ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: Metallurgical Testing Assessment Report on the Porphyry Creek Property

TOTAL COST: $4,131.95

AUTHOR(S): Doug Warkentin
SIGNATURE(S):

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): N/A
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YEAR OF WORK: 2016

PROPERTY NAME: Porphyry Creek

CLAIM NAME(S) (on which work was done): Brunswick

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 093M04E
LATITUDE: 55 ° 07 ' 40 "
LONGITUDE: 127 ° 36 ' 03 " (at centre of work)
UTM Zone: 9 EASTING: 590000 NORTHING: 6109000

OWNER(S): Kyler Hardy, Tim Johnson, Doug Warkentin

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REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. **Do not use abbreviations or codes**)
Jurassic-Cretaceous, Bowser Lake Group, Kasalka Group, Stocks, Porphyrytic Granodiorites, Hornfels, Stockwork, Veins, Molybdenite, Chalcopyrite, Pyrite, Scheelite

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

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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			
Silt			
Rock			
Other			
DRILLING (total metres, number of holes, size, storage location)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling / Assaying	ICP 23 Samples	Brunswick	$718.94
Petrographic			
Mineralographic			
Metallurgic	4 tests 23 Samples	Brunswick	$3,413.01
PROSPECTING (scale/area)			
PREPATORY / PHYSICAL			
Line/grid (km)			
Topo/Photogrammetric (scale, area)			
Legal Surveys (scale, area)			
Road, local access (km)/trail			
Trench (number/metres)			
Underground development (metres)			
Other			
		TOTAL COST	$4,131.95

Metallurgical Testing 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 East, 6109000 North

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

Project Tenure Numbers: 1037653, 1038181, 1044459, 1045275, 1045347, 1045348 1045349, 1045350, 1045351, 1045352, 1045353, 1045354, 1045355.

SOW Event Numbers: 5602018, 5606737and 5610942

Prepared By:

Doug Warkentin, PEng

Submitted: October 12, 2016

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1 Introduction

This report describes mineral and metallurgical evaluation work carried out by the property owners on samples from the Porphyry Creek Property, located in the Hazelton Mountains, British Columbia, Canada. The work was carried out during the spring and summer of 2016.

The work was conducted using samples of tailings from a former tungsten mine which were deposited in the Red Rose Creek area in the 1940's and 50's. The samples were collected in the summer of 2015. A composite was prepared for testing from four tailings samples collected from widely –spaced locations of deposition along the north side of Red Rose Creek. The source deposit for the ore that gave rise to these tailings lies on crown granted mineral claims that are not part of the project area, but the tailings lay within the project claims. There is also potential for extensions or parallel structures bearing similar ore types to be found within the project boundaries.

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

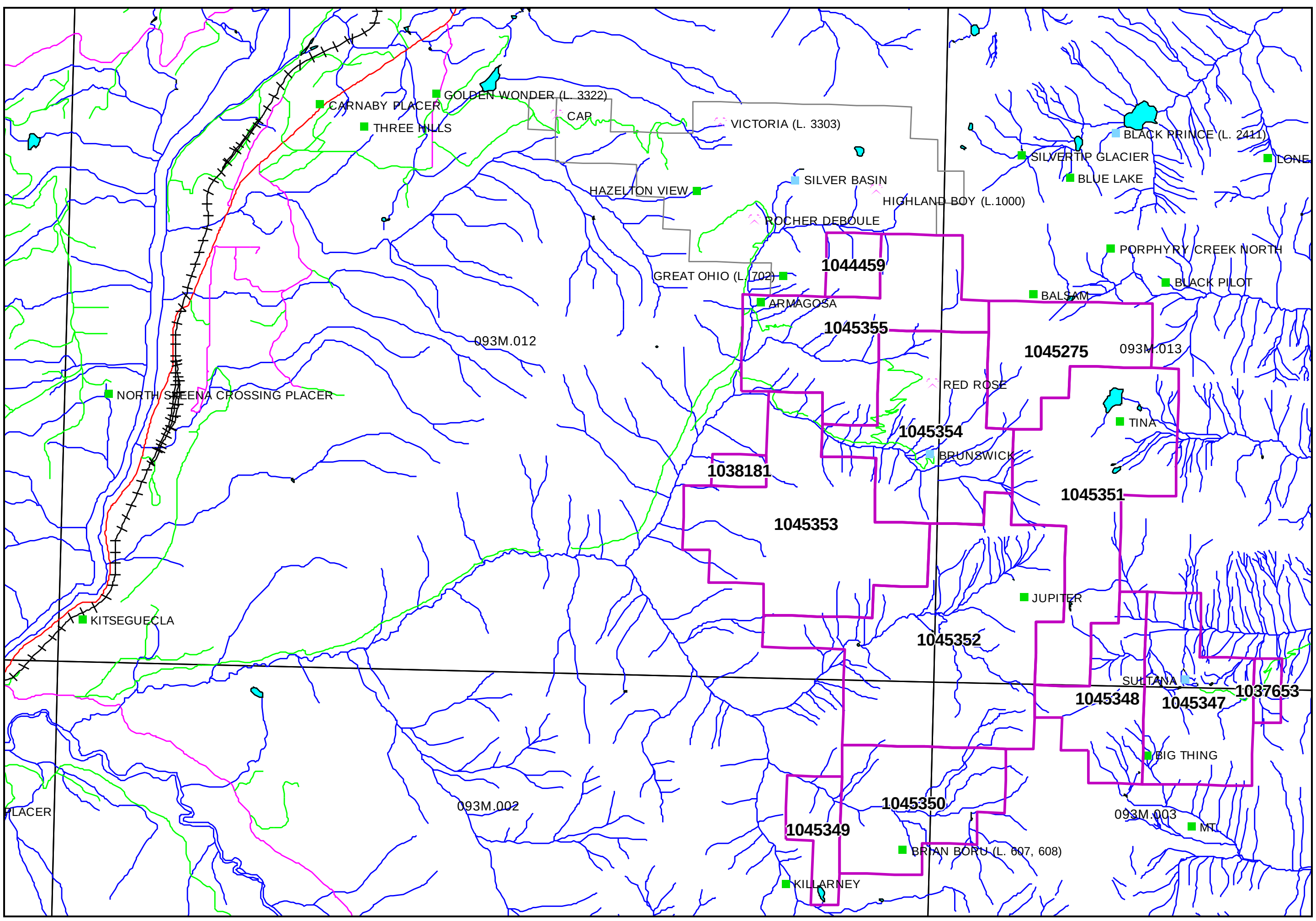


Figure 2 – Porphyry Creek Project Tenures

The Porphyry Creek project consists of 13 MTO claims covering an area of 4,811 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 lying within the northern portion of MTO claim 1045354. The exact suite of minerals granted with these claims has not been investigated, but it is assumed that this area is fully excluded from the property.

Table 1: Porphyry Creek Project Mineral Claims

Title Number	Claim Name	Map Number	Issue Date	Good To Date	Area (ha)
1037653	EAST SULTANA	093M	2015/aug/01	2017/feb/21	37.0
1038181	SLATER NW	093M	2015/aug/25	2017/feb/21	37.0
1044459	OHIO EAST	093M	2016/jun/01	2017/jun/04	73.9
1045275	PORPHYRY	093M	2016/jul/11	2016/nov/30	314.3
1045347	SULTANA	093M	2016/jul/15	2016/nov/30	370.2
1045348	BIG BORU	093M	2016/jul/15	2016/nov/30	259.1
1045349	KILLARNEY	093M	2016/jul/15	2016/nov/30	111.1
1045350	BRIAN BORU	093M	2016/jul/15	2016/nov/30	370.4
1045351	TINA	093M	2016/jul/15	2016/nov/30	647.4
1045352	JUPITER	093M	2016/jul/15	2016/nov/30	906.9
1045353	SLATER	093M	2016/jul/15	2016/nov/30	666.0
1045354	BRUNSWICK	093M	2016/jul/15	2016/nov/30	517.9
1045355	ARMAGOSA	093M	2016/jul/15	2016/nov/30	499.2
				Total	4811

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).

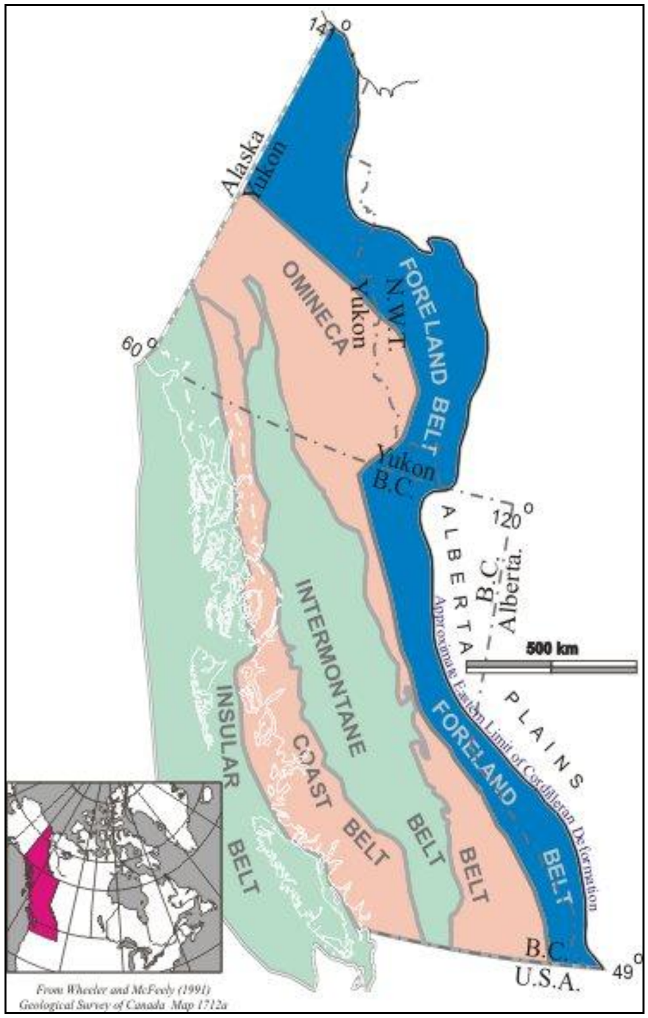
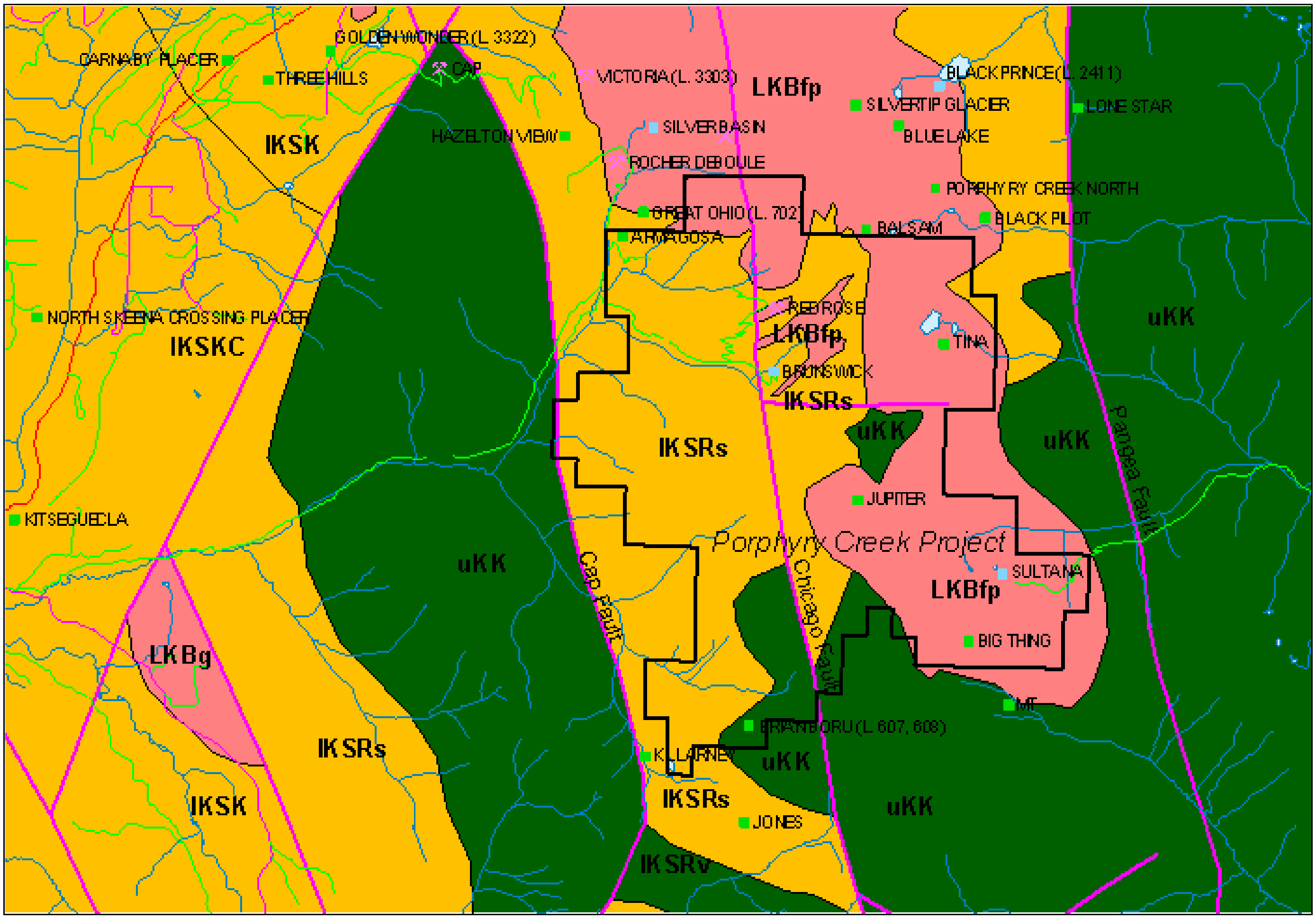


Figure 3 - Five Belt Framework of the Canadian Cordillera (Geological Survey of Canada)

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
lKSK – Lower Cretaceous Skeena Group: Kitsumkalum Shale, mudstone, siltstone, shale fine clastic sedimentary rocks
lKSKC – Lower Cretaceous Skeena Group: Kitsuns Creek Formation, coarse clastic sedimentary rocks
lKSRs – Lower Cretaceous Skeena Group: Red Rose Formation, coarse clastic sedimentary rocks
lKSRv – 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 may follow close to Red Rose Creek on the west side. The regional geology of the claim area is shown 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 porphyrytic 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 qualities 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. Vein and stockwork-type mineralization has also been identified in the northern part of the intrusive in the vicinity of the Roche Deboule mine.

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.

Based on the known occurrences and historical exploration, there appear to be multiple potential sources of mineralization on the property.

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 was 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.

Drilling at the Sultana occurrence in 2010 and 2011 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.

In addition to the Sultana prospect, there are several other areas on the east side of the property showing a positive response on 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 5.

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.

At the least, these values indicate the presence of a potentially 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 generally as elevated. The overall geochemical signature remains suggestive of IOCG as one possible source, comparing with examples occurring in Cordilleran rocks in South America.

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 spahlerite 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 and10%) 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 5). In addition, two singular magnetic high zones were identified.

Figure 5 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 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 6 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 8 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 8, 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.

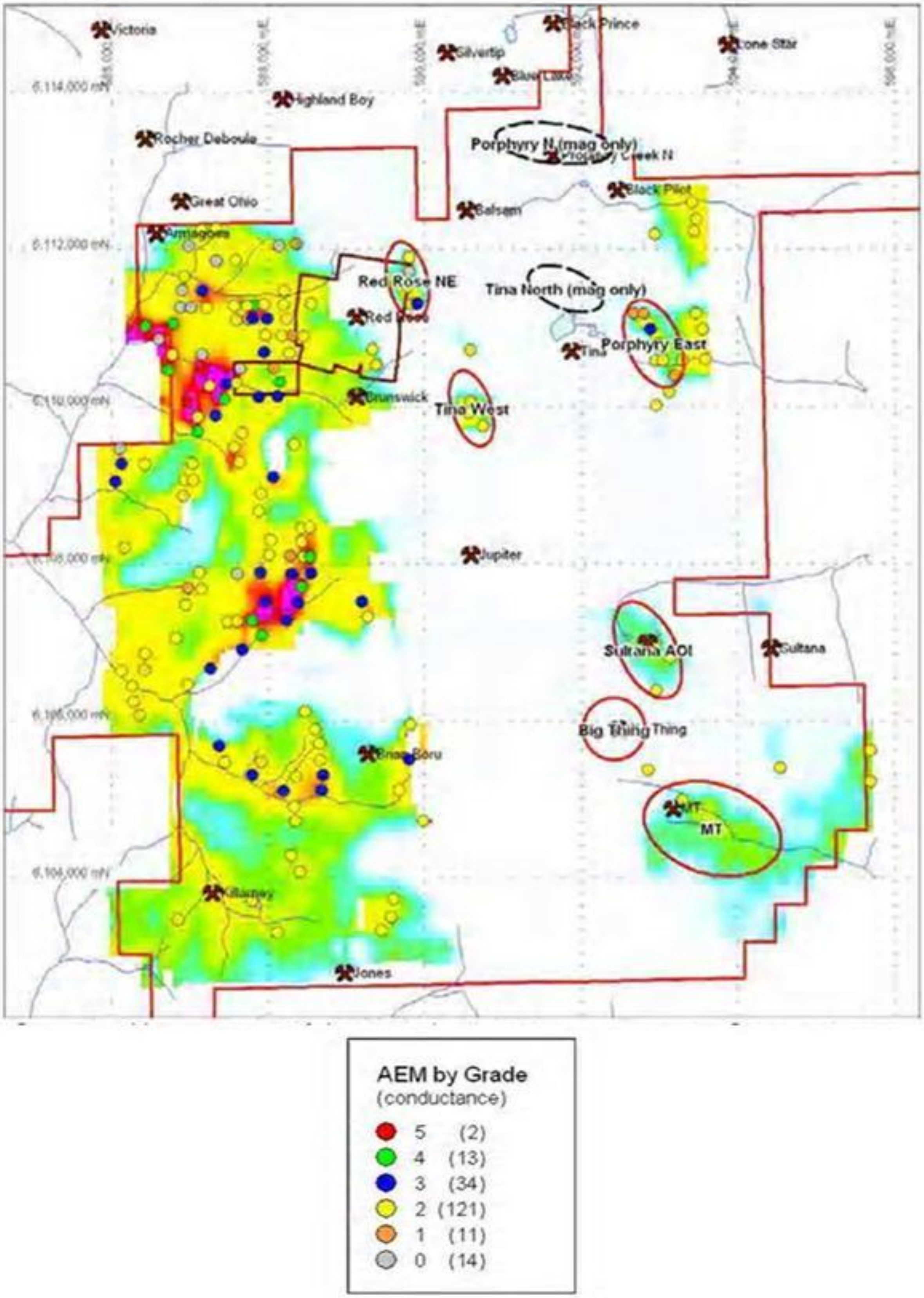


Figure 5- Apparent Resistivity (7200 Hz) and AEM anomalies with East-Side Target Areas Indicated (Campbell 2010).

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.

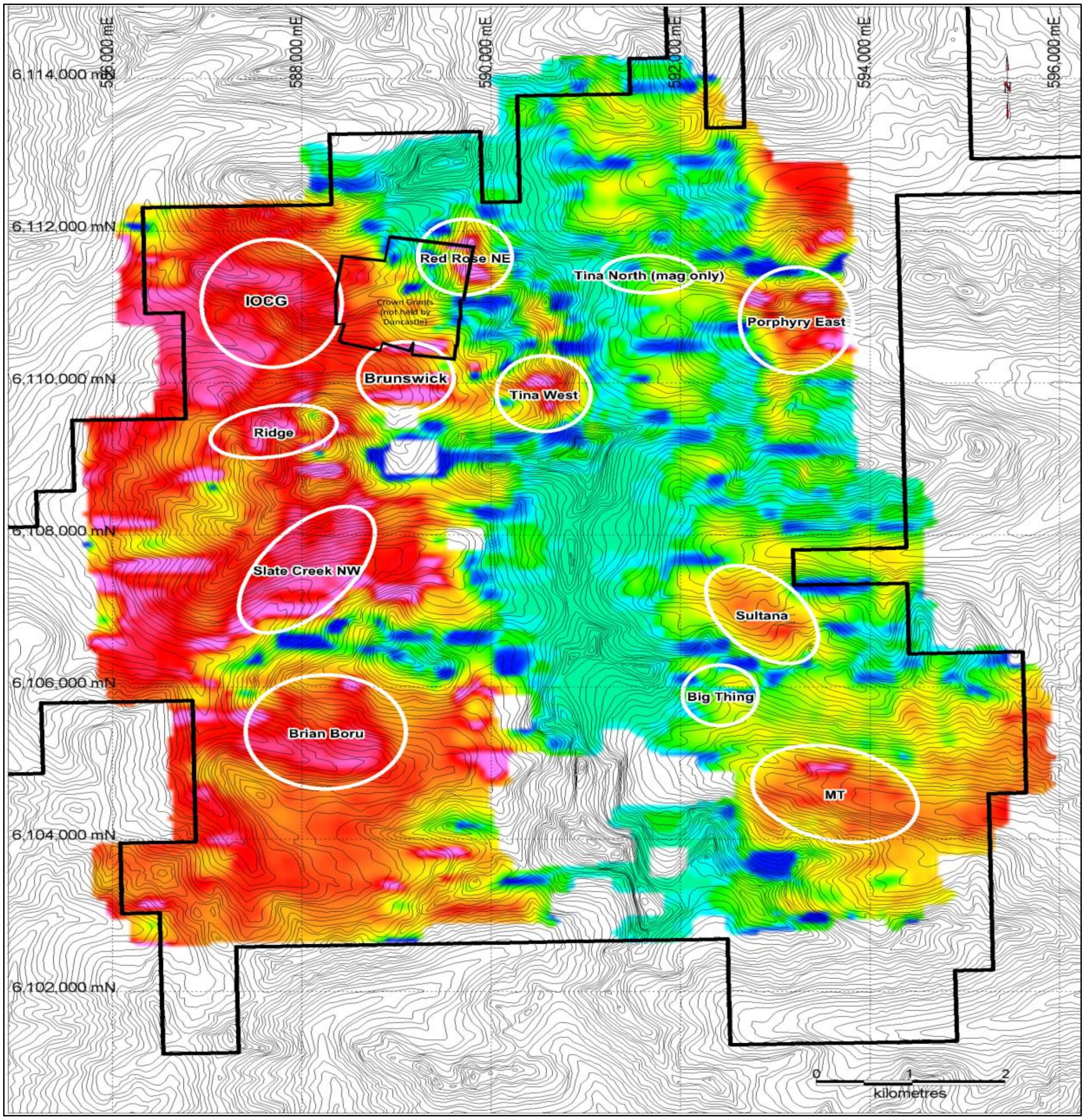


Figure 6 – Resistivity Map showing Priority Geophysical Anomalies

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.

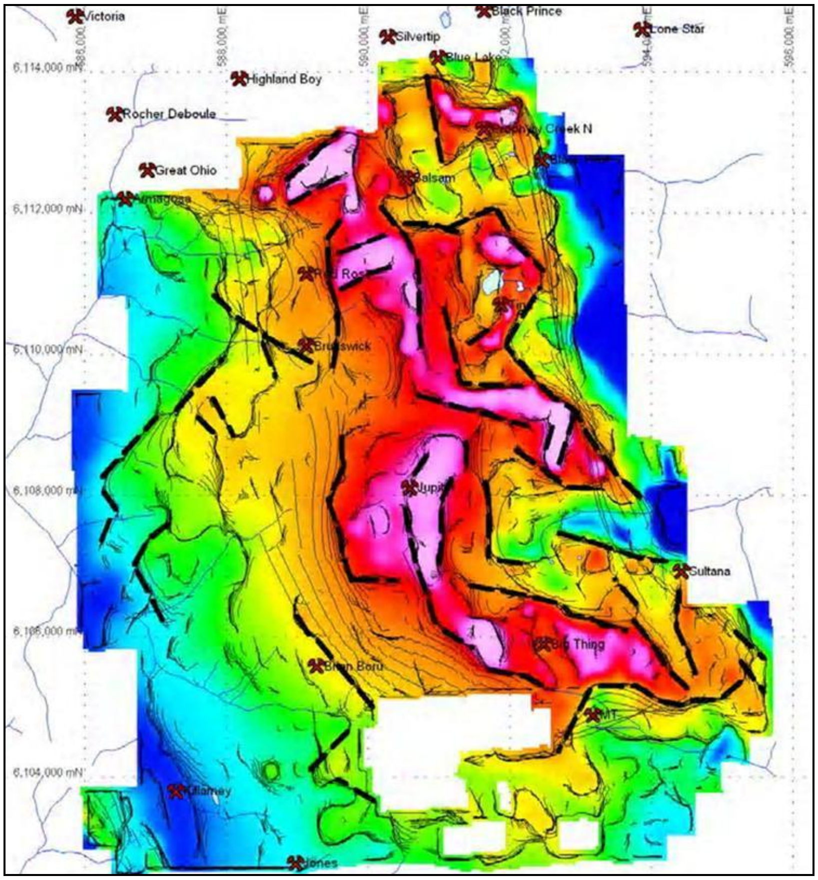


Figure 7- Residual Magnetic Intensity with Major Inferred Structural Breaks/Contacts

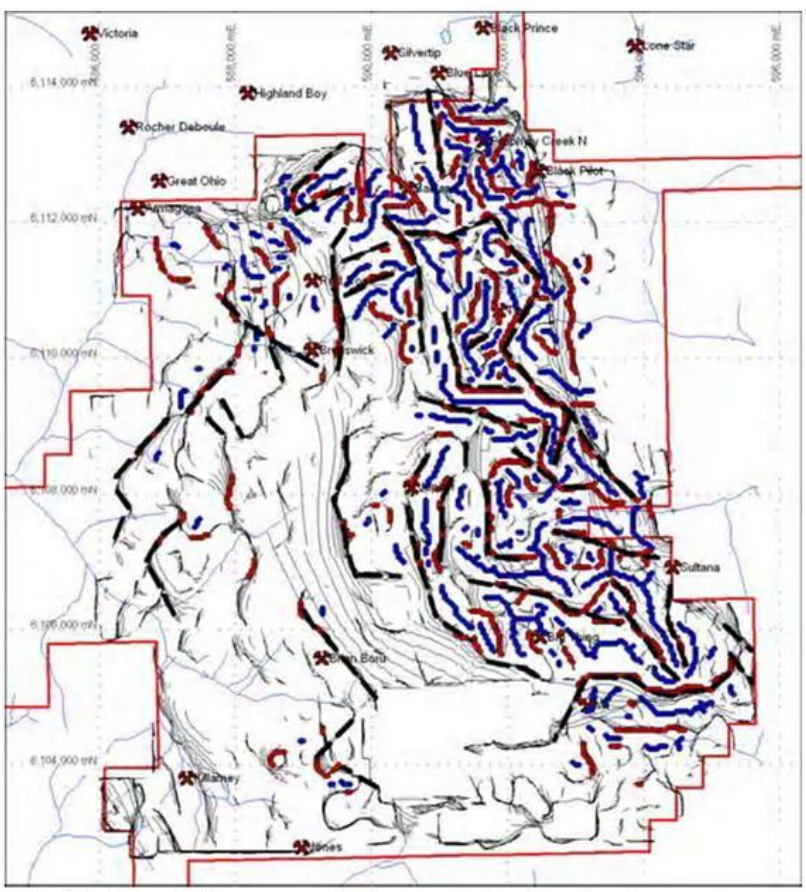


Figure 8 – Cumulative Magnetic Linears (Campbell 2010)

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 8) 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 more 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.

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. The northeast side of this line is the only part of the property showing strong complexity, as indicated by the magnetic linear analysis, that is not directly associated with the intrusive. This area also corresponds to the strong Th/K anomaly extending to the property boundary in the northwest and shows an abundance of EM conductors, particularly in the section south of Armagosa Creek.

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, tennanite/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.

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

interval (m) PC10-01	width (m)	Au PPB	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag 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

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.

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.

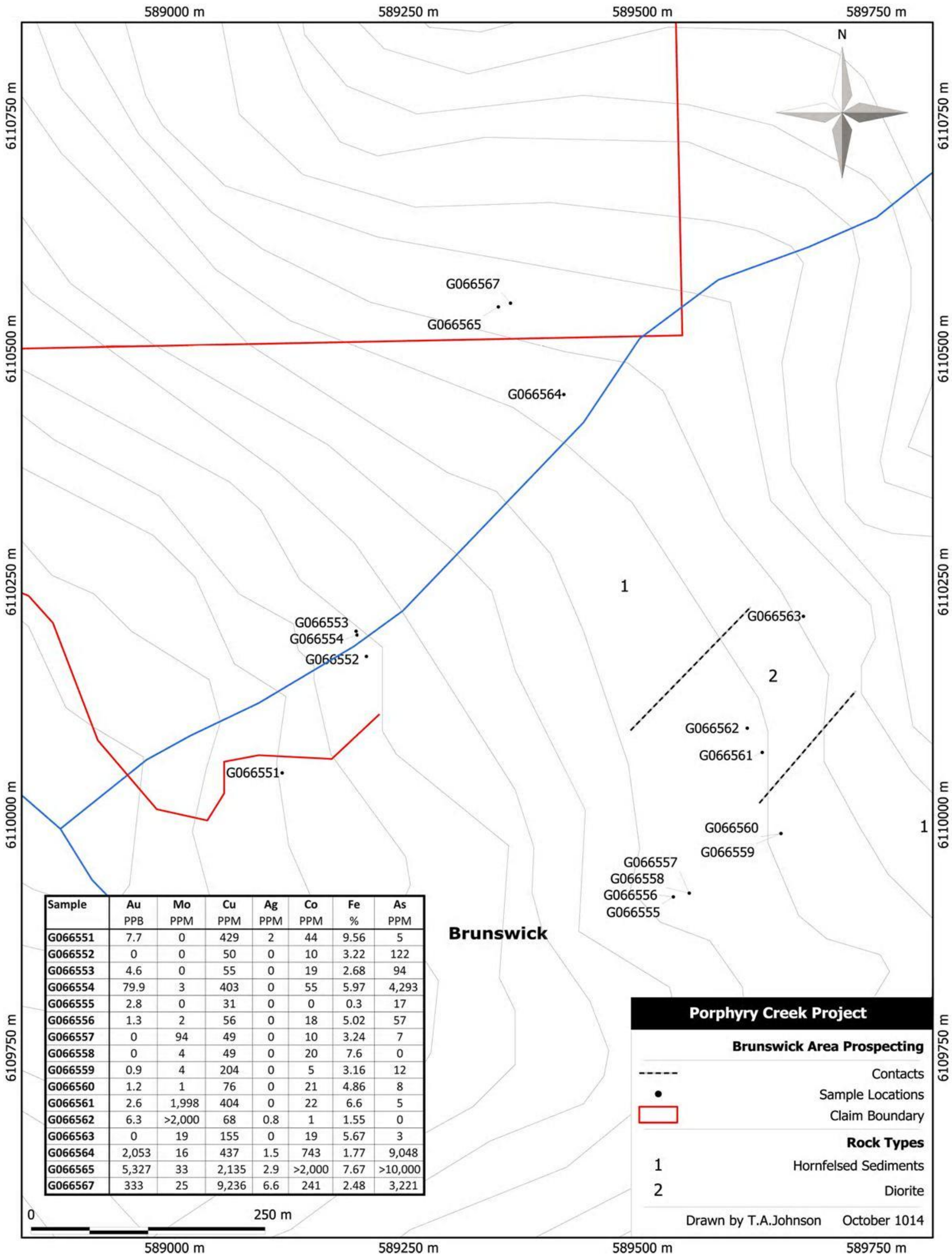
Table 5 - Select Drill Results from the 2011 Porphyry Creek Drill Program

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 2014/15 Exploration Programs



Sample	Au PPB	Mo PPM	Cu PPM	Ag PPM	Co PPM	Fe %	As PPM
G066551	7.7	0	429	2	44	9.56	5
G066552	0	0	50	0	10	3.22	122
G066553	4.6	0	55	0	19	2.68	94
G066554	79.9	3	403	0	55	5.97	4,293
G066555	2.8	0	31	0	0	0.3	17
G066556	1.3	2	56	0	18	5.02	57
G066557	0	94	49	0	10	3.24	7
G066558	0	4	49	0	20	7.6	0
G066559	0.9	4	204	0	5	3.16	12
G066560	1.2	1	76	0	21	4.86	8
G066561	2.6	1,998	404	0	22	6.6	5
G066562	6.3	>2,000	68	0.8	1	1.55	0
G066563	0	19	155	0	19	5.67	3
G066564	2,053	16	437	1.5	743	1.77	9,048
G066565	5,327	33	2,135	2.9	>2,000	7.67	>10,000
G066567	333	25	9,236	6.6	241	2.48	3,221

Figure 9 – 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 9) and 26 soil samples (Figure 10) were collected. All rock samples were collected from the Brunswick area and all soil samples were collected from the Sultana area.

In 2015 four rock samples were collected from an area to the east of the Sultana showing, while on the west side of the property four rock samples and twelve geochemical samples were collected in the Red Rose Creek and Slater Creek areas. Three samples of historical tailings from teh Red Rose mine were also collected.

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.

Rock sampling near the Sultana showing indicated the presence of Cu-Mo mineralization further east than previously documented.

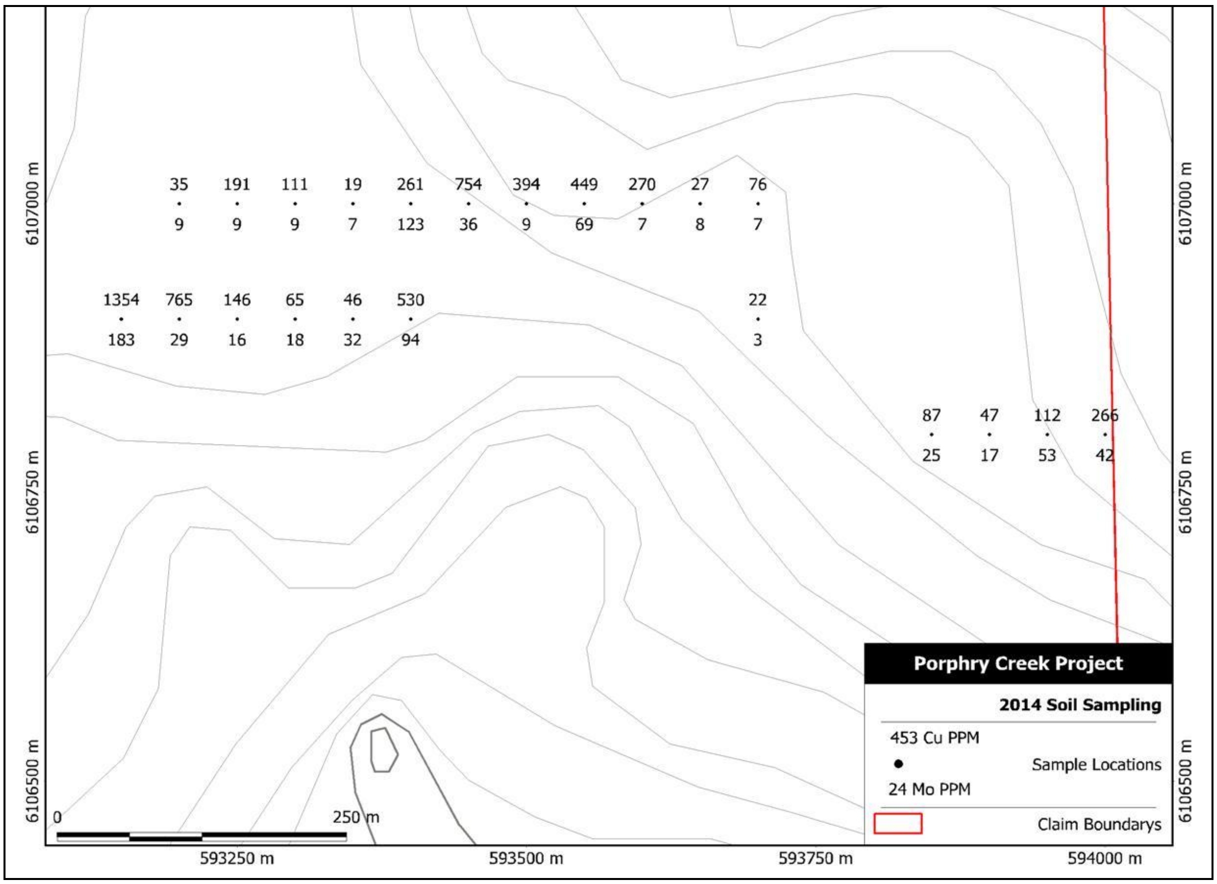


Figure 10 – 2014 Soil Samples, Sultana Area

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.

In the Slater Creek area 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. In the Red Rose Creek area geochemical sampling provided limited but positive initial indications of a possible Au-Cu anomaly in the area above the old town site. 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 historical tailings from the Red Rose mine showed that this material carries significant values in tungsten with gold and copper values also elevated. This work also showed that there is much more of this material present than previously known in the small impoundment near the townsite. The tailings are of interest both for their mineralogical representation of vein systems in the area and as a potential supplemental resource to small high grade deposits in the area.

4 2016 Metallurgical Test Program

In the spring and summer of 2016 a small metallurgical test program was conducted to obtain gravity, flotation and leaching response data for Red Rose mine tailings material collected during a previous site visit. A composite was prepared from three tailings samples collected over a 300 meter stretch of valley bottom along the north side of Red Rose Creek. The composite sample was lightly ground to obtain greater than 90% passing an 80 mesh screen, and then split into small test lots.

Two multi-stage rougher-scavenger flotation tests were carried out, one also including an initial gravity concentration stage. These tests were aimed at evaluating recoverable minerals in separate categories, including precious metals, base metals such as copper and molybdenum, and tungsten. In addition to providing information on mineral forms and associations the tests also provided a confirmation of sample assay results through back-calculation of test lot head grades. Due to the concentration of metals prone to nugget effects in assays, this type of test can be a useful tool in assessing the actual grade of nugget materials using larger sample sizes than conventional assaying. In total, 1 gravity concentrate, 7 flotation concentrates and 4 tailings samples were collected from these tests.

Two ammonia/chloride leaches were carried out, aimed mainly at extracting base and precious metals, but also to evaluate the effects on tungsten in the tailings. For each test three solution samples were collected during leaching and one or two solid precipitates were produced, along with one solid leach residue.

All solid samples were dried and weighed and submitted for analysis. For assaying, a 0.5 gram subsample was digested in hot aqua regia and analyzed by ICP-MS for 36 elements for flotation samples and 53 elements for leaching samples. Samples assaying over-limit for silver or base metals were re-digested in aqua regia and re-analyzed for those metals by ICP-ES. Any samples showing an over-limit value for tungsten were reanalyzed by ICP-ES following phosphoric acid digestion of a 2 gram sample. All solid samples were analyzed by Bureau Veritas Commodities Ltd. (formerly Acme Labs) in Vancouver. Solution samples were analyzed directly from filtered samples by ICP-ES. Solution analyses were carried out by Kemetco Research Inc. in Richmond, BC.

All tailings sample information is summarized in Table 6. This includes the three samples used to prepare the composite as well as two samples collected from the same tailings in 2006 but not used as part of the composite. The table also shows the back-calculated values obtained from the flotation tests. Sample locations and analytical results are also shown on the map in Appendix 1.

Metallurgical test reports for all tests are included in Appendix 2. Full analytical results for test samples are provided in Appendix 3.

The historical Red Rose tailings came from a mill located at the Red Rose townsite at the valley bottom along red Rose Creek. Ore came from a mine located near the top of the mountain to the northeast and was carried to the mill by a tramline. There is currently a small tailings impoundment a short distance downstream from the old mill site (Figure 11). It is not know if this dates from the period of operation or if it was constructed later as a remediation measure, but this appears to represent only a small part of the total tailings deposited in the area. None of the samples collected from these tailings came from this impoundment.

Figure 11 – Red Rose Tailings

4.1 Gravity and Flotation Testing

The test reports for tests PC100 and PC101 are presented in Appendix 2. In both cases the tests started with a deslime step, with flotation of the slimes to try to scavenge any values, particularly for tungsten, which is prone to sliming. For test PC100 this was followed with gravity separation by hand-panning to produce a gravity concentrate targeting both gold and tungsten. Gravity tails were then subjected to 3 stages of flotation, rougher, scavenger and tungsten stages. The rougher and Scavenger used conditions aimed at base and precious metal flotation, while the tungsten stage was run with reagents and conditioning suited to Scheelite flotation. Rougher and scavenger concentrates were combined for assay.

Table 6: Historical Tailings Sample Analytical Results

Sample #	Date	Description	UTM Location East	UTM Location North	Width m	Au g/t	Ag g/t	Co ppm	Cu ppm	Pb ppm	Zn ppm	W ppm	Mo ppm
		Red Rose Tailings - 2006 Sampling											
CR 60814-3	8/14/2006	235m SW of SE corner of pond	587483	6110520	-	0.959	4.3	-	4600	14	186	3190	330
CR 60814-3a	8/14/2006	fine orange ox. fraction	587483	6110520	-	1.314	23	-	10100	-	160	>10000	1271
		Red Rose Tailings - 2015 Sampling											
CR150827-T1	8/27/2015	Downstrean, near creek	587511	6110517	-	0.543	2.2	58.6	3208	4.6	56	2630	220
CR150827-T2	8/27/2015	Just below pond	587578	6110456	-	0.648	2.8	41.3	3724	4.9	51	3090	301
CR150827-T3	8/27/2015	Near millsite, above pond	587801	6110370	-	0.893	5.5	51.1	4722	8.1	65	3740	530
		Average Values - 2015 Samples											
RR Tails Comp #1		Non-weighted average				0.695	3.5	50.3	3885	5.9	57	3153	350
		Calculated Head Grades - 2016 Flotation Tests											
PC100	2/25/2016	Gravity-Flotation				1.19	3.7	54.7	3882	-	-	2900	289
PC101	6/9/2016	Flotation				2.40	4.6	55.0	3982			3090	277

Test PC101 fed the deslimed pulp directly to flotation without a gravity concentration step, and in this case rougher and scavenger concentrates were kept separate. The results of both tests were similar, showing relatively poor recoveries of copper and molybdenum, but good recovery of tungsten and precious metals. The slime fraction was relatively high in precious metals, but unexpectedly, it was not elevated in tungsten. Gravity concentration gave only minor precious metal recovery, but Scheelite recovery was significant (17%). When combined with close to 60% tungsten recovery to the Scheelite concentrate and 5% in the rougher and scavenger, overall tungsten recovery was more than 80%, which is high for tailings. Standard reagents proved to be very effective in this application. The addition of a third reagent in PC101 gave a little higher recovery, but this was most likely due to the lack of a gravity separation stage, and overall the recovery was not improved.

Gold recovery was good, but it did not always report to the targeted concentrate. Only 10% was recovered by gravity, and the remainder was split between concentrates, especially in test PC101. The calculated gold grades were significantly higher that the assayed grades, particularly for PC101, likely indicating a nugget effect in this material (see Table 6). The high gold in float tails in test PC101 may indicate a nugget effect even in poorly liberated material, for example discreet gold grains lock in vein quartz which does not respond to flotation. This could exaggerate the calculated head for this sample, but even if the float tails were the same grade as for PC100, the calculated head would still be approximately 1.4 g/t Au. The higher gold grade could be significant economically for this type of deposit.

4.2 Leach Testing

Leach testing used chemistry that was mainly aimed at base metals, but has been shown to have potential to leach gold and possibly tungsten. Overall extractions in both tests were very low, generally less than 10%, with the best response seen for molybdenum. The addition of ammonium carbonate in the first stage of test L2 had a small positive effect on base metal recovery, but the levels were still very low. The tests did also confirm that some precious metal leaching occurred, in addition to copper and molybdenum. This was confirmed by assaying solid precipitates recovered from the leach solutions. Calculated gold head grades for these tests were less reliable due to the difficulty in accurately assaying low levels of gold in the leach solutions, but gold remaining in the leach residues was generally in line with the average assays making up the head composite.

5 Interpretations and Conclusions

These preliminary metallurgical scoping tests were useful in showing the positive flotation response of the Scheelite, and the similar potential for gold and silver recovery by flotation. Good recoveries were obtained for tungsten without any optimization, indicating that there was reasonable liberation of the Scheelite even though the tungsten was not particularly elevated in the slimes. On the other hand the gold response indicated that liberation may be an issue, which makes sense if the gold is embedded in quartz, which likely makes up much of the coarsest fractions. Liberation may also be a reason for the poor copper and molybdenum recovery, although surface oxidation due to weathering of the tailings may also be a factor.

As expected, gravity separation was able to recover some Scheelite, but flotation was much more effective. Gold recovery by gravity was also limited, again indicating poor liberation.

Significantly different leach conditions and likely finer grinding would be needed to make leaching a viable treatment option for this type of ore or tailings. Given the favourable flotation results, modified leaching methods applied to flotation concentrates may be more suitable as a way of producing marketable individual metal concentrates from mixed flotation concentrates. This could be most relevant for the tungsten.

The quantity of tailings is likely insufficient to economically justify a stand-alone recovery operation, but the values, particularly of gold and tungsten, are high enough that this material would add materially to the available resource if an economically viable high grade vein deposit were to be developed in this area, particularly if it was a vein with the same or similar mineralogy, including possible extensions to the nearby Red Rose vein.

5.1 Recommendations

The primary objective for this property is to continue to define new and existing mineral deposits. Based on past exploration and development, and on geophysics and geochemistry, the Red Rose, Armagosa and adjacent valleys have a high potential for hosting high grade mineral deposits, in addition to any possible larger underlying mineralized systems. One development path for the property would be to focus initially on short term production from smaller high grade veins, in which case a simple process for high value recovery from polymetallic ores will be essential. Continued prospecting of these two valleys is therefore a priority, and further surveys or metallurgical testing of tailings and vein samples would also continue to add to the overall potential.

6 Statement 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 the testwork, 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 12th day of October 2016.

Doug Warkentin, PEng.
Metallurgical Engineer

7 Statement of Costs

Metallurgical Testing Labour		
April to August, 2016		
Doug Warkentin - Metallurgist 45 hrs @ 55/hr		2475.00
	Total Labour	**2,475.00**
Laboratory Equipment and Supplies		
Laboratory Consumables		147.93
	Total Equipment and Supplies	**147.93**
Analysis and Reporting		
Sample Preparation		130.08
Solid Assays		508.94
Solution Assays		210.00
Report Preparation		660.00
	Total Reporting	**1,509.02**
	Total	**4,131.95**

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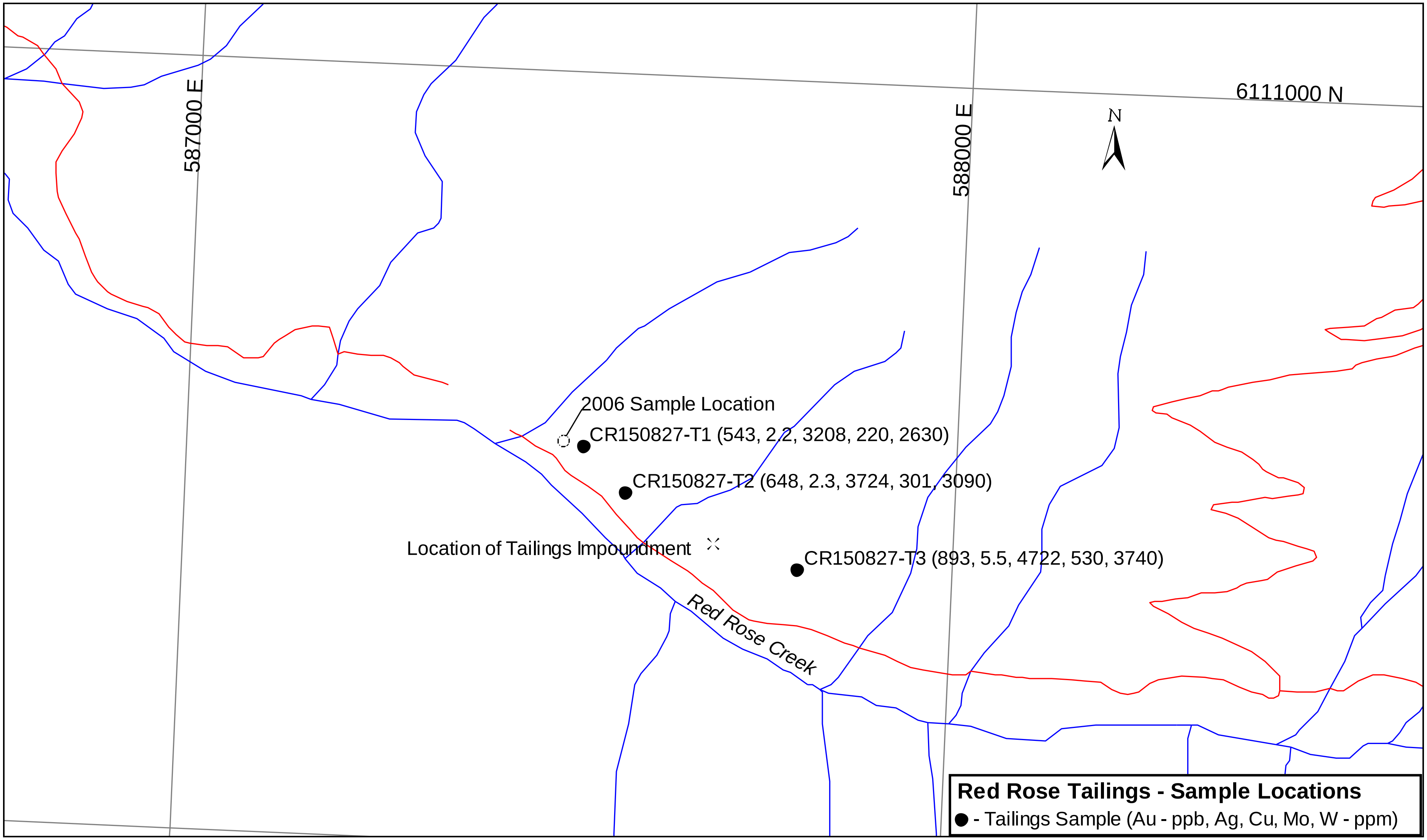
Appendix 1 – Sample Location Map


6111000 N
587000 E
588000 E
N
2006 Sample Location
CR150827-T1 (543, 2.2, 3208, 220, 2630)
CR150827-T2 (648, 2.3, 3724, 301, 3090)
Location of Tailings Impoundment
CR150827-T3 (893, 5.5, 4722, 530, 3740)
Red Rose Creek
Red Rose Tailings - Sample Locations
● - Tailings Sample (Au - ppb, Ag, Cu, Mo, W - ppm)

Scale 1:7500

Appendix 2 – Metallurgical Test Reports

Flotation Test Report

Test: PC 100 **Date:** 25 Apr-16
Feed: RR Tails Comp #1
Grind: 95% -80#

Conditions:

Stage	Reagents added, grams per tonne										Time, minutes			pH
	Na_2CO_3	A3418A	A3302	A208	PAX	A704	A845	Diesel	DF250	MIBC	Grind	Cond.	Froth	
Deslime														
Slimes Condition							28	42				7		6.25
Slimes Rougher.										87			5	6.25
Gravity Pan														
Condition	1350	25	58	25								3		5.62
Rougher 1									29	58			3	8.62
Condition					50							2		8.23
Scavenger													2	8.24
Condition	1625					58	28					5		7.35
W Rougher									58	58			8	9.00
Total	*2975*	*25*	*58*	*25*	*50*	*58*	*56*	*42*	*87*	*203*	*0*	*17*	*18*	

Metallurgical Balance

Product	Weight		Assays							% Distribution						
	g	%	Au (g/t)	Ag (g/t)	Cu (%)	W (%)	Mo (%)	Ni (g/t)	Co (g/t)	Au	Ag	Cu	W	Mo	Ni	Co
Grav Conc.	4.99	2.10	5.90	7.3	0.62	2.40	0.04	58.4	36.9	10.4	4.1	3.3	17.3	3.3	1.1	1.4
Slimes Conc.	1.30	0.55	2.66	29.4	0.98	0.46	0.17	177.9	110.8	1.2	4.3	1.4	0.9	3.2	0.9	1.1
Ro. Conc.	7.12	2.99	24.79	33.0	1.25	0.51	0.15	141.7	74.8	62.3	26.6	9.7	5.2	15.2	3.8	4.1
W Conc.	21.20	8.91	1.45	6.7	0.46	1.93	0.03	127.4	59.9	10.8	16.1	10.5	59.3	10.2	10.0	9.8
Slimes Tails.	7.29	3.06	1.13	13.4	0.77	0.32	0.09	185.1	99.8	2.9	11.1	6.1	3.4	9.1	5.0	5.6
Flotation Tails	196.2	82.40	0.18	1.7	0.33	0.05	0.02	108.6	51.8	12.3	37.8	69.1	13.9	59.0	79.2	78.0
Head (calc.)	238	100.0	1.19	3.7	0.39	0.29	0.029	112.9	54.7	100	100	100	100	100	100	100
Head (assay)			0.70	3.5	0.39	0.32	0.035	111.7	50.3							

Flotation Test Report

Test: PC 101 **Date:** 9 Jun-16
Feed: RR Tails Comp #1
Grind: 95% -80#

Conditions:

Stage	Reagents added, grams per tonne													Time, minutes			pH
	Na_2CO_3	A 3418A	A3302	Mx900	A208	PAX	A704	A845	Oleic Acid	Diesel	$CuSO_4$	DF250	MIBC	Grind	Cond.	Froth	
Deslime	1260																9.00
Slimes Condition	1090							28	175	175					15		7.20
Slimes Rougher.												91				5	8.50
Condition	2740	17	61	30	26										4		6.52
Rougher 1													61			4	9.45
Condition						87					260				5		9.15
Rougher 2																4	8.78
Condition	2870						58	28	175						5		8.59
W Rougher												91				6	9.43
Total	*7960*	*17*	*61*	*30*	*26*	*87*	*58*	*56*	*350*	*175*	*260*	*182*	*61*	*0*	*29*	*19*	

Metallurgical Balance

Product	Weight		Assays							% Distribution						
	g	%	Au (g/t)	Ag (g/t)	Cu (%)	W (%)	Mo (%)	Ni (g/t)	Co (g/t)	Au	Ag	Cu	W	Mo	Ni	Co
Slimes Conc.	1.81	0.84	1.80	22.8	0.80	0.38	0.09	191.7	107.2	0.6	4.2	1.7	1.0	2.8	1.4	1.6
Ro. 1 Conc.	3.52	1.63	19.16	49.4	2.54	0.43	0.20	131.8	70.8	13.0	17.7	10.4	2.3	11.8	1.9	2.1
Ro. 2 Conc.	2.14	0.99	7.96	39.1	0.86	0.44	0.06	181.0	89.3	3.3	8.5	2.1	1.4	2.0	1.6	1.6
W Conc.	17.62	8.18	9.36	8.7	0.37	2.49	0.02	112.4	49.2	31.8	15.6	7.7	65.9	6.5	8.1	7.3
Slimes Tails.	16.05	7.45	0.82	10.1	0.69	0.32	0.07	177.0	95.9	2.5	16.5	12.9	7.7	18.1	11.7	13.0
Flotation Tails	174.4	80.91	1.45	2.1	0.32	0.08	0.02	105.2	50.5	48.7	37.4	65.2	21.7	58.7	75.3	74.3
Head (calc.)	216	100.0	2.40	4.5	0.40	0.31	0.028	113.0	55.0	100	100	100	100	100	100	100
Head (assay)			0.70	3.5	0.39	0.32	0.035	111.7	50.3							

Leach Extraction Test Report

Test: L1 **Date:** 6-Jun-16
Sample: PC Comp RR 1 **Project:** I0603

Test Conditions

Solids: 165.97 g
Solution: 200 g
Solids Content: 45.35 %
Grind Size: 90% -80#
Temp: amb. (15 °C)
pH: alk
Duration: 60 hrs

Notes: Preliminary testing $NH_4Cl/NH_4OH/NaCl$ w $CuSO_4$

Tare: 97.24 g

Head Grade

	Au	Ag	Cu	Mo	Co	Ni	Zn	W	
Calculated:	0.57	3.82	3824	313.6	51.6	111.7	58.1	2937	g/t
Assayed:	0.70	3.50	3884	350	50.3	111.7	57.3	3150	g/t

Leach Solution Data

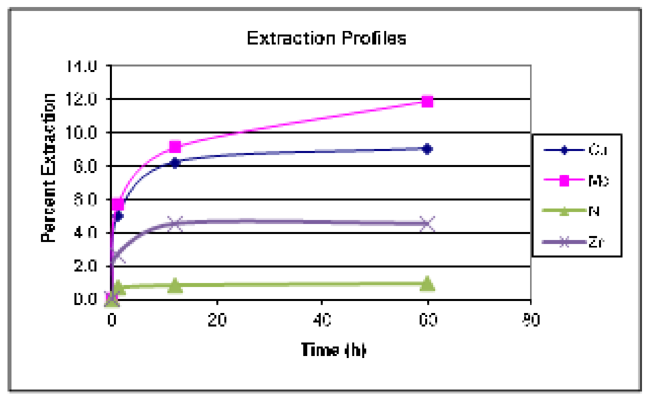
Time (hrs)	Gr. Wt. (g)	Slurry (g)	pH	$CuSO_4$ (g)	NH_4OH (g)	NH_4Cl (g)	NaCl (g)	Sol'n Vol. (mL)	Sample (mL)	Cu (mg/L)	Mo (mg/L)	Co (mg/L)	Ni (mg/L)	Zn (mg/L)	Cu (mg)	Mo (mg)	Co (mg)	Ni (mg)	Zn (mg)
0	492.7	395.4	9.58		3.47	5.35	11.69												
1	487.4	390.1	9.58		3.99	5.35	11.68	218	10.0	147	13.6	0.37	0.60	1.2	32.1	2.97	0.08	0.1	0.3
12	576.2	479.0	9.67	0.1				298	10.0	120	15.5	0.23	0.53	1.4	52.3	4.76	0.07	0.2	0.4
60	582.9	485.7	9.54					308		201	19.2	0.19	0.57	1.3	57.2	6.21	0.06	0.2	0.4
Total				0.11	7.46	10.70	23.37												

Solids

Time (hrs)	Wt (g)	Au (g/t)	Ag (g/t)	Cu (g/t)	Mo (g/t)	Co (g/t)	Ni (g/t)	Zn (g/t)	W (g/t)	Au (mg)	Ag (mg)	Cu (mg)	Mo (mg)	Co (mg)	Ni (mg)	Zn (mg)	W (mg)
PPT	1.32	1.946	9.825	17130	75.2	19.7	40.1	158.9	>100	0.0	0.0	65.8	0.2	0.09	0.1	0.5	0.3
Residue	165.15	0.546	3.622	3496	277.52	51.5	111.1	55.7	2950	0.1	0.6	577.4	45.8	8.5	18.3	9.2	487.2

Leach Results

Time (hrs)	Au Dist. (%)	Ag Dist. (%)	Cu Dist. (%)	Mo Dist. (%)	Co Dist. (%)	Ni Dist. (%)	Zn Dist. (%)	$CuSO_4$ Cons. (kg/t)	NH_4OH Cons. (kg/t)	NH_4Cl Cons. (kg/t)	NaCl Cons. (kg/t)
0			0.0	0.0	0.0	0.0	0.0	0.00	20.92	32.23	70.4
1			5.1	5.7	0.9	0.7	2.7	0.00	44.98	64.47	140.8
12			8.2	9.1	0.8	0.9	4.5	0.66	44.98	64.47	140.8
60			9.0	11.9	0.8	1.0	4.5	0.66	44.98	64.47	140.8
PPT	5.4	5.7									
Residue	94.6	94.3	91.0	88.1	99.2	99.0	95.5				
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0				



* Values below detection limit shown as zero

Leach Extraction Test Report

Test:	L2	**Date:**	16-Aug-16
Sample:	PC Comp RR 1	**Project:**	I0603

Test Conditions

Solids:	165 g	**Notes:**	Optimization testing $NH_4Cl/NH_4OH/NaCl$ w $(NH_4)_2CO_3$
Solution:	200 g		
Solids Content:	45.21 %		
Grind Size:	90% -80#		
Temp:	amb. (15 °C)		
pH:	alk		
Duration:	26 hrs	Tare:	95.63 g

Head Grade	**Au**	**Ag**	**Cu**	**Mo**	**Co**	**Ni**	**Zn**	**W**	
Calculated:	0.88	5.29	3821	305.7	49.3	103.8	65.7	3001	g/t
Assayed:	0.70	3.50	3884	350	50.3	111.7	57.3	3150	g/t

Leach Solution Data

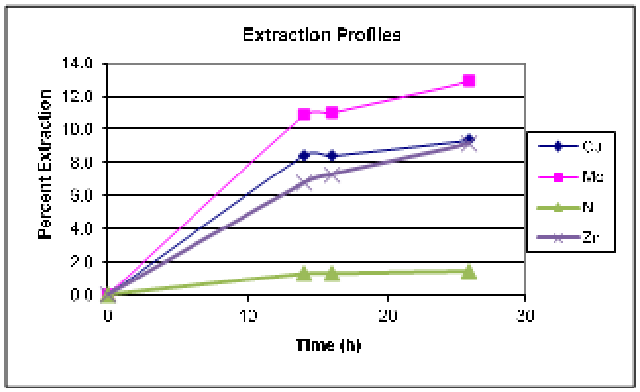
Time (hrs)	Gr. Wt. (g)	Slurry (g)	pH	$(NH_4)_2CO_3$ (g)	NH_4OH (g)	NH_4Cl (g)	NaCl (g)	Sol'n Vol. (mL)	Sample (mL)	Cu (mg/L)	Mo (mg/L)	Co (mg/L)	Ni (mg/L)	Zn (mg/L)	Cu (mg)	Mo (mg)	Co (mg)	Ni (mg)	Zn (mg)
0	497.1	401.5	9.63	16.00	3.11														
14	496.6	400.9	9.75		0.94		5.90	230	107.6	232	23.8	0.83	0.97	3.2	53.4	5.48	0.19	0.2	0.7
16	454.4	358.7	9.58		0.90		5.84	188	48.2	151	16.1	0.56	0.66	2.4	53.4	5.59	0.19	0.2	0.8
26	452.7	357.0	9.66					184		147	17.4	0.50	0.64	2.9	59.3	6.54	0.21	0.3	1.0
Total				16.00	4.94	0.00	11.74												

Solids

Time (hrs)	Wt (g)	Au (g/t)	Ag (g/t)	Cu (g/t)	Mo (g/t)	Co (g/t)	Ni (g/t)	Zn (g/t)	W (g/t)	Au (mg)	Ag (mg)	Cu (mg)	Mo (mg)	Co (mg)	Ni (mg)	Zn (mg)	W (mg)
CuS 1-2	0.1	43.1	202.8						3.2	0.0	0.0						0.0
PPT	17.44	0.025							68.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Residue	164.11	0.860	5.2	3481	267.5	48.3	102.8	60	3010	0.1	0.9	571.3	43.9	7.9	16.9	9.8	494.0

Leach Results

Time (hrs)	Au Dist. (%)	Ag Dist. (%)	Cu Dist. (%)	Mo Dist. (%)	Co Dist. (%)	Ni Dist. (%)	Zn Dist. (%)	$CuSO_4$ Cons. (kg/t)	NH_4OH Cons. (kg/t)	NH_4Cl Cons. (kg/t)	NaCl Cons. (kg/t)
0			0.0	0.0	0.0	0.0	0.0	96.97	18.84	0.00	0.0
14			8.5	10.9	2.4	1.3	6.8	96.97	24.54	0.00	35.8
16			8.5	11.1	2.4	1.3	7.3	96.97	29.97	0.00	71.2
26			9.4	13.0	2.6	1.5	9.2	96.97	29.97	0.00	71.2
CuS 1-2	3.0	2.3									
PPT	0.3	0.0									
Residue	96.7	97.7	90.6	87.0	97.4	98.5	90.8				
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0				



* Values below detection limit shown as zero

Appendix 2 – Assay Reports

BUREAU VERITAS MINERAL LABORATORIES Canada

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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:	July 04, 2016
Report Date:	August 04, 2016
Page:	1 of 2

CERTIFICATE OF ANALYSIS VAN16001081.1

CLIENT JOB INFORMATION

Project:	PC/Fr/New/OS
Shipment ID:	
P.O. Number	
Number of Samples:	29

SAMPLE DISPOSAL

PICKUP-PLP Client to Pickup Pulps

Bureau Veritas does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
SLBHP	24	Sorting, labeling and boxing samples received as pulps			VAN
AQ200	19	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed	VAN
AQ250_EXT	5	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	0.5	Completed	VAN
DRPLP	24	Warehouse handling / disposition of pulps			VAN
AQ370	8	1:1:1 Aqua Regia digestion ICP-ES analysis	0.4	Completed	VAN
FA530	0	Lead collection fire assay 30G fusion - Grav finish	30	Completed	VAN
KP300	13	Phosphoric acid leach, ICP-ES analysis	0.5	Completed	VAN

ADDITIONAL COMMENTS

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

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
MARCUS LAU
Geochemical Laboratory Manager

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: PC/Fr/New/OS
Report Date: August 04, 2016

CERTIFICATE OF ANALYSIS VAN16001081.1

	Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	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	1
PC100-1	Pulp	449.5	6181.7	12.1	60	7.3	58.4	36.9	139	4.65	441.3	5903.3	7.0	34	0.7	5.2	22.3	62	3.23	1.278	224
PC100-2	Pulp	1673.3	9811.7	766.3	1909	29.4	177.9	110.8	907	10.70	890.7	2655.3	15.5	80	42.4	15.8	32.0	186	1.14	0.325	193
PC100-3	Pulp	860.4	7675.9	97.7	209	13.4	185.1	99.8	504	9.62	665.0	1131.5	11.3	55	2.8	8.4	20.4	191	1.02	0.228	153
PC100-4	Pulp	1474.2	>10000	227.1	378	32.6	141.7	74.8	433	7.81	530.7	24792.9	7.3	40	8.7	12.5	19.3	161	0.90	0.310	94
PC100-5	Pulp	333.0	4570.4	72.2	108	6.7	127.4	59.9	344	5.78	273.5	1448.4	5.1	57	1.5	4.4	9.7	147	5.40	2.083	135
PC100-6	Pulp	207.2	3254.4	10.2	53	1.7	108.6	51.8	203	4.50	166.6	177.7	2.4	13	0.3	1.7	5.3	116	0.28	0.091	37
PC101-1	Pulp	930.9	8011.8	153.6	391	22.8	191.7	107.2	801	9.76	678.0	1803.3	11.4	72	6.5	10.6	21.5	190	1.05	0.297	155
PC101-2	Pulp	673.4	6877.7	52.9	144	10.1	177.0	95.9	488	8.84	546.3	821.3	9.1	48	1.7	6.4	16.7	185	0.83	0.235	125
PC101-3	Pulp	>2000	>10000	79.2	312	49.4	131.8	70.8	413	7.87	534.3	19158.4	5.5	28	5.7	17.2	23.0	150	0.75	0.259	61
PC101-4	Pulp	569.4	8570.3	217.8	267	39.1	181.0	89.3	923	8.07	533.9	7963.2	6.4	72	4.0	8.0	16.3	184	1.05	0.316	83
PC101-5	Pulp	220.1	3736.5	145.9	77	8.7	112.4	49.2	310	4.93	213.0	9359.7	5.5	67	0.8	4.4	7.4	134	7.53	2.947	178
PC101-6	Pulp	201.0	3210.1	4.8	49	2.1	105.2	50.5	195	4.43	173.0	1446.1	3.3	13	0.4	1.4	5.4	110	0.23	0.067	42
CR 113 Pb Ro. 1	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CR 113 Pb Ro. 2	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CR 113 Flt Tls.	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CR 113 Zn Ro.	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CN 113 Pb Ro. 1	Pulp	9.2	214.6	>10000	>10000	>100	22.2	9.1	753	5.15	116.0	7119.5	9.4	16	1342.1	89.1	143.6	26	0.24	0.037	13
CN 113 Pb Ro. 2	Pulp	4.3	153.7	>10000	>10000	>100	21.5	9.8	790	5.51	141.4	1752.2	9.8	18	1307.6	43.5	72.5	28	0.27	0.041	14
CN 113 Flt Tls.	Pulp	1.1	95.0	>10000	2578	26.6	10.0	4.4	465	3.08	83.5	194.1	7.2	12	51.6	12.4	18.6	22	0.21	0.037	12
CN 113 Zn Ro.	Pulp	2.4	535.4	>10000	>10000	>100	17.9	12.8	979	6.31	189.2	2039.8	9.1	16	>2000	29.3	47.2	25	0.23	0.039	13
I0603 L7 Res	Pulp	2.5	281.9	192.5	511	47.3	6.2	3.8	1329	2.66	22.9	762.6	0.4	94	3.0	6.1	0.1	61	3.93	0.043	3
I0603 L8 Res	Pulp	2.3	194.6	187.9	485	44.1	6.3	3.8	1319	2.66	22.0	584.7	0.4	92	2.5	6.2	0.1	60	4.00	0.043	3
I0603 L9 Res	Pulp	2.6	189.5	198.8	442	33.1	6.1	3.6	1382	2.74	21.5	841.6	0.4	96	2.1	6.3	0.1	62	4.10	0.043	4
PCR L1 Res	Pulp																				
PCR L1 PPT	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
I0603 PCR L1 PPT	Pulp																				
J2405 L1-S1	Pulp																				
J2405 L1-S2	Pulp																				
J2405 L1-S3	Pulp																				

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

Project: PC/Fr/Nev/OS
Report Date: August 04, 2016

CERTIFICATE OF ANALYSIS VAN16001081.1

	Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ250	AQ250	AQ250	AQ250
	Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu	Pb	Zn
	Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	MDL	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	0.01	0.01	0.01	0.1
PC100-1	Pulp	6	0.56	48	0.077	<20	0.86	0.011	0.48	>100	*	3.5	0.3	0.25	5	3.4	4.4				
PC100-2	Pulp	39	1.81	236	0.183	<20	3.03	0.116	1.04	>100	*	12.8	0.8	0.57	16	5.8	6.0				
PC100-3	Pulp	40	1.98	190	0.207	<20	3.18	0.101	1.22	>100	*	11.8	0.8	0.16	18	2.8	3.9				
PC100-4	Pulp	30	1.59	145	0.200	<20	2.08	0.047	1.21	>100	*	9.4	0.8	0.59	14	6.5	4.2				
PC100-5	Pulp	22	1.68	127	0.042	<20	2.23	0.036	1.33	>100	*	8.0	0.8	0.12	15	0.9	1.8				
PC100-6	Pulp	12	1.37	85	0.196	<20	1.63	0.026	1.15	>100	*	6.3	0.6	<0.05	12	1.1	1.4				
PC101-1	Pulp	58	2.00	198	0.203	<20	3.04	0.120	1.28	>100	*	12.1	0.8	0.23	17	3.5	3.9				
PC101-2	Pulp	45	2.00	161	0.217	<20	2.91	0.095	1.39	>100	*	11.5	0.8	0.13	17	3.0	3.2				
PC101-3	Pulp	35	1.40	134	0.180	<20	1.73	0.040	1.10	>100	*	8.1	0.6	0.96	11	8.7	5.2				
PC101-4	Pulp	68	2.05	172	0.253	<20	2.63	0.079	1.64	>100	*	9.9	1.0	0.29	17	2.9	3.2				
PC101-5	Pulp	18	1.56	110	0.045	<20	2.00	0.047	1.14	>100	*	7.0	0.6	0.09	14	0.6	1.2				
PC101-6	Pulp	13	1.30	82	0.177	<20	1.55	0.057	1.11	>100	*	5.9	0.6	<0.05	11	0.8	1.2				
CR 113 Pb Ro. 1	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CR 113 Pb Ro. 2	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CR 113 Flt Tls.	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CR 113 Zn Ro.	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CN 113 Pb Ro. 1	Pulp	34	0.44	51	0.097	<20	0.93	0.017	0.25	1.8	0.21	2.2	0.3	8.58	5	95.5	6.5				
CN 113 Pb Ro. 2	Pulp	34	0.49	57	0.106	<20	1.03	0.039	0.27	2.4	0.21	2.6	0.3	6.92	5	47.0	3.7				
CN 113 Flt Tls.	Pulp	25	0.45	43	0.082	<20	0.83	0.030	0.22	1.8	0.03	1.9	0.1	1.42	4	6.3	0.5				
CN 113 Zn Ro.	Pulp	28	0.41	50	0.093	<20	0.91	0.021	0.24	1.4	0.39	2.4	0.2	9.22	5	31.3	1.9				
I0603 L7 Res	Pulp	14	1.19	24	0.022	<20	1.30	0.051	0.07	0.8	0.14	3.6	<0.1	0.05	5	1.7	<0.2				
I0603 L8 Res	Pulp	13	1.17	23	0.021	<20	1.30	0.034	0.07	0.6	0.13	3.4	<0.1	<0.05	5	1.7	<0.2				
I0603 L9 Res	Pulp	14	1.21	25	0.023	<20	1.34	0.040	0.08	0.9	0.14	3.6	<0.1	0.05	6	1.3	<0.2				
PCR L1 Res	Pulp																	277.52	3496.25	8.94	55.7
PCR L1 PPT	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
I0603 PCR L1 PPT	Pulp																	75.20	>10000	10.49	158.9
J2405 L1-S1	Pulp																	0.52	122.93	5.95	4.8
J2405 L1-S2	Pulp																	1.37	>10000	23.94	68.6
J2405 L1-S3	Pulp																	2.27	5708.99	8.52	294.3

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Project: PC/Fr/New/OS

Report Date: August 04, 2016

CERTIFICATE OF ANALYSIS VAN16001081.1

	Method	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
	Analyte	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba
	Unit	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm
	MDL	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01	0.001	0.5	0.5	0.01	0.5
PC100-1	Pulp																				
PC100-2	Pulp																				
PC100-3	Pulp																				
PC100-4	Pulp																				
PC100-5	Pulp																				
PC100-6	Pulp																				
PC101-1	Pulp																				
PC101-2	Pulp																				
PC101-3	Pulp																				
PC101-4	Pulp																				
PC101-5	Pulp																				
PC101-6	Pulp																				
CR 113 Pb Ro. 1	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CR 113 Pb Ro. 2	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CR 113 Flt Tls.	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CR 113 Zn Ro.	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CN 113 Pb Ro. 1	Pulp																				
CN 113 Pb Ro. 2	Pulp																				
CN 113 Flt Tls.	Pulp																				
CN 113 Zn Ro.	Pulp																				
I0603 L7 Res	Pulp																				
I0603 L8 Res	Pulp																				
I0603 L9 Res	Pulp																				
PCR L1 Res	Pulp	3622	111.1	51.5	232	4.87	220.6	40.4	545.6	3.6	18.9	0.42	2.80	7.70	118	0.90	0.346	53.9	12.8	1.37	96.4
PCR L1 PPT	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
I0603 PCR L1 PPT	Pulp	9825	40.1	19.7	82	0.14	50.7	89.9	1946.0	0.5	132.9	3.86	15.10	0.35	16	26.57	0.025	3.2	20.9	2.92	9.3
J2405 L1-S1	Pulp	3730	2.6	1.2	25	<0.01	0.3	<0.1	504.4	<0.1	65.9	0.06	1.10	<0.02	<2	36.65	<0.001	<0.5	4.3	<0.01	10.2
J2405 L1-S2	Pulp	67180	99.1	87.2	110	0.06	4.9	1.4	11795.7	0.2	97.7	1.49	10.07	0.14	9	25.52	0.007	0.9	51.6	0.11	68.5
J2405 L1-S3	Pulp	502	69.9	6.6	147	0.13	1.5	6.4	92.8	0.4	156.8	1.78	2.04	<0.02	21	29.30	0.018	2.1	21.9	3.93	26.1

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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: PC/Fr/Nev/OS
Report Date: August 04, 2016

CERTIFICATE OF ANALYSIS VAN16001081.1

	Method	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
	Analyte	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Cs	Ge	Hf	Nb	Rb	Sn	Ta
	Unit	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	MDL	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1	0.02	0.1	0.02	0.02	0.1	0.1	0.05
PC100-1	Pulp																				
PC100-2	Pulp																				
PC100-3	Pulp																				
PC100-4	Pulp																				
PC100-5	Pulp																				
PC100-6	Pulp																				
PC101-1	Pulp																				
PC101-2	Pulp																				
PC101-3	Pulp																				
PC101-4	Pulp																				
PC101-5	Pulp																				
PC101-6	Pulp																				
CR 113 Pb Ro. 1	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CR 113 Pb Ro. 2	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CR 113 Flt Tls.	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CR 113 Zn Ro.	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CN 113 Pb Ro. 1	Pulp																				
CN 113 Pb Ro. 2	Pulp																				
CN 113 Flt Tls.	Pulp																				
CN 113 Zn Ro.	Pulp																				
I0603 L7 Res	Pulp																				
I0603 L8 Res	Pulp																				
I0603 L9 Res	Pulp																				
PCR L1 Res	Pulp	0.178	<20	1.71	0.052	1.10	>100	6.8	0.65	0.06	<5	1.5	1.78	11.8	12.16	0.3	0.04	4.51	151.3	1.5	<0.05
PCR L1 PPT	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
I0603 PCR L1 PPT	Pulp	0.007	<20	0.13	0.409	0.01	>100	0.8	0.14	1.04	<5	2.7	0.09	0.7	0.05	<0.1	0.09	0.39	0.6	3.0	<0.05
J2405 L1-S1	Pulp	<0.001	79	<0.01	0.086	<0.01	0.8	<0.1	<0.02	0.30	<5	<0.1	0.05	<0.1	<0.02	<0.1	<0.02	0.02	<0.1	10.4	<0.05
J2405 L1-S2	Pulp	0.002	40	0.04	1.040	0.01	2.0	0.3	1.44	5.06	50	1.2	0.19	0.2	0.04	<0.1	0.05	0.14	0.5	14.9	<0.05
J2405 L1-S3	Pulp	0.010	50	0.16	0.252	0.01	0.7	0.8	<0.02	0.43	11	0.2	0.02	0.5	0.02	<0.1	0.10	0.19	0.2	2.9	<0.05

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Project: PC/Fr/Nev/OS

Report Date: August 04, 2016

CERTIFICATE OF ANALYSIS VAN16001081.1

	Method	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ374	AQ374	AQ374	AQ374	FA530	KP300
	Analyte	Zr	Y	Ce	In	Re	Be	Li	Pd	Pt	Cu	Pb	Zn	Ag	Au	W
	Unit	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppb	%	%	%	gm/t	gm/t	%
	MDL	0.1	0.01	0.1	0.02	1	0.1	0.1	10	2	0.001	0.01	0.01	2	0.9	0.005
PC100-1	Pulp															2.397
PC100-2	Pulp															0.463
PC100-3	Pulp															0.324
PC100-4	Pulp										1.254	0.02	0.03	33	I.S.	0.505
PC100-5	Pulp															1.930
PC100-6	Pulp															0.049
PC101-1	Pulp															0.375
PC101-2	Pulp															0.319
PC101-3	Pulp										2.539	<0.01	0.02	47	I.S.	0.428
PC101-4	Pulp															0.440
PC101-5	Pulp															2.490
PC101-6	Pulp															0.083
CR 113 Pb Ro. 1	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.						
CR 113 Pb Ro. 2	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.						
CR 113 Flt Tls.	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.						
CR 113 Zn Ro.	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.						
CN 113 Pb Ro. 1	Pulp										0.022	9.28	5.50	333		
CN 113 Pb Ro. 2	Pulp										0.014	4.67	5.49	185		
CN 113 Flt Tls.	Pulp										0.008	1.11	0.23	26		
CN 113 Zn Ro.	Pulp										0.052	2.69	13.52	122		
I0603 L7 Res	Pulp															
I0603 L8 Res	Pulp															
I0603 L9 Res	Pulp															
PCR L1 Res	Pulp	1.6	26.19	82.3	0.28	17	0.2	14.3	<10	<2						0.295
PCR L1 PPT	Pulp	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.						
I0603 PCR L1 PPT	Pulp	3.7	3.33	5.3	<0.02	3	0.2	0.5	16	2	1.713	0.07	<0.01	12		I.S.
J2405 L1-S1	Pulp	<0.1	0.01	<0.1	<0.02	<1	<0.1	<0.1	<10	<2						
J2405 L1-S2	Pulp	1.8	1.45	1.4	<0.02	<1	<0.1	0.4	12	9	7.661	<0.01	<0.01	70	I.S.	
J2405 L1-S3	Pulp	4.6	3.85	3.8	<0.02	<1	<0.1	0.7	<10	3						

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9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Crucible Resources Ltd.**
745 East 30th Ave
Vancouver British Columbia V5V 2V8 Canada

Submitted By:	Doug Warkentin
Receiving Lab:	Canada-Vancouver
Received:	August 30, 2016
Report Date:	September 16, 2016
Page:	1 of 3

CERTIFICATE OF ANALYSIS VAN16001524.1

CLIENT JOB INFORMATION

Project:	PC/Franklin/Hearn
Shipment ID:	
P.O. Number	
Number of Samples:	35

SAMPLE DISPOSAL

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

Bureau Veritas does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PRP70-250	19	Crush, split and pulverize 250 g rock to 200 mesh			VAN
SLBHP	16	Sort, label and box pulps			VAN
AQ200	30	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed	VAN
AQ250_EXT	5	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	0.5	Completed	VAN
DRPLP	35	Warehouse handling / disposition of pulps			VAN
DRRJT	19	Warehouse handling / Disposition of reject			VAN
FA330-Au	1	Fire assay fusion Au by ICP-ES	30	Completed	VAN
KP300	1	Phosphoric acid leach, ICP-ES analysis	0.5	Completed	VAN

ADDITIONAL COMMENTS

Invoice To: Crucible Resources Ltd.
745 East 30th Ave
Vancouver British Columbia V5V 2V8
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
MARCUS LAU

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Project: PC/Franklin/Hearn
Report Date: September 16, 2016

CERTIFICATE OF ANALYSIS VAN16001524.1

	Method	WGHT	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
CR160723-G4	Rock Pulp	0.02																			
CR160723-G5	Rock Pulp	0.02																			
I0603 FRT L10 Res.	Rock Pulp	0.10	2.5	292.3	190.2	443	33.9	5.6	3.3	1229	2.20	21.2	196.2	0.4	95	3.6	5.0	0.1	50	3.99	0.049
I0603 PCR-L2-PPT	Rock Pulp	0.02	22.4	69.5	118.5	40	<0.1	3.9	2.2	23	0.02	56.9	25.0	1.2	139	0.7	2.8	<0.1	7	32.70	0.013
I0603 PCR-L2-Residue	Rock Pulp	0.17	267.5	3480.9	25.1	60	5.2	102.8	48.3	226	4.64	210.2	859.8	3.4	20	0.8	2.1	7.4	112	0.84	0.342

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CERTIFICATE OF ANALYSIS VAN16001524.1

	Method	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ250	AQ250	AQ250
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu	Pb
	Unit	ppm	ppm	%	ppm	%	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	0.01	0.01	0.01
CR160723-G4	Rock Pulp																		2.21	55.07	25.44
CR160723-G5	Rock Pulp																		4.02	73.51	31.66
I0603 FRT L10 Res.	Rock Pulp	4	12	0.95	23	0.021	<20	1.07	0.030	0.06	3.2	0.07	3.3	<0.1	0.06	5	0.9	0.3			
I0603 PCR-L2-PPT	Rock Pulp	<1	3	0.83	5	0.004	<20	0.05	1.582	<0.01	68.2	0.01	2.2	<0.1	0.08	<1	1.1	<0.2			
I0603 PCR-L2-Residue	Rock Pulp	59	12	1.38	96	0.182	<20	1.80	0.041	1.14	>100	*	7.0	0.6	0.08	12	1.4	1.6			

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Report Date: September 16, 2016

CERTIFICATE OF ANALYSIS VAN16001524.1

	Method	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	FA330	KP300
	Analyte	Ta	Zr	Y	Ce	In	Re	Be	Li	Pd	Pt	Au	W
	Unit	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppb	ppb	%
	MDL	0.05	0.1	0.01	0.1	0.02	1	0.1	0.1	10	2	2	0.005
CR160723-G4	Rock Pulp	<0.05	7.0	9.85	30.0	0.10	<1	0.8	19.1	<10	<2		
CR160723-G5	Rock Pulp	<0.05	4.6	12.00	29.5	0.11	1	0.7	19.9	<10	3		
I0603 FRT L10 Res.	Rock Pulp												
I0603 PCR-L2-PPT	Rock Pulp												
I0603 PCR-L2-Residue	Rock Pulp												0.305