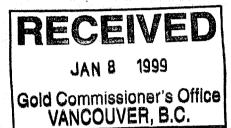
# GEOLOGICAL AND GEOCHEMICAL REPORT ON THE YREKA PROPERTY



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BRITISH COLUMBIA NANAIMO MINING DIVISION 92L/5E LATITUDE 50°27'30''N LONGITUDE 127°34'00''W

FOR

TALLTREE RESOURCES LTD. 1104 – 750 West Pender Street, Vancouver, B.C., V6C 2T8

BY

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GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORT

June 16, 1998

TABLE OF CONTENTS

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8

PAGE

1. INTRODUCTION AND SUMMARY	1
2. LOCATION, TOPOGRAPHY, AND ACCESS	3
3. PROPERTY DESCRIPTION	3
4. HISTORY AND DEVELOPMENT	4
5. REGIONAL GEOLOGY AND METALLOGENY	7
6. PROPERTY GEOLOGY	9
6.1 ROCK UNITS	9
6.2 STRUCTURE	12
6.3 ALTERATION AND MINERALIZATION	12
7. 1998 GEOCHEMISTRY AND SURVEY RESULTS	16
7.1 ROCK GEOCHEMISTRY	16
7.2 SOIL GEOCHEMISTRY	18
8. DISCUSSION	20
9. CONCLUSIONS	21
9A. STATEMENT OF 1998 EXPENSES	22A
10. RECOMMENDATIONS	23
11. PROPOSED BUDGET	24
12. REFERENCES	26
13. CERTIFICATE OF QUALIFICATIONS	28

# FOLLOWING PAGE

#### FIGURE 1 -LOCATION MAP 3 -CLAIM MAP FIGURE 2 FIGURE 3 -REGIONAL GEOLOGY 7 -PROPERTY GEOLOGY AND FIGURE 4 SAMPLE LOCATION MAP 9 FIGURE 5 -DETAILED GEOLOGY 13 - CROSS SECTION 1300 FIGURE 6 14 FIGURE 7 -CLYDE WORKINGS, CROSS SECTION 15 -LOWER BLUE GROUSE, ROCK GEOCHEMISTRY FIGURE 8 16 FIGURE 9 -CLYDE PROSPECT, ROCK GEOCHEMISTRY 16 FIGURE 10 -GRID # 1, SOIL GEOCHEMISTRY, COPPER 19 FIGURE 11 -GRID # 1, SOIL GEOCHEMISTRY, ZINC 19 FIGURE 12 -GRID # 1, SOIL GEOCHEMISTRY, SILVER 19 FIGURE 13 -GRID # 1, SOIL GEOCHEMISTRY, GOLD 19 FIGURE 14 -GRID # 2, SOIL GEOCHEMISTRY, COPPER 19 FIGURE 15 -GRID # 2, SOIL GEOCHEMISTRY, ZINC 19 FIGURE 16 -GRID # 2, SOIL GEOCHEMISTRY, SILVER 19 FIGURE 17 -GRID # 2, SOIL GEOCHEMISTRY, GOLD 19 FIGURE 18 -1999 EXPLORATION TARGETS 22

LIST OF FIGURES

# APPENDIXES

APPENDIX IROCK SAMPLE DESCRIPTIONSAPPENDIX II1998 ASSAY CERTIFICATESAPPENDIX IIIANALYTICAL PROCEDURESAPPENDIX IVSOIL GEOCHEMISTRY STATISTICS

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# INTRODUCTION AND SUMMARY

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This report was prepared at the request of J.Minni, president of Talltree Resources Ltd., 1104 – 750 West Pender Street, Vancouver, B.C., who controls the claims under option.

The CD, BF, Bern, and Micha 5 claims, a contiguous group called "Yreka", are situated on Vancouver Island in southwestern B.C. The property area is underlain by Triassic and Jurassic rock formations of the Insular Belt. The 1995 assessment of mineral potential conducted by B.C. Government Geological Survey Branch rated the area highly in terms of its perceived potential for undiscovered mineral deposits (Massey, 1995). The most significant economic deposit in the area was the Island Copper deposit located 16 kilometers northwest of the Yreka property. The mine was in continuous production from 1971 to 1997 and was the third largest copper mine in Canada.

Copper was discovered on Yreka property at the turn of the century and was the target of intermittent exploration and production until 1979. A total 145,334 tonnes of ore averaging 2.71 percent copper, 31.22 g/t silver and 0.34 g/t gold was mined. Most of the production took place between 1965 and 1967 and was accomplished by a joint venture between Mitsubishi Metal Mining Co. and Yreka Mines Limited. Noranda Explorations Ltd. delineated the deposit by diamond drilling and underground development in 1953-56. An estimated 2.7 million (1998 \$'s) has been spent on exploration since 1953.

Numerous mineral prospects surrounding the old mine workings were discovered during the years of exploration activity. Limited drilling was performed during the seventies to test three of the nine identified prospects.

The following report describes the latest geochemical program performed on the property by Talltree Resources Ltd. The expenditure involved with the new survey and economic evaluation is reported to be minimum \$ 100,000.

The author acknowledges the assistance of C.Dyakowski (P.Geo.) and B.Fitch regarding management of the program, T. Jones, Patric Poissant, Michael Pringle, and Jason Fitch regarding prospecting and sampling.

The results of the preliminary program consisting of soil and rock geochemistry surveys can be summarized as follows:

A total of 8 mineral prospects have been identified within the newly defined exploration perimeter ranging 200 to 1000 metres from the old mine. A few of them contain numerous showings and exploratory adits but none was a past producer.

During the course of 1998 surveys 5 of the 8 prospects were examined and sampled. Two prospects, Clyde and North Arm, revealed particularly promising geological features and returned encouraging assay results. They were selected as targets of the 1999 exploration programs (Figure 18). The mineralization at the Yreka deposit is hosted by a skarn which is 500 metres long and 30-100 metres wide, and was well documented during exploration work in the past. Most of the copper-gold-silver production came from a high-grade sulphide zone of limited size, grading more than 5 % copper ("A" Zone), outlined by 1954 drilling in the vicinity of old exploration adits at elevation 600 meters. Mine workings presently contain large stopes on three sub-levels within the largely mined out deposit. The deposit, delineated at about 1 % copper cut-off, is situated near the hangingwall of the skarn. It is 140 metres long, 100 metres wide and from 5 to 23 metres thick. References to and the descriptions of the Yreka deposit are included in this report for the purpose of the model and exploration guidelines to be applied in evaluating the surrounding prospects.

The southern limit of the main skarn zone, near Clyde prospect, remains open and is situated 300 metres south of the Yreka deposit. It is marked by old exploratory workings on the north bank of Canyon Creek where the initial copper discovery took place at the turn of the century. The workings are presently inaccessible. No production was reported from Clyde workings, however two test shipments were made in 1903 and 1917. The 1954 data indicates that the thickness of the main skarn horizon in this area is at its maximum exceeding 250 meters. After research and preliminary evaluation this year the Clyde prospect was included in the "new exploration perimeter" along with other prospects of economic interest. Apart from old workings this prospect contains mineralized outcrops of significant size, most of which were examined during geochemistry surveys in 1998. Sampling results include a 8.0 metre chip sample which assayed 1.67 % copper, 30.5 g/t silver and 161 ppb gold and 6.0 metre sample assaying 1.95 % copper, 35.7 g/t silver and 294 ppb gold. In addition, a 3.5 metre chip sample taken 120 meters northeast of the Clyde portals produced 2.09 % copper, 31.7 ppm silver and 914 ppb gold (Figure 9). Highly anomalous assays were also obtained locally from rocks surrounding the main skarn. This area was mapped and sampled in 1954 (Noranda), and represents the so called "lower band horizon" which branches off the main zone to the northeast. The 1998 soil geochemistry extended this zone to the northeast for a distance of at least 110 meters along strike for a total length of 300 metres. Indications are that additional important mineralization is present within and near the old Clyde workings and a program of exploratory drilling is recommended (Figure 18).

Other mineral occurrences and showings surrounding the Yreka deposit also have considerable exploration potential. Large gossans and alteration zones at the North Arm prospect indicate a prime target for large tonnage copper deposit. The prospect is located 250 – 400 meters west of the Clyde prospect and has seen limited exploration in the past. The economic potential is substantiated by encouraging grab sample results which produced up to 3.54 % copper with associated low-grade gold (155 ppb) and silver (46.2 g/t). Molybdenite and chalcopyrite were noted in outcrops encompassed by large gossans suggesting that the style of mineralization may be porphyry related. A work program followed by exploratory and definitive drilling is recommended to evaluate the potential of this area (Figure 18).

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In summary numerous prospects within the new exploration perimeter require follow up geochemistry surveys and prospecting. Included are Comstock, Anvil and the area between Upper Blue Grouse and Clyde as shown on included maps. The North Arm and Clyde prospects returned very encouraging results which warrant diamond drilling following detailed definition of the targets.

# 2. LOCATION, ACCESS AND TOPOGRAPHY

The Yreka property is located in the northern part of Vancouver Island, B.C. (Figure 1), centered at approximately 50°27'30''N Lat., 127°34'00''W Long (UTM 5,590,500N and 601,700E).

The nearest settlement is Port Alice, the site of a pulp mill, situated across Neurotsos Inlet, 3.5 km southwest of the property. The inlet is the southeast arm of Quatsino Sound which leads westerly to the Pacific Ocean. Access to a dock on the property is by boat from Juneau Landing near Port Alice or Coal Harbour at Holberg Inlet 12 kilometers southwest of Port Hardy. A 1.9 km reconditioned road leads from the dock to the property workings.

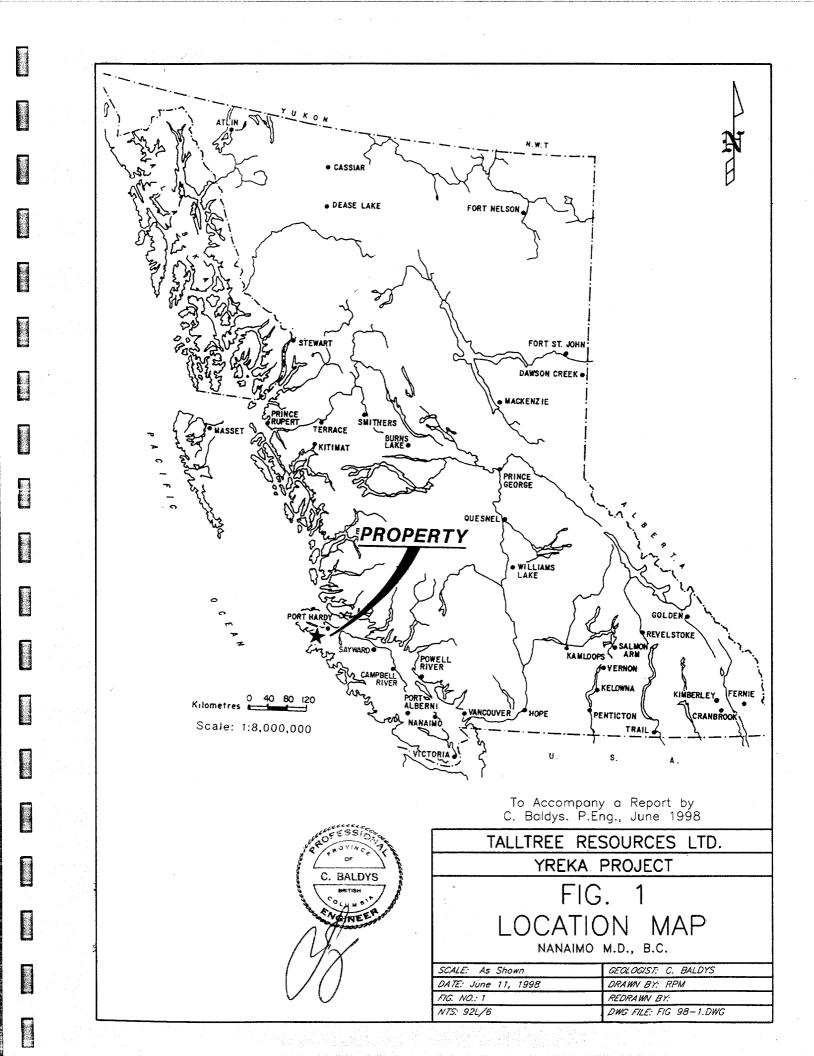
The area on the west side of Vancouver Island has rugged relief and high annual precipitation.

The property extends from tidewater up the mountainside to the west, and covers an area of 675 hectares. Most of it is heavily wooded and accessible by foot. Steep slopes and bedrock cliffs are common and the elevation ranges from 0 to 1128 metres above sea level (Mount Comstock). The highest peak in the area, Mount Wolfenden (1273 m), lies to the south of the claim area only 3 kilometers from the shore of Neroutsos Inlet. Mine workings range in elevation from 325 to 700 meters.

Montane and lowland areas are deeply incised by valleys that drain to Neroutsos Inlet. Major valleys and fjords exploit regional northwest and northeast-striking faults.

# 3. PROPERTY DESCRIPTION

The property consists of 4 continuous mineral claims comprising 27 units located in Nanaimo Mining Division (NTS 92L/5E). The particulars are as follows:



CLAIM NAME	NUMBER OF UNITS	TYPE	RECORD #	REGISTERED OWNER	EXPIRY DATE
CD	16	MGS	353373	C.DYAKOWSKI	JAN. 25, 1999
BF	6	MGS	353335	<b>C.DYAKOWSKI</b>	JAN. 25, 1999
BERN	4	MSG	361294	C.DYAKOWSKI	,
MICHA 5	1	2 POST	361321	C.DYAKOWSKI	,

The claims are currently under option to Talltree Resources Ltd. of Vancouver B.C. The Edison Crown Granted claim (Lot #244) is contained within the Yreka claim group boundary but is not part of the Talltree option (Figure 2).

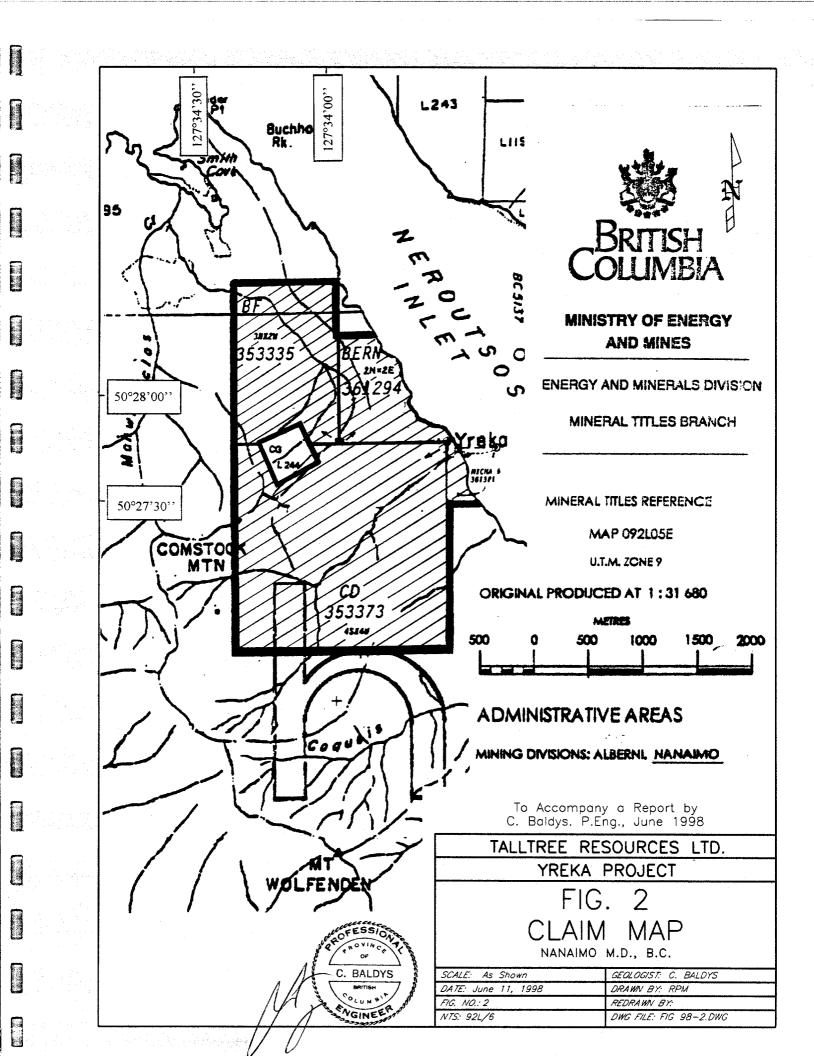
The claim area approximates 675 hectares.

# 4. HISTORY AND DEVELOPMENT

The Yreka copper deposit was discovered at the end of the last century, the first claims being staked in 1898 and 1899. The discovery was quickly followed by a considerable amount of development work, and by 1903 the property was equipped with an aerial tram, a ten-drill air compressor powered by a Pelton wheel, ore bunkers, and a wharf. In that year 2500 tons of copper ore, of unknown grade, was shipped from the Clyde workings on the property. In 1903 the Northwestern Smelting and Refining Company assumed control of the property from Yreka Copper Company, however all work ceased in 1904.

Stimulated by the substantial increase in the price of copper which took place towards the end of the First World War, operations were resumed in 1917 by N.S.Clarke and his associates of Seattle. A new wharf, ore bunkers and aerial tramway were erected in the spring of 1917 and a shipment of 900 tons of 3% copper ore was made, but the property was again abandoned later in the year.

No further work was done on the property until 1952, when it was taken over by Noranda Exploration Company Limited. In that year sampling and prospecting were carried out. In 1953 the company conducted detailed mapping and "X-Ray" diamond drilling. Two short holes were drilled at the portal of Tunnel # 1 on the Clyde workings. One hole intersected 18.5 feet of 1.42 % copper (Figure 7). Underground sampling indicated similar average copper grades in sulphide zones mapped in Tunnels # 1, 2 and 3. Gold assays of up to 0.05 oz/t and silver up to 3.0 oz/t were returned from chip samples of the best mineralized sections. It appears that Noranda performed some mapping and reconnaissance work on a couple other prospects which are now part of the new exploration perimeter. At Upper Blue Grouse it outlined an area of mineralization approximately 34 metres long and 5 - 10 metres wide on a steep northerly facing scarp immediately south of, and across Canyon Creek from, the Clyde prospect. Nine samples



taken later by Green Eagle Mines Ltd. in 1971 averaged 0.42 % copper and 1.30 % zinc (J.R. Poloni, 1971).

More diamond drilling was carried out by Noranda at higher elevation in 1954 followed by underground development on two levels in 1955 and 1956 at the central and northern part of the main skarn zone (Figure 6). No production was reported during this period.

By 1956 a total 40,388 feet of diamond drilling (EX and AX size), 6103 feet of drifting and cross cutting and 1723 feet of raises were completed on the property (J.R. Poloni, 1971).

The property was dormant between 1958 and 1964. In 1965, Minoca Mines Ltd., jointly owned by Mitsubishi Metal Mining Co. Ltd (49%) and Yreka Mines Ltd. (51%), prepared the property for production based on the ore resource figure of 154,221 tonnes grading 3.7% copper and 41.15 g/t silver. This figure was classified as "measured geological resource", based on Noranda's exploration work from 1953 to 1956. An additional indicated resource was estimated at 45,359 tonnes of 2.6 percent copper and 34.29 g/t silver (MINFILE reprint from Northern Miner, 1965).

Production between the commencement of milling in November, 1965 and cessation of operations at the beginning of October 1967 was 133,572 tonnes of ore, grading 2.9% copper, 32.79 g/t silver and 0.36 g/t gold (MINFILE, 1989). The majority of ore was extracted from the 15 metre wide, 49 metre long and 60 metre high "A" zone (Figure 6). The zone was mined by stoping on 3 sub-levels.

No production from the prospects surrounding the Yreka deposit is reported. Exploration adits are situated at the Edison and Superior, to the north of, and at the Clyde, to the south of the old mine. Historical designations and names like "tunnel portal" were used in the drawings of this report to avoid confusion even though all of them are adits. Trenches and/or open cuts were reported to exist in most prospects.

In 1970 the property was optioned by Green Eagle Mines Ltd from K.Akre. The company conducted airborne electromagnetic and magnetometer surveys over the main part of the property as well as ground geophysical and geochemical surveys over the Tuscarora and Upper Blue Grouse areas (Figure 4). In addition, reconnaissance stream sediment sampling was carried along the creeks to the south and north of Canyon Creek. Copper, zinc and molybdenum anomalies were located in creeks draining the slopes of Upper and Lower Blue Grouse prospects to the south of Canyon Creek.

In 1972 ISO Explorations Ltd., who optioned the property from Green Eagle Mines Ltd., conducted geochemical and geophysical surveys on nine prospective areas in the vicinity of the Yreka Mine workings. At the time the claims extended most of the way to Mount Wolfenden and ISO carried out a stream silt survey of the Coquis Creek and creeks north and east of Mount Wolfenden (Figure 2). Anomalous zinc results were obtained but no follow-up surveys were conducted.

The main focus of ISO's work was the targets surrounding the Yreka deposit. It did however, include the northern (Superior) and the southern (Clyde) limits of the skarn horizon (Figure 4). A majority of the target areas were surveyed by MAG, VLF, self potential and soil geochemistry surveys. Two of the nine areas, Comstock-Edison and North Arm, were tested by diamond drilling the same year. A total of 1,844 feet of drilling at Comstock-Edison was performed to test two copper-silver showings discovered in 1971 and 1972. The down dip extension of one of the showings (No.8) was intersected. The best assay yielded 1.92 % copper across 5.9 metres. Two holes drilled in the North Arm Creek were aimed at testing a VLF conductor. One hole was lost in bad ground at 46 feet. The second hole was drilled to 116 feet of length. No mineralization, only pyrite, was intersected.

The 1972 report concluded that the Superior, Comstock-Edison and Lower Blue Grouse areas warranted further work based on survey results. (R.V. Crossley). It appears that this conclusion was based solely on geophysical results. There is no reference to rock geochemistry results and anomalous soil results were discounted unless they correlated with geophysical anomalies. As a result the North Arm prospect was temporarily "condemned" by unsuccessful drilling of a VLF geophysical anomaly and the Anvil prospect was excluded due to the absence of a significant geophysical anomaly. It appears that most grid survey areas were too small to produce significant anomalies. On balance, however, the 1972 work produced useful exploration data with numerous clues for further exploration.

In 1978 the mineral title to the property was registered in the name of Uke Resources Limited. In 1979 the company drilled 3 diamond holes from one collar location at the Tuscarora prospect. A total of 300 feet was drilled. The assessment report filed with the Ministry of Mines and Petroleum Resources contains no reference to assay results.

Outside the current perimeter of the Yreka property, exploration activity continued throughout the eighties. In 1988 Teck Exploration Limited carried out a regional stream geochemistry survey in the area between Klaskino Inlet and Neourotsos Inlet (Figure 3). Anomalous gold and zinc values obtained from the drainage's southwest of Mount Wolfenden were followed by more detailed moss mat silt sampling and reconnaissance geochemical soil sampling lines. Consistent anomalous values with strong direct correlation between zinc and gold were obtained from the northeastern slope of Mount Wolfenden (Figure 2). A rock chip sample taken in this area from a 0.5 meter vein mineralized with pyrite and sphalerite assayed 1350 ppb gold and 7.0 % zinc.

In March and May 1998 Talltree Resources Ltd. conducted an exploration program aimed at evaluating the economic potential of the property. Initial examination was done by using boat access from Coal Harbour located 15 kilometres northeast of the property. Subsequently a camp with a 5 man crew was established at the property to conduct detailed work on two selected exploration targets. A total of 135 man-days were spent on the property. The exploration work consisted of rock and soil geochemistry surveys, prospecting and line cutting. A total of 83 rock samples and 285 soil samples were collected from the property area. In addition 1.8 kilometers of old access road was upgraded by an excavator. Work included new water bars, cross ditches and repairing of a short washed-out section. The mechanical work was preceded by field assessment and recommendations made by S.Petersen, P.Eng on March 6, 1998.

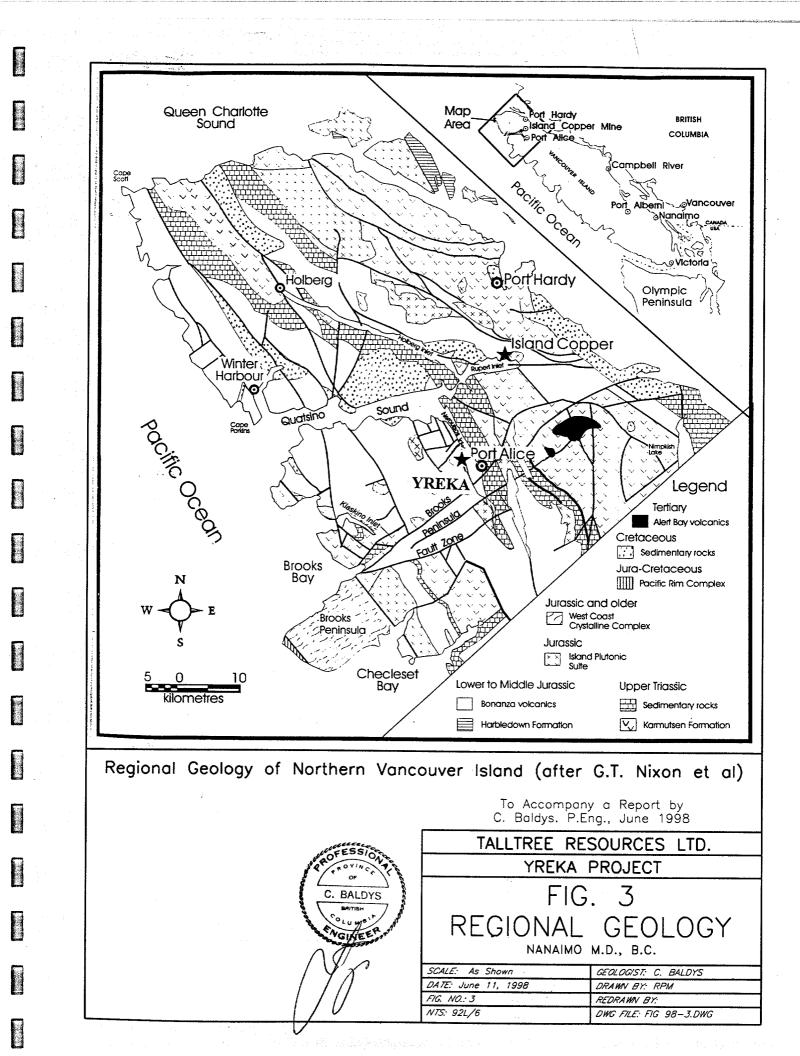
Two areas were selected for detailed sampling and examination: Lower Blue Grouse and Clyde (Figure 4). Blue Grouse is an old prospect with showings comprising trenches and open cuts. Further work was recommended on it in 1972 based on encouraging geochemistry and geophysical results (R.V. Crosley,1972). The Clyde area surrounds old underground exploratory workings which have seen little surveying since the 1950's. It is situated 300 metres south of the former Yreka Mine. Geological evidence suggests that the skarn horizon of the main zone reaches its greatest thickness in this area (Figure 5 and 7). A part of the footwall zone branches off and traverses the steep hill to the northeast (Figure 9). According to J.R. Billingsley, former General Manager of the Yreka Mine, it was known in the past as the "lower skarn band" carrying some economic potential, however it had not been explored to date (personal communications, 1998).

# 5. REGIONAL GEOLOGY AND METALLOGENY

Most of Vancouver Island is underlain by rocks of the Insular Belt of the Canadian Cordillera. In recent years the lower part of the Insular Belt stratigraphy, including the Paleozoic Sicker Group, Triassic Vancouver Group and Jurassic Bonanza Group, has been recognized as part of an allochthonous terrane derived from more southerly latitudes (A. Southerland Brown, A. Yorath, 1985). This major terrane has been named "Wrangellia". It comprises an ensimatic island arc sequence which ascended from the zone of partial melting localized at the intersection of the eastward dipping subduction zone with the upper mantle at a depth of approximately 100 km. It was accreted to the North American continent in the Cretaceous, along a suture crossing the coast Plutonic Complex at an acute angle.

The magmatic history of Vancouver Island can be simplified into four major episodes: (1) formation of the Paleozoic volcanic arc of the Sicker Group (2) extrusion of the Triassic tholeitic basalts of the Karmutsen Formation (3) development of the Jurassic volcanic arc of the Bonanza Group and related Island Intrusions (Island Plutonic Suite), and (4) Tertiary volcanic and plutonic activity including intrusions of the Tertiary Tofino suite.

The generalized geology of northern Vancouver Island is shown on Figure 3. The oldest rocks encountered in the Quatsino Sound area belong to the Upper Triassic Vancouver Group and comprise tholeitic flood basalts (Karmutsen Formation) at the base, overlain by thinly bedded to massive limestone (Quatsino Formation) and intercalated marine shale, siltstone and impure limestone (Parson Bay Formation). Above it, the Lower to



Middle Jurassic Bonanza Group is composed of mafic to felsic volcanic and lesser intercalated sedimentary rocks laid down in both submarine and subaerial environments. The Bonanza Group is unconformably overlain by marine to non-marine Upper Jurassic (?) to Cretaceous clastic sequences and localized Tertiary volcanic rocks. The Mesozoic strata are intruded by Lower to Middle Jurassic granitoids of the Island Plutonic Suite, and mafic to felsic dykes and sills of Karmutsen, Bonanza and Tertiary age.

With reference to "Metallogeny", Vancouver Island has a long history of mineral exploration and mining dating from the discovery of coal near Fort Rupert in 1848. Over 1300 mineral occurrences are recorded in the MINFILE database. At present, three mines are operating on Vancouver Island – Myra Falls (Cu, Zn, Ag, Au, Pb), Benson Lake (limestone) and Quinsam (coal). The Island Copper mine is undergoing reclamation after 26 years of continuous production.

The island-arc setting of the Insular Belt played a role in creating a regional scale, oreforming phenomena. The timing of mineralization was determined by the large scale structural components which also reflect on the geographic distribution of mineral deposits. These components include Early-Jurassic eastward plunging subduction, eastnortheast contraction and deformation, accretion, southwest verging folding, magmatic activity and mountain building.

The first ore-forming episode occurred very early in the geological time scale during Paleozoic. It is represented by the H-W massive sulphide deposit hosted by Sicker Group sediments. Located in the central part of the island, mineralization was exposed on surface during the structural uplift of the Buttle Lake area. The deposit, discovered in 1979, added a significant base and precious metal resource to previously existing ore bodies at Myra Falls. Tracks of land underlain by the Sicker Group – the oldest stratigraphic unit on the Island – have long been the highest ranking in terms of mineral potential (N.W. Massey, 1995). As in other regions of the "Pacific Ring of Fire" they are remnants of the oldest and probably the most productive of volcanic arcs.

The second metallogenic episode is related to volcanic and plutonic activity during Jurassic time. In northern Vancouver Island the subvolcanic intrusions which are feeders for dacites and ryodacites forming the upper part of Bonanza Group stratigraphy have significant economic implications. At Island Copper a wide quartz-feldspar porphyry dyke intrudes the volcanic sequence. Hydrothermal convection cells and brecciation which developed subsequently around the feeder zone produced a large coppermolybdenum-gold porphyry deposit. The mine produced copper concentrate containing 1.3 billion kilograms of copper, 31 million kilograms of molybdenum, 31.7 million grams of gold, 336 million grams of silver and 27,000 kilograms of rhenium.

The most extensive recent exploration has been carried out north of Holberg Inlet and west of the Island Copper Mine by BHP Minerals Limited and associated companies (Figure 3). A belt of altered Bonanza rocks with high-level advanced argillic alteration represents a target in a 'transitional' setting between porphyry copper and epithermal environments (Panteleyev et al., 1995).

Granitoids of the Island Plutonic Suite span a range from Early Jurassic to Early Cretaceous. Propylitic and argillic alteration assemblages and skarn mineralization are locally well developed. Apart from the Island Copper mine on Rupert Inlet numerous other mineral prospects in the Quatsino Sound are hosted by Bonanza Group and coeval intrusions. One of the examples is Yreka, a former small producer of copper, gold and silver and the subject of this report. It is surrounded locally by nine mineral prospects most of which have not been tested by drilling.

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Most of the areas in northern Vancouver Island have poorer accessibility and have been less well explored in the past. Latest research by the provincial geological survey concludes that they are underlain by geology that is very favorable for the discovery of mineral resources in the future (N.W. Massey, 1995).

### 6. PROPERTY GEOLOGY

# 6.1 GEOLOGICAL UNITS

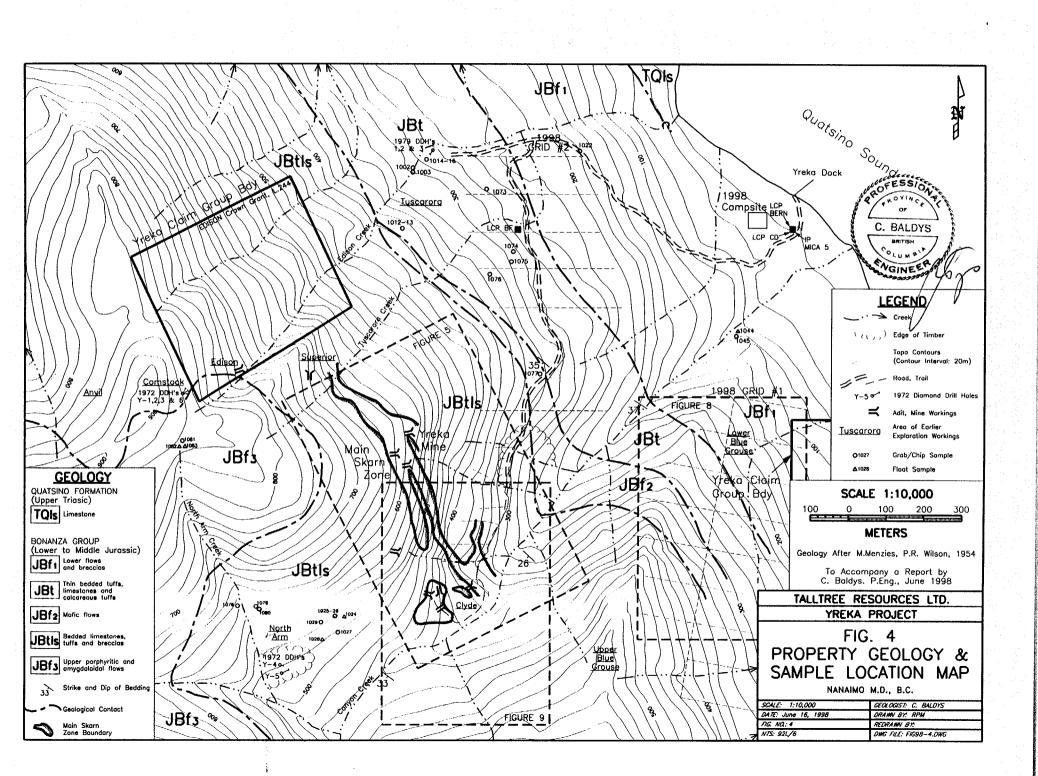
The Lower to Middle Jurassic Bonanza Group is the dominant stratigraphic component of the Yreka property. It is represented by massive and esitic lavas, tuffs and breccias interbedded with marine sediments.

The rocks strike northwest and dip southwesterly into the mountainside at 35 degrees. The bedded sequences are intruded by dykes and sills of felsic porphyries and quartz-diorite which are probably comagmatic with the Upper Bonanza Group volcanics.

The property geology map (Figure 4) was compiled from historical Assessment Reports, property files of Noranda Explorations Ltd., and a Master's Thesis by P.R. Wilson. The lithological units are subdivided below in detail based on the above references and the 1998 property evaluation. The latest research by Jeletzky (1976) and Nixon et. al. (1995) was used for stratigraphy.

Detailed geology of the Yreka deposit (Figure 5) is based on work performed by M.M. Menzies of Noranda Explorations in 1954. The drawing is a reduced printout of a digitized geology map. The original, hand drawn and color coded version of this map in 1 : 600 scale is available at the library of Ministry of Mines in Victoria.

Based on all the above references the geology of Yreka Property can be described as follows:



# Quatsino Formation (Upper Triassic)

Limestone: (TQls)

Beds of white to grey crystalline limestone of the Quatsino Formation underlie the Atkins Cove area and a few other locations near the shoreline.

# Bonanza Group (Lower to Middle Jurassic)

# Lower flows and breccias: (JBf1)

The lowermost sequence of the Bonanza Group is well exposed on the access road between elevations 60 and 200 metres. It consists mainly of dark green, massive flows and breccias of andesitic to basaltic composition. A distinct fragmental unit marks the middle part of this series. It consists of subangular fragments ranging to 5 cm in a fine-grained matrix.

# Thin bedded tuffs. limestones and limy tuffs: (JBt)

Overlying the lower flow sequence are bedded tuffs and limestones. The bedding is not easily distinguishable. The dominant petrographic type is a calcareous crystal to lithic tuff (or tuffaceus wacke ?). The clastic rocks are locally interbedded with pure and impure limestone beds and argillites. Grey limestone containing brachiopods was encountered by P.R Wilson at elev. 200 metres to the north of Canyon Creek. The combined thickness of this sequence is approximately 150 metres. An intercept of mineralized porphyritic rhyolite in hole 79 - 1 at the Tuscarora prospect at 240 metres elevation has not been mapped to date but appears to occupy the central part of this sequence.

# Mafic Flow: (JBf2)

A prominent massive and esitic ? flow traverses the mountainside at 300 metres elevation. The band strikes northwest and the thickness ranges from 30 to 100 metres. Due to common chlorite-carbonate-epidote alteration the unit was formerly referred to as "greenstone". It closely resembles the massive flows within the lowermost part of the Bonanza Group.

# Bedded limestones, tuffs and breccias: (JBtls)

These rocks comprise a well bedded sequence reaching thickness' of 600 to 700 metres. They strike northwesterly and dip southwesterly at 30 to 40°. The lower part consists of thin-bedded limestone with varying amount of tuffaceous material. Upwards in the stratigraphy the lime content appears to decrease rapidly and the rocks become harder and finer grained. The overall colour changes from dark grey to dark green. Some good exposures along Canyon Creek show the change from calcareous tuff varieties to thin-bedded, cherty-looking types alternating with soft, limy beds and locally pyroclastic ? breccias. A well developed fragmental stratum over 1 metre thick is exposed in the creek bed near an old Pelton wheel at an elevation of 300 metres. Here the fragments, which are dark green and very fine grained, are angular and average 1 centimeter across,

with some as much as 15 centimeters in width. The upper part consists of very thin-bedded, mostly very fine-grained hard (flinty) tuffs with interbedded lenses of limestone. In contrast to the rocks in the lower parts of the stratigraphy, the tuffaceous units are in many places rusty weathering probably due to presence of pyrrhotite.

# Upper porphyritic and amygdaloidal flows: (JBf3)

Stratigraphically overlying the bedded sequence is a series of porphyritic and amygdaloidal flows with minor interbedded breccias and tuffs. They are well exposed on the cliffs between the south and west forks of Canyon Creek around elevations approximating 600 metres and between North Arm Creek and the west branches at elevations of about 900 metres. The contact with the underlying bedded members appears to be an unconformity. Sporadic attitude measurements taken from flows indicate the same strike and dip as the underlying tuffaceous beds.

# Island Plutonic Suite (Early to Middle Jurassic)

No large bodies of intrusive rocks have been mapped on the property. However, dykes and sills of various composition and textures are common. P.R. Wilson noted that "a small batholith or stock of quartz-diorite" had been reported on the property by V. Dolmage of GSC in 1918. He suggested that "this may have been one of the larger quartz-feldspar intrusives outcropping along the hanging wall of the main skarn zone" (P.R.Wilson, 1954).

The intrusives described below have ages assigned on the basis of published information available for Quatsino - San Joseph and Mahatta Creek Map Areas (Nixon, G.T. et al. 1993, 1995).

#### Felsic Porpyritic Intrusives: (JIp)

A large number of small quartz-feldspar and feldspar porphyry intrusions, usually one to several metres in thickness, were noted in the main skarn zone during the course of mapping and diamond drilling in the past (Figure 5). Many appear to be sill-like, and conform to the existing bedding in the tuffs, or if in skarn, to the pre-existing bedding. Others, however, definitely cut across the strata. The felsic intrusives contain phenocrysts of plagioclase and hornblende in an aphanitic groundmass. To the west of Clyde workings felsic dykes of medium grained, locally quartz-phyric texture were encountered during 1998 prospecting traverses. They trend in a westerly direction. Abundant intrusive float was found in this area and extends to North Arm Creek.

#### Quartz-Diorite Dykes:

Dykes of quartz-diorite porphyry were noted at higher elevations including the area of the main skarn zone. About 300 metres west of the skarn zone at an elevation of 700 metres, a light coloured, medium to fine-grained dyke cuts

tuffaceous beds. It is approximately 1 metre thick, is steeply dipping and was traced along strike for 10 metres.

#### **Cretaceous - Tertiary ? Intrusives**

#### Basalt and Diabase Dykes:

Basalt dykes have been encountered in a few locations at the headwaters of North Arm Creek. One outcrop which forms 30 metre high bluffs at 650 metres elevation is marked by heavy iron staining. Although the textures and composition resemble basic flows of the upper flow member, it is likely an intrusive (P.R.Wilson, 1955). The basalts are green aphanitic rocks composed of plagioclase, interstitial pyroxene and magnetite. They range from approximately 10 centimetres to 6 metres in width. The intrusive basalts were distinguished from flows microscopically based on the presence of small amounts of hornblende, strong zoning of feldspar phenocrysts, and reaction rims around quartz crystals. A diabase dyke cuts a basalt sill in the vicinity of the rock slide located at the upper end of the access road. The diabase is dark grey and fine grained, and is composed of plagioclase feldspar, augite and magnetite. The texture is ophitic. The dykes are 1 to 3 metres thick.

# 6.2 STRUCTURE

Strikes and dips of the volcanic and sedimentary rock series vary little throughout the mapped area. The structure is essentially homoclinal. According to P.R.Wilson there does not appear to be any repetition of beds in a southwesterly direction up the mountainside. Uncommon significant deviation from prevailing dips of 35° might be explained as being due to minor warping, dragfolding or possibly drag in the vicinity of faults.

No major displacement of the bedded rocks has been observed. However, faulting of some importance has taken place in the vicinity of the Yreka skarn. One of these faults is exposed in No.1 Tunnel (Figure 5). It strikes 045° and is dipping 70° southwest. To the northeast the fault probably intersects Canyon Creek at a 45° angle along a small gulch below a waterfall. There is no evidence of extension of the fault on the south side of the creek (P.R. Wilson, 1955).

Other shear directions are north-northeasterly (025° - 040°), northwesterly (320° - 330°) and west-northwesterly (280°). Deeply incised creeks of Tuscarora, Edison and Third Creek are probably exploiting the northeasterly shears. North Arm Creek follows a northwesterly fault dipping at 70° to the southwest.

# 6.3 ALTERATION AND MINERALIZATION

Alteration is widespread and pervasive throughout the entire property. The presence of ubiquitous epidote, chlorite, sericite and calcite may be attributed to

low grade regional metamorphism. Actinolite, biotite or phlogopite and quartz are quite common also and would more likely indicate the extent of retrograde alteration related to skarns. In a number of places, such as Lower Blue Grouse, North Arm and Tuscarora, this alteration is associated with strong sulphide mineralization while no evidence of garnet skarn exists locally (Appendix I).

A prominent skarn zone hosts the Yreka deposit. The skarn occupies the northwest side of Canyon Creek in the central part of the upper bedded member (JBtls). Most of the past exploration was focused on this area. It is roughly 500 metres long and 30 to 70 ? metres wide. It strikes in a northwesterly direction and appears to conform to the bedding (Figure 6). The original rock, calcareous tuff, has been more or less converted to a medium to coarse grained andradite garnet with variable amounts of calcite, biotite, chlorite, hedenbergite, epidote, quartz, magnetite and sulphides.

Limestone beds form lenses within the upper bedded member and in many cases do not appear to have been replaced by skarn. Some silicate metasomatism is evident locally. Recrystalization is common. "Silicate rock" was a term used by M.M.Menzies to describe an altered unit of an unknown protolith.

According to W.C. Robinson the distribution of sulphides appears to be controlled by two fracture systems (Ministry of Mines and Petroleum Resources Report, 1967). Mining operations in the sixties were focused on high grade ore shoots which tend to lie along faults striking 040° and dipping 65° southeast. Some mineralization was reported to be related to the set of fractures striking 330° and dipping 80° northeast.

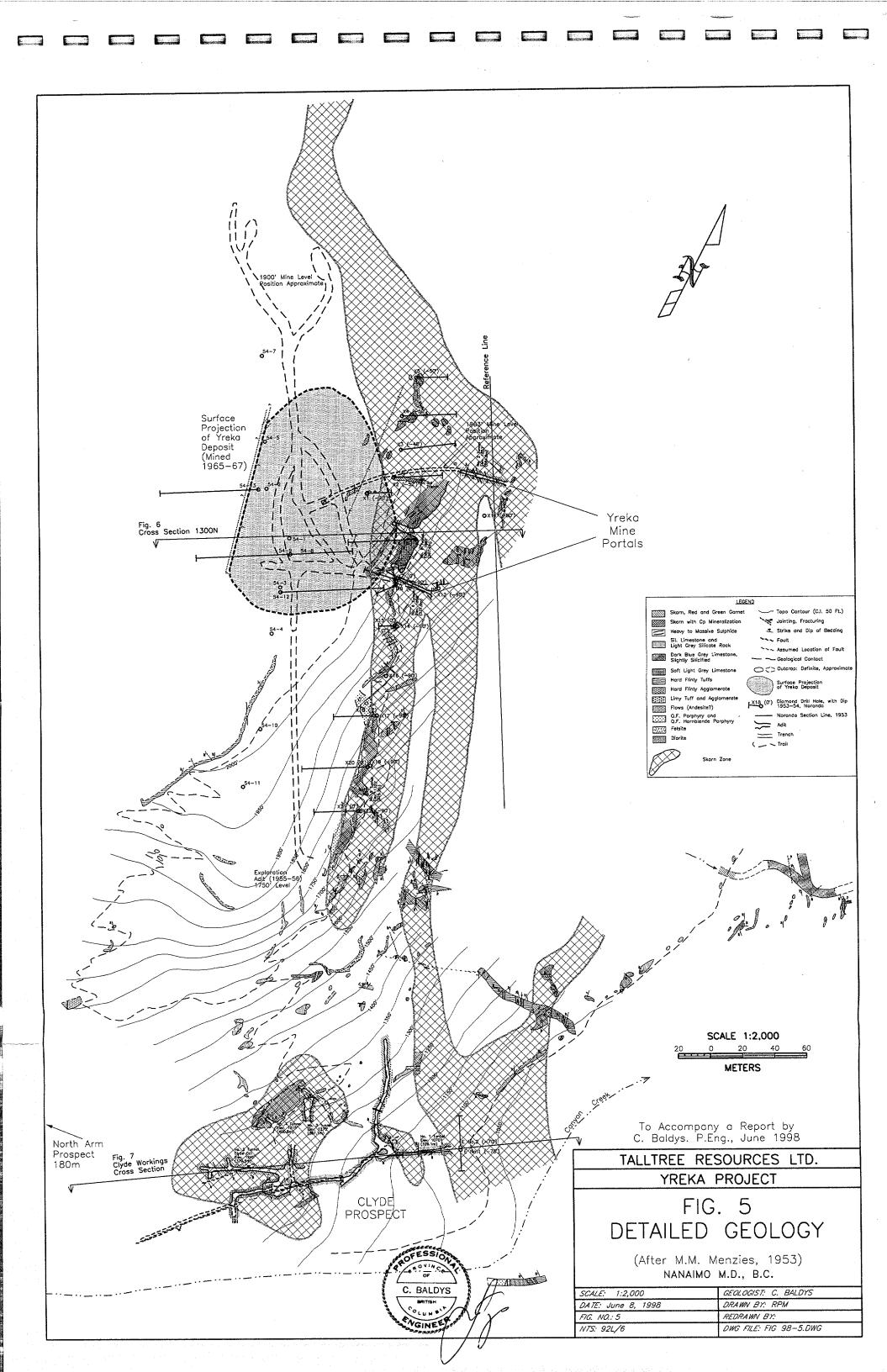
Primary mineralization consists of sulphides in the following order of abundance: pyrrhotite, chalcopyrite, pyrite, sphalerite, cubanite, bornite, and galena.

Pyrrhotite is widespread throughout the property and locally forms massive replacements generally devoid of other sulphides.

Sphalerite and galena were reported in 1953 in skarn at Edison Creek.

Sphalerite is present in very small amounts in the Yreka skarn zone. It is much more common in the surrounding prospects where it may form massive mineralization with minor associated chalcopyrite. Samples containing sphalerite were collected at Lower and Upper Blue Grouse, Tuscarora and Comstock prospects.

Cubanite ( $Cu_2Fe_4S_6$ ) was identified in polished sections of samples collected at the northern end of the main skarn zone by P.R.Wilson in 1954. It is present as small, irregular parallel laths in some of the chalcopyrite grains.



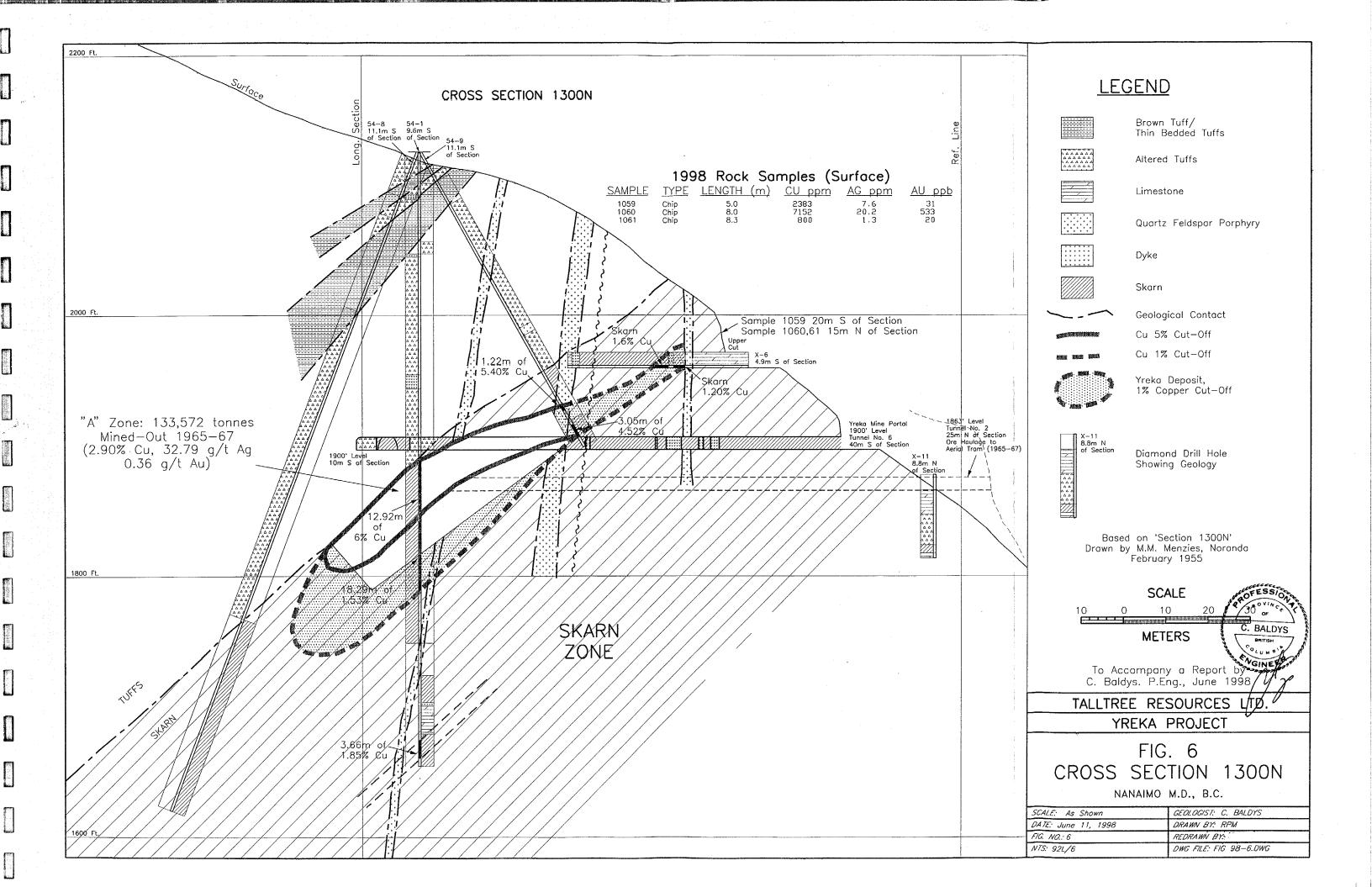
Within the main skarn zone area pyrrhotite accompanies chalcopyrite as the main sulphide minerals. They form disseminations, irregular pods and replacements near the hangingwall of the skarn zone with chalcopyrite ranging from trace to several percent (Figure 6). Examination of showings and dumps indicate that massive chalcopyrite is not uncommon but generally very localized. Drill intersections of continuous chalcopyrite bearing mineralization rarely exceeded 5% copper content. The distribution of chalcopyrite appears to be closely linked to enrichment in gold and silver on the property (see paragraph 8).

The majority of high grade chalcopyrite mineralization is within a 15 metre wide, 49 metre long and 60 metre high "A" zone. It was delineated during 1954 drilling by Noranda (Figure 6). It was an oval-shaped body steeply dipping to the southwest. The average grade of the mill feed produced from this zone in the sixties was 2.9 % copper. This was lower than the 3.7 % average assigned to the resource calculated from drill sections and underground sampling by Noranda (J.R.Billingsley, personal communication).

There are significant volumes of skarn carrying minor chalcopyrite mineralization. References to chalcopyrite in drill core ranging from "trace" through "slightly mineralized" up to "locally fair" were made on 1954 cross sections. These zones were not assayed routinely. The limit of low grade copper mineralization on longitudinal section (not included in this report) may be interpreted as the boundary between "skarn" and "dark skarn".

It appears that the 1954 drilling program was designed with the purpose of testing the hangingwall part of the skarn horizon as none of the eleven long holes reached the footwall (Figure 6). As a result the maximum thickness of skarn can only be estimated based on surface mapping where it is best exposed - ie. near Clyde workings. Assuming the stratiform shape and dip of 30° to the southwest the composite true width of the horizon could reach 250 metres. This appears to be substantiated by the 1954 underground mapping (Figure 7). It is significantly thicker than the estimated (70 - 100 m) width near the old mine making Clyde prospect a larger potential target with economic mineralization similar to the Yreka deposit.

Figure 6 is one of the Noranda's cross sections with grade distribution and interpretation in its original form. It was selected from a total of 10 sections filed at the Ministry of Mines in Victoria (see references). The section shows the "blind" nature of the high-grade mineralization. Various tuff types in the hangingwall of skarn were combined into one unit called "Altered Tuff". The approximate location of 1965-67 mining stopes was added to the drawings for the purpose of this report. It should be emphasized that the former mine operator, Minoca Mines Ltd., did not conduct exploration drilling prior to or during production.



Detailed examination of the main skarn zone in the Clyde area by the author revealed that the majority of the skarn outcrops contain small amounts of disseminated chalcopyrite. Altered tuffs surrounding the skarn commonly carry minor chalcopyrite as well. Sparsely disseminated, macroscopic chalcopyrite produces copper grades in a range of 0.05 to 0.10 %. Three locations contained strong, 3-5 % chalcopyrite mineralization over significant length of up to 8 metres (Figure 9). Chip samples from these locations contained encouraging gold

Based on a detailed geology map of the main skarn, the above mineralization is localized within the footwall zone of the skarn. It branches off the main horizon near the Clyde workings. Surveys in 1998 indicate a total strike length of 300 metres in a northeasterly direction. The footwall marks the southeasterly limit of the exploration target. There are indications of it as far as the end of access road, thus approaching the old mine to within a distance of 200 metres. To the south the zone is delimited by Canyon Creek beyond which no detailed mapping was done. Past prospecting suggests the presence of localized mineralization but no data is available.

Surface evaluation of the Clyde prospect revealed that the semi-massive and massive type of mineralization is very localized. Underground work in the area was designed to test the continuity of 4 surface showings. It was the main target of exploration at the turn of the century. Detailed sampling and mapping information from 1954 indicates grades averaging 1 - 2 % copper across sulphide zones measuring up to 12 x 30 meters on level plan.

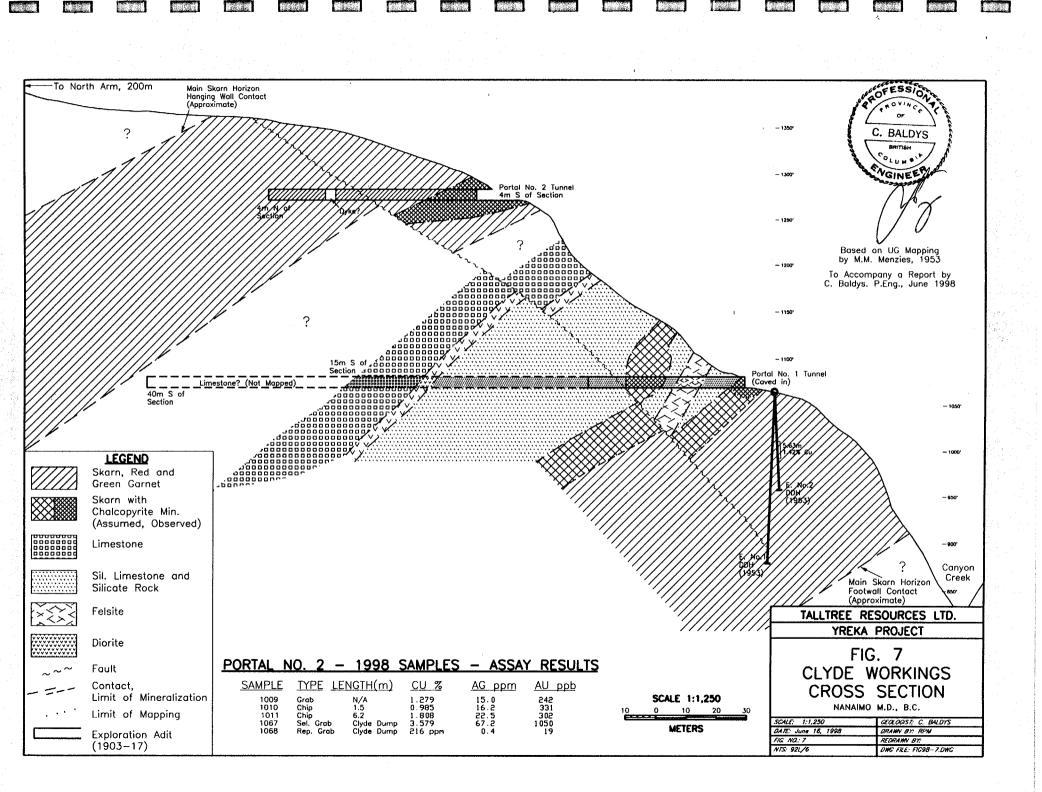
During the1998 traverses two chalcopyrite-mineralized outcrops were located 250 and 400 metres west of the Clyde workings. The prospect is known as North Arm Creek. In 1972 a limited area along the creek was tested by soil geochemistry and geophysics. The surveys were followed by unsuccessful drilling of a VLF anomaly.

One of the occurrences in question on the North Arm prospect also contained a significant amount of molybdenite. This mineral was also reported in the area in 1972. At the location sampled in 1998 molybdenite appears to have selectively replaced large "pebbly" fragments in tuffs. This mineralization is associated with disseminated chalcopyrite in the matrix. The outcrop is within a large gossan zone situated outside the area of 1972 surveying and drilling and appears a worthwhile target.

Examination of a few narrow dykes on the property revealed potassic alteration marked by the presence of minor sericite accompanied by secondary quartz and pyrite.

Mineralization and alteration at Blue Grouse and Tuscarora are associated with notheasterly trending shears and fracture zones in tuffs and flows. Silicification

and silver values (see paragraph 7.1).



and carbonate alteration is widespread. Skarn minerals are absent. At Tuscarora massive porphyritic rhyolite hosts sulphide mineralization in highly silicified and breccia-textured zones as reported in a drill hole log. The sulphides are mainly pyrrhotite and sphalerite. Shear controlled sphalerite mineralization with minor copper content manifests itself locally in creek bedrock marked by silicification and iron-oxide staining of flows.

Massive sulphides were sampled in one of the three old trenches at Blue Grouse. Low grade copper mineralization sampled at several locations probably follows the crest of the ridge between Upper and Lower Blue Grouse based on soil geochemistry results. No prospecting was done along the ridge at higher elevations during the 1998 program.

Minor copper sulphides were found in a partly exposed gossan at the western end of line 100 S. Replacement of calcareous tuff is masked by strong oxidation of iron sulphides. Alteration appears to be following the bedding orientation of  $152^{\circ}/50^{\circ}/NW$ .

# 7. 1998 GEOCHEMISTRY SURVEY RESULTS

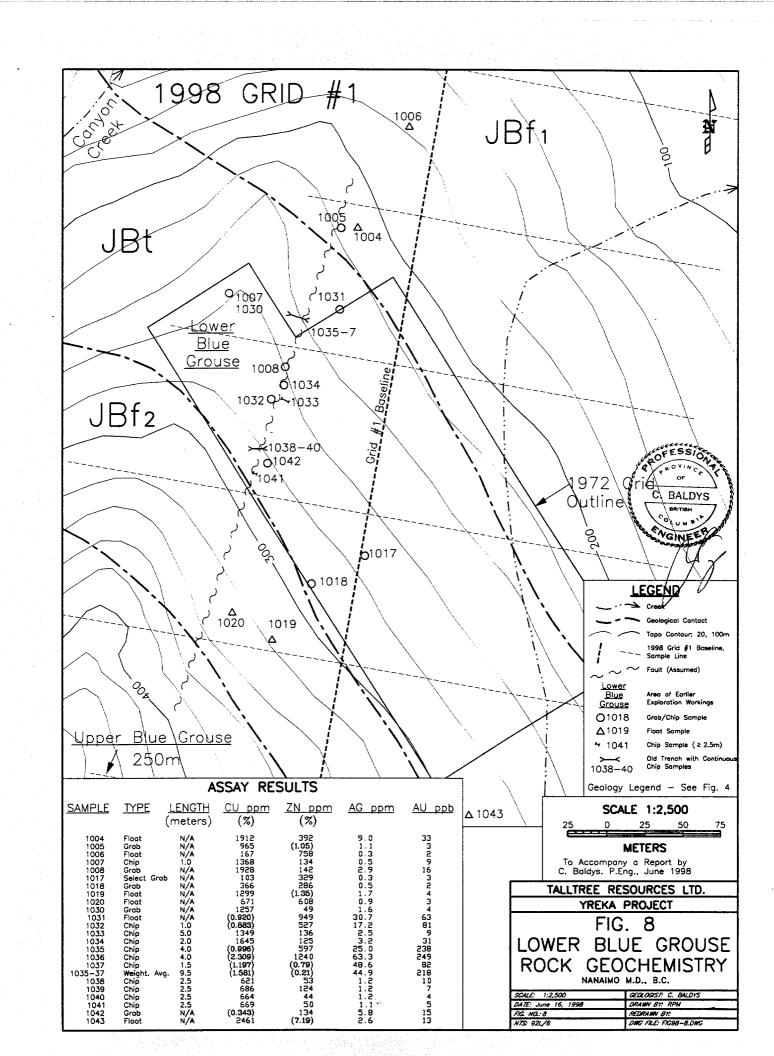
# 7.1 ROCK GEOCHEMISTRY RESULTS

A total of 83 rock samples were collected on the property. It includes three samples collected from outcrops at the old Yreka Mine portals and one from the dump of nearby 1750' Level Exploration Adit (Figure 6 and 9).

All of the remaining 79 samples were taken from an area situated 200 to 1000 metres from the old mine workings marking the identified area of interest and referred to as "new exploration perimeter" (Figures 4, 8 and 9). Four samples were from dumps of inaccessible exploratory adits at the Clyde prospect, 67 were chip and grab samples from outcrops including old open cuts, exploratory adit portals and trenches. Eleven samples were from elluvial and colluvial float boulders. Field descriptions of all rock samples collected are listed in Appendix 1.

The assays from surface exposures of mineralized skarn at the old mine did not exceed 0.7 % copper, 533 ppb gold and 20.2 g/t silver (8.0 metre chip sample). This confirms that the deposit, particularly the high-grade part outlined in 1954 (5 % copper cut-off), represents a "blind" zone of mineralization (Figure 6).

From a total of 79 samples collected within the new exploration perimeter, 36 contained more than 0.20 % copper including 19 that assayed above 1.0 % copper. Copper assays ranged from 59 to 1929 ppm in altered intrusives. 178 ppm to 2.06 % in skarn and 91 ppm to 3.32 % in altered volcanics and sediments (Figures 8 and 9 and Appendix I).



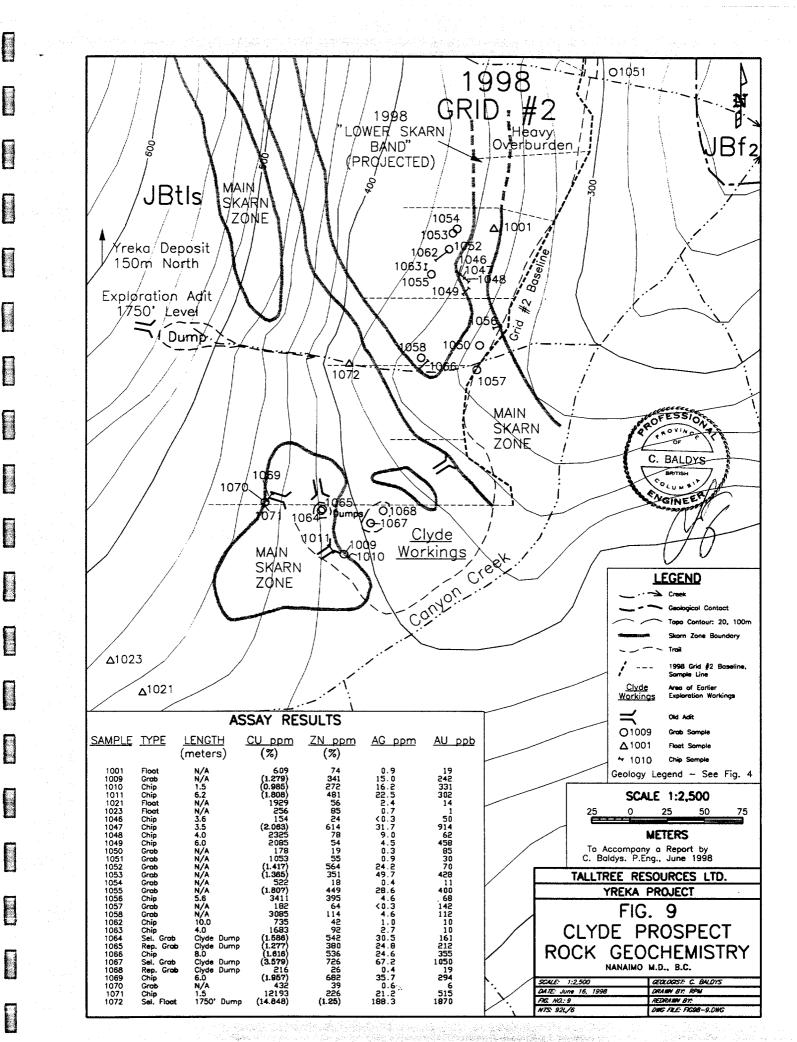
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At the southern limit of the main skarn zone near the Clyde prospect, 20 samples showed copper values exceeding 0.20 %. Nine of these were chip samples taken over lengths ranging from 1.5 to 8.0 metres (Figure 9). Among these, the highest copper content was in a 3.5 metre chip at location 1000S/25W. It returned 2.06 % copper, 31.7 g/t silver and 914 ppb gold. This sample represents the highest precious metal content obtained from chip samples on the property in 1998.

The highest gold assay within the new exploration perimeter came from a selected high-grade sample of a dump near Clyde workings (Tunnel No 2). It contained chalcopyrite in excess of 25%. The assay returned 1050 ppb gold and 67.2 g/t silver. It can be compared with the selected massive chalcopyrite sample originating from the old mine area (1750 ' Level Exploration Adit) which assayed 1870 ppb gold and 188.3 g/t silver.

Zinc content within the main skarn zone was low and did not show any significant increase in massive sulphide zones. The 1998 assays did not exceed 614 ppm zinc in the proposed new exploration perimeter and the mine itself has little sphalerite reported. Higher zinc values exceeding 1000 ppm were obtained from soils at Clyde prospect which could be attributed to high geochemical mobility of this metal. However, the prospects surrounding the skarn contain zinc showings some distance away from the Yreka deposit and the copper skarn host. These occurrences appear to be structurally controlled and are situated at least 500 metres from the old mine.

Copper content in rocks at the Lower Blue Grouse prospect ranged from 103 ppm to 2.3%. Zinc ranged from 44 ppm to 7.19%. From a total of 23 samples 7 returned copper grades exceeding 0.20 %. The sampling was focused on the area of old showings containing trenches excavated in the 1950's (Figure 8). In one of the trenches the average weighted sample obtained over 9.5 metres of width of mineralization was 1.58 % copper, 0.21 % zinc, 44.9 ppm silver and 218 ppb gold. This zone and minor copper occurrences surrounding the showings appear to follow a shear zone as reported in 1972.

A new potential areas of mineralization at Lower Blue Grouse was indicated by soil anomalies in 1972 and was followed with an enlarged geochemistry grid in 1998. The latter survey extended it by 400 metres to the southwest towards the Upper Blue Grouse prospect (Figure 10 - 12). This is over and beyond a small anomaly centered near the old trenches which was indicated by a small survey grid placed in 1972 (Figure 10 - 14). One geological traverse was completed in 1998 within this area prior to receiving the soil sample results. Float samples indicated up to 1,299 ppm copper and 1.35 % zinc, 1.7 ppm silver and 3 ppb gold. Also a semi-massive sphalerite boulder was sampled near an old open cut at location 400S/125E beyond the area of reported showings and beyond soil anomalies defined in 1998. The assay returned 7.19 % zinc, 0.25% copper, 2.6 ppm silver and 13 ppb gold. It probably reflects a localized in-situ mineralization.

It also explains the zinc anomalies in stream sediments reported in this area in 1970. However, no molybdenum values of interest were found in rocks and soils although they were also reported from stream sediments. The Upper Blue Grouse prospect was not systematically evaluated in 1998.

The assaying of samples collected at Tuscarora revealed a locally high zinc content of up to 6.4 % in grab samples taken from sheared creek bedrock. Low grade copper mineralization is associated with zinc. The highest copper content was obtained from a 1.0 metre fracture zone at the same location which is approximately 40 metres west of the the1979 drill collar location. The assay showed 0.26 % copper, 3.77 % zinc, 5.6 g/t silver and 5 ppb gold. An old open cut located near the drill collar assayed 0.25 % copper, 0.50 % zinc, 6.6 g/t silver and 6 ppb gold across 1.5 metres.

Numerous mineralized gossans were located in 1998 to the east of North Arm Creek by following an open copper anomaly in soils outlined in 1972. The 1972 anomaly was poorly defined due to size of the grid (130 x 180 m). However, it was indicated by 24 samples exceeding 150 ppm copper out of 57 samples collected and included eight samples ranging from 500 ppm to 5750 ppm. A 1998 chip sample taken at this location across 3.4 metre outcrop assayed 1.11 % copper, 8 ppm molybdenum, 381 ppm zinc, 46.2 g/t silver and 98 ppb gold (#1080). A grab sample from the same zone assayed 3.54 % copper, 11 ppm molybdenum, 0.17 % zinc, 68.6 g/t silver and 155 ppb gold (#1079). Strongly anomalous values were obtained from gossans sampled 150 metres southeast from the above location (samples 1024 -1029). It includes one select grab which assayed 0.23 % copper, 0.49 % molybdenum, 98 ppm zinc, 2.8 ppm silver and 3 ppb gold.

Abundant float of somewhat altered intrusive rocks was noted between the Clyde area and North Arm Creek. A composite float sample of most altered material assayed 1929 ppm copper, 48 ppm molybdenum, 2.4 g/t silver and 14 ppb gold. At the higher elevations near the headwaters of North Arm Creek massive sphalerite float was found at a location reported in 1972. It assayed 4.53 % zinc, 1.06 % copper 18.3 g/t silver and 43 ppb gold (sample 1082). Lower grades of similar mineralization were found in a nearby outcrop as well (sample 1081).

Signs of mineralization as indicated above suggest that these areas be further investigated.

#### 7.2 SOIL GEOCHEMISTRY RESULTS

Two areas were soil sampled by Talltree Resources Ltd. in 1998 controlled by chain and compass survey grids. At Blue Grouse (Grid #1) the line spacing was 100 metres with station intervals at 25 metres referenced to a 500 metre long baseline (Figure 10 - 13). Grid # 2 was placed between the Clyde workings and

Tuscarora Creek and consisted of short east-west oriented lines across rugged topography. The lines were referenced to the chain and compass stations located along the road/trail to the Clyde workings. The spacing between the lines ranged from 35 to 50 metres in the south and 90 to 100 metres in the northern part. Samples were taken at 12.5 metre intervals on the west side and at 25 metre intervals on the east side of the reference line (Figures 14 - 17).

A total of 120 soil samples were collected from Grid # 1 and 165 samples from Grid # 2 (Figures 10 - 17). Most of the samples were collected from the B-horizon. Color, soil type, and sample depth were recorded at each station: (A), (B), (C) – soil horizons, T – talus fines, S – stream/wash sediment etc. (Appendix IV). In addition, slope inclination measurements were recorded at Grid #2 stations.

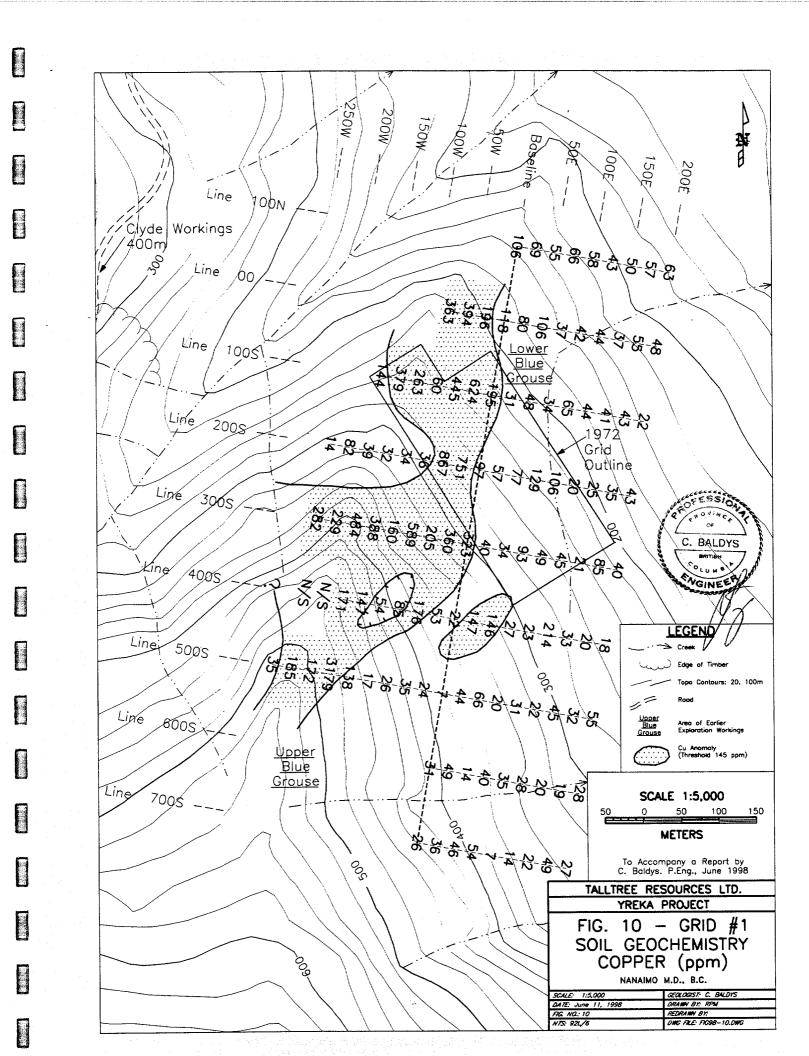
Soil and rock samples were analyzed at Acme Analytical Laboratories Ltd. for 31 elements including copper, molybdenum, zinc, silver and gold. Particulars of preparation procedures and analyses are included in Appendixes II and III.

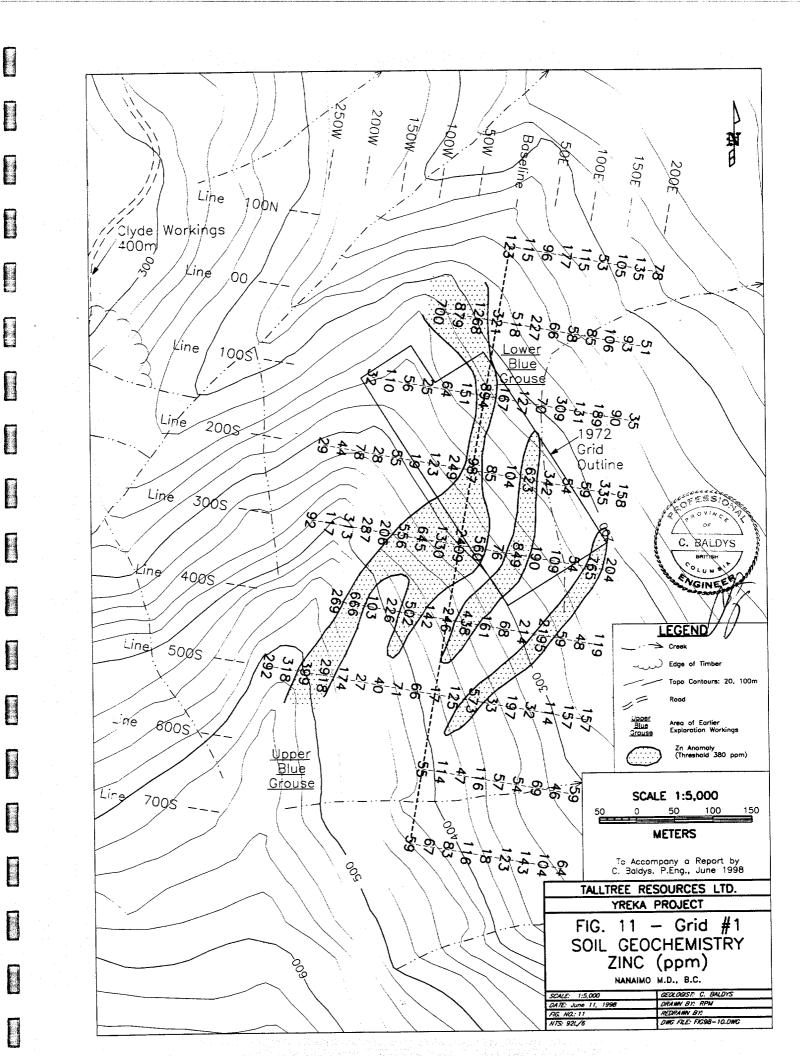
Soil sample results were statistically analysed from each grid separately. Copper, zinc, silver and gold frequency distributions were plotted on logarithmic scale. Silver plot was corrected for lower truncation to account for missing observations below detection limit. Grid # 2 data were filtered to exclude 38 possibly contaminated samples located downslope from old workings (see Figures 14 – 17, sample lines 800S, 900S, 1100S 1150S and most of 1200S). All observation data sets except one had lognormal polymodal distributions. The particulars of soil geochemistry statistics are included in Appendix IV.

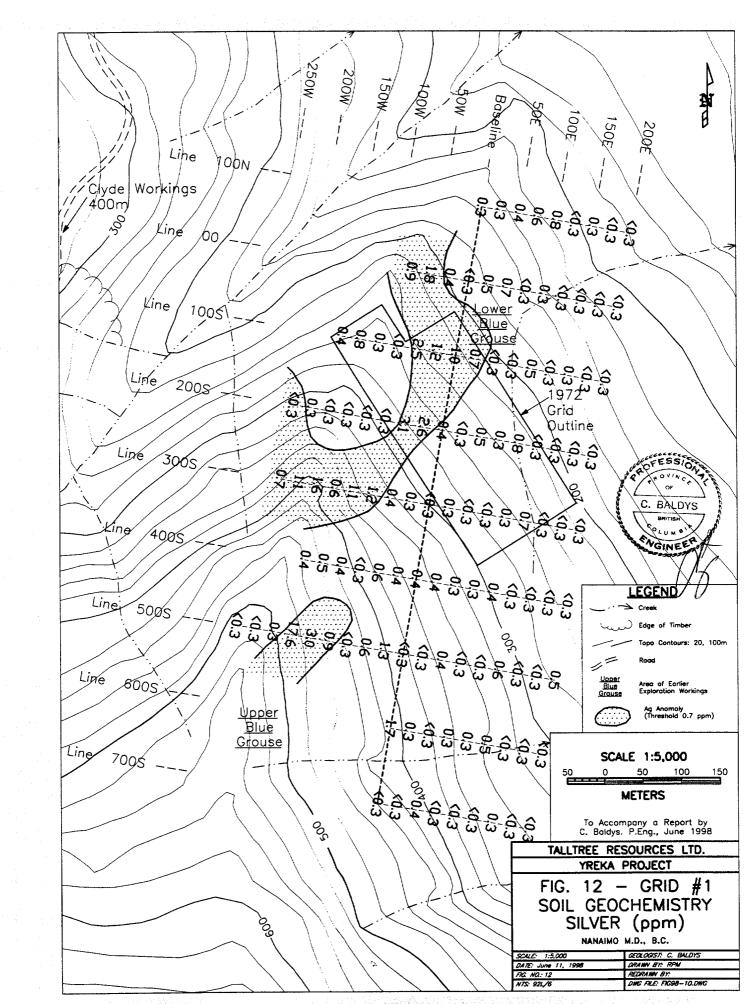
The anomalous areas were contoured at threshold values selected based on statistical data and correlation with rock geochemistry for copper, zinc, silver and gold on Figures 10-17.

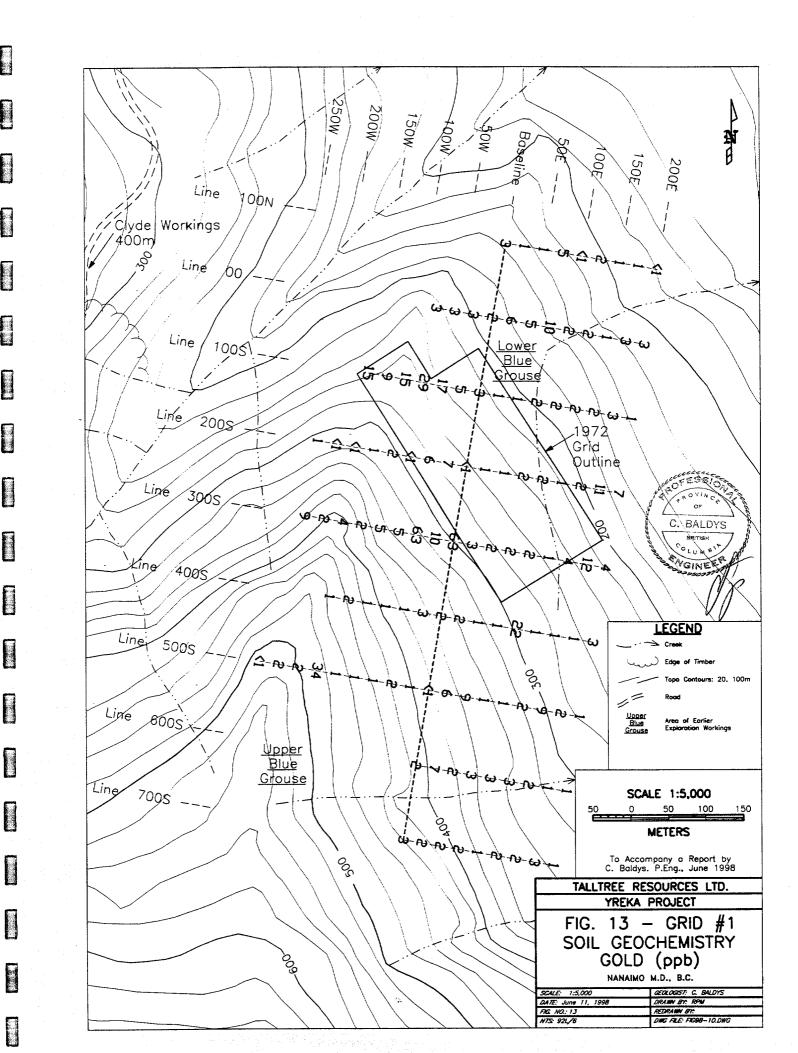
<u>Grid # 1 Anomalies:</u> A 500 metre long anomaly of coincident copper and silver values in soils roughly follows the ridge between Upper and Lower Blue Grouse. It is open to the north, south and west (Figure 10, 13). Anomalous values in zinc appear to follow the same north to northeasterly trend but have defined, narrow widths (Figure 11).

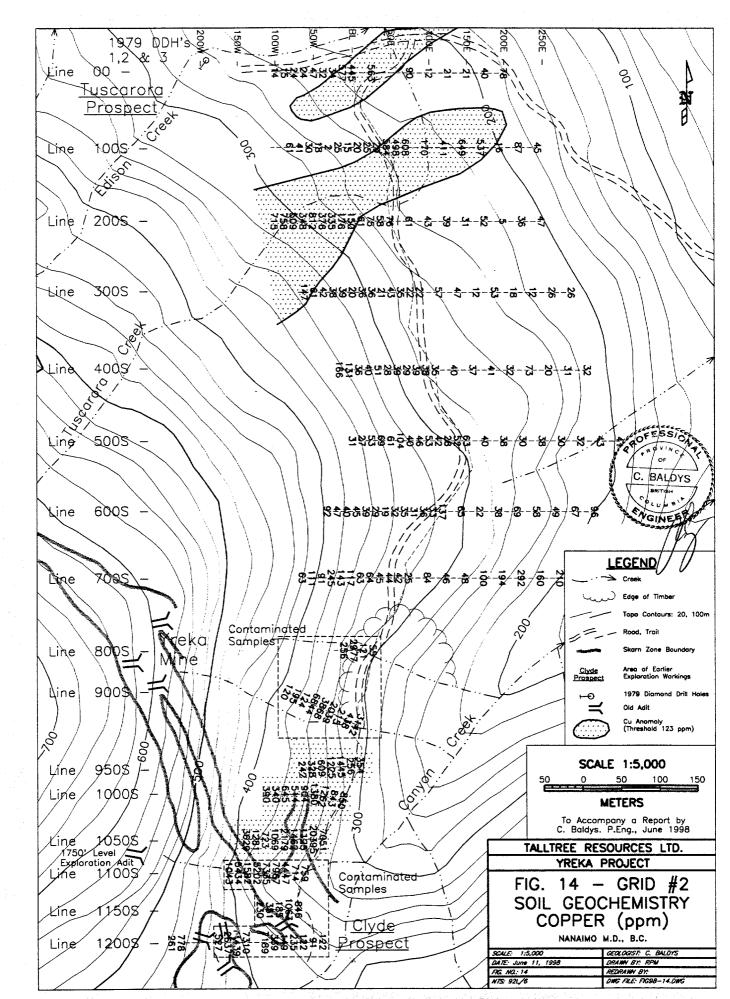
<u>Grid # 2 Anomalies:</u> Two anomalies were outlined over the area of Grid # 1. Three elements: copper, zinc, silver form anomalous populations in the data set. Gold >11 ppb forms a distinct enrichment haloe coincident with the above anomalies. The first anomaly, located along Tuscarora Creek, is well defined by copper values ranging from 145 ppm to 800 ppm. It measures 800 meters in length and 150 – 300 meters in width. The copper anomaly area coincides with anomalous zinc concentrations and is situated within larger haloes of gold and silver (Figure 15 –18). The second anomaly traverses rugged slopes north of the Clyde workings. It is open to the south, east and west. Limited grid size due to

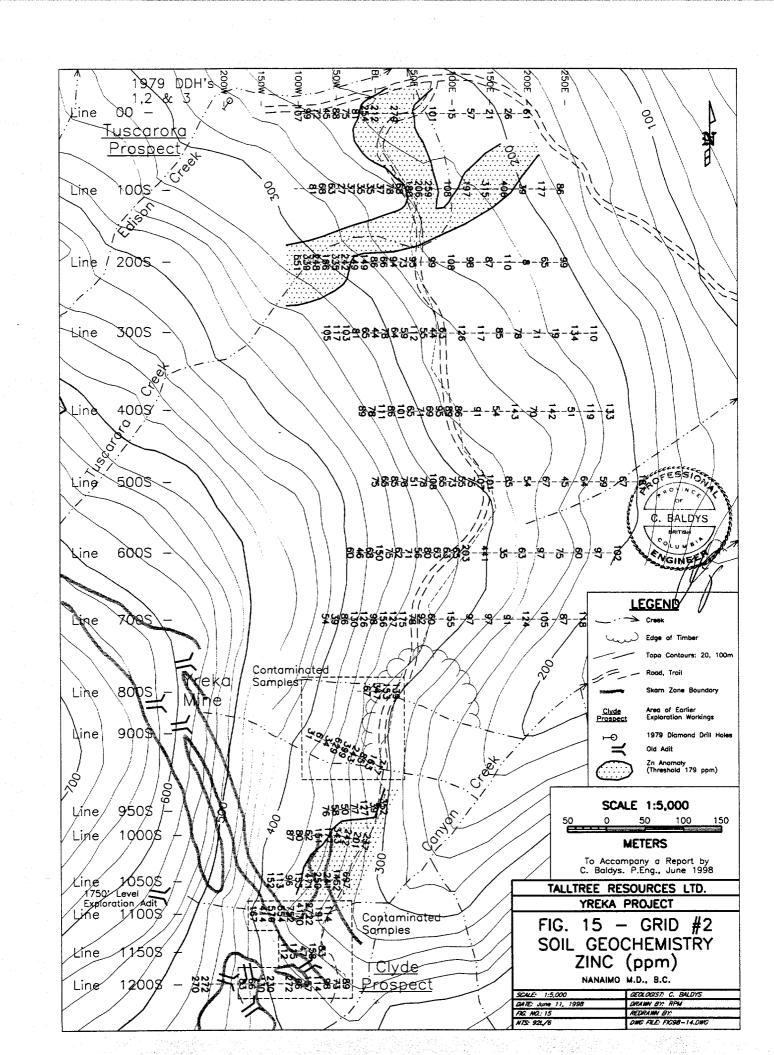


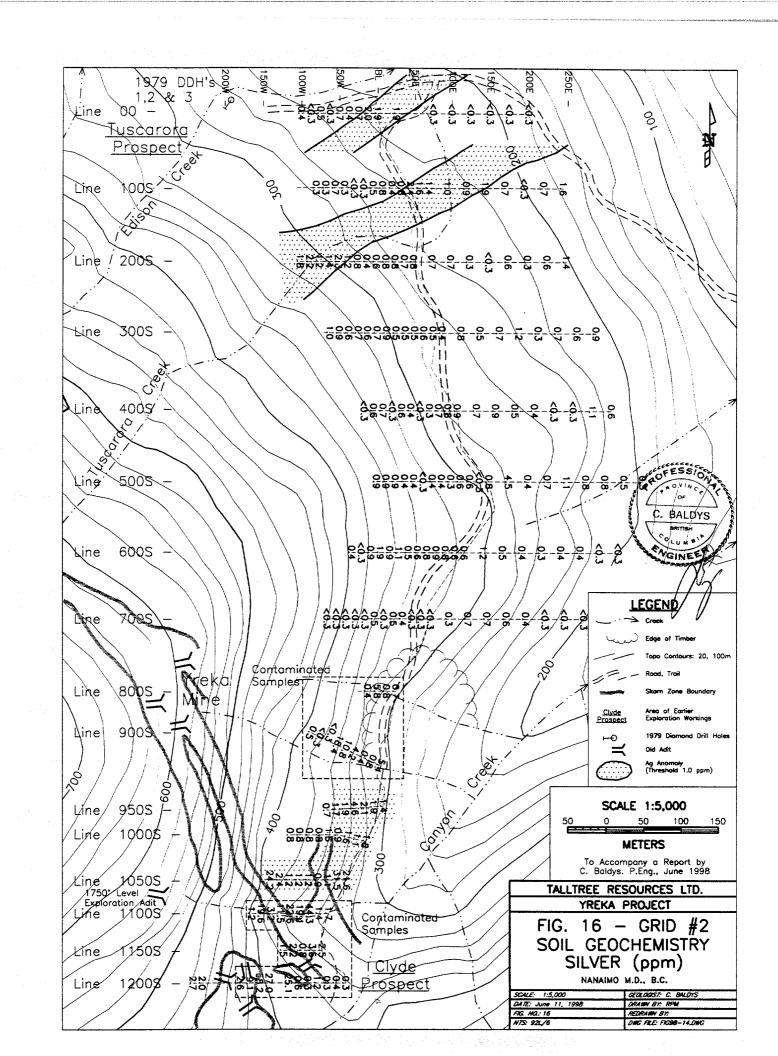




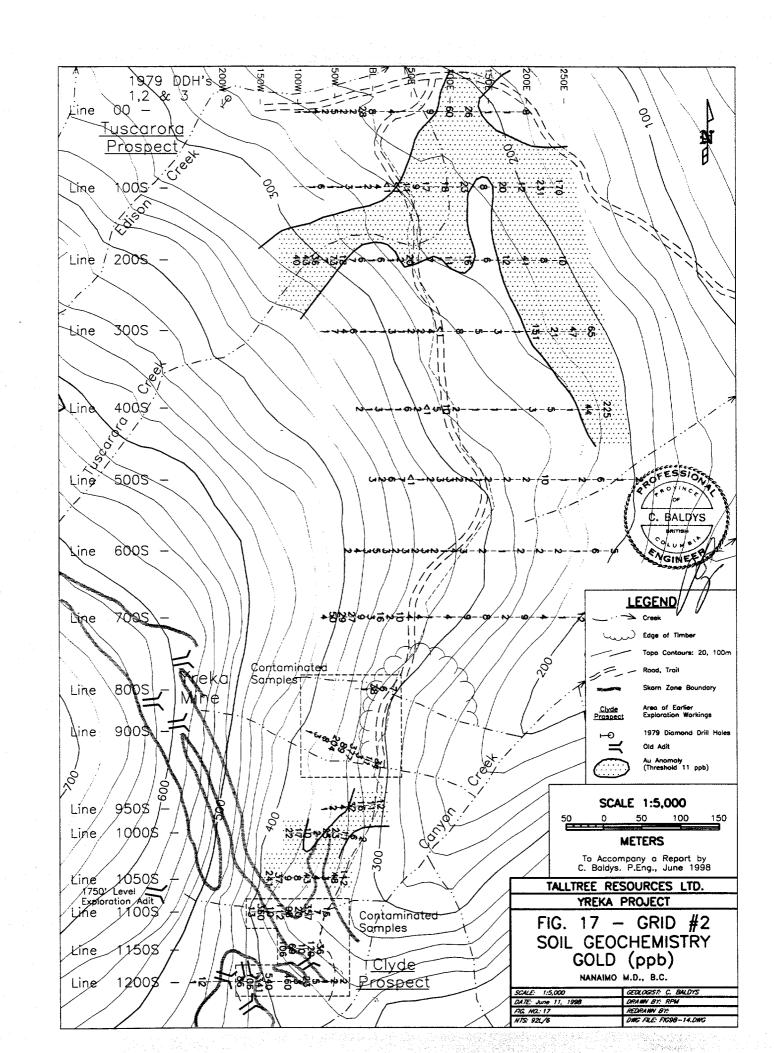








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steep topography in this area (slope inclination >30°) prevents any definite conclusions as to the size and geological meaning of this anomaly. In addition only part of the collected data is considered suitable for interpretation, namely lines 700S, 950S, 1000S, 1050S, 1100S and the western end of line 1200S. Notwithstanding, in-situ rock geochemistry results where available correlate well with the respective soil sample assays and indicate a northeast extension of the "lower band" skarn horizon at the Clyde prospect (Figures 9 and 14 - 17).

### 8. **DISCUSSION**

The largest copper skarn deposits in the world are associated with mineralized porphyry copper plutons. These deposits can exceed 1 billion tons of combined porphyry and skarn ore, with more than 5 million tons of copper recoverable from skarn (L.D. Meinert, 1992). The mineralized plutons exhibit characteristic potassium silicate alteration, which can be correlated with pro-grade garnet-pyroxene. The peripheral potassic and propylitic assemblages characterize the retro-grade alteration. In skarns they are expressed by epidote-actinolite dominated assemblages.

Most copper skarns are associated with I-type, magnetite series, calc-alcaline, porphyritic plutons, many of which have cogenetic volcanic rocks, stockwork veining, brittle fracturing and brecciation, intense hydrothermal alteration and large size. These are all features indicative of relatively shallow environment of formation compared to some other types of skarn. Copper skarns with the largest size potential are related to small stocks of granodiorite to quartz-monzonite composition. Cogenetic volcanics are andesite and quartz latite, however they are rare (Einaudi et. al 1981).

Skarn deposits in B.C. produced a total of 95 tonnes of gold (more than 3 million ounces) and 342 tonnes of silver (11 million ounces). Most of it came from the Hedley gold deposit located in south-central B.C. (E.Ray, I.Webster, 1995). Others, like skarns on Vancouver Island, host copper and iron deposits that produced gold as a byproduct. Very few produced gold in excess of 100,000 ounces.

Most of the skarn deposits on the Island are hosted in the Upper Triassic Quatsino limestone close to the contact with either underlying Karmutsen Formation or overlying Bonanaza Group volcanics. At Yreka the host of most of the mineralization is the calcareous tuff of Upper Bonanza Group.

The composition and form of intrusive heat sources is wide ranging but most of them are Mid - Jurassic (comagmatic with Upper Bonanza Group volcanics). In the Quatsino Sound area Island Copper, a world class porphyry copper-molybdenum-gold deposit about 16 km northeast of Yreka, is situated in this geological setting. It is hosted in part by a quartz-feldspar porphyry dyke which could be a feeder for dacites and rhyodacites which form the upper volcanic sequences (D.G.Cargill et al., 1992).

At the Yreka deposit the "felsite" or diorite bodies are the most likely heat sources. A calcareous tuff host was susceptible to metasomatic alteration along dyke and sill contacts. The main sulphide mineralization stage probably followed the initial diffusional stage as the temperature decreased (P.R. Wilson, 1954). Permeability and structure controlled the hydrothermal circulation of metal-rich fluids (pro-grade stage). This stage probably also involved creation of distal "hot spots" along structural lineaments and the prospects surrounding the Yreka are suggested examples of it. Late retro-grade alteration followed the two earlier stages.

The large widths and lateral extent of metasomatic alteration (skarn) indicate long timing of diffussional processes at the Yreka deposit. It is therefore reasonable to expect long timing and large areal extent of pro-grade processes as well. In all of the largest deposits of any kind the time duration of mineralization was the critical ore-forming factor. Within the large skarn deposits long timing is usually exhibited by textures of mineralization having "contorted", banded-like appearance with readily apparent multiplicity of replacement stages. These textures were visible at Yreka occasionally. Strong iron-oxidation on surface was a factor in fully understanding the nature of mineralization.

The most encouraging aspect of the Yreka skarn deposit is the size of the skarn host itself. Permeability and favourable stratigraphy requirements were certainly fulfilled. Structural control of pro-grade processes is less well understood, however it did not prevent delineating blind "ore-grade" mineralization drill intersected in 1954. Easily traceable morphology of skarn due to stratiform layering was probably a factor. Drilling and geological mapping will be an effective tool in locating additional mineralization. In addition, localized geochemical haloes along lineaments and fracture intersections are present and should provide drill targets. Notwithstanding, exploring for copper skarns in general requires utilizing geochemical methods and models which take into consideration the fact that there is a specific spatial and genetic relationship between copper porphyries and some copper skarns. In case of Yreka the proximity to Island Copper is another motivating factor.

Current world mineral economics suggests that copper skarns and gold skarns are the most economically attractive targets for exploration among various types of skarns. In the case of copper skarns it is their relatively good potential to form large tonnage copper-gold deposits while in case of gold skarns it is their potential for high-grade that makes them most economically desirable in times of fluctuating commodity prices.

### 9. CONCLUSIONS

The Yreka property is underlain by economically favorable geological formations, particularly the Lower to Mid Jurassic Bonanza Group and coeval intrusions. Widespread alteration and mineralization are present throughout the entire property. The copper skarn horizon of significant lateral extent and thickness of up to 250 metres has a

potential to host additional economic mineralization outside of the old Yreka mine area and there are surface indications that other styles of mineralization of significant size such as porphyry copper-moly(-gold) might also be discovered.

A total of 8 mineral prospects have been identified within the newly defined exploration perimeter ranging 200 to 1000 metres from the mine. A few of them contain numerous showings and exploratory adits but none was a past producer. Most were discovered and explored preliminarily in the past but steep terrain and limited budgets prevented completion of most proposed work programs.

During the course of 1998 surveys, 5 of the 8 prospects were examined and sampled. Two prospects, Clyde and North Arm, revealed particularly promising geological features and returned encouraging assay results. They were selected as targets for the 1999 exploration programs (Figure 18).

At Clyde, the first target, extensive exploratory adits completed at the turn of the century are inaccessible but were surveyed by Noranda in 1953-53. Grades obtained underground correlate well with results obtained during 1998 sampling on surface. Indications are that additional important mineralization is present within and near the old workings. In spite of considerable surface and underground work done over the years, only two short holes were drilled in this area in 1953 (Figure 7). Later, in 1954, Noranda used deeper holes to delineate a blind deposit at Yreka, 400 metres to the north.

The skarn horizon hosting localized sulphide mineralization at Clyde is approximately 250 metres thick and has never been drill tested across the full width. It dips approximately 30° west-southwest towards the North Arm prospect situated 250 to 400 metres west of the Clyde portals. Topographic conditions would allow testing of this zone by step-out holes.

The 1998 soil and rock geochemistry surveys have followed on surface the extension of the footwall part of the main zone ("lower skarn band") to the northeast for a total distance of 300 metres. Significant widths of mineralized outcrops were sampled and locally revealed encouraging precious metal values (Figure 9).

The second target is the area situated between the Clyde and the North Arm Creek (North Arm prospect). Numerous mineralized gossans were located to the east of North Arm Creek by following a strong, open copper anomaly in soils outlined in 1972 (see paragraph 8.1). The anomaly was poorly defined due to size of the grid (130 x 180 m). The style of mineralization in outcrops appears to be quite different from the Yreka skarn area. Red-brown iron oxides observed in the weathering zone with silicification and copper-molybdenite mineralization might indicate a transitional zone toward a copperporphyry system at depth. The geological setting of the area including the presence of thick skarn nearby (Clyde prospect) favors a porphyry copper-moly(-gold) system as a prime target of economic interest (Figure 18).

### **STATEMENT OF EXPENSES 1998**

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1. RENTALS

	4 X 4 Trucks & autos	\$ 1,666	
	ATV	\$ 1,104	
	Autotel	\$ 300	
	Generator & Field Equipment	\$ 850	
	Geophysical Instrument	<u>\$ 596</u>	
		\$ 4,516	\$ 4,516
2.	TRAVEL & TRANSPORT		
	Road Travel & Accomodation	\$ 2,098	
	Bus & Water Shipping	\$ 494	
	Water Taxi	\$ 3,443	
	Barging-Heavy Equipment	\$ 600	
	Helicopter Support	<u>\$ 581</u>	
		\$ 7,216	\$ 7,216
3.	ACCOMODATION (PROJECT)		
	Hotel Accomodation	\$ 1,372	
	Meals - town	\$ 1,077	
	Field Accomodation & Meals	<u>\$ 7,920</u>	
		\$10,369	\$10,369
4.	FIELD EQUIPMENT		
	Tools & Lumber	\$ 2,715	
	Support Material & Gas	<u>\$ 1,825</u>	
		\$ 4,540	\$ 4,540
5.	CONTRACTS - CONSULTING		
	Road Construction	\$ 7,000	

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Geologist's Report	\$ 7,986	
Road Engineering	\$ 1,333	
Geological Consulting	<u>\$2,323</u>	
	\$18,642	\$18,642
ASSAYING	\$ 6,686	\$ 6,686
WORKERS COMPENSATION	\$ 677	\$ 677
WAGES	· ·	
B. Fitch, Supervisor	• • •	
36 days @ \$300/day	\$10,800	
T. Jones, Soil Sampler		
24 days @ \$200/day	\$ 4,800	
P. Poissant, Linecutter		
28 days @ \$200/day	\$ 5,600	
J. Fitch, Surveyor		
20 days @ \$200/day	\$ 4,000	
M. Pringle, Helper		
33 days @ \$150/day	\$ 4,950	
C. Baldys, Geologist		
26 days @ \$350/day	<u>\$ 9,100</u>	• •
	\$39,250	\$39,25
	PENSES	\$91,89

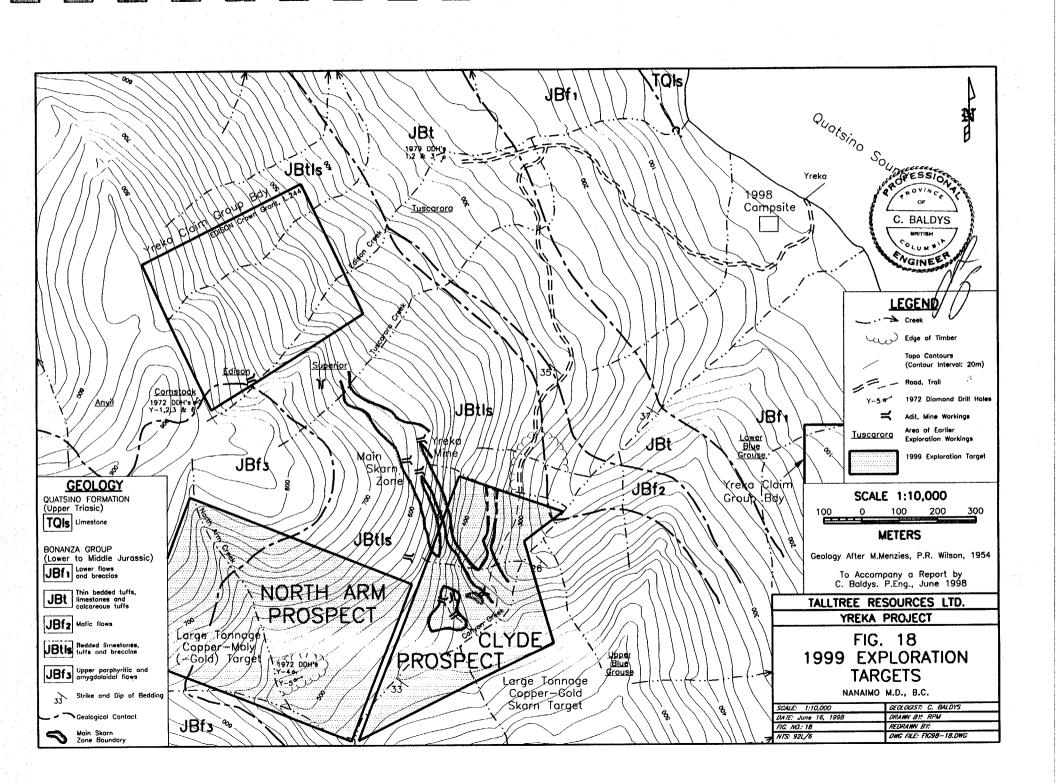
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### **10. RECOMMENDATIONS**

A two phase work program is recommended for 1999 on the the Yreka property. The proposed budget is \$ 100,000 for Phase I and \$ 300,000 for Phase II.

Due to the favorable geological setting of the Clyde and North Arm prospects and close relative location, they were selected as first priority targets from which detailed grid work and exploratory drilling should commence (Figure 18). Other prospects within the new exploration perimeter require subsequent reconnaissance evaluations as the work on the Clyde and North Arm prospects progresses. One or two lines should reach the headwaters of North Arm Creek to provide survey control in this area and, if possible, extend all the way to the Anvil Prospect. The subsequent rock sampling should also include Comstock, and the area between Upper Blue Grouse and Clyde. More rock chip sampling and prospecting is also justified in the vicinity of new anomalies near Tuscarora Creek.

### **1999 WORK ESTIMATES**

### Clyde area

The following work is recommended to test the potential for economic mineralization down dip and to extend the surface mineralization to the northeast and south from Clyde workings:

### Phase I:

Detailed, 1:500 scale mapping and additional geochemistry surveys

### Phase II:

- 1) Drill Site Preparation
- 2) 800 meters of NQ Diamond Drilling

### North Arm Creek

The following work is recommended to explore the area for potential large tonnage copper-moly(-gold) mineralization based on results to date:

### Phase I:

- 1) Grid controlled soil geochemistry surveys, 6 line kilometres
- 2) Magnetometer surveys, 6 line kilometres
- 3) Geological mapping, prospecting and rock geochem. surveys at 1: 2,500 map scale
- 4) Detailed mapping of selected areas at 1 : 500 scale

### Phase II:

- 1) Hand-drill blasting/trenching
- 2) Drill site preparation
- 3) 800 meters of NQ Diamond Drilling

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# Anvil, Comstock, Tuscarora Creek, and the area between Upper Blue Grouse and Clyde

One phase of work is proposed for 1999 to establish the source of anomalies outlined to date and/or to evaluate the old showings

### Phase I

1) Prospecting and rock geochemistry surveys

### 11. PROPOSED BUDGET

Yreka Property, Phase I and II of 1999 exploration program:

### Phase I

ITEM		COST					
1) Legal, Insurance, Permit	s, Bonding	\$6,000					
2) Field Equipment, Supplies							
3) Mob – Demob/Storage/S	hipping	\$5,200					
4) Geophysical surveys - 6	.0 km MAG @ \$375/km	\$2,250					
5) Analyses, samples	400 @ \$15/sample	\$6,000					
	100 @ \$22/sample	\$2,200					
6) Food, sustenance, accom	modation	\$ 9,000					
7) Personel: (1 Geologist, 2	-						
	\$225/day, \$200/day * 26 days)	\$24,700					
Project Geolo	gist (30 days @ \$ 325/day)	\$9,750					
8) Reporting, Project Geolo	gist (20 days @ \$ 325/day)	\$6,500					
9) Truck Rental	\$80/day * 30 days	\$2,400					
10) 4-Wheel ATV Rental	\$30/day * 26 days	\$780					
11) Helicopter Support	5 hours \$ 800/hr	\$4,000					
12) Water Taxi	10 trips @ \$ 225/trip	\$2,250					
	Subtotal	\$91,000					
	Contingency (10 %)	\$9,000					

Total \$100,000

Proposed Budget cont. page 25

Dependent on positive Phase I stage results:

### Phase II

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ITEM					COST
1) Helicopter Support		20 hours @	\$800/h	r	\$16,000
2) Hand-drill blasting/	trenching	12 days @	\$600/da	iy	\$7,200
3) Drill Site Permittin	g				\$6,000
4) Drill Site Preparatio	on, (5 sit	es)			\$9,000
5) Diamond Drilling N	NQ size (all in	nclusive)			
1 Drill	Metro	es \$/M	eter	Drilling \$	
	1600	\$11	0.00	\$176,000	\$176,000
6) Assays	40 %	(640 metres)	a	\$25.00	\$16,000
7) Travel		· ·	-		\$3,000
8) Personel:					
Geologist	(\$300/day	* 26 days)			\$7,800
Core Technician	(\$200/day	* 26 days)			\$5,200
Cook/Expediting	(\$200/day	* 26 days)			\$5,200
9) Reporting, Consult	ing Geologist	(\$300/day *	10 days		\$3,000
10) Food, Sustenance		• •	•	· · · · · · · · · · · · · · · · · · ·	\$11,000
11) Field/Camp Equip	•				\$4,500
12) Truck Rental		<b>\$80/day *</b> 2	8 days		\$2,240
13) 4-Wheel Drive A	<b>FV</b> Rental	\$30/day * 2	-		\$780
	·			Subtotal	\$273,000
			_		
			Contin	gency (10%)	\$27,00

<u>Total \$ 300,000</u>

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52

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#### **CERTIFICATE OF QUALIFICATIONS** 13.

I, CHRISTOPHER BALDYS, of 23035 Cliff Avenue, Maple Ridge, in the Province of British Columbia, do hereby certify that:

- I am a Consulting Geologist with an office at 23035 Cliff Avenue, Maple Ridge, 1. British Columbia.
- I am a 1980 graduate of the University of Mining and Metallurgy of Cracow, 2. Poland with a degree in Mining Geology.
- I have practiced my profession as a geologist in Poland in 1980 -1983 and in 3. Canada continuously since 1984.
- 4. I am a member in good standing of the Association of Professional Engineers and Geoscientists of the Province of British Columbia since 1990.
- 5. I have evaluated the claims in March 4 - 14 and May 4 - 12, 1998 and examined all relevant private and published descriptions as referenced pertaining to the Yreka claims area.
- 6. I hold neither interest in the securities of Talltree Resources Ltd. nor in their present holdings in the Yreka claims area nor do I expect to obtain such securities or holdings.
- 7. This report may be used by Talltree Resources Ltd. for any news release, Prospectus or Statement of Material Facts or other documentation required by a regulatory authority, related to the Yreka Group of Claims, provided that no excerpts are used out of context with the whole.

Dated at Maple Ridge, B.C. this 16<sup>th</sup> day of June, 1998

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Christopher Baldys, P.Eng.



## APPENDIX I

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## **ROCK SAMPLE DESCRIPTIONS**

Sample	Туре	Lenght (m)	Area	Description	Cu ppm	Mo ppm	Zn ppm	Ag ppm	Au ppb
1001	grab float	N/A	Clyde	Green flow textured volcanic, brecciated, some sec. qtz and carb. intense lim. staining	609	2	74	0.9	19
1002	grab	N/A	Tuscarora	Grab from gouge/shear zone mineralized with black, dusty sph, pyrr, py mixed with oxides in a flow textured volc.host.	665	5	56,012 * 6.41%	1.5	2
1003	chip	1.0	Tuscarora	Shear zone in siliceous flow mineralized with py., and minor sph. and pyrr. Loc. abundant lim., hem.	2,604	5	34,141 * 3.77%	5.6	5
1004	float composite	N/A	Lower Blue Grouse	Pieces of stronly oxidized skarn ?, with pyrr, py. and minor cpy.	1,912	2	392	9.0	33
1005	grab	N/A	Lower Blue Grouse	Sheared tuff with limy matrix and sele- ctive replacement of frag's by py (25%)	965	5	9,426 * 1.05%	1.1	3
1006	grab float	N/A	Lower Blue Grouse	Silicified tuff cut by qtz stringers	167	2	758	0.3	2
1007	grab panel	1.0	Lower Blue Grouse	Altered tuff: limonitic-hematitc, porous text., locally graphitic. Minor py min. Alteration following bedding 152/50/NW	1,368	2	134	0.5	9
1008	grab	N/A	Lower Blue Grouse	Green siliceous tuff with secondary carb. garnet ? and pyrr min. (8%). Fractured lim stained outcrop.	1,928	2	142	2.9	16

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Yreka Pro	perty - 1998	Rock	Sample	Descriptions
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5	Sample	Туре	Lenght (m)	Area	Description	Cu ppm	Mo ppm	Zn ppm	Ag ppm	Au ppb	
	1009	grab	N/A	Clyde Portal #2	Garnet skarn mineralized by cpy (10%) and pyrr (12%).	10,609 * 1.279%	1	341	15.0	242	
	1010	chip	1.5	Clyde Portal #2	Malachite-limonite stained shear (340/90 in carbonatized and sulph. min tuff	8,207 * 0.985%	1	272	16.2	331	
	1011	chip	6.2	Clyde Portal #2	Garnet skarn with irregular cpy and pyrr min.	15,074 * 1.808%	3	481	22.5	302	
	1012	grab	N/A	Tuscarora Old cut	Siliceous-limey tuff, with strong iron-ox. staining and patchy min. by black dusty sph mixed with hem.? Shear zone: 363/85/E	797	5	52,934 * 6.03%	1.2	11	
	1013	chip	1.7	Tuscarora Old cut	Siliceous-limey tuff with poddy qtz, lim on fractures and sph + pyrr + py min. (7%).	824	4	10,870 * 1.22%	1.2	5	
ý	1014	chip	1.5	Tuscarora Old cut	Siliceous, carb. altered tuff with loc pyrr and sph min mixed with oxides.	2,482	4	4,108 *0.50%	6.6	6	
	1015	chip	2.1	Tuscarora Old cut	Siliceous tuff, loc strongly carb with marble-like text., minor diss sulph.	302	5	1,173	0.8	2	
	1016	chip	1.5	Tuscarora Old cut	Sheared siliceous tuff, strongly iron-ox. with irregular sulph min. (15%). Mainly pyrr and sph. Minor cpy. 40/86/SE	1,797	5	17,039 *2.11%	4.2	<b>4</b>	
	1017	select grab	N/A	Lower Blue Grouse	Selected quartz from 1-1.5 cm wide quartz vein.	103	4	329	0.3	3	

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Sample	Туре	Lenght (m)	Area	Description	Cu ppm	Mo ppm	Zn ppm	Ag ppm	Au ppb	
1018	grab	N/A	Lower Blue Grouse	Limey tuff with strong carb alt; stringers and blebs of pyrr (15%)	366	1	286	0.5	2	
1019	grab float	N/A	Lower Blue Grouse	Large, 1 metre, boulder in a creek gully. Limy bedded tuff, sil and carb. Strong iron-ox. on fractures and bedding planes, mineralized with pyrr, py, sph.	1,299	4	11,051 *1.35%	1.7	4	
1020	grab float	N/A	Lower Blue Grouse	Brecciated limey tuff boulder sil + carb alt; min with pyrr, py (7%). Strong iron- ox. staining.	671	2	608	0.9	3	
1021	composite float	N/A	Clyde	Intensely altered felsic intrusive. Sil and boxwork textured (after py cubes). 15-20% of py remaining.	1,929	48	56	2.4	14	
1022	grab	N/A	Grid # 2 North	Shear zone in a siliceous tuff of flow 198/83/W. Strong iron-ox. marking tect. brecciation.	902	5	15,656 *1.87%	4.4	49	
1023	float	N/A	Clyde	Dk green, siliceous tuff. Chlorite reaming fragments up to few cm in size. Patches of pyrr mineralization in some frag's.	256	1	85	0.7	1	
1024	float	N/A	North Arm	Massive, dk grey silicified tuff? or flow min by cpy (1%) and pyrr (<0.5%).	4,164 *0.458%	59	243	7.6	29	
1025	select grab	N/A	North Arm	Large, few cm limestone fragment, replaced by quartz, molybdenite (3%) and pyrr (15%).	2,359	4,958	98	2.8	3	
1026	chip	3.0	North Arm	Chip/panel across intensly fractured sil. and iron-ox stained tuff. with minor cpy. and moly. min. Fracture trend 30/82/NW	2,033	741	105	3.1	6	

Yreka Property - 1998 Rock Sample Descriptions

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Sample	Туре	Lenght (m)	Area	Description	Cu ppm	Mo ppm	Zn ppm	Ag ppm	Au ppb	
1027	grab	N/A	North Arm	Sheared, lim. stained siliceous tuff? or flow outcrop.	1,075	443	31	1.3	23	
1028	grab float	N/A	North Arm	Altered porphyritic intrusive: qtz. pheno- crysts in propylitized ? matrix min with diss py.	59	3	112	0.7	1	
1029	grab	N/A	North Arm	Strongly fractured iron-ox. stained, bedded flow. Shear zone: 83/85/NE. Locally limonite-rich tectonic breccia.	266	34	20	0.3	2	
1030	grab	N/A	Lower Blue Grouse	Iron-oxide rich outcrop in the footwall of 1007 sampled zone. High content of black dusty "graphite-like" mineral mixed with oxides and minor cpy.	1,257	2	49	1.6	4	
1031	grab float	N/A	Lower Blue Grouse	30 cm diam. boulder of sulphide min. tuff. Strong sil and carb alt. plus minor gar- net ? Pyrr (15%), cpy (3%)	9,406 *0.920%	<1	949	30.7	63	
1032	chip	1.0	Lower Blue Grouse Old trench	Carb. and sil. tuff with 13 -18% sulph min: pyrr (12%), cpy (3%) and py (1%). Min. is depleted along "cherty", sil and carb alt flow bands and increases within tuff textured bands.	8,892 *0.883%	<1	527	17.2	81	
1033	chip	5.0	Lower Blue Grouse	Carb and sil tuff with minor pyrr and cpy mineralization	1,349	3	136	2.5	9	
1034	chip	2.0	Lower Blue Grouse	Carb and sil tuff with frequent "cherty" bands. Minor pyrr and cpy. Loc. dark, dusty graphite?.	1,645	10	125	3.2	31	

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Sample	Туре	Lenght (m)	Area	Description	Cu ppm	Mo ppm	Zn ppm	Ag ppm	Au ppb
1035	chip	4.0	Lower Blue Grouse Old trench	Sil and carb alt tuff (lapilli to breccia size frag's). Loc strong sulph min (up to 30% cpy.) Avg. suph. content: 10%; mainly pyrrothite.	10,266 *0.996%	2	597	25.0	238
1036	chip	4.0	Lower Blue Grouse Old trench	As above, locally with massive pyrr/cpy replacements. Minor sph min.	23,717 *2.309%	1	1,240	63.3	249
1037	chip	1.5	Lower Blue Grouse Old trench	Massive to semi-massive pyrr and cpy min. Locally strongly oxidized.	12,473 *1.197%	1	7,935 *0.79%	48.6	82
1038	chip	2.5   	Lower Blue Grouse Old trench	Fractured iron-ox stained tuff with minor sulph min.	621	3	53	1.2	10
1039	chip	2.5	Lower Blue Grouse Old trench	As above. Loc pyrr stringers concordant with bedding.	686	1	124	1.2	7
1040	chip	 2.5	Lower Blue Grouse Old trench	Pale greenish tuff, fractured, iron-ox stained.	664	2	44	1.2	4
1041	chip	2.5	Lower Blue Grouse Old cut ?	Massive sil tuff, fractured/sheared 50/90 Minor diss py min.	669	1	50	1.1	5
1042	grab	N/A	Lower Blue Grouse Old trench	Main shear zone at the east end of an old trech. Shear 68/85/NW. Strong carb alt. Locally massive py. Cpy 0.5%.	3,496 *0.343%	2	134	5.8	15
1043	grab float	t N/A	Lower Blue Grouse	30 cm diam. boulder of intensely alt tuff? min by sph (20%) py (10%) and minor cpy (0.5%). Sample collected 10 metres from an old open cut filled with water.	2,461	2	77,646 *7.19%	2.6	13

from an old open cut filled with water.

Yreka Property - 1998 Rock Sample Descriptions	

Sample	Турө	Lenght (m)	Area	Description	Cu ppm	Mo ppm	Zn ppm	Ag ppm	Au ppb	
1044	grab float	N/A	Canyon Creek	Oxidized vuggy quartz vein float with 10% py min.	458	1	531	1.3	19	
1045	grab	0.8	Canyon Creek	Gouge/shear zone in limey tuff: 350/87/W. Py min 3-5%.	190	<1	290	0.6	3	
1046	chip   	3.6	Clyde	Skarn - quartz rich, some green garnets, epidote. Minor sulph min, mainly pyrr Iron oxides up to 15% locally.	154	96	24	<0.3	50	
1047	chip   	3.5	Clyde	Garnet skarn with strong sulph min: cpy + pyrr, loc massive. Malachite 1-3% iron oxides 10-15%.	20,886 *2.063%	15	614	31.7	914	
1048	l chip	4.0	Clyde	Garnet skarn with extreme iron oxide content (50-60%). Locally crumbly, soft. Minor "relicts" of fresh cherty tuff. Cpy + pyrr min < 3%.	2325	8	78	9.0	62	
1049	chip	6.0	Clyde	Garnet skarn, with irregular cpy min avg 1-2 %. Locally podds of pyrr of up to 20%, intermixed with black oxide. Malachite < 1%.	2085	28	54	4.5	458	
1050	grab	N/A	Clyde	Garnet skarn with strong iron-oxide (20- 30%), + black "graphite-like" oxide ? (10%). No visible copper min.	178	2	19	0.3	85	
1051	grab	N/A	Grid #2 South at Road End	Flinty silicified tuff breccia, min. with pyrr. (10-18%) in form of irregular podds Located at footwall of barren skarn zone.	1053	5	55	0.9	30	
1052	grab	N/A	Clyde	Lt. greenish flinty tuff, lappilli size clasts. Interstitial cpy min (5 - 8%) replacing matrix of tuff.	13,652 * 1.417%	1	564	24.2	70	

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Sample	Туре	Lenght (m)	Area	Description	Cu ppm	Mo ppm	Zn ppm	Ag ppm	Au ppb	
1053	grab	N/A	Clyde	Massive, cpy mineralization in form of isolated "pocket" wedged between iron stained, barren, garnet skarn and flinty flinty tuff along 338/82/NE fracture.	13,614 * 1.365%	6	351	49.7	428	
1054	grab	N/A	Clyde	Strongly altered diorite dyke (qtz+ser?+ py.). 10-15% diss pyrite and minute cpy. grains.	522	2	18	0.4	11	
1055	grab	N/a	Clyde	Rusty zone 0.5x0.3m in silicified tuff, with pebble-like fragments loc replaced by skarn minerals.Interstititial cpy (8-9% and pyrr (7-8%) replacing matrix.	18,453 * 1.807%	1	449	28.6	400	
1056	chip	5.6	Clyde	Quartz-epidote-garnet altered tuff with low but consistent pyrr+ cpy min thro- ughout the sampled interval and beyond. (steep inaccesible outcrops) Total cpy min. averaging < 1 %.	3,411	3	395	4.6	68	
1057	grab	N/A	Clyde	Garnet skarn with high iron oxide cont- ent (30%). Minor cpy < 1%. Locally massive pyrrothite along 0.3 m wide zone related to vert. fracture system trending 20 deg. intersected by a sys- tem 353/60/SE.	182	2	64	<0.3	142	
1058	grab	N/A	Clyde	Greenish, flinty tuff with diss cpy mine - ralization (3-4%) and minor pyrr (<1%).	3,085	1	114	4.6	112	
1059	chip	5.0	eka Mine Portal	Garnet-epidote skarn with massive suph min. locally. Average < 2% cpy. 5% pyrr High iron oxide content (30-40%).	2,383	1	73	7.6	31	
1060	chip	8.0	eka Mine Portal	Garnet skarn strongly stained by iron oxides. Locally minor malachite staining.	7,152	1	177	20.2	563	

Sample	Туре	Lenght (m)	Area	Description	Cu ppm	Mo ppm	Zn ppm	Ag ppm	Au ppb
1061	chip	8.3	Yreka Mine Portal	Garnet skarn with high iron oxides cont. loc. 30-40%. Cpy min avg 2-3% through- out the interval. Black to dark green col due to chlorite-phlogopite+oxide content	800	2	53	1.3	20
1062	chip	10.0	Clyde	Silicified tuff, with bleached apperance on weathered faces. Minor cpy minera- lization (<1% avg) within rusty patches localized along fractures.	735	1	42	1.0	10
1063	chip	4.0	Clyde	Skarn (30%), silicified tuff (70%). Locally iron oxides up to 10% and cpy up to 7% (avg < 1% ?).	1,683	1	92	2.7	10
1064	select grab	N/A	Clyde Tunnel # 3 dump	Garnet skarn piece 8x25cm with 30% cpy. mineralization - high grade sample.	16,095 * 1.586%	4 '	542	30.5	161
1065	rep grab	N/A	Clyde Tunnel # 3 dump	Randomly collected small pieces.Mainly garnet skarn with <1% cpy.	13,261 * 1.277%	8	380	24.8	212
1066	chip	8.0	Clyde	Greenish flinty tuff with epidote-garnet ? alt.locally + some fracturing and iron ox. coincident with cpy min. loc. up to 15%. Avgerage cpy in 3 - 5% range.	16,641 * 1.616%	23	536	24.6	355
1067	select grab	N/A	Clyde Tunnel # 2 dump	10cm diam. piece of high-grade material with 20-30% cpy and 5% pyrr minerali- zation.	49,129 * 3.579%	2	726	67.2	1,050
1068	rep grab	N/A	Clyde Tunnel # 2 dump	Sparsely mineralized pieces of skarn randomly collected from waste dump.	216	8	26	0.4	19

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Sample	Туре	Lenght (m)	Area	Description	Cu ppm	Mo ppm	Zn ppm	Ag ppm	Au ppb
1069	chip	6.0	Clyde	Garnet skarn with strong cpy mineraliz- ation loc. up to 30%. Iron oxides 10%. Pyrrothite 5%.	19,489 * 1.957%	23	682	37.7	294
1070	grab	N/A	Clyde	Altered diorite or felsite dyke. Silicified, pyritized (5-10% py). Strongly fractured hosted by skarn. Strike/dip: 5/50 West	432	3	39	0.6	6
1071	chip	1.5	Clyde	Garnet skarn with high iron ox. content (30-40%) and 4-6% cpy mineralization.	12,193	3	226	21.2	515
1072	chip	N/A grab	1750' Expl. Adit Dump	High grade cpy. mineralized piece (3 kg) from a gulley utilized in 1965-67as a mine dump.	44,652 * 14.796%	2 ,	12,176 * 1.25%	188.3	1,870
1073	grab	N/A	Grid # 2 North	Dark grey ash tuff with 2-3 %interstial pyrite and carb. alteration	257	1	111	<0.3	23
1074	grab	N/A	Grid # 2 North	Strongly pyritized, dark andesite flow ? (20-25% py).	116	3	72	<0.3	8
1075	grab	N/A	Grid # 2 North	Altered tuff (epidote, silica, garnet ?). Pyrr (10%), py (5%) and possibly some minor cpy. Subcrop or large block in a creek.	413	1	29	0.3	3
1076	grab	N/A	Grid # 2 North	Strongly silepidote altered tuff min with py (10%) + possibly minor aspy ?.	91	1	75	<0.3	3
1077	grab	N/A	Grid # 2 North	Massive pyrrothite replacing a flow ? (90% pyrrothite). Subcrop at the road cut.	2,048	<1	24	1.6	17
1078	grab	N/A	North Arm	Shear zone with strong iron oxide staining in siliceous volcanic rock. Pyrr. 10-15%, py 5-15%.	819	16	16	0.4	5

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Yreka Property	- 1998 Rock	Sample	Descriptions
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Sample	Туре	Lenght (m)	Area	Description	Cu ppm	Mo ppm	Zn ppm	Ag ppm	Au ppb
1079	grab	N/A	North Arm	Massive silicified and chloritized volc. flow ? with 25% sulphides incl.cpy 4-6% pyrr, py. Iron ox. on fractures.	35,420 * 3.321%	11	1,759	68.8	155
1080	chip	3.4	North Arm	Massive silicified, chloritized volc. flow ? strongly fractured and loc iron ox stain- ed. Low grade cpy. mineralization near fractures filled with iron-ox. Fractures: strike/dip - 8/90	11,095	8	381	46.2	98
1081	grab	N/A	Comstock	Massive, black-greenish weathering pyrite intermixed with cherty, bleached tuff ?. Black, fine, massive pyrite 30 - 50%, sphalerite ? and iron ox. 8 %.	1,730	1	694	1.9	13
1082	float	N/A	Comstock	Semi-massive sphalerite (25%) with cpy 2-3% in a coarse quartz, epidote, chlo-rite aggregate.	10,648	1	45,317 * 4.53%	18.3	42
1083	fioat	N/A	Comstock	Quartz-sulphide boulder with 30% py, 8% sphalerite, and 2% cpy. Quartz is white to greenish, opaque, med. to fine grained, with pitted texture due to ox of sulphides. Iron ox content 5-8%.	1,623	3	1,338	5.4	22

\* Check Assay %, See Appendix III for Procedures

APPENDIX II
1998 ASSAY CERTIFICATES

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FAX (604) HASTINGS ST. VANCOUVER BC V6A PHONE (640)ACME ANALYTICAL LABORATOR TES LTD. GEOCHEMICAL ANALYSIS CERTIFICATE Fitch, Bernard File # 9800849 102 - 420 - 7th St., New Westminster BC V3M 3L1 Submitted by: BERNARD FITCH Fe As U Au Th Sr Cd Sb Bi Са P La Cr Mg Ba Ti B AL Na K W TL Hg Au\*\* Мо Cu Pb Zn Ag Ni Co Mn V SAMPLE# . % ppm ppm ppm ppm mad mad mad mad was ppm ppm ppm ppm % % ppm ppm % ppm % ppm % % ppm ppm ppm oz/t mag mag ppm ppm .2 <3 <3 16 1.23 .045 6 337 1.03 <2 <8 <2 <2 134 1 17 .12 44 .14 3 1.13 .22 .04 1<.001

1001

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609 8 74

.9 12

1002 1003 RE 1003 1004	5 2604 5 34141 5.6 19 50 1213 12.53 2 <8 <2 <2 28 246.0 <3 <3 44 1.14 .033 1 27 .45 19 .04 <3 1.20 .04 .08 3 < 5 2572 4 33818 5.5 19 50 1198 12.42 <2 <8 <2 <2 27 245.9 <3 <3 43 1.13 .032 <1 28 .45 19 .04 <3 1.19 .03 .08 4	5 <1<.001 5 <1<.001 5 <1<.001 5 <1<.001
1005 1006 1007 1008 1009	5       965       <3	5 <1<.001 5 <1<.001 5 <1<.001
1010 1011 1012 1013 1014	4 824 <3 10870 1.2 16 21 1391 7.15 2 <8 <2 <2 226 70.8 <3 3 99 3.77 .063 1 26 .98 27 .10 <3 4.19 .40 .12 <2	5 <1 .014 5 <1<.001
1015 1016 1017 1018 *1019	5       302       27       1173       .8       19       6       598       2.48       4       <8	5 <1<.001 5 <1<.001
1020 1021 1022 1023 1024	2       671       <3	5 <1 .001 5 <1 .002 5 <1<.001
1025 1026 Standard C3/AU-1 Standard G-2	4958       2359       <3	5 <1<.001 5 1.095

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE. - SAMPLE TYPE: ROCK Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

March 20/98 SIGNED BY ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS DATE RECEIVED: MAR 16 1998 DATE REPORT MAILED:

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# GEOCHEMICAL ANALYSIS CERTIFICATE

Fitch, Bernard PROJECT YREKA File # 9800896 102 - 420 - 7th St., New Westminster BC V3M 3L1

		سور مواد مرد و در مرد م					ويبد ومعروده و	ومديد ومعرومه		منتقاب بموادية			an in an									يستبع بالمراجع		and and the fact of a			وأستر وأسترو				ويعتقد والمراجع والمراجع
	SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm			Mn ppm					Th Sr ppm ppm									ˈMg %				Al %			W ppm	
	1027 1028 1029 1030 1031	443 3 34 2 <1	1075 59 266 1257 9406	39 4 4	31 112 20 49 949	.7 .3 1.6	35 22 3 19 36	16 <1 75	129 12 749		<2 <2 <2	<8 <8 <8	<2 <2 <2	<pre>&lt;2 157 &lt;2 85 3 5 2 269 2 167</pre>	1.3 .4 1.4	<3 <3 <3	<3 9 <3	59 222 64	1.15 .01 2.89	.064 .083 .072	6 1 2	19 10 30	.07 .96 .15 .43 .65	55 94 24	.21 .17 .09	<3 6 <3	2.12 .29 2.23	.39 .01 .28	.15 .05 .04	<2 <2 2	1 2 4
	1032 1033 1034 1035 1036	3 10 2	8892 1349 1645 10266 23717	5 7 6 8 4	136 125	2.5 3.2 25.0	18 14 19	15 18 29	628 508 449	4.41 6.95	5 <2 <2	<8 <8 <8	<2 <2 <2	<2 337 <2 282 <2 372	2.1	3 <3 <3	<3 <3 7	60 77 121	6.26 4.40 6.93	.095 .112 .073	3 3 3	12 20 39	.44 .47 .65 .67 1.07	33 40 38	.12 .15 .14	3 3 <3	5.53 5.77 5.99	1.14 1.14 1.20	.04 .04 .05	2 2 <2	9 31 238
	1037 1038 1039 RE 1039 1040	1 3 1 <1 2	12473 621 686 673 664	<3 17 9	124 120	1.2	15 15	11 18 17	750 568 549	2.51 3.75	<2 <2 <2	<8 <8 <8	<2 <2 <2	<2 119 <2 423 <2 358 <2 351 <2 327	3 1.2 1.1	<3 <3 <3	5 <3 <3	70 91 88	1.61 4.93 3.57 3.48 3.64	.110 .076 .074	3 3 3	21 15 13	.88 .56 .91 .88 .64	40 89 93	.24 .25 .24	<उ <उ <उ	7.18 5.50 5.17	1.41	.05 .20 .19	<2 3 3 <2 3	10 7 6
5	1041 1042 1043 1044 1045	1 2 2 1 <1	669 3496 2461 458 190	8		1.1 5.8 2.6 1.3 .6	18 16 10 28 48	28 64 47	842 1061 428	6.35 20.16	<2 3 236	<8 <8 <8	<2 <2 <2	<2 285 2 22	2 628.4 2.9	<3 <3 <3	3 8 <3	79 82 70	4.81 .73	.067 .034 .019	3 2 1	17 10 47	.78 .93 1.30 1.17 4.06	33 2 22	.16 .07 .01	<3 <3 <3	5.23 2.05 1.35	1.08 .06 .01	.03 .04 .12	<2 <2 2	15 13 19
	STANDARD C3/AU-R Standard G-2	27 2		37 <3		5.3 <.3		12 5							23.5 3.2							172 81	.59 .61				1.93 1.02				497 <1

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. - SAMPLE TYPE: ROCK AU\* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.(10 GM) Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

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# COCHEMICAL ANALYSIS CERTIFICATE

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SAMPLE#	Au* Cu Zn ppb % %	
1001 1002 1003 RE 1003 1004	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
1005 1006 1007 1008 1009	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	
1010 1011 1012 1013 1014	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
 1015 1016 1017 1018 1019	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
1020 1021 1022 1023 1024	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
1025 1026 STANDARD AU-R/GC-2	3 6 484 .933 16.70	

CU & ZN BY REGULAR ASSAY ICP.

ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB - SAMPLE TYPE: ROCK PULP

Data  $\mathcal{N}_{FA}$ 

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AU\* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.(10 GM)

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: APR 13 1998 DATE REPORT MAILED: Hpm / 20/98

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

ASSAY CERT: Fitch, Bernard PROJECT YRI 102 - 420 - 7th St., New V	IFICATE EKA File # 9800896R
SAMPLE#	CU Zn
1031 1032 1035 1036 1037	.920 - .883 - .996 - 2.309 - 1.197 .79
RE 1037 1042 1043 STANDARD R-1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

1.000 GM SAMPLE DIGESTED IN 30 ML AQUA - REGIA, DILUTE TO 100 ML, ANALYSIS BY ICP.

- SAMPLE TYPE: ROCK PULP

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Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data C FA

TILYNUIL LATYATOL LI (ISU 9002 Accredited Co.)

DATE RECEIVED:

MAY 15 1998

GEOCHEMICAL ANALYSIS CERTIFICATE

E. FILLING

Fitch, Bernard File # 9801725 Page 1 402 - 420 - 7th St., New Westminster BC V3M 3L1 Submitted by: Bernard Fitch

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SAMPLE#	Mo ppm	Cu ppm		Zn ppm	•		Co ppm p			As ppm p					Cd ppm			V ppm	່Ca %		La ppm				Ti %	B ppm			К % р		Au* ppb	
1046 1047 1048 1049 1050	15 2 8 28	154 20886 2325 2085 178	6 <3 3 4 <3	24 614 78 54 19		119 15 11	79 7 10 6 10 7	723 1: 651 1 755 1:	6.62 2.00 1.37 0.53 9.96	27 16 17	<8 <8 <8	<2 <2 <2	<2 <2 <2	22	4.3 .4 .5	<3 3 <3	78 15 21	8 13 10	10.10 12.27 10.65 9.81 10.79	.005 .025 .027	1 4 6	12	.05 .04 .06 .05 .05	2 8 6	.01 .04 .02	59 <3 1 <3	.51 1.10 .68<	.01< .03 .01		42 66 62	914 62	
1051 1052 1053 1054 1055	1 1 6 1 2	1053  3652  3614  522  8453	<3 4 <3 6 4	351 18	24.2 49.7	322 28 17	57 2 22 2 44	279 283 1 56	3.75 2.28 4.53	2 29 3	<8 <8 <8	<2 <2 <2	<2 <2 <2	384 31 72	3.1 <.2 <.2	<3 5 <3	13 41 <3	37 31 17	1.36 3.44 1.07 .72 3.09	.087 .039 .069	<1 <1 4	55 31 7	.23	8 10 23	.20 .09 .07	<3 / <3 <3 /	4.41 .58	.11 .01 .15	.02 .02 4 .05	71	11	
RE 1055 1056 1057 1058 1059	3 2 1	8086 3411 182 3085 2383	<3 4 <3 <3 <3	441 395 64 114 <b>73</b>	27.9 4.6 <.3 4.6 7.6	23 11 37	14 7 9 9 14 4	728 755	1.25 8.65 1.86	5 12 <2	<8 <8 <8	<2 <2 <2	<2 <2 <2	141 8 166	2.5 .7 .4	<3 <3 <3	4 3 <3	15 23 38	3.01 7.54 8.03 1.72 10.90	.043 .042 .081	1 3 1	6 15 33	.20 .11 .35	30 9 16	.10 .04 .22	<3 ' <3 <3 '	1.07 .99	.09 .01 .27	.11 .02 .01	<2 14 <2	68 142	
1060 1061 1062 1063 1064	2 1 1	7152 800 735 1683 6095		53 42 92	1.0 2.7	25 72 121	14 8 10 2 15 3	328	8.50 1.00 1.31	5 26 8	<8 <8 <8	<2 <2 <2	<2 <2 <2	6 283 431	1.0 <.2 <.2	<3 <3 <3	<3 <3 <3	25 32 59	9.83 9.16 2.80 4.21 10.50	.035 .066 .072	<1 <1	23 44 64	.16 .34	5 9 18	.05 .18 .22	<3 / <3 / <3 /		.01 .08 .12	.02 .01 .03	5 <2 <2	563 20 10 10 161	
1065 1066 1067 1068 1069	23 / 2 / 8	13261 16641 19129 216 19489	<3 18 <3	536 726 26	24.6 67.2	49 454 5	45 4 87 5 4 9	499 582 1 756	4.75 2.97 9.22	8 11 16	<8 <8 <8	<2 <2 <2	<2 <2 <2	292 5 23	2.7 2.0 1.3	<3 5 <3	16 67 <3	29 23 20	11.62 3.73 7.00 13.17 7.62	.029 .001 .024	1 <1 <1	40 16	.46	13 2 3	.13 .04 .04	<3 3 <3 7 <3 7	1.18< 3.15 1.10< 1.25 1.19	.20 .01 .01	.21 .01 .02	<2 12 1	1050 19	
1070 1071 1072 1073 1074	24		<3		21.2 188.3 <.3	390 51	27 9 591 3 30 7	353 3 700 -	0.52	7 76 15	<8 <8 <8	11 <2	<2 2 <2	4 4 76	.6	<3 35 <3	9 <3	26 <1 203	9.99 .04 3.41	.144	1 2 2	27 14 138 3	.26 .06 .01 3.02 2.44	2 2< 23	.04 .01 .24	<3 8 <3 3	3.39	.01 .01 .06	.03 .01 .05	<2 <2 <2		
1075 1076 1077 1078 STANDARD C3/AU-R	1 <1 <1 16 25	413 91 2048 819 62		29 75 24 16 162	<.3 1.6 .4 5.0	21 10 16 34	28 6 97 44 12 7	654 60 3 58 752	5.22 1.22 5.59 3.22	7 <2 12 60	<8 <8 <8 21	<2 <2 <2 4	<2 <2 <2 21	118 305 88 29	.3 <.2 <.2 24.1	<3 <3 <3 20	<3 5 <3 23	165 8 44 76	5.25 1.03 1.26 .64 .53	.070 .026	1 <1 1	28 2 8 11	2.16 .07 .47	38 8 12	.30 .03 .12	<3 2 <3 2 <3 1	2.97 2.24 1.53	.21 .41 .26	.16 .01 .04	<2 <2 <2 <2 18	3 3 17 5 487	
STANDARD G-2	2	4	<3	43	<.3	8	5 5	531	2.07	<2	<8	<2	3	75	<.2	<3	<3	40	.62	.099	6	74	.60	240	.12	<3	.97	.08	.50	2	2	
IC	P5	500 GR	AM SA	MPLE	IS DIG	ESTE		TH 3M	L 3-1	-2 H					5 DEG			ONE	HOUR A	ND IS	DIL	UTED	то 1	0 ML	WIT	H WAT	TER.					

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.

ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB

- SAMPLE TYPE: ROCK AU\* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.(10 GM)

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE REPORT MAILED: May 26/95

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

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SAMP	LE#	Mo ppm	Cu ppin	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppill	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppin	Sb ppm	Bi ppm	۷ هور	Ca %	P %	La	Cr ppm	Mg %	Ba ppm	Ti %	B B B B B B B B B B B B B B B B B B B B	Al %	Na %	K %	W ppm	Au* ppb
1079 1080 1081 1082 1083		8 <sup>-</sup> 1	35420 11095 1730 10648 1623	10 5 7 18 13		46.2 1.9 18.3	11 2 10 3 8	66 13 62 371 54	100 125 181	6.45 4.77 4.48 19.66 4.34	5 <2 11 25 13	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	<2 <2 <2 <2 <2 <2 <2	259 208 27 7 9	11.8 3.2 3.4 299.4 10.4	ও ও ও ও ও ও	42 13 75 102 245	19		.025	<1 1 <1 2	3 2 6 21 13	.37 .69 1.20 .59 .45	8 11 15 5 3	.05 .05 .03 .02 .02	-			.03 .03 .04 .03 .03	3 <2 <2 <2 2 2	155 98 13 42 22
RE 1	1083	3	1555	12	1258	4.3	7	52	267	4.18	11	<8	<2	<2	9	9.6	<3	229	25	.31	.036	1	13	.44	3	.02	<3	.49	<.01	.03	2	23

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

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

ACME ANALYTICAL LABORATORIES LTD	852 E. HASTINGS ST.	역 2012 2019 2019 2019 2019 2019 2019 2019	
(ISO 9002 Accredited Co.)	Fitch, Bernard	New Westminster BC V3M 3L1	<u> </u>
	SAMPLE#	CU Zn AG % % oz/t	
	$     1047 \\     1052 \\     1053 \\     1055 \\     1064   $	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	
	1065 1066 1067 1069 1072	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	
	RE 1072 1079 1080 1082 STANDARD R-1	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	
- 54	O GM SAMPLE DIGESTED IN 30 ML AQUA - MPLE TYPE: ROCK PULP les beginning 'RE' are Reruns and 'F	REGIA, DILUTE TO 100 ML, ANALYSIS (	BY ICP.
DATE RECEIVED: MAY 27 1998 DATE R	EPORT MAILED: June 1 /9	f SIGNED BY.C.	TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS
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Data AFA

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

SAMPLE#								Mn ppm	Fe %	As ppm	U ppm	Au ppm p	Th opm p	Sr opm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %			Au*
1+00N BL 1+00N 0+25E (B) 1+00N 0+50E (B) 1+00N 0+75E (B) 1+00N 1+00E (B)	223	69 55 66	3 12 58	115 96 177	.3 .4 .6	24 20 32	21 14 25	581 489 1268	7.57 6.10 6.36	13 8 <2	<8 <8 <8	<2 <2 <2	3 <2 2	6 7 3	<.2 <.2 <.2	<3 <3 <3	<3 <3 <3	157 175 204	.08 .09 .05	.067 .147 .116 .081 .071	8 5 8	99 68 122	.59 .60 .66	19 22 14	.34 .30 .17	<3 <3 <3	9.83 5.33 4.37	.01 .01 .01	.03 .03 .03	<2 <2 <2	1 1 5
1+00N 1+25E (B) 1+00N 1+50E (B) 1+00N 1+75E (B) 1+00N 2+00E (B) 0+00S 0+75W (B)	1 2 2	50	22 9 5	105 135 78	.3 <.3 <.3	40 23 32	26 26 38	905 629 1465	8.01 6.98 10.76	12 106 133	<8 <8 <8	<2 <2 <2	2 2 2	11 8 20	<.2 <.2 <.2	<3 <3 <3	<3 <3 <3	198 203 277	.10 .07 .16	.049 .080 .087 .090 .036	1 7 2	134 104 248	1.17 .36 .35	16 17 11	.34 .28 .38	<3 <3 <3	6.22 6.04 5.20	.01 .01 .01	.03 .02 .01	<2 <2 <2	1 1 <1
0+00S 0+50W (B) 0+00S 0+25W (B) 0+00S 0+00 (B) RE 0+00S 0+00 (B) 0+00S 0+25E (B)	3	112	6 13 8	1268 321 304	.4 <.3 <.3	25 16 15	42 9 9	1603 439 415	5.82 4.46 4.22	2 <2 <2	<8 <8 <8	<2 <2 <2	<2 <2 <2	30 23 21	4.9 .4 .3	<3 <3 <3	<3 <3 <3	117 93 87	.66 .18 .17	.044 .065 .074 .071 .116	3 3 3	65 66 63	.50 .47 .45	28 15 14	.23 .14 .13	<3 <3 <3	6.21 4.59 4.34	.03 .05 .05	.02 .02 .02	2 <2 <2	2 4
0+00S 0+50E (B) 0+00S 0+75E (B) 0+00S 1+00E (B) 0+00S 1+25E (B) 0+00S 1+50E (B)	223	37 42 44	5 7 13	66 58 85	<.3 .3 <.3	15 11 13	13 26 25	818 1350 2527	6.99 6.76 7.23	12 <2 19	<8 <8 <8	<2 <2 <2	<2 <2 2	23 9 10	<.2 <.2 <.2	<3 <3 <3	<3 <3 <3	205 173 215	.14 .12 .12	.139 .070 .099 .086 .073	4 4 8	48 44 40	.45 .30 .71	20 15 27	.35 .26 .34	<3 <3 <3	4.67 6.87 5.53	.02 .02 .02	.03 .05 .04	<2 <2 <2	10 2 2
0+00S 1+75E (B) 0+00S 2+00E (B) 1+00S 1+50W (B) 1+00S 1+25W (B) 1+00S 1+00W (B)	2 3 2	55 48 144 379 263	6 8 4	51 32	<.3 .4 8	15 5 20	16 6 17	496 124 212	6.93 5.18 8.17	16 <2	<8 <8 <8	<2 <2 <2	<2 <2 <2	12 52 20	<.2 <.2 <.2	<3 <3 <3	<3 <3 <3	235 143 124	.11 .35 .16	.067 .059 .025 .059 .063	9 1 3	57 11 110	.43 .16 .25	19 16 37	.32 .23 .28	<3 <3 <3	4.47 1.28 7.25	.01 .02 .01	.02 .03 .02	<2 <2 <2	3 15 9
1+00S 0+75W clay 1+00S 0+50W (B) 1+00S 0+25W (B) 1+00S BL (B) 1+00S 0+25E (B)	3 2 2	445 624	5 7 10	64 151 894	2.5 1.2 1 0	9 11 25	8 23 17	164 716 685	6.71 4.97 6.07	<2 <2 351	<8 <8 <8	<2 <2 <2	<2 <2 <2	32 20 46	<.2 .2 9.4	<3 <3 <3	3 <3 <3	173 74 126	.18 .19 .96	.020 .033 .104 .080 .044	1 2 4	21 16 61	.27 .19 .56	15 19 26	.36 .13 .34	<3 <3 <3	2.70 6.50 5.88	.02 .02 .02	.02 .01 .02	3 <2 <2	17 5 3
1+00S 0+50E (B) 1+00S 0+75E (B) 1+00S 1+00E (B) 1+00S 1+25E (B) STANDARD C3/AU-S	1 2 2	65 44	7 5 8	70 309 131	<.3 .5 <.3	13 12 22	12 12 21	381 395 692	7.24 5.15 6.12	6 42 8	<8 <8 <8	<2 <2 <2	<2 <2 <2	9 16 15	.2 2. 2.>	<3 <3 <3	<3 3 <3	204 130 152	.13 .23 .15	.082 .048 .051 .071 .085	7 7 4	36 41 58	.34 .31 .67	20 23 36	.38 .24 .28	<3 <3 <3	4.67 5.07 6.56	01. 02. 01.	.01 .02 .02	<2 <2 <2	2 2 2
STANDARD G-2	1	3	3	51	<.3	8	4	514	2.04	<2	<8	<2	3	73	<.2	<3	<3	40	.65	.097	7	71	.59	223	.13	<3	.91	.08	.46	3	<1

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Data<u>.</u> FA



STANDARD G-2

Fitch, Bernard PROJECT YREKA FILE # 9800896A

Page 2



SAMPLE#	Mo Cu Pb	Zn Ag Ni Co ppm ppm ppm ppm	Mn FeAs ppm %ppm	s U Au Th Sr mppmppmppmppmppm	Cd Sb Bi V Ca P ppm ppm ppm '% % (	La Cr Mg Ba Ti B Al ppm ppm % ppm % ppm %	Na K W Au* % % ppm ppb
1+00S 1+50E (B) 1+00S 1+75E (B) RE 1+00S 1+75E (B) 1+00S 2+00E (B) 2+00S 2+00W (A+T)		189 .3 18 24 90 <.3 11 16 92 <.3 11 16 35 <.3 9 7	1276 4.96 19 678 5.84 4 709 6.02 7 267 7.69 12	9 <8 <2 <2 15 4 <8 <2 <2 8 7 <8 <2 <2 8 2 <8 <2 <2 7	.7 <3 <3 123 .15 .076 <.2 <3 <3 107 .07 .077 <.2 <3 <3 111 .07 .080 <.2 <3 <3 250 .07 .044	5       35       .54       27       .15       <3	.01 .02 <2 3 .01 .02 <2 2 .01 .02 <2 1
2+00S 1+75W (B) 2+00S 1+50W (B) 2+00S 1+25W (B) 2+00S 1+25W (B) 2+00S 0+75W (B)	1 82 <3 1 39 7 1 32 16 1 34 4 1 36 11	78 <.3 107 22 28 <.3 20 5 55 <.3 24 7	356 6.87 <2 142 7.95 <2 165 9.39 8	2 <8 <2 <2 13 2 <8 <2 <2 7 8 <8 <2 <2 8	<.2	7       118       .35       15       .11       3       7.98         <1	.05 .05 <2 <1 .01 .01 <2 1 .02 .02 <2 2
2+00S 0+50W (B) 2+00S 0+25W (B) 2+00S BL (B) 2+00S 0+25E (B) 2+00S 0+25E (B)	3 751 5 1 97 15 2 57 4	249 2.6 9 28 987 .4 13 25 85 <.3 5 8	717 6.47 <2 1128 4.34 8 500 6.15 <2	2 <8 <2 <2 15 8 <8 <2 <2 35 2 <8 <2 <2 55	1.4 <3 <3 91 .64 .060	3         20         .16         12         .20         <3         5.78           1         13         .35         47         .18         <3	.01 .01 <2 7 .03 .02 <2 <1 .04 .34 <2 1
2+00S 0+75E (B) 2+00S 1+00E (B) 2+00S 1+25E (B) 2+00S 1+50E (B) 2+00S 1+75E (B)	1 106 < <b>3</b> 2 20 14 2 25 17	342 .8 18 28 54 <.3 7 6	970 5.73 2 260 7.92 <2 384 10.31 <2	2 <8 <2 <2 35 2 <8 <2 <2 22 2 <8 <2 <2 10	1.6       <3	5 49 .32 41 .26 <3 5.41 <1 38 .13 11 .55 <3 1.39 2 45 .14 14 .49 <3 3.28	.01 .01 <2 2 .01 .01 <2 1 .01 .01 <2 2
2+00S 2+00E (B) 3+00S 2+00W (B) 3+00S 1+75W <b>(A+B)</b> 3+00S 1+50W " 3+00S 1+25W "	2 282 18 <1 229 <3 2 484 <3	92 .7 44 13 177 1.1 102 19 313 1.6 67 49	141 12.62 11 302 6.22 5 382 7.54 <2	1 <8 <2 <2 17 5 <8 <2 <2 11 2 <8 <2 <2 38	<pre>' &lt;.2 &lt;3 11 243 .10 .049 &lt;.2 &lt;3 &lt;3 102 .55 .024</pre>	2       73       .95       34       .22       <3	.01 .01 <2 9 .05 .05 <2 2 .02 .02 <2 4
3+00S 1+00W " 3+00S 0+75W " 3+00S 0+50W " 3+00S 0+25W " 3+00S BL "	1 589 6 2 205 46 1 360 9	556 1.2 50 54 645 .4 15 21 1330 .3 30 28	1592 9.97 <2 2952 6.48 472 1501 6.20 46	:2 <8 <2 3 15 '2 <8 <2 <2 19 .6 <8 <2 2 34	<.2	3 47 .28 21 .20 <3 2.74 5 62 .68 57 .33 <3 5.94	.01 .01 4 5 .01 .02 <2 63 .03 .02 <2 10
3+00S 0+25E " 3+00S 0+50E " 3+00S 0+75E " 3+00S 1+00E " STANDARD C3/AU-S	1 34 8 1 93 <3 2 49 15	76 <.3 5 14 849 <.3 12 20 190 .3 16 28	422 6.27 <2 585 3.77 260 559 6.44 8	2 <8 <2 <2 22 0 <8 <2 <2 20 8 <8 <2 <2 52	3.6 <3 <3 95 .47 .085 2 <3 <3 122 .52 .068	1 15 .90 73 .29 <3 2.85 5 47 .45 13 .13 <3 3.98	.01 .14 <2 2 .02 .02 <2 2 .02 .01 <2 2

1 4 3 45 <.3 7 4 483 1.89 <2 <8 <2 3 70 <.2 <3 <3 38 .61 .090 7 68 .55 219 .13 <3 .90 .08 .44 2 1

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

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Data\_\_\_\_FA

Fitch, Bernard PROJECT YREKA FILE # 9800896A

**D** 

Page 3

ACHE ANALYTICAL	· · ·			-																	<u> </u>								- AC	1E AUALYT	ICAL
SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	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	Au* ppb
3+005 1+25E (A+B) 3+005 1+50E " 3+005 1+75E " 3+005 2+00E " 4+005 1+50W "	2 2 2 2 3	45 21 85 40 171	6 8 9 4 5	109 54 765 204 269	.7 <.3 <.3 <.3 .4	6 6 12 14 23		143 341 745 577 1131	6.13 5.55 6.42 6.02 3.51	3 13 <2 <2 <2 <2	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2 <2	<2 <2 <2 <2 <2 <2	29 37 33 14 39	.4 .3 1.0 <.2 1.7	ও ও ও ও	5 <3 <3 <3 <3	219 194 149 143 43	.75 .24		1 1 6 4	22 21 31 31 18	.25 .15 .71 1.09 .07	23 19 41 30 12	.39 .38 .28 .25 .10	<3 2 <3 2 <3 6 <3 7 <3 4	.15 .29 .65	.01 .03 .03	.02 .01 .03 .05 .01	<2 <2 <2 2 2 <2	1 4 12 4 1
4+005 1+25W <sup>33</sup> 4+005 1+00W <sup>33</sup> 4+005 0+75W <sup>34</sup> 4+005 0+55W <sup>34</sup> 4+005 0+25W <sup>34</sup>	2 2 3 2 3	147 54 85 176 53	6 <3 8 3 5	666 103 226 502 142	.5 .4 <.3 .6 .4	23 17 12 28 23	10 17 19	347 1831 5101	3.75 5.49 4.28 4.22 6.58	4 5 2 6 8	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	<2 <2 <2 2 2 2	11 24 208	5.6 <.2 1.5 4.0 <.2	<3 <3 <3 <3 5	<3 <3 <3 3 <3	128 87	.20 2.19	.051 .048	4 5 2 4 3	21 55 31 16 80	.20 .29 .09 .17 .48	34 22 17 43 22	.04 .26 .18 .05 .28	3 3 <3 4 <3 3 <3 3 <3 5	.66 .61 .29	.12 .01 .02 .22 .01	.02 .01 .01 .02 .01	<2 2 <2 <2 <2 <2	2 1 1 3
4+00S BL " 4+00S 0+25E " RE 4+00S 0+25E " 4+00S 0+50E " 4+00S 0+75E "	1 1 3 2	22 147 151 146 27	7 6 7 14 5	246 438 448 161 68	.4 .4 .3 .3	15 35 36 14 13	21 22	362	6.06 4.62 4.69 4.84 6.43	3 <2 3 261 109	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	<2 <2 <2 <2 <2 <2	37 40 41 22 22	<.2 1.0 .9 .4 <.2	<3 <3 <3 5 3	<3 <3 <3 <3 <3	93 91 93 133 213	.30 .30 .15	.059 .073 .074 .073 .043	5 4 5 2	59 77 79 90 77	.12 .75 .76 .27 .33	57 22 22 11 25	.22 .18 .18 .24 .33	<3 6 <3 5 <3 5 <3 4 <3 3	.18 .31 .98	.03 .06 .06 .03 .01	.01 .02 .03 .02 .02	<2 <2 2 2 2 2	2 2 1 1
4+00S 1+00E '' 4+00S 1+25E '' 4+00S 1+50E '' 4+00S 1+75E '' 4+00S 2+00E ''	1 1 1 2	23 214 33 20 18		214 2195 59 48 119	.4 <.3 <.3 <.3 <.3	9 9 5 7	19 23 8 4 14	962 1292 500 191 283	4.28 6.32 5.88 5.96 6.41	14 <2 <2 <2 32	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	<2 <2 <2 ~2 ~2 ~2	28 82 18 5 9	.8 5.7 <.2 <.2 <.2	<3 <3 <3 <3 4	<3 <3 <3 <3 <3	80 89 172 147 187	.05		9 3 1 2 4		.19 1.08 .64 .55 .46	17 33 18 8 22	.18 .15 .30 .29 .14		.93	.01 .17 .02 .01 .01	.02 .05 .04 .02 .02	<2 <2 <2 <2 <2 <2	22 1 1 3
5+00S 2+25W (B) 5+00S 2+00W (B) 5+00S 1+75W (B) 5+00S 1+50W (T) 5+00S 1+25W (B)	3	35 185 172 3179 138		318	<.3 <.3 .3 17.6 3.0	16 28 34 46 23		93 529 498 6738 461	3.42 5.04 6.98 12.67 4.25	<2 <2 6 4 2	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	<2 <2 <2 7 <2	184 38 17 137 8	.6 .6 .4 14.7 .4	ও ও ও ও ও	<3 <3 <3 38 <3	42 92 125 41 87	.23 .10 .56	.027 .050 .051 .213 .064	3 3 1 3 3	32 55 97 30 85	.07 .09 .51 .28 .37	12 20 20 89 10	.14 .24 .31 .04 .20	<3 3 <3 4 <3 5 <3 5	.52 .14 .13	.18 .04 .01 .02 .01	.01 .02 .02 .03 .02	<2 2 <2 <2 <2 <2	<1 2 2 34 1
5+00S 1+00W (C) 5+00S 0+75W (C) 5+00S 0+50W (B) 5+00S 0+25W (B) 5+00S BL (C)	2 2 4 7	17 26 35 24 7	3 6 9 12 5	27 40 71 66 17	.9 <.3 .6 1.3 <.3	5 16 16 9 6	3 7 8 3 2	37 141 177 95 31	1.60 6.39 5.68 3.53 2.55	2 5 10 3 3	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	<2 2 <2 <2 <2 <2	3 6 10 6 10	<.2 <.2 <.2 <.2 <.2	<3 <3 <3 <3 <3	<3	66 240 178 111 116	.07 .03	.040 .031	2 1 2 1	5 42 57 27 10	.02 .06 .34 .14 .06	4 7 13 5 7	.09 .43 .29 .16 .16	<3 <3 2 <3 1		.01 .01 .01 .01 .01	.01 .01 .02 .01 .01	<2 <2 <2 <2 <2 <2	1 1 2 1 <1
5+00S 0+25E (B) 5+00S 0+50E (B) 5+00S 0+75E (B) 5+00S 1+00E (B) STANDARD C3/AU-S	2 2 1 1 25	44 66 20 31 61	17 16 6 38	125 573 33 197 173	<.3 .4 <.3 <.3 5.2	23 23 20 20 35	14 7	217	5.15 3.22 6.08 8.15 3.23	10 104 <2 19 55	<8 <8 <8 <8 18	<2 <2 <2 <2 <2 2	<2 <2 <2 <2 17	182 18 23	<.2 10.2 .2 <.2 23.8	<3 3 <3 5 17	<3 <3 <3 <3 22		. 13 . 15	.103	2 5 1 1 17	58 73 90 139 159	1.49 .95 .70 .75 .58	21 29 18 25 149	. 18 . 06 . 53 . 69 . 10	<3 5 4 3 <3 2 <3 3 18 1	22 2.74 3.84	.08 .16 .01 .01 .04	.03 .04 .03 .02 .16	<2 <2 <2 <2 22	6 9 1 1 51
STANDARD G-2	2	3	4	47	<.3	8	4	521	2.03	<2	<8	<2	3	75	<.2	<3	<3	41	.65	.094	7	72	.59	232	.13	<3	.94	.08	.47	3	<1

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

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Data\_\_\_\_\_FA



Fitch, Bernard PROJECT YREKA FILE # 9800896A



Page 4

ACHE ANALYTI	CAL																																ACHE ANAL FILCAL
	SAMPLE#	Мо	Cu	Pb	Zn	Ag	Ni	Со	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	٧	Са	Ρ	La	Cr	Mg	Ba	Ti	В	Al	Na	K	W	Au*	
									ppm		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ррт	%	ppm	%	%	%	ppm	ppb	
	5+00S 1+25E (B)	2	22	4	32	.6	12	7	200	5.56	10	<8	<2	<2	8	<.2	<3	<3	187	.06	.020	1	55	.37	17	.25	<3	1.67	.01	.02	<2	2	
	RE 5+00S 1+25E (B)	2	22	9	32	.6	12	7	204	5.57	11	<8	<2	<2	8	<.2	<3	<3	190	.06	.020	1	55	.40	16	.26	<3	1.71	.01	.02	<2	2	
	5+00S 1+50E (B)	2	45	17	114	<.3	36	13	337	9.23	18	<8	<2	2	9	<.2	<3	<3	245	.10	.041	2	235	1.11	21	.54	<3	5.78	.01	.03	<2	9	
	5+00S 1+75E (B)	1	32	<3	157	<.3	24	29	771	5.34	42	<8	<2	<2	63	1.1	<3	<3	100 '	1.46	.186	4	38	1.48	28	.12	<3	5.73	.07	.02	<2	2	
	5+00S 2+00E (B)																				.040				52							1	
	6+00S BL (B)	2	31	21	55	1.7	12	6	185	5.89	9	<8	<2	<2	9	<.2	<3	<3	170	.05	.035	3	65	.40	18	.31	<3	4.62	.01	.02	<2	2	
	6+00S 0+25E (B)	3	49	47	114	.3	22	11	279	7.24	41	<8	<2	<2	20	<.2	<3	<3	160	.11	.045	6	68	.55	19	.27	<3	5.93	.01	.02	<2	7	
	6+00S 0+50E (B)	3	14	10	47	<.3	9	4	107	4.11	12	<8	<2	<2	- 4	<.2	<3	<3	110	.02	.022	- 4	21	.10	12	.10	<3	1.41	<.01	.01	<2	2	
	6+00\$ 0+75E (B)	4	40	5	116	.3	23	13	384	5.37	36	<8	<2	<2	10	<.2	<3	3	84	.08	.055	13	30	.54	30	.09	<3	2.98	.01	.04	<2	3	
	6+00S 1+00E (B)	1	35	17	57	.3	38	11	224	7.82	9	<8	<2	2	5	<.2	<3	<3	282	.13	.020	1	183	1.07	9	.57	<3	2.32	.01	.03	<2	3	
	6+00S 1+25E (B)	3	28	27	54	.5	18	8	189	5.68	16	<8	<2	<2	12	.2	<3	<3	177	.33	.045	2	76	.33	12	.28	<3	3.63	.01	.02	<2	3	
	6+00S 1+50E (S)	3	20	- 9	69	<.3	18	10	503	4.29	29	<8	<2	<2	40	.5	<3	<3	134	.80	.033	1	43	.29	22	.15	<3	1.51	.01	.03	<2	2	
	6+00S 1+75E CLAY																				.015		25	.09	5	.08	<3	.97	.01	.02	<2	1	
	6+00S 2+00E (B)				59			6	156	5.42	15	<8	<2	<2	5	<.2	<3	<3	105	.02	.024	2	33	.41	20	.11	<3	2.23	.01	.02	<2	1	
	7+00S BL (B)	2	26	9	59	<.3	16	8	170	6.33	11	<8	<2	2	6	<.2	<3	<3	171	.02	.032	3	82	.27	14.	.16	<3	3.13	.01	.01	<2	3	
	7+00S 0+25E (B)	1	36	<3	67	<.3	26	13	333	5.27	13	<8	<2	<2	8	<.2	<3	<3	118	.03	.051	5	108	.51	41	.18	<3	5.15	.01	.02	<2	2	
	7+00S 0+50E (B)																				.177				30								
	7+00S 0+75E (B)	1	54	13	116	<.3	41	32	1744	6.57	28	<8	<2	2	12	<.2	<3	<3	162	.13	.099	9	128	.87	37	.21	<3	5.51	.01	.03	<2	2	
	7+00S 1+00E (B)	3	7	4	18	<.3	7	3	49	2.57	3	<8	<2	<2	3	<.2	<3	<3	49	.01	.013	1	1	.01	2	.01	<3	.07	<.01	.01	<2	1	
	7+00s 1+25E (B)	2	14	20	123	<.3	13	9	951	4.05	16	<8	<2	<2	6	.6	<3	3	59	.05	.056	12	26	.37	25	.02	<3	2.35	.01	.03	<2	2	
54	7+00s 1+50E (B)	2	22	10	143	.3	21	10	501	5.00	83	<8	<2	<2	20	.7	<3	<3	115	.17	.040	6	44	.22	33	.05	<3	2.38	.01	.02	<2	2	
	7+00S 1+75E (B)	4	49	4	104	<.3	27	19	2052	6.50	114	<8	<2	<2	31	1.0	<3	<3	148	.46	.059	13	76	.52	29	.20	<3	4.17	.01	.02	<2	3	
	7+00S 2+00E (B)	1	27	<3	64	<.3	18	14	456	6.40	11	<8	<2	<2	16	<.2	<3	<3	163	.14	.058	6			20							1	
	STANDARD C3/AU-S	25	63	34	177	5.5	36	13	763	3.34	57	19	3	18	31	23.8	19	22	81	.59	.087	18	166	.60	152	.10	20	1.91	.04	.17	25	45	
	STANDARD G-2	1	3	5		<.3	7	4	532	2.07	<2	<8	<2	2	78	<.2	<3	<3	41	.68	.095	8	74	.60	235	.14	<5	.98	.09	.47	2	1	

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

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

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	г.сса 0	L LA LCCI	HOR	ATOR		LTR		Ċ	רב ביים	I	STI1	1G.4	ĴŦ.	127.N	Gouv		PC	Ϋ́́Ύ́)	1R6	<u>)</u>	P#4	<u>)</u>	640	<del></del> _3	- 311	r) F	a <b>ří</b> í	ີງ4)2	(î)	]716	
<b>AA</b>								Fit	GE .ch,	осн. Ве:	EMI rna:	сац rd	AN. Fi	ацт le	SIS # 9	СЕ. 801	<b>RTT</b> 726	Ρ⊥C.	Paq	e 1									1		
SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %						Cd ppm		Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %		Au* ppb
0+000s 1+000w (B) 0+000s 0+875w " 0+000s 0+750w " 0+000s 0+625w " 0+000s 0+500w "	2 2 2 2 2	14 15 24 24 47	31 12 12 10 18	107 99 72 45 88	.4 <.3 .5 <.3 .7	14 16 19 13 24	18 10 4	773 258 104	6.12 6.68 6.17 4.60 5.53	37 14 16 13 25	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	<2 <2 <2 <2 <2 <2	39 9 6 5 6	.6 .4 <.2 <.2 .3	ও ও ও ও	<3 3 3 4 <3	78 129 111 96 72	.13 .05 .02	.036 .026	7 7 4 3 9		1.69 2.27 .63 .24 .93	34 37 31 11 49	.06 .14 .14 .07 .06	<3 <3 <3	3.71 3.53 4.24 1.69 2.82	.05 .02 .01 .01 .02	.02 .02 .01 .01 .02	<2 <2 <2 <2 <2 <2	1 1 4 2 5
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RE 0+00S 0+75E " 0+00S 1+00E "	1	90 12	31 9	102 15	.4 <.3	12 2	18 5 2	376 182 118	3.62 4.67	10 5	<8 <8	<2 <2	<2 2	15 18	.4 <.2	<3 <3	3 <3	175 252	.23 .10 .14	.094 .036 .048	5 6	60 14	1.30 .23	32 13	.35 .16	<3 <3 <3	3.36 2.11	.02 .01	.03 .06	<2 <2	60
0+00S 1+75E " 0+00S 2+00E (B) 1+000S 1+500W (B)+ 1+000S 1+375W (B) 1+000S 1+250W "	1 2 T 2 3 1		19 18 9 10 8	26 61 81 68 63	<.3 <.3 .3 .3 .7	9 20 14 9 9	69 26 13	1719 754 617	6.10 9.74 5.93 7.63 6.37	3 20 18 31 19	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2 <2 <2	2 2 <2 2 3	15 5 52 9 11	.2 .4 1.0 .2 .6	ও ও ও ও ও	<3 <3 <3 6 <3	224		.117	3 6 11 5 5	45 28 38	.51 1.04 .53 .94 1.08	16 54	.31 .24 .13 .06 .03	<3 <3 <3	1.92 8.41 5.59 5.80 6.58	.05 .06 .01 .02 .02	.04 .02 .02 .02 .03	<2 <2 <2 <2 <2 <2	1 8 1 6 1
1+000S 1+125W 4 1+000S 1+000W 4 1+000S 0+875W 4 1+000S 0+750W 4 1+000S 0+750W 4 1+000S 0+625W 4	2 8 2 2 4	18 2 25 15 20	7 17 13 3 13	27 37 35 35 35 37	.3 <.3 <.3 .5 .8	6 5 9 9	5 2 5 5 4	176 161 85	4.85 7.22 7.64 1.80 4.57	15 13 15 10 22	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	<2 2 2 2 2 2 2 2 2 2 2	21 5 4 12 3	.4 <.2 <.2 <.2 .3	ও ও ও ও ও	<3 <3 5 <3 <3	130 169 206 54 100	.04 .06 .28	.033 .035 .031 .019 .025	3 4 2 2 2	15 34 48 9 35	.25 .40 .39 .05 .15	15	.04 .14 .19 .01 .02	<3 <3 <3	2.16 2.10 2.95 .85 2.17	.01 .01 .02 .01 .01	.03 .02 .03 .01 .01	<2 <2 <2 <2 <2 <2	1 3 1 2 4
1+000S 0+500W * 1+000S 0+375W * 1+000S 0+250W * 1+000S 0+125W * 1+000S BL *	2	25 29 584 498 608	12 9 17 17 19		.4 .8 2.4 1.6 1.4	22 19 20 27 36	10 23 19	280 1545 600	5.21 4.59 4.49 4.77 4.78	12 13 61 68 118	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	2 <2 <2 2 2	11 46 43	<.2 .5 1.2 1.1 1.6	<3 <3 <3 <3 <3	<3 <3 <3 <3 <3	74 53 76 86 79	.05 .57 .51	.058 .079 .066 .057 .077	4 9 7 3 6	26 24 56 62 65	.58 .43 .68 .65 .96		.01 .01 .10 .13 .11	<3 <3 3	2.80 3.28 3.63 4.49 4.90	.02 .01 .05 .04 .06	.02 .03 .03 .03 .05	2 <2 <2 <2 <2 <2 <2	<1 <1 11 9 17
1+00S 0+25E " 1+00S 0+50E " 1+00S 0+75E " 1+00S 1+00E " 1+00S 1+25E "	3			197 315	.9	12 20 41 39 4	12 40 33	566 1882 2269	4.18 8.06 5.03 6.43 6.44		<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	2	27 30 41	<.2 .7 1.6 1.6 <.2		6 <3 <3	112		.106	3 3 8 6 5	76	.41 .67 .97 1.21 .18	29 45	.12 .11 .09 .07 .01	<3 <3 <3	1.64 3.61 6.25 5.13 2.52	.01 .04 .04	.02 .03 .04 .04 .03	<2 <2 <2 <2 <2 <2	18 23 8 20 12
STANDARD C3/AU-S Standard G-2	25 1	65 6	38 <3		5.2 <.3	41 8	12 4		3.50 2.06	55 <2	25 <8	<2 <2	22 4		24.6 <.2	16 <3	24 <3		.56 .65			170 77	.64 .61				2.01 1.05			17 2	
DATE RECEI		THIS - SAM <u>Samp</u> l	LEACH IPLE 1 es be	I IS F TYPE: eginni	ARTIA SOIL ing 'R	L FOR A <u>E' ar</u>	MN I U* - e Rei	E SR AQUA	CA P -REGIA	LA CR /MIBK RE' a	MG B EXTR re Re	A TI ACT, <u>ject</u>	B W A GF/AA <u>Rerur</u>	ND LI FINI	MITED SHED.	FOR (10 G	NAK M)	and a 17 7	г. Р				O 10				TIFIED	B.C.	ASSI	AYERS	

DATE RECEIVED: MAY 15 1998 DATE REPORT MAILED: 11/04 26/95 SIGNED BY.....D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYE All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only. Data FA

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SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	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 %		Au* ppb
1+00s 1+50E <b>(B)</b> 1+00s 1+75E " 2+000s 1+500W <b>S</b> 2+000s 1+375W <b>(B)</b> 2+000s 1+250W "	11 1 2 2 2	87 45 715 758 509	524 191 21 23 18	177 86 551 339 248	.7 1.6 1.8 2.2 1.2	13 6 52 38 25	30 9 25 33 19	895 9 262 9 1341 3 988 4 218 3	9.71 3.92 4.87	417 86 94 78 85	12 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	3 2 ~2 2 2	3 5 206 77 37	1.0 .9 4.3 1.8 1.5	<3 <3 <3 <3 3	<3 <3 <3 6 4	176 333 63 82 65	.04 1.95 .67	.056 .041 .068 .049 .047	4 3 4 7 7	23 25 67 62 42	.23 .22 1.06 .98 .53	12 28 59 44 43	<.01 .02 .08 .11 .12	<3 <3 <3	3.36 3.15 3.33 4.45 5.34	.01 .01 .21 .09 .03	.04 .02 .20 .04 .03		231 170 40 43 36
2+000S 1+125W * 2+000S 1+000W * 2+000S 0+875W * RE 2+000S 1+25E * 2+000S 0+750W *	2 2 3 3 3	348 812 376 56 335	14 15 18 27 15	166 335 242 113 149	1.4 2.3 1.2 .7 .8	20 37 18 28 15	19 32 18 13 9	574 1572 397 739 224	4.83 7.26 2.95	82 100 167 100 111	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	2 2 3 2 3		1.2 1.9 1.6 1.0 1.3	<3 <3 <3 <3 <3	<3 <3 <3 6	83 75 117 72 106	.95 .75 .70	.044 .074 .036 .088 .045	4 6 5 5 4	53 61 40 54 39	.68 .98 .46 .70 .35	27 57 44 36 21	.11 .10 .15 .07 .13	3 <3 3	3.36 4.23 3.64 3.65 5.30	.04 .11 .02 .10 .02	.04 .06 .03 .03 .02	<2 <2 <2 <2 <2 <2	7 73 18 10 7
2+000S 0+625W <sup>12</sup> 2+000S 0+500W <sup>14</sup> 2+000S 0+375W <sup>14</sup> 2+000S 0+250W <sup>14</sup> 2+000S 0+125W <sup>14</sup>	3 3 2 2	176 150 61 75 58	12 10 14 13 9	149 86 66 94 73	.4 .6 .8 .8 .7	21 14 11 20 15	31 7 10 14 21	582 127 109 1037 1065	6.10 4.67 4.97	49 41 31 29 16	<8 11 <8 <8 <8	<2 <2 <2 <2 <2 <2	2 2 2 2 2	32 10 6 28 13	1.2 1.3 .9 1.8 1.3	ও ও ও ও ও ও	<3 <3 <3 <3 <3 <3	96 80 145 96 119	.09 .06 .35	.054 .047 .039 .073 .060	4 4 6 5	35 40 21 30 40	.70 .46 .09 .37 .69	37 8 11 45 58	.08 .08 .01 .02 .05	<3 <3 <3	4.85 5.83 2.94 4.18 4.24	.02 .01 .01 .02 .01	.02 .03 .02 .03 .03	<2 <2 <2 <2 <2 <2	6 1 6 1 2
2+000S BL " 2+00S 0+25E (B)+5 2+00S 0+50E (B) 2+00S 0+75E " 2+00S 1+00E "	2 2 2 3 4	76 61 43 39 31	19 18 25 27 23	95 99 108 98 87	.8 .7 .7 .3 <.3	32 29 27 21 14	21 17 13 52 43	1275 958 632 8440 20801	4.45 4.59 5.20	135 76 109 148 111	<8 8 <8 8 <8	<2 <2 <2 <2 <2 <2	<2 2 2 <2 2 2 2	37 71 43 31 36	1.4 1.1 1.1 2.6 1.7	<3 <3 <3 <3 <3	<3 3 3 3 3 3 3	93 97 85 102 119	.66 .18 .51	.053 .059 .050 .045 .058	7 5 5 6	73 59 74 55 31	.90 1.11 .82 .46 .19	27 43 39 49 152	.13 .12 .11 .12 .06	<3 <3 <3	5.04 4.06 4.84 3.39 2.24	.05 .10 .05 .01 .01	.04 .06 .04 .02 .03	<2 <2 <2 <2 <2 <2	20 7 11 16 6
2+00S 1+25E " 2+00S 1+50E " 2+00S 1+75E " 2+00S 2+00E " 3+000S 1+500W	3 1 3 2 2	52 5 36 47 147	27 23 32 23 7	110 8 65 99 105	.6 .3 .6 1.4 1.0	27 2 13 23 14	12 2 32 16 23	802 44 500 1290 387	1.01 6.83 5.14	93 22 75 79 37	<8 <8 10 11 <8	<2 <2 <2 <2 <2 <2	<2 2 3 <2 2	102 4 6 76 26	1.0 <.2 1.1 1.6 1.0	<3 <3 <3 <3 <3	3 <3 <3 <3 <3	69 121 153 116 132		.010	5 1 4 6 4	51 13 57 46 30	.67 .02 .27 .62 .74	29 4 17 45 <b>3</b> 0	.07 .46 .17 .08 .21	<3 <3 <3	3.53 .43 6.63 3.39 6.12	.10 .01 .01 .07 .04	.04 .01 .02 .04 .04	<2 <2 <2 <2 <2 <2	12 41 8 10 1
3+000S 1+375W 3+000S 1+250W 3+000S 1+125W 3+000S 1+000W 3+000S 0+875W	2 2 2 2 1	61 42 38 39 20	24 11 9 12 11	117 103 81 65 44	.9 .6 .7 .6 .7	36 26 14 17 7	14 15 19 11 5	916 1077 747 392 199	4.25 5.43 4.23	94 35 33 32 15	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	<2 <2 2 2 2	74	1.1 1.4 1.3 1.4 1.2	<3 <3 <3 <3 <3 <3	<3 <3 <3 <3 8	79 64 111 100 106	.80 .89 .48 .17 .05	.094 .046 .047	6 6 5 3	69 30 41 54 48	.74 .64 1.93 .86 .69	32 23 33 23 20	.08 .05 .10 .14 .09	<3 <3 <3	4.62 3.64 5.88 4.89 5.34	.16 .12 .20 .04 .02	.05 .05 .05 .03 .03	<2 <2 <2 <2 <2 <2 <2 <2	7 4 6 1 1
3+000S 0+750W 3+000S 0+625W 3+000S 0+500W 3+000S 0+375W 3+000S 0+250W <b>(A+B)</b>	2 3 2 3 2	36 36 21 43 35	15 12 16 15 10	78 64 59 112 55	.9 .5 .5 .5	19 15 9 17 12	27 19 9 35 12	573 265 558 6698 673	7.32 5.37 6.19	15 14 7 16 11	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	3 2 2 2 2	9 4 26 12 5	1.7 .7 1.2 1.2 1.2	ব ব ব ব ব ব	<3 <3 7 <3 <3	126 167 94 74 126	.03 .62 .15		8 7 4 8 3	45 39 22 25 26	.45 .48 .62 .69 1.12	26 23 29 45 19	.15 .15 .11 .04 .08	<3 <3 <3	5.22 5.23 3.89 4.31 2.74	.01 .02 .02 .02 .01	.02 .02 .03 .04 .04	<2 <2 <2 <2 <2 <2	1 3 1 2 2
3+000S 0+125W STANDARD C3/AU-S STANDARD G-2	3 25 2	22 62 3	13 34 3	44 164 44	.5 5.4 <.3	9 34 7	7 11 5	748	5.62 3.23 2.02	40 52 <2	<8 26 <8	<2 3 <2	<2 22 4		.5 23.6 <.2	<3 20 <3	<3 23 3	146 77 41	.53	.027 .088 .094	3 17 8	20 165 76	.40 .59 .59	22 151 219	.16 .08 .12	18	1.37 1.88 1.00	.01 .04 .07	.04 .16 .48	<2 14 2	4 59 <1

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

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**CONTRACT** 

Contraction of the

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SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppmi	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %		Au* ppb
3+0005 BL 3+005 0+25E (A+B) 3+005 0+50E " 3+005 0+75E (B) 3+005 1+00E "	2 2 3 3 2	22 57 47 12 53	4 3 10 34 7	63 126 117 85 78	.4 .8 .5 .7 1.2	10 50 39 4 38	53 5 21 5 7		10.55 4.61 7.60	3 12 15 15 14	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2 <2	2 2 <2 <2 <2	42 66 36	1.0 1.9 1.3 .8 1.7	<3 <3 <3 <3 <3	ও ও ও ও ও	97 116		.131 .100 .049	5 11 6 2 9	73	2.26	21 56 49 46 58	.11 .09 .08 <.01 .09	<3 5 <3 4 <3 7	5.34	.07 .11	.02 .01 .05 .03 .04	<2 <2 <2 <2 <2 <2 <2	<1 8 5 3
3+00s 1+25E 4 3+00s 1+50E 4 3+00s 1+75E 4 3+00s 2+00E 4 4+000s 1+25W	2 1 2 2 1	18 12 26 26 166	47 11 64 53 <3	71 19 134 110 89	.3 .7 .6 .9 <.3	11 9 13 17 158	6 24 13	772 1227	7.47 3.40 9.09 4.00 4.89	89 27 76 44 13	<8 <8 <8 10 <8	<2 <2 <2 <2 <2 <2	<2 <2 3 <2 <2	4 6 17 332	.8 .3 .9 1.4 1.1	<3 <3 <3 <3 <3	<3 <3 <3 <3 4	181 174 187 91 102	.03 .08	.034 .018 .043 .056 .065	2 2 5 6 4	57 22 90 37 339	.49 .08 .35 .62 3.37	9 14 25 45 75	.12 .16 .18 .03 .18	<3 3 <3	2.65	.01 .01 .01 .01 .72	.02 .02 .02 .03 .22	<2 <2 <2 <2 <2 <2	151 21 47 65 2
4+000S 1+125w(A+B) 4+000S 1+00w (B) 4+000S 0+875w " 4+000S 0+75w " 4+000S 0+625w "	2 1 1 2	131 36 40 51 28	4 11 3 3 11	78 111 86 101 65	.6 .7 <.3 .6 .4	104 47 17 25 18	20 20 17	1397 1551 2817	6.54	11 16 5 7 16	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	<2 <2 <2 <2 <2 <2 <2 <2 <2	247	1.0 1.4 1.6 1.1 .9	<3 <3 <3 <3 <3	3 <3 <3 3 4	93 146 89	.58 2.58 2.27 1.49 .16	.084 .077	3 7 6 5 4	30 45	2.68 2.37 1.80 1.33 1.18	34 41 50 49 25	.11 .10 .09 .06 .16	4 <3 3	4.43 4.21 5.62 3.56 4.65		.11 .14 .09 .04 .03	<2 <2 <2 <2 <2 <2	1 3 1 1 6
4+000S 0+50W '' 4+000S 0+375W '' 4+000S 0+25W '' 4+000S 0+125W '' 4+00S BL ''	2 2 3 3 2	39 29 39 38 35	8 11 22 23 16	71 69 95 89 86	<.3 .3 .7 .8 .9	19 22 27 32 34	15 14	974 1451 1426	5.03 3.69 3.88 3.56 3.29	21 22 36 29 30	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	<2 <2 <2 <2 <2 <2	24 63	1.3 1.0 1.5 1.4 .9	<3 3 <3 3 3 3	3 3 3 3 3 3	112 82 85 73 71	.21 .33 .60	.054 .067 .074 .085 .079	6 4 7 7 7	58 68 58 54 55	1.04 .79 .89 .83 .81	25 15 37 37 27	.15 .09 .06 .06 .06	<3 <3 <3	5.52 5.43 4.20 4.06 3.77	.02 .04 .09 .15 .14	.03 .02 .04 .05 .04	2 <2 <2 <2 <2 <2	2 <1 5 10 2
RE 4+00'S BL (B) 4+00S 0+25E '' 4+00S 0+50E '' 4+00S 0+75E '' 4+00S 1+00E ''	2 2 3 2 2	34 40 37 41 32	14 19 8 7 15	87 91 54 143 70	.7 .7 .9 .5	34 32 23 31 9	15 12	1159 1128 6529	3.28 3.49 3.11 5.22 5.82	28 24 15 11 26	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2 <2	<2 <2 <2 <2 <2 <2 <2	107	1.1	3 <3 <3 <3 <3	<3 <3 <3 4 3		.92 2.40 1.02	.080 .082 .063 .081 .043	7 6 5 6 4	55 58 70 50 23	.81 .99 .56 1.15 .72	24 34 30 88 25	.06 .07 .09 .13 .10	4 <3 3	3.77 4.03 2.78 4.61 3.77	.14 .16 .03 .04 .01	.04 .05 .02 .04 .03	<2 <2 <2 <2 <2 <2 <2	2 1 1 3
4+00S 1+25E '' 4+00S 1+50E '' 4+00S 1+75E '' 4+00S 2+00E '' 5+000S 1+500W (B)	2 2 2 2 2	73 20 31 32 31	15 13 105 147 24	142 51 119 133 75	<.3 <.3 1.1 .6 .9	27 8 19 25 39	5	277 926 493	5.38 5.14 6.64 7.43 3.79	13 14 190 222 47	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	2 <2 <2 2 2 <2	11 8 28 8 104	1.8 .8 1.0 1.3 1.0	ব্য ব্য ব্য ব্য ব্য	<3 <3 <3 4 <3	89 103 128 193 94	.06 .72 .13	.090 .033 .051 .031 .057	11 2 9 8 8	46 73	.82 .51 1.19 .48 1.31	53 18 50 47 28	.14 .09 .07 .22 .08	<3 <3 <3	6.67 3.06 4.37 4.93 5.05	.01 .01 .01 .01 .18	.03 .02 .02 .01 .05	<2 <2 <2 <2 <2 <2 <2	5 1 44 225 3
5+000S 1+375W " 5+000S 1+250W " 5+000S 1+125W " 5+000S 1+000W " 5+000S 0+875W "	2 2 1 <1 1	27 53 69 61 104	19 15 7 <3 3	65 85 78 51 78	.9 .9 .4 .4 <.3	17 32 75 102 97	16 21 21	1223 564 267	3.39 4.11 4.16 3.55 4.63	52 60 23 10 13	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	<2 <2 <2 <2 <2	114 100 126 187 158	1.2 1.2 1.1 .5 .8	ব্য ব্য ব্য ব্য ব্য	<3 5 6 <3 <3	81 92 92 89 94	-61 -85	.038 .034	9 10 6 2 4	38 69 145 212 153	2.17	21 22 41 32 73	.07 .11 .15 .13 .16	<3 5 <3	4.20 5.16 5.21 5.19 4.76	.14 .15 .25 .48 .34	.04 .04 .07 .09 .11	<2 <2 <2 <2 <2 <2	2 6 7 <1 1
STANDARD C3/AU-S Standard G-2	26 2		33 5		5.4 <.3	37 6			3.32 1.95	55 <2	19 <8	3 <2	22 5		24.1 <.2	19 <3	24 <b>&lt;3</b>	79 40		.089 .093	18 8	167 74	.62 .58	145 224	.09 .12		1.98 .99	.04 .07	.17 .47	16 2	53 <1

FILE # 9801726

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

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

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ACME ANALYTICAL																												-	AC	HE ANALY	
SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	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	Au* ppb
5+000S 0+750W (€) 5+000S 0+625W " 5+000S 0+500W " 5+000S 0+375W " 5+000S 0+250W "	1 1 1 2	40 46 53 42 28	7 12 14 10 16	108 65 73 55 75	.4 .4 .3 .6	34 38 39 30 11	16 13 12		3.91 4.30 5.06	24 21 18 15 4	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2	<2 <2 <2 <2 2	71 38 17 7 6	1.3 .7 .7 1.1 .8	<3 <3 <3 <3 <3	<3 3 <3 <3 <3	204 97 108 138 159	.23 .11 .10	.080 .049 .042 .040 .061	9 6 4 4	95 124 125	2.75 1.12 1.14 .87 1.08	42 26 20 11 21	.12 .14 .20 .25 .16	<3 / <3 ! <3 /	4.28 4.55 5.34 4.13 5.82	.10 .07 .03 .02 .02	.04 .03 .03 .02 .02	<2 <2 <2 <2 <2 <2	2 3 2 2
5+000S 0+125W # 5+000S BL # 5+00S 0+25E # 5+00S 0+50E # 5+00S 0+75E #	1 2 1 1 2	52 63 40 38 30	7 36 115 9 18	107 101 85 54 67	<.3 .8 4.5 .4 .7	23 19 12 10 12	26 11 7	3831 1733 470 214 217	6.39 6.47 4.26	<2 <2 <2 <2 <2 <2	<8 <8 <8 <8 11	<2 <2 <2 <2 <2 <2	2 2 2 2 2	41 45 14 9 6	1.4 1.0 1.1 .8 .5	<उ <उ <उ <उ	<3 <3 15 <3 <3	193 173 206 106 231	.44 .11 .06	.052 .060 .051 .040 .024	8 5 2 5 3		4.99 3.15 .70 .84 .65	93 39 17 20 30	.21 .18 .28 .18 .25	<3 <3 <3	7.93 7.31 3.86 5.84 5.05	.04 .14 .03 .02 .01	.07 .11 .03 .03 .02	<2 <2 <2 <2 <2 <2	1 2 2 2 10
5+00S 1+00E " RE 5+00S 1+25E " 5+00S 1+25E " 5+00S 1+50E " 5+00S 1+75E "	3 2 2 2 1	38 28 30 32 43	<3 5 6 20 7	45 61 64 59 67	1.1 .7 .8 .8	10 12 13 13 18	4 7 8 13 17	328 265	6.30 6.46 6.35	3 6 4 22 24	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	2 <2 2 <2 2 2	8 8 9 7	1.2 .8 1.1 .5 1.0	ব ব ব ব ব ব	<3 3 <3 <3 4	138 158 162 149 210	.05 .04 .04	.038 .027 .027 .025 .034	3 3 5 4	45 35 37 35 58	.59 .91 .93 .76 .85	20 32 36 69 23	.21 .24 .25 .10 .31	<3 <3 3	5.42 7.03 7.25 5.05 5.95	.01 .02 .02 .01 .02	.02 .02 .03 .03 .02	<2 <2 <2 <2 <2 <2	1 5 2 6 1
5+00S 2+00E " BL 6+00 1+50W " 6+000S 1+375W " BL 6+00 1+25W " 6+000S 1+125W "	<1 3 5 5 3	41 92 47 40 45	25 3 11 6 64	181 60 46 68 150	.5 .4 <.3 .9 1.9	40 44 23 39 33	28 20 7 16 16	268 130 159	4.25 5.29 4.05	26 4 12 22 42	<8 <8 9 10 <8	<2 <2 <2 <2 <2 <2 <2	<2 <2 2 <2 2	32 10 4 71 59	1.0 .7 .9 .9 1.3	ও ও ও ও ও ও	उ उ उ उ उ	130 98 130 91 92	.10 .04 .41	.050 .030 .022 .035 .046	7 7 6 7 6	79 111 88 79 66	.90 .77 .22 .58 .65	35 10 7 16 19	.17 .32 .27 .14 .12	<3 <3 <3	5.03 4.27 4.24 4.82 5.55	.03 .02 .01 .12 .11	.04 .04 .01 .02 .02	<2 <2 <2 <2 <2 <2	2 2 4 3 5
BL 6+00 1+00W " 6+000S 0+875W " BL 6+00 0+75W " 6+000S 0+625W " BL 6+00 0+50W "	4 4 3 2 1	39 29 19 32 35	23 26 22 17 27	75 62 71 56 80	.9 1.1 .5 .6 .8	27 26 18 38 51	12	126 330 973	3.87 3.74 4.40	35 20 19 14 14	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	<2 2 <2 <2 <2 <2	30 24 28 23 26	.9 .7 1.0 .7 1.0	ও ও ও ও ও ও ও	<3 <3 <3 <3 5	111 110 101 112 102	.16 .19 .21	.033 .036 .032 .048 .044	6 5 5 4 4		.83 .62 .65 1.12 1.24	13 10 13 37 28	.14 .14 .11 .14 .16	<3 <3 <3	5.93 3.94 4.06 3.17 4.96	.06 .04 .04 .04 .06	.02 .01 .01 .05 .05	<2 <2 <2 <2 <2 <2 <2	3 2 3 2 3
6+000\$ 0+375W " BL 6+00 0+25W " 6+000\$ 0+125W " BL 6+00 BL " 6+00\$ 0+25E "	1 1 3 1 2	31 36 33 137 65	14 14 23 16 37	63 63 65 203 441	9. 8. 6. 1.2	47 41 42 76 39		544	4.10 6.06 4.59	6 11 25 12 23	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	<2 2 <2 <2 <2 <2	13 17 6 122 65	1.0 1.0 .7 2.2 2.6	<3 <3 <3 <3 <3	<3 <3 <3 4 5	112 105 174 115 80	.16 .07	.051 .050 .036 .056 .049	4	132 107 146 161 89	.99	16 19 13 47 37	.20 .18 .33 .20 .15	<3 <3 <3	4.78 4.37 4.56 5.19 4.13	.03 .02 .02 .21 .03	.04 .03 .02 .16 .03	<2 <2 <2 <2 <2 <2	2 1 4 3 2
6+00s 0+50E " 6+00s 0+75E " 6+00s 1+00E " 6+00s 1+25E " 6+00s 1+50E "	1 1 1 2	22 38 69 58 49	8 3 <3 <3 <3	35 63 97 75 60	.5 .4 .3 .4 .4	6 9 10 17 15	6	126 185 170	6.38 4.46 4.22	<2 2 <2 5 <2	10 16 13 <8 11	<2 <2 <2 <2 <2 <2	<2 <2 <2 2 2	8 3 11 9 7	.9 .8 .6 1.0 1.0	ও ও ও ও ও	ও ও ও ও ও	163 159 87 62 108	.07	.023 .036 .046 .046 .038	3 3 4 5 4	34 37 24 27 52	.46 .44 .30 .40 .30	6 7 15 19 12	.21 .34 .21 .17 .25	<3 <3 <3	4.58 5.57 5.34 7.53 6.52	.02 .02 .03 .02 .02	.02 .02 .02 .02 .02	<2 <2 <2 <2 <2 <2	1 2 2 1
STANDARD C3/AU-S Standard G-2	25 2	61 <1	33 3	164 41	5.0 <.3	36 8	11 5	730 495		55 <2	27 <8	3 <2	21 5		23.0 <.2	19 <3	21 <3	76 39		.087 .091	18 8	163 75	.58 .56	145 210	.08 .12		1.89 .92	.04 .07	.16 .46	14 2	53 <1

FILE # 9801726

Fitch, Bernard

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

Data $\underline{\mathcal{M}}$ FA

Page 4

X	
<b>F1/T</b>	
ACHE ANALYTICAL	

ACKE ANALYTICAL	Fitch, Bernard FILE # 9801726 Mo Cu Pb Zn Ag Ni Co Mn Fe As U Au Th Sr Cd Sb Bi V ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm															-					P	age	5			LE ANALYT					
SAMPLE#					-													-	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %		Au* ppb
6+00S 1+75E (Ə) 6+00S 2+00E " 7+000S 1+375W " 7+000S 1+250W " 7+000S 1+125W "	3 3 1 4 2	67 96 63 111 91	6 8 5 6 9	97 102 54 39 86	<.3 <.3 <.3 <.3 <.3	22 22 85 18 61	13 21 27 8 23	235 424 275 105 248	5.83 4.45 7.00	22 30 13 12 12	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	2 <2 <2 2 2	10 10 102 19 70	.8 1.2 1.1 .3 .6	<3 <3 <3 <3 <3	<3 <3 <3 12 6	150 138 131 154 162	.09 .79 .24	.026 .044 .036 .027 .027	5 7 1 2 2	61 58 206 78 196	.31	24 18 88 9 65	.33 .29 .20 .41 .35	<3   <3   <3	5.74 4.98 2.27	.01 .01 .25 .02 .12	.04 .02 .30 .03 .11	<2 <2 <2 <2 <2 <2	6 5 4 50 29
7+000S 1+000W " 7+000S 0+875W " 7+000S 0+750W " 7+000S 0+625W " RE 7+000S 0+625W"	1 3 4	245 143 117 63 59	<3 6 5 68 64	130 126 98 156 153	<.3 <.3 .5 <.3 .3	72 71 40 21 22	21	214 155 217 295 288	5.41 5.28 5.53	13 9 33 26	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	<2 2 <2 2 2 2	35 21 14 14 15	1.4 1.1 1.0 .8 .9	<3 <3 <3 <3 <3	3 3 3 3 4	143 138 116 123 121	.26 .12 .07	.027 .028 .036 .033 .030	2 2 3 5 5	185 231 177 100 96		22 19 19 4 10	.47 .47 .37 .30 .30	<3 7 <3	5.81 6.55 6.58 5.57 5.43	.07 .05 .03 .02 .02	.05 .07 .03 .02 .02	2 <2 <2 <2 <2 <2	27 9 3 16 10
7+000S 0+500W " 7+000S 0+375W " 7+000S 0+250W " 7+000S 0+125W " 7+000S BL "	3 2 2 1 <1	64 45 44 42 25	127 97 4 43 3	127 175 78 92 60	.5 .4 <.3 <.3 <.3	24 30 12 13 57	20 21 14	282 2190 1852 1475 365	5.86 6.90 3.45	34 49 34 15 10	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	<2 2 <2 2 2 2 2 2 2 2	21 84 126 101 124	1.4 1.8 1.4 1.1 1.0	3 3 3 3 3 3	3 <3 <3 <3 <3	82 128 201 82 81	.19 .50	.046 .039 .029 .054 .103	7 8 9 7 5	29	.28 .96 3.40 .76 2.56	16 92 60 31 87	.16 .17 .18 .06 .20	5 <3 3	4.92 4.97 5.13 2.50 4.61	.02 .04 .14 .13 .54	.02 .05 .11 .05 .64	<2 <2 <2 <2 <2 <2	2 10 4 4 1
7+00S 0+25E '' 7+00S 0+50E '' 7+00S 0+75E '' 7+00S 1+00E '' 7+00S 1+25E (3) + T	2 2 2 2 2	84 46 48 100 194	29 41 30 22 4	155 97 97 91 124	.3 .7 .7 .6 .4	95 32 42 58 82	25 15 18 22 29	850 839 790 550 801	4.09 4.35 4.83	23 25 19 20 15	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2	<2 <2 <2 <2 <2 <2	154 106 132 71 144	1.7 .9 1.1 1.0 1.9	ব্য ব্য ব্য ব্য ব্য	ব ব ব ব ব ব	116 109 112 119 104	.56 .98 .49	.044	6 6 7 5 6	84 136	1.26 1.26	57 17 35 32 73	.18 .11 .13 .22 .21	<3 <3 <3	5.63 5.15 5.28 5.45 5.48	.30 .19 .21 .13 .23	.18 .04 .05 .06 .14	<2 <2 <2 2 2 2	4 9 8 2 9
7+005 <sup>,47</sup> 1+50E (G) 7+00S 1+75E 4 7+00S 2+00E 7 8+000S 0+375W(A+G) 8+000S 0+25W <b>T</b>		160	5 9 6 <3 10	105 87 118 67 347	<.3 <.3 <.3 .4 5.8	48 31 45 63 100	22 27 22	582 373 1637 218 499	6.14 6.19 4.18	29 18 69 4 14	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2 <2 <2	<2 2 <2 <2 <2 <2	145 23 180 148 130	1.4 .9 1.6 1.0 2.1	ব্য ব্য ব্য ব্য ব্য	ও ও ও ও ও ও ও ও	103		.036 .051 .042	5 5 2 2	64		61 33 158 57 65	.30 .26 .25 .27 .22	<3 <3 <3	7.50 5.24 3.72 4.52 4.39	.43 .05 .12 .22 .30	. 13 . 04 . 08 . 17 . 44	<2 <2 <2 <2 <2 2	4 1 12 1 38
8+000S 0+125W ( <b>A+B)</b> 8+000S BL ( <b>B)</b> 9+00S 1+00W " 9+00S 0+875W " 9+00S 0+750W ( <b>A+B)</b>	1 3 3	121 55 120 195 124	18 45 11 6 11	153 139 31 61 34	.8 .7 .5 <.3 <.3	56 34 16 99 13		193	5.43 4.89	14 23 8 54 4	<8 <8 <8 <8 <8	<2 <2 <2 <2 <2 <2 <2	<2 <2 <2 <2 <2 <2	231 281 73 80 90	1.4 1.3 .8 1.1 .4	<3 <3 <3 <3 <3	<3 <3 <3 <3 <3 <3			.071	4 6 3 4 2	107 59 56 191 41	.48 .56	42 36 26 15 20	. 13 . 05 . 37 . 45 . 49	4 5 <3	3.77 2.97 2.41 6.82 1.39	.34 .50 .05 .14 .03	.10 .06 .04 .06 .04	<2 <2 <2 <2 <2 <2	6 7 1 3 8
9+00s 0+625w (B) +7 9+00s 0+500w " 9+00s 0+375w (B) 9+00s 0+250w " 9+00s 0+250w ?	1 3 2	6844 3868 2039 215 438	<3 3 11 27		18.4 10.8 4.2 .4 .8	87 70 35 24 29	95 73 38 9 18	758 847 480 129 320	6.62 5.44 4.75	4 9 7 12 6	<8 <8 <8 9 <8	<2 <2 <2 <2 <2 <2	2 2 2 2 <2	144 125 83 21 143	3.3 2.0 1.5 .9 .5	<3 <3 <3 <3 <3	<3 <3 <3 <3 4	56		.039	3 2 3 3 3	76 67 50 70 47	1.04 .93 .56 .35 .57	34 34 24 15 42	.13 .11 .25 .28 .16	<3 <3 <3	3.03 2.69 1.88 3.54 2.78	.31 .27 .12 .02 .09	.17 .11 .06 .02 .07	5 2 <2 <2 <2	204 89 377 3 11
STANDARD C3/AU-S STANDARD G-2	25 2	64 6	37 3	166 43	5.2 <.3	33 9	12 5	761 512		59 <2	26 <8	2 <2	21 5		23.1 <.2	17 <3	24 5	79 41		.086 .094	18 8	169 76	.59 .58	152 233	.09 .13		1.92 1.00	.04 .07	.17 .47	16 2	53 1

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

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



Fitch, Bernard FILE # 9801726



Data 🖌 FA

ACHE ANALYTICAL	11.1																					1.1.1		1.1							ACH	E ANALYTICAL
SAMPLE#	Mo ppm		Pb ppm	Zn ppm				Mn ppm							Cd ppm				,Ca %								Al %					
9+00S BL (B) + T 9+50S 0+750W (B) 9+50S 0+625W " RE 10+000S 0+750W" 9+50S 0+500W (B)	2 2 2	242 328	13 3 6 5 7	76 58 61	.7 1.7 .9	94 43 127	27 14 35	354 208 104	4.91 3.65 5.34 5.02 3.71	2 12 <2	<8 <8 <8	<2 <2 <2	2 <2 2	278 66 59	1.3 1.4 1.3	<3 3 <3	4 31 3	101 127 109	1.36 .40 .29	.034 .035 .017	2 3 3	214 95 229	2.46 .35 2.12	43 43 68	.24 .33 .32	4 <3 3	5.09 5.92 3.94 7.14 4.18	.52 .03 .08	.13 .02 .17	<2 18 <2	1 2 5	
9+50S 0+375W (B) 9+50S 0+250W (A+B) 9+50S 0+125W (B) 9+50S BL " 10+000S 1+000W "	2 2 2	1225 1445 256 354 390	3 7 3	127 39 352	2.1 1.9 1.4	50 18 37	47 4 38	763 135 778	5.13 4.22 5.61 5.55 6.38	<2 5 <2	<8 <8 <8	<2 <2 <2	2 2 2	41 14 34	1.5 1.1 2.5	<3 <3 <3	12 27 <3	78 121 90	.57 .44 .50	.044 .031 .054	3 2 7	123 73 137	.72 .16 .52	21 12 31	.20 .36 .25	3 <3 <3	4.44 4.84 1.74 5.28 7.50	.08 .01 .06	.06 .02 .04	5 14 2	16 11 12	
10+000S 0+875W '' 10+000S 0+750W '' 10+000S 0+625W '' 10+000S 0+500W '' 10+000S 0+375W ''	6		5	151	.8 8. 1.6	129 99 109	35 128 48	101 1024 455	4.93 5.07 5.37 7.79 7.47	4 5 7	<8 <8 <8	<2 <2 <2	2 2 2	58 97 77	1.2 1.3 1.4 1.5 1.7	<3 <3 <3	<3 <3 7	109 74 104	.29 1.24 1.42	.018 .053 .023	3 3 3	232 153 194	2.17 1.64 2.49	68 81 75	.31 .18 .32	<3 4 3	5.74 7.10 5.65 5.12 5.77	.09 .10 .09	.16 .18 .19	<2 <2 <2	10 2 25	
10+000S 0+250W " 10+000S 0+125W " 10+000S BL '' BL 10+50 1+00W T BL 10+50 0+875W (B)	4 3 11	1262 843 850 3629 1281	5 <3 <3	201 237 152	1.1 1.8 24.2	94 102 34	29 51 102	221 1537 2607	6.00 5.06 7.10	5 3 16	10 <8 <8	<2 <2 <2	2 <2 2	76 152 24	1.6 2.2 1.2	<3 <3 <3	<3 <3 4	74 67 26	.95 2.07 2.19	.019 .036 .054	3 2 6	182 187 24	2.32 2.51 .16	40 65 40	.24 .21 .04	<3 5 <3	6.94 5.12 5.30 1.58 2.00	.16 .29 .01	.17 .16 .01	<2 <2 3	6	
<sup>57</sup> BL 10+50 0+75W <sup>11</sup> BL 10+50 0+62.5W <sup>14</sup> BL 10+50 0+50W <sup>14</sup> BL 10+50 0+37.5W <sup>14</sup> BL 10+50 0+25W <sup>14</sup>	2 3 5	723 1069 2179 1462 1125	3 <3 <3	153 471 250	1.2 1.2 .9	124 143 77	32 42 31	500 393 312	5.68 4.10 5.21 4.85 5.30	26 25 46	<8 <8 <8	<2 <2 <2	<2 2 <2	254 96 39	1.3 1.6 1.0	<3 <3 <3	<3 4 <3	92 101 87	2.76 1.15 .76	.036 .024 .033	2 4 4	195 210 133	2.69 2.64 1.29	59 44 18	.21 .26 .19	3 <3 5	1.41 5.51 6.11 4.75 2.61	.45 .23 .09	.50 .16 .08	<2 <2 <2	8 43	
10+50S 0+125W '' 10+50S BL '' BL 11+00 1+00W '' BL 11+00 0+87.5W(3) BL 11+00 0+75W <b>(B)</b>	24 9 +T 4	5434	<3 <3 99	697 167 414	21.6 1.2 19.6	105 191 57	94 47 41	1809 775 531	6.24 6.19 11.65	52 12 38	<8 10 <8	4 <2 <2	<2 3 2	85 27 62	4.0 1.4 2.9	<3 <3 15	19 <3 3	36 99 29	<b>3.8</b> 4 1.09	.061 .020 .050	3 4 3	52 443 44	3.78 .43	37 37 22	.06 .14 .04	10 <3 5	2.18 2.04 4.45 1.65 4.22	.09 .02 .06	.06 .06 .03	7 <2 6	48 112 13 360 10	
BL 11+00 0+62.5W <b>(B)</b> BL 11+00 0+50W <b>W</b> BL 11+00 0+37.5W <b>T</b> BL 11+00 0+25W <b>(B)</b> BL 11+00 0+12.5W <b>(B)</b>	6	5202 7 <b>33</b> 5 7967 4447 714	8 23 49	752 4170 2722	22.6 19.1 44.3	139 171 43	99 139 45	1737 922 561	14.49	46 462 610	<8 <8 <8	<2 <2 <2	2 2 2	43 63 22	5.7 25.6 13.0	<3 6 6	<3 10 40	37 34 30	5.08 3.07 3.23	.051 .053 .043	3 3 2	34 47 36	.44 .48 .40	28 25 22	.04 .03 .04	5 8 <3	1.81 1.50 1.52 1.27 3.09	.03 .04 .02	.03 .04 .03	6 3 8	112 98 20 357 7	
STANDARD C3/AU-S Standard G-2	25 1								3.12 1.98																							

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

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

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	TTICAL T									Fi	tch,	Be	rna	ırd		FI	LE	# 9	980	)17	26				,				P	ag	e 7			АСИЕ	ANAL YTICAL
	SAMPLE#			Mo ppm				Ag ppm			Mn ppm		As ppm					Cd ppm			V ppm	Ca %		La ppm p			Ba ppm			Al %	Na %	K %	W ppm	Au* ppb	
	BL 11+00	BL	(B)	23	759	3	114	1.7	119		12201																104 .							15	
	RE 12+00				7085			26.1			1325													4			20 .							383	
	BL 11+50				230			1.5		27	2858												.047				29								
	BL 11+50				351	_		2.2				6.43				2		.2					.046				29							69	
	BL 11+50	0+25W	(B)	8	185	9	47	.8	18	8	666	5.54	22	9	<2	2	17	.7	<3	9	93	.49	.040	2	70	.32	22	. 19	<5 1	.40	.02	.02	<2	10	
	BL 11+50	0+12 5	u (B)	10	1063	7	158	35	52	32	1567	8.07	39	<8	<2	3	24	.2	<3	9	104	.63	.052	4 1	16	.44	32	- 14	<3 3	5.90	.02	.02	2	120	
	BL 11+50				846			2.5				8.10											.074				16							36	
	12+000s	2+000	(B)	5	261			2.7				4.17											.061				41						2	1	
	12+000S	1+875w (	B+A		778	-		2.0				4.59											.043				43						<2	12	
	12+000s			5	527			2.6			1507												.057				18				.01		4	86	
	12+000s	1+2500	(ค)	14	2637	6	66	9.1	1.2	57	2118	8 04	17	۶2	-2	7	10	< 2	۲,	8	77	1 74	067	4 م	116	30	12	09	<3 7	3.27	.02	.02	</td <td>106</td> <td></td>	106	
	12+000S				14439	-		58.2			1299												.037	2			12							1341	
	12+0003 12+000S				7310			27.0			1773			<8				1.2								.10					<.01			540	
	12+000S				7189	_		25.1	61	63	1310						23						.083										<2	460	
	12+000S			-	369		66	.6	18	11		5.39					10		<3			.17					26							3	
	12+000s	0+5004	<b>T</b>	4	149	9	157	.3	37	29	1416	6.08	25	<8	<2	3	27	.6	<3	<3	127	.25	.065	7	41 1	.49	83	.25	<3 /	4.38	.02	.05	<2	23	
	12+0005			3	235	-		1.2				7.01		-	<2	4	8	.2					.044				48							5	
	12+000\$				122	-	98		25	8		6.74		<8	<2	3	8	<.2	<3	<3	158	.07	.036	4	68	.64	29	.23	<3 !	5.11	.01	.02	<2	1	
	12+000s				91				17			8.06	26	<8	<2	3	6	<.2	<3	4	201	.08	.038				13							2	
	12+000s		(B)	3	122	15	89	.3	14	8	241	5.87	52	<8	<2	3	10	<.2	<3	3	133	.08	.042	4	42	.61	22	.22	<3	5.01	.02	.03	<2	2	
ý	STANDARD	C3/AU-	s	26	65	33	172	5.6	35	12	794	3.38	56	32	<2	23	29	24.6	15	25	80	.55	.092	18 <sup>-</sup>	170	.62	158	.09	16	1.96	.04	.17	16	53	
	STANDARD			1				<.3				1.98	2	<8	<2	6	72	<.2	<3	<3	41	.63	.098	8	78	.60	221	.13	<3	.97	.07	.48	2	1	

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

# ΑΡΡΕΝΔΙΧ ΙΙΙ

# ANALYTICAL PROCEDURES

### SUMMARY

Gold was analyzed using wet extraction and Graphite Furnace Atomic Absorption. The sample charge in this method is a 0.00002 ml organic extract (methyl isobutyl ketone). The charge is prepared by wet extraction from a 10 gram sample pulp. This method is considered adequate for low level gold content (< 1000 ppb).

ICP emission spectrograph was used for the analysis of the other elements. A solution charge is obtained through the preparation stage and digestion of 0.50 gram pulp in Aqua Regia. The instrument analyzes the content of 30 elements in each charge. The silver and base metal content was reported in ppm. The method is considered reliable where concentrations do not exceed 5,000 ppm. Check copper and zinc assays were done by the same method for selected samples that assayed more than 5,000 ppm Cu and 10,000 ppm Zn. Adequate matching of assays was obtained. A larger pulp size was used during the check analyses. All samples containing more than 15,000 ppm copper (1.5 %) were reassayed. All of the check assays were reported in percent on the Assay Certificates.

Appendix III

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Contraction of the local division of the loc

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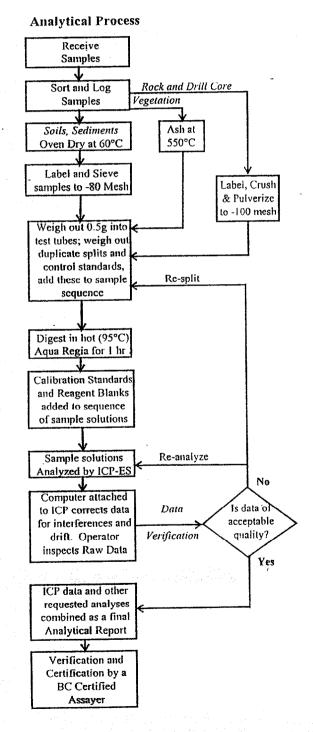
H

Attn Chris Baldys 4662909

# A A C M E Analytical Laboratories Ltd.

852 East Hastings Street, Vancouver, British Columbia, Canada V6A 1R6 Telephone: (604) 253-3158 • Facsimile: (604) 253-1716 • Toll free: 1-800-990-ACME (2263) • e-mail: acme\_labs@mindlink.bc.ca

# METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 1D - 30 ELEMENT ICP BY AQUA REGIA



### 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 -100 mesh (-150 microns). Plant samples are dried (60°C) and pulverized or dry ashed (550°C). Moss-mat samples are dried (60°C), pounded to loosen trapped sediment then sieved to -80 mesh. At the clients request, moss mats can be ashed at 550°C then sieved to -80 mesh although this can result in the potential loss by volatilization of Hg, As, Sb, Bi and Cr. A 0.5 g split from each sample is placed in a test tube. A duplicate split is taken from 1 sample in each batch of 34 samples for monitoring precision. A sample standard is added to each batch of samples to monitor accuracy.

### **Sample Digestion**

Aqua Regia is a 3:1:2 mixture of ACS grade conc. HCl, conc. HNO<sub>3</sub> and demineralized H<sub>2</sub>O. Aqua Regia is added to each sample and to the empty reagent blank test tube in each batch of samples. Sample solutions are heated for 1 hr in a boiling hot water bath (95°C).

### **Sample Analysis**

Sample solutions are aspirated into and ICP emission spectrograph (Jarrel Ash AtomComp model 800 or 975) for the determination of 30 elements comprising: 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.

### **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.

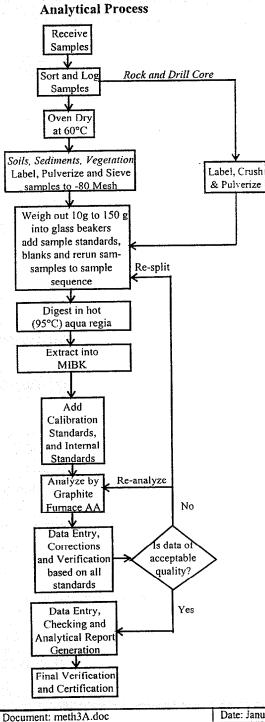
Document: ICP30M&S.doc

Date: November 15, 1995

# ACME Analytical Laboratories Ltd.

852 East Hastings Street, Vancouver, British Columbia, Canada V6A 1R6 Telephone: (604) 253-3158 · Facsimile: (604) 253-1716 · Toll free: 1-800-990-ACME (2263) · e-mail: acme\_labs@mindlink.bc.ca

## METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE **GROUP 3A - AU BY WET EXTRACTION**



### 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 -100 mesh (-150 microns). Plant samples are dried (60°C) and pulverized or ashed (550°C). Sediment in moss mats is recovered by disaggregation then sieved to -80 mesh. A precise quantity of the fine fraction (client may select from 10 g to 150 g sample weights) is weighed. In every analytical batch (34 samples) a duplicate split is added from a randomly selected sample to monitor precision. Reference materials (in-house control standards) are also added to each batch to monitor accuracy.

### **Sample Digestion and Extraction**

Aqua Regia is a 3:1:2 mixture of ACS grade conc. HCl, conc. HNO, and demineralized H<sub>2</sub>O. Aqua Regia is added to each sample and to the empty reagent blank test tube in each batch of samples. Sample solutions are heated for 1 hr in a boiling hot water bath (95°C). After cooling, MIBK is added and the samples are shaken to extract Au into the MIBK phase.

### **Sample Analysis**

Sample extracts are aspirated into a graphite furnace AAS (Varian model SpectrAA 10Plus) for the determination of Au.

### **Data Evaluation**

Raw and final data from the 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.

Date: January 31, 1997

Analytical Laboratories Ltd.

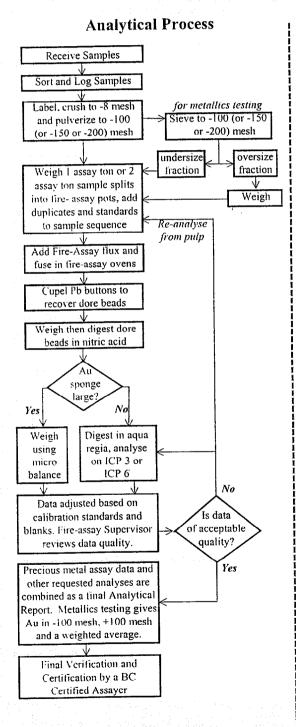
ACME

 acme\_lab@iSTAR.ca

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 Telephone: (604) 253-3158 · Facsimile: (604) 253-1716 · Toll free: 1-800-990-ACME (2263) · e-mail: acme\_labs@mindlink.bc.ca

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



### Comments



### **Sample Preparation**

Rocks and drill core are crushed to -8 mesh (-0.25 cm), riffle split to 250 g splits then pulverized to -100 mesh (-150 or -200 at client's request). Duplicates of crushed (rejects) and pulverized (pulp) material are added in each analytical batch (34 samples) to monitor sample inhomogeniety and analytical precision, respectively. One assay ton (29.2 ±0.01g) or two assay ton (58.4 ±0.01g) splits are weighed. High-grade gold standard STD Au-1 (Ag-2 if Ag assay requested) and a blank are added to each analytical batch to monitor accuracy. Results are reported in imperial (oz/t) or metric (gm/tonne) measure. For metallics testing, a IKg (or larger) split is pulverized and sieved to -100 mesh (-150 or -200 mesh at client's request). A representative 1 or 2 assay ton split of the undersize (-100, -150 or -200 mesh) fraction is assayed. Material remaining in the sieve (oversize fraction) is collected, weighed and assayed in total.

### Sample Digestion

Fusing at 1000°C for 1 hour with fire-assay fluxes containing a PbO litharge and Ag inquart liberates all Au, Pt and Pd. After cooling, lead buttons are recovered and cupelled at 950°C to render Ag  $\pm$ Au  $\pm$ Pt  $\pm$ Pd dore beads. Beads are weighed then leached in 1 mL of conc. HNO3 at >95°C to dissolve Ag leaving Au sponges.

### Sample Analysis

Large Au sponges >2 mm weighed by micro-balance (gravimetric determination). Small flakes are digested by adding 6 mL of 50% HCl to the HNO<sub>3</sub> solution then determined by ICP-ES (Jarrel Ash Atom-Comp model 800 or 975). Pt and Pd are also determined by ICP-ES. Every Ag fire assay is accompanied by a wet assay. Ag concentrations <10 oz/t are reported from the wet assay, results >10 oz/t are from the fire assay. Au metallics testing reports concentrations of Au in the -100 mesh fraction, the +100 mesh 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.

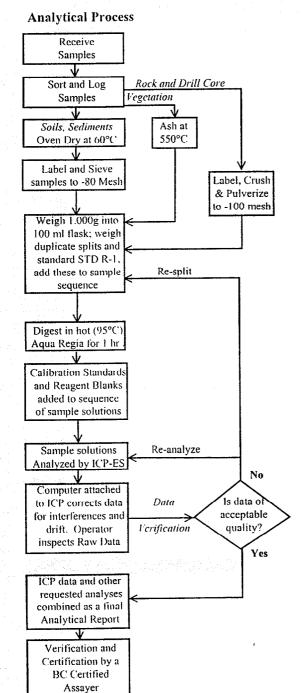
Document: AssayAu.doc

Date: March 5, 1997

# ACME Analytical Laboratories Ltd.

852 East Hastings Street, Vancouver, British Columbia, Canada V6A 1R6 Telephone: (604) 253-3158 • Facsimile: (604) 253-1716 • Toll free: 1-800-990-ACME (2263) • e-mail:-aeme\_labs@mindlink.be.ca-

# METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 8 - WET ASSAY FOR COPPER, LOAD ZINC, CO, NO.



### Comments

### Sample Preparation

Soils and sediment samples are rarely assayed, however the procedure is provided for completeness. Assaying is recommended for rocks and drill core where concentrations exceed 5000 ppm. Rocks are crushed to -8 mesh (-0.25 cm) prior to riffle splitting. 250 g splits are pulverized to -100 mesh. A reject duplicate split and pulp duplicate split is taken from one sample in every 34. These measure the subsampling error due to sample inhomogeniety (reject split) and precision of the analysis (pulp split). Precisely 1.000  $\pm$ 0.002g of pulp are added to 100 ml volumetric flasks. Standard STD R-1 and a blank are added to each batch of 34 samples during weighing to monitor accuracy.

### **Sample Digestion**

30 ml of Aqua Regia (3:1:2 ACS grade conc. HCl, conc. HNO<sub>3</sub> and demineralized  $H_2O$ ) is added to each flask. Sample solutions are heated for 1 hr in a boiling water bath (95°C) then cooled for 3 hrs. Demineralized  $H_2O$  is added to bring the volume to the 100 ml mark.

### Sample Analysis

Sample solutions are aspirated into and ICP emission spectrograph (Jarrel Ash AtomComp model 800 or 975) for the determination of Cu. A concentrated Cu solution standard is analysed together with the samples to monitor accuracy.

### **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.

Document: AssayCu.doc

Date: November 20, 1995

# L. L. APPENDIX IV SOIL GEOCHEMISTRY STATISTICS Π Π

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SUMMARY

Probability plots were constructed using best fitting curves with the aid of PROBPLOT computer software (Stanley, C.R. 1987) to establish the number and the parameters of sub-populations (called "populations" below). Trimodal lognormal distribution curves defined most of the data sets very well. There were generally 2 background and 1 anomalous populations in each data set. Thresholds were calculated for each population as T = mean + / - 2 standard deviations. Anomalous population thresholds were selected accordingly with consideration given to population overlap. Third quartile value was used for single lognormal population of gold values on the Grid # 2. The 11 ppb value defined an anomaly ? coincident with copper, zinc and silver anomalies which were defined by polymodal distributions.

Appendix IV

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14:46:39

ALC: NO.

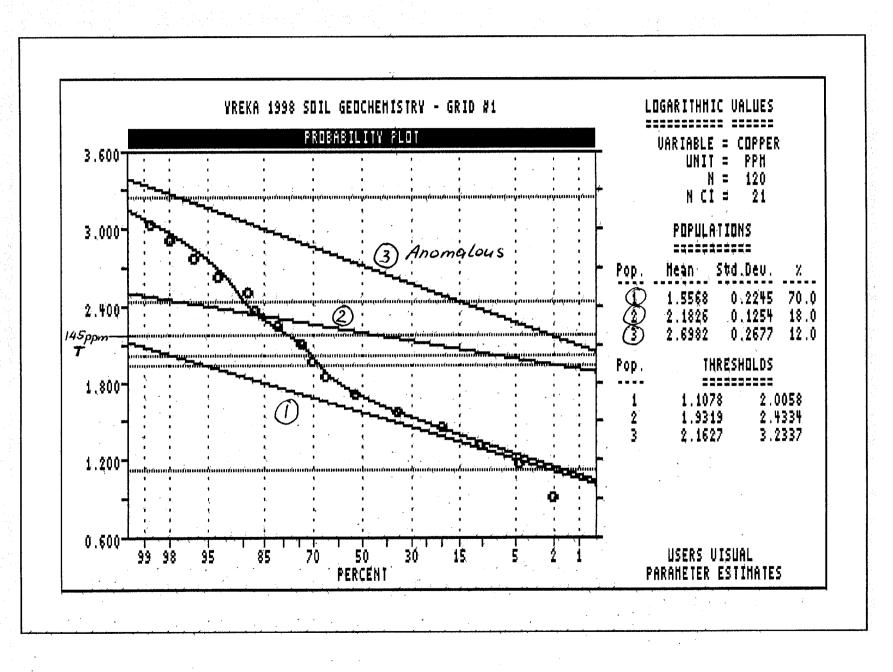
YREKA 1998 SOIL GEOCHEMISTRY - GRID #1

05/21/98

Variable = 0	COPPER	Unit =	PPM	N =	120
Mean = Std. Dev. = CV % =	1.8088 0.4633 25.6152	Min = Max = Skewness =	0.8451 3.5023 0.8348	1st Quartile = Median = 3rd Quartile =	1.5185 1.6902 2.1399
	-Log Mean =	64.390	-	Std. Dev. : (-) (+)	22.156 187.134

cls int (# of bins = 21 - bin size =cum % antiloq 0.1329)음 \_\_\_\_ \_\_\_\_ \_\_\_\_\_ ........... 6.007 0.00 0.41 0.7787 1.67 2.07 8.157 0.9115 0.00 2.07 11.076 1.0444 15.040 1.1772 2.50 4.55 \*\* \*\*\*\*\* 5.83 10.33 20.422 1.3101 9.17 19.42 27.731 1.4430 \*\*\*\*\*\* 1.5758 15.83 35.12 37.655 \*\*\*\*\* 51.131 \*\*\*\*\* 17.50 52.48 1.7087 12.50 64.88 69.430 1.8415 \*\*\*\*\*\* 5.00 69.83 94.277 1.9744 \*\*\*\* 4.17 73.97 128.016 2.1073 \*\*\*\* \*\*\*\*\* 7.50 81.40 173.830 2.2401 \*\*\*\*\* 5.83 87.19 236.039 2.3730 2.5058 2.6387 2.7716 320.511 1.67 88.84 \* 5.00 93.80 435.214 \*\*\*\* 2.50 96.28 590.966 \*\* 2.9044 1.67 97.93 802.458 \* 0.83 98.76 1089.637 3.0373 \* 1479.590 3.1701 0.00 98.76 3.3030 0.00 98.76 2009.098 0.00 98.76 2728.103 3.4359 0.83 99.59 3704.421 3.5687 0 1 2 3 4

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*



Page 15

PARAMETER SUMMARY STATISTICS FOR PROBABILITY PLOT ANALYSIS

Data File Name = Y-4EL.PP

Variable = COPPER Unit = PPM N = 120 N CI = 21 Transform = Logarithmic Number of Populations = 3 # of Missing Observations = 0.

\_\_\_\_\_\_

Users Visual Parameter Estimates

Population	Mean		Std Dev	Percentage		
1	36.043	-	21.494	70.00		
		+	60.440			
2	152.275	-	114.090	18.00		
		+	203.239			
3	499.117	_	269.449	12.00		
		+	924.547			

Default Thresholds.

Standard Deviation Multiplier = 2.0

Pop.	Thre	sholds
	<b>e e e</b> e e construirs and a secondaria de la construir de la construir ante a secondaria de la construir de la constru ante a secondaria de la construir de la construi	
1	12.818	101.351
2	85.481	271.260
3	145.462	1712.597

YREKA 1998 SOIL GEOCHEMISTRY - GRID #1

05/21/98

14:58:49

SUMMARI SIAI	ISIICS and					DOGARTINA	IC VALUED
Variable =	ZINC	Unit	= -	PPM		N =	120
Mean = Std. Dev. = CV % =	2.1405 0.4679 21.8572	Min Max Skewness		1.2304 3.4651 0.5845	1st Qu 3rd Qu	artile = Median = artile =	1.8062 2.0645 2.4298
						Dev. : (-) (+)	405.876
	antilog	cls int				oin size =	
$\begin{array}{ccccccc} 0.00 & 0.41 \\ 2.50 & 2.89 \\ 0.83 & 3.72 \\ 4.17 & 7.85 \\ 2.50 & 10.33 \\ 7.50 & 17.77 \\ 12.50 & 30.17 \\ 7.50 & 37.60 \\ 13.33 & 50.83 \\ 9.17 & 59.92 \\ 8.33 & 68.18 \\ 6.67 & 74.79 \\ 5.83 & 80.58 \\ 2.50 & 83.06 \\ 2.50 & 85.54 \end{array}$	14.948 19.334 25.006 32.343 41.832 54.106 69.980 90.512 117.068 151.415 195.840 253.299 327.616 423.737 548.060 708.860 916.837 1185.834 1533.754 1983.753	1.1746 1.2863 1.3980 1.5098 1.6215 1.7332 1.8450 1.9567 2.0684 2.1802 2.2919 2.4036 2.5154 2.6271 2.7388 2.8506 2.9623 3.0740 3.1858 3.2975 3.4092	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * *			

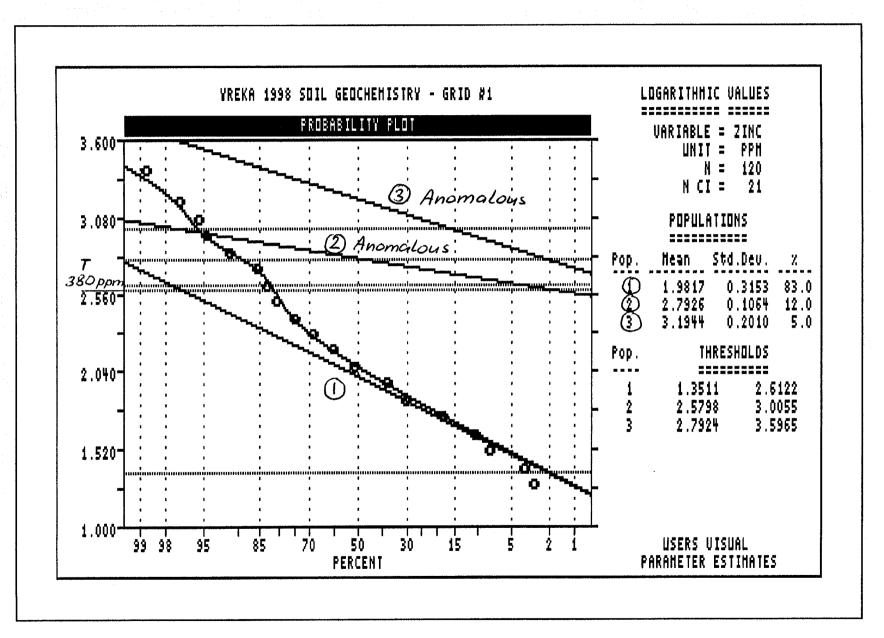
0

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2

3



PARAMETER SUMMARY STATISTICS FOR PROBABILITY PLOT ANALYSIS

Data File Name = Y-4EL.PP

Variable = ZINC Unit = PPM N = 120 N CI = 21 Transform = Logarithmic Number of Populations = 3

# of Missing Observations = 0.

AND NO. Y

101

Users Visual Parameter Estimates

\_\_\_\_\_\_\_

Population	Mean		Std Dev	Percentage
		- - -	<b></b>	
1	95.865	-	46.388	83.00
		+	198.115	
2	620.337	-	485.526	12.00
		+	792.578	
3	1564.682		984.941	5.00
		+	2485.660	

Default Thresholds.

Standard Deviation Multiplier = 2.0

\_\_\_\_\_\_\_

Pop. Thresholds 1 22.446 409.427 2 <u>380.013</u> 1012.645 3 620.004 3948.731

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YREKA 1998 SOIL GEOCHEMISTRY - GRID #1

A DESCRIPTION OF

15:11:23

4.62 97.73

0.00 97.73

0.00 97.73

0.00 97.73

0.00 97.73

0.00 97.73

0.00 97.73

0.00 97.73

1.54 99.24

3.226

4.045

5.072

6.359

7.974

9.998

12.536

15.718

19.708

0.5087

0.6069

0.7052

0.8034

0.9017

0.9999

1.0981

1.1964

1.2946

05/21/98

Variable =	SILVER	Unit	= PPM		N =	65
Mean = Std. Dev. = CV % =	-0.2220 0.3362 151.4388	Min Max Skewness	= 1.2455	1st Quarti Medi 3rd Quarti	lan =	-0.5229 -0.3010 -0.0969
Anti	-Log Mean	= 0.600	Anti-Log	Std. Dev.	: (-) (+)	0.277 1.301
8 Cum 8	antilog	cls int (	# of bins = 19	9 - bin s	size =	0.0982)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0:268 0.336 0.421 0.528 0.662 0.830 1.041 1.305 1.637	-0.3755 * -0.2773 * -0.1790 * -0.0808 * 0.0175 *	***** ***** **** **** **** **** **** ****	***	· · · · · · · · · · · · · · · · · · ·	
3.08 91.67 1.54 93.18	2.052 2.573	0.3122 * 0.4104 *				

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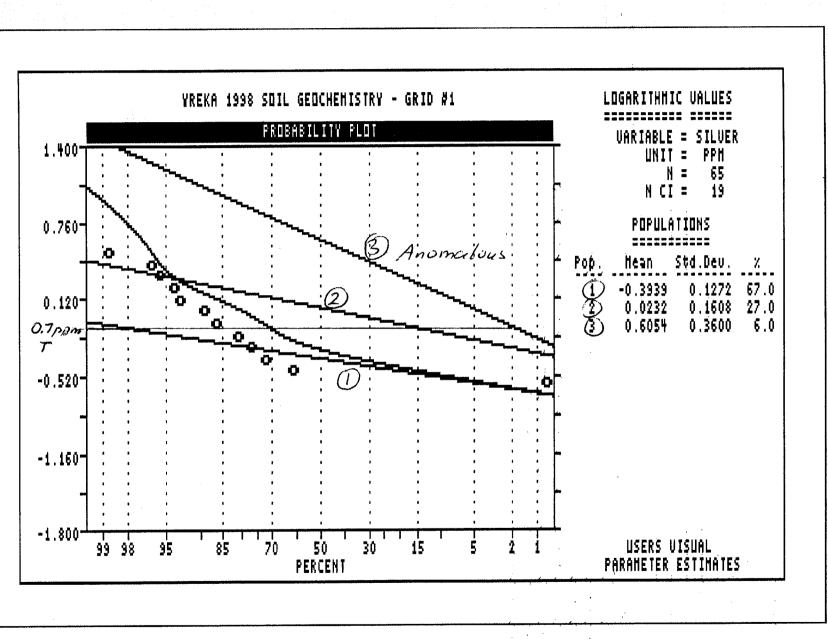
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3

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PARAMETER SUMMARY STATISTICS FOR PROBABILITY PLOT ANALYSIS

Data File Name = Y-4EL.PP

Variable = SILVERUnit =PPMN =65N CI =19

Transform = Logarithmic Number of Populations = 3

# of Missing Observations = 55.

Lower Truncation Correction of 46 percent.

Users Visual Parameter Estimates

Population	Mean	St	d Dev	Percentage		
			<b></b> 1997 - 1997 - 1997 1997 - 1997 - 1997			
1	0.404	-	0.301	67.00		
		+	0.541			
2	1.055		0.728	27.00		
		+	1.528			
3	4.031	-	1.759	6.00		
and the second states of the		+	9.235			

\_\_\_\_\_\_

\_\_\_\_\_

Default Thresholds.

Standard Deviation Multiplier = 2.0

Pop.	Thre	sholds
1	0.225	0.725
2	0.503	2.212
3	0.768	21.157

\*\*\*

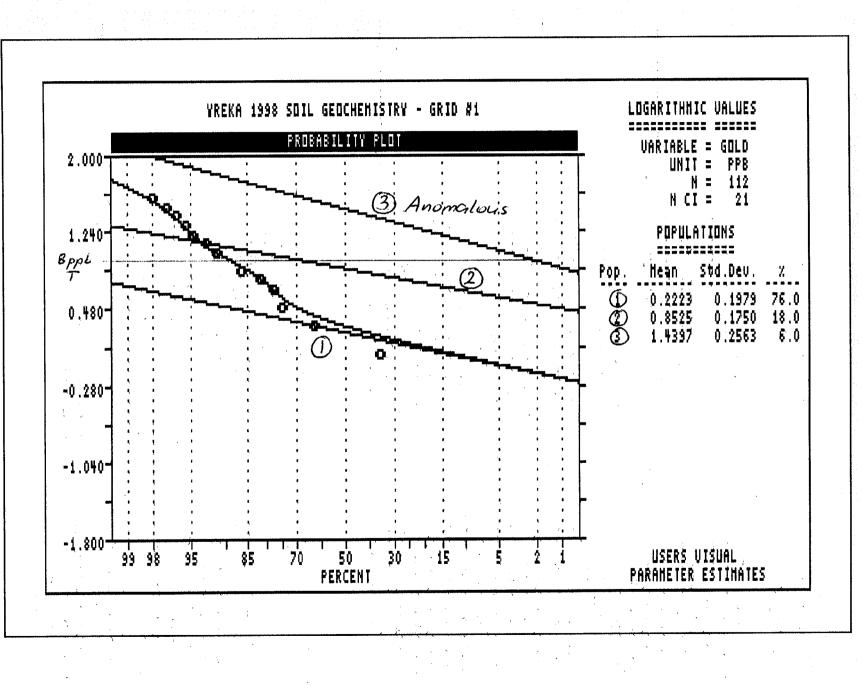
15:18:49

YREKA 1998 SOIL GEOCHEMISTRY - GRID #1

05/21/98

Variable = GOLD	Uni	t =	PPB		N =	112
Mean = 0.417 Std. Dev. = 0.417 CV % = 100.075	L Ma	.n = ax = 3s =	0.0000 1.7993 1.1832		ian =	0.0000 0.3010 0.6021
Anti-Log Mean	n = 2.6	513	Anti-Lo	og Std. Dev.	: (-) (+)	0.999 6.832
* cum * antilog	g cls int	(# of	bins =	21 - bin	size =	0.0900)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	* * * * * * * * * * * *		*****		
		0	1	2	3	4

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PARAMETER SUMMARY STATISTICS FOR PROBABILITY PLOT ANALYSIS

Data File Name = Y-4EL.PP

Variable = GOLDUnit =PPBN =112N CI =21Transform = LogarithmicNumber of Populations = 3

# of Missing Observations = 8.

-

Lower Truncation Correction of 7 percent.

\_\_\_\_\_\_\_\_\_

Users Visual Parameter Estimates

Population	Mean		Std Dev	Percentage
		. :		
1	1.668	-	1.058	76.00
		+	2.632	
2	7.121	-	4.759	18.00
		+	10.654	
3	27.523	-	15.254	6.00
		+	49.660	

Default Thresholds.

Standard Deviation Multiplier = 2.0

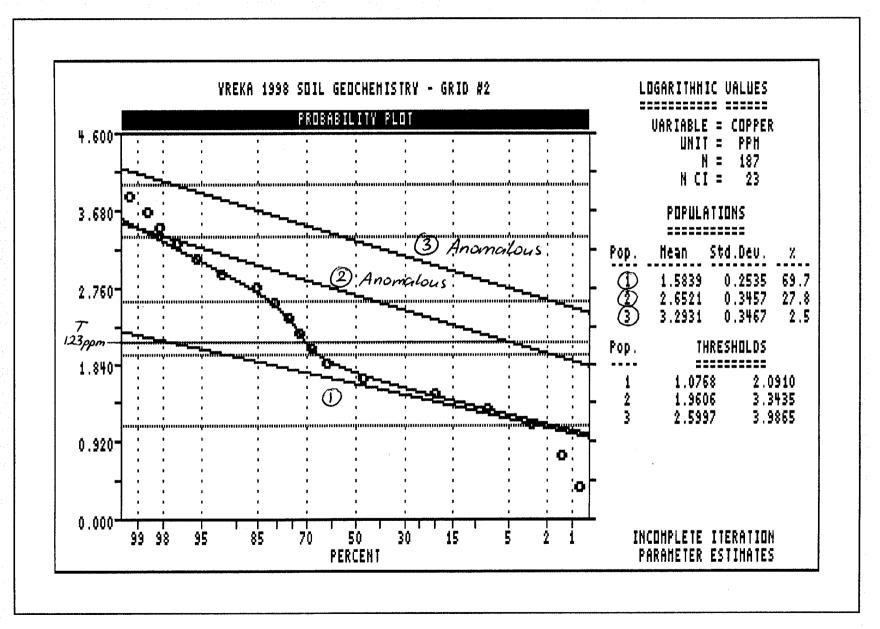
Pop.	Thres	Thresholds				
	0.671	4.152				
23	$\frac{3.181}{8.455}$	15.939				

YREKA 1998 SOIL GEOCHEMISTRY - GRID #2

06/01/98

50				
Variable = COPPER	Unit =	PPM	N =	187
Mean = 1.9379	Min =	0.3010	1st Quartile =	1.5218
Std. Dev. = 0.6252	Max =	4.3095	Median =	1.6989
CV % = 32.2646	Skewness =	0.9420	3rd Quartile =	2.3684
		0.0120		2.0001
Anti-Log Mean	= 86.668	Anti-Log	Std. Dev. : (-)	20.541
	proversion and the second		(+)	
% cum % antilog	cls int (# of	bins = $23$	3 - bin size =	0.1822)
				· · · · · · · · · · · · · · · · · · ·
0.00 0.27 1.622	0.2099		.*	
0.53 0.80 2.467	0.3921 *			
0.00 0.80 3.753	0.5743			
0.53 1.33 5.709	0.7565 *			
0.00 1.33 8.685	0.9387			
	1.1209 **			
4.81 7.71 20.098		*		
11.76 19.41 30.574		*****	* *	
27.27 46.54 46.512		*****	* * * * * * * * * * * * * * * * * *	****
14.97 61.44 70.756		*****	* * * * * *	
6.42 67.82 107.639	2.0320 *****	* * *	· · · · · · · · · · · · · · · · · · ·	
4.28 72.07 163.748		<b>k</b> -		
3.74 75.80 249.103	2.3964 *****			
4.81 80.59 378.951	2.5786 *****	*	·	
4.81 85.37 576.484	2.7608 *****	*		
6.95 92.29 876.984	2.9430 *****	* * * *		
3.21 95.48 1334.123	3.1252 ****			
1.60 97.07 2029.552	3.3074 **			
1.07 98.14 3087.483	3.4896 *			
0.53 98.67 4696.873	3.6718 *			
0.53 98.87 4090.073	3.8540 *			
0.00 99.20 10869.694 0.00 99.20 16535.662	4.0362			
0.53 99.73 25155.088	4.4006 *			
	0	1	2 3	4

12:40:41



12:44:23 YREKA 1998 SOIL GEOCHEMISTRY - GRID #2 06/01/98 PARAMETER SUMMARY STATISTICS FOR PROBABILITY PLOT ANALYSIS Data File Name = Y-4EL2.PPUnit = Variable = COPPER N = 187PPM N CI = 23 Transform = Logarithmic Number of Populations = 3 # of Missing Observations = 0. Incomplete Iteration Parameter Estimates Std Dev Percentage Population Mean \_\_\_\_\_ 1 38.360 -69.69 21.396 68.774 + 202.471 448.836 -2 27.84 + 994.977 1963.851 - 883.918 2.47 3 a ya ta sa**`+**` 4363.201 \_\_\_\_\_\_\_ \_\_\_\_\_ Default Thresholds. Standard Deviation Multiplier = 2.0 Pop. Thresholds \_\_\_\_\_ 111.934123.300291.3352205.6573397.8469693.976 \*\*\*\*\*

YREKA 1998 SOIL GEOCHEMISTRY - GRID #2

06/01/98

SUMMARY STATISTICS and HISTOGRAM LOGARITHMIC VALUES

Variable = Z	INC	Uni	t	PPM		N =	187
Mean = Std. Dev. = CV % =	1.9760 0.2951 14.9339		1 = X = 3 =	0.9031 3.1620 0.4220	1st Quarti Medi 3rd Quarti	an =	1.8129 1.9345 2.1038
Anti-	Log Mean	= 94.62	27	Anti-Log	Std. Dev.	: (-) (+)	47.964 186.686
-=====================================	antilog	cls int	====== (# of	bins = 2	3 - bin s	======= ize =	0.1027)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	7.108 9.004 11.405 14.447 18.300 23.181 29.364 37.195 47.115 59.681 75.599 95.761 121.302	$\begin{array}{c} 0.8518\\ 0.9544\\ 1.0571\\ 1.1598\\ 1.2625\\ 1.3651\\ 1.4678\\ 1.5705\\ 1.6732\\ 1.7758\\ 1.8785\\ 1.9812\\ 2.0839 \end{array}$	****	* * * *	*****	***	
16.04 72.61 8.56 81.12 4.28 85.37 4.81 90.16 3.74 93.88	121.302 153.654 194.634 246.544 312.299	2.0839 2.1865 2.2892 2.3919 2.4946		***** * *	~ ~ ~ × * × *		

1

2

3

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0

2.5972

2.6999

2.8026

2.9053

3.0080 3.1106

3.2133

12:45:58

ALC N.

in the second

2.67 96.54

1.60 98.14

0.53 98.67

0.53 99.20

0.00 99.20

0.00 99.20

0.53 99.73

395.592

501.099

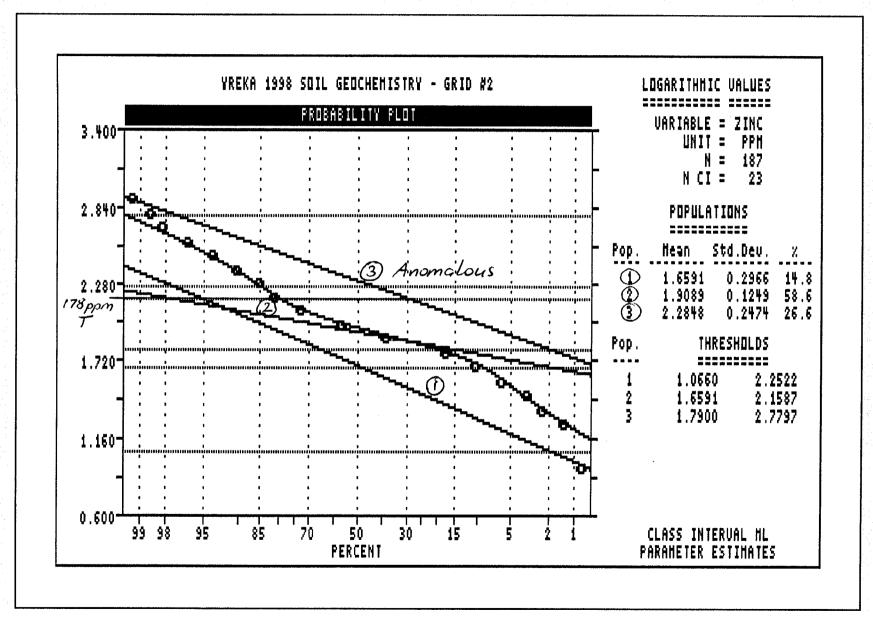
634.746

804.037

1018.480

1290.115

1634.198



1.0.5

1.32

PARAMETER SUMMARY STATISTICS FOR PROBABILITY PLOT ANALYSIS

Data File Name = Y-4EL2.PP

Variable = ZINC

Unit = PPM

N = 187 N CI = 23

Transform = Logarithmic # of Missing Observations = 0.

Number of Populations = 3

5

Class Interval Data Maximum Likelihood Parameter Estimates

Maximum LN Likelihood Value = -440.672

Parameterized Degrees of Freedom =

Population	Mean		Std Dev	Percentage
		-		
1	45.611	-	23.042	14.80
		· +	90.287	
2	81.070	-	60.809	58.62
		+	108.083	
3	192.677	-	108.992	26.58
		+	340.617	

Default Thresholds.

Standard Deviation Multiplier = 2.0

Pop.		Thres	nolds
1	11.6	540	178.721
2	45.0	511	144.096
3	61.6	654	602.148

YREKA 1998 SOIL GEOCHEMISTRY - GRID #2

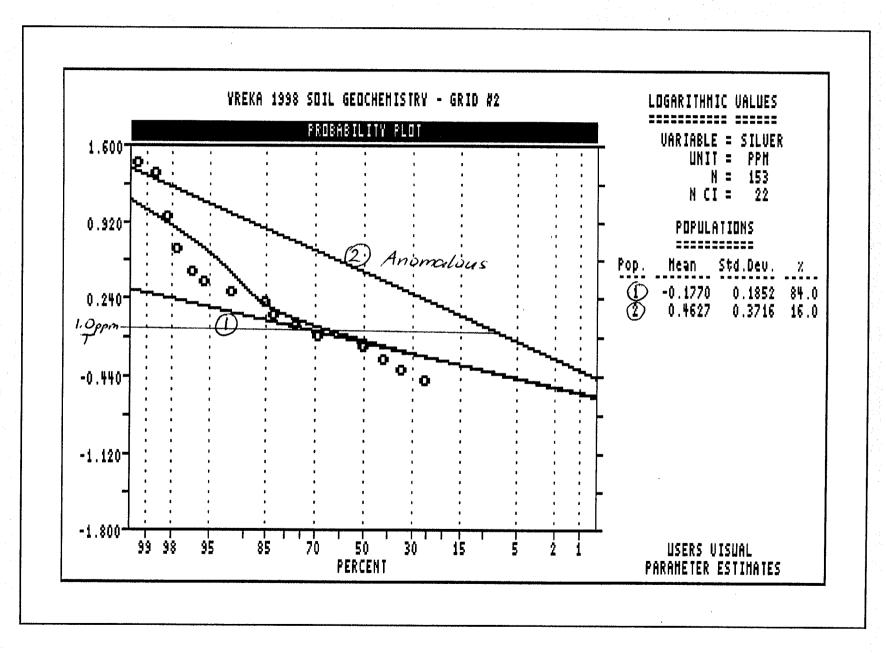
06/01/98

Variable = SILVER	Unit =	PPM	N =	153
Mean = -0.0698 Std. Dev. = 0.3368 CV % = 482.1993	Min = Max = Skewness =	1.4983	Quartile = Median = Quartile =	-0.3010 -0.1259 0.0508
Anti-Log Mean	= 0.851	Anti-Log Std	. Dev. : (-) (+)	0.392 1.849
% cum % antilog	cls int (# o	f bins = 22 -	bin size =	0.0962)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-0.2823 **** -0.1860 **** -0.0898 **** 0.0065 **** 0.1027 **** 0.1990 ***	***** ***** ****** ****** ****** ***** ****	****	
0.65 97.73 9.310 0.00 97.73 11.620	0.9690 * 1.0652			
0.0097.7314.5030.0097.7318.1010.6598.3822.5910.6599.0328.1960.6599.6835.191	1.1614 1.2577 1.3539 * 1.4502 * 1.5464 *			
	0	1	2 3	4

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14:10:12 YREKA 1998 SOIL GEOCHEMISTRY - GRID #2 06/01/98 PARAMETER SUMMARY STATISTICS FOR PROBABILITY PLOT ANALYSIS Data File Name = E:Y-4EL2.PP Unit = Variable = SILVER PPMN =153 N CI =22 Transform = Logarithmic Number of Populations = 2 # of Missing Observations = 34. Lower Truncation Correction of 20 percent. \_\_\_\_\_\_ \_\_\_\_\_\_ Users Visual Parameter Estimates Population Mean Std Dev Percentage 0.665 -1 0.434 84.00 1.019 + 2 2.902 -1.234 16.00 6.828 Default Thresholds. Standard Deviation Multiplier = 2.0 Pop. Thresholds

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YREKA 1998 SOIL GEOCHEMISTRY - GRID #2

06/01/98

Variable = GOL	D Un	it = PPB		N =	182
Mean = Std. Dev. = CV % = 2	36.584 M	in = 1.000 ax = 241.000 ss = 4.367	Medi	an =	2.000 4.000 11.000
% Cum % C	ls int	(# of bins =	23 - bin e	size =	10.909)
60.44 60.38 20.33 80.60 6.59 87.16 2.20 89.34	-4.455 6.455 17.364 28.273 39.182	******** ******* ***	**************		> 78
0.55 94.26 0.55 94.81 0.55 95.36 0.55 95.90	50.091 61.000 71.909 82.818 93.727 04.636	* * * * * * * * *			
1.10 96.99 1 0.00 96.99 1 0.00 96.99 1 0.00 96.99 1	15.545 26.455 37.364 48.273 59.182	*			
0.55 98.09 1 0.00 98.09 18 0.00 98.09 19 0.00 98.09 20	70.091 81.000 91.909 02.818	*			
0.00 98.09 22 1.10 99.18 23	13.727 24.636 35.545 46.455	*			
		0 1	2	3	4

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YREKA 1998 SOIL GEOCHEMISTRY - GRID #2

06/01/98

Variable = 0	OLD	Unit =	PPB		N =	182
Mean = Std. Dev. = CV % =	0.7282 0.5877 80.7084	Min = Max = Skewness =	0.0000 2.3820 0.7242	1st Quartil Media 3rd Quartil	n =	0.6021
Anti-	Log Mean =	en en grant anti-ser en sent. Anti-ser en sent		Std. Dev. :	(+)	1.382 20.698
* Cum *	antilog	cls int (# c	f bins = 2	======================================	====== ze =	0.1083)
	1.453 1.865 2.393 3.071 3.940 5.056 6.487 8.324 10.681 13.705 17.585 22.564 28.953 37.151 47.669 61.166 78.485 100.707 129.221 165.808	0.1624 0.2707 0.3790 **** 0.4872 **** 0.5955	* * * * * * * *	•		
		0	1	2	3	4

