

# **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.**

## **Dane and Morrell Areas - Exploration and Geochemical Sampling Report**

**Apr. 2, 2013**

**BC Geological Survey  
Assessment Report  
33945**

**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 60 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, connected by a narrow line of claims on the west, and one small non-contiguous claim to the northwest. Both the north and south claim blocks are traversed 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 traverses the southern claim block. This road is in good condition nearly to the south end of the property but 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 likely remain in good condition, but this 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 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 26 Mineral Titles Online claims with a total area of 2642 hectares. The project claims primarily form two major contiguous blocks connected by a narrow strip, and stretch from St. Anne's Creek in the south to Franklin and Gloucester Creeks in the north and northwest. The project also includes the separate 42 hectare 'Averill' 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**

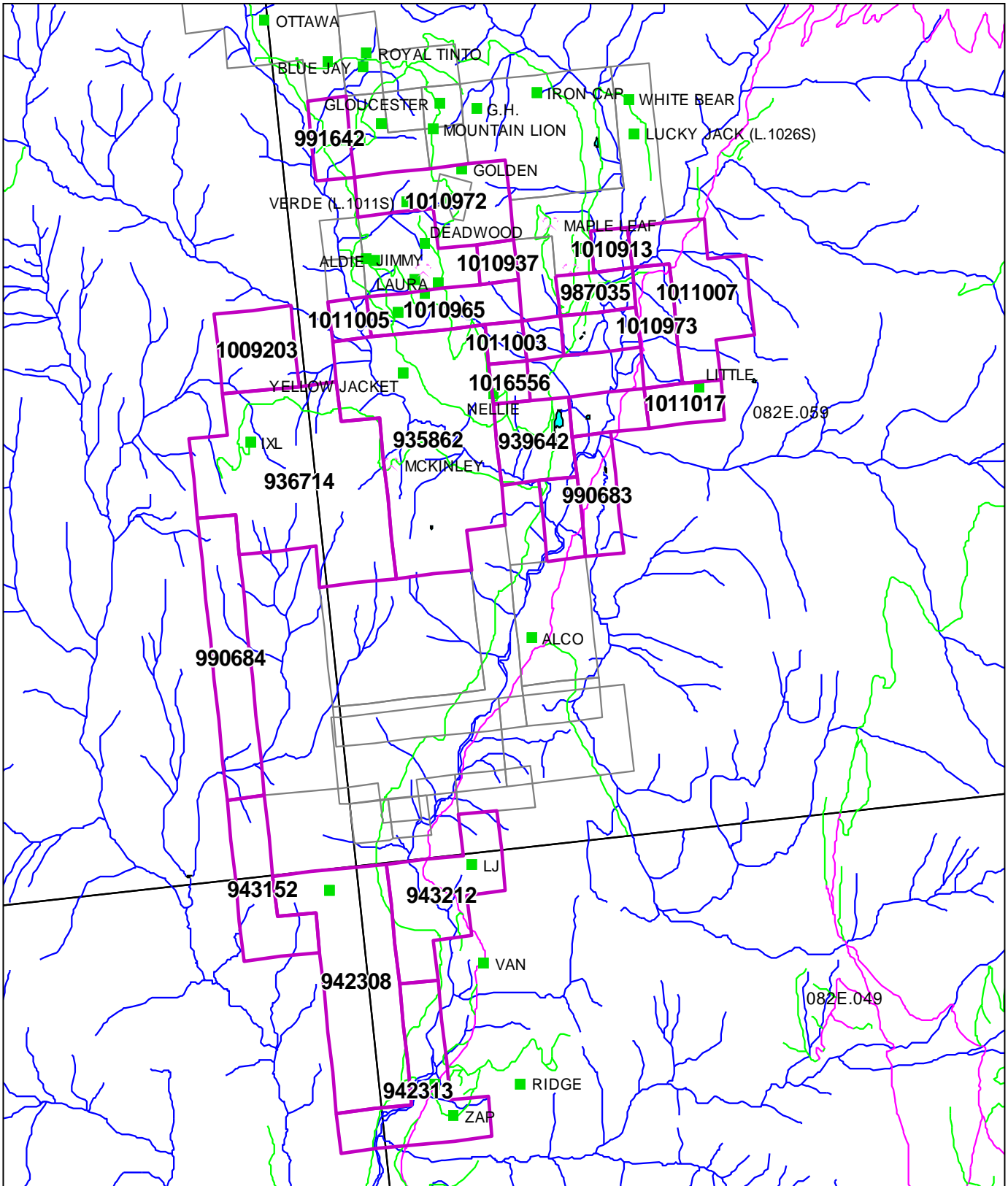


Figure 2 – Project Tenure Outline

**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/may/01	398.27
936714	FRANKLIN-IXL	145582 (100%)	082E	2011/dec/08	2013/may/01	398.29
939642	FRANKLIN SE1	145582 (100%)	082E	2012/jan/03	2013/may/01	83.85
942308	SILVER QUEEN	145582 (100%)	082E	2012/jan/24	2013/may/01	272.80
942313	MORREL'S CAMP	145582 (100%)	082E	2012/jan/24	2013/may/01	146.93
943152	SILVER QUEEN WEST	145582 (100%)	082E	2012/jan/27	2013/may/01	104.90
943212	LJ	145582 (100%)	082E	2012/jan/27	2013/may/01	146.87
987035	UNION FR	145582 (100%)	082E	2012/may/17	2013/may/30	41.91
990683	FRANKLIN-NICHOL	145582 (100%)	082E	2012/may/28	2013/may/30	62.89
990684	FRANKLIN WEST	145582 (100%)	082E	2012/may/28	2013/may/30	146.79
991642	FRANKLIN-AVERILL	145582 (100%)	082E	2012/may/31	2013/may/31	41.90
1009203	WEST FORK	145582 (100%)	082E	2012/jun/30	2013/jul/01	83.83
1010913	PAPER UNION	145582 (100%)	082E	2012/jul/09	2013/jul/11	20.95
1010937	IDAHO UNION	145582 (100%)	082E	2012/jul/10	2013/jul/10	20.95
1010965	BULLION	145582 (100%)	082E	2012/jul/10	2013/jul/10	83.82
1010972		145582 (100%)	082E	2012/jul/10	2013/jul/10	125.71
1010973	DANE	145582 (100%)	082E	2012/jul/10	2013/jul/11	62.87
1011003	BULLION 2	145582 (100%)	082E	2012/jul/10	2013/jul/10	20.96
1011005	BULLION 3	145582 (100%)	082E	2012/jul/10	2013/jul/10	20.96
1011007	FRANKLIN DANISH	145582 (100%)	082E	2012/jul/10	2013/jul/11	146.70
1011017	LITTLE DANISH	145582 (100%)	082E	2012/jul/10	2013/jul/11	41.92
1011821	BULLION 3	145582 (100%)	082E	2012/aug/05	2013/aug/05	20.96
1013315	UNION	145582 (100%)	082E	2012/sep/29	2013/sep/30	41.92
1013856	FRANKLIN-NICHOL W	145582 (100%)	082E	2012/oct/19	2013/oct/19	41.93
1015696	UNION TAILS	145582 (100%)	082E	2013/jan/04	2014/jan/04	41.92
1016556	NELLIE	145582 (100%)	082E	2013/feb/02	2014/feb/02	20.96
<b>Total Area</b>						<b>2641.76</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

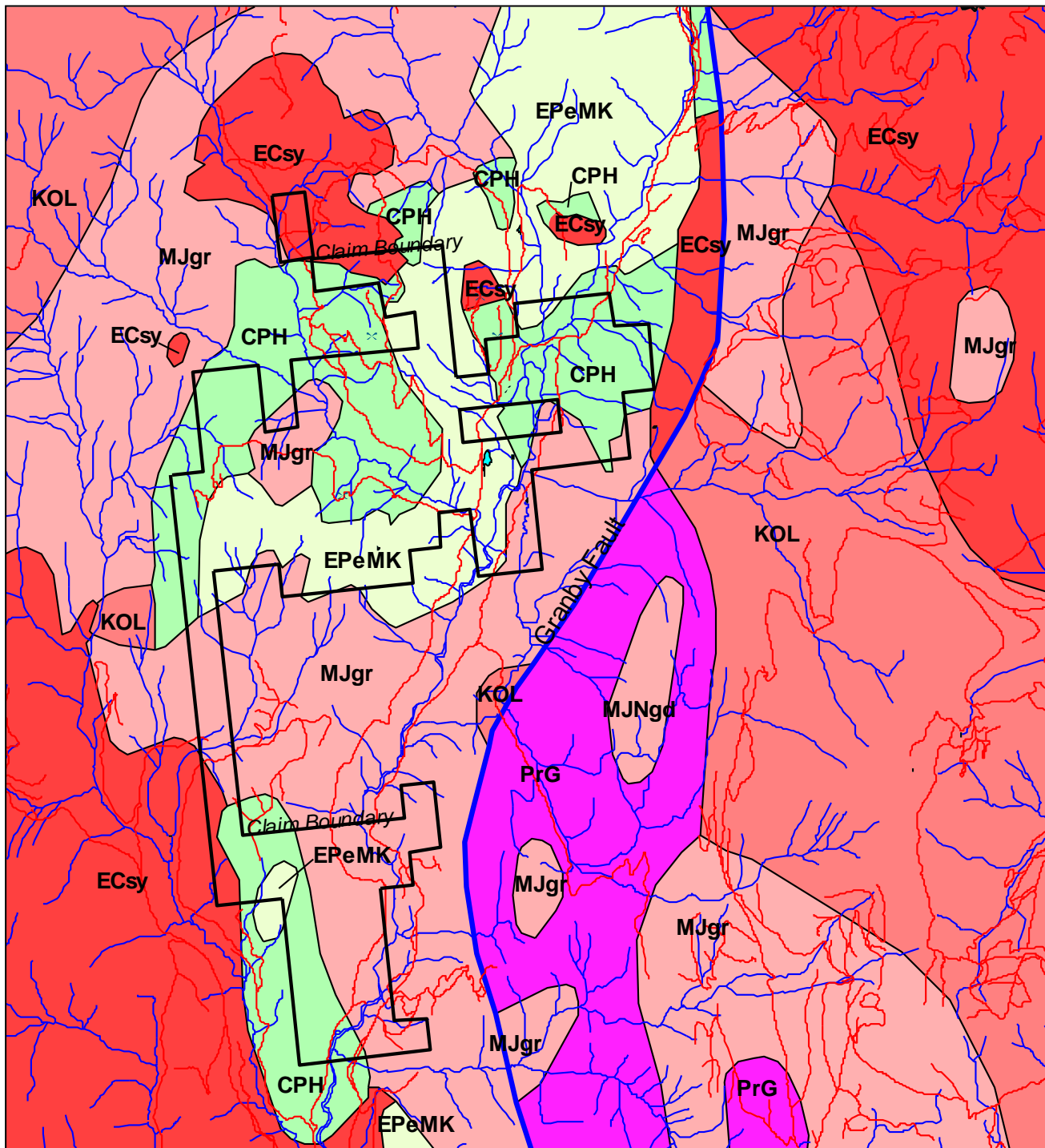
Forks area (Caron 2004). This group includes argillite, conglomerate, chert, tuffaceous siltstone, limestone and greenstone, often showing significant alteration. The Franklin rocks are intruded several distinct bodies of plutonic rock, including diorite/granodiorite from the Jurassic aged Nelson batholith 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 silicified zones and skarn deposits with high base metal values along limestone contact zones. 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 much of 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 a small part of the Averill complex, including at least one 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  
**MJNgd** – 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 overlaps the main historic producers in the camp, the Union and McKinley, while 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 in 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 Eocene volcanics are reportedly mineralized with pyrite, chalcopyrite and copper carbonates at the Nellie showing. This area reportedly shows evidence of hydrothermal alteration associated with nearby intrusives. In the extreme 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 is 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 showing 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			
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 lie within the boundaries of the MTO claims that make up the property. The northern and northwest claim blocks cover much of the historical Franklin camp, which was first actively explored at the beginning of the 1900'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 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 hole 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 northern and north-western portions of the current Franklin project area, 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 ore.

In 1991 Canamax conducted an airborne geophysical survey over the IXL area along with rock and soil sampling. A substantial 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.

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.

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.

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.

### 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.

## **Summary of Work**

One day was spent in the Morrell camp area in May 2012 and two days were spent in the Dane showing area in Sept 2012. Work in the Morrell camp area consisted of initial site reconnaissance including assessing road access, locating and sampling old workings and prospecting. Work in the Dane area included prospecting and geochemical soil and rock sampling as well as locating and sampling old workings on the Dane showing itself. In total fourteen rock samples (eight chip samples, two float samples and four samples of dump material from shafts) and seventeen soil geochemical samples were collected for analysis and bedrock outcrops found were prospected.

## **Work Program**

### **Sampling and Data Collection**

Samples were collected on two separate site visits, the first on May 28<sup>th</sup>, 2012 to the Morrell's camp area, including the Silver Queen showing and the second on September 29<sup>th</sup> and 30<sup>th</sup>, 2012 to the area immediately to the south of the Dane showing, east of the Burrell Creek Forest Service Road. Relevant sample locations are identified on the maps in Appendix 1. Assay results for rock samples are summarized in Table 4, while results for the soil samples 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 from the Morrell's camp 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 all other samples were also digested with aqua regia but using a standard 0.5 gram sample and were analyzed with a standard 36 element scan by ICP-MS. One sample (CR20930-7) was also re-analyzed for gold by fire assay, and for copper by ICP-ES after aqua regia digestion. Soil samples were dried and screened at 80 mesh before being digested in aqua regia and analyzed by ICP-MS in the same manner as the rock samples (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.

### Rock Samples

In the Morrell's camp area, outcrops seen included areas of diorite as well as greenstones and altered volcanics belonging to the Franklin group. Outcrops of diorite were common along steep slopes rising above the road, but exposures were much less common in more gently sloping areas above these cliffs. Samples were collected from each of the old workings encountered on the traverse, which was aimed at locating the historical Silver Queen showing. The first sample (CR20528-1) was collected from the dump of a shaft encountered at the south end of a small north trending ridge. The shaft was approximately 4 meters deep and dump rock contained significant amounts of mineralized vein material as well as altered volcanics. Mineralization consisted of quartz with sulphides along fractures and contacts. Sulphides were primarily pyrite, with minor

galena and some malachite staining and possible chalcopyrite. At the Silver Queen showing the vein was sampled in a small pit about 10 meters west of the main shaft (CR20528-2). At this point the quartz vein was about 0.3 meters wide, and the sample included wall rock on either side. The quartz showed little sulphide but altered wall rock contained pyrite. Two samples (CR20528-3 and -3A) were collected from the Silver Queen dump. The first was typical mineralized vein material containing quartz with semi-massive pyrite and lesser chalcopyrite. The second was fine limonitic material that made up a large part of the dump, presumably formed from sheared and friable wall rock. The final sample (CR20528-4) was float collected in front of a very shallow adit or open cut in a hillside. While some of the rock was silicified with minor quartz veinlets and disseminated pyrite, no clear mineralized vein was present.

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

Sample #	Date	Description	Width (m)	Au g/t	Ag g/t	Cu %	Pb %	Zn %	
<b>Morell Camp Area - Rock</b>									
CR20528-1	28/05/2012	Qtz and alt volc with sulph in shaft dump	1.0	0.066	66.8	0.163	0.13	0.01	
CR20528-2	28/05/2012	Altered volc, incl 0.3 m qtz vein		0.014	3.48	0.048	0.00	0.00	
CR20528-3	28/05/2012	Silver Queen shaft dump - vein qtz w sulph		0.065	43.8	0.525	0.00	0.01	
CR20528-3A	28/05/2012	SQ dump - Limonitic volc and fines		0.019	6.58	0.027	0.00	0.00	
CR20528-4	28/05/2012	Silicified volc float in small pit		0.005	0.38	0.003	0.00	0.00	
<b>Dane Area - Rock</b>									
CR20929-1	29/09/2012	Qtz vein float buried in soil	12	0.001	0.20	0.005	0.00	0.01	
CR20929-2	29/09/2012	Chips across outcrop of silicified volc		0.004	0.20	0.004	0.00	0.02	
CR20930-1	30/09/2012	Altered granodiorite w qtz veinlets		1.0	0.005	0.40	0.001	0.00	0.00
CR20930-2	30/09/2012	Chips from large silic volc outcrop		1.0	0.005	0.30	0.004	0.00	0.00
CR20930-3	30/09/2012	Subcrop shear in volc w qtz-cc + py		0.5	0.004	0.30	0.007	0.00	0.01
CR20930-4	30/09/2012	Chip sample from gossanous outcrop		5.0	0.003	0.20	0.005	0.00	0.00
CR20930-5	30/09/2012	Silic. and lim. shear in pit w mal staining		1.3	0.260	12.3	0.248	0.00	0.00
CR20930-6	30/09/2012	Chips from back and face of 5 m adit	0.5	0.013	2.70	0.123	0.00	0.01	
CR20930-7	30/09/2012	Dane shaft dump vein sample w cpy, py		4.663	62.0	1.989	0.00	0.02	

In the Dane area outcrops included both altered granodiorite and Franklin group rocks. Sheared, silicified and otherwise altered zones are fairly common in this area, along with occasional quartz veins, but most lack significant sulphide mineralization aside from pyrite and pyrrhotite. Aside from locating old workings, the main objective of this visit was soil sampling. At one sample location coarse quartz vein material was found buried at a shallow depth (CR20929-1). The quartz contained minor pyrite and showed a brecciated contact. A few areas of heavier shearing or alteration were sampled (CR20929-2, CR20930-1, -2, -3) despite the lack of strong visible mineralization. Closer to the Dane showing a prominent gossanous outcrop was encountered. Rock appears to be highly altered volcanics with considerable silicification, some with a brecciated appearance. The rock is pyritic and highly oxidized. A sample was collected consisting of multiple chips from fractured and broken float and subcrop covering the outcrop (CR20930-4).

A short distance to the north of this outcrop is the main workings of the Dane showing. A shallow pit to the east of the main shaft does not show a prominent quartz vein, but contains a sheared and silicified zone trending east-west. The wall rock adjacent to the mineralized zone is highly limonitic and alteration extends for some distance into the wall rock. Minor malachite staining was also evident. A sample across 1.3 meters included some wall rock (CR20930-5), but the pit also exposes at least another meter of silicified volcanics in the hanging wall to the south. About 20

meters to the west is a deeper water-filled shaft that appears to be the main exposure. The dump is not large, indicating a fairly shallow shaft, but it contains highly mineralized material. Ore material includes semi-massive pyrite with chalcopyrite and quartz. Some quartz also contains malachite and azurite. A fairly representative sample of the small dump was collected (CR20930-7). Down slope and about 20 meters further west a 5 meter adit has been driven toward the shaft with a bearing of approximately 070. Some malachite stain is evident in the back but a distinct ore zone is not visible. Chips from the back and face were collected (CR0930-6). In the adit the rock is very hard and difficult to chip. The shearing seen in the pit to the east is not apparent in the adit.

### Soil Samples

An initial series of 17 soil samples was collected in the area to the south of the Dane showing. These were aimed at identifying possible source mineralization responsible for a conductivity anomaly in this area. Sampling consisted roughly of two lines, one a closely spaced north-south line in a low forested area close to where the main anomaly was mapped, and the second a more widely spaced north-westerly trending line following the contour of the hillside to the southeast.

### **Interpretation of Results**

In the Morrell's camp area two historic workings separated by about 1.5 km showed very similar mineralization. Based on the apparent size and grade of the veins the sections developed are presently sub-economic, but both show significant silver values with minor base metal, principally as copper. These veins show a similar orientation and mineralization to other occurrences to the south of the main Franklin camp area. These east-west shears and/or veins may be related to the north-south Granby fault, which lies a relatively short distance to the east in this area. These zones have seen relatively little systematic exploration, and little is known about their overall extent, grade potential or frequency.

In the Dane area initial rock sampling gave mixed results. Several zones of alteration were sampled, but despite the alteration, and in some cases significant pyrite mineralization, all were lacking in economic values. At the same time, sampling of historic workings at the Dane showing showed promising values. In particular, the value of 4.66 g/t gold in the dump sample was higher than values seen in past work, and the pit sample (CR20930-5) also showed significant values over a relatively wide sample interval despite the lack of strong visible mineralization.

Soil sampling did not identify any strong precious metals anomalies and base metal values were also generally low. There were a few anomalies, however, including a lead-zinc high on the north-south line and weakly anomalous values for multiple metals in two samples to the southeast. This sampling program was very preliminary and further sampling will be necessary to determine what if any significance can be placed on the limited anomalous values seen to date.

### **References**

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THOMLINSON, W., 1920: Mineral Investigations - Platinum, Munitions Resources Commission, Canada, Final Report.



## **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 29<sup>th</sup> day of March 2013.

Doug Warkentin, PEng.  
Metallurgical Engineer

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

Prep, Travel and Site Labour (38 hours @ \$45/hr)	\$1,710.00
Transportation (\$358.94 truck rental, plus \$140 fuel)	\$498.94
Accommodation (5 days @ \$85.28/day)	\$426.42
Food and Supplies (5 days)	\$101.53

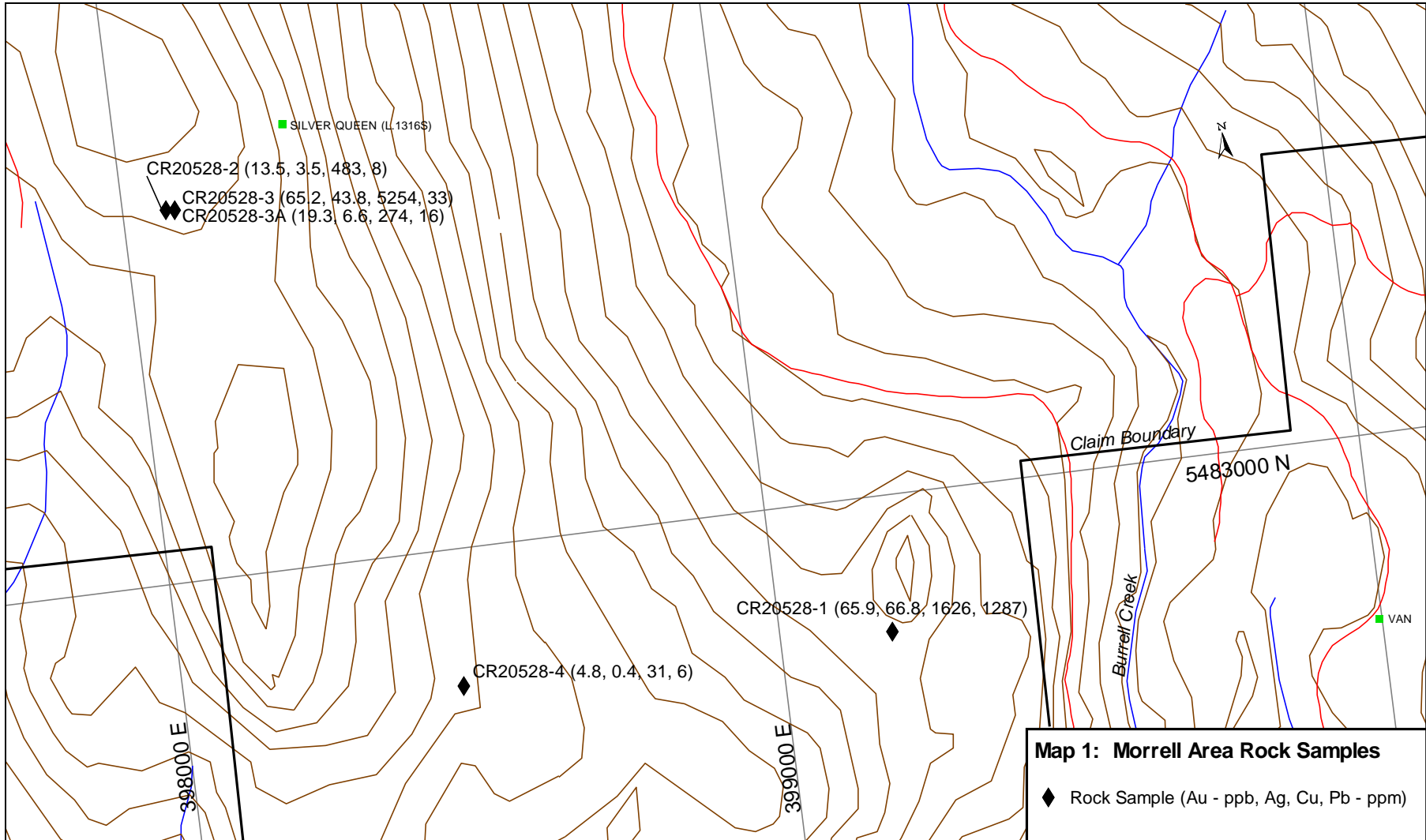
**Sample Analysis**

Sample Preparation (17 samples @ \$7.50/sample) (14 samples @ \$8.61/sample)	\$247.99
Sample Assaying (31 samples @ \$20.77/sample)	\$644.00

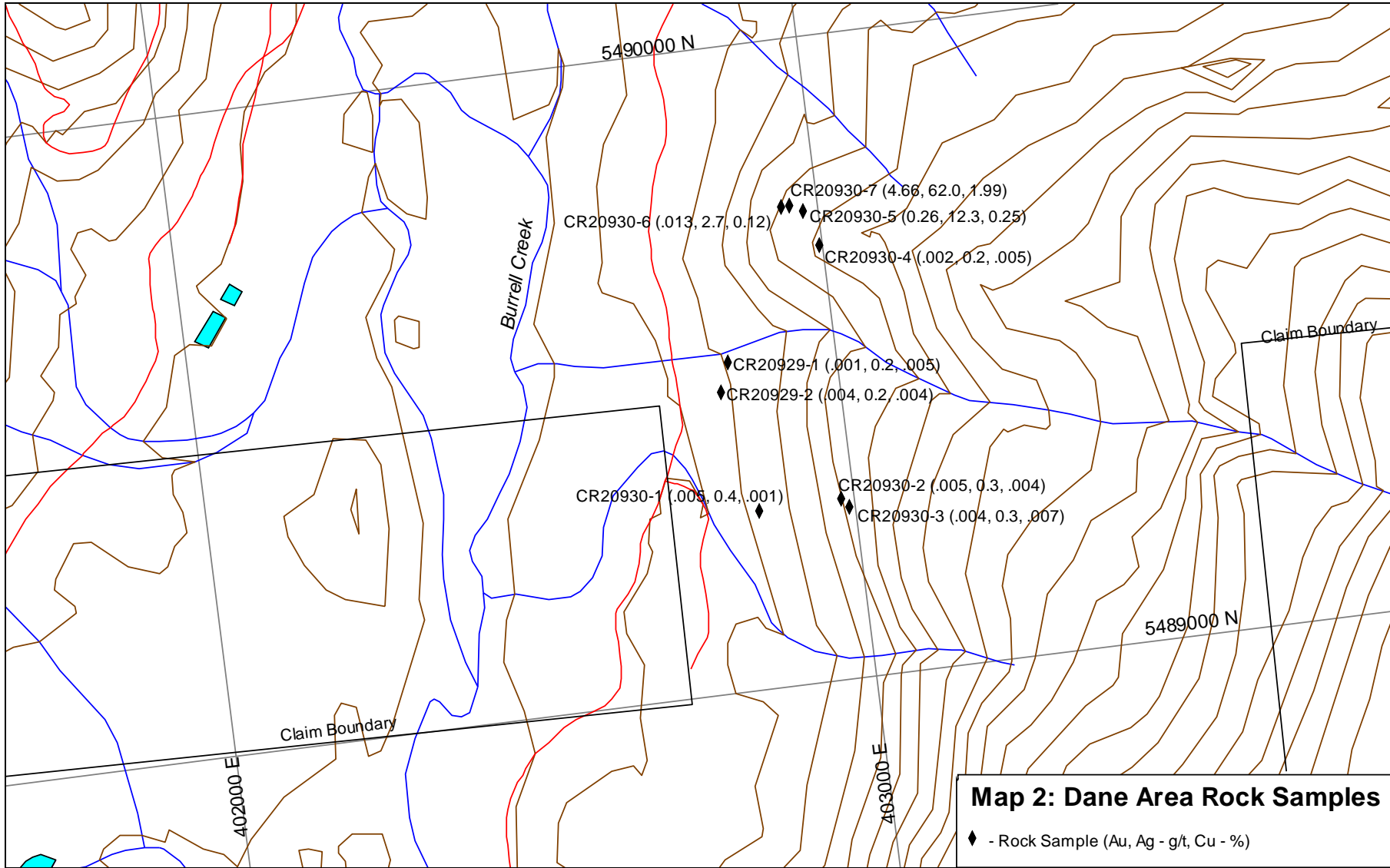
<b>Report Preparation</b>	<b>\$1080.00</b>
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<b>Total Cost</b>	<b>\$4,708.88</b>
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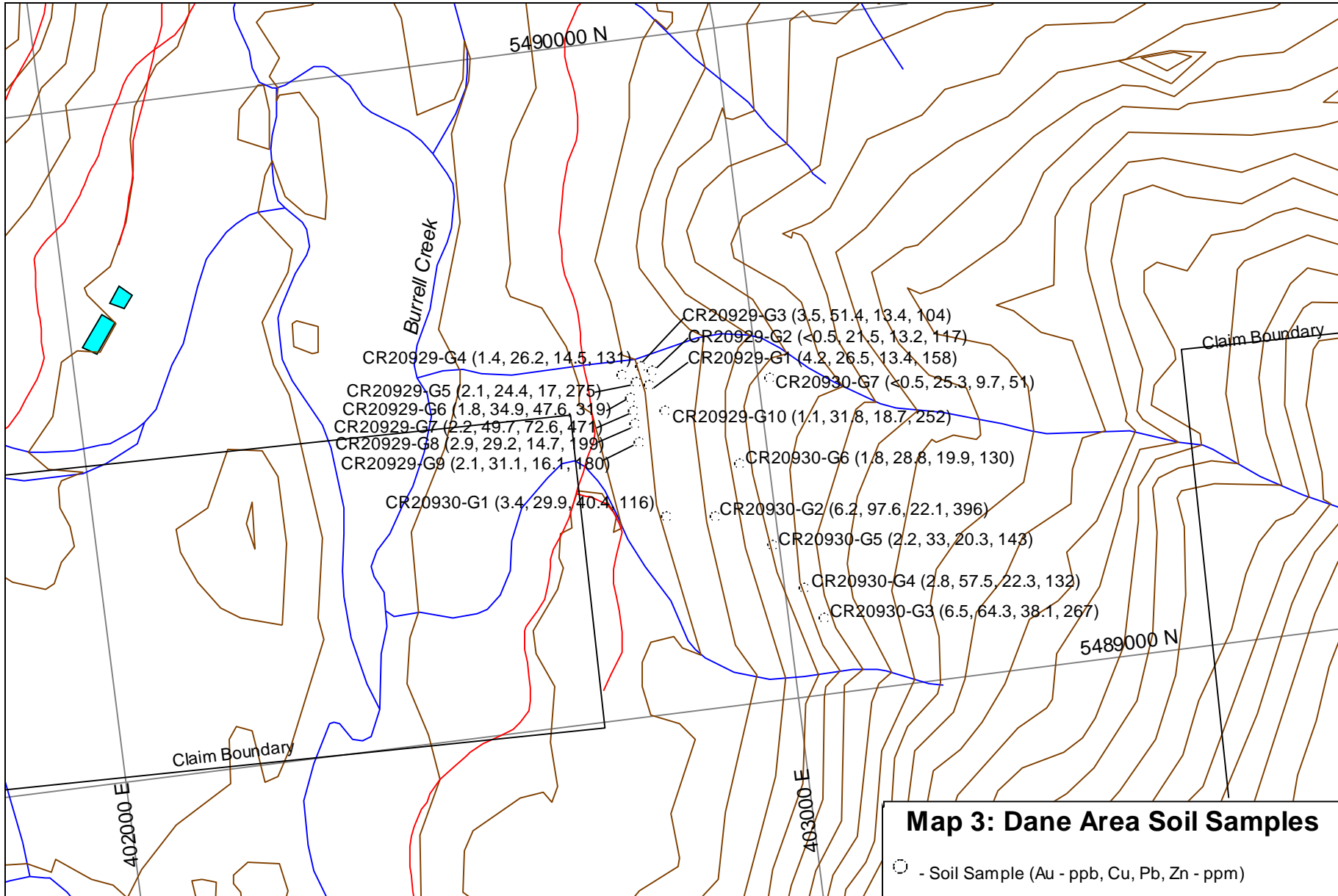
## **Appendix 1 – Sample Location Maps**



Scale 1:10,000



Scale 1:9000



Scale 1:8000

## **Appendix 2 – Assay Reports**



Acme Analytical Laboratories (Vancouver) Ltd.  
1020 Cordova St. East Vancouver BC V6A 4A3 Canada

www.acmelab.com

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

Submitted By: Doug Warkentin  
Receiving Lab: Canada-Vancouver  
Received: July 24, 2012  
Report Date: August 21, 2012  
Page: 1 of 2

**CERTIFICATE OF ANALYSIS**

**VAN12003437.1**

**CLIENT JOB INFORMATION**

Project: Clubine/Franklin/Morgan  
Shipment ID:  
P.O. Number  
Number of Samples: 19

**SAMPLE DISPOSAL**

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

**SAMPLE PREPARATION AND ANALYTICAL PROCEDURES**

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	18	Crush, split and pulverize 250 g rock to 200 mesh			VAN
1DX2	11	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN
1F01-1F08	2	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	0.5	Completed	VAN
1F05	5	1:1:1 Aqua Regia digestion Ultratrace 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.





Acme Analytical Laboratories (Vancouver) Ltd.  
 1020 Cordova St. East Vancouver BC V6A 4A3 Canada  
 Phone (604) 253-3158 Fax (604) 253-1716

www.acmelab.com

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

Project: Clubine/Franklin/Morgan  
 Report Date: August 21, 2012

Page: 2 of 2

Part: 4 of 7

CERTIFICATE OF ANALYSIS

VAN12003437.1

Method	Analyte	1F Ba	1F Ti	1F B	1F Al	1F Na	1F K	1F W	1F Sc	1F Ti	1F S	1F Hg	1F Se	1F Te	1F Ga	1F Pd	1F Pt	1F15 Mo	1F15 Cu	1F15 Pb	1F15 Zn
	Unit	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm
	MDL	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	0.01	0.01	0.01	0.1
G1	Prep Blank	221.5	0.132	<20	1.20	0.155	0.58	<0.1	2.7	0.32	<0.02	<5	<0.1	<0.02	5.4	<10	<2	0.32	3.88	4.33	53.0
G1	Prep Blank	214.7	0.128	<20	1.15	0.138	0.56	<0.1	2.5	0.32	<0.02	<5	<0.1	<0.02	5.3	<10	<2	0.10	3.05	6.03	49.0
CR20529-1	Rock	414.7	0.158	<20	2.44	0.054	1.28	<0.1	11.5	0.48	0.14	6	0.6	0.08	7.3	<10	<2	N.A.	N.A.	N.A.	N.A.
CR20529-1A	Rock	48.8	<0.001	<20	0.84	0.102	0.11	<0.1	0.8	0.08	<0.02	13	<0.1	<0.02	3.0	<10	<2	N.A.	N.A.	N.A.	N.A.
CR20526-1	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20526-1A	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20526-2	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20526-3	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20526-4	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20526-5	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20527-1	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20527-2	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20527-3	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20527-4	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20527-5	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20528-1	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	36.06	1626	1287	120.8
CR20528-2	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	3.54	482.9	7.96	48.9
CR20528-3	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	6.96	5254	32.70	55.0
CR20528-3A	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	10.59	274.3	16.09	22.5
CR20528-4	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	3.76	30.60	5.98	15.8

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.



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

Project: Clubine/Franklin/Morgan  
 Report Date: August 21, 2012

Page: 2 of 2

Part: 5 of 7

CERTIFICATE OF ANALYSIS

VAN12003437.1

Method	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	
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	
G1	Prep Blank	34	5.0	5.2	582	2.01	0.4	1.6	2.1	5.5	66.0	0.04	0.10	0.10	36	0.70	0.076	10.4	14.7	0.70	236.5
G1	Prep Blank	78	4.3	4.9	593	1.94	0.4	1.6	1.0	5.7	63.9	0.01	0.14	0.04	37	0.69	0.077	10.7	13.0	0.69	232.5
CR20529-1	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20529-1A	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20526-1	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20526-1A	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20526-2	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20526-3	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20526-4	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20526-5	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20527-1	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20527-2	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20527-3	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20527-4	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20527-5	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20528-1	Rock	66764	7.7	16.8	288	6.56	5.7	1.3	65.9	2.6	32.5	6.70	0.17	176.6	47	0.32	0.034	1.9	17.9	0.58	23.6
CR20528-2	Rock	3483	9.9	32.1	365	3.40	2.0	0.6	13.5	1.8	8.0	0.15	0.10	0.99	37	0.17	0.038	7.7	11.8	0.68	176.3
CR20528-3	Rock	43846	5.0	44.9	82	6.83	5.3	0.2	65.2	0.1	8.6	2.50	0.32	84.86	10	0.25	0.002	<0.5	17.7	0.03	18.5
CR20528-3A	Rock	6578	2.8	6.4	112	3.88	3.3	0.2	19.3	1.4	6.2	0.18	0.20	36.50	22	0.01	0.032	5.2	11.3	0.22	180.4
CR20528-4	Rock	376	1.5	5.2	170	2.18	3.2	0.1	4.8	1.7	8.3	0.01	0.35	1.21	16	0.26	0.087	5.3	7.1	0.26	89.5

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

Project: Clubine/Franklin/Morgan  
 Report Date: August 21, 2012

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Part: 6 of 7

CERTIFICATE OF ANALYSIS

VAN12003437.1

Method	Analyte	Unit	MDL	1F15 Ti	1F15 B	1F15 Al	1F15 Na	1F15 K	1F15 W	1F15 Sc	1F15 Ti	1F15 S	1F15 Hg	1F15 Se	1F15 Te	1F15 Ga	1F15 Cs	1F15 Ge	1F15 Hf	1F15 Nb	1F15 Rb	1F15 Sn	1F15 Ta
		%	0.001	0.143	1	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
G1	Prep Blank			0.143	<1	0.98	0.081	0.49	0.1	2.5	0.33	<0.02	6	0.2	0.05	5.0	2.43	0.1	0.12	0.63	38.2	0.6	<0.05
G1	Prep Blank			0.146	<1	0.99	0.084	0.50	<0.1	2.4	0.29	<0.02	6	<0.1	<0.02	5.0	2.47	0.1	0.10	0.55	38.7	0.5	<0.05
CR20529-1	Rock			N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20529-1A	Rock			N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20526-1	Rock			N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20526-1A	Rock			N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20526-2	Rock			N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20526-3	Rock			N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20526-4	Rock			N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20526-5	Rock			N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20527-1	Rock			N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20527-2	Rock			N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20527-3	Rock			N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20527-4	Rock			N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20527-5	Rock			N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CR20528-1	Rock			0.085	<1	0.98	0.025	0.11	2.6	2.9	0.06	0.99	<5	1.6	13.53	4.7	0.77	<0.1	<0.02	0.14	6.5	0.2	<0.05
CR20528-2	Rock			0.008	<1	1.25	0.019	0.28	0.2	2.9	0.09	0.05	<5	0.2	0.20	4.2	4.18	<0.1	0.02	0.03	12.5	0.1	<0.05
CR20528-3	Rock			0.001	<1	0.09	0.002	0.03	4.1	0.3	<0.02	4.79	24	5.5	17.63	0.6	0.36	<0.1	<0.02	0.04	1.9	0.2	<0.05
CR20528-3A	Rock			0.005	<1	0.51	0.006	0.23	1.1	1.5	0.09	0.32	399	1.5	15.31	2.4	3.64	<0.1	<0.02	0.05	11.4	0.2	<0.05
CR20528-4	Rock			0.042	<1	0.64	0.067	0.15	<0.1	2.4	0.09	0.72	20	3.6	0.51	2.6	1.26	<0.1	0.02	0.18	5.5	0.6	<0.05

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Project: Clubine/Franklin/Morgan  
 Report Date: August 21, 2012

Page: 2 of 2

Part: 7 of 7

CERTIFICATE OF ANALYSIS

VAN12003437.1

Method	Analyte	1F15 Zr	1F15 Y	1F15 Ce	1F15 In	1F15 Re	1F15 Be	1F15 Li	1F15 Pd	1F15 Pt	7AR Zn
	Unit	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppb	%
	MDL	0.1	0.01	0.1	0.02	1	0.1	0.1	10	2	0.01
G1	Prep Blank	1.5	5.44	20.1	0.04	1	0.3	33.4	<10	<2	
G1	Prep Blank	1.5	5.58	20.3	<0.02	<1	0.3	32.1	<10	<2	
CR20529-1	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
CR20529-1A	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
CR20526-1	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
CR20526-1A	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
CR20526-2	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
CR20526-3	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
CR20526-4	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
CR20526-5	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	1.73
CR20527-1	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
CR20527-2	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
CR20527-3	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
CR20527-4	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
CR20527-5	Rock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
CR20528-1	Rock	0.4	1.86	3.3	0.10	<1	0.2	11.9	<10	<2	
CR20528-2	Rock	0.3	6.10	15.0	0.07	<1	0.4	13.8	<10	<2	
CR20528-3	Rock	<0.1	0.59	0.9	0.65	<1	<0.1	0.6	<10	<2	
CR20528-3A	Rock	0.2	1.25	9.9	0.16	<1	0.1	3.5	<10	<2	
CR20528-4	Rock	0.8	9.21	11.3	0.02	45	<0.1	7.3	<10	<2	

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**Client:** **Crucible Resources Ltd.**  
745 East 30th Ave  
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Submitted By: Doug Warkentin  
Receiving Lab: Canada-Vancouver  
Received: October 31, 2012  
Report Date: November 06, 2012  
Page: 1 of 2

**CERTIFICATE OF ANALYSIS**

**VAN12005194.1**

**CLIENT JOB INFORMATION**

Project: Clubine and Franklin  
Shipment ID:  
P.O. Number  
Number of Samples: 23

**SAMPLE PREPARATION AND ANALYTICAL PROCEDURES**

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
No Prep	23	Sorting of samples on arrival and labeling			VAN
1DX1	23	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed	VAN

**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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 Vancouver BC V5V 2V8 Canada

Project: Clubine and Franklin  
 Report Date: November 06, 2012

Page: 2 of 2

Part: 1 of 1

CERTIFICATE OF ANALYSIS

VAN12005194.1

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	
CR20929-G1	Soil Pulp	4.3	26.5	13.4	158	0.3	26.4	9.4	508	3.30	35.8	4.2	2.0	25	1.7	0.8	0.3	50	0.19	0.125	4
CR20929-G2	Soil Pulp	1.1	21.5	13.2	117	0.2	11.0	6.6	498	2.32	9.2	<0.5	5.4	24	1.0	0.1	0.2	41	0.24	0.165	16
CR20929-G3	Soil Pulp	1.2	51.4	13.4	104	0.3	17.5	8.8	299	2.68	9.9	3.5	8.9	35	0.5	0.1	0.2	55	0.34	0.100	37
CR20929-G4	Soil Pulp	2.2	26.2	14.5	131	0.2	13.6	7.4	529	2.32	13.3	1.4	5.5	12	1.1	0.2	0.3	42	0.11	0.127	18
CR20929-G5	Soil Pulp	3.9	24.4	17.0	275	0.4	29.9	7.8	314	2.57	21.7	2.1	5.2	17	1.8	0.3	0.2	45	0.12	0.088	10
CR20929-G6	Soil Pulp	3.4	34.9	47.6	319	0.4	25.1	13.8	925	3.23	151.4	1.8	2.5	17	1.7	0.8	0.4	50	0.16	0.181	7
CR20929-G7	Soil Pulp	6.0	49.7	72.6	471	0.6	26.9	14.0	1043	3.29	52.9	2.2	4.6	23	3.8	1.0	0.4	52	0.21	0.097	15
CR20929-G8	Soil Pulp	3.0	29.2	14.7	199	0.3	20.0	8.9	603	2.42	14.7	2.9	4.5	20	1.2	0.4	0.2	39	0.19	0.160	13
CR20929-G9	Soil Pulp	2.7	31.1	16.1	180	0.3	21.5	8.7	334	2.82	16.8	2.1	6.0	33	1.2	0.3	0.2	45	0.24	0.145	18
CR20929-G10	Soil Pulp	1.9	31.8	18.7	252	0.3	23.0	11.5	897	2.87	16.8	1.1	4.4	25	1.5	0.3	0.3	56	0.25	0.120	13
CR20930-G1	Soil Pulp	1.6	29.9	40.4	116	1.1	10.0	6.8	823	2.15	7.6	3.4	5.3	28	0.4	0.2	1.0	34	0.27	0.118	27
CR20930-G2	Soil Pulp	14.3	97.6	22.1	396	0.5	55.0	23.5	855	5.80	234.3	6.2	3.3	26	2.6	5.4	0.3	71	0.26	0.065	21
CR20930-G3	Soil Pulp	3.2	64.3	38.1	267	0.8	36.8	18.8	1169	3.47	47.1	6.5	3.9	28	1.5	1.1	0.2	56	0.37	0.087	24
CR20930-G4	Soil Pulp	4.6	57.5	22.3	132	0.5	20.3	15.4	964	3.31	23.5	2.8	3.4	29	0.6	0.5	0.3	54	0.26	0.103	17
CR20930-G5	Soil Pulp	2.9	33.0	20.3	143	0.2	32.8	16.2	894	3.31	33.2	2.2	3.7	45	0.3	0.4	0.3	54	0.56	0.122	16
CR20930-G6	Soil Pulp	1.4	28.8	19.9	130	0.4	17.2	8.4	563	2.68	34.2	1.8	4.1	20	0.3	0.3	0.2	48	0.20	0.135	10
CR20930-G7	Soil Pulp	0.9	25.3	9.7	51	0.2	11.8	6.6	368	2.01	7.0	<0.5	6.4	16	0.2	0.2	0.2	38	0.13	0.072	19
CR21001-G1	Soil Pulp	1.4	44.1	40.0	195	0.2	64.1	20.7	1354	3.40	11.7	1.1	3.0	103	1.0	0.6	0.3	64	0.46	0.240	19
CR21001-G2	Soil Pulp	1.6	53.6	45.5	230	0.3	38.0	17.5	1999	3.38	14.5	2.2	3.2	45	2.2	0.7	0.4	64	0.22	0.341	14
CR21001-G3	Soil Pulp	1.4	46.2	26.4	158	0.3	27.6	16.1	1910	3.33	10.1	12.5	2.3	36	1.0	0.7	0.4	67	0.33	0.195	11
CR21001-G4	Soil Pulp	3.3	97.9	45.8	478	0.4	43.5	26.7	842	4.31	24.3	10.3	2.1	43	3.9	1.0	0.4	88	0.36	0.161	12
CR21001-G5	Soil Pulp	3.3	64.3	87.3	985	0.8	67.6	27.2	1480	4.42	17.4	1.9	1.7	54	8.9	1.0	0.5	79	0.45	0.125	10
CR21002-S1	Silt Pulp	0.9	38.5	1.7	85	<0.1	67.9	11.9	295	1.95	2.8	1.9	0.4	5	0.2	0.1	<0.1	28	0.20	0.026	2

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Project: Clubine and Franklin  
 Report Date: November 06, 2012

Page: 2 of 2

Part: 2 of 1

CERTIFICATE OF ANALYSIS

VAN12005194.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
Analyte	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	0.01	0.05	1	0.5	0.2	
CR20929-G1	Soil Pulp	12	0.33	122	0.145	<20	3.60	0.014	0.04	0.2	0.05	2.5	0.1	<0.05	9	0.5	<0.2
CR20929-G2	Soil Pulp	20	0.20	130	0.121	<20	3.00	0.014	0.05	0.2	0.04	2.5	<0.1	<0.05	7	<0.5	<0.2
CR20929-G3	Soil Pulp	31	0.40	125	0.092	<20	1.93	0.010	0.05	0.3	0.02	3.5	0.1	<0.05	5	<0.5	<0.2
CR20929-G4	Soil Pulp	15	0.21	100	0.132	<20	3.73	0.013	0.04	0.2	0.05	3.6	0.1	<0.05	9	<0.5	<0.2
CR20929-G5	Soil Pulp	18	0.22	65	0.103	<20	2.59	0.012	0.04	0.2	0.04	2.6	0.1	<0.05	6	0.6	<0.2
CR20929-G6	Soil Pulp	15	0.50	211	0.118	<20	3.43	0.011	0.05	0.3	0.06	3.1	0.2	<0.05	9	0.7	<0.2
CR20929-G7	Soil Pulp	18	0.37	133	0.126	<20	3.64	0.013	0.05	0.2	0.05	4.8	0.2	<0.05	8	0.9	<0.2
CR20929-G8	Soil Pulp	17	0.26	144	0.128	<20	3.33	0.014	0.05	0.2	0.04	2.8	0.1	<0.05	8	0.5	<0.2
CR20929-G9	Soil Pulp	20	0.25	177	0.096	<20	2.90	0.013	0.05	0.2	0.08	3.8	0.1	<0.05	7	<0.5	<0.2
CR20929-G10	Soil Pulp	27	0.37	127	0.115	<20	2.15	0.010	0.06	0.3	0.04	2.6	0.1	<0.05	7	<0.5	<0.2
CR20930-G1	Soil Pulp	13	0.25	214	0.088	<20	3.46	0.013	0.09	0.2	0.05	3.4	0.2	<0.05	8	<0.5	<0.2
CR20930-G2	Soil Pulp	22	1.11	132	0.068	<20	2.75	0.013	0.08	0.2	0.03	6.8	0.3	<0.05	7	1.1	<0.2
CR20930-G3	Soil Pulp	27	0.60	106	0.080	<20	2.91	0.011	0.06	0.2	0.04	6.9	0.2	<0.05	7	0.7	<0.2
CR20930-G4	Soil Pulp	16	0.49	99	0.115	<20	3.98	0.011	0.06	0.2	0.07	5.8	0.2	<0.05	10	1.5	<0.2
CR20930-G5	Soil Pulp	20	0.34	148	0.085	<20	2.24	0.022	0.08	0.3	0.02	4.4	0.1	<0.05	7	<0.5	<0.2
CR20930-G6	Soil Pulp	21	0.27	130	0.118	<20	2.94	0.012	0.06	0.3	0.06	2.4	<0.1	<0.05	8	<0.5	<0.2
CR20930-G7	Soil Pulp	15	0.20	108	0.072	<20	2.08	0.011	0.04	0.3	0.03	3.0	<0.1	<0.05	6	0.6	<0.2
CR21001-G1	Soil Pulp	96	1.45	453	0.257	<20	3.01	0.008	0.22	0.4	0.03	2.7	0.3	<0.05	9	<0.5	<0.2
CR21001-G2	Soil Pulp	53	0.85	475	0.168	<20	3.06	0.009	0.16	0.5	0.02	3.4	0.2	<0.05	9	<0.5	<0.2
CR21001-G3	Soil Pulp	33	0.58	302	0.152	<20	3.36	0.008	0.12	0.3	0.06	3.6	0.2	<0.05	10	<0.5	<0.2
CR21001-G4	Soil Pulp	26	0.57	181	0.102	<20	3.01	0.009	0.13	0.9	0.07	6.1	0.3	<0.05	7	0.9	<0.2
CR21001-G5	Soil Pulp	28	0.46	223	0.095	<20	3.01	0.009	0.10	0.8	0.04	3.8	0.3	<0.05	8	0.9	<0.2
CR21002-S1	Silt Pulp	38	0.86	90	0.052	<20	0.75	0.004	0.11	<0.1	0.01	2.6	<0.1	0.05	3	<0.5	<0.2

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Acme Analytical Laboratories (Vancouver) Ltd.

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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: October 31, 2012
Report Date: November 14, 2012
Page: 1 of 2

CERTIFICATE OF ANALYSIS

VAN12005192.1

CLIENT JOB INFORMATION

Project: Clubine and Franklin
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

Table with 6 columns: Method Code, Number of Samples, Code Description, Test Wgt (g), Report Status, Lab. Rows include R200-250, 1DX1, G601, and 7AR.

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: Clubine and Franklin  
 Report Date: November 14, 2012

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Part: 1 of 1

CERTIFICATE OF ANALYSIS

VAN12005192.1

Method	WGHT	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
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	
G1	Prep Blank	<0.01	0.1	1.5	2.8	52	<0.1	4.0	4.6	628	2.11	<0.5	2.3	5.1	70	<0.1	<0.1	<0.1	38	0.51	0.088
G1	Prep Blank	<0.01	<0.1	1.8	2.9	50	<0.1	4.4	4.6	618	2.13	<0.5	1.8	4.9	64	<0.1	<0.1	<0.1	38	0.48	0.083
CR20929-1	Rock	0.72	12.6	53.2	5.0	75	0.2	25.2	15.3	492	3.94	26.4	1.2	1.3	83	0.3	0.5	<0.1	109	1.85	0.097
CR20929-2	Rock	1.70	8.2	35.5	6.6	169	0.2	15.9	12.4	1570	3.35	35.7	3.7	1.9	48	1.0	0.8	0.2	119	3.02	0.068
CR20930-1	Rock	0.32	0.6	5.7	34.4	35	0.4	0.8	1.7	498	0.45	0.5	4.9	16.4	13	0.3	<0.1	0.4	<2	0.31	0.005
CR20930-2	Rock	0.41	8.2	44.1	5.1	38	0.3	22.0	10.8	348	2.25	22.9	4.6	0.7	159	0.2	0.9	<0.1	50	3.83	0.118
CR20930-3	Rock	1.22	2.1	65.8	11.2	54	0.3	16.4	14.0	361	2.72	8.4	3.6	0.5	58	0.2	0.2	0.1	49	3.79	0.102
CR20930-4	Rock	0.49	3.7	47.6	2.7	36	0.2	9.9	11.4	631	5.57	1.7	2.5	0.6	32	<0.1	0.3	0.2	111	0.50	0.085
CR20930-5	Rock	1.38	71.3	2476	5.7	48	12.3	9.9	12.3	503	4.75	8.6	259.6	2.7	6	0.3	0.4	0.2	83	0.10	0.053
CR20930-6	Rock	1.73	4.3	1225	1.8	55	2.7	11.7	16.6	864	3.89	16.6	12.6	0.8	114	0.4	0.3	<0.1	124	3.70	0.088
CR20930-7	Rock	0.55	4.8	>10000	4.9	174	62.0	13.8	6.7	794	5.96	9.6	5090	3.4	50	2.6	0.3	0.1	38	2.30	0.045
CR21001-1	Rock	1.50	5.4	57.8	6.0	70	0.1	7.7	39.1	1064	6.77	7.0	26.7	2.7	95	0.2	1.5	<0.1	87	0.91	0.218
CR21001-2	Rock	0.54	0.6	35.3	19.0	36	0.3	3.4	1.8	361	0.70	8.7	17.9	28.0	4	0.7	0.2	0.1	<2	0.03	0.004
CR21002-1	Rock	0.38	0.2	18.1	0.4	13	<0.1	39.6	7.2	301	1.32	1.6	10.6	<0.1	2	<0.1	<0.1	<0.1	32	0.15	0.017
CR21002-2	Rock	1.19	1.2	21.1	0.4	49	<0.1	1.4	1.3	281	2.02	4.2	11.4	0.6	2	<0.1	0.1	<0.1	5	0.03	0.010

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Project: Clubine and Franklin  
 Report Date: November 14, 2012

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Part: 2 of 1

CERTIFICATE OF ANALYSIS

VAN12005192.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	G6	7AR
Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Au	Cu	
Unit	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	0.005	0.001	
G1	Prep Blank	10	9	0.63	258	0.133	<20	1.07	0.090	0.53	<0.1	<0.01	2.5	0.3	<0.05	6	<0.5	<0.2		
G1	Prep Blank	10	8	0.62	237	0.128	<20	1.06	0.100	0.51	<0.1	<0.01	2.5	0.3	<0.05	5	<0.5	<0.2		
CR20929-1	Rock	8	30	1.62	146	0.146	<20	1.82	0.128	0.07	0.3	<0.01	12.3	<0.1	0.99	7	0.7	<0.2		
CR20929-2	Rock	7	31	1.35	73	0.063	<20	1.61	0.045	0.09	0.3	<0.01	7.6	0.3	0.17	7	2.1	<0.2		
CR20930-1	Rock	7	1	0.02	68	<0.001	<20	0.16	0.020	0.17	<0.1	<0.01	0.2	0.1	<0.05	<1	<0.5	<0.2		
CR20930-2	Rock	3	27	0.47	23	0.086	<20	2.27	0.326	0.07	0.3	<0.01	3.0	<0.1	0.43	5	1.1	<0.2		
CR20930-3	Rock	2	23	0.41	4	0.130	<20	2.05	0.032	0.02	0.5	<0.01	4.2	<0.1	0.53	4	1.7	<0.2		
CR20930-4	Rock	3	39	1.16	22	0.180	<20	2.05	0.119	0.06	0.2	<0.01	6.7	<0.1	0.18	9	1.2	<0.2		
CR20930-5	Rock	3	28	1.22	15	0.012	<20	1.64	0.055	0.13	<0.1	<0.01	5.8	0.1	0.70	7	4.4	0.9		
CR20930-6	Rock	5	40	1.40	23	0.107	<20	1.81	0.089	0.10	0.4	0.06	9.4	0.1	1.11	8	0.9	<0.2		
CR20930-7	Rock	7	5	0.92	15	0.017	<20	1.27	0.034	0.12	0.2	0.01	2.1	0.1	2.26	5	10.7	1.0	4.663	1.989
CR21001-1	Rock	7	11	0.97	197	0.170	<20	1.68	0.122	0.51	0.4	<0.01	3.0	0.2	0.76	6	0.8	<0.2		
CR21001-2	Rock	12	2	0.03	18	0.006	<20	0.18	0.041	0.09	<0.1	<0.01	0.4	0.1	<0.05	<1	<0.5	<0.2		
CR21002-1	Rock	<1	115	0.74	20	0.024	<20	0.74	0.025	0.03	<0.1	<0.01	3.1	<0.1	<0.05	2	<0.5	<0.2		
CR21002-2	Rock	4	3	0.58	134	0.003	<20	0.69	0.062	0.02	<0.1	<0.01	1.9	<0.1	0.83	4	0.6	<0.2		

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