



Ministry of Energy, Mines & Petroleum Resources
Mining & Minerals Division
BC Geological Survey



Assessment Report
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Geochemical

TOTAL COST: 11,366.41

AUTHOR(S): Doug Warkentin

SIGNATURE(S): 

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): N/A

YEAR OF WORK: 2015

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5568144, Aug 28, 2015; 5578551, 12 Nov, 2015
5586474, 14 Jan, 2016

PROPERTY NAME: Porphyry Creek

CLAIM NAME(S) (on which the work was done): Brunswick, Armagosa, Center West, East Sultana

COMMODITIES SOUGHT: Au, Ag, Cu, Mo, W

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 093M 059, 060, 061, 062, 064, 065, 066 and 068

MINING DIVISION: Omenica

NTS/BCGS: NTS Map 093M04E

LATITUDE: 55 ° 07 ' 40 " LONGITUDE: 127 ° 36 ' 03 " (at centre of work)

OWNER(S):

1) Doug Warkentin

2) Tim Johnson, Kyler Hardy

MAILING ADDRESS:

7069 McBride St, Burnaby, BC, V5E 1R1

2674 Pylades Drive, Ladysmith, BC, V9G 1E5

OPERATOR(S) [who paid for the work]:

1) Doug Warkentin

2) Tim Johnson

MAILING ADDRESS:

7069 McBride St, Burnaby, BC, V5E 1R1

2674 Pylades Drive, Ladysmith, BC, V9G 1E5

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

Jurassic-Cretaceous, Bowser Lake Group, Kasalka Group, Stocks, Porphyritic Granodiorites, Hornfels, Stockwork, Molybdenite
Chalcopyrite, Pyrite

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 00092, 01134, 02855, 04839, 06849, 08332

09587, 12712, 13340, 14632, 16012, 16455, 29082, 29502, 30096, 30431, 31728, 32516, 32636

Next Page

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for...)			
Soil 5 samples, ICP analysis		Brunswick, Centre West	1876.92
Silt 6 samples, ICP analysis		Centre West	2252.31
Rock 8 samples, ICP analysis		Sultana, Centre West, Armagosa	5051.54
Other 1 talus, 3 tailings, ICP analysis		Brunswick	1501.54
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying 23 samples, ICP		All	684.10
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
TOTAL COST:			11366.41

2015 Surface Exploration Assessment Report

on the

Porphyry Creek Property

Omineca Mining Division, British Columbia

NTS Map Sheet 93M/04

Project Centre: UTM NAD 83, Zone 9,
590000 West, 6109000 North

**Registered Owners: Kyler Hardy, Tim Johnson, Doug Warkentin.
Operators: Kyler Hardy, Tim Johnson, Crucible Resources Ltd.**

***Project Tenure Numbers: 532096, 532103, 532105, 535639, 542244, 542246, 542247, 542254,
547139, 549610, 556426, 567326, 567334, 574185, 577338, 577340, 606970, 622463, 622466,
659243, 764883, 1037653, 1038181.***

SOW Event Numbers: 5568144, 5578551 and 5586474

Prepared By:
Doug Warkentin, PEng

Submitted: December 24, 2015

Table of Contents

1	Introduction.....	1
1.1	Location and Access.....	1
1.2	Mineral Tenure.....	2
1.3	Climate and Physiography	3
1.4	Property History	4
2	Geology.....	6
2.1	Regional Geology.....	6
2.2	Local Geology	8
2.3	Exploration Models.....	9
3	Past Exploration	14
3.1	Introduction	14
3.2	Historical Exploration	14
3.2.1	Armagosa Creek.....	14
3.2.2	Brunswick/Red Rose Creek	15
3.2.3	Brian Boru Creek	15
3.2.4	Sultana.....	16
3.3	Porphyry Creek Property Exploration.....	16
3.3.1	2006/7 Prospecting.....	16
3.3.2	2008 Geochemical Survey	17
3.3.3	2010 Airborne Surveys	18
3.3.4	2010 and 2011 Sultana Geochemical and Drilling Programs.....	22
3.3.5	2014 Exploration Program.....	24
4	2015 Exploration Program.....	26
4.1	Rock Sampling	26
4.2	Geochemical Sampling	28
4.3	Red Rose Tails Sampling.....	29
5	Interpretations and Conclusions.....	31
5.1	Recommendations	31
6	Certificates of Qualifications	33
7	Statement of Costs	35
8	Selected Bibliography.....	36

List of Figures

Figure 1 - Porphyry Creek Location Map.....	1
Figure 2 – Porphyry Creek Project Tenures	2
Figure 3 - Five Belt Framework of the Canadian Cordillera (Geological Survey of Canada)	6
Figure 4 - Regional Geology of the Porphyry Creek Area	7
Figure 5 - Magnetic Intensity Map for the Sultana Area	10
Figure 6 - Apparent Resistivity at 7200hz Coplanar in the Sultana Area.....	11
Figure 7 – Residual Magnetic Intensity.....	13
Figure 8 – Radiometric Th/K ratio.....	13
Figure 9 - Apparent Resistivity (7200 Hz) and AEM anomalies with East-Side Target Areas Indicated (Campbell 2010).....	19

Figure 10 – Resistivity Map showing Priority Geophysical Anomalies.....	20
Figure 11- Residual Magnetic Intensity with Major Inferred Structural Breaks/ Contacts.....	21
Figure 12 – Cumulative Magnetic Linears (Campbell 2010).....	21
Figure 13 – 2014 Rock Sampling, Brunswick Area.....	24
Figure 14 – 2014 Soil Samples, Sultana Area.....	25
Figure 15 – Red Rose Tailings.....	30

List of Tables

Table 1 - Porphyry Creek Project Mineral Claims	3
Table 2 - Summary of BC Minfile Occurrences on the Property.....	5
Table 3 - Stream Sediment Values by Area.....	Error! Bookmark not defined.
Table 4 - Selected Drill Results for the 2010 Porphyry Creek Drill Program.....	23
Table 5 - Selected Drill Results for the 2011 Porphyry Creek Drill Program.....	23
Table 6 - Rock and Tailings Sample Descriptions and Analytical results.....	23
Table 7 - Stream Sediment, Talus Fines and Soil Sample Locations	23

List of Appendices

- Appendix 1 – Sample Location Maps
- Appendix 2 – Assay Certificates

1 Introduction

This report describes exploration work carried out by the property owners on the Porphyry Creek Property in the Hazelton Mountains, British Columbia, Canada, during August of 2015.

The limited ground exploration program consisted of site visits for prospecting and for rock, soil and stream sediment geochemical sampling in the Red Rose Creek, Slater Creek and Sultana-Boulder Creek areas. These areas are in close proximity to previously developed vein deposits carrying strong base and precious metal mineralization, and the Sultana-Boulder Creek area is also known to host extensive low-grade Cu-Mo mineralization. In addition, in the Red Rose Creek area uncontained tailings deposits from a nearby past-producing tungsten mine were sampled. A total of 8 rock samples, 12 soil and silt geochemical samples and 3 tailings samples were collected.

Site work was carried out between August 18th and August 30th.

1.1 Location and Access

The property lies within NTS map sheet 93M/04 with its geographic center at approximately Longitude 127°35'19" West, Latitude 55°07'10" North. It is located 10 km south of New Hazelton, and 40 km northwest of Smithers, which was used as a base of operations for the 2014 exploration program.



Figure 1 - Porphyry Creek Location Map

The Porphyry Creek project is a mineral property located along the rugged Rocher Deboule Mountain Range, south of New Hazelton, British Columbia. Direct road access into the area is limited, but services are readily available within 10 km of the property in New Hazelton and, about 40 km away, in Smithers. Parts of the property have limited ground access via poorly maintained 4WD roads and rough trails, but much of it is only accessible by helicopter. Past producing mines in the area are at high elevation, and glaciers cover some of the peaks.

The main road accessing the property is the old Rocher Deboule mine road, with branches accessing the Red Rose Mine and the Armagosa prospect. This road follows Juniper Creek northeast from Skeena Crossing on the Yellowhead highway about 10 km south of New Hazelton. The road is not maintained and is presently washed out in several locations, and is only passable by 4WD for about five kilometres beyond the highway intersection. Beyond that it is seasonally passable by All-Terrain Vehicle (ATV). An old exploration road also provides ATV access to the Sultana area from the east, along the south fork of Boulder Creek, in the south-eastern portion of the property.

1.2 Mineral Tenure

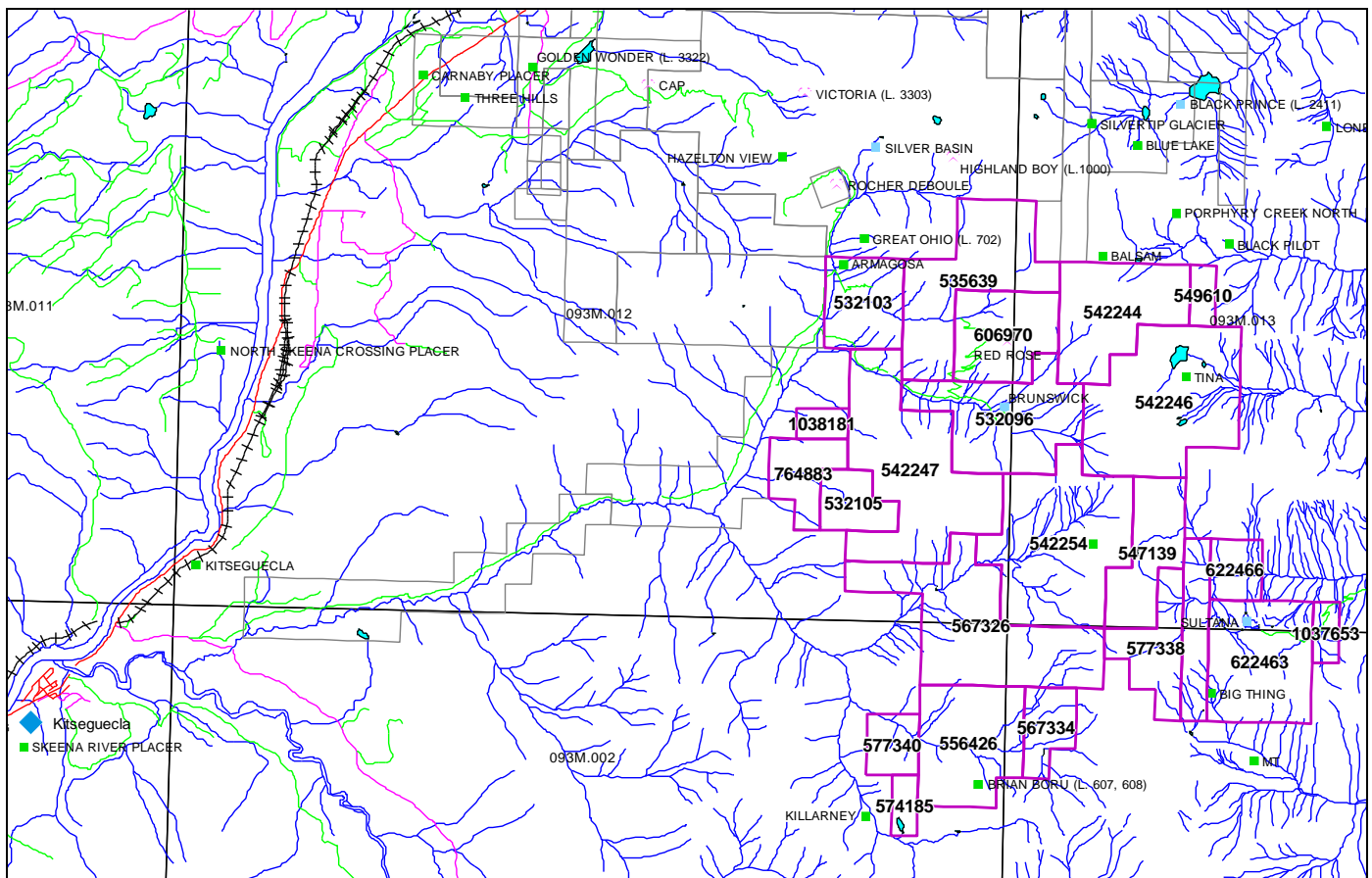


Figure 2 – Porphyry Creek Project Tenures

The Porphyry Creek project consists of 23 MTO claims covering an area of 4,737 hectares located within the Omineca Mining Division of northwest British Columbia. These claims are tabulated in Table 1 and graphically outlined in Figure 2. The tenures are held jointly by the author (60%), Timothy Johnson (20%) and Kyler Hardy (20%). Two additional partners have an agreement to acquire an equal interest in the portion of the claims owned by the author. The MTO claims that make up the property overlap a small group of active crown-granted mineral

claims that surround the past-producing Red Rose tungsten mine. This group consists of 15 crown granted claims and fractional claims covering 182 hectares roughly within the area of overlying MTO claim 606970. The exact suite of minerals granted with these claims has not been investigated, and it is assumed that this area is fully excluded from the property.

Table 1: Porphyry Creek Project Mineral Claims

Title Number	Claim Name	Issue Date	Good To Date	Area (ha)
532096	BRUNSWICK	2006/apr/14	2016/mar/11	314.5
532103	ARMAGOSA	2006/apr/14	2016/mar/11	166.4
532105	SLATER	2006/apr/14	2016/mar/11	92.5
535639	OHIO EAST	2006/jun/14	2016/mar/11	332.8
542244	PORPHYRY	2006/oct/01	2016/mar/11	277.4
542246	TINA	2006/oct/01	2016/mar/11	462.4
542247	RIDGE	2006/oct/01	2016/mar/11	462.5
542254	JUPITER	2006/oct/01	2016/mar/11	462.7
547139	TILTUSHA	2006/dec/11	2016/mar/11	185.1
549610	PORPHYRY WEST	2007/jan/16	2016/mar/11	37.0
556426	BRIAN BORU	2007/apr/15	2016/mar/11	277.8
567326	SLATE CREEK	2007/oct/03	2016/mar/11	444.3
567334	BORU EAST	2007/oct/03	2016/mar/11	92.6
574185	KILLARNEY	2008/jan/21	2016/mar/11	37.0
577338	BORU GLACIER	2008/feb/27	2016/mar/11	148.1
577340	SLATER	2008/feb/27	2016/apr/15	74.1
606970	RED ROSE	2009/jul/03	2016/mar/11	203.4
622463	SULTANA	2009/aug/21	2016/mar/11	296.2
622466	SULTANA NORTH	2009/aug/21	2016/mar/11	74.0
659243	SE FRINGE	2009/oct/25	2016/mar/11	111.1
764883	CENTER WEST	2010/may/01	2016/mar/11	111.0
1037653	EAST SULTANA	2015/aug/01	2016/nov/30	37.0
1038181	SLATER NW	2015/aug/25	2016/aug/25	37.0
Total				4736.7

1.3 Climate and Physiography

The property includes many high elevation peaks, steep ridges and talus slopes that are free of forest cover; valleys and lower slopes are generally heavily forested. The relief is very mountainous, with elevations ranging from below 900 m to almost 2,400 m above sea level.

The Rocher Deboule Range is located on the eastern edge of the much larger Coast Mountain Range resulting in a mix of coastal and interior British Columbia weather patterns. Climate in the Hazelton area is reported as semi-arid and annual precipitation is less than 51 centimetres per year. However, the core of the Porphyry Creek property is significantly higher, and correspondingly experiences far more dramatic and inclement weather patterns.

Since there are heavy snow accumulations in winter, the recommended exploration work season for high elevations is between July and September. Lower elevation zones can be explored from May through October. It should be noted that accumulation of deep snow at higher elevations could result in a heavy spring runoff. With the onset of summer, snow melting is rapid and by July most of the property is snow free, apart from isolated areas of permanent snowfield. The

summer months tend to be dry and hot, though pacific coastal storms do occasionally reach inland.

1.4 Property History

The area has had a long history of exploration and development, dating back to at least 1910. Between 1915 and 1954 the area saw substantial production from the Rocher Deboule and Red Rose mines, as well as lesser production from the Victoria, Cap, Highland Boy and Brunswick mines (Sutherland Brown, 1960). Exploration has been intermittent since the closing of these mines, with some substantial exploration programs occurring in the 1980's on the neighbouring Rocher Deboule/Victoria and Red Rose properties, and at the Killarney/Jones prospects (Brian Boru area) within the current project boundaries. Key points in the history of the property's developed prospects are as follows.

Sultana Prospect

- First acquired by the Brewer Brothers in 1912, where considerable surface work was performed
- Abandoned, then restaked in 1921 by Messrs. Macdonald and Hicks, who expanded on the surface work and found 'ore' from 4 to 20 feet wide over a length of 125 feet.
- Optioned in 1923 to Granby Consolidated Mining and Milling Co. Ltd, who drilled one hole and then dropped the property.
- Restaked in 1939 by G. Christensen of Hazelton who did a small amount of surface work.
- Restaked again by G. Parent and associated of Hazelton in 1951.
- Work done by C.H.Macdonald in 1953, when the property was under option to Northern BC Mining Co. Ltd., who sampled several quartz-silver outcrops in the trenches.
- Property restaked in 1956 by J.W.Bryand and Bert Spisak for Canusa Mining Corp and renamed Snowshoe 1 to 8. Several short holes were drilled.
- Split into Silver Tip claims, staked in 1966/67 by C.E.Calson and Victor Bartell, and the 'S' claims staked in 1970 for Sultana Silver Mines Ltd., Sultana Silver drilled 5 short holes in 1968 and 3 deeper holes in 1969 (this group of claims included the MT Minfile occurrence).
- Detailed I.P., Geological and Geochemical survey conducted by Sultana Silver Mines in 1970.
- Acquired in 2009 by Duncastle Gold Corp, drilled a total of 3925 meters in 9 holes, conducted airborne electromagnetic, magnetic and radiometric surveys and soil geochemistry.

Brian Boru Prospect

- Brian Boru first discovered in 1914-15 as a series of irregular sphalerite-pyrite veins containing variable amounts of lead, zinc, arsenic and gold.
- GAM claims staked in 1979 by Asarco Inc. Who mapped it in 1980 at 1:5000 and conducted a soil sampling program and magnetometer survey. In 1981 this was followed up by VLF, IP and magnetic studies and a soil grid.
- Further geological and geochemical surveys were done in 1984, 1985 and 1987 by Noranda.
- Optioned in 2008 by Duncastle Gold Corp as part of Porphyry Creek property. A stream sediment survey was conducted in 2008. An airborne geophysical survey was conducted in 2010.

Brunswick Prospect

- Originally located in 1912 by J.Miller and sporadic work (locating veins, driving two small adits and possibly making small shipments of selected ore) was conducted prior to 1950.
- Acquired in 1950 by Skeena Silver Mines Ltd., who rehabilitated and extended old workings, drilled 4 holes and carried out additional prospecting. Additional small ore shipments were also made.
- Restaked in the early 1960's by J.T.Williamson, who conducted further geological mapping and sampling.
- Lower drift was advanced to 98 meters by Arcadia Exploration in 1972-73 under option.

- Staked in 1984 by R.Holland who prospected the surrounding area, finding an additional four mineralized vein systems.
- Optioned in 2008 by Duncastle Gold Corp. as part of the Porphyry Creek property. Prospecting and a stream sediment survey were conducted. An airborne geophysical survey was completed in 2010.

Table 1 - Summary of BC Minfile Occurrences on the Property

Occurrence	Status	Commodities	Production (tonnes)	Best Historical Grades (Date)
Armagosa	Showing	Cu, W		
Balsam	Showing	Cu		
Big Thing	Showing	Cu, Mo		
Brian Boru	Showing	Ag, Zn, Pb		220.5g/t Ag, 1.84% Pb, 11.27% Zn (1954)
Brunswick	Past Producer	Ag, Zn, Pb, Au, Cu	?	3802g/t Ag, 1g/t Au, 1.9% Cu, 17.3% Pb, 28.4% Zn (1954)
Jupiter	Showing	Cu, Mo		
Sultana	Prospect	Cu, Mo, Ag, Au		112oz/t Ag, 16% Cu, 0.06oz/t Au (1922)
Tina	Showing	Mo		

BC's Minfile database lists 8 separate occurrences on the Porphyry Creek property. A summary of the listed occurrences is given in Table 2. One of these occurrences, the Brunswick Mine, is listed as a prospect, but apparently had some minor production from two adits, driven to 20 and 52 meters and possibly from open cuts, prior to 1950. Development occurred mainly in the 1920's, and the total amount of ore produced is unknown, but 'thirty bags' of handpicked ore are reported from a later operator in 1954 (Kindle, 1954). Other occurrences that are reported to have some old development workings include the Armagosa, and the Brian Boru, consisting of small open cuts and short adits. The Sultana prospect has had more extensive past exploration, including substantial trenching (essentially small-scale mining) and limited drilling on a high grade silver vein (Campbell and Saunders, 1969 and 1970). This prospect was the main focus of an exploration and drilling program in 2010 and 2011 that identified extensive low grade copper and molybdenum mineralization below and to the northwest of the historical workings.

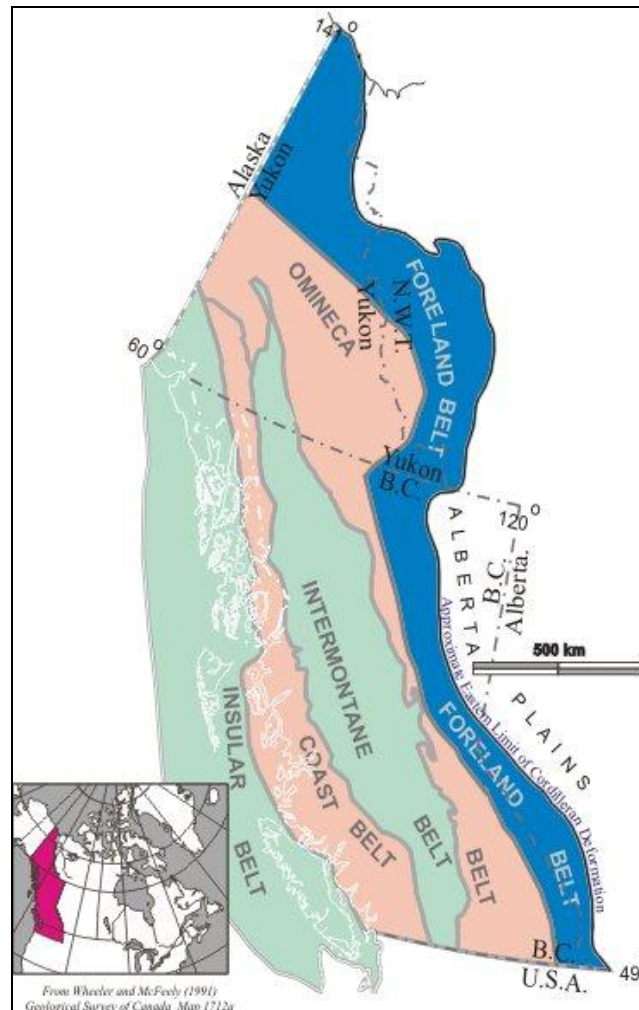
Beginning in 2008 Duncastle Gold Corp carried out geochemical and geophysical surveys over wider areas of the property, which was significantly larger than the current property area. This was followed by the drilling in the Sultana area. Areas on the west side of the property were prospected and a stream sediment geochemical survey was conducted in 2008. A property-wide airborne geophysical survey was carried out in 2010 that included magnetic, electromagnetic and radiometric measurements. Short site visits were also made to the MT showing, the Big Thing showing and various areas of geophysical interest around the Tina showing.

Other occurrences are alluded to in old reports which are not listed in Minfile and which have not yet been confirmed by site visits. These include Ag-Pb-Zn veins near the headwaters of Red Rose Creek (referred to as the Kaslo and Betty veins, ARIS 16012) upslope and to the east of the Brunswick Mine, and an Ag-Pb-Au vein (referred to as the Slate or Slater vein) south of Red Rose Creek near the divide between the Red Rose and Brian Boru basins (Ministry of Mines, 1914).

2 Geology

2.1 Regional Geology

British Columbia can be subdivided into five belts running roughly parallel with the north-westerly grain of the Cordillera. These five belts, from west to east, today are called the Insular, Coast, Intermontane, Omineca and Foreland belts accreted to North America (Figure 3). The most easterly of these, the Foreland Belt, is the youngest, being formed when Proterozoic and Paleozoic sedimentary rocks were thrust up onto the continental margin to form the Rocky Mountains. The Omineca Belt is composed primarily of Devonian-Mississippian magmatic island arc sequences formed on the edge of North America. The intermontane belt is a complex assemblage of Carboniferous to early Jurassic aged rocks which are largely arc-related. Younger arc-related magmatic activity continued into the Tertiary. The Coastal Belt which is composed of plutonic and metamorphic rocks forms the suture zone between the Intermontane Belt and the exotically derived Insular Belt (Campbell, 2010).

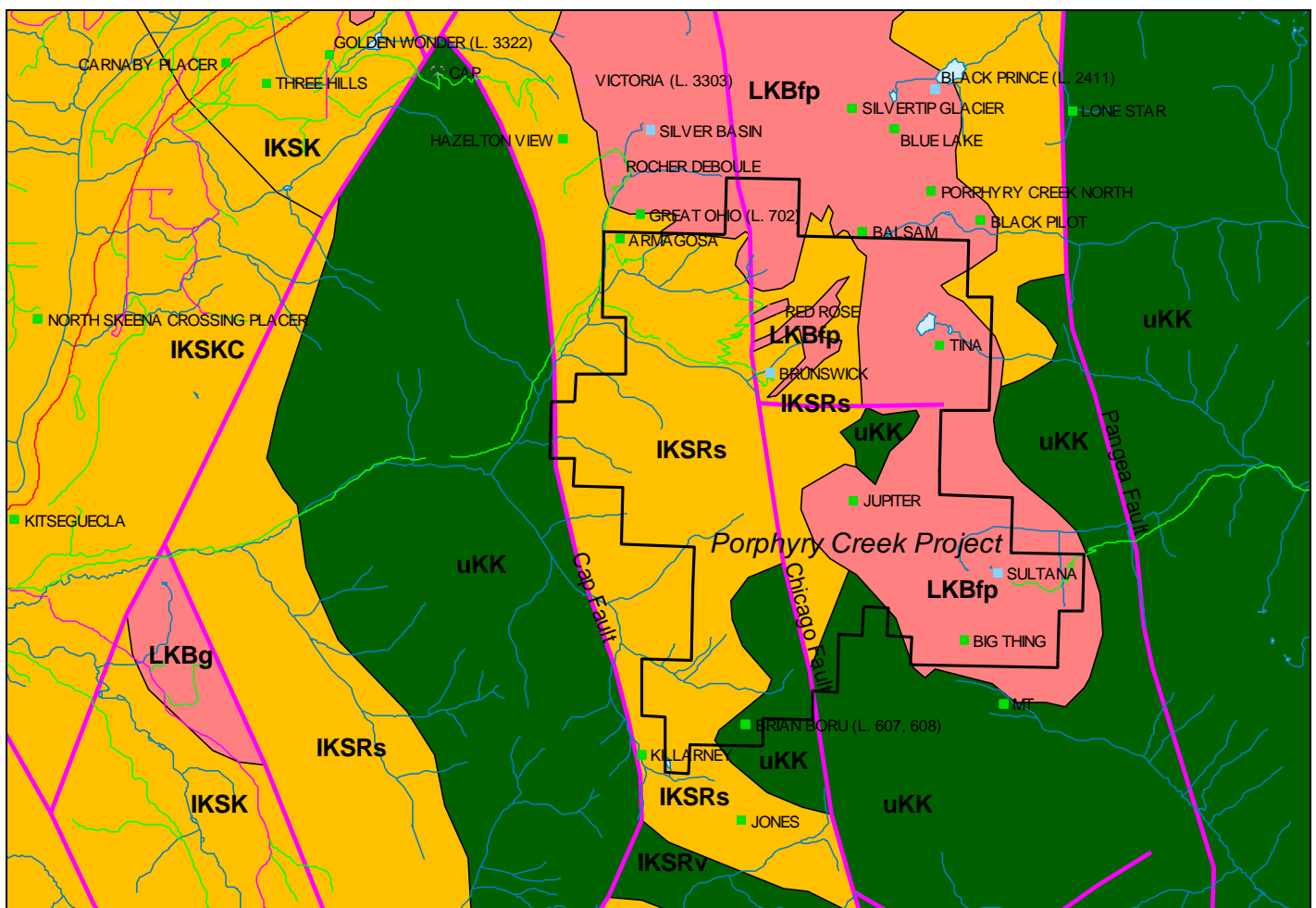


**Figure 3 - Five Belt Framework of the Canadian Cordillera
(Geological Survey of Canada)**

The arc-related and complex nature of the rocks in the Intermontane Belt (in which the Porphyry Creek property lays) means that it hosts many economic porphyry deposits. The country rocks in the Porphyry Creek area are early Jurassic in age and are intruded by the Cretaceous Rocher

Deboule stock. This is the right timeframe for intense hydrothermal arc-related activity, making the prospects of discovering another mineral deposit very favourable.

Warkentin and Young (2008) report that the western part of the project area is underlain by the Lower Cretaceous Skeena Group - Red Rose Formation clastic sediments, and the Cretaceous Kasalka Group - Brian Boru Formation andesitic volcanics, while the eastern portion is underlain by Late Cretaceous Bulkley intrusives (the Rocher Deboule stock), which forms a massive, prominently jointed body of porphyritic (biotite and K-Spar phenocrysts) diorite. Aplite, pegmatite, porphyritic andesite, felsite, lamprophyre and granitoid dykes/sills are common throughout the pluton and extend into the surrounding country rock. NNW trending steeply dipping joint structures are prominent in the contact zone of the Cretaceous pluton and Jurassic volcanics/sediments. This NNW trending joint set parallels the contact, and there is a subsidiary set of joints perpendicular to the contact, which roughly traces the main mineral trend (i.e., 070° strike, moderate to steep N dip) of some of the historical deposits in the area.



- LKBfp – Late Cretaceous Bulkley Plutonic Suite: feldspar porphyry intrusive rocks
- LKBg – Late Cretaceous Bulkley Plutonic Suite: undivided intrusive rocks
- IKSK – Lower Cretaceous Skeena Group: Kitsumkalum Shale, mudstone, siltstone, shale fine clastic sedimentary rocks
- IKSKC – Lower Cretaceous Skeena Group: Kitsuns Creek Formation, coarse clastic sedimentary rocks
- IKSRs – Lower Cretaceous Skeena Group: Red Rose Formation, coarse clastic sedimentary rocks
- IKSRv – Lower Cretaceous Skeena Group: Rocky Ridge Formation, alkaline volcanic rocks
- uKK - Cretaceous Kasalka Group: andesitic volcanic rocks

Figure 4 - Regional Geology of the Porphyry Creek Area

Several prominent faults traverse the area, including the N–S trending Cap, Chicago Creek and Pangea faults (Warkentin and Young, 2008). The east side of the Chicago Creek fault has been uplifted and displaced several hundred meters to the south. There is also at least one prominent cross fault, the Mill fault, which lies to the south of the Red Rose Mine on the east side of the Chicago Creek fault and likely follows Red Rose Creek on the west side. The regional geology of the claim area is shown below in Figure 4.

2.2 Local Geology

The Porphyry Creek project area is primarily underlain by argillites and greywacke of the Red Rose formation, and by andesitic volcanics of the Kasalka Group. The Red Rose sediments strike northeast and dip 45° southeast and have been altered to hornfels in the vicinity of the porphyritic granodiorite intrusive body (the Rocher Deboule stock) that underlies much of the eastern part of the project area. Smaller dioritic intrusions occur in the area of the Red Rose mine and the Brunswick prospect (see Figure 4).

Several major faults cross the area, two of which appear to intersect west of the Brunswick prospect. The Chicago Creek fault is a major north-south normal fault with an estimated displacement of 600 to 900 meters. It has been traced over a total length of nearly 35 kilometres. The Mill fault trends east-southeast, following Red Rose creek. It appears to have been displaced several hundred meters to the south by the Chicago creek fault. The Cap fault, which is also a major north-south fault, lies along the western boundary of the project area. Finally, the Pangea fault is another fault with a large displacement that runs N-S a short distance to the east of the property (Sutherland Brown, 1960).

A smaller fault zone known as the Red Rose Shear runs roughly parallel to, and is likely subsidiary to, the Chicago creek fault in the area around the Red Rose mine. The Red Rose tungsten vein occurs where this shear passes through an intrusive tongue of diorite. Outside the diorite the shear is mainly a narrow seam. The full extent of this shear is unknown, but its trend projects towards additional diorite tongues to the south of the mine and recent airborne data suggests it may extend at least as far south as the Mill fault. The diorite is distinct from the much larger granodiorite intrusive and significant bodies have only been mapped at the Red Rose mine and around the headwaters of Red Rose creek (Sutherland Brown, 1960).

Mineralization associated with many of the principal occurrences in the area is in the form of base and precious metals in quartz veins located in fractures and shears related to northeast or northwest trending fault sets. Most of the known mineral occurrences (aside from the southern Brian Boru showings) lie within 1,000 meters of the contact of the Rocher Deboule intrusive stock with the surrounding country rock (Sutherland Brown, 1960). Significant historical production from the neighbouring Rocher Deboule and Red Rose mines was principally for copper and for tungsten, respectively, but small quantities of gold, silver, cobalt, molybdenum, lead and zinc have also been recovered from these and other smaller deposits (Kindle, 1954). In 2010, the Rocher Deboule intrusive stock itself was shown to host broad porphyry-style mineralization around the **Sultana** prospect, consisting of Cu and Mo in quartz-carbonate veinlets and rarely as disseminate blebs within the granodiorite.

Veins can vary widely in their mineralization. At the Red Rose mine the upper part of the vein contained mainly scheelite with minor amounts of chalcopyrite. At lower levels, chalcopyrite was much more abundant and there were values in gold and molybdenite (Sutherland Brown, 1960). At the Rocher Deboule mine, just outside the project boundary to the north, chalcopyrite was the principal economic mineral, with significant gold and silver values. At the Victoria mine, a short distance to the north, mineralization is primarily cobalt sulpharsenides with high

gold values (occurring as small specks scattered throughout the sulpharsenides), and minor molybdenite (Kindle, 1954). At the **Brunswick** mine, which is located on the Porphyry Creek property, the quartz veins are mineralised mainly with galena, sphalerite and tetrahedrite, with lesser amounts of chalcopyrite (Holland, 1987).

In the **Brian Boru** Creek area, semi-massive to massive sulphide mineralization reportedly occurs at or near the contact between andesitic and rhyolitic volcanics and also in narrow veins containing base metal sulphides. Mineralization is primarily massive sphalerite and pyrrhotite with significant amounts of galena and chalcopyrite in some of the smaller veins (Warkentin and Young, 2008).

At the **Sultana** prospect the historic target was a silver-rich “stockwork” that was exposed at surface and had been trenched and sampled (Campbell and Saunders, 1969 and 1970). The underlying rock in this area is mostly weakly Cu-Mo mineralized diorite which is intruded by dyke swarms of varying composition. Silicified andesite dykes intrude parallel to the main mineralized trend and close to the silver rich vein stockwork. Also in the area, aplite, pegmatite, granite porphyry and hornblende dykes intrude the stock. These dykes are also mineralized with Cu-Mo and magnetite to varying degrees (ARIS report 2855).

The MT showing is located at the southern boundary of the Rocher Deboule stock. This was mapped in detail in 1967 (ARIS report 01134) as an extensively pyritized zone projecting southward from the stock into the Brian Boru formation volcanics. Country rock in this location varies from andesites to dacites with interstitial tuffs and agglomerates. Intruding into this volcanic sequence are three dyke swarms: altered feldspar porphyry, diorite and basalt.

2.3 Exploration Models

Two genetic models have been used to establish a framework for exploration on the project.

Initial work on the property by the present owners (detailed in Warkentin, 2006) suggests a potential IOCG or skarn target in the volcanic-sedimentary stratigraphy on the western side of the property based on government RGS data and later stream sediment sampling, reconnaissance sampling of known occurrences and airborne geophysical data.

The most extensive recent work, conducted by Duncastle in 2010 and 2011, focused on the eastern side of the property and Cu-Mo mineralization associated with granodiorite to diorite intrusions which show a closer genetic relationship with a porphyry system.

The conceptual target is a zoned porphyry mineral system related to the intrusion of the Rocher Deboule stock, a large composite intrusion of granodiorite to quartz monzonite composition. Mineral occurrences include “proximal” intrusion-hosted, bulk tonnage Cu-Mo deposits and “distal” polymetallic veins and shears within the adjacent volcano-stratigraphy. In regional surveys the intrusion appears as a broad, 10 kilometre long aeromagnetic anomaly associated with the access of the stock. Mineral occurrences are distributed around the margins of the aeromagnetic anomaly.

A very concise description of possible porphyry systems is provided by Rogers in his 2010 paper: “...*fracture-controlled quartz-sulphide veinlets and veins, and sulphide disseminations in fractures hosted by, or proximal to, high-level, calc-alkaline, intermediate to felsic, porphyritic intrusions. There may be a spatial and genetic relationship to high-level (epizonal), calc-alkaline, intermediate to felsic stocks, dykes, sills, and breccia pipes, with porphyritic phases, that are intrusive into volcanic and sedimentary rocks. These commonly occur as subvolcanic intrusions to volcanic complexes. The porphyritic intrusions and/or the surrounding country*

rocks may host the mineralization. Multiple intrusive phases and brecciation are common. Typical general associations are: quartz monzonite to alkali feldspar granite: Mo-W; granodiorite to quartz monzonite: Cu-Mo; and diorite-quartz diorite-tonalite: Cu-Au-(Mo).”

Individual mineral occurrences may be associated with smaller intrusive bodies and dykes either within or on the margins of the main stock. An example of this may be the Sultana prospect where airborne geophysics has identified an aeromagnetic high located on the eastern margin of the stock. The magnetic high is surrounded by an arcuate magnetic low which grades into background magnetics. This magnetic low may be caused by the destruction of primary magnetite in the host rock by hydrothermal fluids mobilized by the heat of intrusion. Sulphide mineralization is localized within the altered area around the barren core. Figure 5 shows a map of the magnetic intensity in the Sultana area. This is also coincidental with a large EM anomaly (see Figure 6), which indicates potential for significant sulphide mineralization. Figure 5 also shows the 2010 and 2011 drillhole locations.

The host rock in the Sultana area is predominantly hornblende-granodiorite of the Rocher Deboule Stock. As described in section 2.2, several types of dykes intrude the stock at this location as well. These two factors correspond to Rogers’ description (above), which adds more evidence for a Cu-Mo porphyry system in the Sultana area.

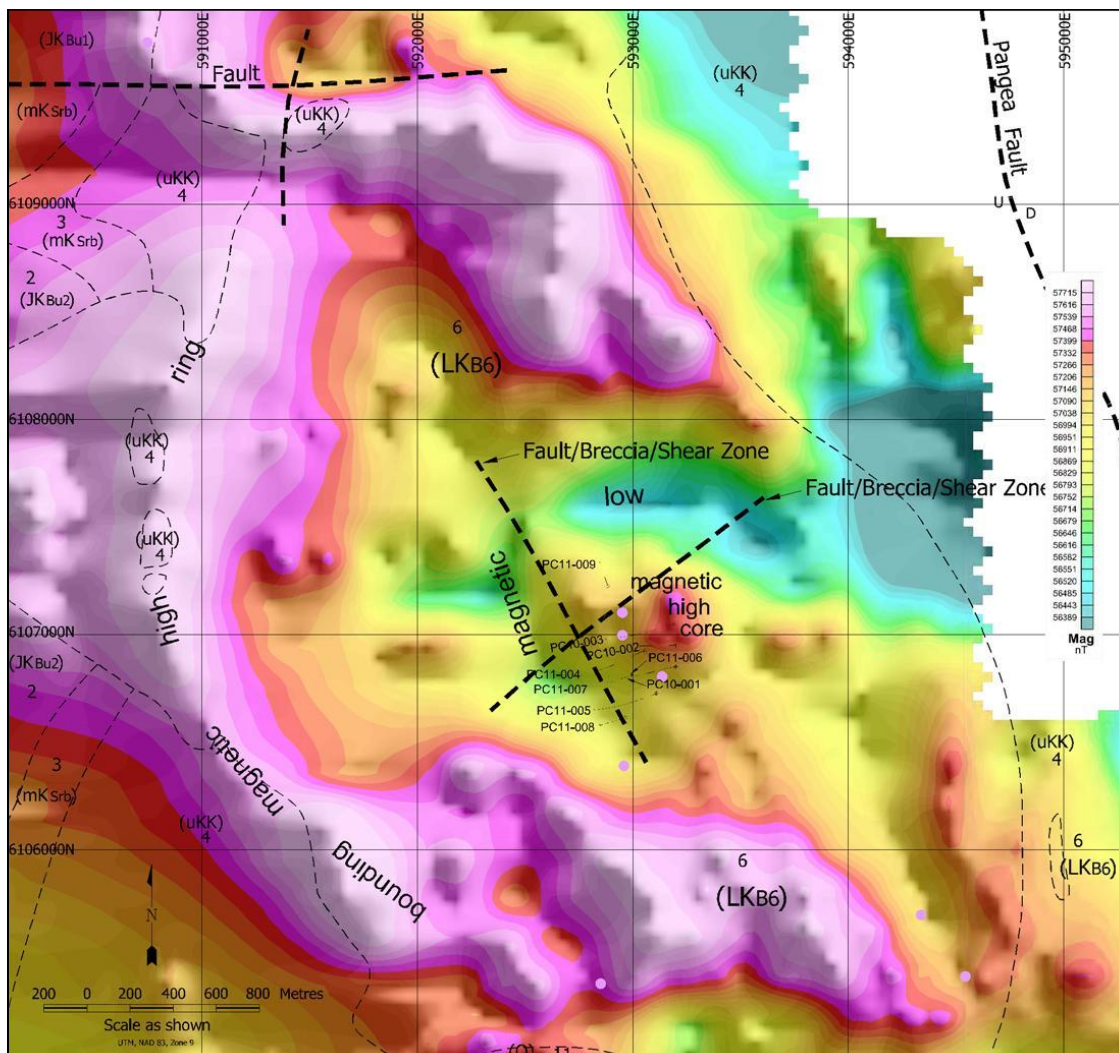


Figure 5 - Magnetic Intensity Map for the Sultana Area

The 2010 and 2011 drilling (9 NQ drillholes, 3,925 m) cut weak to moderately sericite-chlorite+/-epidote altered medium grained granodiorite indicative of the phyllic-propylitic alteration zone surrounding a porphyry style deposit. Fracturing and vein density encountered in the drilling appeared to be insufficient to produce Cu-Mo grades above the 0.1% range over significant lengths in drill core. The holes drilled to date have shown pervasive low grade copper and molybdenum mineralization over an area of approximately 200 by 300 meters, and extending to depths of more than 400 meters. Average grades are sub-economic, in the range of 0.03 to 0.05% Cu and .002 to .003% Mo, although there are sections showing significantly higher grades. All drilling to date has been to the west of the central magnetic high core feature.

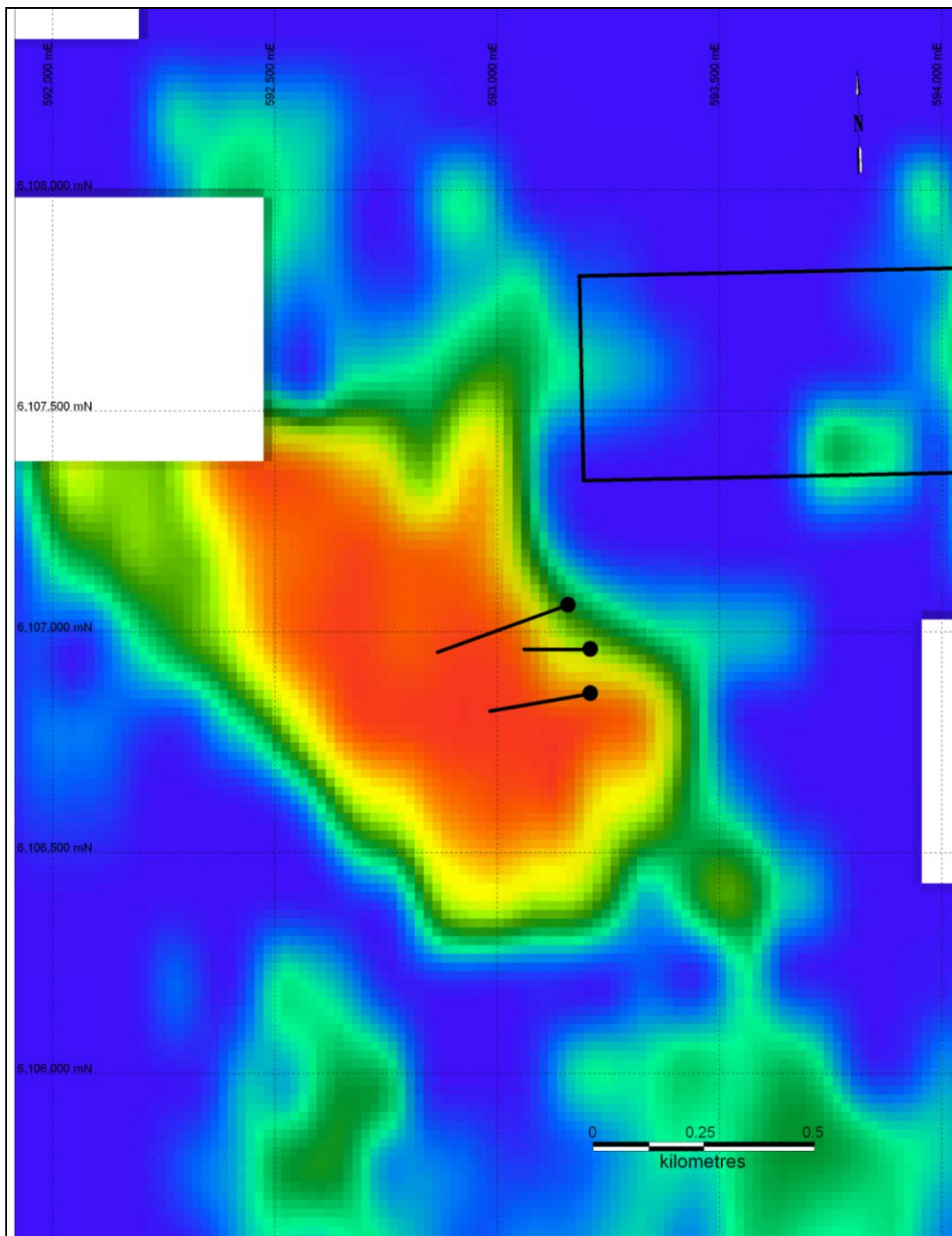


Figure 6 - Apparent Resistivity at 7200hz Coplanar in the Sultana Area

In addition to the Sultana prospect, there are several other areas on the east side of the property showing a positive response to the airborne geophysical surveys. These represent additional possible porphyry targets that have yet to be explored in any meaningful way. These areas are indicated in Figure 7.

On the west side of the property, the BC government regional geochemical survey (RGS) database indicates that stream sediment sample 93M831097, taken from the lower part of Red Rose Creek, carried values greater than the 95th percentile for Cu, Au, Fe and La. These are important indicator elements for IOCG systems and their values make this one of the highest ranked samples for IOCG indicator elements in BC. This sample is likely affected by its location downstream from a former tungsten mine, but the values for these metals as well as for secondary IOCG indicators are very high (generally greater than 99th percentile), and these elements are also elevated in other stream RGS samples in the area that should not have been affected by past mining, including 93M831390 and 93M831391. In addition to the primary indicators these samples also show elevated levels of other IOCG indicator minerals such as cobalt, uranium and other REEs besides lanthanum.

These values indicate the presence of a significant source of polymetallic mineralization in this part of the property large enough to affect several drainages. Stream geochemistry carried out by Duncastle in 2008 confirmed high Cu, Au and Fe in many drainages, along with other indicator minerals, but lanthanum values were not as elevated. The overall geochemical signature remains suggestive of IOCG as one possible source, comparing with examples occurring in Cordilleran rocks in South America.

IOCG systems are similar structurally to porphyry systems (i.e. deep intrusion related hydrothermal systems, with similar zones of alteration). They generally form at a greater depth than porphyries and can have large breccia pipes/zones associated with the magma conduits. These systems also often have associated epithermal-style veins at some distance from the main centres.

Geophysical data shows magnetic highs on the west side of the Porphyry Creek property that are distinct from the strongly magnetic Rocher Debole stock. Some of these show a linear structure suggestive of fault zone associations (Figure 7). There are also several areas with fairly strong bedrock EM anomalies that could represent conductive breccia zones, as well as coincident areas of low resistivity. Radiometric data also shows a strong potassium response in the northwest part of the property, correlating with other indicators. Thorium and Uranium signatures are relatively high in many parts of the property, but analysis of the 2010 airborne data shows a wide area in the northwest part of the property with low Th/K values as well as an elevated U response in the same area (Figure 8). This is indicative of a zone of potassic alteration in the sedimentary and volcanic units in that part of the property.

Based on the above indications, a broad target zone has been identified that is believed to be prospective for IOCG or other extensive polymetallic mineralization. Within this zone, several targets have been identified for further investigation with the strongest one being in the lower Red Rose Creek valley, including part of the ridge between Red Rose and Armagosa Creeks. Other targets are on the ridge to the south of Red Rose Creek and above Slater Creek. An important next step in site exploration will be to carry out geochemical sampling in target areas, along with prospecting and mapping.

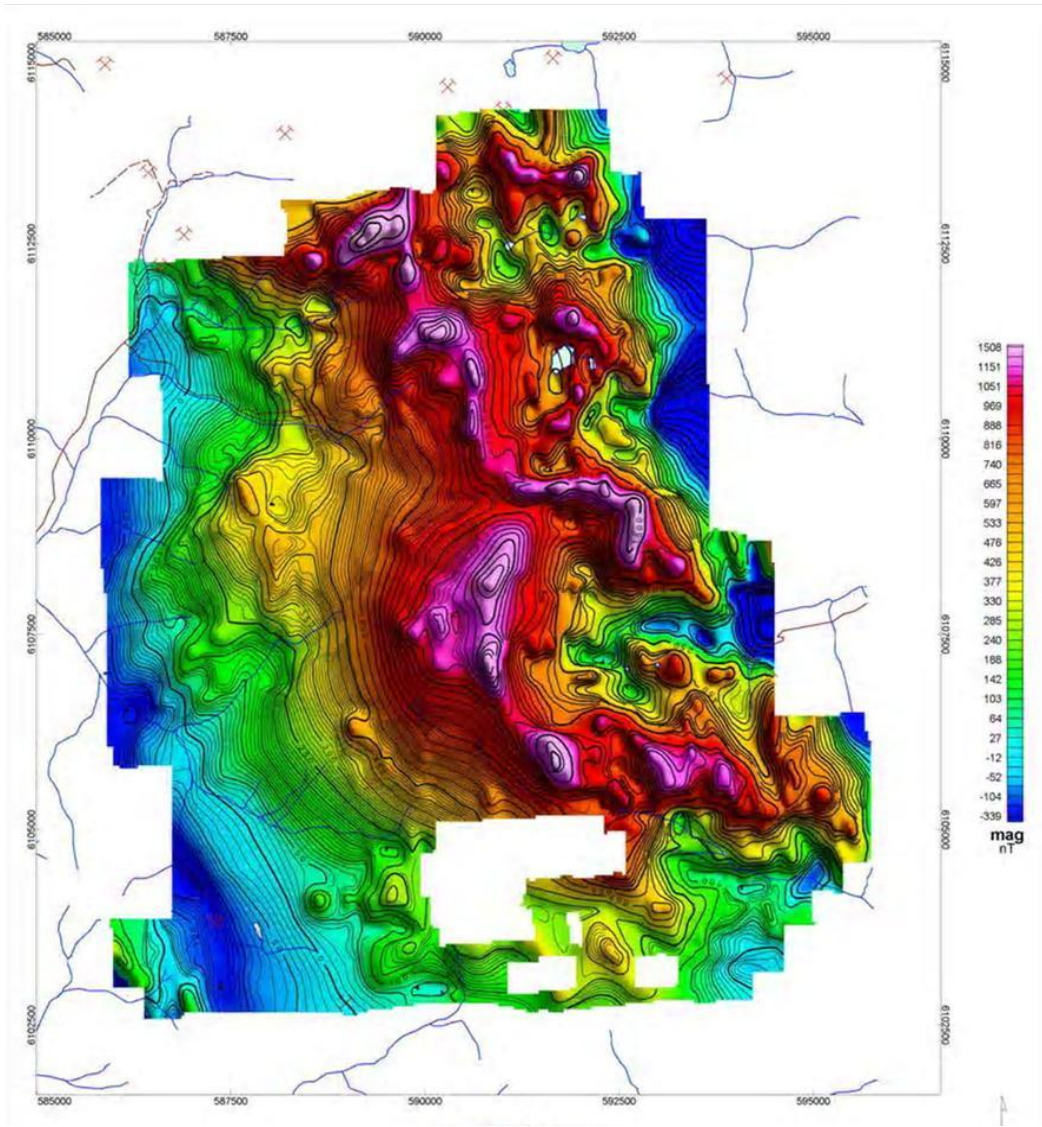


Figure 7 – Residual Magnetic Intensity

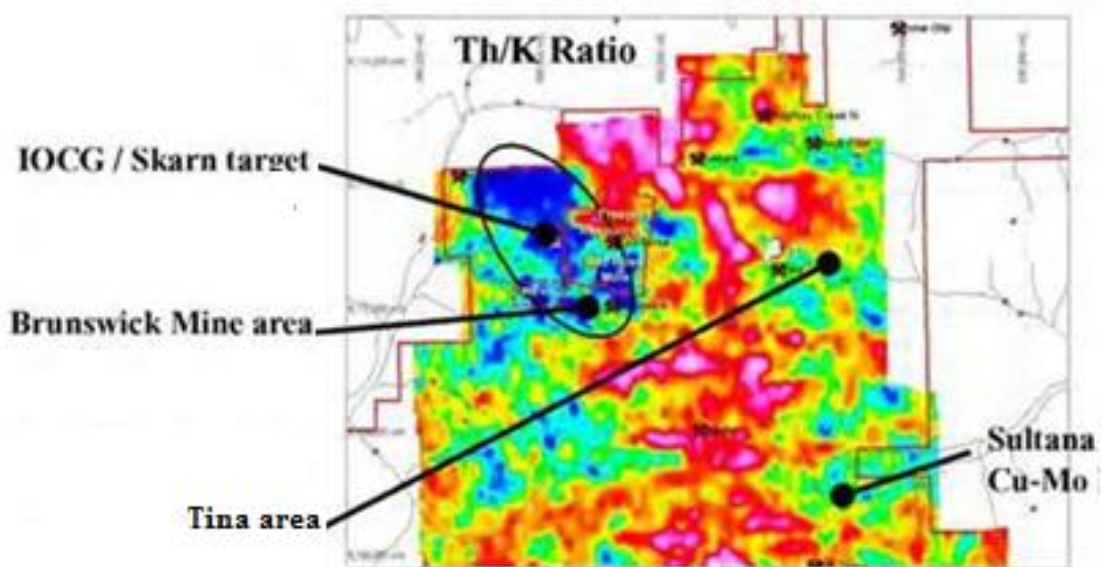


Figure 8 – Radiometric Th/K ratio

3 Past Exploration

3.1 Introduction

Exploration in the area has a long history, but since the end of production in the camp in the early 1950's, it was intermittent and mainly localized around known prospects prior to the acquisition and consolidation of the property by the current owners beginning in 2006. Section 1.4 provides a brief summary of the ownership and exploration history for the three most developed areas on the property. Additional details relevant to current interpretations are provided below.

Duncastle Gold optioned the property from the current owners in 2008. Previous to that the current owners (Warkentin, 2006 and 2007) had compiled a historical database and conducted limited surface sampling in several high-grade target areas on the western portion of the property. A field program by Duncastle in 2008 continued to follow-up initial targets identified by the owners in the western portion of the property. Following significant additions to the eastern portion of the property by staking in 2009, additional historical data compilation was conducted in the winter of 2010 which identified several potential targets on the newer claims in the southeast. A 495 line-kilometre airborne geophysical survey was conducted over the newly consolidated property in 2010 (Campbell 2010) which identified multiple additional targets as summarized in Section 3.3. Duncastle then carried out a major exploration program, including a significant drill program totalling 3924 m at the Sultana prospect during 2010 and 2011.

3.2 Historical Exploration

Prior to 2006 the area was never explored as a single project, but could best be described as the southern and central portions of the Roche Deboule camp, which included two significant past producers, the Roche Deboule and Red Rose mines, and several other smaller shipping mines. The earliest recorded work in the area was just north of the property boundary at the Rocher Deboule and Great Ohio properties beginning in 1910. By 1915 a mill was in operation at the Rocher Deboule mine and development work was underway at several other prospects, including the Red Rose, Armagosa, Brunswick and Brian Boru.

The Rocher Deboule mine produced more than 36,000 tonnes of ore before closing in 1918. The mine produced a further 12,000 tonnes during a brief period of operation in 1952. During this early period small pits and adits were developed on mineralized showings at the Armagosa and Brian Boru prospects, and a tunnel was developed on the high grade Brunswick vein. A vein was also reportedly explored on the ridge to the south of Red Rose Creek, but the exact location is unknown. On the Red Rose property a gold bearing vein was developed to the south of the later tungsten mine, which was discovered in the 1920's and produced 1 million kg of tungsten from 113,000 tonnes of ore in two periods of operation between 1942 and 1954.

The most relevant recent exploration for current project areas is described below.

3.2.1 Armagosa Creek

Little is known about the early exploration of this area, and the historical workings have not been described in detail in any published reports. There are reportedly two adits and a small shaft exploring a mineralized shear trending at 030 and dipping steeply to the northwest, following a steep ravine on the north side of Armagosa Creek. An entry in the 1912 BC Mines Annual Report mentions that the claims included part of the Great Ohio vein and two other veins 4 to 9

feet wide, the lower one carrying 2% copper. It is also reported that the area was explored in the early 1950's by Skeena Silver Mines Ltd. when veins containing Scheelite were discovered.

The only well documented exploration was by Southern Gold Resources Ltd. in 1987. As part of a larger exploration program at the Rocher Deboule mine to the north, talus fines and float were sampled along the north and south slopes of the ridge to the north of Armagosa Creek. Additional grab samples were collected from float and mineralized exposures in the vicinity of the Armagosa workings. Talus fines showed numerous strong Au, Cu, Pb and Ag anomalies along the north slope, including some within the current property boundaries. On the south slope, there was only one strongly anomalous sample for gold, although copper values were generally strong. One float sample of vein material, collected below the Armagosa workings, assayed 1.3 oz/t Au.

Recent exploration on the adjacent Rocher Deboule property reportedly discovered a well mineralized vein on the north side of the ridge, directly north of the Armagosa, a sample of which assayed over 20% Cu.

3.2.2 Brunswick/Red Rose Creek

The Brunswick mine was located in 1912 and developed by two adits, with most of the early development carried out in the 1920's. A few tonnes of high grade ore was reportedly shipped during this period. In the early 1950's Skeena Silver Mines Ltd. extended the lower adit and carried out underground diamond drilling. In 1972 and 73 Arcadia Explorations Ltd. extended the lower tunnel to a length of approximately 100 meters and carried out trenching on the slope above the adits. The upper adit follows a 0.3 to 0.6 m wide quartz vein well mineralized with galena and sphalerite and carrying high silver values. The lower adit is driven on a less mineralized fault that appears to be a different structure than the upper vein. The work in 1972 exposed some higher grade vein material in the wall rock, but it was not certain if it was the downward extension of the upper vein. Samples of the upper vein assayed up to 67 opt Ag, and ore as high as 100 opt Ag was reported from the early development period. The vein was not seen in surface trenches on the slope above.

In 1986 prospecting by Catoosea Resources Corp. identified two additional veins in the vicinity of the Brunswick mine and three other veins in drainages to the southeast in the upper part of the Red Rose Creek basin. Beyond these small programs, no significant work has been reported in the Red Rose Creek area since the closing of the Red Rose mine in 1954.

3.2.3 Brian Boru Creek

The Brian Boru and surrounding prospects were originally staked in the period following the discovery of the Rocher Deboule deposit in 1910. The area saw considerable activity in that period and again in the 1920's. Multiple showings of lead and zinc with variable silver values were found in the basins of both the main creek and the south fork. Most were reported to be small lenses or veins of sphalerite and galena, but a more extensive flat lying band of sphalerite and pyrrhotite was reportedly developed with a 9 meter adit along the south slope of the north basin. This band was reported to be 4 feet wide and grade up to 20% zinc with some minor silver values.

There is no further record of work in this area until 1979, when the southern basin was staked by Asarco. This property included the Jones and Killarney Minfile occurrences but did not include the Brian Boru occurrence in the north basin. Between 1979 and 1985 Asarco, and later Noranda

Exploration, conducted talus, rock and silt sampling, grid soil sampling and ground-based geophysics over much of the area. Numerous anomalies were found and some high grade occurrences were confirmed, but no significant ore zone was identified. Individual sample grades as high as 15% Zn and 20 opt Ag were reported.

3.2.4 Sultana

Originally staked in 1910, the first work recorded was a single diamond drill hole and work on open cuts carried out by Granby Consolidated in 1923. Canusa Mining completed several short drill holes in 1956, and Sultana Silver Mines added 9 short holes between 1966 and 1969. Utah Construction and Mining carried out rock sampling and drilled two longer holes totalling 305 meters in 1970-71.

Aside from rock geochemistry sampling of the surrounding granodiorite by Utah in 1970, prior to 2010 work was focused primarily on a high-grade silver copper vein. The vein outcrop exposed in trenches is 20 meters long and up to 7 meters wide, strikes at 070 and dips at 45 degrees to the southeast. Assays over the entire width show silver values up to 600 g/t with more than 2% copper and minor gold values. Numerous small drill intercepts showed some continuity below surface, but the size appeared to diminish with depth. Utah's geochemistry defined an area of 90 by 150 meters that showed the presence of Cu-Mo mineralization, providing an initial indication of potential for wider low-grade mineralization.

3.3 Porphyry Creek Property Exploration

The Porphyry Creek property was acquired by the current owners through staking beginning in 2006. Prior to optioning the property to Duncastle Gold Corp in 2008 small programs of prospecting and geochemical sampling were completed in 2006 and 2007. Duncastle expanded the property by staking to 13,560 Ha between 2008 and 2012, carried out prospecting, geochemical surveys, an airborne geophysical survey and two drilling programs. The property was returned to the current owners in 2014 and a small surface program was conducted that year. Much of the expanded claims acquired by Duncastle have since been allowed to lapse.

3.3.1 2006/7 Prospecting

Initial work by the current owners in 2006 and 2007 consisted of visits to some of the known prospect areas and collection of rock and stream sediment samples. Areas visited included the Brunswick mine, the Armagosa area and the Brian Boru basin. High grade vein material was obtained from near the Brunswick mine, assaying 48 oz/ton Ag, and some strong geochemical responses were obtained from stream sediments in the Armagosa area, including one assay of 0.52 g/t Au from the west end of the ridge.

Stream sediment sampling in the northern Brian Boru basin showed no significant lead-zinc anomalies from the north side or upper end of the basin, but two samples at the upper, or eastern end of the basin showed anomalous copper and precious metals values in streams draining the upper slopes to the east. One sample returned a value of 8.3 g/t Ag.

Stream sediments from the Armagosa area were all from small streams draining the north side of the creek at the western end of the valley. All showed strong copper values (200-500 ppm). All were also anomalous in Au, Mo and As, with the two western-most samples showing very high Au and As values (520 and 140 ppb Au and 3100 and 500 ppm As). These two were also anomalous in La, while the two more easterly samples, closer to the reported location of the old workings, showed very high Fe content (7 and 10%) and anomalous W values. Float rock

collected from a talus slope a short distance to the west of the Armagosa workings showed elevated As and minor precious metal values in quartz vein float and slightly stronger precious metal values (0.03 oz/t Au and 1.0 oz/t Ag, and high Cu and As (<1.0%) in a sample of massive sulphide float.

A sample of tailings from the red Rose mine showed considerable remaining W value (0.3%) as well as elevated Cu, Mo and Au values.

3.3.2 2008 Geochemical Survey

After optioning the property, Duncastle's first site exploration work consisted of a helicopter-supported prospecting and stream sampling program on the west side of the property in 2008. Both rock and stream sediment samples showed elevated values from numerous locations. Rock sampling confirmed the high silver and base metal values from vein material at the Brunswick mine (up to 75 oz/t Ag and 30% combined Pb and Zn) and also showed the high zinc content in massive sulphide mineralization at the old Brian Boru prospect (up to 22% Zn and 4.4 oz/t Ag). Rock sampling also returned some significant values from areas with poorly documented or no known mineral occurrences, including the east end of the ridge north of Armagosa Creek, the area below the Jupiter Minfile occurrence and the eastern part of the northern Brian Boru basin.

The rock samples were primarily float, so new specific zones of mineralization were not identified, but included wide areas of the property. Of the anomalous samples only one was of sufficient grade to be of interest as vein mineralization (9% Zn and 3.3 oz/t Ag in the Jupiter area), but numerous samples carried elevated Cu at levels of interest for bulk tonnage targets (ranging from 0.10% to 0.75% Cu). In some cases these samples showed disseminated mineralization in volcanic rocks rather than vein mineralization, and in at least two samples the Cu was accompanied by gold values. These included a sample with 0.7% Cu and 0.47 g/t Au near the headwaters of Armagosa Creek and a sample with 0.30% Cu and 0.24 g/t Au on the south side of the Slate Creek valley, less than two kilometers west of the Jupiter Minfile location. Overall, of 43 samples collected across the property, 15 returned values above 0.10% Cu, with another 5 showing anomalous values for other metals of interest but a Cu content below 0.1%.

Stream sediment sampling showed multiple strongly anomalous areas for a spectrum of economic and indicator elements. The most widespread anomalous elements were Cu and As, but Au anomalies were also fairly common. Medium to strong anomalous values were also seen for Mo, Pb, Zn, Ag, Fe, Sb, Co and W, but these tended to be more localized. For Cu, 30 of 58 samples were over 100 ppm, with 10 of the remaining 28 over 85 ppm. For most elements values tended to be much more anomalous in the northern part of the survey area outside of a few strongly mineralized drainages below the Brian Boru prospect. All of the 23 samples collected from the Armagosa and Red Rose drainages contained greater than 90 ppm Cu and As, with many above 200 ppm.

Table 3 shows a summary of stream sediment results by area, incorporating results from the 2007 work into the 2008 database. Other elements also showed a similar pattern. The zoning of higher values to the north would be even more pronounced if not for a few very high values found near the Brian Boru prospect.

Table 3 – Stream Sediment Values by Area

Property Area	Samples	High Au (ppb)	Ave Au (ppb)	High Ag (ppb)	Ave Ag (ppb)	High Cu (ppm)	Ave Cu (ppm)	Ave As (ppm)	Ave Co (ppm)	Years
Armagosa	9	520	95.3	1047	178	505.4	340	700	25	2007/8
Red Rose	18	758.3	88.2	8823	1174	707.7	291	339	49	2008
Jupiter	12	52.6	22.8	1288	397	182.3	78	187	14	2008
Slate	8	14.9	6.2	339	228	150.6	101	93	31	2007/8
Brian Boru	20	116.7	10.8	8300	827	3423	279	47	19	2007/8
Total	67		41.8		450		154	231	23	

3.3.3 2010 Airborne Surveys

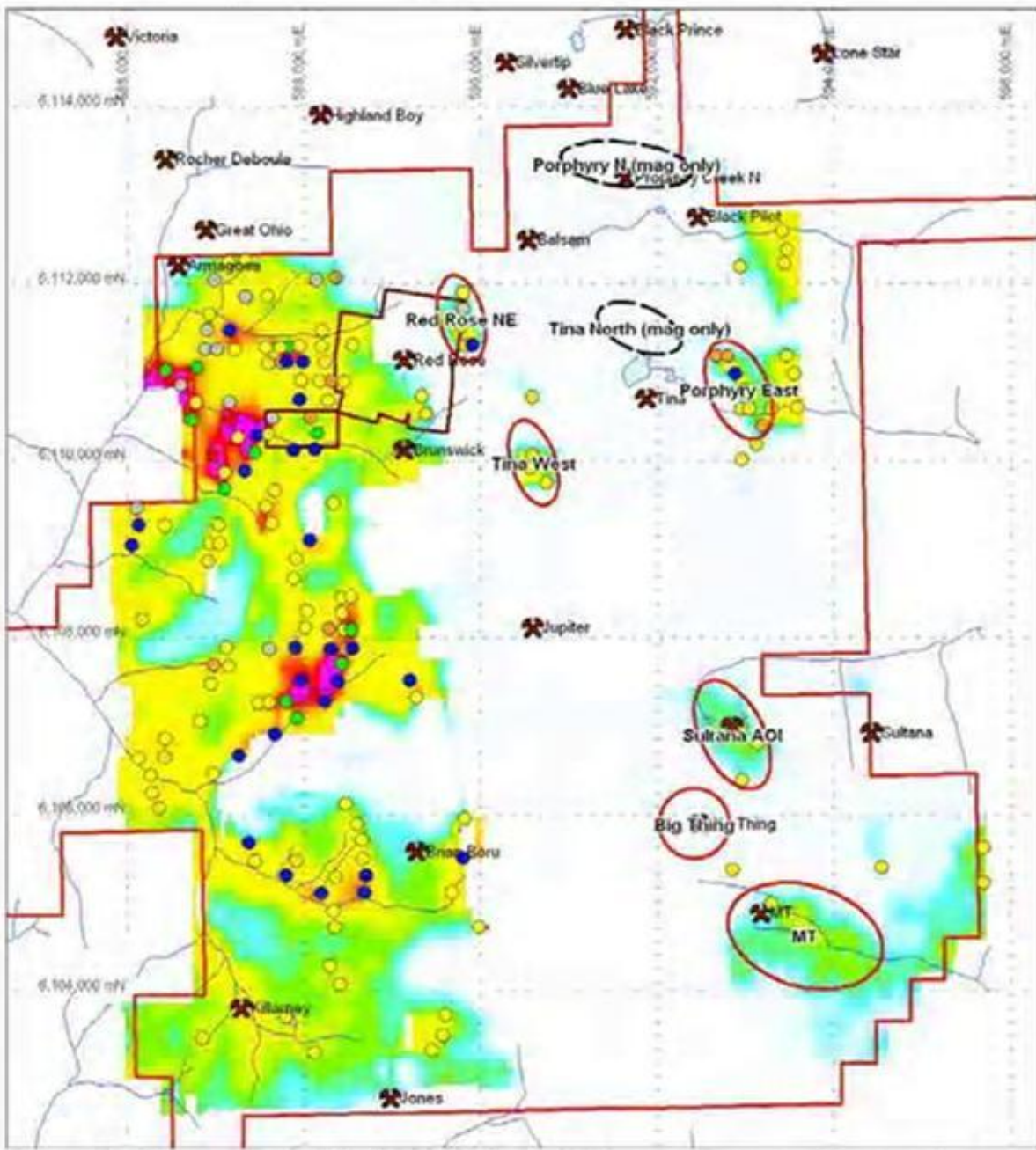
In July of 2010 Duncastle conducted a helicopter-borne electromagnetic, resistivity, magnetic and radiometric survey of the property. The survey was flown by Fugro Airborne Surveys Corp. using a DIGHEM electromagnetic system and consisted of 495 line-kilometers flown using a 200 meter spacing. In addition to Fugro’s reporting, the data was analyzed and interpreted by Intrepid Geophysics Ltd.

Results confirmed a strong magnetic response associated with the intrusive stock underlying the eastern part of the property and showed generally low resistivity associated with the older volcanic and sedimentary rocks on the west side. Within that broad framework numerous anomalies were identified through all of the parameters measured. At the time the principal focus was on potential porphyry zones within or adjacent to the Rocher Deboule stock and Intrepid identified a total of six anomalous conductive zones in that area (Figure 9). In addition, two singular magnetic high zones were identified.

Figure 9 also shows ranked EM anomalies and the resistivity at 7200 Hz after excluding areas where data was potentially compromised by the difficult terrain. This shows the strong resistivity response in the west half of the property, and the concentration of EM anomalies particularly in the northwest part of the property. Nine areas of elevated radiometric response were identified, and later interpretation of the Th/K ratio (Figure 8) identified several areas of potential strong potassic alteration, with the strongest covering much of the northwest part of the property. The broader compilation indicates no fewer than 12 'Areas of Interest' for follow-up on the property. Figure 10 summarizes these priority anomalies with the uncorrected apparent resistivity as the background.

Intrepid also employed algorithms for Textural and Phase Analysis and Structure Detection from the magnetic data both to interpret potential structural breaks such as faults and contacts, and to identify 'Zones of Complexity' that could be conducive to emplacement of mineralization. Figure 11 shows the inferred structural features resulting from this analysis. In addition to these features, the detailed analysis indicated extensive smaller magnetic linear features within the intrusive stock, indicative of significant structural complexity. Outside of the stock these were largely absent aside from the larger features shown in Figure 11, with the exception of an area to the west of the Red Rose mine. This area roughly corresponds with the area of the strongest Th/K ratio anomaly shown in Figure 8.

Intrepid’s interpretation of this analysis was that the property appears to feature a major NW-SE structural fabric that cuts across the general trend of the regional geology. This runs through the central area of the intrusive stock, but also appears to extend into the sediments to the west.



AEM by Grade (conductance)	
5 (2)	Red
4 (13)	Green
3 (34)	Blue
2 (121)	Yellow
1 (11)	Orange
0 (14)	Grey

Figure 9- Apparent Resistivity (7200 Hz) and AEM anomalies with East-Side Target Areas Indicated (Campbell 2010).

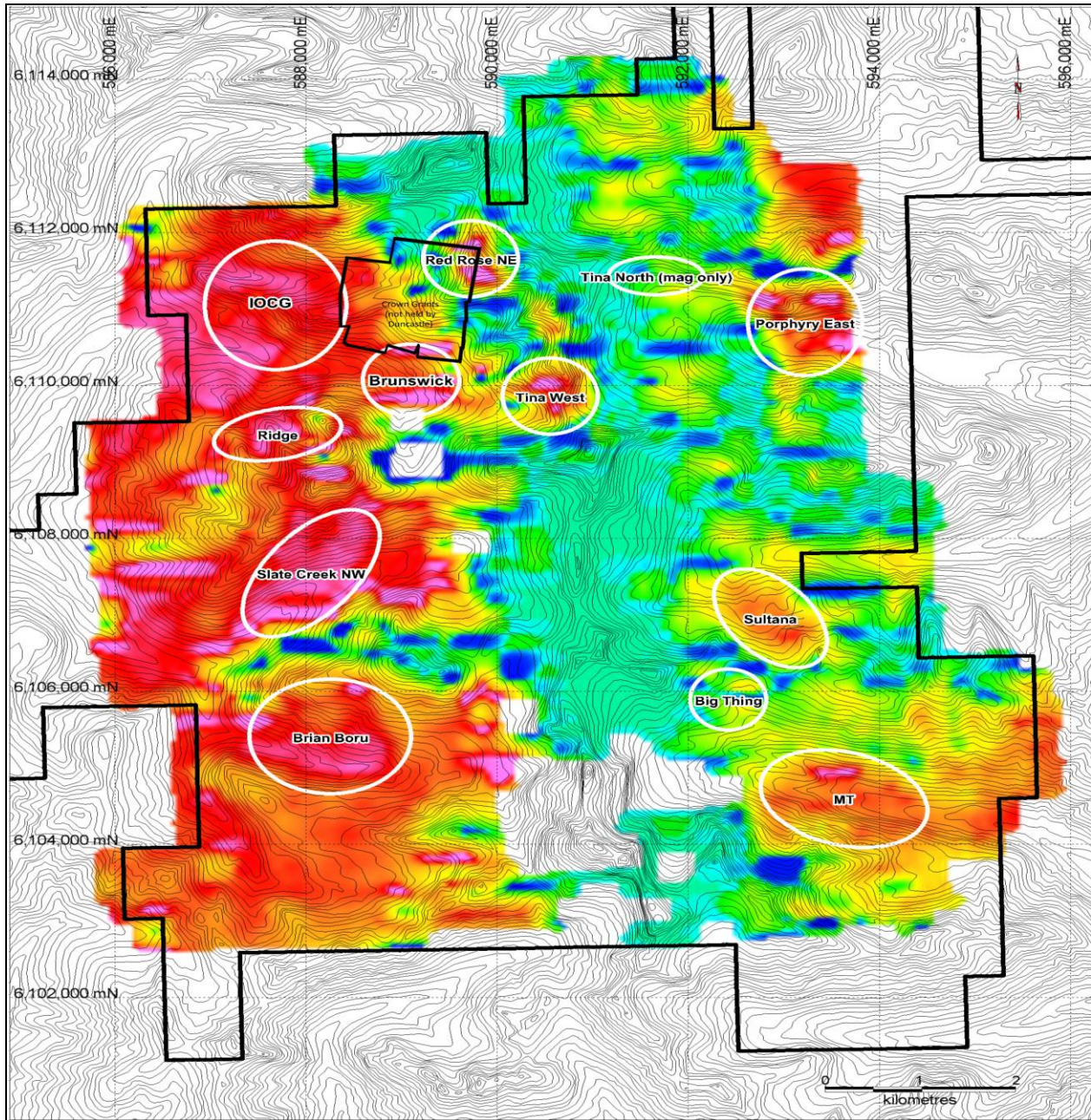


Figure 10 – Resistivity Map showing Priority Geophysical Anomalies

As noted, Duncastle and Intrepid focused their interpretations on the intrusive covering the eastern part of the property. This resulted in a substantial exploration program at the Sultana prospect, but only brief visits to other identified prospects, where no obvious surface deposits were encountered. These other targets remain essentially untested. It is also worth noting that regional geochemistry shows strong copper-gold anomalies for the streams draining the areas of these geophysical anomalies.

Analysis of the geophysics of the west side of the property was only incidental and no attempt was made at interpretation despite the presence of numerous anomalies. Some of the implied structural features (Figure 11) correspond fairly well with mapped contacts of the intrusive body, but the major NNW-SSE faults mapped over the area (e.g. the Chicago fault) are largely absent, aside from some possible intermittent segments that only loosely correspond to the mapped location. The northerly of these segments seems more likely to be either the intrusive contact or the red Rose shear, as it lies to the east of the Brunswick and Red Rose mine locations.

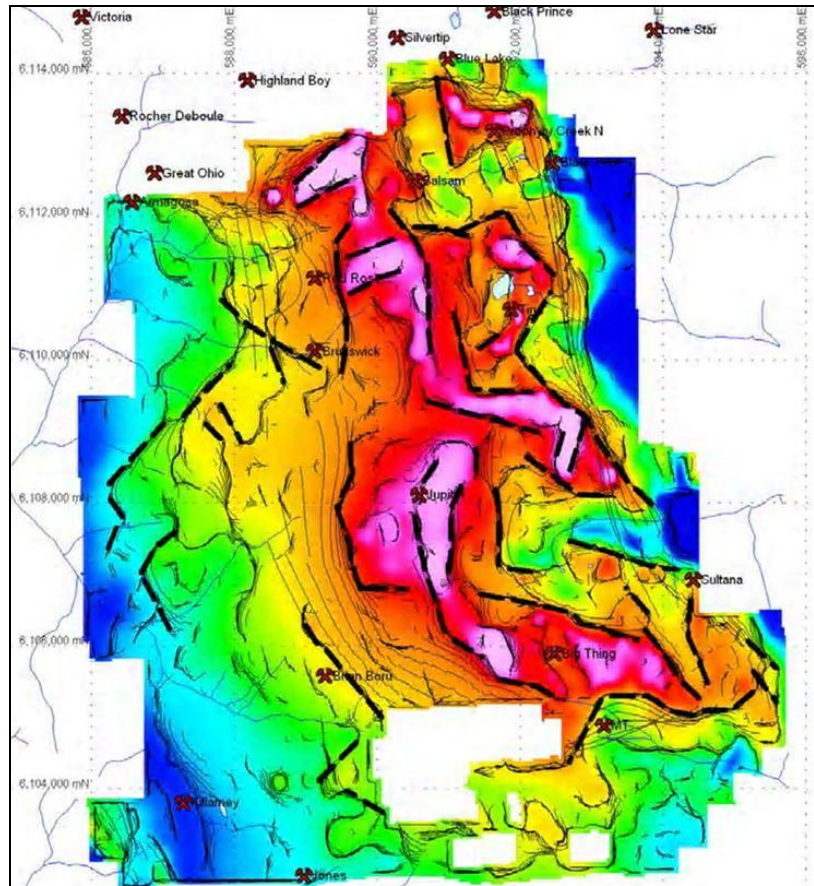


Figure 11- Residual Magnetic Intensity with Major Inferred Structural Breaks/Contacts

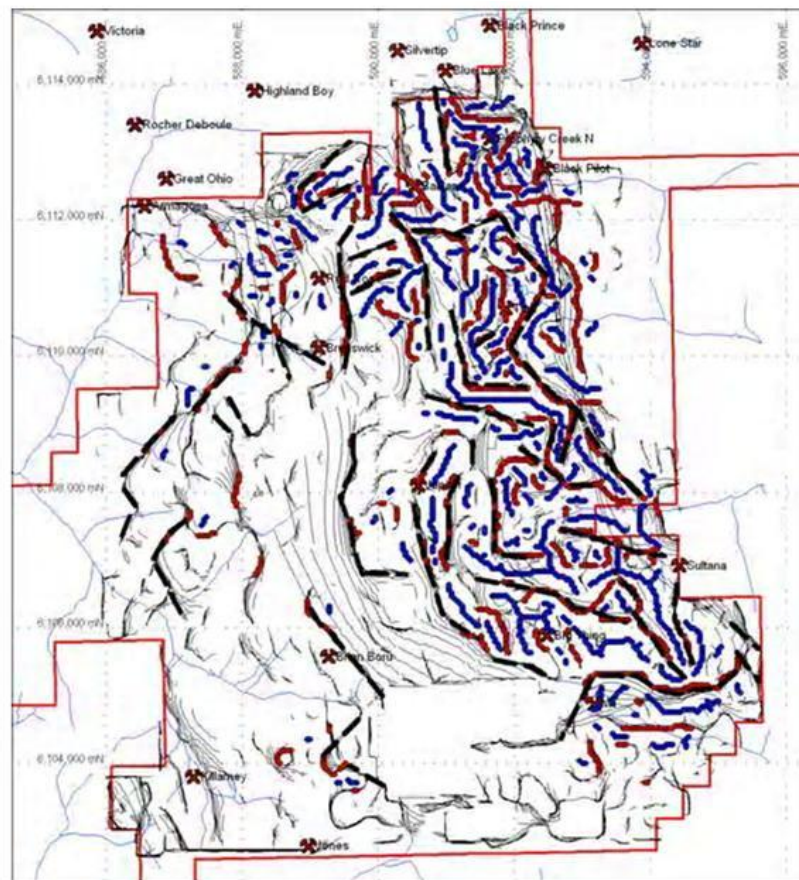


Figure 12 – Cumulative Magnetic Linearities (Campbell 2010)

The northwest part of the property is an area of particular interest from these interpretations. The strong NW-SE linears noted in the intrusive appear to show some continuity into the sediments to the west, and may be related to the 'Mill fault' shown on older geological mapping as roughly paralleling Red Rose creek. This corresponds loosely with the location of a strong NW trending magnetic discontinuity passing just south of the Brunswick mine and running up the ridge between Red Rose and Armagosa Creeks. On the northeast side of this line is the only part of the property showing strong complexity, as indicated by the magnetic linear analysis, that does not appear to lie within or along the contact of the intrusive.

As noted, this area corresponds closely to the strong Th/K anomaly extending to the property boundary in the northwest. At the scale mapped, these appear to overlap almost exactly. The same area shows some low resistivity, although not as strongly as areas to the southwest of the fault. More interestingly, the area shows an abundance of EM conductors, particularly in the section south of Armagosa Creek. As noted in Section 3.3.2, above, these two drainages have generally shown strong geochemical values from stream sediments. Overall this area appears to be highly prospective for finding significant zones of mineralization. To date no record has been found of exploration occurring on the ridge between Red Rose and Armagosa Creek to the west of the Red Rose mine claims, although the area was mapped by Sutherland-Brown in 1960.

3.3.4 2010 and 2011 Sultana Geochemical and Drilling Programs

Geological and structural mapping and soil sampling was conducted at the Sultana prospect as part of the 2010 exploration program. Hydrothermal argillic and sericitic alteration were evident within the Sultana showing. Chalcopyrite, pyrite, tennantite/tetrahedrite, and molybdenite were found on fracture surfaces in outcrop and had also been reported in the historic drill hole logs from this area. Rock samples of quartz veins taken in the Sultana area assayed up to 18.25g/t Au, 865g/t Ag, 17.87% Cu, 0.57% Zn and 1.08% Mo.

As a result of the encouraging preliminary surface evaluation and historical information the Sultana occurrence was targeted for further work. A follow-up soil sampling program was conducted on the Sultana prospect which totalled 480 samples. The samples were taken 5 to 10 meters apart along several lines spaced 25 to 50 meters apart. The short sample intervals were chosen due to the close spacing of quartz veins carrying pyrite and chalcopyrite observed at the Sultana showing. The program covered a total area of about 250 x 400 meters (Westphal, 2010c).

The results of the soil sampling were extremely encouraging, returning values up to 3363 ppm Cu and 834 ppm Mo, with anomalous values over much of the grid. There were also intermittent high lead, silver and gold values. The mean and maximum value for both Cu and Mo were unusually high, suggesting high-grade mineralization close to the surface. Rock samples taken in the area confirmed this, with values up to 1.08% Mo. Because of the excellent soil results, a three-hole drill program totalling 1,330 m was conducted before the end of the field season.

Drill sites were chosen based on soil anomalies and geophysics. All three holes showed widespread low grade Cu-Mo mineralization with occasional higher grade intervals. Hole PC10-01 gave the best results, and ended with 40 meters of some of the highest grade intervals. Results are summarized in Table 4.

Table 2 - Select Drill Results from the 2010 Porphyry Creek Drill Program

interval (m)	width (m)	Au	Mo	Cu	Pb	Zn	Ag
PC10-01		PPB	PPM	PPM	PPM	PPM	PPM
0-444	444	4.8	70	547	24	37	0.7
111-117	6.0	162.0	2985	2988	876	913	13.9
339-444	105	4.1	107	1036	5	27	0.9
405-444	39	4.1	41	1673	8	35	1.7
PC10-02							
0-303	303	2.2	18	369	4	32	0.4
111-117	6.0	2.0	37	526	3	23	0.7
201-204	3.0	11.0	11	3439	7	49	9.6
PC10-03							
0-582	582	1.9	24	330	3	21	0.3
186-204	18	2.8	16	597	5	22	0.6
516-576	60	2.9	32	555	2	24	0.5

These results encouraged a follow up program in the summer of 2011. The 2011 drilling consisted of 6 NQ drill-holes totalling 2,594 meters. These holes mainly cut altered medium grained granodiorite typical of the phyllic-propylitic zone of a porphyry system. All the holes were mineralized throughout their entire length, but mostly the grades returned were sub-economic. The average grades for each hole are shown in Table 5, along with some of the sections showing higher grades. Weighted average grades for holes PC11-04 to -08 ranged from 0.046% Cu and 0.007% Mo in hole PC11-08 to 0.074% Cu and 0.009% Mo in hole PC11-04. The latter hole was over a total length of over 600 meters.

Table 5 - Select Drill Results from the 2011 Porphyry Creek Drill Program

interval (m)	width (m)	Au	Mo	Cu	Ag	W
PC11-04		PPB	PPM	PPM	PPM	PPM
5-617	612	4.4	92	741	0.6	19
324-375	51	6.0	210	1149	1.0	21
479-488	9.0	7.6	331	1673	1.1	21
586-594	8.0	4.1	172	1396	0.9	82
611-617	5.7	9.3	394	1686	1.2	97
PC11-05						
4-588	584	6.8	59	620	0.8	13
388-424	36	9.0	293	1140	1.5	20
PC11-06						
4-469	465	4.9	79	713	0.7	25
141-170	29	10.2	220	1406	0.8	82
247-294	47	9.9	146	1189	2.7	37
PC11-07						
5-402	397	4.6	82	553	0.5	15
318-343	25	6.5	25	1410	1.2	35
PC11-08						
4-271	267	3.8	71	460	0.4	9.1
241-246	5.0	3.2	811	646	0.4	5.7
PC11-09						
5-248	243	3.6	25	293	0.3	9
114-120	6.0	8.5	4.5	911	1.08	22
144-146	2.0	9.5	2	1687	1	44

Significant higher grade zones were encountered in holes PC11-04 to PC11-07, with sections of 25 to 50 meters grading above 0.10% Cu and up to 0.029% Mo. Hole PC11-09 was drilled to the north, away from the zone targeted by other holes, and returned significantly lower grades.

Results of the 2011 drilling expanded the moderately anomalous porphyry style Cu-Mo zone to some 300m in strike length (N-S) and up to 200m in width (E-W). Interpretations of metal gradients and previous geophysics based on these drill results led to a recommendation for further surface geochemistry and ground-based geophysics to better identify likely higher grade portions of the porphyry system, which appears to occupy a much larger area than that drilled.

3.3.5 2014 Exploration Program

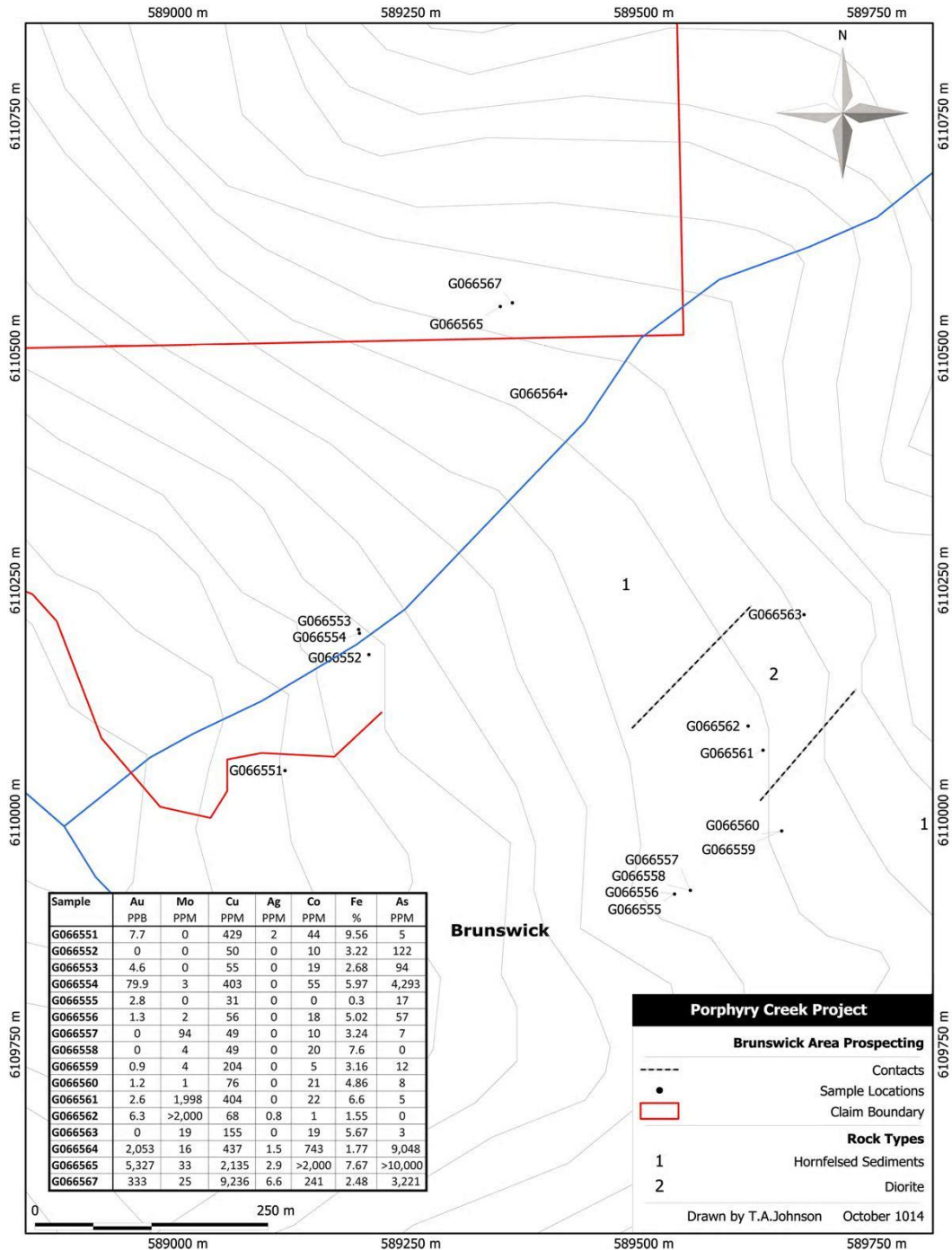


Figure 13 – 2014 Rock Sampling, Brunswick Area

At the end of June, 2014, Duncastle Gold Corp relinquished its option on the property, returning 100% ownership to the original owners. In July a limited work program was carried out to follow up on exploration by Duncastle and to begin to develop other potential exploration targets. Site work consisted of prospecting and mapping in the area of the Brunswick prospect, examining Sultana area drill core, carrying out a limited extension of the soil geochemical sampling in the Sultana area, and reclaiming drill sites left from drilling in the Sultana area. A total of 16 rock samples (Figure 13) and 26 soil samples (Figure 14) were collected. All rock samples were collected from the Brunswick area and all soil samples were collected from the Sultana area.

Rock samples showed some molybdenite mineralization in an area of diorite talus to the east of the Brunswick workings, which may be suggestive of mineralization associated with the intersection of the Red Rose shear with a tongue of diorite in this area. Samples of quartz vein material collected in the vicinity of the old gold prospect adit south of the red Rose mine showed significant values in gold and copper, and indicated the probable presence of cobalt sulpharsenide mineralization similar to that seen at the Victoria mine located to the north of the Rocher Deboule mine.

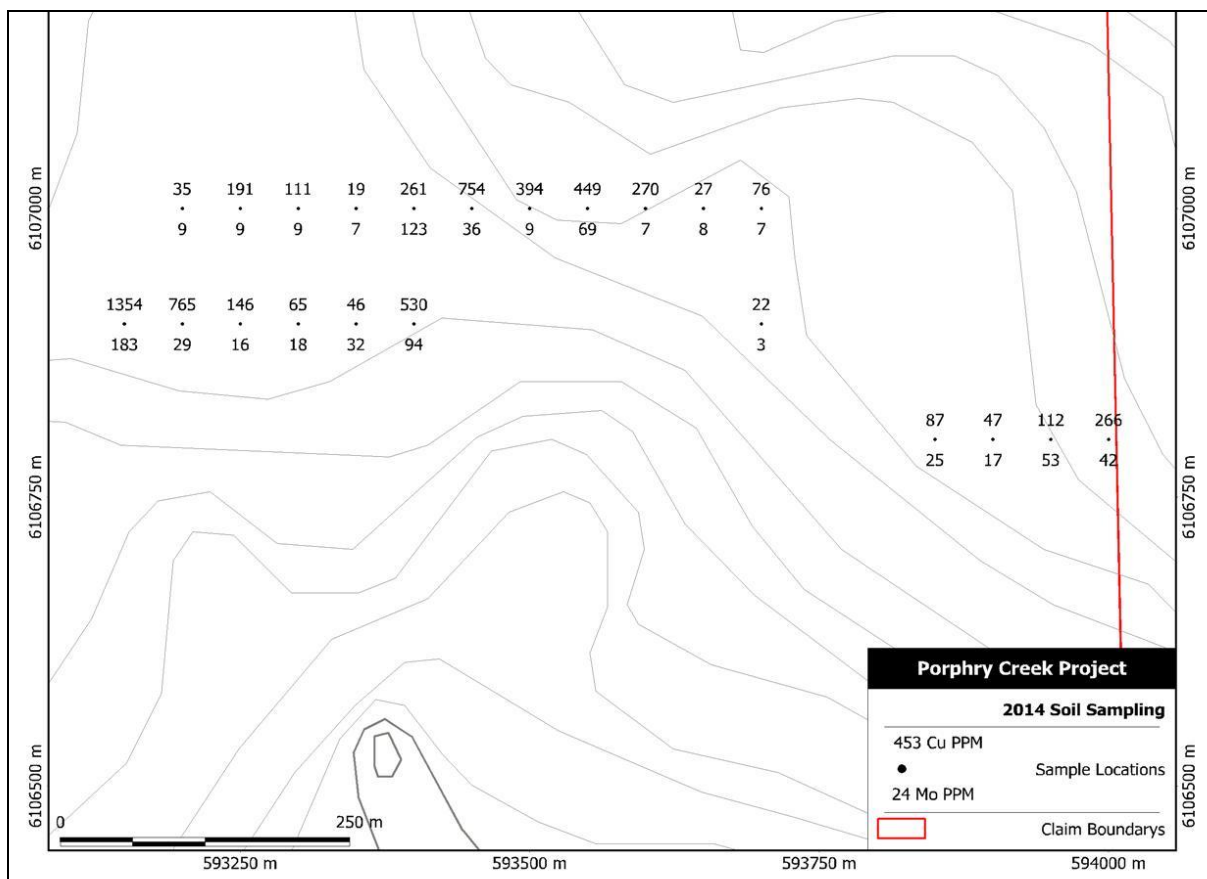


Figure 14 – 2014 Soil Samples, Sultana Area

Soil sampling extended eastward from the old Sultana trenches and showed additional sections of strongly anomalous Cu and Mo values in this direction. The highest values, at the west end of the middle grid line, were likely affected by trench mineralization, but two other distinct anomalies were indicated.

4 2015 Exploration Program

In August a small field program was carried out to continue to investigate high priority exploration targets at the Porphyry Creek project. Site work was carried out between August 8th and August 30th, 2014, and consisted of prospecting and rock sampling in the Sultana area, prospecting and limited geochemical sampling in the Red Rose Creek area, including initial surveys and sampling of tailings from the former Red Rose mine, and geochemical stream sampling in the Slater Creek area. A total of 8 rock samples, 6 stream sediment samples, 5 soil samples, one sample of talus fines and 3 tailings samples were collected. Rock samples were collected from all three areas, while stream sediments were only collected in the Slater area and other geochemical samples were collected from both the Slater area and the red Rose Creek area.

Rock samples were crushed and split to produce a 250 gram fraction which was pulverized to minus 200 mesh. Tailings samples were dried and split to produce a 100 grab sample for analysis, which were then pulverized to minus 200 mesh. From each pulverized rock and tailings pulp, a 0.5 gram subsample was digested in hot aqua regia and analyzed by ICP-ES and ICP-MS for 36 elements. Stream sediment samples were screened at 10 mesh in the field. Prior to analysis, stream sediment, soil and talus fines samples were dried and screened at 80 mesh. A 0.5 gram subsample of each minus 80 mesh fraction was digested in hot aqua regia and analyzed by ICP-ES and ICP-MS for 36 elements. Any samples showing an over-limit value for Mo or W were reanalyzed by ICP-ES following phosphoric acid digestion of a 2 gram sample. All samples were analyzed by Bureau Veritas Commodities Ltd. (formerly Acme Labs) in Vancouver.

Rock and tailings sample information is summarized in Table 6. Sample locations and analytical results are also shown on the three area maps in Appendix 1. Geochemical sample locations and key analytical values are shown on the Red Rose area and Slater Creek area maps in Appendix 1. Full analytical results for all samples are provided in Appendix 2.

4.1 Rock Sampling

The Sultana area was visited on August 8th, 2015 via the old Sultana access road. Four samples were collected, which included two samples of mineralized talus float and two grab samples from exposures in road cuts. The lower sample of talus (PCTJ 15-1) was andesite well mineralized with pyrite and magnetite but showed only slightly anomalous copper values. This appears to be from surrounding country rock altered by proximity to the intrusive. The two outcrop grab samples were both from the same road cut (PCTJ 15-2 and 15-3). One was andesite mineralized with pyrite and the other was from a quartz breccia zone, both lying within the mapped intrusive boundary. Neither sample carried any significant values. The final sample from the Sultana area was from a 2 cm wide quartz vein showing chalcopyrite and molybdenite in a large diorite talus boulder. The talus in this area was large and blocky, and clearly derived directly from the ridge above. The sample showed low grade copper values and higher molybdenum.

This sampling was from further east than any previously reported work from the Sultana and shows that Cu-Mo mineralization does extend in this direction. While the Mo grade of the last sample is of interest, much wider mineralization would need to be found to be of economic interest. Map 1 places the 2015 sample locations in context with 2014 soil lines, the 2010 soil grid and the area of historical trenching. Drilling was generally below or to the west and northwest of the trenches.

Table 6: Rock and Tailings Sample Descriptions and Analytical Results

Sample #	Date	Description	UTM Location		Width m	Au	Ag	Co	Cu	Pb	Zn	W	Mo
			East	North		g/t	g/t	Ppm	ppm	ppm	ppm	ppm	ppm
Sultana Area													
PCTJ 15-1	11/08/2015	Andesite talus float with py and magnetite	594532	6107462	-	0.003	0.3	26.1	394.7	8.2	55	0.3	1.7
PCTJ 15-2	11/08/2015	Quartz breccia in road cut	594162	6106939	-	0.001	<0.1	16.3	6.6	3.1	60	<0.1	0.7
PCTJ 15-3	11/08/2015	Andesite with py and trace cpy	594162	6106939	-	0.001	<0.1	31.9	49.3	8.5	55	0.2	0.4
PCTJ 15-4	11/08/2015	Quartz vein with Mo and cpy in diorite. Talus	594078	6106782	-	0.003	0.4	30.1	988.7	3.6	38	0.8	2630
Red Rose Creek/Slater Creek Areas													
CR150827-1	27/08/2015	Stream Float - Dense argillite with sulphides	587305	6110584	-	0.001	0.2	16.7	57.4	5.5	58	0.2	6.0
CR150827-2	27/08/2015	Talus - Silicified argillite and quartz breccia	586815	6110975	-	0.001	<0.1	5.3	64.4	2.7	16	<0.1	5.7
CR150829-1	29/08/2015	Stream Float - Sheared argillite	585937	6110375	-	0.001	0.2	37.3	108.9	8.1	136	<0.1	2.0
CR150829-2	29/08/2015	Stream Float - Silicified sediments	585715	6108905	-	0.002	<0.1	12.1	52.0	5.6	30	<0.1	2.1
Red Rose Tailings													
CR150827-T1	27/08/2015	Downstream, near creek	587511	6110517	-	0.543	2.2	58.6	3208	4.6	56	2630	220
CR150827-T1	27/08/2015	Just below pond	587578	6110456	-	0.648	2.8	41.3	3724	4.9	51	3090	301
CR150827-T1	27/08/2015	Near mill site, above pond	587801	6110370	-	0.893	5.5	51.1	4722	8.1	65	3740	530

Rock sampling in the other two areas visited was incidental to visit intended primarily for geochemical and tailings sampling. On August 27th the Red Rose Creek area was visited via the old Red Rose mine road, which branches off the Juniper Creek road. Near the western end of the valley the road passes a wide coarse talus field made up primarily of argillic sediments, many showing varying degrees of alteration. Chip samples from several silicified pieces showing some quartz and pyrite mineralization were collected as sample CR150827-2. No significant values were found. Further upstream, a short distance below the town site an old stream channel contained coarse angular argillite float showing some pyrite and/or pyrrhotite content. A sample of this rock (CR150827-1) returned no significant values.

On August 29th a traverse was carried out along the east side of the Juniper Creek valley in the Slater Creek area. Two float rock samples were collected from streams in the area during the course of stream sediment sample collection. The first was from a fairly significant drainage a short distance to the south of Red Rose Creek. Float showed highly sheared iron-rich sediments. A sample (CR150829-1) did show high iron content (>15%), but economic elements were low or absent. Further to the south in Slater Creek a small float sample of silicified sediments containing pyrite was collected (CR150829-2). This sample showed no value apart from slightly anomalous As.

4.2 Geochemical Sampling

The August 29th traverse was aimed at conducting a stream sediment profile for the Slater Creek area. A total of 6 stream sediments were collected from four separate drainages along the steep east side slope of the Juniper Creek Valley. See Map 2 and Table 7 for locations. A BC Regional Geochemical Survey sample from the south end of this area was reported to carry very high values for copper and gold, but these very high levels were not seen in any of the samples from this work. Two samples were collected from a larger drainage at the north end of the survey area (CR150829-S1 and -S2) and two were collected from Slater Creek (CR150829-S4 and -S5). In both cases values for gold were very consistent between the two samples, adding confidence to interpretation of upstream conditions. While not near the levels seen from the RGS data, gold and base metals were somewhat elevated in the two larger drainages and lower for the small localized drainages (CR150829-S3 and -S6), indicating more mineralized rocks at a higher elevation. The sample of most interest was the upstream sample from Slater Creek, which showed the highest values for most base and precious metals (with the exception of Cu), and also showed increased values for most elements when compared with the downstream sample from the same creek.

Two soil samples were also collected near Slater Creek, in an area near an EM anomaly detected in the 2010 airborne survey. Aside from a slightly anomalous silver level in one sample (CR150829-G1) the assays were low.

A small number of geochemical samples were collected on the August 27th visit to the Red Rose Creek area. Previous stream sediment sampling in 2008 showed anomalous Au and Cu throughout the area between the Brunswick mine and the Red Rose mill site. These are shown for reference on Map 3 in the Appendix. While there is a known gold occurrence to the northeast, within the Red Rose crown grants, this did not appear to account for all of these anomalies, so the limited time available was used to collect samples along the slope above the town site, well to the west of any known mineralization. In this area the slope is relatively steep

and talus-covered, generally with a thin soil cover and a poorly developed or non-existent B horizon. Soil samples were taken in three locations, and at a fourth location a sample of fines was collected from talus in a slide area with no soil cover. The soil samples all contained some mineral fines, but also included variable amounts of A horizon organic material.

All samples were anomalous in Cu and Mo, with Cu higher to the west, and at least two contained elevated Au. The eastern-most soil sample showed anomalous W, while the two western samples showed higher Fe, As, Sb, Co, Pb and Zn.

Table 7: Stream Sediment, Talus Fines and Soil Sample Locations

Sample #	Date	Sample Type	UTM Location	
			East	North
Red Rose Creek Area				
CR150827-F1	27/08/2015	Talus fines - slide zone -10#	587969	6110400
CR150827-G1	27/08/2015	Soil - poor B horiz., loamy, rocky	588086	6110388
CR150827-G2	27/08/2015	Soil - good B horizon	588066	6110409
CR150827-G3	27/08/2015	Soil - B horizon	587930	6110383
Slater Creek Area				
CR150829-S1	29/08/2015	Stream Sediment	585937	6110375
CR150829-S2	29/08/2015	Stream Sediment	586022	6110332
CR150829-S3	29/08/2015	Stream Sediment	585850	6109460
CR150829-S4	29/08/2015	Stream Sediment	586130	6108920
CR150829-S5	29/08/2015	Stream Sediment	585715	6108905
CR150829-S6	29/08/2015	Stream Sediment	585370	6108840
CR150829-G1	29/08/2015	Soil - B horizon	585835	6109095
CR150829-G2	29/08/2015	Soil - B horizon	586010	6109056

4.3 Red Rose Tails Sampling

The Red Rose tungsten mine produced more than 100,000 tonnes of ore between 1942 and 1954. The ore was high grade by the standard of current tungsten deposits, at between 1.0 and 1.5% W, but recoveries were reportedly relatively poor, potentially leaving significant value in the tailings. During the period of operation there does not appear to have been a conventional tailings impoundment used, as tailings appear to have been deposited along or within Red Rose Creek. There is currently a small impoundment located a short distance below the old mill site (Figure 15), but this contains a relatively small amount of tailings (estimated at 5-10,000 tonnes), and was likely constructed late in the mine's operation, or even post-closure.



Figure 15 – Red Rose Tailings

To allow some initial evaluation of the value potential remaining from these tailings, a traverse of the area was conducted and three samples were collected from different areas. The sample locations are shown on Map 2. The tailings are deposited along a long section of the north bank of Red Rose Creek. Where observed, significant piles and banks of tailings stretch over a distance of at least 400 meters. They appear to continue further downstream, but the changing course of the creek has cut through the area of deposition, leaving material further downstream on the opposite bank. There is also a significant amount of material above the current pond, continuing right to the old mill foundations. The width and depth of these tailings are difficult to estimate as they vary with terrain and much of the area is now covered with vegetation. Where tailings piles have been eroded by stream channels, there is sometimes up to 2 meters depth exposed, and in places the width is tens of meters, indicating that there are significantly more tailings remaining on these banks than in the pond.

Three widely-spaced tailings samples were collected, generally from 10-20 cm depth to avoid recent surface weathering. All three samples showed strong values in Au, Cu and Mo, in addition to high remaining W concentrations. Also of interest was the apparent trend to higher grades upstream toward the mill, with particularly high values in the sample taken upstream of the pond (CR150827-T3). This could be an effect of segregation during deposition or during later erosion, but could also relate to changes in mineralogy and mill performance during different periods of operation.

5 Interpretations and Conclusions

The 2015 exploration program provided only limited additional data for this large and diverse property, and no significant new targets were identified, but some progress was made in defining previously known targets.

At the Sultans prospect mineralized Cu-Mo veins were shown to be present further east than the areas of previous work, although the specific vein found was very narrow.

In the Slater Creek area sampling failed to identify any new mineralization, but the geochemical survey showed that anomalous results are related to the larger drainages only, and that the values do appear to improve upstream particularly for Slater Creek itself, providing direction for further work. The high RGS values reported were not repeated in this work, but the exact stream sampled for the RGS value is not clear from the reported coordinates, and it is possible that it is connected to a stream further to the south which was not sampled as a part of this work.

Along Red Rose Creek, geochemical sampling provided very limited, but positive initial indications of a possible Au-Cu anomaly in the area above the old town site, supporting an anomalous stream sediment value in this area from the 2008 program. The results also showed that talus fines and soil sampling show similar responses in this area, so that both could be useful for future exploration.

Sampling of old tailings from the Red Rose mine showed that this material has considerable value, as the remaining tungsten alone is similar to ore grades from many projects and the gold and copper values are also significant. The main question is the amount of material that would be available if recovery was attempted. This work showed that there is much more material present than represented by the small impoundment at the site, but the quantity cannot be estimated without a more detailed survey. It is very unlikely that there is enough material available to justify a stand-alone reprocessing operation, but they could be of value to any future small-scale operation aimed at processing high grade ores from any of the known occurrences in the area.

Compilation and re-evaluation of some of the available past data for the property continues to show high potential for the discovery of new mineral deposits. In particular, correlation of multiple geophysical and geochemical anomalies points to a strong target area in the northwest part of the property, centered on the area surrounding Red Rose and Armagosa Creeks. Within this broader area, geophysical data defines an area between the two creeks as being of particular interest. The area, along a ridge to the west of the former Red Rose mine, appears to have received comparatively little past exploration.

5.1 Recommendations

The Porphyry Creek property covers a large area of varied geology that appears to be extensively mineralized and underexplored. Many targets remain that have seen little or no exploration, especially the porphyry targets in the relatively inaccessible eastern part of the property. These targets will require considerable resources to evaluate in a meaningful way. For these targets, including possible higher grade portions of the zone already drilled at the Sultana prospect, wider geochemical survey coverage is needed, using wide spacing and including talus fines and stream silt sampling where appropriate. Ground-based IP surveys would also be a useful tool in better defining the shape of these targets.

In addition to the porphyry targets, the compilation of current data shows that there is strong potential for additional discoveries in the northwest part of the property. This area is generally outside of the intrusive stock and is host to several known high-grade vein occurrences on and adjacent to the property. There may be potential for the discovery both of additional high-grade veins and of a larger mineralized hydrothermal system genetically related to these veins. This area is comparatively accessible, although also extremely rugged, so further prospecting and geochemical sampling programs can be implemented at a modest cost. These should focus in particular on the Red Rose and Armagosa area. Additional work could be aimed at better defining the known occurrences such as the Brunswick and Armagosa veins, and the lesser known veins in the Armagosa area. It would also be useful to follow up on higher grade rock samples collected during the 2008 geochemical program.

6 Certificates of Qualifications

Doug Warkentin P.Eng

I, Douglas Warkentin, P.Eng., a professional engineer with a business address at 745 East 30th Ave., Vancouver, B.C., certify that:

I have been a Registered Member of the Association of Professional Engineers and Geoscientists of the Province of British Columbia since 1992.

I am a graduate of the University of British Columbia, Vancouver, B.C. and hold a degree of Bachelor of Applied Science in Mining and Mineral Process Engineering.

I have practiced my profession as a Metallurgist and Mineral Process Engineer for 26 years.

I am currently employed as a Metallurgical Engineer by Kemetco Research Inc., Vancouver B.C., and have previously been employed as a Mineral Process Engineer by Vista Mines Inc., Coastech Research Inc., NTBC Research Corp., Biomet Mining Ltd., Blue Sky Mines Ltd., and Vizon Scitec Inc. I have also served as a Director of Duncastle Gold Corp., a TSX-Venture listed company.

Since 2001 I have also acted as an independent engineering consultant for a number of mining clients.

I am a qualified person for the purposes of National Instrument 43-101 in relation to metallurgical testing and evaluation programs.

I personally conducted a portion of the site work and sampling, and directly supervised all sample handling and preparation related to the Porphyry Creek Project that is described in this report.

I am the sole author of this report.

I am not aware of any material fact or material change with respect to the subject matter of this technical report that is not reflected in this report, the omission to disclose which would make this report misleading.

Dated at Vancouver, B.C., this 24th day of December 2015.

Doug Warkentin, PEng.
Metallurgical Engineer

Timothy Johnson

I, Timothy Johnson, with business address at 2674 Pylades Drive, Ladysmith, British Columbia V9G 1E5, hereby certify that:

I have completed the BCIT/Chamber of Mines advanced prospecting course at Oliver BC 2005.

I have worked as a prospector, geologist assistant and general explorations for various companies from 1984 to 1992.

I have worked as a prospector, geologist assistant and general explorations from 2005 to present.

I have a 20% interest in the claims for which this report is written

I personally visited the property, took samples and supervised work completed on the property as outlined in this report

Signed "*Timothy Johnson*"

7 Statement of Costs

August 7 th to 9 th	
Tim Johnson – Prospector 2 days @ 550/day	1100.00
Nichole Busby – Assistant/Sampler 2 days @ 450/day	900.00
August 25 th to 30 th	
Doug Warkentin - Prospector 72 hrs @ 55/hr	3960.00
	Total Labour 5,960.00
Travel	
Doug Warkentin – Return air fare Terrace –Vancouver	311.06
Tim Johnson – 2302 km @ .45/km	1035.90
BC Ferries – Vancouver-Nanaimo and return	69.50
Vehicle rental (6 days @ 58.02)	348.14
Hotel (5 days @ 52.43)	262.16
	Total Travel 2,026.76
Quad rental 2 days @ 120	240.00
Fuel	86.95
Equipment rental	100.00
Meals and Supplies	233.60
	Total Equipment and Camp 660.55
Sample Preparation	227.19
Assays	456.91
Data Compilation	770.00
Report	1265.00
	Total Reporting 2,719.10
	Total 11,366.41

8 Selected Bibliography

- Anderson, R. B. (1971): Geology, Geochemistry and Geophysics, Sultana Group (ARIS 2855).
- BC Dept. of Energy Mines and Petroleum Resources (2008): Minfile Mineral Occurrence Database.
- Burgoyne, A. A. and Kikauka, A. (2007): Technical Report on the Rocher Deboule Property, for Rocher Deboule Minerals Corp. (ARIS 29338).
- Campbell, C. (2010): Airborne Geophysical Survey of the Porphyry Creek Survey, Omineca Mining Division, British Columbia. (ARIS 31728)
- Campbell, D. D. and Saunders, C. R. (1969): Progress Report on the Sultana Silver Property, Hazelton BC (Property File 36299).
- Campbell, D. D. and Saunders, C. R. (1970): Report on the Sultana Property, Hazelton BC (Property File 36298).
- Cochrane, D. R. (1973): Geological and Geophysical Report on the Brunswick Project (ARIS 4839).
- Gale, R. E. (1984): Geochemical Rock Sampling, Gam Claim, Brian Boru Area (ARIS 12712).
- Gorc, D. (1984): Geology, Rock and Soil Geochemistry, Killarney Showing, Brian Boru Prospect (ARIS 13340).
- Holland, R. (1987): Prospecting Report on the Brunswick Mineral Claim, Rocher Deboule Range, Hazelton, BC (ARIS 16012).
- Holliday, J. R. and Cooke, D. R., (2007): Advances in Geological Models and Exploration Methods for Copper ± Gold Porphyry Deposits; in "Proceedings of Exploration 07: Fifth Decennial International Conference on Mineral Exploration" edited by B. Milkereit, 2007, p. 791–809.
- Kindle, E. D. (1954): Mineral Resources, Hazelton and Smithers Areas, Cassiar and Coast Districts, GSC Memoir 223.
- MacArthur, R. G. (1987): Geology and Geochemistry Report, Brian Boru Prospect (ARIS 16455).
- Macdonald, C. H. (1953): Geological Report, Sultana Group of Mineral Claims, Boulder Creek Area, Hazelton District of BC (ARIS 92).
- Macdonald, R.J.W., Warkentin, D. and Hamilton, C.J. (2011): 2010 Surface Exploration and Diamond Drilling Assessment Report on the Porphyry Creek Property, Omineca Mining Division, BC, for *Duncastle Gold Corporation* (ARIS 32516).
- MacIntyre, D. (2006): Geology and Mineral Deposits of the Skeena Arch, West-Central BC: A Geoscience BC Digital Data Compilation Project, Geoscience BC.

Massey, N.W.D., MacIntyre, D.G., Haggart, J.W., Desjardins, P.J., Wagner C.L. and Cooney; R.T. (2005) Digital Geology Map of British Columbia: Tile NN8-9 North Coast and Queen Charlotte Islands/Haida Gwaii, B.C. Ministry of Energy and Mines, Geofile 2005-5.

Ministry of Mines BC (1914): Annual Report, pp. 190-193.

Olson, D. H. (1980): Report on Soil Geochemistry, Brian Boru Prospect (ARIS 8332).

Ogryzlo, P. (2011): Personal communication regarding the Porphyry Creek Project

O'Neill, J. J. (1919): Preliminary Report on the Economic Geology of Hazelton District BC, GSC Memoir 110.

Payne, C. (2011): 2011 Core Drilling Report on the Porphyry Creek Property (Sultana Prospect Area), Omineca Mining Division, BC, for *Duncastle Gold Corporation* (ARIS 32636).

Perkins, E. W. (1981): Report on Geophysical Surveys, Brian Boru Prospect (ARIS 9587).

Rogers, M., (2010): Model No. 28, Calc-Alkaline Porphyry Copper-Molybdenum-Gold-Tungsten, Saskatchewan Mineral Deposit Models, Geological Services and Mineral Resource Information.

Sellmar, H. W. and Allan, J. F. (1967): Geological and Geochemical Report on the Corya Creek Property, MT Claims (ARIS 1134).

Sutherland Brown, A. (1960): Geology of the Rocher Deboule Range, BC Department of Mines and Petroleum Resources, Bulletin No. 43.

Warkentin, D. (2007a): Slater Creek, Red Rose Creek and Brunswick Areas – Reconnaissance and Sampling Report. (ARIS 29082)

Warkentin, D. (2007b): Armagosa, Mudflat Creek, Cap and Brian Boru Areas – Reconnaissance and Sampling Report. (ARIS 29502)

Warkentin, D. (2008): Juniper Creek South Areas – Reconnaissance and Sampling Report (ARIS 20096)

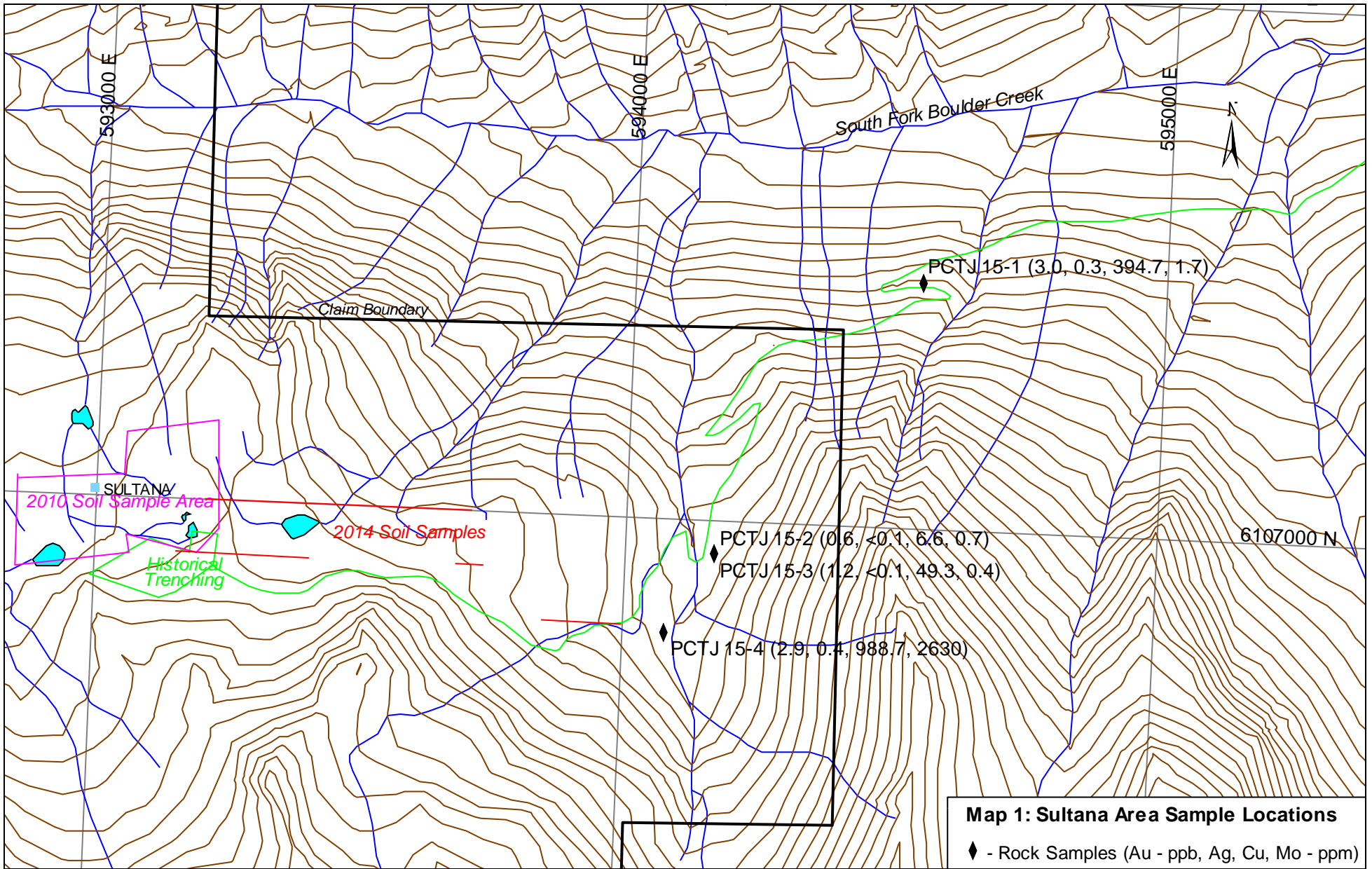
Warkentin, D. and Young, C. (2008): West Side of Rocher Deboule Range – Stream and Rock Geochemistry Report. (ARIS 30431)

Westphal, M (2010a): Internal company memorandum dated September 22nd, 2011 regarding the Sultana Prospect

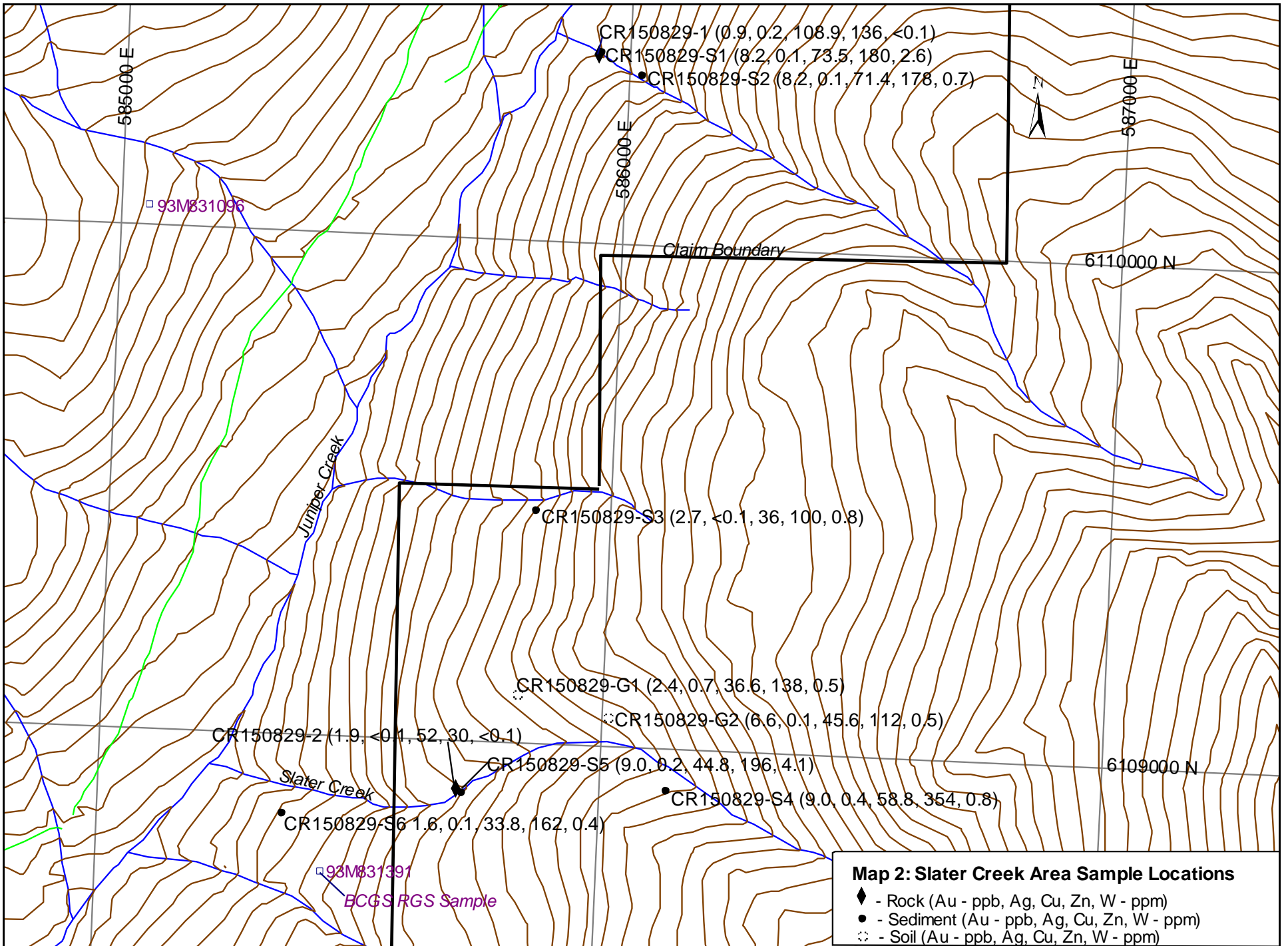
Westphal, M (2010b): Internal company memorandum on the drilling results at the Sultana Prospect

Westphal, M (2010c): Internal report of the 2010 Exploration Program on the Porphyry Creek Property, BC

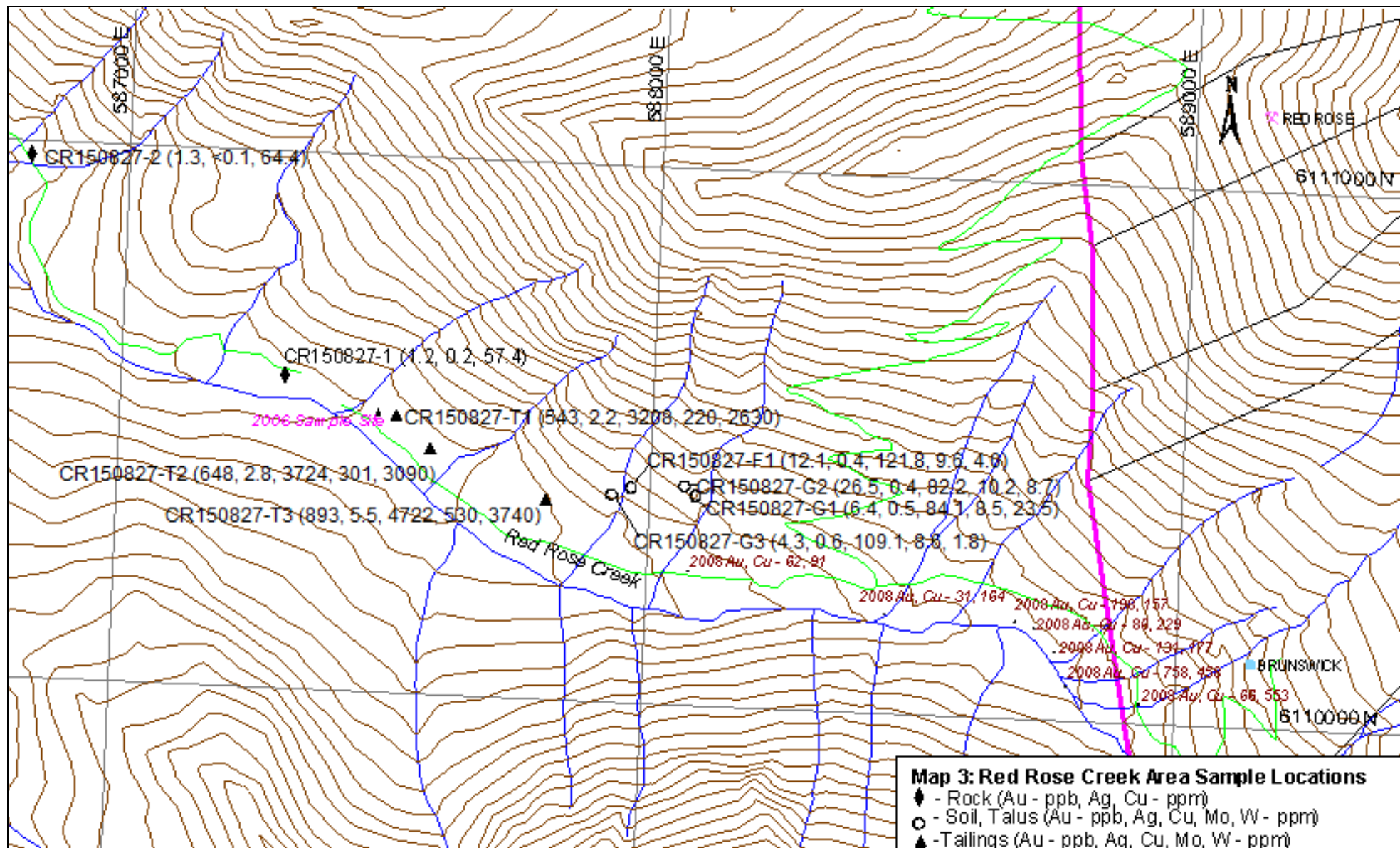
Appendix 1 – Sample Location Maps



Scale 1:10,000



Scale 1:10,000



Appendix 2 – Assay Reports



BUREAU VERITAS MINERAL LABORATORIES
Canada

www.bureauveritas.com/um

Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
PHONE (604) 253-3158

Client: **Crucible Resources Ltd.**
745 East 30th Ave
Vancouver BC V5V 2V8 CANADA

Submitted By: Doug Warkentin
Receiving Lab: Canada-Vancouver
Received: October 30, 2015
Report Date: December 08, 2015
Page: 1 of 2

CERTIFICATE OF ANALYSIS

VAN15002935.2

CLIENT JOB INFORMATION

Project: Porphyry Creek
Shipment ID:
P.O. Number
Number of Samples: 24

SAMPLE DISPOSAL

PICKUP-PLP Client to Pickup Pulps
PICKUP-RJT Client to Pickup Rejects

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PRP70-250	8	Crush, split and pulverize 250 g rock to 200 mesh			VAN
PUL85	3	Pulverize to 85% passing 200 mesh			VAN
SLBHP	13	Sort, label and box pulps			VAN
AQ200	24	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed	VAN
DRPLP	24	Warehouse handling / disposition of pulps			VAN
DRRJT	6	Warehouse handling / Disposition of reject			VAN
KP300-X	4	Phosphoric acid leach, ICP-ES analysis	0.5	Completed	VAN

ADDITIONAL COMMENTS

Version 2: KP300-Mo & W included.

Invoice To: Crucible Resources Ltd.
745 East 30th Ave
Vancouver BC V5V 2V8
CANADA

CC:



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Bureau Veritas assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. *** asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



BUREAU VERITAS MINERAL LABORATORIES
Canada

www.bureauveritas.com/um

Client: Crucible Resources Ltd.
745 East 30th Ave
Vancouver BC V5V 2V8 CANADA

Project: Porphyry Creek
Report Date: December 08, 2015

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
PHONE (604) 253-3158

Page: 2 of 2

Part: 1 of 2

CERTIFICATE OF ANALYSIS

VAN15002935.2

Method	WGHT	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	
PCTJ 15-1	Rock	0.44	1.7	394.7	8.2	55	0.3	20.6	26.1	457	5.45	5.8	3.0	1.1	26	0.1	0.7	1.2	127	0.73	0.122
PCTJ 15-2	Rock	1.04	0.7	6.6	3.1	60	<0.1	7.6	16.3	1556	4.89	1.2	0.6	1.4	95	0.4	<0.1	<0.1	68	10.66	0.046
PCTJ 15-3	Rock	0.79	0.4	49.3	8.5	55	<0.1	15.7	31.9	449	4.81	7.2	1.2	4.0	17	0.1	0.5	0.1	117	0.46	0.089
PCTJ 15-4	Rock	0.58	>2000	988.7	3.6	38	0.4	10.3	30.1	286	3.17	0.6	2.9	8.3	21	5.4	0.5	0.2	60	0.94	0.092
CR150827-1	Rock	0.70	6.0	57.4	5.5	58	0.2	52.0	16.7	227	2.75	2.8	1.2	1.6	16	<0.1	0.6	0.2	29	0.15	0.038
CR150827-2	Rock	1.28	5.7	64.4	2.7	16	<0.1	12.8	5.3	147	2.99	20.3	1.3	1.7	19	<0.1	0.2	0.3	74	0.21	0.052
CR150829-1	Rock	0.26	2.0	108.9	8.1	136	0.2	13.9	37.3	4026	15.33	5.3	0.9	0.3	10	<0.1	2.3	0.7	185	0.77	0.466
CR150829-2	Rock	0.14	2.1	52.0	5.6	30	<0.1	25.5	12.1	117	2.18	113.9	1.9	1.6	22	0.2	0.6	0.3	55	0.15	0.022
CR150827-T1	Sand	0.05	219.7	3208.0	4.6	56	2.2	135.7	58.6	411	6.06	197.0	543.3	4.7	29	0.7	1.3	6.6	143	1.07	0.437
CR150827-T2	Sand	0.05	300.8	3723.7	4.9	51	2.8	82.1	41.3	286	5.01	197.5	648.4	4.0	36	0.6	1.6	6.9	108	1.01	0.365
CR150827-T3	Sand	0.03	530.3	4721.7	8.1	65	5.5	117.2	51.1	303	6.12	290.0	892.9	4.5	33	1.5	2.1	10.1	123	0.85	0.323
CR150827-F1	Rock Pulp	0.02	9.6	121.8	22.3	194	0.4	55.1	30.8	807	9.79	149.3	12.1	1.1	50	0.7	4.1	0.8	70	0.16	0.156
CR150827-G1	Rock Pulp	0.03	8.5	84.1	12.7	64	0.5	15.6	5.5	297	6.44	92.5	6.4	<0.1	80	0.8	3.0	0.6	50	0.41	0.145
CR150827-G2	Rock Pulp	0.03	10.2	82.2	12.4	97	0.4	27.3	10.4	390	4.94	94.8	26.5	0.2	47	0.6	2.4	0.7	62	0.24	0.126
CR150827-G3	Rock Pulp	0.04	8.6	109.1	19.0	179	0.6	48.4	20.2	549	9.86	154.7	4.3	0.9	51	0.6	4.9	0.7	60	0.11	0.167
CR150829-S1	Rock Pulp	0.02	2.5	73.5	15.2	180	0.1	44.7	20.8	904	5.64	73.3	8.2	1.3	52	0.7	3.6	0.2	65	0.30	0.097
CR150829-S2	Rock Pulp	0.01	2.5	71.4	11.3	178	0.1	44.0	20.2	908	5.73	77.7	8.2	1.3	52	0.7	3.5	0.2	66	0.29	0.087
CR150829-S3	Rock Pulp	0.01	1.6	36.0	5.0	100	<0.1	14.5	19.5	2264	3.90	15.9	2.7	0.6	24	1.1	0.4	<0.1	58	0.17	0.036
CR150829-S4	Rock Pulp	<0.01	2.3	58.8	15.5	354	0.4	133.2	22.3	2764	5.12	80.2	9.0	0.7	91	4.3	1.1	0.3	61	0.61	0.131
CR150829-S5	Rock Pulp	<0.01	2.5	44.8	9.4	196	0.2	60.9	15.5	1258	4.41	61.2	9.0	1.2	53	1.3	1.1	0.2	61	0.38	0.082
CR150829-S6	Rock Pulp	0.07	1.8	33.8	6.7	162	0.1	35.4	12.8	984	4.56	24.7	1.6	1.1	39	0.5	1.1	0.1	51	0.25	0.052
CR150829-G1	Rock Pulp	0.06	1.9	36.6	11.4	138	0.7	20.4	9.6	366	6.19	18.4	2.4	2.0	10	0.3	0.6	0.3	62	0.04	0.136
CR150829-G2	Rock Pulp	0.05	2.3	45.6	10.1	112	0.1	31.8	12.3	543	4.85	30.5	6.6	1.5	35	0.2	0.7	0.3	77	0.33	0.142
FRT-L6-R1	Rock Pulp	0.13	2.1	400.8	187.3	437	49.4	6.1	3.5	1305	2.57	21.7	463.4	0.4	99	2.9	6.2	0.1	58	3.82	0.047



BUREAU VERITAS MINERAL LABORATORIES
Canada

www.bureauveritas.com/um

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: Crucible Resources Ltd.
745 East 30th Ave
Vancouver BC V5V 2V8 CANADA

Project: Porphyry Creek
Report Date: December 08, 2015

Page: 2 of 2

Part: 2 of 2

CERTIFICATE OF ANALYSIS

VAN15002935.2

Method	Analyte	Unit	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	KP300	KP300
			La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo
		MDL	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%
			1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5	0.2	0.001	0.005
PCTJ 15-1	Rock		4	11	1.39	62	0.218	<20	1.89	0.114	0.69	0.3	0.01	11.3	0.4	2.62	8	1.1	0.2	
PCTJ 15-2	Rock		5	3	1.62	188	0.001	<20	0.23	0.003	0.17	<0.1	<0.01	11.2	<0.1	0.08	<1	0.8	<0.2	
PCTJ 15-3	Rock		9	50	0.89	76	0.230	<20	1.21	0.083	0.46	0.2	<0.01	7.5	0.3	0.48	5	<0.5	<0.2	
PCTJ 15-4	Rock		10	20	0.81	215	0.137	<20	0.87	0.056	0.42	0.8	0.02	5.6	0.3	0.99	5	2.2	<0.2	0.263 <0.005
CR150827-1	Rock		3	14	0.62	47	0.033	<20	1.94	0.052	0.24	0.2	<0.01	2.0	0.4	1.64	4	1.8	<0.2	
CR150827-2	Rock		4	35	0.74	115	0.077	<20	1.48	0.058	0.52	<0.1	<0.01	7.1	0.3	0.55	5	1.4	<0.2	
CR150829-1	Rock		4	31	1.16	4	0.022	<20	5.50	0.001	<0.01	<0.1	<0.01	16.1	<0.1	1.21	14	0.8	<0.2	
CR150829-2	Rock		4	22	0.88	87	0.037	<20	1.38	0.061	0.57	<0.1	0.01	3.6	0.4	0.61	4	0.8	<0.2	
CR150827-T1	Sand		98	16	1.66	111	0.194	<20	2.21	0.069	1.35	>100	<0.01	9.3	0.7	0.07	15	1.7	1.3	0.022 0.263
CR150827-T2	Sand		133	16	1.24	107	0.171	<20	1.84	0.109	1.04	>100	<0.01	7.5	0.5	0.11	12	1.8	1.4	0.030 0.309
CR150827-T3	Sand		161	18	1.40	122	0.187	<20	1.99	0.088	1.17	>100	<0.01	8.1	0.6	0.13	14	2.2	2.4	0.052 0.374
CR150827-F1	Rock Pulp		6	33	0.77	94	0.042	<20	4.40	0.019	0.19	4.0	0.04	6.1	0.2	0.15	8	4.0	<0.2	
CR150827-G1	Rock Pulp		3	22	0.35	49	0.017	<20	2.73	0.006	0.05	23.5	0.13	1.6	<0.1	0.16	7	2.4	<0.2	
CR150827-G2	Rock Pulp		6	24	0.50	77	0.028	<20	3.21	0.008	0.10	8.7	0.13	2.4	0.1	0.10	8	1.6	<0.2	
CR150827-G3	Rock Pulp		4	27	0.63	70	0.028	<20	3.92	0.012	0.12	1.8	0.04	5.3	0.2	0.14	7	3.8	0.2	
CR150829-S1	Rock Pulp		8	30	0.81	47	0.005	<20	2.41	0.015	0.04	2.6	0.01	6.7	<0.1	<0.05	7	1.2	<0.2	
CR150829-S2	Rock Pulp		8	29	0.80	43	0.005	<20	2.40	0.015	0.04	0.7	<0.01	6.9	<0.1	<0.05	7	1.1	<0.2	
CR150829-S3	Rock Pulp		8	16	0.57	25	0.002	<20	1.84	0.005	0.02	0.8	<0.01	6.6	<0.1	<0.05	6	<0.5	<0.2	
CR150829-S4	Rock Pulp		11	45	0.73	94	0.017	<20	2.59	0.015	0.06	0.8	0.05	3.8	0.1	0.05	7	2.5	<0.2	
CR150829-S5	Rock Pulp		9	42	0.77	65	0.028	<20	2.19	0.014	0.06	4.1	0.02	4.2	<0.1	<0.05	7	1.3	<0.2	
CR150829-S6	Rock Pulp		6	30	0.80	40	0.012	<20	2.15	0.012	0.03	0.4	0.01	4.1	<0.1	<0.05	6	0.6	<0.2	
CR150829-G1	Rock Pulp		7	32	0.32	62	0.016	<20	4.18	0.004	0.03	0.5	0.13	5.4	<0.1	<0.05	10	0.6	<0.2	
CR150829-G2	Rock Pulp		7	36	0.63	124	0.039	<20	2.65	0.006	0.07	0.5	0.04	4.4	<0.1	<0.05	11	0.7	<0.2	
FRT-L6-R1	Rock Pulp		4	12	1.13	24	0.017	<20	1.25	0.037	0.06	0.8	0.14	3.8	<0.1	0.05	5	1.9	<0.2	

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.



BUREAU VERITAS MINERAL LABORATORIES
Canada

www.bureauveritas.com/um

Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
PHONE (604) 253-3158

Client: **Crucible Resources Ltd.**
745 East 30th Ave
Vancouver BC V5V 2V8 CANADA

Project: Porphyry Creek
Report Date: December 08, 2015

Page: 1 of 1

Part: 1 of 2

QUALITY CONTROL REPORT

VAN15002935.2

Method	WGHT	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	
Pulp Duplicates																					
REP ROCK-VAN	QC		0.5	3.6	3.8	36	<0.1	0.8	3.6	408	1.76	0.7	<0.5	2.4	27	<0.1	0.1	<0.1	22	0.96	0.042
CR150827-T3	Sand	0.03	530.3	4721.7	8.1	65	5.5	117.2	51.1	303	6.12	290.0	892.9	4.5	33	1.5	2.1	10.1	123	0.85	0.323
REP CR150827-T3	QC																				
Reference Materials																					
STD AMIS0140	Standard																				
STD DS10	Standard		10.6	139.9	136.2	347	1.8	65.7	11.7	871	2.68	42.7	80.7	6.5	65	2.6	8.7	12.4	42	1.02	0.081
STD NBLG	Standard																				
STD OREAS45EA	Standard		1.4	701.7	13.7	33	0.3	391.1	51.3	422	22.70	9.2	52.6	9.9	4	0.1	0.3	0.3	304	0.04	0.029
STD W107	Standard																				
STD DS10 Expected			13.6	154.61	150.55	370	2.02	74.6	12.9	875	2.7188	46.2	91.9	7.5	67.1	2.62	9	11.65	43	1.0625	0.0765
STD OREAS45EA Expected			1.6	709	14.3	31.4	0.26	381	52	400	23.51	10.3	53	10.7	3.5	0.03	0.32	0.26	303	0.036	0.029
STD W107 Expected																					
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank																				
Prep Wash																					
ROCK-VAN	Prep Blank		0.7	4.2	2.7	31	<0.1	0.8	3.4	405	1.73	<0.5	0.8	2.3	27	<0.1	0.1	<0.1	22	1.24	0.042
ROCK-VAN	Prep Blank																				
ROCK-VAN	Prep Blank		0.6	3.6	3.8	36	<0.1	0.9	3.4	400	1.72	<0.5	0.9	2.3	27	<0.1	0.1	<0.1	21	0.95	0.040



BUREAU VERITAS MINERAL LABORATORIES
Canada

www.bureauveritas.com/um

Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
PHONE (604) 253-3158

Client: Crucible Resources Ltd.
745 East 30th Ave
Vancouver BC V5V 2V8 CANADA

Project: Porphyry Creek
Report Date: December 08, 2015

Page: 1 of 1

Part: 2 of 2

QUALITY CONTROL REPORT

VAN15002935.2

Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	KP300	KP300	
Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	W	
Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	
MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	0.001	0.005	
Pulp Duplicates																				
REP ROCK-VAN	QC	5	2	0.39	72	0.071	<20	0.84	0.072	0.08	<0.1	<0.01	2.5	<0.1	<0.05	4	<0.5	<0.2		
CR150827-T3	Sand	161	18	1.40	122	0.187	<20	1.99	0.088	1.17	>100	<0.01	8.1	0.6	0.13	14	2.2	2.4	0.052	0.374
REP CR150827-T3	QC																		0.053	0.379
Reference Materials																				
STD AMIS0140	Standard																		<0.001	<0.005
STD DS10	Standard	16	48	0.75	381	0.069	<20	0.96	0.065	0.32	2.2	0.26	2.9	4.5	0.27	4	2.4	4.7		
STD NBLG	Standard																		<0.001	<0.005
STD OREAS45EA	Standard	7	829	0.10	145	0.101	<20	3.09	0.025	0.05	<0.1	0.01	93.7	<0.1	<0.05	13	0.5	<0.2		
STD W107	Standard																		0.045	0.440
STD DS10 Expected		17.5	54.6	0.775	412	0.0817		1.0259	0.067	0.338	3.32	0.3	2.8	5.1	0.29	4.3	2.3	5.01		
STD OREAS45EA Expected		7.06	849	0.095	148	0.0984		3.13	0.02	0.053			78	0.072	0.036	12.4	0.78	0.07		
STD W107 Expected																			0.045	0.4235
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
BLK	Blank																		<0.001	<0.005
Prep Wash																				
ROCK-VAN	Prep Blank	5	2	0.37	78	0.070	<20	0.84	0.087	0.09	<0.1	0.01	2.7	<0.1	<0.05	4	<0.5	<0.2		
ROCK-VAN	Prep Blank																			
ROCK-VAN	Prep Blank	5	2	0.38	69	0.071	<20	0.82	0.069	0.07	<0.1	0.01	2.8	<0.1	<0.05	4	<0.5	<0.2		