

## Franklin Project

*Claim ID Numbers: 942308, 942313 and 1010973*

*Greenwood Mining Division  
NTS 082E/08 and /09*

*Project Area Location:  
UTM NAD 83: Zone 11, 403000 East, 5489500 North*

Registered Owner: Doug Warkentin  
Operator: Crucible Resources Ltd.

## LJ, Dane and Nellie Areas - Exploration and Geochemical Sampling Report

*Project Tenure Numbers: 935862, 936714, 939642, 942308, 942313, 943212, 987035,  
990683, 1010913, 1010937, 1010965, 1010972, 1010973, 1011003, 1011005, 1011007,  
1011017, 1011821, 1013315, 1013856, 1015696, 1016556, 1019846, 1019983.*

*SOW Event Numbers: 5459629, 5465551, 5466682, 5469298, 5471808, 5477522,  
5478381.*

**Nov. 25, 2013**

**Prepared By: Doug Warkentin, P.Eng**

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## **Introduction**

### **Location and Access**

The Franklin project lies along the Burrell Creek valley in the Christina Range of the Monashee Mountains of Southeast BC, approximately 65 km north of Grand Forks, BC. It covers part of the historic Franklin Camp, including the abandoned town sites of Franklin and Gloucester City. The general project location is shown in Figure 1.

The property consists of two main claim blocks, a southern and northern section, and one small non-contiguous claim to the northwest. Both the north and south claim blocks are crossed by the Burrell Creek Forest Service Road (FSR) which is a well-maintained all-season two wheel drive accessible road which runs along the east side of the Burrell Creek Valley in the claim area. A few kilometres south of the property the Burrell Creek FSR crosses to the west side of valley and a secondary spur follows the west side of the creek to the north and also crosses the southern claim block. Much of this road is in good condition to the south of the property but it is narrow and rough where it crosses the property. It is passable with a 4WD vehicle. Near the north end of the property a forestry spur road crosses Burrell Creek and splits into at least two branches, providing access to much of the western part of the north claim block as well as to the northwest block. These are recently active logging roads that remain in good condition in lower sections, but the condition of upper sections has not been verified first hand. The area was part of an active exploration and mining camp in the early part of the last century, and there are therefore also many overgrown and unmaintained roads and trails accessing old workings.

The area is mountainous, with deep valleys to the west of the broader Burrell Creek Valley. The east-facing slopes tend to be steep, while west-facing slopes are shallower. The climate is generally dry in the summer and the terrain is generally tree-covered, but with relatively little underbrush.

### **Tenure Information**

The Franklin Project currently consists of 24 Mineral Titles Online claims with a total area of 2285 hectares. The project claims primarily form two major blocks, a southern block stretching approximately 4 kilometres north from St. Anne's Creek and a larger northern block in the area of Franklin and Gloucester Creeks, covering much of Mt. McKinley and Mt. Franklin. The project also includes the separate 84 hectare 'Averill NW' claim lying immediately to the northwest of the main claim block, along Franklin Creek. Much of the project area covers parts of the historically active Franklin and Morrell mining camps, with a long history of past exploration and previous tenures. The area includes many reverted crown granted mineral claims that no longer hold title along with a small number of crown grants that remain in good standing and a single reverted crown grant that also remains in good standing. The active crown grants principally cover the past producing Union and McKinley Mines, while the active reverted crown grant covers the 'Alpha' showing. Together these claims exclude title to approximately 100 hectares of the total project area.

The claims are all owned by the author, and Crucible Resources Ltd. has an option to acquire 100% ownership of these claims. Claim details are shown in Table 1. Expiry dates shown in this table reflect the application of work described in this report.

Figure 2 outlines the tenures of the Franklin Project.

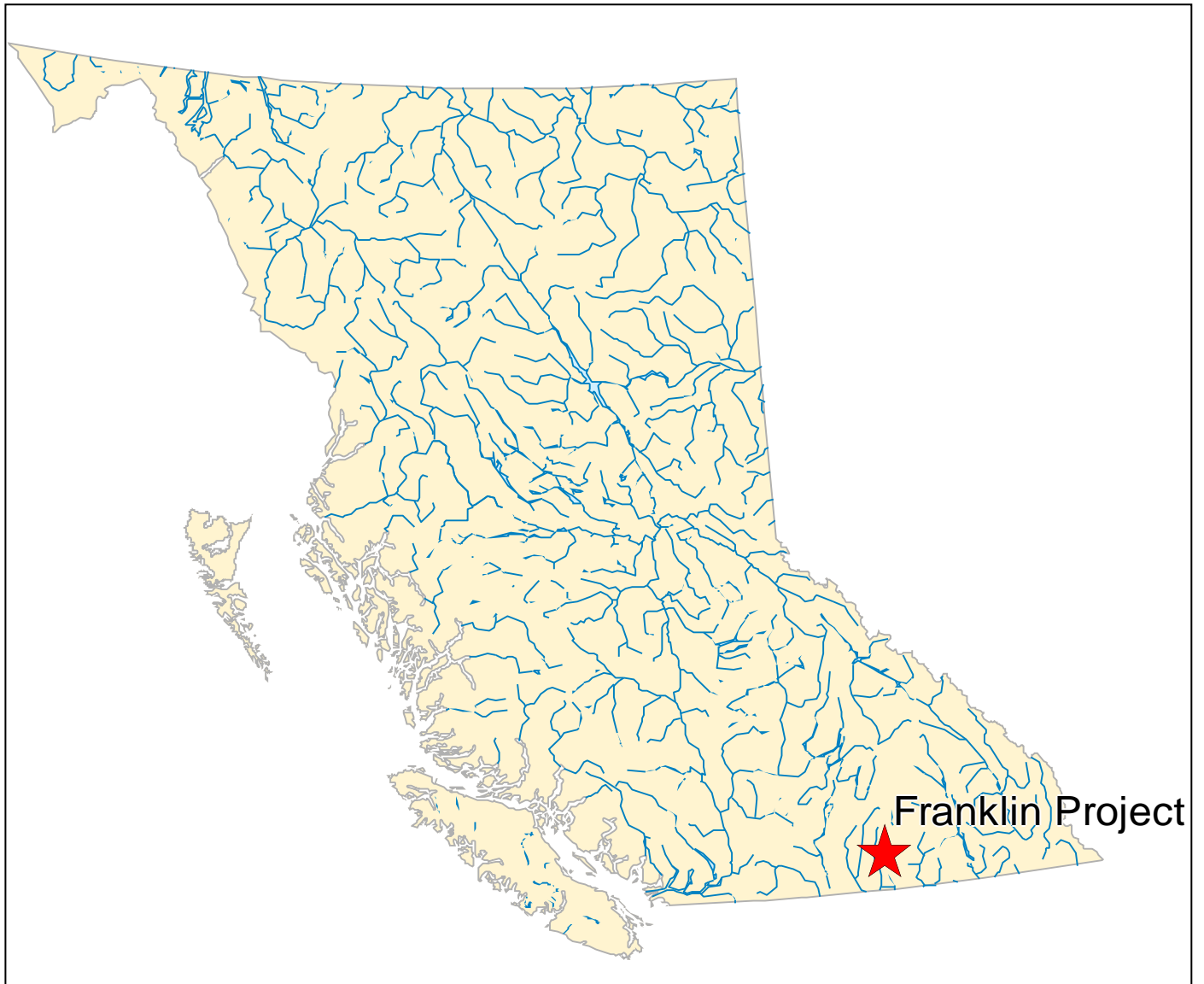


Figure 1 – Franklin Project Location Map

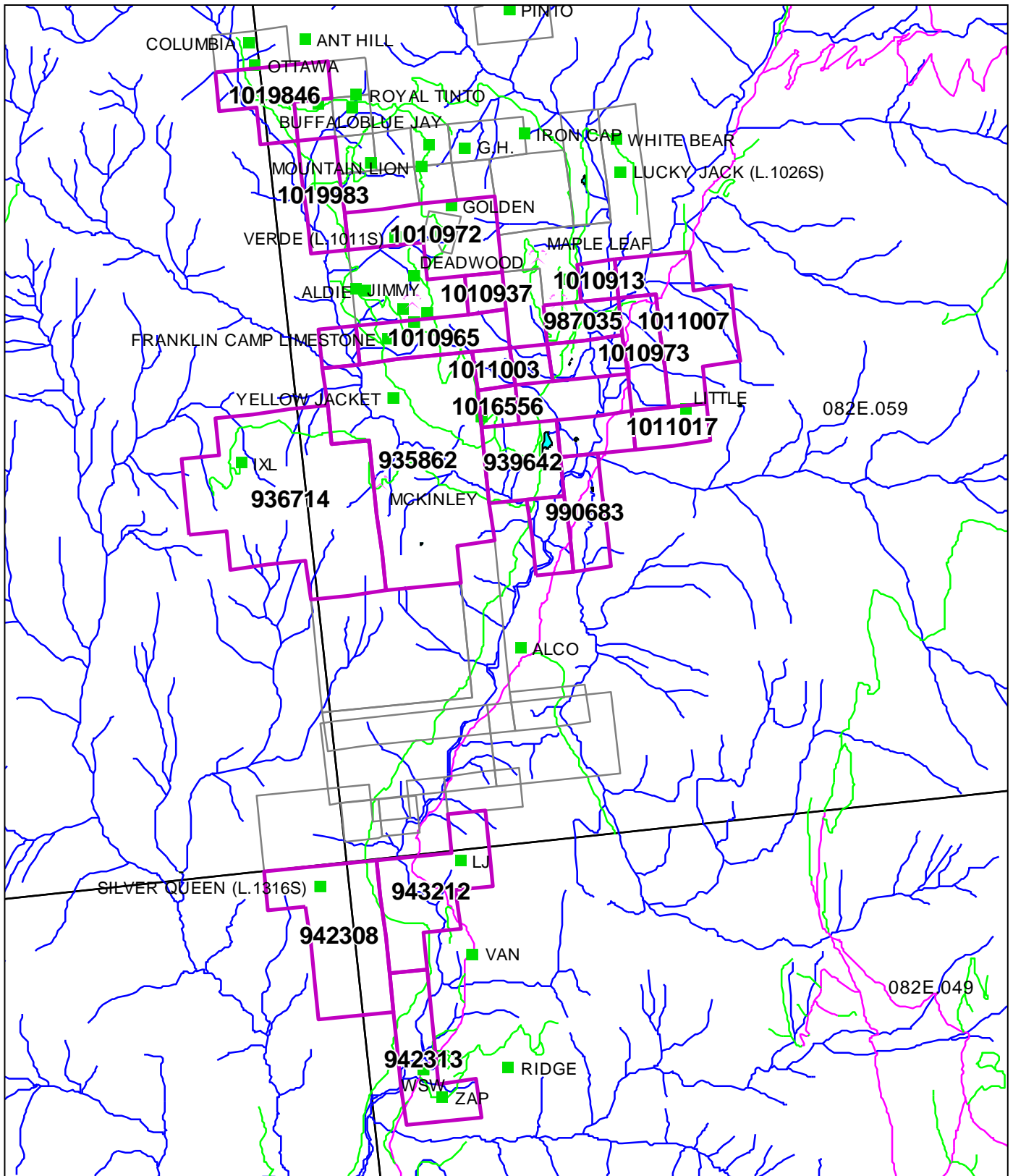


Figure 2 – Project Tenure Outline

**Table 1: Franklin Project Mineral Tenures**

Tenure Number	Claim Name	Owner	Map Number	Issue Date	Good To Date	Area (ha)
935862	FRANKLIN-YELLOWJACKET	145582 (100%)	082E	2011/dec/02	2013/dec/28	398.27
936714	FRANKLIN-IXL	145582 (100%)	082E	2011/dec/08	2013/dec/28	398.29
939642	FRANKLIN SE1	145582 (100%)	082E	2012/jan/03	2013/dec/28	83.85
942308	SILVER QUEEN	145582 (100%)	082E	2012/jan/24	2014/apr/15	188.85
942313	MORREL'S CAMP	145582 (100%)	082E	2012/jan/24	2014/apr/15	104.94
943212	LJ	145582 (100%)	082E	2012/jan/27	2014/apr/15	146.87
987035	UNION FR	145582 (100%)	082E	2012/may/17	2013/dec/28	41.91
990683	FRANKLIN-NICHOL	145582 (100%)	082E	2012/may/28	2013/dec/28	62.89
1010913	PAPER UNION	145582 (100%)	082E	2012/jul/09	2013/dec/28	20.95
1010937	IDAHO UNION	145582 (100%)	082E	2012/jul/10	2013/dec/28	20.95
1010965	BULLION	145582 (100%)	082E	2012/jul/10	2013/dec/28	83.82
1010972		145582 (100%)	082E	2012/jul/10	2013/dec/28	125.71
1010973	DANE	145582 (100%)	082E	2012/jul/10	2013/dec/28	62.87
1011003	BULLION 2	145582 (100%)	082E	2012/jul/10	2013/dec/28	20.96
1011005	BULLION 3	145582 (100%)	082E	2012/jul/10	2013/dec/28	20.96
1011007	FRANKLIN DANISH	145582 (100%)	082E	2012/jul/10	2013/dec/28	146.70
1011017	LITTLE DANISH	145582 (100%)	082E	2012/jul/10	2013/dec/28	41.92
1011821	BULLION 3	145582 (100%)	082E	2012/aug/05	2013/dec/28	20.96
1013315	UNION	145582 (100%)	082E	2012/sep/29	2013/dec/28	41.92
1013856	FRANKLIN-NICHOL W	145582 (100%)	082E	2012/oct/19	2013/dec/28	41.93
1015696	UNION TAILS	145582 (100%)	082E	2013/jan/04	2014/jan/15	41.92
1016556	NELLIE	145582 (100%)	082E	2013/feb/02	2014/feb/11	20.96
1019846	AVERRILL NW	145582 (100%)	082E	2013/may/28	2014/may/28	83.77
1019983	AVERRILL SW	145582 (100%)	082E	2013/jun/01	2014/jun/03	62.85
<b>Total</b>						<b>2285.0</b>

## Regional Geology

The Franklin Project covers much of the historic Franklin mining camp and the smaller but geologically similar Morrell camp further to the south. The area is defined by major north-south regional faults that form a graben structure. The Granby fault, which runs to the east of the property, can be traced for more than 100 km to the south, where it forms the eastern boundary of the Republic graben in Washington State. In the Franklin camp area, this fault separates older metamorphic rocks to the east from younger intrusive rocks that surround and partly underlie the Franklin property.

While plutonic rocks are dominant regionally, the geology of the Franklin camp is more complex (Figure 3). The oldest rocks are a sequence of sediments, volcanics and related intrusives known locally as the Franklin Group. These are mapped as part of the Carboniferous Harper Ranch Group, and show strong similarities to the Brooklyn formation in the Greenwood-Grand Forks area (Caron 2004). This group includes argillite, conglomerate, chert, tuffaceous siltstone, limestone and greenstone, often showing significant alteration. The Franklin rocks are

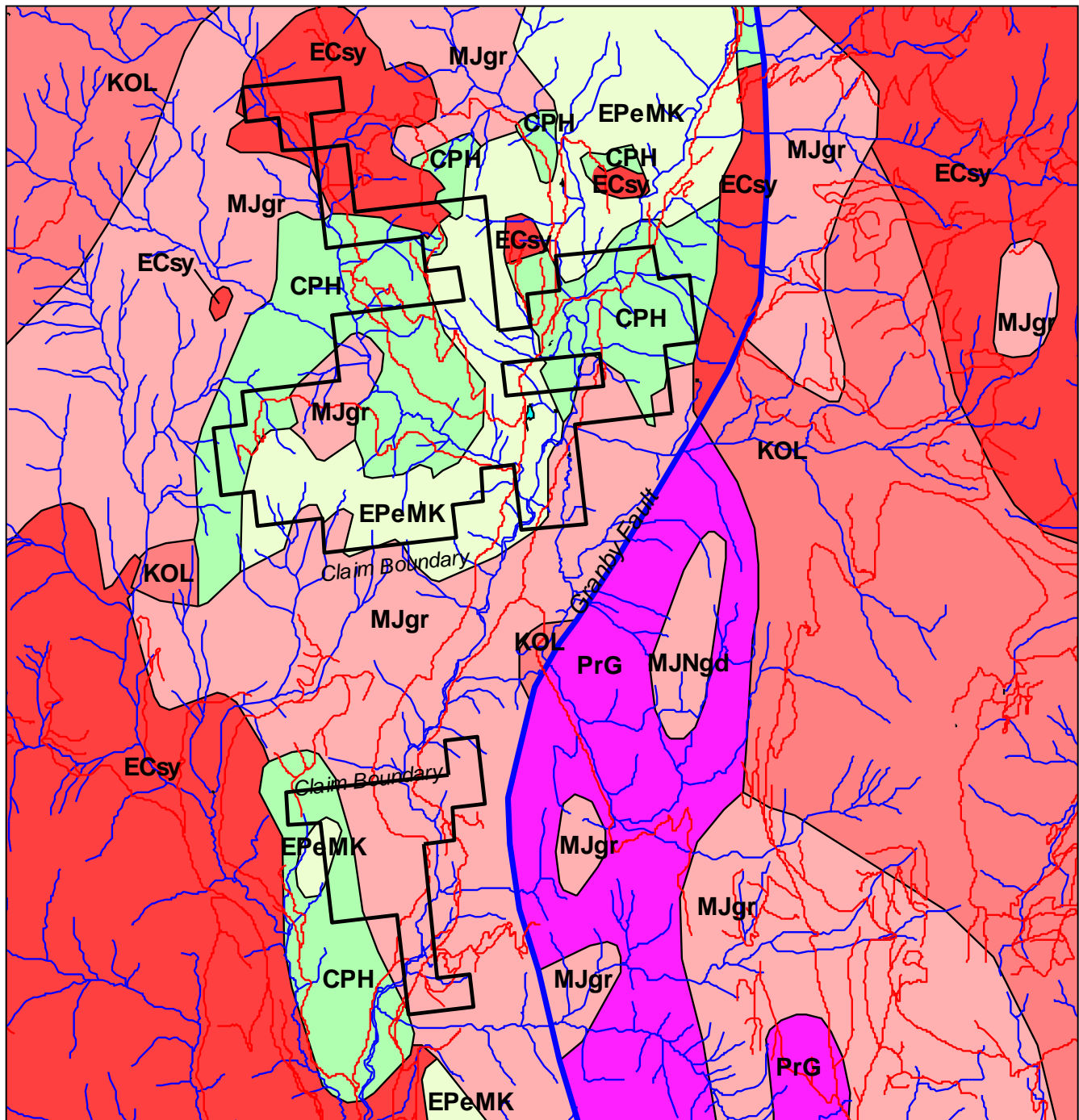
intruded by several distinct bodies of plutonic rock, including diorite/granodiorite from the Jurassic aged Nelson batholith and related bodies, as well as Jurassic aged porphyry dikes, the Jurassic Averill complex and the Eocene Coryell suite, including syenite stocks and lamprophyre dikes. Overlying the Franklin rocks and much of the intrusive rock are Eocene clastic sediments of the Kettle River formation. In addition to sandstones and conglomerates, these rocks include tuffs and some areas of rhyolite. These are in turn overlain by andesites and trachytes of the Eocene Marron formation, which mainly occur at higher elevations.

The Franklin rocks were the main focus of early exploration in the Mt McKinley and Mt Franklin areas, particularly for precious metal-bearing quartz veins and for silicified zones and skarn deposits with high base metal values along limestone contacts. Another type of mineralization identified in the early days of exploration was the so-called 'Black Lead' zones of shear hosted massive chalcopyrite with some PGM values. These tend to form small erratic pods along contact zones of the pyroxenite phase of the Averill plutonic complex. The Averill complex was originally correlated to the Eocene Coryell intrusives, but recent dating suggests a Jurassic age. The complex covers much of the north end of the Franklin camp and is a concentrically zoned differentiated intrusion with pyroxenite at its centre, grading outward through monzogabbro to monzonite, with trachytic syenite intruding the pyroxenite and monzogabbro along the axis of the pluton. The black lead mineralization generally occurs along the syenite-pyroxenite contacts.

Other possible styles of mineralization have been identified in more recent exploration programs, including epithermal gold and volcanogenic massive sulphide (VMS). Several areas of epithermal-style alteration and veining have been identified associated with intrusive contact zones but no significant economic mineralization has yet been identified in these areas. There are also apparent intrusive contact zones associated with low-grade base metal mineralization that have seen very limited exploration. The potential for VMS mineralization is suggested by the correlation of the Franklin rocks with similar formations along the Granby fault to the south, where economic VMS deposits have been discovered in the Belcher district in Washington State.

## **Local Geology**

The Franklin Property is primarily underlain by Franklin group rocks and the overlying Eocene sediments and volcanic rocks of the Kettle River and Marron formations. The property also includes significant intrusive contact zones in and around the Franklin rocks. The southern claim block includes part of the southern extension of the Franklin group, especially the area known as Morrell's camp, as well as a substantial area of granitic rocks to the east which includes numerous minor mineral occurrences that may be associated with small bodies of Franklin rocks or possibly wider areas of hydrothermal alteration. To the north the project area includes part of the Averill complex, including at least one known occurrence of the 'Black Lead' mineralization.



- CPH** – Carboniferous to Permian Harper Ranch Group – volcanoclastic rocks  
**ECsy** – Eocene Coryell Plutonic Suite – syenitic to monzonitic intrusive rocks  
**EPeMK** – Eocene Penticton Group: Marron, Kettle River, Springbrook, Marama and Skaha Formations – undivided volcanic rocks  
**KOL** – Cretaceous Okanogan Batholith: Ladybird and Valhalla Intrusions – undivided intrusive rocks  
**MJgr** – Middle Jurassic – granite, alkali feldspar granite intrusive rocks  
**MJNqd** – Middle Jurassic Nelson Batholith – granodioritic intrusive rocks  
**PrG** – Proterozoic Grand Forks Gneiss/Monashee Complex – paragneiss metamorphic rocks

**Figure 3 – Regional Geology, Franklin and Morrell Camp Areas**



The project area partly overlaps the main historic producers in the camp, the Union and McKinley, and the other two historic producers, the Maple Leaf and the Homestake, lie close to the property boundary. While the actual mines are held by active crown granted claims, these are small and do not necessarily cover potential extensions or parallel zones. By far the most important ore zones discovered to date were at the Union Mine (see Table 2). The ore was a relatively low sulphide replacement-style vein with some adjacent zones of higher base metal sulphide content. The mineralization consisted of a zone of almost complete replacement of a limestone horizon in Franklin sediments which was later fractured into small irregular sections by multiple faults. Precious metal grades were highest at the intersections of these faults, indicating that the faulting also played a role in later mineralization.

Ore grades diminished with depth and to the east, and the vein was truncated by a larger fault to the west. More recent exploration has identified small ore remnants and unmined zones within the old workings, but no significant extensions of the mineralization have been found since active mining ceased in the 1940's. Mill tailings are deposited within the Franklin property boundaries, to the south of the mine, and parts of these have been reprocessed on two separate occasions.

**Table 2. Historical Production from the Franklin Camp**

Mine	Years of Operation	Production (tonnes)	Gold Production (ounces)	Historical Grades
Union	1913-89	122,555	55,525	14.1 g/t Au, 353 g/t Ag, 0.2% Zn, 0.1% Pb, 0.01% Cu
Maple Leaf	1915-16	36	2	1.7 g/t Au, 172 g/t Ag, 7.6% Cu
Homestake	1940-41	453	223	15.3 g/t Au, 30.0 g/t Ag, 0.12% Zn, 0.06% Pb
McKinley	1949	132	2	0.47 g/t Au, 215 g/t Ag, 17.1% Zn, 11.2% Pb

A significant band of limestone runs through the Franklin Creek valley with a north-south orientation and is associated with the high grade skarn mineralization found at the McKinley mine. Other more poorly defined occurrences have also been identified along this trend and may indicate additional skarn mineralization. At the IXL showing to the west of the McKinley Mine, shallow zones of skarn-type mineralization have also been identified. This area has seen considerable modern exploration, including trenching and drilling that has identified significant zones of copper gold surface mineralization in Franklin group rocks and altered porphyry intrusives in contact with small bodies of Franklin limestone. Drilling has shown that exposed surface mineralization is generally cut off at shallow depths by intrusive rocks, however the mineralized rocks are covered by Eocene sediments to the east and possible thickening in this direction has not yet been tested.

In the Mt Franklin area numerous small quartz veins have been identified in Franklin rocks, some carrying significant gold and/or base metals. These include the Bullion and Verde showings. On the southeast flank of Mt Franklin pyrite, chalcopyrite and copper carbonate mineralization occurs in Franklin rocks near the contact with Eocene volcanics at the Nellie showing. This area reportedly shows evidence of hydrothermal alteration associated with nearby intrusives. In the northwest part of the property the Franklin rocks are intruded by the Averill complex, and at least one occurrence of copper mineralization with platinum values was historically reported in a shear zone along the pyroxenite contact at the Golden showing.

To the east of Burrell Creek few mineral showings are reported, but recent work has identified at least one previously explored mineralized shear zone in Franklin volcanics not far from a contact with granodiorite intrusive rocks. The Dane showing includes significant gold values in addition to copper and silver values.

High copper and silver values with minor to significant gold values is a more common pattern of mineralization to the south, normally occurring in east-west striking veins or shear zones. The high value veins in the Mt. Franklin area are more typically associated with lead and zinc mineralization, also often with high silver values. To the south several of these types of veins as well as possible intrusive contact zones, were explored in the Morrell camp, but these have been poorly documented. On the east side of Burrell Creek there have been several more recent discoveries of high grade contact mineralization as well as intrusive related copper-zinc mineralization and epithermal-style vein systems in granodiorite which locally carry some values.

A summary of all known showings occurring within the Franklin project claim area is included in Table 3.

**Table 3: Franklin Project - Documented Mineral Occurrences**

Name	Minfile #	Location	Minerals	Reported Grades	Width (m)	Year
<b>Minfile showings</b>						
Verde	082ENE020	Mt Franklin	Au, Ag, Cu, Pb, Zn	5.5 g/t Au	grab	1914
Golden	082ENE053	Mt Franklin	Pt, Cu	2.06 g/t Pt	grab	1918
Bullion	082ENE013	Mt Franklin	Ag, Au, Cu, Pb, Zn	1.1 g/t Au, 100 g/t Ag, 2.5% Pb	grab	2003
Yellow Jacket	082ENE021	Mt Franklin	Cu, Pb, Zn			
Franklin Limestone	082ENE062	Mt Franklin	Limestone			
Nellie	082ENE059	Mt Franklin	Cu			
Little	082ENE004	Dinsmore Crk	Pb, Zn	1.82 g/t Au, 1.9 g/t Ag	0.07	2006
IXL	082ENE033	Mt McKinley	Cu, Au, Pb, Zn	3.85 g/t Au, 0.8% Cu	5.5	2003
Silver Queen	082ESE108	Morell's Camp	Ag, Cu, Pb, Au	48 g/t Ag, 1.0% Cu, 0.5% Pb	grab	1914
LJ	082ESE178	Burrell Crk W	Au, Ag, Cu, Pb, Mo	2.81 g/t Au, 5.8 g/t Ag, 0.37% Pb	1.5	1991
WSW	082ESE177	St. Anne's Crk	Au, Ag, Cu, Pb, Zn	0.54 g/t Au, 23 g/t Ag, 0.5% Pb, 0.7% Zn	0.6	1991
Zap	082ESE271	St. Anne's Crk	Cu, Pb, Zn, Au, Ag	5.35 g/t Au, 219 g/t Ag, 0.8% Pb, 0.6% Zn	0.4	1991
<b>Non-minfile occurrences</b>						
Dane		Dane Crk	Au, Ag, Cu	2.16 g/t Au, 162 g/t Ag, 5.7% Cu	grab	2006
Golden Zone		Gloucester Crk	Au			
C.P.R.		Morell's Camp	Ag, Cu, Pb, Au	67 g/t Ag, 0.16% Cu, 0.13% Pb	grab	2012
Tripoli		Morell's Camp	Ag, Cu, Pb, Au			
Black Bear		Morell's Camp	Ag, Cu, Pb, Au			
Last Chance		Mt McKinley	Au, Ag	1.9 g/t Au, 13.5 g/t Ag, 0.1% Zn	grab	2005
Jack		Mt McKinley	Zn, Ag, Cu	17.5 g/t Ag, 2.9% Pb, 6.5% Zn	grab	2005
Mary Ann		Gloucester Crk	Au			

## Property History

The property has a long history of exploration, and some minor development. None of the past producing mines in the camp are included in the property, although the principal ones are located on small active crown-granted mineral claims that are partly overlain by MTO claims that are part of the property. The northern and northwest claim blocks cover much of the historical Franklin camp, which was actively explored beginning in the 1890's, while the southern block covers most of the smaller Morrell Camp about 5 km to the south that first became active around the same time.

### Franklin Camp

Exploration in the Franklin camp area began around 1896, when the first claims were staked. The camp was very active in the early 1900's when most of the principal showings were discovered and developed with small shafts and adits. As early as 1901 the Banner vein had seen considerable development and test shipments had been made. During this same period considerable development occurred on the McKinley property and ore shipments may have been made during that period, although none were recorded.

The Union vein was discovered in 1913 when a silicified zone near earlier workings on a quartz vein carrying lead and zinc was found to be rich in gold and silver. Shipments of high grade ore began almost immediately from a large open cut, with adits later developed to access more of the ore. Development and small shipments continued from the Union vein until 1920, when operations were shut down due to the high cost of transporting ore to the smelter.

In 1918 the federal government's munitions department evaluated the camp for its platinum potential after the metal was identified in ore shipped from the Maple Leaf claim. Numerous showings of copper from the 'Black Lead' zones were sampled, with grades ranging from 2 g/t to 13 g/t Pt, with the highest grades coming from the Maple Leaf. A sample from the Golden showing assayed 2.06 g/t Pt.

In 1927 Hecla Mining Company bonded the Union and Maple Leaf properties and began to develop milling ore on the Union vein. By 1929 a 145 ton per day concentrator had been constructed and milling operations began in 1930. Full mine production lasted until 1932, when most of the known ore had been mined out, and the mine closed in 1933. In that same year a cyanidation plant was constructed to retreat the tailings, which operated from 1934-36. Lease operators produced a small amount of additional ore between 1937 and 1942. During this same period a small amount of ore was also produced from the nearby Homestake mine.

In 1964 Franklin Mines Ltd acquired most of the Franklin camp and carried out geological and geophysical surveys along with limited sampling of old workings. In 1968 Newmont Exploration acquired part of the camp and carried out a work program which included airborne and ground geophysics, trenching and drilling of three holes at the IXL showing in 1969. Limited information is available regarding this work program, but in general, good mineralization was encountered in trenches but this same mineralization was not found in the drill core. One of the holes reportedly encountered ultrabasic rocks with disseminated chalcopyrite, but this zone was not assayed.

In 1979 Pearl Resource acquired part of the camp, including the Union mine and surrounding area. Their work focused on the Union mine and included re-opening the lowest adit and a program of underground drilling in 1984.

In 1986 Longreach Resources Ltd acquired a large part of the Franklin camp and carried out an exploration program that included geochemical sampling, geophysical surveys and drilling. The

following year the property was renamed the Platinum Blonde property and optioned to Placer Development Limited who carried out additional drilling, prospecting and geochemical sampling over the entire property. This project was focused mainly on PGM mineralization and the property primarily covered the northern part of the camp, but overlapped much of the northern and north-western portions of the current Franklin project claims, and this work identified several soil anomalies that do not appear to have been fully investigated.

From 1987 to 89 Sumac Ventures ran a heap leach operation on the Union tailings, reportedly recovering 13,300 grams of gold and about 400,000 grams of silver from 42,500 tonnes of tailings and waste rock.

In 1991 Canamax conducted an airborne geophysical survey over the IXL area along with rock and soil sampling. A new zone of low-grade copper mineralization in diorite was identified about 1.5 km south of the main IXL showing.

In 1993 and 94 Sway Resources drilled up to 29 short diamond drill holes and 14 percussion holes in the Banner-Homestake area and carried out rock and silt sampling, and diamond drilled 900 meters in 8 holes at the IXL showing, but available results of this work are very limited and poorly documented. Some high grade drill intercepts were reported to the west of the Homestake workings.

In 2001 Tuxedo Resources Ltd. acquired much of the south and west portions of the Franklin camp and an airborne geophysical survey was flown that year. In 2003 rock sampling, trenching and a small drill program were carried out in the IXL and Banner-Homestake areas. Good mineralization was encountered, but the extent was limited. A single drill hole showed significant widths of low grade gold mineralization.

In 2004 Solitaire Minerals carried out trenching and a limited drill program in the Union and Maple Leaf areas. Drilling failed to find the western extension of the Union vein, but work on the Maple Leaf crush zone identified low grade gold mineralization.

Also in 2004, New Cantech Ventures conducted an 11 hole 1741 meter drill program at the IXL showing, indicating that encouraging surface mineralization encountered in trenches was generally cut off at shallow depths by feldspar porphyry and syenite intrusions. Follow-up work in 2005 by Nanika Resources Inc. found evidence of new mineralized zones to the east, near the McKinley mine, mainly based on samples showing good zinc grades, but also occasional samples with good copper, silver and gold grades at the Jack and Last Chance showings. No follow-up work was reported.

In 2006 and 2007 Yankee Hat Minerals conducted limited rock sampling and prospecting in the Dane and Little area and conducted an airborne geophysical survey covering much of the Franklin camp, including some less-explored areas to the east of Burrell Creek. Few strong targets were identified with the exception of a relatively strong conductivity target to the south of the Dane showing. A small subcrop sample of gold in quartz was also found somewhat further to the south, a few hundred meters northwest of the probable location of the Little showing.

Sampling by Crucible Resources in 2012 confirmed the presence of high grade copper-gold-silver mineralization at the Dane showing, and limited soil sampling showed some anomalous base metal values.

### Morrell Camp

The Morrell Camp includes two groups of former crown granted mineral claims that date back to the early part of the 1900's. Numerous poorly documented workings were developed during the early active periods of the Franklin camp, but in later years there appears to have been much less activity, and no reference to significant work in this area has been found later than the 1930's. The only documented Minfile showing from the camp is the Silver Queen. The dump from a shaft was sampled in 1914, returning 48 g/t silver and 1.0 % copper and only a 'trace' of gold. The shaft was flooded at that time and presumably dated from even earlier.

To the east of Burrell Creek the first discovery of mineralization was in 1973 when this area was opened by a logging road. The Van, LJ and WSW showings were discovered at that time. The area was restaked in 1987 and small surface programs of geochemistry and geophysics were performed between then and 1993, resulting in some additional discoveries, including the Zap sulphide zone and the epithermal-style Ridge zone of quartz stringers with minor precious metal values.

Sampling of the Silver Queen dump in 2012 confirmed the 1914 numbers, giving 44 g/t silver, 0.53% copper and 65 ppb gold. A sample from the dump of a small shaft encountered on the former C.P.R. claim showed similar values.

### **Summary of Work**

A total of three days were spent on the project claims carrying out the work covered in this report. On the south claim block a prospecting traverse was carried out in the LJ area in Sept 2013, while at the north claim block two separate visits were made to the Dane area for geochemical sampling in July and Sept 2013, and a day was spent prospecting and sampling at the Union tailings site, the Nellie showing and the old Ax claim in July 2013. Work in the LJ area consisted of prospecting and limited geochemical sampling without successfully locating the reported showing. Two rock chip samples and two soil samples were collected. Work in the Dane area consisted mainly of geochemical soil and rock sampling with some incidental prospecting, including recent nearby road cuts. A total of nineteen soil samples and six rock samples (three chip samples and three float/subcrop samples) were collected. At the Union tailings, five widely spaced tailings grab samples were collected along with a single sample from a small rock dump. Work at the Nellie and Ax areas included reconnaissance prospecting and sampling of old workings. A total of five rock chip samples were collected.

## **Work Program**

### **Sampling and Data Collection**

Samples were collected on two separate site visits, the first on July 3<sup>rd</sup> and 4<sup>th</sup>, 2013 to the main Franklin camp area, including the area surrounding the Dane showing, the Union mine tailings site, the Nellie showing and the former Ax crown grant workings. The second visit, on September 20<sup>th</sup>, 2013 included the LJ showing area on the southern claim block and a return to the area below the Dane showing on the main claim block. Relevant sample locations are identified on the maps in Appendix 1. Assay results for rock and tailings samples are summarized in Table 4, and results for all samples, including soils are also shown on the maps in Appendix 1. Complete assay reports are included in Appendix 2. All rock samples were dried, crushed, split and pulverized before being analyzed. Rock samples collected in July from the Dane area were digested in aqua regia using a 15 gram sample and analyzed with a 53 element scan by ultra-trace ICP-MS, including Pt and Pd, while the waste rock sample from the tailings site was analyzed by the same method using

a 0.5 gram sample. All other samples were also digested with aqua regia but were analyzed using a standard 36 element scan by ICP-MS, with the five samples collected from the Nellie and Ax areas digested from a 15 gram sample, and the remaining samples using 0.5 grams. Tailings samples were digested in aqua regia using a 0.5 gram sample and analyzed with a 53 element scan by ultra-trace ICP-MS, including Pt and Pd, with the four samples reported above 1 g/t gold being re-assayed for gold by lead collection fire assay with an AAS finish using a 30 gram sample. Soil samples were dried and screened at 80 mesh before being digested in aqua regia using a 0.5 gram sample and analyzed by a 36 element standard ICP-MS analysis. All analyses were carried out by Acme Analytical Laboratories Ltd. in Vancouver.

The locations visited and samples collected are described below.

**Table 4 - Rock Sample Description and Analytical Results**

Sample #	Date	Description	Width (m)	Au g/t	Ag g/t	Cu %	Pb %	Zn %
<b>LJ Area - Rock</b>								
CR130920-1	20/09/2013	Altered diorite, chlorite with qtz and py	1.5	0.003	0.20	0.006	0.00	0.01
CR130920-2	20/09/2013	Silicified, chloritized diorite, minor Fe ox.	2.0	<0.001	<0.10	0.001	0.00	0.01
<b>Dane Area - Rock</b>								
CR130703-1	03/07/2013	Qtz-cc alt with sulphide fracture filling	1.0	0.129	18.1	0.007	0.03	0.01
CR130703-2	03/07/2013	Pyrox with sulphides and mal stain	0.6	0.065	2.08	0.095	0.00	0.01
CR130703-3	03/07/2013	Argillic shear with narrow limonitic qtz	-	0.002	0.02	0.001	0.00	0.00
CR130920-3	20/09/2013	Highly silicified zone w py fracture filling	3 m	<0.001	0.10	0.009	0.00	0.00
CR130920-4	20/09/2013	limonitic py qtz brx in subcrop	-	0.002	0.40	0.003	0.01	0.00
CR130920-5	20/09/2013	weathered qtz vein float with py	-	0.001	0.80	0.003	0.00	0.01
<b>Nellie Area - Rock</b>								
CR130704-1	04/07/2013	Greenstone with minor qtz and py	0.3	0.005	0.10	0.008	0.00	0.01
CR130704-2	04/07/2013	Silic. volc with qtz and diss py/cpy, mal	2.5	0.189	7.90	0.574	0.00	0.02
CR130704-3	04/07/2013	limonitic qtz brx from side of cut	1.3	0.025	1.30	0.051	0.00	0.00
CR130704-4	04/07/2013	slightly limonitic qtz bands at face of cut	0.5	0.030	0.50	0.021	0.00	0.01
CR130704-5	04/07/2013	silic volc w qtz and some py/lim - 0.3 m	0.3	0.005	<0.1	0.001	0.00	0.00
<b>Union Area - Rock and Tailings</b>								
CR130704-T1	04/07/2013	Tailings pile 1 - southwest (0.3 m depth)		1.73	87.7	0.009	0.03	0.06
CR130704-T2	04/07/2013	Tailings pile 2 - crest		1.32	66.0	0.007	0.02	0.05
CR130704-T3	04/07/2013	Tailings pile 3 - lower slope		1.22	60.0	0.009	0.02	0.06
CR130704-T4	04/07/2013	Tailings pile 3 - northeast slope		0.24	16.2	0.005	0.02	0.06
CR130704-T5	04/07/2013	Ore/waste rock dump		27.24	58.8	0.040	0.03	0.12
CR130704-T6	04/07/2013	Tailings pile 1 - northeast		2.10	79.5	0.006	0.01	0.04

### Rock Samples

In the LJ area, in the southern claim block, the country rock is primarily granitic, with occasional pendants of altered volcanics. Fairly extensive alteration is apparent both in the granitic rocks and in volcanics, including silicification and chloritization. Occasional zones of more intense alteration and shearing were noted, but little mineralization was seen in those observed. One zone of intense chloritization of granite and near a small volcanic pendant showed minor limonitic staining

and small amounts of disseminated pyrite. A chip sample was collected (CR130920-1) but showed no significant values. On a ridge above, a wide talus slope included a few pieces of broken vein quartz with minor mineralization, but the source was not identified. A nearby zone of intense shearing without visible sulphide mineralization was also sampled (CR130920-2), but also gave negative results. The reported location of the LJ showing is near this second sample location, but the occurrence could not be located.

In the area below the Dane showing there are outcrops of silicified Franklin volcanics showing iron oxidation and bearing pyrite. A chip sample from an exposure showing strong sulphide fracture filling (CR130703-1) returned anomalous gold and silver values, but follow-up sampling in this area in September was hampered by a significant blow-down event that had occurred in the interim which obscured the original exposure. Sampling in the general area, including pyritic subcrop and float freshly exposed in recent tree root-wells (CR130920-3 to CR130920-5) failed to show any significant values.

Approximately one kilometre north of the Dane showing a relatively new logging road has been constructed to the northeast from the Burrell Creek FSR. The lower part of this road, which lies within the claim boundary, was prospected. Road cuts and outcrops in recent cut blocks showed both intrusives and volcanics. One road cut exposure showed a band of mafic intrusive, including pyroxenite, possibly in contact with syenite. A very narrow shear in the pyroxenite showed strong malachite staining. This showing appeared to be of the 'Black Lead' type seen in other parts of the Franklin camp, although this particular area has not previously been reported to include occurrences of the Averill intrusive complex that hosts this type of mineralization. A chip sample across the pyroxenite and including the narrow shear (CR130703-2) did show anomalous copper values, with slightly anomalous gold and silver values as well, but PGM values were near detection levels. A quartz-bearing shear is exposed in subcrop a short distance to the south. The quartz showed some limonitic staining, but a chip sample (CR130703-3) returned no values.

At the Nellie showing a wide area of Franklin volcanics are exposed along a ridge crest, possibly the result of historical surface work. An exposed face on this ridge showed strong malachite staining and chip samples were collected over a 2.5 meter length of this exposure (CR130704-2). This section was made up of silicified volcanics with minor quartz veinlets and disseminated pyrite and chalcopyrite, and returned strongly anomalous values for copper, silver and gold. Two samples of silicified and lightly pyritic Franklin rocks near a contact with younger volcanics further to the south (CR130704-1 and CR130704-5) contained minimal values.

On the former Ax crown grant, to the northwest of the Nellie showing, two old open cuts were located along the crest of a steep west-facing ridge. The northerly cut was several meters long with a substantial waste dump below, and may actually have been an entrance to a collapsed adit, as the face is no longer exposed. Dump material from this cut was highly oxidized and limonitic. Rock was highly silicified and fractured, but did not appear to contain distinct vein quartz. A sample of highly fractured and oxidized material was collected from the side of the cut (CR130704-3) which showed anomalous copper, with low gold and silver values. The cut to the south was smaller and showed less mineralization. The face of the cut showed some bands of silicification with quartz veinlets and very minor sulphides. A sample at the cut face (CR130704-4) was only slightly anomalous for copper and gold.

#### Union Tailings Site Samples

The tailings from the Union mine have been partially reprocessed at least twice in the past, first in the 1930's and more recently in the 1980's in a cyanide heap leach operation. Prior to the operation in the 1980's a sampling program resulted in an estimate that the tailings contained 70,000 tonnes grading 1.5 g/t gold and 48.9 g/t silver. The heap leach operation was terminated

due to operational upsets rather than depletion of grade, so a series of widely spaced samples were collected to obtain a preliminary indication of the remaining grade potential of this material. A total of 5 tailings samples were collected (CR130704-T1 to CR130704-T4 plus CR130704-T6), including samples from each of three distinct piles that have been created during past re-working and site remediation. Each sample was collected from about 20 cm below the surface. During the site visit a small pile of mineralized rock was also noted near the edge of the tailings. A small sample (CR130704-T5) of this material was also collected. Four of the five tailings samples returned greater than 1.2 g/t gold and 60 g/t silver, while the fifth sample contained much lower grade. The rock sample assayed as high grade ore at 27 g/t gold and 59 g/t silver. A re-assay gave much higher values (77 g/t Au, 64 g/t Ag).

### Soil Samples

Only two soil samples were collected in the LJ area. These were meant simply to provide initial baseline geochemistry for the area, where little previous work has been done.

A total of 19 soil samples were collected in the area below the Dane showing. This was to test for potential extensions of that mineralization as well as checking an area where a high gold-in-soil value was reported by a previous operator. Sampling was carried out in a north-south direction, covering an area immediately north of areas samples in 2012.

### **Interpretation of Results**

In the LJ area no significant mineral occurrences were found. The previously reported high grade gold showing could not be located. Sampling showed that the widespread alteration seen did not generally carry values, but this preliminary visit does not discount the potential for this area.

In the Dane area some limited mineralization was found, but grades were not high and follow up sampling was unsuccessful in expanding the mineralized area. While the pyroxenite-associated copper occurrence was narrow and low grade where sampled, this showing is of interest as it represents an extension of this rock type to the southeast of previously identified showings.

Soil sampling in the Dane area showed some weakly anomalous gold values (to 20 ppb), but these did not necessarily correlate with other indicator metals, aside from a slightly higher lead value associated with one of the anomalous samples. Toward the north end of the sampling area was a small zone of higher copper, and there is a wider zone of elevated zinc to the south, possibly indicating a change in the underlying rock type.

Workings found in the Ax area showed minor values and this area may be worth additional prospecting for other occurrences, as little work has been done in this area in recent decades. The Nellie showing is of more interest. Copper mineralization was reported from this claim in historical records, but no modern work has been reported. The showing sampled gave very encouraging results, particularly as this was not a narrow vein, but a 2.5 meter wide section showing malachite staining. Based on the limited description of past work, this may not even be the primary exposure of copper mineralization. Follow-up investigation to determine the extent of the copper mineralization is warranted.

The Union tailings samples show that considerable values remain in the tailings despite previous extraction projects. The grade appeared to be fairly consistent, with the exception of one sample. Follow-up testing would be needed to determine if this is an area that has been more depleted, or if the tailings in this area may have been diluted through mixing with local soil during later re-



contouring of the tailings piles. If a potential recovery project was contemplated, a sample grid would need to be established and an auger used to sample at depth in order to confirm the overall resource. The high grade rock sample was of potential interest only because of the very high values obtained. The pile is small and its origin is unknown. It may be ore derived from the Union workings, but historically ore from that mine carried higher silver values.

## References

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## **Author's Qualifications**

I, Douglas Warkentin, P.Eng., a professional engineer with a business address at 745 East 30<sup>th</sup> 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 25 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 also serve as a Director of Duncastle Gold Corp., a TSX-Venture listed company.

Since 2001 I have 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 directly conducted or supervised all sampling, sample handling and preparation related to the Franklin 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 21<sup>st</sup> day of November 2013.

Doug Warkentin, PEng.  
Metallurgical Engineer

**Statement of Costs****Site Reconnaissance and Sampling**

Prep, Travel and Site Labour (42 hours @ \$55/hr)	\$2,310.00
Transportation (\$451.18 truck rental, plus \$175.46 fuel)	\$626.64
Accommodation (4 days @ \$85.60/day)	\$342.40
Food and Supplies (4 days)	\$146.04

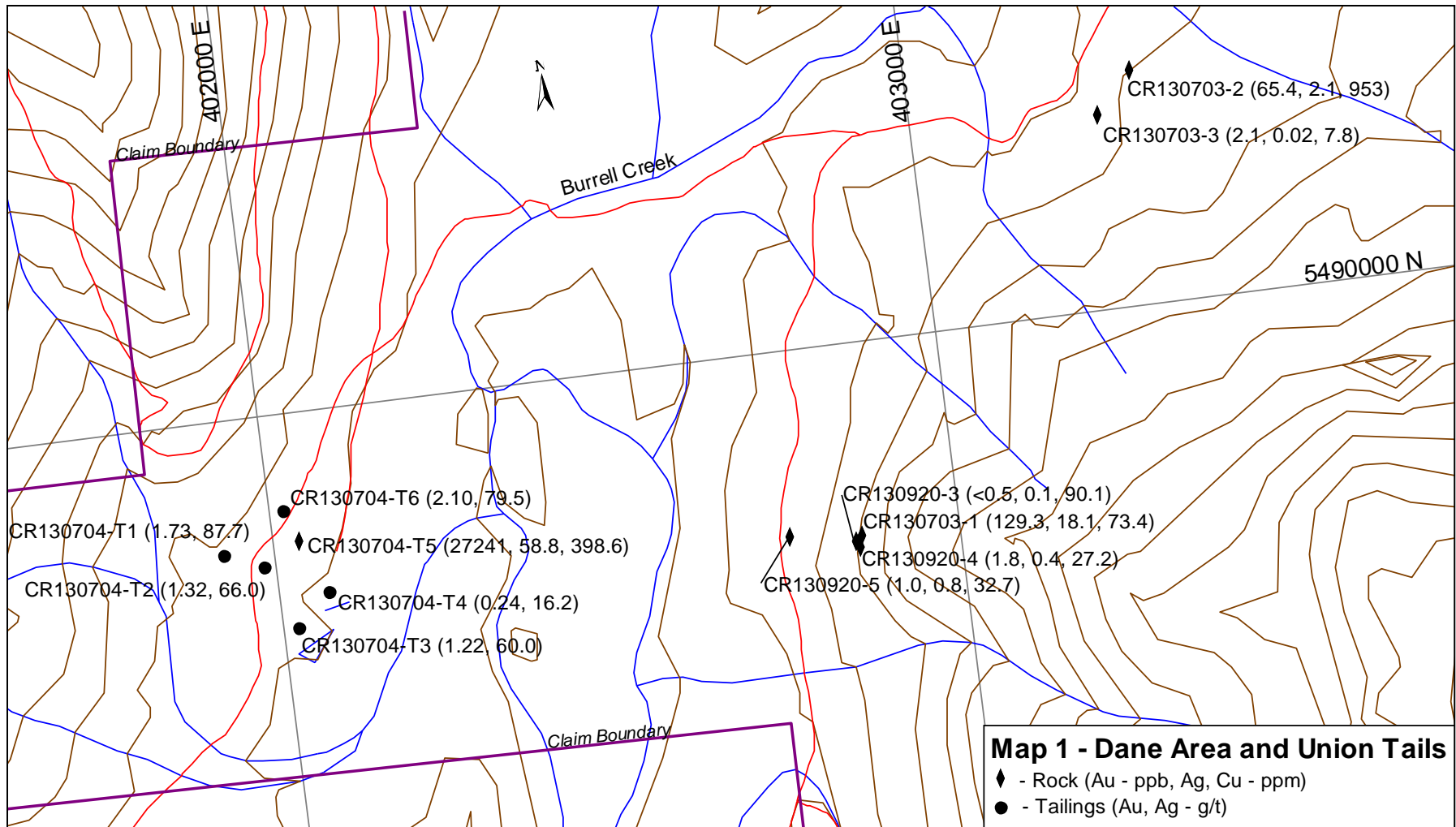
**Sample Analysis**

Sample Preparation (21 samples @ \$7.50/sample) (19 samples @ \$8.41/sample)	\$317.22
Sample Assaying (40 samples @ \$20.56/sample)	\$822.52

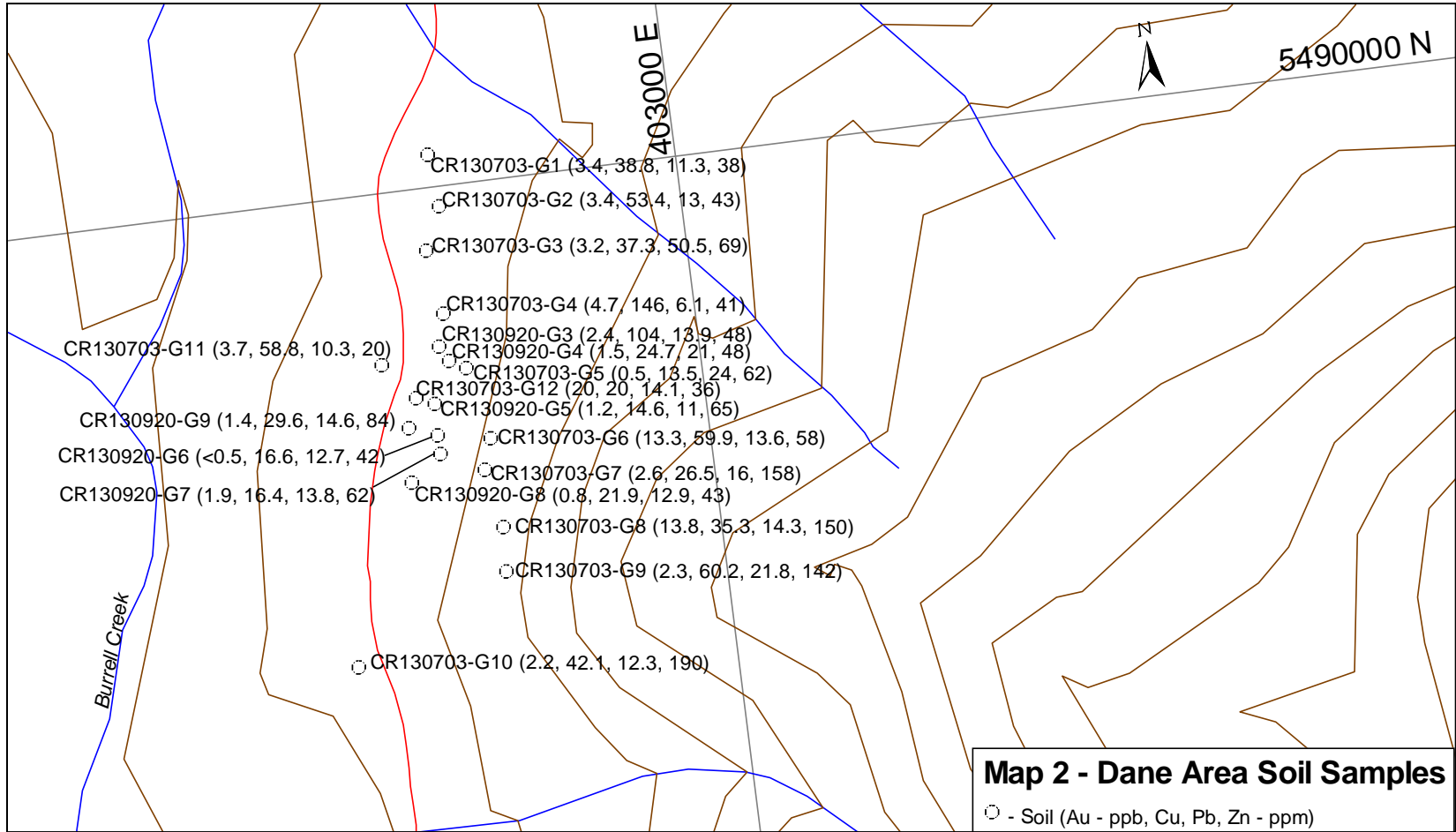
<b>Report Preparation</b>	<b>\$880.00</b>
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<b>Total Cost</b>	<b>\$5,444.82</b>
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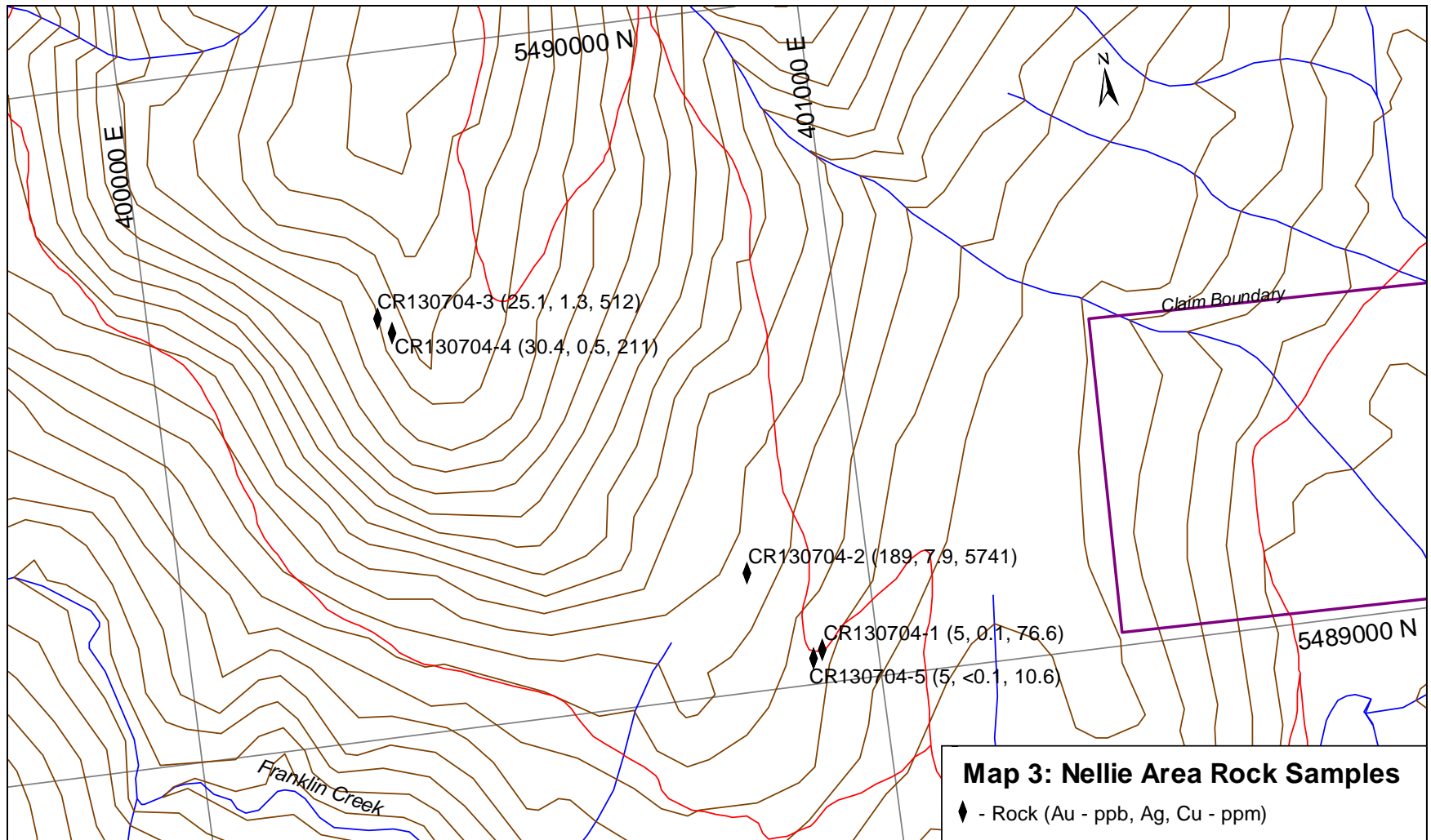
## **Appendix 1 – Sample Location Maps**



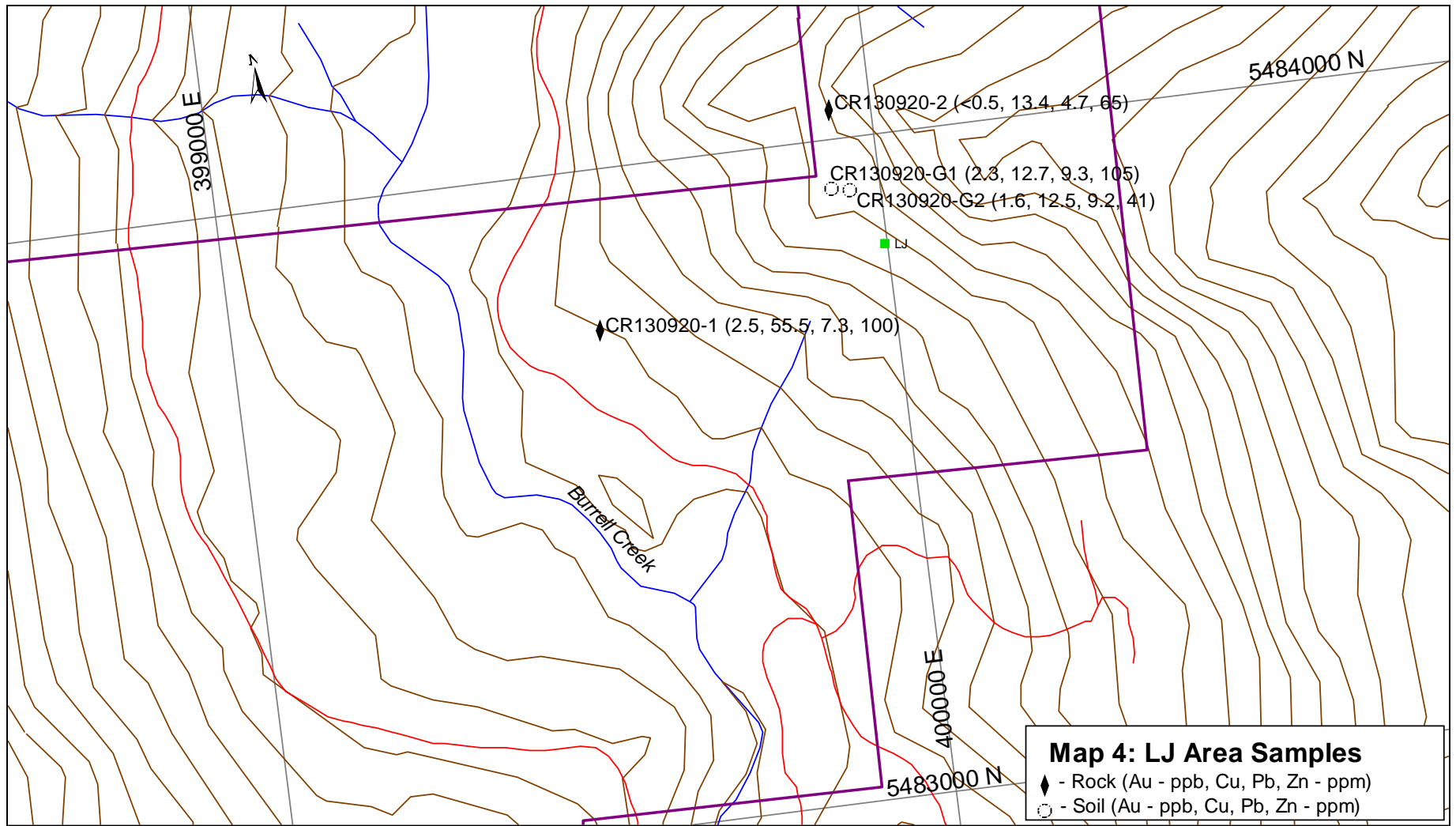
Scale 1:9,000



Scale 1:5000



Scale 1:9000



399000 E

5484000 N

CR130920-2 (<0.5, 13.4, 4.7, 65)

CR130920-G1 (2.3, 12.7, 9.3, 105)

CR130920-G2 (1.6, 12.5, 9.2, 41)

LJ

CR130920-1 (2.5, 55.5, 7.3, 100)

Burrell Creek

400000 E

5483000 N

**Map 4: LJ Area Samples**

- ◆ - Rock (Au - ppb, Cu, Pb, Zn - ppm)
- - Soil (Au - ppb, Cu, Pb, Zn - ppm)

Scale 1:9000



## **Appendix 2 – Assay Reports**



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Acme Analytical Laboratories (Vancouver) 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: August 16, 2013  
 Report Date: September 11, 2013  
 Page: 1 of 2

**CERTIFICATE OF ANALYSIS**

**VAN13003201.1**

**CLIENT JOB INFORMATION**

Project: Franklin/Nevada  
 Shipment ID:  
 P.O. Number  
 Number of Samples: 13

**SAMPLE DISPOSAL**

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

**SAMPLE PREPARATION AND ANALYTICAL PROCEDURES**

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	13	Crush, split and pulverize 250 g rock to 200 mesh			VAN
1F01-1F08	1	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	0.5	Completed	VAN
1F02-1F08	3	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	15	Completed	VAN
1DX2	9	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN
7AR	1	1:1:1 Aqua Regia Digestion ICP-ES Finish	0.4	Completed	VAN

**ADDITIONAL COMMENTS**

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

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

CC:



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



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 PHONE (604) 253-3158

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

**Project:** Franklin/Nevada  
**Report Date:** September 11, 2013

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Part: 1 of 6

**CERTIFICATE OF ANALYSIS**

**VAN13003201.1**

Method	WGHT	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
MDL	0.01	0.01	0.01	0.01	0.1	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	
CR130703-1	Rock	1.38																			
CR130703-2	Rock	2.05																			
CR130703-3	Rock	0.33																			
CR130704-1	Rock	0.86																			
CR130704-2	Rock	1.71																			
CR130704-3	Rock	0.96																			
CR130704-4	Rock	0.86																			
CR130704-5	Rock	0.37																			
CR130704-T5	Rock	0.93	5.42	398.6	329.1	1227	58832	12.2	10.5	972	2.38	82.1	0.2	27241	0.4	77.0	8.41	9.21	0.49	62	5.65
CR130705-1	Rock	1.57																			
CR130705-2	Rock	2.78																			
CR130705-3	Rock	0.67																			
CR130705-4	Rock	0.86																			

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**VAN13003201.1**

Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	
Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Pd	Pt	
Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb	ppb	
MDL	0.001	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1	10	2	
CR130703-1	Rock																				
CR130703-2	Rock																				
CR130703-3	Rock																				
CR130704-1	Rock																				
CR130704-2	Rock																				
CR130704-3	Rock																				
CR130704-4	Rock																				
CR130704-5	Rock																				
CR130704-T5	Rock	0.054	3.3	17.9	0.81	26.0	0.022	<20	1.05	0.019	0.10	<0.1	4.4	0.07	0.69	65	11.4	0.59	4.3	<10	3
CR130705-1	Rock																				
CR130705-2	Rock																				
CR130705-3	Rock																				
CR130705-4	Rock																				

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**Project:** Franklin/Nevada  
**Report Date:** September 11, 2013

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Part: 3 of 6

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Method	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.01	0.01	0.01	0.1	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	
CR130703-1	Rock	10.31	73.38	314.9	125.9	18138	23.8	7.3	252	3.28	22.3	0.7	129.3	1.7	7.2	0.39	1.59	0.18	184	0.25	0.083
CR130703-2	Rock	3.32	953.2	3.92	82.8	2082	14.4	30.4	901	5.04	3.0	0.3	65.4	0.8	37.5	0.20	0.09	0.07	176	1.15	0.151
CR130703-3	Rock	11.84	7.85	2.36	15.3	21	1.8	4.5	1122	2.27	1.0	0.4	2.1	0.6	41.3	0.11	0.05	0.03	12	0.86	0.062
CR130704-1	Rock																				
CR130704-2	Rock																				
CR130704-3	Rock																				
CR130704-4	Rock																				
CR130704-5	Rock																				
CR130704-T5	Rock																				
CR130705-1	Rock																				
CR130705-2	Rock																				
CR130705-3	Rock																				
CR130705-4	Rock																				

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**Project:** Franklin/Nevada  
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Part: 4 of 6

**CERTIFICATE OF ANALYSIS** **VAN13003201.1**

Method	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1DX15
Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Pd	Pt	Mo	
Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb	ppb	ppm	
MDL	0.5	0.5	0.01	0.5	0.001	1	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1	10	2	0.1	
CR130703-1	Rock	5.8	66.0	1.44	49.6	0.175	<1	1.51	0.042	0.26	0.4	11.4	0.26	0.20	<5	3.3	10.27	7.2	<10	<2	
CR130703-2	Rock	10.7	23.4	1.65	65.3	0.022	<1	1.99	0.056	0.06	0.2	10.7	<0.02	0.04	<5	0.3	0.07	9.4	10	3	
CR130703-3	Rock	7.6	2.6	0.05	1308	<0.001	<1	0.26	0.002	0.19	<0.1	1.9	0.05	0.12	<5	<0.1	0.05	0.6	<10	<2	
CR130704-1	Rock																				0.5
CR130704-2	Rock																				0.8
CR130704-3	Rock																				33.2
CR130704-4	Rock																				1.8
CR130704-5	Rock																				4.7
CR130704-T5	Rock																				
CR130705-1	Rock																				2.1
CR130705-2	Rock																				1.2
CR130705-3	Rock																				2.0
CR130705-4	Rock																				3.1

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Part: 5 of 6

**CERTIFICATE OF ANALYSIS** **VAN13003201.1**

Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
Analyte	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	
MDL	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	1	
CR130703-1	Rock																				
CR130703-2	Rock																				
CR130703-3	Rock																				
CR130704-1	Rock	76.6	1.8	91	0.1	10.8	25.5	1331	5.65	5.6	5.0	0.7	37	<0.1	0.1	<0.1	124	1.00	0.082	8	19
CR130704-2	Rock	5741	2.4	151	7.9	1.3	19.4	829	3.74	8.8	189.1	0.7	91	1.9	0.9	<0.1	113	1.51	0.149	7	1
CR130704-3	Rock	511.7	10.7	11	1.3	3.7	3.9	97	18.87	50.6	25.1	0.6	6	<0.1	1.9	40.0	75	0.06	0.046	1	49
CR130704-4	Rock	211.0	16.0	59	0.5	10.7	24.0	830	6.29	1170	30.4	1.0	13	0.1	3.7	0.8	118	0.30	0.089	5	15
CR130704-5	Rock	10.6	3.1	38	<0.1	1.7	20.8	467	7.63	16.0	5.0	0.6	64	<0.1	0.6	0.2	80	0.90	0.101	3	1
CR130704-T5	Rock																				
CR130705-1	Rock	55.8	2474	1353	29.2	1.8	3.6	694	2.37	7.7	354.5	8.9	14	55.0	22.3	0.2	17	0.32	0.072	15	6
CR130705-2	Rock	31.3	974.8	8801	4.1	1.5	3.2	874	2.29	9.4	71.7	5.4	12	189.0	2.5	0.3	11	0.36	0.046	8	10
CR130705-3	Rock	35.5	2452	>10000	27.2	1.0	2.9	298	2.95	11.5	298.7	1.8	6	324.0	7.8	14.3	6	0.08	0.018	3	8
CR130705-4	Rock	51.0	23.5	115	0.9	77.2	15.8	599	4.02	6.5	22.7	6.3	11	0.9	0.2	0.3	95	0.19	0.078	14	86

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Acme Analytical Laboratories (Vancouver) 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: Franklin/Nevada  
 Report Date: September 11, 2013

Page: 2 of 2

Part: 6 of 6

CERTIFICATE OF ANALYSIS

VAN13003201.1

Method	Analyte	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	7AR
		Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Zn	
Unit		%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%
MDL		0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	0.01	
CR130703-1	Rock																	
CR130703-2	Rock																	
CR130703-3	Rock																	
CR130704-1	Rock	2.61	537	0.002	<1	3.42	0.018	0.17	<0.1	<0.01	10.1	<0.1	<0.05	11	<0.5	<0.2		
CR130704-2	Rock	1.09	338	0.139	2	2.01	0.044	0.11	0.4	0.02	3.2	0.1	0.42	6	<0.5	<0.2		
CR130704-3	Rock	0.24	29	0.107	<1	0.81	0.013	0.07	1.3	0.01	3.8	<0.1	0.39	10	15.7	31.8		
CR130704-4	Rock	1.38	40	0.092	2	2.23	0.030	0.18	0.6	<0.01	8.9	0.1	0.20	7	1.2	0.7		
CR130704-5	Rock	1.44	50	0.161	1	1.78	0.130	0.07	0.3	<0.01	3.8	<0.1	2.09	6	<0.5	<0.2		
CR130704-T5	Rock																	
CR130705-1	Rock	0.37	27	0.047	1	1.11	0.018	0.26	0.3	<0.01	1.9	<0.1	0.61	4	<0.5	<0.2		
CR130705-2	Rock	0.25	18	0.039	2	0.72	0.009	0.21	1.3	0.02	1.3	<0.1	1.25	2	0.9	<0.2		
CR130705-3	Rock	0.08	7	0.017	<1	0.28	0.003	0.07	6.1	0.06	0.6	<0.1	1.69	2	3.8	1.6	1.20	
CR130705-4	Rock	1.19	154	0.086	<1	1.87	0.022	0.46	0.1	0.02	7.2	0.2	0.43	7	1.6	<0.2		

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Acme Analytical Laboratories (Vancouver) 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: August 16, 2013  
Report Date: September 09, 2013  
Page: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN13003202.1

### CLIENT JOB INFORMATION

Project: Franklin/Nevada  
Shipment ID:  
P.O. Number  
Number of Samples: 5

### SAMPLE DISPOSAL

PICKUP-PLP Client to Pickup Pulps

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
P200	5	Pulverize to 85% passing 200 mesh			VAN
1F01-1F08	5	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	0.5	Completed	VAN
G601	4	Lead Collection Fire - Assay Fusion - AAS Finish	30	Completed	VAN

### ADDITIONAL COMMENTS

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

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

CC:



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



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Acme Analytical Laboratories (Vancouver) 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:** Franklin/Nevada  
**Report Date:** September 09, 2013

Page: 2 of 2

Part: 1 of 2

**CERTIFICATE OF ANALYSIS**

**VAN13003202.1**

Method	Analyte	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
Unit		ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%	
MDL		0.01	0.01	0.01	0.1	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
CR130704-T1	Sand	3.45	86.73	276.6	620.5	87732	5.2	3.0	1096	2.01	16.1	0.2	1591	0.3	78.1	5.18	4.16	0.08	45	3.83	0.044
CR130704-T2	Sand	4.44	69.90	164.2	455.5	65977	6.3	3.8	1399	2.90	21.2	0.2	1253	0.5	91.2	3.51	3.94	0.10	62	3.78	0.044
CR130704-T3	Sand	3.44	91.28	222.7	556.4	59963	7.1	4.4	1421	3.13	23.6	0.3	1188	0.5	94.0	4.23	3.96	0.11	68	4.05	0.045
CR130704-T4	Sand	1.51	54.50	186.8	625.2	16180	5.2	3.0	1262	2.61	20.9	0.2	241.9	0.4	101.2	4.34	3.76	0.09	56	4.45	0.044
CR130704-T6	Sand	3.57	62.69	136.2	439.6	79533	5.5	3.3	1203	2.38	18.9	0.2	2322	0.4	77.2	3.33	4.90	0.08	50	3.22	0.043

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 9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA  
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**Client:** Crucible Resources Ltd.  
 745 East 30th Ave  
 Vancouver BC V5V 2V8 Canada

**Project:** Franklin/Nevada  
**Report Date:** September 09, 2013

Page: 2 of 2

Part: 2 of 2

**CERTIFICATE OF ANALYSIS** **VAN13003202.1**

Method	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	1F	G6
Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Pd	Pt	Au		
Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb	ppb	ppb	ppm	
MDL	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1	10	2	0.005		
CR130704-T1	Sand	2.9	12.3	0.77	26.6	0.020	<20	0.90	0.012	0.07	0.8	3.0	0.05	0.04	79	1.6	0.15	3.7	<10	4	1.703	
CR130704-T2	Sand	3.5	12.0	1.19	30.2	0.018	<20	1.35	0.009	0.09	0.3	3.7	0.07	0.04	113	1.8	0.13	5.6	<10	<2	1.323	
CR130704-T3	Sand	4.2	14.6	1.26	35.8	0.023	<20	1.45	0.012	0.10	0.4	4.2	0.08	0.06	130	2.3	0.10	5.9	<10	3	1.220	
CR130704-T4	Sand	3.4	13.7	1.03	32.7	0.020	<20	1.22	0.012	0.09	0.4	3.7	0.07	0.06	132	1.9	0.06	5.1	<10	3		
CR130704-T6	Sand	3.0	10.4	0.93	30.8	0.017	<20	1.08	0.008	0.07	0.4	2.9	0.07	0.05	118	2.4	0.11	4.4	<10	3	2.099	

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9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA  
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**Client:** **Crucible Resources Ltd.**  
745 East 30th Ave  
Vancouver BC V5V 2V8 Canada

Submitted By: Doug Warkentin  
Receiving Lab: Canada-Vancouver  
Received: August 16, 2013  
Report Date: September 09, 2013  
Page: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN13003203.1

### CLIENT JOB INFORMATION

Project: Franklin/Nevada  
Shipment ID:  
P.O. Number  
Number of Samples: 12

### SAMPLE DISPOSAL

PICKUP-PLP Client to Pickup Pulps  
DISP-RJT-SOIL Immediate Disposal of Soil Reject

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

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

CC:

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
Dry at 60C	12	Dry at 60C			VAN
SS80	12	Dry at 60C sieve 100g to -80 mesh			VAN
1DX1	12	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed	VAN

### ADDITIONAL COMMENTS



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 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:** Franklin/Nevada  
**Report Date:** September 09, 2013

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Part: 1 of 2

**CERTIFICATE OF ANALYSIS**

**VAN13003203.1**

Method	Analyte	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
		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	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
CR130703-G1	Soil	1.3	38.8	11.3	38	0.2	9.1	7.0	587	2.18	2.0	3.4	4.3	16	0.1	0.2	0.2	47	0.15	0.106	16
CR130703-G2	Soil	2.3	53.4	13.0	43	0.2	9.4	7.1	523	2.42	2.9	3.4	4.5	14	0.1	0.2	0.3	46	0.13	0.080	13
CR130703-G3	Soil	2.3	37.3	50.5	69	0.5	7.4	6.4	298	2.61	2.1	3.2	2.8	20	0.1	0.1	0.6	41	0.13	0.081	12
CR130703-G4	Soil	1.5	146.0	6.1	41	0.3	7.0	10.0	379	2.43	3.7	4.7	0.9	30	0.1	0.2	0.2	69	0.35	0.158	10
CR130703-G5	Soil	0.9	13.5	24.0	62	0.3	7.6	4.2	478	1.82	5.1	0.5	4.0	23	0.3	0.3	0.3	26	0.18	0.347	20
CR130703-G6	Soil	6.0	59.9	13.6	58	0.4	9.6	6.3	473	2.03	3.9	13.3	4.3	29	0.3	0.2	0.3	37	0.34	0.054	51
CR130703-G7	Soil	3.7	26.5	16.0	158	0.2	14.4	7.9	748	2.38	23.9	2.6	3.5	18	0.6	0.3	0.3	41	0.15	0.213	7
CR130703-G8	Soil	2.7	35.3	14.3	150	0.2	17.4	7.6	535	2.25	27.5	13.8	4.6	19	0.8	0.3	0.3	42	0.16	0.142	10
CR130703-G9	Soil	4.0	60.2	21.8	142	0.3	33.2	10.3	413	2.49	24.2	2.3	4.3	23	0.9	0.5	0.3	48	0.25	0.166	11
CR130703-G10	Soil	3.8	42.1	12.3	190	0.3	20.7	9.6	561	2.45	12.6	2.2	2.4	13	1.1	0.3	0.3	45	0.14	0.114	6
CR130703-G11	Soil	2.8	58.8	10.3	20	0.3	5.3	3.2	515	1.29	2.8	3.7	2.8	28	0.2	0.1	0.3	23	0.34	0.031	58
CR130703-G12	Soil	1.1	20.0	14.1	36	0.2	6.8	4.3	420	1.62	2.8	20.0	4.5	26	0.2	0.2	0.3	24	0.19	0.077	28

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Acme Analytical Laboratories (Vancouver) 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:** Franklin/Nevada  
**Report Date:** September 09, 2013

Page: 2 of 2

Part: 2 of 2

**CERTIFICATE OF ANALYSIS**

**VAN13003203.1**

Method	Analyte	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
		Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
Unit		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
CR130703-G1	Soil	15	0.26	136	0.096	<20	2.95	0.010	0.04	0.2	0.06	3.3	0.1	<0.05	8	<0.5	<0.2
CR130703-G2	Soil	13	0.26	131	0.118	<20	3.54	0.011	0.05	0.2	0.04	3.7	0.1	<0.05	9	0.6	<0.2
CR130703-G3	Soil	7	0.21	221	0.074	<20	2.75	0.014	0.04	0.1	0.05	3.3	0.1	<0.05	8	<0.5	<0.2
CR130703-G4	Soil	11	0.48	78	0.072	<20	1.94	0.015	0.04	0.2	0.06	6.4	<0.1	<0.05	7	1.0	<0.2
CR130703-G5	Soil	9	0.15	255	0.135	<20	3.52	0.012	0.04	0.2	0.05	1.7	<0.1	<0.05	10	<0.5	<0.2
CR130703-G6	Soil	16	0.28	105	0.063	<20	1.79	0.011	0.04	0.2	0.03	3.0	<0.1	<0.05	5	<0.5	<0.2
CR130703-G7	Soil	12	0.23	159	0.122	<20	3.52	0.013	0.04	0.3	0.05	2.5	0.2	<0.05	8	<0.5	<0.2
CR130703-G8	Soil	15	0.26	169	0.112	<20	2.76	0.011	0.05	0.3	0.03	2.4	0.2	<0.05	7	<0.5	<0.2
CR130703-G9	Soil	13	0.38	132	0.139	<20	4.00	0.013	0.05	0.3	0.06	3.1	0.2	<0.05	9	<0.5	<0.2
CR130703-G10	Soil	10	0.24	127	0.148	<20	3.46	0.013	0.04	0.3	0.04	2.7	0.1	<0.05	9	<0.5	<0.2
CR130703-G11	Soil	6	0.10	91	0.089	<20	2.52	0.027	0.04	0.1	0.05	3.4	0.1	<0.05	6	<0.5	<0.2
CR130703-G12	Soil	8	0.14	232	0.129	<20	3.71	0.019	0.03	0.2	0.03	3.6	0.1	<0.05	8	<0.5	<0.2

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Acme Analytical Laboratories (Vancouver) Ltd.  
 9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA  
 PHONE (604) 253-3158

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

Submitted By: Doug Warkentin  
 Receiving Lab: Canada-Vancouver  
 Received: October 18, 2013  
 Report Date: October 31, 2013  
 Page: 1 of 2

**CERTIFICATE OF ANALYSIS**

**VAN13004321.1**

**CLIENT JOB INFORMATION**

Project: Franklin/Zacta  
 Shipment ID:  
 P.O. Number  
 Number of Samples: 9

**SAMPLE PREPARATION AND ANALYTICAL PROCEDURES**

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	9	Crush, split and pulverize 250 g rock to 200 mesh			VAN
1DX1	9	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed	VAN

**SAMPLE DISPOSAL**

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

**ADDITIONAL COMMENTS**

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

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

CC:



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



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

**Project:** Franklin/Zacta  
**Report Date:** October 31, 2013

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Part: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN13004321.1

Method	Analyte	WGHT	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
		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	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
CR130910-1	Rock	0.75	0.4	4.8	2.8	42	<0.1	0.7	2.0	482	2.68	1.5	<0.5	0.3	10	<0.1	<0.1	0.2	<2	0.27	0.022
CR130910-2	Rock	0.75	0.1	119.4	0.4	59	<0.1	36.4	26.0	441	3.83	254.4	2.1	<0.1	6	<0.1	0.2	<0.1	86	0.47	0.041
CR130910-3	Rock	1.17	1.0	91.8	0.3	45	<0.1	33.5	23.8	331	3.26	4.0	<0.5	<0.1	10	<0.1	<0.1	<0.1	86	0.88	0.063
CR130910-4	Rock	0.64	5.3	64.0	15.8	39	0.7	25.0	4.9	90	2.34	9.7	3.9	3.3	4	0.4	0.6	<0.1	35	0.60	0.281
CR130920-1	Rock	0.75	10.1	55.5	7.3	100	0.2	9.6	10.2	423	2.26	<0.5	2.5	3.5	28	0.4	<0.1	0.3	38	0.45	0.040
CR130920-2	Rock	0.99	<0.1	13.4	4.7	65	<0.1	7.0	7.7	442	1.81	<0.5	<0.5	5.8	41	<0.1	<0.1	<0.1	30	0.86	0.040
CR130920-3	Rock	1.94	26.5	90.1	5.5	39	0.1	30.5	10.7	352	2.11	14.4	<0.5	1.2	41	0.4	1.0	<0.1	71	1.27	0.026
CR130920-4	Rock	1.11	19.3	27.2	58.9	24	0.4	8.0	3.2	74	2.05	37.4	1.8	1.4	6	0.2	0.9	0.1	11	0.04	0.031
CR130920-5	Rock	0.76	51.7	32.7	9.0	69	0.8	8.5	6.0	382	3.91	14.0	1.0	0.6	62	0.3	0.3	<0.1	55	2.09	0.035





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 Vancouver BC V5V 2V8 CANADA

**Project:** Franklin/Zacta  
**Report Date:** October 31, 2013

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## CERTIFICATE OF ANALYSIS

VAN13004321.1

Method	Analyte	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
Unit		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
MDL		1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5	0.2	
CR130910-1	Rock	2	3	0.71	15	<0.001	<20	0.20	0.032	0.02	<0.1	0.58	3.4	0.1	1.23	4	0.6	<0.2
CR130910-2	Rock	<1	76	1.75	81	0.089	<20	2.26	0.050	0.10	0.5	<0.01	5.6	<0.1	0.09	8	<0.5	0.2
CR130910-3	Rock	<1	33	1.12	54	0.169	<20	1.56	0.110	0.11	0.1	0.12	6.0	<0.1	0.21	7	0.9	<0.2
CR130910-4	Rock	9	10	0.27	77	0.008	<20	0.38	0.062	0.03	<0.1	0.03	3.7	<0.1	0.76	5	2.8	<0.2
CR130920-1	Rock	3	27	0.93	24	0.084	<20	1.05	0.045	0.09	0.5	<0.01	2.9	<0.1	0.10	8	<0.5	<0.2
CR130920-2	Rock	5	21	0.87	45	0.045	<20	1.10	0.036	0.09	<0.1	<0.01	2.7	<0.1	<0.05	8	<0.5	<0.2
CR130920-3	Rock	5	18	0.79	43	0.032	<20	0.89	0.018	0.11	0.5	<0.01	3.0	<0.1	0.05	6	0.8	<0.2
CR130920-4	Rock	4	6	0.12	35	0.040	<20	0.35	0.015	0.16	0.7	0.01	0.5	<0.1	0.16	4	2.1	<0.2
CR130920-5	Rock	4	12	0.56	524	0.007	<20	0.87	0.002	0.14	0.1	<0.01	3.2	<0.1	0.27	7	<0.5	0.3



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Client: Crucible Resources Ltd.
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Submitted By: Doug Warkentin
Receiving Lab: Canada-Vancouver
Received: October 18, 2013
Report Date: October 29, 2013
Page: 1 of 2

CERTIFICATE OF ANALYSIS

VAN13004323.1

CLIENT JOB INFORMATION

Project: Franklin/Zacta
Shipment ID:
P.O. Number
Number of Samples: 13

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Table with 6 columns: Procedure Code, Number of Samples, Code Description, Test Wgt (g), Report Status, Lab. Rows include SPLP and 1DX1 procedures.

SAMPLE DISPOSAL

PICKUP-PLP Client to Pickup Pulps
DISP-RJT-SOIL Immediate Disposal of Soil Reject

ADDITIONAL COMMENTS

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

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

CC:



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



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**Project:** Franklin/Zacta  
**Report Date:** October 29, 2013

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Part: 1 of 2

CERTIFICATE OF ANALYSIS

VAN13004323.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
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	
CR130920-G1	Soil Pulp	0.9	12.7	9.3	105	0.2	7.1	3.5	671	1.32	3.1	2.3	2.1	21	0.3	<0.1	0.1	21	0.15	0.284	6
CR130920-G2	Soil Pulp	0.8	12.5	9.2	41	0.3	10.6	3.6	226	1.64	1.2	1.6	4.4	22	<0.1	<0.1	0.2	30	0.17	0.041	22
CR130920-G3	Soil Pulp	4.2	104.0	13.9	48	0.2	7.0	4.9	1287	1.66	1.8	2.4	1.7	35	0.5	0.2	0.2	33	0.52	0.069	35
CR130920-G4	Soil Pulp	3.3	24.7	21.0	48	0.3	8.3	5.1	401	2.12	5.0	1.5	3.8	24	<0.1	0.2	0.2	39	0.28	0.155	41
CR130920-G5	Soil Pulp	0.9	14.6	11.0	65	<0.1	5.9	3.8	791	1.37	3.6	1.2	2.4	12	0.2	0.2	0.2	23	0.12	0.137	10
CR130920-G6	Soil Pulp	1.1	16.6	12.7	42	0.3	6.8	4.3	547	1.65	3.7	<0.5	3.0	15	0.2	0.1	0.2	26	0.13	0.120	13
CR130920-G7	Soil Pulp	1.6	16.4	13.8	62	0.3	6.9	4.8	252	1.91	9.4	1.9	2.8	15	0.2	0.2	0.2	31	0.13	0.118	7
CR130920-G8	Soil Pulp	1.6	21.9	12.9	43	0.2	8.2	5.7	516	2.09	6.2	0.8	5.0	22	0.1	0.2	0.3	32	0.19	0.085	10
CR130920-G9	Soil Pulp	2.3	29.6	14.6	84	0.1	11.4	7.4	648	2.19	6.9	1.4	6.1	11	0.3	0.2	0.2	38	0.12	0.078	12
CR130910-S1	Silt Pulp	0.5	33.2	1.8	66	<0.1	27.5	9.3	292	1.97	11.7	1.4	0.6	3	0.3	<0.1	<0.1	49	0.21	0.040	2
CR130910-S2	Silt Pulp	0.5	36.7	2.1	67	<0.1	30.8	10.5	257	2.13	17.9	9.1	0.8	4	0.4	0.1	<0.1	55	0.26	0.047	3
CR130910-S3	Silt Pulp	0.2	28.4	1.5	20	<0.1	149.2	11.1	176	1.44	17.7	1.3	<0.1	2	<0.1	0.1	<0.1	31	0.15	0.010	<1
CR130910-S4	Silt Pulp	0.1	32.6	1.4	21	<0.1	325.8	21.2	283	1.85	50.6	0.6	0.2	5	<0.1	0.2	<0.1	35	0.26	0.036	<1

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**Project:** Franklin/Zacta  
**Report Date:** October 29, 2013

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Part: 2 of 2

## CERTIFICATE OF ANALYSIS

VAN13004323.1

Method	Analyte	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
		Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
Unit		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
CR130920-G1	Soil Pulp	7	0.12	150	0.101	<20	3.12	0.016	0.04	0.2	0.03	1.9	<0.1	<0.05	7	<0.5	<0.2
CR130920-G2	Soil Pulp	15	0.16	138	0.070	<20	1.94	0.014	0.04	0.2	0.04	1.8	<0.1	<0.05	5	<0.5	<0.2
CR130920-G3	Soil Pulp	12	0.19	125	0.080	<20	2.52	0.020	0.04	<0.1	0.05	3.0	0.1	<0.05	7	0.9	<0.2
CR130920-G4	Soil Pulp	12	0.17	137	0.111	<20	4.85	0.012	0.03	0.1	0.08	2.6	0.1	<0.05	11	0.9	<0.2
CR130920-G5	Soil Pulp	7	0.09	202	0.110	<20	2.89	0.018	0.03	0.1	0.03	1.7	<0.1	<0.05	8	<0.5	<0.2
CR130920-G6	Soil Pulp	8	0.11	176	0.127	<20	3.93	0.018	0.03	0.2	0.05	2.1	<0.1	<0.05	9	<0.5	<0.2
CR130920-G7	Soil Pulp	8	0.10	159	0.141	<20	3.98	0.015	0.03	0.1	0.05	1.8	<0.1	<0.05	11	<0.5	<0.2
CR130920-G8	Soil Pulp	10	0.18	185	0.127	<20	4.07	0.014	0.04	0.2	0.05	2.5	0.1	<0.05	10	0.6	<0.2
CR130920-G9	Soil Pulp	15	0.17	138	0.095	<20	3.24	0.011	0.03	0.2	0.05	2.6	0.1	<0.05	8	<0.5	<0.2
CR130910-S1	Silt Pulp	34	0.63	83	0.052	<20	0.91	0.006	0.11	<0.1	0.01	3.7	0.1	<0.05	3	<0.5	<0.2
CR130910-S2	Silt Pulp	44	0.70	84	0.056	<20	0.96	0.007	0.13	<0.1	<0.01	3.7	0.1	<0.05	3	<0.5	<0.2
CR130910-S3	Silt Pulp	164	0.65	32	0.040	<20	0.66	0.006	0.03	<0.1	<0.01	1.6	<0.1	<0.05	2	<0.5	<0.2
CR130910-S4	Silt Pulp	234	1.07	56	0.050	<20	0.73	0.010	0.06	<0.1	<0.01	2.3	<0.1	<0.05	2	<0.5	<0.2

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