PSAD56 Zone 19 Southern Hemisphere.

### **3.0 Reliance on Other Experts**

The Report has been prepared by Caracle Creek International Consulting Inc. (Caracle) for the Issuer. The Authors have not relied on any report, opinion or statement of another expert who is not a qualified person, or on information provided by the Issuer concerning legal, political, environmental or tax matters relevant to the Report.

## 4.0 Property Location and Description

### 4.1 Area and Location of the Property

The Carrizal Property is located about 700 km north of Chile’s capital city of Santiago, in Region III, referred to as the “Region de Atacama”. The Property lies within the Carrizal Alto Mining District, straddling the border between Huasco and Copiapo provinces, approximately 75 km northwest of the City of Vallenar, 150 km south of Copiapo, and 20 km west of the Pan-American Highway (Figure 4). The centre of the Carrizal Property is situated at coordinates 308750 mE and 6895000 mN (PSAD56 Zone 19, Southern Hemisphere).

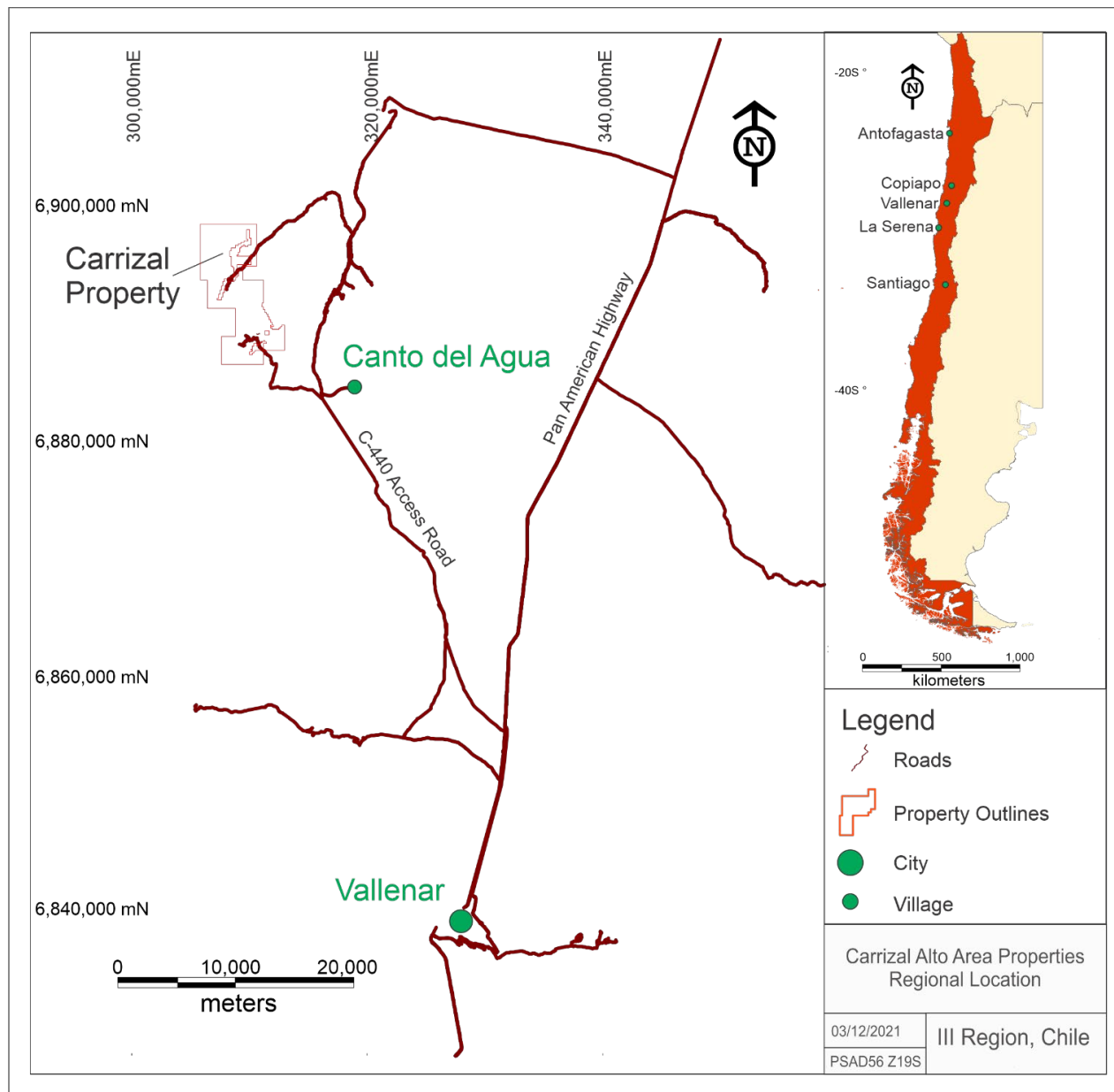


Figure 4 - Location of and access to the Carrizal Cu-Co-Au Property in Region III, Region de Atacama, northern Chile (figure provided by Red Metal).

The Carrizal Property has historically been subdivided into two separate project areas, namely the Perth and Farellón projects, representing roughly the northern and southern halves of the Carrizal Property, respectively. The Carrizal Property consists of 21 mining concessions ('mensuras') (Table 3). The Property covers a total area of 3,278 hectares with 2,044 ha in the Perth Project and 1,234 ha in the Farellón Project (Figures 5, 6, and 7).

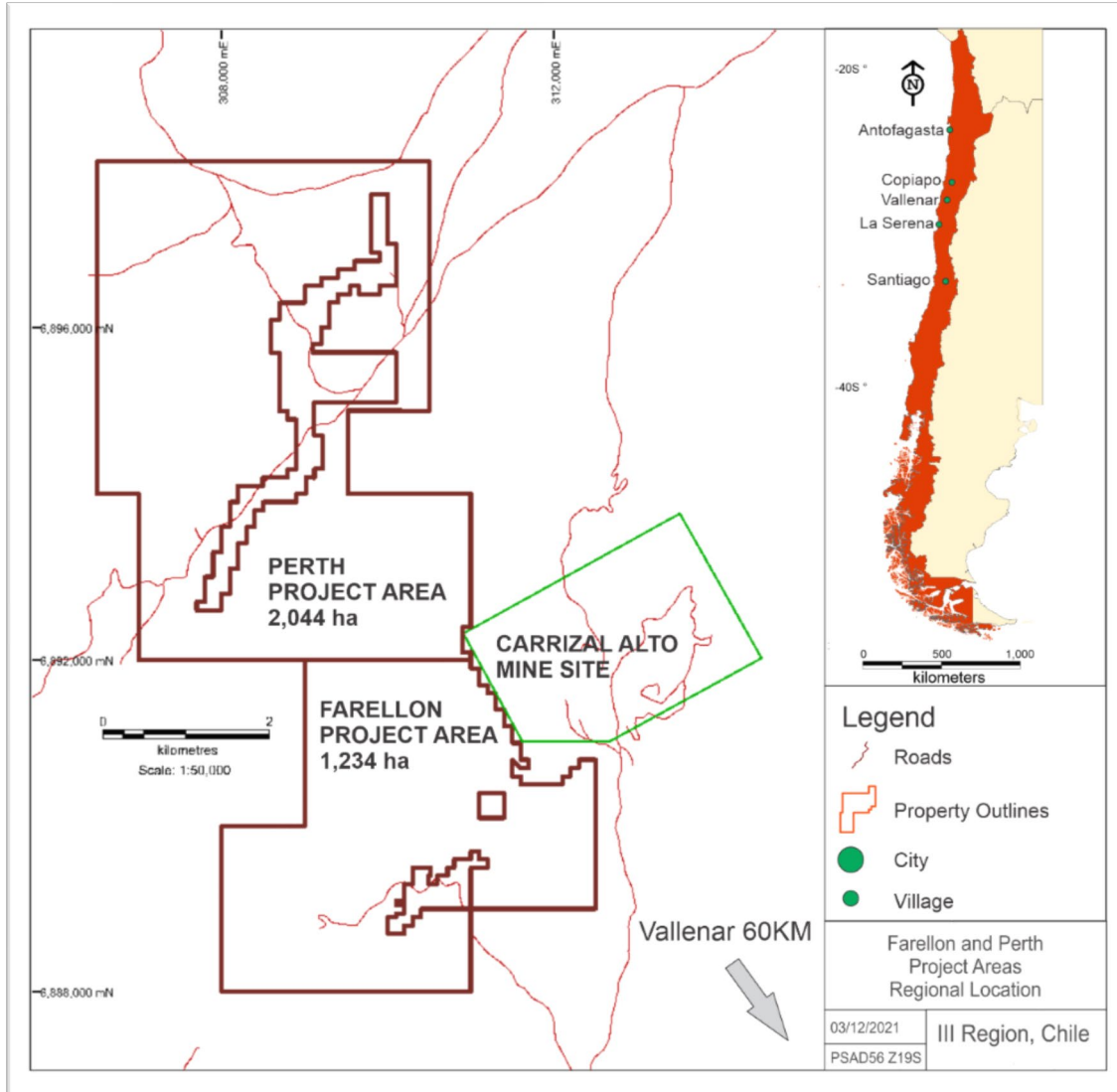


Figure 5 - Location of the Farellón and Perth projects claim blocks of the Carrizal Cu-Co-Au Property, Region III, Region de Atacama, northern Chile (figure provided by Red Metal).



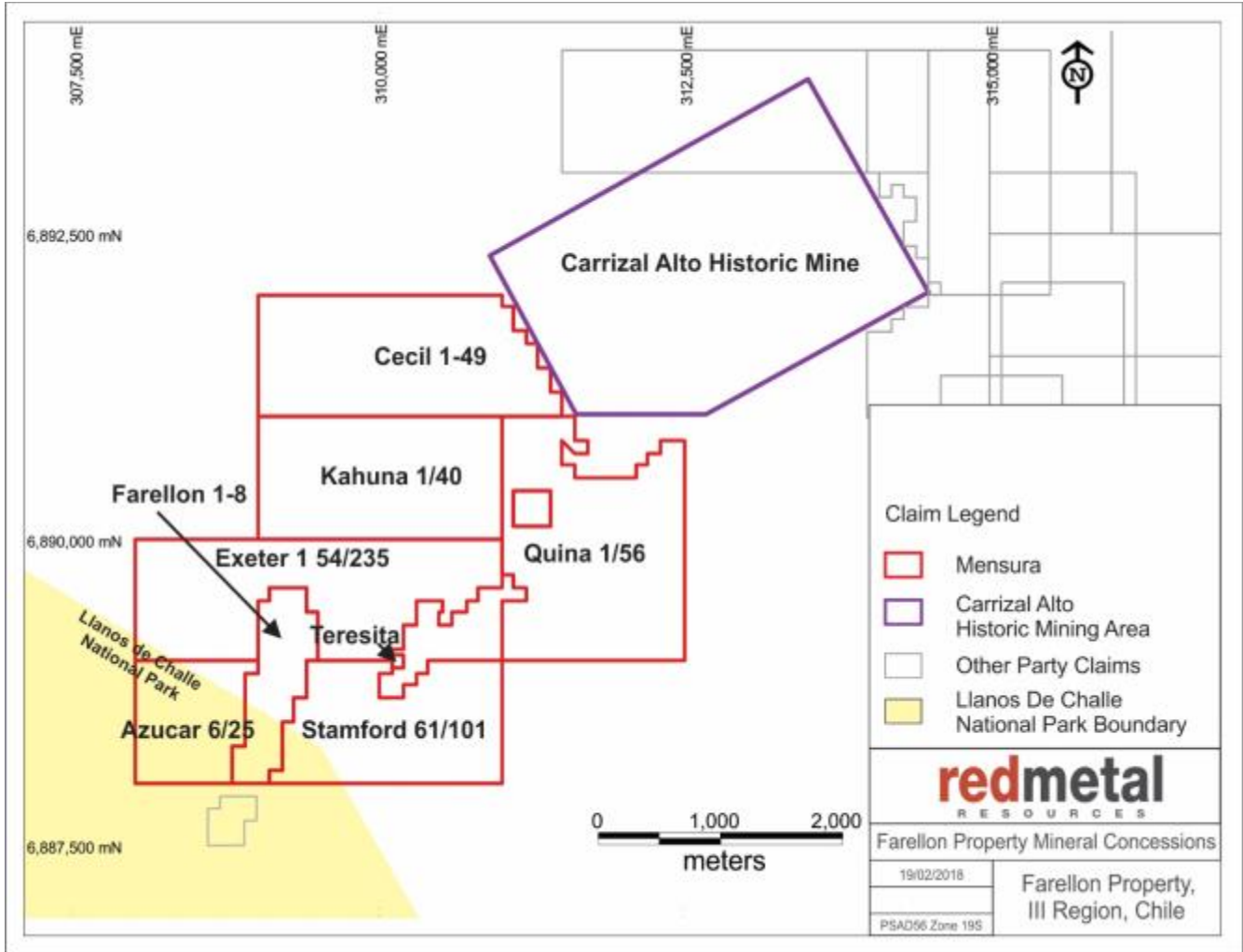


Figure 6 - Claims in the southern portion of the Carrizal Property referred to as the Farellón Project area (figure provided by Red Metal).

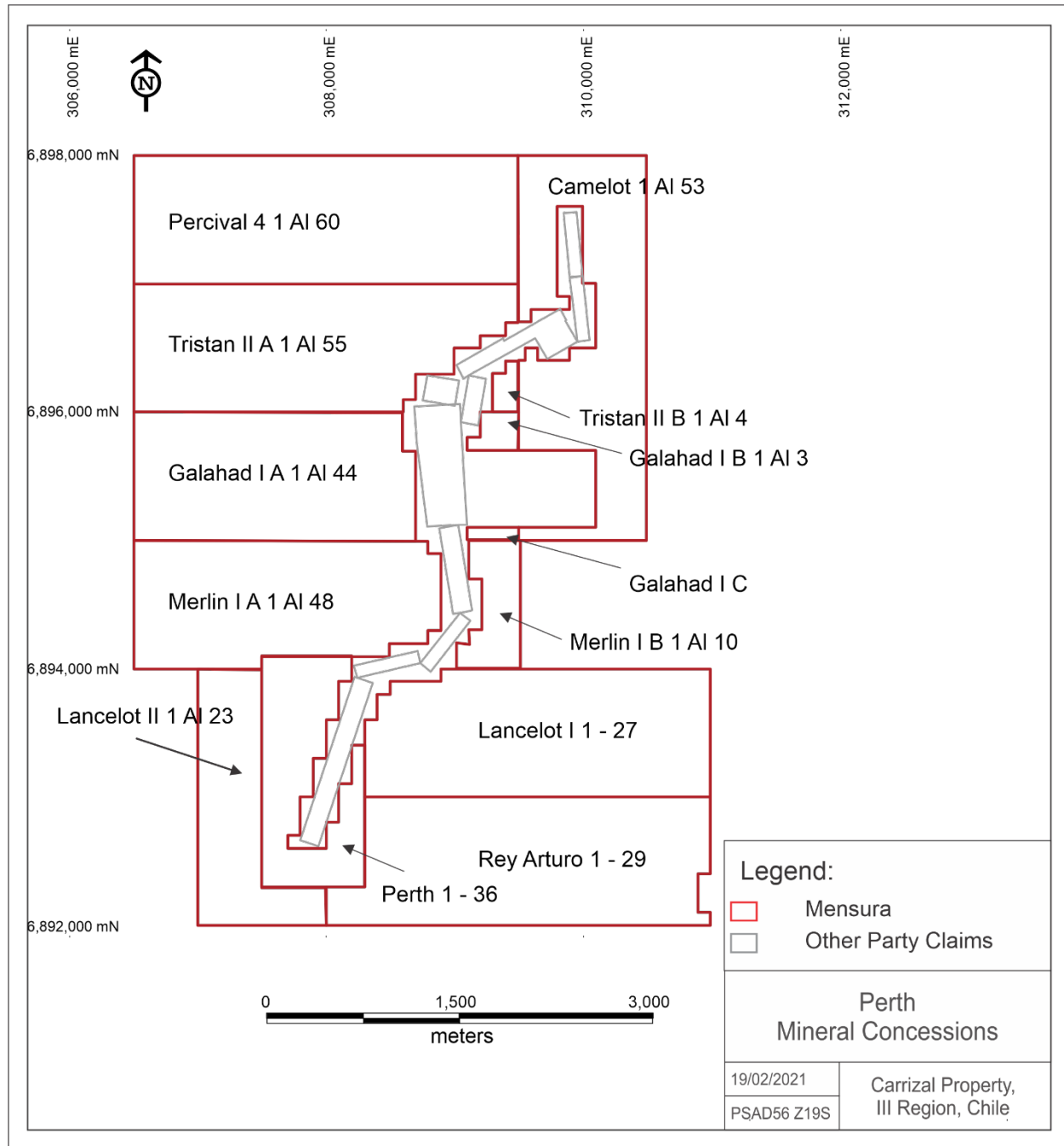


Figure 7 - Claims in the northern portion of the Carrizal Property referred to as the Perth Project area (figure provided by Red Metal).

Table 3 - Summary of mineral concession Information for the Farellón Project (as of March 2021).

Concession Name	Concession Type	Concession Number	Annual Taxes		
			Pesos*	US\$**	CDN\$***
Southern claim block (Farellón Project)					
Farellón Alto 1-8	Mensura	033030156-2	\$205,920	\$282	\$338
Cecil 1-49	Mensura	033030329-8	\$1,173,744	\$1,608	\$1,929
Azúcar 6-25	Mensura	033030342-5	\$453,024	\$621	\$745
Kahuna 1-40	Mensura	033030360-3	\$1,029,600	\$1,410	\$1,692
Stamford 61-101	Mensura	033030334-4	\$849,420	\$1,164	\$1,396
Teresita	Mensura	033030361-1	\$5,148	\$7	\$8
Quina 1-56	Mensura	033030398-0	\$1,292,148	\$1,770	\$2,124
Exeter 1-54	Mensura	033030336-0	\$1,209,780	\$1,657	\$1,989
Northern claim block (Perth Project)					
Perth 1-36	Mensura	033030383-2	\$561,132	\$769	\$922
Rey Arturo 1-30	Mensura	033030638-6	\$1,420,848	\$1,946	\$2,336
Lancelot 1 1-27	Mensura	033022832-6	\$1,338,480	\$1,834	\$2,200
Galahad IA 1 al 44	Mensura	03201D252-K	\$1,117,116	\$1,530	\$1,836
Camelot 1 al 53	Mensura	03201D253-8	\$1,168,596	\$1,601	\$1,921
Percival 4 1 al 60	Mensura	03201D256-2	\$1,544,400	\$2,116	\$2,539
Tristan II A 1 al 55	Mensura	03201D264-3	\$1,343,628	\$1,841	\$2,209
Galahad IB 1 al 3	Mensura	03201D55-4	\$51,480	\$71	\$85
Tristan II B 1 al 4	Mensura	03201D251-1	\$36,036	\$49	\$59
Merlin IB 1 al 10	Mensura	033030691-2	\$195,624	\$268	\$322
Merlin A 1 al 48	Mensura	033030692-0	\$1,132,560	\$1,551	\$1,862
Lancelot II 1 al 23	Mensura	033030690-4	\$592,020	\$811	\$973
Galahad IC	Mensura	03201D254-6	\$20,592	\$28	\$34
Summary					
<b>21 mensuras</b>		<b>Totals:</b>	<b>\$16,741,296</b>	<b>\$22,933</b>	<b>\$27,520</b>
*The Peso amount changes slightly each year based on an internal Chilean inflationary rate (UTM); taxes are due every March.					
**Estimated May 24, 2021 using an exchange rate of 730.00 Chilean pesos 1 US dollar.					
***Estimated May 24, 2021 using an exchange rate of 1.20 Canadian dollars to 1 US dollar.					

Table provided by Red Metal

## 4.2 Mineral Tenure

Chile's current mining and land tenure policies were incorporated into laws in 1982 and amended in 1983. The laws were established to secure the property rights of both domestic and foreign investors to stimulate mining development in Chile. While the state owns all mineral resources, exploration and exploitation of these resources is permitted by acquiring mining concessions which are granted by the courts according to the law.

Concessions are defined by UTM coordinates representing the centre-point of the concession and dimensions (in metres) in north-south and east-west directions. There are two kinds of concessions, exploration and exploitation, and three possible stages of a concession to get from an exploration concession to an exploitation (mining) concession: (1) 'pedimento', (2) 'manifestación', and (3) 'mensura' (see below for descriptions). An exploration concession ('pedimento') can be placed on any area, whereas the survey to establish a permanent exploitation concession ('mensura') can only be effected on "free" areas where no other mensuras exist.

### 4.2.1 Pedimento

A pedimento is an initial exploration concession with well-defined UTM coordinates delineating the north-south and east-west boundaries. The minimum size of a pedimento is 100 ha and the maximum is 5,000 ha, with a maximum length-to-width ratio of 5:1. A pedimento is valid for a maximum period of two years. At the end of the two year period it can either be reduced in size by at least 50% and renewed for an additional two years or, entered into the process to establish a permanent concession by converting it into a 'manifestación'. New pedimentos are allowed to overlap pre-existing pedimentos, however, the pedimento with the earliest filing date always takes precedence providing the concession holder maintains their concession in accordance with the Mining Code and the applicable regulations.

### 4.2.2 Manifestación

Before a pedimento expires, or at any stage during its two year life (including the first day the pedimento is registered), it may be converted to a manifestación. A manifestación is valid for 220 days, and then prior to the expiry date, the owner must request an upgrade to a mensura.

### 4.2.3 Mensura

Prior to the expiration of a manifestación, the owner must request a survey (mensura). After acceptance of the Survey Request ('Solicitud de Mensura'), the owner has approximately 12 months to have the concession surveyed by a government licensed surveyor. The surrounding concession owners may witness the survey, which is subsequently described in a legal format and presented to the National Mining Service (Sernageomin) for technical review, which includes field inspection and verification. Following the technical approval by Sernageomin, the file returns to a judge of the appropriate jurisdiction, who dictates the constitution of the claim as a mensura (equivalent to a patented claim in Canada). Once constituted, an abstract describing the claim is published in Chile's official mining bulletin (published weekly), and 30 days later the claim can be inscribed in the appropriate Mining Registry ('Conservador de Minas').

Once constituted, a mensura is a permanent property right, with no expiration date. As long as the annual fees ('patentes') are paid in a timely manner (from March to May of each year), clear title and ownership of the mineral rights is assured in perpetuity. Failure to pay the annual patentes for an extended period can result in the concession being listed for auction sale ('remate'), wherein a third party may acquire a concession for the

payment of back taxes owed (plus a penalty payment). In such a case, the claim is included in a list published 30 days prior to the auction and the owner has the possibility of paying the back taxes plus penalty and thus removing the claim from the auction list.

### 4.3 Issuer's Title or Interest in the Property

Red Metal Resources Ltd. owns 100% all of the concessions in the Carrizal Cu-Co-Au Property (Farellón and Perth projects), through right of title and in Red Metal's wholly-owned subsidiary, Minera Polymet S.G.A. Some of the concessions are subject to certain underlying royalties (Table 4). The Author has reviewed all of the information and data regarding the concessions and as supplied by the Issuer.

There are four types of certificates for the 21 concessions:

1. **Certificado de Vigencia** (Certificate of Validity): Document that certifies that there is no note or marginal annotations apart from the first registration that the company has terminated. It is usually required to verify that the company is still in force, whether for bank procedures, tenders, contracts, etc.
2. **Certificado de Hipotecas y Gravámenes** (Mortgage and Liens Certificate): It is a certificate that includes the liens that affect real estate such as mortgages, easements, usufructs, etc., and prohibitions such as embargoes, banking or SERVIU impediments to sell, among others. This certificate is generally requested by banks or buyers, to carry out a study of titles of a property that will be sold or transferred.
3. **Certificado de Prohibiciones e Interdicciones** (Prohibitions and Interdictions Certificate): The technical name of the previous concept is "Certificate of the Records of Mortgages, Encumbrances and Prohibitions of a Property", which includes prohibitions and interdictions.
4. **Certificado de Dominio Vigente** (Valid Domain Certificate): It is an authorized copy of an inscription, which indicates who is the current owner of a property. Usually this document is requested by banks or buyers, to carry out the study of titles of a property that will be sold.

#### 4.3.1 Acquisition History – Farellón Project (8 Concessions)

The Company acquired the initial mining claim for the Farellón Project pursuant to an assignment agreement between Polymet and Minera Farellón Limitada ("Minera Farellón") dated September 25, 2007, and amended on November 20, 2007. Under the terms of the assignment agreement, Minera Farellón agreed to assign to Polymet its option to buy the Farellón 1 Al 8 mining concession. Polymet acquired the option on April 25, 2008, and concurrently assumed all of Minera Farellón's rights and obligations under the Farellón option agreement. Polymet exercised the option and bought the property from the vendor on April 25, 2008. The patented mining concessions are registered in the name of and owned 100% by Polymet.

On September 17, 2008, the Company acquired the Cecil 1 - 49, Cecil 1 - 40 and Burghley 1 - 60 claims for an aggregate purchase price of \$27,676. On December 1, 2009, the Company initiated the manifestación process by applying to convert the Cecil 1 - 40 and Burghley 1 - 60 exploration (pedimento) claims to mining (mensura) claims. In January 2013, the Company abandoned the manifestación process for the Cecil 1-40 and Burghley 1-60 claims as the Company discovered that the most prospective ground, as outlined in the Company's prospecting and mapping program completed in April 2012, was covered by several mensuras underlying both claims.

On August 21, 2012, the Company acquired four mineral claims - Azucar 6-25, Kahuna 1-40, Stamford 61-101, and Teresita - through the government auction for a total price of \$19,784.

On December 15, 2014, the Company entered into an option agreement with David Marcus Mitchell to earn 100% interest in a Quina 1-56 claim (the “Quina Claim”). The Quina Claim covers 251 hectares and is centered at 310,063 east and 6,890,435 south UTM PSAD56 Zone 19 and is contiguous to the Farellón Property. Acquisition of the Quina Claim added approximately 2 kilometers of strike length of the Farellón Veins. In order to acquire the 100% interest in the Quina Claim the Company paid a total of \$150,000 in combined stock and cash payments and completed the acquisition on December 15, 2018.

On June 3, 2015, the Company entered into an option agreement, made effective on June 15, 2015, with Minera Stamford S.A., to earn 100% interest in a mining claim known as “Exeter 1-54” (the “Exeter claim”). The Exeter claim totals 235 hectares and is contiguous to the Farellón Property, which is located in the Carrizal Alto mining district, located approximately 75 kilometers northwest of the city of Vallenar, 150 kilometers south of Copiapo and 20 kilometers west of the Pan American Highway. In order to acquire 100% interest in the Exeter claim, the Company paid a total of \$150,000 and completed the transaction on May 12, 2019.

#### 4.3.2 Acquisition History – Perth Project (13 Concessions)

On March 10, 2011, Red Metal purchased for \$35,000, a group of 12 concessions referred to as the Perth concessions. Subsequent to that purchase, one of the concessions was split into two concessions through the process of changing the claims from pedimentos to mensuras, resulting in the current configuration of 13 concessions.

### 4.4 Surface Rights and Legal Access

The surface rights of the Carrizal Property are owned by the Chilean government. If the Property is developed and mined at a later date, the surface rights will have to be secured as part of the permitting process. Surface rights are rented to mines for the life of the mine by the Chilean government. Claim holders have legal, unimpeded access to their pedimentos and mensuras.

### 4.5 Other Land Tenure Agreements

There are pre-existing Net Smelter Return Royalties (“NSR”) on the properties as outlined in Table 4. There are no other land tenure agreements regarding the Carrizal Property known to the Author. The existing mensuras have been surveyed by the Chilean government.

Table 4 - Pre-existing NSRs on concessions from the Carrizal Property.

Concession Name	Concession Type	Concession Number	NSR	2nd NSR
Southern claim block (Farellón)				

Farellón Alto 1-8	Mensura	033030156-2	1.5*	1.5
Cecil 1-49	Mensura	033030329-8		2.5
Azúcar 6-25	Mensura	033030342-5		2.5
Kahuna 1-40	Mensura	033030360-3		2.5
Stamford 61-101	Mensura	033030334-4		2.5
Teresita	Mensura	033030361-1		2.5
Quina 1-56	Mensura	033030398-0	1.5**	1.5
Exeter 1-54	Mensura	033030336-0	1.5***	1.5
Northern claim block (Perth)				
Perth 1-36	Mensura	033030383-2		2.5
Rey Arturo 1-29	Mensura	033030638-6		2.5
Lancelot II 1-23	Mensura	033030690-4		2.5
Lancelot 1 1-27	Mensura	033022832-6		2.5
Merlin IB 1 al 10	Mensura	033030691-2		2.5
Merlin I A 1 al 48	Mensura	033030692-0		2.5
Tristan II B 1 al 4	Mensura	03201D251-1		2.5
Galahad IA 1 al 44	Mensura	03201D252-k		2.5
Camelot 1 al 53	Mensura	03201D253-8		2.5
Galahad I C	Mensura	03201D254-6		2.5
Tristan II A 1 al 55	Mensura	03201D264-3		2.5
Galahad I B 1 al 3	Mensura	03201D255-4		2.5
Percival 4 1 al 60	Mensura	03201 D256-2		2.5
*can be bought back for US\$600.000				
**can be bought back for US\$1,500.000				
***can be bought back for US\$750,000				

Table provided by Red Metal

## 4.6 Environmental Liabilities

To the best of the Author's knowledge, there are no known environmental liabilities within the Carrizal Property. The Author is unable to comment on any remediation which may have been undertaken by previous companies. Red Metal has not applied for any environmental permits on the Property and has been advised that none of the exploration work completed to date requires an environmental permit. For all exploration work in Chile, any damage done to the land must be repaired.

The Llanos de Challe National Park, which was created in July 1994, covers the southern 750 m of the Farellón Una al Ocho concession. According to the Mining Code of Chile, to mine or complete any exploration work within the park boundaries, Red Metal will be required to get written authorization from the Chilean government.

## 4.7 Exploration Plans and Permits

At this stage of exploration, there is no requirement to hold an exploration permit. When more advanced work is undertaken, an exploration permit will be required and applied for by Red Metal.

## 4.8 Any Other Significant Risks Affecting the Ability to Perform Work

As of the Effective Date of the Report , the Author is not aware of any other significant factors that may affect access, title, or the right to work on the Carrizal Property by Red Metal.



## 5.0 Accessibility, Climate, Local Resources, Infrastructure, Physiography

### 5.1 Accessibility

The Carrizal Property is readily accessible from the City of Vallenar, Chile, via both paved and well-maintained dirt roads. Access is primarily gained by taking the Pan-American highway (Ruta 5) north from Vallenar to the Carrizal turn-off (about 20 km north). From the turn-off, follow the well-maintained dirt road to the CMP Cerro Colorado iron mine where one turns right (north) and continues to Canto del Agua. Just prior to the historic slag dumps and historic plant ruins there is a right-hand turn which heads towards Carrizal Alto. Follow the road towards Carrizal Alto for approximately 3 km prior to turning left (west) onto a dirt side road which leads directly to the Carrizal Property. There are numerous gravel roads in the area, so a guide is recommended to access the Property, especially on the initial visit. The historic Farellón Mine workings, situated on the western slopes of the Cerro Azucar, are located about 8 km from the turn-off.

The Mining Code of Chile guarantees the owner of mining concessions the right-of-access to the surface area required for their exploration and exploitation. This right is normally obtained by a voluntary agreement between the mineral claim owner and the surface owner. The mining company may obtain the rights of way ('Servidumbre') through the civil court system, if necessary, by agreeing to indemnify the surface owner for the court determined value of the surface area.

### 5.2 Climate and Operating Season

The Carrizal Property lies within the Atacama Desert, considered the driest nonpolar place in the World. The Atacama Desert is bound to the west by the Chilean Coast Range mountains and to the east by the Andes mountains. In the winter, fog moving in from the coast provides enough moisture for some cacti and lichens to grow. Any rainfall is primarily in the winter, and averages 12 mm annually in Copiapo to the north. Average daily temperatures in the summer months range from 10° to 35°C and from 0° to 15°C in the winter months. In general, exploration programs can be conducted throughout the year.

### 5.3 Infrastructure, Local Resources, Power, Water, Personnel, Potential Tailings Storage, Waste Disposal, Heap Leach Pads, Processing Plant Sites

There is no infrastructure located on the Property other than the historic underground workings and gravel roads. Cellular telephone service is available at all peak elevations on the Property.

The major population centres for the region are Copiapo and Vallenar, with 130,000 and 60,000 inhabitants, respectively. Both population centres have fairly modern facilities with high tension power lines and a fibre optic communication line located parallel to the Pan-American highway.

The City of Copiapo, 150 km to the north, is the general supply centre for the growing mining industry in the region. The Paipote copper smelter, which services the region as well as other areas, is located in Copiapo. The City of Vallenar is situated 70 km southeast of the Property and is the closest major centre for the area.

Copiapo has daily air and bus services to Santiago and other centres. Vallenar has daily bus services as well but the closest airport is located in the coastal city of La Serena to the south. There is a small airport close to Vallenar but this airstrip only services private flights.

ENAMI currently operates a 35,000 tonnes per day toll crushing facility with an attached heap leach operation in Vallenar. This facility is used by a number of small mining operations to process mineralized rock and ENAMI pays the miners for the mineralized rock depending on the tonnage and grade of the material shipped to the plant and based on monthly published payment schedules. All of the concentrates are sent to the Paipote smelter in Copiapo.

Vallenar is the closest community to Barrick Gold Corporation's ("Barrick Gold") Pascua Lama project and the Nueva Union project that is a 50/50 joint venture between Teck and Goldcorp.

Airstrips for light aircraft are located at Tololo Pampa, 13 km south of Canto del Agua and at Carrizal Bajo. However, the current state of repair of these airstrips is not known.

The Chilean mining industry is extremely well developed, with the country being a major producer of copper, iron, lithium, and other metals. Mining supplies and equipment as well as a highly trained technical and professional workforce are available in Chile, and major international mining companies operating in Chile have little requirement for expatriate employees. A number of international exploration and mining service companies and engineering firms also operate in Chile and provide excellent geological and logistical support to foreign companies. An experienced labour force is available in the town of Vallenar, as well as within the surrounding communities.

The concessions have both rights and obligations as defined by a Constitutional Organic Law (enacted in 1982). Concessions can be mortgaged or transferred, and the holder has full ownership rights and is entitled to obtain the rights of way for exploration and exploitation. The concession holder has the right to use, for mining purposes, any water flows which infiltrate any mining workings. In addition, the concession holder has the right to defend his ownership against state and third parties. An exploration concession is obtained by a claims filing and includes all minerals that may exist within its area.

Water is located on the Property, as all of the historic drill holes intersected water at about 100 metres. Water which infiltrates the old mine workings as well as any other water found within the Carrizal mineral concessions can be used for exploration, exploitation or processing. Water which does not infiltrate mine workings can be obtained from Canto del Agua, approximately 10 km from the Property. Canto del Agua is situated in a small valley where the water table lies about 1 m underground. To obtain water from Canto del Agua, Red Metal would have to apply for a water usage permit according to the Chilean Water Code.

## 5.4 Physiography

The Carrizal Property is located near the commencement of the steeply sided river bed valley of the Quebrada Carrizal channel, which flows directly to the coastal village of Carrizal Bajo. Immediately to the east of the Property, the regional topography opens into the plain of the La Jolla and Algarrobo Valleys, which cover a gently sloping catchment area of approximately 1,000 km<sup>2</sup>, before entering the foothills of the High Cordillera.

## 6.0 History

### 6.1 Introduction and Regional History

Mining has played an important role in Chile's economy starting in the 16<sup>th</sup> century, with gold, silver and copper being mined from high grade deposits. Copper mining in particular, has employed a significant portion of the population both directly and indirectly over the last 100 years. Historically, the most significant mineral producing zone in Chile has been the Coastal Cordillera, ranging between 50 and 100 km wide, extending over 2,500 km from Valparaiso in the south, northward to the Peruvian boarder.

The Carrizal Alto Mine area is located within this prolific Coastal Cordilleran range, in the Atacama III Region of northern Chile, between Copiapo and Vallenar. Historical records indicate that copper mining commenced at Carrizal Alto in the 1820's and continued on a significant scale mostly by British companies until 1891, when disastrous flooding occurred, and mines closed. The historical reports indicate that the larger mines were obtaining good grades over significant widths in the bottom workings at the time of closure. Very little information regarding mining has survived, but there is a small amount of historical data located in the SERNAGEOMIN National Archives in Santiago, Chile. Up until 1891, mining at the Carrizal Alto Mine site produced over 3 million tonnes of copper ore, grading between 5 and 15% Cu (National Archives in Santiago, Chile). There was also a large quantity of direct shipping ore at 12% Cu. At one time there was a considerable body of tailings present to support these figures, however this material has been reprocessed and depleted due to the high prices of gold and copper over the last few years.

The Carrizal Alto Mine area contains a series of northeast-trending shear structures, including the principal vein systems of 'Mina Grande' and 'Armonia'. Both vein systems have been worked extensively. The Mina Grande shear contains workings that extend for over 2.5 km as a nearly continuous line of pits, collapsed stopes, narrow open cuts and numerous shafts. The Armonia vein system is similar, extending for 1.8 km. Oxidation depths range from 50 to 150 m, and judging from remnant material, many of the veins were probably worked to this depth and then abandoned as sulphide mineralization was reached.

In the most productive zone at Mina Grande (which stretches for 1.5 km), the mineralized vein reached 15 m in width and is composed of quartz, sericite, chalcopyrite and pyrite. Amphibole-rich seams occur proximal to the diorite wall rock, which also frequently contains chalcopyrite and pyrite-bearing impregnations and smaller veins. The main producing mine in the Carrizal Alto Mine area was the Veta Principal on the Mina Grande shear, which was mined to a depth of 400 m along a strike of 1.8 km and over a width varying from 2-15 m. The deepest workings reached 600 metres. Several slag dumps remain at old sites of local smelters treating the sulphide ores. Carrizal Alto, despite spectacular past production from the Capote, Mina Grande, and Armonia mines, has remained virtually untouched since the brief gold revival of the 1930's.

The current Carrizal Property comprises two contiguous blocks, namely the **Farellón** to the south and **Perth** to the north (see Figure 5). Both of these blocks border the historically-productive Carrizal Alto Mine to the east, sharing geological and mineralogical attributes, and for consistency, the historical names have been retained.

The Carrizal Alto Mine is not located on the Property and the Qualified Person has been unable to verify the information on the adjacent property and as such the information disclosed is not necessarily indicative of mineralization on the Property that is the subject of the Report.

## 6.2 Farellón Project Area

The Farellón block of concessions, which are contiguous with the Carrizal Alto Mine area, was mined on a limited basis in the 1940's. Very little information remains from this time period, except for a few plans of the limited underground mining (SERNAGEOMIN National Archives, Santiago, Chile).

In 1963, eight samples were taken from two high grade veins from the accessible workings within the Farellón Project area, namely Veta Pique and Veta Naciente (Table 5). These samples were analysed for copper, gold, silver, and gangue oxides. Unfortunately, no units of measure were provided in the 1963 report accompanying the assay grades, although weight percent is most likely for copper. In conjunction with historic records from the 1940's, this information was incorporated into a mineral resource estimate (see below).

In the 2010 Technical Report by Micon on Red Metal's Farellón Property (which corresponds roughly to the current Farellón Project area), the Author stated that "no attempt was made to verify the sampling program of 1963, as the workings were not entirely accessible and there is no sample location map upon which to attempt to duplicate the samples" (Lewis, 2010).

Table 5 - Grades of Cu, Au, and Ag from veins of the Farellón Project.

Sample Number	Vein	Length (m)	Metal Grade (%)/Oxides (wt%)						
			Cu	Au	Ag	CaO	FeO	MgO	SiO <sub>2</sub>
1	Veta Pique	2.5	1.8	0.5	5	47.89	6.54	0.27	1.34
2	Veta Pique	2.45	6.9	1.0	20	31.14	13.77	0.30	2.00
3	Veta Pique	3.0	3.0	1.0	10	46.43	5.86	0.26	2.50
4	Veta Pique	1.0	1.2	0.2	5	31.52	3.49	0.30	25.66
5	Veta Naciente	2.0	2.4	0.5	5	47.99	5.52	0.32	1.50
6	Veta Naciente	1.8	3.0	1.0	5	38.25	6.09	0.23	17.84
7	Veta Pique	1.7	1.7	0.5	3	43.77	4.51	0.28	10.00
8	Veta Naciente	0.8	1.6	0.5	3	28.8	3.71	0.23	29.54
	<b>*Total:</b>	<b>1.8</b>	<b>2.1</b>	<b>0.6</b>	<b>5</b>	<b>40.66</b>	<b>5.10</b>	<b>0.27</b>	<b>12.62</b>

\*Note: arithmetic average for the total excludes Sample 2; information from 1963 report in SERNAGEOMIN files, National Archives, Chile.

Oliver Resources, an Irish based company, through its Chilean subsidiary Oliver Resources Chile Ltda., briefly explored the Farellón Property in 1990 with a stream sediment sampling program and sampling of the Farellón Alto and Bajo mine dumps.

The Farellón Property was incorporated into a larger land package called the Azucar Project in the 1990's, owned by Minera Stamford S.A. (Minera Stamford), a Chilean exploration company. In a joint venture with Metalsearch, an Australian company, exploration on these concessions included geological mapping, rock chip sampling, soil geochemistry, reverse circulation ("RC") drilling and metallurgical sampling. Geological mapping of the Azucar

Project showed a NE-trending sheared contact 50 to 200 m wide, containing significant consistent mineralization along a 2 km strike length.

Minera Stamford collected 152 rock chip and dump samples from prospective areas along the mineralized shear zone, of which 36 samples fell within the boundary of the Farellón Project. Samples were analyzed for gold, copper and cobalt. The highest gold sample within the Farellón Property was 13.50 g/t Au, the highest copper result was 6.15% Cu, and the highest cobalt result was 0.68% Co. Results of this, and other sampling programs conducted on the Farellón Project area are included in Figures 14, 15, and 16, showing Cu, Au, and Co concentrations, respectively. A total of 591 soil samples were also taken by Minera Stamford, but no records of this work have been located.

### 6.2.1 Historical Drilling

A reverse circulation drilling program of 33 holes totaling 6,486 m was completed between 1996 and 1997 targeting the shear zone on the Azucar property by the JV between Minera Stamford and Metalsearch. Twenty-two of these holes were located within the present Farellón Project area, representing a total of 3,918 metres (Table 6). Drill holes were placed at irregular intervals along the mineralized shear zone, and the holes were sampled at regular 1 m intervals along their entire length. Results of this drill campaign confirmed the consistent presence of mineralization in the shear zone, to a vertical depth of about 200 m. As shown in Table 7, the highest gold concentration was 21.03 g/t Au, the highest copper result was 9.21% Cu, and the highest cobalt result was 0.58% Co (all results are over 1 m intervals).

Locations of historical drill hole collars for the Farellón Project in the south are provided in Figure 8.

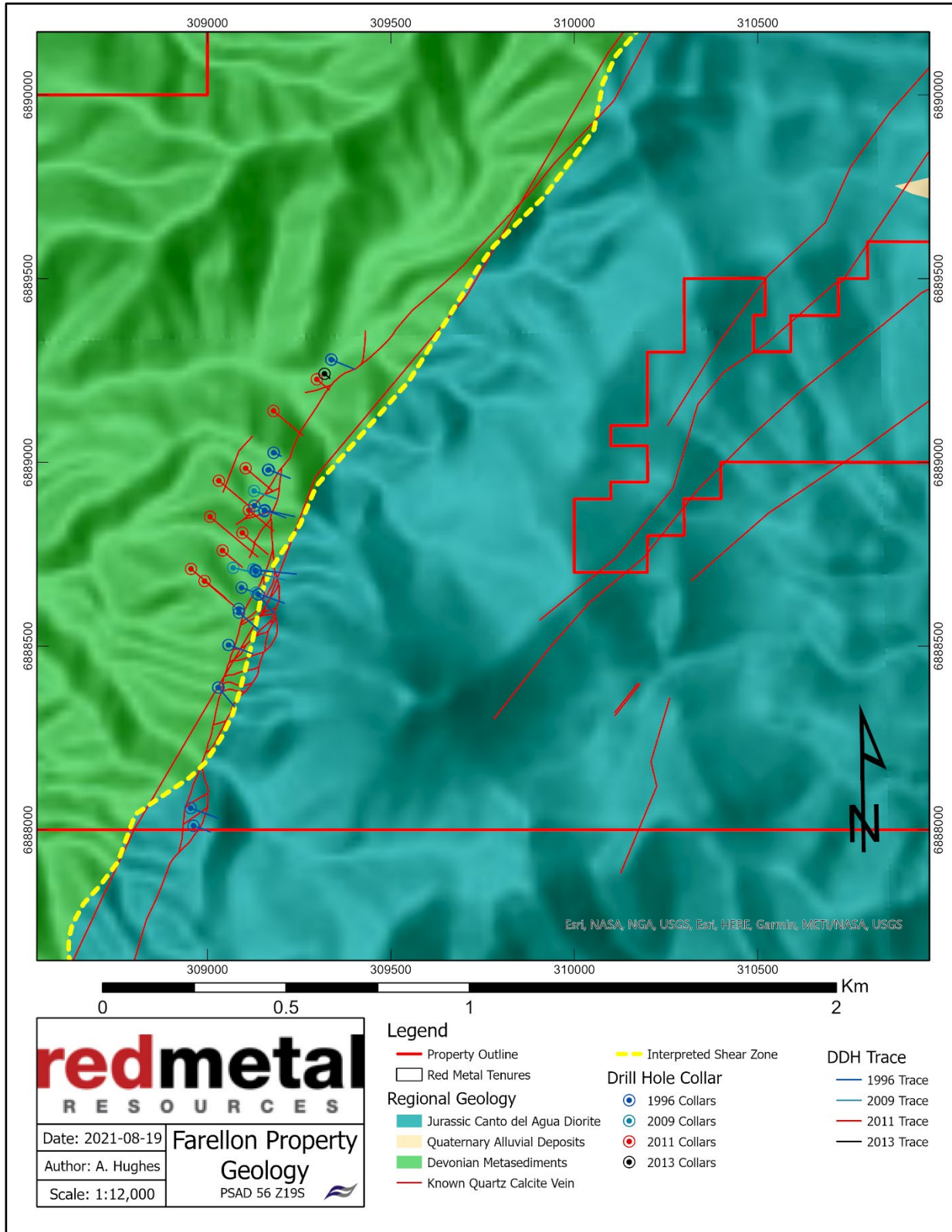


Figure 8 - Drill hole collar locations on the Farellón as of December 2018 (Geology from Arevalo and Welkner, 2003; figure provided by Red Metal).

Table 6 - Summary of 1996 Minera Stamford-Metalsearch JV RC drill hole statistics, Farellón Project area.

Hole Number	UTM Coordinates			Azimuth (°)	Dip (°)	Depth (m)
	Easting	Northern	Elevation (m)			
FAR-96-06	308962.3	6888011	573	110	-62	100
FAR-96-07	308954.2	6888059	560	110	-62	163
FAR-96-09	309131.2	6888706	552	95	-65	242
FAR-96-010	309167.3	6888980	557	112	-75	211
FAR-96-011	309155.5	6888870	565	102	-62	169
FAR-96-013	309092.8	6888659	540	110	-65	257
FAR-96-014	309131.5	6888703	552	90	-90	203
FAR-96-015	309155	6888867	565	90	-90	200
FAR-96-016	309128.3	6888882	565	111	-65	200
FAR-96-017	309165.4	6888979	557	90	-90	200
FAR-96-018	309181	6889026	562	115	-65	51
FAR-96-019	309180	6889026	562	90	-90	200
FAR-96-020	309138.7	6888640	553	140	-65	150
FAR-96-021	309137.9	6888641	553	90	-90	200
FAR-96-022	309086.1	6888591	564	131	-65	150
FAR-96-023	309085.3	6888601	564	90	-90	200
FAR-96-024	309057.6	6888503	544	110	-65	150
FAR-96-025	309056.6	6888503	544	90	-90	172
FAR-96-026	309029.9	6888387	544	140	-65	150
FAR-96-027	309029.3	6888387	544	90	-90	199
FAR-96-028	309337.5	6889279	500	112	-65	150
FAR-96-029	309336.5	6889280	500	90	-90	201
<b>Total:</b>						<b>3,918</b>

Table provided by Red Metal

Table 7 - Summary of significant intercepts, 1996-1997 RC drilling program by Minera Stamford and Metalsearch, Farellón Project area.

Drill Hole	Significant Interval (m)			Assay Results		
	From (m)	To (m)	Length	Gold (g/t)	Copper (%)	Cobalt (%)
FAR-96-06	49	54	5	0.15	0.73	0.01
FAR-96-07	25	34	9	0.38	1.05	0.02
FAR-96-09	57	84	27	0.51	0.91	0.03
FAR-96-010	31	36	5	1	0.68	0.04
FAR-96-011	20	26	6	0.67	0.46	0.02
FAR-96-013	86	93	7	0.87	1.68	0.04

Drill Hole	Significant Interval (m)			Assay Results		
	From (m)	To (m)	Length	Gold (g/t)	Copper (%)	Cobalt (%)
FAR-96-014	77	83	6	0.66	0.85	0.06
FAR-96-015	59	79	20	0.99	0.98	0.06
	99	109	10	0.18	1.02	0.03
FAR-96-016	24	26	2	0.95	1.57	0.02
	64	70	6	0.73	0.81	0.07
FAR-96-020	14	16	2	0.46	1.85	0.05
	39	43	4	0.75	0.9	0.03
FAR-96-021	22	25	3	4.17	5.29	0.11
FAR-96-022	29	39	10	1.53	1.31	0.04
FAR-96-022	100	108	8	3.72	2.49	0.06
FAR-96-023	50	53	3	0.48	1.1	0.06
	59	64	5	0.28	0.78	0.03
	132	147	15	0.6	1.42	0.03
FAR-96-024	33	36	3	0.94	2.89	0.06
FAR-96-025	65	85	20	0.97	1.22	0.02
FAR-96-028	55	58	3	0.12	0.52	0.06
FAR-96-029	30	34	4	0.18	1.15	0.07

Table provided by Red Metal

The historic Farellón workings are in metamorphic units within the sheared metamorphic/tonalite contact zone which is about 200 m wide. The workings are large but restricted to the oxide zone and range from 1-20 m wide. A sample of the wall rock and quartz veined metamorphic rocks taken by Minera Stamford returned 3.0% Cu, 1.4 g/t Au, 0.08% Co, and 1.1% As.

The lower Farellón workings are several hundred metres to the south and associated with massive siderite. A sample collected by Minera Stamford of the lode material returned 5.6% Cu, 2.4 g/t Au, 0.02% Co. A 20 tonne trial parcel of material from the Farellón workings in the 1950's is reported to have returned over 1% Co.

The Kahuna concession, part of the Farellón Project area, was historically held by Vector Mining, a private company, and optioned to Catalina Resources PLC ("Catalina"), a private UK registered mineral exploration company. Catalina conducted a geophysical exploration program in order to determine whether the mineralized structures to the northeast, exploited in the Carrizal Alto mine, extended into the Kahuna area, to determine whether any such structures were associated with possible sulphide mineralization, and to define drill targets for a subsequent phase of work. The survey area was traversed in detail and a geological map was prepared showing all the different lithologies and previous mine workings. Two target areas were defined; one within the diorite intrusive hosting the high-grade mineralization at the old Carrizal Alto mine, the other in the surrounding metamorphic sediments. Two ground geophysical surveys, induced polarisation ("IP") and magnetometry, were completed in May 2007, confirming the continuity of the mineral-bearing structures between Carrizal Alto and the Kahuna area, allowing for the definition of sites for follow-up drilling.



The ground magnetic survey was completed on a grid measuring 1.2 by 3.2 line kilometres. A total of 70 line-km were surveyed on lines spaced 50 m apart. In the IP survey a total of 27 line-km of data were acquired with a gradient array. Three one km lines were surveyed in a more detailed follow-up survey with a multi-array consisting of both pole-dipole and multi-bipole gradient array (Note: In a bipole array, the two transmitting electrodes are placed so far apart that the electric field from them can be considered a field from two separate poles). The principal orientation of the shear zones was confirmed to be to the northeast towards Carrizal Alto where similar structures were exploited previously for copper and cobalt. However, there are also several trends to the northwest interpreted to be fault zones that offset the mineralized shear zones slightly. A north-south trend is probably due to dykes. A strong IP anomaly was located in the western portion of the survey area. The IP anomaly correlated with a shallow strongly conductive zone known to be associated with mineralization developed on the margin of the intrusive and exposed in shallow workings. Despite positive results warranting further attention, Catalina eventually dropped the option to the Kahuna Property, and it returned to Vector Mining.

### 6.3 Perth Project Area

The northern concessions of the Carrizal Property have historically been called the Perth Project. There are numerous artisanal workings throughout this section of the Carrizal Property. The Puenta Negra Mine area contains the Argentina and Dos Amigos veins, with the most significant workings on the Perth Project occurring at the Argentina shaft (Figure 9). Unfortunately, no historic mining records have been located for the Argentina and Dos Amigos veins.

In the 1990's the Cachina Grande area of the Carrizal Alto received some attention. The Cachina Grande area is underlain by Paleozoic metasediments to the west of the dioritic-hosted Carrizal Alto. In 1991, seven samples from the Cachina Grande area were taken for the report on the Carrizal Alto mining district by Oliver Resources (Ulriksen, 1991). Samples were taken from the Argentina old workings vein 1.8 m, resulting in a range of Cu between 1.76% and 3.4% Cu, and between 0.05 g/t and 1.22 g/t Au. Samples taken from the Dos Amigos North dump were grab samples and ranged between 0.46% and 0.83% Cu, and between 1.29 g/t and 3.41 g/t Au.

Appleton Resources Ltd. optioned the Perth Project in 2007 and completed a surface grab sampling program with Red Metal covering 12 veins identified on the southern portion of the project area, as part of a NI 43-101 Technical Report on their Perth Caliza Property, which includes the southern portion of the current Perth project area (Butrenchuk, 2008). Significant results from the 56 sample program by Appleton Resources in 2007 include total copper between 0.01% and 11.4% Cu, and between 0.01 g/t and 10.7 g/t Au and up to 0.186% Co.



Figure 9 - Argentina Shaft and Headframe in the northern Perth Project area (photo provided by Red Metal).

## 7.0 Geological Setting and Mineralization

### 7.1 Regional Geology

Chile is divided into three major physiographic units running north-south, namely the Coastal Cordillera, Central Valley (also termed the Central Depression), and the High Cordillera (Andes). The Carrizal Cu-Co-Au Property lies within the Coastal Cordillera, on the western margin of Chile (Figure 10).

There are five main geological units within the Coastal Cordillera, including, (1) early Cretaceous back-arc basin marine carbonates (east); (2) late-Jurassic to early-Cretaceous calc-alkaline volcanic arc rocks (central); (3) early-Cretaceous Coastal batholith (west) (Marschik, 2001); (4) the Atacama fault zone (west) (Marschik, 2001); and, (5) Paleozoic basement metasedimentary rocks along the western margin (Hitzman, 2000). Many of these geological units are shown in Figure 10.

The Coastal Cordillera formed in the Mesozoic Era as major plutonic complexes were emplaced into broadly contemporaneous arc and intra-arc volcanics and underlying Paleozoic deformed metasediments (Hitzman, 2000). This time period also saw development of the NW-trending brittle Atacama fault system, followed by widespread extension-induced tilting. Sedimentary sequences accumulated immediately east of the Mesozoic arc terrane in a series of interconnected, predominantly marine, back-arc basins. Early- to mid-Jurassic through mid-Cretaceous volcanism and plutonism throughout the Coastal Cordillera and immediately adjoining regions are generally considered to have taken place under variably extensional conditions in response to retreating subduction boundaries (slab roll-back) and steep, Mariana-type subduction (Hitzman, 2000).

### 7.2 Local Geology

The Carrizal Cu-Co-Au Property covers two distinct contact zones between Paleozoic metasedimentary rocks in the central section, and late Jurassic diorites and monzodiorites to the northwest and southeast (Figure 11).

Paleozoic metasedimentary rocks belonging to the Chañaral Epimetamorphic Complex are composed of shales, phyllites and quartz-feldspar schists/gneisses (Minera Stamford, 2000). The sedimentary rocks have a strong NNE-striking shallow foliation dipping ~40° southeast. The intrusives towards the southeast corner of the Carrizal Property, in the Farellón Project area, belong to the Canto del Agua formation and consist of diorite and gabbro hosting many NE-oriented intermediate-mafic dykes. These diorites are known to host extensive veining with copper and gold mineralization (Arevalo and Welkner, 2003). Locally, a small stock-like felsic body, called Pan de Azucar, with lesser satellite dykes, intrudes the diorite. The intrusive relationship between the diorite and metasediments on this south end of the Property always appears to be tectonic (Willsted, 1997).

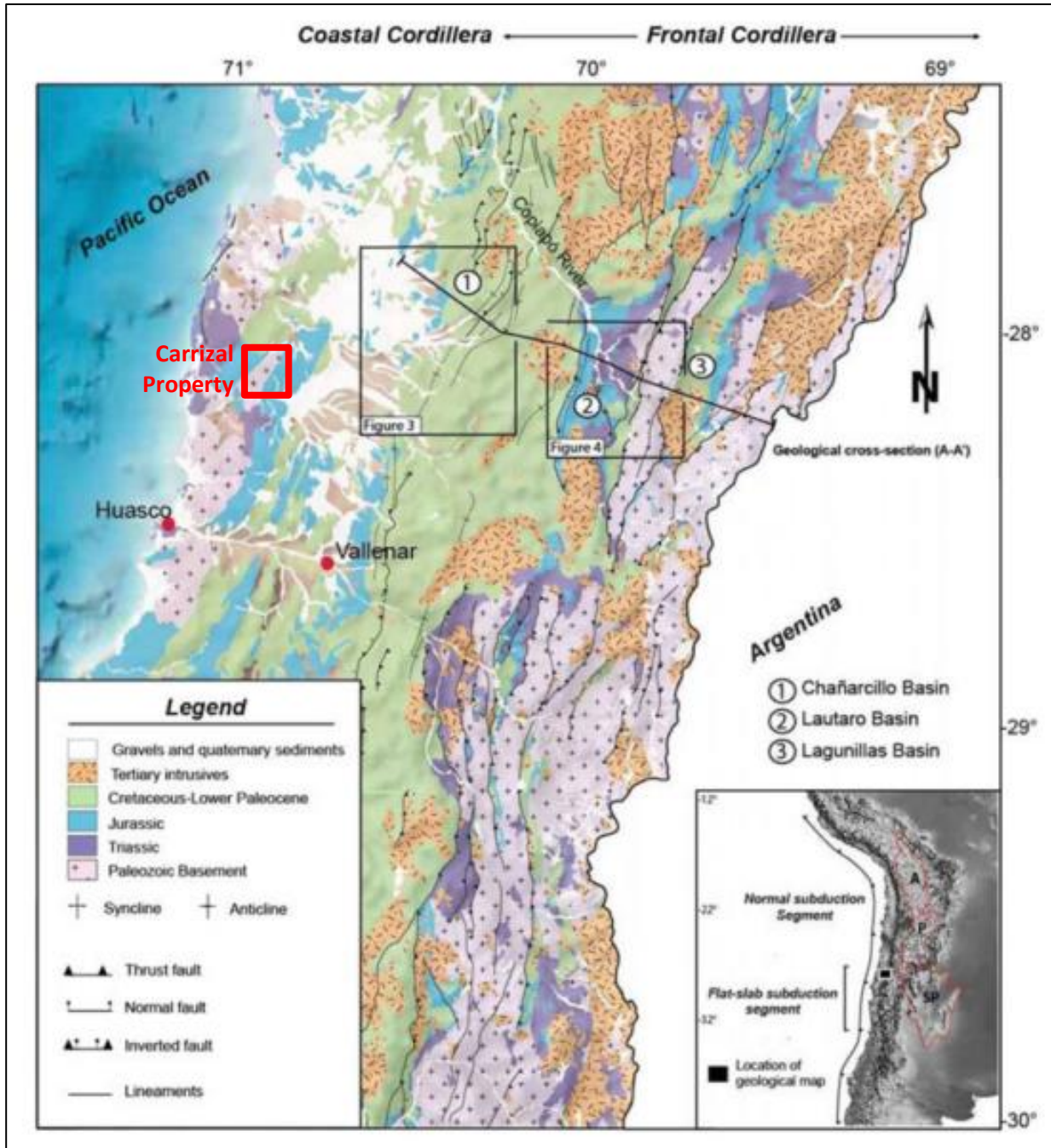


Figure 10 - Generalized geological map of a segment of northern Chile showing the approximate location of the Carrizal Property (outlined in red) (from Martinez et al., 2017).

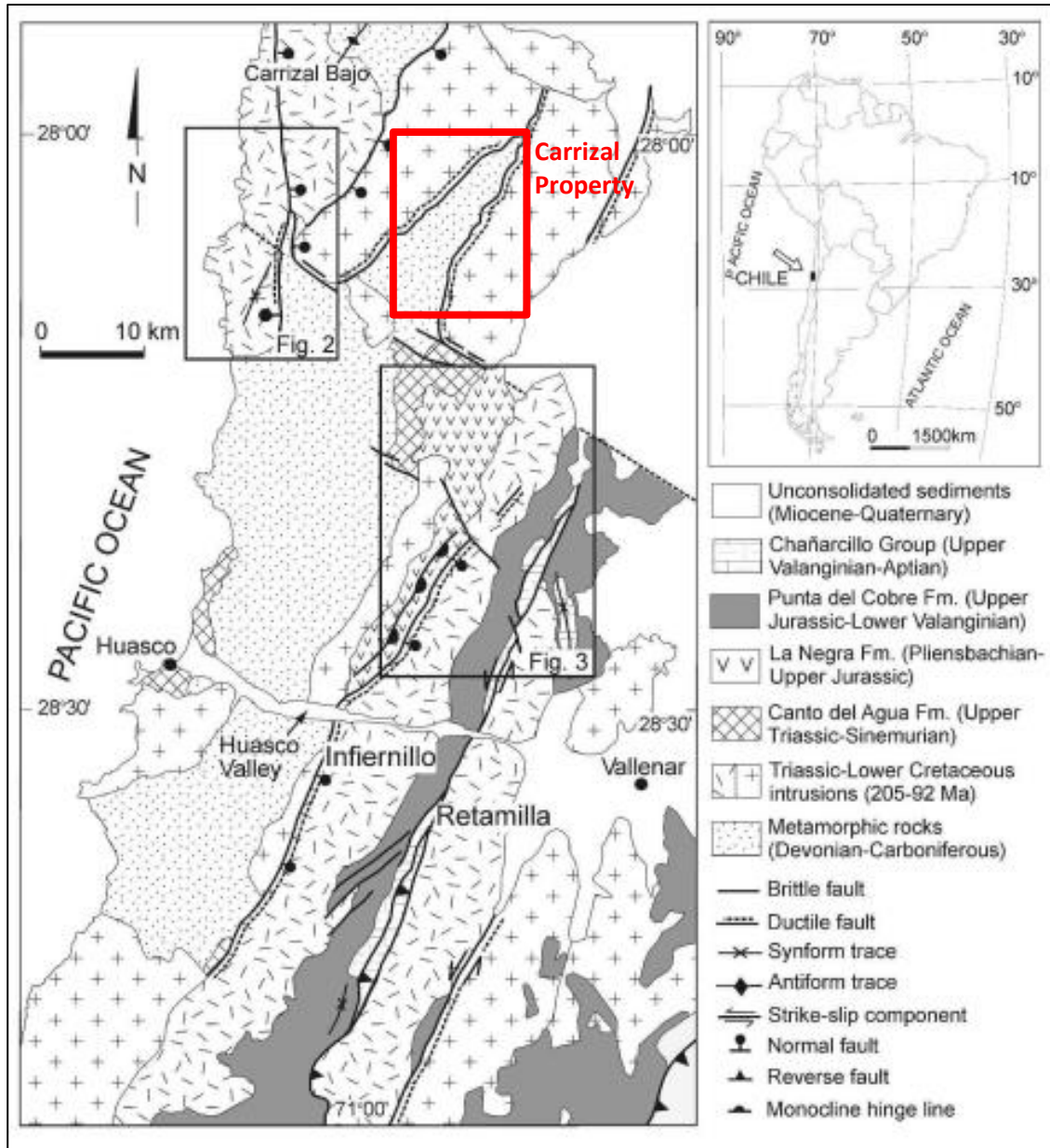


Figure 11 - Local geology surrounding the Carrizal Cu-Co-Au Property (outlined in red) (after Grocott et al., 2009).

### 7.3 Property Geology

The southern contact zone between the metasedimentary rocks and the diorite is a mylonitic shear zone, ranging between 5 m and 15 m in width, striking NNE, and dipping  $\sim 65^\circ$  to the northwest (Figure 12). This shear zone is host to mineralized quartz-calcite veins that splay off to the east into the diorites of the adjacent Carrizal Alto Mine area.

The Perth project area at the northern end of the Carrizal Property, also hosts a significant NS-trending vein swarm (Figure 12). Although these veins pinch and swell, they are generally 2 m wide and have been measured up to 6 m wide. Individual veins can be traced from a few 100 m to greater than 2 km in length. Most of the veins

identified thus far on surface lie within the metasedimentary rocks, however several veins have been traced cross-cutting the northern metasediment-granodiorite contact (Figure 12).

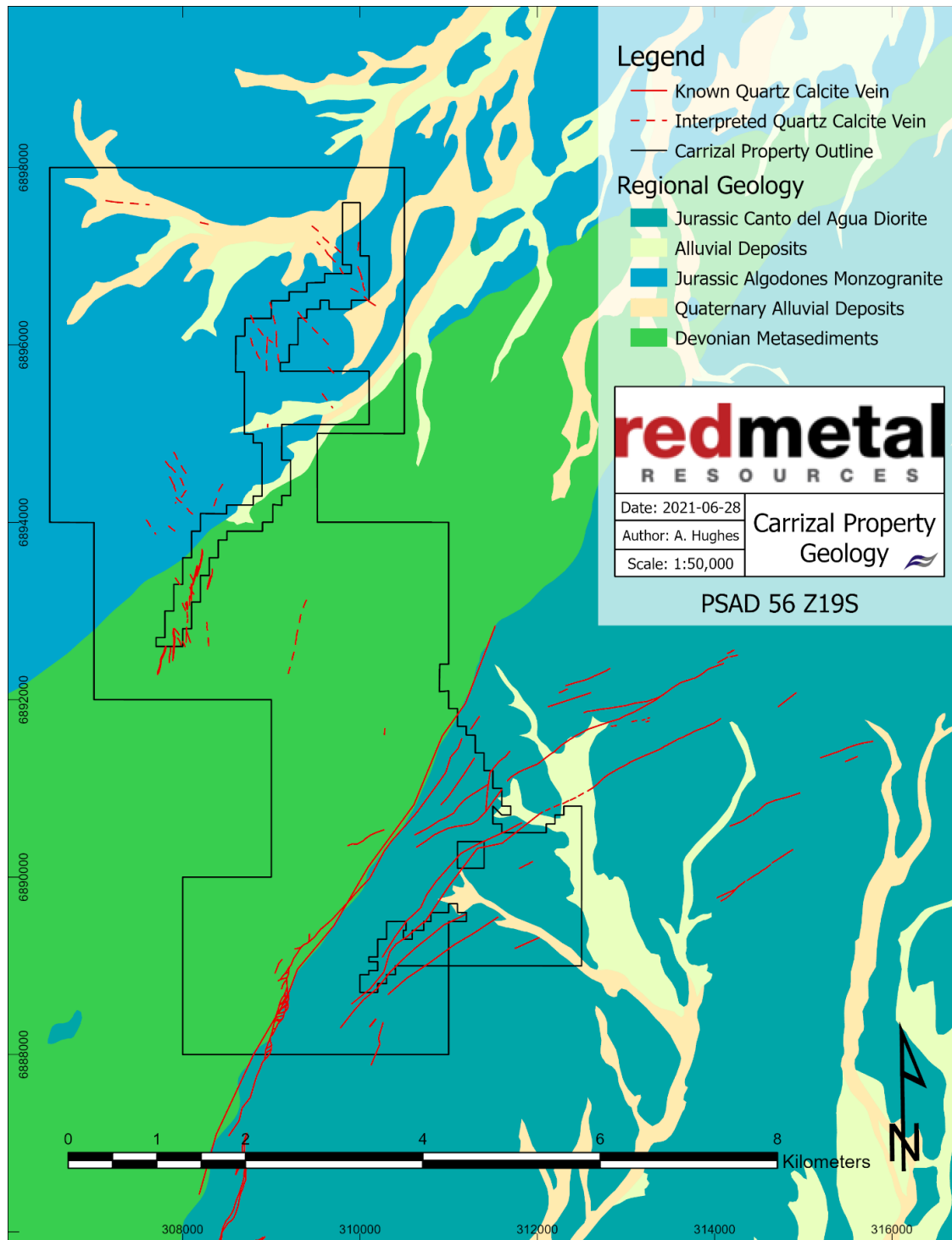


Figure 12 - Property geology of the Carrizal Cu-Co-Au Property, northern Chile (geology after Arevalo and Welkner, 2003; figure provided by Red Metal).

## 7.4 Mineralization

The Carrizal Property occurs within the Central Andean IOCG Province (Sillitoe, 2003; Figure 13). Vein type, plutonic-hosted IOCG deposits such as Carrizal Alto (highlighted in red on Figure 13), and by extension the contiguous Carrizal Cu-Co-Au Property, are characterized by a distinct mineralogy that includes not only copper and gold but also cobalt, nickel, arsenic, molybdenum, and uranium (Sillitoe, 2003; Clark, 1974). All of the IOCG deposits in the region are partially defined by their iron content in the form of either magnetite or hematite (Sillitoe, 2003).

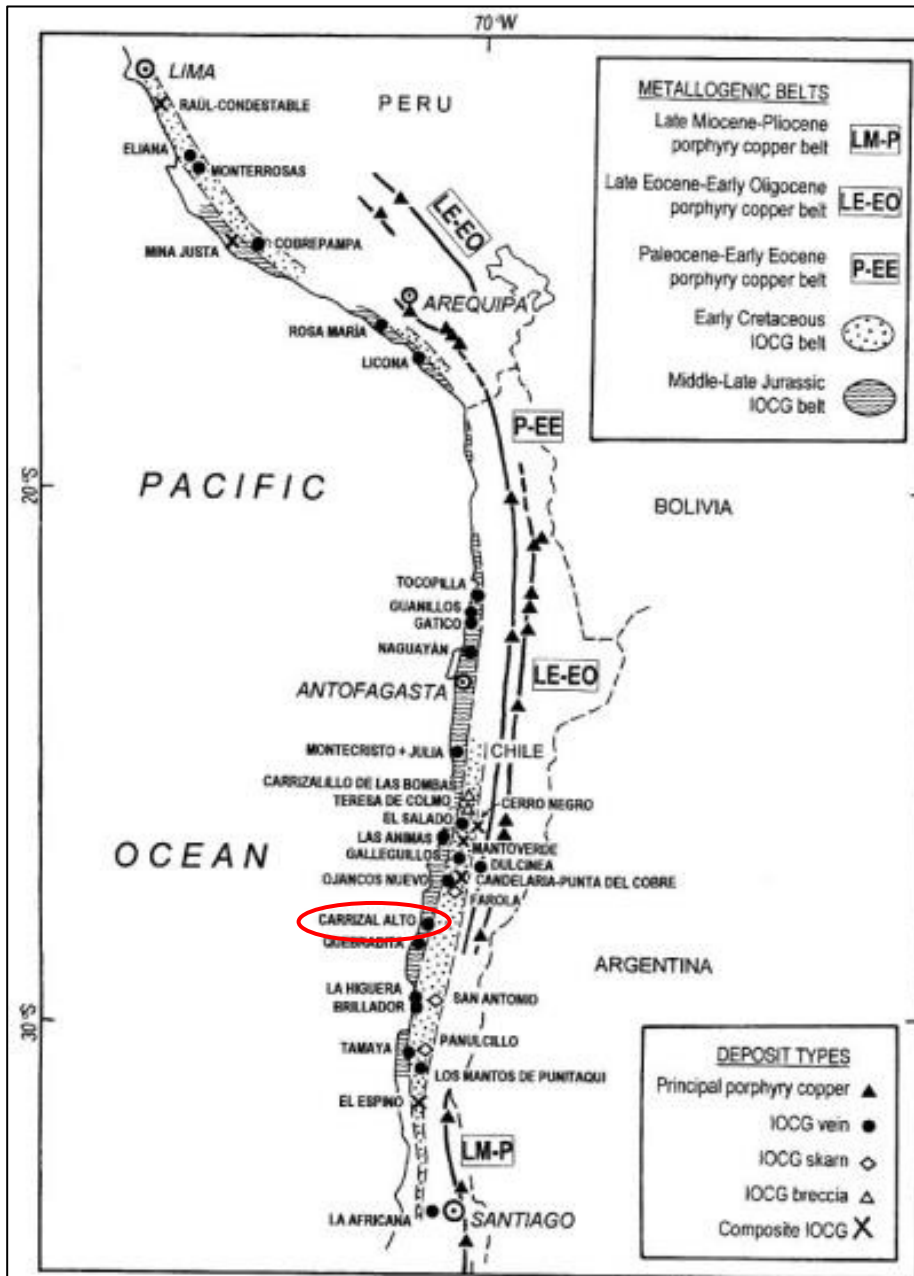


Figure 13 - The Central Andean IOCG Province of northern Chile (Sillitoe, 2003). The Carrizal Alto Mine, directly adjacent to the Carrizal Cu-Co-Au Property, is highlighted (red oval) for reference.

A variety of alteration assemblages has been noted in the Chilean deposits according to whether or not the deposits are hematite or magnetite dominated:

1. Magnetite-rich veins contain appreciable actinolite, biotite and quartz, as well as local apatite, clinopyroxene, garnet, hematite and K-feldspar, and possess narrow alteration haloes containing one or more of actinolite, biotite, albite, K-feldspar, epidote, quartz, chlorite, sericite and scapolite.
2. Hematite-rich veins tend to contain sericite and/or chlorite, with or without K-feldspar or albite, and to possess alteration haloes characterised (Sillitoe, 2003) by these same minerals. Typically, the vein deposits of the coastal Cordillera are chalcopyrite, actinolite and magnetite deposits (Ruiz, 1962).

Carrizal Alto, the property adjacent to and east of Red Metal's Carrizal Cu-Co-Au Property, has historically been known as a significant cobalt deposit (Ruiz, 1962; Clark, 1974) and has returned cobalt grades of up to 0.5% Co in the form of cobaltiferous arsenopyrite (Sillitoe, 2003; Ruiz, 1962), carrollite, and other cobalt sulphides (Clark, 1974).

The Qualified Person has been unable to verify the information on the adjacent property and as such the information disclosed is not necessarily indicative of mineralization on the Property that is the subject of the Report.

Copper mineralization on the Carrizal Cu-Co-Au Property consists of malachite and chrysocolla in the oxide zone and chalcopyrite in the sulphide zone. There is some indication that in the oxide zone some of the copper mineralization is tied up in a goethite-bearing clay matrix (Willsted, 1997; Floyd, 2009).

Alteration associated with the greater shear zone is comprised of actinolite, biotite, sericite, epidote, quartz and carbonate mineralization. The sulphidized quartz-calcite veins occurring within the shear zone can display an intense pyrite-sericite-biotite alteration halo. In places, there is massive siderite and ankerite alteration (Minera Stamford, 2000).



## 8.0 Deposit Types

The main target on the Carrizal Property is vein-style iron oxide-copper gold (“IOCG”) mineralization associated with a shear contact between intrusive diorite and metasedimentary rocks, containing significant amounts of iron oxide, copper, gold and cobalt, distinctive of IOCG deposits in the region (Sillitoe, 2003). IOCG deposits of northern Chile are known to exist in the belt from just south of the town of Vallenar (almost 29°S) to just south of Chañaral (26°S) (Hitzman, 2000). Although this deposit type covers a wide spectrum, the characteristic IOCG deposits of northern Chile have been clearly defined by Sillitoe (2003) as:

“Iron oxide-copper-gold deposits, defined primarily by their elevated magnetite and/or hematite contents, constitute a broad, ill-defined clan related to a variety of tectono-magmatic settings. The youngest and, therefore, most readily understandable IOCG belt is located in the Coastal Cordillera of northern Chile and southern Peru, where it is part of a volcano-plutonic arc of Jurassic through Early Cretaceous age. The arc is characterised by voluminous tholeiitic to calc-alkaline plutonic complexes of gabbro through granodiorite composition and primitive, mantle-derived parentage. Major arc-parallel fault systems developed in response to extension and transtension induced by subduction rollback at the retreating convergent margin. The arc crust was attenuated and subjected to high heat flow. IOCG deposits share the arc with massive magnetite deposits, the copper-deficient end-members of the IOCG clan, as well as with Manto-type copper and small porphyry copper deposits to create a distinctive metallogenic signature.”

“The IOCG deposits display close relations to the plutonic complexes and broadly coeval fault systems. Based on deposit morphology and dictated in part by lithological and structural parameters, they can be separated into several styles: veins, hydrothermal breccias, replacement mantos, calcic skarns and composite deposits that combine all or many of the preceding types. **The vein deposits tend to be hosted by intrusive rocks, especially equigranular gabbrodiorite and diorite**, whereas the larger, composite deposits (*e.g.*, Candelaria-Punta del Cobre) occur within volcano-sedimentary sequences up to 2 km from pluton contacts and in intimate association with major orogen-parallel fault systems. Structurally localised IOCG deposits normally share faults and fractures with pre-mineral mafic dykes, many of dioritic composition, thereby further emphasising the close connection with mafic magmatism. The deposits formed in association with sodic, calcic and potassic alteration, either alone or in some combination, reveal evidence of an upward and outward zonation from magnetite-actinolite-apatite to specular hematite-chlorite-sericite and possess Cu-Co-Au-Ni-As-Mo-U-(LREE) (light rare earth element) signature reminiscent of some calcic iron skarns around diorite intrusions. Scant observations suggest that massive calcite veins and, at shallower paleodepths, extensive zones of barren pyritic feldspar-destructive alteration may be indicators of concealed IOCG deposits.”

The Carrizal Property lies well within the Chilean IOCG belt and fits many of the tectonic and mineralogical definitions outlined by Sillitoe (2003). The Property is considered to be a vein-style IOCG deposit with significant amounts of iron oxide, copper, gold and cobalt distinctive of IOCG deposits in the region.

The main targets on the Carrizal Property are the two mineralized shear contact zones between the metasediments and diorites (Farellón Project area) and monzodiorites (Perth Project area). The shear zone has been interpreted to host several parallel, mineralized lenses.

## 9.0 Exploration

Red Metal began their exploration programs on the Property in 2009 with a 5 hole RC drilling program, followed by programs in 2011 (11 RC/core holes), and in 2013 (2 core holes) (see Section 10), focusing on the Farellón Project area. Red Metal completed surface sampling and mapping programs between 2011 and 2014, as described below. The last work completed on the Property by the Issuer was in 2014.

### 9.1 Farellon Project Area Mapping and Sampling

A mapping and sampling program was conducted on the Farellón Property in 2012, covering the contact zone between the metasediments and the diorite. The main focus of this program was to ascertain the nature of the veins occurring within each major rock type, and to determine whether any major differences existed in vein structure, mineralogy, alteration, size, and geochemical composition. Over 1,270 mapping sites were visited, with information such as major rock type and mineralization recorded. Of these sites, 56 samples were selected and submitted for geochemical analysis (Figures 14, 15 and 16). The range of total copper achieved by this sampling program was between 1.17% and 5.78% Cu, with between 50% and 99% of that representing copper sulphide mineralization. These samples also contained from 19-2465 ppm Co, and from 0.02-2.87 g/t Au.

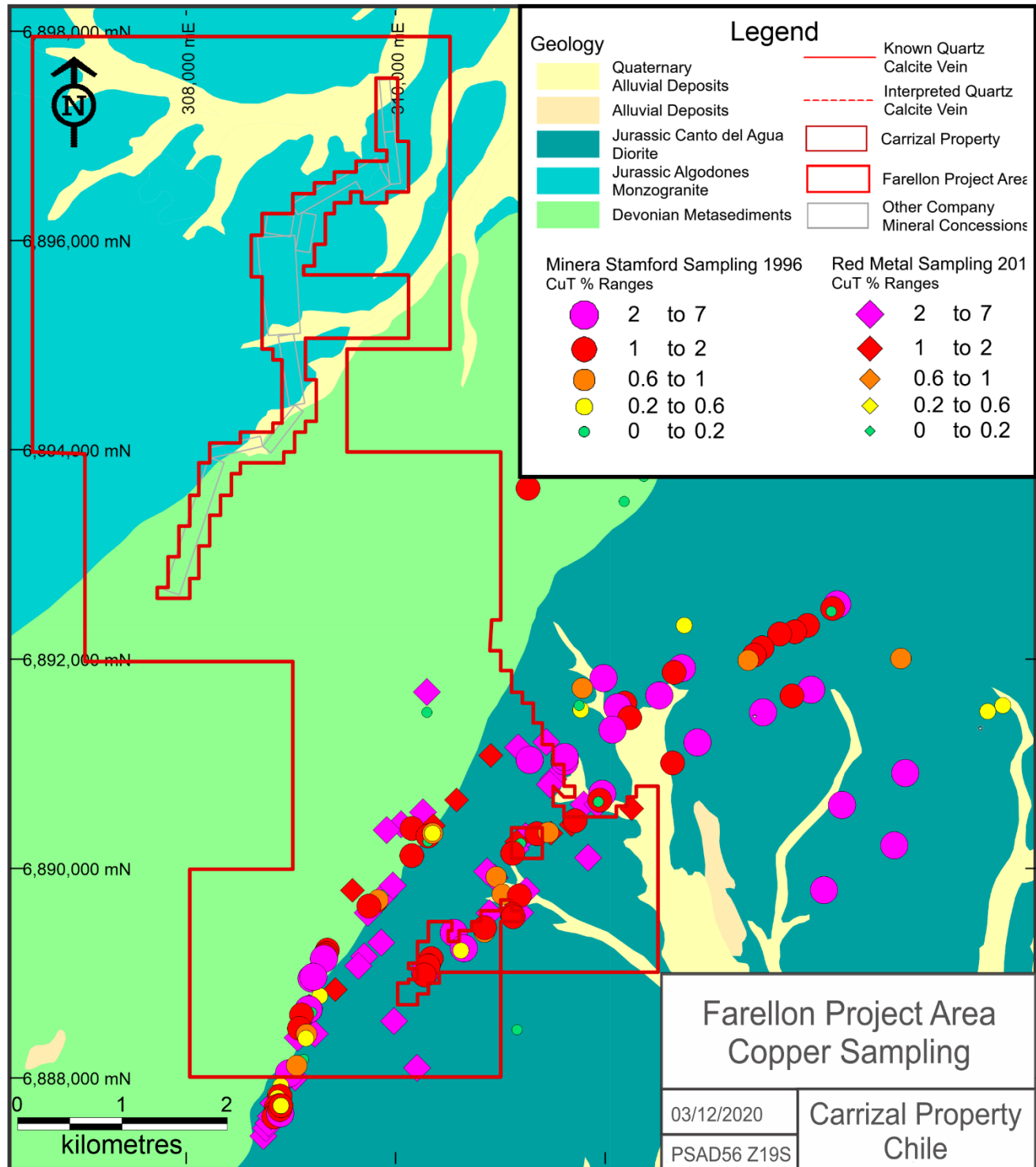


Figure 14 - Results of sampling programs in the Farellón Project area, showing copper concentrations (Geology based on Arevalo and Welkner, 2003; figure provided by Red Metal).

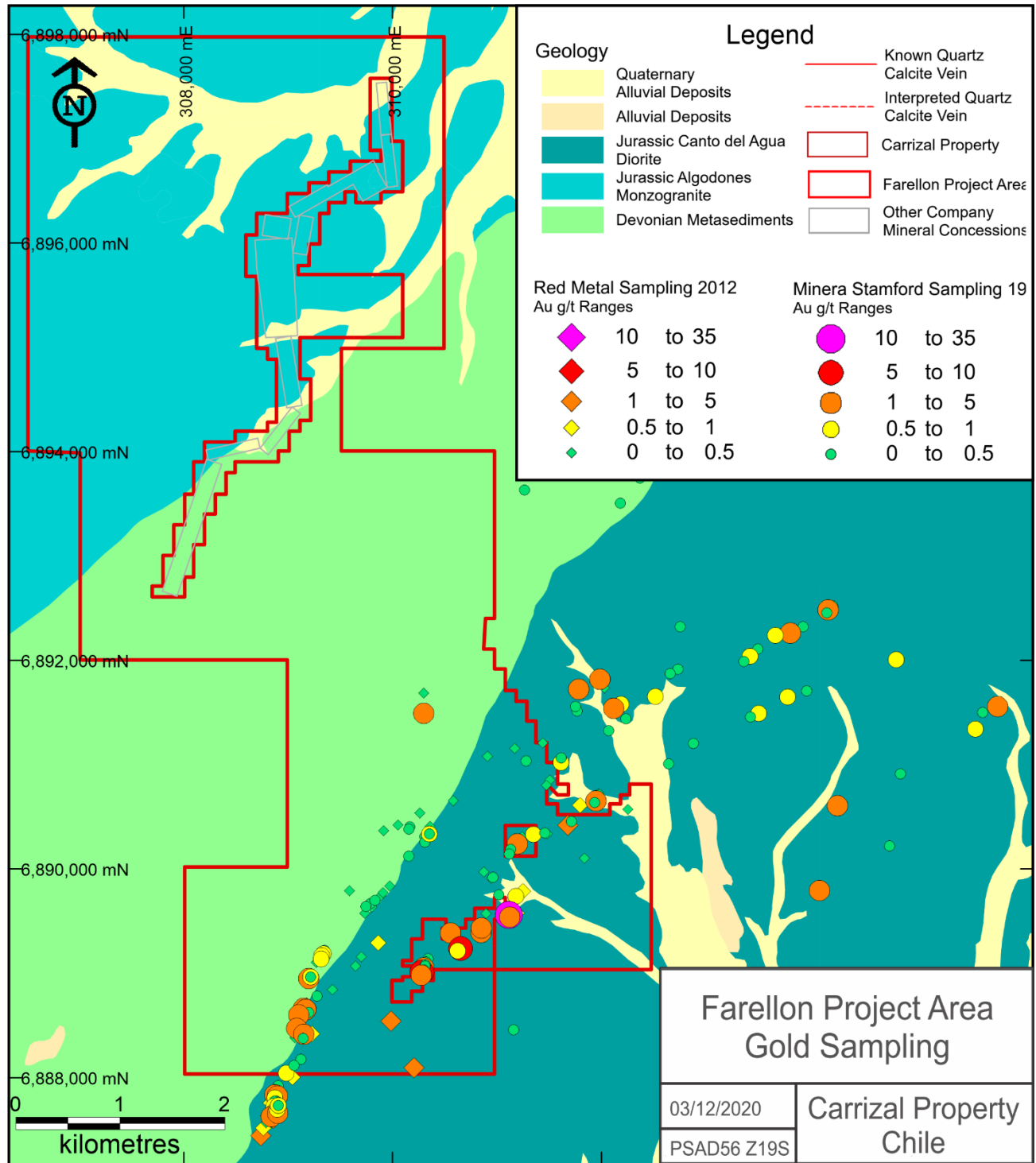


Figure 15 - Results of sampling programs in the Farellón Project area, showing gold concentrations (Geology based on Arevalo and Welkner, 2003; figure provided by Red Metal).

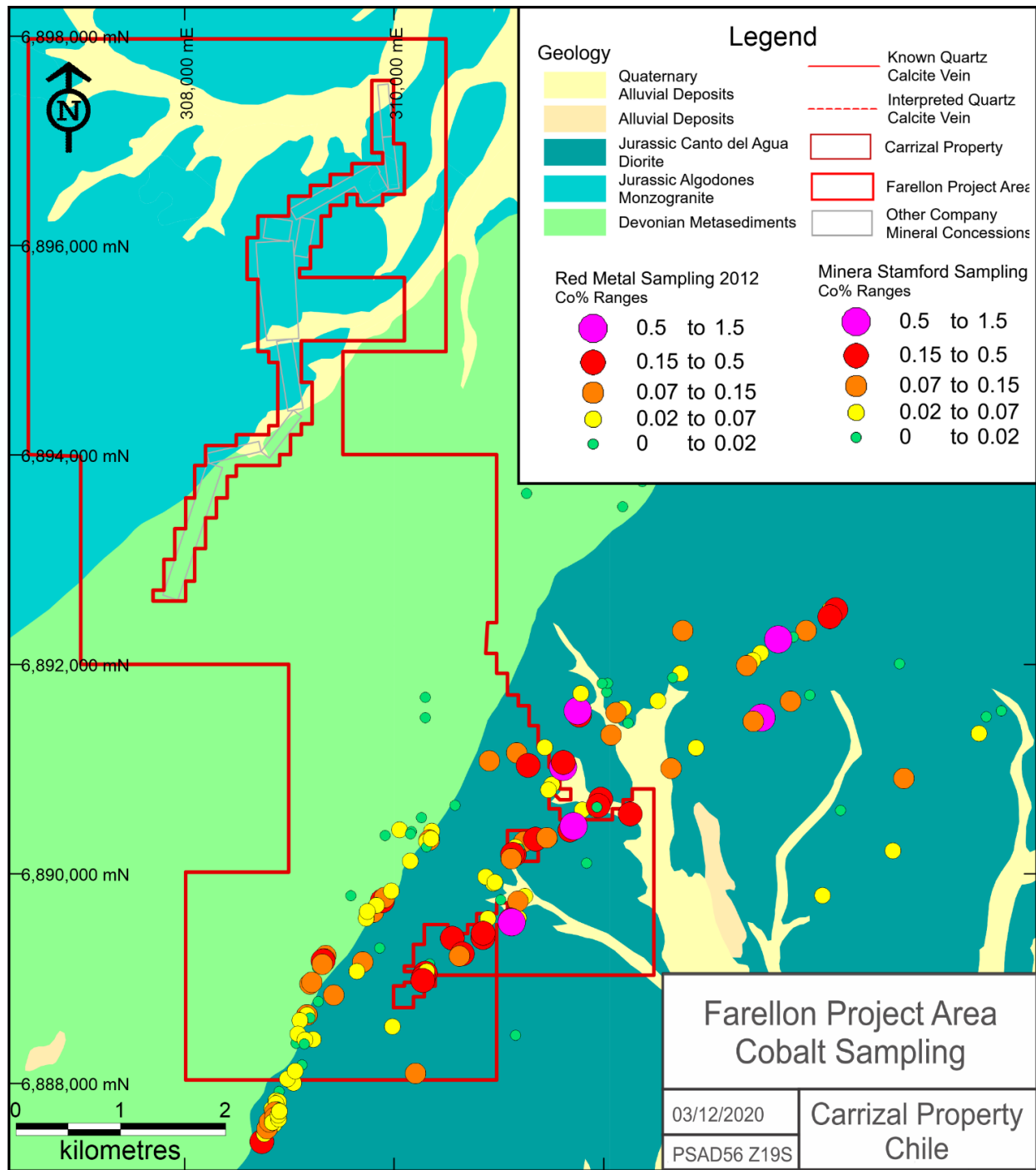


Figure 16 - Results of sampling programs in the Farellón Project area, showing cobalt concentrations (Geology based on Arevalo and Welkner, 2003; figure provided by Red Metal).

## 9.2 Perth Project Area Mapping and Sampling

In 2011, Red Metal conducted a mapping and sampling program focused on identifying new veins outcropping at surface and determining strike length of veins (Figure 17). Through the program numerous new veins were identified and 129 samples were collected on the Perth Project, and analyzed for total copper, soluble copper, gold, and cobalt. Results show total copper ranging between 0.01% to 11.36% Cu (Figure 18), gold ranging between 0.01 g/t to 29.93 g/t Au (Figure 19), and cobalt ranging between 2 ppm to 6933 ppm Co (Figure 20).

In 2013 and 2014, Red Metal optioned the Perth Project area to Minería Activa, a Chilean private mining company. Minería Activa conducted a surface sampling, stripping and channel sampling program followed by a two-phase drilling program within the Perth Project area.

The surface sampling and stripping program consisted of collecting 762 samples, a combination of grab and chip samples, and analysing them for total copper, soluble copper, gold, and cobalt. Results are included in Figures 18, 19, and 20, for copper, gold, and cobalt, respectively, illustrating a range of copper total results between 0.001% and 7.16% Cu, between 0.005 g/t and 16.5 g/t Au, and between 0.001% and 0.437% Co.

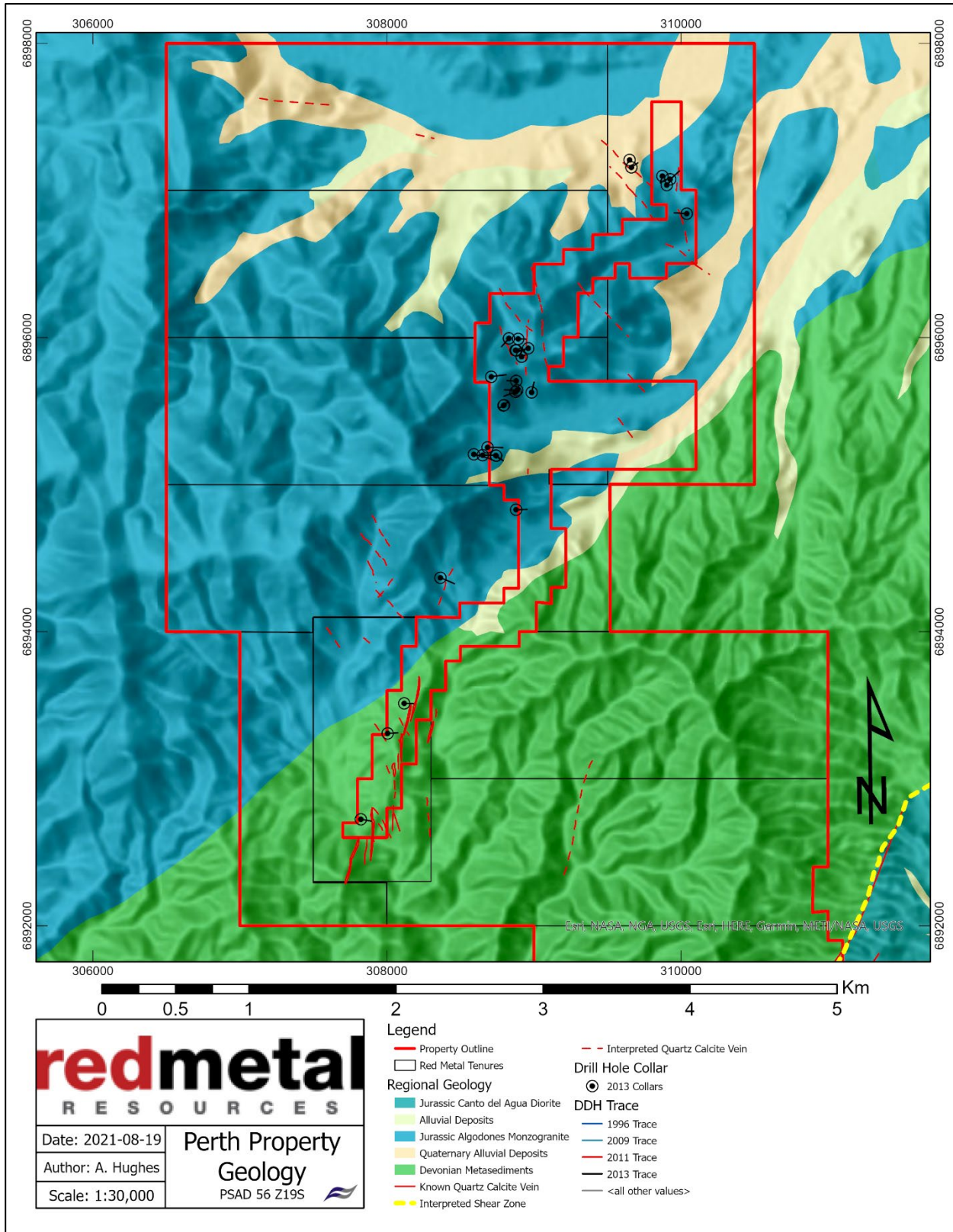


Figure 17 - Perth Geology and Veining (Geology based on Arevalo and Welkner, 2003; figure provided by Red Metal).

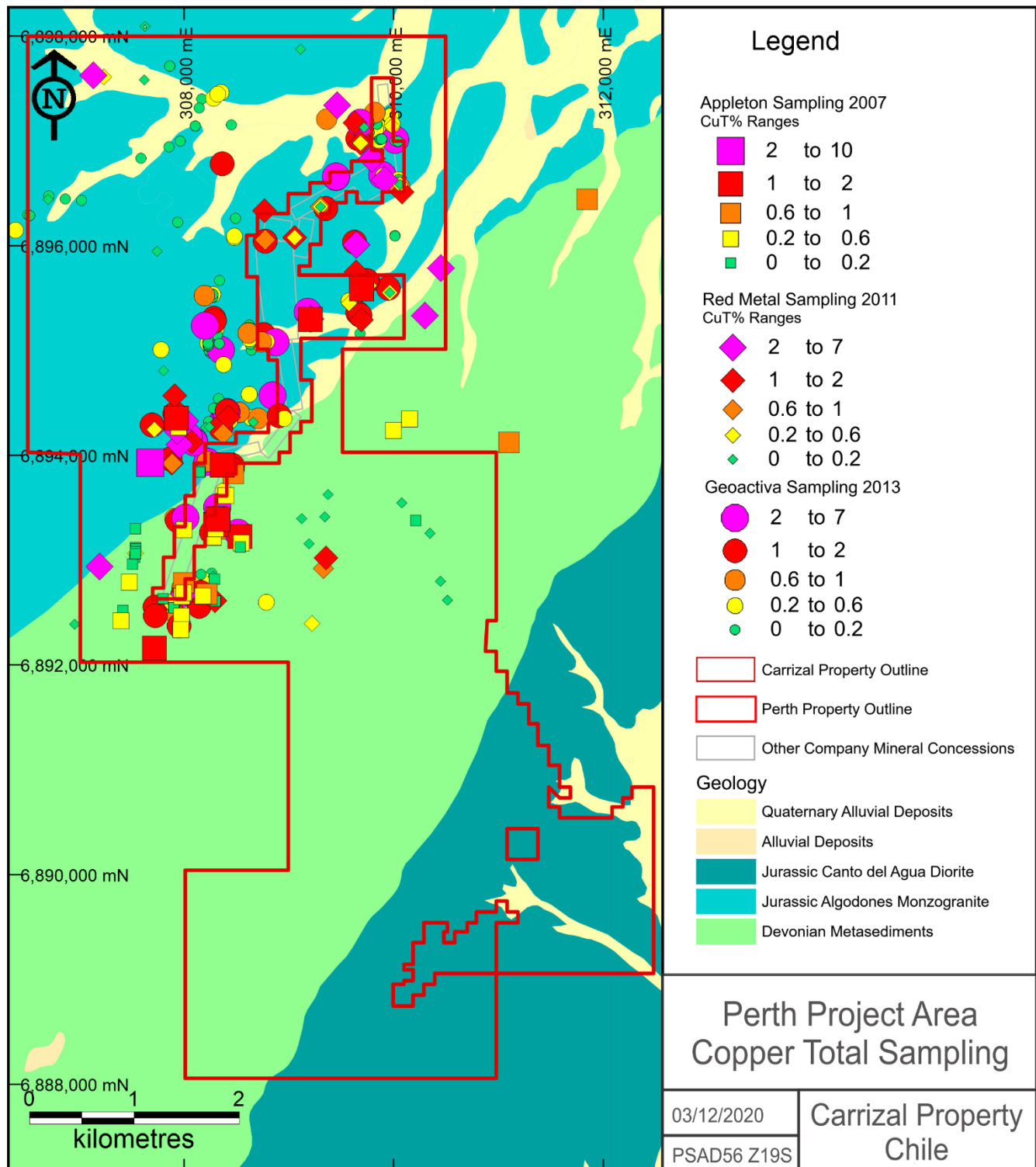


Figure 18 - Results of sampling programs in the Perth Project area, showing copper concentrations (Geology based on Arevalo and Welkner, 2003; figure provided by Red Metal).



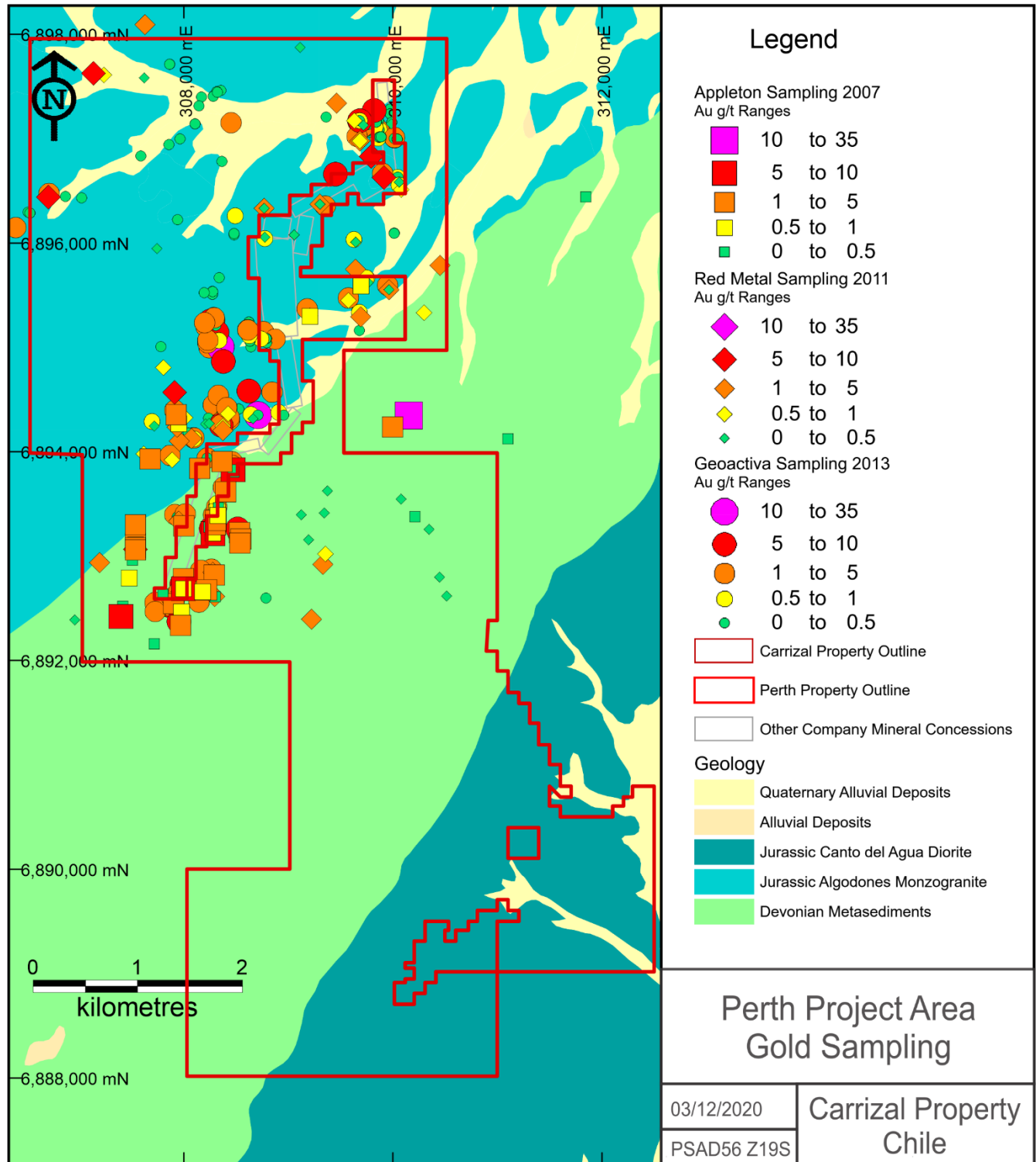


Figure 19 - Results of sampling programs in the Perth Project area, showing gold concentrations (Geology based on Arevalo and Welkner, 2003; figure provided by Red Metal).

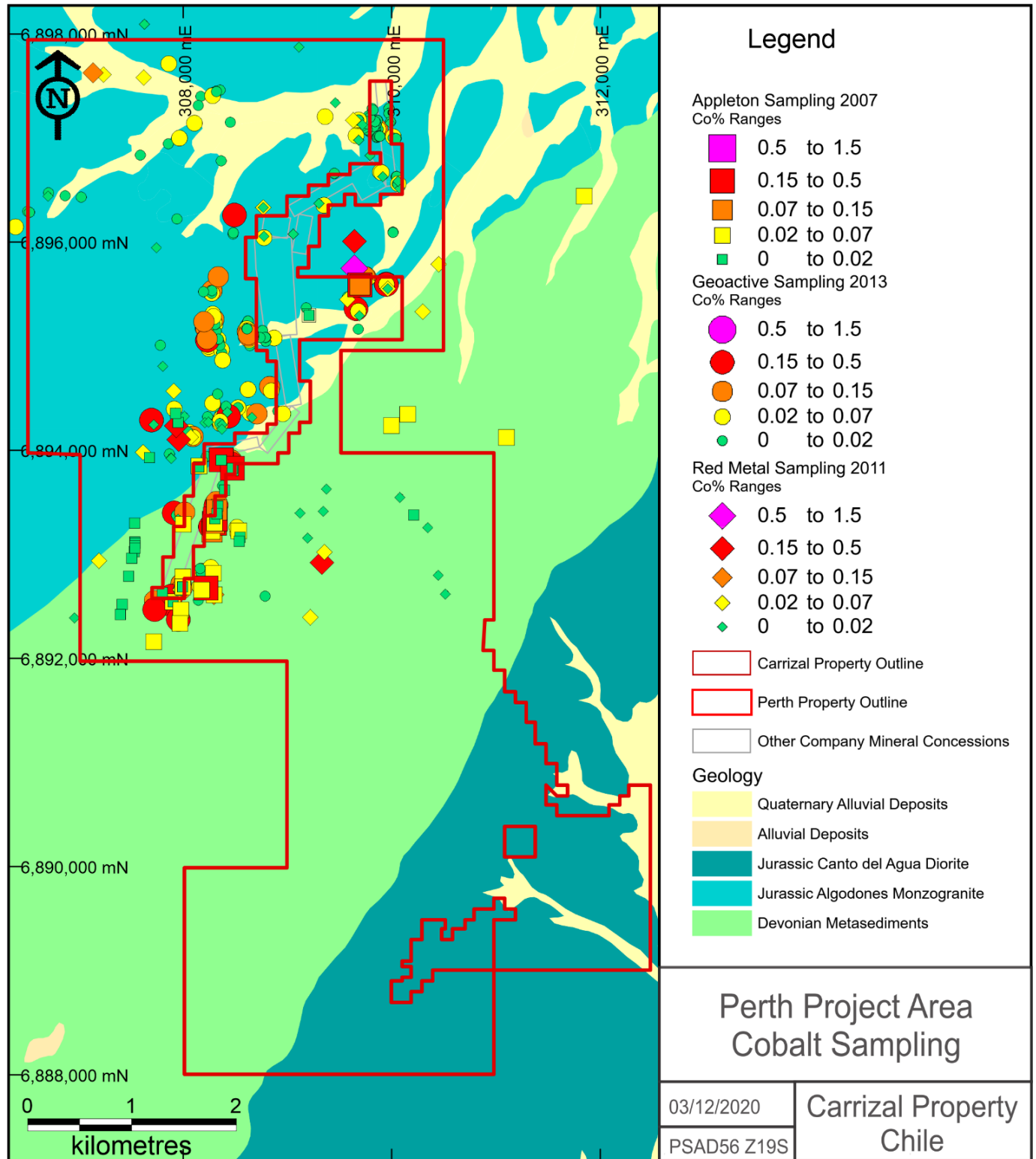


Figure 20 - Results of sampling programs in the Perth Project area, showing cobalt concentrations (Geology based on Arevalo and Welkner, 2003; figure provided by Red Metal).

## 10.0 Drilling

### 10.1 Farellon Project Area Drilling 2009, 2011 & 2013

Red Metal Resources Ltd. acquired the rights to the Farellón Property on April 25, 2008, upon its Chilean subsidiary exercising the option to buy the Project from Minera Farellón. Red Metal completed five RC drill holes in 2009, totalling 725 m and using a Tramrock Dx40 RC rig (Table 8). This larger rig necessitated widening existing roads rehabilitating access to old drill pads. The drilling program was designed to twin some of the Minera Stamford 1996-1997 drill holes for data verification, as no geological information was recovered from the Minera Stamford drilling program and assays were not accompanied by laboratory certificates. One drill hole tested 100 m below the known mineralization, and another hole tested continuity of mineralization between previously drilled sections.

Table 8 - Summary of RC drill hole parameters, Red Metal's 2009 drilling program, Farellón Project.

Drill Hole Number	UTM Coordinates			Azimuth (°)	Dip (°)	Depth (m)	Comments
	Easting (m)	Northern (m)	Elevation (m)				
FAR-09-A	309086	6888591	550	131	-65	125	twinning FAR-96-22
FAR-09-B	309125	6888709	560	95	-65	100	twinning FAR-96-09
FAR-09-C	309127	6888922	555	105	-65	145	testing continuity
FAR-09-D	308955	6888696	539	95	-65	287	testing depth extent of
FAR-09-E	309133	6888645	551	Vertical	-90	68	twinning FAR-96-21
<b>Total:</b>						<b>725</b>	

Table provided by Red Metal

Collar locations and azimuths for the 2009 drilling were surveyed using a total station surveying tool. Each drill hole had approximately 1.5 m of blue PVC piping added to it as a surface pre-collar which was cemented into place to permanently denote the drill hole location. Downhole surveys were completed on all drill holes from the 2009 program and on six drill holes from the 1996-1997 Minera Stamford program (holes 9, 14, 20, 21, 22, and 23). Surveying of all historic drill holes surrounding the current drilling was attempted, but some of the holes were caved and the survey tool was unable to be lowered into the hole.

Significant intervals calculated from the RC drilling program by Red Metal are provided in Table 9. Intervals are reported as core lengths, as the true width of the mineralized zones have not been determined.

Table 9 - Summary of significant intercepts from Red Metal's 2009 RC drilling program, Farellón Project.

Drill Hole Number	Assay Interval (m)			Assay Grade			
	From (m)	To (m)	Core Length (m)	Gold (g/t)	Copper (%)	Cobalt (%)	
FAR-09-A		32	37	5	0.59	1.3	0.02
	including	97	106	9	0.44	1.63	0.04
		103	106	3	0.48	2.49	0.07
FAR-09-B		56	96	40	0.27	0.55	0.02
	including	60	63	7	0.46	1.42	0.04
		75	87	12	0.71	1.28	0.03

Drill Hole Number	Assay Interval (m)			Assay Grade			
		From (m)	To (m)	Core Length (m)	Gold (g/t)	Copper (%)	Cobalt (%)
FAR-09-C		77	82	5	4.16	2.57	0.05
FAR-09-D		95	134	39	0.11	0.58	0.01
	including	95	103	8	0.33	2.02	0.02
FAR-09-E		25	30	5	0.54	1.35	0.02
		65	68	3	0.58	1.46	0.06

Table provided by Red Metal

Results from the 2009 drilling confirmed the general location and tenor of the mineralization determined during the 1996-1997 Minera Stamford drilling program, however the 2009 program was not able to reproduce the historical gold assays within holes FAR-09-A and FAR-09-E, designed to duplicate historical holes FAR-96-22 and FAR-96-21, respectively. In the case of FAR-09-E, the disparity between the historical 1996-1997 and 2009 assays was also found with respect to copper. All drill holes during the 2009 drilling program intersected oxide facies mineralization with only minor amounts of sulphide (*e.g.*, hole FAR-09-D).

In 2011, Red Metal completed a second drilling program, consisting of nine RC holes and two combined RC/diamond drill (core) holes (Table 10). Chips and core recovered consisted of 2,050 m of RC drilled, and 183 m of diamond (core), for a total of 2,233 metres. The program was designed to expand the known mineralized zone down-dip to 200 m vertical depth, extend the known mineralized strike length of the overall deposit to 700 m, and infill large gaps with holes drilled at 75 m spacing. Two of the drill holes finished with diamond drill core, providing information to better define the structural controls on mineralization.

Collar locations and azimuths for the 2011 drilling were surveyed using a hand held GPS. Red Metal used a magnetic REFLEX EZ-TRAC instrument to complete downhole surveys using a digital remote gyroscope. Downhole surveys were completed on all 11 drill holes from the 2011 program every 50-100 m down-hole, so most drill holes had at least three readings taken along with the one at the surface. Due to the high magnetic susceptibility of the subsurface, the azimuth reading, and the magnetic readout gave inaccurate results. Therefore only the down-hole dip could be recorded with any level of confidence. The significant assays provided in Table 11 are reported as core lengths as the true width of the mineralized zone was not established.

Table 10 - Survey information from Red Metal's 2011 combined RC/diamond drilling program.

Drill Hole Number	UTM Coordinates (PSAD 56)			Azimuth (°)	Dip (°)	Depth (m)	Comments
	Easting (m)	Northern (m)	Elevation (masl)				
FA-11-001	309298	6889226	499	130	-65	101	
FA-11-002	309180	6889140	508	130	-65	228	
FA-11-003	308992	6888677	517	130	-60	200	
FA-11-004	309095	6888808	513	130	-65	200	
FA-11-005	309041	6888760	497	130	-60	143	Abandoned at 143 m
FA-11-006	309113	6888870	556	130	-80	200	
FA-11-007	309113	6888870	556	130	-60	162	
FA-11-008	309104	6888984	531	130	-65	200	
FA-11-009	308955	6888710	536	130	-65	247	Diamond 200-247 m

Drill Hole Number	UTM Coordinates (PSAD 56)			Azimuth (°)	Dip (°)	Depth (m)	Comments
	Easting (m)	Northern (m)	Elevation (masl)				
FA-11-010	309007	6888852	528	130	-60	300	Diamond 164-300 m
FA-11-011	309031	6888950	541	130	-65	252	
				<b>Total:</b>		<b>2,233</b>	

Table provided by Red Metal

Table 11 - Significant intercepts from Red Metal's 2011 drilling program on the Farellón Project.

Drill Hole Number	Assay Interval (m)				Assay Grade		
		From (m)	To (m)	Core Length (m)	Gold (ppm)	Copper (%)	Cobalt (%)
FA-11-001		36	49	13	0.35	2.51	0.06
	including	36	44	8	0.53	3.95	0.09
FA-11-002	Zone faulted off, no significant intercepts						
FA-11-003		150	155	5	0.28	0.4	0.03
FA-11-004		141	145	4	0.01	0.73	0.01
FA-11-005		124	133	9	0.26	0.84	0.02
	Hole lost in mineralization						
FA-11-006		80	112	32	0.99	1.35	0.02
FA-11-007		64	70	6	0.7	0.66	0.07
FA-11-008		98	102	4	0.26	0.85	0.01
FA-11-009		202	211.55	9.55	0.42	0.95	0.05
FA-11-010		179.13	183	3.87	0.39	0.5	0.05
FA-11-011		54	56	2	0.48	0.97	0.03

Table provided by Red Metal

Drilling returned copper results as high as 8.86% Cu, with 0.80 g/t Au over 1.0 m (FA-11-001), and 5.35 g/t Au, 4.77% Cu, and 0.024% Co over a 2.0 m interval (FA-11-006). There was evidence of pinching and swelling in the mineralized vein structures, as significant intercepts ranging in width from 2.0 m to 32.0 metres. Ten of the 11 drill holes contained significant intercepts (see Table 11). Drill hole FA-11-002 did not intersect the interpreted mineralized zone, likely due to a misinterpretation of localized fault off-set of the mineralized vein. Selected drill hole sections from the 2011 drilling program are presented in Figures 21 through 28, all provided by Red Metal.

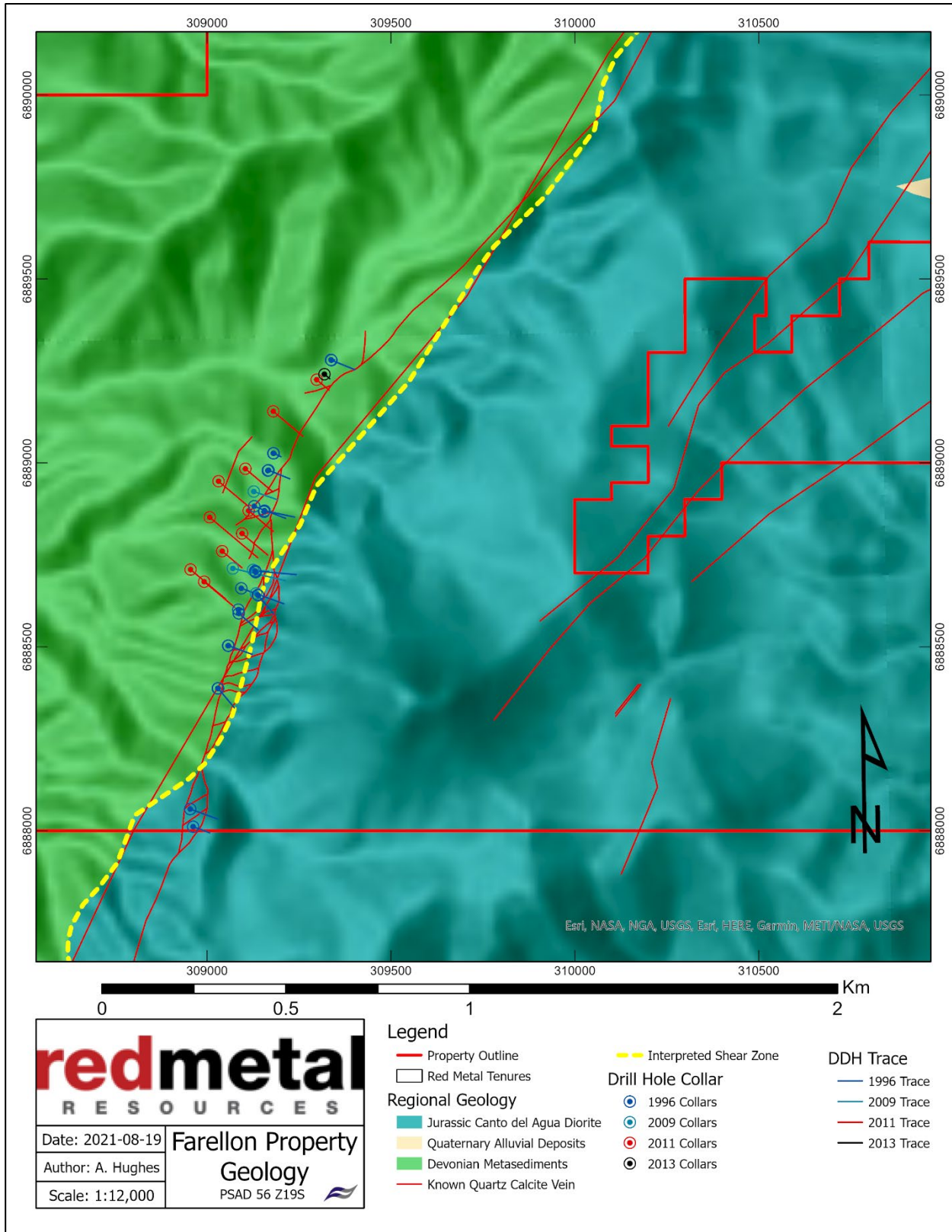


Figure 21 - Farellon Drill Collar Locations (figure provided by Red Metal).

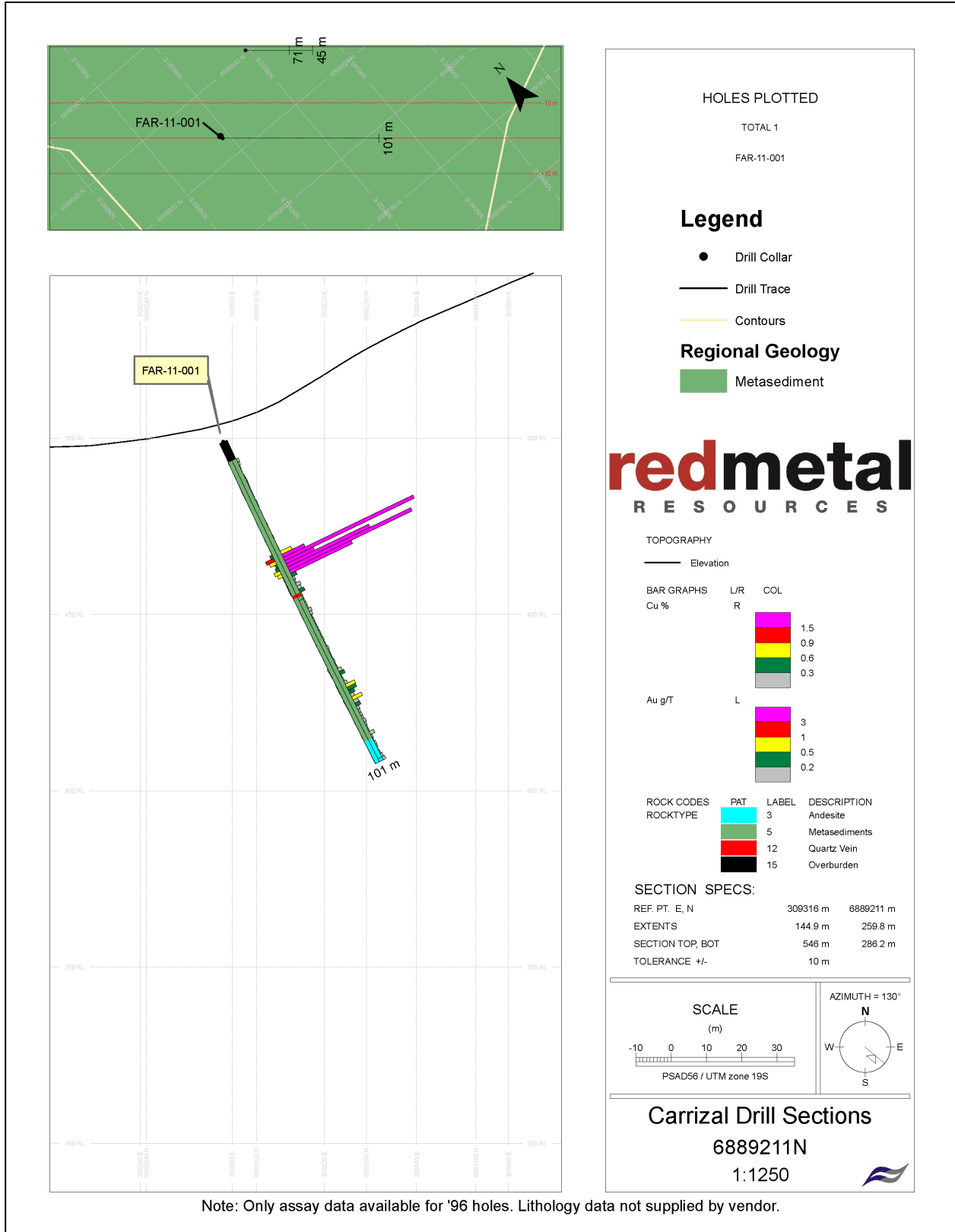


Figure 22 - Drill hole section for FA-11-001 (figure provided by Red Metal).

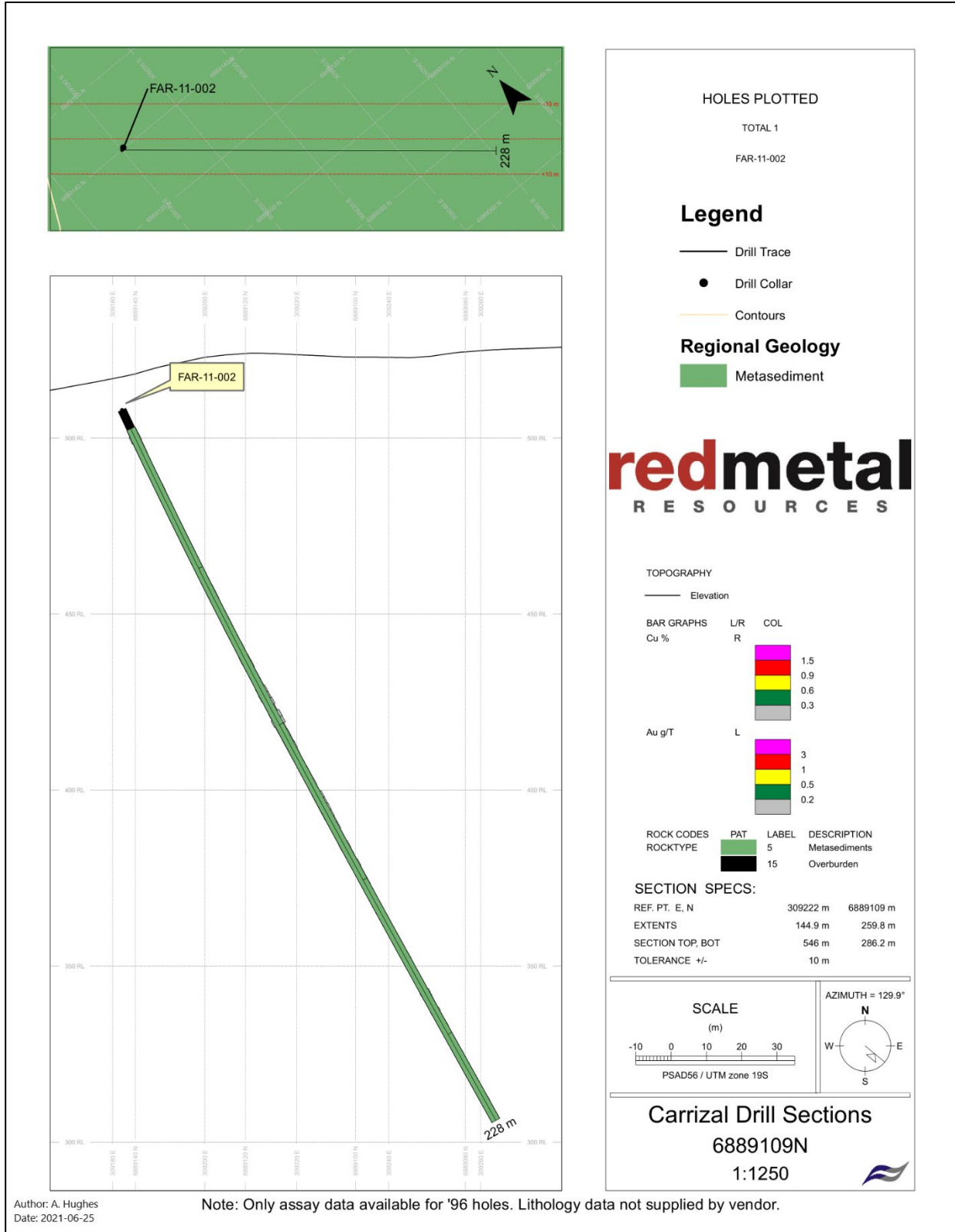


Figure 23 - Drill section for FA-11-002 (figure provided by Red Metal) .



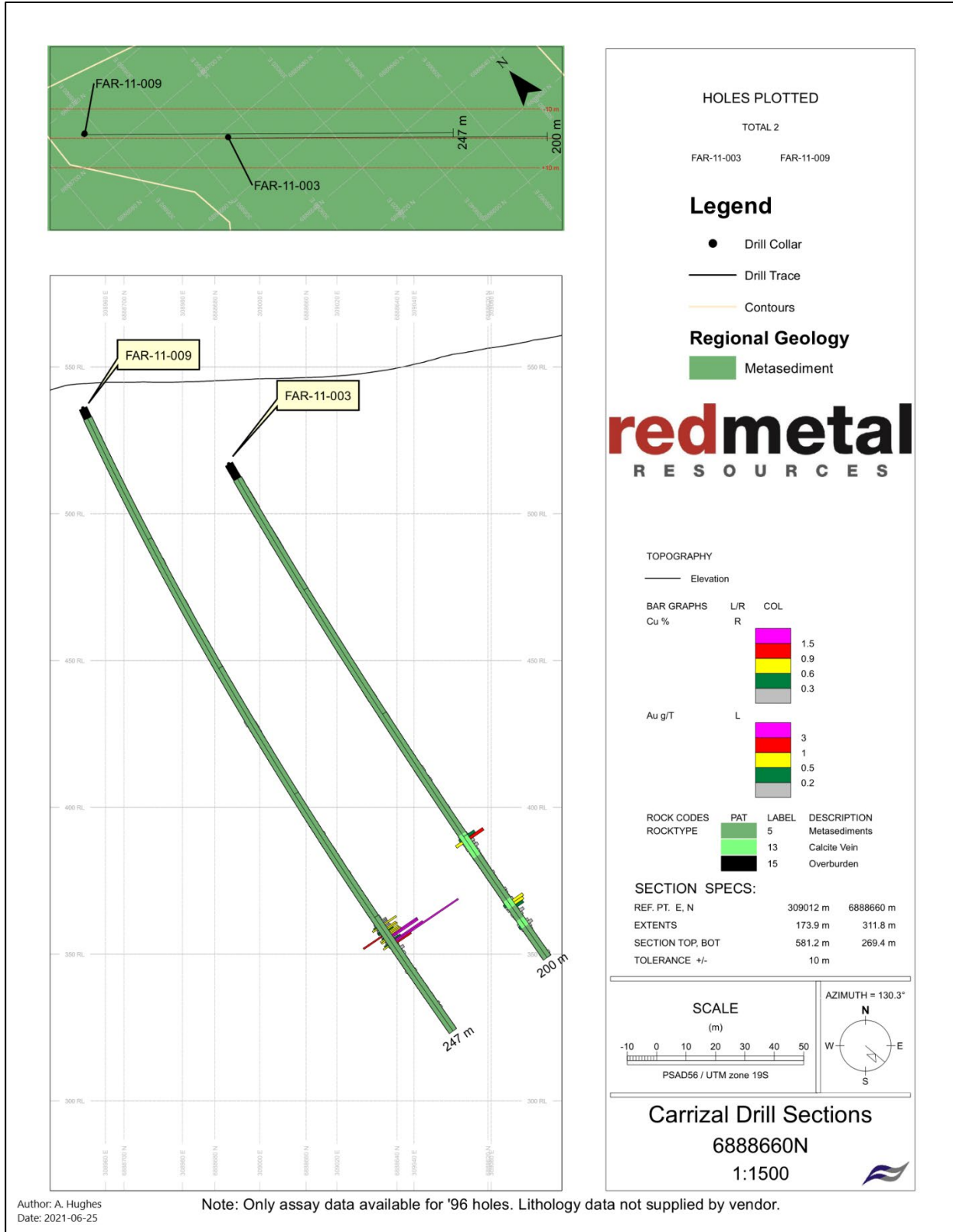


Figure 24 – Drill Section FA-11-003 and -009 (figure provided by Red Metal)

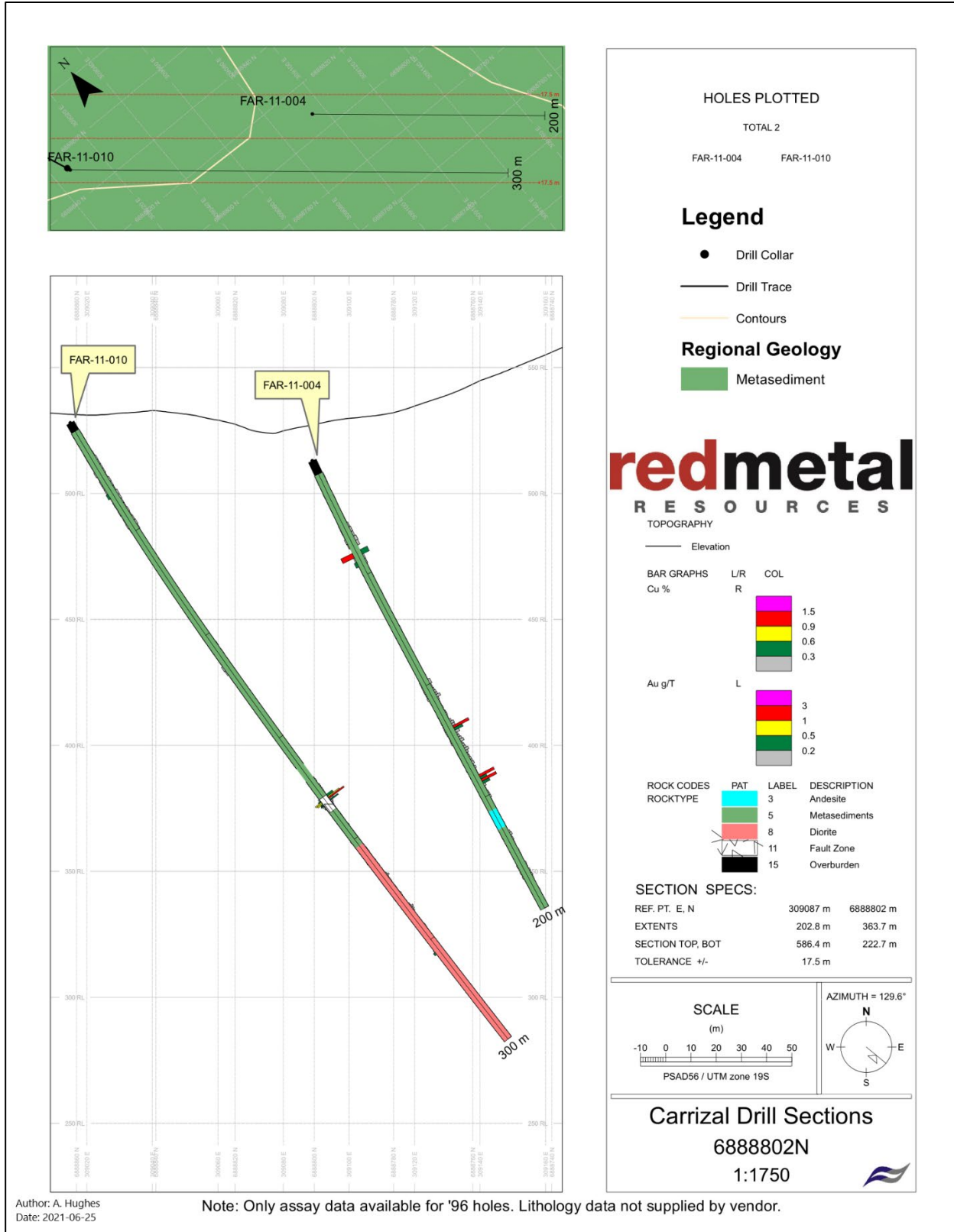


Figure 25 - Drill hole section for FA-11-004 and -010 (figure provided by Red Metal)

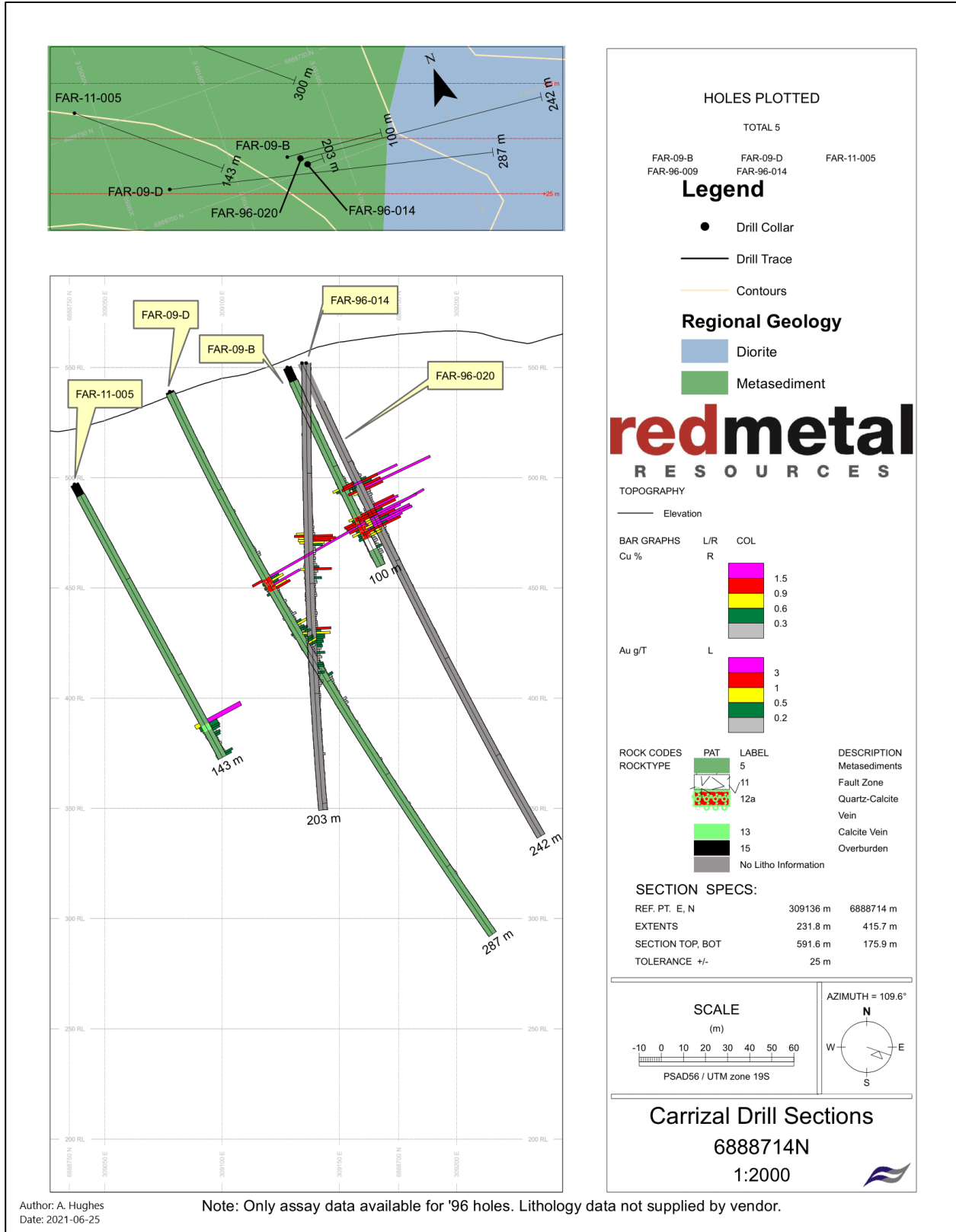


Figure 26 - Drill hole section for FA-11-005 and previous holes (figure provided by Red Metal) .

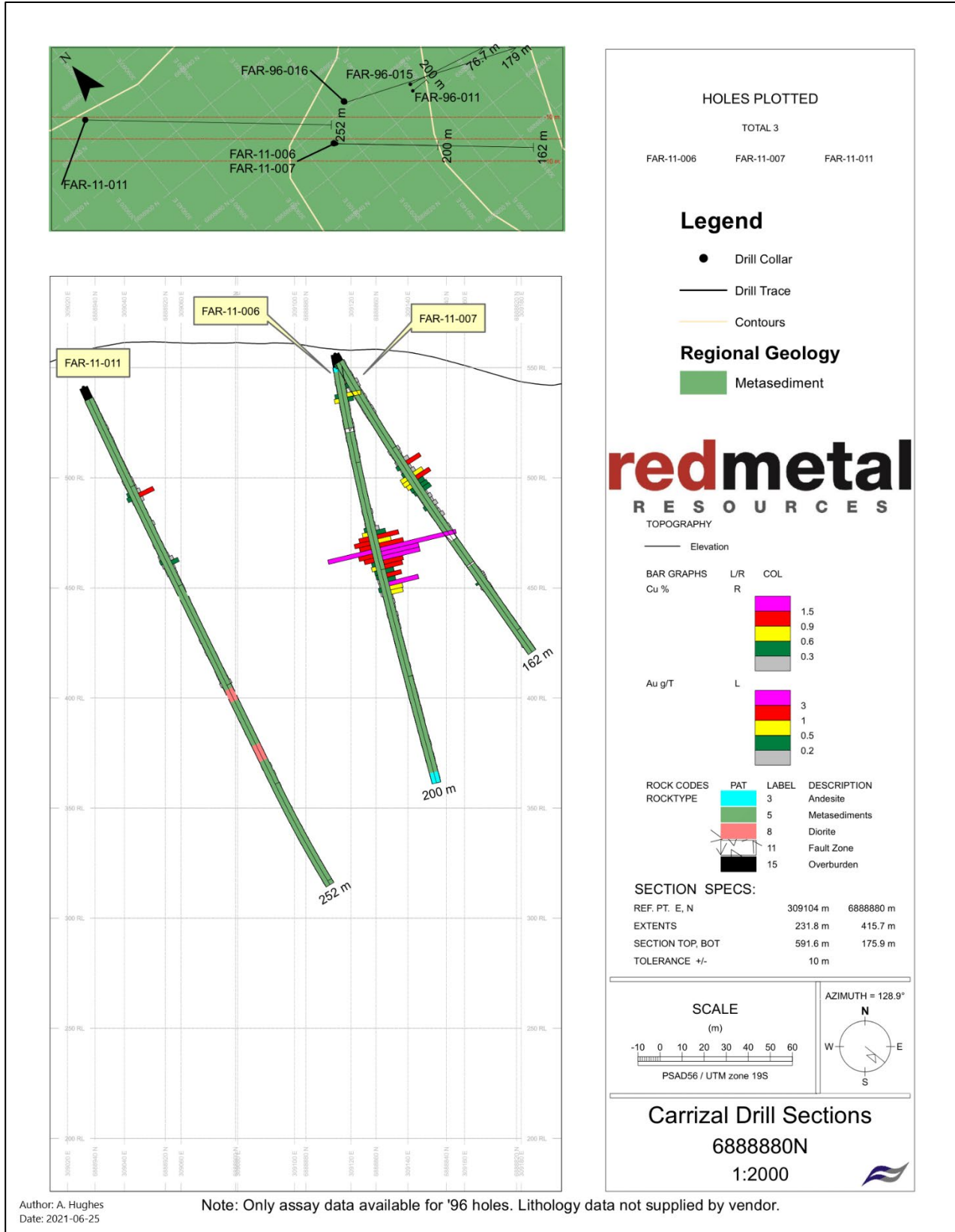


Figure 27 - Drill hole section for FA-11-006, -007, and -011, and historical (figure provided by Red Metal) .

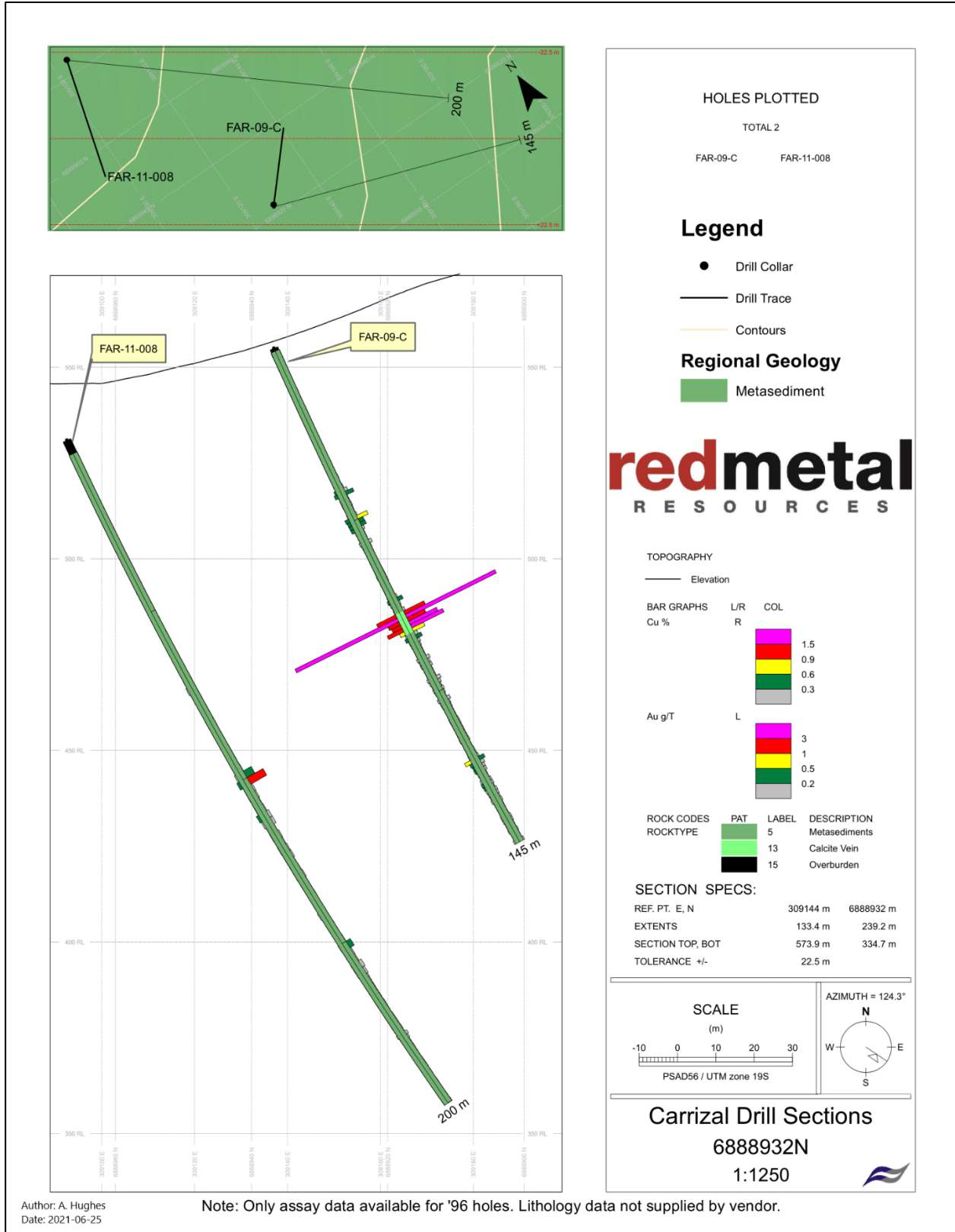


Figure 28 - Drill hole section for FA-11-008, as well as historical holes (figure provided by Red Metal)

All significant intercepts from the 2011 drilling program were dominated by supergene oxide mineralization from surface to approximately 150 m depth. Sulphide mineralization was minimal within this shallow depth range, becoming more abundant as the transition to the hypogene zone approached below approximately 150 m depth. This transition zone was highly variable depending on faulting, groundwater flow pathways, and variable elevation. Below 150 m, hypogene conditions dominated, resulting in abundant sulphide mineralization, as seen in drill holes FA-11-003 (177-182 m), FA-11-009 (202-211.55 m), and FA-11-010 (179.13-183 m). Supergene mineralization was dominated by malachite, chrysocolla, and copper ± gold within goethite and limonite iron oxides. Alteration haloes were associated with supergene mineralization such as carbonate, limonite, hematite, goethite, and manganese oxide. Other alteration minerals were present, such as chlorite, epidote, actinolite, biotite, and sericite, however these minerals were not related to the supergene mineralization.

Hypogene mineralization was dominated by chalcopyrite with associated gold. Chalcopyrite occurred as amorphous blebs and lesser disseminations hosted in massive, sometimes vuggy quartz and calcite. A good example was found in drill core from hole FA-11-009 within the mineralized intersection between 202 m and 211.55 metres. The mineralized intersections broadly occur along the regional lithological boundary shear zone between overlying Paleozoic metasediments to the west and underlying Jurassic intrusives to the east.

Most of the 2011 drill holes did not pass through the lithological boundaries, even after drilling through the mineralized structures. Therefore, it was interpreted that this mineralization occurs in close proximity to the lithological boundaries, but that the mineralized structures do not exactly follow the contact and instead occur as splays and faults emanating off the major structural boundary.

The 2011 drilling results confirmed that mineralization is still present down-dip of the intersections identified during the previous drilling campaign and are still open at depth. The infill drilling confirmed that the mineralization had significant grades and initiated the process of outlining a consistent 75 m spacing between drill holes. The 2011 drilling results also indicated that the significant grades for the copper and gold mineralization were still open along strike to the northeast and southwest, as demonstrated by hole FA-11-001, which was drilled towards the northwest. All drill holes during the 2011 drilling program intersected oxide facies mineralization with the only significant intercepts bearing sulphides in holes FA-11-003 and FA-11-009. The supergene-hypogene transition occurred anywhere between 50 m and 150 m and appeared to be dependent on local fracturing and faulting.

Two diamond drill holes were completed in 2013 by Perfoandes on behalf of Red Metal totalling 116 m (45 m in the first hole, 71 m in the second). The first hole (F13-001) was located 28 m north of FAR-11-001 on a 45° bearing. Drill core was selectively sampled (16 m sampled from FAR-13-001 and 15 m sampled from FAR-13-002), and analysed for gold, total copper and soluble copper. A significant intersection was encountered in each drill hole, returning 0.7% Cu and 0.2 g/t Au over 6 metres. The second hole recorded 1.75% Cu and 0.25 g/t Au over 9 metres. These results confirmed similar findings from FAR-11-001, which was collared 28 m to the south. Both holes recorded the change in mineralogy from dominantly ankerite and other carbonates to more quartz-dominant, containing pyrite and chalcopyrite mineralization.

## 10.2 Perth Project Area Drilling 2013 and 2014

In 2013 and 2014, Minería Activa (under their option agreement with Red Metal) drilled 30 diamond drill holes on the Perth Project area, and of these 30 holes, only three were entirely on the Red Metal mineral concessions,

the remainder targeted a vein that is exposed at surface on a claim owned by another company that runs through the middle of Red Metal's Perth Project area. Of these three drill holes only one, DP-04, intersected any significant mineralization; 1.0 m grading 2.15 g/t Au, 1.32% Cu and 0.017% Co (see Figure 17).

## 11.0 Sample Preparation, Analysis and Security

This section reviews all known sample preparation, analysis and security as it relates to exploration work completed by the Issuer on the Project, and to the extent that it is known. Additional information relating to exploration completed by the Issuer on the Project is provided in Section 10.

Industry standard core sampling protocols were used by Red Metal on all drill holes completed and these protocols are well documented by the issuer. On the basis of information and data available to the Author, it is the opinion of the Author that Red Metal applied industry best practices in the collection, handling, and management of drill core assay samples and other data and information related to the Project. There is no evidence that the sampling approach and methodology used by Red Metal introduced any sampling bias or contamination.

Red Metal's internal system for QA/QC (collection and processing) was of sufficient quality to provide adequate confidence in the database for the purpose of the Report. The Issuer is independent of all laboratories used in the collection of assay data and related information.

### 11.1 Farellon Project

Red Metal conducted its initial exploration program in 2009 (5 RC holes), followed by programs in 2011 (11 RC/core holes) and in 2013 (2 core holes) on the Farellón Project which it acquired from Minera Farellón in April 2008. As part of the 2011 – 2012 Phase I exploration program Red Metal completed 11 holes (combined RC/diamond core drilling) during July and August and geological mapping and sampling was completed in March and April of 2012. In 2013, Red Metal completed two diamond drill holes on the Project. As part of the 2009, 2011 and 2013 drilling programs and during mapping and sampling programs on Perth and Farellon in 2011 and 2012, Red Metal instituted a QA/QC program to address the security of the samples and integrity of the results. What follows is a description of sample preparation, analysis and security for the 2009 and 2011 and 2013 drilling programs and 2012 mapping program. The difference in the 2013 program and the mapping programs, was that no check samples were completed.

For all grab samples collected during the 2011 and 2012 mapping programs, sample locations were marked with hand held Garmin GPS devices. Samples were collected in 6mil poly bags with a laboratory ticket sealed in the bag with plastic zap straps. Every night samples were secured at the Red Metal field house in a locked shed. Samples were then gathered in large poly woven bags for shipping.

In 2009, samples were taken for every 1 metre interval in every drill hole. In 2011, two metre sampling intervals of the RC drill holes started at the collar of the hole and proceeded from the surface down to approximately 20 m above where mineralization was expected to commence (based on modelling projections). At 20 m above where the mineralization was expected to commence, the 2 m sample intervals were reduced 1 metre. By reducing the sampling intervals in the mineralized zones, better constraints were placed to further isolate mineralization intervals and improve mineralization control at depth. This system of 2 m to 1 m sampling intervals was repeated for all holes. FA-11-009 and FA-11-010 still used this RC system but switched to from RC to diamond drilling at 200 m and 164 m, respectively.

The cuttings for each one or two metre sample were obtained from the cyclone and then passed through a splitter. Two samples were obtained for each sample interval in the drilling program; a larger sample



(approximately 15 kg) to be used as a backup sample and a smaller sample (from 2 to 5 kg) which was sent to the assay laboratory for analysis. Both plastic sample bags were clearly marked with the drill hole identification letter and the depths of the sample. Assay lab sample tickets were added later and recorded in both the log and the stubs of the ticket book for precise sample number correlation control. Washed drill chips or cuttings were also obtained from each sample interval of either one or two metres and these were placed in cutting tray boxes to record the geology of each interval. The maintenance of cuttings in a tray box is similar to keeping half the core for each sample interval in a core drilling program.

Each sample destined for the assay laboratory had a paper ticket placed in the sample bags and the number written twice on each bag with a permanent ink marker. Drawstrings were used to secure each cloth sample bag. Each sample was placed with five to seven other individual samples in poly-woven sacks which were then zap-strapped with the assay lab address and sample series written in permanent marker on the bag.

The backup or representative samples for every metre of drilling from the 2011 drilling program have been saved in heavy duty sample bags and stored in Vallenar at Red Metal's field house. The sample bags have been stored under heavy duty dark tarps to protect the sample bags from deterioration under the strong sunlight. All samples have been clearly marked with drill hole and metreage information as well as an extra sample ticket was stapled to the sample bag.

The chip trays, backup samples as well as the assay samples prior to shipment are stored under lock and key in a shed at Red Metal's field house. The shed is very secure, and the key is held by the property caretaker.

The assay samples contained in the sealed poly-woven sacks were trucked by Red Metal to Vallenar and then shipped via Pullman Cargo to Acme Labs laboratory in 2009 and Geoanalitica Ltda laboratory in 2011, 2012 and 2013, both labs are located in Coquimbo. Once in Coquimbo the samples were prepared and assayed.

Red Metal's QA/QC protocol consists of the addition of standards, blanks and laboratory duplicates to the sample stream. These are inserted into the sample series using the same number sequence as the samples themselves. One of the QA/QC check samples is inserted every 25 samples and it alternates between standards, blanks and laboratory duplicates so within each batch of 75 samples, one sample of each type of control and check samples was included. Table 12 summarizes the type and frequency of the QA/QC samples inserted at the various preparation stages. Table 13 summarizes how the QA/QC samples were inserted into the sampling series for the 2009 and 2011 drilling programs.

Table 12 - Summary of the type and frequency of the QA/QC samples, Farellón Project.

Stage	Type	Frequency	Description	Inserted By
After Splitting	Standard	1 per 50 Samples	One of 3 Standards	Red Metal
After Splitting	Blank	1 per 125 Samples	Pulp Blank	Red Metal
After	Field Duplicate	1 per 125 Samples	Second 50 g split	Laboratory

Table provided by Red Metal

Table 13 - Summary of the type and frequency of the QA/QC samples, Farellón Project.

Sample Number	Description of Samples
001-024	Samples collected and analyzed by geologist
025	Standard 1
026-049	Samples collected and analyzed by geologist
050	Blank Pulp

Sample Number	Description of Samples
051-074	Samples collected and analyzed by geologist
075	Standard 2
076-099	Samples collected and analyzed by geologist
100	Duplicate of 099 sample
101-124	Samples collected and analyzed by geologist
125	Standard 3
126-149	Samples collected and analyzed by geologist
150	Standard 1
151-174	Samples collected and analyzed by geologist
175	Blank Pulp
176-199	Samples collected and analyzed by geologist
200	Standard 2
201-224	Samples collected and analyzed by geologist
225	Duplicate of 224 sample

Table provided by Red Metal

### 11.1.1 Standard Reference Samples

For the 2009 drill program, Red Metal used 3 standards which it purchased for the drilling program. The 3 standards are comprised of 1 gold standard and 2 copper-gold multi-element standards. The gold standard (SG31) was purchased from RockLabs Limited in Auckland, New Zealand and the copper-gold multi-element standards (OREAS 91 and 96) were purchased from Analytical Solutions Ltd. based in Toronto, Canada. Table 14 summarizes the assay standards used for Red Metal's 2009 drilling program on the Farellón project as well as the number of each standard sent for analysis.

Table 14 - Summary of the Standard Reference Material.

Type of Reference Material	Number of Standards sent	Label	Element	Recommended Value	95% Confidence Level	
					Low	High
Gold standard	3	SG-31	Gold	0.996 ppm	0.985 ppm	1.007 ppm
Copper-Gold multi-element standard	4	OREAS 94	Copper	1.14%	1.12%	1.17%
				23.1 ppm	22.2 ppm	24.0 ppm
Copper-Gold multi-element standard	3	OREAS 96b	Copper	3.93%	3.87%	3.99%
			Cobalt	49.9 ppm	47.6 ppm	52.1 ppm
<b>TOTAL :</b>	<b>10</b>					

Table provided by Red Metal Resources Ltd.

For the 2011 drilling program, the three standards are comprised of one high grade copper standard and two copper-gold multi-element standards. The three standards were purchased from Analytical Solutions Ltd. based in Toronto, Canada. Table 15 summarizes the assay standards used for Red Metal's 2011 drilling program on the Farellón project as well as the number of each standard sent for analysis.

Table 15 - Summary of the Standard Reference Material.

Type of Reference Material	Number of Standards Shipped	Label	Element	Recommended Value	95% Confidence	
					Low	High
High Copper STD	11	OREAS 152	Copper	1.71%	1.62%	1.79%
Copper-Gold multi-element standard	13	OREAS 151a	Copper	0.166%	0.162%	0.169%
			Gold	0.043 ppm	0.042	0.044
Copper-Gold multi-element standard	11	OREAS 152a	Copper	0.385%	0.379%	0.391%
			Gold	0.116 ppm	0.114	0.118
<b>TOTAL :</b>	<b>35</b>					

Table provided by Red Metal

### 11.1.2 Blank Samples

Blank pulp samples were in house blank samples packaged by Red Metal Resources using clean barren quartz. The blank pulp samples were inserted sequentially numbered on ratio of one sample for every 125 samples.

### 11.1.3 Field Duplicate Samples

Field duplicates were employed by sampling the same interval as the immediate previous sample and treating it as an ordinary sample – bar that it was recorded as a duplicate. The field duplicate samples were inserted sequentially numbered on ratio of one sample for every 125 samples.

## 11.2 QA/QC results – 2009 Drilling Program

### 11.2.1 Results for Standard Reference Samples

A total of 10 standard reference samples were submitted to Acme in Santiago for analysis during the 2009 drilling program. Table 16 summarizes the assay results for the 10 standard reference samples submitted. Figures 29, 30 and 31 graphically depict the assay results for each one of the different standard reference samples submitted to the assay laboratory. The number of standard reference statistically too small number of samples upon which to normally base any definitive conclusions. However, the results do appear to indicate that the assay procedures for both copper and gold at Acme in Santiago is well conducted and in general no assay errors were encountered during the process. Further samples will be required in order to build up enough data statistically to conclusively demonstrate this statement.

Table 16 - Summary of the assay results for the blank submitted to Acme Labs.

Standard Reference Sample ID	Drill Hole Number	Sample Number	Assay Results	
			Copper (%)	Gold (ppm)
SG-31	FAR-09-A	200275	----	0.926
	FAR-09-D	200425	----	0.971
	FAR-09-D	200650	----	0.949
OREAS 94	FAR-09-B	200125	1.105	----
	FAR-09-A	200350	1.163	----
	FAR-09-D	200500	1.115	----
	FAR-09-C	200725	1.131	----

OREAS 96b	FAR-09-E	200200	3.906	----
	FAR-09-D	200575	3.946	----
	FAR-09-C	200800	4.155	----

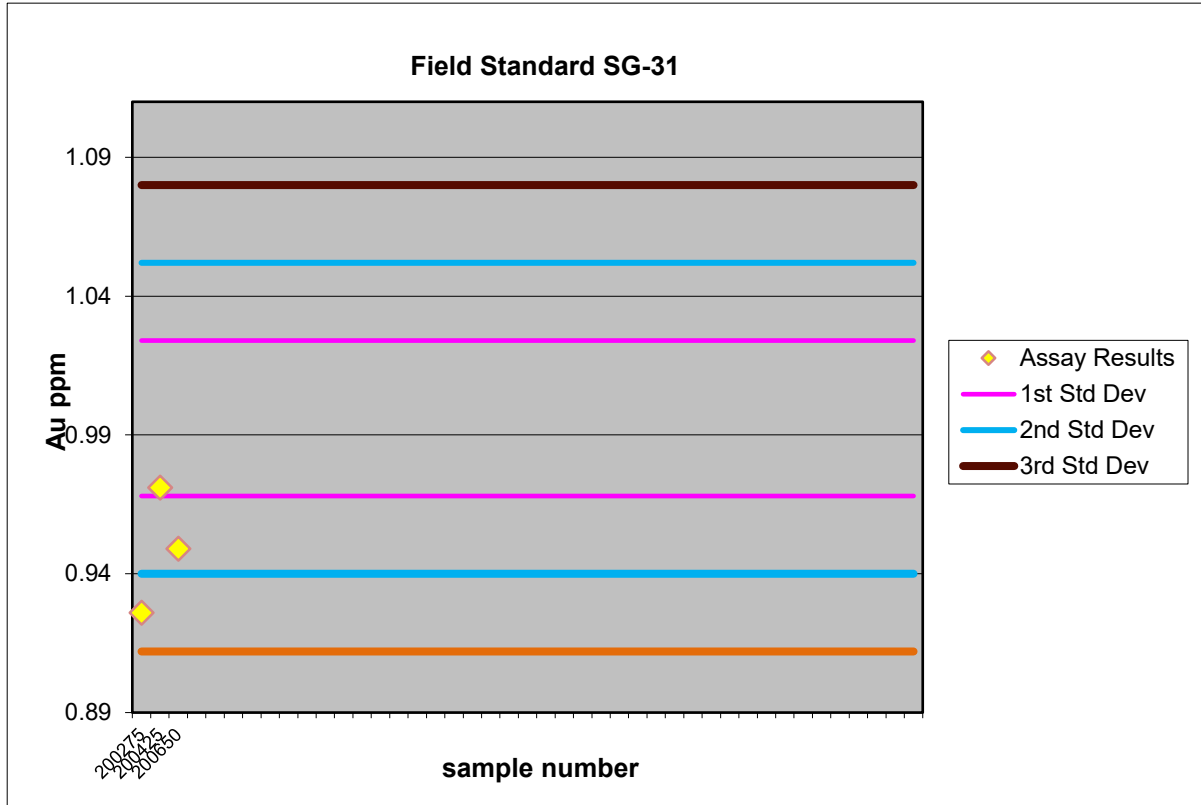


Figure 29 - Graph of gold assay results for Standard Reference Sample SG-31 at ACME Labs.

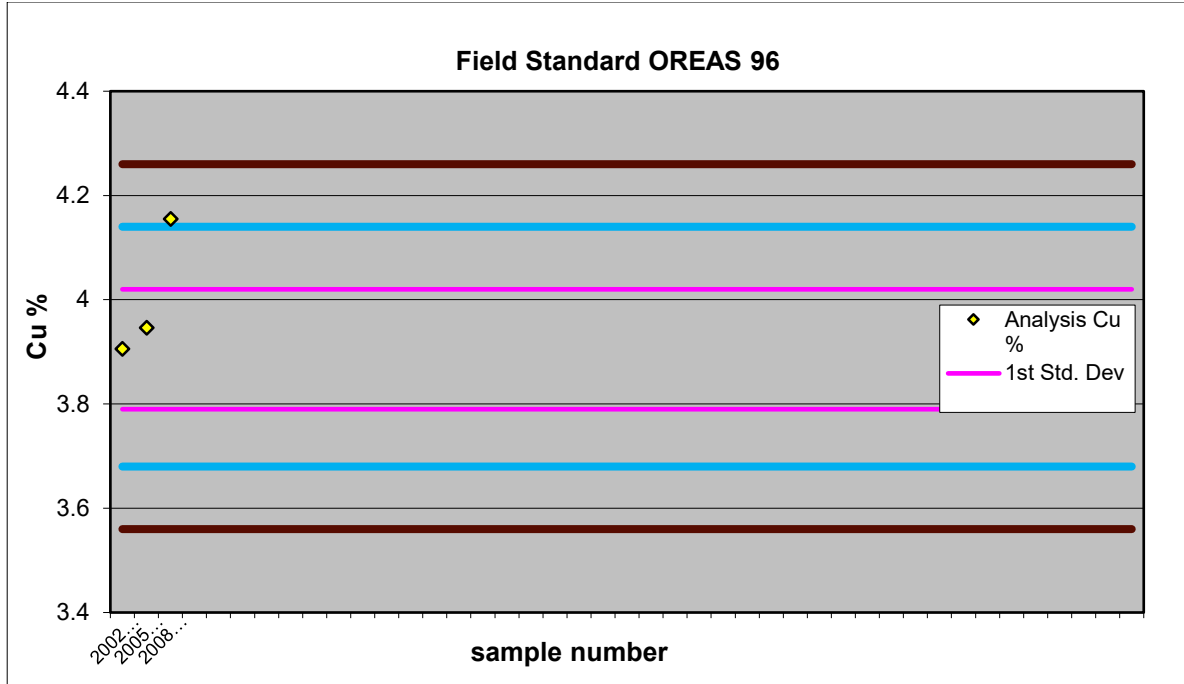


Figure 30 - Graph of copper assay results for Standard Reference Sample OREAS 96 at ACME Labs.

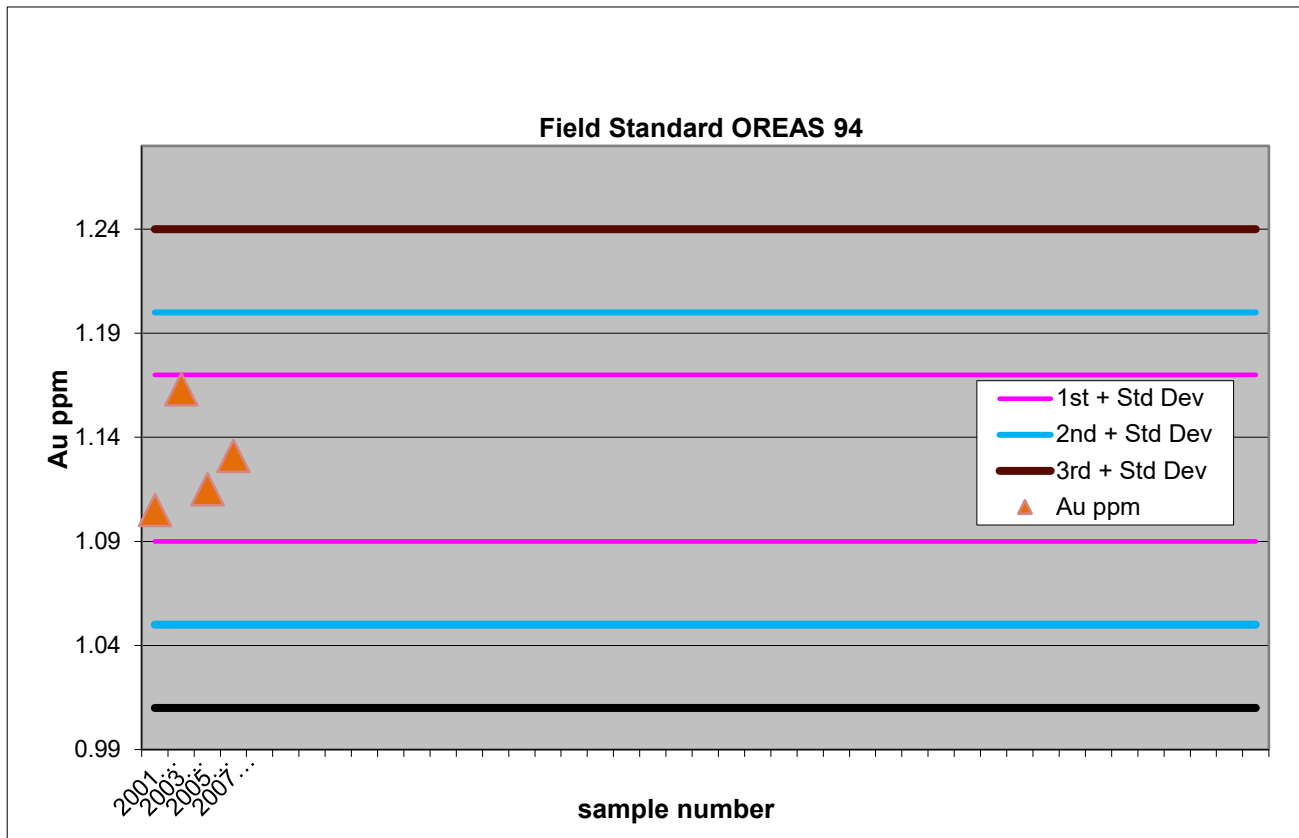


Figure 31 - Graph of copper assay results for Standard Reference Sample OREAS 94 at ACME Labs.

### 11.2.2 Results for Blank Samples

A total of 10 blank samples were submitted to Acme in Santiago for analysis during the 2009 drilling program. Table 17 summarizes the assay results for the 10 blank samples submitted. While 10 samples is statistically a small number of samples upon which to normally base any definitive conclusions all of the samples returned assays below or at the detection limit. Therefore it appears that the sample preparation at Acme in Santiago is well conducted and no contamination or other potential errors were introduced during the sample preparation phase of the assaying process. However, further samples will be required in order to build up enough data statistically to conclusively demonstrate this statement.

Table 17 - Summary of the assay results for the blank submitted to Acme Labs.

Drill Hole Number	Sample Number	Assay Results	
		Copper (%)	Gold (ppm)
FAR-09-B	200150	0.001	0.005
FAR-09-E	200225	0.001	0.005
FAR-09-A	200300	0.001	0.005
FAR-09-A	200375	0.001	0.005
FAR-09-D	200450	0.001	0.005
FAR-09-D	200525	0.001	0.005
FAR-09-D	200600	0.001	0.005
FAR-09-D	200675	0.001	0.005
FAR-09-C	200750	0.001	0.005
FAR-09-C	200825	0.001	0.005

### 11.2.3 Results for Crush Duplicates Samples

A total of 9 crush duplicate samples were submitted to Acme in Santiago for analysis during the 2009 drilling program. Table 18 summarizes the assay results for the 9 crush duplicate samples submitted. Figure 32 graphically depicts the assay results for the 9 crush duplicate samples submitted to the assay laboratory. At this time the 9 samples are statistically a small number of samples upon which to base any definitive conclusions regarding the repeatability of the sample results at the assay laboratory or the overall QA/QC conducted by Red Metal. While the repeatability looks good for the 9 samples this has to be tempered by the knowledge that the sample that the crush duplicate originated as part of the original crushed sample and therefore the samples should match to a large degree.

Table 18 - Summary of assay results for the 2009 lab Duplicate Samples analyzed at Acme Labs

Drill Hole Number	Sample Number	Original Assay Results		Duplicate Assay Results		Mean		Absolute Difference	
		Copper (%)	Gold (ppm)	Copper (%)	Gold (ppm)	Copper	Gold	Copper	Gold
FAR-09-B	200174	0.569	1.279	0.562	1.107	0.5655	1.193	0.007	0.172
FAR-09-E	200249	0.007	0.005	0.006	0.005	0.0065	0.005	0.001	0.000
FAR-09-A	200324	0.044	0.01	0.044	0.009	0.044	0.0095	0.000	0.001
FAR-09-D	200399	0.004	0.006	0.004	0.005	0.004	0.0055	0.000	0.001

FAR-09-D	200474	0.031	0.013	0.031	0.011	0.031	0.012	0.000	0.002
FAR-09-D	200549	0.086	0.012	0.086	0.014	0.086	0.013	0.000	0.002
FAR-09-D	200624	0.018	0.008	0.017	0.006	0.0175	0.007	0.001	0.002
FAR-09-C	200699	0.002	0.009	0.002	0.009	0.002	0.009	0.000	0.000
FAR-09-C	200774	2.214	2.016	2.377	2.114	2.2955	2.065	0.163	0.098

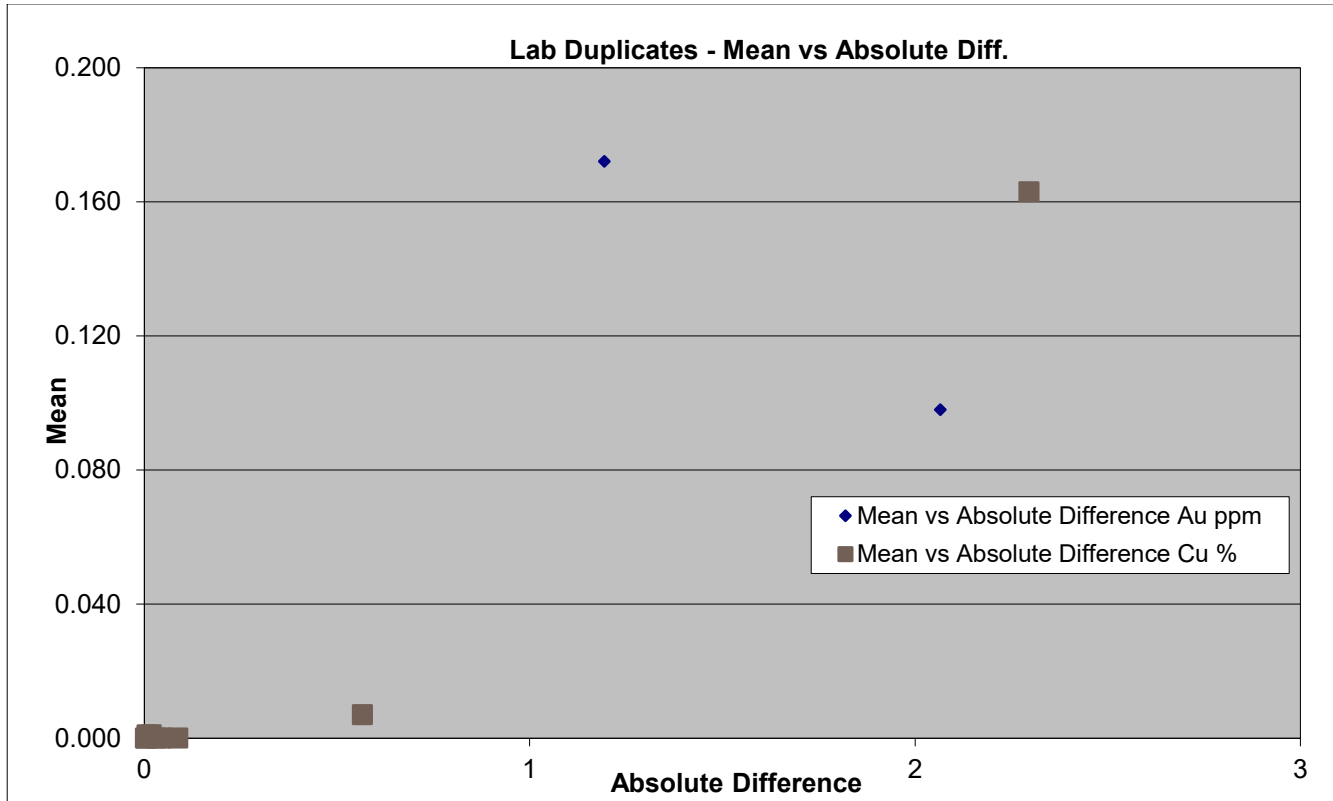


Figure 32 - Graph of assay results for the 2009 lab Duplicate Samples submitted to Acme Labs.

### 11.3 QA/QC results – 2011 Drilling Program

#### 11.3.1 Results for Standard Reference Samples

A total of 35 standard reference samples were submitted to Geoanalitica in Coquimbo for analysis during the 2011 drilling program. Table 19 summarizes the assay results for the 35 standard reference samples submitted. Figures 33, 34, 35, 36, and 37 graphically show the level of consistency for the three standards sent to the laboratory for assay to test laboratory calibration. The number of standard reference statistically too small number of samples upon which to normally base any definitive conclusions. However, the results do appear to indicate that the assay procedures for both copper and gold at Geoanalitica is well conducted and in general no assay errors were encountered during the process. Further samples will be required in order to build up enough data statistically to conclusively demonstrate this statement.

Table 19 - Summary of the assay results for the Standard Reference Samples submitted to Geoanalitica.

Standard Reference Sample ID	Drill Hole Number	Sample Number	Assay Results	
			Copper (%)	Gold (ppm)
OREAS 151a	FA-11-001	202275	0.16	0.05
	FA-11-002	202725	0.17	0.05
	FA-11-003	201500	0.16	0.05
	FA-11-004	201825	0.16	0.05
	FA-11-006	202575	0.16	0.06
	FA-11-007	261325	0.18	0.07
	FA-11-008	202075	0.17	0.04
	FA-11-009	201625	0.16	0.05
	FA-11-009	201750	0.17	0.05
	FA-11-010	202525	0.16	0.06
	FA-11-010	202675	0.16	0.05
	FA-11-010	202400	0.17	0.06
	FA-11-011	6525	0.17	0.05
OREAS 152a	FA-11-002	201375	0.40	0.11
	FA-11-003	201475	0.40	0.13
	FA-11-004	201875	0.40	0.09
	FA-11-005	202475	0.39	0.12
	FA-11-007	261375	0.40	0.13
	FA-11-008	202125	0.40	0.13
	FA-11-009	202975	0.40	0.12
	FA-11-010	200875	0.39	0.14
	FA-11-010	261550	0.40	0.13
	FA-11-010	202375	0.40	0.12
	FA-11-011	202775	0.39	0.13
OREAS 163	FA-11-001	202325	1.63	0.08
	FA-11-002	201425	1.68	0.06
	FA-11-003	201550	1.69	0.08
	FA-11-004	201925	1.62	0.09
	FA-11-005	202450	1.62	0.07
	FA-11-006	202625	1.68	0.07
	FA-11-009	201725	1.65	0.06
	FA-11-010	261525	1.70	0.06
	FA-11-010	261425	1.67	0.08
	FA-11-010	201975	1.66	0.07
	FA-11-011	6575	1.68	0.08

Table provided by Red Metal



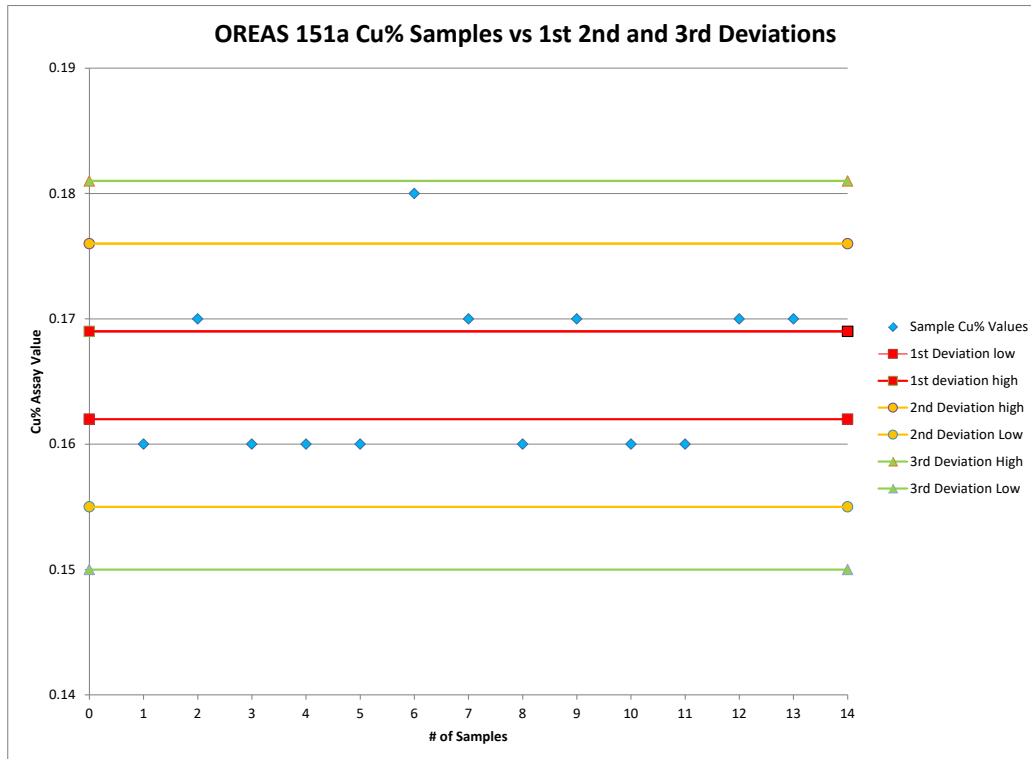


Figure provided by Red Metal

Figure 33 - Graph of copper assay results for Standard Reference Sample OREAS 151a at Geoanalitica.

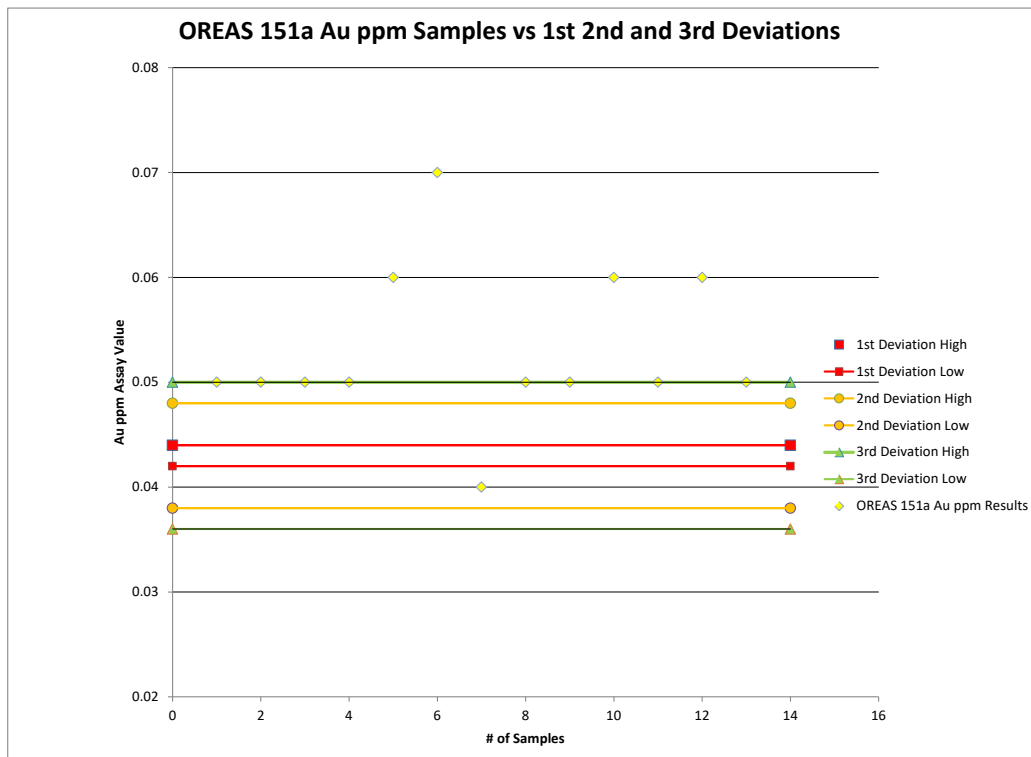


Figure provided by Red Metal

Figure 34 - Graph of gold assay results for Standard Reference Sample OREAS 151a at Geoanalitica.

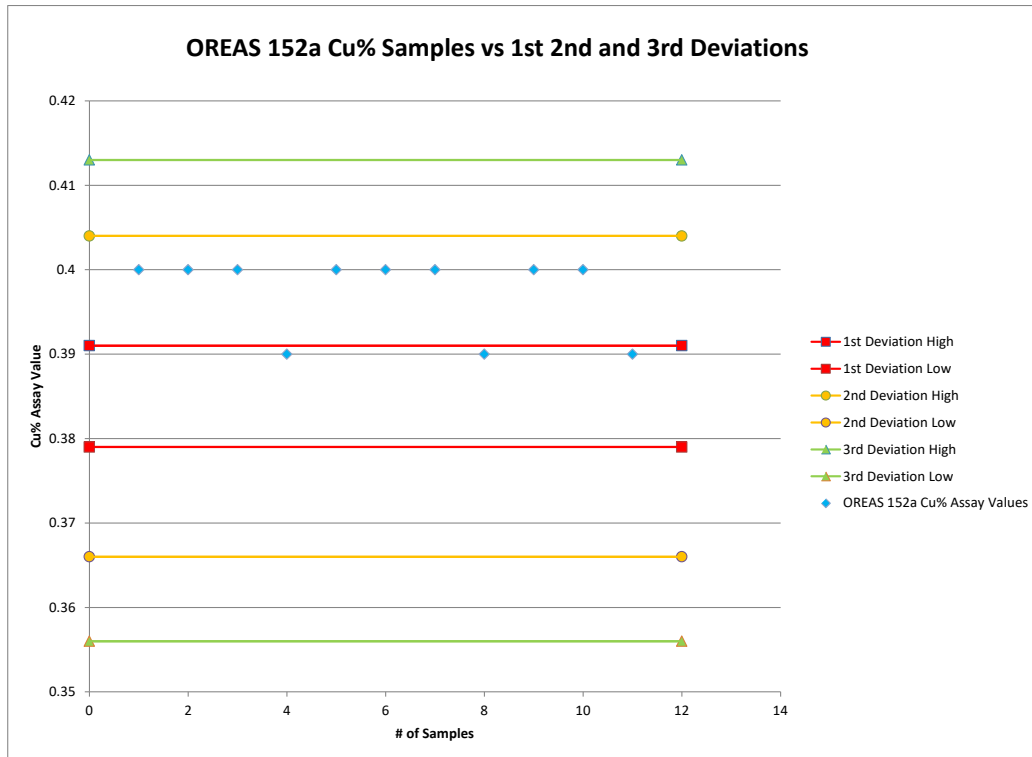


Figure provided by Red Metal  
Figure 35 - Graph of copper assay results for Standard Reference Sample OREAS 152a at Geoanalitica.

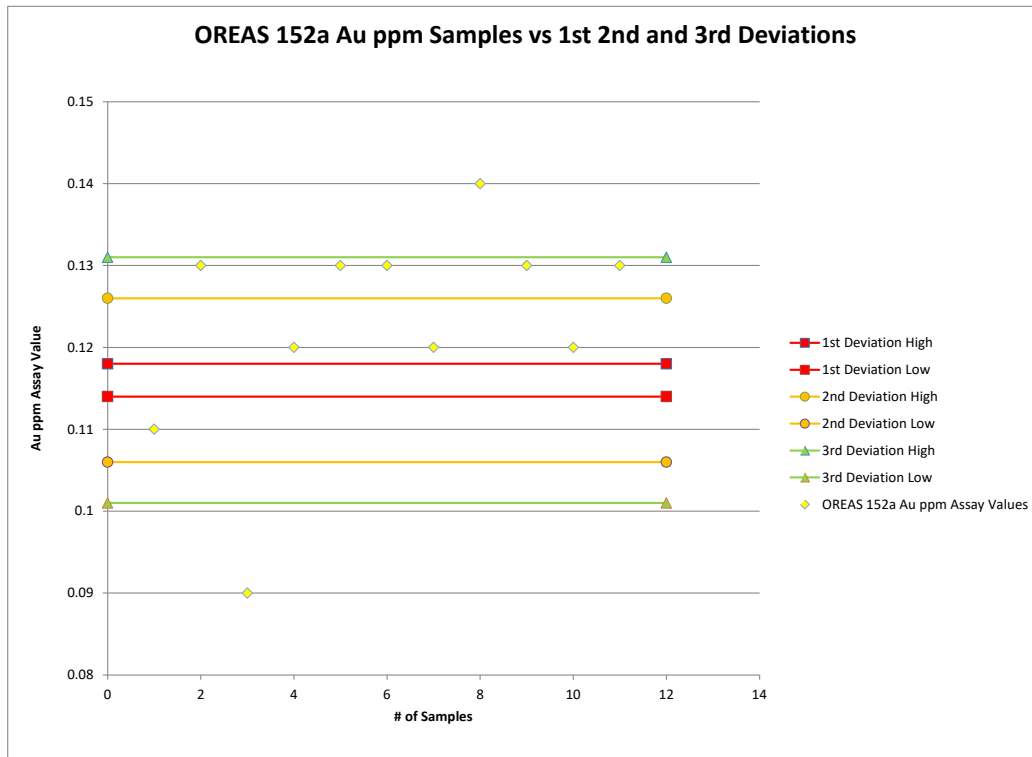


Figure provided by Red Metal  
Figure 36 - Graph of gold assay results for Standard Reference Sample OREAS 152a at Geoanalitica.

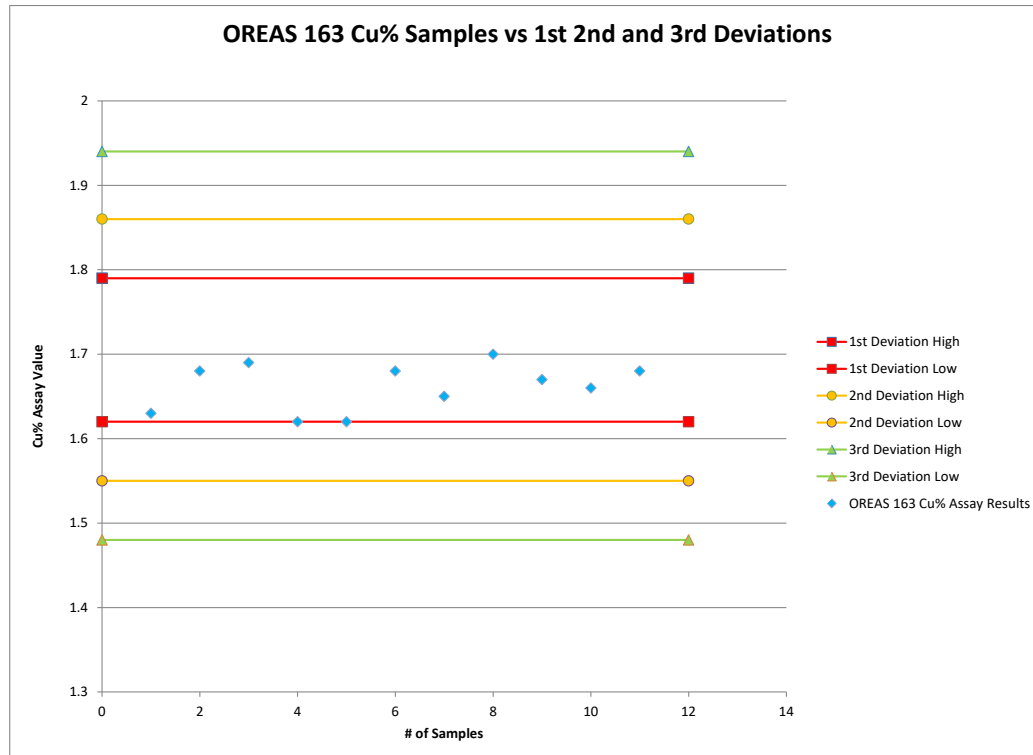


Figure 37 - Graph of copper assay results for Standard Reference Sample OREAS 163 at Geoanalitica.

### 11.3.2 Results for Blank Samples

A total of 14 blank samples were submitted to Geoanalitica for analysis during the 2011 drilling program. Table 20 summarizes the assay results for the 14 blank samples submitted. Figure 38 graphs the assay results for the 14 blank samples submitted to the laboratory. While 14 samples is statistically a small number of samples upon which to normally base any definitive conclusions all of the samples returned assays below or at the detection limit. Therefore, it appears that the sample preparation at Geoanalitica is well conducted and no contamination or other potential errors were introduced during the sample preparation phase of the assaying process. However, further samples will be required in order to build up enough data statistically to conclusively demonstrate this statement.

Table 20 - Summary of the 2011 assay results for the Blank Samples submitted to Geoanalitica.

Drill Hole Number	Sample Number	Assay Results	
		Copper (%)	Gold (ppm)
FA-11-002	201400	<0.01	<0.01
FA-11-003	201525	<0.01	<0.01
FA-11-004	201850	<0.01	<0.01
FA-11-004	201950	<0.01	<0.01
FA-11-005	202425	<0.01	<0.01
FA-11-006	202600	<0.01	<0.01
FA-11-007	261350	<0.01	<0.01
FA-11-008	202100	<0.01	<0.01
FA-11-009	201650	<0.01	<0.01
FA-11-009	200075	<0.01	<0.01

Drill Hole Number	Sample Number	Assay Results	
		Copper (%)	Gold (ppm)
FA-11-010	202550	<0.01	<0.01
FA-11-010	202700	<0.01	<0.01
FA-11-010	201600	<0.01	<0.01
FA-11-011	6550	<0.01	<0.01
FA-11-011	202800	<0.01	<0.01

Table provided by Red Metal

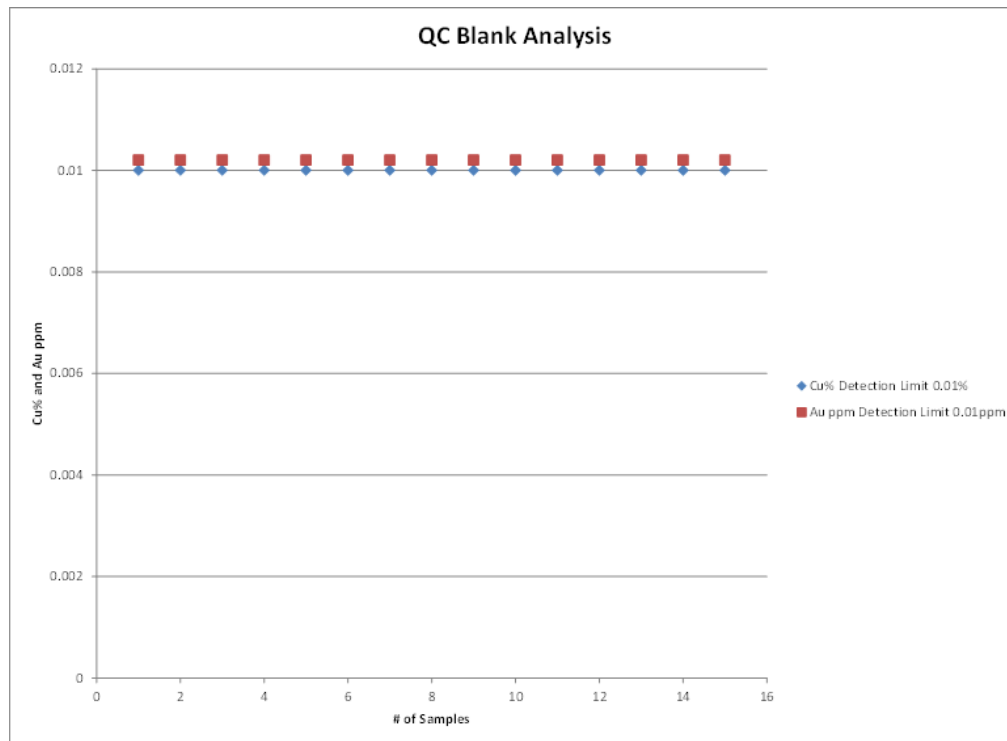


Figure provided by Red Metal

Figure 38 - Graph of the 2011 assay results for the Blank Samples submitted to Geoanalitica.

### 11.3.3 Results for the Field Duplicate Samples

A total of 11 field duplicate samples were submitted to Geoanalitica for analysis during the 2011 drilling program. Table 21 summarizes the assay results for the 11 field duplicate samples submitted. Figure 39 graphically depicts the assay results for the 11 field duplicate samples submitted to the assay laboratory. At this time the 11 samples are statistically to small number of samples upon which to base any definitive conclusions regarding the repeatability of the sample results at the assay laboratory or the overall QA/QC conducted by Red Metal.

Table 21 - Summary of assay results for the 2011 Field Duplicate Samples submitted to Geoanalitica.

Drill Hole Number	Sample Number	Original Assay Results		Duplicate Assay Results		Mean		Absolute Difference	
		Copper (%)	Gold (ppm)	Copper (%)	Gold (ppm)	Copper	Gold	Copper	Gold
FA-11-001	202350	0.07	<0.01	0.11	<0.01	0.09	<0.01	0.04	0
FA-11-002	202703	0.03	0.02	0.01	0.04	0.02	0.03	0.02	0.02
FA-11-003	201575	0.14	0.16	0.13	0.16	0.135	0.16	0.01	0
FA-11-004	201900	0.07	0.01	0.10	0.01	0.085	0.01	0.03	0

Drill Hole Number	Sample Number	Original Assay Results		Duplicate Assay Results		Mean		Absolute Difference	
		Copper (%)	Gold (ppm)	Copper (%)	Gold (ppm)	Copper	Gold	Copper	Gold
FA-11-006	202650	<0.01	<0.01	0.02	0.01	0.01	0.01	0.02	0.01
FA-11-007	261400	0.02	0.02	0.02	0.01	0.02	0.015	0	0.01
FA-11-008	202150	0.02	0.01	0.02	<0.01	0.02	0.01	0	0.01
FA-11-009	203000	<0.01	0.02	<0.01	0.02	<0.01	0.02	0	0
FA-11-010	200900	0.85	0.33	1.71	0.38	1.28	0.355	0.86	0.05
FA-11-010	261450	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	0
FA-11-011	6600	0.03	0.02	0.03	0.02	0.03	0.02	0	0

Table provided by Red Metal

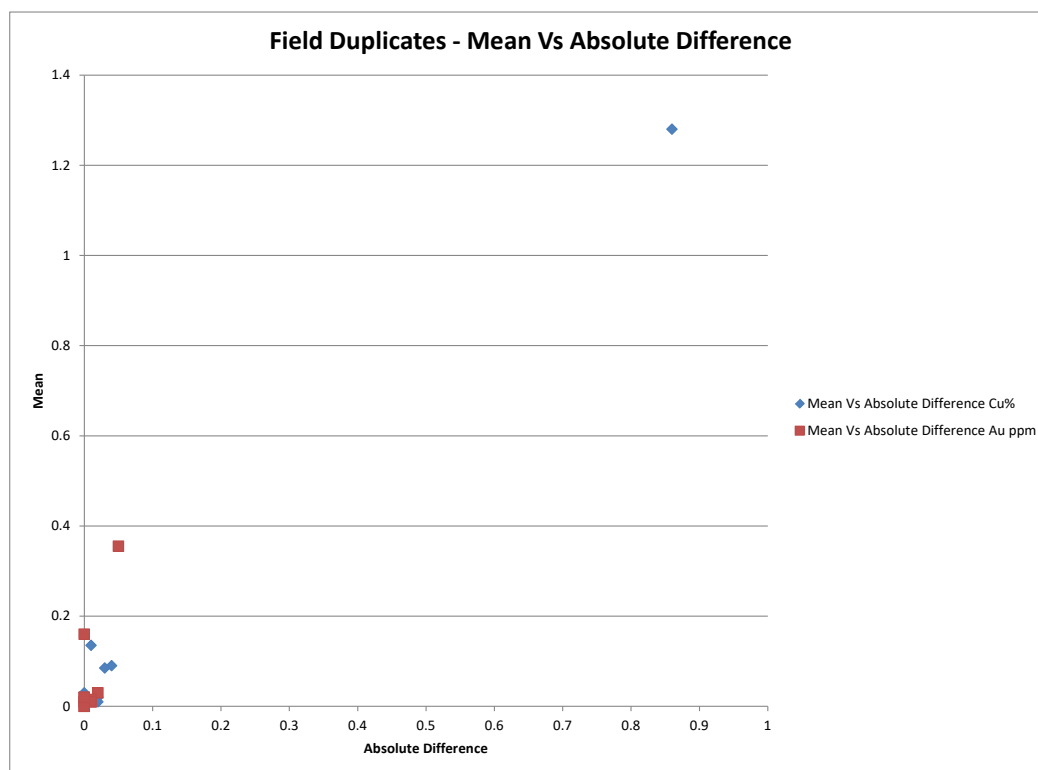


Figure provided by Red Metal

Figure 39 - Graph of assay results for the 2011 Field Duplicate Samples submitted to Geoanalitica.

## 12.0 Data Verification

During the 13 January 2018 personal inspection (see Section 2.4), the Qualified Person verified that the Carrizal Cu-Co-Au Property contains widespread underground workings, and frequent drill pads with existing collars, and also that artisanal mining has been previously conducted on the Farellón Project. The QP examined all historical data made available relating to historic sampling and drilling within the Carrizal Cu-Co-Au Property, and took six mineralized rock grab samples from the area being bulk sampled and investigated underground, in order to verify the typical grades of Cu, Au, and Co encountered on the Property.

A description of the samples is provided in Table 22 and assay results in Table 23. Assays from grab rock samples collected on the Carrizal Property confirmed the presence of copper (oxide and sulphide phases), gold, silver, and cobalt. In the opinion of the QP, this verification data is adequate for the purposes of this Technical Report, as described in Section 2.3 (Purpose of the Technical Report).

Table 22 - Description of verification samples collected on the Farellón Project, Carrizal Property.

Sample No.	Location	Type	Alteration/Silicates	Zone	Mineralization
<b>FN-01</b>	Farellón North	Grab – level 7 stockpile on surface	Chlorite; quartz>calcite	Hypogene	chalcopryrite, pyrite
<b>FN-02</b>	Farellón North	Grab – level 7 stockpile on surface	Chlorite; quartz>calcite	Hypogene	chalcopryrite, pyrite
<b>FN-03</b>	Farellón North	Grab – level 7 stockpile on surface	Chlorite; quartz>calcite	Hypogene	chalcopryrite, pyrite
<b>FN-04</b>	Farellón North	Grab – level 7 stockpile on surface	Chlorite; quartz>calcite	Enriched Supergene	chalcopryrite, pyrite, bornite
<b>FS-01</b>	Farellón South	Grab – adit stockpile – roughly 3 years on surface	Oxidized, hematized, limonite	Supergene	cuprite; azurite, malachite
<b>FS-02</b>	Farellón South	Grab – underground, east wall of south drift		Enriched Supergene	chalcocite, chrysocolla

Table 23 - Assay results for verification samples collected on the Farellón Project, Carrizal Property.

Sample No.	Au	Ag	Cu (total)	Cu (oxide)	Cu (sulphide)	Co	Co
Method	FA-AAS	4ACID-AAS	4ACID-AAS	LIX-AAS	Calc.	FUS-AAS	Calc.
units	ppm	ppm	%	%	%	ppm	%
(Detection Limit)	(-0.01)	(-0.1)	(-0.001)	(-0.001)	(-0.001)	(-1)	(-0.0001)
<b>FN-01</b>	0.46	12.1	2.735	0.119	2.616	17366	1.7366
<b>FN-02</b>	0.25	10.1	5.573	0.076	5.497	578	0.0578
<b>FN-03</b>	0.16	12.3	6.631	0.12	6.511	171	0.0171
<b>FN-04</b>	1.56	28.5	7.145	0.213	6.932	2086	0.2086
<b>FS-01</b>	3.49	5.3	10.62	10.786	0	467	0.0467
<b>FS-02</b>	0.48	2.3	3.538	3.221	0.317	2285	0.2285

## 12.1 Northern Section of the Farellón Project Area

Samples FN-01 through FN-04 were collected from an ore dump near the portal to the North Mine (see Figure 1). The ore, reported to be from Level 7 of the mine (hypogene/enriched supergene zones), contained mainly chalcopyrite with lesser bornite (see Figure 2).

Assays from samples FN-01 through FN-04 range from 0.16 ppm to 1.56 ppm Au, 10.1 ppm to 28.5 ppm Ag, 2.74% to 7.15% Cu(T); the copper was mainly in sulphide form (*e.g.*, chalcopyrite). The highest concentration of gold and silver were from sample FN-04 which also had the highest sulphide copper concentration. Analyses for cobalt, using the peroxide fusion method, returned concentrations ranging from 0.21% to 1.74% Co.

## 12.2 Southern Section of the Farellón Project Area

Sample FS-01 was collected from a small stockpile near the old workings (Figure 40) of the South Mine which had been exposed to the elements for a number of years. This sample was heavily oxidized and contained copper oxides including cuprite, malachite and azurite (supergene zone). Sample FS-02 was collected from the east wall of the south drift in the South Mine exploration portal (see Figures 3 and 41). This sample contained chalcocite, chrysocolla, malachite, and azurite (enriched supergene zone).

Assays from sample FS-01 reflect its high copper oxide content reporting 10.62% Cu(T) and averaging 10.70% Cu between the two assay methods used for copper. This sample contained the highest gold concentration at 3.49 ppm Au and assayed 0.05% Co. Sample FS-02 contained 3.54% Cu(T), with relatively low sulphide copper (enriched supergene zone), and 0.23% Co.



Figure 40 - Old south mine workings on the Farellón Project area looking north (photo by Dr. Jobin-Bevans).

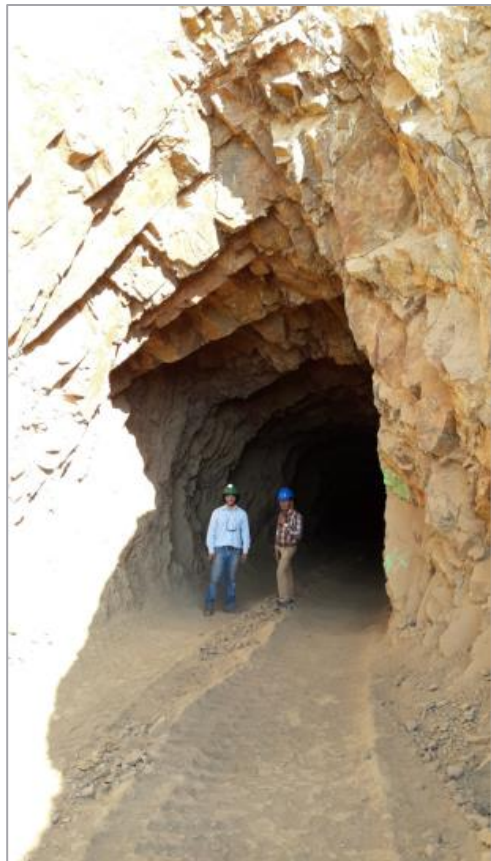


Figure 41 - Mining personnel (Kevin Mitchell and Ramon Delgado) standing in front of the South Mine exploration portal in the Farellón Project area (photo by Dr. Jobin-Bevans).

### 12.3 Verification of Contract Mining on the Property

The Author has reviewed the ENAMI “Liquidacion Compra de Minerales” (Mineral Purchases Settlement) receipts for the delivery of mineralized rock, as provided by the Company, and the Author is satisfied that the production tonnages and grades delivered to ENAMI, as summarized in Table 25 (see Section 24), accurately reflect the contract mining on the Property.

### 12.4 Verification of No Recent Work on the Property

The Author is satisfied that since his personal inspection of the Property on 13 January 2018, that there has been no additional work completed by the Issuer or any other persons or companies on behalf of the Issuer since that time.

The Author has reviewed all news releases and public documents from the Issuer for any mention of active work on site or funds spent on the Property, above and beyond normal land maintenance costs. At the time of the 2018 personal inspection, the contract artisanal mining group had already committed to ceasing activities and was in the process of departing the site.



## **13.0 Mineral Processing and Metallurgical Testing**

No mineral processing or metallurgical testing programs have been undertaken on the Carrizal Cu-Co-Au Property for this Technical Report.

## **14.0 Mineral Resource Estimates**

The Project has no current NI 43-101 mineral resources.

## **15.0 Mineral Reserve Estimates**

The Project has current NI 43-101 mineral reserves.

## **16.0 Mining Methods**

This section is not relevant to the Project.

## **17.0 Recovery Methods**

This section is not relevant to the Project.

## **18.0 Project Infrastructure**

This section is not relevant to the Project.

## **19.0 Market Studies and Contracts**

This section is not relevant to the Project.

## **20.0 Environmental Studies, Permitting and Social or Community Impact**

This section is not relevant to the Project.

## **21.0 Capital and Operating Costs**

This section is not relevant to the Project.

## **22.0 Economic Analysis**

This section is not relevant to the Project.

## 23.0 Adjacent Properties

The Carrizal Property is adjacent and contiguous to the Carrizal Alto Mine, just to the east; what follows are the details of the operation and its history.

### 23.1 Carrizal Alto Mine

Copper mining commenced at the Carrizal Alto mining district in the 1820's and continued on a significant scale, mostly by British companies, until 1891 when disastrous flooding occurred, and mines closed. Historical reports indicate that the larger mines obtained good grades over significant intervals in the bottom workings when the mines closed. During the 1800's, in excess of 3 million tonnes with grades in excess of 5% Cu and widths of 8 m was extracted as well as there was a large amount of direct shipping material containing 12% Cu. A considerable body of tails and old dumps was present until recently which lent support to these figures. Table 24 summarizes the yearly production between 1862 and 1870.

Table 24 - Summary of Production from the Carrizal Alto Mine (1862 – 1870).

Year	Tons	Copper Grade (%)
1862	22,479	15.5
1863	24,900	15.5
1864	35,245	15.5
1865	24,032	15.0
1866	26,159	15.0
1867	24,547	13.4
1868	17,802	15.0
1869	20,300	13.5
1870	26,600	13.0
<b>Total:</b>	<b>222,064</b>	

Table taken from (Ulriksen, 1991)

The Author and Qualified Person has been unable to verify the information presented above and this information is not necessarily indicative of the mineralization on the Property that is the subject of the Report.

## 24.0 Other Relevant Data and Information

### 24.1 Contract Artisanal Mining

In October 2013, Red Metal entered into an agreement to rent the Farellon 1 – 8 mineral concessions to a Chilean contract artisanal miner. The rental agreement gave Red Metal a 10% net sales royalty on all mineralized rock sold to an independent processing facility and allowed Red Metal access to all data from the mining recoveries, all surveys and any geological data collected, as well as access to the site at any time to view underground activities (see Red Metal news releases October 2013 and May 2014). The agreement could be cancelled by Red Metal with 90 days' notice. In exchange, the artisanal miner could extract up to 5,000 tonnes per month from the Farellon 1 – 8 mensuras for sale at an independent processing facility. The contract artisanal miner was responsible for applying for and maintaining all relevant permits and safety issues. Permits were finalized in May of 2014 and the artisanal miner was active on site from May 2014 to January 2018.

#### 24.1.1 Artisanal Mining Permits

The Carrizal Property is covered by mining concessions, mensuras, each of which can be readily permitted for production of up to 5,000 tonnes per month under the Chilean "Small Miner" classification governed by SERNAGEOMIN. The small miner application to SERNAGEOMIN details full descriptions of the project, treatment and closure plans, health and safety plans for workers, waste management, explosives handling, operating equipment and fire prevention and control and all safety and environmental issues are reviewed on site regularly by SERNAGEOMIN during any extraction activities. Permits are linked to both a property and a specific miner.

The artisanal miner that rented the Farellon 1-8 mensura, part of the Carrizal Property, was granted a small miner permit in 2014. The permit was issued in the name of the small miner under the agreement that they were renting the property for the purposes of small-scale mining. This permit allowed for the extraction of up to 5,000 tonnes of mineralized rock per month, but did not permit any kind of processing facility or waste treatment on site. All mineralized rock was to be delivered to an independent processing facility for sale as-is. The mining activities on Farellon 1-8 included the direct sale of mineralized rock to ENAMI precluding the need for a treatment plant and significant amounts of power and water. All mining activity completed under the small-scale mining permit was completed by a Chilean company that paid a royalty to Red Metal and provided details on geological information and metal recoveries. The permit for small scale mining expired once the rental agreement was terminated in 2018. Any future mining activities would require a new permit.

#### 24.1.2 Results of Artisanal Mining

Between December 2014 and February 2017, the artisanal miner delivered mineralized material to ENAMI, including a total of 12,905 tonnes of sulphide-mineralized material with an average grade of 1.82% Cu, 5.1 g/t Ag, and 0.19 g/t Au, as well as 1,813 tonnes of oxide mineralized material with an average grade of 1.56% Cu (Table 25).

The ENAMI processing facility does not have the capacity to recover cobalt, however three grab samples taken from the level seven of the artisanal mine workings yielded between 0.09% and 0.12% Co (Table 26). Assay certificates of cobalt sampling were provided to the Author along with brief descriptions of the sample locations written by mine personnel at the time of sampling.

Contract artisanal mining was completed on seven levels to a depth of approximately 95 metres below surface. Over the 27 month period that material was being delivered to ENAMI, the average approximate tonnage delivered was 500 tonnes per month, with some months no mineralized rock being delivered and some months over 1,000 tonnes being delivered. The miner never reached the 5,000 tonne per month limit as outlined by the small scale mining permit.

Samples from levels one to three were heavily oxidized and the vein width was inconsistent and contained significant amounts of calcite. These levels produced 1,813 tonnes of oxide material with an average grade of 1.56% soluble copper. Material from levels four to seven was all sulphide mineralized rock with chalcopyrite, minor bornite and chalcocite in quartz veins. Average grades from all levels are outlined in Table 25 and represent the total copper, silver and gold grades recovered from these levels.

Table 25 – Summary by month and mine level of mineralized rock delivered to ENAMI by the contract miner.

Month	Level	Oxide or Sulphide	Tonnes	Cu (%)	Ag (g/t)	Au (g/t)
Dec-14	1 to 3	Oxides	447	1.67	N/A	N/A
Jan-15	1 to 3	Oxides	864	1.75	N/A	N/A
Feb-15	1 to 3	Oxides	73	1.20	N/A	N/A
Mar-15	1 to 3	Oxides	431	1.15	N/A	N/A
Feb-15	4	Sulphides	393	1.05	N/A	0.24
Mar-15	4	Sulphides	103	1.04	N/A	0.10
May-15	4	Sulphides	535	1.96	N/A	0.23
Jun-15	4	Sulphides	602	2.08	N/A	0.23
Jul-15	4 & 5	Sulphides	867	1.75	4.90	0.22
Aug-15	5	Sulphides	439	1.16	4.56	0.36
Sep-15	5	Sulphides	347	1.20	4.81	0.10
Oct-15	5	Sulphides	1127	1.48	5.49	0.48
Nov-15	5 & 6	Sulphides	340	1.97	7.87	0.46
Dec-15	6	Sulphides	1406	2.04	8.62	0.34
Feb-16	6	Sulphides	930	2.25	8.77	0.33
Mar-16	6	Sulphides	736	1.86	8.02	0.39
Apr-16	7	Sulphides	85	1.57	7.00	0.10
May-16	7	Sulphides	888	1.79	8.30	0.14
Jun-16	7	Sulphides	674	2.54	12.82	0.14
Jul-16	7	Sulphides	377	1.54	7.16	0.10
Aug-16	7	Sulphides	583	2.33	11.55	0.10
Sep-16	7	Sulphides	479	1.76	10.78	0.10
Oct-16	7	Sulphides	770	1.87	8.87	0.19
Nov-16	7	Sulphides	59	1.44	7.00	0.50
Dec-16	7	Sulphides	804	2.07	9.46	0.13
Jan-17	7	Sulphides	62	2.12	10.00	0.10
Feb-17	7	Sulphides	299	1.66	7.40	0.27

Table provided by Red Metal

Table 26 - Level 7 underground grab sampling.

<b>70 metre Level Sampling*</b>		
<b>Gold (ppm)</b>	<b>Copper (%T)</b>	<b>Cobalt (%)</b>
n/a	2.86	0.12
n/a	1.43	0.07
2.2	6.8	0.11
*Grab samples are selective in nature and random in size and may not be representative of mineralization characteristics. n/a = not analyzed.		

Table provided by Red Metal

Having reviewed the ENAMI “Liquidacion Compra de Minerales” (Mineral Purchases Settlement) receipts for the delivery of mineralized rock, as provided by the Company, the Author is satisfied that the production tonnages and grades delivered to ENAMI, as summarized in Table 25, accurately reflect the contract mining on the Property.

## 25.0 Interpretation and Conclusions

Drilling on the Property has yielded significant Cu-Co-Au mineralization, with Red Metal confirming and extending the mineralization both in the down-dip direction and along strike in their 2011 and 2013-2014 programs.

The Carrizal Property is considered to be a early exploration project upon which Red Metal can continue performing exploration and drilling activities in order to further identify the nature and extent of the mineralization in and around the shear zone. This Property is located within a major historical mining district in northern Chile that has not been fully subjected to modern exploration concepts and technology. The Property holds the potential for the discovery of mineralized deposits of similar character and grade as those exploited in the district in the past.

On the basis of information and data available to the Author, it is the opinion of the Author that Red Metal applied industry best practices in the collection, handling, and management of drill core assay samples and other data and information related to the Project.

### 25.1 Risks and Uncertainties

Risks and uncertainties which may reasonably affect reliability or confidence in future work on the Project relate mainly to the reproducibility of exploration results (*i.e.*, exploration risk) in a future production environment. Exploration risks can be mitigated by applying the latest geophysical and sampling techniques to develop high confidence targets for future drilling programs. It is the Author's opinion that exploration risk is low due to the high quality of previously completed exploration work on the Property by the Issuer.

## 26.0 Recommendations

Red Metal has a substantial land holding in a historical mining district in Chile which was a prolific past producer, shut down due to economic conditions, rather than the exhausting of the deposit. Additionally, the Property has only undergone limited modern exploration, which has so far demonstrated the potential of the Property to host a mineralized deposit.

### 26.1 Further Exploration and Studies

Based on the positive results from the multiple exploration programs on the Farellón Project area, it is recommended that Red Metal approach further exploration in two phases, with the implementation of Phase 2 contingent on the success of Phase 1.

The recommended first phase consists of a 3,000 m drilling program to test the primary mineralization at depth that has thus far only been intersected in a few drill holes, and to determine the potential of cobalt mineralization in the sulphide zone. If the first phase returns positive results, a second phase 20,000 m drilling program should be conducted in order to test down to 400 m depths, with enough drill core intercepts to complete an initial mineral resource estimate. The budget for the two phases of exploration is summarized in Table 27.

Table 27 - Carrizal Property recommended work budget.

Budget Item	Total (US\$)	Comments
<b>Exploration (Phase 1) Sulphide Mineralization Testing</b>		
Drilling	\$240,000	Diamond Drilling @ \$160/metre
Consulting Geologist	\$42,000	Consulting geologists @ \$650/day
Geotechnicians	\$10,000	Geotechnicians @ \$200/day
Heavy Equipment Rental	\$60,000	Drill access road and pad building
Assays	\$50,000	Assaying @ \$50/sample
Room & Board	\$7,000	\$100/day per geo & tech
Travel	\$3,000	flights and travel costs for Geologists
Trucks & Fuel	\$6,000	Approx. \$4,000 fuel, service etc. for two trucks per month
Report Writing/updating 3D Model	\$30,000	
10% contingency for miscellaneous items	\$50,000	field supplies etc.
<b>Subtotal (Phase 1)</b>	<b>\$498,000</b>	
<b>Exploration (Phase 2) Delineation of Deposit</b>		
Geophysical surveys	\$250,000	Magnetics and IP
Consulting Geologist	\$350,000	Consulting geologist @ \$650/day
Geotechnicians	\$150,000	Geotechnician @ \$200/day
Heavy equipment rental	\$200,000	building drill pads and access roads
Assays	\$300,000	Assaying @ \$50/sample
Diamond Drilling	\$3,200,000	Diamond Drilling @ \$160/metre
Room & Board	\$100,000	\$100/day per geo & tech
Travel	\$40,000	flights and travel costs for Geologists
Trucks & Fuel	\$12,000	Approx. \$4,000 fuel, service etc. for two trucks per month

Budget Item	Total (US\$)	Comments
3D Model and initial resource estimation	\$100,000	Consultants to build a 3D model required for future exploration and resource estimation
10% contingency for miscellaneous items	\$500,000	Field supplies etc.
<b>Subtotal (Phase 2)</b>	<b>\$5,202,000</b>	
<b>Total US\$ (Both Phases)</b>	<b>\$5,700,000</b>	

## 26.2 General Recommendations

The general direction of proposed exploration programs is outlined above. The following general recommendations should be considered during exploration on the Carrizal Property:

1. It is recommended that any assaying that is done for cobalt should employ a sodium peroxide fusion method, rather than the more commonly used 4-acid digestion. This method has the advantage of more completely extracting cobalt from the pulverized sample, by transforming all metal-sulphide bonds into metal-oxide bonds, thereby increasing the amount of cobalt available in solution. It is also faster and safer, as it doesn't require the use of a two-stage process requiring highly corrosive hydrofluoric acid (HF).
2. Standard QA/QC procedures for the minerals industry is that a secondary assay laboratory (referee lab) be used to re-assay a portion of between 5% and 10% of the samples assayed by the primary lab used. This additional sampling procedure would act as a secondary check on the results produced by the primary laboratory.
3. Considering the silver results from the artisanal mining, sampling should be completed for silver mineralization as well as copper, cobalt, and gold.
4. It is recommended that if the artisanal mining operation continues, a multi-tonne metallurgical sample be taken to determine any potential issues with the sulphide mineralized rock and the potential recoveries of copper, cobalt, gold and silver.
5. It is recommended that Red Metal build a covered facility in which to store its samples on the Carrizal Property, in order to preserve samples from the effects of weather.



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