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AZIMUTH GEOLOGICAL

GEOLOGICAL, GEOPHYSICAL  
AND  
GEOCHEMICAL REPORT  
ON THE  
KRUGER PROJECT

OF

*Owner/Operator:* MAKUS RESOURCES INC.

OZOYOOS MINING DIVISION

NTS 82 E/3W, 82 E/4E

FILMED

01.2'                                   31.5'  
Latitude 49°~~00'00"~~N, Longitude 119°~~00'30"~~W

by

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March 1987

**TABLE OF CONTENTS**

	<b>Page</b>
SUMMARY	1
INTRODUCTION	3
Location and Access	3
Physiography	5
Logistics	5
Property and Ownership	5
PREVIOUS WORK	6
REGIONAL GEOLOGY	7
PROPERTY GEOLOGY	8
SURVEY RESULTS	12
Mapping results	13
Geophysical Survey	15
Procedure - Magnetometer	26
Results - Magnetometer	26
Procedure - VLF-EM	26
Results - VLF-EM	29
Geochemical Survey	33
Soil Sampling Results	33
Soil Sample Results	34
CONCLUSIONS	35
RECOMMENDATIONS	37
REFERENCES	40
CERTIFICATES	41
Appendix 1 - Rock Geochemistry	
Appendix 2 - VLF-EM Unfiltered Data	
Appendix 3 - Soil Geochemistry	
Appendix 4 - Geostatistics	
Appendix 5 - Analytical Procedures	
Appendix 6 - Costs Incurred	

Page	<u>LIST OF FIGURES</u>	Page
1	ation and Claim Map	4
3	ailed Geology - L 0+50N to L 6+00N idend #2 Grid 10+00W to 17+00W	9
5	logy - L 16+00N to L 26+00N thwest Grid 25+00W to 40+00W	10
6	netometer Survey - L 0+50N to L 6+50N idend #2 Grid 10+00W to 17+00W	27
7	netometer Survey - L 16+00N to L 26+00N thwest Grid 25+00W to 40+00W	28
8	-EM Survey - L 0+50N to L 6+50N ser Filter 10+00W to 17+00W idend #2 Grid	30
12	-EM Survey - L 17+00N to L 26+00N ser Filter 25+00W to 40+00W thwest Grid	31
26	logical Compilation ger Claims	in pocket
29	netometer Survey Compilation ger Claims	in pocket
33	-EM Survey Fraser Filter Compilation ger Claims	"
34		
35	Geochemistry	in pocket
37	ilation Map	in pocket

40

#### LIST OF TABLES

41	: Sample Descriptions	16
	.mated Costs for Continued .oration	38

## SUMMARY

Makus Resources Inc. holds in good standing four located mineral claims and five reverted crown grants (The Kruger Property) surrounding the Lakeview - Dividend copper - gold skarn deposit. The property is located immediately southwest of the town of Osoyoos within the Osoyoos Mining Division. These skarns have yielded approximately 19,000 ounces of gold and ore from 91,000 tons of material.

Within the claim group sheared schists, greenstones and "quartzites", referred to as the Kruger schists, are intruded by medium to coarse grained Jurassic to Cretaceous granodiorites of the Osoyoos Batholith.

The current exploration program consisted of geological mapping, prospecting, soil sampling, rock sampling, magnetometer and VLF/EM surveys. This was designed to test geochemical, geophysical and geological features outlined by previous surveys (Di Spirito *et al*, 1986) and thought to have potential for hosting other, as yet undiscovered, skarn deposits. The northwestern portion of the claims, not covered by earlier surveys, was also evaluated on a reconnaissance basis.

An orientation magnetometer survey was completed over the Dividend Mine workings to determine the type of magnetic signature exhibited by this deposit.

Results of the present program indicate that VLF/EM and magnetometer surveys, combined with prospecting and mapping, are the best exploration techniques for evaluating the potential of this property. Soils proved to be of limited use, due to the poor development of the soil profile.

The most current exploration phase has outlined several areas warranting further exploration. Three of these have associated magnetic signatures and occur proximal to old workings and/or exposed skarn/vein type mineralization. Grab samples from one of these areas (line 15+00N between 22+50W and 23+75W) returned 39,700 ppb Au and 1,400 ppb Au from a sulphide bearing quartz vein and sheared volcanics and granodiorite respectively.

A large area in the northwestern portion of the property is underlain by silicified volcanics and "quartzites" spatially related to an intrusive - volcanic contact. This alteration zone is cut by sporadic quartz veins and local concentrations of hematite coated shears and fractures yielding values of up to 1,650 ppb Au and 100 to 160 ppb Au respectively.

Two phases of exploration are recommended. Phase III would evaluate the above mentioned targets by continued mapping and prospecting combined with detailed geophysical and geochemical surveys. Trenching would be conducted on the more favourable zones. The cost of this exploration phase is estimated at \$64,680.00. Contingent upon the successful results of Phase III, an exploratory diamond drilling program, estimated to cost \$79,970.00, is recommended.

## INTRODUCTION

At the request of Makus Resources Inc., Azimuth Geological carried out a geological investigation and conducted geophysical and geochemical surveys on the Kruger Project claims. The purpose of these surveys was to further investigate soil and rock geochemical and geophysical anomalies outlined in the 1986 program (Di Spirito et al, 1986). The current survey was completed by three geologists and two geological technicians between January 20th and February 12th, 1987.

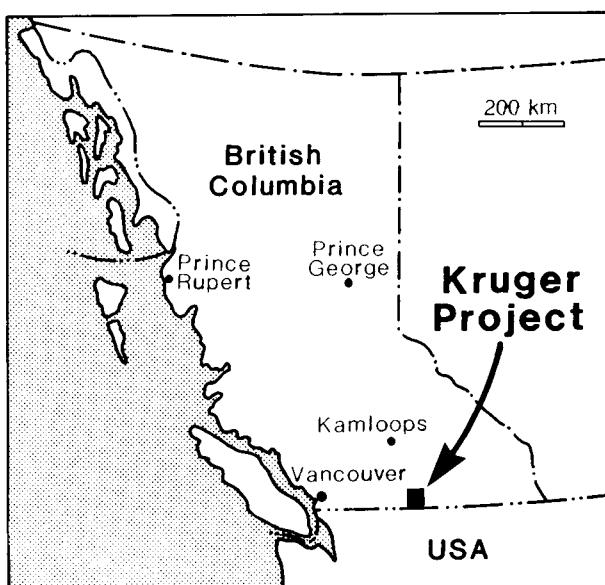
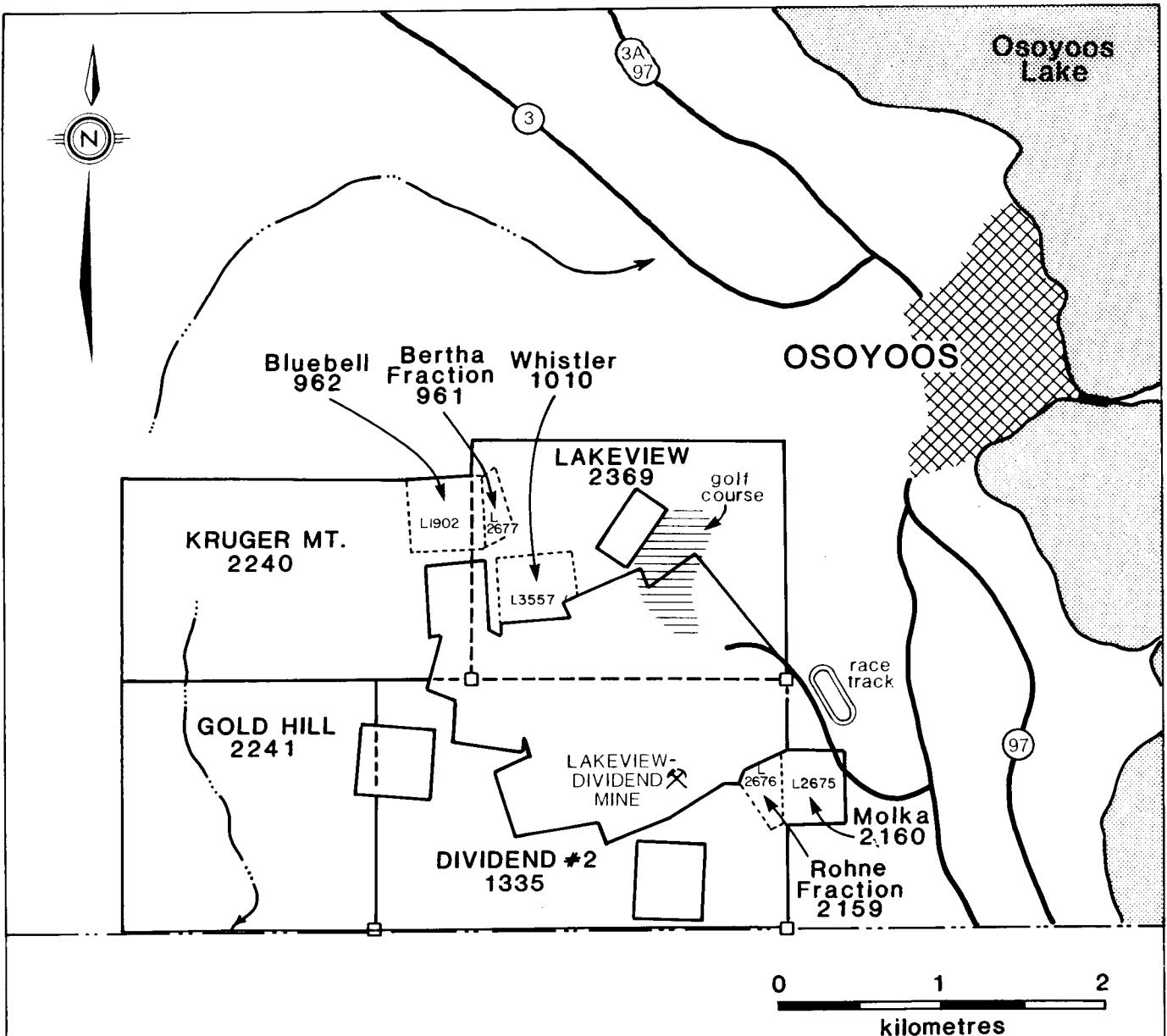
The following report is based on results of this program as well as previously collected technical data.

## Location and Access

The Kruger Claims are located approximately 2 km southwest of the town of Osoyoos in south central British Columbia (Figure 1). The southern boundary of the property is the U.S. - Canada border. The center of the claim group lies at latitude 49°00'30"N and longitude 119°29'30"W.

Access to the eastern boundary of the property is via gravel road which exits the Osoyoos golf course road near the golf course entrance. Access to the northern boundary can be made via the Kilpoola Lake turnoff on Highway #3, five kilometers northwest of Osoyoos.

In spring, summer and fall most areas of the property can be reached by numerous access roads. During the course of the present program access was gained via 4 wheel drive and snowmobile from the Osoyoos golf course road.



**Figure 1**

MAKUS RESOURCES INC
KRUGER PROJECT LOCATION MAP
Osoyoos Mining District
NTS: 82 E/4E,3W
AZIMUTH GEOLOGICAL Vancouver, B.C.
Date: March 1987 Drawn by B.J. Moore

### Physiography

The Kruger Claims cover the west slope of the Okanagan Valley to the south and east of Mt. Kruger. From Mt. Kruger, the land slopes gently to the south and southwest. To the east and southeast the slopes are much steeper and host abundant outcrop. Sparse jack pine and spruce at higher elevations give way to sage brush on the lower slopes.

### Logistics

The Kruger Claims are well situated for development, being located immediately west of Osoyoos and south of Highway #3.

Electric power would be easily attainable within several kilometers. Water however, is in short supply on the property and would have to be brought in for drilling or mining purposes.

Snow levels in the area are low to moderate. The lower slopes remain completely snow free for much of the year.

### Property - Ownership

The property is composed of 5 crown grants and 4 located mineral claims, the latter comprising 48 units. The claims are registered in the name of Makus Resources Inc. and are recorded on Map Sheets 82E/03 and 82E/04 in the Osoyoos Mining Division (Figure 1).

Titles are as follows:

Claim	Lot #	Size/Units	Record #	Expiry
Bertha Fr	(L2677)	6.47 Ha	961	Jan. 18, 1988
Blue Bell	(L1902)	20.90 Ha	962	Jan. 18, 1988
Whistler	(L3557)	18.30 Ha	1010	Mar. 3, 1988
Rohne Fr.	(L2676)	6.92 Ha	2159	Jan. 21, 1988
Molka	(L2675)	18.29 Ha	2160	Jan. 21, 1988
Lakeview		12	2369	Jan. 21, 1988
Kruger Mountain		12	2240	June 13, 1988
Gold Hill		9	2241	June 13, 1988
Dividend #2		15	1335	Feb. 27, 1988

#### PREVIOUS WORK

Previous work in the area was concentrated on and around the Dividend Property (L1589) discovered in the 1890's. This property, a skarn type Cu-Au deposit, was worked intermittently until 1914 and again during the 1930's. The mine has reportedly produced over 99,000 tons of ore averaging 0.19 oz Au/ton (Minfile). Pyrrhotite, chalcopyrite and magnetite comprise the principal mineralization.

Reported tonnages also include production from the Lakeview and Manx claims (L1899 and L3558) located west and northwest of the Dividend Mine. Since the 1940's a number of companies have conducted exploration programs over the Dividend Property. These programs consisted of diamond drilling, various geophysical programs including self potential, magnetometer, induced potential and electromagnetic surveys and geochemical programs (Gregotski, 1966; Haynes, 1984; Pegg, 1964; Rolston and Richmond, 1980; Tully, 1972 and 1980).

With the exception of the IP survey, a portion of which covered what is now in part of the Kruger Claims (Gregotski, 1966), no detailed work was done outside the area of the crown grants. The numerous trenches and adits present on the Kruger Claims are probably a result of exploration during the 1890's/early 1900's or during the 1930's.

Geological, geophysical and geochemical surveys were carried out on the property during February and March, 1986 (Di Spirito et al, 1986). These surveys outlined several areas of anomalous geochemistry which, combined with geological and/or geophysical anomalies, resulted in target areas worthy of detailed follow-up.

The 1987 program by Azimuth Geological was designed to evaluate these anomalous areas and to expand the geological knowledge of the northwest portion of the claims not covered by the earlier programs.

#### REGIONAL GEOLOGY

Both slopes of the Osoyoos Lake Valley are occupied by the Jurassic to Cretaceous Osoyoos Batholith of granodiorite composition (Cockfield, 1935). This batholith is the most easterly component of the Okanagan Composite Batholith. While generally possessing a granular texture, the medium to coarse-grained granodiorite is locally gneissic in texture.

East of the Osoyoos Batholith is a highly altered Paleozoic unit known as the Anarchist Group, the dominant lithologies of which include intensely folded sheared and metamorphosed quartzites, greenstones, phyllites and chlorite/mica schists with intercalated diabasic rocks and occasional altered limestone lenses.

Highly sheared schists, greenstones and quartzites, known as the Kruger Schists, crop out to the west of the Osoyoos Batholith. These have undergone varying degrees of alteration as a result of the intrusion of the Osoyoos Batholith.

The Kruger Schists are very similar in composition and appearance to the Anarchist series. The Kruger Schists however, are characterized by a lower proportion of phyllite, a higher degree of metamorphism and a general lack of limestone.

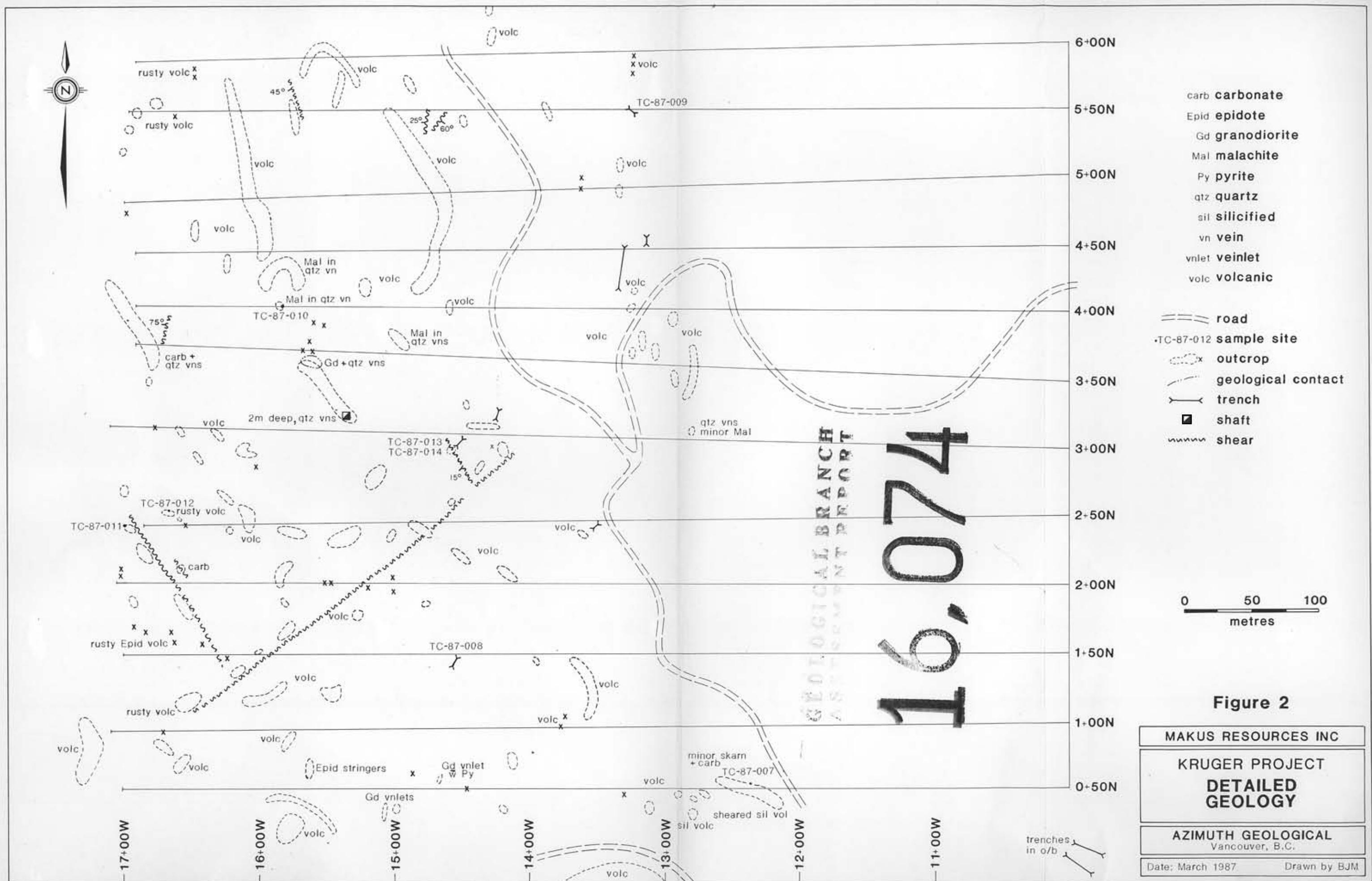
#### PROPERTY GEOLOGY

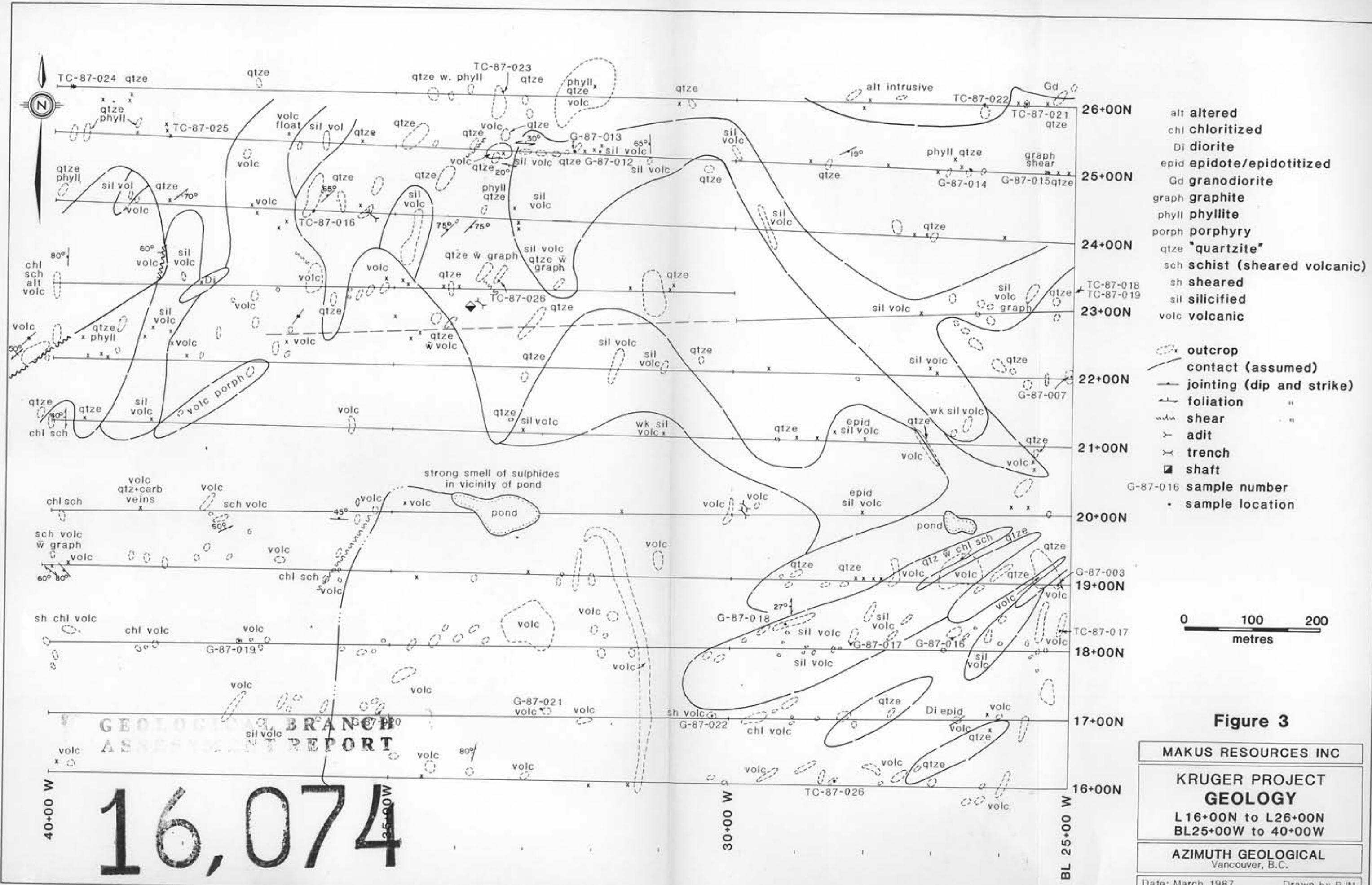
As previously noted the Kruger Claims are underlain by rocks of the Osoyoos Batholith and Kruger Schists (Figures 2, 3 and 8).

The most common unit on the property consists of variably altered volcanic rocks of basaltic to andesitic composition. The majority of these rocks have undergone greenschist facies regional metamorphism. Locally these units have been altered to chlorite schists, formed largely by shearing of the more massive greenstones.

Increased metamorphism of the greenstones, accompanied by the addition of silica, appears to have resulted in the formation of silicified volcanics and "quartzites". "Quartzite" was used mainly as a mapping term to describe rocks which are quartzitic in composition but do not appear to be sedimentary in origin. At several localities on the northwest portion of the property (i.e. line 25+00N, 33+50W) a graduation from metavolcanic to "quartzite" was noted over several metres along foliation.

Intermediate between metavolcanics and "quartzites" are silicified volcanics. These units exhibit remnant volcanic textures and have been silicified to a lesser extent than the





**Figure 3**

MAKUS RESOURCES INC.

KRUGER PROJECT  
GEOLOGY

L16+00N to L26+00N  
BL25+00W to 40+00W

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"quartzites". The silicified volcanics commonly show a distinct foliation, which is not evident in more massive, uniformly coloured and less altered rocks. This foliation may be a result of flow banding or shearing.

The "quartzites" on the southwestern portion of the property are more extensive than those on the northwest and north central areas described above. The large aerial extent of "quartzites" in this region may suggest a sedimentary origin. The presence of phyllitic units and micaceous bands within the "quartzite" lend a bedded or banded appearance to the exposures. Despite this appearance however, it is most probable that all of the "quartzites" are a result of varying degrees of silicification. On the Kruger Mountain claim the "quartzite" is spatially associated with intrusive/volcanic contacts. In the southwest it is possible that intrusive underlies the silicified "quartzite" at a fairly shallow depth. Surface exposures of altered intrusive have been documented in this region (Figure 8).

The phyllites, associated largely with the "quartzites" in the southwest and found to a lesser extent elsewhere on the property, are composed of chlorite, muscovite and quartz. The quartz commonly occurs as small quartz eyes and "boudins" contained within the micaceous foliation. These phyllites are locally silicified.

Graphite is common within the phyllites and quartzites.

Limestone was not discovered during mapping of the Kruger Claims, but it does outcrop at several localities on the Dividend Property (Figure 8).

Granodiorite of the Osoyoos Batholith is found in the northern portion of the claims. This rock is typically granodioritic in composition and texture. Locally the intrusive is highly

epidotized and in proximity to it the metavolcanics may be difficult to recognize. At several localities the granodiorite has been intensely sheared to form a chlorite schist (15+00N, 21+80W) which is distinctly different from those formed as a result of shearing within the metavolcanics. Material similar to that noted at 15+00N, 21+80W is found in outcrop and float on the crown grants to the east.

Altered diorites appear locally within the metavolcanics, being most extensive southeast of the Dividend mine. These diorites are most probably coeval with the granodiorite but may in part be associated with the metavolcanics.

Structure within the Kruger Claims can be attributed largely to shearing. Few primary structures are evident within the volcanics.

The mineralization on the Dividend property, as well as on the Kruger Claims, is controlled by structural trends. The Dividend mine trends NW with an approximate 45° northeasterly dip. Crosscutting southwest trending shears also appear to be well mineralized, as is evidenced by the number of old adits developed along these shears throughout the claim group.

### **SURVEY RESULTS**

Prospecting, geological mapping, soil geochemical, rock sampling and geophysical (VLF/EM and Magnetometer) surveys were concentrated in two areas of the property. The northwest portion of the claims (hereafter referred to as the "Northwest Grid") was tested on a reconnaissance (1:5,000) basis for the potential continuation of Lakeview - Dividend skarn type mineralization along strike. The south central portion of the Dividend #2 claim (hereafter referred to as the "Dividend #2 Grid") was examined in

more detail (1:2,500) in order to determine the source of soil geochemical and geophysical anomalies outlined in the 1986 (Di Spirito, 1986) survey.

### Mapping and Prospecting

Mapping on the Dividend #2 Grid revealed the area to be underlain almost exclusively by metavolcanics. Minor alteration is present locally. Prominent NW and NE trending shears are also evident. In the area of 15+50W on lines 3+50N to 4+50N malachite and chalcopyrite mineralization is found within narrow NW trending quartz veinlets. Gold values of 150 ppb and 220 ppb Au were returned from epidote and calcite rich volcanics in this area. Granodiorite is noted in outcrop at line 3+40N, 15+60W.

The area from line 16+00N to 26+00N west of the 25+00W baseline (Northwest Grid) was mapped at a scale of 1:5000 (Figure 3). This portion of the claims was not covered in the 1986 program. Variably altered volcanics (chloritized and silicified) including "quartzites" occur in close proximity to granodiorite, which outcrops to the east. Numerous sulphide bearing quartz veins and hematite coated shears and fractures are present throughout this 'contact' area. Several samples taken of this material returned anomalous concentrations of gold. Sulphide bearing quartz veins yielded up to 1650 ppb Au (sample G-87-002) while the more extensive hematite coated and fractured siliceous volcanics and "quartzites" returned up to 120 and 160 ppb Au (G-87-016 and TC-87-040 respectively).

The presence of a strong sulphide smell in the vicinity of a pond on line 20+00N at 33+00W to 34+00W is also significant. Due north of this location and south of line 23+00N a shallow shaft has been sunk. This area is coincidental with a 500 gamma magnetic high.

A small soil sample grid was established north of the 'sulphide

pond'. Extensive outcrop precluded soil sampling to the south.

Prospecting was also concentrated in the areas of skarn alteration discovered in the 1986 program (Di Spirito et al, 1986). By far the area of most interest is along line 15+00N from 22+50W to 23+75W. Here several adits have been driven in highly silicified rock cut by quartz and carbonate veining. The eastern most part of this zone appears to be highly sheared granodiorite. This horizon is somewhat of an anomaly in that it differs from other locally exposed skarns. The rocks in the area of the western most adit are pinkish, possibly a product of potassic alteration common in porphyry deposits. Grab samples of material from this area returned 1400 ppb Au (TC-87-034) from sheared volcanic and granodiorite and 39,700 ppb Au from dump material consisting of chalcopyrite bearing quartz veins cutting the potassic rich units.

No limestone was mapped on the Kruger Claims. Sufficient carbonate however, is present within all rocks tested to allow for the formation of skarns. This is documented by the amount of carbonate coated fractures and veinlets developed throughout the property.

The Molka Crown Grant, located along strike and southeast of the Lakeview and Dividend Mines, hosts numerous malachite bearing quartz veins and epidote rich skarns within chloritized volcanics. Several samples (TC-87-042; G-87-025, 026, 028) returned values in excess of 150 ppb Au and 2500 ppm Cu. A pyrite concentrate from a shear hosted quartz vein (G-87-029) yielded 1700 ppb Au.

To the northwest of the Lakeview and Dividend Mines (Blue Bell Crown Grant) quartz veins developed in sheared and silicified volcanics, "quartzites", skarns and altered intrusives have also returned significant concentrations of gold. The existence of

northwest trending gold bearing structures on the Blue Bell, Lakeview, Dividend and Molka Crown Grants (Figures 8 and 12) illustrates the continuation of these zones over a considerable strike length (2.5 km).

A total of 84 rock samples were collected from the Kruger Claims and analyzed for trace element and Au content at Vangeochem Lab Ltd. by ICP and AA methods respectively. Of the 84 samples one third contained anomalous Au values over 100 ppb. Seven of these samples contained over 1000 ppb Au.

Rock descriptions and selected analytical results are listed in Table 1. Sample locations are shown on Figure 8 and gold values of >100 ppb are illustrated on Figure 12.

### Geophysical Survey

Geophysical surveys were carried out over two main area of the property, the Northwest Grid and the Dividend #2 Grid. On the Dividend #2 Grid lines 0+00 to 6+50N from the 1986 survey were re-furbished from 10+00W to 17+00W. Intermediate lines were established to further facilitate the completion of the Dividend #2 VLF-EM and magnetometer surveys. Approximately 9 line kilometers of VLF-EM and 11 line kilometers of magnetometer were completed over this area. The latter included an orientation survey over the Dividend Mine.

Fifteen line kilometers of grid were established from 25+00W to 40+00W on lines 17+00N to 26+00N (Northwest Grid). Line 16+00N was refurbished for mapping purposes. This area had not been covered by previous surveys.

In total approximately 27 km of magnetometer and VLF-EM were run over the Kruger Claims during the course of the 1987 program.

**TABLE 1**  
**ROCK DESCRIPTIONS**

<b>SAMPLE</b>	<b>LOCATION</b>	<b>TYPE</b>	<b>WIDTH</b>	<b>DESCRIPTION</b>	<b>Cu ppm</b>	<b>Au ppb</b>	<b>Ag ppm</b>
TC-87-001	NW of adit at 11+75N, 10+15W	Grab	Outcrop	Pale brown weathering, garnet skarn.	29	-	0.1
TC-87-002	NW of adit	Grab	Trench in Outcrop	Lense of massive pyrite within E-W shear in volcanics.	11886	3100	28.5
TC-87-003	19+00N 24+75W	Chip Random	Outcrop	Oxidized shear zone in volcanics. Quartz veining and oxidized veinlets.	256	140	1.3
TC-87-004	23+75N 19+60W	Grab	Outcrop	Sheared volcanics with sulphides (py, cpy) and malachite (305°/ 60° NE).	1956	-	1.7
TC-87-005	23+75N 19+60W	Grab	Outcrop	"Quartzite" material bounding sample 004.	178	55	0.2
TC-87-006	23+15N 20+00W	Grab	Shaft Dump	3 m deep shaft in "quartzite". E-W shear with malachite. Garnet skarn.	5663	100	3.5
TC-87-007	0+50N 12+25W	Grab	Outcrop	Silicified volcanics. Pyrite on fractures. Rusty weathering. Minor epidotization.	121	20	0.8
TC-87-008	2+00N 14+55W	Grab	Trench	Rusty weathering volcanics. Minor epidotization. Sheared at 250°/ 60° N dip.	128	15	0.1
TC-87-009	5+50N 13+25W	Grab	Trench	Trench at intersection of NW and 035° trending shears. Malachite on fractures. Chlorite and epidote alternation. 3 cm qtz. vein with malachite follows NW trending shear.	841	560	0.6

<u>SAMPLE</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>WIDTH</u>	<u>DESCRIPTION</u>	<u>Cu ppm</u>	<u>Au ppb</u>	<u>Ag ppm</u>
TC-87-010	4+00N 15+87W	Grab	Outcrop	Cpy and malachite in qtz. vein in volcanics 4-5 cm thick. Trends 305°/30-45° SE dip.	5956	95	1.7
TC-87-011	2+50N 17+00W	Grab	Outcrop	Highly hematized volcanics. Locally intensely epidotized. No sulphides evident.	128	20	0.1
TC-87-012	2+50N 16+60W	Grab	Outcrop	Similar o/c to TC-87-011. Sample of NW trending 0.6 m thick epidote zone with pyrite stringers.	39	220	0.1
TC-87-013	3+00N 14+50W	Grab	Trench	Hematized quartz with epidote and occasional 1 cm blebs of pyrite.	35	10	0.1
TC-87-014	3+00N 14+50W	Grab	Trench	Brownish carbonate fragments in greenish (epidotized?) matrix. Sheared volcanics in trench.	24	150	0.1
TC-87-015	4+00N 33+25W	Grab	Outcrop	Heavily hematized rock. Possible shear zone or altered mafic dyke.	22	15	0.3
TC-87-016	24+00N 36+15W	Grab	Outcrop	Hematized siliceous rock. Possible silicified volcanics. Minor disseminated pyrite.	85	-	0.2
TC-87-017	18+40N 25+30W	Grab	Cut Outcrop	"Silicified volcanic" (?), Hematized, sheared, thin (0.5 cm) calcite lenses, minor disseminated pyrite.	81	10	0.1
TC-87-018	23+20N 24+95W	Grab	Adit Outcrop	Quartz vein, 50 cm, limonite filled vugs, graphitic blebs.	12	-	0.3
TC-87-019	23+20N 24+95W	Grab	Adit Outcrop	"Silicified Volcanic" (?), numerous thin quartz veins, minor rust weathering.	36	20	0.6

<u>SAMPLE</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>WIDTH</u>	<u>DESCRIPTION</u>	<u>Cu ppm</u>	<u>Au ppb</u>	<u>Ag ppm</u>
TC-87-020	24+00N 20+00W	Grab	Shaft Dump	Mafic rock from shaft. Mafic vein (?) at contact between "quartzite" and volcanics, 5-10% pyrite.	708	-	1.1
TC-87-021	26+00N 25+75W	Grab	Outcrop	Volcanic. Slightly chloritized and silicified. Blebs and stringers of pyrite.	63	-	0.8
TC-87-022	26+00N 26+35W	Grab	Outcrop	Altered intrusive. Carbonate rich. Fine grained greenish rock. 1-2% pyrite.	142	40	0.1
TC-87-023	26+00N 33+40W	Grab	Outcrop	Quartzite with 1% pyrite cubes and hematized fractures. Locally graphitic.	14	20	0.5
TC-87-024	26+00N 39+75W	Grab	Outcrop	Phyllite quartzite with remnant volcanic texture. Slightly brecciated. Carbonate veining. Hematitic fractures.	11	-	1
TC-87-025	25+00N 38+37W	Grab	Outcrop	Graphitic shear bounding quartzite Broken hematized sheared material with graphite on fractures. Trends 040°/75° E.	68	-	0.6
TC-87-026	23+10N 33+35W	Grab	Outcrop	Quartzite with hematized shear zone. Trends 332°/30° S. Shaft and trench to SSW appear to be cutting same structure.	30	-	0.5
TC-87-027	16+00N 28+40W	Grab	Outcrop	Sheared volcanics. Hematite and possible graphite on shears. Dark brown weathering.	91	-	0.1

<u>SAMPLE</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>WIDTH</u>	<u>DESCRIPTION</u>	<u>Cu ppm</u>	<u>Au ppb</u>	<u>Ag ppm</u>
TC-87-028	19+00N 21+50W	Grab	Outcrop	Rusty weathering sheared volcanics. Calcareous. Trends 040°/80° N.	8	-	0.1
TC-87-029	23+10N 20+80W	Grab	Outcrop	Rusty weathering altered volcanic below intrusive contact.	28	-	0.1
TC-87-030	21+85N 21+80W	Grab	Outcrop	Rusty siliceous volcanic. Cut by 1-2 mm quartz veinlets. Hematized fractures 1-2% pyrite.	51	40	0.1
TC-87-031	21+40N 21+85W	Grab	Outcrop	Rusty "quartzite". Sericite (?) evident on fresh surface. Hematized fractures.	40	-	0.2
TC-87-032	14+95N 22+80W	Grab	Outcrop	Quartz vein (?) cutting sheared chloritic volcanics. Malachite on fractures. Minor disseminated sulphides.	1720	-	1.7
TC-87-033	15+08N 22+50W	Grab Chip	Outcrop	Sheared chloritized and epidotized volcanics and possible altered granodiorite. Adit. Limonite after pyrite in quartz pods.	42	20	0.5
TC-87-034	15+12N 22+45W	Grab Chip	Outcrop	Adit. Sheared volcanics and granodiorite (?). Adit 3050/10 m in length.	68	1400	48
TC-87-035	15+75N 22+00W	Grab	Outcrop	East dipping silicified zone. Cut by quartz veins. Blebs and disseminations of pyrite. Malachite on fractures.	145	-	0.8
TC-87-036	15+65N 22+25W	Grab	Dump Adit	Epidotized, sericitized and carbonate rich granodiorite cut by quartz veinlets to 5 cm. Pyrite and limonite.	25	40	0.2

<u>SAMPLE</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>WIDTH</u>	<u>DESCRIPTION</u>	<u>Cu ppm</u>	<u>Au ppb</u>	<u>Ag ppm</u>
TC-87-037	14+90N 23+40W	Grab	Dump Trench	Quartz vein with chalcopyrite and malachite. Veining and chalcopyrite also occur in highly silicified pink rock.	5037	39700	36.5
TC-87-038	14+87N 23+70W	Grab Chip	Outcrop Adit	Chip from quartz veins and country rock at mouth of adit. Minor sulphides.	166	-	3.2
TC-87-039	13+50N 25+10W	Grab	Outcrop	Graphitic shear with limonite below quartz vein.	71	100	1.2
TC-87-040	9+40N 20+00W	Grab	Outcrop	Rusty rock. Schistose in appearance. Silicified volcanics.	83	160	1.3
TC-87-041	9+20N 19+50W	Grab	Outcrop Trench	Quartz vein (0.5 m) in sheared volcanics. Shear at 240°/60° S. Hematized.	52	40	0.3
TC-87-042	10+00N 0+75W	Grab	Outcrop	Quartz vein in volcanics. Hematized. Malachite along fractures and vein selvages. Trends 082°/80° N. 7-25 cm in width.	2547	650	7.1
JC-01	15+00N 28+08W	Grab	Outcrop	Quartz vein material from N dipping (30°) E-W trending vein. (0.6 m thick).	41	40	0.1
JC-02	15+00N 28+08N	Grab	Dump	Quartz vein with disseminated pyrite.	30	-	0.1
JC-03	1+85N 38+70W	Grab	Outcrop	Dark greenish grey schist. Altered volcanic? Graphitic.	8	35	0.3
G-87-001	23+50N 20+00W	Grab	Shaft Dump	Garnet, epidote skarn, malachite and chalcopyrite.	12450	240	2.9

<u>SAMPLE</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>WIDTH</u>	<u>DESCRIPTION</u>	<u>Cu ppm</u>	<u>Au ppb</u>	<u>Ag ppm</u>
X G-87-002	23+50N 20+00W	Grab	Shaft Dump	"Silicified volcanic"(?), 15% pyrite.	28091	1650	20.2
G-87-003	19+00N 25+25W	Grab	Outcrop	"Silicified volcanic", limonite coated fractures, minor quartz veining.	456	35	0.6
G-87-004	19+15N 24+90W	Grab	Outcrop	"Silicified volcanic", 1-3% fine grained disseminated pyrite and pyrite blebs.	135	-	0.2
G-87-005	19+15N 24+90W	Grab	Outcrop	Feldspar porphyry dyke, 2-4% disseminated pyrite, cuts "silicified volcanic", calcite rich veinlets.	48	-	0.4
G-87-006	19+00N 24+90W	Grab	Outcrop	Carbonate (ankerite?) rich rock, 5-7% disseminated pyrite and limonite.	25	100	0.1
G-87-007	22+00N 25+00W	Grab	Outcrop	Meta-volcanic, thin laminated chlorite and epidote rich, quartz and calcite veinlets.	14	55	0.6
G-87-008	23+00N 24+65W	Grab	Outcrop	"Meta-Tuff", siliceous lenses and discontinuous bands within laminated chlorite rich groundmass. Disseminations and patches of fine grained pyrite.	48	-	0.8
G-87-009	23+20N 24+75W	Grab	Outcrop	Silicified "Meta-Tuff", bleached, laminated, limonite along banding and as boxwork.	36	45	0.4

<u>SAMPLE</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>WIDTH</u>	<u>DESCRIPTION</u>	<u>Cu ppm</u>	<u>Au ppb</u>	<u>Ag ppm</u>
G-87-010	25+60N 25+00W	Grab	Outcrop	Altered intrusive (clay and chlorite) and "silicified volcanic", abundant limonite along randomly oriented fractures.	133	140	0.1
G-87-011	25+90N 25+20W	Grab	Outcrop	"Silicified volcanic", banded, cut by altered diorite dyke (clay, epidote chlorite), both cut by crystalline quartz veining with limonite filled vugs.	80	20	0.1
G-87-012	25+05N 32+00W	Grab	Outcrop	"Silicified volcanic" limonite patches and fracture fillings, minor boxwork.	25	20	0.4
G-87-013	25+00N 32+40W	Grab	Outcrop	Meta-volcanic, sheared, chlorite and quartz rich, minor silicification, abundant limonite along fractures and in boxwork, minor pyrite?	71	35	0.4
G-87-014	25+00N 26+50W	Grab	Outcrop	Meta-volcanic, sheared, minor graphite, cut by diorite dyke, very rusty weathering.	53	95	1.2
G-87-015	25+00N 0+42W	Grab	Outcrop	Phyllite, graphitic, abundant limonite as fracture fillings and boxwork.	23	-	0.4
G-87-016	18+20N 26+75W	Grab	Outcrop	Meta-volcanic, chloritized, minor shearing, calcite veins and lenses, limonite rich patches.	31	120	0.6
G-87-017	18+05N 28+25W	Grab	Outcrop	"Silicified volcanic", chlorite foliation, calcite and quartz veining, limonite.	25	20	0.1

<u>SAMPLE</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>WIDTH</u>	<u>DESCRIPTION</u>	<u>Cu ppm</u>	<u>Au ppb</u>	<u>Ag ppm</u>
G-87-018	18+50N 29+25W	Grab	Outcrop	"Silicified volcanic", foliated, limonite coated fractures.	23	-	0.1
G-87-019	18+00N 37+25W	Grab	Outcrop	Meta-volcanic, weakly silicified, chlorite rich, chlorite and calcite veinlets, minor disseminated pyrite.	83	-	1.8
G-87-020	17+00N 35+25W	Chip	0.5 m	Meta-volcanic, sheared, chlorite rich, fracture filling pyrite.	34	-	2.2
G-87-021	17+00N 32+85W	Grab	Float	"Silicified volcanic", banded, limonite filled fractures and boxwork.	22	-	0.5
G-87-022	17+00N 30+35W	Discontinuous Chip	1.0 m	Chlorite, quartz, sericite schist, sheared meta-volcanic, 1-2% disseminated pyrite.	42	-	0.1
G-87-023	8+25N 38+75W	Grab	Float	"Silicified volcanic", quartz veining, limonite and chlorite rich bands, limonite veinlets, pyrite in vugs.	8	115	2.2
G-87-024	5+50N 39+30W	Grab	Outcrop	"Silicified volcanic" abundant limonite coated fractures.	24	-	0.2
G-87-025	8+75N 1+80W	Chip	Open Cut 0.7 m	Meta-volcanic, chloritized, epidote, quartz veining, limonite and malachite staining, minor pyrite in quartz veining.	5024	160	4.4
✓ G-87-026	8+75N 1+80W	Grab	Open Cut Dump	Mixed altered volcanics with epidote, chlorite and malachite and quartz veining with malachite and azurite.	6854	460	16.1

<u>SAMPLE</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>WIDTH</u>	<u>DESCRIPTION</u>	<u>Cu ppm</u>	<u>Au ppb</u>	<u>Ag ppm</u>
G-87-027	8+70N 1+25W	Grab	Cut Outcrop	Intrusive, extensively altered to epidote, cuts meta-volcanics, minor garnet, quartz veining and malachite.	202	-	0.8
G-87-028	8+70N 1+25W	Discontin- Chip	Cut 1.5 m	Quartz veining cutting altered intrusive and meta-volcanics, abundant epidote, minor malachite, pyrite rich lenses to 10 cm.	4141	260	3.9
G-87-029	8+70N 1+25W	Grab	Cut 10 cm	Pyrite concentrate.	8903	1700	12.8
G-87-030	9+00N 1+75W N.W. end of open cut.	Discontin- uous Chip	Open Cut 1.5 m	Altered intrusive, clay, chlorite and epidote, malachite.	5253	-	2.2
G-87-031	8+00N 1+00W	Grab	Open Cut	Meta-volcanic, epidote, chlorite garnet, cut by numerous calcite veinlets, rusty weathering.	113	-	0.1
G-87-032	11+80N 9+75W	Grab	Adit Dump	Skarn with epidote, garnet, calcite, magnetite, chalcopyrite, malachite.	688	240	0.6
G-87-033	23+15N 20+35W	Grab	Cut	Silicified meta-volcanic, 5% disseminated pyrite.	324	750	0.8
G-87-034	23+15N 20+35W	Grab	Cut	Garnet bearing skarn.	61	-	0.1
G-87-035	23+15N 20+35W	Grab	Cut	Epidote rich skarn, 1-2% pyrite, epidote locally follows banding in silicified volcanic.	44	-	0.6

<u>SAMPLE</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>WIDTH</u>	<u>DESCRIPTION</u>	<u>Cu ppm</u>	<u>Au ppb</u>	<u>Ag ppm</u>
G-87-036	22+50N 20+40W	Grab	Outcrop	"Silicified volcanic", limonite as fracture coatings, sparse fine grained disseminated pyrite.	44	950	1.7
G-87-037	Lakeview Dividend 12+75N 6+75W	Grab	Dump	Chloritized meta-volcanic, disseminations and veinlets of pyrite and quartz.	12049	1400	7.1
G-87-038	Lakeview Dividend 12+75N, 6+75W	Grab	Dump	Massive pyrrhotite, minor chalcopyrite.	2066	100	0.1
G-87-039	Lakeview Dividend 12+75N 6+75W	Grab	Dump	Massive to semi-massive pyrite in chloritized meta-volcanic, minor quartz.	8631	1400	10.3

### Procedure - Magnetometer

A Geometrics Model G-816 portable proton magnetometer was utilized to survey established lines. Readings were obtained at 25 metre intervals on the Northwest Grid and at 12.5 metre intervals on the Dividend #2 Grid. Results were corrected for diurnal variations via the closed loop method. Contoured values appear on Figures 4, 5, and 9.

### Results - Magnetometer

Results of the magnetometer survey over the Dividend #2 Grid are shown on Figure 4. Two isolated magnetic highs were noted on line 3+00N. A second area of elevated magnetics at 16+00W extends from line 3+50N to 4+00N. Both of these anomalies are coincident with chalcopyrite and malachite bearing quartz veins.

The Northwest Grid (Figure 5) exhibits both numerous isolated magnetic highs and anomalies which cross several lines. These magnetic highs are generally found north of line 20+00N. One of the larger anomalies, extends from the west end of the pond on line 20+00N to the old workings discovered to the north on line 23+00N. This zone may be indicative of sulphide bearing skarn or shear related mineralization and requires further investigation.

### Procedure - VLF-EM

Surveyed lines were evaluated with a Geonics EM-16 unit. This instrument measures the secondary electromagnetic fields generated by buried conductive bodies when subjected to a primary electromagnetic (radio) signal.

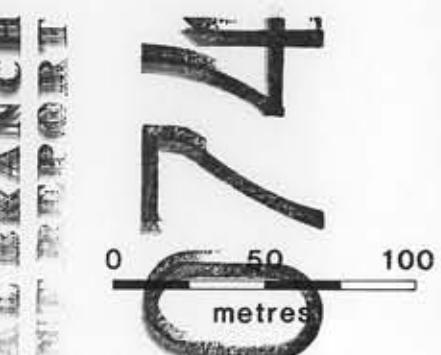
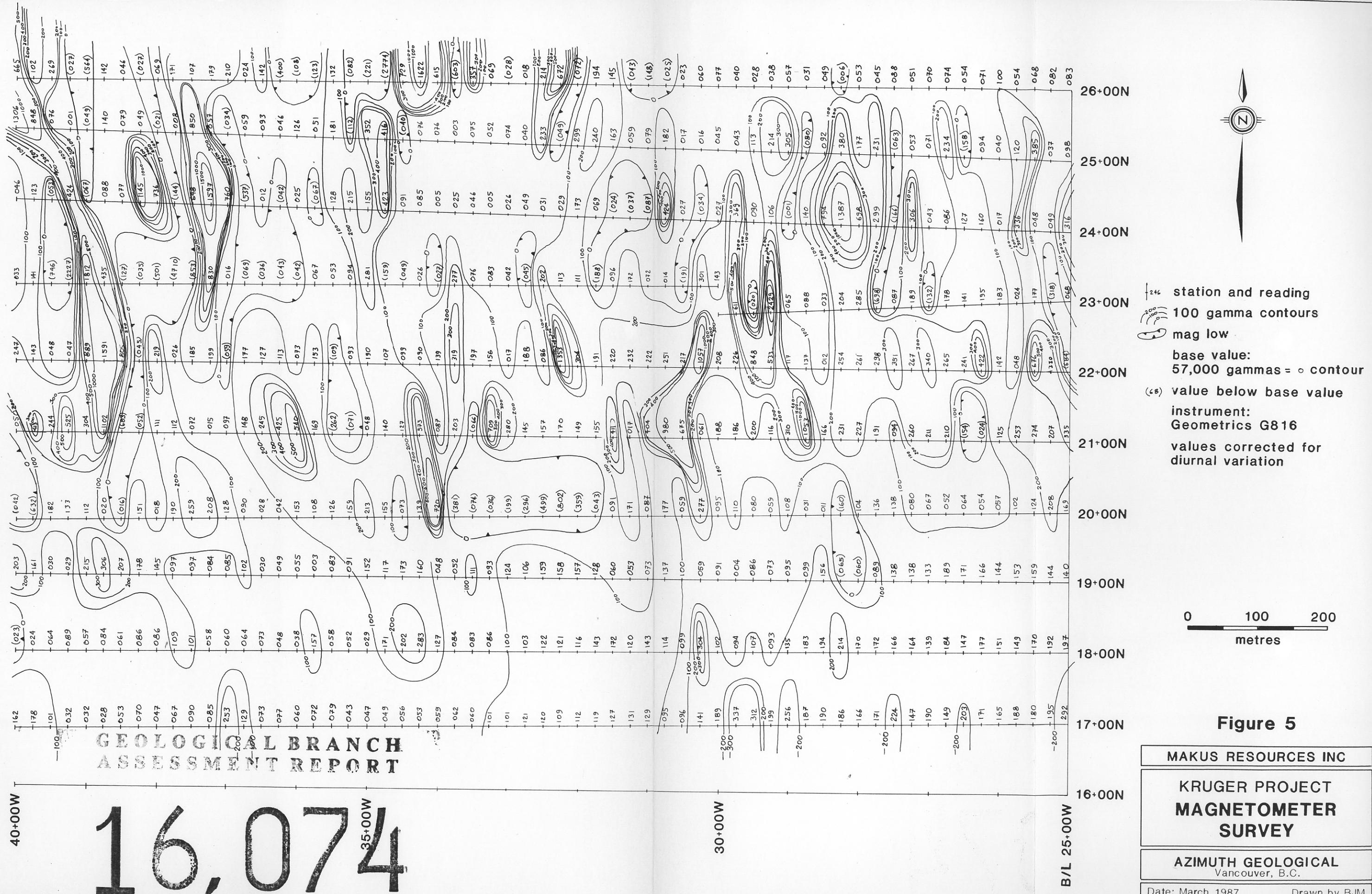


Figure 4



**Figure 5**

Ideally, suspected conductors should be oriented towards the station for optimum results. Due to the lack of a transmitter at the proper orientation, the Seattle transmitter was utilized. The orientation of the Seattle transmitter with respect to the property is approximately 220°.

Inphase and quadrature responses are listed in tabular form in Appendix 5.

All data was reduced by Fraser Filtering and then contoured as illustrated on Figures 6, 7, and 10.

Readings were obtained at 25 meter intervals area on the Northwest Grid and 12.5 meter intervals in the Dividend #2 Grid area.

#### Results - VLF-EM

Contoured Fraser Filtered values appear on Figure 6 for the Dividend #2 Grid and on Figure 7 for the Northwest Grid area.

In the Dividend #2 area weak but marked broad conductors trend northeasterly. A north-south component is noted at the east end of lines 4+50N to 6+50N.

A weak but definable 250 meter wide zone of NW trending of conductors emanates from the Dividend # 2 Grid area. Magnetometer highs and mineralization discovered both on the Dividend # 2 Grid and in the area of the 'sulphide pond' on line 20+00N are located along this trend.

The VLF-EM was also used as a prospecting tool to locate the conductors outlined by the 1986 survey. Most of these conductors appear to be associated with graphitic shear zones. It is probable that the conductors delineated during the recent survey are similarly caused.

**16,074**

**GEODESICAL BRANCH REPORT**

0 50 100  
metres

**Figure 6**

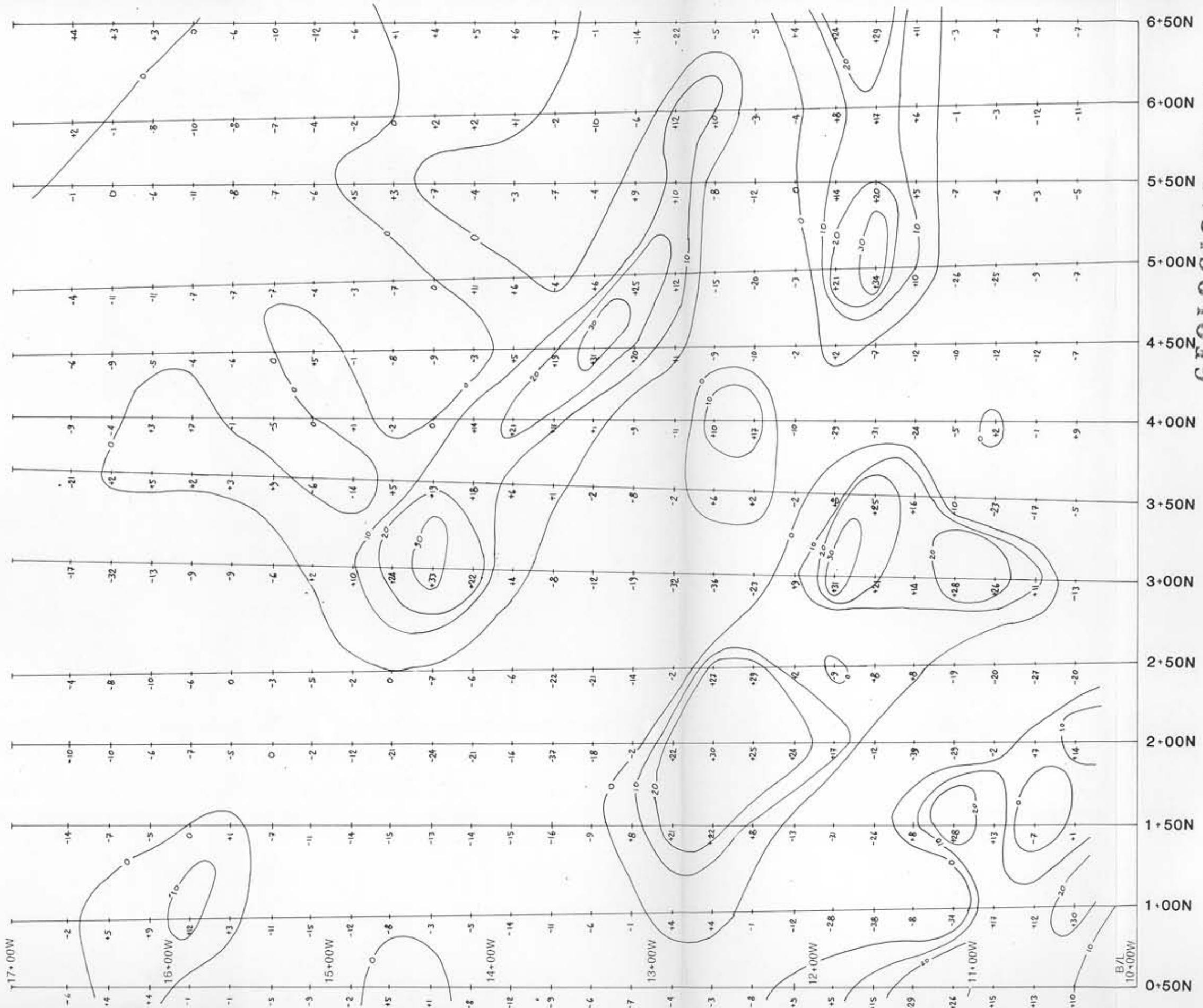
MAKUS RESOURCES INC

KRUGER PROJECT  
**VLF-EM SURVEY**  
(FRASER FILTERED)

AZIMUTH GEOLOGICAL  
Vancouver, B.C.

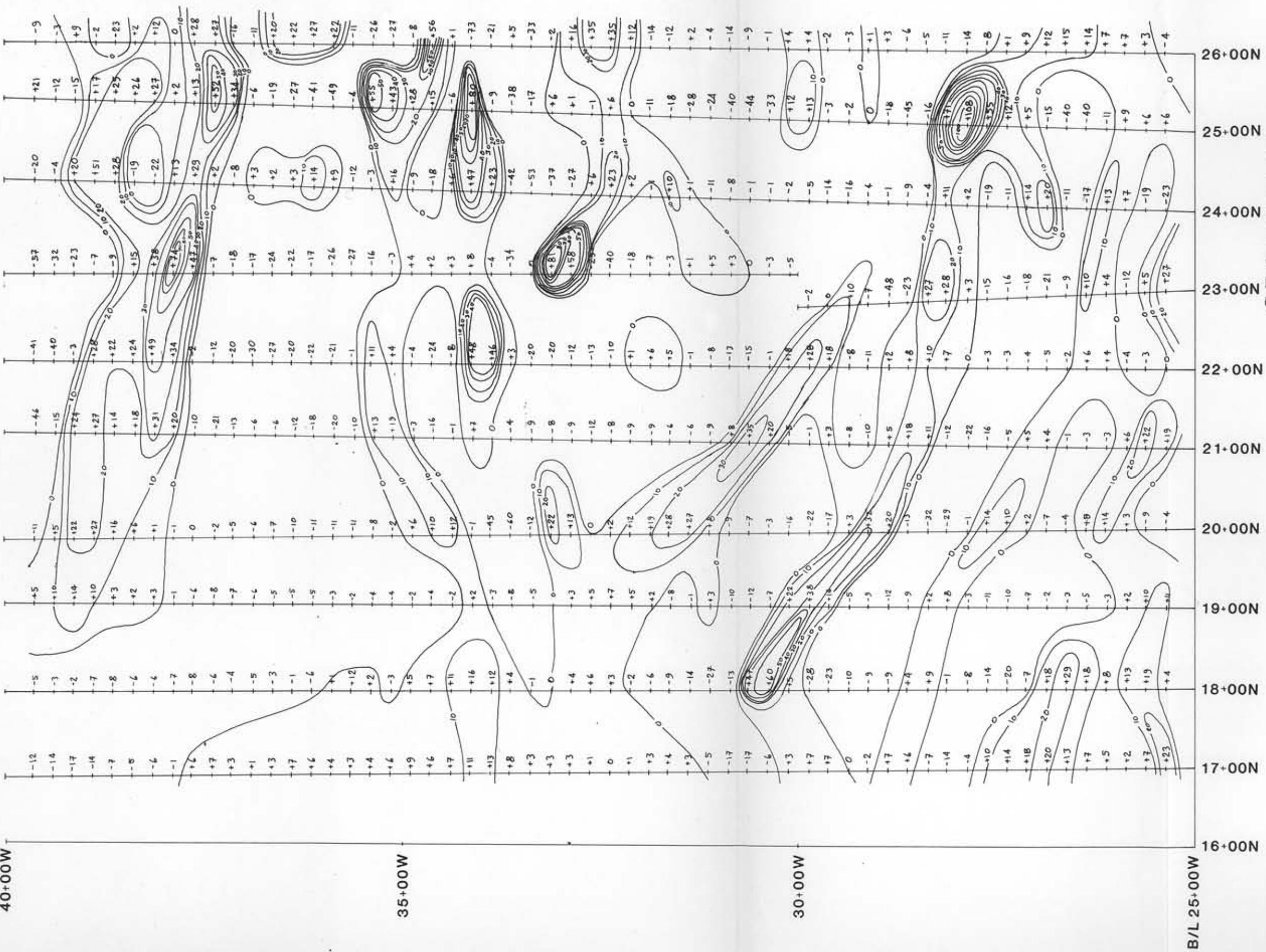
Date: March 1987

Drawn by BJM



**16,074**

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**



**Figure 7**

**MAKUS RESOURCES INC**

**KRUGER PROJECT  
VLF-EM SURVEY  
(FRASER FILTERED)**

**AZIMUTH GEOLOGICAL  
Vancouver, B.C.**

Date: March 1987 Drawn by BJM

## Geochemical Survey

### Soil Sampling Program

A total of 324 soil samples were collected for analysis. These samples were taken predominantly along lines 16+00N, 17+00N, 20+00N as well as over selected areas along lines 20+50N, 21+00N and 21+50N. Other samples were collected to provide fill-in data over areas previously covered in the 1986 survey. Seventy-seven untested soil samples from the 1986 survey were submitted for analysis in order to provide further geochemical coverage of the grid.

Soils were obtained from a depth of 10-20 cm using a cast iron mattock.

The samples consisted of poorly developed "B" horizon material. The lack of development of the "B" zone is most likely the result of the near desert conditions in the area. Old "cat" trenches on the property, reveal a dark brown soil (30 - 100 cm depth) immediately above the rock/soil interface. This soil is of uniform colour from top to bottom and a well defined "B" zone is not developed. The only typical red brown "B" horizon material noted on the property occurs immediately overlying the Dividend and Lakeview workings. As such, the presence of a well developed "B" zone horizon could be indicative of underlying mineralization.

Samples were placed in kraft soil bags and shipped to Vangeochem Lab Ltd. in Vancouver for analysis. All soils were analyzed for Au. A twenty - eight element ICP was also completed for all samples.

Results of the analyses are presented in Appendix 3.

Results for Au are shown on Figure 11. This map includes data from the 1986 survey.

Anomalous values were ascertained by determining the mean and standard deviation for some 401 soil samples from the 1986 and 1987 surveys. Possibly anomalous, probably anomalous and definitely anomalous values were determined as Mean +1 Standard Deviation. Mean +2 Standard Deviations and Mean +3 Standard Deviations respectively (Appendix 4).

Geostatistical analyses were completed for arsenic, copper, lead, strontium, and zinc.

Gold analysis are rounded off to the nearest 5 ppb by the lab and values below 5 ppb are not detectable. As a result the categorization of Au anomalies were less vigorously derived than those of other elements.

#### Soil Sample Results

Anomalous Au values occur in the area outlined by lines 0+50N to 6+50N, 10+00W to 17+00W. These anomalies however, were not directly traceable to mineralization in outcrop. The narrowing of this zone to the north and widening to the south suggests the elevated Au values may have been glacially transported from mineralization found on the Manx claims to the north.

Several isolated anomalous Au and base metal values occur elsewhere on the claims. Since the entire claim area was not covered by soil sampling it is not known if these anomalies represent distinct concentrations of mineralization or whether such patterns are widespread. Only Au values were plotted as no discernible target areas were defined by the other elements.

In general the soil survey results were somewhat disappointing.

Values tended to be low even over known areas of mineralization. The vein and/or podiform skarn type mineralization suggests that intervals of 25 meters and 50 meters are too great to accurately define targets. This factor combined with the previously discussed lack of soil development suggest that deposits in the area may well be geochemically "blind". If so, the best exploration techniques may be geophysical surveys and mapping/prospecting. Detailed soil sampling at 5 to 10 m intervals over targets defined by these techniques may prove of greater usefulness.

### CONCLUSIONS

The Kruger Claims surround an area of pyrrhotite, pyrite, chalcopyrite and magnetite bearing skarn deposits, from which 99,000 tons of ore averaging 0.19 oz/ton Au were mined during the first half of this century. Surveys completed in the past identified other areas of skarn and vein type mineralization, but most work was concentrated in the areas of the existing crown grants.

The 1987 survey, consisting of geophysics, geochemistry, prospecting and geological mapping, was designed to test unexplored sections of the property and to further evaluate geochemical and geophysical anomalies outlined in the 1986 program (Di Spirito et al, 1986).

Skarns are developed along limestone lenses and proximal to volcanic - granodiorite contacts. In addition they appear to be controlled by a prominent northwest trending structural event extending for 2.5 km across the Bluebell, Lakeview, Dividend and Molka crown grants. A second sub-parallel structure may be traceable from the Dividend #2 Grid to the 'sulphide pond' located on the Northwest Grid (line 20+00N, 33+00W to 34+00W).

Prospecting, mapping, VLF/EM and magnetometer surveys outlined several areas that require further investigation. Soil sampling results were inconclusive, even in areas of known mineralization. This is most probably a function of the poorly developed "B" horizon in the near desert conditions of the region.

Five areas of interest, necessitating further exploration, have been identified. In order of decreasing importance, these include:

- 1) Target A (Figure 12), located on line 15+00N between 22+50W and 23+75W. Here, mixed granodiorites and volcanics have undergone limited potassic alteration. Skarns are developed locally. Quartz veining and shearing crosscut these rock units. A grab sample of a sulphide bearing quartz vein from the dump of an old adit returned 39,700 ppb Au. A grab-chip sample of sheared volcanics and granodiorites yielded 1400 ppb Au. A magnetometer high and a northeast trending VLF/EM conductor occurs immediately to the northwest.
- 2) Target B has been referred to as the 'sulphide pond' and is located on line 20+00N between 33+00W and 34+00W. Old workings mark the northern terminus of a magnetic high extending 300 m to the north.
- 3) Target C is characterized by NE and NW trending shears and quartz veinlets exposed proximal to a magnetic high on the Dividend #2 claim. Values of up to 220 ppb Au were obtained from the quartz veinlets.
- 4) Silicified volcanics and "quartzites" are exposed over a large area in the northwest portion of the property. This alteration is spatially related to the intrusive volcanic contact. The silicified zones are sporadically cross-cut by

quartz veins and are locally characterized by ubiquitous hematite coated shears and fractures. Quartz veins have yielded up to 1650 ppb Au and the hematite rich fractured "quartzites" have returned values in the 100 to 160 ppb range.

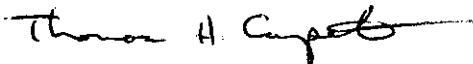
- 5) Elevated gold values are associated with quartz veining developed on the Blue Bell and Molka Crown Grants located to the northwest and southeast of the Lakeview and Dividend Mines respectively. Minor amounts of skarn material have been identified with these showings. These veins and skarns are developed along the 2.5 km Lakeview - Dividend gold bearing structure.

#### RECOMMENDATIONS

Two phases of exploration are recommended in order to further evaluate the gold bearing potential of the above mentioned zones. Phase III would consist of continued prospecting and mapping combined with detailed geophysical and geochemical surveys over target areas. Adit rehabilitation, blasting and trenching of specific targets should follow. This program should be conducted during the late spring to early fall to allow a full evaluation of the higher elevations to be completed. A breakdown of the estimated costs for Phase III (\$ 64,680.00) is given in Table 2.

Contingent upon the successful results of Phase III, a further exploration program of exploratory diamond drilling is estimated to cost \$79,970.00.

Respectfully submitted,

  
Thomas H. Carpenter

B.Sc., F.G.A.C.

  
Gregory G. Crowe,  
M.Sc., P.Geol.

**TABLE 2**

**Estimated Costs for Continued Exploration**

**Phase III**

**Mapping and Prospecting**

Mobilization		\$ 1,500.00
Mapping	24 @ 250/day	6,000.00
Prospecting	24 @ 250/day	6,000.00
Geophysics	12 @ 200/day	2,400.00
Soil Sampling	12 @ 200/day	2,400.00
Geochemical Analyses		
Rock	200 @ 17/sample	3,400.00
Soil	300 @ 15/sample	4,500.00

**Blasting and Trenching**

Road Upgrading and Construction	10 @ 500/day	5,000.00
Back Hoe Rental	10 @ 400/day	4,000.00
Adit Rehabilitation and Blasting	10 @ 200/day	2,000.00
Materials and Supplies		1,000.00
Equipment Rental		2,000.00
Site Reclamation	5 @ 200/day	1,000.00

**Support**

Truck Rental	24 @ 100/day	2,400.00
Fuel		500.00
Food and Accommodation	82 @ 100/day	8,200.00
Secretarial, Office and Drafting		1,500.00
Report		5,000.00
Contingency	10%	<u>5,880.00</u>
	<b>Total</b>	<b>\$ 64,680.00</b>

Phase IV

Diamond Drilling

Mobilization and		\$ 3,000.00
Demobilization		
Drilling	6 holes x 250' @ 25/ft	37,500.00
Materials and Supplies		1,300.00
Water Hauling	21 @ 200/day	4,200.00
Supervision and		
Core Logging	24 @ 250/day	6,000.00
Assistant	24 @ 200/day	4,800.00
Geochemical Analyses	100 @ 17/sample	1,700.00
Truck Rental	24 @ 100/day	2,400.00
Fuel		500.00
Food and Accommodation	48 @ 100/day	4,800.00
Secretarial, Office		
and Drafting		1,500.00
Report		5,000.00
Contingency	10%	<u>7,270.00</u>
	Total	\$ 79,970.00

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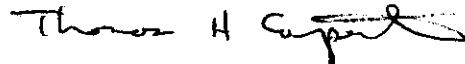
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CERTIFICATE

I, Thomas H. Carpenter of the City of Vernon in the Province of British Columbia hereby certify that:

- 1) I am a Geologist resident at 3011 - 23 Street, Vernon, B.C.
- 2) I hold a Bachelor of Science degree in Geology from Memorial University of Newfoundland granted in May of 1971.
- 3) I have been practicing my profession continuously since that date in Canada, the United States and Australia.
- 4) I am a Fellow of the Geological Association of Canada (Membership #F4838).
- 5) I hold no interest either directly or indirectly in the shares or securities of Makus Resources Inc. nor do I expect to receive any interest.
- 6) This report is based on work carried out by myself and others between January 20 and February 12, 1987 and on an evaluation of previously acquired technical data.
- 7) I consent to the use of this report in a Prospectus, Statement of Material Facts or Qualifying Report.

Dated this 25th day of March, 1987 at Vernon, B.C.



Thomas H. Carpenter, B.Sc. F.G.A.C.  
Geologist

**CERTIFICATE**

I, Gregory G. Crowe of the City of Vancouver in the Province of British Columbia hereby certify that:

- 1) I am a consulting geologist with offices at 209 - 470 Granville St., Vancouver, B.C.
- 2) I hold a degree of Master of Science in Geology from the University of Calgary, November, 1981 and a Bachelor of Science in Geology from Carleton University in Ottawa, June, 1977.
- 3) I have been employed in my profession for the past 10 years.
- 4) I am a Fellow of the Geological Association of Canada (Membership #F3859).
- 5) I am a member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta (Membership #35569).
- 6) I hold no interest either directly or indirectly in the shares or securities of Makus Resources Inc. nor do I expect to receive any interest.
- 7) This report is based on work carried out by myself and others between January 20 and February 12, 1987 and on an evaluation of previously acquired technical data.
- 8) I consent to the use of this report in its entirety in a Prospectus, Statement of Material Facts or Qualifying Report.

Dated this 25th day of March, 1987 at Vancouver, B.C.



\_\_\_\_\_  
Gregory G. Crowe, M.Sc., P.Geol.

**Appendix l**  
**Rock Geochemistry**



# VANGEOCHEM LAB LIMITED

MAIN OFFICE  
1521 PEMBERTON AVE.  
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VANCOUVER, B.C. V6L 1L6  
(604) 251-5656

REPORT NUMBER: 870158 6A

JOB NUMBER: 870158

AZIMUTH GEOLOGICAL

PAGE 1 OF 3

SAMPLE #	Au
G-87-001	0pb
G-87-002	240
G-87-003	1650
G-87-004	35
G-87-005	nd
G-87-006	nd
G-87-007	100
G-87-008	55
G-87-009	nd
G-87-010	45
G-87-011	140
G-87-012	20
G-87-013	28
G-87-014	35
G-87-015	95
G-87-016	nd
G-87-017	120
G-87-018	28
G-87-019	nd
G-87-020	nd
G-87-021	nd
G-87-022	nd
G-87-023	115
G-87-024	nd
G-87-025	160
G-87-026	460
G-87-027	nd
G-87-028	260
G-87-029	1700
G-87-030	nd
G-87-031	nd
G-87-032	240
G-87-033	750
G-87-034	nd
G-87-035	nd
G-87-036	950
G-87-037	1400
G-87-038	100
G-87-039	1400

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample



# VANGEOCHEM LAB LIMITED

MAIN OFFICE  
1521 PEMBERTON AVE.  
NORTH VANCOUVER, B.C. V7P 2S3  
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE  
1830 PANDORA ST.  
VANCOUVER, B.C. V5L 1L6  
(604) 251-5656

REPORT NUMBER: 870158 GA

JOB NUMBER: 870158

AZIMUTH GEOLOGICAL

PAGE 2 OF 3

SAMPLE #	Au ppb
JC-81	48
JC-82	nd
JC-83	35
TC-87-001	nd
TC-87-002	3100
TC-87-003	148
TC-87-004	nd
TC-87-005	55
TC-87-006	168
TC-87-007	28
TC-87-008	15
TC-87-009	568
TC-87-010	95
TC-87-011	28
TC-87-012	228
TC-87-013	18
TC-87-014	158
TC-87-015	15
TC-87-016	nd
TC-87-017	18
TC-87-018	nd
TC-87-019	28
TC-87-020	nd
TC-87-021	nd
TC-87-022	48
TC-87-023	28
TC-87-024	nd
TC-87-025	nd
TC-87-026	nd
TC-87-027	nd
TC-87-028	nd
TC-87-029	nd
TC-87-030	48
TC-87-031	nd
TC-87-032	nd
TC-87-033	28
TC-87-034	1400
TC-87-035	nd
TC-87-036	48

DETECTION LIMIT

5

nd = none detected

— = not analysed

is = insufficient sample



# VANGEOCHEM LAB LIMITED

MAIN OFFICE  
1521 PEMBERTON AVE.  
NORTH VANCOUVER, B.C. V7P 2S3  
(604) 988-5211 TELEX: 04-352578

BRANCH OFFICE  
1630 PANDORA ST.  
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(604) 251-5656

REPORT NUMBER: 870158 GA

JOB NUMBER: 870158

AZIMUTH GEOLOGICAL

PAGE 3 OF 3

SAMPLE #	Au
	ppb
TC-87-037	39700
TC-87-038	nd
TC-87-039	100
TC-87-040	160
TC-87-041	40
TC-87-042	650

DETECTION LIMIT

5

nd = none detected

- = not analysed

is = insufficient sample

**VANGEOCHEM LAB LIMITED**

MAIN OFFICE: 1521 PEMBERTON AVE. N. VANCOUVER B.C. V7P 2S3 PH: (604) 986-5211 TELEX: 04-352578  
 BRANCH OFFICE: 1630 PANDORA ST. VANCOUVER B.C. V6L 1L6 PH: (604) 251-5656

**ICAP GEOCHEMICAL ANALYSIS**

A .5 GRAM SAMPLE IS DIGESTED WITH 5 ML OF 3:1:2 HCL TO HNO3 TO H2O AT 95 DEG. C FOR 90 MINUTES AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR SN, MN, FE, CA, P, CR, MG, BA, PB, AL, MA, K, W, PT AND SR. AU AND PD DETECTION IS 3 PPM.  
 IS= INSUFFICIENT SAMPLE, ND= NOT DETECTED, - = NOT ANALYZED

COMPANY: AZIMUTH GEOLOGICAL  
 ATTENTION:  
 PROJECT:

REPORT #: B70158PA  
 JOB #: B70158  
 INVOICE #: B70158NA

DATE RECEIVED: B7/02/13  
 DATE COMPLETED: 87/02/27  
 COPY SENT TO:

ANALYST ed Pease

PAGE 1 OF 3

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI %	CA PPM	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG PPM	MN PPM	ND PPM	MA %	NJ PPM	P %	PB PPM	PB PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	M PPM	ZN PPM	
G-87-001	2.9	.60	20	ND	301	ND	11.08	3.1	13	69	12450	9.69	.36	.08	5554	11	.01	11	.04	ND	ND	ND	3	7	46	17	80	23	
G-87-002	20.2	.76	43	ND	24	ND	7.16	1.1	145	52	28091	16.82	.52	.15	5205	116	.01	44	.02	ND	ND	ND	11	9	4	26	732	23	
G-87-003	.6	.56	9	ND	28	ND	1.08	.2	9	127	456	1.60	.12	.40	690	2	.01	18	.02	1	ND	ND	ND	3	79	ND	29	17	
G-87-004	.2	.34	9	ND	22	ND	.45	.1	7	121	135	3.42	.10	.20	388	B	.01	12	.06	24	ND	ND	3	2	48	ND	4	10	
G-87-005	.4	2.75	9	ND	45	7	1.23	.1	15	28	48	4.41	.17	1.81	1152	ND	.01	3	.10	7	ND	ND	3	ND	107	ND	7	78	
G-87-006	.1	.83	8	ND	150	ND	2.88	.1	8	8	25	2.38	.22	.32	910	ND	.01	2	.14	2	ND	ND	ND	ND	ND	ND	ND	26	
G-87-007	.6	1.03	37	ND	43	4	1.16	.1	14	126	14	1.61	.10	.85	491	ND	.01	94	.20	4	ND	ND	ND	7	55	ND	ND	35	
G-87-008	.8	.58	ND	ND	738	ND	.14	.1	1	73	48	1.53	.06	.27	53	2	.01	9	.10	3	ND	ND	ND	ND	28	ND	ND	14	
G-87-009	.4	.32	4	ND	450	ND	.03	.1	ND	112	36	2.36	.07	.14	43	10	.01	6	.03	6	ND	ND	ND	ND	11	ND	ND	11	
G-87-010	.1	.27	7	ND	129	ND	.38	.1	4	115	133	1.70	.07	.13	263	15	.01	11	.16	3	ND	ND	ND	1	18	ND	ND	5	
G-87-011	.1	1.00	9	ND	287	ND	.14	.1	5	56	80	1.77	.07	.48	548	5	.01	21	.08	1	ND	ND	ND	ND	14	ND	ND	42	
G-87-012	.4	.40	6	ND	315	ND	.06	.1	ND	153	25	1.31	.05	.27	95	15	.01	10	.07	9	ND	ND	ND	1	8	ND	ND	11	
G-87-013	.4	.56	19	ND	194	ND	.10	.1	2	94	71	4.15	.11	.36	222	8	.01	20	.17	10	ND	ND	ND	3	ND	26	ND	89	
G-87-014	1.2	.58	6	ND	212	7	.12	.1	5	79	53	2.52	.08	.45	116	3	.01	7	.08	11	ND	ND	ND	3	12	9	ND	30	
G-87-015	.4	.41	ND	ND	268	ND	.01	.1	ND	153	23	.88	.06	.27	57	15	.04	4	.03	8	ND	ND	ND	1	9	ND	ND	9	
G-87-016	.6	3.00	15	ND	53	8	8.91	.1	32	76	31	5.40	.32	2.04	1182	ND	.01	83	.13	8	ND	ND	ND	6	412	8	ND	94	
G-87-017	.1	.53	11	ND	55	ND	1.54	.1	5	48	25	1.38	.13	.35	865	ND	.01	14	.04	6	ND	ND	ND	ND	156	ND	ND	16	
G-87-018	.1	.20	14	ND	23	ND	.05	.1	3	236	23	.66	.03	.13	150	17	.01	10	.01	4	ND	ND	ND	1	5	ND	ND	7	
G-87-019	1.8	4.33	8	ND	115	14	4.57	.1	44	130	83	6.94	.38	3.64	1009	ND	.01	69	.14	7	ND	ND	ND	3	17	125	5	84	
G-87-020	2.2	1.91	10	ND	58	14	1.29	.1	27	12	34	4.65	.22	1.16	719	2	.01	14	.26	13	ND	ND	ND	5	25	101	ND	3	80
G-87-021	.5	.14	ND	ND	813	ND	.03	.1	1	215	22	1.00	.05	.05	71	19	.01	13	.01	16	ND	ND	ND	1	13	ND	ND	11	
G-87-022	.1	2.11	340	ND	26	ND	4.79	.1	45	486	42	5.40	.26	8.36	955	ND	.01	477	.05	ND	ND	ND	ND	ND	225	3	ND	62	
G-87-023	2.2	.01	31	ND	70	ND	.08	.1	1	154	B	.65	.03	.14	55	6	.01	13	.02	2725	ND	ND	ND	2	12	ND	ND	29	
G-87-024	.2	.26	5	ND	21	ND	.05	.1	2	218	24	1.18	.05	.19	249	16	.01	8	.02	37	ND	ND	ND	2	5	ND	ND	2	
G-87-025	4.4	1.08	6	ND	73	ND	1.66	1.2	21	43	5024	2.38	.16	.80	359	26	.01	10	.07	17	ND	ND	ND	MD	71	ND	ND	12	
G-87-026	16.1	.71	15	ND	61	3	.97	1.1	22	27	6854	4.55	.17	.58	230	36	.01	9	.05	5	ND	ND	ND	2	57	ND	ND	5	
G-87-027	.8	1.70	5	ND	18	ND	2.99	.1	16	83	202	2.93	.19	1.13	370	4	.01	14	.06	8	ND	ND	ND	2	267	6	ND	10	
G-87-028	3.9	.68	22	ND	16	3	2.04	.6	81	116	4141	7.36	.25	1.00	288	61	.01	58	.01	11	ND	ND	ND	3	6	53	5	ND	4
G-87-029	12.8	.34	39	ND	4	6	.56	.1	326	69	8903	22.18	.48	.45	175	128	.01	153	.01	39	ND	ND	ND	12	9	38	13	15	ND
G-87-030	2.2	1.92	11	ND	48	ND	.79	.B	46	15	5253	3.92	.16	1.26	598	10	.01	19	.06	2	ND	ND	ND	ND	33	ND	ND	66	
G-87-031	.1	1.62	11	ND	45	ND	12.50	.1	23	187	113	4.20	.27	2.57	1527	2	.01	55	.01	4	ND	ND	ND	ND	710	8	4	29	
G-87-032	.6	1.33	40	ND	12	3	7.08	.1	12	25	688	12.53	.44	.26	1152	2	.01	8	.02	22	ND	ND	ND	10	7	34	21	23	14
G-87-033	.8	.65	14	ND	82	ND	.86	.1	21	125	324	3.95	.15	.45	662	98	.01	50	.28	10	ND	ND	ND	2	39	ND	ND	36	
G-87-034	.1	1.10	18	ND	5	ND	11.46	.1	9	21	61	9.55	.40	.08	6859	23	.01	10	.46	17	ND	ND	ND	7	3	20	30	ND	9
G-87-035	.6	.60	6	ND	33	ND	3.66	.1	12	117	44	2.16	.19	.15	1171	16	.01	18	.43	5	ND	ND	ND	6	128	11	ND	13	
G-87-036	1.7	.17	5	ND	36	ND	.43	.2	5	96	44	1.29	.08	.10	199	18	.01	8	.11	3	ND	ND	ND	1	19	ND	ND	ND	
G-87-037	7.1	1.62	1281	ND	25	3	5.41	.1	110	28	12049	22.10	.64	.50	1777	50	.01	10	.01	47	ND	ND	ND	16	8	61	27	8	212
G-87-038	.1	.19	155	ND	3	ND	.17	.1	96	8	2066	46.73	.98	.11	244	4	.01	4	.01	61	ND	ND	ND	22	7	3	38	8	ND
G-87-039	10.3	1.01	254	ND	6	26	.14	.1	138	65	8631	31.62	.64	.35	540	8	.01	24	.01	44	ND	ND	ND	16	7	37	17	115	43

DETECTION LIMIT .1 .01 .1 .3 .1 .01 .1 1 1 .01 .01 1 1 .01 .01 1 1 .01 .01 2 3 5 2 2 1 5 3 1

CLIENT: AZIMUTH GEOLOGICAL JOB#: 870158 PROJECT:

REPORT: 870158PA DATE: 87/02/27

PAGE 2 OF 3

SAMPLE NAME	AS PPM	AL %	AS PPM	AU PPM	BA PPM	BI %	CA PPM	CD %	CO PPM	CR PPM	CU PPM	FE %	K %	Mg %	Mn PPM	Mo PPM	Na PPM	Ni PPM	P %	Pb PPM	Pd PPM	Pt PPM	SB PPM	Sn PPM	SR PPM	U PPM	Mn PPM	Zn PPM
JC-01	.1	.27	4	ND	9	ND	.30	.1	3	123	41	1.41	.03	.29	274	7	.01	21	.01	20	ND	ND	3	ND	23	ND	ND	13
JC-02	.1	.04	5	ND	7	ND	.27	.1	4	5	30	.93	.03	.07	278	1	.01	14	.01	3	ND	ND	4	ND	26	ND	ND	6
JC-03	.3	.12	ND	ND	26	ND	.13	.1	ND	79	8	.40	.04	.03	32	10	.05	ND	.02	16	ND	ND	4	ND	9	ND	ND	ND
TC 87-001	.1	1.50	30	ND	13	ND	11.73	.1	2	46	29	9.16	.36	.16	1693	ND	.01	ND	.02	14	ND	ND	5	ND	5	16	3	8
TC 87-002	28.5	.01	129	ND	4	ND	.15	.1	705	9	11886	36.42	.71	.03	105	7	.01	156	.01	43	ND	ND	18	9	3	19	7	ND
TC 87-003	1.3	.44	17	ND	25	ND	2.17	.3	17	89	256	5.97	.22	.30	782	23	.01	25	.12	36	ND	ND	8	1	211	6	ND	61
TC 87-004	1.7	3.04	9	ND	246	ND	2.49	.5	23	117	1956	8.75	.30	1.64	2292	83	.01	38	.22	10	ND	ND	ND	ND	78	8	ND	96
TC 87-005	.2	.22	ND	ND	51	ND	1.06	.1	3	146	178	1.08	.08	.13	494	4	.01	9	.04	5	ND	ND	ND	ND	27	ND	ND	6
TC 87-006	3.5	1.33	11	3	203	ND	4.55	3.1	33	97	5663	4.91	.25	.32	2891	13	.01	44	.17	4	ND	ND	3	12	66	12	94	65
TC 87-007	.8	1.29	6	ND	14	5	2.11	.1	12	21	121	4.26	.26	.91	846	5	.01	5	.15	11	ND	ND	3	7	87	8	ND	48
TC 87-008	.1	1.29	6	ND	21	ND	.20	.1	2	4	128	5.07	.25	.56	1074	43	.53	9	.11	13	ND	ND	3	ND	18	ND	ND	129
TC 87-009	.6	1.03	36	ND	29	ND	13.25	.1	15	42	841	3.12	.25	.45	1360	350	.01	3	.02	7	ND	ND	ND	ND	494	6	ND	15
TC 87-010	1.7	.96	4	ND	17	ND	1.23	.4	9	72	5956	2.56	.11	.89	440	43	.01	14	.05	ND	ND	ND	ND	ND	34	ND	ND	ND
TC 87-011	.1	1.16	4	ND	24	ND	.17	.1	ND	17	128	5.87	.22	.32	651	6	.01	ND	.16	11	ND	ND	7	ND	40	ND	ND	84
TC 87-012	.1	1.12	ND	ND	39	ND	.17	.1	ND	ND	39	3.39	.17	.32	385	29	.22	ND	.20	11	ND	ND	ND	ND	27	ND	ND	33
TC 87-013	.1	.65	6	ND	14	ND	1.39	.1	5	71	35	2.02	.14	.38	549	4	.01	11	.03	12	ND	ND	3	ND	37	ND	ND	22
TC 87-014	.1	1.86	7	ND	10	ND	5.40	.1	12	130	24	2.58	.20	1.82	863	ND	.01	111	.03	1	ND	ND	40	ND	184	6	ND	12
TC 87-015	.3	1.56	8	ND	89	ND	.35	.1	3	21	22	4.55	.29	.48	1543	4	.40	2	.16	13	ND	ND	ND	4	44	ND	ND	187
TC 87-016	.2	.40	8	ND	18	ND	.17	.1	5	89	85	5.50	.13	.20	413	14	.01	11	.16	15	ND	ND	6	3	16	ND	ND	37
TC 87-017	.1	.98	3	ND	27	ND	2.67	.1	21	133	81	2.22	.17	.56	2013	10	.01	37	.04	7	ND	ND	ND	ND	217	5	ND	40
TC 87-018	.3	.04	10	ND	125	ND	.07	.1	ND	6	12	.73	.03	.03	50	4	.01	8	.01	16	ND	ND	4	ND	6	ND	ND	3
TC 87-019	.6	.22	49	ND	285	ND	.07	.1	ND	70	36	2.43	.08	.03	38	12	.01	5	.02	25	ND	ND	6	ND	8	ND	ND	25
TC 87-020	1.1	3.04	19	ND	37	7	2.70	.1	70	20	708	10.14	.38	2.12	1205	2	.01	48	.20	15	ND	ND	ND	8	95	12	9	84
TC 87-021	.8	5.41	7	ND	151	8	1.52	.1	35	4	63	B.08	.27	4.55	1269	2	.01	17	.20	10	ND	ND	ND	ND	46	ND	ND	149
TC 87-022	.1	2.84	ND	ND	135	3	4.27	.3	13	ND	142	4.22	.25	2.02	1171	2	.01	13	.14	2	ND	ND	ND	ND	178	5	ND	61
TC 87-023	.5	.26	ND	ND	272	ND	.48	.1	ND	104	14	.94	.07	.12	74	3	.01	3	.28	6	ND	ND	3	ND	31	ND	ND	7
TC 87-024	.1	.44	ND	ND	133	ND	.04	.1	1	107	11	1.16	.04	.35	94	9	.01	2	.03	7	ND	ND	ND	ND	9	ND	ND	9
TC 87-025	.6	.98	6	ND	288	ND	.06	.1	3	77	68	3.18	.10	.70	132	5	.01	31	.04	12	ND	ND	3	MD	6	ND	ND	112
TC 87-026	.5	.25	13	ND	81	ND	.16	.1	1	7	30	3.62	.10	.10	76	22	.01	5	.20	12	ND	ND	6	MD	25	ND	ND	9
TC 87-027	.1	.98	3	ND	56	ND	.06	1.2	8	104	91	3.08	.12	.54	553	4	.01	60	.05	21	ND	ND	ND	ND	22	ND	ND	323
TC 87-028	.1	1.70	3	ND	187	ND	1.95	.1	9	33	8	2.72	.25	.83	500	ND	.01	33	.07	6	ND	ND	ND	ND	103	4	ND	52
TC 87-029	.1	1.62	202	ND	335	ND	6.12	.1	39	109	28	5.07	.30	3.34	1370	1	.01	201	.22	6	ND	ND	ND	329	11	3	63	
TC 87-030	.1	.70	ND	ND	1569	ND	.08	.2	2	112	51	2.22	.08	.55	142	188	.01	14	.03	7	ND	ND	ND	ND	20	ND	ND	21
TC 87-031	.2	.50	6	ND	97	ND	.02	.1	ND	17	40	1.92	.07	.28	60	5	.01	3	.01	8	ND	ND	4	ND	5	ND	ND	8
TC 87-032	1.7	.08	80	ND	27	ND	.29	.6	12	100	1720	2.25	.08	.07	243	16	.01	47	.01	9	ND	ND	4	ND	12	ND	ND	24
TC 87-033	.5	.17	17	ND	95	ND	1.87	.3	6	69	42	1.31	.14	.48	457	8	.01	13	.05	18	ND	ND	ND	94	ND	ND	41	
TC 87-034	4.8	.85	41	ND	79	10	6.39	.1	18	176	68	3.92	.25	3.49	1509	3	.01	144	.05	5	ND	ND	ND	460	9	ND	50	
TC 87-035	.8	.22	6	ND	59	ND	.34	1.7	1	3	145	.44	.05	.08	114	4	.01	1	.01	64	ND	ND	ND	21	ND	ND	113	
TC 87-036	.2	.34	28	ND	97	ND	1.66	.1	3	99	25	1.18	.13	.91	359	8	.01	33	.02	4	ND	ND	ND	ND	113	ND	ND	10
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

CLIENT: AZIMUTH GEOLOGICAL JOB#: B70158 PROJECT:

REPORT: B70158PA DATE: 07/02/27

PAGE 3 OF 3

SAMPLE NAME	Ag PPM	Al %	As PPM	Au PPM	Ba PPM	Bi PPM	Ca PPM	Cd PPM	Co PPM	Cr PPM	Cu PPM	Fe %	K %	Mg %	Mn PPM	Mo PPM	Na PPM	Ni PPM	P %	Pb PPM	Pd PPM	Pt PPM	SB PPM	Sn PPM	SR PPM	U PPM	W PPM	Zn PPM
TC 87-037	36.5	.14	72	23	37	ND	.53	1.2	26	97	5037	1.35	.06	.16	220	20	.01	.63	.01	ND	ND	ND	5	2	28	ND	ND	112
TC 87-038	3.2	.22	10	ND	119	ND	1.02	.1	4	105	166	1.25	.08	.34	306	4	.01	.19	.03	1	ND	ND	ND	ND	70	ND	ND	10
TC 87-039	1.2	.15	28	ND	101	ND	.22	2.4	3	6	71	1.33	.06	.07	205	3	.01	22	.02	121	ND	ND	3	1	21	ND	ND	206
TC 87-040	1.3	1.10	12	ND	67	9	1.16	.1	21	97	83	4.22	.19	.72	508	6	.01	24	.13	5	ND	ND	3	16	48	ND	3	44
TC 87-041	.3	.11	25	ND	37	ND	.04	.1	4	113	52	1.77	.04	.08	173	13	.01	10	.01	1	ND	ND	4	1	4	ND	ND	3
TC 87-042	7.1	.50	52	ND	12	24	2.31	.1	20	139	2547	13.53	.39	.55	273	11	.01	19	.01	2	ND	ND	12	15	51	17	25	6
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

**Appendix 2**  
**VLF/EM Unfiltered Basic Data**

**VLF DATA**

**KRUGER MOUNTAIN PROJECT**

**INSTRUMENT: Geonics EM-16**

**TRANSMITTER: Seattle (220°)**

<b>Station</b>		<b>Quadrature</b>	<b>Dip</b>	<b>Station</b>		<b>Quadrature</b>	<b>Dip</b>
L50N	1000W	+9	-12			1450W	+2
	1025W	+9	-14			1475W	+3
	1050W	+7	-9			1500W	+2
	1075W	+3	-7			1525W	+2
	1100W	+2	-3			1550W	-2
	1125W	+4	+2			1575W	-3
	1150W	+4	+14			1600W	0
	1175W	+8	+14			1625W	-1
	1200W	+8	+17			1650W	+1
	1225W	+8	+16			1675W	+2
	1250W	+7	+12			1700W	+2
	1275W	+8	+13				-9
	1300W	+7	+12	L150N	1000W	0	+2
	1325W	+5	+9		1025W	-7	+15
	1350W	+6	+9		1050W	-8	+10
	1375W	+6	+6		1075W	-10	+8
	1400W	+5	+3		1100W	-9	+10
	1425W	+2	0		1125W	-1	+21
	1450W	+3	+1		1150W	+3	+25
	1475W	+4	+3		1175W	-3	+14
	1500W	+4	+3		1200W	-6	+6
	1525W	+3	-1		1225W	-9	+2
	1550W	+4	-2		1250W	-8	+5
	1575W	+3	-1		1275W	-4	+11
	1600W	+3	-3		1300W	-4	+18
	1625W	+3	-1		1325W	-6	+20
	1650W	+3	+1		1350W	-6	+17
	1675W	+1	-1		1375W	-6	+12
	1700W	+1	-5		1400W	-3	+9
					1425W	-1	+5
L100N	1000W	+9	-10		1450W	0	+2
	1025W	+5	-4		1475W	0	-3
	1050W	+3	+9		1500W	-1	-5
	1075W	-3	+7		1525W	-2	-8
	1100W	-8	+10		1550W	-3	-11
	1125W	+2	+23		1575W	-3	-9
	1150W	+3	+28		1600W	-2	-9
	1175W	-2	+13		1625W	-4	-11
	1200W	-3	+9		1650W	-5	-12
	1225W	-3	+4		1675W	-6	-15
	1250W	-1	+6		1700W	-8	-22
	1275W	+2	+6				
	1300W	+4	+8	L200N	1000W	-1	+6
	1325W	+5	+8		1025W	-7	+14
	1350W	-2	+1		1050W	-7	+17
	1375W	-4	+3		1075W	-9	+17
	1400W	-3	+1		1100W	-3	+21
	1425W	-1	0		1125W	-7	+11

**VLF DATA**

**KRUGER MOUNTAIN PROJECT**

**INSTRUMENT:** Geonics EM-16

**TRANSMITTER:** Seattle (220°)

<u>Station</u>	<u>Quadrature</u>	<u>Dip</u>	<u>Station</u>	<u>Quadrature</u>	<u>Dip</u>
1150W	-9	-2	1600W	+4	+5
1175W	-10	-5	1625W	+5	+2
1200W	-7	+2	1650W	+5	+1
1225W	-6	+8	1675W	+3	-2
1250W	-5	+13	1700W	+3	+1
1275W	-3	+22			
1300W	-3	+29	L300	1000W	-6
1325W	-6	+28		1025W	-8
1350W	-10	+21		1050W	-10
1375W	-9	+18		1075W	-11
1400W	-7	+14		1100W	-7
1425W	-6	+9		1125W	-5
1450W	-6	+2		1150W	-7
1475W	-5	-3		1175W	-6
1500W	-4	-7		1200W	-2
1525W	-6	-6		1225W	-2
1550W	-7	-6		1250W	-2
1575W	-7	-7		1275W	-6
1600W	-6	-10		1300W	-9
1625W	-6	-10		1325W	-8
1650W	-6	-13		1350W	-8
1675W	-7	-17		1375W	-8
1700W	-4	-16		1400W	-8
				1425W	-8
L250N	1000W	-1	+21	1450W	-6
	1025W	-2	+25	1475W	-5
	1050W	-2	+24	1500W	-6
	1075W	-2	+22	1525W	-8
	1100W	-1	+20	1550W	-9
	1125W	-2	+16	1575W	-10
	1150W	-1	+17	1600W	-12
	1175W	-1	+17	1625W	-12
	1200W	-3	+14	1650W	-11
	1225W	-6	+11	1675W	-8
	1250W	+1	+22	1700W	-8
	1275W	+4	+32		
	1300W	0	+28	L350N	1000W
	1325W	+7	+24		-13
	1350W	+3	+22	1025W	-13
	1375W	+5	+19	1050W	-12
	1400W	+5	+15	1075W	-12
	1425W	+5	+10	1100W	-13
	1450W	+5	+8	1125W	-16
	1475W	+4	+10	1150W	-11
	1500W	+4	+8	1175W	-8
	1525W	+2	+8	1200W	-11
	1550W	0	+5	1225W	-12
	1575W	+3	+8	1250W	-12

VLF DATA

KRUGER MOUNTAIN PROJECT

INSTRUMENT: Geonics EM-16

TRANSMITTER: Seattle (220°)

<u>Station</u>	<u>Quadrature</u>	<u>Dip</u>	<u>Station</u>	<u>Quadrature</u>	<u>Dip</u>
1275W	-11	0	L450N	1000W	-4
1300W	-10	-1		1025W	-7
1325W	-12	-5		1050W	-10
1350W	-14	-4		1075W	-12
1375W	-13	-4		1100W	-10
1400W	-13	-4		1125W	-13
1425W	-11	+2		1150W	-14
1450W	-12	+8		1175W	-9
1475W	-20	+9		1200W	-4
1500W	-21	+6		1225W	-3
1525W	-22	+3		1250W	-3
1550W	-23	+6		1275W	-8
1575W	-26	+6		1300W	-7
1600W	-27	+6		1325W	-8
1625W	-27	+8		1350W	-6
1650W	-32	+9		1375W	-5
1675W	-36	+7		1400W	-7
1700W	-30	-11		1425W	-9
				1450W	-10
				1475W	-12
L400N	1000W	-3		1500W	-11
	1025W	0		1525W	-10
	1050W	0		1550W	-9
	1075W	-4		1575W	-12
	1100W	-5		1600W	-13
	1125W	-3		1625W	-12
	1150W	-7		1650W	-15
	1175W	-9		1675W	-18
	1200W	-11		1700W	-12
	1225W	-13			
	1250W	-6			
	1275W	-3		L500N	1000W
	1300W	-4			-1
	1325W	-6		1025W	-3
	1350W	-5		1050W	-4
	1375W	-6		1075W	-2
	1400W	-4		1100W	-4
	1425W	-4		1125W	-14
	1450W	-7		1150W	-5
	1475W	-10		1175W	0
	1500W	-11		1200W	+1
	1525W	-10		1225W	+1
	1550W	-10		1250W	-3
	1575W	-11		1275W	-4
	1600W	-12		1300W	-6
	1625W	-10		1325W	0
	1650W	-11		1350W	-6
	1675W	-3		1375W	-5
	1700W	-14		1400W	-8
				1425W	-4
					+3

**VLF DATA**

**KRUGER MOUNTAIN PROJECT**

**INSTRUMENT:** Geonics EM-16

**TRANSMITTER:** Seattle (220°)

<b>Station</b>	<b>Quadrature</b>	<b>Dip</b>	<b>Station</b>	<b>Quadrature</b>	<b>Dip</b>
1450W	-6	+1	1125W	-2	-8
1475W	-7	-2	1150W	+3	-9
1500W	-7	-1	1175W	+5	0
1525W	-7	-3	1200W	+1	0
1550W	-7	-4	1225W	0	-1
1575W	-8	-7	1250W	-4	-3
1600W	-8	-7	1275W	-5	-1
1625W	-11	-11	1300W	-4	+7
1650W	-11	-14	1325W	-5	+1
1675W	-12	-15	1350W	-6	-1
1700W	-13	-14	1375W	-6	-1
			1400W	-6	-1
			1425W	-5	0
L550N	1000W	-1	1450W	-5	0
	1025W	-3	1475W	-3	+1
	1050W	-2	1500W	-4	-1
	1075W	-2	1525W	-3	0
	1100W	+1	1550W	-6	-4
	1125W	-3	1575W	-6	-4
	1150W	-1	1600W	-5	-8
	1175W	+2	1625W	-6	-10
	1200W	+2	1650W	-8	-10
	1225W	+3	1675W	-3	-9
	1250W	+1	1700W	-1	-9
	1275W	-3			
	1300W	-4			
	1325W	-4	L650N	1000W	-1
	1350W	-6		1025W	-2
	1375W	-7		1050W	-1
	1400W	-10		1075W	-1
	1425W	-7		1100W	+1
	1450W	-10		1125W	0
	1475W	-9		1150W	+5
	1500W	-5		1175W	+3
	1525W	-6		1200W	+3
	1550W	-7		1225W	-3
	1575W	-7		1250W	-4
	1600W	-8		1275W	-9
	1625W	-8		1300W	-11
	1650W	-8		1325W	-12
	1675W	-8		1350W	-11
	1700W	-4		1375W	-8
		-17		1400W	-6
				1425W	-4
L600N	1000W	0		1450W	-5
	1025W	0		1475W	-5
	1050W	-1		1500W	-3
	1075W	-4		1525W	-5
	1100W	0		1550W	-6

VLF DATA  
KRUGER MOUNTAIN PROJECT

INSTRUMENT: Geonics EM-16      TRANSMITTER: Seattle (220°)

<u>Station</u>	<u>Quadrature</u>	<u>Dip</u>	<u>Station</u>	<u>Quadrature</u>	<u>Dip</u>
1575W	-6	-15	3525W	-2	+3
1600W	-3	-12	3550W	-2	+4
1625W	-2	-13	3575W	-2	+4
1650W	+1	-11	3600W	-2	+6
1675W	+4	-11	3625W	-4	+6
1700W	+4	-9	3650W	-3	+10
			3675W	-2	+9
			3700W	-2	+10
L1700N	2500W	-9	3725W	-1	+10
	2525W	-7	3750W	-1	+12
	2550W	-15	3775W	+2	+15
	2575W	-10	3800W	+5	+14
	2600W	-4	3825W	+6	+12
	2625W	+1	3850W	+6	+11
	2650W	+4	3875W	+8	+10
	2675W	+2	3900W	+8	+6
	2700W	-1	3925W	+8	+1
	2725W	-2	3950W	+9	-2
	2750W	0	3975W	+10	-5
	2775W	+2	4000W	+11	-8
	2800W	+3			
	2825W	-3			
	2850W	-5			
	2875W	-3			
	2900W	+2			
	2925W	-2			
	2950W	-6			
	2975W	-6			
	3000W	-4			
	3025W	-4			
	3050W	-5			
	3075W	-10			
	3100W	-13			
	3125W	-13			
	3150W	-11			
	3175W	-10			
	3200W	-9			
	3225W	-7			
	3250W	-7			
	3275W	-6			
	3300W	-4			
	3325W	-4			
	3350W	-1			
	3375W	-2			
	3400W	0			
	3425W	0			
	3450W	-1			
	3475W	0			
	3500W	-1			
		+1			
L1800N	2500W	-7	-22		
	2525W	-11	-32		
	2550W	-9	-28		
	2575W	-7	-22		
	2600W	-5	-19		
	2625W	-6	-18		
	2650W	-6	-15		
	2675W	-3	-4		
	2700W	+3	0		
	2725W	+4	-1		
	2750W	-4	-10		
	2775W	-7	-11		
	2800W	-12	-14		
	2825W	-14	-15		
	2850W	-9	-11		
	2875W	-7	-9		
	2900W	-7	-13		
	2925W	-5	-16		
	2950W	-2	-15		
	2975W	-6	-24		
	3000W	-10	-30		
	3025W	-11	-37		
	3050W	+1	-12		
	3075W	+5	+5		
	3100W	-2	-7		
	3125W	-6	-13		
	3150W	-6	-16		
	3175W	-8	-13		
	3200W	-10	-16		
	3225W	-12	-19		
	3250W	-14	-22		
	3275W	-16	-25		
	3300W	-18	-28		
	3325W	-20	-31		
	3350W	-22	-34		
	3375W	-24	-37		
	3400W	-26	-40		
	3425W	-28	-43		
	3450W	-30	-46		
	3475W	-32	-49		
	3500W	-34	-52		

**VLF DATA**

**KRUGER MOUNTAIN PROJECT**

**INSTRUMENT:** Geonics EM-16

**TRANSMITTER:** Seattle (220°)

<b>Station</b>	<b>Quadrature</b>	<b>Dip</b>	<b>Station</b>	<b>Quadrature</b>	<b>Dip</b>	
3175W	-10	-18	2825W	+1	-15	
3200W	-10	-20	2850W	+2	-16	
3225W	-10	-20	2875W	+2	-18	
3250W	-8	-20	2900W	-1	-22	
3275W	-6	-17	2925W	-8	-24	
3300W	-6	-17	2950W	-14	-25	
3325W	-5	-16	2975W	-14	-26	
3350W	-5	-18	3000W	-4	-9	
3375W	-5	-16	3025W	-2	-4	
3400W	-4	-14	3050W	-3	-9	
3425W	-1	-8	3075W	-3	-11	
3450W	+5	-6	3100W	-3	-14	
3475W	+6	-5	3125W	-3	-16	
3500W	+6	-2	3150W	-1	-6	
3525W	+4	-4	3175W	-1	-15	
3550W	+3	-6	3200W	+1	-15	
3575W	+8	+2	3225W	+4	-14	
3600W	+7	0	3250W	+7	-11	
3625W	+4	-3	3275W	+9	-11	
3650W	+5	-1	3300W	+11	-9	
3675W	+4	-3	3325W	+8	-10	
3700W	+4	-4	3350W	+8	-10	
3725W	+4	-5	3375W	+8	-14	
3750W	+6	-6	3400W	+5	-14	
3775W	+7	-9	3425W	+9	-13	
3800W	+7	-10	3450W	+7	-13	
3825W	+7	-12	3475W	+6	-16	
3850W	+8	-13	3500W	+5	-14	
3875W	+8	-15	3525W	+3	-17	
3900W	+8	-18	3550W	+2	-17	
3925W	+10	-17	3575W	+2	-18	
3950W	+10	-18	3600W	+3	-18	
3975W	+10	-20	3625W	+4	-20	
4000W	+9	-20	3650W	+4	-21	
			3675W	+4	-22	
			3700W	+4	-24	
L1900N	2500W	-6	-15	3725W	+5	-25
	2525W	-6	-14	3750W	+6	-28
	2550W	-2	-11	3775W	+5	-29
	2575W	+1	-7	3800W	+6	-30
	2600W	+1	-8	3825W	+7	-28
	2625W	+1	-8	3850W	+9	-28
	2650W	0	-10	3875W	+10	-28
	2675W	-2	-11	3900W	+12	-25
	2700W	-1	-10	3925W	+12	-21
	2725W	-2	-13	3950W	+9	-18
	2750W	-3	-15	3975W	+7	-18
	2775W	-6	-18	4000W	+8	-16
	2800W	-7	-21			

**VLF DATA**  
**KRUGER MOUNTAIN PROJECT**

**INSTRUMENT:** Geonics EM-16      **TRANSMITTER:** Seattle (220°)

<b><u>Station</u></b>	<b><u>Quadrature</u></b>	<b><u>Dip</u></b>	<b><u>Station</u></b>	<b><u>Quadrature</u></b>	<b><u>Dip</u></b>
L2000N	2500W	-2		-6	
	2525W	-3		-6	
	2550W	+3		-5	
	2575W	+2		-11	
	2600W	+4		-9	
	2625W	+6		-4	
	2650W	+11		-2	
	2675W	+11		-3	
	2700W	+9		-7	
	2725W	+8		-5	
	2750W	+5		-3	
	2775W	+10		+1	
	2800W	+15		+5	
	2825W	+5		-8	
	2850W	0		-15	
	2875W	0		-20	
	2900W	-1		-16	
	2925W	+3		+1	
	2950W	-1		-5	
	2975W	-4		-7	
	3000W	-4		-14	
	3025W	-5		-20	
	3050W	+1		-17	
	3075W	+1		-20	
	3100W	-2		-24	
	3125W	-1		-22	
	3150W	+4		-14	
	3175W	+8		-5	
	3200W	+9		-3	
	3225W	-15		+3	
	3250W	+12		+1	
	3275W	+11		+1	
	3300W	+10		+3	
	3325W	+14		+12	
	3350W	+16		+14	
	3375W	+13		-11	
	3400W	+8		-23	
	3425W	+10		-19	
	3450W	+10		-16	
	3475W	+10		-14	
	3500W	+9		-11	
	3525W	+9		-13	
	3550W	+8		-14	
	3575W	+6		-18	
	3600W	+6		-20	
	3625W	+4		-23	
	3650W	+4		-26	
	3675W	+6		-27	
	3700W	+6		-29	
L2100N					
	2500W			-1	-14
	2525W			-5	-19
	2550W			-2	-10
	2575W			-2	-4
	2600W			-2	-3
	2625W			+1	-5
	2650W			+1	-5
	2675W			-1	-6
	2700W			0	-5
	2725W			+1	-2
	2750W			+1	-4
	2775W			+1	-8
	2800W			0	-14
	2825W			-7	-20
	2850W			-6	-14
	2875W			-1	-9
	2900W			0	-7
	2925W			-5	-11
	2950W			-10	-15
	2975W			-3	-11
	3000W			0	-12
	3025W			-2	-15
	3050W			+1	-13
	3075W			+11	+6
	3100W			+11	+1
	3125W			+12	0
	3150W			+10	-2
	3175W			+10	-3
	3200W			+11	-5
	3225W			+8	-9
	3250W			+13	-8
	3275W			+10	-14
	3300W			+10	-15
	3325W			+13	-16
	3350W			+10	-21

**VLF DATA**  
**KRUGER MOUNTAIN PROJECT**

INSTRUMENT: Geonics EM-16      TRANSMITTER: Seattle (2200)

<u>Station</u>	<u>Quadrature</u>	<u>Dip</u>	<u>Station</u>	<u>Quadrature</u>	<u>Dip</u>	
3375W	+16	-19	3025W	+15	-7	
3400W	+12	-22	3050W	+14	-8	
3425W	+16	-18	3075W	+12	-14	
3450W	+24	-16	3100W	+8	-16	
3475W	+21	-25	3125W	+7	-19	
3500W	+17	-25	3150W	+7	-19	
3525W	+15	-18	3175W	+8	-17	
3550W	+17	-13	3200W	+9	-16	
3575W	+10	-18	3225W	+13	-14	
3600W	+9	-23	3250W	+17	-18	
3625W	+7	-28	3275W	+16	-22	
3650W	+10	-31	3300W	+16	-23	
3675W	+12	-32	3325W	+14	-29	
3700W	+18	-33	3350W	+17	-36	
3725W	+23	-36	3375W	+17	-36	
3750W	+17	-42	3400W	+12	-26	
3775W	+14	-48	3425W	+8	0	
3800W	+10	-40	3450W	+4	-14	
3825W	+13	-30	3475W	+1	-20	
3850W	+14	-27	3500W	-1	-18	
3875W	+12	-25	3525W	+4	-20	
3900W	+9	-18	3550W	+7	-14	
3925W	+12	-7	3575W	+9	-13	
3950W	+9	-12	3600W	+9	-22	
3975W	+3	-28	3625W	+10	-26	
4000W	+2	-37	3650W	+10	-31	
			3675W	+9	-37	
			3700W	+9	-47	
L2200	2500W	-9	-23	3725W	+9	-51
	2525W	-8	-24	3750W	+6	-53
	2550W	-6	-23	3775W	+2	-57
	2575W	-3	-24	3800W	+1	-49
	2600W	-6	-26	3825W	+9	-28
	2625W	+3	-25	3850W	+4	-29
	2650W	-2	-21	3875W	+3	-23
	2675W	+1	-24	3900W	+6	-12
	2700W	+4	-24	3925W	+7	-12
	2725W	+4	-26	3950W	+1	-26
	2750W	+4	-26	3975W	+6	-38
	2775W	+7	-27	4000W	+12	-51
	2800W	+9	-28			
	2825W	+10	-25	L2300N	2500W	-5
	2850W	+10	-23		2525W	-6
	2875W	+10	-20		2550W	+5
	2900W	+4	-20		2575W	+3
	2925W	+2	-21		2600W	+2
	2950W	-6	-30		2625W	+1
	2975W	+5	-19		2650W	-2
	3000W	+8	-14			+4

**VLF DATA**

**KRUGER MOUNTAIN PROJECT**

**INSTRUMENT:** Geonics EM-16

**TRANSMITTER:** Seattle (220°)

<b>Station</b>	<b>Quadrature</b>	<b>Dip</b>	<b>Station</b>	<b>Quadrature</b>	<b>Dip</b>
2675W	-3	-3	3900W	+3	-13
2700W	-7	-6	3925W	-2	-23
2725W	-1	-14	3950W	0	-28
2750W	+2	-13	3975W	+13	-40
2775W	+1	-23	4000W	+8	-68
2800W	+6	-19			
2825W	+2	-14			
2850W	+7	0	L2400N	2500W	-31
2875W	+6	-6		2525W	-34
2900W	+9	-31		2550W	-27
2925W	+8	-23		2575W	-27
2950W	+10	-21		2600W	-21
2975W	+13	-23		2625W	-20
3000W	+10	-21		2650W	-21
3025W	+14	-25		2675W	-24
3050W	+15	-24		2700W	-24
3075W	+8	-25		2725W	-25
3100W	+11	-24		2750W	-26
3125W	+8	-22		2775W	-25
3150W	+7	-22		2800W	-17
3175W	+8	-23		2825W	-19
3200W	+11	-24		2850W	-23
3225W	+18	-28		2875W	-31
3250W	+18	-37		2900W	-33
3275W	+9	-55		2925W	-42
3300W	+4	-35		2950W	-21
3325W	+6	+1		2975W	-9
3350W	+6	-10		3000W	-6
3375W	+6	-24		3025W	+3
3400W	-4	-19		3050W	+4
3425W	-7	-19		3075W	+8
3450W	-8	-16		3100W	+11
3475W	-8	-19		3125W	+8
3500W	+4	-14		3150W	+9
3525W	+10	-17		3175W	+7
3550W	+9	-19		3200W	+6
3575W	+14	-28		3225W	-6
3600W	+14	-35		3250W	-6
3625W	+10	-37		3275W	-8
3650W	+7	-43		3300W	-12
3675W	+7	-51		3325W	-15
3700W	+7	-53		3350W	-20
3725W	+3	-58		3375W	-22
3750W	+2	-64		3400W	-7
3775W	0	-54		3425W	+2
3800W	+8	-21		3450W	-1
3825W	+5	-23		3475W	-2
3850W	+5	-14		3500W	-5
3875W	+4	-15		3525W	-8

**VLF DATA**  
**KRUGER MOUNTAIN PROJECT**

**INSTRUMENT:** Geonics EM-16      **TRANSMITTER:** Seattle (220°)

<b>Station</b>	<b>Quadrature</b>	<b>Dip</b>	<b>Station</b>	<b>Quadrature</b>	<b>Dip</b>		
3550W	-5	-25	3200W	-14	-21		
3575W	+3	-36	3225W	-16	-23		
3600W	+6	-27	3250W	-14	-17		
3625W	+2	-25	3275W	-17	-21		
3650W	+3	-24	3300W	-21	-20		
3675W	+4	-25	3325W	-19	-17		
3700W	+4	-22	3350W	-23	-18		
3725W	+6	-24	3375W	-22	-36		
3750W	+3	-31	3400W	-12	-37		
3775W	+6	-14	3425W	0	-26		
3800W	+8	-12	3450W	-11	-39		
3825W	+11	-19	3475W	-5	-30		
3850W	+18	-29	3500W	+4	-20		
3875W	+18	-21	3525W	-5	-21		
3900W	+9	+1	3550W	-7	+14		
3925W	-5	0	3575W	-14	0		
3950W	-3	0	3600W	-10	-11		
3975W	-3	-3	3625W	-2	-24		
4000W	-4	-17	3650W	+5	-28		
			3675W	+4	-34		
			3700W	+4	-37		
L2500N	2500W	-26	+3	3725W	+4	-31	
	2525W	-31	+8	3750W	+6	-6	
	2550W	-28	+8	3775W	0	-10	
	2575W	-30	+9	3800W	-5	-14	
	2600W	-30	+13	3825W	-3	0	
	2625W	-33	+13	3850W	0	+3	
	2650W	-35	-2	3875W	+9	+9	
	2675W	-24	-12	3900W	+7	+19	
	2700W	-21	-17	3925W	0	+10	
	2725W	-15	-12	3950W	+2	+3	
	2750W	-11	-12	3975W	+4	+14	
	2775W	-13	-15	4000W	+4	+20	
	2800W	-12	+36				
	2825W	-14	+55	L2600N	2500W	-9	+10
	2850W	-14	+47		2525W	-8	+12
	2875W	-22	+28		2550W	-7	+8
	2900W	-19	+29		2575W	-7	+10
	2925W	-19	+28		2600W	-6	+13
	2950W	-24	+29		2625W	-5	+12
	2975W	-31	+26		2650W	-3	+18
	3000W	-37	+28		2675W	-4	+21
	3025W	-39	+40		2700W	-4	+24
	3050W	-34	+26		2725W	-6	+27
	3075W	-19	+9		2750W	-8	+27
	3100W	-16	+3		2775W	-12	+25
	3125W	-16	-8		2800W	-14	+21
	3150W	-10	-14		2825W	-13	+17
	3175W	-13	-19				

**VLF DATA**

**KRUGER MOUNTAIN PROJECT**

**INSTRUMENT:** Geonics EM-16

**TRANSMITTER:** Seattle (220°)

<b><u>Station</u></b>	<b><u>Quadrature</u></b>	<b><u>Dip</u></b>
2850W	-13	+18
2875W	-12	+15
2900W	-13	+14
2925W	-14	+16
2950W	-13	+14
2975W	-13	+13
3000W	-12	+15
3025W	-11	+16
3050W	-11	+16
3075W	-10	+14
3100W	-11	+9
3125W	-14	+7
3150W	-13	+12
3175W	-16	+6
3200W	-20	+1
3225W	-16	+3
3250W	-12	+16
3275W	-13	+23
3300W	-11	+31
3325W	-14	+24
3350W	-19	+7
3375W	-13	+15
3400W	-16	+21
3425W	-21	-20
3450W	-4	-17
3475W	-7	+19
3500W	-16	0
3525W	-15	-6
3550W	-20	-12
3575W	-9	-20
3600W	-14	-9
3625W	-2	-1
3650W	-5	-1
3675W	-3	+13
3700W	-4	+5
3725W	-6	-4
3750W	-7	+6
3775W	-2	+22
3800W	-1	+8
3825W	+5	+20
3850W	+5	+22
3875W	-1	+8
3900W	0	+11
3925W	-5	+17
3950W	-9	+11
3975W	+3	+14
4000W	+3	+5

**VLF DATA**

**KRUGER MOUNTAIN PROJECT**

**INSTRUMENT: Geonics EM-16**

**TRANSMITTER: Cutler (60°)**

<b><u>Station</u></b>	<b><u>Quadrature</u></b>	<b>Dip</b>	<b><u>Station</u></b>	<b><u>Quadrature</u></b>	<b>Dip</b>
L100N	1000W	-9	+5	1450W	+2
	1025W	-8	-3	1475W	+2
	1050W	-6	-13	1500W	+1
	1075W	-1	-12	1525W	+3
	1100W	+2	-10	1550W	+4
	1125W	-6	-23	1575W	+4
	1150W	-6	-27	1600W	+3
	1175W	-2	-14	1625W	+2
	1200W	-2	-13	1650W	+2
	1225W	-1	-7	1675W	+5
	1250W	-3	-5	1700W	+2
	1275W	-5	-8		
	1300W	-7	-10		
	1325W	-8	-12	L300N	1000W
	1350W	-4	-8		+4
	1375W	-3	-6	1025W	+5
	1400W	-1	-4	1050W	+7
	1425W	-2	-3	1075W	+8
	1450W	-4	-4	1100W	+5
	1475W	-5	+3	1125W	+2
	1500W	-4	+4	1150W	+3
	1525W	-3	+6	1175W	+2
	1550W	0	+11	1200W	-3
	1575W	+1	+12	1225W	-3
	1600W	-1	+7	1250W	-1
	1625W	0	+6	1275W	+2
	1650W	-2	+5	1300W	+6
	1675W	-3	+6	1325W	+4
	1700W	-2	+7	1350W	+5
			1375W	+5	+7
			1400W	+6	+9
			1425W	+6	+4
L200N	1000W	+4	-3	1450W	+3
	1025W	+10	-9	1475W	+3
	1050W	+10	-13	1500W	+4
	1075W	+8	-11	1525W	+6
	1100W	+4	-16	1550W	+10
	1125W	+8	-8	1575W	+13
	1150W	+12	+5	1600W	+16
	1175W	+12	+7	1625W	+12
	1200W	+7	-2	1650W	+11
	1225W	+8	-5	1675W	+7
	1250W	+4	-9	1700W	+4
	1275W	+1	-19		
	1300W	+1	-24		
	1325W	+5	-19		
	1350W	+12	-9		
	1375W	+10	-7		
	1400W	+6	-5		
	1425W	+3	-1		

**Appendix 3**  
**Soil Geochemistry**

**1987 Survey Results**



# VANGEOCHEM LAB LIMITED

MAIN OFFICE  
1521 PEMBERTON AVE.  
NORTH VANCOUVER, B.C. V7P 2S3  
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE  
1630 PANDORA ST.  
VANCOUVER, B.C. V6L 1L6  
(604) 251-5656

REPORT NUMBER: 870149 GA

JOB NUMBER: 870149

AZIMUTH GEOLOGICAL

PAGE 1 OF 9

SAMPLE #	89
	90
L 4+00N 10+00W	nd
L 4+00N 10+50W	5
L 4+00N 11+00W	10
L 4+00N 11+50W	5
L 4+00N 12+00W	15
L 4+00N 12+50W	10
L 4+00N 13+00W	20
L 4+00N 13+50W	15
L 4+00N 14+00W	5
L 4+00N 14+50W	5
L 4+00N 15+00W	nd
L 4+00N 15+50W	nd
L 4+00N 16+00W	10
L 4+00N 17+00W	15
L 5+00N 10+00W	5
L 5+00N 10+50W	20
L 5+00N 11+00W	10
L 5+00N 11+50W	10
L 5+00N 12+00W	10
L 5+00N 12+50W	10
L 5+00N 13+00W	nd
L 5+00N 13+50W	5
L 5+00N 14+00W	15
L 5+00N 15+00W	5
L 5+00N 15+50W	nd
L 5+00N 16+00W	nd
L 5+00N 16+50W	nd
L 5+00N 17+00W	nd
L 5+00N 25+00W	nd
L 5+00N 25+50W	5
L 5+00N 26+00W	5
L 5+00N 26+50W	5
L 5+00N 27+00W	10
L 5+00N 27+50W	10
L 5+00N 28+00W	5
L 5+00N 28+50W	nd
L 5+00N 29+00W	nd
L 5+00N 29+50W	5
L 5+00N 30+00W	15
DETECTION LIMIT	5

nd = none detected

-- = not analyzed

is = insufficient sample



# VANGEOCHEM LAB LIMITED

MAIN OFFICE  
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BRANCH OFFICE  
1630 PANDORA ST.  
VANCOUVER, B.C. V5L 1L6  
(604) 251-5656

REPORT NUMBER: 870149 GA

JOB NUMBER: 870149

AZIMUTH GEOLOGICAL

EDGE S OF S

SAMPLE #	ANGLE
L 5+00N 30+50W	15
L 5+00N 31+00W	10
L 5+00N 31+50W	5
L 5+00N 32+00W	12
L 7+00N 0+25E	20
L 7+00N 0+75E	nd
L 7+00N 1+25E	nd
L 7+00N 1+75E	10
L 7+00N 2+25E	nd
L 7+00N 2+75E	nd
L 7+00N 3+25E	30
L 7+00N 3+75E	nd
L 7+00N 0+25W	nd
L 7+00N 0+75W	nd
L 7+00N 1+25W	10
L 7+00N 1+75W	5
L 8+00N 0+25E	5
L 8+00N 0+75E	5
L 8+00N 2+75E	15
L 8+00N 1+50E	15
L 8+00N 1+75E	5
L 8+00N 2+25E	12
L 8+00N 2+75E	5
L 8+00N 3+25E	12
L 8+00N 3+75E	5
L 8+00N 0+25W	10
L 8+00N 0+75W	10
L 8+00N 1+25W	10
L 8+00N 1+75W	5
L 8+00N 2+25W	5
L 8+00N 2+75W	5
L 8+75N 0+25E	5
L 8+75N 0+50E	5
L 8+75N 1+25E	5
L 8+75N 1+50E	nd
L 8+75N 1+75E	20
L 8+75N 2+00E	10
L 8+75N 2+25E	25
L 8+75N 2+50E	12
L 8+75N 2+75E	10

DETECTION LIMIT

5

nd = none detected

-- = not analyzed

IS = insufficient sample



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JOB NUMBER: 870149

AZIMUTH GEOLOGICAL

PAGE 3 OF 9

SAMPLE #	Au
	ppm
L 8+75N 3+00E	10
L 8+75N 3+25E	20
L 8+75N 3+50E	10
L 8+75N 0+25W	nd
L 8+75N 0+50W	nd
L 8+75N 0+75W	nd
L 8+75N 1+00W	nd
L 8+75N 1+25W	nd
L 8+75N 1+50W	nd
L 8+75N 1+75W	nd
L 8+75N 2+00W	10
L 8+75N 2+25W	10
L 8+75N 2+50W	nd
L10+00N 0+00E	10
L10+00N 0+25E	10
L10+00N 2+50E	nd
L10+00N 3+75E	nd
L10+00N 4+00E	5
L10+00N 4+25E	20
L10+00N 4+50E	10
L12+00N 1+75E	10
L12+00N 2+25W	10
L12+00N 0+50W	nd
L12+00N 0+75W	nd
L12+00N 1+00W	nd
L10+00N 1+25W	nd
L10+00N 1+50W	nd
L10+00N 1+75W	10
L10+00N 2+00W	nd
L15+00N 25+00W	nd
L16+00N 25+25W	5
L16+00N 25+50W	5
L16+00N 26+00W	10
L16+00N 26+25W	15
L16+00N 26+50W	5
L16+00N 26+75W	10
L16+00N 27+00W	nd
L16+00N 27+25W	20
L16+00N 27+50W	10

DETECTION LIMIT = 5

nd = none detected

-- = not analysed

is = insufficient sample



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1630 PANDORA ST.  
VANCOUVER, B.C. V5L 1L6  
(604) 251-5656

REPORT NUMBER: 870149 GA

JOB NUMBER: 870149

AZIMUTH GEOLOGICAL

DATE 4 DE 3

SAMPLE =	Au
	ppb
L16+00N 28+25W	10
L16+00N 28+75W	5
L16+00N 29+00W	5
L16+00N 29+25W	5
L16+00N 29+50W	15
L16+00N 29+75W	5
L16+00N 30+00W	15
L16+00N 30+25W	40
L16+00N 30+50W	65
L16+00N 31+00W	5
L16+00N 31+25W	10
L16+00N 31+50W	10
L16+00N 31+75W	10
L16+00N 32+00W	5
L16+00N 32+25W	nd
L16+00N 32+50W	nd
L16+00N 32+75W	nd
L16+00N 33+00W	nd
L16+00N 33+25W	nd
L16+00N 33+50W	nd
L16+00N 33+75W	nd
L16+00N 34+00W	10
L16+00N 34+25W	5
L16+00N 34+50W	15
L16+00N 34+75W	nd
L16+00N 35+00W	nd
L16+00N 35+25W	nd
L16+00N 35+50W	5
L16+00N 35+75W	10
L16+00N 36+00W	10
L16+00N 36+25W	5
L16+00N 36+50W	10
L16+00N 36+75W	10
L16+00N 37+00W	10
L16+00N 37+25W	5
L16+00N 37+50W	5
L16+00N 37+75W	5
L16+00N 38+00W	nd
L16+00N 38+25W	5

DETECTION LIMIT = 5

nd = none detected -- = not analyzed 15 = insufficient sample



# VANGEOCHEM LAB LIMITED

MAIN OFFICE  
1521 PEMBERTON AVE.  
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(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE  
1630 PANDORA ST.  
VANCOUVER, B.C. V6L 1L6  
(604) 251-5656

REPORT NUMBER: 870149 BA

JOB NUMBER: 870149

AZIMUTH GEOLOGICAL

PAGE 5 OF 9

SAMPLE #	A6
	333
L16+00N 38+50W	nd
L16+00N 38+75W	nd
L16+00N 39+00W	nd
L16+00N 39+25W	nd
L16+00N 39+50W	5
L16+00N 39+75W	nd
L16+00N 40+00W	nd
L16+00N 40+25W	nd
L16+00N 40+50W	nd
L16+00N 40+75W	nd
L17+00N 25+00W	nd
L17+00N 25+25W	5
L17+00N 25+50W	20
L17+00N 25+75W	10
L17+00N 26+00W	nd
L17+00N 26+25W	nd
L17+00N 26+50W	nd
L17+00N 26+75W	nd
L17+00N 27+00W	10
L17+00N 27+25W	12
L17+00N 27+50W	5
L17+00N 27+75W	10
L17+00N 28+00W	nd
L17+00N 28+25W	nd
L17+00N 28+50W	20
L17+00N 29+00W	10
L17+00N 29+25W	nd
L17+00N 29+50W	5
L17+00N 29+75W	15
L17+00N 30+00W	10
L17+00N 30+25W	5
L17+00N 30+50W	10
L17+00N 30+75W	5
L17+00N 31+00W	nd
L17+00N 31+25W	nd
L17+00N 31+50W	20
L17+00N 31+75W	nd
L17+00N 32+00W	nd
L17+00N 32+25W	nd
L17+00N 32+50W	10

DETECTION LIMIT = 5

nd = none detected

nd = not analysed

is = insufficient sample



# VANGEOCHEM LAB LIMITED

MAIN OFFICE  
1521 PEMBERTON AVE.  
NORTH VANCOUVER, B.C. V7P 2S3  
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE  
1630 PANDORA ST.  
VANCOUVER, B.C. V5L 1L6  
(604) 251-5656

REPORT NUMBER: 870149 GA

JOB NUMBER: 870149

AZIMUTH GEOLOGICAL

PAGE 6 OF 9

SAMPLE #	84
	nd
L17+00N 32+75W	5
L17+00N 33+00W	5
L17+00N 33+25W	nd
L17+00N 33+50W	15
L17+00N 33+75W	nd
L17+00N 34+00W	nd
L17+00N 34+25W	5
L17+00N 34+50W	5
L17+00N 34+75W	5
L17+00N 35+00W	5
L17+00N 35+25W	5
L17+00N 35+50W	5
L17+00N 35+75W	5
L17+00N 36+00W	5
L17+00N 36+25W	10
L17+00N 36+50W	5
L17+00N 36+75W	5
L17+00N 37+00W	5
L17+00N 37+25W	22
L17+00N 37+50W	5
L17+00N 37+75W	nd
L17+00N 38+00W	nd
L17+00N 38+25W	5
L17+00N 38+50W	5
L17+00N 38+75W	5
L17+00N 39+00W	5
L17+00N 39+25W	5
L17+00N 39+50W	15
L17+00N 39+75W	10
L17+00N 40+00W	5
L17+00N 40+25W	10
L17+00N 40+50W	5
L17+00N 40+75W	5
L20+00N 30+00W	22
L20+00N 30+25W	nd
L20+00N 30+50W	5
L20+00N 30+75W	nd
L20+00N 31+00W	5
L20+00N 31+25W	5

DETECTION LIMIT = 5

nd = none detected

-- = not analysed

is = insufficient sample



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REPORT NUMBER: 870149 GA

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AZIMUTH GEOLOGICAL

PAGE 7 OF 9

SAMPLE #	Au
L20+00N 31+50W	10
L20+00N 31+75W	5
L20+00N 32+00W	5
L20+00N 32+25W	5
L20+00N 32+50W	5
L20+00N 32+75W	nd
L20+00N 34+00W	5
L20+00N 34+25W	10
L20+00N 34+50W	nd
L20+00N 34+75W	5
L20+00N 35+00W	15
L20+00N 35+25W	5
L20+00N 35+50W	5
L20+00N 35+75W	5
L20+00N 36+00W	5
L20+00N 36+25W	5
L20+00N 36+50W	5
L20+00N 36+75W	10
L20+00N 37+25W	15
L20+00N 37+50W	20
L20+00N 38+00W	10
L20+00N 38+25W	nd
L20+00N 38+50W	5
L20+00N 38+75W	10
L20+00N 39+00W	10
L20+00N 39+25W	10
L20+00N 39+50W	5
L20+00N 40+00W	10
L20+50N 30+00W	10
L20+50N 30+25W	10
L20+50N 30+50W	10
L20+50N 30+75W	15
L20+50N 31+00W	10
L20+50N 31+25W	10
L20+50N 31+50W	10
L20+50N 31+75W	20
L20+50N 32+00W	nd
L20+50N 32+25W	10
L20+50N 32+50W	nd

DETECTION LIMIT 5

nd = none detected

-- = not analysed

ns = insufficient sample



# VANGEOCHEM LAB LIMITED

MAIN OFFICE  
1521 PEMBERTON AVE.  
NORTH VANCOUVER, B.C. V7P 2S3  
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BRANCH OFFICE  
1630 PANDORA ST.  
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(604) 251-5656

REPORT NUMBER: 870149 GA

JOB NUMBER: 870149

AZIMUTH GEOLOGICAL

PAGE 8 OF 9

SAMPLE #	Au
	ppb
L20+50N 33+00W	5
L20+50N 33+25W	nd
L20+50N 33+50W	10
L20+50N 33+75W	5
L20+50N 34+00W	5
L20+50N 34+25W	5
L20+50N 34+50W	10
L20+50N 34+75W	15
L20+50N 35+00W	nd
L21+00N 30+00W	5
L21+00N 30+25W	15
L21+00N 30+50W	10
L21+00N 30+75W	5
L21+00N 31+00W	5
L21+00N 31+25W	30
L21+00N 31+50W	nd
L21+00N 31+75W	5
L21+00N 32+00W	nd
L21+00N 32+25W	5
L21+00N 32+50W	nd
L21+00N 32+75W	nd
L21+00N 33+00W	nd
L21+00N 33+25W	nd
L21+00N 33+50W	20
L21+00N 33+75W	nd
L21+00N 34+00W	5
L21+00N 34+25W	5
L21+00N 34+50W	5
L21+00N 34+75W	5
L21+00N 35+00W	10
L21+50N 30+00W	15
L21+50N 30+25W	10
L21+50N 30+50W	10
L21+50N 30+75W	15
L21+50N 31+00W	15
L21+50N 31+25W	5
L21+50N 31+50W	5
L21+50N 31+75W	5
L21+50N 32+00W	10
DETECTION LIMIT	5

nd = none detected

-- = not analysed

is = insufficient sample



# VANGEOCHEM LAB LIMITED

MAIN OFFICE  
1521 PEMBERTON AVE.  
NORTH VANCOUVER, B.C. V7P 2S3  
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE  
1630 PANDORA ST.  
VANCOUVER, B.C. V5L 1L6  
(604) 251-5656

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REPORT NUMBER: 870149 BA

JOB NUMBER: 870143

AZIMUTH GEOLOGICAL

PAGE 9 OF 9

SAMPLE #	Au
L21+50N 32+25W	0.03
L21+50N 32+50W	10
L21+50N 32+75W	nd
L21+50N 33+00W	20
L21+50N 33+25W	10
L21+50N 33+50W	nd
L21+50N 33+75W	nd
L21+50N 34+00W	nd
L21+50N 34+25W	5
L21+50N 34+50W	15
L21+50N 34+75W	5
L21+50N 35+00W	5

DETECTION LIMIT

5

nd = none detected

- = not analysed

IS = insufficient sample

VANGEOCH I LAB LIMITED

**MAIN OFFICE:** 1521 PEMBERTON AVE. N. VANCOUVER B.C. V7P 2E3 PH: (604) 986-5211 TELEX: 04-352578  
**BRANCH OFFICE:** 1630 PANDORA ST. VANCOUVER B.C. V5L 1L6 PH: (604) 251-5656

## ICAP GEOCHEMICAL ANALYSIS

A .5 GRAM SAMPLE IS DIGESTED WITH 5 ML OF 3:1:2 HCL TO HNO3 TO H2O AT 95 DEG. C FOR 90 MINUTES AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR SN, MN, FE, CA, P, CR, MS, BA, PB, AL, MA, K, V, PT AND SR. AU AND Pb DETECTION IS 3 PPM.  
IS= INSUFFICIENT SAMPLE. ND= NOT DETECTED. -- NOT ANALYZED

**COMPANY:** AZIMUTH GEOLOGICAL  
**ATTENTION:**  
**PROJECT:**

REPORT#: 870149PA  
JOB#: 870149  
INVOICE#: 870149NA

DATE RECEIVED: 87/02/13  
DATE COMPLETED: 87/02/17  
COPY SENT TO:

**ANALYST** *(f) 18 hours*

PAGE 1 OF 2

SAMPLE NAME	Ag	Al	As	Au	Ba	Bi	Ca	Co	Cr	Cu	Fe	K	Mg	NH	Mo	Na	Ni	P	Pb	Pb	Pt	Sb	Sn	SR	U	V	Zn	
	PPM	%	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	
L4+00N 10+00N	.1	1.70	3	ND	101	ND	.45	.1	10	18	100	2.27	.10	.63	573	1	.01	18	.06	14	ND	ND	ND	ND	77	ND	ND	30
L4+00N 10+50N	.1	1.79	4	ND	111	ND	.54	.1	12	21	110	2.47	.12	.68	664	ND	.01	18	.06	16	ND	ND	ND	ND	48	ND	ND	39
L4+00N 11+00N	.1	1.68	4	ND	93	ND	.83	.1	12	19	134	2.49	.13	.83	675	4	.01	18	.06	14	ND	ND	ND	ND	190	ND	ND	39
L4+00N 11+50N	.1	1.77	4	ND	95	ND	.60	.1	12	20	108	2.47	.12	.76	641	2	.01	19	.06	16	ND	ND	ND	ND	111	ND	ND	39
L4+00N 12+00N	.2	1.76	6	ND	98	ND	.68	.1	14	18	161	2.66	.13	.76	692	1	.01	17	.06	15	ND	ND	ND	ND	96	ND	ND	34
L4+00N 12+50N	.1	.76	ND	ND	54	ND	10.83	.1	3	7	75	.96	.17	.75	283	26	.01	8	.06	3	ND	ND	ND	ND	1299	ND	ND	28
L4+00N 13+00N	.1	2.18	ND	ND	112	ND	.80	.1	14	14	367	2.97	.14	.77	1004	2	.01	13	.13	17	ND	ND	ND	ND	71	ND	ND	36
L4+00N 13+50N	.1	2.38	3	ND	143	ND	.68	.1	12	15	351	2.87	.15	.68	899	5	.01	15	.06	18	ND	ND	ND	ND	90	ND	ND	40
L4+00N 14+00N	.1	.17	ND	ND	35	ND	13.28	.1	ND	12	18	.20	.15	1.08	135	2	.01	9	.02	ND	ND	ND	ND	3384	ND	ND	16	
L4+00N 14+50N	.1	2.12	5	ND	161	ND	.56	.1	10	15	310	2.40	.14	.55	868	1	.01	14	.06	15	ND	ND	ND	ND	81	ND	ND	43
L4+00N 15+00N	.1	1.70	3	ND	95	ND	1.18	.1	10	16	143	2.24	.16	.64	608	2	.01	16	.07	12	ND	ND	ND	ND	149	ND	ND	32
L4+00N 15+50N	.1	2.62	7	ND	136	ND	.61	.1	21	40	96	2.65	.14	.78	848	ND	.01	54	.06	15	ND	ND	ND	ND	80	ND	ND	44
L4+00N 16+00N	.1	2.37	ND	ND	109	ND	.48	.1	14	19	216	2.66	.15	.61	706	ND	.01	21	.02	14	ND	ND	ND	ND	47	ND	ND	21
L4+00N 17+00N	.1	2.08	13	ND	135	ND	1.25	.1	39	81	108	3.54	.19	1.08	918	ND	.01	98	.22	21	ND	ND	ND	ND	111	ND	ND	58
L5+00N 10+00N	.1	2.20	7	ND	155	ND	.55	.2	12	18	146	2.61	.15	.63	700	ND	.01	15	.08	17	ND	ND	ND	ND	54	ND	ND	47
L5+00N 10+50N	.1	1.79	20	ND	150	ND	.69	.2	17	20	202	3.13	.18	.83	981	2	.01	19	.11	23	ND	ND	ND	ND	5	ND	ND	60
L5+00N 11+00N	.1	2.16	6	ND	149	ND	.58	.1	14	22	130	2.87	.15	.73	748	ND	.01	19	.10	15	ND	ND	ND	ND	72	ND	ND	47
L5+00N 11+50N	.1	1.67	8	ND	79	3	.70	.3	11	19	90	2.41	.14	.81	600	4	.01	17	.08	14	ND	ND	ND	ND	3	ND	ND	36
L5+00N 12+00N	.1	.39	ND	ND	13	ND	9.88	.1	ND	2	18	.30	.17	4.12	254	4	.01	5	.05	2	ND	ND	ND	ND	3445	ND	ND	39
L5+00N 12+50N	.1	1.08	ND	ND	79	ND	8.66	.1	1	4	71	.78	.17	3.90	270	3	.01	10	.07	6	ND	ND	ND	ND	1576	ND	ND	31
L5+00N 13+00N	.1	1.16	5	ND	66	ND	4.75	.1	7	11	140	1.67	.22	1.06	489	2	.01	11	.08	7	ND	ND	ND	ND	584	ND	ND	43
L5+00N 13+50N	.1	1.43	ND	ND	61	ND	4.32	.1	8	12	143	1.87	.20	1.28	527	3	.01	13	.08	5	ND	ND	ND	ND	601	ND	ND	37
L5+00N 14+00N	.1	1.79	4	ND	103	ND	.87	.1	11	17	180	2.49	.13	.88	697	ND	.01	15	.11	17	ND	ND	ND	ND	3	ND	ND	45
L5+00N 15+00N	.1	2.24	ND	ND	164	ND	2.52	.1	11	19	129	2.61	.10	.60	727	ND	.01	16	.08	7	ND	ND	ND	ND	49	ND	ND	42
L5+00N 15+50N	.1	1.70	ND	ND	115	ND	2.58	.1	8	14	143	1.97	.19	.52	593	ND	.01	13	.06	4	ND	ND	ND	ND	121	ND	ND	30
L5+00N 16+00N	.1	3.02	5	ND	233	ND	.61	.1	15	18	294	3.04	.15	.67	1267	ND	.01	21	.11	8	ND	ND	ND	ND	59	ND	ND	57
L5+00N 16+50N	.1	3.70	11	ND	116	5	.83	.1	34	129	178	5.35	.22	1.91	1006	ND	.01	144	.06	14	ND	ND	ND	ND	72	ND	ND	46
L5+00N 17+00N	.1	2.49	ND	ND	182	ND	.58	.1	27	26	60	2.03	.10	.58	906	ND	.01	45	.06	5	ND	ND	ND	ND	71	ND	ND	39
L5+00N 25+00N	.1	2.63	11	ND	162	ND	.45	.1	26	32	83	3.25	.10	.70	1053	ND	.01	46	.08	9	ND	ND	ND	ND	52	ND	ND	75
L5+00N 25+50N	.1	1.58	12	ND	97	ND	1.16	.1	14	19	91	2.40	.10	1.18	501	ND	.01	33	.12	7	ND	ND	ND	ND	182	ND	ND	78
L5+00N 26+00N	.1	2.96	12	ND	126	ND	.44	.1	34	28	80	4.29	.15	.83	2483	ND	.01	36	.14	11	ND	ND	ND	ND	53	ND	ND	102
L5+00N 26+50N	.1	2.63	11	ND	162	ND	.54	.1	18	20	49	3.34	.08	.65	1481	ND	.01	22	.08	2	ND	ND	ND	ND	76	ND	ND	87
L5+00N 27+00N	.1	3.16	7	ND	135	ND	.77	.1	72	20	90	4.98	.17	.96	2147	ND	.01	51	.17	8	ND	ND	ND	ND	67	ND	ND	126
L5+00N 27+50N	.1	3.50	13	ND	111	6	.72	.1	38	181	117	4.92	.12	2.54	1899	ND	.01	168	.11	8	ND	ND	ND	ND	61	ND	ND	74
L5+00N 28+00N	.1	2.34	16	ND	144	ND	.61	.1	23	42	123	3.52	.08	1.00	1195	ND	.01	54	.12	9	ND	ND	ND	ND	56	ND	ND	90
L5+00N 28+50N	.1	3.00	11	ND	124	ND	.43	.1	36	43	112	4.40	.10	1.03	1390	ND	.01	53	.10	6	ND	ND	ND	ND	43	ND	ND	77
L5+00N 29+00N	.1	2.27	7	ND	154	ND	.56	.1	20	41	98	3.07	.08	.76	1024	ND	.01	42	.13	2	ND	ND	ND	ND	58	ND	ND	72
L5+00N 29+50N	.1	3.00	6	ND	146	ND	.35	.1	26	33	96	3.67	.04	.76	1197	ND	.01	39	.10	5	ND	ND	ND	ND	41	ND	ND	81
L5+00N 30+00N	.1	1.87	7	ND	140	ND	.52	.1	14	24	83	2.54	.04	.60	875	ND	.01	26	.11	ND	ND	ND	ND	63	ND	ND	56	

CLIENT: AZIMUTH GEOLOGICAL

JOB#: 870149

PROJECT:

REPORT: 870149PA

DATE: 87/02/17

PAGE 2 OF 9

SAMPLE NAME	Ag PPM	Al %	As PPM	Au PPM	Ba PPM	Bi PPM	Ca %	Co PPM	Co PPM	Cr PPM	Cu PPM	Fe %	K %	Mg %	Mn PPM	Mo PPM	Na %	Ni PPM	P %	Pb PPM	Pd PPM	Pt PPM	SB PPM	Sn PPM	SR PPM	U PPM	W PPM	Zn PPM
L5+00M 30+50W	.1	2.29	10	ND	138	ND	.46	.1	18	34	108	3.21	.13	.79	1044	ND	.01	37	.09	16	ND	ND	ND	ND	45	ND	ND	60
L5+00M 31+00W	.1	2.12	11	ND	142	ND	.89	.1	24	36	107	4.22	.18	.94	1577	ND	.01	42	.16	19	ND	ND	ND	ND	72	ND	ND	84
L5+00M 31+50W	.3	2.50	14	ND	137	ND	.49	.5	28	56	106	3.82	.17	1.07	1233	ND	.01	62	.12	13	ND	ND	ND	ND	40	ND	ND	77
L5+00M 32+00W	.1	1.72	10	ND	137	ND	.73	.4	14	25	68	2.51	.13	.69	901	1	.01	27	.11	12	ND	ND	ND	ND	82	ND	ND	79
L7+00M 0+25E	.1	2.12	4	ND	137	ND	.58	.1	18	27	169	2.73	.13	.68	684	ND	.01	30	.08	9	ND	ND	ND	ND	48	ND	ND	50
L7+00M 0+75E	.1	1.54	7	ND	134	ND	.42	.1	10	19	43	2.23	.11	.52	582	ND	.01	18	.09	7	ND	ND	ND	ND	45	ND	ND	54
L7+00M 1+25E	.1	2.07	ND	ND	185	ND	.66	.5	19	29	159	3.34	.14	.73	1286	ND	.01	25	.13	1	ND	ND	ND	ND	60	ND	ND	71
L7+00M 1+75E	.5	2.70	5	ND	337	4	1.08	.3	29	61	702	4.78	.17	1.68	1857	1	.01	40	.09	8	ND	ND	ND	ND	48	ND	4	79
L7+00M 2+25E	.4	2.08	4	ND	157	ND	.39	.3	11	20	271	2.51	.11	.45	647	1	.01	18	.08	8	ND	ND	ND	ND	59	ND	95	53
L7+00M 2+75E	.1	1.88	ND	ND	170	ND	.53	.1	9	17	107	2.17	.11	.51	709	ND	.01	18	.10	5	ND	ND	ND	ND	59	ND	ND	54
L7+00M 3+25E	.1	1.18	3	ND	104	ND	.33	.1	7	17	21	1.88	.08	.41	411	1	.01	16	.08	10	ND	ND	ND	ND	35	ND	ND	45
L7+00M 3+75E	.1	1.62	ND	ND	120	ND	.37	.2	9	18	45	2.05	.10	.45	510	1	.01	15	.08	14	ND	ND	ND	ND	47	ND	ND	45
L7+00M 0+25W	.2	1.60	7	ND	115	ND	.41	.1	11	23	71	2.35	.12	.53	579	1	.01	19	.08	11	ND	ND	ND	ND	43	ND	ND	47
L7+00M 0+75W	.2	1.79	3	ND	126	ND	.48	.1	12	23	115	2.41	.12	.60	620	ND	.01	22	.09	9	ND	ND	ND	ND	44	ND	ND	51
L7+00M 1+25W	.1	1.64	6	ND	125	ND	.58	.1	9	19	46	2.17	.13	.59	543	ND	.01	19	.08	5	ND	ND	ND	ND	95	ND	ND	46
L7+00M 1+75W	.2	1.86	10	ND	123	ND	.54	.1	14	24	109	2.53	.12	.66	637	1	.01	23	.08	5	ND	ND	ND	ND	72	ND	ND	52
L8+00M 0+25E	.2	1.79	3	ND	145	ND	.71	.3	11	20	77	2.40	.15	.57	657	ND	.01	18	.10	8	ND	ND	ND	ND	54	ND	ND	55
L8+00M 0+75E	.1	1.95	5	ND	160	ND	.54	.4	11	21	72	2.62	.14	.61	736	ND	.01	21	.10	3	ND	ND	ND	ND	52	ND	ND	64
L8+00M 1+50E	.1	1.45	7	ND	114	ND	1.10	.1	9	18	54	2.17	.15	.62	506	1	.01	21	.09	6	ND	ND	ND	ND	65	ND	ND	50
L8+00M 1+75E	.2	1.45	6	ND	104	ND	1.58	.2	9	16	68	2.25	.16	.69	621	ND	.01	17	.09	6	ND	ND	ND	ND	108	3	ND	49
L8+00M 2+25E	.2	1.18	6	ND	102	ND	.98	.1	8	18	41	1.89	.14	.53	454	1	.01	23	.08	8	ND	ND	ND	ND	80	ND	ND	41
L8+00M 2+75E	.2	1.64	5	ND	133	ND	.43	.1	9	18	44	2.06	.13	.47	548	ND	.01	18	.08	8	ND	ND	ND	ND	49	ND	ND	45
L8+00M 3+25E	.1	1.53	5	ND	116	ND	.41	.2	9	15	55	2.01	.11	.52	576	ND	.01	17	.08	7	ND	ND	ND	ND	54	ND	ND	47
L8+00M 3+75E	.1	2.20	5	ND	144	ND	.36	.6	13	34	34	2.88	.15	.93	677	ND	.01	29	.07	12	ND	ND	ND	ND	51	ND	ND	70
L8+00M 0+25W	.2	1.64	5	ND	124	ND	.49	.2	12	27	66	2.55	.13	.68	630	1	.01	28	.09	9	ND	ND	ND	ND	45	ND	ND	54
L8+00M 0+75W	.1	1.41	6	ND	100	ND	.59	.2	9	19	36	2.16	.12	.62	480	1	.01	18	.09	8	ND	ND	ND	ND	72	ND	ND	48
L8+00M 1+25W	.2	1.86	3	ND	141	ND	.47	.6	11	23	81	2.43	.12	.60	610	ND	.01	21	.09	8	ND	ND	ND	ND	53	ND	ND	58
L8+00M 1+75W	.2	1.70	11	ND	105	ND	.50	.2	13	27	69	2.57	.13	.72	597	2	.01	29	.09	11	ND	ND	ND	ND	55	ND	ND	60
L8+00M 2+25W	.1	1.83	6	ND	135	ND	.52	.2	10	16	212	2.37	.11	.59	734	ND	.01	16	.08	4	ND	ND	ND	ND	68	ND	ND	43
L8+75M 0+00	.1	1.52	4	ND	135	ND	.46	.1	9	18	63	2.05	.10	.53	584	1	.01	18	.08	6	ND	ND	ND	ND	60	ND	ND	45
L8+75M 0+25E	.1	1.75	4	ND	118	ND	.44	.1	7	14	45	1.76	.10	.43	449	1	.01	15	.08	7	ND	ND	ND	ND	62	ND	ND	58
L8+75M 0+50E	.1	1.26	5	ND	126	ND	.71	.1	7	13	73	1.71	.11	.46	510	ND	.01	14	.08	5	ND	ND	ND	ND	61	ND	ND	40
L8+75M 1+25E	.1	1.62	5	ND	145	ND	.51	.1	9	16	119	2.13	.12	.50	630	ND	.01	17	.09	7	ND	ND	ND	ND	54	ND	ND	45
L8+75M 1+50E	.2	1.90	8	ND	139	ND	.60	.4	15	20	209	2.51	.13	.62	788	ND	.01	22	.08	9	ND	ND	ND	ND	49	ND	ND	53
L8+75M 1+75E	.4	2.58	3	ND	150	ND	.43	.1	22	23	207	2.95	.13	.58	844	ND	.01	21	.07	7	ND	ND	ND	ND	42	ND	ND	56
L8+75M 2+00E	.2	1.93	3	ND	127	ND	.60	.3	13	18	133	2.35	.12	.58	697	ND	.01	18	.09	5	ND	ND	ND	ND	66	ND	ND	48
L8+75M 2+25E	.2	2.22	ND	ND	162	ND	.44	.3	13	18	140	2.32	.12	.45	725	ND	.01	18	.08	6	ND	ND	ND	ND	42	ND	ND	43
L8+75M 2+50E	.6	2.83	ND	ND	160	ND	.52	.2	19	27	474	2.99	.14	.62	1015	ND	.01	27	.09	3	ND	ND	ND	ND	48	ND	ND	55
L8+75M 2+75E	.3	2.20	3	ND	169	ND	.44	.3	11	18	126	2.46	.13	.52	729	ND	.01	17	.07	7	ND	ND	ND	ND	44	ND	ND	57
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

CLIENT: AZIMUTH GEOLOGICAL JOB#: 870149 PROJECT:

REPORT: 870149PA DATE: 87/02/17

PAGE 3 OF 9

SAMPLE NAME	Ag PPM	Al %	As PPM	Au PPM	Ba PPM	Bi PPM	Ca %	Cd PPM	Co PPM	Cr PPM	Cu PPM	Fe %	K %	Mg %	NM PPM	Na PPM	Ni PPM	P %	Pb PPM	Pd PPM	Pt PPM	SB PPM	Sn PPM	SR PPM	U PPM	W PPM	Zn PPM	
LB+75W 3+0OE	.1	2.25	9	ND	203	ND	.58	.3	13	18	175	2.67	.13	.64	931	1	.01	.17	.10	8	ND	ND	13	ND	60	ND	ND	63
LB+75W 3+2SE	.2	2.31	9	ND	232	ND	.56	.3	15	17	272	2.74	.14	.58	989	1	.01	.18	.10	7	ND	ND	13	ND	56	ND	ND	62
LB+75W 3+5OE	ND	2.42	9	ND	116	ND	1.92	.2	18	20	127	4.12	.22	1.08	969	ND	.01	.22	.16	14	ND	ND	12	ND	73	7	ND	70
LB+75W 0+2SW	.1	1.58	10	ND	134	ND	.51	.1	10	22	42	2.37	.13	.60	554	1	.01	.20	.12	8	ND	ND	17	ND	66	ND	4	57
LB+75W 0+5SW	ND	1.60	10	ND	143	ND	.48	.1	10	21	40	2.42	.13	.55	528	1	.01	.20	.11	8	ND	ND	16	ND	59	ND	59	ND
LB+75W 0+7SW	.2	1.76	10	ND	142	ND	.48	.1	10	20	73	2.34	.14	.55	476	1	.01	.19	.12	8	ND	ND	16	ND	60	ND	ND	54
LB+75W 1+00N	.2	1.68	12	ND	139	ND	.45	.3	10	19	48	2.31	.13	.55	498	1	.01	.20	.11	9	ND	ND	17	ND	55	ND	ND	57
LB+75W 1+2SW	.2	1.18	14	ND	81	ND	1.72	.2	11	23	130	2.32	.17	.69	459	3	.01	.22	.11	8	ND	ND	18	ND	154	5	ND	51
LB+75W 1+5SW	.2	1.95	9	ND	158	ND	.54	.6	13	40	434	2.62	.13	.70	637	1	.01	.29	.08	7	ND	ND	14	ND	61	ND	55	ND
LB+75W 1+7SW	.3	2.16	11	ND	162	ND	.64	.4	14	31	400	2.75	.15	.79	832	1	.01	.22	.10	8	ND	ND	14	ND	75	ND	ND	57
LB+75W 2+00N	.1	1.77	13	ND	123	ND	.60	.1	14	27	104	2.66	.14	.68	673	2	.01	.26	.10	12	ND	ND	15	ND	62	ND	65	ND
LB+75W 2+25W	.2	1.95	13	ND	126	ND	.63	.3	14	26	173	2.79	.15	.81	723	2	.01	.25	.11	12	ND	ND	15	ND	240	ND	ND	70
LB+75W 2+50W	.3	1.79	11	ND	117	ND	.70	.1	13	25	82	2.61	.15	.80	640	2	.01	.25	.11	11	ND	ND	15	ND	150	ND	ND	63
L10+00N 0+00	.1	1.79	7	ND	136	ND	.44	.1	10	22	32	2.37	.14	.61	558	2	.01	.23	.11	8	ND	ND	14	ND	76	ND	ND	64
L10+00N 0+2SE	.3	1.56	10	ND	125	ND	.46	.1	10	22	27	2.32	.14	.58	510	2	.01	.22	.11	10	ND	ND	17	ND	79	ND	ND	62
L10+00N 0+5OE	.3	1.67	11	ND	138	ND	1.01	.3	10	23	40	2.40	.17	.64	549	1	.01	.20	.11	10	ND	ND	17	ND	59	3	ND	61
L10+00N 0+7SE	.1	1.95	8	ND	147	ND	.50	.1	11	20	97	2.37	.13	.54	592	ND	.01	.18	.10	8	ND	ND	14	ND	48	ND	ND	53
L10+00N 1+00E	.2	1.43	9	ND	128	ND	.68	.1	10	21	46	2.32	.14	.61	512	1	.01	.22	.12	8	ND	ND	17	ND	64	ND	ND	58
L10+00N 1+2SE	.2	2.47	10	ND	138	ND	.60	.3	16	28	151	3.30	.15	1.02	955	ND	.01	.23	.10	11	ND	ND	12	ND	59	ND	ND	68
L10+00N 1+50E	.2	1.13	12	ND	104	ND	1.12	.1	8	21	32	2.02	.14	.60	428	2	.01	.29	.11	7	ND	ND	17	ND	63	ND	ND	50
L10+00N 1+7SE	.2	2.11	10	ND	157	ND	.45	.1	12	18	83	2.45	.13	.52	703	1	.01	.17	.08	12	ND	ND	14	ND	46	ND	ND	61
L10+00N 0+25W	.1	1.97	7	ND	158	ND	.51	.1	10	22	49	2.43	.13	.55	592	1	.01	.19	.11	8	ND	ND	14	ND	53	ND	ND	60
L10+00N 0+50W	.2	1.26	10	ND	95	ND	2.97	.2	9	22	35	2.27	.20	.97	430	2	.01	.23	.11	8	ND	ND	15	ND	141	5	ND	52
L10+00N 0+75W	.5	1.14	12	ND	84	ND	2.43	.2	9	22	37	2.25	.20	.81	379	3	.01	.24	.11	8	ND	ND	17	ND	153	7	ND	51
L10+00N 1+00N	.1	1.64	8	ND	121	ND	.45	.1	10	22	39	2.37	.12	.64	476	1	.01	.21	.10	9	ND	ND	16	ND	62	ND	ND	53
L10+00N 1+25W	.1	1.39	9	ND	81	3	.65	.4	9	20	34	2.20	.14	.64	479	3	.01	.22	.11	8	ND	ND	15	ND	198	ND	61	ND
L10+00N 1+50W	.1	1.62	11	ND	106	ND	.50	.1	10	21	39	2.32	.13	.60	531	2	.01	.21	.11	9	ND	ND	15	ND	106	ND	ND	62
L10+00N 1+75W	.1	1.52	11	ND	89	ND	1.00	.1	10	19	35	2.12	.15	.61	514	2	.01	.21	.10	7	ND	ND	15	ND	209	ND	ND	59
L10+00N 2+00W	.2	1.56	10	ND	120	ND	.63	.2	10	19	32	2.22	.13	.58	526	2	.01	.23	.10	9	ND	ND	15	ND	84	ND	ND	59
L16+00N 25+00W	.2	2.57	21	ND	190	ND	.63	.6	23	75	53	3.25	.16	.97	956	ND	.01	.76	.12	15	ND	ND	11	ND	65	ND	ND	100
L16+00N 25+25W	.1	2.15	24	ND	159	ND	.91	.2	26	70	56	2.91	.16	.91	1018	1	.01	.90	.13	14	ND	ND	13	ND	99	ND	ND	78
L16+00N 25+50W	.1	2.58	13	ND	181	ND	.51	.1	19	44	46	2.91	.13	.76	951	ND	.01	.55	.10	12	ND	ND	10	ND	58	ND	ND	84
L16+00N 26+00W	.5	3.30	30	ND	153	3	.56	.3	45	68	96	4.69	.17	1.06	1648	ND	.01	100	.14	20	ND	ND	8	ND	66	ND	ND	102
L16+00N 26+25W	.2	2.75	23	ND	198	ND	.65	.4	27	26	60	3.15	.17	.59	1141	ND	.01	50	.14	20	ND	ND	11	ND	81	ND	ND	103
L16+00N 26+50W	.3	3.42	25	ND	184	ND	.93	.6	50	32	70	4.19	.19	.93	2068	ND	.01	80	.20	21	ND	ND	9	ND	104	3	ND	124
L16+00N 26+75W	.3	3.37	38	ND	187	4	.46	.2	30	32	67	4.05	.19	.72	1449	ND	.01	68	.13	23	ND	ND	9	ND	62	ND	ND	113
L16+00N 27+25W	.3	3.04	17	ND	230	ND	.52	.6	20	27	48	3.27	.16	.60	1101	ND	.01	41	.12	27	ND	ND	10	ND	62	ND	ND	121
L16+00N 27+50W	.3	3.40	25	ND	176	3	.66	.8	30	33	60	4.52	.22	.88	3450	2	.01	39	.17	34	ND	ND	9	ND	84	5	ND	230
L16+00N 28+00W	.3	3.02	30	ND	195	ND	.60	.6	22	33	52	3.24	.17	.73	1194	ND	.01	48	.10	18	ND	ND	9	ND	69	ND	ND	111
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

CLIENT: AZIMUTH GEOLOGICAL

JOB#: 870149 PROJECT:

REPORT: 870149PB DATE: 87/03/16

PAGE 4 OF 9

SAMPLE NAME	Ag PPM	Al %	As PPM	Au PPM	Ba PPM	Bi PPM	Ca %	Cd PPM	Co PPM	Cr PPM	Cu PPM	Fe %	K %	Mg %	Mn PPM	Mo PPM	Na %	Ni PPM	P %	Pb PPM	Pd PPM	Pt PPM	SB PPM	Sn PPM	SR PPM	U PPM	W PPM	Zn PPM
.16+00N 28+25W	.1	3.11	8	ND	194	ND	.59	.4	22	39	48	3.45	.17	.75	1743	ND	.01	45	.13	12	ND	ND	ND	65	ND	ND	159	
.16+00N 28+75W	.2	3.79	7	ND	171	ND	.40	.9	22	40	38	4.06	.20	.89	2823	ND	.01	40	.13	13	ND	ND	ND	ND	47	ND	ND	177
.16+00N 29+00W	.1	2.27	9	ND	164	ND	1.02	.2	15	28	41	2.73	.17	.68	1100	ND	.01	36	.11	10	ND	ND	ND	ND	103	ND	ND	100
.16+00N 29+25W	.1	1.92	8	ND	152	ND	.62	.1	13	24	36	2.49	.14	.59	984	ND	.01	30	.11	11	ND	ND	ND	ND	90	ND	ND	94
.16+00N 29+50W	.2	2.69	18	ND	110	3	.61	.2	22	44	51	3.88	.17	1.06	1500	1	.01	46	.17	22	ND	ND	ND	ND	62	ND	5	131
.16+00N 29+75W	.1	2.00	9	ND	149	ND	.68	.4	15	25	36	2.49	.15	.60	1479	1	.01	37	.13	12	ND	ND	ND	ND	96	ND	ND	109
.16+00N 30+00W	.2	1.91	13	ND	81	ND	1.41	1.1	15	19	104	2.52	.17	.50	1169	1	.01	32	.08	16	ND	ND	ND	ND	120	ND	ND	152
.16+00N 30+25W	.2	2.72	43	ND	122	ND	.41	.9	28	39	90	4.45	.17	.69	2068	ND	.01	73	.12	65	ND	ND	ND	ND	57	ND	ND	141
.16+00N 30+50W	.5	1.76	562	ND	77	ND	.75	.1	34	18	160	7.41	.25	.64	2270	6	.01	94	.24	178	ND	ND	7	ND	107	8	ND	235
.16+00N 31+00W	.1	1.68	9	ND	217	ND	1.33	.4	22	24	82	2.30	.16	.60	1472	ND	.01	40	.22	13	ND	ND	ND	ND	138	ND	ND	104
.16+00N 31+25W	.3	2.63	13	ND	124	ND	.68	.1	40	32	68	3.45	.16	.67	1122	ND	.01	47	.12	11	ND	ND	ND	ND	51	ND	ND	79
.16+00N 31+50W	.4	2.74	8	ND	178	ND	.43	.2	20	30	45	2.98	.14	.67	943	ND	.01	58	.08	11	ND	ND	ND	ND	42	ND	ND	76
.16+00N 31+75W	.2	2.74	8	ND	168	ND	.47	.5	20	35	49	3.23	.16	.72	980	ND	.01	43	.11	11	ND	ND	ND	ND	43	ND	ND	84
.16+00N 32+00W	.2	3.00	9	ND	180	ND	.55	.1	17	34	40	2.88	.15	.63	839	ND	.01	35	.07	9	ND	ND	ND	ND	49	ND	ND	86
.16+00N 32+25W	.3	2.80	8	ND	170	ND	.52	.2	17	33	46	2.98	.16	.70	827	ND	.01	36	.11	9	ND	ND	ND	ND	46	ND	ND	73
.16+00N 32+50W	.3	2.25	4	ND	149	ND	.59	.3	17	32	44	2.80	.15	.66	804	ND	.01	34	.11	11	ND	ND	ND	ND	54	ND	ND	78
.16+00N 32+75W	.1	2.08	4	ND	141	ND	.70	.1	16	30	40	2.46	.14	.60	784	ND	.01	34	.11	10	ND	ND	ND	ND	81	ND	ND	67
.16+00N 33+00W	.2	3.35	4	ND	137	ND	.59	.5	18	35	39	3.45	.17	.79	1416	ND	.01	30	.13	8	ND	ND	ND	ND	69	ND	ND	96
.16+00N 33+25W	.3	2.01	5	ND	142	ND	.72	.3	16	33	43	2.65	.16	.69	898	1	.01	34	.13	11	ND	ND	ND	ND	79	ND	ND	77
.16+00N 33+50W	.2	1.64	3	ND	108	ND	2.29	.4	11	30	35	2.09	.19	.63	587	1	.01	34	.10	9	ND	ND	ND	ND	97	5	ND	59
.16+00N 33+75W	.2	2.47	4	ND	157	ND	.50	.4	17	34	43	3.06	.16	.75	1029	ND	.01	35	.11	11	ND	ND	ND	ND	51	ND	ND	91
.16+00N 34+00W	.1	2.58	4	ND	151	ND	.46	.5	15	28	37	2.89	.15	.60	905	ND	.01	27	.11	13	ND	ND	ND	ND	45	ND	ND	90
.16+00N 34+25W	.3	2.41	5	ND	158	ND	.53	.2	15	28	33	2.82	.16	.62	916	ND	.01	27	.11	12	ND	ND	ND	ND	51	ND	ND	97
.16+00N 34+50W	.4	2.47	6	ND	141	ND	.51	.3	15	29	34	2.93	.17	.65	873	ND	.01	29	.11	13	ND	ND	ND	ND	45	ND	ND	86
.16+00N 34+75W	.1	1.89	ND	ND	165	ND	.61	.4	11	21	28	2.20	.14	.51	700	ND	.01	21	.13	10	ND	ND	ND	ND	60	ND	ND	87
.16+00N 35+00W	.1	1.49	ND	ND	115	ND	4.79	.5	11	17	32	2.04	.22	.69	566	ND	.01	22	.12	8	ND	ND	ND	ND	172	10	ND	56
.16+00N 35+25W	.3	2.53	3	ND	160	ND	.51	.3	15	28	34	2.96	.16	.68	866	ND	.01	28	.12	11	ND	ND	ND	ND	46	ND	ND	86
.16+00N 35+50W	.4	2.27	ND	ND	146	ND	.56	.2	15	26	35	2.77	.16	.62	875	ND	.01	25	.13	12	ND	ND	ND	ND	46	ND	ND	87
.16+00N 35+75W	.2	2.03	3	ND	136	ND	.51	.2	14	25	35	2.60	.15	.62	822	ND	.01	26	.12	12	ND	ND	ND	ND	45	ND	ND	75
.16+00N 36+00W	.2	1.89	ND	ND	126	ND	.50	.6	16	28	38	2.77	.15	.72	886	ND	.01	31	.12	14	ND	ND	ND	ND	42	ND	ND	78
.16+00N 36+25W	.2	1.40	4	ND	115	ND	.98	.1	13	26	37	2.37	.17	.63	722	1	.01	27	.11	14	ND	ND	3	ND	73	ND	ND	66
.16+00N 36+50W	.3	1.75	3	ND	120	ND	.66	.2	14	28	35	2.57	.16	.66	752	ND	.01	29	.14	14	ND	ND	ND	ND	48	ND	ND	77
.16+00N 36+75W	.2	1.97	ND	ND	153	ND	.56	.5	13	26	34	2.55	.15	.60	745	ND	.01	26	.14	12	ND	ND	ND	ND	53	ND	ND	83
.16+00N 37+00W	.4	2.15	5	ND	142	3	.68	.5	16	30	38	2.87	.17	.71	787	ND	.01	29	.15	15	ND	ND	ND	ND	53	ND	ND	81
.16+00N 37+25W	.4	2.23	3	ND	156	ND	.63	.7	17	34	43	3.02	.17	.79	898	ND	.01	35	.13	14	ND	ND	ND	ND	52	ND	ND	88
.16+00N 37+50W	.2	1.87	3	ND	143	ND	.65	.2	14	27	35	2.60	.15	.65	748	ND	.01	25	.12	14	ND	ND	ND	ND	53	ND	ND	76
.16+00N 37+75W	.2	1.64	3	ND	127	ND	.53	.1	13	24	34	2.40	.14	.57	651	ND	.01	24	.10	15	ND	ND	ND	ND	51	ND	ND	62
.16+00N 38+00W	.2	1.39	ND	ND	131	ND	1.14	.2	11	20	35	2.02	.16	.54	585	1	.01	22	.11	12	ND	ND	ND	ND	68	ND	ND	58
.16+00N 38+25W	.1	1.23	ND	ND	118	ND	3.54	.3	7	15	39	1.47	.18	.37	407	ND	.01	24	.08	7	ND	ND	ND	ND	149	5	ND	27
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

CLIENT: AZIMUTH GEOLOGICAL

JOB#: 870149

PROJECT:

REPORT: 870149PA

DATE:

87/02/17

PAGE 5 OF 9

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI %	CA PPM	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	NN PPM	NO PPM	NA PPM	Ni PPM	P %	PB PPM	PB PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	V PPM	Zn PPM
L16+00N 38+50W	.1	1.13	ND	ND	115	ND	1.02	.2	8	18	29	1.70	.12	.42	658	1	.01	22	.07	7	ND	ND	3	ND	108	ND	ND	48
L16+00N 38+75W	.4	1.38	12	ND	121	ND	.59	.4	15	31	45	2.59	.13	.72	731	1	.01	37	.12	9	ND	ND	4	ND	51	ND	ND	62
L16+00N 39+00W	.3	1.80	4	ND	161	ND	.55	.4	15	33	41	2.66	.13	.70	772	1	.01	37	.13	5	ND	ND	ND	ND	53	ND	ND	70
L16+00N 39+25W	.4	1.80	6	ND	138	ND	.62	.4	17	42	49	2.82	.14	.84	792	1	.01	44	.13	10	ND	ND	ND	ND	45	ND	ND	75
L16+00N 39+50W	.3	1.92	9	ND	159	ND	.52	.1	15	35	44	2.82	.14	.69	839	1	.01	38	.13	6	ND	ND	ND	ND	46	ND	ND	72
L16+00N 39+75W	.3	2.79	ND	ND	176	ND	.46	.3	26	34	53	3.24	.14	.77	973	ND	.01	41	.13	ND	ND	ND	ND	38	ND	ND	75	
L16+00N 40+00W	.3	2.16	7	ND	158	ND	.41	.3	16	40	44	2.93	.14	.72	799	1	.01	39	.12	4	ND	ND	ND	ND	37	ND	ND	74
L16+00N 40+25W	.2	1.66	9	ND	135	ND	.52	.2	12	22	31	2.18	.12	.51	860	1	.01	24	.09	7	ND	ND	ND	ND	79	ND	ND	79
L16+00N 40+50W	.4	2.17	6	ND	130	ND	.45	.4	13	27	30	2.68	.13	.60	814	ND	.01	25	.11	2	ND	ND	ND	ND	40	ND	ND	79
L16+00N 40+75W	.2	2.77	ND	ND	174	ND	.44	.1	26	34	52	3.20	.14	.75	984	ND	.01	42	.13	1	ND	ND	ND	ND	37	ND	ND	75
L17+00N 25+00W	.2	1.62	11	ND	143	ND	.60	.5	13	18	37	2.20	.12	.40	810	2	.01	34	.14	8	ND	ND	ND	ND	79	ND	ND	99
L17+00N 25+25W	.4	2.67	12	ND	152	ND	.75	.9	33	30	59	3.77	.18	.84	1196	1	.01	57	.12	35	ND	ND	ND	ND	81	ND	ND	124
L17+00N 25+50W	.5	2.70	12	ND	134	ND	.68	3.8	38	28	79	4.11	.18	.77	1469	1	.01	58	.09	166	ND	ND	ND	ND	77	ND	4	429
L17+00N 25+75W	.4	2.53	5	ND	151	ND	.50	.7	22	29	46	3.06	.16	.69	977	1	.01	41	.12	14	ND	ND	ND	ND	49	ND	ND	106
L17+00N 26+00W	.4	2.26	55	ND	151	ND	.61	2.4	22	16	57	2.94	.14	.49	1311	1	.01	41	.13	42	ND	ND	ND	ND	74	ND	ND	215
L17+00N 26+25W	.3	2.38	12	ND	141	ND	.40	.3	17	22	44	2.81	.13	.51	981	1	.01	35	.11	9	ND	ND	ND	ND	42	ND	ND	99
L17+00N 26+50W	.3	2.69	7	ND	145	ND	.52	.5	29	25	81	3.03	.14	.63	1382	ND	.01	45	.12	4	ND	ND	ND	ND	57	ND	ND	79
L17+00N 26+75W	.2	1.90	11	ND	141	ND	.48	.3	16	19	41	2.59	.13	.63	1116	2	.01	28	.12	9	ND	ND	ND	ND	49	ND	ND	74
L17+00N 27+00W	.2	2.69	ND	ND	177	ND	.41	.5	15	23	29	2.67	.13	.58	988	ND	.01	24	.09	7	ND	ND	ND	ND	45	ND	ND	93
L17+00N 27+25W	.4	2.15	24	ND	147	ND	.49	.5	16	18	34	2.71	.14	.61	858	1	.01	24	.11	12	ND	ND	ND	ND	49	ND	ND	79
L17+00N 27+50W	.5	3.31	30	ND	156	4	.46	1.2	46	115	83	4.70	.18	1.18	1530	1	.01	161	.13	9	ND	ND	ND	ND	46	ND	ND	172
L17+00N 27+75W	.4	2.43	11	ND	129	ND	.42	.1	18	26	44	3.10	.14	.70	946	1	.01	37	.09	6	ND	ND	ND	ND	45	ND	ND	73
L17+00N 28+00W	.1	1.39	10	ND	222	ND	1.44	1.3	17	20	56	2.03	.15	.58	1717	2	.01	41	.25	45	ND	ND	ND	2	178	ND	ND	170
L17+00N 28+50W	.4	2.44	12	ND	157	ND	.42	.5	18	36	33	2.87	.14	.71	1042	1	.01	44	.11	8	ND	ND	ND	ND	46	ND	ND	88
L17+00N 28+75W	.3	1.88	20	ND	83	ND	.49	.4	24	40	49	3.32	.14	.98	1139	1	.01	55	.14	22	ND	ND	ND	ND	42	ND	ND	99
L17+00N 29+00W	.3	2.12	36	ND	140	ND	1.24	1.3	51	53	114	3.78	.22	.94	2296	1	.01	117	.22	30	ND	ND	ND	ND	151	7	ND	163
L17+00N 29+25W	.1	1.77	14	ND	127	ND	1.13	.6	18	16	51	2.50	.15	.47	3205	2	.01	33	.11	19	ND	ND	ND	ND	107	5	ND	90
L17+00N 29+50W	.2	2.29	20	ND	146	ND	.39	.6	20	22	40	2.71	.12	.53	1885	1	.01	31	.09	12	ND	ND	ND	ND	45	ND	ND	102
L17+00N 29+75W	.4	2.43	19	ND	136	ND	.36	.6	18	27	39	3.06	.13	.63	1164	1	.01	34	.08	14	ND	ND	ND	ND	42	ND	ND	99
L17+00N 30+00W	.3	2.30	ND	ND	154	ND	.31	.4	16	24	34	2.67	.13	.53	873	1	.01	33	.09	6	ND	ND	ND	ND	36	ND	ND	74
L17+00N 30+25W	.3	2.22	13	ND	143	ND	.50	.5	17	59	45	2.98	.13	.60	1075	1	.01	61	.09	6	ND	ND	ND	ND	56	ND	ND	79
L17+00N 30+50W	.3	1.66	30	ND	110	ND	.61	.5	18	38	46	2.66	.13	.61	938	1	.01	60	.13	10	ND	ND	ND	ND	67	ND	ND	64
L17+00N 30+75W	.2	.93	ND	ND	372	ND	2.37	.5	12	11	78	1.15	.15	.30	1489	1	.01	20	.44	5	ND	ND	ND	ND	288	ND	ND	217
L17+00N 31+25W	.3	2.13	ND	ND	140	ND	.57	.5	40	42	69	2.83	.12	.81	1367	1	.01	59	.11	8	ND	ND	ND	ND	55	ND	ND	69
L17+00N 31+50W	.5	1.85	8	ND	132	ND	.36	.3	16	33	39	2.64	.12	.62	789	1	.01	35	.09	12	ND	ND	ND	ND	33	ND	ND	67
L17+00N 31+75W	.4	1.73	6	ND	137	ND	.46	.5	14	28	37	2.42	.13	.56	683	1	.01	28	.09	8	ND	ND	ND	ND	40	ND	ND	67
L17+00N 32+00W	.5	1.96	3	ND	144	ND	.41	.6	15	28	38	2.51	.13	.58	764	1	.01	30	.09	9	ND	ND	ND	ND	38	ND	ND	72
L17+00N 32+25W	.5	2.02	10	ND	130	ND	.50	.1	19	41	59	2.98	.14	.78	831	1	.01	46	.11	6	ND	ND	ND	ND	39	ND	ND	69
L17+00N 32+50W	.4	1.66	3	ND	123	ND	.48	.4	13	38	35	2.29	.12	.53	664	1	.01	37	.11	8	ND	ND	ND	ND	36	ND	ND	61

DETECTION LIMIT .1 .61 3 3 1 3 .01 .1 1 1 .01 .01 .01 1 1 1 .01 1 1 1 .01 2 3 5 2 2 1 5 3 1

CLIENT: AZIMUTH GEOLOGICAL JOB#:

B70149 PROJECT:

REPORT: B70149PA DATE: 87/02/17

PAGE 6 OF 9

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	ND PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
L17+00M 32+75W	.1	2.17	6	ND	136	ND	.44	.4	16	35	41	2.77	.13	.68	796	1	.01	32	.12	6	ND	ND	ND	42	ND	ND	77	
L17+00M 33+00W	.1	2.47	8	ND	156	ND	.59	.6	18	45	42	3.15	.17	.81	1017	ND	.01	39	.13	4	ND	ND	ND	50	ND	3	97	
L17+00M 33+25W	.3	2.47	14	ND	154	ND	.56	.3	18	45	46	3.16	.17	.77	889	ND	.01	42	.13	4	ND	ND	ND	46	ND	ND	84	
L17+00M 33+50W	.3	2.37	8	ND	154	ND	.64	.3	16	36	44	2.91	.17	.72	941	ND	.01	31	.14	6	ND	ND	ND	56	ND	ND	93	
L17+00M 33+75W	.3	2.06	7	ND	144	ND	.60	.3	16	33	43	2.75	.16	.65	833	1	.01	30	.13	6	ND	ND	ND	52	ND	ND	80	
L17+00M 34+00W	.3	2.16	7	ND	147	ND	.54	.3	15	33	42	2.74	.15	.64	838	1	.01	31	.12	6	ND	ND	ND	49	ND	ND	86	
L17+00M 34+25W	.5	2.42	9	ND	138	ND	.58	.5	19	41	44	3.27	.19	.85	953	ND	.01	34	.13	5	ND	ND	ND	47	ND	ND	91	
L17+00M 34+50W	.4	2.33	7	ND	151	ND	.52	.2	17	35	40	3.06	.17	.68	868	ND	.01	30	.12	6	ND	ND	ND	43	ND	3	88	
L17+00M 34+75W	.2	2.07	4	ND	149	ND	.63	.3	15	32	40	2.79	.16	.64	799	1	.01	28	.13	6	ND	ND	ND	50	ND	ND	81	
L17+00M 35+00W	.2	1.77	3	ND	136	ND	.64	.1	14	26	41	2.52	.15	.63	748	1	.01	25	.12	10	ND	ND	ND	54	ND	ND	65	
L17+00M 35+25W	.4	2.72	9	ND	186	ND	.60	.5	28	40	44	3.49	.17	.81	961	ND	.01	40	.13	16	ND	ND	ND	55	ND	4	85	
L17+00M 35+50W	.3	2.15	7	ND	150	ND	.64	.4	18	39	37	2.91	.16	.70	831	1	.01	33	.13	11	ND	ND	ND	54	ND	ND	83	
L17+00M 35+75W	.3	1.77	10	ND	120	ND	.63	.2	20	44	48	2.82	.16	.81	835	1	.01	40	.13	10	ND	ND	ND	51	ND	ND	70	
L17+00M 36+00W	.2	1.56	3	ND	138	ND	.91	.4	16	34	46	2.62	.16	.70	790	2	.01	35	.13	12	ND	ND	J	70	ND	ND	82	
L17+00M 36+25W	.4	2.40	7	ND	149	ND	.53	.4	18	33	38	3.12	.17	.79	882	1	.01	27	.14	8	ND	ND	ND	45	ND	3	80	
L17+00M 36+50W	.3	2.47	8	ND	174	ND	.63	.4	16	30	39	3.12	.17	.80	964	ND	.01	26	.16	6	ND	ND	ND	54	ND	ND	95	
L17+00M 36+75W	.5	2.31	11	ND	150	ND	.60	.2	19	37	40	3.15	.17	.88	910	1	.01	34	.13	10	ND	ND	ND	52	ND	ND	79	
L17+00M 37+00W	.3	2.50	12	ND	175	ND	.55	.6	17	29	43	3.08	.17	.75	1049	ND	.01	26	.13	8	ND	ND	ND	49	ND	ND	88	
L17+00M 37+25W	.3	3.12	16	ND	204	ND	.50	.5	22	26	40	3.25	.17	.64	1228	ND	.01	27	.14	7	ND	ND	ND	49	ND	ND	91	
L17+00M 37+50W	.3	1.95	9	ND	158	ND	.56	.2	17	32	44	2.91	.15	.68	777	1	.01	32	.14	9	ND	ND	ND	51	ND	ND	77	
L17+00M 37+75W	.2	1.87	4	ND	173	ND	.71	.6	15	33	41	2.62	.16	.64	789	2	.01	39	.16	11	ND	ND	ND	62	ND	MD	88	
L17+00M 38+00W	.2	1.63	8	ND	171	ND	.96	.4	14	28	43	2.41	.16	.60	863	2	.01	33	.15	14	ND	ND	ND	67	3	ND	96	
L17+00M 38+25W	.2	1.33	4	ND	142	ND	.91	.3	13	30	39	2.33	.15	.64	722	2	.01	33	.15	12	ND	ND	3	ND	74	ND	77	
L17+00M 38+50W	.3	1.31	4	ND	138	ND	.96	.6	14	30	42	2.32	.15	.64	758	2	.01	34	.14	16	ND	ND	3	ND	73	ND	96	
L17+00M 38+75W	.1	1.56	ND	ND	152	ND	1.03	.6	12	26	40	2.15	.15	.58	791	1	.01	31	.17	12	ND	ND	ND	91	ND	ND	85	
L17+00M 39+00W	.1	2.04	3	ND	109	ND	.88	.8	11	24	45	1.97	.14	.48	767	1	.01	33	.08	10	ND	ND	ND	77	ND	ND	97	
L17+00M 39+25W	.2	1.77	10	ND	147	ND	.60	.3	16	42	42	2.66	.15	.76	747	2	.01	44	.12	12	ND	ND	ND	48	ND	ND	67	
L17+00M 39+50W	.2	1.75	7	ND	162	ND	.56	.4	14	32	39	2.54	.15	.64	726	1	.01	34	.14	13	ND	ND	ND	52	ND	ND	68	
L17+00M 39+75W	.3	1.95	10	ND	171	ND	.54	.3	17	40	46	2.90	.16	.78	824	1	.01	44	.13	12	ND	ND	ND	47	ND	ND	76	
L17+00M 40+00W	.3	1.92	9	ND	165	ND	.53	.5	16	40	44	2.87	.16	.72	847	1	.01	41	.14	12	ND	ND	ND	49	ND	3	78	
L17+00M 40+25W	.3	1.79	8	ND	136	ND	.68	.5	15	28	41	2.67	.17	.64	763	2	.01	28	.13	14	ND	ND	ND	56	ND	MD	68	
L17+00M 40+50W	.4	2.75	16	ND	177	ND	.40	.3	20	29	40	3.08	.17	.60	998	ND	.01	36	.11	14	ND	ND	ND	45	ND	MD	89	
L17+00M 40+75W	.3	1.95	9	ND	169	ND	.56	.2	17	39	43	2.91	.17	.72	858	1	.01	41	.14	13	ND	ND	ND	52	ND	MD	81	
L20+00M 30+00W	.3	2.97	10	ND	276	ND	1.45	.5	25	12	50	3.97	.25	1.06	1665	1	.01	20	.26	9	ND	ND	ND	114	5	MD	138	
L20+00M 30+25W	.3	2.04	9	ND	176	ND	.44	.1	14	23	35	2.61	.15	.56	762	1	.01	24	.11	15	ND	ND	ND	45	ND	MD	78	
L20+00M 30+50W	.3	2.47	10	ND	195	ND	.44	.6	15	24	33	2.66	.16	.58	785	1	.01	24	.11	14	ND	ND	ND	47	ND	ND	89	
L20+00M 30+75W	.2	1.92	3	ND	154	ND	1.06	.6	12	24	42	2.20	.16	.56	698	2	.01	25	.12	14	ND	ND	ND	84	ND	ND	92	
L20+00M 31+00W	.3	2.12	8	ND	182	ND	.44	.3	16	32	36	2.72	.15	.71	716	1	.01	32	.10	13	ND	ND	ND	44	ND	MD	72	
L20+00M 31+25W	.4	2.66	23	ND	191	ND	.53	.6	23	61	52	3.54	.17	1.20	921	1	.01	56	.14	14	ND	ND	ND	48	ND	MD	97	
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

CLIENT: AZIMUTH GEOLOGICAL JOB#:

870149 PROJECT:

REPORT: 870149PA DATE: 87/02/17

PAGE 7 OF 9

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BL PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	NN PPM	NO PPM	NA PPM	Ni PPM	P PPM	PB PPM	PD PPM	PT PPM	SD PPM	SN PPM	SR PPM	U PPM	V PPM	ZN PPM
L20+00N 31+50W	.1	3.14	39	ND	119	4	.79	.8	36	201	84	3.90	.16	2.39	1209	ND	.01	174	.09	19	ND	ND	ND	73	ND	ND	93	
L20+00N 31+75W	.1	2.24	19	ND	117	ND	.54	.7	16	41	41	2.31	.11	.70	663	ND	.01	47	.04	14	ND	ND	ND	ND	ND	ND	ND	69
L20+00N 32+00W	.1	2.14	9	ND	126	ND	.51	.4	12	27	28	2.06	.10	.49	633	ND	.01	36	.08	10	ND	ND	ND	ND	ND	ND	ND	63
L20+00N 32+25W	.1	1.67	6	ND	297	ND	.62	.5	8	14	25	1.39	.08	.27	512	ND	.01	25	.25	7	ND	ND	ND	ND	ND	ND	ND	54
L20+00N 32+50W	.1	1.98	12	ND	108	ND	.37	.2	10	29	26	1.64	.08	.40	456	ND	.01	42	.09	5	ND	ND	ND	ND	ND	ND	ND	53
L20+00N 32+75W	.1	1.16	11	ND	135	ND	4.68	.1	5	12	76	1.07	.18	.22	367	1	.01	58	.03	4	ND	ND	3	ND	210	9	ND	13
L20+00N 34+00W	.1	2.06	5	ND	99	ND	.62	.2	12	18	19	2.16	.10	.45	379	ND	.01	26	.01	12	ND	ND	ND	ND	ND	ND	ND	34
L20+00N 34+25W	.1	1.86	8	ND	171	ND	1.20	.7	22	36	58	3.07	.16	.89	990	1	.01	49	.12	17	ND	ND	ND	ND	101	ND	ND	89
L20+00N 34+50W	.1	1.93	7	ND	198	ND	.79	.6	13	24	31	2.48	.13	.63	845	1	.01	30	.12	16	ND	ND	ND	ND	ND	ND	ND	90
L20+00N 34+75W	.1	2.28	7	ND	172	ND	.52	.4	19	35	45	3.23	.14	.88	901	ND	.01	49	.15	16	ND	ND	ND	ND	ND	ND	ND	45
L20+00N 35+00W	.1	2.24	7	ND	204	ND	.64	.5	19	36	49	3.16	.14	.86	950	ND	.01	48	.14	14	ND	ND	ND	ND	ND	ND	ND	54
L20+00N 35+25W	.1	2.26	7	ND	135	ND	.54	.2	15	23	37	2.39	.10	.55	660	ND	.01	41	.06	10	ND	ND	ND	ND	47	ND	ND	68
L20+00N 35+50W	.2	2.84	8	ND	237	ND	.56	.8	19	26	46	2.72	.13	.59	1040	ND	.01	44	.17	17	ND	ND	ND	ND	50	ND	ND	97
L20+00N 35+75W	.1	3.71	6	ND	223	ND	.41	.8	26	19	49	2.96	.11	.54	1103	ND	.01	34	.17	9	ND	ND	ND	ND	42	ND	ND	99
L20+00N 36+00W	.1	2.25	8	ND	215	ND	.44	.5	18	36	46	3.21	.12	.72	898	ND	.01	47	.13	18	ND	ND	ND	ND	40	ND	ND	99
L20+00N 36+25W	.1	2.32	8	ND	270	ND	.57	.6	15	35	41	2.79	.14	.66	825	ND	.01	38	.14	13	ND	ND	ND	ND	56	ND	ND	108
L20+00N 36+50W	.3	2.32	11	ND	293	ND	.44	.4	19	49	52	3.44	.14	.85	885	1	.01	53	.12	19	ND	ND	ND	ND	38	ND	ND	95
L20+00N 36+75W	.1	2.06	7	ND	248	ND	.58	.7	15	43	44	2.78	.14	.48	837	ND	.01	42	.14	15	ND	ND	ND	ND	54	ND	ND	102
L20+00N 37+00W	.3	1.97	11	ND	181	ND	.53	.5	16	46	44	2.87	.14	.77	840	ND	.01	46	.13	16	ND	ND	ND	ND	45	ND	ND	84
L20+00N 37+25W	.4	1.80	11	ND	212	ND	.79	.9	18	55	54	3.14	.15	1.13	897	1	.01	55	.15	27	ND	ND	ND	ND	54	ND	ND	90
L20+00N 37+50W	.2	1.90	11	ND	163	ND	.57	.8	17	45	45	2.87	.14	.80	858	1	.01	55	.13	16	ND	ND	ND	ND	49	ND	ND	80
L20+00N 38+00W	.2	1.85	12	ND	204	ND	.74	.9	29	43	48	3.13	.14	.90	1953	1	.01	52	.16	28	ND	ND	ND	ND	58	ND	ND	119
L20+00N 38+50W	.1	1.97	8	ND	151	ND	.69	.8	14	31	36	2.49	.14	.62	920	ND	.01	36	.08	16	ND	ND	ND	ND	63	ND	ND	72
L20+00N 38+75W	.1	1.84	12	ND	154	ND	.80	.7	15	33	40	2.65	.15	.74	847	ND	.01	38	.12	15	ND	ND	ND	ND	60	ND	ND	85
L20+00N 39+00W	.1	1.77	12	ND	147	ND	.76	.5	14	31	36	2.58	.14	.66	744	1	.01	37	.12	16	ND	ND	ND	ND	64	ND	ND	80
L20+00N 39+25W	.1	1.76	9	ND	202	ND	.92	.9	15	30	45	2.59	.15	.69	933	ND	.01	41	.13	12	ND	ND	ND	ND	72	ND	ND	100
L20+00N 39+50W	.2	2.22	7	ND	251	ND	1.25	1.2	20	41	65	3.12	.18	.87	1301	ND	.01	53	.35	15	ND	ND	ND	ND	126	ND	ND	199
L20+00N 40+00W	.1	1.72	74	ND	107	ND	.57	.1	104	203	94	6.29	.17	1.74	1467	2	.01	1074	.07	27	ND	ND	4	ND	59	ND	4	58
L20+50N 30+00W	.2	3.02	8	ND	173	ND	.40	.6	24	27	60	3.87	.15	.71	1706	ND	.01	47	.10	18	ND	ND	ND	ND	54	ND	ND	95
L20+50N 30+25W	.2	2.42	6	ND	200	ND	.38	.7	15	21	32	2.56	.12	.53	823	ND	.01	30	.10	13	ND	ND	ND	ND	43	ND	ND	83
L20+50N 30+50W	.3	1.98	10	ND	171	ND	.50	.5	13	29	36	2.59	.13	.63	742	ND	.01	27	.11	14	ND	ND	ND	ND	45	ND	ND	65
L20+50N 30+75W	.3	2.78	10	ND	193	ND	.45	.8	21	39	63	3.46	.14	.85	923	ND	.01	50	.11	16	ND	ND	ND	ND	47	ND	ND	90
L20+50N 31+00W	.2	3.47	8	ND	199	ND	.44	.5	19	32	40	3.27	.14	.77	1131	ND	.01	36	.12	14	ND	ND	ND	ND	46	ND	ND	101
L20+50N 31+25W	.2	3.54	10	ND	308	ND	.71	.8	27	27	56	3.71	.17	.92	1618	ND	.01	36	.19	17	ND	ND	ND	ND	70	ND	ND	126
L20+50N 31+50W	.3	2.72	10	ND	219	ND	.56	1.2	17	30	34	2.50	.14	.63	984	ND	.01	37	.14	13	ND	ND	ND	ND	58	ND	ND	92
L20+50N 31+75W	.5	3.17	7	ND	171	3	.47	.8	22	42	44	3.34	.15	1.04	985	ND	.01	45	.04	14	ND	ND	ND	ND	42	ND	ND	106
L20+50N 32+00W	.2	2.55	23	ND	185	ND	.65	.8	30	110	62	2.83	.13	1.15	1171	ND	.01	85	.07	16	ND	ND	ND	ND	63	ND	ND	88
L20+50N 32+25W	.1	1.83	17	ND	322	ND	1.47	1.6	30	50	80	2.40	.14	.76	2954	ND	.01	63	.17	26	ND	ND	3	ND	144	ND	ND	247
L20+50N 32+50W	.2	1.50	7	ND	144	ND	.61	1.2	9	17	22	1.87	.11	.46	649	2	.01	18	.06	22	ND	ND	54	ND	ND	ND	90	
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	3	1	

CLIENT: AZIMUTH GEOLOGICAL JOB#:

870149 PROJECT:

REPORT: 870149PA DATE: 87/02/17

PAGE 8 OF 9

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	Mg %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	V PPM	Zn PPM
L20+50W 33+00W	.1	2.54	7	ND	313	ND	.80	.8	24	17	55	2.86	.14	.60	2299	1	.01	32	.20	14	ND	ND	ND	2	78	ND	ND	148
L20+50W 33+25W	.2	1.63	6	ND	277	ND	.83	1.2	14	22	41	2.22	.13	.56	1550	2	.01	28	.11	23	ND	ND	5	2	85	ND	ND	128
L20+50W 33+50W	.4	3.27	3	ND	220	ND	.54	.6	22	33	47	3.70	.17	.83	1130	ND	.01	42	.13	15	ND	ND	ND	ND	57	ND	ND	108
L20+50W 33+75W	.2	3.41	ND	ND	253	ND	.48	.8	22	30	44	3.54	.16	.77	1235	ND	.01	47	.08	13	ND	ND	ND	ND	60	ND	ND	109
L20+50W 34+00W	.2	2.40	5	ND	148	ND	.78	.6	15	20	34	2.32	.14	.48	824	1	.01	39	.05	9	ND	ND	ND	ND	82	ND	ND	62
L20+50W 34+25W	.2	2.68	3	ND	81	ND	1.85	.3	16	23	29	2.67	.17	.59	325	1	.01	42	.01	9	ND	ND	ND	ND	214	ND	ND	40
L20+50W 34+50W	.7	1.92	ND	ND	203	ND	.83	.8	6	15	151	1.37	.11	.50	88	1	.04	84	.03	7	ND	ND	ND	ND	79	ND	ND	28
L20+50W 34+75W	.2	1.18	ND	ND	160	ND	3.00	1.1	9	14	38	1.45	.16	.34	536	2	.01	39	.04	11	ND	ND	5	2	177	4	ND	45
L20+50W 35+00W	.2	1.97	3	ND	227	ND	.75	1.1	15	23	41	2.33	.12	.53	876	1	.01	44	.13	12	ND	ND	ND	ND	71	ND	ND	145
L21+00W 30+00W	.4	2.54	ND	ND	227	ND	.46	.8	13	23	29	2.57	.14	.56	807	ND	.01	23	.11	13	ND	ND	ND	ND	49	ND	ND	84
L21+00W 30+25W	.1	1.76	8	ND	162	ND	.60	.6	15	31	43	2.77	.12	.76	801	1	.01	33	.13	13	ND	ND	3	3	55	ND	ND	62
L21+00W 30+50W	.2	2.50	10	ND	228	ND	.58	.6	19	35	56	3.30	.14	.83	978	1	.01	41	.14	13	ND	ND	ND	ND	59	ND	ND	94
L21+00W 30+75W	.1	2.66	5	ND	233	ND	.56	.6	16	27	42	2.70	.12	.64	1044	2	.01	37	.11	11	ND	ND	ND	ND	62	ND	ND	104
L21+00W 31+00W	.1	3.18	7	ND	214	ND	.68	.8	23	30	44	3.30	.14	.81	1587	ND	.01	38	.22	15	ND	ND	ND	ND	80	ND	ND	124
L21+00W 31+25W	.1	3.65	8	ND	259	ND	.53	1.1	26	42	43	3.62	.15	.88	1530	ND	.01	46	.16	14	ND	ND	ND	ND	53	ND	ND	161
L21+00W 31+50W	.1	3.17	6	ND	261	ND	.63	1.1	18	28	38	3.02	.14	.68	1074	ND	.01	35	.14	17	ND	ND	ND	ND	63	ND	ND	117
L21+00W 31+75W	.2	3.06	5	ND	231	ND	.51	1.1	16	25	35	2.97	.14	.70	913	ND	.01	30	.13	13	ND	ND	ND	ND	54	ND	ND	99
L21+00W 32+00W	.1	2.02	ND	ND	203	ND	.70	.6	11	18	29	2.13	.12	.53	690	1	.01	21	.10	8	ND	ND	ND	ND	73	ND	ND	72
L21+00W 32+25W	.2	2.74	ND	ND	225	ND	.53	.6	15	24	31	2.08	.13	.65	985	1	.01	29	.13	10	ND	ND	ND	ND	55	ND	ND	87
L21+00W 32+50W	.4	2.56	3	ND	209	ND	.51	.6	14	21	29	2.54	.13	.58	861	1	.01	31	.11	12	ND	ND	ND	ND	52	ND	ND	80
L21+00W 32+75W	.1	1.88	ND	ND	172	ND	1.06	1.2	8	13	28	1.72	.12	.41	661	2	.01	21	.13	14	ND	ND	ND	ND	88	ND	ND	115
L21+00W 33+00W	.2	3.08	3	ND	261	ND	.58	1.2	17	25	36	2.97	.15	.66	1155	ND	.01	38	.13	15	ND	ND	ND	ND	61	ND	ND	112
L21+00W 33+25W	.4	3.32	13	ND	228	ND	.48	.6	25	55	46	3.58	.16	.85	1238	ND	.01	87	.08	18	ND	ND	ND	ND	49	ND	ND	107
L21+00W 33+50W	.7	3.02	14	ND	224	ND	.52	1.1	36	34	61	4.64	.17	.88	2293	2	.01	58	.16	40	ND	ND	ND	ND	63	ND	ND	146
L21+00W 33+75W	.6	3.50	12	ND	248	ND	.53	.8	30	40	61	4.22	.17	.91	1247	1	.01	65	.13	19	ND	ND	ND	ND	53	ND	ND	124
L21+00W 34+00W	.2	2.41	3	ND	234	ND	.63	1.1	17	26	34	2.65	.13	.61	961	2	.01	38	.11	16	ND	ND	ND	ND	62	ND	ND	107
L21+00W 34+25W	.2	2.16	7	ND	163	ND	.66	.5	20	36	48	3.32	.14	1.10	1144	2	.01	44	.14	14	ND	ND	ND	ND	52	ND	3	85
L21+00W 34+50W	.4	2.42	5	ND	254	ND	.60	1.1	17	30	38	2.93	.14	.71	998	1	.01	41	.13	16	ND	ND	ND	ND	60	ND	ND	110
L21+00W 34+75W	.4	2.16	9	ND	144	ND	.98	2.7	15	23	80	2.42	.14	.56	909	2	.01	100	.07	14	ND	ND	3	1	79	MD	MD	142
L21+00W 35+00W	.8	1.54	27	ND	401	ND	1.70	1.8	18	18	110	5.33	.20	.46	1876	7	.01	28	.38	38	ND	ND	8	3	168	MD	MD	250
L21+50W 30+00W	.4	2.15	ND	ND	211	ND	.64	1.1	13	25	34	2.47	.14	.63	735	2	.01	27	.13	12	ND	ND	ND	ND	68	ND	ND	81
L21+50W 30+25W	.2	2.34	5	ND	244	ND	.52	.6	14	27	37	2.54	.13	.63	748	1	.01	29	.13	12	ND	ND	ND	ND	58	ND	ND	94
L21+50W 30+50W	.4	2.22	5	ND	259	ND	.86	.8	17	30	43	2.72	.15	.70	1004	3	.01	36	.08	20	ND	ND	ND	ND	77	ND	ND	100
L21+50W 30+75W	.6	3.37	5	ND	126	ND	.45	.6	14	16	46	2.36	.12	.48	611	ND	.01	33	.06	9	ND	ND	41	ND	ND	70		
L21+50W 31+00W	.4	3.25	7	ND	338	ND	1.08	1.5	22	19	67	3.08	.16	.63	1706	ND	.01	32	.29	17	ND	ND	ND	ND	117	ND	ND	197
L21+50W 31+25W	.2	2.57	4	ND	147	ND	.55	1.2	9	14	28	1.89	.11	.41	510	1	.01	19	.06	10	ND	ND	ND	ND	57	ND	ND	59
L21+50W 31+50W	.4	2.50	7	ND	177	ND	.68	1.1	13	21	38	2.41	.14	.55	769	1	.01	25	.08	13	ND	ND	ND	ND	63	ND	ND	85
L21+50W 31+75W	.4	2.79	ND	ND	234	ND	.55	.8	14	20	30	2.67	.13	.60	988	1	.01	24	.12	14	ND	ND	ND	ND	58	ND	ND	94
L21+50W 32+00W	.4	3.59	13	ND	138	ND	.50	1.1	26	35	40	3.87	.15	1.12	1429	ND	.01	41	.26	25	ND	ND	ND	ND	47	MD	MD	125
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

CLIENT: AZIMUTH GEOLOGICAL JOB#: 870149 PROJECT:

REPORT: 870149PA DATE: 87/02/17

PAGE 9 OF 9

SAMPLE NAME	Ag PPM	Al %	As PPM	Au PPM	Ba PPM	Bi PPM	Ca %	Cd PPM	Co PPM	Cr PPM	Cu PPM	Fe %	K %	Mg %	Mn PPM	Mo PPM	Na %	Ni PPM	P %	Pb PPM	Pd PPM	Pt PPM	Sb PPM	Sn PPM	Sr PPM	U PPM	W PPM	Zn PPM
L21+50N 32+25W	.1	2.17	ND	ND	177	ND	.40	.2	14	24	32	2.54	.12	.60	796	ND	.01	26	.11	6	ND	7	ND	41	ND	ND	73	
L21+50N 32+50W	.1	3.62	ND	ND	278	ND	.53	1.1	20	16	40	3.07	.14	.61	1614	ND	.01	31	.20	4	ND	ND	ND	58	ND	ND	145	
L21+50N 32+75W	.1	2.54	ND	ND	179	ND	.39	.6	19	32	43	2.90	.12	.65	1022	ND	.01	46	.12	12	ND	ND	7	ND	39	ND	ND	103
L21+50N 33+00W	.1	3.42	10	ND	387	3	.86	.6	65	66	94	3.97	.17	1.02	3701	1	.01	108	.22	16	ND	ND	6	ND	95	4	ND	144
L21+50N 33+25W	.3	2.52	ND	ND	226	ND	.41	.8	17	23	43	2.97	.14	.58	962	2	.01	38	.11	9	ND	ND	9	ND	52	ND	ND	91
L21+50N 33+50W	.3	3.75	ND	ND	320	ND	.54	.8	36	34	77	4.40	.17	.83	1665	1	.01	57	.22	12	ND	ND	5	ND	65	ND	ND	123
L21+50N 33+75W	.3	2.65	6	ND	245	ND	.54	1.1	18	32	40	3.34	.15	.66	1195	2	.01	41	.11	22	ND	ND	10	ND	70	ND	3	129
L21+50N 34+00W	.3	2.29	ND	ND	213	ND	.55	.6	14	24	32	2.70	.14	.60	944	1	.01	27	.12	11	ND	ND	10	ND	68	ND	ND	91
L21+50N 34+25W	.3	2.22	ND	ND	202	ND	.59	.5	16	26	33	2.77	.14	.66	1158	1	.01	32	.12	9	ND	ND	11	ND	61	ND	ND	88
L21+50N 34+50W	.3	2.04	ND	ND	191	ND	.65	1.3	13	19	34	2.20	.13	.46	893	1	.01	35	.11	8	ND	ND	11	ND	61	ND	ND	183
L21+50N 34+75W	.3	2.04	ND	ND	171	ND	.54	1.2	11	18	40	2.16	.13	.40	740	1	.01	38	.10	6	ND	ND	12	ND	49	ND	ND	215
L21+50N 35+00W	.3	1.76	ND	ND	180	ND	1.47	2.4	12	21	45	2.12	.16	.46	891	1	.01	39	.17	10	ND	ND	11	ND	116	ND	ND	305
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

**1986 Survey Results**



# VANGEOCHEM LAB LIMITED

MAIN OFFICE  
1521 PEMBERTON AVE.  
NORTH VANCOUVER, B.C. V7P 2S3  
(604) 988-6211 TELEX: 04-352578

BRANCH OFFICE  
1630 PANDORA ST.  
VANCOUVER, B.C. V5L 1L6  
(604) 251-5656

REPORT NUMBER: 870225 SA

JOB NUMBER: 870225

AZIMUTH GEOLOGICAL

PAGE 1 OF 2

SAMPLE #	Au
	ppb
L3+00N 11+00W	20
L3+00N 11+50W	10
L3+00N 12+00W	10
L3+00N 12+50W(A)	5
L3+00N 12+50W(B)	5
L3+00N 12+75W	10
L3+00N 13+00W	10
L3+00N 14+00W	5
L3+00N 14+50W	10
L3+00N 15+00W	10
L3+00N 15+50W	5
L3+00N 16+00W	5
L3+00N 16+50W	5
L3+00N 17+00W	10
L3+00N 17+50W	15
L3+00N 18+00W	nd
L4+00N 10+00W	15
L4+00N 10+50W	10
L4+00N 11+00W	10
L4+00N 11+50W	5
L4+00N 12+00W	5
L4+00N 12+50W	10
L4+00N 13+00W	5
L4+00N 13+50W	5
L4+00N 14+50W	5
L4+00N 15+00W(A)	5
L4+00N 15+00W(B)	5
L4+00N 16+00W	10
L4+00N 17+00W	5
L4+00N 17+50W	5
L4+00N 35+00W	5
L4+00N 36+00W	5
L4+00N 36+50W	10
L4+00N 37+00W	10
L4+00N 37+50W	nd
L4+00N 38+50W	15
L4+00N 39+00W	20
L4+00N 39+50W	10
L4+00N 40+00W	20
DETECTION LIMIT	5

nd = none detected

— = not analysed

is = insufficient sample



# VANGEOCHEM LAB LIMITED

## MAIN OFFICE

1521 PEMBERTON AVE.  
NORTH VANCOUVER, B.C. V7P 2S3  
(604) 988-6211 TELEX: 04-352578

## BRANCH OFFICE

1630 PANDORA ST.  
VANCOUVER, B.C. V5L 1L6  
(604) 251-5656

REPORT NUMBER: 870225 6A

JOB NUMBER: 870225

AZIMUTH GEOLOGICAL

PAGE 2 OF 2

SAMPLE #	Au
L6+00N 00+50E	20
L6+00N 1+00E	nd
L6+00N 1+50E	nd
L6+00N 2+00E	nd
L6+00N 2+50E	nd
L6+00N 3+00E	nd
L6+00N 3+50E	38
L6+00N 4+00E	5
L7+00N 0+50W	nd
L7+00N 1+00W	nd
L7+00N 1+50W	nd
L7+00N 2+00W	nd
L7+00N 2+50W	nd
L7+00N 3+00W	10
L7+00N 3+50W	15
L7+00N 4+00W	25
L7+00N 4+50W	nd
L7+00N 5+00W	15
L7+00N 5+50W	nd
L7+00N 6+00W	5
L7+00N 6+50W	5
L7+00N 7+00W	5
L7+00N 7+50W	5
L8+00N 0+00W CL	5
L8+00N 0+50W	10
L8+00N 1+00W	20
L8+00N 1+50W	5
L8+00N 2+00W	nd
L8+00N 2+50W	10
L8+00N 3+00W	15
L8+00N 3+50W	15
L8+00N 4+00W CL	15
L8+00N 4+50W	20
L8+00N 5+00W	5
L8+00N 5+50W	15
L8+00N 6+00W	10
L8+00N 6+50W	5
L8+00N 7+00W	5
L8+00N 7+50W	5
L8+00N 8+00W	15
L8+00N 8+50W	5
L8+00N 9+00W	5
L8+00N 9+50W	5
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L8+00N 23+00W	5
L8+00N 23+50W	5
L8+00N 24+00W	5
L8+00N 24+50W	5
L8+00N 25+00W	5
L8+00N 25+50W	5
L8+00N 26+00W	5
L8+00N 26+50W	5
L8+00N 27+00W	5
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**VANGEOCHEM LAB LIMITED**

MAIN OFFICE: 1521 PEMBERTON AVE. N. VANCOUVER B.C. V7P 2S3 PH: (604) 986-5211 TELEX: 04-352578  
 BRANCH OFFICE: 1630 PANDORA ST. VANCOUVER B.C. V5L 1L6 PH: (604) 251-5656

**ICAP GEOCHEMICAL ANALYSIS**

A .5 GRAM SAMPLE IS DIGESTED WITH 5 ML OF 3:1:2 HCl TO HNO<sub>3</sub> TO H<sub>2</sub>O AT 95 DEG. C FOR 90 MINUTES AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR SN,MN,FE,CU,CR,MG,BR,POL,AL,NA,K,W,PT AND SR. AU AND PD DETECTION IS 3 PPM.  
 IS= INSUFFICIENT SAMPLE. ND= NOT DETECTED. --= NOT ANALYZED

COMPANY: AZIMUTH GEOLOGICAL  
 ATTENTION:  
 PROJECT:

REPORT #: 870225FA  
 JOB #: 870225  
 INVOICE #: 870225NA

DATE RECEIVED: 87/03/02  
 DATE COMPLETED: 87/03/05  
 COPY SENT TO:

ANALYST CDP

PAGE 1 OF 2

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	Ca %	Co PPM	Co PPM	Cr PPM	Cu PPM	Fe %	K %	Mg %	Mn PPM	Mn PPM	Na %	Ni PPM	P %	Pb PPM	Pd PPM	Pt PPM	SB PPM	Sn PPM	SR PPM	U PPM	W PPM	Zn PPM
300N+1100W	.1	1.62	7	ND	103	ND	.75	.1	14	22	161	2.82	.14	.68	845	2	.01	22	.11	9	ND	ND	ND	58	ND	ND	45	
300N+1150W	.1	1.62	8	ND	112	ND	.78	.3	14	20	157	2.77	.14	.64	901	2	.01	19	.13	8	ND	ND	ND	64	ND	ND	48	
300N+1200W	.1	2.08	5	ND	156	ND	.63	.3	11	19	86	2.42	.12	.54	707	ND	.01	18	.10	10	ND	ND	ND	66	ND	ND	49	
300N+1250W(A)	.1	1.61	5	ND	75	ND	1.88	.1	10	15	106	2.11	.15	.53	616	1	.01	16	.07	6	ND	ND	ND	147	ND	ND	29	
300N+1250W(B)	.1	1.54	7	ND	74	ND	1.16	.1	10	15	100	2.13	.12	.51	600	1	.01	17	.06	6	ND	ND	ND	120	ND	ND	27	
300N+1275	.1	2.20	8	ND	119	ND	.56	.1	15	26	269	2.93	.12	.76	776	2	.01	22	.08	10	ND	ND	ND	63	ND	ND	46	
300N+1300	.1	.98	ND	ND	86	ND	6.20	.2	7	14	73	1.45	.20	.91	422	5	.01	16	.08	1	ND	ND	ND	414	ND	ND	25	
300N+1400	.1	1.62	9	ND	102	ND	.86	.2	12	17	78	1.79	.11	.45	623	1	.01	34	.06	8	ND	ND	ND	151	ND	ND	24	
300N+1450	.1	2.15	13	ND	130	ND	.69	.3	21	27	133	2.70	.13	.68	758	ND	.01	61	.08	11	ND	ND	ND	57	ND	ND	43	
300N+1500	.1	2.66	16	ND	126	ND	.68	.2	29	114	140	3.57	.15	1.31	826	ND	.01	121	.05	10	ND	ND	ND	89	ND	4	48	
300N+1550	.1	2.33	44	ND	119	ND	.69	.1	23	46	122	3.54	.16	.93	817	ND	.01	69	.05	11	ND	ND	ND	82	ND	ND	66	
300N+1600	.1	3.04	11	ND	88	ND	.84	.1	39	143	135	4.09	.15	1.53	581	ND	.01	446	.03	11	ND	ND	ND	59	ND	ND	44	
300N+1650	.1	3.16	17	ND	122	ND	.56	.1	51	44	106	3.72	.14	.80	738	ND	.01	97	.06	15	ND	ND	ND	58	ND	ND	59	
300N+1700	.1	3.02	10	ND	151	ND	.48	.1	29	29	67	3.27	.15	.60	807	ND	.01	49	.08	17	ND	ND	ND	50	ND	ND	63	
300N+1750	.1	3.39	18	ND	162	ND	.55	.6	35	26	69	3.87	.17	.70	1305	ND	.01	41	.11	19	ND	ND	ND	62	ND	ND	103	
300N+1800	.1	1.97	9	ND	175	ND	.44	.3	15	23	54	2.68	.14	.43	1067	ND	.01	27	.08	17	ND	ND	ND	50	ND	ND	103	
400N 1000W	.1	2.02	9	ND	119	ND	.55	.2	14	21	119	2.70	.13	.73	694	1	.01	19	.08	12	ND	ND	ND	92	ND	ND	43	
400N 1050W	.2	1.97	9	ND	118	ND	.58	.1	14	23	121	2.70	.13	.76	727	1	.01	29	.10	11	ND	ND	ND	75	ND	4	45	
400N 1100W	.2	1.77	11	ND	79	ND	1.38	.3	13	26	144	2.58	.17	1.00	695	4	.01	19	.10	8	ND	ND	ND	254	ND	ND	43	
400N 1150W	.2	1.86	11	ND	96	ND	.60	.2	13	21	127	2.62	.14	.83	652	3	.01	21	.06	10	ND	ND	ND	124	ND	ND	42	
400N 1200W	.2	1.48	10	ND	67	ND	2.74	.1	15	17	228	2.68	.19	.91	654	4	.01	25	.12	5	ND	ND	ND	103	4	ND	30	
400N 1250W	.1	1.13	3	ND	58	ND	5.09	.1	7	12	87	1.54	.20	1.20	481	109	.01	14	.08	2	ND	ND	ND	1523	ND	ND	27	
400N 1300W	.1	1.81	7	ND	117	ND	1.36	.1	13	20	202	2.65	.16	.76	700	4	.01	19	.11	8	ND	ND	ND	93	ND	ND	40	
400N 1350W	.1	2.41	8	ND	138	ND	.64	.1	14	19	251	1.97	.13	.76	821	3	.01	19	.10	13	ND	ND	ND	65	ND	ND	42	
400N 1450W	.1	2.33	8	ND	154	ND	.59	.1	13	19	233	2.66	.14	.65	782	2	.01	18	.08	13	ND	ND	ND	77	ND	ND	45	
400N 1500W(A)	.1	2.09	11	ND	92	ND	.88	.3	16	20	261	3.02	.15	.93	781	4	.01	20	.05	12	ND	ND	ND	96	ND	ND	38	
400N 1500W(B)	.1	2.52	9	ND	85	ND	.64	.2	22	35	98	2.27	.14	.72	627	ND	.01	56	.03	12	ND	ND	ND	69	ND	ND	33	
400N 1600W	.5	3.72	12	ND	148	5	.81	.1	47	67	108	5.24	.20	1.54	1399	ND	.01	94	.10	19	ND	ND	ND	62	ND	ND	65	
400N 1700W	.1	3.60	14	ND	159	ND	.48	.2	32	31	69	3.09	.13	.65	881	ND	.01	54	.08	17	ND	ND	ND	57	ND	ND	68	
400N 1750W	.1	3.50	15	ND	111	ND	.81	.3	35	20	141	3.00	.14	.58	941	ND	.01	56	.11	20	ND	ND	ND	86	ND	ND	77	
400N+3500W	.3	2.43	21	ND	145	ND	.54	.5	28	41	91	3.65	.17	.85	1083	1	.01	53	.11	18	ND	ND	ND	48	ND	ND	81	
400N+3600W	.1	3.09	14	ND	198	ND	.72	.6	27	44	105	3.59	.20	1.00	1617	ND	.01	58	.16	22	ND	ND	ND	55	ND	ND	112	
400N+3650W	.1	2.74	11	ND	152	ND	1.82	.2	22	46	109	3.50	.22	1.60	872	ND	.01	88	.13	16	ND	ND	ND	63	ND	ND	74	
400N+3700W	.1	2.38	13	ND	154	ND	.83	.4	16	46	74	3.04	.17	.96	912	ND	.01	42	.11	14	ND	ND	ND	64	ND	ND	81	
400N+3750W	.2	3.32	17	ND	213	ND	.53	.4	24	53	71	3.52	.19	1.02	1214	ND	.01	62	.11	24	ND	ND	ND	45	ND	ND	108	
400N+3850W	.3	2.52	16	ND	146	ND	.48	.6	25	41	79	3.65	.17	.91	1066	1	.01	50	.12	18	ND	ND	ND	41	ND	ND	94	
400N+3910W	.4	2.47	20	ND	141	3	.68	.2	28	51	100	3.74	.15	1.12	1156	1	.01	62	.13	19	ND	ND	3	55	ND	ND	95	
400N+3950W	.4	2.56	16	ND	155	3	.63	.6	26	48	84	3.29	.15	.98	939	ND	.01	64	.10	18	ND	ND	ND	48	ND	ND	75	
400N+4000W	.3	2.45	16	ND	145	ND	.61	.7	25	41	82	3.4	.15	.96	974	1	.01	61	.11	16	ND	ND	ND	51	ND	3	84	

CLIENT: AZIMUTH GEOLOGICAL

JOB#: 870225

PROJECT:

REPORT: 870225PA

DATE: 87/03/05

PAGE 2 OF 2

SAMPLE NAME	Ag PPM	Al %	As PPM	Au PPM	Ba PPM	Ca %	Co PPM	Cu PPM	Cr PPM	Cr %	Fe PPM	F %	K %	Mg %	Mn PPM	Mo PPM	Na %	Ni PPM	P %	Pb PPM	Pd PPM	Pt PPM	SB PPM	Sn PPM	Sk PPM	U PPM	W PPM	Zn PPM
600N+50E	.1	1.20	ND	ND	86	ND	.39	.1	10	35	.03	1.57	.08	.52	457	1	.01	19	.07	9	ND	ND	ND	37	ND	ND	44	
600N+100E	.1	1.35	ND	ND	101	ND	.36	.1	10	17	.04	2.04	.06	.50	542	1	.01	17	.07	10	ND	ND	ND	42	ND	ND	47	
600N+150E	.2	1.26	3	ND	95	ND	.34	.1	9	16	.06	1.90	.06	.48	511	1	.01	15	.07	10	ND	ND	ND	39	ND	ND	44	
600N+200E	.2	1.45	9	ND	96	ND	.40	.2	10	18	.04	1.95	.11	.50	505	1	.01	17	.07	11	ND	ND	ND	81	ND	ND	43	
600N+250E	.1	1.93	ND	ND	110	ND	.64	.1	10	15	.02	2.43	.11	.81	914	1	.01	13	.08	12	ND	ND	ND	67	ND	ND	52	
600N+300E	.2	1.29	ND	ND	98	ND	.32	.1	8	17	.06	1.81	.10	.41	421	1	.01	16	.07	10	ND	ND	ND	34	ND	ND	42	
600N+350E	.5	1.77	ND	ND	169	ND	.73	.8	16	14	.05	2.25	.13	.48	1456	1	.01	18	.15	11	ND	ND	ND	68	ND	ND	89	
600N+400E	.3	1.06	ND	ND	82	ND	.36	.1	8	17	.06	1.95	.11	.46	385	1	.01	15	.08	6	ND	ND	ND	36	ND	ND	43	
700N+50W	.2	1.08	3	ND	64	ND	1.77	.2	7	12	.05	1.53	.16	.85	457	9	.01	14	.08	6	ND	ND	ND	1037	ND	ND	41	
700N+100W	.2	1.61	3	ND	105	ND	.46	.3	10	18	.06	1.97	.12	.54	564	1	.01	16	.07	11	ND	ND	ND	103	ND	ND	43	
700N+150W	.3	1.67	3	ND	113	ND	1.12	.5	11	13	.05	2.12	.13	.66	697	1	.01	15	.08	8	ND	ND	ND	65	ND	ND	45	
700N+200W	.4	1.61	7	ND	114	ND	.52	.3	11	16	.04	2.08	.13	.54	656	1	.01	16	.08	12	ND	ND	ND	45	ND	ND	50	
700N+250W	.4	1.51	7	ND	101	ND	.40	.1	11	13	.03	2.20	.12	.51	551	2	.01	19	.08	12	ND	ND	ND	46	ND	ND	44	
700N+300W	.4	1.97	5	ND	93	ND	.50	.5	13	20	.05	2.72	.13	.78	910	1	.01	19	.08	13	ND	ND	ND	45	ND	ND	44	
700N+50E	.5	1.63	9	ND	115	ND	.51	.1	14	23	.07	2.29	.14	.58	616	1	.01	24	.08	13	ND	ND	ND	40	ND	ND	50	
700N+100E	.5	1.25	4	ND	99	ND	.38	.1	10	17	.04	1.99	.12	.46	458	1	.01	16	.07	10	ND	ND	ND	37	ND	ND	42	
700N+150E	.4	1.95	5	ND	136	ND	.41	.2	15	21	.06	2.37	.13	.52	667	1	.01	19	.08	14	ND	ND	ND	40	ND	ND	50	
700N+200E	.2	2.66	7	ND	207	ND	.89	.2	27	31	.04	4.55	.16	1.26	1622	1	.01	29	.13	15	ND	ND	ND	72	ND	ND	41	
700N+250E	.4	1.72	ND	ND	153	ND	.43	.4	11	17	.06	2.13	.12	.46	621	1	.01	16	.08	13	ND	ND	ND	47	ND	ND	51	
700N+300E	.3	1.97	ND	ND	85	ND	2.27	.3	7	15	.05	4.71	.17	.56	401	1	.01	18	.08	6	ND	ND	ND	132	ND	ND	42	
700N+350E	.5	1.70	4	ND	110	3	.36	.1	10	20	.08	2.09	.14	.46	510	2	.01	25	.07	15	ND	ND	ND	44	4	ND	48	
700N+400E	.5	1.20	3	ND	96	ND	.32	.5	8	18	.04	1.93	.13	.43	406	1	.01	17	.08	11	ND	ND	ND	35	4	ND	49	
800N+100W	.7	1.54	7	ND	114	ND	.43	.4	12	24	.09	2.29	.14	.55	555	2	.01	22	.08	14	ND	ND	ND	43	6	ND	52	
800N+50W	.6	2.00	10	ND	139	3	.64	.4	16	18	.05	2.68	.16	.77	881	1	.01	27	.10	18	ND	ND	ND	36	3	ND	66	
800N+100W	.7	1.37	16	ND	53	6	3.41	.2	22	28	.07	2.91	.20	1.11	550	3	.01	36	.11	12	ND	ND	ND	208	9	ND	44	
800N+150W	.8	1.97	6	ND	124	ND	.54	.3	15	27	.06	2.71	.17	.64	633	1	.01	28	.08	20	ND	ND	ND	55	9	ND	68	
800N+200W	.5	1.37	3	ND	78	3	1.58	.1	10	17	.07	2.01	.19	.70	543	6	.01	16	.10	9	ND	ND	ND	832	6	ND	48	
800N+250W	.5	2.86	9	3	144	ND	1.10	.2	21	28	.05	1154	4.10	.19	1.20	1429	2	.01	12	.11	15	ND	ND	ND	91	4	ND	52
800N+300W	.5	3.94	15	ND	95	ND	1.37	.5	30	5	.05	844	5.20	.17	2.32	1518	1	.01	12	.12	19	ND	ND	ND	106	ND	ND	70
800N+EL0+00W	.3	1.21	4	ND	71	ND	.96	.2	8	15	.06	1.67	.15	.60	416	4	.01	16	.08	10	ND	ND	ND	312	ND	ND	48	
800N+50E	.3	2.22	7	ND	142	ND	.59	.2	14	25	.05	2.97	.16	.77	900	1	.01	22	.10	16	ND	ND	ND	56	ND	ND	61	
800N+100E	.2	1.27	6	ND	81	ND	.58	.1	6	15	.05	1.61	.11	.69	454	2	.01	16	.08	10	ND	ND	ND	161	ND	ND	53	
800N+150E	.3	2.67	7	ND	132	ND	.54	.2	15	17	.05	3.81	.14	.65	1002	ND	.01	19	.08	19	ND	ND	ND	54	ND	ND	74	
800N+200E	.1	1.53	ND	ND	120	ND	5.67	.3	7	14	.05	1.81	.20	.78	471	1	.01	13	.10	7	ND	ND	ND	264	ND	ND	43	
800N+250E	.5	2.11	9	ND	154	3	.64	.2	14	21	.06	2.74	.15	.68	825	1	.01	13	.08	18	ND	ND	ND	98	ND	ND	73	
800N+300E	.4	1.70	8	ND	114	5	.56	.3	10	17	.06	2.24	.13	.56	632	1	.01	17	.08	14	ND	ND	ND	69	ND	ND	55	
800N+350E	.4	3.39	11	ND	180	6	.56	.1	19	31	.06	4.15	.19	2.33	870	1	.01	45	.10	24	ND	ND	ND	65	ND	ND	111	
800N+400E	.4	2.02	9	ND	150	ND	.44	.5	10	14	.06	2.61	.14	.60	584	1	.01	21	.10	18	ND	ND	ND	53	ND	ND	74	
DETECTION LIMIT	.1	.01	3	1	3	.01	.1	1	1	1	.01	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

**Appendix 4**  
**Geostatistics**

# VANGEOCHEM LAB LIMITED

1521 PEMBERTON AVE. N. VANCOUVER BC, V7P 2S3. PH 986-5211. TELEX 04-352578  
130 PANDORA ST. VANCOUVER, BC, V5L 1L6 PH 251-5656

COMPANY: AZIMUTH GEOLOGICAL  
REPORT #: 870225SA  
SAMPLE TYPE: SOIL

PROJECT:  
JOB #: 870225-870149

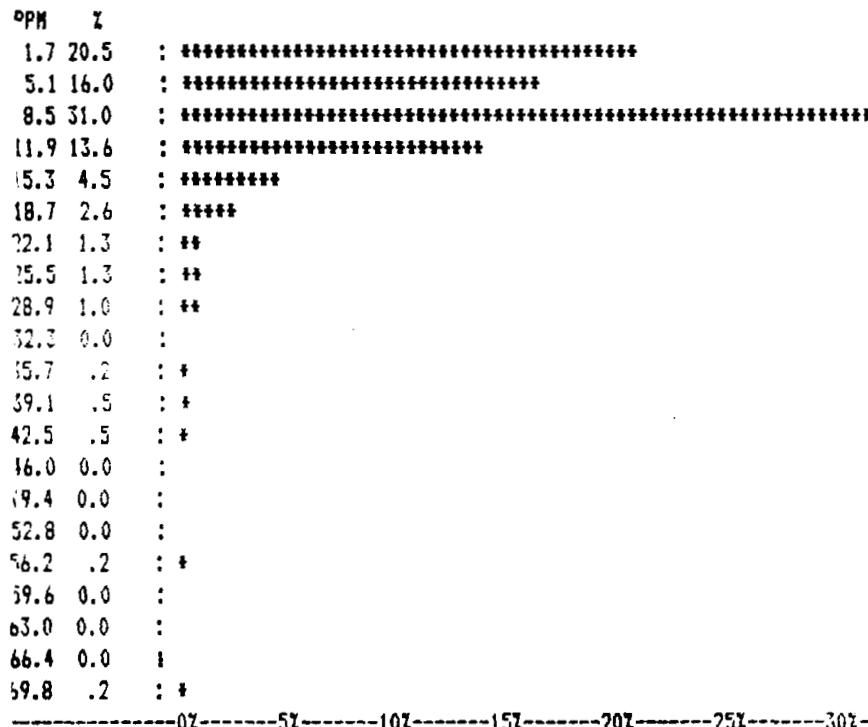
INVOICE #: 870225NA  
DATE: 87/03/09

## STATISTICAL SUMMARY FOR: AS

DETECTION LIMIT: 5 PPM  
SAMPLES BELOW DETECTION LIMIT: 104  
MEAN: 8.78208557  
MINIMUM=.5  
MAXIMUM=74  
STANDARD DEVIATION= 29.6845267  
NUMBER OF SAMPLES IN ANALYSIS: 374

UPPER 95% RANGE LIMIT: 68.1511389  
RANGE DIVISION: 3.40755694  
STD. ERROR OF MEAN: 1.53495033  
VARIANCE: 881.171124  
COEFFICIENT OF VARIANCE %: 338.012269  
SKEW: 454264.458  
NOTE: UNITS PPM

## -----HISTOGRAM FOR AS-----



EACH \* REPRESENTS APPROXIMATELY 1.8 SAMPLES OR .5% OF ALL SAMPLES IN ANALYSIS

SAMPLES IN TOP 2 PERCENTILE (IN PPM)

L20+00N 40+00W =74

**VANGEOCHEM LAB LIMITED**

1521 PEMBERTON AVE. N. VANCOUVER BC, V7P 2S3. PH 986-5211. TELEX 04-352578  
630 PANDORA ST. VANCOUVER, BC, V5L 1L6 PH 251-5656

COMPANY: AZIMUTH GEOLOGICAL  
REPORT#: 870225SA  
AMPLE TYPE: SOIL

PROJECT:  
JOB#: 870225-870149

INVOICE#: 870225NA  
DATE: 87/03/09

## STATISTICAL SUMMARY FOR: CU

DETECTION LIMIT: 1 PPM

UPPER 95% RANGE LIMIT: 273.988038

SAMPLES BELOW DETECTION LIMIT: 0

RANGE DIVISION: 13.6994019

EAN: 74.7139038

STD. ERROR OF MEAN: 5.15211008

MINIMUM= 19

VARIANCE: 9927.54513

MAXIMUM= 397

COEFFICIENT OF VARIANCE %: 133.358133

STANDARD DEVIATION= 99.6370671

SKEW: 7437097

NUMBER OF SAMPLES IN ANALYSIS: 374

NOTE: UNITS PPM

## -----HISTOGRAM-FOR-CU-----

PPM    I

6.8	0.0	:
20.5	1.6	***
34.2	30.2	*****
47.9	22.7	*****
61.6	7.2	*****
75.3	7.2	*****
89.0	4.0	*****
.02.7	5.8	*****
116.4	2.9	****
130.1	2.9	****
143.8	1.8	***
157.5	1.6	***
171.2	1.0	**
.84.9	.2	*
98.6	.5	*
212.3	1.0	**
226.0	.2	*
239.7	.2	*
253.4	.2	*
267.1	1.0	**
280.8	1.0	**

-----0-----5-----10-----15-----20-----25-----30-----35-----

\*CH \* REPRESENTS APPROXIMATELY 1.8 SAMPLES OR .5% OF ALL SAMPLES IN ANALYSIS

## SAMPLES IN TOP 2 PERCENTILE (IN PPM)

L4+00N 13+00W	=367	L4+00N 13+50W	=351	L4+00N 14+50W	=310
L5+00N 16+00W	=294				

# VANGEOCHEM LAB LIMITED

1521 PEMBERTON AVE. N. VANCOUVER BC, V7P 2S3, PH 986-5211, TELEX 04-352578  
130 PANDORA ST. VANCOUVER, BC, V5L 1L6 PH 251-5656

COMPANY: AZIMUTH GEOLOGICAL  
REPORT#: 870225SA  
SAMPLE TYPE: SOIL

PROJECT:  
JOB#: 870225-870149

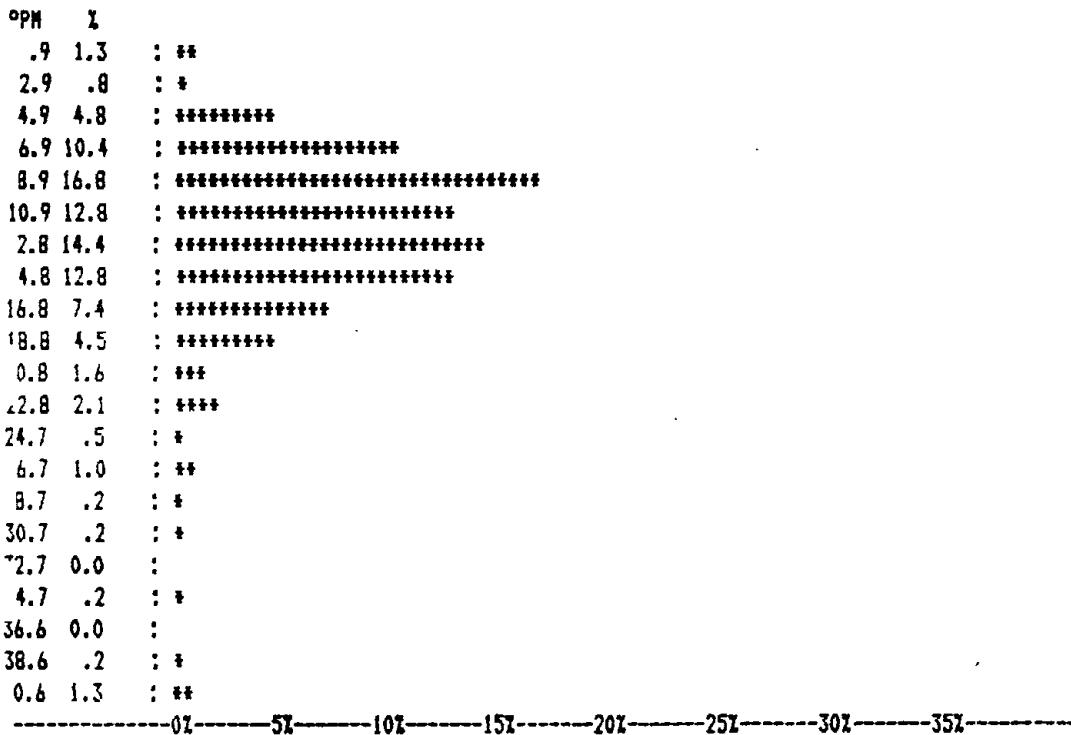
INVOICE#: 870225NA  
DATE: 87/03/09

## STATISTICAL SUMMARY FOR: PB

DETECTION LIMIT: 1 PPM  
SAMPLES BELOW DETECTION LIMIT: 2  
MEAN: 12.7058824  
MINIMUM=.5  
MAXIMUM= 166  
STANDARD DEVIATION= 13.4789952  
NUMBER OF SAMPLES IN ANALYSIS: 374

UPPER 95% RANGE LIMIT: 39.6638728  
RANGE DIVISION: 1.98319364  
STD. ERROR OF MEAN: .69698225  
VARIANCE: 181.683312  
COEFFICIENT OF VARIANCE %: 106.084685  
SKEW: 22373.776  
NOTE: UNITS PPM

## -----HISTOGRAM-FOR-PB-----



E H \* REPRESENTS APPROXIMATELY 1.8 SAMPLES OR .5% OF ALL SAMPLES IN ANALYSIS

## SAMPLES IN TOP 2 PERCENTILE (IN PPM)

L.6+00N 40+25W	=65	L17+00N 25+50W	=166	L17+00N 26+00W	=42
L17+00N 28+00W	=45				

**VANGEOCHEM LAB LIMITED**

1521 PEMBERTON AVE. N. VANCOUVER BC, V7P 2S3, PH 986-5211, TELEX 04-382578  
1630 PANDORA ST. VANCOUVER, BC, V5L 1L6 PH 251-5656

COMPANY: AZIMUTH GEOLOGICAL PROJECT:

INVOICE#: B70225NA

REPORT#: 870225SA

JOB#: 870225-870149

DATE: 87/03/08

SAMPLE TYPE: SOIL

**STATISTICAL SUMMARY FOR: SR**

DETECTION LIMIT: 1 PPM

UPPER 95% RANGE LIMIT: 155.126665

#SAMPLES BELOW DETECTION LIMIT: 0

RANGE DIVISION: 7.75633323

MEAN: 71.7978723

STD. ERROR OF MEAN: 2.14867717

MINIMUM= 34

VARIANCE: 1735.92191

MAXIMUM= 414

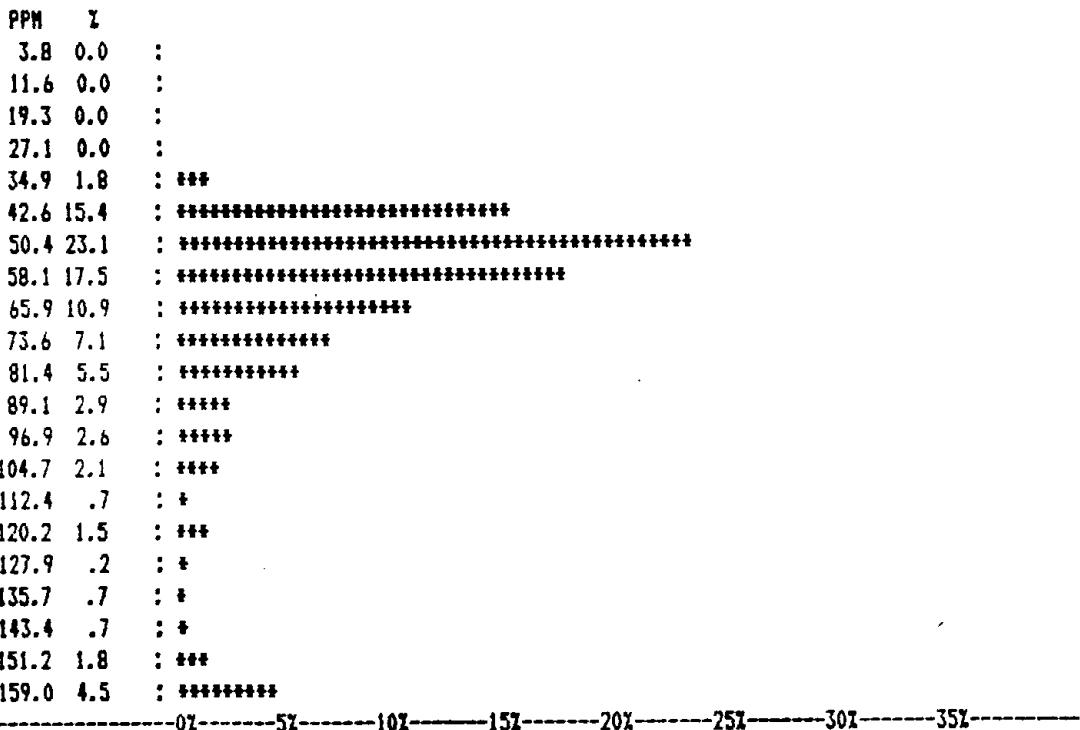
COEFFICIENT OF VARIANCE %: 58.0301266

STANDARD DEVIATION= 41.6643962

SKEW: 251888.377

NUMBER OF SAMPLES IN ANALYSIS: 374

NOTE: UNITS PPM

**HISTOGRAM-FOR-SR**

0%-----5%-----10%-----15%-----20%-----25%-----30%-----35%

EACH \* REPRESENTS APPROXIMATELY 1.8 SAMPLES OR .5% OF ALL SAMPLES IN ANALYSIS

**SAMPLES IN TOP 2 PERCENTILE (IN PPM)**

300N+1300	=414	400N 1100W	=254	800N+100W	=208
800N+CLO+00W	=312	800N+200E	=264	L4+00N 11+00W	=190
-5+00N 11+50W	=204	L5+00N 25+50W	=182	L20+50N 34+75W	=177
L21+00N 35+0W	=188	L8+75N 2+25W	=240	L10+00N 1+25W	=198
L10+00N 1+75W	=209	L17+00N 29+00W	=172		

**VANGEOCHEM LAB LIMITED**

1521 PEMBERTON AVE. N. VANCOUVER BC, V7P 2S3, PH 986-5211, TELEX 04-352578  
1530 PANDORA ST. VANCOUVER, BC, V5L 1L6 PH 251-5656

COMPANY: AZIMUTH GEOLOGICAL  
REPORT#: 870225SA  
AMPLE TYPE: SOIL

PROJECT:  
JOB#: 870225-870149

INVOICE#: 870225NA  
DATE: 87/03/09

## STATISTICAL SUMMARY FOR: ZN

DETECTION LIMIT: 1 PPM

\*SAMPLES BELOW DETECTION LIMIT: 0

EAN: 79.7727273

MINIMUM= 21

MAXIMUM= 429

STANDARD DEVIATION= 42.6779397

NUMBER OF SAMPLES IN ANALYSIS: 374

UPPER 95% RANGE LIMIT: 165.128607

RANGE DIVISION: 8.25643034

STD. ERROR OF MEAN: 2.20682373

VARIANCE: 1821.40654

COEFFICIENT OF VARIANCE %: 53.4994116

SKEW: 226143.731

NOTE: UNITS PPM

## -----HISTOGRAM FOR ZN-----

PPM	I
4.1	0.0 :
12.3	0.0 :
20.6	.5 : *
28.8	2.6 : *****
57.1	3.4 : *****
45.4	10.9 : *****
53.6	7.2 : *****
51.9	10.6 : *****
70.1	8.8 : *****
78.4	11.7 : *****
36.6	10.6 : *****
34.9	9.0 : *****
103.2	5.0 : *****
11.4	2.9 : *****
19.7	1.0 : **
127.9	2.4 : ***
136.2	.2 : *
48.4	1.8 : **
132.7	.2 : *
161.0	.8 : *
39.2	3.4 : *****

0% ----- 5% ----- 10% ----- 15% ----- 20% ----- 25% ----- 30% ----- 35%

EACH \* REPRESENTS APPROXIMATELY 1.8 SAMPLES OR .5% OF ALL SAMPLES IN ANALYSIS

## SAMPLES IN TOP 2 PERCENTILE (IN PPM)

L16+00N	27+50W	=230	L16+00N	38+75W	=177	L17+00N	25+50W	=429
L17+00N	26+00W	=215	L20+00N	39+50W	=199	L20+50N	32+25W	=247
L21+00N	35+0W	=250	L21+50N	31+00W	=197	L21+50N	34+50W	=183
L21+50N	34+75W	=215	L21+50N	35+00W	=305			

**Appendix 5**  
**Analytical Procedures**

VANGEOCHEM LAB LTD.  
1521 Pemberton Ave.  
North Vancouver, B.C.  
V7P 2S3

TO: AZIMUTH GEOLOGICAL SERVICE

FROM: Vangeochem Lab Ltd.  
1521 Pemberton Ave.  
North Vancouver, B.C. V7P 2S3

SUBJECT: Analytical procedure used to determine gold by fire-assay method and detected by atomic absorption spec. in geological samples.

1. Method\_of\_Sample\_Preparation

- (a) Geochemical soil, silt or rock samples were received in the laboratory in wet-strength 4" x 6" Kraft paper bags or rock samples sometimes in 8" x 12" plastic bags.
- (b) The dried soil and silt samples were sifted by hand using a 8" diameter 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.
- (c) The dried rock samples were crushed by using a jaw crusher and pulverized to 100-mesh for finer by using a disc mill. The pulverized samples were then put in a new bag for later analysis.

2. Method\_of\_Extraction

- (a) 20.0 - 30.0 grams of the pulp samples were used. Samples were weighed out by using a two-loading balance into fusion pot.
- (b) A Flux of litharge, soda ash, silica, borax, flour, or potassium nitrite is added, then fused at 1900 degrees F and a lead button is formed.

(c) The gold is extract by cupellation and part with diluted nitric acid.

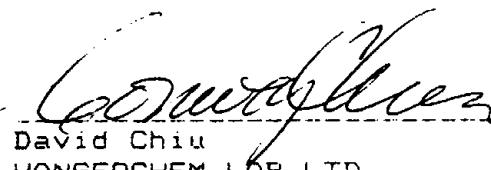
(d) The gold bead is saved for measurement later.

3. Method\_of\_Detection

(a) The gold bead is dissolved by boiling with sodium cyanide, hydrogen peroxide and ammonium hydroxide.

(b) The gold analyses were detected by using a Techtron model AAS Atomic Absorption Spectrographometer with a gold hollow cathode lamp. The results were read out on a strip chart recorder. The gold values in parts per billion were calculated by comparing them with a set of gold standards.

4. The analyses were supervised or determined by Mr. Conway Chiu or Mr. David Chiu and his laboratory staff.

  
\_\_\_\_\_  
David Chiu

VANGEOCHEM LAB LTD.

VANGEOCHEM LAB LTD.  
1521 Pemberton Ave.  
North Vancouver, B.C.  
V7P 2S3

TO: AZIMUTH GEOLOGICAL SERVICE

FROM: Vangeochem Lab Ltd.  
1521 Pemberton Ave.  
North Vancouver, B.C. V7P 2S3

SUBJECT: Analytical procedure used to determine multiple elements  
in hot acid soluble by Induction Coupled Plasma  
Spectrometer (ICP) analysis.

1. Method\_of\_Sample\_Preparation

- (a) Geochemical soil, silt or rock samples were received in the laboratory in wet-strength 4" x 6" Kraft paper bags or rock samples sometimes in 8" x 12" plastic bags.
- (b) The dried soil and silt samples were sifted by hand using a 8" diameter 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.
- (c) The dried rock samples were crushed by using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for later analysis.

2. Method\_of\_Digestion

- (a) 0.500 gram of -80 mesh sample was used.
- (b) Samples were digested in a hot water bath at 95 C for 75 minutes with diluted aqua regia acids. (3 : 1 : 3, HCl : HNO<sub>3</sub> : H<sub>2</sub>O)
- (c) The digested samples were diluted to a fixed volume and shaken well.

3. Method\_of\_Analysis

The analyses were determined by using a Jarrel Ash ICAP model 9000 direct reading emission spectrometer with an inductively coupled plasma excitation source. Background and inter-element corrections (IEC'S) were applied. All data is compiled into an Apple IIe computer, stored on floppy disk and printed by an Epson 100 dot-matrix printer.

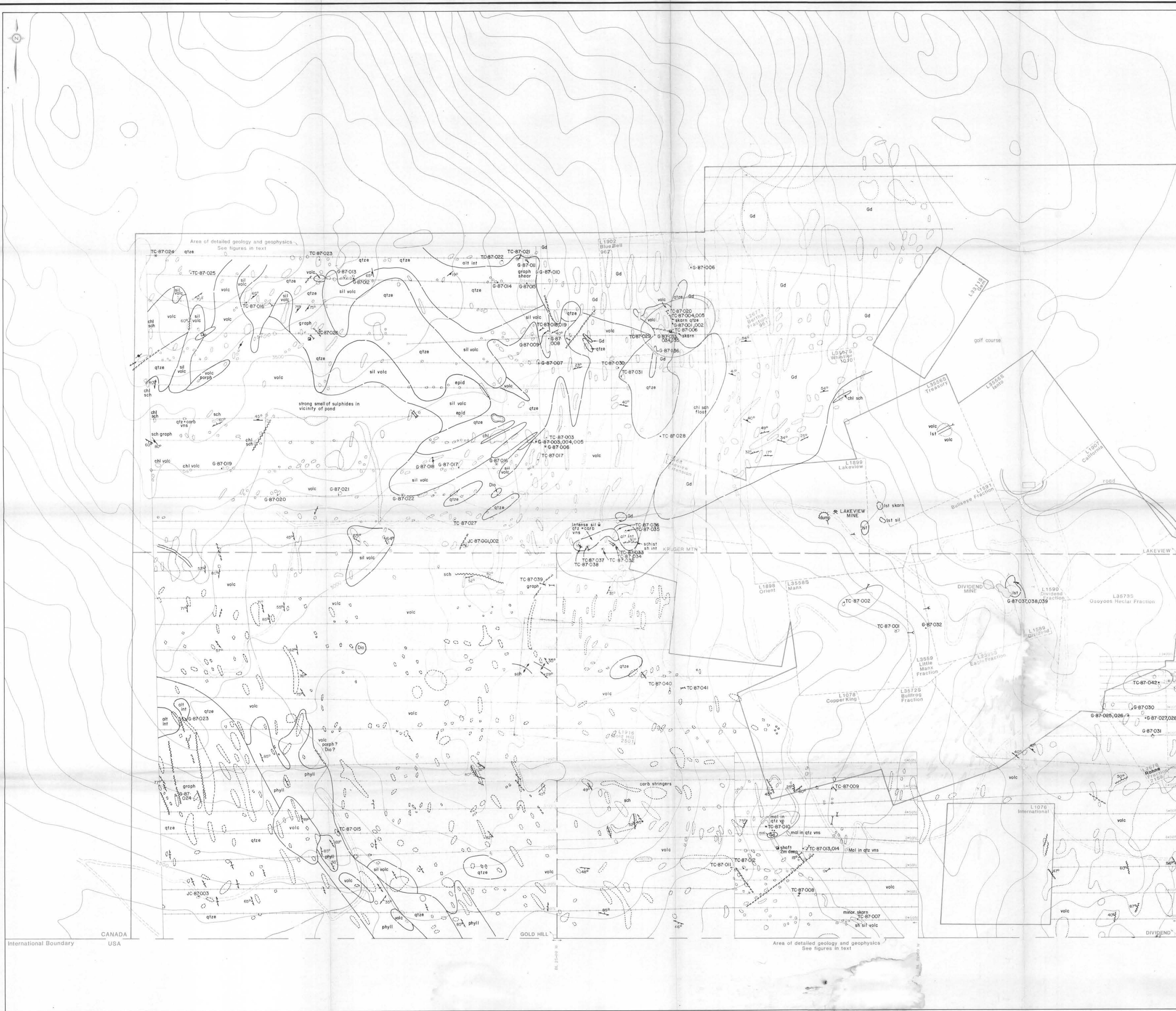
4. The analyses were supervised by Mr. Wade Reeves and Mr. Conway Chun of Vangeochem Lab Ltd. and their staff.

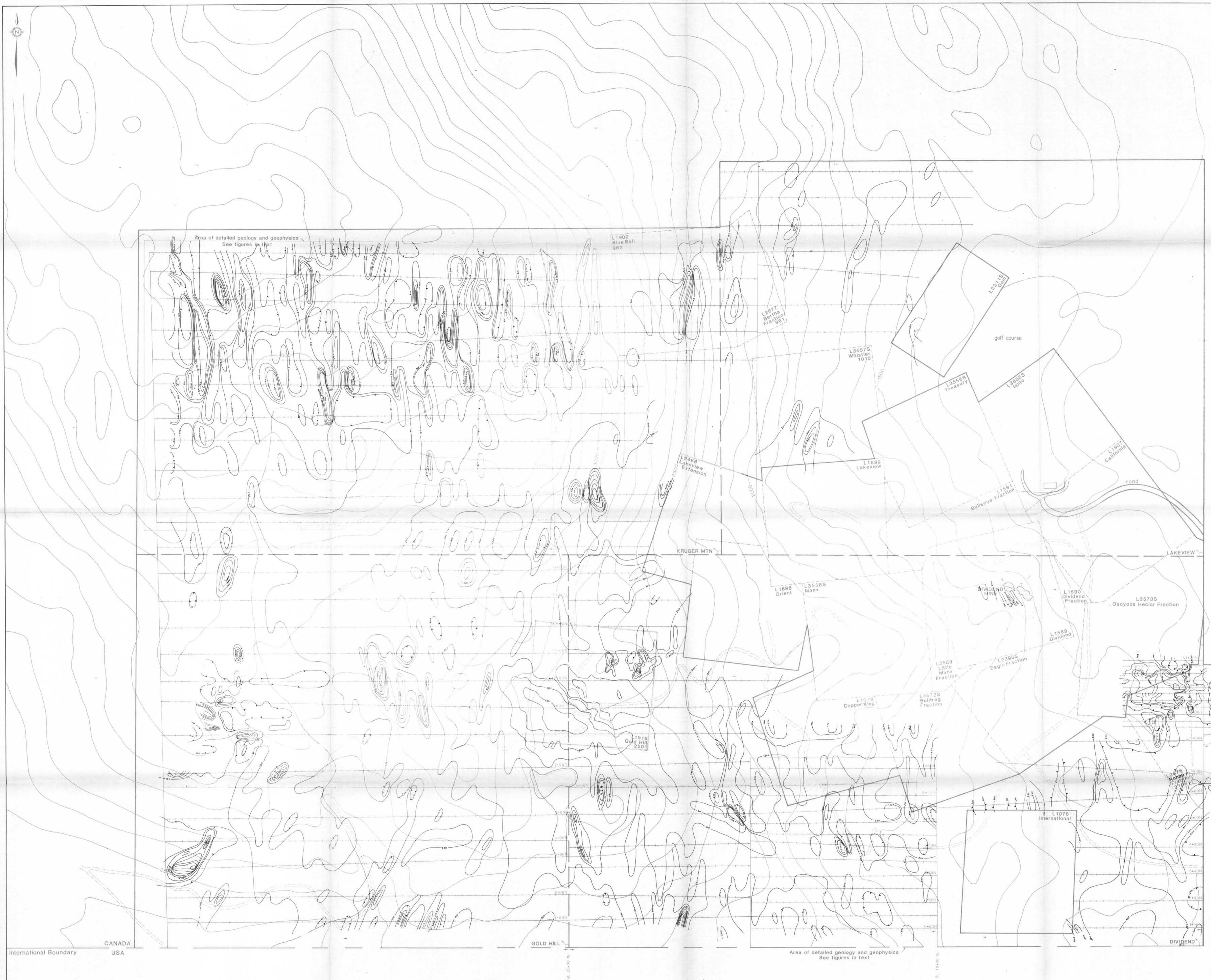
*Wade Reeves*  
Conway Chun  
VANGEOCHEM LAB LTD.


**Appendix 6**  
**Costs Incurred**


**COSTS INCURRED**

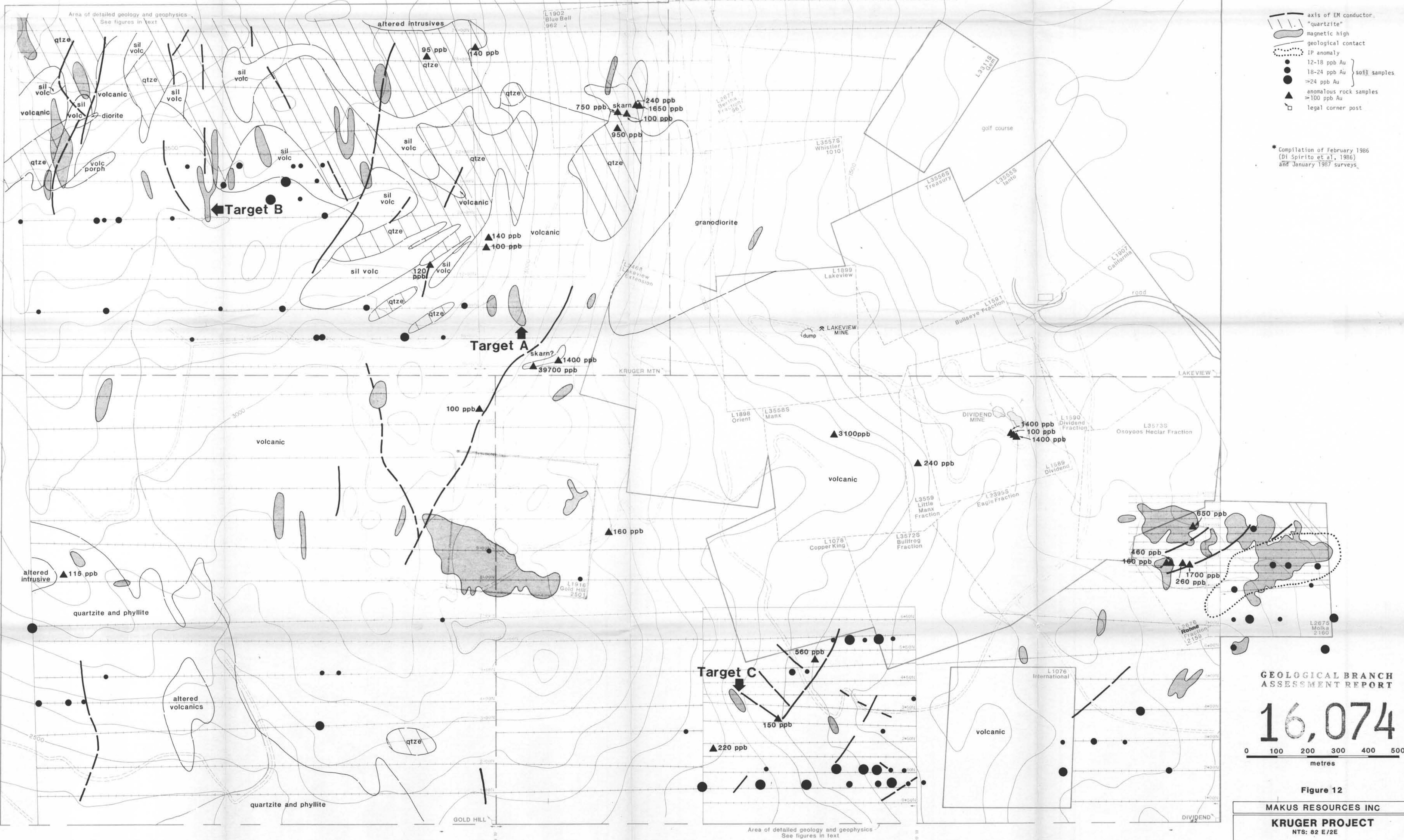
Mobilization		\$ 2,000.00
Personnel		
Supervisor	26 @ 300/day	7,800.00
Senior Geologist	25 @ 300/day	6,250.00
Geologist	25 @ 225/day	5,175.00
Geophysical Technician	22 @ 225/day	4,950.00
Technician	22 @ 200/day	4,400.00
Accommodation	118 @ 30/manday	3,540.00
Food	118 @ 30/manday	3,540.00
Fuel		736.00
Equipment		1,741.00
Vehicle Rentals		
Toyota 4X4	26 @ 100/day	2,600.00
GMC 1 ton	25 @ 75/day	1,875.00
Equipment Rentals		
VLF/EM	25 @ 30/day	750.00
Magnetometer	25 @ 30/day	750.00
Communications		350.00
Freight		230.00
Tolls		32.00
Airfare		90.00
Taxi		35.00
Geochemistry		
Soils	401 @ 14/sample	5,614.00
Rocks	84 @ 17/sample	1,428.00
Geostatistics		500.00
Report		3,300.00
Drafting		1,500.00
Secretarial and Reproduction		1,500.00
Preparation of Assessment		275.00
Reports and Documentation		
Administration, Co-ordination, Liability Insurance, etc.		3,500.00
<b>Total</b>		<b>\$ 64,461.00</b>











**Figure 12**

MAKUS RESOURCES INC

KRUGER PROJECT

NTS: 82 E/2E

AZIMUTH GEOLOGICAL  
Kazakhstan, B.C.

**Vancouver, B.C.**