

Assessment Report

on the

FRANKLIN PROPERTY

Geology, Geochemistry, Trenching, Diamond Drilling

PART 1 - Text & Appendices

NTS 82E/9

Lat: 49° 33' N

Long: 118° 22' W

(at centre of property)

Greenwood Mining Division
British Columbia, Canada

Operator:
Tuxedo Resources Ltd.
817 - 938 Howe St.
Vancouver, B.C.
V6Z 1N9

By:
Linda Caron, M.Sc., P. Eng.
717 75th Ave, Box 2493
Grand Forks, B.C.
V0H 1H0

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1.0 SUMMARY

In 2001, Tuxedo Resources Ltd. acquired a very large land package covering the Franklin property. A thorough compilation of previous exploration data was completed during 2002, which concluded that the exploration should be directed at gold mineralization and not at platinum group elements. A number of high priority areas were identified that required further work. These areas included three large target areas, the Homestake-Banner, Union Mine and IXL, as well as a number of other smaller targets. Because of budget constraints, it was not possible to thoroughly test all the high priority areas during the 2003 field season. The focus of the 2003 program was to test the Homestake-Banner area, and bring this to a drill ready stage, while at the same time completing a preliminary assessment of the other high priority targets identified in the compilation report.

A grid was established in the Homestake area, and soil sampling, geological mapping and rock sampling was completed. Mapping was able to define a good working model for mineralization that explained the relationship between the numerous zones of mineralization. In general, gold values in rock samples were disappointingly low, and previously reported very high gold values from a number of the showings could not be repeated. While the historically reported gold values are believed to be legitimate, they no doubt represent very selective, picked samples. By this time, the dumps of old workings have become so picked over that it is difficult to find any of this high grade material.

Because of budget constraints, only a portion of the soil samples from the grid were submitted for analysis. One very high single station gold-in-soil value, plus several areas of weakly anomalous gold were identified. The very high single station value could not be reproduced, and was discounted as a lab error. Despite thorough prospecting and rock sampling the Homestake grid area, no new areas of alteration or mineralization were discovered.

An area of anomalous gold-in-soils identified by a previous operator on Mt. Franklin was prospected in detail. The area has good rock exposure with no evidence of alteration or mineralization. The lack of evidence for an source to the gold anomaly has led to the (preliminary) conclusion that the soil anomaly is spurious and perhaps caused by contamination from the sampler or the lab. The 2003 soil samples collected from the Mt. Franklin area were not analysed, because of budget constraints and before the "anomalous" area of gold-in-soils on Mt. Franklin is completely ruled out, these samples should be run to see if the gold values are reproducible. The possibility of Eocene epithermal gold mineralization is of such significance that it would be unwise to be overly hasty in dismissing this target. Eocene epithermal mineralization was discovered elsewhere on the property, but without significant gold values.

Despite the somewhat disappointing results to this point, a number of good trench targets existed, to better expose the zones of known mineralization and to better assess the distribution, continuity and overall gold grade of these zones. An excavator trenching program was completed. In general, the results were disappointing. With the exception of the Banner vein, all of the zones trenched were small, discontinuous, difficult to follow, and returned low overall gold grades.

The Banner vein was the exception. On surface, this is a strong looking system. Although gold grade was low at surface, given the size, extent and similarity in style to the Union vein, it was felt prudent to test for the possibility of a vertical zonation in the gold grade. Eight holes were drilled to test the Banner vein. Drilling showed that the vein pinches out rapidly at depth, with no significant increase in gold grade. The best results from drilling was 4.0 metres grading 2.35 g/t Au, 19.25 g/t Ag, 0.23 % Cu, 0.65% Pb and 3.16% Zn.

Thorough prospecting was carried out on the remainder of the property, to locate, sample and give a

preliminary assessment of all the high priority targets identified by the compilation program. Many of the targets were written off based this work, but two areas, the Union Mine and IXL, remain as high priority targets with good exploration potential. Anomalous gold in pyritic chlorite-epidote-magnetite altered mafic volcanics was identified in the vicinity of Newmont's 1969 trenches (one of which had returned 70 feet grading 0.78% Cu). Values to 4.3 g/t Au, 7.3 ppm Ag and 0.64% Cu were returned from in-situ rock samples from the IXL area, with results to 8.6 g/t Au, 14.2 ppm Ag and 1.6% Cu from a sample of float. When drilling failed to return any encouragement from the Banner vein, the balance of the drill budget was spent drilling one hole in the IXL area. This drill hole returned 18.4 meters grading 1.86 g/t Au. No analyses for copper or silver was done on the 2003 drill core from the IXL. Further exploration of the IXL zone is strongly recommended to explore for bulk tonnage gold-copper mineralization.

Further exploration at the Union Mine is also recommended, to attempt to locate the faulted western extension to the system and to explore for possible parallel mineralized zones. Apart from minor rock sampling for geochemical purposes, no work was done at the Union Mine during 2003.

2.0 INTRODUCTION

This report describes the results of the Tuxedo Resources Ltd.'s 2003 work program on the Franklin property. The general background information included in this report is taken in part from an earlier report on the property by Peatfield (2002).

2.1 *Location, Access, Infrastructure and Physiography*

The Franklin property is a very large property covering the historic Franklin Camp and is located about 60 kilometres north of Grand Forks, B.C., as shown in Figure 1. The property is situated in the northern part of the Boundary District on NTS 82E/9, and is centred at approximately 49° 33' north latitude and 118° 22' west longitude. Most services needed for exploration are available in Grand Forks. The closest full-service airports are located in Kelowna, Penticton or Castlegar.

Road access to the property is good. The paved Granby road is followed north from Grand Forks for 40 kilometres to the "28 mile" bridge. From this point, the Granby Forest Service road is followed for 1 kilometre before turning right (north) onto the Burrell Creek Forest Service road for an additional 25 kilometres to the eastern edge of the property. The Gloucester, Franklin and Union Mine Forest Services roads plus numerous other 2 and 4 wheel drive gravel roads provide road access to most parts of the claim group from this point, as shown on Figure 2.

The property is centred about Mt. Franklin. A second mountain, Mt. McKinley is located in the southern part of the property. Two major drainages, Burrell and Gloucester Creeks, cut the eastern part of the property, while a third, Franklin Creek, forms a major north-northwest trending valley in the western part of the claims. Much of the property is moderate to very steep, with elevations ranging from about 1430 metres at the summit of Mt. Franklin to about 820 metres in the Burrell Creek valley. The Union Mine area is situated on the lower east facing slope of Mt. Franklin, just west of the Gloucester-Burrell Creek junction. The Homestake-Deadwood-Banner area is located about 1.5 kilometres west of the Union Mine, on the upper, west facing slope of Mt. Franklin, while the IXL area is situated on the west slope of Mt. McKinley, southwest of Franklin Creek.

Much of the property is covered by mixed fir, larch and pine forest, with thick cedar forest common in creek valleys. Several areas have been logged at various times, with clearcuts in various stages of regrowth. The upper east facing slope of Mt. Franklin is a steep, rocky slope, essentially void of tree cover, but with very thick, buck brush. Old roads and other areas of disturbance are thickly regrown with alder. Outcrop is typically moderate throughout forested areas, although the upper part of Mt. Franklin has near continuous outcrop. The major creek valleys (Burrell, Gloucester, Franklin) have significant alluvium, with little to no rock exposure.

The climate is typical of the area, with moderately dry, hot summers (although mountain storms are common) and with cold winters and with significant snowfall. Snow accumulation is typically in the order of 2-3 meters, and the property is generally free of snow from late May to late November. Water is available for drilling from the major creeks on the property, and seasonally from intermittent creeks, such as Twin Creek in the Homestake area.

2.2 *Property and Ownership*

The Franklin property is a very large property, covering an area of approximately 3500 hectares and consisting of 67 two post mineral claims, 5 four post mineral claims (79 units), 2 reverted crown grants and 7 crown granted mineral claims. The property is located on map sheets 082E058, 082E059, 082E068 and 082E069, in the Greenwood Mining District. Tuxedo Resources Ltd. holds the claims comprising the

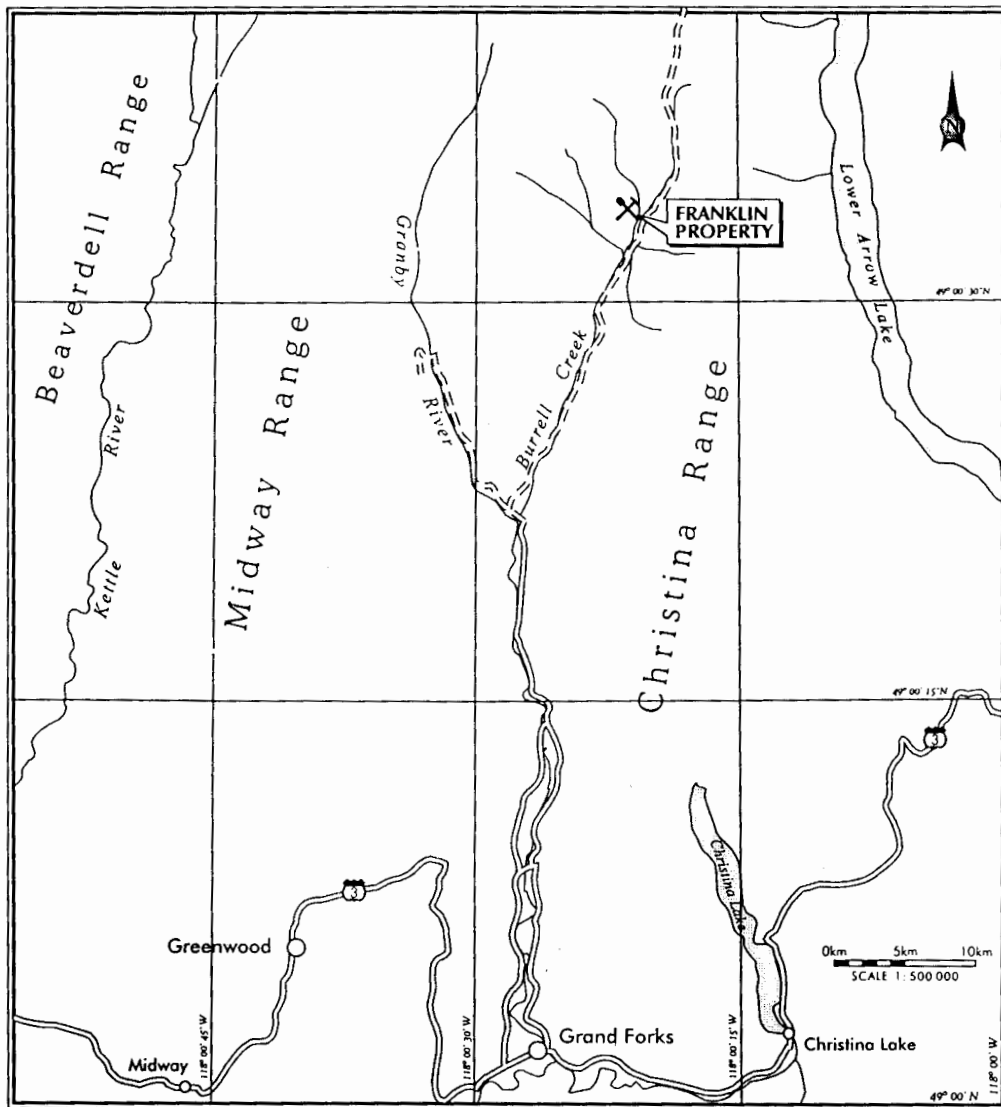


Figure 1: Location Map

Scale 1:500,000

from Peatfield (2002)

Franklin property under option, through seven separate option agreements.

The claims are shown in Figure 2 and summarised below in Table 1. Registered owners of the claims are included in Table 1; expiry dates listed are after filing this report.

Claim Name	Tenure #	Units	Owner	Expiry Date*
Par 99	370045	1	J. Carson	07-Nov-30
Dodge 99	370046	1	J. Carson	07-Nov-30
IXL #1-99	373230	1	J. Carson	07-Nov-30
IXL #2-99	373231	1	J. Carson	07-Nov-30
Seal 3	373423	1	W. Wilkinson	07-Nov-30
Cat #1	383039	1	J. Carson	07-Nov-30
Cat #2	383040	1	J. Carson	07-Nov-30
Cat #3	383041	1	J. Carson	07-Nov-30
Cat #4	383042	1	J. Carson	07-Nov-30
Buff 1	369123	1	W. Wilkinson	06-Nov-30
Buff 2	369124	1	W. Wilkinson	06-Nov-30
Buff 3	369125	1	W. Wilkinson	06-Nov-30
Buff 4	369126	1	W. Wilkinson	06-Nov-30
Wolf 1	369434	1	W. Wilkinson	06-Nov-30
Wolf 2	369435	1	W. Wilkinson	06-Nov-30
Wolf 3	369436	1	W. Wilkinson	06-Nov-30
Buff 5	369440	1	W. Wilkinson	06-Nov-30
Buff 6	369441	1	W. Wilkinson	06-Nov-30
Buff 7	369442	1	W. Wilkinson	06-Nov-30
Wolf 4	369437	1	W. Wilkinson	06-Nov-30
Wolf 5	369438	1	W. Wilkinson	06-Nov-30
Wolf 6	369439	1	W. Wilkinson	06-Nov-30
Doe 2	373066	20	N. Tribe	06-Nov-30
Buck #1	374675	12	J. Carson	08-Nov-30
Buck #2	374676	1	J. Carson	06-Nov-30
Buck #3	374677	1	J. Carson	06-Nov-30
Buck #4	374678	1	J. Carson	06-Nov-30

Table 1: Claim Information

* Note: dates listed are after filing this report.

cont....

Claim Name	Tenure #	Units	Owner	Expiry Date*
Buck #5	374679	1	J. Carson	06-Nov-30
Al #1	375137	1	J. Carson	06-Nov-30
Al #2	375138	1	J. Carson	06-Nov-30
Al #3	375139	1	J. Carson	06-Nov-30
Al #4	375140	1	J. Carson	06-Nov-30
Al #5	375141	1	J. Carson	06-Nov-30
Al #6	375142	1	J. Carson	06-Nov-30
Al #7	375143	1	J. Carson	06-Nov-30
Al #8	375144	1	J. Carson	06-Nov-30
Al #9	375145	1	J. Carson	06-Nov-30
Al #10	375146	1	J. Carson	06-Nov-30
Al #11	375147	1	J. Carson	06-Nov-30
Al #12	375148	1	J. Carson	06-Nov-30
Burrell #1	383137	20	M. Elson	06-Nov-30
Burrell #2	383138	1	M. Elson	06-Nov-30
Burrell #3	383139	1	M. Elson	06-Nov-30
Burrell #4	383140	1	M. Elson	06-Nov-30
Burrell #5	383141	1	M. Elson	06-Nov-30
Burrell #6	383102	1	M. Elson	06-Nov-30
Burrell #7	383103	1	M. Elson	06-Nov-30
Burrell #8	383104	1	M. Elson	06-Nov-30
Burrell #9	383101	12	M. Elson	06-Nov-30
Franklin #1	383136	15	M. Elson	06-Nov-30
Franklin #2	383172	1	M. Elson	06-Nov-30
Franklin #3	383173	1	M. Elson	06-Nov-30
Franklin #4	383174	1	M. Elson	06-Nov-30
Franklin #5	383175	1	M. Elson	06-Nov-30
Franklin #6	383176	1	M. Elson	06-Nov-30
Ant 1	386475	1	W. Wilkinson	06-Nov-30
Ant 2	386476	1	W. Wilkinson	06-Nov-30

Table 1: Claim Information, cont ...

* Note: dates listed are after filing this report.

cont....

Claim Name	Tenure #	Units	Owner	Expiry Date*
Ant 3	386477	1	W. Wilkinson	06-Nov-30
Ant 4	386478	1	W. Wilkinson	06-Nov-30
Ant 5	386479	1	W. Wilkinson	06-Nov-30
Ant 6	386480	1	W. Wilkinson	06-Nov-30
Ant 7	386481	1	W. Wilkinson	06-Nov-30
Ant 8	386482	1	W. Wilkinson	06-Nov-30
Ant 9	386483	1	W. Wilkinson	06-Nov-30
Ant 10	386484	1	W. Wilkinson	06-Nov-30
Ant 11	386485	1	W. Wilkinson	06-Nov-30
Ant 12	387657	1	W. Wilkinson	06-Nov-30
Ant 13	387658	1	W. Wilkinson	06-Nov-30
Ab 1	214183	1	J. Crellin	08-Nov-30
Ab 2	214184	1	J. Crellin	08-Nov-30
Ab 3	214185	1	J. Crellin	08-Nov-30
Ab 4	214186	1	J. Crellin	08-Nov-30
Buffalo	214310	1	J. Crellin	08-Nov-30
Alpha	214604	1	J. Crellin	13-Nov-30
Homestake CG	L 589s		c/o J. Carson	
Deadwood CG	L 590s		c/o J. Carson	
Aldie CG	L 3239		c/o J. Carson	
Union CG	L 1022s		J. Carson	
Paper Dollar Fr.	L 1677s		J. Carson	
Union Fr.	L 1678s		J. Carson	
Idaho Fr.	L 1679s		J. Carson	

Table 1: Claim Information, cont ...

* Note: dates listed are after filing this report.

2.3 History of Exploration

The Franklin property is situated within the northern portion of the Boundary District, an area with a long history of exploration and mining activity. Excellent historical accounts for the district are provided by Caron (2003), Peatfield (1978) and others and the reader is referred to these sources for a more thorough discussion of the regional exploration history. The following discussion pertains only to the exploration history of the Franklin Camp.

The first claims located in the area were the Banner and McKinley, in 1896. A very large number of other claims were staked within the next decade, covering most, if not all, the known areas of mineralization on the current Franklin property. Many of the claims were subsequently crown granted and a number of these crown grants remain in good standing today. Numerous prospect pits, shallow shafts and short adits were completed in the later part of the 19th century and early part of the 20th century. This work was directed at a number of different styles of mineralization, including quartz veins and silicified zones with gold and silver, massive chalcopyrite in shear zones associated with pyroxenite (“Black lead type”), and replacement type (?) lead-zinc mineralization associated with limestone. More details of the geology and style of mineralization of the main significant showings are given in Section 3 of this report and in Peatfield (2002).

The extent of the early exploration activity on the area is reflected in both the number old workings and in the number of Minfile occurrences located on the property. Some 23 such Minfile occurrences are shown on Figure 3, and referenced in Section 9. It is beyond the scope of this report to give a detailed history of exploration for each of these occurrences. The following summarises the highlights of the exploration and development history for the camp. Additional details are available in various Annual Reports of the BC Minister of Mines, and in numerous other references listed below, and/or included in Section 9 of the report.

Drysdale (1915) spent the summer of 1911 in the Franklin Camp, visiting many of the mineral properties and completing regional geological mapping for the Geological Survey of Canada. His report, published as GSC Memoir 56, remains one of the few comprehensive reports of the Franklin Camp and describes the early exploration and development history of the camp. This early work was hampered by the lack of infrastructure, and in 1900 a government trail was cut from Grand Forks to the Franklin Camp. In 1906, considerable work was done in the camp, including surveying the Gloucester City townsite, near the junction of Burrell and Gloucester Creeks. By 1908 the trail from Grand Forks had been upgraded to a wagon road and work continued on a number of properties, including the Maple Leaf, Banner, Gloucester and McKinley.

In 1914, Larsen and Verrill visited the camp on behalf of the BC Bureau of Mines and published a thorough review of work to this point, including a claim map for the camp. The main properties active at the time were the Union, McKinley and the Banner. Their report gives a good account of the camp at this time, and is available in the 1914 BC Minister of Mines Annual Report. Larsen and Verrill concluded that, “the high cost of transportation is practically prohibitive to the development and working of the large mineral resources indicated in this district.” Despite this, the Union Mine was producing at a rate of 30 to 40 tons per day, but the ore had to be hauled by wagon to the end of the rail at Lynch Creek, and from there by rail to the Granby Smelter in Grand Forks, at high cost.

By 1918, the Imperial Munitions Board in London indicated a shortage in the supply of platinum needed for the war, and initiated an examination and evaluation of a number of properties in Canada, including the Franklin Camp (Thomlinson, 1920). One sample collected by Tomlinson from the Maple Leaf area returned 0.17 oz/t Pt and started a period of exploration on the property for PGE’s that has lasted through to the present.

There was no significant work done in the camp until 1927, when the Union Mine was bonded to Hecla

Mining Company. Considerable exploration and development was done by Hecla during 1928 and 1929, including construction of a 145 tonne per day flotation mill. The mill was later upgraded to include Wifley tables to recover free-milling gold. Production began in 1930 and continued through to 1933. At this point, a cyanide plant was constructed to treat the tailings from the earlier milling operation, and from 1934-36 the tailings were reprocessed and a small amount of additional mining was done. Hecla also completed exploration at the Homestake Mine during this period, including diamond drilling (11 holes) and mapping and sampling underground workings (Pike, 1935; Minfile 082ENE003).

After the Hecla era, there was little work done in the camp until the 1960's, apart from small scale lease-mining by W.E. McArthur on the Union, McKinley and Homestake properties. In the 1960's Franklin Mines Ltd. assembled a large land position that covered much of the present Franklin property. Considerable exploration was done, including cat trenching, geophysics, geochemistry and diamond drilling (2 holes at the Maple Leaf showing). This work was directed primarily at the PGE potential of the property, as detailed by Chilcott (1965) and by Chilcott and Lisle (1965).

Newmont Mines Ltd. was also actively exploring the camp during 1968 and 1969. Geological mapping and rock chip sampling was done in the Banner-Homestake area, as well as small scale geophysical and/or soil geochemical surveys in the McKinley, Banner, IXL and Union mine areas. A major trenching program was completed in the IXL area in 1969 to test for porphyry type copper mineralization. One trench returned a 70 foot interval grading 0.78% Cu and a second interval of 80 feet averaging 0.33% Cu. Newmont then drilled 3 diamond drill holes to test the IXL target (Norman, 1968, 1969). Boundary Exploration completed a small drill program (3 holes) near the Banner shaft the same year (Kermeen, 1969.)

Pearl Resources acquired the Union Mine in 1979 and over the next few years completed a thorough compilation of previous work, as well as considerable exploration. Underground workings were rehabilitated, surface mapping, rock and soil geochemistry was done and 5 surface diamond drill holes were drilled in an attempt to locate the western faulted extension of the Union vein, without success (Lisle, 1979, 1980a, 1980b; Lisle and Seraphim, 1980). Further work was done in 1984, including 19 underground diamond drill holes (1076 metres) and 34 underground percussion holes, totalling 397 metres (Drown, 1985).

In 1985, 24K Mining Inc. optioned the Union Mine property from Pearl Resources. The following year, 24K Mining Inc. merged with Summit Ventures Inc. to form Sumac Ventures Inc. Sumac constructed a cyanide heap leach facility to reprocess the Union Mine tailings, however a breach in the liner pad caused serious problems for the company. These problems were more of a political nature, the actual environmental problem being quite minor, but regardless, they resulted in the project being closed in 1989. No further work has been done at the Union Mine since this time. Total production to date from the Union Mine, excluding the processing of tailings by Hecla during the 1930's and by Sumac Ventures in the 1980's, amounts to 122,555 tonnes at an average grade of 14.1 g/t Au and 353.4 g/t Ag.

At the same time that Pearl Resources/Sumac Ventures were actively working the Union Mine, Longreach Resources had assembled a large land package over the northern part of the present Franklin property and were exploring their claims for PGE's. Longreach did considerable work during 1986, including drilling 32 diamond drill holes at the Maple Leaf, Averill, Evening Star, Buffalo and DAJG showings (Clark, 1987a, 1987b, 1987b). Placer Done Inc. optioned the property from Longreach in 1987 and completed a very thorough field program during 1987, including a wide spread soil geochemical survey, significant rock sampling, as well as geological mapping. Placer also drilled 10 diamond drill holes at the Averill, Laura, Jimmy, Maple Leaf and Union showings (Pinsent and Cannon, 1988). Placer's interest in the property was originally because for the PGE potential of the area (the project was known as the Platinum Blonde project). By late in 1987, the focus of work had shifted to "Union Mine" type targets. An internal Placer memo (now

part of the BC Ministry and Mines “Placer Dome Files”) states that “Our work to date indicates that the greatest potential for a high-grade Au, Ag deposit of the Union Mine type lies in the interconnected silicified faults which outcrop on the Homestake and Deadwood claims”. These claims did not, however, form part of Placer’s land package. Financial disputes with Longreach, combined with Placer’s inability to obtain title to what they considered the key claims, caused Placer to abandon the property in 1989.

Concurrent with Placer’s work in the camp, Myra Keep completed a study of the geology and petrology of the Averill plutonic rocks as the basis for a M.Sc. thesis at the University of British Columbia (Keep, 1989; Keep and Russell, 1987, 1989, 1992). This most important outcome of Keep’s work was the evidence for a Jurassic age for the Averill suite. All previous workers had assumed these rocks to be a part of the Eocene Coryell suite (as originally suggested by Drysdale, 1915).

In the early-mid 1990’s work was ongoing in two parts of the property. Canamax Resources Inc. optioned the IXL claims in 1991 and completed an airborne geophysical survey, soil and rock chip sampling, as well as geological mapping (Harris, 1991; Johnson, 1991). Sway Resources carried out a significant amount of drilling in the Deadwood-Homestake-Banner areas during 1993 and 1994, including some 29(?) diamond drill holes and 14(?) percussion holes. This work is very poorly documented, but covered in part by Miller (1993, 1995), by several page sized sketches and notes, and by various company news releases from this era. During 1994, Sway also drilled 8 holes at the IXL showing. These holes are similarly poorly documented. Serious analytical errors were made by the lab in samples from first of the 1994 IXL drill holes, and subsequent legal action was successfully launched by Sway Resources, but the outcome was still that no additional financing could be completed to allow work to continue on the property.

No further exploration, apart from minor assessment work programs to keep some of the claims in good standing, was completed on the Franklin property until it was acquired as a listing property by Tuxedo Resources Ltd. in 2001. Tuxedo assembled a very large land package, by way of 7 separate option agreements. An airborne geophysical survey was completed over the property as a partial fulfilment of the listing requirements (Smith, 2001). Following this, a Technical Report on the property was prepared by Peatfield (2002). One of the recommendations of Peatfield’s report was that a thorough compilation of all previous exploration results on the property should be completed. This compilation was undertaken during 2002, numerous exploration targets were identified, and recommendations were made for a follow-up work program (Caron, 2002). During 2003, the work program recommended in the compilation report was carried out, as detailed in the current report.

2.4 Summary of Work Program (May - November 2003)

The 2003 exploration program on the Franklin property was funded by Tuxedo Resources Ltd. and managed by Mike Elson of Northern Natural Resource Services. Fieldwork began on May 3, 2003 and continued through to Oct 16, 2003, with reporting done subsequently. The project was shut down, due to forest fire closures, from Aug 19 - Sept 21, 2003.

A total of 40 line kilometres of flag and picket grid was established in the Homestake area from May 3-20, 2003. Grid work was completed by John Boutwell, Scott Hodges and Roger Pugh. Timothy Young assisted with baseline placement.

Soil samples were collected from the Homestake grid, from May 14 - 20, 2003. Sampling was done by John Boutwell, Scott Hodges, Roger Pugh, Lee-Anne Ennes and Alfreda Elden. Due to budget constraints, only a fraction of the total number of samples collected was submitted for analysis. The remainder of the samples have been dried and placed in storage at Jack Carson's Brown Creek residence north of Grand Forks for analysis at a later date if needed. Several duplicate soil samples were later collected by John Boutwell to check a very high single station gold anomaly within the Homestake grid. Contour soil samples were also collected from the Iron Cap area, by Alfreda Elden.

Geological mapping of the Homestake grid was completed by Linda Caron from May 5 - June 6, 2003 and a number of rock samples were collected during the course of geological mapping. John Boutwell carried out detailed prospecting (and accompanying rock sampling) of the Homestake grid area, as well as prospecting and sampling all of the high priority targets elsewhere on the property, which had been identified by the 2002 compilation report. Prospecting was ongoing from May 21-July 1 and from July 15-Aug 18, 2003. A total of 288 rock samples were collected from the property during 2003.

A sample of vein material from the Homestake shaft dump was collected by Murray McLaren and submitted to the University of British Columbia for lead isotope analysis.

Trenching was completed from July 2-14 2003, to follow-up on targets in the Homestake grid area. A total of 364 lineal metres of trenching was done in 15 trenches, using a Hitachi EX 60 excavator owned and operated by Impact Equipment of Trail, B.C. The caved portal to the Banner adit was re-excavated during the trenching program, to allow access to the underground workings for examination of the vein.

Trench layout, mapping and sample layout was done by Linda Caron. John Boutwell and Alfreda Elden assisted with trench mucking. Trench samples were collected by John Boutwell. All trenches have been backfilled, using a D6 cat owned and operated by Guy Delorme. Any timber disturbed as a result of the trenching or drilling program was bucked and scattered by John Boutwell.

Drilling was done between Sept 22 - Oct 16, 2003. Nine NQ holes, totalling 490.6 metres were drilled by Guy Delorme of Merritt, B.C. Water for drilling was hauled from Burrell Creek using a 200 gallon water truck owned and operated by Impact Equipment of Trail, B.C. Drill hole location, core logging and drill supervision was by Linda Caron (Sept 22-30) and by Jim Kermeen (Oct 1-16). John Boutwell provided assistance and completed core splitting and sampling. All drill sites and access roads have been reclaimed. Core is stored at Jack Carson's Brown Creek residence.

Soil, rock, trench and drill core samples were shipped to Acme Analytical Labs in Vancouver for preparation and analysis. All samples were routinely analysed for 36 elements (including gold) by ICP/ES & MS (Acme method 1F, 1DX). Overlimit samples were assayed for gold, silver, copper, lead or zinc. The exception was in the latter part of the drill program, when samples were submitted directly for Au assay, with no multi-element analyses completed.

From June 1 to August 18, 2003, crews operated from a base camp on Burrell Creek in the eastern part of the property. The exception to this was geologist, Linda Caron, a resident of Grand Forks and who travelled to and from home daily. During the grid and soil sampling component of the program (in May, 2003) and during the drill program (Sept 22-Oct 16), crews were lodged in motels in Grand Forks, B.C. and travelled to and from the property daily.

The total expenditure on the property during 2003 was \$185,000.00, as detailed in the cost statement included in Appendix 10. In total, the following was completed on the Franklin property during 2003:

- 40 line kilometres of flag/picket grid
- 1530 soil samples (collected)
- 292 soil samples (analysed)
- 288 rock samples collected and analysed
- 1 Pb isotope analysis (galena)
- 111 trench samples collected and analysed
- 110 drill core samples collected and analysed
- 364 lineal metres of trenching (in 15 trenches)
- 9 NQ diamond drill holes (totalling 490.6 metres)

3.0 GEOLOGY

3.1 Regional Geology, Structure and Metallogeny

The Franklin property is situated within the Boundary District of southern British Columbia and northern Washington State. The following discussion of the geological setting and metallogeny of the Boundary District is taken largely from an earlier report by the same author (Caron, 2003).

The Boundary District straddles the Canada-USA border and includes the Republic, Belcher, Rossland and Greenwood Mining Camps. It is a highly mineralized district with total contained gold (produced + known reserves) exceeding 10 million ounces. Within the Boundary District, the majority of gold production is from the Republic and Rossland areas. At Republic, an excess of 2.5 million ounces of gold, at an average grade of better than 17 g/t Au, has been produced from Eocene epithermal veins. In the Rossland Camp, almost 3 million ounces of gold averaging 16 g/t Au was mined from massive pyrrhotite-pyrite-chalcopyrite veins associated with a Jurassic intrusive.

Portions of the Boundary District have been mapped on a regional basis by numerous people, including Fyles (1990), Little (1957, 1961), Drysdale (1915) and Cheney and Rasmussen (1996). While different formational names have been used within different parts of the district, the geological setting is similar.

The Boundary District is situated within Quesnellia, a terrane which accreted to North America during the mid-Jurassic. The oldest of the accreted rocks in the district are late Paleozoic volcanics and sediments. In the southern and central parts of the district, these rocks are separated into the Knob Hill and overlying Attwood Groups. Rocks of the Knob Hill Group are of dominantly volcanic affinity, and consist mainly of chert, greenstone and related intrusives, and serpentinite. The serpentinite bodies of the Knob Hill Group represent part of a disrupted ophiolite suite which have since been structurally emplaced along later structures. Unconformably overlying the Knob Hill rocks are sediments and volcanics (largely argillite, siltstone, limestone and andesite) of the late Paleozoic Attwood Group.

The Paleozoic rocks are unconformably overlain by the Triassic Brooklyn Formation, represented largely by limestone, clastic sediments and pyroclastics. Both the skarn deposits and the gold-bearing volcanogenic magnetite-sulfide deposits in the district are hosted within the Triassic rocks. Volcanic rocks overlie the limestone and clastic sediments of the Brooklyn Formation and may be part of the Brooklyn Formation, or may belong to the younger Jurassic Rossland Group. In the western part of the district, the Permo-Triassic rocks are undifferentiated and grouped together as the Anarchist Group, while in the Franklin Camp these rocks are referred to as the Franklin Group.

At least four separate intrusive events are known regionally to cut the above sequence, including the Jurassic aged alkalic intrusives (i.e. Lexington porphyry, Rossland monzonite, Sappho alkalic complex, Averill alkalic complex), microdiorite related to the Brooklyn/Franklin Group greenstones, Cretaceous-Jurassic Nelson intrusives, and Eocene Coryell (and Scatter Creek) dykes and stocks.

Eocene sediments and volcanics unconformably overlie the older rocks with the distribution of these Tertiary rocks largely controlled by a series of faults. The oldest of the Tertiary rocks are arkosic and tuffaceous sediments of the Eocene Kettle River Formation. These sediments are overlain by andesitic to trachytic Eocene Marron, which are in turn unconformably overlain by lahars and volcanics of the Eocene Klondike Mountain Formation. Epithermal gold mineralization, related to Eocene structural activity, has been an important source of gold in the district.

The important gold deposits within the district can be broadly classified into six deposit types, including gold and copper-gold skarns, mesothermal gold veins, epithermal gold veins, Jurassic alkalic intrusives with

Cu, Au, Ag +/- PGE mineralization, gold mineralization associated with serpentine (or listwanite), and gold-bearing volcanogenic magnetite-sulfide deposits. Details of the different styles of gold mineralization are given in Caron (2003) and will not be repeated here.

3.2 Property Geology and Mineralization

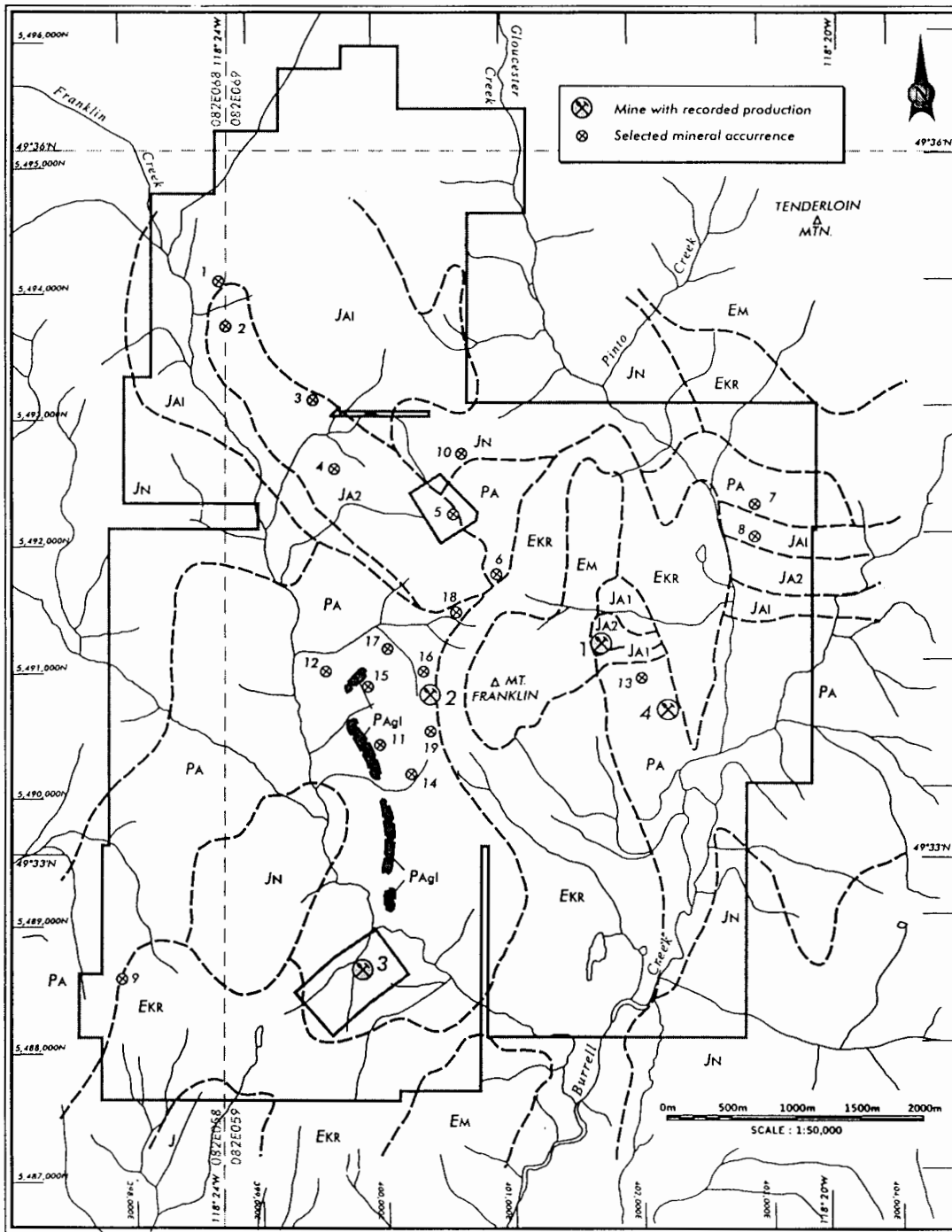
The Franklin property covers an inlier of Paleozoic volcanic and sedimentary rocks, surrounded by Mesozoic and Tertiary plutonic rocks. Locally the Paleozoic rocks are overlain by Tertiary sediments and volcanics and intruded by small intrusive bodies of various ages. Figure 3 is a simplified geology map of the property, taken from Peatfield (2002).

High-grade metamorphic rocks, part of the Grand Forks metamorphic complex, occur to the east and slightly south of the property. A major north trending normal fault, the Granby Fault, separates the gneisses from the younger rocks to the west. This fault forms the eastern boundary to the Republic graben in Washington State and can be traced for over 100 kilometres northwards to the Franklin property, where it follows Burrell Creek.

The oldest rocks exposed on the property are the Franklin Group volcanics and sediments. No fossil or isotopic dating has been done to explicitly define the age of these rocks, however there is a remarkable similarity between the Franklin Group and the Triassic Brooklyn Formation in the Greenwood-Grand Forks area and in the Belcher District of Washington State. Both the Franklin Group and the Brooklyn Formation contain similar lithological and stratigraphic sequences, including argillite, conglomerate, chert, tuffaceous siltstone, limestone and greenstone. Furthermore, both the Franklin Group and the Brooklyn Formation contain a very distinctive chert pebble conglomerate (referred to as "sharpstone conglomerate" in the Greenwood area) and both contain an unusual looking limestone cobble conglomerate (known in the Grand Forks area as "puddingstone"). Given these similarities, it seems very likely that the Franklin Group is correlative with the Brooklyn Formation. This correlation is significant because of the presence of stratabound volcanogenic mineralization within the Brooklyn Formation, which may also occur within the Franklin Group. Further details of the lithologies within the Franklin Group are given in the discussion of the geology of the Homestake Grid, in Section 3.3 of this report and in Pinsent and Cannon (1988). The Franklin Group rocks are intruded by several types of plutonic rocks, including granodiorite and diorite of the Jurassic-Cretaceous Nelson Plutonic complex, alkalic intrusives of the Jurassic Averill complex, and syenite and lamprophyre dykes and stocks of the Eocene Coryell suite. The most important of these intrusives, from a metallogenic point of view, are the alkalic rocks of the Averill suite, described below:

The Averill plutonic complex ... comprises pyroxenite, monzogabbro, monzonite and syenite phases and two compositionally distinct sets of late dikes. The intrusion is concentrically zoned, with pyroxenite at the centre, grading outwards through monzogabbro and monzodiorite, to monzonite at the perimeter. Trachytic syenite occurs along the axis of the pluton as a coarse-grained core and a fine-grained marginal phase. It is mineralogically distinct and is characterized by a prominent alignment of K0-feldspar megacrysts. This alignment does not demonstrably relate to the contacts. This may reflect poor sampling due to lack of exposure or a complicated actual pattern. The syenite intrudes the pyroxenite and monzogabbro, and the mafic phases are brecciated along the margin of the syenite. (Keep and Russell, 1992)

Drysdale (1915) first suggested an Eocene age to the Averill rocks and this notion persisted through to Keep's work in the late 1980's (despite the fact that clasts of various phases of the Averill suite occur within the basal conglomerate of the Eocene). A K-Ar age date on the Averill suite of 150 +/- 5 Ma now places these rocks as Jurassic (Keep and Russell, 1992).



Notes: Geology modified after Drysdale (1915); Pinsent and Cannon (1988).
 For key to geologic units, and names of mines and mineral occurrences, see next page.

Figure 3: Property Geology Map

Scale 1:50,000

from Peatfield (2002)

Legend to Accompany Figure 3

Table of Geologic Units:

EM	Eocene	Marron Formation	alkalic volcanic flows.
EKR	Eocene	Kettle River Formation	continental clastic sediments, rhyolitic flows and tuffs.
JA2	Jurassic	Averill Plutonic Complex	mafic syenite, pyroxenite.
JA1	Jurassic	Averill Plutonic Complex	syenite, monzonite, gabbro.
JN	Jurassic	Nelson Plutonic Suite	dominantly granodiorite.
PA	Paleozoic	Anarchist Group	greenstone, altered tuff, silicified argillite.
PAgl	Paleozoic	"Gloucester Formation"	marble

List of Mines with Recorded Production:

- 1 Maple Leafsmall tonnage; copper, gold, silver; PGE's not paid for.
- 2 Homestakesmall tonnage; gold, silver, traces lead and zinc (but see note, page 14).
- 3 McKinleysmall tonnage; gold, silver, lead, zinc; copper not paid for.
- 4 Uniongold, silver; about 55,500 troy ounces gold, 1.4 million
troy ounces silver.

List of Selected Mineral Occurrences:

- 1 Columbia (060)¹ PGE's with copper
- 2 Ottawa (061) PGE's with copper
- 3 Buffalo (008) PGE's with copper
- 4 Averill (007) PGE's with copper
- 5 Mountain Lion (055) PGE's with copper
- 6 Golden Age (053) PGE's with copper
- 7 White Bear (056) PGE's with copper
- 8 Lucky Jack (056) PGE's with copper
- 9 IXL (033) lead-zinc skarn, porphyry copper.
- 10 Glou[ce]ster (005) quartz veins; gold, silver, base metals.
- 11 Banner (002) quartz veins; gold, silver, base metals.
- 12 Jimmy (042) quartz veins, limestone replacements; silver, base metals.
- 13 Beaver (080) volcanic rocks with pyrite, chalcopyrite.
- 14 Bullion (013) quartz veins; gold, silver, base metals.
- 15 Aldie (050) quartz veins, limestone replacements; silver, base metals.
- 16 Deadwood (063) quartz veins; gold, silver, base metals.
- 17 Violet Fraction (020) quartz veins; gold, silver, base metals.
- 18 Alpha (052) poly-metallic; details lacking.
- 19 Laura (066) quartz veins; gold, silver, trace base metals, arsenic.

¹ Minfile number – complete number format is 082ENExxx.

Clastic sediments of the Eocene Kettle River Formation unconformably overly the older rocks. These rocks include arkosic sediments, conglomerates, and water-lain tuffs, as well as some rhyolite flows, as described by Drysdale (1915). The Eocene sediments are overlain by trachytic flows of the Eocene Marron Formation. These volcanics form the highest points on the property, on Mt. Franklin and Mt. McKinley.

Mineralization on the property can broadly be classified into 4 main styles, as listed below. Much of the previous exploration on the property had focussed on the "Black lead" type Cu-PGE zones. A compilation of previous exploration results was carried out during 2002, from which it was concluded that the property has far more potential for gold and/or base metal mineralization than it does for PGE's. Previous exploration has shown that PGE values in soils, rocks and in drill core, are very scattered and that zones with PGE (+ Cu) mineralization are small and discontinuous. Further exploration directed specifically at PGE's was not recommended (Caron, 2002).

Union Mine type veins/silicified zones

The Union Mine is the premier example of this style of mineralization on the Franklin property. A total of 122,555 tonnes at an average grade of 14.1 g/t Au and 353.4 g/t Ag was produced from the Union Mine. Rather than being a planar vein with sharp contacts, the Union vein is a broad silicified zone with assay walls. The mineralized zone, which trends at 080°/90°, is hosted within greenstone and silicified calcareous sediments of the Franklin Group. The sulfide content within the quartz/silicified zone is generally less than 5%, with sulfides consisting of pyrite, galena, sphalerite and minor chalcopyrite. Higher gold values are typically associated with higher sulfide content, although free gold (with spectacular gold values) occurs locally. The Union vein has a geochemical signature of Au:Ag:Cu:Pb:Zn:Hg:Se:Te. Much of the mineralization in the Homestake Grid area belongs to this style of mineralization. These showings are discussed in more detail in the Section 3.3 of this report.

The age of mineralization is unknown, however the Union vein is cut off on the west by a fault which places unmineralized Eocene sediments and overlying volcanics in contact with the vein. Similarly in the Homestake/Laura/North Homestake area, where Eocene rocks lie unconformably on the older rocks but without any fault present along the unconformity, the mineralization cannot be traced into the Eocene rocks. This would suggest that mineralization is pre-Eocene. Lead isotope analysis on galena was done on a sample from the Homestake mine during 2003 (see Appendix 9) that suggests a Jurassic age to the mineralization. These veins may in fact be epithermal veins, as suggested by some previous workers (Peatfield, 2002; Pinsent and Cannon, 1988), however it would appear that they represent an older epithermal event and are not part of the Eocene epithermal event, such as occurs in the Republic area of Washington State.

Black Lead type Cu-PGE zones

Considerable previous exploration on the property has been directed at the "Black Lead" type zones. These zones are poddy, shear hosted zones of massive chalcopyrite (+ lesser pyrite, pyrrhotite and other sulfides) with erratic platinum and palladium values. They are associated most commonly with the pyroxenite phase of the Averill plutonic complex, but also occur in syenite phases and along contacts with the syenite and various dykes. Examples include the Maple Leaf, Buffalo, Averill, Alpha, Ottawa-Evening Star.

Contact Metamorphic (Skarn) zones

The McKinley (not part of the Franklin property) is the best example of this style of mineralization. It appears to be a classic skarn zone along the Franklin Group limestone contact. Mineralization consists of massive pyrite-chalcopyrite, pods and disseminations of galena-sphalerite and massive zones of magnetite-pyrite. Mineralization is quite restricted and only a small tonnage was produced from the McKinley in 1949. Surface and underground exploration, including diamond drilling, failed to find any additional areas

of mineralization. The Gloucester, in the north-central part of the Franklin property, is another example of a magnetite skarn.

IXL type

The IXL zone, located near the southwest corner of the Franklin property is a belt of intense silicification and disseminated sulfide mineralization spatially associated with a limestone contact within Franklin Group rocks. Medium-grained porphyritic dikes of perhaps dacite composition intrude the Franklin sequence and probably make up a large percentage of the rock mass in the most intensely silicified portion of the belt. In 1969, Newmont carried out an extensive program of deep trenching to test for porphyry style disseminated copper mineralization in this area. Trench sampling indicated 70 feet grading 0.78% copper and elevated gold in the central part of the zone. Three diamond drill holes were then drilled to test the zone. During the current program, rock sampling uphill and east of the copper zone in the trench suggested a significant area of anomalous gold in pyritic (+/- chalcopyrite) chlorite-epidote-magnetite altered Franklin Group volcanics. Values to 4.3 g/t Au, 7.3 ppm Ag and 0.64% Cu were returned from rock samples from this area, with results to 8.6 g/t Au, 14.2 ppm Ag and 1.6% Cu from float in IXL creek to the south. One hole was drilled to test this area during 2003 and returned 18.4 metres grading 1.86 g/t Au from the interval of altered volcanics (no copper or silver analyses done). The nature of mineralization at the IXL remains unresolved. Possible models that should be considered for mineralization include mafic volcanic hosted skarn mineralization or alkalic copper-gold porphyry type mineralization.

One further point is worth noting in the discussion concerning styles of mineralization. The possibility that Lamefoot style volcanogenic mineralization exists on the property should be recognized. This is a relatively newly identified type of mineralization in the district, described as "gold bearing, magnetite-pyrrhotite-pyrite syngenetic, volcanogenic mineralization". A number of deposits of this type have been discovered in the Belcher District in Washington State, just south of Grand Forks. Mineralization of this style also occurs north of the border in the Greenwood area. The largest of the known deposits was the Lamefoot deposit (2 million tonnes @ 7 g/t Au - now mined out). The known massive sulfide-oxide deposits all occur at the same stratigraphic horizon within the Triassic Brooklyn Formation, with a stratigraphic footwall of felsic volcanoclastics (the top of the "sharpstone" unit) and with a massive limestone hangingwall. Base metal VMS type mineralization occurs along this same horizon. Auriferous quartz-sulfide and sulfide veinlets occur in the footwall of the Lamefoot-type deposits, and at least part of the gold mineralization is attributed to a late stage epigenetic event. A later skarn event may cause remobilization of earlier syngenetic mineralization along the Lamefoot horizon.

On the Franklin property, much of the known mineralization is hosted within rocks of the Franklin Group and much of this mineralization occurs on or close to a common stratigraphic horizon. As discussed above, there are remarkable similarities between the Franklin Group rocks and the rocks of Triassic Brooklyn Formation as seen both in the Greenwood area and in the Belcher District of Washington State. There is a good argument to suggest that the Franklin Group is equivalent to the Brooklyn Formation, and thus that has potential to host Lamefoot-type mineralization. To date, no definitive examples of this style of mineralization have been identified on the property.

3.3 Homestake Grid Geology

During the current program detailed geological mapping was undertaken in the Homestake Grid area, as shown on Figure 4. Geological mapping was completed by L. Caron between May 5 and June 6, 2003, using grid lines for control. The grid covers the very steep west facing slope of Mt. Franklin, as well as the summit of the mountain and the upper north and east facing slopes. Locally there are cliffs that are impassable and grid lines had to be broken and restarted above the cliffs. Several very deep creek gullies with considerable downfall also posed challenges in grid placement. Grid lines were spaced at 50 metre intervals, with stations marked every 25 metres. Considerable inaccuracy exists in the grid placement, due in part to the rugged topography. Original plans were to accurately locate grid lines and stations, and to create a topographic base for the grid, using differentially corrected GPS. Budget constraints later in the program prevented this work from being completed. The reader should be aware that Figure 4, and other figures showing the Homestake grid, depict an idealized grid. Some inaccuracies will exist in the geological picture as a result of mapping to the idealized grid, however these should not significantly change the overall geological picture.

The grid covers a complex sequence of Franklin group sediments and volcanics. As shown on Figure 4, geological units include:

- black aphanitic argillite and argillaceous siltstone (unit Fa)
- fine to medium grained pebble conglomerate, which can be a dominantly chert pebble conglomerate (sharpstone conglomerate) or it can be a polyimictic conglomerate (unit Fcg)
- chert and cherty tuffaceous siltstone (unit Fc)
- fine grained tuffaceous sandstone-siltstone, locally calcareous (unit Fs)
- massive grey-white limestone and limestone breccia (unit Fl)
- aphanitic greenstone, locally calcareous (unit Fv)

Very commonly, contacts between these units are gradational with frequent and often rapid facies changes suggested.

Bedding is highly variable across the grid area. At the Banner shaft, the "vein" sits conformably within the sediments with bedding at 280-300°/30° N. Several hundred metres to the north, at the North Banner pit, very well developed bedding in argillite and conglomerate is 000-010°/80°E. In general, the units are steeply dipping. In the Greenwood and Belcher Districts, the Brooklyn limestone sits above the sharpstone conglomerate. If the same is true in the Franklin Group, then the sequence is younging to the west and beds are tipped and locally overturned.

Repetition of units across the grid area may be a true stratigraphic repetition, or may be a result of later faulting. There is a suggestion of broad scale folding, with the Jimmy showings located at the fold nose, however this remains unresolved.

A large body of granodiorite to diorite intrudes the Franklin Group sediments in the western part of the grid. Numerous other smaller dykes and stocks are present elsewhere on the grid.

A major north trending, moderate west dipping fault (named the McFarlane Fault, after Frank McFarlane the original locator of the Banner claim) occurs in the gully between the Homestake and North Banner showings, and is exposed in a number of old pits along the gully and near the portal to the Banner adit. Stratigraphy is near vertical and there is little offset in units, suggesting that the McFarlane fault may be a normal fault with little or no strike-slip movement. The amount of displacement is unknown.

A second major fault also occurs in the northern fork of the Twin Creek valley, at the northern limit to the 2003 geological mapping program. Previous mapping (Pinsent and Cannon, 1988) identified a large body of Averill plutonic rocks north of the creek. These rocks are exposed along the main access road, north of the

Twin Creek gully. In the western part of the grid, Franklin Group argillite and sediments cover a very steep hillside north of Twin Creek below the Averill bluffs.

Along the main access road, the Franklin rocks are unconformably overlain by arkosic sandstone (locally very immature) and interbedded pebble to cobble sized, polymictic conglomerate of the Eocene Kettle River Formation. Bedding is well developed in the Eocene sediments, with flat to low angle east dips. There is no evidence of faulting at the basal Eocene contact.

These sediments are in turn overlain by (dominantly) andesitic and trachytic lavas of the Eocene Marron Formation. The Marron volcanic form prominent ridges and large areas of scoured outcrop on Mt. Franklin. Several distinct flows can be recognized, including a glassy rhyodacite with fine feldspar and pyroxene phenocrysts, a pyroxene phyric andesite flow which very commonly displays well developed flaggy jointing, a feldspar and needle-like amphibole phyric andesitic flow with minor large blocky pyroxene phenocrysts, and an amygdaloidal, pyroxene phyric flow (+/- analcime).

Several significant areas of anomalous gold in soils had been identified on Mt. Franklin by Placer's geochemical survey in 1987, with individual values to 3370 ppb Au and 1730 ppb Au (Pinsent and Cannon, 1988). Mapping and prospecting were done to follow-up on these areas of anomalous gold in soils, for the possibility of Eocene epithermal style mineralization. There is good rock exposure in the "anomalous" areas, all of which are underlain by Eocene volcanics and sediments. No evidence of alteration or mineralization was noted, and there was no indication that the anomalies were caused by glacial dispersion. Soil sampling was done in an attempt to reproduce the soil anomalies, however due to budget constraints, these samples were not submitted for analysis. On re-examining the Placer soil data, it seems very likely that these results were erroneous, caused by either sampler or lab error, however before dismissing these targets completely, the 2003 soil samples from this area should be analysed.

A large number of areas of mineralization occur on the Homestake grid, as shown in Figure 4 and summarized below. Numerous rock samples were collected from areas of mineralization on the grid (see Figure 12 & Section 5.0). Results from follow-up trenching and drilling are described in Section 6.0 and 7.0, respectively. Some reference to previous results is included in the following discussion. A complete summary of these previous results is available in the 2002 compilation report (Caron, 2002).

Homestake

The Homestake Mine produced about 453 tonnes at an average grade of 15.3 g/t Au and 30 g/t Ag during the period 1940-41. Since this time, a number of very high gold values (to as much as 17.5 oz/t Au) have been reported from grab samples from the dump. The old workings are flooded and little can be seen as to the nature of mineralization, apart from scattered (well picked through) samples of ore left on the shaft dump. The ore is intensely silicified calcareous Franklin sediments, very similar to that from the Union Mine (and from the Banner and North Banner showings), with small pods and disseminations of fine grained pyrite, galena and sphalerite. Underground mapping and sampling by Hecla in the 1930's showed that the mineralized zone trended about 320°/50°N. Mineralization is reported to have been strongly disrupted by faulting, with none of the ore shoots exceeding 4.5 metres in length. A north trending, shallow east dipping fault zone is visible at the portal to the decline. A second fault, also north trending but dipping moderately east to vertically, has been explored by a series of pits southeast of the shaft. Drilling by Hecla (in 1933) and by Sway Resources (in 1993) failed to locate the Homestake zone at depth.

North Banner

The North Banner pit is situated about 200 metres northwest of the Homestake shaft and roughly on strike with the Homestake zone. The pit exposes white, intensely silicified and locally brecciated rock. Very rare limestone fragments are seen within the siliceous rock. The sulfide content is low, typically less than 2%, and consists primarily of pyrite and fine grained galena. Very minor malachite staining occurs. Previous grab samples collected from the dump of the North Banner pit returned values to 10.1 oz/t Au, however sampling during the current program was unable to reproduce these results. Considerable drilling has been done to test the North Banner zone with erratic results, as documented by Caron (2002). The best result was hole 93-12 which returned 3.4 metres grading 0.23 oz/t Au, at a vertical depth of 10.5 metres below surface.

In the original North Banner pit, the orientation of the mineralized zone is unclear. During 2003, an attempt was made to follow the zone on strike to the east and west. The vein could not be traced to the west by trenching. To the east, two vein segments were exposed and show the vein to have an orientation of about 300°/70°N. The vein averages 1 to 2.5 metres in width, but is affected along strike by numerous post-mineral faults that offset the vein. Hangingwall and footwall contacts to the North Banner "vein" are gradational, except where the zone is cut along strike by later faults. Detailed chip sampling from the 2003 trenches showed that, on average, the gold grade was quite low. Samples from TR03-1 returned a weighted average grade of 6.6 g/t Au, 7.2 ppm Ag, 295 ppm Cu, 1000 ppm Pb and 1074 ppm Zn over an average true width of 2.34 metres. One sample from this trench assayed 25.32 g/t Au (over 1.6 metres). Samples from TR03-3 were significantly lower in gold, returning an average of 192 ppb Au with similar Ag, Cu, Pb and Zn values.

North Homestake

A very large number of pits and trenches occur west of the main road, on the hillside north of the Homestake shaft, over an area of some 200 metres x 150 metres. The pits test a large area of silicification with local veining, brecciation and with numerous faults zones (+/- mineralization) that is known as the North Homestake showing. Select samples from the dumps of old pits, by previous workers, have returned values to 2.75 oz/t Au, however samples collected during the current program failed to reproduce these high results. Numerous drill holes tested this zone in 1993 and 1994, most of which failed to trace the mineralization to depth. One hole, NHO94-3c did return 1.8 metres grading 1.09 oz/t Au, at a vertical depth of about 25 metres below surface.

Note: This hole is shown and described by Miller (1995) as testing the North Banner vein, however this would seem to be incorrect. A drill collar labelled with this number was found in the North Homestake area, and it is believed that this collar corresponds with these results. After re-examining the drill core, completing the 2003 trenching program, and attempting to correlate the geology on surface and in the drill hole, it was concluded that the North Homestake location was the correct location for this hole. The following explanation for the error is offered. Sway Resources chose a confusing numbering system for their drill holes. Two different holes were called NHO94-3c and WHO94-3c, respectively. The first was in the North Homestake area (NHO) and the second in the West Homestake area (WHO). The West Homestake area = the North Banner area. Miller (1995) has erroneously associated the NHO results with the WHO location.

Banner

Prior to the 2003 trenching program, the surface exposure of the Banner vein consisted of a water filled shaft (the Banner shaft), one short blasted trench across the shaft dump, and an outcrop on an old road just below the shaft dump. No vein contacts were exposed, and the orientation of the vein was unclear. An adit with a caved portal had been dug to test the vein below the shaft, and 3 drill holes were drilled on the vein in 1969.

During 2003, a very large and impressive looking trench (Trench 03-12) was dug adjacent to the Banner shaft to expose the vein and define its orientation. A 28 metre long by 10 metre wide area was stripped, which was essentially entirely within the "vein". The weighted average grade for the Banner vein, in Trench 03-12 is 1.4 g/t Au, 35.3 g/t Ag, 0.3% Cu, 1.3% Pb and 1.5% Zn over an 11 meter true width. Eight drill holes were drilled during 2003 to test the vein at depth, as detailed in Section 7.0. The best results from drilling was 4 metres grading 2.35 g/t Au, 19.25 g/t Ag, 0.23% Cu, 0.65% Pb and 3.16% Zn in drill hole FR03-5.

The Banner vein is similar in appearance to the Homestake and Union veins, consisting of intensely silicified calcareous Franklin sediments, locally resembling a massive quartz-carbonate vein. It is weakly mineralized with poddy sphalerite, galena and chalcopyrite and, on surface, has weak malachite and manganese staining. Locally the sulfide content ranges up to 5 or 10%, but is typically much less than this. Narrow massive galena veins occur within the silicified zone. Better gold grades correlate with higher sulfide concentrations.

In Trench 03-12, a prominent 340/75°W trending fault forms the western contact of the vein/silicified zone with argillite. It was unclear in trenching whether this represented the true vein orientation, however drilling has confirmed that it does not and that the zone in fact trends at 280-300°/30-35°N. The Banner zone is best described as an intensely silicified zone, rather than a true vein. It is conformable with bedding, and hosted within Franklin Group conglomerate and fine grained siltstone. Contacts to the zone are gradational, where not disrupted by later faulting. Its true thickness ranges up to 11 meters near surface, but pinches out rapidly at depth. Drilling and trenching failed to trace the Banner vein on strike to the east. Intermittent outcrops, float and old workings on similar silicified material continue for approximately 250 meters on strike to the northwest.

Bullion

The Bullion showing is located just east of the Banner road, near the switchback to the Banner shaft. A narrow vuggy quartz vein with poddy fine pyrite and with minor sphalerite and galena occurs along a fissure within the cherty siltstone and has been explored by several pits or shallow shafts. Previous workers have reported values to 0.65 oz/t Au from select grabs of the vein material from the Bullion pits. Three samples were collected from this area during 2003, with a maximum value of 1052 ppb Au returned. Several (vertical) percussion holes have been drilled along the road at this location.

Laura

The Laura zone is an area of silicification within the Franklin Group, located at the turn-around at the end of the logging road to the Homestake area. An area of anomalous As and Ag in soils is associated with the silicified zone. This area has been explored by a series of pits and by several 1987 Placer drill holes. Values to 77.9 ppm Ag (and 260 ppb Au) were returned from rock samples collected from this area during 2003. Previous workers have reported values to 141 ppm Ag. Gold values are consistently low.

Aldie

Several old pits test a zone of patchy silicification in limestone and limestone breccia, about 150 metres northwest of the North Banner pit. Very minor sulfides (pyrite, chalcopyrite, galena and sphalerite) occur as small pods and disseminations, but overall the Aldie zone is small and relatively unimpressive. Previous samples from this area had returned values to 1.186 oz/t Au and to 4.55% Zn and 1.45% Pb (Caron, 2002). Sampling during the current program was unable to duplicate these high values, returning a maximum of 536 ppb Au. Two trenches were dug adjacent to the (upper) old workings, and failed to extend the known zone of mineralization.

Deadwood

The Deadwood showing is large area of intense silicification in Franklin Group sediments that is located about 200 metres north-northeast of the North Banner pit. An old drill road leads from the North Banner pit steeply downhill to the Deadwood zone, and ends just above a short adit which tested this zone. Previous workers have described the Deadwood zone as a "15 metre wide quartz vein", but there are no well defined vein contacts and this is better described as an area of silicification. Gold values within the silicified zone are elevated, to 0.17 oz/t Au in one historic grab sample, but more typically in the several hundred to 1000+ ppb Au range.

North Deadwood

The North Deadwood zone could not be located during the current program. Previous workers have reported values to 0.627 oz/t Au, 14.29 oz/t Ag, 5000 ppm Cu, 1.43% Zn and 37.96% Pb from this zone, however the zone itself is poorly described. A strong NE trending Zn soil anomaly was defined by the Placer survey in this area, spatially associated with a sediment-limestone contact in the Franklin Group. This is now a clearcut logged area with considerable surface disturbance. The supposed showing plots within a large landing area in the clearcut. There is no rock exposed and no evidence of any old workings in the area.

Jimmy

The Jimmy zone refers to several narrow quartz fissure veins within or adjacent to the western contact of the granodiorite intrusive. Several pits and short adits test these veins. A number of small old pits also explore the limestone/intrusive contact in this area, and a large, more recent cat trench has exposed an area of rusty argillaceous siltstone. Mineralization at the Jimmy zone consists of poddy galena and sphalerite within quartz veins. Gold values are low. Two drill holes tested the zone in 1987 without significant results (Pinsent and Cannon, 1988).

Prior to the 2003 program, there was no good understanding as to how all of the different areas of mineralization in the Homestake grid area related to each other. Geological mapping during 2003 was successful in providing a good working model for mineralization, and for providing an explanation about the relationship between the various known showings. Briefly, the model involves a series of sub-parallel irregular, discontinuous silicified zones, trending on average approximately 300°/50°N, which are offset by a series of north trending faults. The veins are all hosted within Franklin Group rocks, near the contact with the diorite/granodiorite intrusion.

As described above, a major north trending, moderate west dipping fault, the McFarlane Fault, occurs in the gully between the Homestake and North Banner showings, and is exposed in a number of old pits along the gully and near the portal to the Banner adit. Current thinking has the Homestake hill forming a dip-slope on the fault and places the Homestake-North Homestake-Laura showings in a thin hangingwall remnant in the upper plate of the fault. As such, these showings have limited depth extent.

The North Banner vein may represent the western on-strike extension of the Homestake vein. The Deadwood zone is a silicified zone, subparallel to the North Banner vein and located a few hundred metres to the north. Both these zones occur in the near hangingwall of the McFarlane fault, and as such, have limited depth extent. There is potential to locate the faulted footwall portions of these zones, however these targets are blind targets that would require testing by drilling. Given the discontinuous nature of the zones and the erratic gold grades, this may not be justified.

The depth potential for the North Banner vein in the hangingwall of the McFarlane fault increases on strike

to the west, however trenching was not able to follow the vein on surface in this direction past the North Banner pit. The Aldie showings, and other areas of silicification discovered west of the North Banner pit, may represent this system, however gold values were low and trenching failed to find any significant mineralization. This particular vein system appears to get weaker on strike to the west.

The Banner “vein”, at the shaft and Trench 03-12, is within the footwall of the McFarlane fault and as such the fault does not limit the vertical or eastern extent of the vein. That said, the Banner vein does appear to peter out both at depth (as shown by the 2003 drill program) and to the east. The Bullion showing, on strike to the east, does show that the system continues in this direction, albeit weakly. The Banner vein is also exposed on the hangingwall side (down dropped side?) of the McFarlane fault.

4.0 SOIL GEOCHEMISTRY

Soil samples were collected from the Homestake grid from May 14 - 20, 2003. Sampling was done by John Boutwell, Scott Hodges, Roger Pugh, Lee-Anne Ennes and Alfreda Elden. Due to budget constraints, only a fraction of the total number of samples collected was submitted for analysis. The remainder of the samples have been dried and placed in storage at Jack Carson's Brown Creek residence north of Grand Forks for analysis at a later date if needed. Several duplicate soil samples were later collected by John Boutwell to check a very high single station gold anomaly within the Homestake grid. Contour soil samples were also collected from the Iron Cap area, by Alfreda Elden during June, 2003. In total some 1530 soil samples were collected, with 292 of the samples submitted for analysis.

Samples were submitted to Acme Analytical Laboratories in Vancouver for preparation and analysis by the Group 1F method (36 element (including gold) analysis of a 1 gm sample by ICP/ES & MS). Details of the analytical procedure are contained in Appendix 4 of this report. Complete analytical results are included in Appendix 5.

Simple statistics for the Homestake Grid soils are shown below in Table 2. Sample locations and results for Au, Ag, Cu, Pb, Zn and As are plotted on Figure 5 -10. Where duplicate samples were collected, the results for these samples are shown in parentheses next to the original result for that location.

STATISTICAL DATA FOR SOIL SAMPLES							
	Au	Au *	Ag	Cu	Pb	Zn	As
	ppb	ppb	ppm	ppm	ppm	ppm	ppm
Minimum Value	0.2	0.2	0.1	13	5	27	2
Maximum Value	10263.1	1269.9	6.5	653	1391	3133	950
Average Value	52.4	16.1	0.7	64	44	230	85
Median Value	3.4	3	0.5	49	21	161	63
Standard Deviation	640.1	112.7	0.8	67	123	285	98

* note: statistical data for Au values have been recalculated, removing from the data set. one very high value that could not be reproduced

Table 2 - Soil Sample Statistics

Given the number of known mineral showings in the portion of the grid that was tested by soil sampling, the geochemical response of this area was disappointingly low. In general, there is a good correlation between anomalous gold and lead values. A weak, linear northwest trending Au-Pb (+Zn, Ag) soil anomaly corresponds to the Bullion-Banner vein occurs in the southwest. The anomaly measures about 200 m long x 25-50 metres wide, with maximum values of 1270 ppb Au, 6.5 ppm Ag, 1391 ppm Pb and 1003 ppm Zn. The anomaly was tested by trenches TR03-10, -11 and -12, as described in Section 6.0.

A single station value of 10,263 ppb Au was reported for L102+00N, 98+00E, roughly on-strike of the above anomaly and in an area of known quartz veining in outcrop. The reject from this sample was re-analysed, using a metallic screen fire assay and the anomalous gold value was not repeated. A duplicate sample was collected from this site, which returned only 1 ppb Au. An infill sample collected 25 metres to the northwest, and a duplicate sample from the adjoining grid station to the southwest also failed to return elevated gold values. It was concluded that the original sample result was the result of sampler or lab contamination.

The only other area of significantly elevated gold in soil samples is on line L104N about 100 metres east of the baseline. A two station gold anomaly (479 & 111 ppb Au) with corresponding elevated lead (to 812 ppm Pb) and with weakly elevated Zn, As and Ag corresponds to an area of quartz veining (with minor galena, sphalerite and pyrite) and silicified Franklin sediments in outcrop. Rock samples from this area returned low gold values, to a maximum of 673 ppb Au (with 1.8% Zn, 1.7% Pb).

Copper is consistently low throughout the area sampled. Broad areas of elevated zinc and arsenic appear to be stratigraphically controlled, and correlate generally with Franklin limestone/conglomerate contacts. There is also a zinc-arsenic anomaly associated with the North Homestake area, and a weak-moderate silver anomaly associated with the Laura showing. Elevated tellurium (to 1.3 ppm) occurs downslope from the Homestake dump, as well as downslope from the Banner showing.

As discussed in the preceding section, four areas of anomalous gold in soils on Mt. Franklin were identified by Placer's geochemical survey in 1987, with individual values to 3370 ppb Au and 1730 ppb Au (Pinsent and Cannon, 1988). These areas were prospected during the 2003 program and no evidence of alteration or mineralization was noted, nor was there any indication that the anomalies were caused by glacial dispersion. Soil samples were collected from the Mt. Franklin area in an attempt to reproduce the soil anomalies, however due to budget constraints, these samples were not submitted for analysis. On re-examining the Placer soil data, it seems very likely that these results were erroneous, however before dismissing these targets completely, the 2003 soil samples from this area should be analysed.

Sample locations and results for contour soil samples collected in the Iron Cap area are shown on Figure 11. No significant results were obtained from these samples.

5.0 ROCK GEOCHEMISTRY

An extensive prospecting and rock sampling program was done from May-September 2003, to follow-up all of the high priority targets on the property that had been identified by the 2002 compilation program (Caron, 2002). The reader is referred to the 2002 compilation report for details and rationale in selecting targets for follow-up. A total of 288 rock samples were collected from the Franklin property during 2003. The majority of the samples were collected by John Boutwell during the course of prospecting. A lesser amount of rock sampling was completed by Linda Caron, while carrying out geological mapping on the Homestake grid. A very few samples were collected by other individuals (Alfreda Elden, Jim Kermeen, Murray McLaren).

Descriptions for all rock samples are contained in Appendix 1. Sample locations from the Homestake Grid are shown on Figure 12. Locations from the IXL area are included on Figure 13, while those from the remainder of the Franklin property are shown on Figure 11.

All samples were submitted to Acme Analytical Laboratories in Vancouver for preparation and analysis by the Group 1F method (36 element (including gold) analysis of a 30 gm sample by ICP/ES & MS). Overlimit samples were assayed for Au and Ag (and for Cu, Pb, and Zn where relevant). Details of the analytical procedure are contained in Appendix 4 of this report. Complete analytical results are included in Appendix 6.

Results for select elements are included on Figures 11-13, and are discussed below. No attempt has been made to calculate any statistics on the rock samples, because of the extremely varied nature of material sampled and the wide range of sample locations. "Significant" values are somewhat arbitrarily picked at:

- > 1000 ppb Au
- > 20 ppm Ag
- > 1000 ppm Cu, Pb, Zn
- > 300 ppm As
- > 300 ppb Hg

Values meeting or exceeding these limits are shown in bold on Figures 11-13. Antimony, selenium and tellurium are also of interest, because of their association with epithermal style mineralization elsewhere in the district. Values exceeding 35 ppm Sb, 20 ppm Se and 3 ppm Te are considered anomalous.

One sample was collected for lead isotope analysis on galena. The sample was submitted to the University of British Columbia; results are included in Appendix 9.

Franklin Property *Figure 11*

Five samples (JB024, 025, 2417-2419) were collected from the Union Mine dumps to provide a geochemical signature for comparison to samples from showings in the Homestake grid area. Two of the Union samples contained elevated gold, to a maximum of 9.6 g/t Au. Higher gold values were associated with a higher sulfide content. Sample JB024 was collected from greyish quartz/silicified material with galena, chalcopyrite and sphalerite mineralization and shows a geochemical signature for the Union vein of Au:Ag:Cu:Pb:Zn:Hg:Se:Te. It returned:

	Au	Ag	Cu	Pb	Zn	As	Hg	Sb	Se	Te
	ppb	ppm	%	%	%	ppm	ppb	ppm	ppm	ppm
JB024	9578	>100	0.7	2.2	8.4	94	1441	26	107	5

Considerable sampling was done from an area labelled on Figure 11 as the Iron Cap (after the former crown grant on which it is situated). Intensely silicified Nelson intrusive rocks are exposed along the main road at

this point, and several small flecks of what was confidently identified as native gold were noted. Some 30 metres south and up the hill from this area, an old pit has been dug along a strong north trending, near vertical fault zone. A number of pieces of very impressive looking epithermal quartz breccia were found on the dump of the pit. A large number of samples were collected from this area, as shown on Figure 11. Samples did not returned elevated values in gold, silver, base metals or other elements of interest. Further uphill to the south minor quartz veining was noted in float boulders of Eocene Kettle River sediments. About 300 metres to the southeast of the Iron Cap pit, the hillside is riddled with shallow old pits and trenches within an area of Eocene sediments and Franklin Group volcanics (?). Sample JB129 was a sample of magnetite, pyrrhotite and pyrite in quartz, collected from the dump of an adit in this area. This sample returned 1893 ppb Au and 28.9 ppm Ag. Tellurium was also elevated in this sample (5 ppm Te).

Eocene epithermal veining occurs on the east side of Gloucester creek, along the main logging road (samples JB166-68, 170). Samples of vuggy quartz breccia veining in carbonate altered intrusive from this area were not anomalous in gold, silver, base metals or other elements of interest.

Some sampling was done at the McKinley showing to investigate the possibility for Lamefoot type mineralization. Samples JB001-011 were collected from samples of massive sulfide (chalcopyrite, sphalerite, pyrite) and magnetite from this area, and consistently show high silver and copper values, with local high values of lead, zinc, arsenic, mercury, antimony, selenium and tellurium. Gold values are elevated, but low, to a maximum of 784 ppb Au. JB001 was a sample across a 0.4 metre wide sphalerite-chalcopyrite zone adjacent to a magnetite body. Samples JB009 and -010 were similar material collected about 150 metres to the south of this (uphill) from the dump of an old trench, and returned similar results, as shown below.

	Au ppb	Ag ppm	Cu %	Pb %	Zn %	As ppm	Hg ppb	Sb ppm	Se ppm	Te ppm
JB001	64	>100	2.1	2.6	1.5	1622	1018	1110	148	14
JB009	784	91	2.2	2.5	>9	780	3158	12	272	23
JB010	126	>100	7.5	0.9	3.0	64	1594	10	108	8

An area of pyritic sediments adjacent to limestone along the main road, north of the McKinley showings and on the north side of Franklin creek, was also prospected and sampled. No elevated values were returned from this area (samples JB105-116, etc).

Rock sampling was also done in the vicinity of the Maple Leaf showings, on the Dodge 99 claim to test for gold mineralization in this area. Epithermal quartz veining was noted in old pits within the Averill intrusive rocks in this area, in close spatial association with copper mineralization within the pyroxenite. Two samples of sulfides with quartz veining were sampled (JB026-027) and showed highly anomalous Hg and Ag (+Cu, Pb, Zn, Se +/- Sb), but no significant enrichment in Au, as shown below. Sample AE007, from the same location, was a sample of massive sulfides (chalcopyrite, galena, sphalerite).

	Au ppb	Ag ppm	Cu %	Pb %	Zn %	As ppm	Hg ppb	Sb ppm	Se ppm	Te ppm
JB026	99	>100	2.9	1.3	5.8	5	4009	66	53	2
JB027	90	>100	1.6	2.1	0.3	1	2229	2	97	1
AE007	57	76.8	4.2	0.7	6.2	3	4601	3	40	0.4

Samples of massive to semi-massive chalcopyrite within shear zones in pyroxenite from the same area (JB028-030) returned copper values to 4.7% Cu with >100 ppm Ag. In the same area, two samples were collected from the Maple Leaf crush zone (JB186-187), a large zone of shattering and copper staining in syenite. One sample was elevated in gold, the other in silver and copper, as listed below.

	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Hg ppb	Sb ppm	Se ppm	Te ppm
JB186	3244	17.3	10	26	3	16	16	0.3	4	2
JB187	317	58.6	9050	5	62	2	<5	0.5	0.8	0.2

About 500 metres south of this area, and due west of the Union Mine, two samples were collected from an area of silicification and quartz veining (JB188, 189). The quartz is whitish, lacking the sulfides seen at the Union dumps. One sample did return elevated gold, as shown below.

	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Hg ppb	Sb ppm	Se ppm	Te ppm
JB188	1406	8.8	385	155	800	33	26	2	2	0.1

Only one other sample is worth specific mention. Sample JB240 was collected from a 1.4 metre wide bull-type quartz vein on Mt. McKinley in the southern part of the property. An old pit was dug on the vein, which appears to trend at about 300° along a sediment-augite porphyry contact. Gold and copper were enriched in the vein, which has a different geochemical signature from the Union vein.

	Au g/t	Ag ppm	Cu %	Pb ppm	Zn ppm	As ppm	Hg ppb	Sb ppm	Se ppm	Te ppm
JB240	4.92	6.9	1.3	18	68	12	15	1	15	1

Homestake Grid *Figure 12*

A considerable amount of rock sampling was done in the Homestake Grid area, as shown on Figure 12. Significant gold results are discussed below.

Samples from each of the known areas of mineralization were collected to test the geochemical signature of mineralization for comparison to the Union Mine. Rock sample results reported by previous workers include some very high gold values from some of the areas of mineralization in the grid area, in particular the Homestake and North Banner. These very high gold values were not repeated by the 2003 rock sampling program.

Two grab samples were collected from the dump of the Homestake shaft. The samples show a similar signature to the Union mine (Au:Ag:Cu:Pb:Zn:Hg:Se:Te) although elevated tellurium is lacking at the Homestake and values are generally lower for all elements except gold. A lead isotope analysis on galena was done on a sample collected from the Homestake mine during 2003 (see Appendix 9) that suggests a Jurassic age to the mineralization.

	Au ppb	Ag ppm	Cu %	Pb %	Zn %	As ppm	Hg ppb	Sb ppm	Se ppm	Te ppm
JB022	6559	16.4	0.17	0.33	0.49	101	79	5	19	1
JB023	9305	26.2	0.21	0.95	2.8	61	505	7	26	1

Five samples were collected from the dump at the Banner shaft. As with the Union vein, higher gold values are associated with a higher sulfide content. The Banner vein has a similar geochemical signature to the Union vein, as shown below. Results from trenching and drilling done to follow-up the Banner vein are described in Sections 6.0 and 7.0 of the report.

	Au ppb	Ag ppm	Cu %	Pb %	Zn ppm	As ppm	Hg ppb	Sb ppm	Se ppm	Te ppm
JB019	302	22.1	0.14	0.92	9852	27	1044	12	6	0.5
JB020	817	47.6	0.11	0.89	292	56	388	25	7	1
JB021	1439	>100	1.37	3.05	>9 %	64	1850	128	42	6
2325	1691	97.4	0.47	4.07	>9 %	37	2679	57	9	3
2326	826	49.6	0.46	0.66	1323	32	557	17	12	3

Samples from the Bullion pits, 150 metres on strike to the southeast from the Banner shaft, had similar results, with anomalous Au, Ag, Cu, Pb, Zn, Hg, Se (JB017, 018, 2322). Arsenic was also elevated in the Bullion samples, to 438 ppm As, while elevated tellurium was lacking.

Numerous old pits and trenches test an area of silicification, quartz veining and brecciation on the hillside below the main road and a few hundred metres north of the Homestake shaft. This area is known as the North Homestake area. A number of samples were collected in this area, and elevated gold values were returned from several samples, as shown below. A metallic screen gold assay was run on sample JB064, which did not significantly increase the gold grade and suggests that gold is not occurring as coarse particulate gold.

	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Hg ppb	Sb ppm	Se ppm	Te ppm
JB064	10.3	33.7	2790	1.58 %	2393	194	152	9	38	0.7
	g/t									
2304	1982	4.9	193	138	147	294	16	6	5	0.3
2308	2714	18	189	1562	240	511	44	14	24	0.6
2309	2695	19	372	3676	1076	196	35	11	12	0.5
2312	4650	18.2	391	1632	361	68	73	7	8	0.2
2313	6612	17.9	355	1602	1115	163	322	4	5	0.2

Elevated gold was also returned from samples from the dump North Banner pit, as shown below. Intensely silicified, brecciated calcareous sediments are exposed in the pit. Sulfide content is low, generally less than 3%, as fine black bands and patches. Higher gold values are associated with higher sulfide content. A metallic gold assay on sample 2314 did not upgrade the gold value significantly.

	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Hg ppb	Sb ppm	Se ppm	Te ppm
JB058	3.96	18	1772	9002	3.2%	39	768	5	15	0.5
	g/t									
JB059	1074	11.2	1511	3699	1.7%	16	773	4	10	0.4
JB060	1991	12	753	1.1%	1.5%	27	956	6	7	0.6
2314	9.38	46.8	1811	2.35%	1595	163	322	21	27	4
	g/t									

An old adit tests a zone of massive pyrrhotite-arsenopyrite mineralization along a syenite contact on the steep hillside north of Twin Creek. Samples JB074 to -076 were collected from this area. Two of the samples returned elevated gold, to 2983 ppb Au, with arsenic values exceeding the ICP limit.

IXL Area**Figure 13**

Figure 13 shows the rock sample locations and results for sampling in the IXL area in the southwestern part of the Franklin property. The 1969 Newmont trenches and drill holes are included on this figure for reference. The location of the 2003 drill hole (IXL03-1) is also shown. In general, there is a strong correlation between copper and gold values in this area.

Several samples were collected from Newmont's 1969 Trench 3 (in the area reported to return 0.78% Cu over 21.3 metres (70 feet)) and show that gold values are elevated within this zone. Silver was only slightly anomalous and no other elements of interest were significantly enriched. The Newmont trench is sloughed with limited rock exposure. Sulfide rich boulders and silicified, sulfidic feldspar porphyry were sampled, with anomalous results listed below.

	Au <u>ppb</u>	Ag <u>ppm</u>	Cu <u>%</u>
JB016	1154	7.1	0.64
JB233	3.03	3.2	1.14
	g/t		
JB234	1398	1.4	0.38
JB243	1171	7.8	1.19

An area of epidote-chlorite-magnetite altered Franklin volcanics occurs in outcrop and subcrop in the logged area uphill from Newmont's Trench 3. A old adit, now caved, tested this zone. Numerous samples were collected from this area. Gold and copper values were consistently elevated, to a maximum of 1598 ppb Au and 4081 ppm Cu. Some of the better results from this area are as follows:

	Au <u>ppb</u>	Ag <u>ppm</u>	Cu <u>%</u>
JB034	4326	7.3	0.62
JB205	1598	3	0.23
JB207	1461	1.3	0.34
JB208	1242	1.2	0.41
JB230	1981	9.3	886

A sample of massive sulfide float about 100 metres to the northwest and downhill from this area, in IXL creek contained 8.6 g/t Au and 1.65 % Cu (JB012).

Skarn with galena and sphalerite occurs in several places near Franklin Group limestone contacts (samples JB013, 211-12, and 236-38). These samples are significantly enriched in Ag, Cu, Pb, Zn, As and Hg, but do not contain appreciable gold.

6.0 TRENCHING

A trenching program was carried out from July 2-14 2003, to follow-up on targets resulting from the geological mapping, prospecting, soil and rock sampling programs in the Homestake grid area and to follow up results from previous exploration programs in this area. A total of 364 lineal metres of trenching was done in 15 trenches, using a Hitachi EX 60 excavator owned and operated by Impact Equipment of Trail, B.C. Trench layout, mapping and sample layout was done by Linda Caron. John Boutwell and Alfreda Elden assisted with trench mucking and trench samples were collected by John Boutwell. All trenches have been backfilled and any timber disturbed has been bucked and scattered.

Trench locations, relative to property boundaries and to the Homestake grid, are shown on Figure 4. Table 3, below, lists the specifications for each of the trenches. Detailed geology and sample layout for the individual trenches are shown in Figures 14 - 18.

Trench	Area	Sample #'s	Length	Target
TR 03-1	North Banner	2333-2347	12 m	To expose the North Banner vein on strike near the North Banner pit.
TR 03-2	North Banner	-	20 m	To test for the offset eastern strike extension of the North Banner vein.
TR 03-3	North Banner	2348-2374	23 m	To test for the offset eastern strike extension of the North Banner vein, in the area of mineralized quartz vein float.
TR 03-4	North Banner	2375-2376	53 m	To test for the surface expression of veining intersected in ddh 94NHO-3c. Note that this hole location was plotted incorrectly by Miller (1994) and now is believed to be at the North Homestake zone.
TR 03-5	North Banner	-	33 m	To test for the offset western strike extension of the North Banner vein.
TR 03-6	North Banner	2388-2392	11 m	To better expose an area of veining/silicification in outcrop with elevated gold values (JB104), east of the North Banner vein.
TR 03-7	Aldie	2377-2380	11 m	To test the Aldie zone up hill from old pits in limestone (JB061, 062), near unknown RC drill hole sites.
TR 03-8	Aldie	2381-2387	26 m	To test the Aldie zone up hill from old pits in limestone (JB061, 062), near unknown RC drill hole sites.
TR 03-9	North Banner	-	12 m	To test the gully between the North Banner and Homestake veins.
TR 03-10	Banner - east	2393-2397	19 m	To test the 1270 ppb Au soil anomaly at L98+50N, 97+00E for possible vein between the Banner and Bullion workings.
TR 03-11	Banner - east	2398-2399	26 m	To test for the possible eastern strike extent of the Banner vein near an old working and quartz vein float by the road.
TR 03-12	Banner shaft	2400-2430	29 m	To expose the Banner vein along strike at the Banner shaft.
TR 03-13	Banner - north	2431-2434	14 m	To test Cu ox stained qtz float along the road northwest of the Banner adit near the 10g/t Au in soils (not repeatable). Can't get the machine to the anomalous soil site.
TR 03-14	North Homestake	2435-2440	59 m	To test for the surface expression of veining intersected in ddh 94NHO-3c. Note that the location and results for this hole are questionable.
TR 03-15	North Homestake	2441-2443	16 m	To better expose veining in an old pit on the North Homestake where previous samples had returned high Au values (JSK #4, 2308, JB064).

Table 3 - Trench Specifications

A total of 111 samples were collected from the trenches, as listed in Table 5 and shown in Figures 14 - 18. Descriptions of trench samples are included in Appendix 2. Unless specifically noted, all samples were channel samples. Samples were shipped to Acme Analytical Laboratories in Vancouver for Group 1F analysis (36 elements (including gold) by ICP/ES & MS on a 30 gm sample). Overlimit samples were assayed for Au and Ag. Further details of the analytical procedures are contained within Appendix 4 of this report.

Sample results, for select elements, are included on Figures 14 - 18. Note where a standard repeat analysis was done on a sample by the lab for quality control purposes, the average value of the original and repeat analysis is quoted for the sample. Basic statistics for the select elements for the trench samples are shown below in Table 4. It should be noted that trench samples were heavily weighted towards areas of mineralization or silicification. Furthermore, no attempt was made separate the samples by rock type or style of mineralization prior to calculating these statistics.

	Au	Ag	Cu	Pb	Zn	As	Hg
	ppb	ppm	ppm	ppm	ppm	ppm	ppb
Minimum Value	2	0.1	20	3	76	1	5
Maximum Value	20772	88.4	13756	27975	35852	1480	1863
Average Value	1097	12.1	1095	4049	4461	195	206
Median Value	178	4.8	301	659	569	117	56
Standard Deviation	2945	17.3	2024	7606	7996	267	342

Table 4 - Statistical Data for Trench Samples

As with rock samples, “significant” values are somewhat arbitrarily picked at:

- > 1000 ppb Au
- > 20 ppm Ag
- > 1000 ppm Cu, Pb, Zn
- > 300 ppm As
- > 300 ppb Hg

Values meeting or exceeding these limits are shown in bold on Figures 14-18.

North Banner Area *Figure 14*

Seven trenches were dug in the vicinity of the North Banner showing, as shown on Figure 14. The orientation of the North Banner vein was unclear in the old pit and from previous drilling that tested the zone. An attempt was made to follow the North Banner zone on strike to the east and west from the original North Banner pit. The vein could not be traced to the west by trenching. To the east, two vein segments were exposed by trenching and show the vein to have an orientation of about 300°/70°N. The vein averages 1 to 2.5 metres in width, but is affected along strike by numerous post-mineral faults that offset the vein. Hangingwall and footwall contacts to the North Banner “vein” are gradational, except where the zone is cut along strike by later faults. Detailed chip sampling from the 2003 trenches showed that, on average, the gold grade was quite low. Samples from TR03-1 returned a weighted average grade of 6.6 g/t Au, 7.2 ppm Ag, 295 ppm Cu, 1000 ppm Pb and 1074 ppm Zn over an average true width of 2.34 metres. One sample from this trench assayed 25.32 g/t Au (over 1.6 metres). Samples from TR03-3 were significantly lower in gold, returning an average of 192 ppb Au with similar Ag, Cu, Pb and Zn values. Arsenic and mercury and antimony values were locally elevated in the TR03-3 samples (to 1480 ppm As, 366 ppb Hg and 44 ppm Sb), while none of the samples from TR03-1 contained elevated As, Hg or Sb. This may indicate a vertical zonation between the two vein segments.

Aldie Area

Figure 15

Trenches 03-7 and 03-8 were dug to test for mineralization in the vicinity of the upper Aldie pits. Previous samples from this area reportedly returned values to 1.186 oz/t Au and to 4.55% Zn and 1.45% Pb (Caron, 2002) however sampling during the current program was unable to duplicate these high values, returning a maximum of 536 ppb Au. Only very minor silicification and malachite staining was discovered in the TR03-7 and 03-8. There were no significant gold values from samples collected.

Banner Area

Figure 16

Two trenches were dug to test the Au-Pb soil anomaly between the Bullion pits and the Banner shaft, as shown on Figure 16. The eastern strike extension of the Banner vein was not intersected in either trench. Trenching was then done adjacent to the Banner shaft to expose the Banner vein and to define its orientation. A 28 metre long by 10 metre wide area was stripped and which was essentially entirely within the “vein”.

The Banner vein is similar in appearance to the Homestake and Union veins and is best described as a zone of intensely silicified Franklin (calcareous) sediments which locally grades to a massive quartz-carbonate vein. It is weakly mineralized with poddy sphalerite, galena and chalcopyrite and, on surface, has weak malachite and manganese staining. Locally the sulfide content ranges up to 5 or 10%, but is typically much less than this. Narrow massive galena veins occur within the silicified zone. Better gold grades correlate with higher sulfide concentrations.

In Trench 03-12, a prominent 340°/75°W trending fault forms the western contact of the vein/silicified zone with argillite. It was unclear in the trench whether or not this represented the true vein orientation, however drilling has confirmed that it does not and that the Banner vein in fact trends at 280-300°/30-35°N. The weighted average grade for the Banner vein, in Trench 03-12 is 1.4 g/t Au, 35.3 g/t Ag, 0.3% Cu, 1.3% Pb and 1.5% Zn over an 11 meter true width. Mercury, antimony, selenium and tellurium were locally elevated in samples from Trench 03-12, and in particular in sample 2410 (a sample of massive galena). This sample contained 1863 ppb Hg, 205 ppm Sb, 115 ppm Se and 17.4 ppm Te. Arsenic values were not elevated in the surface samples of the Banner vein.

Banner Area (West)

Figure 17

A single trench was dug along the old road, about 250 meters northwest of the Banner adit, as shown on Figure 17. The trench was designed to test an area of malachite staining and quartz vein float, near the very high gold in soil value on L102N, 98+00E. While this value was not repeated in subsequent sampling and is believed to be the result of lab or sampler contamination, an effort was made to test the site to be sure. Unfortunately, the topography was too steep to allow the excavator to reach the grid station in question. Trench 03-13 was dug along the road, about 70 meters west (and downhill from) of the “anomalous” sample site. A 0.7-1 meter wide zone of silicification and irregular quartz-carbonate veining with minor sulfide mineralization (galena, sphalerite) and with moderate malachite staining was uncovered in the trench. The best result from the zone was 147 ppb Au, 43 ppm Ag, 0.9% Cu, 2.0% Pb and 2.7% Zn, over 0.7 meters. Mercury was also elevated, to 489 ppb.

North Homestake Area

Figure 18

The final two trenches of the 2003 trenching program were dug in the North Homestake area, to test an area of silicification and quartz veining with anomalous gold values in rock samples. Trench 03-14 was designed to test for the surface expression of veining intersected in ddh 94NHO-3c. (Note that the location and results for this hole are questionable, as detailed in Section 3.3 of this report). There was no evidence of veining in Trench 03-14, and no samples with significant values of gold or silver. One sample contained

elevated zinc (1169 ppm Zn).

Trench 03-15 was dug to better expose veining in an old pit on the North Homestake where previous samples had returned high Au values (to 2.75 oz/t Au). A pod of quartz veining/silicification along a 355°/65°E trending fault zone was exposed in TR03-15. The vein could only be traced for about 8 metres along strike before it pinched out along a sandstone/argillite contact. One sample across the 1.3 metre true width of the vein in TR03-15 returned 2346 ppb Au and 8.4 ppm Ag (with 1522 ppm Pb).

7.0 DIAMOND DRILLING

Between September 22 and October 14, 2003 a 9 hole diamond drill program, totalling 490.6 meters, was carried out. The drill program was designed to follow-up on results from the May-August, 2003 exploration program (geology, rock and soil sampling, trenching). General management was by Northern Natural Resource Services of Vancouver, drilling was contracted to Delorme Diamond Drilling of Merritt, B.C. and field supervision, core logging and sample layout was provided by Linda Caron and Jim Kermeen. John Boutwell provided assistance in the field, as well as splitting and sampling drill core.

Water for drilling was hauled from Burrell Creek using a 200 gallon water truck owned and operated by Impact Equipment of Trail, B.C. Drilling was on a one shift per day basis. Core was moved off site daily to the Jack Carson's Brown Creek residence north of Grand Forks. Logging and sampling was done at this location, where core is presently stored.

Eight of the holes (FR03-1 to FR03-8) were drilled on the Banner vein, while the final hole (IXL03-1) was drilled at the IXL target. Core logs for all holes are contained within Appendix 3. Table 5, below, lists the specifications of drill holes.

Drill Hole	Drilled	Azim/Dip	Depth		Approx grid coordinates	GPS coordinates (NAD 27)	Samples
			(feet)	(meters)			
FR03-1	Sept 22-23/03	070°/-50°	150'	45.7	99+71 N 97+16 E	400208 E 5490265 N	2444 - 2446
FR03-2	Sept 23-24/03	250°/-50°	130'	39.6	99+54N 97+67E	400257 E 5490280 N	2447 - 2459
FR03-3	Sept 25-26/03	250°/-85°	132'	40.2	99+54N 97+67E	400257 E 5490280 N	2460 - 2472
FR03-4	Sept 26-27/03	070°/-60°	165'	30.3	99+54N 97+67E	400257 E 5490280 N	2473 - 2478
FR03-5	Sept 28-29/03	290°/-60°	147'	44.8	99+54N 97+67E	400257 E 5490280 N	2479 - 2496
FR03-6	Sept 29-30/03	210°/-60°	100'	30.5	99+54N 97+67E	400257 E 5490280 N	2497 - 2502
FR03-7	Sept 30-Oct 2/03	200°/-53°	170'	51.8	100+05N 97+74 E	400235 E 5490326 N	2503 - 2508
FR03-8	Oct 2-3/03	- /-90°	187'	57.0	100+05N 97+74 E	400235 E 5490326 N	2509 - 2529
IXL03-1	Oct 6-14/03	315°/-45°	429'	130.7	n/a	397837 E 5488407 N	2531 - 2562

Table 5: Diamond Drill Hole Specifications

A total of 110 samples were collected from the drill holes, as listed above in Table 5 and shown on drill logs. Samples were split, with half of the core remaining in the box and the remaining half shipped to Acme Analytical Laboratories for assay. Core samples were analysed by Acme's Group 1DX method (a 0.5 g sample was analysed for 36 elements (including Au) by ICP/MS). Towards the end of the program, some samples were submitted directly for gold assay, with no multi-element analyses completed. Further details of the analytical procedure are contained in Appendix 4; complete analytical results are included in Appendix 8.

Banner Zone *Figures 19 - 23*

Holes FR03-1 to 8 were drilled on the Banner Showing where base and precious metal values occur in a quartz vein/silicified zones hosted by Franklin Group sediments and volcanoclastics near a limestone contact. Although trenching showed that the gold grade of the Banner vein was relatively low on surface, given the similarities to the Union vein, it was felt prudent to test the zone at depth for the possibility of an increase in gold grade at depth. Figure 19 shows the drill hole locations for these drill holes. The geology for the drill holes is shown in section view in Figures 20a - 23a, while sample locations and results are plotted on Figures 20b - 23b.

Hole FR03-1 was drilled easterly to test for a steep west dip to the silicified zone exposed in Trench 03-12 (see Section 6.0 of this report). The hole did not intersect the vein. Subsequent holes were drilled in a westerly direction, and have defined an orientation to the Banner zone of 280-300°/30-35°N. A recognizable vein was intersected in holes FR03-to 7. The vein zone ranges up to 11 meters in true thickness where exposed on surface, but appears to pinch out rapidly at depth, as indicated by holes FR03-4 and FR03-8.

The mineralized zone consists of vein quartz and/or silicified host rock with up to 5% sulphides comprising pyrite, sphalerite, galena and chalcopyrite in decreasing order of abundance. Better gold values appear to coincide with higher concentrations of sulfides. Individual gold assays in drill core range up to 5.16 g/t; silver assays are low; copper ranges up to 0.57%, lead to 3.23%, and zinc to 4.77%.

The better gold values from the Banner drill holes are listed below:

Hole #	From m	To m	Interval m	Au g/t	Ag g/t	Cu %	Pb %	Zn %
FR03-2	20.3	26.5	6.2	0.44	17.95	0.22	0.20	0.99
<i>including</i>	23.2	23.5	0.3	2.0	37.6	0.51	0.59	3.94
FR03-3	19.3	24.6	5.3	0.73	29.6	0.33	0.65*	2.32
<i>including</i>	21.2	21.4	0.2	3.23	31.2	0.41	0.38	2.04
FR03-5	30.0	34.0	4.0	2.34	19.25	0.23	0.65	3.16
<i>including</i>	33.0	34.0	1.0	5.16	32.3	0.42	0.68	4.77

Table 6: Summary of Banner Drill Results

* Note: Two samples within this interval did not have lead assays done to follow-up overlimit lead values by ICP. For these samples, a lead value of 1% is assumed. The average lead value for this interval is therefore only approximate.

The full suite of multi-element analyses was done on only a portion of the Banner drill core samples. Mercury was elevated in samples from the Banner vein, to a maximum of 640 ppb Hg. Although trench samples did not show elevated arsenic values, arsenic was anomalous in some of the vein samples from drilling, to 1069 ppm As.

True widths of the intersections are considerably less than the core lengths. Since the values intersected are well below economic levels for this type of deposit and the vein appears to have limited vertical extent, no further testing of this showing is recommended at this time.

400200E

400240E

5490340N



Drill Hole	Azimuth	Dip	Depth (m)
FR03-1	70	-50	45.7
FR03-2	250	-50	39.6
FR03-3	250	-85	40.2
FR03-4	70	-60	30.3
FR03-5	290	-60	44.8
FR03-6	210	-60	30.5
FR03-7	200	-53	51.8
FR03-8	-	-90	57

FR03-7,8
elev. 1031m

DRILL ROAD

TRACE OF VEIN HANGINGWALL
AT ADIT LEVEL

Banner Adit
elev 1000m (assumed)

30°

TR03-12
(see fig. 16)

21

51

6

FR03-2 to FR03-6
elev. 1037.5m

FR03-1
elev. 1024m

Banner
Shaft

SURFACE TRACE OF
VEIN HANGINGWALL

5490300N

5490260N

NAD 27, ZONE 11

TUXEDO RESOURCES LTD.

FRANKLIN PROPERTY

FIGURE 19

BANNER AREA DRILL HOLE PLAN

SCALE: 1:500



DRAWN BY: LJC/jw
DATE: JANUARY 2004

FILENAME: TUXEDO-FIG19-BANNER-DDR.DWG

Located on Doe 2 claim
See figures 3 & 4 for relationship to property boundary

IXL Zone **Figures 13, 24**

As described in Section 3.2 of this report, the IXL zone is located near the southwest corner of the Franklin property. Intense silicification and disseminated sulfide mineralization is associated with a feldspar porphyry intrusion into Franklin Group rocks. In 1969, Newmont carried out an extensive program of deep trenching in the area, and then drilled three diamond drill holes all of which crossed the silicified zone. The main target was a disseminated copper deposit. Newmont's trench sampling outlined a zone 70 feet long and grading 0.78% copper in one trench, with a second zone of 80 feet grading 0.33% Cu in the same trench. Elevated gold was associated with the central part of the zone. Unfortunately complete records for Newmont's work are available and it is not known whether the silicified zone was adequately sampled for gold. Rock sampling during 2003 showed a good correlation between gold and copper values in the IXL zone, with values to 4.3 g/t Au with 0.62%Cu and 3.03 g/t Au with 1.1% Cu from rock samples. A float sample from the area returned 8.6 g/t Au and 1.65% Cu.

Hole IXL03-1 in the current program was drilled at 045°/-45° and spaced between the Newmont drill sections, as shown on Figure 13. Its location was selected so the upper part of the hole would test the mineralized felsic pyroclastics which lie SE of the ground tested by Newmont and the remainder of the hole would test the silicified zone primarily for gold.

A drill section showing the geology for Hole IXL03-1 is included as Figure 24a. Sample locations and results are included on Figure 24b. Only gold analyses were done on the IXL drill core; significant results are summarized below in Table 7.

Hole #	From m	To m	Interval m	Au g/t
IXL03-1	10.3	28.7	18.4	1.86
<i>including</i>	13.5	20.5	7.0	3.3
<i>and</i>	19.0	19.6	0.6	10.91
<i>and</i>	24.0	28.7	4.7	2.07

Table 7: Summary of IXL Drill Results

Only certain sections of the silicified zone below 28.7 metres were sampled. Assays ranged from 0.12 to 0.35 g/t Au. The gold values in the felsic pyroclastics are very significant and further testing of this rock is recommended.

8.0 RECOMMENDATIONS

Prospecting on Mt. Franklin in the area of anomalous gold-in-soils identified by a previous operator could not account for the anomaly and had led to the (preliminary) conclusion that the soil anomaly is spurious and perhaps caused by contamination from the sampler or the lab. The 2003 soil samples collected from the Mt. Franklin area were not analysed, because of budget constraints and before the “anomalous” area of gold-in-soils on Mt. Franklin is completely ruled out, these samples should be run to see if the gold values are reproducible. The possibility of Eocene epithermal gold mineralization is of such significance that it would be unwise to be overly hasty in dismissing this target. Eocene epithermal mineralization was discovered elsewhere on the property, but without significant gold values.

Thorough prospecting was carried out on the Franklin property, to locate, sample and give a preliminary assessment of all the high priority targets identified by the 2002 compilation program. Detailed geological mapping, rock and soil geochemistry, trenching and diamond drilling was done in the Homestake grid area to follow-up targets in this area. Many of the targets Homestake area and elsewhere on the property that had been identified by the 2002 compilation program were written off based the results of the 2003 exploration program. Two areas, the Union Mine and IXL, remain as high priority targets with good exploration potential.

Anomalous gold in pyritic chlorite-epidote-magnetite altered mafic volcanics was identified east of the 1969 Newmont trenches (70 feet @ 0.78% Cu and 80 feet @ 0.33% Cu). Values to 4.3 g/t Au, 7.3 ppm Ag and 0.64% Cu were returned from rock samples from this area, with results to 8.6 g/t Au, 14.2 ppm Ag and 1.6% Cu from float in IXL creek to the south. When drilling failed to return any encouragement from the Banner vein, the balance of the drill budget was spent drilling one hole in the IXL area. This drill hole returned 18.4 meters grading 1.86 g/t Au. No analyses for copper or silver was done on the 2003 drill core from the IXL. Further exploration of the IXL zone is strongly recommended to explore for bulk tonnage gold-copper mineralization.

Further exploration at the Union Mine is also recommended, to attempt to locate the faulted western extension to the system and to explore for possible parallel mineralized zones. Apart from minor rock sampling for geochemical purposes, no work was done at the Union Mine during 2003.

9.0 REFERENCES

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10.0 STATEMENT OF QUALIFICATIONS

I, Linda J. Caron, certify that:

1. I am an independent consulting geologist residing at 717 75th Ave (Box 2493), Grand Forks, B.C., V0H 1H0
2. I obtained a B.A.Sc. in Geological Engineering (Honours) in the Mineral Exploration Option, from the University of British Columbia (1985) and graduated with an M.Sc. in Geology and Geophysics from the University of Calgary (1988).
3. I have practised my profession since 1987 and have worked in the mineral exploration industry since 1980. Since 1989, I have done extensive geological work in Southern B.C. and particularly in the Greenwood - Grand Forks area, both for exploration companies and as an independent consultant.
4. I am a member in good standing with the Association of Professional Engineers and Geoscientists of B.C. with professional engineer status.
5. I carried out the geological field work on the Franklin property, as described in this report.
6. I have no direct or indirect interest in the property described herein.

Linda Caron, M.Sc., P. Eng.

Date

APPENDIX 1

Rock Sample Descriptions

Samples 2301-2332, 2529, JK 001,
JB 001-246, AE 004-007

Sample #	Northing	Easting	Area	Type	Width	Description
2301	98+00N	100+35E	Laura	grab		grab from dump of shallow pit near end of road. Int silic'd, bx'd volc siltst? minor hem stain.
2302	98+40N	100+50E	Laura	grab		intensely silic'd, bx'd, rusty siltst, patchy fine dissem py to 5%. Later white qtz veinlets cut silic'd siltst. Grab sample from large scraped area at end of road.
2303	98+00N	106+25E	Mt. Franklin	grab		glacial erratic boulder of white vuggy chalcedonic - sugary qtz vein, minor carbonate, minor qtz druse, no sulfides. Boulder is 20x20cm. Sample for evid of glacial dispersion of geochem anomalies.
2304	100+50N	100+85E	North Homestake	grab		Prominent low angle fault zone exposed in series of pits. Select grab from dump of pit of v rusty, bx'd, pyritic qtz/siliceous fine siltst.
2305	100+50N	100+65E	North Homestake	grab		same structure as at 2305. Another pit ... structure trends 360°/30°E with blocks of qtz (+ minor carb) within fault and fine flt bx with milled qtz frags. Rx in hwall are unaltered grey-black argillaceous siltst. Sample is select grab of qtz vein material from dump - very little py, no Fe ox stain.
2306	98+75N	99+60E	Homestake	grab		pit just below rd (3x3x2m deep) on bx'd bleached argillic + silic'd siltst. Local bx'd qtz vein with minor fine grained patchy py on dump. Sample is vein material from dump.
2307	101+00N	101+75E	North Homestake	grab		Several old pits/trenches this area + drill hole collars 94NHO2,3. Rusty silic bx'd siltst. Siliceous crackle bx healed fault zone with 2-5% brassy diss py trends 060°/40°SE. Sample of fault bx from dump. Bx has 50% 2-4 mm angular clasts of grey-buff int silic'd siltst with finely crushed granular qtz-siliceous siltst matrix.
2308	100+95N	101+10E	North Homestake	grab		Old trench with sample flag JSK#4 (Kermeen high grade sample). Difficult to see controls to silic'n and minz'n. Massive v silic rusty pyritic siltstone in hwall of siliceous bx'd fault/crush zone, appears to trend 060°/20°E. Sample 2308 is a select grab from the trench dump of rusty, vuggy silic bx.
2309	100+95N	101+10E	North Homestake	grab		Same as 2308, but sampled 060°/20°E crush zone in place in trench. Can't see true width of zone.
2310	101+50N	101+50E	North Homestake	grab		3-4 metre deep shaft/pit (3m x 3m) on 020°/90° structure. Rusty int silic'd bleached, crackled bx zone (almost a true "vein"). Steep tight structure - not a crush zone.
2311	102+25N	101+25E	North Homestake	grab		deep trench exposes wide hem bx crush zone in purple-green ep-hem alt'd volcanics. No sense of orientation of structure causing bx/crackling. Sample is grab from trench wall.
2312	101+60N	101+70E	North Homestake	grab		deep old trench dug on qtz vein (silic shear vein/zone) in rusty silic'd bx'd fine grained siltstone. Vein trends 360°/40°W, true width ~1-2 m (not well exposed). 5% fng sulfides (brassy py + black ?) as fine grained patches. Minor mal + Mn stain. Footwall of vein is bx'd volcanics. Hwall is Fe ox stained, silic, bleached siltstone. Vein grades into intensely silic'd hwall - hard to define upper contact.
2313	101+60N	101+70E	North Homestake	chip	1 m	same as 2312. Chip sample across 1 m of vein.
2314	102+05N	99+20E	North Banner	grab		Select grab from dump of North Banner pit. Sample is bleached, white qtz (& minor carb) to intensely silic'd bx, strong Fe ox stain, 2% fine black sulfide bands and patches, minor vuggy cavities, minor mal stain.

Sample #	Northing	Easting	Area	Type	Width	Description
2315	102+05N	99+20E	North Banner	chip	2 m	chip sample across N wall of pit. White qtz - intensely silic'd bx vein.
2316	102+25N	99+80E	North Banner	grab		subdued small moss covered outcrop of qtz-intense silic'n with minor patchy oxid sulfides. Strong fracture on edge of o/c may be vein contact @ 065°/50°NW.
2317			Maple Leaf???	grab		float near trailer at No. 4 portal to Union Mine, but possibly from Maple Leaf. Strong mal stain and 2% coarse patchy cpy in bladed Kspar syenite.
2318			Union Mine	grab		massive white quartz with strong Fe ox on weathered surfaces and with 5% patchy coarse py. From dump below rail spur.
2319			Union Mine	grab		massive crackled grey-green tinged qtz + minor carb. Trace py, no Fe ox stain. From road level near rail spur.
2320	95+10N	102+70E	Franklin Mtn.	grab		Weak clay alt'd, white-pale green, qtz-feldspar-biotite phyric intrusive, or possible very immature arkose. 5% qtz eyes to 4 mm.
2321	97+75N	100+20E	Laura	grab		Numerous pits this area on very fine grained, siliceous, white-pale grey, cherty siltstone. Silic'd, bx'd, rusty weathering, 5-10% diss py. Sample is grab from dump of pit.
2322	98+00N	97+20E	Bullion	grab		Grab sample in place in second pit east of road (JB 018 is from pit nearest road). Intensely siliceous, white-grey, very fine grained cherty siltstone with clots of fine grained py + black sulfides to 5-10%. Strong Fe ox on weathered surfaces.
2323	100+90N	98+75E	Banner area	grab		Quartz outcrop on steep slope between Banner and North Banner showings. Massive, white brecciated quartz.
2324	99+50N	97+18E	Banner	grab		Rotten white quartz with moderate malachite stain from dump of old pit by road to Banner shaft.
2325	99+70N	97+30E	Banner	grab		Dump at Banner shaft. Pick of galena-sphalerite rich quartz vein from dump. Massive white-grey quartz with up to 10% galena + sphalerite, very select grab. Banner vein trends ~ 155°/60°N, up to 7 m wide exposed in trench in dump. Massive and locally strongly bx'd quartz vein, with local bands of late crystalline quartz vein. Sphal-gal may be associated with late xtalline qtz.
2326	99+70N	97+30E	Banner	grab		Dump at Banner shaft. Grab sample of white, rusty, bx qtz with mod Fe stain and mod mal stain, minor py, cpy.
2327	99+50N	96+75E	Banner	grab		Start of old adit on 0.5 m rusty low angle shear zone trending ~ 340°/30° SW (poss same structure as at Banner adit portal). V strong Fe ox, bx'd broken fng volc siltstone. Second trench ~ 10 m to N.
2328	98+20N	95+80E	S of Bullion	grab		Select grab of qtz-py veinlets and clots in v broken, fng bleached volc siltstone. At ~ right strat position to be footwall to Lamfoot horizon, but more likely related to intrusive contact.
2329	102+80N	100+80E	Deadwood	grab		large o/c 5+ meters, of massive white qtz at end of road, outcrops of qtz and silic'd, cherty bx'd siltstone go for another 30+ meters SE from here. Sample is a grab from bx'd massive white quartz at base of outcrop. Can't tell trend of zone.

Sample #	Northing	Easting	Area	Type	Width	Description
2330	104+25N	104+10E	North Deadwood	grab		old pit on v steep hillside just below edge of clearcut, massive white quartz/silic'n in limestone. Trace mal stain. V minor to nil sulfides. Trend of quartz is ~360 °, see qtz o/c downhill to N.
2331	104+30N	99+10E	Aldie	grab		large old pit in forested area NW of North Banner pit. Several other pits to SE of here. Crystalline quartz veining and silic'n in dirty limestone, minor (<3%) sphal-gal-cpy, minor mal stain. Possible minor brown garnets. Looks weakly skarny.
2332	103+50N	106+00E	North Deadwood	grab		area of subcrop near N edge of logging slash, below road. White-pale green, bleached looking, v hard, silic'd. Hard to tell what protolith is - may be Kettle River immature arkose, but sometimes looks intrusive. Prominent quartz eyes (or grains) and irregular patches of finely granular quartz in a fine grained siliceous groundmass with irreg chl alt'd mafic remnants. Protolith could be same as sample 2320.

JB- and AE- Series Rock Sample Descriptions

Note: GPS locations are Nad 27.

Sample #	Location		Description
	Easting	Northing	
JB 001	399712	5488397	McKinley area. 0.4 m vein? in limestone adjacent to magnetite. Sphal, cpy, mal, azurite.
JB 002	399768	5488305	McKinley area. Skarn adjacent to magnetite body. 35% py.
JB 003	399768	5488305	same loc as JB 002. Py rich magnetite ore. 2.5 m wide.
JB 004	399768	5488305	same loc as JB 003. Massive Fe-magnetite with 1.5 cm qtz veinlet.
JB 005	399768	5488305	same loc as JB 003. Pyritic, blackish, + cpy, magnetite.
JB 006	399768	5488305	same loc as JB 003. Massive magnetite.
JB 007	399687	5488276	McKinley area. Old trench upslope from JB 002-6, with py-sphal-cpy in skarny rx. Mag-cpy in 1.5 m "vein". "Vein" is weak-mod magnetic, traced for 5 m @ 270°. Steep dip on limestone contact.
JB 008	399687	5488276	same loc as JB 007. Massive py.
JB 009	399677	5488274	from dump of trench as in JB 007-008. Py, cpy, sphal. Calcite bands.
JB 010	399677	5488274	same loc as JB 009. Sphal, cpy, py in silic'd ??
JB 011	399564	5488272	at McKinley gossan. Massive sulfides.
JB 012	397677	5488457	IXL area. Semi massive sulfide float train in creek/old road.
JB 013	397689	5488477	IXL area. Galena-py-sphal in vein - qtz in limey rx. Float at Trench 4? Many blackish sulfide rich Cu stained boulders look very similar to rocks at McKinley property.
JB 014	397780	5488547	IXL area - Trench 3? Well fractured, gossanous, pyritic porphyritic intrusive.
JB 015	397780	5488547	IXL area - same loc as JB 014. Pyritic felsic fractured intrusive.
JB 016	397780	5488547	IXL area. 20 m NW of JB 014-15. More propylitic than above. Sulfides + chlorite, intrusive.
JB 017			Bullion pit. Jarosite, poss Hg rich. Vuggy qtz vein from dump of working.
JB 018			10 m NW of JB 017. Pyritic qtz vein from dump. Sphal, py in qtz.
JB 019	400227	5490272	Banner. Epi qtz texture. Rusty vuggy qtz.
JB 020	400227	5490272	Banner, same loc as JB 019. Vuggy epi qtz.
JB 021	400227	5490272	Banner, same loc as JB 019. Sphal-gal-py-cpy qtz vein from dump.
JB 022	400410	5490450	Homestake. Recemented crushed qtz vein, grey + white, qtz-calcite, very fine sulfides, cpy-gal.
JB 023	400410	5490450	Homestake. Same loc as JB023. Unidentified sulfides - gal-sphal-cpy in grey-white qtz from dump.
JB 024	402340	5490272	Union dump. gal-sphal-cpy in greyish qtz matrix.
JB 025	402340	5490272	Union dump. Same loc as JB 024, lower portal. Recemented qtz vein, grey-green, cpy.
JB 026	401858	5490885	Maple Leaf. Old digging with epi qtz veinlets + cpy dissem and veinlets. Sample is epi qtz, cpy-mal-az in carb altd syenite?
JB 027	401858	5490885	Maple Leaf. Same loc as JB 026. Epi qtz vein, approx 2-3 cm in carb alt'd syenite?
JB 028	401810	5490843	Maple Leaf. Cu syenite/pyrox float.

JB 029	401899	5490721	Maple Leaf. Cu syenite/pyrox from dump.
JB 030	401899	5490721	Maple Leaf. Pyroxenite with cu from pit.
JB 031	397780	5488412	IXL. Old shaft in clearcut. Silic'd pyritic intrusive.
JB 032	397780	5488412	IXL. Same loc as JB 031. Pyritic, some vein qtz, silic'd intrusive from above shaft.
JB 033	397659	5488354	IXL area. Py+cpy rich bleb/vein in Franklin rx.
JB 034	397812	5488488	IXL area - V1 target. Very pyritic silic'd intrusive.
JB 035	397959	5488656	IXL area. Chlorite-epidote + qtz-calcite veins, Franklin? From old dump close to skarn (60 m).
JB 036	397999	5488661	IXL area. Silic Franklin seds, propylitic, py+qtz. Trench.
JB 037	400787	5492175	Gloucester area. "A" pit on Gloucester. Sample from vein in pit. Magnetite, py, cpy in intrusive shear.
JB 038	400787	5492175	Gloucester area. Same loc as JB 037. Less magnetite, more qtz + py, cpy.
JB 039	399657	5490686	Jimmy area. Sooty crushed argillite, some py, from trench.
JB 040	400875	5492177	Gloucester area. Small trench with magnetite, py, cpy veinlet.
JB 041	400759	5442113	Gloucester trench. Py, cpy, minor magnetite. Not much of this material laying around.
JB 042	399619	5490559	Homestake area. Partially silic'd, well fractured Franklin Group. Rusty outcrop.
JB 043	399678	5490687	Jimmy. Dump at Jimmy vein shaft. Partially silic'd, qtz frags, rusty siltstone, minor py. Appear to be > 10 m wide, poss 20.
JB 044	399676	5490719	Jimmy area. Pyritic, not totally silic, banded siltstone, from trench.
JB 045	399705	5490618	Trench. Sugary, silic, fractured siltstone, partially silic'd small fissures Fe rich.
JB 046	399705	5490618	From Trench at JB 045, plus 15 m south. Sheeted sugary 2 mm qtz vein in siltstone.
JB 047	399634	5490719	Skarn? horizon on contact between Fa unit and limestone, approx 2 m wide. Gal-sphal-minor cpy. Trends E-W?
JB 048	399681	5490700	8 m wide silic'd band siltstone, not complete silic'n. Minor py. Not much actual veining. Runs @ 320° and is target of small adit 30 m south of sample.
JB 049	399681	5490700	Jimmy adit. 20 m at 320° from JB 048. Difficult to sample. Recemented qtz+calcite, some Fe staining, minor py.
JB 050	399840	5490599	GPS location suspect. Qtz vein in silic'd seds at top of conspicuous cliff on L 105. Rusty weathering. Vein approx 20 cm wide, approx strike 270°.
JB 051	399838	5490592	Composite sample from 2 veinlets 4 m apart. Py-mal, more calcite rich, some rusty weathering. These 2 samples in a zone of intermittent silica area. Resembles calc rich portion of Banner vein, approx 8 m wide, cliffs out to W.
JB 052	399835	5490608	Approx 40 metres along strike of vein. "Banner" style calcite rich, sphal-cpy.
JB 053	399762	5490649	Old pit, approx on strike of vein in JB 052. Fairly deep, long trench, following vein at ~ 300°. Sample is sphal-gal calcite-qtz from vein and dump.

JB 054	399762	5490649	Same loc as JB 053. More silica + py.
JB 055			Homestake area. Target M. L 106+50N, 98+75E(?) (or 25E?). No GPS loc here. Limestone-Franklin sed contact. Rusty pyritic seds.
JB 056	399957	5490861	Old digging in limestone. Epidote rich, more silic than usual, weakly magnetic. Epi qtz float 20 m east of above, sampled as JB 056.
JB 057	400047	5491121	Adit at confluence of Twin Creek. Gossan. Franklin seds + volc, sulfide rich horizon? Dump sample. Adit mostly caved.
JB 058	400199	5490957?	North Banner pit. Gal-sphal-py in qtz-calcite epi vein from dump.
JB 059	400199	5490957?	North Banner pit. Cpy-gal-sphal in qtz-calcite vein from dump.
JB 060	400199	5490957?	North Banner pit. More calcite, vuggy, gal-sphal from dump.
JB 061	400125	5490713	Aldie. Qtz-clast silic limestone, py-cpy, from dump. Strong resemblance to Union material.
JB 062	400125	5490713	Aldie. Qtz-clast silic limestone, various sulfides. From dump.
JB 063	400261	5490603	Collection of chips over 20 m length, Frank seds, epi bx very weak. Same loc as 2316.
JB 064	400438	5490598	North Homestake. Vein qtz from pit, Gal-sphal-cpy, rusty.
JB 065			L 103+5N, 99+15E, no GPS position. Common calc seds, very minor Si, outcrop.
JB 066	400129	5490668	Partially silic'd limestone, suspect fine gal. Outcrop.
JB 067	400011	5490734	1? m wide limey qtz vein, bland looking, trends E-W?
JB 068	400002	5490744	Another (or same) vein, seems to go 320°. Gal-cpy, qtz-calcite. Note this vein system has had no work done on it, hosted by congl with vein of black limestone nearby. L 105N, 98+75E.
JB 069	400017	5490780	Picked up vein again to NE.
JB 070			Silic'd limestone, gal-py. Too steep for GPS, just W of baseline at about L106+15N, 99+40E.
JB 071			Same loc as JB 070. Qtz vein in limestone. Brittle, buff weathered, 25% qtz.
JB 072	399999	5489238	Silic limestone outcrop on road, py-cpy.
JB 073	399999	5489238	Same loc as JB 072. Silic siltstone on top of above. Py stringers.
JB 074	400297	5491313	Pyrrhotite-py-cpy in skarny matrix, old pit - collapsed. Skarn ~ 4 m wide? Appears to be a low angle fault in top of pit, syenite contact is within 10 metres.
JB 075	400297	5491313	Much the same as JB 074. Both rx may have arsenopyrite in them as well. Some rx are strongly magnetic.
JB 076			L 108N, 104E, float with bornite + cpy, magnetic.
JB 077	399694	5490951	Qtz-py-cpy in volc seds at corner of road, just N of baseline trail corner.
JB 078	399694	5490951	Same loc as JB 077. Qtz-cpy=py in calc volc seds.
JB 079	400122	5490830	Homestake I target. Partially silc'd limey siltstone, some py.
JB 080	400180	5490845	Vein system, strikes N-S. 4 m wide qtz vein, and another smaller vein. Sample JB 080 is from smaller vein.
JB 081	400180	5490845	Same as JB 080.
JB 082	400214	5490833	Followed float to small pit. Vein system in outcrop is 2 m wide, but float can be found up to 4-5 meters distant. Gal-py-qtz.

JB 083	400214	5490833	Same loc as JB 082. Dirty, somewhat rusty, crumbly, ugly, weak bx, from 5 m west of vein in float.
JB 084	400214	5490833	Same loc as JB 082. Massive siliceous epidote-chlorite skarnish sed from vicinity of pit.
JB 085	400287	5490861	Two very small pits with plain vein qtz + silic host rock.
JB 086	400268	5490656	Partially silic'd siltstone, minute qtz stringers, composite sample on silic ridge.
JB 087			L 104+50N, 103+50E. Silica rich pyroxenite skarn? sphal + qtz, hem, some magnetite here.
JB 088	400366	5490949	Cruddy, dead looking but with some qtz. Very dirty, limey.
JB 089	400441	5491011	Epi qtz bx in limestone from dump. Cpy + Si. Followed vein approx 35 meters @ 40°. Strong bx + Si, but outcrop disappears.
JB 090	400589	5491052	Cruddy looking but slightly silic'd, crushed looking Franklin rocks.
JB 091	400320	5490903	Target N. Limestone, appears to have sphalerite.
JB 092	400325	5490910	Weak zone of Si infusion into limestone. Qtz-cal lattice work, not fully penetrating rock, approx 1 m wide.
JB 093	400259	5490847	Followed limestone W across gully. Found flat lying 15 cm wide vein, gal-cpy, crushed, recemented look + plain silicification in limestone. Sample consists of both.
JB 094	400148	5490612	NW of North Banner. Limey lense + partially silic'd clastic rock.
JB 095	400160	5490665	Cu + qtz-calcite in limey conglom outcrop. This may be fairly wide system.
JB 096	400134	5490633	12 m west of JB 097. Fe carb alt'd arkose? some Si.
JB 097	400134	5490633	Cpy-gal in calc-Si vein. No guess as to width.
JB 098	399806	5490762	Vuggy, whitish, somewhat silic limestone float.
JB 099	399919	5490807	Poss sphal (weak) in limestone.
JB 100	399968	5490811	Large pit, poss continuation of veins up hill. Si + calcite, cpy-mal-az from pit.
JB 101	399968	5490811	Same loc as JB 100. Mostly grey Si, yellowish stain, hem-limonite, fairly massive rock, from pit. This is a large impressive digging.
JB 102	400134	5490633	Same loc as JB 096. Whitish qtz-calcite, minor sulfide, minor dendrites.
JB 103	400176	5491374	In vicinity of Target Q. Pyritic silic siltstone outcrop in gully.
JB 104	400320	5490509	Qtz vein, 340°, visible for 12 m, poss flat lying.
JB 105	400222	5489002	Chloritic silic intrusive dyke?, py, in road cut.
JB 106	400222	5489002	"Milled" chloritic-calc greenstone, some Si + py, road cut, 10 meters NW of JB 105.
JB 107	400222	5489002	20 m NW of JB 105. Chloritic, sheared calc greenstone, py.
JB 108	400222	5489002	35 m NW of JB 105. Not sure if silic'd limestone or chert or both. Minor sulfides. Very minor Cu staining. Along road cut.
JB 109	400158	5489056	Black and white banded limestone with silicified bands with pyrite. Road cut.
JB 110	400158	5489056	15 m NW along road from JB 109. Rusty bits of qtz-calcite veining in blackish limestone, unidentified sulfide.
JB 111	400158	5489056	30 m NW of JB 110. Massive silic limestone - skarn? Road outcrop.
JB 112	400116	5489120	Pyritic limestone outcrop, NW end of road sampling.
JB 113	400175	5489040	Light coloured banded partially silic limestone.

JB 114	400175	5489040	Same location as JB 113. Dark coloured chloritic calc-silicate, py,
JB 115	400030	5489223	Py-cpy in chert/silic limestone. Massive brittle.
JB 116	400887	5488693	Road cut. Crushed looking calc rock in Franklin seds. Py.
JB 117	400357	5490528	Homestake O target. Weak veinlet in Franklin seds. Subcrop downslope 70 m from Homestake pit.
JB 118	400557	5490481	Target U, underlain by siltstone, Minor Si intrusion, a little hem + py, < 1 mm? stringers of Si.
JB 119	400412	5490534	Old digging. Particularly unattractive, may have been an attempt to access vein. Sample upslope as 2305. Limey slightly silc rx, similar to Homestake-Union material, very minor py.
JB 120	400172	5490703	Basic sharpstone conglomerate.
JB 121	400145	5490622	Cu stained, rusty (Banner style) vein. Not sure if this is in place. This material is approx 30 m upslope of JB 097 which is outcrop. Host rocks are mixed arkose-conglom.
JB 122	402148	5491951	Qtz-albite(?) veins in tuff.
JB 123	402148	5491951	Same loc as JB 122. Epi qtz veins in tuff.
JB 124	402148	5491951	Same loc as JB 122. Fluorite-qtz+celadonite veinlets in tuff.
JB 125	402207	5491874	Float. Qtz vein in tuff? grit? Fluorite + Si.
JB 126	402278	5491974	Old trench, propylitic sandstone, rusty, some qtz + py.
JB 127	402311	5491991	Felsic, sugary, many micro fractures, hem. From pit.
JB 128	402311	5491991	Same loc as JB 127. Epidote, lots py, some cpy. Propylitic volc, from old pit. This hillside is riddled with diggings.
JB 129	402345	5492002	Adit. Some qtz, mostly magnetite, pyrrhotite + py.
JB 130	402345	5492002	30 m at 240° from previous sample. Pit. Pyrrhotite, py, poss arsenopy-py. Appears to be volc in sandstone. Very py-po, some magnetite rich.
JB 131	402369	5492047	Altered volc, poss rhyolite dyke, suspect potassic alt'n. Outcrop along road.
JB 132	402125	5492393	Mid Road showing (vg noted in this showing, along road). Epi qtz vein.
JB 133	402125	5492393	Same loc as JB 132. Mostly massive felsic rhyolite? Minor epi qtz vx, some vugs.
JB 134	402125	5492393	Same loc as JB 132. Qtz vein in 1 piece, mild bx in another.
JB 135	402125	5492393	Same loc as JB 132. Epi qtz vein, slightly rusty.
JB 136	402125	5492393	Same loc as JB 132. Epi qtz vein, whitish.
JB 137	402125	5492393	Same loc as JB 132. Same as above.
JB 138	402125	5492393	Same loc as JB 132. Samples are spread over 50 m width of subcrop. JB 138 is vein qtz, sugary crystalline, some rusty weathering.
JB 139	402125	5492393	Same loc as JB 132. Pyritic epi-qtz vein.
JB 140	402125	5492393	Same loc as JB 132. Silic sericite massive sed (could be dyke?)
JB 141	400775	5491247	Old trench. Rusty syenite, epi bx, hem, some vugs.
JB 142	400825	5491204	Alpha road showing. Select sample. Qtz veining, bx, cpy-py.
JB 143	400465	5489528	Rusty zone in Franklin seds, vuggy, lots of hem, a little qtz, approx 3 m wide. (Target C)
JB 144	400403	5489661	Rusty banded Franklin seds.
JB 145	400574	5490036	Small pit where road forks. Epi qtz vein, whitish qtz + some banded looking material, small.

JB 146	400590	5490114	Dug up from road bed, pyritic silic Franklin seds.
JB 147	400580	5489525	Back in vicinity of Target C. Small pit. Rusty partially silic'd sandstone. 3 m wide rusty band.
JB 148	401984	5489768	Qtz-calc bx/congl in sulfide rich outcrop on road.
JB 149	401984	5489768	Same loc as JB 148. Pyritic volc, light coloured, jarosite vugs.
JB 150	401984	5489768	25 m W of JB 149, on road cut. Gry cherty seds, qtz-calcite.
JB 151	402311	5491397	Small digging in Marron grit-tuff? Minor Si.
JB 152	402095	5492355	Mid Road Showing (vg showing). Old digging 20 m above road, mostly pyrrhotite + minor mag in intrusive.
JB 153	402095	5492355	Same loc as JB 152. Beautiful py + epi qtz bx, well brecciated, sulfide "clasts".
JB 154	402095	5492355	Taken 30 m SE of JB 152 pit, silic intrusive, hem spots. Fault in gully.
JB 155	402095	5492355	Rusty + yellowish altered (poss potassic) intrusive? Same location as JB 154.
JB 156	402907	5490922	Qtz carb bx zone along road east of Gloucester creek. Epi qtz carb limonitic bx in road cut.
JB 157	401411	5492843	Target F. Cpy-py + minute stringers in slightly chloritic + silic intrusive.
JB 158	401461	5492835	Target F. Rusty syenite.
JB 159	401461	5492835	20 m east of JB 158. Grey potassic syentite?
JB 160	401442	5492881	Target F. Rusty pyritic syenite, small 4 cm vein.
JB 161	401361	5492745	On upper switchback. Pyrite + Si in outcrop in road cut.
JB 162	402546	5491102	Eocene black matrix bx/conglom. Qtz eyes in matrix, at bend in road.
JB 163	402731	5490870	Target H, west side Gloucester Creek. Minute veinlets in carb alt'd intrusive under tree roots.
JB 164	403017	5491791	Target H, cont. E side creek. 3 cm qtz vein in qtz-carb alt'd intrusive.
JB 165	403042	5491634	Target H cont. Felsic, biotite gone, carb alt'd intrusive.
JB 166	402914	5491084	Road cut. Epi qtz bx in carb intrusive.
JB 167	402914	5491084	12 m south of JB 166. 10 cm wide qtz vein in road cut. Strikes 320/90. Other veins in outcrop strike 40°. 3 x 1 cm veins over 1 m width.
JB 168	402914	5491084	Same loc as JB 167. Sample of 40° vein, 1.5 cm wide. Alteration halos extend out 15 cm from veinlets.
JB 169	402380	5492004	Small pit, porph, py+qtz, very rusty intrusive.
JB 170	402980	5491283	epi qtz vein in road cut
JB 171	402795	5490334	at pit by road near camp. Qtz (minor) + calcite, sulfide specs in a chaotic recemented volc
JB 172	402795	5490334	same as JB 171
JB 173	400193	5490535	15 cm qtz vn trends 240°/90
JB 174	400193	5490535	20 m along slope from JB 173, qtz lense in limey seds, whitish, dirty, minor vugs, calcite.
JB 175	400193	5490535	15 m NW of JB 173, cherty silic limey seds.
JB 176	401134	5492537	fine veinlets in intrusive, qtz, poss Kspar alt'n, old pit.
JB 177	401192	5492553	qtz vein in dyke(?), qtz porph dyke
JB 178	400927	5488717	sheared qtz-calc pyritic fsp porph
JB 179	400878	5488688	road cut, milled, crushed, re-cemented calcite-silica lens-vein in fsp porph rock, py + cu minerals. These rocks bear a strong resemblance to the Union and Homestake rocks but less Si.

JB 180	400878	5488688	same loc as JB 179, very similar to Union-Homestake. Felsic, whitish, calcite-silica, diss py + cu minerals.
JB 181	400878	5488688	12 m east of JB 179, road cut, silica-py rich sed.
JB 182	400878	5488688	same loc as JB 181, cruddy qtz-cc-fluorite epithermal bx in arkose (?).
JB 183	400297	5498870	lower road, silic limestone?, epithermal qtz, angle wing fabric to qtz.
JB 184	397673	5488448	hem-chlorite py skarn, massive, subcrop.
JB 185			upper road cut, Eocene conglom from road cut approx 1 km NNW of Laura showings. Fe stained.
JB 186	401979	5490941	old pit, Maple Leaf crush zone. Very fine py in pinkish syenite.
JB 187	401930	5490898	Maple Leaf crush zone. 3 cm qtz veinlet with lots Cu staining, old road cut, E-W strike, steep NE dip. Old sample #3375 here.
JB 188	401842	5490403	Maple Leaf crush zone. Abundant silic'n + veining over a 20 m width, qtz is whitish, lacking the grey qtz + sulfides at the Union. Same is chip sample over 3 m of outcrop. Could be one E-W vein, 3-4 m wide.
JB 189	401842	5490403	same as JB 188. 3 m chip sample.
JB 190	401784	5490476	poss same vein as JB 188, 189, along strike. From pit 40 m S of Maple Leaf cabin.
JB 191	400134	5490461	N extention of Banner vein. Mal-galena-poss sphal in bx, crushed, milled, calcite-silica rx.
JB 192	400146	5490371	pit on Banner vein. Py-gal-sphal in rusty sed.
JB 193	397934	5488469	IXL V-2 target. Silic, pyritic intrusive, mini hem-qtz-py veinlets, rusty, brittle.
JB 194	397955	5488501	massive, silic, pyritic intrusive. IXL V-2 target.
JB 195	397950	5488526	25 m N of JB 194. Very rusty, vugs, minute poss qtz micro-veinlets, pyritic intrusive. IXL V-2 target.
JB 196	397971	5488563	From old pit, propylitic granitic (?) intrusive, sheared, chlorite, py. IXL V-2 target.
JB 197	398006	5488605	subcrop, pyritic silica rich granite, minute vugs, bleached, weakly pyritic. IXL V-2 target.
JB 198	398001	5488640	several minute stringers + dissem py in granite, well fractured. Kind of a "bread & butter" rock for a porphyry prospect. IXL V-2 target.
JB 199	397830	5488519	IXL V-1 target. Strong propylitic, mild argillic alt'd, qtz-py, from Trench 3.
JB 200	397817	5488488	IXL V-1 target. Propy, green, qtz-chlorite-cpy. From JB 200-209 rocks look good. This area is approx 30 m N of old pit. Rx have skarn overtones - cc, garnet, mag, chlorite + Cu.
JB 201	397793	5488476	IXL V-1 target. Propy, green, cpy + malachite. Looks out of place here.
JB 202	397780	5488456	pit. silic + py, different looking qtz, more sugary, less iron. Very minor secondary Cu minerals.
JB 203	397780	5488456	same loc as JB 202. Strongly bleached, silicified intrusive, py-cpy, pit dump.
JB 204	397780	5488456	same loc as JB 202, 203. Almost massive sulfides + some silica.
JB 205	397793	5488476	same loc as JB 201. Silica + py in granite. Yellowish + hem.
JB 206	397808	5488432	fine py, poss arsenopy in rusty granite.
JB 207	397808	5488432	same loc as JB 206. Magnetite-py-cpy bx in granite.
JB 208	397808	5488432	same loc as JB 206. Cu stained, greyish intrusive. Partially silic'd.

JB 209	397808	5488432	same loc as JB 206. py-cpy-mag bx.
JB 210			Float sample taken on old overgrown road used to access JB 176, 177. This float was found approx 250 m NW of JB 176, 177 on road bed.
JB 211	397970	5488712	In vicinity of Eocene Au anomaly in massive Eocene fanglomerate. Lots of lithologies in float, prob clasts in fanglomerate. JB 211 is rusty skarny limestone (?) /dyke rock with cpy. Subcrop.
JB 212	397970	5488712	same loc as JB 211. Fe rich skarn, cu staining, vuggy.
JB 213	403073	5492045	White Bear area. Old pit. Py, minor cpy, poss arsenopy in fine grained, greenish volc. Also garnet + calcite.
JB 214	403084	5492067	White Bear area. 3 pits in a row, on azim 290°. More Cu staining, calcite + minor carbonate weathering on E most pit. Tiny pit Si in volc.
JB 215	403084	5492067	White Bear area. Same loc as JB 214. Arsenopy? 45% in volc, from pits.
JB 216	401095	5491566	Averill Area. 2 pits. Hem rich, Franklin seds near intrusive contact. Large halo of carb alt'n on access road, approx 150 m wide. Sample JB 216 is silica rich sst, py-hem, from pit.
JB 217	401095	5491566	Same loc as JB 216. Py + silic sandstone.
JB 218	401095	5491566	Same loc as JB 216. Py, cpy diss + frac filling in Franklin seds from pit.
JB 219	399929	5489253	Road cut - pyritic siltstone bx.
JB 220			IXK flt from slightly SW of Au geochem (V-4). This is float. May be clast from fanglomerate. Minute epith qtz vein, py + mod siliceous dark coloured intrusive, grey-black.
JB 221			Maple Leaf flt. Approx 30 m down road from cabin, just N of JB 190 on road cut. Sugary qtz, weak bx, cu stained (very weakly), black dendrites.
JB 222	400016	5494094	N end of claim block, 50 m wide zone of sheared, altered monzonite with mesoth. qtz vein. Glassy, clear. Subcrop in road cut.
JB 223	400016	5494094	Strongly bleached, crumbly, whitish-pink, magnetite bleb, monzonite. Subcrop in road cut.
JB 224	400286	5491170	Float. Hem rich, poss zinc limestone float on road to sump, just off clear cut near Deadwood.
JB 225	400386	5490990	on access road to sump. 1 piece massive silic, dirty lst + 1 piece whitish qtz-limestone bx float. This is approx 70 m SW? of old pit.
JB 226			VG? rock from Iron Cap road showing.
JB 227	397851	5488425	IXL. Magnetite-S in Franklin seds.
JB 228	397851	5488425	IXL, same loc as JB 227. Silic Franklin seds, very pyritic, non-magnetic.
JB 229	397851	5488425	IXL, same loc as JB 227. 1.5 m Cu-Si py stringer in Franklin seds.
JB 230	397791	5488431	IXL. Very rusty, crumbly intrusive. Qtz + magnetite, subcrop.
JB 231	397717	5488362	IXL. Silic siltstone, S edge of clearcut. Was able to follow Cu-chl-magnetite rx to W of JB 208-209 for approx 60 m, float + subcrop on hillside in clearcut.
JB 232	397830	5488457	E of JB 208, silic siltstone or qtz vein, weak mal, float or subcrop.
JB 233	397791	5488550	py cpy porphyry? + magnetite from Trench 3, 10 m downslope from JB 016.

JB 234	397797	5488552	cpy in mal stained, slightly calcareous Franklin sed (?).
JB 235	397797	5488552	same loc as JB 234. Composite sample. Partially silic limestone/calc sed. Cu rx from Trench 3 bear a strong resemblance to rx at JB 208 zone to the south. Possibly the limestone unit x-cuts the clearcut - one long limestone lens.
JB 236	397695	5488476	IXL - From Trench 5? Cu-magnetite skarn boulder.
JB 237	397858	5488600	IXL. Zinc rich skarn + magnetite, poss arsenopy, from trench bank.
JB 238	397921	5488751	IXL. Cat push dump from NE most skarn. Sphal, cpy, poss gal in limestone.
JB 239	398968	5487915	Mt McKinley. Old pit, rusty silic Franklin sed's?, minor bleaching + py. Another v small digging 30 m WSW of this.
JB 240	398553	5487905	1.4 m "Bull" qtz vein has an old digging on it, appears to be on a sed-augite porph contact, 300° strike.
JB 241	397839	5487952	old pit in Franklin sed's, rusty, slightly pyritic, some silic'n.
JB 242	397797	5488553	IXL, Trench 3, 30 m downslope from road on S trench bank. 1 m sulfide-magnetite boulder, similar to massive sulfide boulders in creek.
JB 243	397797	5488553	10 m downslope on trench bank from JB 242. Silic sulfide rich (no magnetite) boulder.
JB 244	397659	5488354	same loc as JB-033. Magnetite-cpy-py. Massive py-epidote. this may be source of the massive sulfide boulders in IXL creek.
JB 245	397823	5488427	ugly massive siltstone, weakly magnetic, subcrop.
JB 246	397536	5488265	Partially silic limestone subcrop.
AE 004	402791	5490350	Whitish qtz sample from road cut.
AE 005	403362	5490295	E of Target H. Old pit.
AE 006	403012	5491538	Epi qtz vein on road.
AE 007	401858	5490885	Maple Leaf - massive cpy. Same location as JB 026.

APPENDIX 2

Trench Sample Descriptions

Samples 2333 - 2443

Sample #	Trench	Sample Width (m)	Description
			All samples are channel samples, unless noted.
2333	TR03-1	1.2	2333 & 2334 are a continuous sample across the vein. True thickness of vein is 3.2 m. Qtz-carb vein/intensely silic'd zone with minor patchy sulfides and malachite stain.
2334	TR03-1	2	see 2333
2335	TR03-1	1.5	2335 & 2336 are a continuous sample across the vein. True thickness of vein is 3 m. Sharp hwall contact, gradational fwall contact to siltstone.
2336	TR03-1	1.5	see 2335
2337	TR03-1	1	2337 & 2338 are a continuous sample across the vein. True thickness of vein is 2.3 m. As above with gradational fwall contact to silic'd, bx fine grained siltstone.
2338	TR03-1	1.3	see 2337
2339	TR03-1	2	Footwall of vein at same section as 2337-38. Silic'd bx, fine grained, locally calcareous siltstone.
2340	TR03-1	1.6	2340-2342 are a section across the vein, footwall, small footwall vein, and footwall to this. 2340 is 1.6 m channel sample across true width of main vein/silic'd zone.
2341	TR03-1	1.1	see 2340. 2341 is sample of fine grained calcareous and siliceous siltstone footwall to main vein.
2342	TR03-1	0.2	see 2340. 2342 is 0.2 m channel sample across small, well defined vein in footwall to main vein. Qtz-carb vein with patchy fine grained sulfides and local strong mal stain.
2343	TR03-1	1	see 2340. 2343 is 1 m sample of footwall to small vein sampled as 2342. Fine grained calcareous siltstone.
2344	TR03-1	1.6	2344-2346 are samples in a section across the main vein, footwall and small footwall vein. 2344 is a 1.6 m channel sample across the main vein/silic'd zone, as in 2340.
2345	TR03-1	1	see 2344. 2345 is 1 m sample of footwall.
2346	TR03-1	0.15	see 2344. 2346 is 0.15 m channel across small footwall vein, as in 2342.
2347	TR03-1	0.5	Brecciated, clay altered siltstone in fault cutting/offsetting North Banner vein.
2348	TR03-3	0.5	Samples 2348-51 are a section across a 0.5 m wide hwall vein, hangingwall to the main vein, and the main vein. Sample 2348 is 0.5 m channel across a low angle, crushed crackled quartz vein
2349	TR03-3	1.1	see 2348. Sample 2349 is 1.1 m channel of fine grained crackled cherty siltstone hwall to main vein.
2350	TR03-3	2.8	see 2348. Sample 2350 is channel across massive silic'n/qtz vein with trace to nil sulfides. True width of vein here is 3.3 m.
2351	TR03-3	0.5	see 2348. Sample 2351 is 0.5 meter channel across selvege of vein, against faulted contact. Minor sulfides.
2352	TR03-3	1.5	sample across vein
2353	TR03-3	1.7	sample across vein
2354	TR03-3	1.1	Samples 2354-2356 are a section across the vein and footwall argillite. Sample 2354 is 1.1 m sample of vein. True width of vein here is 2.5 meters.
2355	TR03-3	1.4	see 2354. Sample 2355 is 1.4 m sample of vein.
2356	TR03-3	0.2	see 2354. Footwall argillite.
2357	TR03-3	0.7	Samples 2357-59 are a section across the hwall and vein. Sample 2357 is hwall of vein. Intensely siliceous fsp-hnbld (+ qtz) porphyry.
2358	TR03-3	1.2	see 2357. Sample 2358 is 1.2 m sample of vein. True width of vein here is 2.6 m.
2359	TR03-3	1.4	see 2357. Sample 2359 is 1.4 m sample of vein.
2360	TR03-3	1.3	Samples 2360 and 2361 are a section across the vein. True width of vein here is 2.7 meters.

2361	TR03-3	1.4	see 2360.
2362	TR03-3	1.7	Samples 2362 and 2363 are a section across the vein. True width of vein here is 3.2 meters.
2363	TR03-3	1.5	see 2362.
2364	TR03-3	1.6	Samples 2364 and 2365 are a section across the vein. True width of vein here is 3 meters.
2365	TR03-3	1.4	see 2364.
2366	TR03-3	0.9	crushed vein in fault
2367	TR03-3	1.1	sample across vein.
2368	TR03-3	0.9	Samples 2368 and 2369 are a section across the hwall and vein. Sample 2368 is clay alt'd, bx'd fine grained siltstone.
2369	TR03-3	1	see 2368. Sample 2369 is 1 m chip across entire true width of vein.
2370	TR03-3	1	sample across true width of vein.
2371	TR03-3	0.9	Samples 2371 and 2372 are a section across the vein and footwall. Sample 2371 is across true width of vein.
2372	TR03-3	0.5	see 2371. Sample 2372 is 0.5 metre footwall sample.
2373	TR03-3	0.4	sample across true width of vein.
2374	TR03-3	1	crushed zone on strike of vein.
2375	TR03-4	3	fine grained sharpstone conglomerate on strike of vein (where exposed in TR03 3)
2376	TR03-4	3	same as 2375.
2377	TR03-7	0.5	grey limestone breccia
2378	TR03-7	0.3	weak Fe ox zone, trends 300°.
2379	TR03-7	0.5	fine grained chloritic volcanic siltstone breccia.
2380	TR03-7	1	breccia zone along 315/85°N fault zone.
2381	TR03-8	1.3	limestone with local silic'n & weak mal stain adjacent to contact with green cherty siltstone.
2382	TR03-8	0.55	crushed qtz bx zone on shear
2383	TR03-8	0.7	in limestone on S side of shear.
2384	TR03-8	0.7	channel sample across shear zone. Same zone sampled as 2380, 2382.
2385	TR03-8	0.5	fine grained volcanic breccia
2386	TR03-8	2.6	limestone
2387	TR03-8	0.8	channel sample across shear/bx zone cutting limestone.
2388	TR03-6	1	intensely silic'd or cherty tuff
2389	TR03-6	1.4	same as 2388.
2390	TR03-6	1.5	crowded feldspar porphyry
2391	TR03-6	1.2	intensely silic'd zone with minor argillic altered bx frags of poss intrusive or tuff in fine grained, silica flooded groundmass. Locally looks like just chert, but bx frags suggest silic'n of ?, rather than chert protolith.
2392	TR03-6	2	same as 2391
2393	TR03-10	1.2	weak Fe ox zone, could be argillite band.
2394	TR03-10	0.7	crackle bx in Fv, footwall to 2395.
2395	TR03-10	0.7	mod-str Fe ox zone, as in 2393. Likely argillite. Minor gossan veinlets.
2396	TR03-10	0.6	hangingwall to 2395. Crackle bx'd Fv.
2397	TR03-10	0.6	weak-mod Fe ox as in 2393, 2395. Prob narrow argillite band.
2398	TR03-11	1.2	limestone
2399	TR03-11	1.5	shattered, str Fe ox black argillite
2400	TR03-12	1.8	Samples 2400 & 2401 are continuous channels across the 3.6 m exposed true width of the vein. Full true width here is ~ 8m.
2401	TR03-12	1.8	see 2400
2402	TR03-12	2	Samples 2402-04 are continuous channels across the 6 m exposed true width of the vein. Full true width here is ~8.6 m, but E contact is covered with shaft debris.
2403	TR03-12	2	see 2402

2404	TR03-12	2	see 2402
2405	TR03-12	1.5	Samples 2405-2409 are continuous samples from west-east across the hwall and vein. Exposed true width of vein here is 7.5 meters. Total true width here is ~ 8 m. 2405 is argillite west of vein (apparent hwall).
2406	TR03-12	2	see 2405. 2406 is vein with poddy massive galena.
2407	TR03-12	2	see 2405. Vein.
2408	TR03-12	2	see 2405. Vein.
2409	TR03-12	1.5	see 2405. Vein.
2410	TR03-12	0.5	massive galena pod along W vein contact
2411	TR03-12	0.4	Samples 2411-2415 are continuous samples from west-east across the hwall and vein. 7.4 of 8 metre true width of vein exposed here. Sample 2411 is hwall argillite.
2412	TR03-12	2	see 2411. Vein. Sample 2412 has poddy massive galena.
2413	TR03-12	2	see 2411. Vein.
2414	TR03-12	2	see 2411. Vein.
2415	TR03-12	1.4	see 2411. Vein.
2416	TR03-12	2	Samples 2416-2419 are a section across the vein + footwall. Full 6 m true width of vein exposed. 2416 is vein.
2417	TR03-12	2	see 2416. Vein.
2418	TR03-12	2	see 2416. Vein.
2419	TR03-12	1.3	see 2416. Dirty silic'd cherty tuff? footwall to vein. Gradational footwall contact.
2420	TR03-12	2	Samples 2420-2424 are another section across the full vein, through the gradational footwall contact, and into the footwall. True width of vein is 7.4 meters. Full true width of vein exposed. Sample 2420 is vein with poddy massive galena.
2421	TR03-12	2	see 2420. Vein. Strong Fe-Cu ox.
2422	TR03-12	2	see 2420. Vein.
2423	TR03-12	1.4	see 2420. Vein - becoming gradational to silic'd cherty tuffaceous footwall.
2424	TR03-12	1	see 2420. Footwall. Dirty silic'd crackled cherty tuff?
2425	TR03-12	1.4	Samples 2425-2429 are a section across the vein through to the footwall, near the north end of TR03-12. A strong north trending, 75° W dipping fault cuts the vein along strike and down drops? the segment to the west. This fault may form the western vein contact south of this point. Sample 2425 is a channel sample across the apparent down-dropped segment of vein. Rusty weathering with mod patchy sulfides.
2426	TR03-12	0.5	see 2425. Sample 2426 is across the fault zone cutting the vein. Recessive weathering, strong Fe ox shear zone cuts the vein along strike.
2427	TR03-12	2	see 2425. Vein.
2428	TR03-12	2.2	see 2425. Vein.
2429	TR03-12	1.4	see 2425. Sample 2429 is footwall, as in 2424. Gradational footwall contact.
2430	TR03-12	2	Sample across down dropped? part of vein, west of fault, as in 2425.
2431	TR03-13	0.7	quartz-carb vein with minor galena and moderate malachite stain.
2432	TR03-13	1	crackled chert breccia or silic'd siltstone with local dissem pyrite and patchy weak carb and mal stain, adjacent to qtz-diorite intrusive contact.
2433	TR03-13	1	same as 2432
2434	TR03-13	1	same as 2432
2435	TR03-14	2	buff-maroon cherty tuff.
2436	TR03-14	2	fine grained equigran to weakly porphy diorite (or possible volcanic). Mod chl-hem alt'n.
2437	TR03-14	2	same as 2426.

2438	TR03-14	2	Strong fault zone, trends 270/45°N. Strongly brecciated, strong chl-hem alt'n of Fd?/Fv? + gouge.
2439	TR03-14	2	pale green, locally cherty tuff grading to fine grained fsp porph volcanic.
2440	TR03-14	2	same as 2439.
2441	TR03-15	1.3	Sample is across 340-355/65-70°E dipping silic'd zone/vein along fault. Minor patchy py-gal.
2442	TR03-15		sample not collected (same as 2441)
2443	TR03-15	0.7	Brecciated, shattered argillaceous siltstone along fault.

APPENDIX 3

Diamond Drill Logs

Drill Holes: FR03-1 to FR03-8 (Banner area)
IXL03-1 (IXL area)

DIAMOND DRILL RECORD

page 1 of 2PROPERTY FRANKLIN - BANNERHOLE # FR03-1Coordinates: Grid 99+71 N 97+16 E (approx)Azimuth: 070°Started: Sept 22/03GPS 400208 E, 5490265 N NAD 27Dip: -50°Completed: Sept 23/03Claim: Doe 2Depth: 150' (45.7 m)Drilled by: Guy DelormeOperator: Tuxedo ResourcesElevation: 1024 m (Adit: 1000 m datum)Logged by: Linda Caron

DOMINANT ROCK TYPE		DESCRIPTION	SAMPLE			Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
From - To (m)	Lithology		Sample #	From - To (m)	Interval (m)					
0 - 4.6	Overburden									
4.6 - 12.0	F1 (bx)	Black argillaceous limestone breccia with angular, fine grained, grey limestone clasts in an aphanitic, black argillaceous groundmass. Common cc veinlets.								
		10.4 - 10.9 m Massive grey limestone interval. Sharp contacts @ 45° to C/A.								
12.0 - 13.3	Fcg	Pale grey-green, hard, massive, v. fine chert pebble conglomerate → coarse est. 30% "1 mm chert grains in an aphanitic calcareous groundmass. "tapioca chert" texture. 2% py as v. fine stringers. Minor cc veinlets.								
13.3 - 14.2	Fs/Fc	Aphanitic tan-grey, mottled, chert → cherty siltstone. Cracked. Dirty looking. Minor chl-py units.								
		13.4 - 13.7 m Fine grained, massive, grey, limey siltstone interval. Poss. bedding @ 20° to C/A.								
		15.7 - 15.9 m Narrow vuggy qtz bx vein @ 30° to C/A. 10% sulfides (py+gal) as massive irregular bands + bx mtrx. Good recovery through vein.	2444	14.7-15.7	1.0	14	0.5	139	14	699
		@ 16.2 m sharp contact but core broken & orientation unclear - poss @ 90° to C/A.	2445 (V)	15.7-15.9	0.2	518	58.6	5707	79999	31,170
			2446	15.9-16.9	1.0	10	1	289	524	943

DIAMOND DRILL RECORD

PROPERTY FRANKLIN - BANNERHOLE # FR03-1page 2 of 2

DOMINANT ROCK TYPE		DESCRIPTION	SAMPLE		Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
From - To (m)	Lithology		Sample #	From - To (m)					
16.2 - 19.0	Fv	Dark grey-green, v. fine grained, massive, greenstone (or poss fmg diorite dyke). Cut by minor cc & py stringers.							
		16.7 - 18.0 } Fault Zones. Rubble zones with v. poor core 18.7 - 19.0 } recovery.							
19.0 - 45.7	Fc	Aphanitic, mottled tan-grey cherty siltstone w local well developed bedding @ 40-50° to C/A. Local Fe ox stain. Minor chl-py stringers, v minor cc vnits. Local crackle bx zones.							
		19.7 - 20.3m Fault zone - strongly bx'd							
		21.9 - 22.3m Fault zone - rubble	Box 4 22.3 - 28.2 m 90% recovery						
		25.9 - 26.6m Bx zone w mod Fe ox stain.							
		29.30m bx'd, str Fe ox stain	Box 5 28.2 - 34 m 98% recovery						
		33.5 - 38.0 m Fine grained tuffaceous siltstone, massive, grey-green, mod. well developed bedding @ 45° to C/A. Gradational lower contact back to aphanitic, mottled cherty siltstone as above.							
		39.7 m v. well developed bedding @ 45° to C/A.	Box 6 34 - 39.6 m 98% recovery						
		41 - 42 m strongly bx'd interval							
		45 m v. well developed bedding @ 75° to C/A.	Box 7 39.6 - 45.4 m 100% recovery						
		45.7m E.O.H.							
			Box 8 45.4 - 45.7 m 100% recovery						

DIAMOND DRILL RECORD

page 1 of 2PROPERTY FRANKLIN - BANNERHOLE # FR03-2Coordinates: Grid 99+54 N, 97+67E (approx)
GPS 400257E, 5490280 N NAD 27Azimuth: 250°Started: Sept 24/03Claim: Doe 2Dip: -50°Completed: Sept 25/03Operator: Tuxedo ResourcesDepth: 130' (39.6 m)Drilled by: Guy DelormeElevation: 1037.5 m (Adit = 1000 m datum)Logged by: Linda Caron

DOMINANT ROCK TYPE		DESCRIPTION	SAMPLE			Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	
From - To (m)	Lithology		Sample #	From - To (m)	Interval (m)						
0 - 6.1	Overburden										
6.1 - 11.0	F1(box)/Fcg	Intermixed zone of 1) black argillaceous lst bx w angular - subround lst (+ < chert) clasts in an aphanitic, black, argillaceous, calcareous mtrx, and 2) fine grained, clast supported, chert pebble conglom w rounded 2mm - 1cm chert (+ minor argillite, siltst) clasts in a calcareous gmass. Common cc units.	Box 1 6.1 - 11.5 m 95% recovery								
11.0 - 26.5	Fcg	Pale grey, massive, v. fine grained conglom or coarse sst w close packed 1mm chert grains in a grey-buff calcareous gmass. "tapioca chert" texture. 1-2% py - drss & vltts. Minor cc units.									
		11.0 - 11.4 m @ contact is zone of grey calcareous sst + tan, crackled chert.	Box 2 11.5 - 17.1 m 95% recov (low @ 12.6-12.8, 15.2-15.3)								
		12.6 - 12.8 m Fault. Broken zone w minor clay on frags.									
		15.2 - 15.3 m Fault. Broken, poor recov, Str. Fe + Mn ox stain.									
		15.8 - 16.2 m Black argillaceous limestone interval w contacts @ 70° to C/A.									
		16.2 - 26.5 m Congl. becomes coarser grained with fine pebble sized chert (+ < arg, siltstone) grains. This interval is cut by a series of qtz veins, as follows.									
		16.9 - 17.3 m Qtz vein / Silic'd Zone in conglom. Buff coloured massive qtz but remnant congl. text visible locally. Gradational contacts. Mod Fe/Mn ox on frags, tr v fine sulfides.	Box 3 17.1 - 22.4 m 90% recov, core v. broken	2447	16.2-16.9	0.7	33	1.3	105	196	383
				2448 (V)	16.9-17.3	0.4	15	1.1	104	280	197

DIAMOND DRILL RECORD

PROPERTY FRANKLIN - BANNERHOLE # FR03-3page 2 of 3

DOMINANT ROCK TYPE		DESCRIPTION	SAMPLE			Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	
From - To (m)	Lithology		Sample #	From - To (m)	Interval (m)						
14.8-15.5	Fa	Black, aphanitic, calcareous argillite w local strong crackle bx. Sharp contacts above and below @ 65° to CIA.									
15.5-28.8	Fcg	Grey-tan fine grained chert pebble congl as in 10.0-14.8, but also includes significantly coarser chert pebble conglom w clasts averaging 0.5-1 cm. V minor narrow silty interbeds, < 1 cm, @ ~80° to CIA.									
		This interval is commonly silic'd and cut by numerous min'd silica flood zones/veins, as listed below. Veins are really intense silica flood zones, grey-white in colour, mottled looking, with local remnant congl. texture visible. Contacts are frequently gradational. Veins typically have v. minor cc on fracs, but generally no fizz, whereas less silic'd zones in congl react strongly to acid. Very good recovery through veins/silic'd zones.	Box 4 18.9-24.6 m 95+2 recovery	2460	15.5-16.5	1.0	62	1.1	86	52	127
		16.5-17.3 m grey-white, intense perv silic'd zone w gradational contacts. Minor Fe ox stain. V. minor sulfides - dom py.		2461 (V)	16.5-17.3	0.8	37	0.8	45	50	226
		17.3-19.3 m Vein/intense silica flood zone. Gradational contacts but local strongly min'd zones w massive irreg. bands & patches (+diss) gal/sphal + << cpy, to 1 cm thick. ~5% sulfides		2462	17.3-19.3	2.0	19	0.7	44	90	243
		19.3-20.6 m Vein/intense silica flood zone. Gradational contacts but local strongly min'd zones w massive irreg. bands & patches (+diss) gal/sphal + << cpy, to 1 cm thick. ~5% sulfides		2463 (V)	19.3-20.6	1.3	604	39.9	4275	79999	41,843
		20.6-21.2 m Intense silica flood min'd zone. Upper contact @ 70° to CIA. 5% sulfides - diss + small irreg bands, py = sphal > gal > cpy.		2464	20.6-21.2	0.6	80	2	367	116	595
		21.2-21.4 m Intense silica flood min'd zone. Upper contact @ 70° to CIA. 5% sulfides - diss + small irreg bands, py = sphal > gal > cpy.		2465 (V)	21.2-21.4	0.2	3229	31.2	4121	3816	20,443
		21.4-21.7 m Strongly min'd vein/intense silica flood zone w 5+7% sulfides, py-sphal-gal; << cpy, as irreg massive patches. Rem congl text locally visible. Mod well dev. contacts.		2466	21.4-21.7	0.3	292	10.4	1447	790	13,998
		21.7-23.5 m Strongly min'd vein/intense silica flood zone w 5+7% sulfides, py-sphal-gal; << cpy, as irreg massive patches. Rem congl text locally visible. Mod well dev. contacts.		2467 (V)	21.7-23.5	1.8	946	40.8	2970	79999	27,746
		23.5-24.2 m Strongly min'd vein/intense silica flood zone w 5+7% sulfides, py-sphal-gal; << cpy, as irreg massive patches. Rem congl text locally visible. Mod well dev. contacts.		2468	23.5-24.2	0.7	40	1.4	100	215	594

DIAMOND DRILL RECORD

PROPERTY FRANKLIN - BANNER

HOLE # FR03-6

Coordinates: Grid 99+54 N, 97+67 E
 GPS 400257 E, 5490280 N NAD 27
 Claim: Doe 2
 Operator: Tuxedo Resources

Azimuth: 210
 Dip: -60
 Depth: 100' (30.5 m)
 Elevation: 1037.5 m (adit = 1000m datum)

Started: Sept 29/03
 Completed: Sept 30/03
 Drilled by: Guy Delorme
 Logged by: J.S. Kermeen

DOMINANT ROCK TYPE		DESCRIPTION	SAMPLE			Au (ppt) g/t	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
From - To (m)	Lithology		Sample #	From - To (m)	Interval (m)					
0 - 1.55	Overburden									
1.55 - 9.30	Fcg	Mainly coarse sharpstone conglomerate; chiefly white to grey fragments of chert; some carbonate in matrix throughout; jointing (possibly bedding?) @ 40-50° to C/A. 4.71-5.0 - aphanitic black cherty shale 5.33-5.66 "	Box 1 1.55 - 7.30 96% recovery							
9.30 - 10.30	Fa	Black aphanitic shale - network of white carbonate veins throughout. Contacts & larger carb vns @ 25° to C/A.	Box 2 7.30 - 12.60 95% recovery							
10.30 - 16.60	Fcg	Conglomerate: pale grey-green, fine grained. 50% angular chert fragments; some carbonate in matrix throughout. No distinct bedding, foliation.								
16.60 - 21.34	Fcg	Coarse grained sharpstone, silicified and with minor sulfides here and there. Rusty fractures.	Box 3 12.60 - 18.29 95% recov.	2497	16.7 - 17.7	1.0	6.03 g/t	2.2	-	-
		19.5 - 19.8 Quartz Vein. Lower contact sharp @ 45°, upper contact irregular at low angle to C/A. sparse pyrrh, gal, sphal on fractures.		2498	17.7 - 18.44	0.74	0.11 g/t	8.4	-	-
				2499	18.44 - 19.44	1.0	0.02 g/t	4.2	-	-
				2500	19.44 - 19.80	0.36	0.27 g/t	22.2	-	-
21.34 - 30.48 E.O.H.	Fcg	Sharpstone conglom - variable grain size, some polymictic sections; numerous short intervals of aphanitic cherty black shale.	Box 4 18.29 - 23.60 95% recov.	2501	19.80 - 20.80	1.0	0.04 g/t	4.7	-	-
				2502	20.80 - 21.70	0.9	0.02 g/t	3.8	-	-
			Box 6 29.2 - 30.48 E.O.H.							
			Box 5 23.60 - 29.2 97% recov							

DIAMOND DRILL RECORD

page 1 of 2

PROPERTY FRANKLIN - BANNER

HOLE # FR03-7

Coordinates: Grid 100+05 N, 97+74 E

GPS 400235 E, 5490326 N NAD 27

Claim: Doe 2

Operator: Tuxedo Resources

Azimuth: 200

Dip: -53

Depth: 170' (51.8 m)

Elevation: 1031.1 m (Adit = 1000 m datum)

Started: Sept 30/03

Completed: Oct 2/03

Drilled by: Guy Delorme

Logged by: J.S. Kermeen

DOMINANT ROCK TYPE		DESCRIPTION	SAMPLE			Au (ppb) g/t	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
From - To (m)	Lithology		Sample #	From - To (m)	Interval (m)					
0.60-2.30	Overburden									
2.30-23.66	Fcg	chiefly coarse grained sharpstone conglomerate. Little evidence of stratification or foliation. Most joints 45-60° to c/a. Fragments largely cherty but with polymictic intervals.	Box 1 2.30 - 14.34 m 45% recov							
23.60-24.58	Fc	Aphanitic, hard, light greenish grey to buff coloured. Upper contact @ 45°, lower contact @ 80° to c/a. 24.10 1 cm qtz vn w minor sulfides 24.54 " " " "	Box 2 14.34 - 19.20 m 98% recov	2503	23.55-24.65	1.10	0.05	1.7	-	-
		veins @ 75° to core		2504	24.65-25.45	0.80	0.05	4.7	-	-
				2505	25.45-26.30	0.85	0.08	4.7	-	-
24.58-31.60	Fcg	Coarse grained sharpstone congl. with silic'd sections and chert intervals as noted below. 24.58-25.45 silic'd 25.45-26.35 possibly some tectonic breccia. Shot thru with network of fine veinlets of orange coloured soft material which does not react to acid. 28.16-28.60 chert, similar to 23.60-24.58. A few minor irregular qtz veins with minor sulfides.	Box 3 19.20 - 24.38 m 98% recov.							
31.60-41.20	Fcg	Coarse grained sharpstone congl. with intervals (or large fragments) of chert. 37.79-40.5 "Vein" varies from silic'd to vein quartz. Sulfides including pyrrhotite, chalcopyrite, pyrite & sphalerite in intermittent patches and veinlets. This vein is considerably weaker than the "vein" in hole FR03-5	Box 4 24.38 - 30.00 m 98% recov.	2506	38.70-39.82	1.12	0.12	17.3	-	-
				2507	39.82-40.50	0.68	0.08	1.3	-	-
				2508	40.50-41.00	0.50	0.03	1.7	-	-
			Box 5 30.0 - 35.4 m 98% recov							

DIAMOND DRILL RECORD

PROPERTY FRANKLIN - BANNER

HOLE # FR03-7

DOMINANT ROCK TYPE		DESCRIPTION	SAMPLE			Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
From - To (m)	Lithology		Sample #	From - To (m)	Interval (m)					
41.2 - 51.8 E0H	Fc	Similar to 23.60 - 24.58. To 48.20 has intervals of coarse sharpstone conglom. Minor qb vns with minor pyrrhotite here and there.	Box 6 35.4 - 41.0 98% recov.							
			Box 7 41.0 - 46.85 95% recov.							
			Box 8 46.85 - 51.82 95% recov.							
			[Empty Box]							
			[Empty Box]							
			[Empty Box]							

DIAMOND DRILL RECORD

page 1 of 2PROPERTY FRANKLIN - BANNER HOLE# FR03-8Coordinates: Grid 100+05 N 97+74 E
GPS 400235 E 5490326 N NAD 27Azimuth: —Started: Oct 2/03Claim: Doe 2Dip: -90Completed: Oct 3/03Operator: Tuxedo ResourcesDepth: 187' (57.0 m)Drilled by: Guy DelormeElevation: 1031.1 m (Adit = 1000 m datum)Logged by: J.S. Kermeen

DOMINANT ROCK TYPE		DESCRIPTION	SAMPLE			Au (ppb) g/t	Ag (ppm)	Cu (ppm) %	Pb (ppm) %	Zn (ppm) %
From - To (m)	Lithology		Sample #	From - To (m)	Interval (m)					
0 - 2.4	Overburden									
2.4 - 34.3	Fcg	Chiefly coarse grained conglomerate with angular fragments - commonly angular chert fragments ("sharpstone") but also polymictic as noted. Also short intervals of impure chert and cherty argillite.	Box 1 2.40 - 7.82 98% recov.							
		5.2-5.9 Black aphanitic cherty argillite (Fa), upper contact sharp @ 35° to c/a. In part finely banded @ 35° to c/a.		2509 31.8-32.8 1.0	0.03	1.2	0.03%	0.01%	0.04%	
		6.71-14.3 polymictic	Box 2 7.82 - 13.32 98% recov.	2510 32.8-33.3 0.5	0.21	65.8	0.69%	3.23%	3.42%	
		10.7-10.92 Aphanitic grey Fc - contacts sharp @ 45° to c/a		2511 33.3-34.3 1.0	0.05	3.5	0.08%	0.13%	0.15%	
		14.44 Vuggy weathered fracture		2512 34.3-35.4 1.1	0.08	2.8	-	-	-	
		22.95-25.20 finer grained conglomerate		2513 35.4-36.4 1.0	<0.01	1.1	-	-	-	
		25.20 - 25.40 aphanitic black cherty argillite, bxd upper contact @ 40° to c/a		2514 36.4-37.6 1.2	0.02	0.8	-	-	-	
		32.80-33.30 VEIN MATERIAL	Box 3 13.32 - 19.46 93% recov.	2515 37.6-38.6 1.0	<0.01	1.6	-	-	-	
		33.0 5 cm wide vn @ 45° to c/a, 20% sulfides - sphal, gal, cpy		2516 38.6-39.6 1.0	0.02	1.5	-	-	-	
				2517 39.6-40.6 1.0	0.01	1	-	-	-	
				2518 40.6-41.6 1.0	0.01	2.5	-	-	-	
				2519 41.6-42.6 1.0	<0.01	1.7	-	-	-	
				2520 42.6-43.6 1.0	<0.01	0.3	-	-	-	
				2521 43.6-44.6 1.0	0.03	0.6	-	-	-	
34.3-52.6	Fr	Aphanitic grey to buff to pale greenish grey chert to cherty siltstone. Short intervals of sharpstone.		2522 44.6-45.6 1.0	0.01	1.5	-	-	-	
		Pyrrhotic veins and blotches and small qtz veins here and there throughout (decided to sample most of it).	Box 4 17.46 - 24.80 99% recov	2523 45.6-46.6 1.0	<0.01	1.4	-	-	-	
				2524 46.6-47.6 1.0	0.01	<0.3	-	-	-	
				2525 47.6-48.6 1.0	0.01	<0.3	-	-	-	
				2526 48.6-49.6 1.0	0.01	3	-	-	-	
				2527 49.6-50.6 1.0	0.01	<0.3	-	-	-	
		35.0 - 35.10 poss vn qtz		2528 50.6-51.6 1.0	<0.01	<0.3	-	-	-	
		37.2 - 37.40 vn qb - pyrrhotic		2529 51.6-52.6 1.0	<0.01	0.3	-	-	-	
			Box 5 24.80 - 30.20 97% recov							

DIAMOND DRILL RECORD

PROPERTY FRANKLIN - BANNER

HOLE# FR03-8

DOMINANT ROCK TYPE		DESCRIPTION	SAMPLE			Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
From - To (m)	Lithology		Sample #	From - To (m)	Interval (m)					
52.6-57.0 EOH	Fcg	Mixture of polymictic and sharpstone conglomerate.	Box 6 30.20 - 35.70 98% recov							
			Box 7 35.70 - 41.25 96% recov							
			Box 8 41.25 - 47.10 99% recov							
			Box 9 47.10 - 52.43 99% recov.							
			Box 10 52.43 - 57.0 99% recov.							
			[Empty Box]							

DIAMOND DRILL RECORD

page 1 of 4PROPERTY FRANKLIN - 1XLHOLE # 1XL03-1

Coordinates: Grid

GPS 397837 E 5488407 N NAD 27Azimuth: 315°Dip: -45°Started: Oct 6/03Completed: Oct 14/03Claim: 1XL #1-99Depth: 429' (130.7 m)Drilled by: Guy DelormeOperator: Tuxedo Resources

Elevation:

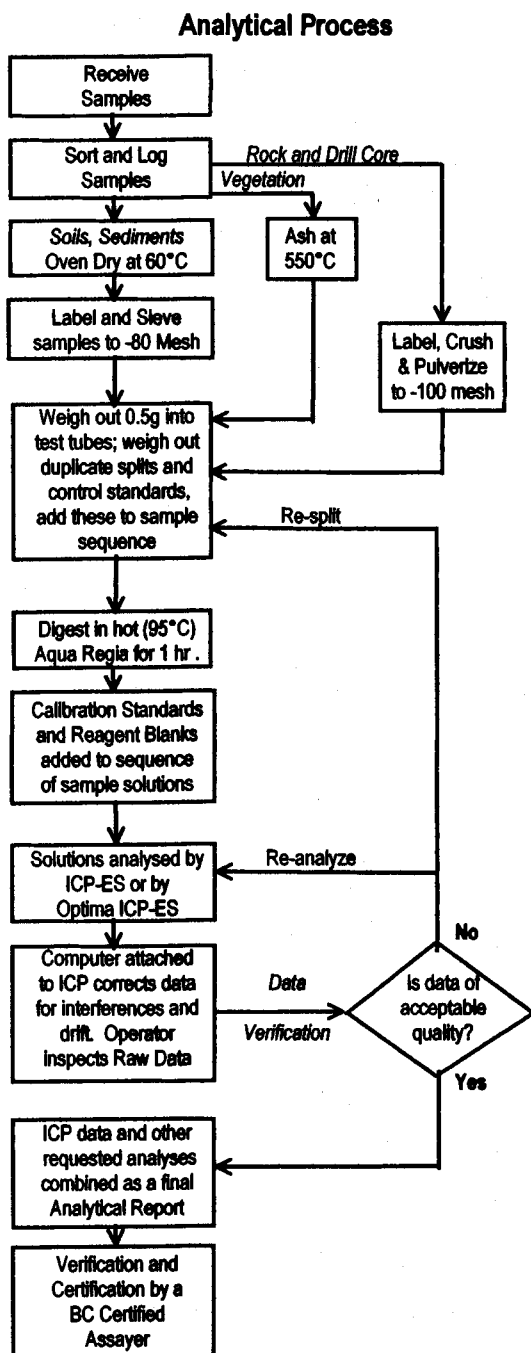
Logged by: J.S. Kermeen

DOMINANT ROCK TYPE		DESCRIPTION	SAMPLE			Au (ppb) g/t	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	
From - To (m)	Lithology		Sample #	From - To (m)	Interval (m)						
0-6.71	Casing										
6.71-20.39	Fv	Pale greyish green to medium green, fine grained volcanic, quite hard, probably dacite to rhyolite in composition; however on broken surfaces appears to be considerable black chlorite fracturing - increases through the section to near brecciation at lower contact. Mineralized with pyrrhotite and some pyrite throughout, chiefly as fine stringers but also as disseminated grains. Considerable magnetite occurs with sulfides in places suggesting it is epigenetic rather than an original constituent of the volcanic. May be a fine grained tuff (needs a thin section). Weak to moderate pistachio green epidote alteration here and there both along fractures and replacing breccia fragments. No distinct flow banding or bedding.	Box 1 6.71 - 12.8 70% Recov	2531	6.7-7.9	1.2	0.05	-	-	-	-
			2532	7.9-9.1	1.2	0.05	-	-	-	-	
			2533	9.1-10.3	1.2	0.13	-	-	-	-	
			2534	10.3-11.3	1.0	0.33	-	-	-	-	
			2535	11.3-12.5	1.2	0.52	-	-	-	-	
			2536	12.5-12.75	0.25	1.03	-	-	-	-	
			2537	12.75-13.5	0.75	0.21	-	-	-	-	
			2538	13.5-14.5	1.0	1.21	-	-	-	-	
			2539	14.5-15.5	1.0	3.12	-	-	-	-	
			2540	15.5-16.3	0.8	0.56	-	-	-	-	
			2541	16.3-17.0	0.7	3.04	-	-	-	-	
			2542	17.0-18.0	1.0	3.51	-	-	-	-	
			2543	18.0-19.0	1.0	3.69	-	-	-	-	
2544	19.0-19.6	0.6	10.91	-	-	-	-				
2545	19.6-20.5	0.9	2.68	-	-	-	-				
2546	20.5-21.0	0.5	0.43	-	-	-	-				
2547	21.0-22.0	1.0	0.11	-	-	-	-				
2548	22.0-23.0	1.0	0.04	-	-	-	-				
2549	23.0-24.0	1.0	0.12	-	-	-	-				
2550	24.0-25.0	1.0	1.11	-	-	-	-				
2551	25.0-26.0	1.0	0.66	-	-	-	-				
2552	26.0-27.0	1.0	3.75	-	-	-	-				
2553	27.0-28.0	1.0	3.08	-	-	-	-				
			28.0-28.7	0.7	1.62	-	-	-	-		
16.90-17.0		3 cm wide seam of pyrrhotite/pyrite/magnetite @ 25' to C/A cutting earlier fine, close spaced stringers of po/py.									
16.3-20.39		Increased bx'n & silic'n. Some Qtz-sulfide units @ 30-40' to C/A.	Box 5 30.2 - 35.8 96% Recov								

APPENDIX 4

Analytical Procedures

METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 1D & 1DX - ICP ANALYSIS – AQUA REGIA



Comments

Sample Preparation

Soils and sediments are dried (60°C) and sieved to -80 mesh (-177 μ m), rocks and drill core are crushed and pulverized to -150 mesh (-100 μ m). Vegetation is dried (60°C) and pulverized or dry ashed (550°C). Moss-mat samples are dried (60°C), pounded then sieved to recover -80 mesh sediment or ashed at 550°C then sieved to -80 mesh with potential loss by volatilization of Hg, As, Sb, Bi and Cr. Aliquots of 0.5 g are weighed into test tubes. Duplicate aliquots are taken from two samples in each batch of 34 samples to measure precision. An aliquot of sample standard STD C3 is added to each batch to monitor accuracy.

Sample Digestion

Aqua Regia is a 2:2:2 mixture of ACS grade conc. HCl, conc. HNO₃ and demineralized H₂O. Aqua Regia is added to each sample and to two empty reagent blank test tubes in each batch of samples. Sample solutions are digested for 1 hr in a boiling hot water bath (95°C).

Sample Analysis

Group 1D: sample solutions are aspirated into a Jarrel Ash AtomComp 800 or 975 ICP emission spectrograph to determine 30 elements: Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, Ti, U, V, W, Zn.

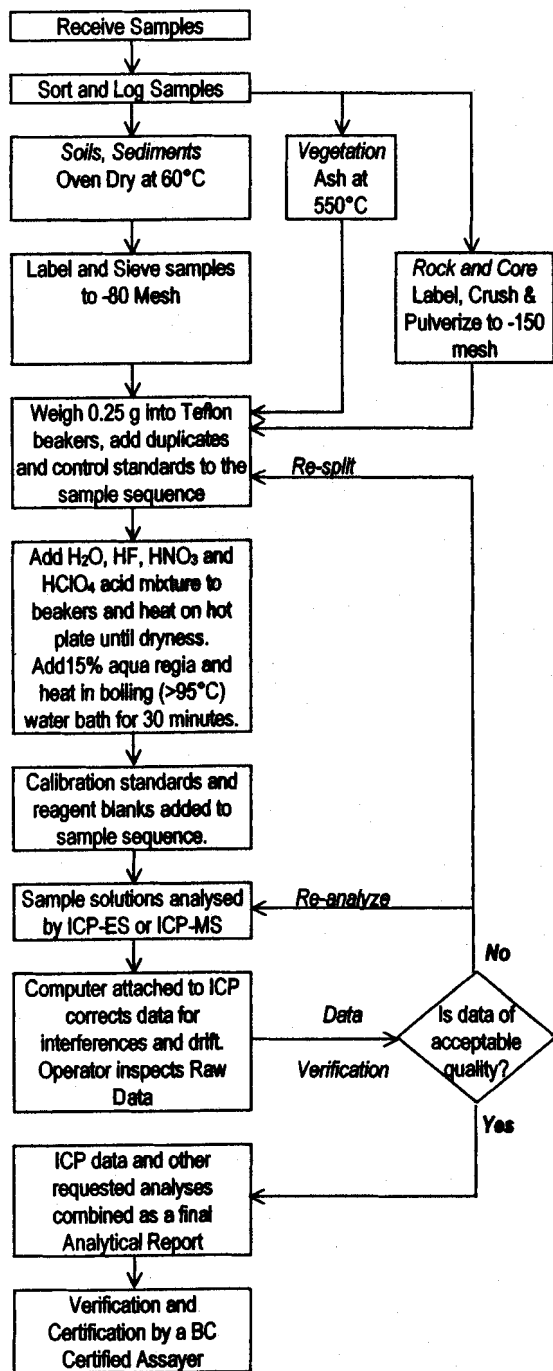
Group 1DX: sample solutions are aspirated into a Perkin Elmer Optima 3300 Dual View ICP emission spectrograph to determine 35 elements: Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Ti, Sr, Th, Ti, U, V, W, Zn.

Data Evaluation

Raw and final data from the ICP-ES undergoes a final verification by a British Columbia Certified Assayer who then signs the Analytical Report before it is released to the client. Chief Assayer is Clarence Leong, other certified assayers are Dean Toye and Jacky Wang.

METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 1E & 1EX - ICP ANALYSIS – TOTAL DIGESTION

Analytical Process



Comments

Sample Preparation

Soils and sediments are dried (60°C) and sieved to -80 mesh (-177 microns), rocks and drill core are crushed and pulverized to -150 mesh (-100 microns). Moss-mat samples are dried (60°C), pounded then sieved to recover -80 mesh sediment or samples can be ashed (550°C) on the client's request. Sample splits (0.25 g) are placed in Teflon beakers. Duplicate splits of crushed (rejects) and pulverized (pulp) fractions are included with every 34 rock samples to define sample homogeneity (reject split) and analytical precision (pulp split). Duplicate pulp splits are included in each batch of 34 soil or sediment samples. A blank and standard STD DST-3 are included in each batch of samples to monitor accuracy.

Sample Digestion

The 4-Acid solution of 18:10:3:6 H₂O-HF-HClO₄-HNO₃ (ACS grade) is added to each sample, heated to fuming on a hot plate and taken to dryness. The residue is dissolved in dilute (15%) aqua regia of 2:2:2 HCl-HNO₃-H₂O (ACS grade) heated in a boiling water (>95°C) bath for 30 minutes.

Sample Analysis

Group 1E: sample solutions are aspirated into a Jarrel Ash AtomComp 800 or 975 ICP emission spectrograph to determine 35 elements: Ag, Al, As, Au, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Sb, Sc, Sr, Th, Ti, U, V, W, Y, Zn, Zr.

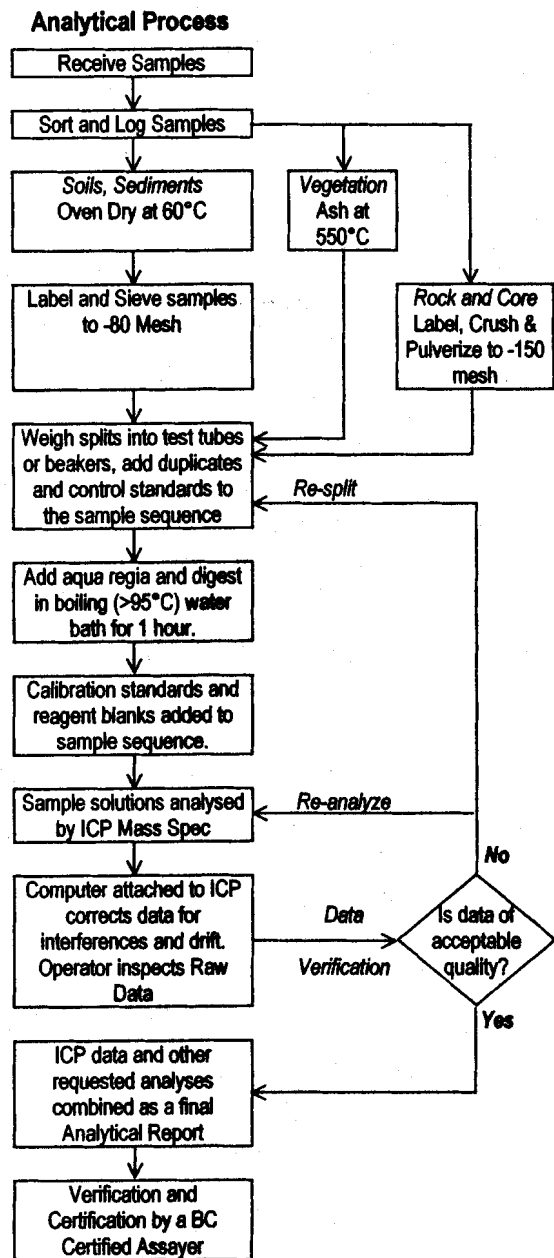
Group 1EX: sample solutions are aspirated into a Perkin Elmer Elan 6000 ICP mass spectrometer to determine 41 elements: Ag, Al, As, Au, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, Hf, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, S, Sb, Sc, Sr, Ta, Th, Ti, U, V, W, Y, Zn, Zr.

Data Evaluation

Raw and final data from the ICP-ES undergoes a final verification by a British Columbia Certified Assayer who then signs the Analytical Report before it is released to the client. Chief Assayer is Clarence Leong, other certified assayers are Dean Toye and Jacky Wang.

852 East Hastings Street • Vancouver, British Columbia • CANADA • V6A 1R6
Telephone: (604) 253-3158 • Fax: (604) 253-1716 • Toll free: 1-800-990-ACME (2263) • e-mail: info@acmelab.com

METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 1F-MS – ULTRATRACE BY ICP-MS • AQUA REGIA



Comments

Sample Collection

Samples may consist of soil, sediment, plant or rock. A minimum field sample weight of 200 gm is recommended.

Sample Preparation

Soils and sediments are dried (60°C) and sieved to -80 mesh (-177 microns). Moss-mat samples are dried (60°C), pounded to loosen trapped sediment, then sieved to -80 mesh. Rocks are dried (60°C) crushed (>75% -10 mesh) and pulverized (>95% -150 mesh). Splits weighing 1 to 30 g (Optional packages) are placed in bottles. Each batch (34 samples) contains a duplicate pulp split for monitoring precision and reference material DS2 for monitoring accuracy.

Sample Digestion

Aqua Regia is added to each bottle (3mL/gm of sample). Aqua Regia is a 2:2:2 mixture of ACS grade concentrated HCl, concentrated HNO₃ and distilled H₂O. Sample solutions are heated for 1 hr in a boiling hot water bath (95°C). The solutions are then diluted to 20:1 mL/gm ratio. A reagent blank is carried in parallel through leaching and analysis.

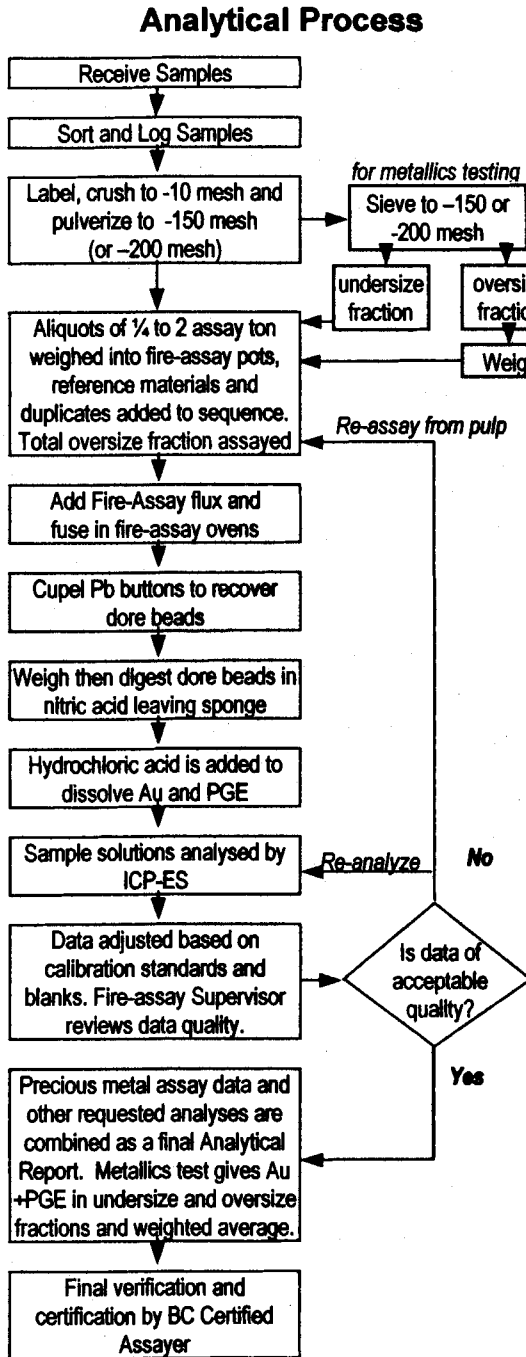
Sample Analysis

Analysis is by an Elan 6000 ICP Mass Spec for the determination of 37 elements comprising: Au, Ag, Al, As, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, Hg, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Se, Sr, Te, Th, Ti, Tl, U, V, W and Zn. Extended element packages containing incompatible elements (Hf, Nb, etc.) and REEs are available. Sample volumes of 10 to 30 gm are recommended when the determination of Au or other elements subject to the nugget effect are of importance.

Data Evaluation

Raw data are reviewed by the instrument operator and by the laboratory information management system. The data is subsequently reviewed and adjusted by the Data Verification Technician. Finally all documents and data undergo a final verification by a British Columbia Certified Assayer who then signs the Analytical Report before it is released to the client. Chief Assayer is Clarence Leong, other certified assayers are Dean Toye and Jacky Wang.

METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 6 - PRECIOUS METAL ASSAY



Comments

Sample Preparation
 Rocks and drill core are crushed to 75% minus 10 mesh (-1.7 mm), a 250 g subsample is riffle split then pulverized to 95% minus 150 mesh (-100 microns) or minus 200 mesh upon request. Reject and pulp duplicate splits are taken from two samples in every 34 to monitor, sub-sampling variation related to sample inhomogeneity and analytical variation, respectively. One quarter (7.5 g) to two assay ton (58.4 ±0.01g) splits are weighed. STD Au-1 (Au reference material), STD Ag-2 (Ag reference material) or STD FA-10R (Au, Pt, Pd, Rh reference material) and a blank are added to each analytical batch to monitor accuracy. Results are reported in imperial (oz/t) or metric (gm/mt) measure. For metallica testing, 500+ gm is pulverized and sieved through a 150 or 200 mesh screen. The oversize material on the screen is weighed and assayed in total. A 1 or 2 assay ton split of the undersize fraction is also assayed.

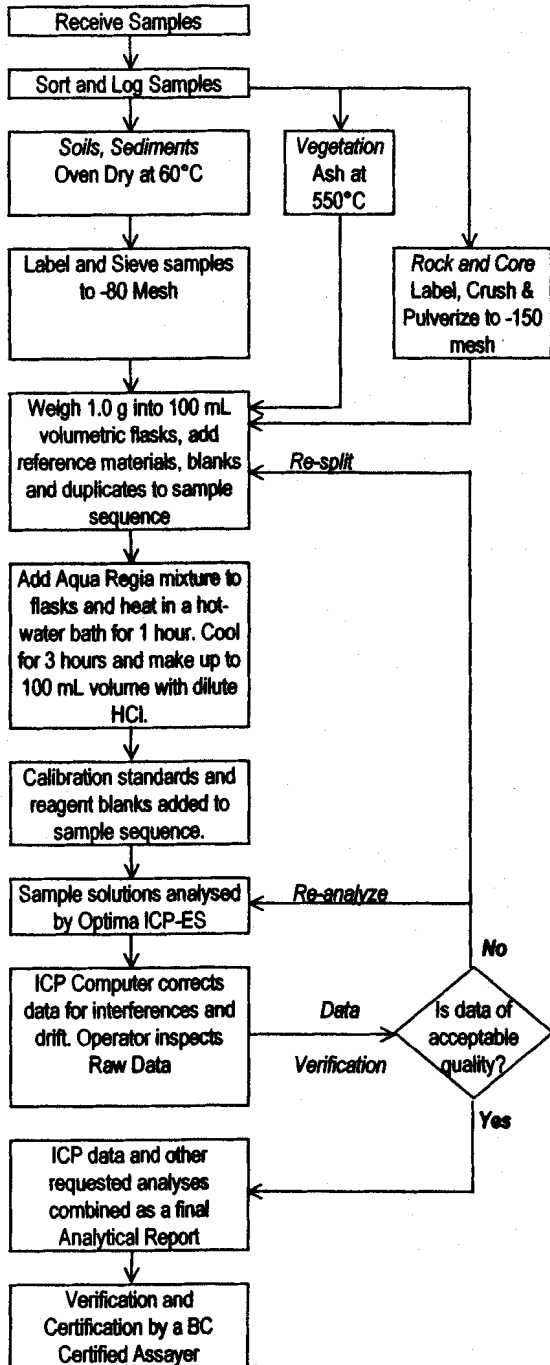
Sample Digestion
 Sample split is mixed with fire-assay fluxes containing PbO litharge and a Ag inquant then heated at 1000°C for 1 hour to liberate Au + PGE. After cooling, lead buttons are recovered and cupelled at 950°C to render Ag ±Au ±Pt ±Pd ±Rh dore beads. Beads are weighed then leached in 1 mL of conc. HNO₃ at >95°C to dissolve Ag leaving Au ±PGE sponges. A Au inquant is used for Rh assays where the concentration is likely to exceed 10 ppb. The sponge is dissolved by adding 6 mL of 50% HCl.

Sample Analysis
 The solutions are analyzed by ICP-ES (Jarrel Ash Atom-Comp model 800 or 975) to determine Au, Pt, Pd and Rh. Au or PGEs over 1 oz/t are determined by gravimetric finish. Ag is determined both by fire assay and wet assay. Ag over 10 oz/t is reported from the fire assay while concentrations <10 oz/t are reported from the wet assay. Metallica testing reports concentrations of Au ±PGEs in the undersize fraction, the oversize fraction and the calculated weighted average of these fractions.

Data Evaluation
 Raw and final data undergoes a final verification by a British Columbia Certified Assayer who then signs the Analytical Report before it is released to the client. Chief Assayer is Clarence Leong, other certified assayers are Dean Toye and Jacky Wang.

**METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE
GROUP 7AR – MULTI-ELEMENT ASSAY BY ICP-ES • AQUA REGIA DIGEST**

Analytical Process



Comments

Sample Preparation

Assaying is recommended for samples containing very high concentrations of commodity or pathfinder elements (ie. > 1%). Assaying is rarely carried out on soil, sediment or vegetation samples. Soils and sediments are sieved to minus 80 mesh (-177 microns). Vegetation is usually dry ashed prior to analysis. Rocks are crushed to 75% minus 10 mesh (-1.7 mm), a 250 g sub-sample is riffle split then pulverized to 95% minus 150 mesh (-100 microns). Reject duplicate and pulp duplicate splits are taken from two samples in every 34 to monitor sub-sampling variation due to sample inhomogeneity (reject split) and analytical precision (pulp split). Sample splits of 1.000 ± 0.002g are placed in 100 mL volumetric flasks. In-house reference material STD R-1 and a blank are carried through weighing, digestion and analysis with each batch of 34 samples to monitor accuracy.

Sample Digestion

Samples are digested in 30 mL of Aqua Regia comprising 2:2:2 HCl - HNO₃ - H₂O (ACS grade acids) heated in a boiling water bath (>95°C) for 1 hour. The solutions are cooled for 3 hours and made up to volume (100 mL) with dilute HCl (5%). Very high-grade samples may require a 0.25 g to 100 mL or 0.25 g to 250 mL sample to solution ratio for accurate determination.

Sample Analysis

Sample solutions are aspirated into a Perkin Elmer Optima 3000 or 3300 Dual View ICP emission spectrograph to determine 21 elements: Ag, Al, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, W, Zn.

Data Evaluation

Raw and final data from the ICP-ES undergoes a final verification by a British Columbia Certified Assayer who then signs the Analytical Report before it is released to the client. Chief Assayer is Clarence Leong, other certified assayers are Dean Toye and Jacky Wang.

APPENDIX 5

Analytical Results - Soil Samples

GEOCHEMICAL ANALYSIS CERTIFICATE

Northern Natural Resources Services PROJECT FRANKLIN File # A301820 Page 1
901 - 1030 Burnaby St., Vancouver BC V6E 1N8 Submitted by: John Boutwell



Table with columns for elements (Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Hg, Ba, Tl, B, Al, Na, K, W, Sc, Ti, S, Hg, Se, Te, Ga) and rows for various sample IDs (e.g., G-1, L104+50N 98+00E, L104+50N 99+00E, etc.) and a STANDARD DS4 row.

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SOIL SS80 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 2 2003 DATE REPORT MAILED: June 18/03 SIGNED BY: [Signature] D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Data FA



SAMPLE#	Hg	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Sc	Ti	S	Hg	Se	Te	Ga
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm
G-1	1.08	2.71	2.66	39.7	13	3.3	3.7	496	1.76	.2	2.3	<2	4.3	63.7	.01	.02	.10	37	.55	.088	6.9	11.9	.50	175.5	.116	1	.85	.064	.38	1.2	2.0	.23	.02	<5	<.1	<.02	4.5
L104+00N 102+00E	1.65	44.43	28.99	175.5	383	16.9	7.0	958	2.14	48.1	.7	1.3	2.7	25.5	1.24	.40	.21	49	.29	.313	7.4	11.9	.25	67.5	.107	3	2.88	.018	.05	.3	3.2	.10	<.01	950	.2	.03	7.5
L103+50N 98+00E	2.15	67.49	28.28	228.7	183	24.7	11.2	943	2.65	30.3	.5	1.1	1.5	34.4	.51	.49	.17	72	.45	.059	6.5	27.7	.71	92.1	.107	2	2.59	.017	.08	.3	4.3	.13	.01	543	.5	.03	7.8
L103+50N 98+50E	.88	95.41	91.37	344.3	500	24.6	15.2	1664	2.57	65.5	.6	1.5	1.4	26.8	1.26	1.29	.31	60	.55	.046	8.3	25.6	.80	83.9	.073	2	2.26	.014	.07	.3	3.6	.17	.01	1172	.3	.05	6.5
L103+50N 98+75E	1.41	100.10	65.42	383.7	873	20.6	14.5	3363	2.66	105.3	1.1	6.0	1.4	20.6	1.98	1.68	.39	60	.39	.076	13.0	21.5	.76	147.6	.062	2	2.33	.013	.06	.3	3.6	.19	<.01	1644	.6	.05	6.7
L103+50N 99+00E	2.17	65.69	23.70	239.2	558	34.2	16.2	2773	3.48	116.1	.8	2.7	1.6	28.6	.92	2.25	.34	90	.44	.067	12.7	35.8	1.27	193.8	.059	2	2.96	.012	.09	.2	6.0	.23	<.01	972	.8	.06	8.3
L103+50N 99+25E	1.06	30.75	30.07	244.7	133	18.3	12.8	3093	2.67	44.8	.8	1.6	.7	30.8	1.89	1.12	.16	95	.59	.089	7.8	34.0	1.34	202.6	.090	2	2.21	.020	.10	.1	7.6	.19	<.01	996	.3	.02	7.4
L103+50N 99+50E	1.96	88.00	45.36	270.0	1197	34.7	15.6	874	3.50	673.0	.9	13.9	3.0	19.1	.92	5.66	.23	83	.28	.130	9.9	24.9	.85	121.6	.111	2	3.70	.017	.13	.3	5.2	.30	<.01	794	.9	.08	10.3
L103+50N 99+75E	1.11	21.63	16.24	311.3	245	9.7	12.1	2439	2.01	42.3	.3	1.7	.7	16.7	1.43	.62	.26	47	.19	.098	4.9	14.3	.43	119.6	.055	1	1.47	.019	.06	.2	2.6	.14	<.01	1068	.2	.02	5.5
L103+50N 100+00E	.81	28.60	12.33	110.3	345	6.1	12.4	1869	1.63	35.4	.3	1.4	.7	11.3	.60	.43	.12	49	.13	.057	4.3	7.6	.26	76.9	.075	1	1.23	.021	.04	.2	2.2	.10	<.01	1129	.3	.02	4.7
L103+50N 100+25E	.78	21.19	13.87	182.6	249	6.5	9.3	1458	1.53	37.3	.3	1.5	.5	18.3	.97	.52	.21	42	.24	.078	4.1	7.2	.21	75.1	.065	1	1.10	.017	.05	.2	1.4	.07	.02	925	.3	.03	4.9
L103+50N 100+50E	.67	22.16	17.98	87.4	216	4.5	10.0	1364	1.28	23.0	.2	.5	.2	11.7	1.05	.60	.22	36	.11	.069	3.0	6.2	.15	56.9	.047	1	.71	.016	.04	.1	1.2	.08	.04	1295	.4	<.02	3.8
L103+50N 100+75E	.82	50.07	11.89	81.9	497	5.9	18.1	1320	1.99	20.0	.4	5.1	.7	11.8	.36	.39	.16	58	.12	.077	5.0	8.1	.25	43.7	.083	<1	1.39	.016	.03	.2	2.1	.07	.01	983	.4	.02	5.7
L103+50N 101+00E	2.00	40.08	93.02	240.3	645	12.2	11.2	2119	2.38	41.5	.4	14.6	1.0	18.5	1.74	.91	.19	66	.28	.058	6.1	11.2	.40	103.4	.056	1	1.51	.016	.05	.3	2.4	.18	<.01	1424	.3	.05	6.0
L103+50N 101+25E	.96	61.47	80.30	238.0	1931	14.7	33.7	2364	3.15	96.1	.4	3.7	.9	35.7	1.38	1.70	.16	82	.45	.071	12.1	12.3	.77	91.6	.059	<1	2.18	.015	.06	.4	6.5	.22	<.01	1553	.3	.06	7.6
L103+50N 101+50E	.86	52.29	22.50	170.0	984	17.7	18.6	2117	3.07	77.6	.4	2.0	1.4	31.5	1.05	1.00	.22	76	.36	.074	9.0	15.0	.79	180.0	.068	2	2.58	.016	.09	.3	5.0	.24	<.01	1490	.3	.04	8.4
L103+50N 101+75E	.84	35.19	12.47	153.3	500	11.9	13.2	1405	2.97	35.9	.7	7.5	1.5	24.2	.80	.56	.17	74	.28	.108	6.7	15.1	.54	153.3	.019	1	2.12	.010	.07	.4	4.1	.22	<.01	1093	.1	.04	7.5
L103+50N 102+00E	.93	51.81	10.06	88.0	192	8.1	10.9	661	3.30	11.6	.9	29.1	3.1	26.7	.19	.36	.20	98	.51	.088	11.8	13.7	.46	75.0	.054	1	1.63	.010	.09	.3	4.1	.09	<.01	416	.1	<.02	6.4
L103+00N 98+00E	1.98	140.06	44.97	241.8	1198	29.1	18.0	1399	3.96	66.4	1.8	6.6	2.8	35.2	.78	1.19	.32	95	.63	.141	19.6	35.3	1.07	57.0	.136	2	3.95	.014	.07	.3	8.3	.13	<.01	754	.9	.06	9.1
L103+00N 98+25E	1.29	52.89	30.81	163.8	268	7.1	6.1	2862	1.20	17.5	.4	3.5	.2	39.6	1.70	.45	.17	26	.93	.134	4.8	9.8	.27	135.8	.037	3	.89	.019	.05	.2	1.8	.06	.03	485	.7	.04	2.7
L103+00N 98+50E	1.98	153.33	171.99	496.3	726	25.4	15.3	2782	2.81	112.9	.8	5.1	1.2	26.9	2.51	2.05	.41	57	.35	.097	12.1	24.5	.91	92.5	.066	2	2.18	.020	.07	.2	4.7	.17	<.01	802	.7	.06	5.9
L103+00N 98+75E	.99	77.61	52.98	244.6	357	19.6	11.7	2946	2.17	87.4	.6	3.9	1.2	27.0	2.05	1.32	.31	49	.47	.071	8.9	23.6	.66	133.2	.063	2	1.92	.019	.06	.1	3.5	.14	<.01	1034	.5	.07	5.5
L103+00N 99+00E	.94	53.29	28.90	172.2	263	12.1	7.1	2340	1.71	135.2	.3	.2	.6	15.7	1.30	1.47	.24	36	.21	.068	5.3	13.5	.39	95.5	.057	3	1.33	.019	.06	.2	1.9	.11	<.01	1511	.2	.03	4.7
RE L103+00N 99+00E	.93	50.90	27.72	166.3	275	11.7	7.2	2295	1.67	130.2	.3	2.7	.6	15.3	1.16	1.43	.25	35	.21	.066	5.3	13.3	.38	94.1	.055	2	1.31	.019	.05	.1	1.9	.10	<.01	1514	.2	.02	4.6
L103+00N 99+25E	2.29	83.67	66.55	397.7	446	27.0	15.9	2725	3.18	290.1	.4	6.2	1.1	25.9	1.53	2.74	.20	69	.31	.122	7.9	28.0	.84	145.8	.077	2	2.27	.016	.10	.2	4.3	.25	<.01	1167	.4	.05	7.6
L103+00N 99+50E	1.33	72.19	23.69	303.9	877	11.6	19.2	2916	2.16	71.0	.7	19.0	.4	31.8	3.60	1.20	.21	54	.84	.114	10.5	12.3	.41	118.3	.051	1	1.79	.019	.06	.2	2.6	.16	.03	1050	1.2	.06	6.0
L103+00N 99+75E	1.79	50.15	17.02	222.3	466	17.0	15.7	1917	2.44	71.1	.6	3.9	1.6	22.2	1.66	.89	.18	67	.26	.096	7.5	17.1	.53	132.9	.089	2	2.37	.019	.05	.2	3.8	.16	<.01	1287	.5	.04	7.1
L103+00N 100+00E	1.81	55.91	21.51	199.4	761	23.1	18.6	2356	2.76	98.2	.6	2.2	1.8	35.0	1.40	1.19	.21	72	.32	.135	7.2	23.8	.71	178.7	.107	3	2.71	.016	.07	.3	4.8	.25	<.01	1369	.6	.07	8.0
L103+00N 100+25E	3.55	41.34	43.72	441.1	436	26.7	17.4	2053	2.82	107.7	.4	<2	1.4	19.3	3.79	1.57	.20	70	.20	.083	6.1	21.7	.67	160.6	.105	2	2.54	.012	.07	.3	4.1	.31	<.01	1586	.3	.07	8.0
L103+00N 100+50E	2.47	37.54	23.15	219.4	656	12.8	15.2	845	3.08	107.8	.7	15.6	2.6	14.3	.64	1.51	.24	87	.22	.054	7.7	14.9	.43	57.6	.104	2	2.13	.012	.05	.4	3.5	.14	<.01	812	.2	.08	8.4
L103+00N 100+75E	.97	28.37	23.26	140.5	883	7.6	20.0	1496	2.47	113.4	.4	4.3	1.0	12.3	.79	1.18	.17	74	.21	.058	5.6	11.2	.37	79.5	.070	1	1.26	.014	.05	.2	2.7	.13	<.01	1250	.1	.04	5.8
L103+00N 101+00E	2.13	39.40	77.74	348.9	987	14.9	16.0	1444	2.54	130.4	.5	3.8	1.9	14.5	2.27	1.24	.20	62	.25	.130	8.1	12.9	.35	110.4	.072	1	1.69	.014	.06	.3	2.8	.18	<.01	1192	.2	.07	6.3
L103+00N 101+25E	1.65	57.62	38.43	487.6	665	29.7	13.3	654	3.02	182.5	.8	5.4	3.4	14.3	2.33	1.24	.23	74	.23	.161	9.6	16.0	.44	117.3	.082	2	2.76	.011	.06	.3	3.2	.17	<.01	605	.2	.04	8.0
L103+00N 101+50E	.73	23.30	11.02	142.6	417	8.3	9.4	466	2.81	12.1	.5	3.4	2.6	13.2	.47	.32	.24	69	.19	.177	7.9	13.0	.30	78.4	.054	2	1.66	.008	.05	.3	2.4	.10	<.01	852	<.1	.03	7.2
L103+00N 101+75E	1.03	286.83	9.47	69.1	532	8.2	7.2	526	2.51	3.2	2.4	3.7	4.7	43.7	.19	.20	.21	63	.37	.023	20.1	13.1	.34	56.7	.078	1	1.50	.014	.07	.3	4.3	.14	<.01	207	.2	.02	5.6
STANDARD DS4	6.75	126.03	30.54	159.6	294	35.4	11.9	796	3.21	22.8	5.9	24.6	3.6	26.9	5.37	4.56	5.00	75	.51	.090	16.2	167.4	.60	139.8	.082	3	1.78	.029	.15	3.6	3.7	1.08	.07	269	1.4	.75	



ACME ANALYTICAL

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ACME ANALYTICAL

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Sc	Ti	S	Hg	Se	Te	Ga
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	
G-1	1.30	2.99	2.59	41.1	14	4.0	3.9	504	1.82	.3	2.5	.7	3.9	65.8	<.01	<.02	.11	38	.57	.087	7.3	15.1	.50	168.5	.125	1	.91	.066	.37	1.1	2.0	.23	.01	7	<.1	<.02	4.8
L103+00N 102+00E	.49	17.58	5.11	42.2	151	5.0	4.5	167	2.23	2.5	.5	.5	2.5	17.9	.16	.12	.14	73	.25	.052	7.8	8.8	.14	50.0	.065	1	1.08	.009	.03	.2	1.7	.04	.01	322	<.1	<.02	4.6
L103+00N 102+25E	.90	39.55	8.36	47.8	384	4.8	7.5	618	2.47	3.0	2.3	2.4	4.5	32.5	.15	.19	.15	70	.31	.040	25.9	9.7	.30	40.4	.061	1	1.12	.010	.05	.3	3.2	.11	.01	558	<.1	<.02	4.5
L103+00N 102+50E	.80	26.11	7.05	90.3	445	7.6	6.3	228	2.40	3.1	.7	1.7	3.1	28.6	.23	.15	.20	68	.30	.060	8.4	11.3	.22	74.8	.046	1	1.63	.009	.05	.2	2.1	.08	<.01	322	.1	<.02	7.0
L102+50N 98+00E	1.77	94.37	21.89	147.0	359	24.3	12.6	778	3.25	34.2	1.7	2.3	2.3	45.3	.67	.47	.22	110	.91	.164	9.7	32.9	1.09	59.4	.132	3	3.11	.021	.08	.5	6.5	.09	<.01	514	.5	.08	9.2
L102+50N 98+25E	2.21	104.30	27.48	166.9	528	25.4	17.8	2357	2.99	41.8	1.1	3.4	1.2	35.3	.63	.73	.16	86	.75	.078	11.0	32.4	1.04	71.3	.090	2	2.21	.026	.07	.5	7.1	.15	<.01	1023	.9	.07	7.2
L102+50N 98+50E	1.93	67.77	17.35	183.1	193	33.4	14.3	938	3.20	41.0	.7	4.2	2.1	43.7	.36	.48	.21	84	.68	.152	8.8	40.8	.93	73.6	.130	4	2.90	.023	.08	.8	6.2	.14	<.01	652	.4	.07	7.8
L102+50N 98+75E	2.03	85.67	18.86	151.7	783	20.6	20.0	3041	2.55	79.2	.8	5.5	.7	32.8	1.14	1.27	.27	63	.74	.102	14.8	21.2	.68	98.9	.059	2	2.14	.023	.07	.2	3.8	.17	.02	772	.8	.03	6.8
L102+50N 99+00E	1.31	59.31	25.58	126.4	1313	16.3	16.9	2019	2.22	63.3	.7	4.8	.8	25.1	1.09	1.57	.24	51	.67	.065	16.1	17.6	.56	75.0	.053	<1	1.81	.020	.05	.1	3.4	.14	<.01	1273	.9	.07	5.8
L102+50N 99+25E	2.72	73.02	29.13	196.3	596	21.5	25.7	2709	3.41	95.4	.7	2.0	1.9	21.7	1.34	1.30	.28	86	.33	.084	11.1	25.2	.79	135.4	.097	1	2.98	.014	.08	.2	4.8	.23	<.01	1583	.5	.05	10.4
L102+50N 99+50E	3.25	73.63	26.46	228.8	3999	23.1	27.1	2261	3.15	80.1	.8	4.5	1.5	24.0	1.03	1.65	.25	67	.46	.144	30.3	19.8	.66	107.9	.054	1	2.29	.014	.06	.2	4.5	.24	<.01	1396	1.0	.05	7.9
L102+50N 99+75E	2.79	73.37	24.70	121.7	1878	18.5	17.1	921	3.48	61.7	1.3	4.9	4.4	19.3	.35	1.18	.26	86	.34	.169	23.0	21.4	.57	55.5	.130	1	4.69	.013	.07	.2	5.0	.16	<.01	1039	1.0	.05	11.5
L102+50N 100+00E	3.55	46.58	27.94	122.4	1298	12.6	18.3	2651	2.09	70.2	.4	4.7	.5	15.9	1.34	1.57	.21	51	.29	.074	20.5	11.2	.35	76.5	.041	1	1.40	.022	.05	.1	2.4	.14	<.01	1695	.6	.04	5.3
RE L102+50N 100+00E	3.54	46.14	27.22	119.8	1406	12.8	17.7	2578	2.06	67.5	.4	35.4	.5	15.2	1.25	1.53	.19	51	.28	.073	19.9	10.9	.35	74.1	.041	1	1.36	.022	.05	.2	2.5	.13	<.01	1660	.6	.04	5.3
L102+50N 100+25E	2.19	56.34	31.29	203.2	1427	12.6	39.0	3541	2.69	103.2	.4	2.4	.7	19.9	1.30	1.59	.20	68	.23	.105	10.2	13.3	.50	125.9	.056	1	1.83	.020	.07	.2	3.1	.21	.01	2187	.4	.05	7.7
L102+50N 100+50E	.99	37.30	18.05	137.3	292	9.5	9.3	791	2.47	62.4	.6	2.5	2.5	15.4	.86	1.07	.16	67	.30	.193	7.0	11.5	.25	111.1	.051	1	1.38	.011	.06	.3	2.3	.09	<.01	738	.2	.03	5.6
L102+50N 100+75E	1.49	34.92	19.44	242.7	358	14.0	10.7	1452	2.48	89.4	.5	4.5	2.0	14.6	1.31	1.00	.20	63	.24	.109	6.4	12.5	.38	150.9	.063	1	1.92	.013	.06	.3	2.6	.14	<.01	1213	.1	<.02	7.3
L102+50N 101+00E	1.19	43.11	18.51	179.8	420	11.7	9.5	751	2.33	68.3	.7	7.5	2.6	13.7	1.15	.81	.18	60	.22	.093	7.5	11.8	.32	85.2	.076	<1	1.89	.014	.06	.3	2.6	.12	<.01	590	.2	.05	6.4
L102+50N 101+25E	1.32	87.28	20.31	189.2	1000	14.4	22.5	1004	4.37	32.6	.6	5.7	2.2	60.2	.70	.70	.29	105	.40	.287	5.7	17.4	.84	111.2	.045	<1	3.51	.010	.12	.5	4.0	.13	<.01	1055	.2	.04	12.5
L102+50N 101+50E	1.04	47.38	13.95	241.7	593	14.2	12.0	999	2.76	19.4	.7	6.6	2.9	35.9	.82	.42	.23	69	.30	.155	14.5	17.3	.36	112.8	.055	<1	2.03	.010	.07	.3	3.3	.12	<.01	1015	.1	.03	8.1
L102+50N 101+75E	1.23	73.01	7.51	109.5	344	6.7	12.1	891	2.83	8.6	.5	10.2	1.9	31.8	.65	.31	.31	65	.27	.118	7.0	10.0	.26	89.6	.052	1	1.44	.011	.06	.3	2.4	.13	<.01	607	.1	.09	6.5
L102+50N 102+00E	.60	25.90	7.15	73.2	195	5.6	8.4	549	2.25	5.9	.5	4.4	2.1	38.7	.24	.22	.16	63	.30	.104	7.4	9.3	.28	97.9	.058	<1	1.44	.013	.08	.3	2.0	.15	<.01	525	.2	.04	6.2
L102+50N 102+25E	.38	12.94	6.54	47.7	106	2.9	6.6	881	1.91	2.6	.3	3.4	1.3	32.1	.12	.23	.13	48	.21	.036	4.8	5.1	.29	69.3	.068	1	1.09	.020	.05	.3	2.0	.09	.01	750	.1	.02	4.8
L102+50N 102+50E	.95	22.15	13.16	61.8	180	4.0	7.5	1165	1.92	3.7	.7	2.4	1.8	48.2	.19	.26	.15	44	.33	.042	9.8	5.8	.37	79.5	.058	<1	1.29	.018	.07	.3	2.3	.12	.01	1015	<.1	<.02	5.6
L102+00N 97+50E	3.43	43.65	17.22	120.6	183	11.7	11.7	2082	2.23	18.5	.4	.2	1.2	40.0	.79	.43	.23	59	.57	.055	6.7	14.3	.37	124.0	.097	2	1.83	.017	.08	.2	3.2	.15	.03	1255	.4	.04	7.0
L102+00N 97+75E	2.51	66.33	10.15	94.9	298	9.9	18.2	1806	2.28	14.5	.3	3.4	.7	33.5	.49	.51	.18	65	.40	.076	4.4	12.5	.30	78.9	.066	2	1.27	.024	.04	.2	4.2	.11	.03	874	.7	.04	5.1
L102+00N 98+00E	3.00	112.83	10.96	135.5	2110	24.8	12.7	880	2.97	28.6	.5	10263.1	1.6	31.6	.30	.61	.17	86	.41	.055	6.0	27.1	.65	78.4	.112	1	2.24	.014	.06	.4	4.8	.10	.01	484	.6	.06	8.3
L102+00N 99+25E	2.42	52.88	39.08	171.9	746	16.3	19.9	2395	2.46	58.9	.5	6.4	1.0	17.9	.99	1.12	.23	59	.25	.092	16.2	14.0	.38	100.8	.048	<1	1.78	.014	.05	.3	3.0	.17	.02	1483	.5	.02	7.5
L102+00N 99+50E	1.95	35.30	25.94	106.3	640	8.8	16.2	1463	2.09	35.1	.5	15.0	.9	7.7	.22	.60	.17	53	.11	.084	7.0	10.3	.26	47.1	.064	<1	1.61	.014	.03	.2	2.0	.10	.01	736	.4	<.02	6.5
L102+00N 99+75E	2.18	44.11	30.99	157.3	1035	14.3	16.8	1919	2.65	49.5	.7	6.0	2.5	22.5	1.12	.69	.26	64	.31	.110	10.4	14.2	.33	159.6	.096	<1	2.33	.013	.05	.2	3.0	.16	<.01	939	.4	.04	8.5
L102+00N 100+00E	1.94	29.68	17.61	203.5	404	13.9	13.0	1645	2.53	68.1	.5	3.0	2.2	17.5	.90	.59	.22	62	.24	.118	8.6	13.3	.31	121.2	.083	<1	1.79	.015	.05	.2	2.3	.12	<.01	779	.1	<.02	7.5
L102+00N 100+25E	1.56	26.44	15.47	82.0	550	7.2	13.4	1369	2.01	25.0	.4	.8	1.0	13.0	.25	.39	.15	55	.22	.062	6.1	9.9	.25	51.2	.065	<1	1.17	.018	.04	.2	2.0	.10	.01	968	.2	<.02	5.7
L102+00N 100+50E	.98	32.67	11.44	115.3	226	6.7	13.4	862	2.14	49.6	.3	2.6	1.1	19.7	.36	.57	.14	63	.27	.084	5.2	8.6	.40	70.0	.052	1	1.52	.021	.07	.2	3.2	.10	<.01	681	.2	.02	6.4
L102+00N 100+75E	.84	35.79	4.90	27.1	74	3.9	6.3	343	2.25	15.7	.7	25.9	3.8	20.1	.11	.31	.12	82	.42	.079	13.3	10.0	.20	40.8	.059	<1	.64	.008	.03	.3	2.6	.03	<.01	274	.1	.03	3.4
L102+00N 101+00E	1.99	90.15	18.28	228.0	2155	12.8	10.5	955	2.41	53.3	1.6	10.8	2.4	28.1	1.91	1.08	.18	59	.51	.048	21.2	14.0	.47	81.0	.047	1	2.08	.020	.09	.3	4.8	.16	.01	574	.5	.02	7.0
STANDARD DS4	7.02	120.12	31.48	150.0	316	33.5	11.6	782	3.07	22.1	5.8	26.6	3.5	27.0	5.03	4.39	4.94	74	.51	.087	15.7	164.7	.57	136.2	.083	2	1.69	.029	.15	3.6	3.5	1.08	.04	288	1.2	.75	6.0

Sample type: SOIL S580 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Tl	B	Al	Na	K	W	Sc	Ti	S	Hg	Se	Te	Ga
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	
G-1	1.42	2.77	2.85	44.7	21	4.7	4.7	593	2.07	.1	1.6	.2	4.0	91.8	.03	.05	.13	40	.64	.079	9.5	12.1	.59	259.0	.152	<1	1.16	.132	.55	2.2	3.2	.31	<.01	6	<.1	<.02	5.4
L102+00N 101+25E	.62	56.89	26.47	271.4	1187	12.4	11.8	664	2.69	20.9	.6	4.6	2.3	24.5	1.56	.48	.15	66	.32	.060	7.0	12.1	.59	111.9	.052	1	2.24	.012	.11	1	3.4	.13	<.01	396	.2	.06	6.7
L102+00N 101+50E	.92	44.15	36.69	351.8	769	23.7	13.7	1046	2.41	69.2	.4	3.3	1.7	27.7	2.62	.85	.19	60	.24	.133	6.3	13.8	.48	136.3	.068	2	2.09	.016	.09	4	2.9	.14	<.01	897	.2	.02	7.0
L102+00N 101+75E	.98	25.76	16.11	263.5	503	12.5	10.1	1027	2.59	21.1	.4	3.1	2.1	20.1	1.10	.73	.19	71	.24	.073	8.3	14.1	.47	89.1	.055	<1	1.60	.009	.07	3	2.9	.14	<.01	963	.2	.02	6.6
L102+00N 102+00E	.80	24.43	8.12	76.8	166	6.5	8.7	365	2.49	4.4	.6	3.1	2.8	41.7	.21	.21	.20	57	.37	.045	9.4	6.8	.35	107.4	.061	<1	1.70	.009	.10	3	2.2	.09	<.01	202	.1	.04	6.2
L102+00N 102+25E	.57	30.15	12.69	139.0	361	8.6	5.9	226	1.93	3.5	1.0	.8	6.9	34.5	.35	.14	.23	36	.28	.114	18.4	6.5	.21	110.9	.064	2	2.16	.012	.08	3	1.8	.12	<.01	377	<.1	<.02	8.3
L102+00N 102+50E	.42	14.05	6.75	72.4	73	6.2	5.2	185	1.80	1.9	.6	11.1	4.5	28.8	.19	.16	.14	54	.29	.033	15.0	9.2	.18	60.6	.066	<1	1.00	.008	.05	2	1.9	.04	<.01	174	.2	<.02	4.8
L101+50N 97+50E	1.00	49.36	16.16	135.1	328	9.7	13.4	1723	2.18	26.0	.5	5.6	.8	30.1	1.11	.55	.21	64	.40	.067	5.9	10.3	.29	78.4	.054	1	1.24	.018	.04	2	2.7	.13	.02	1377	.3	.05	5.2
L101+50N 97+75E	1.83	87.82	9.47	67.1	272	15.3	11.0	782	2.85	27.8	1.1	12.3	2.8	31.7	.18	.73	.16	91	.53	.085	19.4	19.0	.48	35.0	.064	<1	1.17	.009	.06	4	5.5	.05	<.01	261	.6	<.02	4.4
L101+50N 98+00E	.56	29.13	4.76	73.2	143	8.0	6.2	1013	1.12	11.0	.2	1.3	.4	19.1	.30	.22	.07	33	.23	.048	3.6	9.2	.18	51.7	.051	1	.89	.025	.03	2	1.9	.05	.02	646	.3	<.02	3.1
L101+50N 98+25E	6.85	291.83	27.31	208.1	952	25.4	52.7	2555	6.95	74.4	.5	5.6	1.2	51.2	.86	1.90	.37	207	.75	.104	11.5	23.6	1.22	96.9	.104	3	2.86	.015	.06	.8	13.2	.34	.01	1092	2.8	.30	12.2
L101+50N 98+50E	2.14	86.34	23.51	146.1	643	17.5	25.2	1773	3.41	40.6	.8	8.0	2.5	27.4	.95	1.01	.31	91	.30	.120	10.7	21.3	.57	87.6	.117	1	2.70	.011	.05	5	5.0	.18	<.01	844	.7	.18	8.7
L101+50N 98+75E	3.01	46.84	20.26	155.9	255	25.3	16.5	1535	2.49	41.9	.5	1.9	1.6	20.2	.81	1.60	.20	57	.23	.051	9.9	16.9	.48	158.8	.068	2	2.11	.018	.05	2	3.1	.17	<.01	1109	.6	.04	6.6
L101+50N 99+00E	2.15	55.01	38.16	205.4	387	18.3	21.5	2170	2.54	92.0	.7	5.6	2.1	22.7	1.45	1.80	.22	56	.32	102	13.9	14.4	.43	151.7	.079	1	2.36	.018	.05	1	3.8	.17	<.01	491	.6	.05	7.4
L101+50N 99+25E	1.52	41.26	14.57	91.6	536	9.2	14.7	3044	2.12	54.7	.5	5.2	1.6	33.7	.86	.51	.19	51	.58	.098	9.4	9.9	.25	236.6	.069	2	1.65	.015	.07	2	2.2	.14	<.01	1152	.4	.02	6.1
L101+50N 99+50E	2.13	48.69	18.09	98.2	1341	11.0	16.6	1945	2.72	85.6	.8	10.9	2.4	18.2	.43	.83	.23	62	.28	.103	11.7	11.0	.30	114.2	.077	1	2.18	.011	.05	.2	2.6	.15	<.01	1051	.5	<.02	7.4
L101+50N 99+75E	1.24	46.78	20.74	120.4	1198	8.5	13.9	2073	2.30	99.9	.6	10.5	1.9	22.9	.93	.79	.21	55	.43	.116	11.1	9.7	.25	142.0	.065	1	1.73	.014	.05	2	2.3	.10	.01	1869	.4	<.02	5.9
L101+50N 100+00E	1.28	48.93	20.43	167.5	994	13.9	18.9	2108	2.83	96.4	.5	5.4	2.4	22.2	.85	.75	.27	68	.29	.090	9.0	13.1	.39	197.5	.090	2	2.18	.011	.08	2	3.2	.17	<.01	1122	.3	.05	7.7
RE L101+50N 100+00E	1.44	53.85	21.31	178.4	1041	14.9	21.1	2201	2.95	101.5	.6	2.6	2.6	23.4	.90	.77	.29	71	.30	.093	9.6	14.4	.42	207.2	.097	1	2.31	.011	.08	3	3.6	.18	<.01	1038	.4	.02	8.3
L101+50N 100+25E	1.58	53.03	13.25	215.6	1396	10.5	33.9	1535	4.87	88.8	.3	11.5	1.4	15.0	.71	1.50	.26	116	.22	.165	6.2	12.9	.68	105.7	.072	1	2.02	.009	.06	2	4.3	.14	<.01	1131	.3	.12	9.6
L101+50N 100+50E	7.05	74.51	136.49	484.2	1697	12.8	25.6	1531	4.48	250.6	.4	14.7	1.2	22.2	1.14	4.74	.18	81	.43	.152	6.5	13.0	.78	91.9	.023	1	2.13	.011	.08	.3	3.4	.20	.01	1002	.6	.17	7.9
L101+50N 100+75E	2.47	38.62	32.74	299.5	1918	22.8	14.8	1946	3.01	66.1	.8	11.2	2.9	22.8	2.71	.96	.30	53	.33	.226	12.0	16.3	.38	155.7	.117	2	2.93	.016	.08	.3	3.9	.17	<.01	1033	.4	.02	9.5
L101+50N 101+00E	1.93	60.78	65.30	2601.7	885	24.8	21.6	1489	3.63	120.4	.4	10.5	1.8	19.8	7.27	1.69	.19	87	.26	.058	7.9	20.2	.99	149.2	.083	1	3.08	.011	.10	.3	5.2	.26	<.01	1018	.3	.07	9.8
L101+50N 101+25E	1.48	60.09	24.80	565.1	372	19.0	15.5	1164	3.02	63.5	.4	1.3	1.9	15.8	3.11	1.01	.19	66	.20	.082	8.0	16.1	.68	120.0	.053	<1	2.55	.010	.09	4	4.0	.22	<.01	873	.2	.02	8.2
L101+50N 101+50E	1.35	45.80	49.91	325.9	787	12.5	15.5	1179	2.87	22.4	.6	4.9	2.0	18.9	.94	.76	.16	68	.25	.054	8.3	13.9	.63	83.6	.044	<1	2.06	.010	.10	4	3.4	.17	<.01	1075	.2	.02	6.9
L101+50N 101+75E	1.04	33.54	25.20	175.8	417	9.5	15.5	1205	2.66	14.6	.6	1.6	1.8	37.0	.71	.52	.17	66	.33	.087	7.4	11.6	.43	95.9	.045	1	1.88	.015	.08	.4	3.1	.14	<.01	994	.2	.03	7.5
L101+50N 102+00E	.78	26.82	7.83	75.8	174	5.5	8.0	553	2.04	4.5	.7	5.6	2.6	23.8	.39	.30	.13	58	.31	.038	11.1	9.3	.26	43.7	.062	<1	1.02	.010	.06	.3	2.4	.10	.01	398	.1	<.02	4.0
L101+50N 102+25E	1.02	30.60	5.95	52.1	181	5.1	6.5	262	2.00	2.8	1.6	4.1	4.4	27.6	.12	.22	.15	56	.35	.024	20.2	10.3	.23	21.5	.081	1	.75	.008	.04	.4	2.7	.09	<.01	166	.3	<.02	3.6
L101+50N 102+50E	1.09	46.75	8.19	71.7	169	7.1	9.5	498	2.39	5.7	1.4	13.1	4.2	39.1	.34	.25	.22	61	.43	.071	18.2	9.9	.30	47.2	.078	1	1.17	.009	.06	.4	2.9	.08	<.01	531	.3	.03	4.9
L101+00N 96+50E	1.80	42.90	23.55	138.9	182	14.7	15.6	2492	2.73	58.8	.3	1.3	.8	30.2	1.20	.97	.32	58	.34	.045	5.4	15.2	.40	87.7	.068	1	1.65	.014	.06	.3	3.3	.22	<.01	1103	.4	.09	5.9
L101+00N 96+75E	1.72	42.89	11.85	182.2	169	42.2	18.3	1817	4.00	50.4	.4	1.6	1.6	46.1	1.30	.68	.40	104	.51	.105	8.2	35.5	.81	137.7	.110	3	2.81	.017	.08	.6	6.3	.25	<.01	985	.9	.07	10.5
L101+00N 97+00E	2.43	151.43	74.37	378.0	559	25.3	16.5	1059	3.75	50.8	.7	6.3	2.2	27.6	1.44	1.49	.46	95	.40	.041	10.5	21.6	.64	80.1	.074	2	2.35	.011	.05	.4	4.9	.23	<.01	995	.8	.20	8.3
L101+00N 97+25E	2.36	38.65	32.17	211.9	310	21.2	11.0	2719	2.58	83.3	.8	2.7	1.4	23.4	2.04	1.41	.61	56	.38	.048	9.2	16.6	.53	162.5	.057	1	1.83	.016	.08	.3	3.2	.24	<.01	1177	.3	.15	6.1
L101+00N 97+50E	1.38	46.95	22.35	192.9	685	23.6	13.4	1543	3.15	114.8	1.3	1.0	2.9	23.2	1.03	1.33	.37	65	.44	.069	15.0	24.1	.78	138.9	.082	2	2.75	.013	.07	.4	4.7	.24	<.01	777	.6	.06	8.4
L101+00N 97+75E	.81	36.75	16.70	113.0	444	12.3	11.2	2536	2.07	83.3	.7	4.0	.6	27.8	1.02	1.01	.23	45	.74	.064	8.0	15.5	.51	102.0	.036	1	1.46	.025	.04	2	3.1	.16	.01	997	.7	.03	4.4
STANDARD D54	6.51	120.24	31.98	159.1	282	34.3	12.5	799	3.16	22.5	5.9	27.5	3.6	28.2	5.17	4.69	4.88	74	.55	.089	16.5	165.0	.58	136.2	.084	2	1.76	.030	.15	3.7	3.7	1.07	.05	264	1.3	.77	5.9

Sample Type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Tl	B	Al	Na	K	W	Sc	Ti	S	Hg	Se	Te	Ga
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm
G-1	1.16	2.78	2.48	35.8	8	4.0	3.7	496	1.73	.2	2.7	.4	4.1	65.0	.02	.02	.10	34	.60	.085	7.7	12.9	.48	168.5	.115	<1	.91	.069	.35	1.2	2.2	.23	<.01	5	<.1	<.02	4.3
L101+00N 98+00E	1.03	32.08	10.22	91.3	167	11.2	7.8	724	2.38	32.4	.5	4.3	2.7	14.9	.26	.44	.19	74	.26	.046	7.7	10.8	.31	63.2	.076	1	1.58	.011	.04	.3	2.0	.08	<.01	628	.3	.03	5.3
L101+00N 98+25E	1.64	50.15	18.93	160.6	504	14.0	11.7	1800	2.55	64.3	.8	2.7	1.9	31.5	1.27	.63	.24	64	.52	.075	11.4	12.3	.36	130.9	.083	2	2.20	.016	.05	.1	2.6	.13	<.01	982	.3	.07	6.0
L101+00N 98+50E	2.28	62.65	23.57	164.2	734	18.7	17.2	2261	2.81	103.2	.6	<.2	2.2	28.5	1.79	1.17	.18	71	.50	.054	12.5	14.0	.45	148.3	.069	1	2.05	.014	.06	.2	3.1	.14	<.01	1339	.4	<.02	5.8
L101+00N 98+75E	2.71	73.69	30.71	106.3	958	15.1	25.0	3814	2.97	105.3	.4	3.3	1.2	38.6	1.51	1.25	.19	73	.66	.069	15.3	10.8	.51	230.1	.045	2	1.81	.016	.06	.1	3.1	.18	<.01	1651	.6	.06	5.7
L101+00N 99+00E	1.82	60.73	26.49	78.7	1062	8.0	23.2	2433	2.14	34.8	.4	2.5	.5	28.5	.66	.90	.27	56	.40	.109	8.3	7.8	.26	154.0	.053	<1	1.35	.018	.06	.1	2.0	.12	<.01	1721	.2	.05	5.9
L101+00N 99+25E	1.52	44.48	10.59	60.0	1143	7.0	15.0	1536	2.57	40.1	.5	1.0	.7	10.1	.15	.62	.20	72	.13	.101	6.2	8.5	.30	69.3	.058	<1	1.51	.014	.05	.1	2.1	.10	.01	973	.4	<.02	6.8
L101+00N 99+50E	1.20	38.89	13.70	89.6	1231	8.5	15.6	1837	2.58	67.4	.6	0.8	1.7	7.5	.27	.56	.19	72	.16	.097	8.7	9.5	.32	93.5	.087	<1	1.99	.015	.04	.2	3.1	.12	<.01	1114	.4	.04	6.7
L101+00N 99+75E	1.32	39.10	24.38	117.9	1054	9.2	15.2	1208	2.78	36.1	.7	7.9	2.3	18.9	.45	.42	.24	74	.37	.093	9.1	11.3	.33	95.8	.085	1	1.85	.014	.06	.3	2.5	.10	<.01	841	.4	.05	7.3
L101+00N 100+00E	2.72	107.36	25.00	362.4	1779	19.6	29.1	1804	3.94	216.4	1.1	29.6	2.9	17.0	1.35	1.27	.30	85	.24	.153	21.1	14.8	.60	83.3	.100	1	2.80	.012	.06	.3	4.5	.21	<.01	997	.5	.04	8.9
L101+00N 100+25E	2.00	73.11	15.48	263.9	919	15.4	12.9	1169	2.52	74.4	1.0	3.4	2.5	20.5	1.23	.65	.25	55	.32	.119	19.8	12.3	.35	106.2	.075	1	2.70	.020	.07	.2	3.4	.13	<.01	764	.4	<.02	7.3
L101+00N 100+50E	2.20	96.44	29.45	338.8	2000	24.5	25.9	1933	3.73	125.0	.9	3.3	2.7	22.3	1.42	1.42	.28	88	.31	.099	19.4	18.4	.77	128.3	.109	1	3.45	.015	.08	.3	4.8	.26	<.01	1289	.6	.03	9.2
L101+00N 100+75E	2.54	102.33	18.44	229.4	2324	22.5	23.6	1177	3.71	68.5	.6	4.0	2.0	20.7	.85	1.04	.19	102	.36	.054	12.8	18.9	.98	79.9	.060	<1	3.10	.016	.08	.2	5.1	.22	<.01	674	.7	.03	8.7
L101+00N 101+00E	2.13	86.01	20.78	398.0	895	20.4	20.1	789	3.46	84.1	.8	2.8	2.7	25.8	1.17	1.13	.21	95	.30	.143	13.4	16.3	.81	100.2	.083	<1	3.08	.016	.09	.3	5.1	.21	<.01	616	.4	.05	9.4
L101+00N 101+25E	2.76	84.46	23.38	896.8	1212	16.6	28.3	1687	3.54	107.1	.5	3.0	1.7	25.5	2.34	1.41	.21	94	.39	.117	9.4	12.5	.73	142.4	.055	1	2.69	.015	.09	.3	4.1	.28	<.01	822	.4	<.02	9.2
L101+00N 101+50E	1.05	51.16	8.04	97.9	663	8.9	9.4	896	2.39	8.5	1.2	3.3	1.9	23.6	.62	.38	.13	52	.48	.045	14.1	11.5	.56	131.0	.048	<1	2.00	.018	.16	.5	4.7	.16	<.01	418	.6	<.02	6.1
L101+00N 102+00E	.98	28.56	16.74	97.6	3722	8.8	8.2	369	2.43	5.1	.7	2.6	3.5	23.0	.60	.48	.16	65	.31	.051	12.0	12.0	.31	99.8	.068	<1	1.62	.009	.06	.5	2.6	.11	<.01	529	.2	.02	5.9
L100+50N 96+50E	2.77	64.84	13.59	157.2	233	19.2	27.1	2387	4.39	55.3	.6	1.3	1.6	34.9	1.86	.91	.31	109	.61	.055	9.1	32.8	.84	61.6	.103	2	2.41	.017	.06	.3	7.3	.25	.01	1705	.8	.12	8.7
L100+50N 96+75E	1.01	33.11	13.79	253.5	228	12.4	8.7	699	2.52	35.7	.5	.5	1.7	18.7	1.37	.46	.23	74	.31	.062	7.0	16.2	.31	48.6	.058	1	1.47	.012	.04	.2	2.6	.10	.01	706	.4	.07	5.6
L100+50N 97+00E	14.90	546.46	55.77	956.5	885	33.3	82.9	3601	10.42	287.5	1.3	28.4	.9	66.8	14.49	5.57	1.07	238	.88	.113	10.2	22.3	1.54	64.5	.086	<1	3.05	.013	.06	.5	11.7	.53	.01	2507	5.7	.76	13.5
L100+50N 97+25E	3.36	113.76	216.42	608.5	1184	44.5	16.1	2357	3.63	397.1	1.0	21.9	1.2	22.8	4.08	4.42	.67	64	.62	.052	17.7	27.1	.79	132.8	.013	<1	1.99	.013	.07	.3	4.9	.33	.04	1013	1.4	.38	6.5
L100+50N 97+50E	1.89	39.65	17.76	239.5	658	20.2	13.2	1743	2.38	91.2	.9	4.6	.8	19.5	1.32	.91	.13	62	.64	.063	10.5	25.3	.91	77.8	.051	1	1.68	.026	.07	.3	6.4	.21	.03	718	.6	.05	5.8
L100+50N 97+75E	1.49	49.33	18.59	148.6	612	28.3	15.3	1733	2.83	120.6	.8	1.0	2.2	28.0	.64	1.27	.28	60	.42	.071	11.6	22.2	.57	119.4	.091	<1	2.69	.016	.09	.2	3.3	.20	.02	1323	.8	.05	8.0
L100+50N 98+00E	2.02	38.90	16.41	201.2	370	18.3	11.4	1614	2.32	91.2	.7	1.1	2.1	25.2	1.04	.91	.19	50	.43	.051	10.6	15.9	.42	109.0	.093	<1	2.44	.021	.07	.1	3.3	.14	.01	1097	.4	.04	7.1
RE L100+50N 98+00E	2.00	38.43	16.89	207.5	375	18.6	11.5	1631	2.37	90.4	.7	.5	2.0	25.5	.93	.97	.20	51	.44	.050	10.9	16.3	.43	111.9	.096	2	2.52	.021	.07	.2	3.1	.15	.01	996	.4	.04	6.9
L100+50N 98+25E	1.69	73.37	15.34	112.4	266	12.4	14.2	942	3.27	51.7	.9	3.2	3.0	20.8	.43	.84	.17	93	.33	.088	14.1	14.5	.56	79.7	.072	<1	2.20	.010	.05	.3	4.6	.13	<.01	859	.4	.04	7.1
L100+50N 98+50E	2.83	84.37	22.68	157.8	635	14.1	20.7	2276	3.63	100.2	1.0	8.2	2.1	33.1	.87	.86	.26	103	.55	.078	13.3	18.8	.66	99.1	.063	1	2.23	.009	.05	.3	5.2	.17	.01	1631	.9	.15	7.4
L100+50N 98+75E	1.98	57.70	14.68	112.6	284	11.5	16.9	2119	2.50	36.3	.5	8.3	.9	23.9	.77	.73	.22	67	.42	.084	7.0	14.8	.48	110.1	.061	1	1.68	.021	.05	.3	4.8	.14	.02	1647	.7	.06	5.5
L100+50N 99+00E	2.40	56.17	22.70	237.1	529	20.6	22.3	2516	3.03	141.9	.6	8.2	2.1	23.7	1.84	1.15	.29	65	.35	.065	11.6	16.7	.49	147.9	.084	1	2.58	.013	.07	.2	3.4	.18	.01	1377	.7	.06	8.0
L100+50N 99+25E	2.82	76.10	17.27	217.2	791	15.9	22.1	2980	2.99	198.3	.9	2.7	1.5	29.6	1.78	1.16	.33	62	.50	.133	14.6	16.5	.55	187.0	.075	1	2.78	.016	.06	.2	3.7	.17	.02	1991	1.0	.08	8.3
L100+50N 99+50E	1.29	34.98	27.04	178.8	363	10.3	10.9	1674	1.78	69.7	.5	5.8	1.5	18.6	1.67	.60	.18	41	.37	.079	6.7	10.8	.28	92.8	.059	1	1.43	.023	.04	.2	2.2	.10	<.01	906	.5	.10	4.8
L100+50N 99+75E	2.41	60.70	31.17	333.7	399	19.4	17.7	1994	2.81	74.7	.7	2.9	2.4	19.7	3.53	.94	.34	62	.29	.108	10.5	18.3	.55	118.3	.087	3	2.60	.016	.07	.3	4.0	.17	<.01	1201	.4	.07	7.9
L100+50N 100+00E	1.17	47.51	51.64	225.6	426	9.8	12.9	1056	1.81	53.5	.4	2.6	1.4	15.5	1.29	.67	.13	44	.20	.095	6.7	9.9	.29	82.4	.061	1	1.64	.023	.05	.2	2.3	.10	<.01	715	.2	<.02	5.0
L100+50N 100+25E	1.26	49.15	14.79	122.3	405	9.9	20.0	1818	2.53	43.0	.7	2.3	1.5	24.6	.71	.59	.16	71	.37	.060	9.9	13.9	.54	66.9	.090	1	2.07	.024	.05	.2	4.6	.13	<.01	1721	.7	.02	6.3
L100+50N 100+50E	3.33	41.44	41.36	149.5	423	15.2	22.1	2223	2.25	59.7	.4	5.1	.5	16.1	1.31	1.52	.23	46	.28	.076	9.1	13.2	.41	79.4	.033	1	1.32	.018	.05	.1	1.9	.15	.02	1813	.5	.08	5.0
STANDARD DS4	6.96	126.68	31.13	158.0	278	35.6	11.8	796	3.09	22.5	5.9	26.1	3.8	27.0	5.29	4.73	4.96	74	.55	.087	16.9	165.2	.58	140.6	.083	2	1.74	.030	.15	3.4	3.5	1.09	.07	293	1.4	.74	5.9

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



Table with columns: SAMPLE#, Mo, Cu, Pb, Zn, Ag, Hl, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Tl, B, Al, Na, K, W, Sc, Ti, S, Hg, Se, Te, Ga. Rows include sample IDs like G-1, L100+50N 100+75N, etc., and a STANDARD DS4 row at the bottom.

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Tl	B	Al	Na	K	W	Sc	Ti	S	Hg	Se	Te	Ga
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm
G-1	1.06	3.01	2.39	40.6	10	3.7	3.7	498	1.73	.2	2.5	.5	4.2	65.0	<.01	.02	.11	35	.55	.081	7.1	14.7	.48	173.2	.111	<.1	.79	.058	.37	1.1	1.9	.24	.01	<.5	.1	<.02	4.3
L99+50N 98+50E	1.58	79.66	16.34	253.8	1463	15.8	12.8	557	2.95	69.7	1.3	3.4	4.3	23.2	1.10	.67	.29	73	.27	.101	13.3	17.0	.39	65.8	.132	<.1	3.24	.015	.05	.3	4.4	.17	<.01	896	.6	.03	7.4
L99+50N 98+75E	2.82	50.25	13.91	189.6	309	12.4	11.0	569	3.05	49.3	.9	2.5	3.6	22.7	.83	.42	.27	84	.30	.054	10.9	17.0	.43	86.5	.119	<.1	2.84	.012	.05	.4	4.1	.12	<.01	682	.5	.10	8.2
L99+50N 99+00E	5.16	128.63	17.72	162.9	707	21.7	25.2	1538	4.00	77.0	1.4	7.3	3.6	34.5	.53	.76	.28	113	.46	.075	16.1	22.3	.92	114.1	.132	2	3.64	.014	.08	.5	9.2	.24	<.01	905	1.1	.14	10.1
L99+50N 99+25E	5.39	198.07	23.79	203.9	906	24.4	44.1	3145	4.60	107.8	.7	5.5	1.1	63.0	.94	1.46	.29	123	.64	.164	10.2	21.8	1.13	106.8	.079	2	3.86	.015	.08	.7	9.4	.32	<.01	1543	2.2	.27	10.6
L99+50N 99+50E	4.00	214.51	52.61	285.4	3776	38.3	41.4	3241	4.38	295.8	.8	15.1	1.9	36.4	2.01	3.72	.90	58	.46	.086	22.1	15.9	.79	124.3	.061	1	3.02	.013	.07	.4	3.8	.32	<.01	2009	1.9	.40	7.8
L99+50N 99+75E	2.94	88.65	39.49	242.4	1041	25.9	21.3	4144	2.69	180.0	.3	5.4	1.0	38.5	3.26	2.85	.32	37	.45	.073	11.5	10.4	.45	185.9	.046	<.1	1.51	.020	.06	.3	1.8	.22	<.01	1528	.7	.15	4.8
L99+50N 100+00E	1.54	45.98	19.37	78.1	732	9.1	19.3	2555	2.19	52.7	.6	6.4	.6	24.2	.57	.67	.26	53	.36	.097	10.1	11.3	.30	138.9	.050	1	1.69	.013	.06	.2	1.6	.14	.01	1400	.4	.05	6.7
L99+50N 100+25E	2.06	46.41	13.46	74.6	623	8.9	14.7	1808	2.25	66.4	.7	4.0	1.4	20.6	.34	.73	.23	57	.32	.105	9.9	11.6	.30	121.5	.066	<.1	1.87	.013	.05	.3	2.1	.17	<.01	941	.4	.04	6.7
L99+50N 100+50E	1.68	43.33	12.42	68.8	275	9.0	12.1	1462	2.09	33.2	.8	3.7	2.2	16.4	.40	.55	.24	53	.30	.067	12.4	11.0	.29	98.4	.077	<.1	1.93	.015	.05	.2	2.6	.18	<.01	1061	.5	.02	6.5
L99+50N 100+75E	2.24	35.82	11.94	69.3	533	9.0	15.4	1446	2.16	25.3	.6	2.3	1.9	12.2	.10	.51	.23	50	.17	.071	10.0	11.0	.26	79.6	.078	<.1	1.68	.017	.04	.3	1.9	.13	<.01	1245	.3	.04	7.1
L99+50N 101+00E	1.74	39.12	17.13	71.6	791	7.9	12.1	1483	1.90	23.2	.6	1.8	1.6	16.3	.32	.49	.24	47	.17	.081	9.9	10.2	.22	119.1	.066	<.1	1.61	.015	.05	.2	1.7	.14	<.01	1190	.4	.03	6.6
L99+00N 96+50E	1.61	34.19	24.20	178.5	467	20.2	11.0	3436	2.66	185.7	1.0	10.0	.6	27.1	2.46	1.88	.20	54	.83	.094	12.1	24.9	.84	123.6	.034	1	1.84	.018	.09	.2	4.4	.21	.03	1729	.5	.08	5.8
L99+00N 96+75E	1.90	48.49	26.47	258.9	1069	17.5	17.4	1429	3.96	194.9	.7	12.3	2.3	26.7	.96	1.65	.26	86	.36	.055	9.9	16.1	.72	70.4	.049	<.1	2.60	.010	.09	.3	4.7	.23	<.01	818	.6	.05	9.0
L99+00N 97+00E	1.22	63.58	102.38	652.3	711	17.1	16.9	1668	2.72	193.9	.5	127.4	1.9	41.2	8.81	.92	.23	69	.45	.081	7.4	14.5	.43	159.3	.105	<.1	2.30	.016	.09	.3	4.2	.18	<.01	1154	.4	.07	8.0
L99+00N 97+25E	1.51	80.97	35.68	380.7	547	27.6	24.0	2024	3.58	179.4	.6	4.5	2.4	38.4	2.51	1.33	.28	95	.41	.060	8.7	21.6	.77	158.1	.147	1	3.42	.020	.10	.3	5.8	.34	<.01	1252	.5	.06	11.1
L99+00N 97+50E	.96	37.39	12.53	93.2	511	9.9	11.0	914	2.12	85.6	.5	2.2	1.8	24.7	.47	.80	.16	55	.30	.061	7.5	10.9	.31	68.8	.086	1	1.72	.019	.05	.3	2.9	.13	<.01	775	.3	.02	5.9
L99+00N 97+75E	2.82	92.19	21.65	120.3	4762	17.4	28.1	1736	3.79	234.3	.6	9.7	1.6	51.8	.48	2.84	.26	80	.41	.136	6.9	15.0	.65	71.4	.104	<.1	3.01	.010	.08	.5	4.0	.23	<.01	1667	.8	.08	10.1
L99+00N 98+00E	2.49	47.04	14.66	161.4	442	22.6	16.3	1425	2.75	167.6	.4	1.3	1.7	21.4	.66	1.66	.22	54	.24	.089	6.8	16.5	.51	187.8	.061	1	2.40	.013	.08	.2	2.7	.21	<.01	1110	.3	.05	7.7
L99+00N 98+25E	1.29	30.36	12.74	124.8	454	15.5	15.5	1600	2.25	89.6	.4	.6	1.5	21.3	.50	1.02	.22	45	.26	.086	7.5	12.8	.33	169.3	.067	1	1.43	.015	.06	.2	2.0	.13	<.01	970	.3	.03	5.6
L99+00N 98+50E	2.26	67.11	27.66	233.5	720	21.8	29.5	4289	3.16	127.2	.7	1.3	2.4	28.6	2.04	1.69	.32	62	.29	.102	13.2	17.3	.52	317.5	.083	1	2.25	.012	.08	.2	3.4	.30	<.01	2032	.5	.04	8.6
L99+00N 98+75E	1.24	42.07	14.31	157.2	620	13.3	23.3	2412	2.37	32.3	.5	1.7	1.7	21.8	.91	.62	.23	57	.27	.137	8.2	12.7	.37	126.5	.093	1	1.83	.013	.06	.2	2.6	.15	<.01	1052	.3	.05	7.6
L99+00N 99+00E	2.01	61.35	14.30	164.2	443	14.2	23.7	2238	2.73	105.1	.7	2.1	2.4	29.9	.83	.68	.29	66	.33	.174	9.9	15.2	.37	190.3	.096	1	2.35	.013	.06	.3	3.2	.16	<.01	980	.5	.09	8.1
L99+00N 99+25E	2.89	92.18	17.66	176.0	494	17.5	29.1	2349	3.26	135.7	.7	9.4	2.1	25.8	.46	1.11	.32	68	.31	.098	10.2	15.5	.49	151.6	.097	1	2.45	.013	.07	.5	3.5	.20	<.01	1457	.8	.12	8.6
L99+00N 99+50E	1.58	73.11	21.15	138.3	517	13.8	31.7	3143	2.48	118.0	.6	3.8	.9	23.9	1.02	1.25	.56	54	.37	.099	10.7	12.2	.39	144.6	.053	1	1.71	.014	.05	.2	2.9	.18	.01	1710	.5	.05	6.4
L99+00N 99+75E	2.09	45.64	15.83	69.0	606	9.6	12.9	1623	2.21	55.5	.7	3.2	1.7	24.0	.58	.65	.21	56	.43	.052	9.4	11.3	.29	119.4	.067	1	1.56	.012	.05	.2	2.6	.12	<.01	1004	.4	.07	5.8
L99+00N 100+00E	3.10	64.77	13.80	102.6	901	9.7	24.8	2806	2.18	74.9	.6	1.8	1.2	29.1	.68	1.11	.22	50	.51	.064	9.6	9.7	.32	182.2	.053	1	1.56	.016	.06	.2	2.9	.22	.01	1251	.6	.05	5.6
RE L99+00N 100+00E	3.05	63.55	13.40	99.4	880	9.4	24.0	2818	2.12	72.8	.6	2.6	1.1	28.8	.70	1.06	.21	48	.51	.063	9.4	9.6	.32	184.1	.052	1	1.56	.015	.05	.2	2.7	.22	.01	1183	.5	.03	5.5
L99+00N 100+25E	2.42	67.20	14.19	82.0	987	11.9	19.9	1601	2.54	37.9	1.0	3.5	2.8	18.8	.39	.70	.26	62	.26	.141	14.8	14.7	.36	117.5	.075	1	2.29	.010	.05	.3	3.4	.20	<.01	1229	.5	.04	7.6
L99+00N 100+50E	1.33	35.41	13.57	78.2	428	8.1	15.8	2208	1.82	13.7	.5	1.3	.6	16.4	.48	.55	.21	47	.23	.096	7.0	9.2	.27	139.5	.046	<.1	1.50	.013	.04	.2	1.7	.14	<.01	1179	.4	.02	6.3
L99+00N 100+75E	1.45	25.68	7.38	45.9	537	7.6	8.9	854	1.51	32.1	.4	4.9	1.8	13.8	.14	.34	.15	36	.18	.050	7.3	8.2	.18	73.6	.066	<.1	1.16	.015	.03	.2	1.5	.12	<.01	568	.2	.03	4.8
L98+50N 96+50E	2.77	69.20	21.11	377.4	769	31.6	19.8	2475	3.91	210.4	.7	5.3	1.3	29.2	1.41	2.32	.22	94	.51	.060	12.3	27.8	1.03	75.7	.038	1	2.68	.011	.08	.3	6.5	.27	.01	1319	.8	.11	9.1
L98+50N 96+75E	1.61	64.38	15.70	528.4	340	10.7	16.0	2003	1.89	76.8	.8	2.4	.9	17.9	4.76	.60	.19	47	.37	.062	6.4	8.9	.25	54.7	.072	1	1.62	.018	.05	.1	2.7	.18	.02	1299	.5	.03	6.2
L98+50N 97+00E	5.82	241.10	1391.13	962.4	6518	27.0	29.0	3082	4.27	328.9	1.5	1269.9	2.8	32.2	3.64	3.73	.30	94	.44	.095	13.3	21.9	.65	77.9	.099	1	3.12	.009	.06	.3	5.6	.31	<.01	1749	1.5	.19	10.4
L98+50N 97+25E	.64	38.79	37.85	123.5	661	6.1	15.2	2794	1.27	25.7	.2	3.8	.2	32.3	1.67	.67	.18	32	.94	.103	3.6	6.8	.20	134.1	.037	<.1	.86	.015	.05	.1	1.4	.12	.02	1746	.3	.04	3.9
STANDARD DS4	6.56	126.63	30.69	159.9	297	34.5	12.0	802	3.21	23.2	6.1	26.0	3.6	28.5	5.38	4.84	5.10	76	.54	.089	16.6	164.9	.60	147.5	.085	1	1.79	.030	.16	3.7	3.7	1.10	.05	286	1.3	.75	6.0

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Tl	B	Al	Na	K	W	Sc	Ti	S	Hg	Se	Te	Ga
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm
L98+50N 97+50E	1.22	40.25	26.80	99.9	697	10.3	21.2	2964	2.07	74.1	.5	1.2	.3	38.5	1.13	1.54	.24	50	.43	.089	7.4	10.2	.35	113.6	.058	2	1.55	.014	.06	.2	1.6	.14	.04	1908	.4	.03	6.2
L98+50N 97+75E	1.08	28.01	15.28	83.7	318	8.9	15.5	2275	2.31	57.6	.4	1.1	.7	21.8	.43	.92	.20	59	.23	.075	6.4	10.8	.34	100.8	.071	1	1.54	.014	.05	.3	1.8	.11	.02	1276	.3	.04	6.6
L98+50N 98+00E	2.38	76.16	23.27	146.4	456	19.7	28.7	3151	3.62	160.7	.6	2.1	1.8	35.9	.80	1.56	.29	80	.49	.124	10.6	15.6	.61	241.6	.090	2	2.35	.012	.09	.2	3.9	.34	.01	1257	.4	.02	9.6
L98+50N 98+25E	.98	43.32	23.26	114.2	369	9.2	22.3	2595	2.23	63.4	.4	1.3	.7	39.8	.79	1.03	.25	51	.52	.128	7.0	10.1	.33	231.4	.065	2	1.38	.015	.06	.1	1.6	.14	.04	1241	.3	.02	6.7
L98+50N 98+50E	1.18	39.89	9.39	64.2	258	10.1	15.6	1614	2.10	57.6	.6	1.3	1.5	18.3	.42	.81	.18	50	.28	.091	9.3	10.5	.29	102.0	.071	2	1.57	.014	.05	.2	2.0	.12	.01	974	.3	<.02	5.8
L98+50N 98+75E	1.57	35.66	9.81	57.7	281	7.8	12.1	1118	2.01	35.2	.7	1.5	1.1	13.7	.20	.51	.23	50	.18	.134	7.9	10.5	.25	75.9	.073	1	1.53	.012	.04	.3	1.6	.09	.02	1104	.3	.04	6.9
L98+50N 99+00E	1.04	22.41	7.90	54.9	204	7.8	11.9	960	1.79	14.9	.4	.3	1.0	11.5	.20	.40	.19	47	.18	.073	6.0	11.8	.23	59.5	.080	1	1.22	.015	.04	.3	1.5	.08	.01	1010	.2	.03	6.2
L98+50N 99+25E	2.06	46.32	10.80	86.5	292	9.1	15.5	1942	2.09	52.5	.4	2.1	1.0	20.2	.34	.61	.21	45	.19	.101	5.9	9.4	.23	132.9	.071	1	1.25	.015	.04	.3	1.3	.14	.02	1075	.5	.09	6.0
L98+50N 99+50E	1.58	41.41	12.99	134.4	317	10.4	12.6	1150	2.10	61.0	.9	1.8	1.8	21.5	.73	1.01	.24	46	.39	.071	14.0	11.0	.28	108.1	.082	2	1.81	.016	.05	.2	2.2	.15	<.01	571	.3	.04	7.1
L98+50N 99+75E	2.23	54.53	23.27	131.2	1318	13.9	16.1	1047	2.97	178.6	1.1	8.0	2.9	21.6	.46	1.21	.30	59	.33	.067	16.1	14.1	.40	92.2	.094	2	2.23	.012	.06	.2	2.7	.15	<.01	865	.7	.03	7.8
L98+50N 100+00E	.64	24.57	12.26	62.2	440	4.6	12.1	2224	1.32	38.5	.2	.4	.3	27.0	.52	.87	.18	29	.34	.081	5.2	6.0	.18	178.9	.031	1	.83	.017	.05	<.1	.9	.09	.02	1088	.2	.03	3.8
L98+50N 100+25E	1.42	21.99	22.48	103.9	303	6.6	11.5	2029	1.62	71.4	.3	9.3	.8	11.4	.35	.96	.26	35	.13	.046	6.0	7.6	.15	148.0	.056	1	.95	.014	.05	.1	.8	.14	<.01	823	.2	.03	5.0
L98+50N 100+50E	1.63	29.40	10.64	75.8	289	9.1	9.3	1261	1.78	31.0	.9	1.5	2.5	15.2	.21	.39	.24	32	.17	.158	12.3	7.6	.15	103.8	.130	1	3.20	.015	.04	.2	1.9	.14	<.01	770	.5	.02	9.2
L98+50N 100+75E	2.06	54.87	15.71	109.2	1147	16.4	15.3	1306	2.57	33.3	.9	.9	3.3	15.1	.25	.56	.27	49	.18	.153	14.8	12.7	.30	169.1	.099	1	2.69	.010	.05	.2	2.6	.19	<.01	681	.5	.03	8.8
L98+00N 96+50E	1.32	59.53	15.15	148.8	533	15.7	19.7	2666	2.72	118.0	.5	2.3	1.1	27.6	1.09	1.16	.23	71	.31	.058	8.4	14.8	.44	83.7	.070	1	1.98	.014	.06	.2	4.3	.19	.02	1118	.6	.05	7.3
L98+00N 96+75E	1.11	62.19	28.99	215.2	518	16.1	19.9	3053	2.38	151.3	.4	4.6	.6	49.9	2.03	2.24	.22	52	.57	.094	5.9	11.7	.44	139.0	.053	2	1.77	.016	.08	.2	2.8	.25	.01	1348	.5	.06	6.4
L98+00N 97+00E	1.71	77.19	111.78	274.8	1369	20.0	18.4	2237	2.63	189.5	.6	12.4	1.1	26.5	2.35	3.00	.27	51	.35	.097	9.7	15.2	.48	112.0	.066	1	2.23	.011	.08	.3	2.8	.21	.02	1172	.6	.06	7.0
L98+00N 97+25E	1.98	49.65	28.08	265.2	714	26.4	15.5	2693	2.94	82.1	.5	2.3	1.6	28.3	2.44	1.72	.22	62	.27	.271	7.7	17.9	.54	149.3	.086	1	2.34	.012	.08	.3	2.6	.33	<.01	960	.5	.02	7.8
L98+00N 97+50E	1.13	22.16	18.27	202.9	475	12.5	7.5	3487	1.25	30.7	.2	.6	.5	23.3	4.88	.45	.18	29	.21	.104	4.2	7.0	.14	211.4	.057	1	1.02	.020	.06	.2	.9	.14	<.01	1343	.2	<.02	4.2
L98+00N 97+75E	.91	30.83	12.01	98.1	207	11.3	10.5	1195	1.87	80.7	.4	2.2	1.3	27.8	.95	.98	.14	47	.31	.053	6.6	9.6	.33	117.9	.056	1	1.44	.015	.07	.2	2.2	.13	<.01	481	.3	<.02	5.0
L98+00N 98+00E	.86	43.47	22.41	70.4	505	6.5	36.3	3107	2.14	49.1	.3	.5	.2	41.2	.82	1.11	.30	67	.52	.110	5.3	8.9	.38	196.5	.040	2	1.14	.015	.06	.1	2.5	.13	.03	1306	.3	.04	5.4
L98+00N 98+25E	1.03	41.41	8.76	63.5	360	9.6	18.6	1804	2.04	69.4	.5	1.4	1.2	30.3	.29	.71	.20	56	.39	.131	7.3	9.8	.28	196.2	.074	1	1.60	.015	.06	.2	2.3	.12	<.01	929	.3	.03	6.6
L98+00N 98+50E	.63	23.35	10.25	61.0	218	4.3	14.2	2049	1.25	21.4	.2	.5	.3	10.0	.55	.52	.18	29	.11	.097	4.7	5.8	.15	123.7	.035	<1	.77	.014	.03	.2	.7	.08	<.01	1449	.2	.03	3.6
L98+00N 98+75E	.73	30.90	12.28	86.2	107	12.0	10.0	1360	1.88	225.1	.5	.7	1.7	26.3	1.00	1.65	.21	42	.41	.105	9.1	9.6	.21	138.7	.074	1	1.51	.013	.06	.2	2.0	.11	<.01	911	.4	.04	5.2
L98+00N 99+00E	.85	47.53	30.94	112.4	213	9.3	22.5	2369	2.04	44.5	.3	1.8	1.1	26.7	1.09	.62	.27	51	.39	.153	6.3	10.9	.31	226.5	.075	1	1.33	.015	.06	.2	2.8	.14	<.01	1025	.3	.08	5.9
RE L98+00N 99+00E	.86	47.93	31.76	118.1	208	9.7	22.8	2408	2.04	44.8	.3	.7	1.1	26.7	1.10	.63	.29	52	.39	.158	6.5	11.4	.30	239.4	.074	1	1.31	.015	.06	.2	3.0	.14	<.01	973	.3	.07	5.9
L98+00N 99+25E	1.01	29.11	9.98	43.4	184	7.0	9.9	1047	1.80	16.2	.6	1.3	.4	16.6	.22	.42	.21	46	.19	.096	7.0	9.9	.23	64.7	.058	1	1.56	.013	.04	.2	1.4	.08	.01	637	.4	.04	6.2
L98+00N 99+50E	3.39	55.27	15.01	84.9	517	9.8	17.9	2901	2.51	113.1	.5	3.9	1.3	25.3	.47	.88	.28	51	.27	.110	6.6	9.1	.29	192.5	.082	1	1.79	.013	.06	.3	2.6	.31	<.01	1653	.6	.10	6.8
L98+00N 99+75E	2.10	48.02	20.66	112.1	1364	14.0	15.1	1917	2.76	76.6	.8	3.8	3.3	18.2	.44	.88	.23	56	.22	.077	12.1	12.4	.36	124.9	.089	1	2.15	.010	.06	.2	3.0	.23	<.01	1292	.5	.04	7.3
L98+00N 100+00E	3.85	37.98	26.50	117.8	5491	13.5	19.5	1891	3.55	160.5	.9	15.5	2.6	10.8	.27	1.72	.26	52	.11	.214	12.2	12.8	.37	107.6	.080	1	2.68	.009	.05	.2	2.8	.27	<.01	1113	.6	.02	9.1
L98+00N 100+25E	2.64	38.89	25.37	268.1	2687	14.8	17.1	2272	2.46	62.8	.6	3.2	2.2	29.6	1.64	1.07	.25	38	.29	.172	11.6	11.2	.27	166.9	.079	1	1.86	.014	.07	.2	2.3	.18	<.01	1212	.4	.04	6.9
L98+00N 100+50E	2.21	40.44	24.34	101.3	530	12.1	6.3	387	2.26	11.5	2.5	2.4	7.4	44.1	.12	.22	.42	36	.33	.077	25.1	11.5	.31	136.4	.062	<1	3.40	.014	.08	.2	3.6	.23	<.01	315	.5	.02	12.7
L98+00N 100+75E	1.34	39.30	12.97	54.0	587	7.0	6.3	115	2.14	10.6	.7	.9	3.2	18.7	.13	.29	.24	37	.15	.084	12.3	8.4	.18	59.5	.075	1	2.48	.010	.05	.3	2.3	.09	<.01	319	.4	.04	8.9
STANDARD DS4	6.96	127.08	33.25	162.3	298	37.5	12.6	846	3.33	25.5	6.3	28.2	3.9	29.7	5.49	4.81	5.54	77	.56	.094	18.7	169.1	.62	149.0	.082	2	1.75	.029	.17	3.6	3.6	1.19	.05	290	1.4	.76	6.4

Sample type: SOIL SS80 60C. Samples beginning "RE" are Reruns and "RRE" are Reject Reruns.



(ISO 9002 Accredited Co.)

ASSAY CERTIFICATE



Northern Natural Resources Services PROJECT FRANKLIN File # A301820R
901 - 1030 Burnaby St., Vancouver BC V6E 1N8 Submitted by: John Boutwell

SAMPLE#

Au**
gm/mt

L102+00N 98+00E

.01

GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM TOTAL SAMPLE, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: SOIL PULP

DATE RECEIVED: JUN 25 2003

DATE REPORT MAILED: *June 27/03*

SIGNED BY: *C. Leong*

TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



GEOCHEMICAL ANALYSIS CERTIFICATE



Northern Natural Resources Services PROJECT FRANKLIN File # A302217

901 - 1030 Burnaby St., Vancouver BC V6E 1N8 Submitted by: John Boutwell

Table with columns: SAMPLE#, Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Ti, B, Al, Na, K, W, Sc, Tl, S, Hg, Se, Te, Ga. Rows include G-1, MR 5+50N, MR 5+25N, MR 5+00N, MR 4+75N, MR 4+50N, MR 4+25N, MR 4+00N, MR 3+75N, MR 3+50N, MR 3+25N, MR 3+00N, MR 2+75N, MR 2+50N, MR 2+25N, MR 2+00N, RE MR 2+00N, MR 1+75N, MR 1+50N, MR 1+25N, MR 1+00N, MR 0+75N, MR 0+50N, MR 0+25N, MR 0+00, and STANDARD DS4.

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS. UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM. - SAMPLE TYPE: SOIL SS80 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 25 2003 DATE REPORT MAILED: July 4/03 SIGNED BY: [Signature] TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

GEOCHEMICAL ANALYSIS CERTIFICATE



Northern Natural Resources Services PROJECT FRANKLIN File # A302311

901 - 1030 Burnaby St., Vancouver BC V6E 1N8 Submitted by: John Boutwell

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm
G-1	1.24	7.90	2.60	41.1	11	4.7	4.1	514	1.83	.4	2.3	1.0	4.3	74.8	.01	.02	.10	39	.54	.077	7.0	33.2	.52	197.9	.123	<1	.81	.061	.41	.8	1.9	.32	<.01	<5	<.1	<.02	4.7
L102N 98+25ER	6.40	119.38	19.03	172.3	572	30.7	20.5	2049	3.62	44.8	.7	9.5	1.1	45.9	.73	.88	.19	92	.86	.075	8.7	36.5	.81	69.4	.083	2	2.13	.018	.06	.7	6.7	.19	.01	40	1.4	.10	7.7
L102N 98+00ER	3.42	98.48	14.35	133.1	333	21.3	12.7	1431	2.87	25.9	.5	1.2	1.4	40.5	.55	.51	.22	79	.56	.066	7.2	28.0	.59	107.9	.106	1	2.21	.016	.06	.5	4.2	.14	.01	30	.6	.06	7.6
L102N 97+75ER	3.09	83.46	13.23	98.9	418	13.2	21.4	2035	2.47	16.1	.4	6.0	.8	41.7	.70	.56	.22	69	.51	.088	5.1	20.0	.35	94.1	.063	1	1.41	.022	.05	.3	4.3	.13	.01	34	1.0	.06	5.4
102+22N 98+10E	1.49	48.75	12.16	94.3	233	16.8	8.0	433	2.18	43.1	.7	1.3	2.5	38.1	.25	.40	.17	51	.69	.127	7.1	17.4	.35	52.5	.148	2	3.30	.024	.06	.4	3.7	.09	.02	23	.6	.04	8.0
101+80N 97+90E	2.84	103.92	14.02	179.2	245	26.4	14.6	1044	3.12	31.2	1.0	2.7	2.7	27.7	.42	.55	.23	88	.37	.067	11.3	32.9	.69	86.7	.123	1	2.83	.014	.05	.5	5.6	.15	<.01	22	.7	.07	9.4
STANDARD DS4	6.82	129.29	31.00	157.0	300	33.6	12.6	794	3.18	22.6	6.5	27.8	3.8	27.0	5.33	4.48	4.94	75	.51	.085	16.4	164.7	.59	137.4	.082	1	1.75	.029	.14	4.2	3.5	1.23	.06	270	1.3	.76	6.2

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
 UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
 - SAMPLE TYPE: SOIL SS80 60C

DATE RECEIVED: JUN 30 2003 DATE REPORT MAILED: *July 8/03* SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

APPENDIX 6

Analytical Results - Rock Samples

Samples 2301-2332, 2529, JK 001,
JB 001-246, AE 004-007



GEOCHEMICAL ANALYSIS CERTIFICATE



Northern Natural Resources Services PROJECT FRANKLIN File # A301677 Page 1
901 - 1030 Burnaby St., Vancouver BC V6E 1N8 Submitted By: J. Boutwell

Table with columns: SAMPLE#, Ho, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Tl, B, Al, Na, K, W, Sc, Ti, S, Hg, Se, Te, Ga, Sample gm. Rows include samples JB 001 through 2303 and STANDARD DS4.

GROUP 1F30 - 30.00 GM SAMPLE LEACHED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 600 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: ROCK R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAY 26 2003 DATE REPORT MAILED: June 5/03 SIGNED BY: [Signature] D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only. Data LFA M



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Hg	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Sc	Ti	S	Hg	Se	Te	Ga	Sample
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	gm
2304	21.62	192.88	138.21	147.0	4895	6.2	6.8	225	6.52	293.7	<.1	1981.9	.1	2.9	.40	5.89	.51	49	.04	.021	1.0	7.0	.28	13.0	.023	1	.51	.004	.05	.2	2.6	.08	1.42	16	4.9	.30	3.5	30
2305	5.50	59.45	51.17	182.7	1545	6.7	4.1	282	1.00	26.1	<.1	37.6	.1	6.7	1.24	2.29	.10	11	.46	.016	1.4	16.5	.17	20.7	.005	2	.29	.005	.07	4.7	.6	.03	.10	25	.5	.04	1.0	30
2306	6.55	35.62	40.19	140.0	1803	8.2	3.8	323	1.41	57.7	.1	30.1	.2	21.1	.66	2.00	.11	6	1.32	.016	1.6	2.6	.05	55.4	.005	1	.21	.003	.08	.1	.7	.04	.60	21	1.4	.07	.7	30
2307	78.71	37.08	35.15	32.9	5827	3.0	3.0	195	2.89	40.5	.5	103.7	.3	3.5	.05	1.79	.15	61	.03	.034	1.0	21.0	.31	37.6	.079	1	.63	.006	.13	4.2	2.7	.09	.29	<5	2.2	.08	3.5	30
2308	87.56	189.43	1562.42	240.2	18046	5.1	2.6	70	5.81	511.3	.3	2714.2	.4	3.8	.81	13.87	.18	27	.03	.019	1.2	6.6	.03	17.9	.030	1	.20	.001	.09	1.4	.5	.08	1.66	44	23.6	.62	1.5	30
2309	34.22	371.99	3675.81	1075.6	19087	3.9	3.2	427	3.55	195.9	.3	2695.3	<.1	1.5	2.21	11.59	.04	16	.03	.005	1.1	11.6	.12	10.4	.001	1	.36	.001	.04	5.1	.8	.05	.44	35	11.6	.53	1.9	30
2310	7.46	51.52	188.83	43.4	2073	1.5	.5	49	.72	16.8	.1	703.4	.1	1.4	.17	1.58	.04	2	.01	.002	<.5	1.5	.01	7.8	.001	1	.07	.001	.04	<.1	.3	.02	.05	85	.5	.03	.2	30
2311	1.47	112.42	28.20	61.6	1268	1.7	13.7	953	5.04	9.3	.4	171.9	.6	34.1	.26	.88	.16	106	.50	.108	4.3	4.2	1.26	44.1	.220	2	1.95	.030	.09	2.3	6.8	.05	<.01	<5	.2	.13	9.4	30
2312	13.80	390.90	1631.51	360.6	18221	2.1	3.6	125	3.28	126.5	.1	4649.8	.1	1.6	1.16	7.46	.07	10	.02	.013	<.5	1.6	.05	26.0	.011	2	.21	.002	.07	.5	.6	.04	.95	61	8.4	.21	.9	30
2313	6.94	355.02	1601.72	1114.8	17907	2.3	3.7	364	1.84	68.4	<.1	6611.8	<.1	2.8	8.03	4.15	.06	6	.11	.007	<.5	11.9	.08	14.2	.006	1	.21	.003	.04	5.5	.5	.04	.60	73	5.3	.15	.8	30
2314	62.32	1811.01	23453.84	1594.8	46814	3.4	3.9	131	2.53	163.3	<.1	7000.8	<.1	4.2	9.41	21.00	.15	13	.02	.011	.8	1.0	.14	19.7	<.001	<.1	.32	.003	.06	2.2	.6	.05	.83	322	27.1	3.62	1.4	30
2315	6.98	347.56	470.82	2229.7	3011	6.0	4.7	371	1.41	64.6	<.1	118.3	.1	4.7	7.17	2.55	.03	7	.29	.022	1.4	14.2	.08	21.2	.001	1	.26	.004	.09	5.0	.8	.05	.48	52	1.4	.12	.7	30
2316	10.56	27.85	113.62	29.9	1964	5.6	4.9	642	1.46	81.0	.1	56.5	.2	4.9	.16	1.74	.03	12	.12	.033	2.0	2.6	.14	41.9	.004	1	.38	.002	.14	.2	.9	.06	.10	9	.7	.20	1.0	30
RE 2316	10.67	29.24	117.72	27.4	1889	5.8	5.3	641	1.46	80.9	.1	57.2	.2	4.9	.16	1.80	.03	12	.12	.034	2.1	2.6	.14	45.8	.006	1	.39	.002	.13	.2	.9	.06	.10	6	.6	.27	1.0	30
2317	24.80	9317.09	18.18	45.4	10351	4.9	6.4	119	1.61	2.7	.6	77.4	3.0	96.4	.46	4.15	3.55	65	.07	.023	4.5	5.7	.17	48.8	.009	1	.41	.029	.13	1.6	1.0	<.02	.53	9	2.6	.89	2.0	30
2318	5.09	62.06	26.04	18.4	1509	1.5	4.6	282	1.24	37.6	.1	37.4	<.1	33.1	.14	2.17	.08	6	.89	.004	.8	1.4	.18	11.9	.005	<.1	.20	.002	.02	<.1	.7	.03	.77	10	.4	.04	1.0	30
2319	13.11	83.74	362.21	1203.1	99999	.8	.5	493	1.16	52.2	<.1	1478.5	<.1	153.9	7.20	13.38	.03	5	3.41	.001	<.5	10.5	.30	7.8	.003	<.1	.21	.001	.01	4.6	.5	<.02	.82	81	8.5	.05	.8	30
STANDARD DS4	7.03	128.32	28.96	158.4	298	35.3	11.8	769	3.13	24.3	6.2	27.9	4.2	29.0	5.18	5.07	4.88	79	.52	.088	16.9	175.0	.59	146.6	.094	2	1.77	.028	.17	4.1	4.1	1.17	.04	282	1.4	.75	6.0	30

Sample type: ROCK R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Assay recommend for Cu, Zn > 1%
 Pb > 5000 ppm
 Ag > 30 ppm
 Au > 1000 ppb



(ISO 9002 Accredited Co.)

ASSAY CERTIFICATE



Northern Natural Resources Services PROJECT FRANKLIN File # A301677R2

901 - 1030 Burnaby St., Vancouver BC V6E 1N8 Submitted by: J. Boutwell

SAMPLE#	S.Wt gm	NAu mg	-Au gm/mt	TotAu gm/mt
SI 2314	<1 446	<.01 .50	.01 8.26	.01 9.38

-AU : -150 AU BY FIRE ASSAY FROM 1 A.T. SAMPLE. DUPAU: AU DUPLICATED FROM -150 MESH. NAU - NATIVE GOLD, TOTAL SAMPLE FIRE ASSAY.
 - SAMPLE TYPE: ROCK REJ.

DATE RECEIVED: JUN 25 2003

DATE REPORT MAILED: *July 8/03*

SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

GEOCHEMICAL ANALYSIS CERTIFICATE

Northern Natural Resources Services PROJECT FRANKLIN File # A301818 Page 1
901 - 1030 Burnaby St., Vancouver BC V6E 1N8 Submitted by: John Boutwell



Table with columns: SAMPLE#, Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Hg, Ba, Tl, B, Al, Na, K, W, Sc, Ti, S, Hg, Se, Te, Ga, Sample gm. Rows include samples S1, JB 031-034, JB 035-039, JB 040-044, JB 045-049, JB 050, RE JB 050, JB 051-053, JB 054-057, JB 063, 2320-2324, and STANDARD DS4.

GROUP 1F30 - 30.00 GM SAMPLE LEACHED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 600 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: ROCK R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 2 2003 DATE REPORT MAILED: June 11/03 SIGNED BY: [Signature] D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Date: LFA [Signature]



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Sample
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppm	gm
2325	1.37	4691.06	40704.47	99999.0	97445	.5	62.0	414	2.59	37.2	<.1	1691.3	<.1	2.2	1154.57	56.72	.41	<2	.01	.002	<.5	.7	.01	5.5	<.001	<.1	.03	.001	<.01	1.1	<.1	.05	1.75	2679	9.2	2.84	.9	30
2326	6.16	4637.58	6632.94	1322.8	49555	2.4	1.5	45	1.82	31.7	<.1	826.3	<.1	1.3	5.72	17.44	.51	4	<.01	.002	<.5	20.7	.01	3.3	<.001	1	.11	.001	<.01	8.7	.4	<.02	.04	557	12.2	2.51	1.5	30
2327	4.98	434.16	78.81	120.5	816	9.6	25.0	1466	8.60	282.5	.2	28.0	.6	21.9	.65	2.32	.73	183	.33	.084	11.4	23.5	1.64	16.6	.150	<.1	2.98	.040	.08	.7	14.8	.32	.40	68	3.7	.27	12.4	30
2328	6.22	301.47	44.88	53.2	743	24.1	21.9	513	6.52	52.9	.3	12.3	.9	33.4	.25	1.66	.78	179	.42	.135	5.2	35.9	1.06	54.7	.163	<.1	1.76	.078	.13	2.0	9.1	.20	.94	104	4.8	.76	8.9	30
2329	13.98	147.53	171.49	131.6	3568	2.7	1.3	216	1.25	68.5	.2	195.7	.1	1.6	.32	4.44	.02	9	.01	.013	.6	16.9	.07	14.6	.003	2	.24	.003	.02	9.6	.8	.02	.01	176	.7	.08	1.0	30
2330	7.13	333.31	720.81	6194.2	4530	.3	1.2	505	.45	41.7	1.7	321.9	.1	43.0	46.56	2.78	.07	7	4.86	.043	1.2	2.2	.03	3.4	.002	8	.05	.003	.01	.3	.5	<.02	.02	373	3.7	.09	.4	30
2331	5.87	2614.95	1842.30	8219.4	19606	2.8	4.7	520	1.14	83.2	.4	55.0	.1	21.9	66.33	5.30	.21	3	3.38	.024	.9	15.5	.05	11.1	.001	2	.15	.001	.05	5.8	.7	.02	.26	158	5.3	.22	.5	30
2332	.51	91.04	28.41	202.6	314	20.8	8.8	735	1.13	11.1	.7	6.0	1.1	28.1	1.14	.43	.02	36	1.14	.080	6.0	29.9	.43	86.8	.088	<.1	.47	.046	.06	.1	3.8	<.02	.01	35	.4	.02	2.7	30
STANDARD D54	6.78	125.51	29.12	157.3	294	33.8	11.9	790	3.06	22.9	6.0	29.2	3.4	25.9	5.47	4.67	5.18	71	.50	.087	15.9	158.6	.57	143.6	.082	2	1.66	.026	.14	4.2	3.5	1.12	.03	281	1.3	.74	5.8	30

Sample type: ROCK R150 60C.

Assay recommend for Pb > 5000 ppm
 Zn > 1%
 Ag > 30 ppm
 Au > 1000 ppb



GEOCHEMICAL ANALYSIS CERTIFICATE



Northern Natural Resources Services PROJECT FRANKLIN File # A301819

901 - 1030 Burnaby St., Vancouver BC V6E 1N8 Submitted by: John Boutwell

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Tl	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Sample
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	gm
SI	.32	.66	.26	.7	3	.1	<.1	5	.03	1.0	<.1	.9	<.1	2.3	<.01	.03	<.02	<2	.12	<.001	<.5	1.1	<.01	2.6	<.001	<.1	.01	.483	<.01	.2	.2	<.02	.02	5	<.1	<.02	<.1	30
JB 058	5.07	1772.42	9001.60	32134.4	18007	1.1	12.4	965	1.08	38.6	<.1	2611.6	<.1	69.5	272.52	4.95	.06	3	6.12	.006	1.2	10.5	.04	12.7	.001	7	.14	.007	.06	5.6	.7	.04	1.48	768	15.1	.50	.8	30
JB 059	5.04	1510.76	3698.61	17035.5	11165	1.7	5.9	584	.77	15.6	<.1	1074.0	<.1	47.2	137.00	3.59	.04	2	3.77	.004	.9	14.6	.02	7.8	<.001	3	.08	.003	.04	6.9	.5	.02	.99	773	10.4	.43	.4	30
JB 060	9.12	752.85	10979.04	14900.4	11981	2.8	4.9	661	.87	27.0	<.1	1990.8	<.1	23.9	123.47	5.84	.07	<2	2.07	.003	1.2	17.7	.02	8.1	<.001	3	.06	.003	.03	8.7	.7	.02	.34	956	6.8	.59	.3	30
JB 061	7.54	667.94	816.86	875.0	7704	5.1	4.1	2111	1.77	860.4	.1	535.7	.2	211.3	12.91	15.10	.06	5	14.53	.021	6.9	7.5	.09	14.3	.001	1	.18	.002	.10	3.0	1.0	.05	1.33	48	5.8	.27	.6	30
JB 062	9.21	468.48	372.65	1654.4	6580	2.9	3.0	1511	2.22	660.1	.1	161.5	<.1	139.0	9.48	23.53	.04	2	9.80	.008	3.3	7.8	.12	7.1	.001	1	.21	.003	.03	3.6	.5	.04	1.52	48	7.7	.24	.7	30
JB 064	14.25	2790.01	15817.19	2393.3	33660	3.3	2.1	296	4.42	193.7	.3	6959.5	<.1	5.9	13.01	9.21	.04	16	.19	.007	1.7	14.3	.11	11.5	.009	1	.30	.003	.03	6.2	.6	.03	2.52	152	37.5	.66	2.0	30
STANDARD DS4	6.76	125.63	31.25	157.7	284	34.1	11.9	792	3.15	22.6	6.0	25.7	3.7	27.0	5.34	4.89	5.26	74	.52	.087	16.8	167.2	.58	138.1	.088	2	1.79	.030	.14	4.2	3.6	1.13	.05	280	1.3	.76	5.9	30

GROUP 1F30 - 30.00 GM SAMPLE LEACHED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 600 ML, ANALYSED BY ICP/ES & MS.
 UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
 - SAMPLE TYPE: ROCK R150 60C

DATE RECEIVED: JUN 2 2003 DATE REPORT MAILED: *June 6/03* SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Assay recommend for
Zn > 1%
Pb > 5000 ppm
Ag > 30 ppm
Au > 100 ppb



ASSAY CERTIFICATE



Northern Natural Resources Services PROJECT FRANKLIN File # A301819R2

901 - 1030 Burnaby St., Vancouver BC V6E 1N8 Submitted by: John Boutwell

SAMPLE#	S.Wt gm	NAu mg	-Au gm/mt	TotAu gm/mt
SI	<1	<.01	<.01	.01
JB 058	483	.13	3.69	3.96
JB 064	505	.11	10.08	10.30

-AU : -150 AU BY FIRE ASSAY FROM 1 A.T. SAMPLE. DUPAU: AU DUPLICATED FROM -150 MESH. NAU - NATIVE GOLD, TOTAL SAMPLE FIRE ASSAY.
- SAMPLE TYPE: ROCK REJ.

DATE RECEIVED: JUN 25 2003

DATE REPORT MAILED: July 8/03

SIGNED BY: C. Leong D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

GEOCHEMICAL ANALYSIS CERTIFICATE

Northern Natural Resources Services PROJECT FRANKLIN File # A301856

901 - 1030 Burnaby St., Vancouver BC V6E 1N8 Submitted by: John Boutwell



Table with columns: SAMPLE#, Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Hg, Ba, Tl, B, Al, Hf, K, W, Sc, Ti, S, Hg, Se, Te, Ga, Sample. Rows include samples JB 065 through STANDARD D54.

GROUP 1F30 - 30.00 GM SAMPLE LEACHED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 600 ML, ANALYSED BY ICP/ES & MS. UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM. - SAMPLE TYPE: ROCK R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 5 2003 DATE REPORT MAILED: June 16/03 SIGNED BY: [Signature] D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Northern Natural Resources Services PROJECT FRANKLIN
901 - 1030 Burnaby St., Vancouver BC V6E 1N8 Submitted by: John Boutwell

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Tl	B	Al	Na	K	W	Sc	Ti	S	Hg	Se	Te	Ga	Sample
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	gm
S1	.17	.19	.23	.6	3	.1	<.1	5	.02	.6	<.1	.2	<.1	1.9	<.01	.02	<.02	3	.08	<.001	<.5	.8	<.01	1.5	<.001	<.1	.01	.367	<.01	.1	.1	<.02	<.01	<.5	.1	<.02	<.1	30
JB 087	16.94	17.07	5.33	1917.2	138	.2	8.0	4984	1.96	13.3	2.1	71.4	<.1	23.4	8.78	1.35	.13	5	2.23	.011	.5	.6	.17	20.3	.001	2	.09	.007	.01	2.8	.4	<.02	.17	41	.9	.10	.7	30
JB 088	2.08	73.79	8.02	75.8	243	15.2	5.5	1582	1.31	13.2	.3	5.0	2.4	70.6	.31	.89	.08	58	2.56	.051	5.6	31.6	.51	51.5	.114	1	.78	.019	.09	1.9	6.7	.02	<.01	5	<.1	.03	2.7	30
JB 089	24.33	569.05	1258.50	9608.9	7684	.9	1.3	522	.37	12.2	3.1	328.1	.1	23.8	33.49	4.46	.05	12	3.74	.089	1.2	2.0	.02	3.2	<.001	2	.05	.002	.01	.7	1.0	<.02	<.01	597	3.2	.19	.4	30
JB 090	3.02	73.82	10.40	339.7	128	17.0	6.0	2176	1.76	8.9	2.1	5.2	1.0	166.1	.84	.18	.02	62	9.24	.106	6.1	36.0	.73	24.2	.068	<.1	.72	.010	.02	4.6	6.1	.04	<.01	60	.6	.03	3.1	30
JB 091	2.35	7.02	13.93	71.7	219	.3	.1	1563	1.65	55.7	3.0	61.7	.1	317.6	.60	.53	<.02	19	34.07	.033	3.4	2.4	.17	8.3	<.001	<.1	.07	.001	<.01	.2	.2	<.02	.51	13	1.2	.08	1.1	30
JB 092	1.19	1.49	2.99	12.3	31	1.4	<.1	748	.20	3.6	1.3	4.1	.1	205.3	.11	.17	<.02	4	22.59	.023	1.9	4.2	.10	6.0	.003	<.1	.03	.001	<.01	1.6	.2	<.02	.04	<.5	.1	.03	.2	30
JB 093	5.39	451.19	375.79	1126.2	1713	1.4	.7	290	.41	10.8	1.3	11.6	<.1	37.1	3.77	2.26	.08	3	3.60	.027	.7	1.0	.03	2.0	<.001	<.1	.04	.008	.01	.3	.3	<.02	.19	33	1.6	.15	.2	30
JB 094	4.88	100.38	6.71	88.3	167	13.8	7.7	1275	2.20	10.3	.6	2.3	1.0	98.7	.27	.77	.12	70	7.53	.052	3.5	28.5	1.22	67.9	.048	<.1	1.48	.046	.22	2.5	5.2	.18	.06	<.5	1.0	.09	4.9	30
JB 095	1.37	3959.86	92.96	157.5	12955	17.9	37.0	2186	2.20	62.8	.6	35.9	.4	36.9	.79	2.86	6.90	37	.55	.079	3.5	24.4	.99	10.6	.075	1	1.07	.008	.03	.4	3.2	.08	.05	10	4.8	2.55	2.6	30
JB 096	3.55	97.34	136.48	232.8	753	20.7	17.0	4676	4.36	350.1	.4	15.6	.4	84.0	1.74	3.75	.74	38	5.35	.036	4.6	29.8	1.07	6.5	.019	<.1	1.41	.002	.02	3.2	4.4	.04	.45	26	1.8	.26	4.8	30
JB 097	2.61	1783.07	140.94	30250.2	7300	10.9	82.4	2453	2.82	130.2	.6	27.9	.4	86.0	225.15	2.40	3.67	30	5.57	.061	4.0	13.3	.56	8.9	.013	<.1	.97	.010	.04	.5	3.4	.03	.56	701	16.5	.78	3.3	30
JB 098	10.45	191.45	5756.15	13942.5	2787	4.6	5.1	1062	.56	9.0	3.2	11.0	.1	88.3	70.49	2.22	.22	3	11.65	.042	1.6	.8	.04	3.6	.003	<.1	.04	.001	<.01	.3	1.5	<.02	.19	193	10.6	.36	.3	30
RE JB 098	9.51	187.80	5618.10	13589.0	2616	5.0	5.2	1038	.55	9.0	3.0	12.9	<.1	85.6	68.83	2.14	.20	3	11.42	.039	1.5	.9	.04	3.1	.001	<.1	.04	.001	<.01	.2	1.4	<.02	.20	192	9.9	.35	.3	30
JB 099	2.10	4.27	40.60	109.8	215	<.1	<.1	1445	.59	18.5	3.0	4.1	.1	335.6	.86	.65	.02	4	35.20	.046	3.5	1.0	.16	4.3	<.001	<.1	.08	.001	.01	.3	.3	.08	.04	5	.3	.12	.4	30
JB 100	23.81	3157.23	14897.24	31433.2	10435	10.1	13.9	964	.79	103.6	5.2	11.2	.2	90.9	217.28	11.02	.11	3	12.84	.110	3.2	3.2	.07	1.9	.002	117	.10	.025	.01	11.6	3.1	.02	<.01	145	7.4	.80	.8	30
JB 101	20.73	502.47	12302.94	761.1	8005	3.9	4.4	643	.65	58.4	9.1	10.1	.7	67.8	2.88	5.21	.15	6	1.05	.414	2.7	26.2	.04	2.3	.001	3	.07	.008	<.01	11.0	.4	.03	.01	61	13.0	1.29	.6	30
JB 102	2.59	153.60	133.39	169.7	358	11.1	3.8	2904	1.12	13.2	.4	2.5	.3	223.1	1.34	1.11	.51	32	12.33	.062	5.5	27.9	.78	13.7	.011	<.1	.82	.004	.02	2.3	3.0	<.02	<.01	<.5	.2	.07	2.6	30
STANDARD 054	6.81	123.76	31.08	149.1	288	32.7	11.3	756	3.02	21.3	6.4	25.7	3.5	25.9	5.02	4.64	4.93	71	.50	.082	15.7	158.7	.55	136.6	.082	1	1.66	.030	.14	4.1	3.6	1.17	.05	278	1.2	.72	5.9	30

GROUP 1F30 - 30.00 GM SAMPLE LEACHED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 600 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: ROCK R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 9 2003 DATE REPORT MAILED: *June 19/03* SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



GEOCHEMICAL ANALYSIS REPORT



901 - 1030 Burnaby St., Vancouver BC V6E 1N8 Submitted by: John Boutwell

Table with columns: SAMPLE#, Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Tl, B, Al, Na, K, W, Sc, Ti, S, Hg, Se, Te, Ga, Sample gm. Rows include samples 51, JB 103-135, and STANDARD D54.

GROUP 1F30 - 30.00 GM SAMPLE LEACHED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 600 ML, ANALYSED BY ICP/ES & MS. UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM. - SAMPLE TYPE: ROCK R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 16 2003 DATE REPORT MAILED: June 28/03 SIGNED BY: [Signature] D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Data FA [Signature]



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Sample gm
DB 136	.65	13.89	.88	5.6	37	1.5	1.4	287	.50	.6	.2	1.4	.8	5.5	.03	.06	.04	10	.05	.013	8.7	18.0	.07	32.7	.002	1	.32	.042	.15	<.1	.9	.05	.01	<5	<.1	<.02	1.1	30
DB 137	7.84	145.56	3.47	23.9	431	13.7	15.4	324	2.91	4.8	.8	5.2	1.0	20.5	.07	.20	.17	29	.13	.049	4.7	26.9	.25	171.1	.001	<1	.64	.030	.14	6.1	2.1	.04	.72	<5	1.3	.14	2.6	30
DB 138	7.19	38.58	2.99	8.7	753	2.3	3.2	107	1.59	3.3	.4	3.6	.4	10.2	.04	.15	.09	20	.06	.024	3.8	8.1	.10	19.6	.001	<1	.29	.008	.13	<.1	.8	.03	.09	5	.6	.39	1.1	30
DB 139	61.94	25.73	14.16	13.3	1163	5.1	4.8	322	7.91	31.2	.7	10.4	2.2	31.2	.01	.34	.09	43	.15	.056	9.7	22.7	.11	25.2	.002	<1	.65	.003	.21	7.2	1.0	.07	5.39	<5	4.7	.38	2.7	30
DB 140	.56	14.51	1.56	2.3	50	1.5	1.6	137	.37	.3	.2	1.8	1.0	8.1	.04	.04	.02	6	.05	.002	4.5	3.7	.03	18.7	.002	1	.26	.069	.14	<.1	.3	.04	.02	<5	<.1	<.02	.7	30
STANDARD DS4	6.78	123.01	31.06	158.0	289	33.7	11.8	791	3.13	22.4	6.5	26.0	3.8	27.4	5.25	4.32	4.84	74	.52	.086	16.7	164.1	.58	140.7	.087	2	1.77	.031	.15	4.0	3.7	1.16	.06	269	1.2	.70	6.0	30

Sample type: ROCK R150 60C.

GEOCHEMICAL ANALYSIS CERTIFICATE

Northern Natural Resources Services PROJECT FRANKLIN File # A302126 Page 1

901 - 1030 Burnaby St., Vancouver BC V6E 1N8 Submitted by: John Boutwell



Table with columns: SAMPLE#, Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Hg, Ba, Tl, B, Al, Na, K, W, Sc, Ti, S, Hg, Se, Te, Ga, Sample gm. Rows include sample IDs like JB 141, JB 142, etc., and their corresponding element concentrations.

GROUP 1F30 - 30.00 GM SAMPLE LEACHED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 600 ML, ANALYSED BY ICP/ES & MS. UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM. - SAMPLE TYPE: ROCK R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 20 2003 DATE REPORT MAILED: June 30/03 SIGNED BY: [Signature] TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Data L FA m



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Sc	Ti	S	Hg	Se	Te	Ga	Sample
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	gm
AE 004	2.49	733.45	3.46	41.4	510	80.8	119.3	860	7.04	23.5	.2	17.3	.2	77.3	.15	.40	.09	42	2.08	.028	.9	8.1	.29	14.0	.030	<1	.42	.004	.03	.7	2.8	.02	4.64	<5	9.6	.16	2.5	30
AE 005	41.99	5544.42	1.34	134.5	5692	60.7	42.4	427	1.92	4.3	.3	151.0	.5	63.4	2.37	.18	.07	117	2.39	.125	2.6	14.7	.65	4.2	.105	<1	.78	.039	.01	1.5	9.9	<.02	.76	<5	4.0	.07	2.9	30
AE 006	3.57	82.58	6.94	22.7	536	16.3	16.8	507	1.82	21.7	.4	13.2	.3	14.3	.12	.23	.02	23	.16	.031	2.2	11.7	.03	155.3	.003	<1	.19	.001	.11	2.7	2.2	.03	.11	<5	.2	<.02	.3	30
STANDARD D54	6.71	126.08	32.02	160.1	280	33.8	11.9	793	3.04	22.7	6.7	27.5	3.9	26.9	5.36	4.67	5.12	74	.52	.080	16.8	163.3	.57	139.4	.086	1	1.75	.030	.14	3.9	3.6	1.12	.02	270	1.2	.71	6.0	30

Sample type: ROCK R150 60C.

GEOCHEMICAL ANALYSIS CERTIFICATE

Northern Natural Resources Services PROJECT FRANKLIN File # A302216

901 - 1030 Burnaby St., Vancouver BC V6E 1N8 Submitted by: John Boutwell



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Sc	Ti	S	Hg	Se	Te	Ga	Sample gm
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppm	gm
SI	1.50	.66	.71	.6	8	.3	.1	4	.04	.2	<.1	<.2	.1	3.1	.01	<.02	.12	3	.13	<.001	1.1	.7	.01	2.5	.001	<.1	.01	.424	<.01	.2	.1	<.02	.06	<.5	<.1	<.02	<.1	30
JB 173	41.53	156.84	3028.96	491.9	8829	11.4	17.7	606	3.23	51.5	.2	173.0	.6	7.8	4.46	3.82	3.84	130	.21	.059	3.1	7.8	1.06	20.3	.067	1	1.09	.020	.06	2.0	6.5	.06	.99	585	19.2	5.48	6.0	30
JB 174	3.79	14.09	26.44	31.5	175	4.2	4.1	1277	1.49	11.8	.1	25.5	.1	62.8	.15	.41	.20	32	7.61	.019	2.2	7.7	.48	10.8	.021	<.1	.55	.007	.03	.8	1.9	.02	.41	79	1.5	.12	2.5	30
JB 175	2.07	79.16	27.79	67.8	208	24.1	7.6	697	1.00	6.7	.7	31.8	.9	99.7	.18	.24	.10	45	5.33	.132	5.6	29.0	.38	23.5	.071	<.1	.66	.047	.04	2.0	3.1	.02	.16	120	1.7	.13	2.3	30
JB 176	3.81	104.99	5.06	22.1	132	3.0	7.5	305	2.48	2.5	.9	13.2	10.6	12.1	.07	.17	.30	38	.23	.020	5.7	5.6	.41	16.4	.046	<.1	.72	.046	.07	.6	2.3	.04	.30	44	.4	.08	3.4	30
JB 177	1.20	16.33	4.86	9.4	51	2.4	1.0	139	.45	1.4	.8	10.9	7.3	26.7	.04	.16	.06	21	.85	.053	2.5	6.4	.27	18.1	.053	1	.37	.053	.03	1.3	3.6	<.02	.02	22	.1	.03	1.4	30
JB 178	1.55	55.51	3.53	38.1	94	5.4	16.9	976	4.02	6.9	.3	4.3	1.0	123.1	.03	.50	.28	125	2.90	.091	6.5	9.4	1.33	78.0	.111	2	4.49	.397	.06	.6	11.4	.07	.82	19	.2	.11	10.5	30
JB 179	3.88	45.04	5.91	30.1	103	7.7	11.3	573	3.04	6.7	.6	4.6	1.7	31.8	.04	.86	.26	54	2.32	.055	6.4	24.5	.95	30.3	.151	1	1.35	.027	.09	1.6	4.0	.06	1.36	13	1.0	.12	5.5	30
JB 180	4.94	49.71	9.86	27.3	123	8.6	11.7	529	3.08	8.5	.6	4.8	1.6	42.7	.04	1.19	.53	58	2.00	.059	5.3	23.3	.92	62.5	.156	1	1.62	.051	.16	1.1	7.4	.08	1.81	9	2.2	.16	5.8	30
JB 181	3.29	76.14	3.35	33.6	138	4.8	23.1	1031	4.86	11.7	.2	2.2	.8	106.9	.05	.91	.47	109	3.93	.075	4.8	4.6	1.19	65.1	.079	1	2.84	.221	.09	.8	9.0	.10	2.60	5	.9	.19	7.1	30
JB 182	37.19	23.25	4.19	22.3	588	2.5	11.1	423	2.47	7.0	.3	6.8	.6	12.0	.02	.81	.21	60	.69	.043	5.5	3.6	.63	28.4	.092	<.1	1.52	.008	.23	5.2	4.1	.23	.05	11	.1	.05	5.0	30
JB 183	1.41	19.71	2.52	8.7	39	13.0	5.1	224	.48	2.8	.3	3.6	.7	25.9	.03	.17	.04	19	1.07	.082	4.3	16.6	.06	24.0	.105	<.1	.53	.029	.04	1.4	2.3	.02	.01	21	.2	<.02	1.7	30
RE JB 183	1.47	17.94	2.37	9.8	38	11.5	4.3	223	.47	2.7	.3	8.3	.7	26.7	.04	.17	.04	20	1.12	.080	4.6	17.8	.06	24.8	.114	<.1	.55	.030	.04	1.5	2.2	.02	.02	20	.3	<.02	1.8	30
JB 184	4.55	258.80	3.99	36.6	159	44.3	15.1	737	6.35	10.7	.7	28.1	1.1	207.8	.04	.97	.19	105	5.16	.244	9.2	69.2	1.37	22.8	.081	1	1.47	.028	.03	.3	7.5	<.02	5.06	16	2.6	.17	6.3	30
JB 185	64.22	26.58	6.98	21.9	88	2.6	2.1	159	3.42	117.5	3.7	6.5	18.7	34.9	<.01	1.29	.10	71	.21	.066	34.4	12.2	.35	26.7	.273	<.1	1.30	.023	.10	.2	5.7	.42	.11	19	.3	.02	6.8	30
STANDARD DS4	6.44	125.64	31.28	152.6	296	34.2	12.3	785	3.10	22.6	6.4	25.8	3.5	26.8	5.13	4.81	5.09	74	.52	.085	15.8	163.4	.58	143.8	.083	2	1.73	.027	.15	4.0	3.5	1.08	.06	274	1.3	.72	5.8	30

GROUP 1F30 - 30.00 GM SAMPLE LEACHED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 600 ML, ANALYSED BY ICP/ES & MS.
 UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
 - SAMPLE TYPE: ROCK R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 25 2003 DATE REPORT MAILED: July 3/03 SIGNED BY:  D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

GEOCHEMICAL ANALYSIS CERTIFICATE

Northern Natural Resources Services PROJECT FRANKLIN File # A302310
901 - 1030 Burnaby St., Vancouver BC V6E 1N8 Submitted by: John Boutwell



Table with columns: SAMPLE#, Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Tl, B, Al, Na, K, W, Sc, Ti, S, Hg, Se, Te, Ga, Sample gm. Rows include samples JB 186 through JB 210 and STANDARD D54.

GROUP 1F30 - 30.00 GM SAMPLE LEACHED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 600 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: ROCK R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 30 2003 DATE REPORT MAILED: July 8/03 SIGNED BY: [Signature] D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

GEOCHEMICAL ANALYSIS CERTIFICATE

Northern Natural Resources Services PROJECT FRANKLIN File # A302440

901 - 1030 Burnaby St., Vancouver BC V6E 1N8 Submitted by: John Boutwell



Table with columns: SAMPLE #, Hg, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Hg, Ba, Tl, B, Al, Na, K, W, Sc, Ti, S, Hq, Se, Te, Ga, Sample Int. wt. Rows include sample IDs (e.g., S1, JN 211) and corresponding element concentrations in ppm and ppb.

GROUP 1F30 - 30.00 GM SAMPLE LEACHED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 600 ML, ANALYSED BY ICP/ES & MS. UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM. - SAMPLE TYPE: ROCK R150 60C

DATE RECEIVED: JUL 7 2003 DATE REPORT MAILED: July 22/03 SIGNED BY: C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Tl	B	Al	Na	K	W	Sc	Ti	S	Hg	Se	Te	Ga	Sample	Int	wt
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	gm	gm	
2431	4.80	8984.19	20475.67	27471.9	43000	7.3	21.2	622	3.19	14.2	1	146.8	.2	13.0	253.33	10.77	.56	23	.52	027	1.4	9.0	.33	39.3	044	1	.60	.010	.07	1.4	2.2	.07	.86	489	14.4	1.46	2.1	30	4400	
2432	9.34	1437.15	3407.95	4216.2	7628	5.0	12.2	965	2.51	23.4	.2	209.9	.3	16.4	18.68	3.20	1.54	41	.45	.036	2.8	15.2	.61	21.1	.061	<1	1.16	.038	.11	4.2	2.6	.07	.11	108	4.7	1.50	3.5	30	2600	
2433	14.19	1742.94	1805.92	3463.4	4315	7.7	13.6	1135	3.41	15.1	.2	123.0	.5	24.9	22.72	1.99	1.27	62	.67	.060	3.6	13.5	.95	32.0	103	1	1.67	.044	.13	1.3	4.6	10	.13	52	5.6	1.00	5.2	30	2500	
2434	6.01	275.57	206.15	1442.1	1261	7.1	9.0	587	2.35	13.9	.1	19.9	.4	17.2	13.00	1.18	.29	42	.32	.033	2.1	26.0	.69	21.8	.077	1	1.11	.020	.11	5.6	2.8	.06	.27	67	1.2	.10	4.0	30	3200	
2435	2.30	53.56	38.45	126.3	3411	7.4	18.6	1037	3.61	30.5	.7	39.6	.8	18.6	.48	.93	.09	84	.31	.073	5.9	20.1	.94	68.5	.095	1	1.71	.024	.20	1.1	5.8	.12	.01	16	3	.04	8.1	30	3300	
2436	2.46	37.74	39.14	113.1	1892	9.5	20.9	1493	4.24	17.2	.6	101.7	.8	15.0	.30	.71	.08	75	.24	.059	7.0	21.9	.83	66.1	.163	1	1.76	.018	.24	2.4	5.1	.15	.07	13	1.2	.12	7.9	30	1800	
2437	.51	24.29	21.65	143.4	1632	9.4	21.3	1637	4.21	38.1	.5	51.5	1.1	13.8	.21	.67	.09	95	.34	.078	6.8	18.3	1.47	76.9	.205	<1	2.31	.019	.32	.8	7.7	.28	.02	.5	9	.09	10.5	30	3900	
2438	1.25	29.78	15.55	111.4	1079	13.0	17.5	1412	4.30	8.5	.5	30.5	1.1	16.4	.18	.48	.02	81	.53	.078	7.0	37.0	1.79	177.6	.159	1	2.71	.016	.59	1.0	6.8	.39	<.01	.8	.2	.08	9.7	30	3500	
2439	9.93	100.09	34.39	1169.1	1350	10.4	19.4	1784	4.72	148.8	.3	16.3	.9	17.8	2.34	3.43	.06	151	.44	.139	6.6	22.0	1.88	93.3	.067	<1	2.46	.031	.18	.7	7.2	.20	.13	34	1.1	.08	11.2	30	2400	
2440	5.58	166.65	30.16	430.0	1243	8.9	25.9	2128	6.11	129.4	.2	9.4	.5	25.4	2.47	2.75	.03	198	.61	.152	8.5	11.8	2.52	115.4	.107	<1	3.58	.034	.49	.7	12.5	.33	.08	17	.9	.03	13.1	30	3100	
RE 2440	5.40	162.37	30.45	426.0	1233	9.7	26.3	2152	6.17	133.1	.2	8.4	.5	25.8	2.43	2.67	.03	202	.62	.157	8.7	11.9	2.54	115.6	.111	1	3.61	.035	.54	.7	13.1	.34	.08	12	1.1	.04	13.1	30	-	
JB 224	4.84	6.54	20.58	159.3	141	.7	7.4	15894	4.21	18.8	.9	2.8	<.1	144.5	.32	1.06	.18	15	13.93	.007	<.5	2.1	.14	10.5	.001	3	.15	.002	.01	.8	.3	.02	.01	.8	.3	.05	1.4	30	1300	
JB 225	7.29	37.74	27.61	49.0	149	.4	2.1	5126	10.93	154.1	1.3	4.4	<.1	12.4	.23	1.77	.12	5	12.64	.009	1.0	3.5	.04	3.5	.001	5	.20	.005	<.01	30.0	.6	.02	.05	25	.5	.06	3.7	30	800	
JB 226	.63	14.70	19.47	12.8	72	1.7	.9	369	.62	1.5	.1	1.3	1.0	8.9	.11	.08	<.02	6	.51	.001	4.7	4.9	.01	15.7	.002	<1	.25	.052	.15	.4	.2	.03	.04	<.5	1	<.02	.7	30	1300	
STANDARD D55	12.58	136.52	23.39	132.6	290	24.3	11.9	772	2.89	18.5	5.8	42.3	2.7	47.3	5.67	3.82	5.89	59	.72	.095	12.4	186.9	.65	134.7	.097	16	2.00	.030	.14	4.9	3.4	1.04	.02	169	4.9	.82	6.8	30	-	

Sample type: ROCK R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Assay gold > 3000ppb in progress.

Assay recommend for Zn > 1%
Pb > 5000 ppb
Ag > 30 ppm

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716 @ CSV TEXT FORMAT

To Northern Natural Resources Services PROJECT FRANKLIN

Acme file # A302836 Received: JUL 24 2003 * 23 samples in this disk file.

Analysis: GROUP 1F30 - 30.00 GM

ELEMENT	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Ti	S	Hg	Se	Te	Ga
SAMPLES	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm
SI	0	4	3	8	35	0.4	0	14	0.05	0.5	<.1	<.2	<.1	2	0	1.13	<.02	<.2	0.09	.001	<.5	0.8	0.01	1.9	0	<.1	0.01	0.44	<.01	1.2	0.1	<.02	0.07	46	0.1	<.02	<.1
JB 227	2	529	18	127	2753	11.9	14	382	7.82	7	0.1	960	0.4	55.6	0	3.69	0.15	158	0.51	0.08	1.9	24.6	1.42	19.9	0.16	1	1.57	0.05	0.02	0.3	6.2	<.02	0.33	243	1.8	0.2	6.8
JB 228	4	1291	10	68	1433	17	12	147	4.12	5.1	0.2	267	0.7	53.3	0	1.84	0.25	81	0.46	0.09	2.6	49.4	0.76	34	0.17	2	0.78	0.05	0.03	2.6	5.2	<.02	2.46	72	5.3	0.55	4.5
JB 229	4	570	5	167	1254	28.1	11	716	5.63	5.6	0.1	666	0.7	46.6	0	0.88	0.19	115	0.49	0.1	2.8	52.7	2.53	35	0.19	1	2.48	0.03	0.03	1	5.8	<.02	0.92	30	2.2	0.56	8.3
JB 230	2	886	27	11	9346	1.3	1	39	10.5	46.5	0.1	1981	0.5	3.3	0	2.58	1.26	90	0.01	0.02	0.5	11.1	0.03	77.5	0.01	1	0.2	0.01	0.09	0.5	1	0.03	0.29	51	21.4	1.26	5.3
JB 231	2	39	2	30	284	16.9	14	513	2.34	5.9	0.3	9	0.8	68.4	0	1.16	0.27	85	1.78	0.08	2.9	55.4	1.55	102	0.15	1	1.47	0.04	0.05	0.4	6.1	<.02	0.33	17	1.8	0.21	4.3
JB 232	1	692	3	19	533	9.4	5	308	1.18	2.7	0.2	67	0.5	3	0	1.42	0.13	16	0.1	0.03	1.6	11.2	0.28	30.3	0.01	<.1	0.41	0.01	0.05	0.2	1.4	0.02	<.01	46	0.8	0.11	1.5
JB 233	2	11429	3	25	3214	13.9	28	174	8.92	9.6	0.2	2743	0.4	33.4	0	1.2	0.62	118	0.38	0.06	1.6	21.2	1.28	17	0.08	1	1.43	0.02	0.01	0.1	3.3	<.02	4.47	25	12.5	0.88	8.3
JB 234	6	3785	3	38	1392	20.5	19	176	2.45	2.5	0.3	1398	1.7	55.2	0	1.01	0.1	43	0.75	0.06	5.6	21.1	1.13	98.3	0.11	1	1.22	0.04	0.11	0.1	3.4	0.03	1.28	18	3.9	0.15	4.1
JB 235	3	797	4	25	526	19.2	17	237	2.12	2.9	0.4	37	0.7	82.2	0	1	0.19	89	3.4	0.08	6.4	51.8	1.63	92	0.17	1	1.37	0.06	0.05	0.2	8.3	<.02	1.43	12	3.9	0.16	4.7
JB 236	10	7173	2243	32515	3045	8	81	8722	11.7	95.1	5.3	18	0.3	73.1	404	3.25	2.97	47	6.58	0.05	7.5	6.7	0.39	47.2	0.01	<.1	0.44	0	<.01	28.1	1.4	0.02	0.02	621	14.8	0.33	7.5
JB 237	6	1606	201	56304	5979	3.5	53	6247	3.96	10.1	3.8	25	0.1	98	604	3.29	4.59	6	7.8	0.03	3.6	1.5	0.65	31.4	0	2	0.09	0.01	<.01	70.2	0.7	0.03	3.25	1007	59.2	1.09	1.1
JB 238	48	24118	23622	99999	99999	3.7	200	2319	5.96	379.6	5.6	352	0.1	41.2	2002	20.3	163	2	4.71	0.03	1.2	4.1	0.28	16	0	<.1	0.15	0	<.01	1.4	0.3	0.04	8.84	5115	457	33.8	1.5
RE JB 238	46	23542	23400	99999	99999	3.3	195	2201	5.73	367.8	5.5	342	0.1	38.5	1949	19.5	158	<.2	4.58	0.03	1.2	3.9	0.28	14.6	.001	<.1	0.14	0	<.01	1.3	0.3	0.03	8.25	4828	435	31.7	1.5
JB 239	3	208	192	670	1672	6.8	8	986	5.05	30.9	0.5	49	1.2	48.5	5	2.13	0.45	93	0.41	0.08	3.8	21.3	2.05	82.2	0.22	1	1.98	0.01	0.06	0.4	7.2	0.02	1.16	34	3.3	0.18	6.1
JB 240	4	13239	18	68	6928	30.9	43	330	12.8	12.4	0.2	4609	0.5	56.7	0	1.24	0.82	155	0.59	0.11	1.5	54.6	1.31	12.7	0.09	1	1.52	0	<.01	0.3	3.4	<.02	6.55	15	15.3	1.19	10.1
JB 241	0	73	61	164	394	27.8	15	1048	3.3	18.7	0.1	4	0.5	51.1	1	1.2	0.15	91	1.04	0.09	1.9	65.8	2.33	83.1	0.16	3	2.15	0.03	0.09	0.3	8.4	0.05	0.77	8	2.5	0.11	4.9
JB 242	2	162	447	802	1179	1.2	6	165	1.18	4	0.2	3	0.1	9.3	7	0.84	1.25	7	0.09	0.01	0.7	4.3	0.11	7.1	0.01	<.1	0.17	0	0.02	0.4	0.7	<.02	0.23	48	2.7	0.53	1
JB 243	4	11861	7	48	7824	35.1	47	279	10.6	15.3	0.2	1171	0.4	63.9	0	1.24	1.1	90	0.53	0.07	1	48.2	1.4	3.7	0.09	1	1.27	0.01	<.01	0.3	3.2	<.02	9.24	16	26.7	1.9	5.8
JB 244	2	1281	6	28	563	19	44	213	15.1	14.9	1.3	212	0.5	55.3	0	1.29	1.16	60	1.05	0.12	3.3	48.4	0.7	16.7	0.1	2	1.04	0	<.01	0.9	4.7	<.02	6.31	9	32.5	0.58	4.9
JB 245	2	380	5	125	769	16	13	512	6.23	3.8	0.2	208	0.4	73.5	0	0.53	0.1	216	0.78	0.15	3.8	34	2.39	69.9	0.24	1	2.49	0.06	0.06	0.6	8.9	0.02	0.3	7	0.9	0.13	8.4
JB 246	1	34	11	44	71	10.7	3	238	0.93	6.2	0.1	3	0.5	6.2	0	0.61	0.04	10	0.14	0.04	3.1	12.8	0.31	35.9	0	<.1	0.48	0	0.05	<.1	1.3	0.02	<.01	8	0.1	0.02	1.4
AE 007	4	41845	6989	62032	76773	2.8	16	256	6.82	2.8	0.7	57	0.8	33.1	636	3.8	67.4	74	0.23	0.07	9.2	3.9	0.07	22.8	0.01	1	0.24	0.01	0.12	0.7	5.1	0.03	3.9	4601	39.8	0.44	1.5
STANDARD	12	140	25	135	277	24.9	12	747	2.88	18.4	6	43	2.9	48.4	5	3.81	6.19	59	0.73	0.09	12.6	184	0.65	133	0.1	18	2.05	0.04	0.14	4.9	3.6	1.06	0.04	171	4.6	0.83	6.6

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716 @ CSV TEXT FORMAT
To Northern Natural Resources Services PROJECT FRANKLIN

Acme file # A302836R Received: AUG 12 2003 * 3 samples in this disk file.

ELEMENT	Au**
SAMPLES	gm/mt
JB 233	3.03
JB 240	4.92
STANDARD /	3.43



GEOCHEMICAL ANALYSIS CERTIFICATE

Northern Natural Resources Services File # A305104
901 - 1030 Burnaby St., Vancouver BC V6E 1N8



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Sn	Y	Nb	Be	Sc	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
S1	<2	4	12	14	<.5	<2	<2	32	.11	<5	23	<4	<2	161	<.4	<5	<5	<2	6.83	.010	3	6	.13	141	.02	1.31	9.98	.20	<4	82	2	3	<2	<1	<1	
2529	<2	24	5202	12557	3.9	37	15	3378	2.82	29	<10	<4	<2	405	88.3	17	<5	93	11.14	.059	11	239	1.18	101	.24	5.39	.08	<.01	<4	22	<2	12	2	1	13	
STANDARD	13	142	29	154	.5	30	14	1049	4.26	26	<10	<4	5	369	5.6	6	6	122	2.31	.109	24	233	1.23	676	.42	6.91	1.71	1.40	8	45	6	14	8	2	13	

Standard is STANDARD DST5.

GROUP 1E - 0.25 GM SAMPLE DIGESTED WITH HClO4-HNO3-HCL-HF TO 10 ML. UPPER LIMITS - AG, AU, W = 200 PPM; MO, CO, CD, SB, BI, TH & U = 4,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM. DIGESTION IS PARTIAL FOR SOME MINERALS & MAY VOLATIZE SOME ELEMENTS, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: ROCK R150 60C

DATE RECEIVED: OCT 20 2003 DATE REPORT MAILED: *Oct 28/03* SIGNED BY: *C. Leong* D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

GEOCHEMICAL ANALYSIS CERTIFICATE



Northern Natural Resources Services PROJECT FRANKLIN File # A304806

901 - 1030 Burnaby St., Vancouver BC V6E 1N8 Submitted by: John Boutwell

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Sample	
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	gm
SI	.08	1.26	.54	1.2	4	.3	.1	10	.05	.2	<.1	<.2	<.1	6.3	<.01	.18	<.02	<2	.29	<.001	<.5	3.1	.01	5.7	.002	<1	.02	1.138	.01	<.1	.1	<.02	.03	<.5	<.1	<.02	.1	30	
JK 001	1.09	105.99	14.84	277.3	1150	21.0	24.0	2303	6.63	186.6	.2	17.3	.5	23.8	2.64	4.46	.08	251	.74	.162	4.6	26.5	2.25	48.8	.135	1	2.80	.053	.10	.5	12.8	.13	.84	6	1.9	.05	12.0	30	
STANDARD	12.27	142.74	23.93	136.1	277	24.2	12.5	786	3.00	18.9	5.8	42.0	2.7	49.0	5.51	3.72	5.98	61	.75	.095	12.2	189.0	.67	136.4	.099	16	2.13	.036	.14	4.8	3.7	.98	.04	171	5.0	.83	6.5	30	

Standard is STANDARD DS5.

GROUP 1F30 - 30.00 GM SAMPLE LEACHED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 600 ML, ANALYSED BY ICP/ES & MS.

UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.

- SAMPLE TYPE: ROCK R150 60C

DATE RECEIVED: OCT 6 2003 DATE REPORT MAILED: Oct 21/2003 SIGNED BY: [Signature] D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

APPENDIX 7

Analytical Results - Trench Samples

Samples 2333 - 2443



GEOCHEMICAL ANALYSIS CERTIFICATE

Northern Natural Resources Services PROJECT FRANKLIN File # A302440

SAMPLE#	Pb	Cd	Hg	As	Ag	Bi	Co	Ni	Pb	Al	U	V	Cr	Sr	Zn	Mo	B	Ca	P	La	Cr	Ni	Ba	Tl	B	Al	Si	K	V	Sc	Ti	S	Hg	Se	Te	Ga	Sample	Int	wt		
51	76	87	2.36	5.0	19	3	<1	4	83	9	<1	2.2	<1	2.5	13	<10	2	12<000	<5	1.4	<0.1	3.5<001	<4	<0.1	620	01	3	1	<0.2	04	36	<1	<0.2	<1	30						
JR 211	0.32	20200.95	17007.70	5100.1	80001	6.1	40.5	1029	14.12	506.9	4.1	199.7	3	7.4	43.30	16.49	16.00	11	53.000	9	7.6	07	15.7	001	<1	09.000	01	17.6	5	03	7.70	037	112.0	14.90	1.7	30	1000				
JR 212	47.40	10395.90	24254.57	44001.1	99999	3.4	70.9	1540	8.38	901.1	21.7	352.9	7	29.0	400.17	32.73	100.00	17	2.02	200	2.5	19.2	14	10.8	001	<1	11.000	02	4.0	3	03	2.47	3192	290.7	34.76	1.4	30	1100			
JR 213	3.14	5771.00	106.44	240.5	0094	14.6	26.3	1497	0.01	40.9	9	7.0	5	200.0	3.94	1.10	05	10	2.77	122	3.7	32.2	22	17.0	052	<1	1.04	007	10	9	3.1	07	5.17	20	10.6	47	4.0	30	1575		
JR 214	15.03	2543.74	680.35	501.1	0297	11.9	17.5	309	3.04	23.1	4	7.5	3	10.1	2.00	07	0.00	30	05.000	1.0	10.7	07	147.9	001	<1	04.000	12	5.2	1.0	05	24	36	4.4	34	2.0	30	090				
JR 215	5.27	494.70	69.46	109.3	3020	33.0	39.0	1362	15.20	800.4	8	0.0	6	13.9	27	2.22	00	409	23	100	2.9	39.9	34	2.9	014	<1	2.07	001	04	4.3	6.5	04	12.00	10	16.7	22	12.4	30	1294		
JR 216	6.72	382.42	41.00	45.7	700	13.1	9.6	145	4.04	10.3	5	30.6	7	4.6	22	00	00	91	15	007	2.0	49.2	00	9.0	000	<1	00.000	<0.1	12.1	4.0	03	1.20	14	2.9	09	1.9	30	1344			
JR 217	2.71	111.50	17.30	10.5	545	9.0	7.0	40	3.09	15.6	2	21.0	1	1.9	11	41	00	90	00	000	3	25.0	01	8.7	019	<1	03.000	01	2.5	2.0	03	02	13	1.9	07	7	30	993			
JR 218	1.04	400.65	10.30	57.0	0079	33.3	23.0	917	5.32	1.2	4	22.0	5	104.1	25	40	00	105	2.00	009	4.6	30.0	1.30	41.0	192	1	1.00	009	17	6	10.1	06	4.30	20	10.0	41	4.4	30	905		
JR 219	8.63	406.10	10.02	42.3	1046	22.1	0.0	990	12.49	10.3	7	142.6	5	19.1	30	2.05	07	01	1.35	506	11.2	22.5	00	15.9	076	1	1.43	011	07	2.2	4.5	27	32.77	5	27.0	00	6.0	30	1677		
JR 220	4.10	22.62	33.29	7.6	1410	4.6	2.2	31	1.34	63.0	2	21.0	6	12.3	07	2.10	1.40	9	03	049	1.5	10.3	02	206.6	079	1	10	004	10	3.4	0	09	15	190	4.6	13	0	30	640		
JR 221	2.04	24.96	30.97	139.5	331	7.4	2.9	400	00	11.1	2	9.0	3	10.4	1.06	1.10	00	20	00	007	3.1	9.3	20	00.0	002	<1	00.000	06	<1	1.1	03	03	13	4	05	1.3	30	1000			
JR 222	4.94	301.01	16.94	60.3	00	1.6	2.0	1000	2.20	1.0	2.2	2.3	2.7	12.4	20	77	00	100	00	009	7.9	14.4	01	102.4	013	1	25	007	03	10.1	0	<0.2	01	5	1	<0.2	1.6	30	1307		
JR 223	0.99	69.98	9.71	13.7	141	5	1.3	300	1.00	0	1.3	3.5	4.9	10.1	10	07	00	70	07	000	5.5	<5	01	05.0	000	<1	20	030	12	4	4	<0.2	<0.1	7	1	<0.2	0	30	1043		
2233	10.52	411.67	1049.74	2202.1	7020	6.1	9.3	994	1.99	65.9	1	1031.3	3	20.0	19.00	2.79	00	20	1.90	000	4.0	11.0	46	40.9	003	1	70	013	00	2.0	1.7	00	16	65	1.7	30	2.3	30	2700		
2234	6.62	400.57	3303.30	2507.0	11040	4.3	0.0	1040	1.37	75.2	1	6473.2	2	3.0	14.70	3.75	00	20	13	026	2.4	10.9	20	27.6	003	1	06	090	06	4.0	1.4	04	00	107	2.0	27	1.0	30	4000		
2235	9.95	734.70	1049.25	2423.5	9130	3.1	7.1	1040	1.30	40.9	1	3011.2	2	6.5	21.00	4.00	00	17	42	000	2.0	2.4	20	23.5	000	2	51	000	00	3	1.1	05	12	141	1.5	12	1.5	30	1500		
2236	1.16	742.00	900.02	1125.0	2440	10.7	10.9	1302	2.44	111.1	1	2990.0	5	7.3	7.30	3.00	00	00	22	004	0.0	10.2	01	01.1	000	2	1.04	017	10	2	2.0	09	02	42	9	11	3.3	30	3700		
21 00 2236	3.94	707.76	695.71	1111.2	2574	10.1	10.6	1334	2.41	107.1	1	2000.6	5	7.0	7.70	2.00	00	01	21	090	0.1	10.4	00	09.6	000	1	1.00	017	12	2	3.0	09	04	45	5	17	3.2	30			
2207	4.64	134.52	246.31	135.6	1900	5.6	5.9	004	1.32	101.5	1	200.0	3	7.6	1.62	1.00	00	20	20	004	2.2	14.0	20	46.1	000	1	30	002	07	2.6	1.5	05	<0.1	17	4	06	1.0	30	1700		
2208	15.07	207.11	041.00	732.0	4051	4.7	0.4	1375	1.00	101.0	1	2000.3	3	4.7	5.32	2.00	00	41	10	049	2.2	5.9	44	42.4	003	2	07	011	00	3	2.2	06	02	61	9	10	2.5	30	1300		
2209	6.02	201.79	231.49	791.1	3074	9.0	16.7	1376	4.00	200.9	2	60.4	0	10.2	6.72	3.00	00	20	20	194	5.4	22.0	1.30	57.2	009	1	1.30	003	09	9	5.0	07	<0.1	27	4	17	0.4	30	0200		
2210	4.72	106.07	140.79	395.0	2307	0.1	0.4	002	1.00	140.5	3	700.0	3	4.5	1.72	3.00	00	20	11	005	2.2	10.4	20	102.4	013	3	07	010	12	2.1	1.5	00	05	20	5	07	1.6	30	1900		
2211	3.41	200.30	34.22	209.7	1002	16.2	22.0	1023	5.21	101.2	2	00.0	0	0.1	00	3.00	00	101	20	130	0.0	22.1	1.07	04.9	011	1	2.49	003	10	1	7.4	00	<0.1	15	4	19	10.7	30	1000		
2212	6.90	1700.33	100.94	907.0	7002	5.5	0.4	026	2.42	73.4	2	100.0	2	0.1	10.01	5.20	00	20	20	040	4.3	2.1	17	35.7	007	2	51	000	12	3	2.5	00	13	43	1.6	00	1.7	30	0400		
2213	2.97	309.74	89.20	326.7	4004	13.4	14.3	1123	3.01	121.1	2	71.3	0	9.6	1.07	2.00	00	100	27	126	0.0	17.0	1.30	10.5	007	1	1.00	024	09	7	4.6	05	<0.1	23	5	00	0.3	30	1000		
2214	17.40	250.07	600.90	200.4	12003	4.1	9.7	711	1.00	106.7	3	2072.1	3	3.2	2.20	3.47	00	14	09	024	1.9	2.3	10	30.0	000	2	20	000	09	6	1.3	04	07	139	2.3	79	9	30	1000		
2215	2.02	140.13	30.95	104.7	1073	10.1	10.9	1000	4.73	101.9	2	01.0	7	9.4	00	2.00	00	100	20	140	6.4	21.1	1.00	72.1	079	2	2.20	003	11	1	6.9	06	<0.1	14	4	05	9.0	30	0400		
2216	2.96	1096.04	104.70	910.4	12003	3.2	4.0	023	1.10	20.0	1	010.0	1	3.3	4.52	4.09	00	10	00	020	1.9	9.7	17	20.3	003	1	23	000	06	3.1	1.1	03	07	97	0	03	1.1	30	1500		
2217	7.40	90.94	44.14	509.2	295	15.0	25.6	2540	6.00	30.1	2	0.6	0	9.0	00	1.00	00	107	25	100	3.0	27.3	2.05	102.2	000	1	3.01	012	13	1	7.3	12	<0.1	7	2	04	11.5	30	0000		
STANDARD 955	13.06	190.67	25.00	145.4	270	25.5	12.7	749	3.01	10.2	6.5	41.3	3.1	52.3	5.09	3.04	6.30	03	79	090	12.6	105.4	09	120.9	100																



RECEIVED JAN 11 2004 10:00 AM VANCOUVER File # A302440R



SAMPLE#

Au**
gm/mt

2333
2334
2335
2338
2344

9.15
5.43
4.53
4.02
25.32

STANDARD AU-1

3.33

GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: ROCK PULP

DATE RECEIVED: JUL 23 2003

DATE REPORT MAILED:

Dec 15/03

SIGNED BY:

B. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Report No. **1103**

File # **1103-03**

SAMPLE	No	Cu	Pb	Zn	Ag	Bi	Cd	Ni	Fe	Al	S	Mn	Co	Se	Zr	Ga	In	Sn	Tl	Ba	K	V	Sc	Ti	S	Mo	W	Ga	Sample	Tot wt									
																															ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
2348	1.12	142.34	49.86	122.1	4215	10.4	6.3	798	1.71	107.9	.1	104.1	2.45	.76	3.29	.08	.09	.005	2.0	4.7	.30	72.5	.000	3	.00	.004	.00	.4	1.4	.09	.33	41	1.0	.10	1.4	30	2700		
2349	9.06	202.70	100.00	172.1	10004	9.3	9.6	793	2.21	109.9	.2	1000.1	5.07	.31	6.42	.20	.20	.05	.073	4.1	10.0	.30	102.2	.002	4	.00	.000	.30	3.9	2.3	.17	.11	.30	5.0	.41	1.0	30	3700	
2350	1.64	26.77	17.20	70.5	626	3.5	2.1	300	.97	62.1	<.1	65.0	1.1	3.5	.45	1.30	.20	.20	.00	.7	3.4	.05	22.5	.001	2	.20	.005	.30	.4	.6	.05	.32	7	.7	.03	.5	30	6000	
2361	16.21	309.30	2006.72	207.7	11077	3.6	4.6	297	3.41	1109.3	.2	700.0	3.6	6.0	1.06	10.90	.40	.40	.05	.045	1.7	6.0	.09	10.4	.002	1	.41	.005	.36	3.2	1.5	.09	.27	21	13.3	1.24	1.3	30	2000
2362	10.00	437.10	1005.27	1106.5	10076	1.9	2.9	502	2.90	204.1	.1	200.0	1.10	6.0	12.30	10.00	.20	.5	.06	.005	1.2	1.9	.02	10.0	.002	1	.11	.003	.00	.2	.8	.04	1.26	127	6.6	.47	.3	30	4700
2363	14.57	602.00	2250.00	1416.6	20007	3.2	6.3	573	6.10	330.0	.1	1700.3	1.1	6.3	12.00	12.00	.30	.00	.00	.014	1.1	8.0	.03	20.9	.002	4	.19	.004	.05	4.0	1.3	.04	2.26	206	12.4	.62	.5	30	6300
2364	3.22	270.70	1247.04	404.2	10000	2.3	2.9	406	2.20	100.4	.1	200.0	1.1	2.6	3.01	44.00	.00	7	.00	.003	1.3	2.0	.03	11.5	.004	1	.11	.004	.04	.2	.8	.02	.00	206	4.3	.32	.4	30	4700
2365	6.57	602.00	2250.00	1009.4	17141	2.6	4.0	901	2.30	202.6	<.1	200.3	<.1	7.7	6.94	10.10	.00	3	.00	.007	1.9	9.2	.01	10.2	.001	1	.00	.000	.04	4.0	.6	.04	1.27	207	7.6	.36	.2	30	4000
2366	6.26	143.23	127.00	1010.3	1504	19.4	10.1	999	2.72	202.6	.4	8.0	1.3	10.4	11.72	6.00	.10	10	.00	.004	1.1	11.1	1.26	10.1	.001	1	1.92	.011	.20	2.3	3.0	.16	.04	13	2.0	.09	6.2	30	3000
2367	1.22	39.00	21.15	117.1	607	4.4	9.4	1005	2.01	20.7	.3	64.0	6.20	3.1	1.21	1.21	.30	40	.20	.004	9.9	6.7	.07	10.0	.012	2	1.20	.033	.33	.9	3.0	.14	.36	7	.2	.00	4.0	30	2700
2368	4.94	104.04	429.37	297.1	4077	7.6	9.6	723	2.00	1070.5	.3	200.2	5.6	6.0	3.20	21.00	.20	10	.00	.001	4.5	6.1	.25	25.2	.002	2	.64	.004	.21	.6	2.0	.14	.30	40	1.9	.20	1.7	30	4000
2369	7.26	109.70	1000.00	1000.0	12000	3.5	2.8	600	2.00	100.0	<.1	200.9	1.1	3.4	6.40	6.00	.00	0	.00	.004	1.4	10.0	.00	20.7	.004	1	.17	.000	.00	4.0	.9	.06	.70	116	4.5	.27	.5	30	3700
2370	7.01	15.70	604.01	200.3	1000	4.0	5.9	400	2.70	100.0	.1	100.0	3.0	3.0	1.73	15.00	.00	10	.00	.000	2.3	2.1	.10	20.4	.002	2	.30	.000	.30	.3	1.4	.09	.23	71	2.4	.30	1.0	30	4700
2371	7.70	600.30	2000.00	1001.0	12000	3.0	4.2	507	2.57	100.4	<.1	400.1	1.1	9.9	11.72	6.00	.00	0	.00	.004	1.7	10.4	.04	20.1	.001	1	.10	.004	.00	4.0	.9	.04	.00	100	6.0	.26	.4	30	6000
2382	6.06	210.22	100.29	201.9	4076	3.5	1.4	800	1.01	100.0	.1	400.6	2.0	3.4	2.01	5.10	.20	10	.00	.004	2.5	2.7	.05	10.0	.001	1	.20	.002	.12	.2	1.0	.06	.11	.30	1.1	.24	.6	30	3000
2383	6.07	1207.70	6001.20	1070.4	20007	2.4	3.9	900	2.10	120.1	.1	2000.7	1.1	10.5	10.10	7.40	.00	7	2.00	.000	1.1	15.1	.05	20.7	.001	1	.20	.000	.09	7.1	.8	.06	1.07	202	17.2	.62	.7	30	4300
2384	4.00	415.10	1000.00	2000.0	12000	1.6	4.7	500	1.00	100.0	.1	400.9	2.0	12.4	20.00	6.00	.00	10	0.00	.007	2.3	2.2	.10	20.0	.002	1	.40	.007	.12	.2	1.2	.00	.30	10	6.0	.27	1.2	30	2000
NI 2384	4.40	411.90	2000.00	2000.0	10000	1.6	4.7	500	1.00	200.2	.1	400.1	2.0	12.9	20.00	6.00	.00	10	0.00	.007	2.1	2.1	.10	20.1	.001	1	.40	.007	.12	.2	1.2	.00	.30	101	5.7	.25	1.2	30	-
2385	3.00	1000.00	4000.00	10000.0	20000	3.2	4.7	1000	2.20	100.0	<.1	1000.5	1.1	10.0	12.30	6.00	.00	7	2.00	.002	1.4	11.5	.09	20.1	.002	2	.20	.000	.00	4.5	.6	.05	1.57	204	13.2	.35	.7	30	4000
2386	4.04	1207.01	6000.00	2000.0	20000	2.6	4.0	1000	4.01	1000.2	.1	1000.7	1.1	2.6	4.20	21.20	.00	9	.00	.004	1.6	1.2	.05	10.3	.001	1	.20	.002	.06	.2	1.1	.05	.30	229	12.9	.63	.9	30	1000
2387	2.99	100.00	2000.00	2000.7	1000	2.0	4.5	1000	1.00	100.2	.1	200.3	2.0	10.0	21.00	4.70	.00	10	0.00	.000	2.2	10.2	.25	25.1	.002	5	.30	.000	.06	4.0	1.3	.05	.17	97	6.4	.30	1.5	30	4000
2388	1.00	101.00	40.20	10.2	607	4.7	9.0	1000	2.00	10.4	.2	70.0	6.10	6.0	6.0	4.00	.00	10	.00	.000	0.6	5.0	.01	10.4	.001	1	1.20	.000	.20	.0	2.4	.20	.35	.0	.5	.04	3.6	30	2000
2389	1.00	100.00	1000.00	1000.0	7000	4.1	2.6	1000	1.20	10.1	.1	100.7	2.0	10.0	12.30	2.40	.00	10	0.00	.002	2.0	6.7	.20	20.2	.003	6	.40	.000	.00	.5	1.6	.05	.00	63	3.6	.36	1.4	30	3000
2390	3.20	700.00	600.00	401.4	1000	6.2	6.0	1000	1.30	100.0	.1	100.4	2.0	10.0	6.00	3.00	.00	10	0.00	.000	1.9	12.0	.20	20.2	.002	0	.40	.000	.00	2.1	1.0	.06	.00	25	1.2	.30	1.9	30	4000
2371	3.00	100.00	100.00	200.7	7000	6.9	10.3	1000	1.70	100.0	.1	200.0	6	7.0	3.00	6.10	.00	10	.00	.004	4.3	10.4	.09	20.5	.001	5	1.20	.000	.30	.4	4.2	.00	.05	.36	.6	.30	4.0	30	4000
2372	.00	100.00	10.00	117.2	400	20.4	10.0	1220	4.70	10.0	.2	6.0	6.20	1.1	1.26	.00	.00	1.40	.002	7.0	11.5	2.20	10.2	.005	2	2.00	.002	.05	.1	11.3	.11	<.01	<.01	<.01	.5	.03	9.6	30	2700
2372	4.12	200.30	700.00	100.7	2000	4.9	3.0	1000	1.00	10.2	.1	40.5	2	2.7	2.30	2.00	.00	10	.00	.003	2.4	6.0	.10	10.0	.002	2	.40	.000	.11	.0	1.1	.05	.05	10	.5	.10	1.2	30	1900
2374	3.24	604.57	1000.00	611.7	4000	10.5	12.7	1000	3.34	200.2	.1	100.7	6	12.1	3.41	6.40	.00	10	.00	.002	6.0	7.7	.30	20.0	.004	3	1.20	.000	.30	.6	6.6	.09	.36	73	1.0	.13	6.1	30	4000
STANDARD 600	13.00	144.20	24.50	127.7	201	20.0	12.4	600	3.04	10.0	6.3	42.0	3.0	42.0	6.01	3.70	5.00	.00	.70	.002	11.0	100.2	.70	120.0	.001	10	2.00	.004	.34	4.7	2.0	1.01	.04	100	4.0	.90	6.9	30	-

GROUP 1F30 - 30.00 GM SAMPLE LEACHED WITH 100 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 600 ML, ANALYSED BY ICP/ES & MS.
 UPPER LIMITS - AG, AU, NI, U, SE, TE, TL, GA, SN = 100 PPM; NO, CO, CD, SO, BI, TH, U, S = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
 - SAMPLE TYPE: ROCK N150 60C Samples Impurities 'DE' are Barium and 'DN' are Nickel Barium.

DATE RECEIVED: JUL 9 2003 DATE REPORT MAILED: July 22/03 SIGNED BY: *C. Leong* TOYE, C. LEONG, J. WANG; CERTIFIED S.G. ASSAYERS



HEAVY METALS

LAB # **A302526**

Sample No.	Pb	Cd	Fe	Zn	Ag	Ni	Co	Mn	Va	As	U	Mo	W	Bi	Cr	Sb	Se	V	Sr	P	Ca	Si	Al	Ti	B	Na	K	Cl	S	Fl	S	Br	I	Te	Os	Ir	Pt	Sample Totals		
2375	.11	1.05	.28	<1	6	1.7	.2	1	.04	<1	<1	.5	<1	2.6	<0.1	<0.2	<0.2	2	10	<0.01	<0.5	1.5	.01	2.1	.004	<1	.01	.004	<.01	.1	<1	<0.2	.04	<.5	1	<0.2	<1	30		
2376	2.05	60.22	6.02	61.0	201	25.0	17.7	1400	4.95	40.8	.2	2.2	.8	12.4	.10	1.15	.05	0.00	40	100	7.7	45.1	2.75	04.6	.020	<1	2.04	.010	.10	2	4.9	.09	.02	<.5	4	<0.2	9.2	30		
2376	2.15	50.25	6.72	50.8	209	20.5	19.3	1400	5.02	37.2	.2	1.7	.5	17.3	.12	1.05	.05	0.00	30	100	6.6	44.6	2.17	03.1	.019	2	2.09	.015	.10	1	5.4	.07	<.01	5	4	.05	9.4	30		
2377	2.39	35.05	50.97	271.8	880	10.1	6.4	1400	2.33	100.5	.4	19.4	.8	30.2	1.72	2.00	.07	<0	2.00	100	11.3	30.0	1.72	37.0	.000	<1	1.02	.005	.12	.9	3.5	.11	.04	8	6	.12	4.5	30		
2378	6.77	604.20	1076.91	1007.6	6079	27.7	15.1	1400	3.00	1000.7	.6	71.8	.8	11.2	12.04	17.12	.17	.10	.40	100	11.3	10.6	.75	07.7	.000	<1	1.20	.002	.10	.3	3.6	.25	.00	27	1.7	.01	3.7	30		
2379	4.90	690.29	519.19	201.2	9047	0.9	5.9	000	1.93	101.6	.2	70.7	.3	4.9	1.04	9.76	.10	.02	10	0.00	2.6	30.0	.20	24.4	.004	1	.40	.002	.10	1.6	1.0	.05	.11	10	1.6	.13	1.1	30		
2380	5.14	75.99	29.29	230.3	5124	45.6	10.2	2000	2.94	100.4	.8	1.6	1.0	104.3	2.05	4.95	.10	.05	5.72	100	17.0	41.7	.90	45.9	.005	1	1.27	.000	.12	.6	3.9	.16	.00	20	2.3	.05	4.3	30		
2381	6.06	124.26	141.53	203.5	1000	15.4	8.7	1200	2.39	405.1	.2	74.2	.5	12.1	2.05	8.90	.10	.07	37	100	4.5	10.2	.10	45.0	.013	<1	.97	.004	.16	.9	1.0	.11	.12	27	.8	.13	2.5	30		
2382	2.06	200.27	204.04	400.1	1200	13.5	7.8	1000	1.91	305.9	.3	30.3	.4	14.7	2.73	7.91	.10	.10	10	100	8.9	13.5	.05	24.6	.005	<1	.10	.003	.10	.7	2.3	.09	.07	25	.5	.15	2.4	30		
2383	1.05	37.00	37.45	105.1	200	12.7	6.2	1000	1.01	26.9	.6	8.2	.4	102.2	1.37	.10	.10	10	10	100	5.3	17.1	.75	40.4	.002	<1	1.17	.000	.10	.6	2.2	.11	.17	5	6	.04	2.4	30		
2384	4.76	40.01	15.20	114.4	522	22.2	12.4	1000	3.14	70.2	.6	6.6	.6	11.4	1.00	3.03	.07	.00	20	100	9.4	31.1	1.40	205.4	.020	<1	1.71	.002	.27	.4	7.7	.20	.05	11	.9	.05	6.0	30		
2385	4.50	121.00	74.16	104.1	1402	15.6	10.9	1000	3.22	420.7	.2	75.4	.5	12.0	.10	5.91	.10	.10	2.00	100	5.0	21.3	.75	25.2	.030	<1	1.00	.005	.15	.6	2.4	.12	.11	10	1.1	.22	3.3	30		
2386	.07	30.91	17.91	101.0	200	17.9	8.0	1000	2.41	35.3	.3	3.4	.5	40.2	.45	.70	.10	.10	10	100	5.0	45.6	1.25	137.1	.040	<1	1.00	.005	.40	.3	5.7	.10	.07	6	3	.06	5.2	30		
2387	2.02	24.40	8.95	140.4	200	12.0	12.0	1000	2.00	40.2	.6	3.6	.6	10.0	.00	1.45	.10	.00	10	100	9.2	45.3	1.45	120.0	.040	<1	1.74	.015	.30	.9	8.1	.10	.05	12	.6	.04	6.8	30		
2388	14.10	61.07	41.00	102.7	2000	5.1	12.4	000	2.03	100.7	1	100.0	.2	3.4	.20	3.40	.10	.10	10	100	1.5	7.7	.20	40.1	.005	1	.10	.004	.11	.8	1.5	.05	.03	45	.9	.05	2.0	30		
2389	12.00	61.00	201.00	216.3	2000	3.9	8.4	000	3.10	101.4	1	100.0	.3	3.5	.10	2.10	.10	.10	10	100	2.2	4.2	.40	40.1	.000	1	.10	.005	.10	.4	1.9	.05	.09	00	1.5	.04	2.7	30		
2390	4.07	95.57	20.70	104.4	1400	11.0	10.0	1000	3.31	102.3	1	100.0	.5	0.9	.10	1.10	<.01	.10	10	100	7.0	10.3	1.10	02.6	.004	1	2.07	.013	.10	.2	6.3	.09	.02	20	.6	.10	9.3	30		
2391	4.00	100.00	21.20	149.9	1400	11.7	10.0	1000	3.30	102.9	.5	0.6	.10	2.04	.10	1.10	.10	.10	10	100	5.7	10.2	1.07	07.6	.004	1	2.00	.013	.10	.3	6.1	.00	.02	20	.6	.12	9.4	30		
2394	6.40	19.00	42.00	77.2	000	4.9	6.0	000	1.37	91.0	1	97.4	.4	2.4	.15	2.05	.10	.10	10	100	2.4	6.7	.17	41.5	.003	<1	.40	.004	.11	1.3	.8	.05	.05	17	.5	.15	1.2	30		
2392	7.10	20.20	30.02	12.1	0000	4.6	6.3	000	2.37	400.5	2	100.5	.3	4.1	.20	7.00	.10	.10	10	100	2.0	4.0	.20	44.2	.000	1	.20	.003	.11	.4	1.0	.05	.10	11	.6	.11	2.1	30		
2394	1.21	140.02	15.05	114.1	400	12.6	10.3	1400	6.05	40.7	.3	10.2	.8	11.3	.10	.10	.10	.10	10	100	5.3	20.9	1.04	12.1	.000	<1	2.00	.003	.10	.6	10.6	.05	.05	<.5	2.2	.05	11.9	30		
2394	1.11	130.00	15.30	105.4	400	17.0	10.0	1400	6.21	40.4	.3	7.7	.5	10.4	1.02	.10	.10	.10	10	100	5.0	17.3	1.05	10.3	.005	<1	2.20	.006	.10	.6	10.6	.05	.21	<.5	1.5	.09	10.2	30		
2395	6.20	400.04	102.04	113.0	1000	15.3	12.1	100	10.15	370.4	.5	25.4	.5	10.9	.75	2.00	.10	.10	10	100	2.0	10.2	6.5	16.3	.02	15.0	.000	<1	1.00	.002	.10	.4	8.4	.10	1.00	7	27.0	.02	11.7	30
2396	.70	49.00	2.00	10.3	100	12.5	10.5	1000	3.10	40.7	.2	2.4	.8	10.5	.10	.10	.10	.10	10	100	1.10	4.5	16.5	1.10	10.3	.000	<1	2.10	.040	.10	.4	6.2	.05	.01	<.5	.4	.05	11.1	30	
2397	11.00	200.00	41.20	200.0	912	10.4	10.2	100	7.42	170.0	1.2	6.8	.5	10.0	3.90	4.04	.10	.10	10	100	5.5	9.3	.05	25.3	.105	1	1.00	.002	.10	.6	7.3	.09	.04	12	4.4	.19	11.5	30		
STANDARD 001	12.42	144.00	24.01	120.0	200	24.2	11.9	794	3.02	17.3	5.9	40.8	2.6	10.1	5.41	3.07	5.90	.02	.70	100	22.1	102.6	.40	120.7	.004	17	2.10	.003	.10	5.1	3.7	1.06	.03	100	5.0	.02	6.0	30		

GROUP 1F30 - 30.00 GM SAMPLE LEACHED WITH 100 ML 2-2-2 HCL-NH03-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 600 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, BR, U, SE, TE, TL, BA, SN = 100 PPM; NO, CO, CD, SO, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: ROCK R130 60C TOTAL WEIGHT FOR ROCK SAMPLES. Samples designated 'SE' are Sealed and 'MS' are Reagent Entries.

DATE RECEIVED: JUL 11 2003 DATE REPORT MAILED: *July 25/03* SIGNED BY: *C. Long* .D. TOVE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Geochemical Analysis Certificate

Northern Natural Resources Ltd. Sample # A302766

Page 1

SAMPLE#	Pb	Cu	Zn	Ag	Al	As	Au	Bi	Br	B	Ca	Cl	Co	Cr	Fe	Fl	Ga	Ge	Hg	Ir	K	Li	Mn	Mo	Ni	Os	P	Rb	S	Sr	Tl	Ti	V	W	Xe	Y	Zn	Zr
2378	1.47	54.10	24.20	100.4	100	23.9	14.4	1204	3.26	35.7	2	9.9	9.0E-4	1.09	2.89	80	4.00	0.71	4.5	10.9	1.51	14.7	0.03	11.03	0.029	25	6	5.5	19	20	146	1.0	04	6.7	30	3000		
2379	7.91	89.23	44.10	207.2	1405	41.9	12.3	2046	3.47	1002.0	5	47.8	1.2	19.5	4.00	12.20	60	57	100	10.7	30.3	1.10	67.7	0.02	21.56	0.005	25	1.9	2.9	26	86	27	1.0	11	4.3	30	5000	
2400	2.23	404.34	2403.37	11252.5	2000	12.6	14.1	2000	1.05	105.0	7	70.9	5.94	16.02	5.26	20	4.10	0.02	4.5	13.7	30	45.7	0.02	2.09	0.003	12	1.1	2.1	10	87	95	1.1	20	1.9	30	4000		
2401	7.46	7501.20	20200.40	20200.7	50000	3.0	11.2	1000	1.10	100.0	4	1000.0	1	4.4	16.50	20.00	20	5	20	0.03	1.4	15.4	35	12.9	0.02	2.26	0.002	05	0.1	9	04	06	516	27.1	2.77	1.3	30	6000
2402	1.87	2307.05	20000.57	10000.0	20000	7.3	12.1	700	1.30	80.3	7	1007.7	4	40.2	100.04	30.00	20	10	4.00	0.04	3.3	12.2	30	20.0	0.02	2.40	0.003	07	1.2	1.6	07	99	207	12.0	1.99	1.5	30	6000
2403	4.76	3061.05	20001.07	7000.4	8000	2.0	9.9	400	1.97	47.3	1	1000.9	1	9.2	10.37	04.00	20	2	10	0.02	1.1	10.4	06	10.0	0.01	1.20	0.003	03	10.2	7	05	1.53	1070	25.4	4.03	9	30	5000
2404	1.61	2349.95	10530.02	6236.3	20000	2.4	7.9	200	1.26	26.5	<1	801.7	<1	2.3	20.00	10.00	20	4	10	0.00	7	9.4	00	9.3	0.01	2.10	0.002	02	1.3	3	<0.02	10	495	7.4	1.64	5	30	6000
2405	2.23	206.21	1200.04	5021.2	1000	10.3	12.7	600	3.00	100.3	1	12.3	1.1	1.5	42.09	4.30	20	10	21.000	10.5	4.0	1.20	10.7	0.02	<1.00	0.005	20	2.4	4.0	14	20	22	3.2	25	5.6	30	4000	
2406	4.80	8074.70	25400.42	22073.7	90000	3.7	17.7	200	2.07	103.0	2	2362.0	1	6.0	100.47	124.20	20	3	21	0.04	7	6.2	00	20.1	0.02	2.20	0.002	02	1.9	0	09	2.00	1304	67.4	0.28	1.3	30	6200
2407	3.91	2773.14	10002.10	10336.0	20000	2.6	11.0	600	1.91	60.0	1	1200.0	1	10.2	91.02	10.00	20	4	3.00	0.04	1.1	14.5	00	14.9	0.01	1.13	0.002	03	7.0	7	02	27	307	6.7	1.26	5	30	5000
2408	4.00	1700.40	10000.40	4002.4	20000	3.7	7.1	100	2.00	80.0	2	600.2	1	2.9	14.01	12.47	20	0	10	0.00	1.0	0.6	03	20.3	0.01	2.22	0.002	04	1.4	7	02	10	000	7.0	1.25	0	30	6000
2409	2.79	1400.02	1000.00	12007.7	17000	6.4	12.0	400	2.30	100.7	2	700.3	3	4.3	60.74	6.00	20	6	20	0.04	2.7	0.3	30	20.0	0.01	1.20	0.003	06	0	1.1	03	20	200	2.0	0.75	0	30	5000
2410	5.26	12000.70	20000.00	90000.0	90000	2.7	00.6	700	2.26	1.3	<1	10004.9	<1	5.0	1141.67	201.00	0.00	4	03	0.01	7	2.9	04	10.0	0.01	1.20	0.001	03	1.3	2	31	10.42	1020	112.7	17.27	1.1	30	4000
2411	3.26	900.06	6000.07	20007.2	1700	17.0	17.0	820	2.70	700.3	2	10.2	0	0.7	100.47	3.00	20	10	20	0.07	9.3	47.9	1.00	20.7	0.03	1.10	0.004	35	2.4	4.0	10	14	27	1.4	14	5.2	30	2000
2412	9.06	1005.02	20000.20	20000.0	60000	0.9	21.2	107	2.40	107.1	1.0	1000.4	1	0.6	100.70	77.00	20	4	10	0.00	1.2	6.9	04	25.0	0.01	1.20	0.004	04	2.4	7	06	2.00	1032	25.4	3.20	9	30	7000
2413	4.24	3007.07	20000.20	20000.4	40000	4.9	14.1	100	2.01	60.0	1	1000.0	1	0.1	200.40	10.70	20	10	10	0.07	1.6	10.1	05	20.2	0.01	2.20	0.002	04	7.1	7	03	1.00	1000	11.9	1.09	9	30	9000
2414	1.95	2004.40	10000.07	10000.0	20000	3.2	11.0	107	1.00	100.0	<1	1000.7	<1	0.0	100.12	9.00	20	4	10	0.00	6	6.4	20	9.0	0.01	1.10	0.002	02	1.5	3	<0.02	10	503	6.6	1.15	4	30	5000
2415	5.00	1401.02	3000.05	6000.4	20000	3.9	6.3	100	1.41	100.7	2	1000.0	1	2.5	14.45	7.00	20	4	10	0.01	9	10.2	05	10.0	0.01	1.20	0.002	04	7.0	4	02	24	202	4.0	0.72	4	30	5000
2416	2.72	2007.04	10000.20	20040.1	20000	6.4	12.4	900	1.00	60.0	5	1000.0	1.0	27.0	145.00	10.00	20	10	2.00	0.04	7.2	10.9	30	20.2	0.01	2.20	0.002	00	2.3	1.3	05	00	499	4.5	09	1.9	30	6000
2417	4.00	1400.06	10000.07	10000.1	20000	5.5	14.9	100	1.00	70.0	2	1000.0	2	10.0	100.27	11.00	20	4	10	0.07	1.9	17.5	07	20.0	0.01	4.20	0.002	05	0.1	9	03	30	100	6.3	1.02	0	30	5700
2418	1.20	700.03	1000.00	1000.9	2000	11.1	10.4	100	1.20	100.0	4	107.1	6	17.3	21.79	3.00	20	10	10	0.00	0.7	10.9	30	49.1	0.02	1.20	0.003	30	1.0	1.0	06	00	72	6	12	1.9	30	4000
2419	4.00	100.70	1000.00	1000.3	2000	9.7	9.0	700	1.00	100.2	5	20.0	5	0.5	4.20	5.10	20	10	20	0.01	5.9	20.1	30	45.9	0.02	2.20	0.002	30	6.0	1.6	06	00	73	3	09	1.4	30	2000
2420	6.00	2000.00	20000.00	20000.1	10000	7.7	10.9	600	1.00	100.6	4	1000.2	2	10.3	100.77	40.00	1.00	10	10	0.01	2.4	9.3	30	20.0	0.01	2.20	0.002	06	1.0	1.2	07	1.79	006	21.7	3.22	1.2	30	6000
2421	7.14	2007.00	20000.05	10000.5	10000	3.7	9.2	200	1.42	200.0	3	1000.0	1	3.5	10.70	10.70	20	4	10	0.04	1.2	10.5	30	20.9	0.02	1.20	0.002	05	9.9	6	03	19	719	6.3	1.12	0	30	6000
2422	1.00	300.74	300.45	7000.9	2040	11.0	0.0	604	1.21	100.7	4	600.1	4	20.4	21.34	4.00	20	6	2.00	0.00	4.0	6.4	10	10.4	0.02	1.40	0.002	11	1.0	1.4	06	10	34	5	09	1.0	30	3000
2423	3.72	604.26	1000.07	2000.9	2000	9.0	7.0	700	1.00	100.0	4	101.2	5	0.4	9.04	3.40	20	10	20	0.00	4.0	10.1	30	40.0	0.01	1.40	0.002	11	6.0	1.2	06	09	40	7	17	1.1	30	4000
2424	1.00	60.70	1000.00	300.2	600	0.9	4.7	600	1.00	100.0	4	101.4	5	0.3	2.70	3.10	20	10	17	0.03	3.5	10.4	30	40.0	0.01	1.40	0.003	10	1.2	1.3	07	00	11	3	04	1.3	30	2000
2425	5.40	2000.97	20000.00	10000.2	10000	3.0	7.1	200	1.01	67.2	3	1000.4	1	2.9	10.00	10.20	20	4	10	0.00	1.2	10.0	04	10.5	0.01	1.20	0.002	00	7.0	6	03	06	740	16.4	1.02	1.0	30	2000
2426	0.10	1000.10	10000.04	4073.0	20000	3.1	10.7	1000	1.70	107.0	0	1000.0	1	1.4	20.52	21.40	20	2	02	0.01	2.0	6.0	01	9.4	0.01	1.11	0.002	02	1.3	0	03	10	1300	4.4	02	0	30	4700
2427	5.44	2004.06	6000.71	6000.2	20007	6.2	21.9	400	1.20	140.6	4	1000.4	2	3.1	71.21	12.10	20	2	00	0.00	2.0	10.1	03	20.0	0.01	2.17	0.003	06	0.4	0	03	30	470	4.4	09	0	30	5200
2428	2.04	1007.90	3000.04	10000.0	10000	7.1	13.5	100	1.00	100.0	4	1000.3	3	7.2	20.40	7.00	20	6	20	0.00	3.1	0.4	00	20.2	0.02	3.27	0.002	00	1.2	0	05	22	254	4.3				



SAMPLE#	As	Cd	Pb	Zn	Ag	Al	Ca	Fe	Mn	Ni	Sr	Co	Cu	V	Cr	Pb	Cr	Ni	Mo	Y	B	Al	Mg	K	M	Sc	Ti	S	Hg	Se	Te	Ge	Sample	Unit					
2431	4.00	0.004	19.25	25475.67	27471.9	42000	7.3	21.2	622	3.19	14.2	1.146	0.2	13.0	253.30	10.77	.06	20	52	0.07	1.4	9.0	.33	30.3	0.04	1	0.0	0.00	.07	1.4	2.2	.07	.06	409	14.4	1.46	2.1	30	4000
2432	9.34	1437.75	3087.95	4216.2	7620	5.0	12.2	985	2.54	23.4	2.289	9.3	16.4	10.00	3.20	5.24	44	45	0.06	2.0	16.2	.61	21.1	0.01	<1	1.16	0.00	.11	4.2	2.6	.07	.11	100	4.7	1.50	3.5	30	2000	
2433	14.19	1742.04	1005.92	3063.4	4365	7.7	13.6	1126	3.41	10.1	2.120	5.5	24.9	22.72	1.90	5.27	62	67	0.00	3.6	13.5	.95	32.0	1.03	1	1.67	0.04	.13	1.3	4.6	.10	.13	52	5.6	1.00	5.2	30	2500	
2434	6.01	275.57	305.95	1402.1	1201	7.1	9.0	957	2.35	13.9	1.19.9	4	17.2	13.00	1.10	.20	40	32	0.33	2.1	25.0	.09	21.0	0.07	1	1.11	0.00	.11	5.6	2.0	.06	.27	67	1.2	.10	4.0	30	2000	
2435	2.30	53.55	30.45	125.3	3411	7.4	10.6	1007	3.64	20.5	7.20.6	6	10.6	.40	.50	.20	00	30	0.73	5.9	20.1	.94	65.5	0.05	1	1.71	0.00	.20	1.1	5.0	.12	.01	16	.3	.04	0.1	30	3000	
2436	2.45	37.74	30.34	113.1	1002	9.6	20.0	1400	4.24	17.2	6.100.7	8	10.0	.20	.70	.00	70	30	0.00	7.0	20.0	.03	65.1	0.00	1	1.70	0.00	.20	2.4	5.1	.15	.07	13	1.2	.12	7.9	30	3000	
2437	.51	24.29	21.05	143.4	1002	9.4	21.3	1400	4.21	20.1	5.91.5	1.1	13.0	.21	.67	.00	50	30	0.00	6.0	10.3	1.47	70.9	0.00	<1	2.30	0.00	.32	0	7.7	.20	.02	5	.9	.07	10.5	30	2500	
2438	1.25	29.70	15.95	111.4	1079	13.0	17.5	1412	4.20	0.5	5.20.5	1.1	16.4	.30	.40	.00	00	53	0.70	7.0	27.0	1.79	107.6	0.00	1	2.71	0.00	.90	1.0	6.0	.30	<0.1	0	2	.00	9.7	30	3000	
2439	9.93	100.00	34.30	1100.1	1300	10.4	10.4	1304	4.72	140.0	3.16.3	9	17.0	2.34	3.43	.05	100	44	1.00	6.0	20.0	1.00	93.3	0.00	<1	2.40	0.00	.10	7	7.2	.20	.13	34	1.1	.00	11.2	30	2000	
2440	5.90	105.05	30.16	430.0	1303	0.9	25.9	2300	6.16	120.4	2.9.4	5	25.4	2.47	2.70	.00	100	61	1.00	6.5	10.0	2.30	115.4	0.00	<1	2.00	0.00	.40	7	12.5	.30	.00	17	.9	.03	13.1	30	3000	
RE 2440	5.40	102.37	30.45	425.0	1320	9.7	25.3	2102	6.17	120.1	2.9.4	3	25.0	2.43	2.67	.00	100	62	1.07	6.7	11.9	2.54	115.4	0.00	1	2.00	0.00	.94	7	13.1	.34	.00	12	1.1	.04	13.1	30		
JB 224	4.04	6.94	30.30	130.3	141	7	7.4	1000	4.01	10.0	9.2.0	<1	140.5	.30	1.00	.10	10	13.93	0.07	<5	2.1	.94	10.0	0.01	3	1.0	0.02	.01	0	.3	.05	1.4	0	.3	.05	1.4	30	1300	
JB 225	7.20	37.74	27.61	49.0	140	4	2.1	1000	10.93	104.1	1.3	4.4	<1	12.4	.20	1.70	.02	9	12.04	0.00	1.0	3.5	.04	3.5	0.04	5	2.0	0.00	<0.1	10.0	.6	.02	.05	25	.5	.05	3.7	30	000
JB 226	.63	14.70	19.47	32.0	72	1.7	9	300	.02	1.5	1	1.3	1.0	0.9	.10	.00	<0.0	6	51	0.04	4.7	4.9	.01	15.7	0.02	<1	2.0	0.02	.10	4	.2	.03	.04	<5	.1	<0.02	.7	30	1200
STANDARD 025	12.90	135.52	33.30	137.5	210	24.3	11.9	772	2.09	10.5	0.0	62.3	2.7	47.3	5.67	3.02	5.00	30	72	0.70	12.4	100.9	.05	134.7	0.07	16	2.00	0.00	.14	4.9	3.4	1.04	.02	169	4.9	.02	6.0	30	

Sample Lab: NRC RSD INC. Sample location: "E" are Down and "W" are Right Down.

Assay gold > 3000ppb in progress.

Assay recommend for Zn > 1%
 Pb > 5000ppm
 Ag > 30ppm

STANDARD	AS% SOLUBLE
110	10.33
111	2.57
112	7.48
STANDARD AG-1	3.42

GROUP 2 - PRECISION METALS BY FINE LARGE PORE 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.
 - SAMPLE TYPE: BUCK PULP

DATE RECEIVED: AUG 4 2003 DATE REPORT ISSUED: *Aug 14/03* SIGNED BY: *C. Long* TOYE, C. LEONG, J. WANG; CERTIFIED S.C. ASSAYERS

APPENDIX 8

Analytical Results - Diamond Drill Core Samples

Samples 2444 - 2553 (except 2529)



SAMPLE	Pb	Cu	Pb	Zn	Ag	Wl	Ca	Mn	Fe	Al	V	Au	Th	Sr	Cd	Sb	Bi	V	Co	P	La	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Sample
ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	gm
S1	.1	1.5	4.5	4	<.1	.4	.1	6	.07	<.5	<.1	<.5	<.1	3	<.1	.1	<.1	1	.13<.001	<.1	3.4	<.01	<.001	1	.02	.692	.01	<.1	<.01	.1	<.1	<.05	<.1	<.5	-		
2444	1.3	138.9	13.7	699	.5	17.3	19.9	1004	4.90	167.5	.1	13.8	.5	46	3.8	1.7	.2	174	1.93	.114	5	24.5	2.11	119	.008	1	2.60	.062	.23	.6	.01	7.4	.3	1.04	11	1.7	2200
2445	1.4	5707.4	>9999	31170	98.6	9.6	30.8	494	5.24	36.4	.1	517.9	.1	9	287.3	8.9	38.8	191	.36	.050	2	8.3	1.88	42	.012	1	1.47	.015	.07	.7	.45	5.2	.2	2.99	6	71.2	700
2446	1.1	288.2	523.7	943	1.0	10.6	21.2	1163	5.54	137.1	.1	18.1	.4	63	16.1	1.6	.2	237	2.72	.107	4	17.8	1.89	112	.111	2	2.61	.088	.42	.7	.01	10.9	.4	1.11	10	2.0	1700
2447	3.1	185.2	195.7	383	1.3	9.6	4.4	688	1.11	227.4	.2	32.9	.3	58	3.6	2.7	.1	36	3.46	.048	3	17.0	.39	78	.001	1	.47	.003	.87	.2	.02	1.2	.1	.50	1	1.3	1000
2448	2.8	183.8	279.5	197	1.1	3.8	2.2	373	.77	64.9	.2	14.9	.2	21	2.4	1.9	<.1	16	1.85	.048	2	15.3	.37	24	.002	2	.41	.005	.85	.6	.03	1.1	<.1	.12	1	.7	1100
2449	1.8	25.4	27.1	122	.4	12.6	4.3	953	1.28	43.4	.4	4.5	.5	84	.7	1.6	<.1	29	5.87	.058	5	24.4	.93	24	.004	1	.86	.003	.04	.2	<.01	2.5	<.1	.13	2	.6	5000
2450	1.8	431.4	694.7	2089	3.9	3.7	1.8	200	.66	30.9	.1	31.6	.1	21	17.0	5.1	<.1	4	1.34	.010	1	12.9	.09	10	.001	2	.10	.004	.82	1.2	.10	.4	<.1	.46	<.1	1.7	700
2451	1.6	98.6	101.4	373	1.0	9.3	3.7	994	1.16	57.4	.2	13.3	.8	49	3.9	2.6	<.1	21	3.48	.068	4	26.8	.98	29	.001	1	.68	.002	.87	.2	.01	1.7	.1	.15	2	.7	1800
2452	1.9	2955.5	428.6	8248	21.6	6.6	9.3	198	2.46	65.7	.1	384.7	.1	12	69.9	16.3	.1	6	.91	.019	1	15.8	.12	17	.001	1	.23	.082	.02	1.1	.18	.6	.1	2.17	1	1.8	3100
2453	2.6	374.8	1207.4	2174	4.3	13.8	6.2	803	1.54	162.9	.5	29.8	.4	96	17.5	4.9	<.1	21	5.95	.076	4	13.7	.47	43	.001	3	.62	.003	.88	.2	.05	1.7	.1	.83	2	1.6	3300
2454	2.9	5061.7	5862.2	39408	37.6	4.1	27.1	299	1.95	54.7	.1	2833.8	<.1	14	368.8	21.8	.3	8	.95	.007	1	11.4	.09	9	<.001	1	.19	.002	.01	1.4	.77	.4	<.1	2.86	1	7.8	700
2455	2.1	192.1	181.1	1117	1.9	6.7	4.3	882	1.48	88.8	.3	38.8	.3	44	11.0	8.5	<.1	17	3.46	.072	3	13.3	.19	53	.001	<.1	.39	.002	.85	.7	.83	1.1	.1	.38	1	.7	2800
2456	4.3	3329.1	3791.3	16483	27.7	5.8	13.2	288	2.24	62.9	.1	671.2	<.1	17	147.9	13.1	1.8	7	1.84	.069	1	14.5	.12	18	.001	1	.30	.002	.01	1.0	.22	.5	.1	1.86	1	6.0	3600
2457	.9	75.7	25.3	684	.4	33.6	8.4	786	2.99	58.8	.2	.6	.9	38	3.6	.8	.2	60	1.52	.849	11	56.4	1.68	138	.009	<.1	1.99	.008	.36	.1	<.01	6.3	.2	.23	6	1.7	700
2458	.9	91.2	102.9	263	.8	4.5	2.9	507	.72	48.4	.1	23.6	.2	34	2.8	2.7	<.1	13	2.16	.029	3	11.1	.15	38	.001	1	.25	.003	.05	1.4	.01	.7	<.1	.12	1	.7	300
2459	.8	79.8	15.5	142	.3	38.1	18.9	779	3.25	54.8	.1	.7	.9	50	.5	1.8	.2	58	2.44	.053	12	95.1	1.58	49	.009	<.1	1.95	.818	.26	.1	<.01	5.2	.2	.61	6	3.4	2400
2460	6.9	85.5	51.5	127	1.1	16.8	6.6	812	1.77	133.3	.3	61.8	.3	86	1.8	2.6	<.1	12	4.73	.053	3	14.3	.26	78	.001	1	.47	.002	.13	6	<.01	1.3	.1	1.31	1	1.6	2500
RE 2460	6.8	85.2	54.6	123	1.1	15.6	6.7	888	1.77	129.3	.4	89.5	.3	87	1.8	2.6	<.1	11	4.72	.052	3	13.6	.25	75	.001	1	.46	.002	.13	.6	.01	1.4	.1	1.26	1	1.3	-
RE 2460	6.8	86.9	51.3	122	1.1	16.9	7.1	828	1.79	138.5	.4	66.1	.3	86	1.1	2.7	<.1	11	4.87	.056	3	12.8	.25	63	.001	2	.43	.002	.11	.5	<.01	1.2	.1	1.33	1	1.6	-
2461	3.7	44.9	49.9	225	.8	7.2	3.9	544	.82	116.4	.2	35.7	.2	66	2.2	1.8	<.1	7	4.12	.042	2	18.2	.14	46	.001	1	.26	.002	.07	.2	.15	1.8	<.1	.52	1	.9	2800
2462	9.6	48.9	98.3	243	.7	19.2	6.2	986	1.32	214.8	.7	18.8	.5	184	1.8	3.4	.2	28	7.47	.872	6	18.8	.48	39	.001	<.1	.88	.002	.88	.3	.81	1.5	.1	.42	2	1.5	5300
2463	13.2	4275.1	>9999	43843	38.9	11.8	28.3	828	2.11	488.1	.5	884.8	.3	48	371.2	19.5	.1	11	3.88	.841	3	11.8	.11	38	.001	1	.24	.002	.07	1.7	.64	.8	.1	2.76	1	18.6	3400
2464	2.2	367.8	116.1	585	2.8	18.4	4.9	879	1.25	415.6	.4	88.8	.3	99	4.8	3.8	.1	7	6.13	.088	3	7.2	.18	24	.001	1	.28	.001	.87	.2	.86	1.8	.1	.84	1	.9	1200
2465	1.8	4321.2	3816.8	28443	31.2	2.8	11.9	485	1.89	99.7	.1	3828.5	<.1	42	171.5	18.8	<.1	2	2.94	.884	1	8.8	.86	7	<.001	<.1	.18	.001	.01	1.2	.58	.3	<.1	1.76	<.1	6.6	488
2466	1.9	1446.9	798.1	12936	18.4	6.6	10.3	584	1.44	388.8	.2	291.9	.2	47	186.8	5.4	<.1	6	3.59	.848	2	8.3	.11	17	.001	<.1	.24	.001	.84	.2	.28	.7	<.1	1.37	1	2.4	700
2467	3.3	2878.1	>9999	27748	48.8	5.1	17.5	758	1.58	348.8	.1	946.3	.1	48	247.3	26.2	.2	3	3.75	.821	2	18.5	.87	17	.001	1	.15	.002	.84	1.4	.58	.5	.1	1.97	1	18.7	4600
2468	7.1	98.9	215.1	594	1.4	15.1	5.3	1321	1.48	289.5	.6	48.1	.4	192	4.4	3.8	<.1	17	11.95	.886	5	18.5	.34	35	.001	<.1	.53	.002	.87	.2	.01	1.8	.1	.45	2	1.5	1900
2469	45.2	8988.5	5624.6	24188	88.3	12.2	18.7	577	2.67	587.8	1.8	1448.5	.3	41	216.2	13.8	.2	11	3.14	.631	2	9.2	.13	13	.001	<.1	.24	.001	.84	1.6	.48	.7	.1	2.37	1	8.9	1100
2470	2.3	315.7	42.9	328	1.5	10.6	4.4	1121	1.41	191.5	.7	79.9	.3	163	1.8	2.4	<.1	10	11.87	.871	3	11.4	.27	38	.001	<.1	.39	.001	.87	.3	.01	1.4	<.1	.75	1	1.1	5200
2471	3.2	1489.8	1688.4	3833	16.7	7.2	6.3	1827	1.94	328.6	.4	295.8	.2	144	45.5	8.5	.3	6	7.78	.858	3	9.3	.11	35	.001	3	.22	.083	.89	.8	.87	1.8	.1	1.81	1	12.1	4800
2472	3.8	97.1	73.2	588	.9	15.9	5.6	869	1.28	136.4	.5	1.9	.4	123	9.5	1.8	.1	26	8.46	.847	4	28.1	.39	37	.001	1	.59	.004	.11	.3	.01	1.9	.1	.46	2	1.8	3800
2473-A	3.6	2331.4	4762.4	4258	22.1	10.8	8.4	1888	4.88	388.8	.5	145.6	.3	96	39.4	5.3	1.7	29	5.18	.886	4	16.3	.54	35	.001	2	.97	.084	.87	.3	.14	2.7	.1	2.86	3	9.3	3800
2473-B	1.7	119.1	27.8	638	1.1	48.9	36.7	2788	7.12	85.7	.3	18.6	.3	181	4.6	2.7	.1	56	9.78	.852	5	38.6	1.26	37	.889	<.1	1.88	.819	.13	.6	.84	5.1	.1	4.74	6	11.6	2788
2474	2.9	383.7	1868.8	2238	4.2	6.8	7.1	646	2.78	388.9	.8	178.4	.2	47	28.2	4.4	.1	17	2.86	.888	2	9.5	.24	32	.882	<.1	.53	.082	.86	.3	.18	1.8	.1	1.86	2	4.3	4900
STANDARD	11.9	136.8	25.3	138	.3	24.4	11.9	748	2.84	18.9	6.2	42.5	2.5	46	5.4	2.7	6.3	58	.73	.091	12	188.8	.64	138	.883	16	2.81	.834	.13	5.8	.16	3.6	1.1	<.05	6	4.8	-

Standard is STANDARD 885.

GROUP 10X - 0.50 gm sample leached with 3 ml 2-2-2 HCl-HNO3-K2O at 95 deg. C for one hour, diluted to 10 ml, analysed by ICP-MS.
UPPER LIMITS - As, Au, Ni, V = 100 ppm; Nb, Co, Cs, Bi, Th, U & B = 2,000 ppm; Cu, Pb, Zn, Bi, Mn, Ag, V, La, Cr = 10,000 ppm.
- SAMPLE TYPE: CORE R158 60C Sample designation 'RE' are Retests and 'ST' are Select Retests.

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All results are considered the confidential property of the client. Agri assumes the liabilities for actual cost of the analysis only. Data LFA



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Tl	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Tl	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Sample
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
2475	6.9	54.6	112.6	293	1.0	18.9	6.8	867	2.06	311.6	.5	8.2	.4	92	2.5	6.2	.1	22	5.70	.047	5	19.0	.48	80	.001	1	.97	.002	.09	.8	.02	1.8	.1	.91	2	2.3	4800
2476	6.0	104.4	150.1	400	1.2	15.4	4.9	873	2.20	301.1	.4	41.4	.4	105	4.2	6.8	.1	21	6.23	.043	5	17.4	.38	40	<.001	2	.70	.006	.08	.6	.03	1.8	.1	.76	2	2.2	7300
2477	4.8	46.1	144.7	606	.6	15.8	5.7	1071	1.42	157.9	.8	4.4	.4	149	5.0	5.4	.1	30	9.43	.054	6	22.4	.53	36	<.001	1	.75	.006	.08	.6	.03	2.0	.1	.51	2	2.1	5800
2478	3.6	59.7	176.3	481	.6	21.1	7.0	893	1.46	123.2	.4	54.0	.5	80	3.6	3.2	.2	31	5.77	.043	5	34.7	.60	46	<.001	1	.83	.009	.10	.5	.02	2.3	.1	.49	2	2.4	5200
2479	2.6	30.1	47.7	88	.7	10.5	5.5	677	1.47	1068.8	.2	65.6	.3	69	.7	9.2	<.1	12	5.89	.050	3	16.3	.24	142	<.001	1	.50	.002	.09	.8	.02	1.3	.1	.65	1	1.3	7400
2480	2.8	34.9	129.9	290	.7	8.5	6.4	1502	1.64	365.6	1.8	20.7	.2	161	2.5	9.8	.2	24	13.72	.051	6	16.7	.49	69	.005	2	.70	.002	.06	.5	.05	1.6	.1	.59	2	1.5	4800
2481	3.0	25.0	72.8	236	.6	13.9	4.7	984	1.21	108.5	.9	2.1	.4	132	1.8	3.7	<.1	32	9.57	.053	6	18.4	.41	264	<.001	1	.63	.002	.09	.7	.01	1.6	.1	.41	2	1.8	5100
2492	4.2	154.8	88.1	1353	1.0	10.4	7.1	1340	1.65	223.9	.3	.8	.4	112	13.4	4.7	.1	23	7.37	.045	6	27.8	.30	39	<.001	2	.74	.002	.12	.8	.03	2.0	.1	.63	2	2.1	4700
2493	3.0	56.6	29.2	131	.4	21.7	7.7	995	1.08	170.9	.8	<.5	.5	110	.9	2.3	.1	36	8.79	.093	6	48.2	.62	42	<.001	1	.86	.004	.09	.8	<.01	3.1	.1	.46	2	2.2	5600
2494	2.6	88.6	67.6	292	.6	25.1	8.7	1040	2.22	89.0	1.0	87.3	.5	101	2.6	1.8	.2	62	9.24	.073	5	48.0	.74	34	.835	1	1.23	.031	.11	1.0	<.01	3.9	.1	.89	4	3.3	3400
RE 2494	2.6	85.0	65.2	302	.6	25.1	8.4	1070	2.25	90.2	1.0	64.1	.5	104	2.6	1.7	.2	63	9.42	.076	5	44.0	.76	34	.034	1	1.24	.032	.12	1.0	.01	4.0	.2	.59	4	3.3	-
RRE 2494	2.8	81.0	65.0	290	.5	23.1	7.5	1065	2.10	79.6	1.1	60.3	.5	112	2.6	1.6	.2	60	9.63	.076	5	41.0	.71	32	.033	1	1.19	.028	.12	1.1	.01	3.8	.2	.55	4	3.2	-
2495	4.2	76.9	48.2	100	.3	13.5	9.1	1216	2.59	47.7	.6	6.7	.4	98	1.3	1.0	.2	84	9.16	.064	4	25.0	.92	20	.040	2	1.23	.018	.06	.8	.01	4.5	.1	.59	5	1.7	2300
2496	4.0	467.9	91.5	443	1.5	15.4	21.0	1013	4.74	19.0	.2	14.1	.6	70	3.9	2.2	.4	106	2.63	.100	6	31.8	1.46	24	.130	1	1.84	.051	.09	1.3	.01	8.9	.2	1.70	8	2.3	2496
STANDARD 056	11.6	144.6	24.0	137	.2	24.8	12.2	750	2.80	19.6	5.0	41.3	2.7	47	5.4	3.4	6.0	86	.72	.006	13	189.3	.64	137	.095	17	1.90	.035	.14	4.4	.17	3.6	1.0	<.06	6	4.5	-

Sample type: CORE R150 GDC. Samples beginning 'RE' are Returns and 'RRE' are Reject Returns.



SAMPLE#	Cu %	Pb %	Zn %	Ag** gm/mt	Au** gm/mt	Sample gm
SI	.001	<.01	<.01	<.3	<.01	-
2482	.202	.05	.58	10.5	.11	2500
2483	.146	.10	.41	13.1	.21	2500
2484	.123	.03	1.30	10.2	.37	2400
2485	.179	.30	1.22	13.5	.63	2800
2486	.327	1.13	3.53	26.5	3.14	2600
2487	.060	.48	2.26	9.0	.39	2400
2488	.121	.39	3.07	9.2	.72	2500
2489	.423	.68	4.77	32.3	5.16	2700
2490	.251	.15	2.34	16.5	.74	2300
RE 2490	.253	.15	2.34	17.3	.76	-
RRE 2490	.245	.15	2.30	15.7	.59	-
2491	.101	.26	1.72	9.5	.56	1800
STANDARD R-2/AU-1	.582	1.58	4.30	156.2	3.27	-

GROUP 7AN - 1.000 GN SAMPLE. ANIM - RESIN (INCL. WIND-RED) DIGESTION TO 100 ML, ANALYSED BY ICP-ES.
 - SAMPLE TYPE: CORE R199 SOC AG** & AU** BY FIRE ASSAY FROM 1 A.T. SAMPLE.
 Sampled location 'RE' see notes and 'RRE' see notes below.

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* Sample weight



SAMPLE#	Ag** g/mt	Au** g/mt	Sample gm
81	.5	<.01	-
2497	2.2	.03	2600
2498	8.4	.11	1500
2499	4.2	.02	2700
2500	22.2	.27	1200
2501	4.7	.04	2500
2502	3.8	.02	2100
2503	1.7	.05	3200
2504	4.7	.05	1800
2505	4.7	.08	2000
2506	17.3	.12	2500
2507	1.3	.08	1900
2508	1.7	.03	1600
RRR 2508	2.7	.03	-
RRR 2508	2.2	.03	-
2512	2.8	.08	2900
2513	1.1	<.01	1500
2514	1.8	<.02	2700
2515	1.6	<.01	2300
2516	1.5	.02	3000
2517	1.0	.01	2000
2518	2.5	.01	2400
2519	1.7	<.01	2600
2520	.3	<.01	2700
2521	.6	.03	2600
2522	1.5	.01	2800
2523	1.4	<.01	2300
2524	<.3	.01	2900
2525	3.3	.01	2800
2526	3.0	.01	2700
2527	<.3	.01	2800
2528	<.3	<.01	2400
2529	.3	<.01	2300
STANDARD R-2/AU-1	153.4	3.32	-

GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.
 - SAMPLE TYPE: CORE RING 600
 Sample Residue: 'RE' Ags Residue and 'RRR' Ags Residue Return.

DATE RECEIVED: OCT 16 2003 DATE REPORT MAILED: *Oct 20/2003* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. MANG; CERTIFIED S.C. ASSAYERS

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Date *LFA* *[Signature]*

SAMPLES	Cu %	Pb %	Zn %	Ag** gm/mt	Au** gm/mt	Sample gm
SI	<.001	<.01	<.01	<.3	.01	-
2509	.030	.01	.04	1.2	.03	2500
2510	.691	3.23	3.42	65.8	.21	1300
2511	.084	.13	.15	3.5	.05	2800
STANDARD R-2/AU-1	.566	1.45	4.26	154.8	3.32	-

GROUP 7A - 1.000 GR SAMPLE, AQA - REGIA (HCL-NH4S-N2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES.
 - SAMPLE TYPE: CORE R150 GC AG** & AU** BY FIRE ASSAY FROM 1 A.T. SAMPLE.

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Sample	As	Au	Co	Cu	Fe	Mn	Ni	Pb	Sb	Se	Si	Te	Tl	Zn	Ag	Al	B	Ca	Cl	Cd	Cr	K	Li	Mg	Mo	Na	N	NO ₃	P	S	U	V	W	Zr	Sample Total			
2441	36.82	494.46	1002.10	477.5	10000	4.8	8.2	821	4.46	200.3	5	1000.0	2	6.2	1.36	10.20	10	30	100	2.0	0.7	44	34.0	1000	4	1.00	1000	10	0	1.0	12	10	10	5.9	41	3.0	30	2400
2442	1.12	10.00	17.04	200.0	200	20.0	10.0	1000	4.11	20.0	5	2.2	1.2	20.7	10	10	100	10	100	7.9	41.4	1.72	100.2	100	4	2.07	1001	10	7	0.7	16	0.01	0	9	104	10.2	30	2000
STANDARD 800	12.87	127.00	24.22	520.4	277	24.2	12.3	740	2.00	10.5	1.7	42.0	2.7	40.7	0.41	1.00	1.00	10	70	100	12.4	104.0	10	100.0	1000	17	2.12	1000	10	4.0	2.0	10	171	4.0	77	6.4	30	

GROUP 1F30 - 30.00 GR SAMPLE LEACHED WITH 100 ML 2-2-2 HCL-NH4OH-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 400 ML, ANALYSED BY ICP/ES & MS.
 UPPER LIMITS - AS, AU, NI, W, SE, TE, TL, BA, BR = 100 PPM; NO, CO, CD, SB, BI, TH, U, S = 2,000 PPM; CU, PG, ZN, NI, NH, AS, V, LA, CR = 10,000 PPM.
 - SAMPLE TYPE: ROCK R150 60C

DATE RECEIVED: OCT 16 2003 DATE REPORT MAILED: *Oct 23/2003* SIGNED BY: *JWJ* . . . D. TOYE, C. LEONG, J. WANG; CERTIFIED S.C. ASSAYERS



ANALYSIS REPORT

Page 1



SAMPLE#	Au % g/mt	Sample gm
81	<.01	-
2530	1.03	1600
2531	.05	1000
2532	.05	2000
2533	.13	1500
2534	.33	2000
2535	.52	500
2536	.21	200
2537	1.21	1900
2538	3.12	2400
2539	.56	2100
2540	3.04	2100
2541	3.51	2400
2542	3.69	2600
2543	10.91	1300
2544	2.68	1900
2545	.43	1600
2546	.11	2500
2547	.04	2300
2548	.12	1900
2549	1.11	1800
2550	.66	2800
RR 2550	.63	-
RR 2550	.66	-
2551	3.75	2200
2552	3.08	2200
2553	1.62	2100
2554	.25	2100
2555	.25	2400
2556	.20	2100
2557	.19	1900
2558	.22	1700
2559	.29	1200
2560A	.03	4100
2560B	.21	2000
2561	.35	2000
STANDARD AU-1	3.41	-

GROUP 6 - PRECIOUS METALS BY FINE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.

- SAMPLE TYPE: CONE R150 GOC

Samples designated 'RR' are Return and 'RE' are Reject Samples

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Date *15A* *[Signature]*



SAMPLE#	Au** gm/mt	Sample gm
2562	.31	2900
2563	.13	2100
2564	.05	2500
2565	.23	1400
2566	.67	2400
2567	.46	2200
2568	1.15	2300
2569	1.28	2300
2570	.76	2500
2571	.42	1900
2572	.25	2500
2573	.31	3000
2574	.32	3000
RE 2574	.30	-
RRE 2574	.31	-
2575	.03	2600
2576	.02	3700
2577	.02	3400
2578	.08	1400
2579	.11	3500
STANDARD AU-1	3.36	-

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

APPENDIX 9

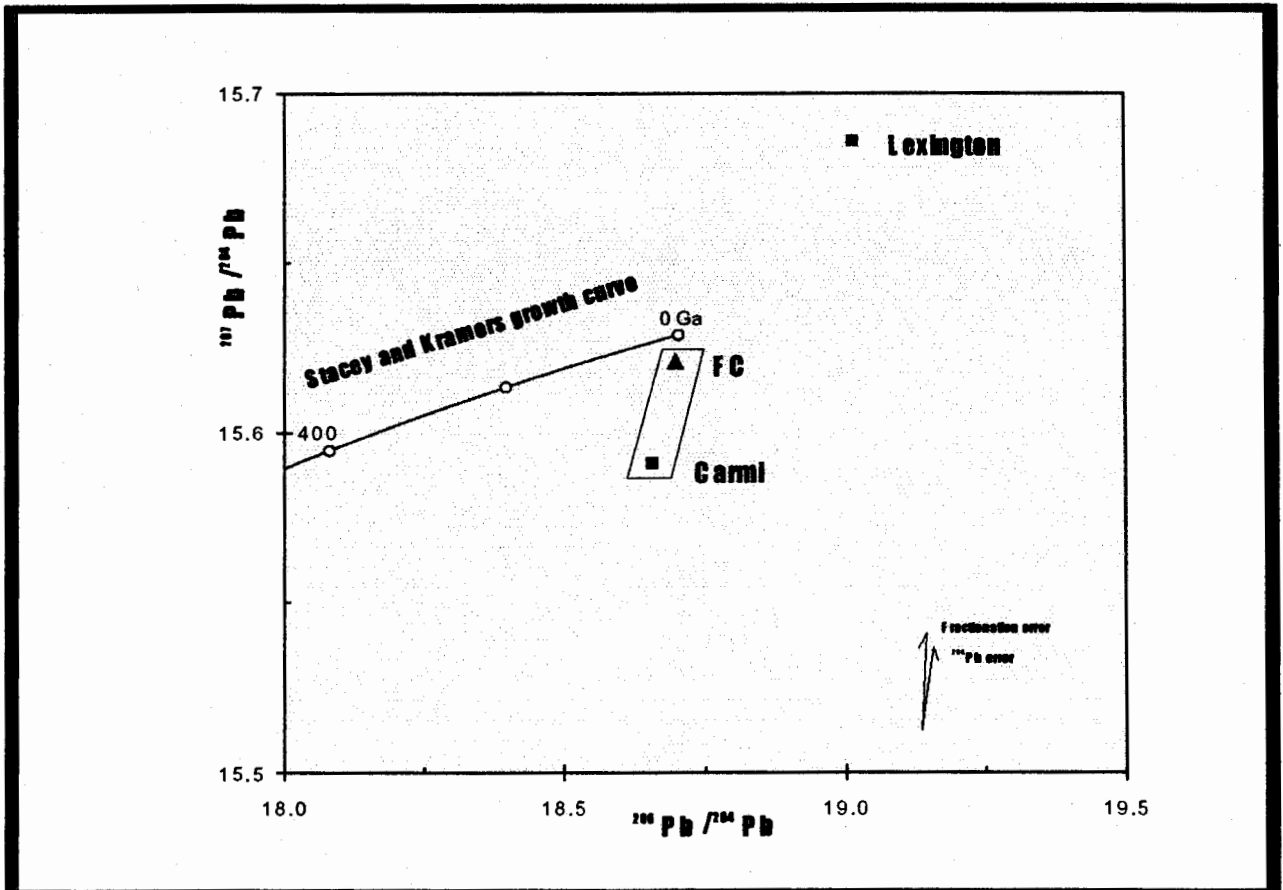
Lead Isotope Analysis

FRANKLIN CAMP LEAD ISOTOPE ANALYSIS

M. McClaren P. Geo.
June 29, 2003

A galena rich sample taken from the Homestake dump was analysed for its lead isotope composition. The results of the analysis are plotted on the accompanying graph. Y-axis has been expanded and error bars are not plotted.

The sample is comparable to the lead ratios determined for the Carmi Ag-Pb-Zn-Au polymetallic veins. The results imply that the Homestake and similar type veins are Jura-Cretaceous and not related to a Tertiary mineralizing event. As a comparison, a sample from the Lexington area (McClaren, M., 1993) plots within the Beaverdell cluster (Tertiary).



Sample	$^{206}\text{Pb}/$	Pb^{64}	Pb^{64}	$^{207}\text{Pb}/$	Pb^{74}	Pb^{74}	$^{208}\text{Pb}/$	Pb^{84}	Pb^{84}	$^{207}\text{Pb}/$	Pb^{76}	Pb^{76}	$^{208}\text{Pb}/$	Pb^{86}	Pb^{86}
Number	^{204}Pb	abs err	% err	^{204}Pb	abs err	% err	^{204}Pb	abs err	% err	^{204}Pb	abs err	% err	^{206}Pb	abs err	% err
FC PB2	18.6984	0.0081	0.04	15.6209	0.0101	0.06	38.4264	0.0333	0.09	0.8354	0.0002	0.022	2.0551	0.0009	0.043

NOTES: Analysis by Janet E. Gabites, Geochronology Laboratory, Department of Earth, Ocean, and Atmospheric Sciences, University of British Columbia, Vancouver, B.C.

All ratios corrected for isotopic fractionation (0.15% for Faraday collector), based on repeated analyses of NBS981 lead standard.

Mineral analysed is galena.

APPENDIX 10

Cost Statement

COST STATEMENT

FRANKLIN PROPERTY May 1 to November 30, 2003

Labour & Consulting

Linda Caron	Geologist	47 days @ \$454.75/day	\$ 21,373.25
		geological mapping, trench mapping, core logging, report preparation	
Jim Kermeen	Geologist	16 days @ \$454.75/day	\$ 7,276.00
		core logging	
Glen McDonald	Consultant	3 days @ \$454.75/day	\$ 1,364.25
Mike Elson	Project Manager	28 days @ \$321/day	\$ 8,988.00
John Boutwell	Prospector	118 days @ \$214/day	\$ 25,252.00
John Carson	Prospector	2 days @ \$267.50/day	\$ 535.00
Tim Young	Line Cutter	1 day @ \$347.75/day	\$ 347.75
Roger Pugh	Line Cutter/Soil Sampler	17 days @ \$214/day	\$ 3,638.00
Scott Hodges	Line Cutter/Soil Sampler	15 days @ \$214/day	\$ 3,210.00
Alfreda Elden	Soil Sampler/Assistant	8 days @ \$160.50/day	\$ 1,284.00
Lee-Anne Ennis	Soil Sampler	3 days @ \$160.50/day	<u>\$ 481.50</u>
			\$ 73,749.75

Diamond Drilling

Delorme Drilling, Merritt, B.C.			
		490.6 metres NQ drilling @ \$67.75/metre	\$ 33,239.19
Impact Equipment - water haul, including living out expenses for operator			<u>\$ 9,500.00</u> \$ 42,739.19

Trenching

Impact Equipment, Trail, B.C.			\$ 10,773.00
		114 hours @ \$94.50/hr, including living out expenses for operator	
Delorme Drilling - trench reclamation			
		20 hours @ \$50/hour cat	<u>\$ 1,000.00</u>
			\$ 11,773.00

Analytical Costs

Acme Analytical	292 soil samples, 288 rock samples, 111 trench samples, 110 core samples (35 element ICP + Au + overlimit assays)		\$ 19,791.50
Crockite Resources	Pb isotope analysis		<u>\$ 1,123.50</u>
			\$ 20,915.00

continued next page ...

Meals & Accommodation

Johnny's Motel, Grand Forks	\$ 4,681.32
Food and meals	<u>\$ 3,280.00</u>
	\$ 7,961.32

Field Expenses

Vehicle Rental	4x4 148 days @ \$53.50/day	\$ 7,918.00
	4x4 2 months @ \$1500/month	\$ 3,000.00
4 wheeler rental	4 days @ \$50/day	\$ 200.00
hand held radio rental	6 months @ \$100/month x 2	\$ 1,200.00
core splitter rental	2 months @ \$300/month	\$ 600.00
core logging facility rental	2 months @ \$150/month	\$ 300.00
Deakin Equipment - field supplies (bags, flagging, tags)		\$ 3,104.03
fuel		\$ 3,874.60
miscellaneous supplies (pickets, chisels, logging supplies, field maps)		\$ 2,078.11
travel expenses (Vancouver-Grand Forks)		\$ 2,000.00
Greyhound - shipping costs (samples, supplies)		<u>\$ 595.72</u>
		\$ 24,870.46

Reporting and Office Supplies

phone/fax	\$ 145.00
report copying and binding	\$ 800.00
drafting & map plotting (Wildrock Resources, L. Caron)	<u>\$ 3,006.48</u>
	\$ 3,951.48

TOTAL EXPENSES: \$185,960.20

All costs include GST.

Costs listed are minimum expenditures.