

**GEOLOGICAL REPORT ON THE****NAHWITTI LAKE GROUP****Nanaimo Mining Division
British Columbia****January 19, 1968****W. G. Stevenson, P.Eng.****INTRODUCTION**

During January, 1968, I made an examination of mineralization that is exposed within a block of claims located along the north and west sides of Nahwitti Lake, 220 miles northwesterly from Vancouver and 20 miles westerly from Port Hardy.

The accompanying report is based on the data that I collected during my examination, from a review of the available literature and published maps, from discussions with engineers, geologists and prospectors who have worked in this area, and from experience gained while I was conducting geological examinations on the northern end of Vancouver Island during 1963 and 1964.

Mr. Pat Russell, Prospector, accompanied me on this examination and has provided valuable information pertaining to these mineral claims.

PROPERTY AND TITLE

Mr. Russell has staked, recorded and holds title to a block of 16 mineral claims on the north and west side of Nahwitti Lake. These are the JEAN 1-8; FTR 1-7 and the Lake Mineral claims, Record Numbers, 18101-18104; 18426-18429; 21369-21375 and 17810.

While on the property I examined three sets of the claim posts that were used to stake these mineral claims. These posts were of the proper size, were properly squared and the direction to the next set of claim posts was marked by readily recognizable blazed lines. The claim posts that I examined were the Number 1 post of the FTR 1 and 2; the number 1 post of the Lake and Jean 3 & 4 and the number 2 posts of the Jean 1 & 2, and number 1 post of Jean 3 & 4. These posts were properly tagged and the tags were properly inscribed.

As a result of my examination of these three claim posts, from my search of the records in the Department of Mines Recording Office in Vancouver and from my past experience with the prospector who accomplished the staking, I have concluded that the claims have been staked in accordance with the provisions of the Mineral Act of the Province of British Columbia, and are valid.

I have attached as appendix "E" a list of claims and the pertinent data shown on the A Forms retained by the B.C. Department of Mines.

LOCATION AND ACCESS

The claims held by Mr. Russell are centered over the west side of Nahwitti Lake, 20 miles west of the village of Port Hardy. They encompass an area of approximately 1 square mile.

Access to Nahwitti Lake can be gained by motor vehicle, float plane or by an improved road which crosses the property connecting Holberg with Port Hardy. Access across the claims at the present time can be accomplished by foot trail from the road or from the shore of Nahwitti Lake.

HISTORY

After 1900, Vancouver Island was subjected to extensive prospecting and exploration. A number of gold, silver, lead, zinc, and copper occurrences have been discovered, and many of these have been developed and brought into production. In 1957 a market for iron ore from British Columbia was opened by the Japanese and the iron ore deposits of Coast Copper, Yreka and Empire Development at the north end of Vancouver Island commenced production.

During 1963 the Geological survey of Canada released a set of airborne magnetic maps which covered the northern part of Vancouver Island. These maps sparked renewed interest in the area and a number of companies and individuals acquired mineral claims, and initiated mineral exploration programs, which have continued to date.

One of these companies, Utah Construction Mining Co., launched a major exploration program and since 1965 have concentrated their activity on the north side of Rupert Inlet. They have initiated a major diamond drilling program and the results of their drilling have remained a closely guarded secret. However under date of November 21, 1967, officials of Utah Construction released a statement that their property at the northern end of the Island may be placed in production.

In 1966 Falconbridge Nickel Mines Ltd., optioned the subject property, prepared a geological sketch and conducted a geochemical and geophysical program and put down 5 pack sack diamond drill holes. Falconbridge terminated this option during the latter part of 1966. During 1967 several hundred mineral claims have been located in the Nanaimo Mining Division at the northern end of Vancouver Island.

GEOLOGY

The coast of Northern Vancouver Island and the area from Rupert Inlet and southerly for 20 miles has been geologically mapped by members of the B.C. Department of Mines and the Geological Survey of Canada. A preliminary geological map of this area has been published by the B.C. Department of Mines and Petroleum Resources. The remainder of the north end of Vancouver Island which encompasses the area held by Mr. Russell, has not been geologically mapped by personnel from the government agencies.

The oldest rocks in the Port Hardy area are a sequence of volcanic basalts and interlayered limestone, all variably metamorphosed. These rocks are part of the Vancouver group which is of Triassic Age. The Vancouver group is subdivided into the Karmutsen volcanic formation, the oldest member, which is overlain by the Quatsino formation, a crystalline limestone horizon which is in turn overlain by the Bonanza Formation, the youngest member.

The Bonanza formation is composed of a series of thin-bedded argillites and limestone measures interbedded with volcanic tuffs and agglomerates. The rocks exposed on the property are volcanics and one or more limestone horizons with a thickness in excess of 20 feet. These rocks are probably those of the Karmutsen or possibly the Bonanza formation.

The attitude of Bedding in the sediments and layering in the volcanic series has been recognized at three localities. The strike veins are east west with a dip towards the south to north south with a dip towards the east. There is evidence of severe contortion and deformation.

An intrusive mass is exposed about ½ mile north of the claim group. I did not trace the outline of this intrusive and I do not believe it has been mapped.

An east west trending fault is projected through Nahwitti Lake. This fault separates an intrusive mass

on the south from the Vancouver Group rocks on the north.

A porphyry dike and associated shear zone is exposed on the Jean 1 and 2 and Lake mineral claims. This dike has produced a skarn zone up to 25' wide which can be traced for several hundred feet along the surface in an east west direction.

MINERALIZATION

Two distinct types of mineralization have been exposed on the property. The first is copper iron sulfide with variable amounts of magnetite in a skarn zone. This skarn zone is associated with a narrow porphyry dike that is exposed near the contact between limestone and volcanic rocks. One skarn zone which averages 10 feet in width can be traced along the surface for a distance of 200 feet. Mineralization extends easterly an additional 400 feet and it may be continuous. While on the property I collected one sample across a 6 foot width which assayed trace gold, 0.36 oz silver and 1.63% copper.

One or more parallel zones are exposed toward the south.

The second type of mineralization recognized on the property is lead zinc sulfide which has developed as a limestone replacement. The lead zinc contains variable and impressive silver values. I collected two samples of this mineralization. The first over a width of 1 1/2 feet assayed trace gold; 5.44 oz silver; 0.07% copper; 3.26% lead and 6.46% zinc. The second sample taken from a 4 inch stringer of high grade galena within a structure that is about 9' wide assayed trace gold; 130.04 oz silver; 0.04% copper; 53.24% lead and 9.18% zinc. These two samples were separated by 250 feet.

The structural pattern is such that the samples might have been collected from the same shear zone. However, cover masks the intravening geology. Other occurrences of lead zinc which have not been tested have been reported from the property.

CONCLUSIONS

1. Falconbridge Nickel mines have mapped and tested in some detail the southern half of one mineral claim. The area of the remaining 15 mineral claims has not been prospected or assessed.
2. The work by Falconbridge on the Lake mineral claim exposed copper mineralization associated with one or more skarn horizons laterally over a distance in excess of 700 feet and over a width of possibly 10 feet.
3. The high silver content in the lead zinc replacement bodies is significant. These bodies were not tested by Falconbridge. The veins are irregular and will require detailed mapping, stripping and diamond drilling for a proper assessment.
4. The airborne geophysical maps released by the G.S.C. show a magnetic high immediately north of the edge of Nahwitti Lake in an area that has not been investigated.

RECOMMENDATIONS

1. A topographic map drawn to a scale of 1" = 1000' with a contour interval of 50 feet covering the property should be prepared from existing air photography.
2. Lay out a base line across the property and establish picket lines at 400 foot intervals.
3. Prospect the claims and map the geology in areas of outcrop.

T S L LABORATORIES LIMITED
325 HOWE STREET, VANCOUVER 1, B.C.

CERTIFICATE OF ANALYSIS

Sample No.	Gold (Au)oz:ton	Silver (Ag)oz:ton	Copper (Cu) %	Lead (Pb) %	Zinc (Zn) %
5737	trace	5.44	0.07	3.26	6.46
5738	trace	0.36	1.63	-	-
5739	trace	130.04	0.04	53.24	9.18

oz:ton - Troy ounces per 2,000 lbs.

January 10, 1968.

kodiak mines ltd. (N.P.L.)

Mailing Address: Box 181, Station A, Vancouver 2, B.C.
Telephone 682-1212

LETTER TO SHAREHOLDERS

OF

KODIAK MINES LTD. (N.P.L.)

During the past exploration season Kodiak Mines Ltd. (N.P.L.) has been actively exploring its Nahwitti Lake property on northern Vancouver Island. This property, located in the extremely active Port Hardy area, was acquired in early 1968 from Mr. Pat Russell, prospector.

Numerous companies, including several of the majors, have been conducting exploration programs on northern Vancouver Island this past year following Utah Construction & Mining Co.'s announcement of a major copper find. After extensive drilling Utah has completed bulk sampling of their main deposit, and a possible production decision in the order of 20,000 ton per day expected early in 1969.

The Kodiak property lies several miles west of Utah's orebody in an area where exploration is being concentrated by both Utah and other major companies and which is likely to be the scene of considerable exploration activity in the coming years.

Work by Kodiak Mines this past season has consisted of geochemical, geophysical and geological surveys plus extensive trenching.

Previous work on the property was conducted by Falconbridge Nickel Mines Ltd., in 1966, which company explored copper-zinc-molybdenum mineralization in a skarn zone near the west end of Nahwitti Lake. A 1965 report, referring to this same area, suggested a zone 630 feet long by an average of 12 feet wide grading 1.29 - 1.49% copper, with additional values in silver, zinc, and molybdenum, indicating a possible 300,000 tons to a depth of 500 feet.

Prospecting and trenching by Kodiak Mines has been concentrated on exploring a second recently discovered skarn zone lying east of the one explored by Falconbridge. This zone, which has been exposed intermittently for 600 feet by stripping, is open for extension to both the east and west, and is probably a continuation of the zone explored earlier. Widths vary from 4 to 50 feet and values vary up to several percent copper and zinc plus 6 ounces per ton silver. Detailed sampling will soon be carried out to determine the average grades over the entire zone.

This skarn zone lies within and near the western end of a strong, 3,000 foot long copper geochemical anomaly, containing values up to 10,000 parts per million copper. Anomalous zinc and lead values have also been found coincident with the copper anomaly. This indicates an additional 2,400 feet of probable skarn zone remaining to be explored.

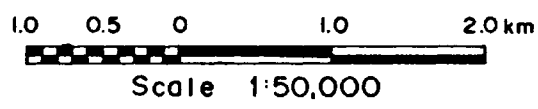
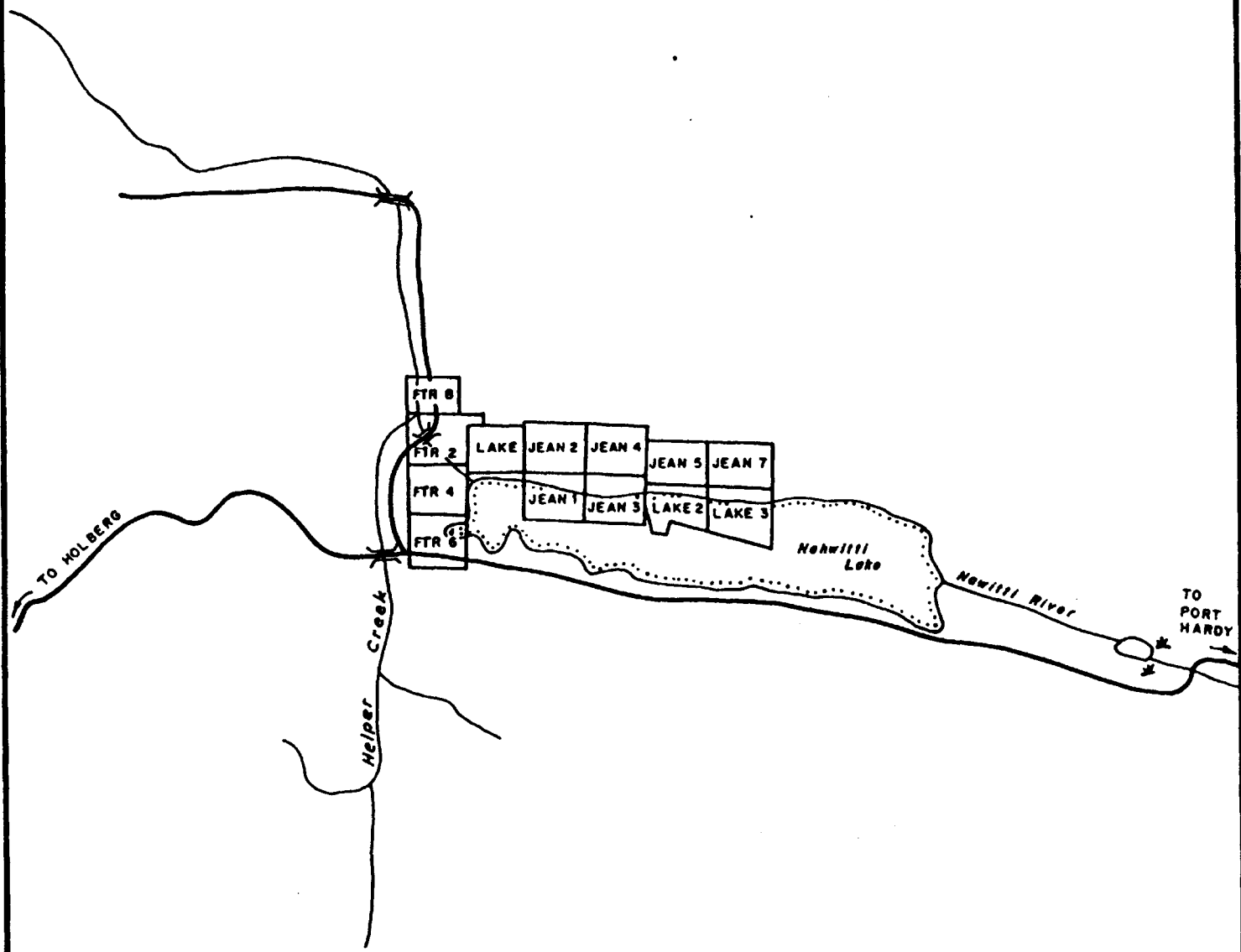
Other mineralized zones have been located on the property and from one, a select sample taken by the company's consulting geologist assayed 130.04 oz/T silver.

Also, the geochemical and geophysical surveys have indicated several additional targets which warrant further exploration.

Access to the property is excellent, with a forestry access road passing through the western portion of the claims and a recently completed logging road extending into the eastern section.

With funds made available from the current public issue, the Company intends to initiate an extensive diamond drilling program to delineate the known mineralized zones. Also, further surveys and drilling will be carried out to fully investigate the several anomalous areas indicated by the preliminary work.

The Company also retains its Starbird Ridge property in the Invermere area, where earlier work indicated widespread copper and molybdenum mineralization. Further exploration to follow up results of the previous work is planned in this area, following completion of the Nahwitti program. In the meantime, negotiations are being carried out with several major companies regarding a possible participation.



QPX MINERALS INC.			
Nahwitti Project, Nanaimo M.D., B.C.			
CLAIM MAP			
Originator LJL	Drawn	Plan No.	FIG.
Revised	Date Jan/89	NTS 92L/12M	2
MINEQUEST EXPLORATION ASSOCIATES LTD.			

1.0

INTRODUCTION1.1 Location, Access and Terrain

The Nahwitti property is located about 30 kilometres west of Port Hardy, B.C. on the north shore of Nahwitti Lake, as shown in Figure 1. The claims are centered at about 50° 43'N, 127° 52'E in N.T.S. 92L/12W. Access to the property is by the Holberg Road west from Port Hardy to the bridge over the Nahwitti River just west of the lake. From this point, a well marked trail leads to the Lake Zone showings, a distance of about one kilometre. The eastern portion of the property and the Raven Zone showings are best reached by boat. Small boats can be launched at the Forest Service campsite on Nahwitti Lake.

The topography is generally very rugged with mature forests and thick underbrush. The eastern portion of the property was previously logged and underbrush is very thick in these areas. Richmond Plywood holds the timber rights for this region and plans to log the remainder of the property in 1989.

1.2 Claim Status

The Nahwitti property consists of 13 two-post mineral claims as listed below and shown in Figure 2. The claims are held by Mr. F.T. Russell of Hefley Creek, B.C. and are under option to QPX Minerals Inc.

<u>Claim Name</u>	<u>Record Number</u>	<u>Number of Units</u>	<u>Record Date</u>	<u>Due Date Before Submission of This Report</u>
Lake	17810	1	Mar. 29, 1965	Mar 29, 1992
Jean No. 1	18101	1	July 20, 1965	July 20, 1992
Jean No. 2	18102	1	July 20, 1965	July 20, 1992
Jean No. 3	18103	1	July 20, 1965	July 20, 1992
Jean No. 4	18104	1	July 20, 1965	July 20, 1992
Jean No. 5	18426	1	Feb. 28, 1966	Feb. 28, 1990
Jean No. 7	18428	1	Feb. 28, 1966	Feb. 28, 1990
F.T.R. No. 2	21370	1	Nov. 30, 1967	Nov. 30, 1991
F.T.R. No. 4	21372	1	Nov. 30, 1967	Nov. 30, 1991
F.T.R. No. 6	21374	1	Nov. 30, 1967	Nov. 30, 1991
Lake No. 2	24670	1	May 2, 1968	May 2, 1991
Lake No. 3	24671	1	May 2, 1968	May 2, 1991
F.T.R. #8	33598	1	Mar. 22, 1971	Mar 22, 1991

1.3 Property Definition and History

The Nahwitti Lake area has been actively prospected since the early 1900's and a large number of showings are known in the region. The majority of these showings are copper-magnetite skarns and silver-lead-zinc replacement lenses hosted in the Quatsino limestone (Minister of Mines Annual Report, 1936 p. F47 - F52, Sutherland, 1966).

The present claims were staked in 1965 to cover several showings described in the above annual report (The North Shore showings). Since this time the claims have been worked by several different companies and individuals with the main emphasis on copper potential. In 1965, Silver Standard Mines Ltd. did geological mapping and magnetometry over the Lake Zone showings. Naylor (1965) summarizes this work. Falconbridge Nickel optioned the property in 1966 and did a program consisting of geological mapping, soil sampling, magnetometer and SP surveys, as well as 59 metres of packsack diamond drilling. Again, the work, which is summarized by McDougall (1967), was restricted to the Lake Zone. In 1968, Kodiak Mines Ltd. optioned the property and completed geological mapping, and magnetic and geochemical surveys over much of the property. In addition, eighty-seven metres of diamond drilling was done on the Raven Zone (Stevenson, 1968). Nippon Mining Ltd. drilled an additional three diamond drill holes on the Raven Zone in 1971 (Ichihara, 1971) and in 1978, Riocanex completed a small IP survey (Walcott, 1976). The reader is referred to Westervelt (1988) for a thorough summary of previous work on the property.

1.4 Summary of Work Done, 1988

Work covered in this report includes line cutting, geological mapping and rock chip sampling. Twelve hundred metres of cut baseline were established on the property, with 8.5 kilometres of flagged cross-lines. Line cutting was done by B. Miller, C. O'Neill, G. Vernon and A. Young. Detailed geological mapping and rock chip sampling of the grid area was done by L. Lee and G. Vernon. The project was under the direction of R.V. Longe; G.R. Peatfield provided technical advice. Field work was done from September 27th to October 15th, 1988.

2.0

GEOLOGY2.1 Regional Geology

The geology of the Nahwitti Lake area is covered by Open file 463 (Muller, 1977). The property occurs within a westerly trending belt of Middle to Upper Triassic volcanics and sediments of the Karmutsen and Quatsino Formations. A large granitic intrusive of Jurassic age is situated to the north of the claims.

2.2 Claim Group Geology

The claim group geology was mapped at a scale of 1:2000 as shown in Figure 3. Upper Triassic limestones of the Quatsino Formation overly Middle Triassic Karmutsen volcanics. The limestone - volcanic contact is not well exposed but the contorted nature of the contact suggests an irregular depositional surface. Dips are moderate to the south with the Quatsino limestones forming a dip slope to the lake. Skarn-type mineralization is common near the volcanic-limestone contact.

The limestones are generally dark grey and very fine grained but may locally be coarsely crystalline or crudely banded. Underlying the limestones is a thick succession of basaltic volcanics of the Karmutsen Formation. The basalts are typically very fine grained but may be locally porphyritic with phenocrysts of olivine or plagioclase. Feeder zones (or possibly dykes) distinguished by a coarser grain size to the basalt are common. Narrow, buff-grey, very fine grained felsic volcanic flows occur within the basalt, near the limestone contact. Several exposures of this felsite occur spatially within the limestone. This may represent a later flow, contemporaneous with the deposition of the limestone but more likely indicates a window of earlier volcanics through the limestone skin.

A series of near vertical north-south trending faults with left lateral movement cut the above sequence of rocks. Less prominent northwest-southeast trending faults are also present.

S A M P L E R E S U L T S

<u>Sample Number</u>	<u>Cu (ppm)</u>	<u>Zn (ppm)</u>	<u>Pb (ppm)</u>	<u>Ag (ppm)</u>	<u>Co (ppm)</u>
NLR 88-017	521	64	18	0.7	44
NLR 88-018	2213	36	24	1.1	532
NLR 88-019	761	35	2	0.6	156
NLR 88-020	5882	147	7	10.2	25

S A M P L E R E S U L T S

<u>Sample Number</u>	<u>Cu (ppm)</u>	<u>Zn (ppm)</u>	<u>Pb (ppm)</u>	<u>Ag (ppm)</u>	<u>Co (ppm)</u>
NLR 88-026	5578	1556	44	6.4	37
NLR 88-027	572	360	30	0.8	22
NLR 88-028	11,617	6974	89	5.5	115
NLR 88-029	3771	1878	22	2.6	43
NLR 88-030	2617	892	16	1.1	21

S A M P L E R E S U L T S

<u>Sample Number</u>	<u>Cu (ppm)</u>	<u>Zn (ppm)</u>	<u>Pb (ppm)</u>	<u>Ag (ppm)</u>	<u>Co (ppm)</u>
NLR 88-034	3227	319	13	6.3	416

S A M P L E R E S U L T S

<u>Sample Number</u>	<u>Cu (ppm)</u>	<u>Zn (ppm)</u>	<u>Pb (ppm)</u>	<u>Ag (ppm)</u>	<u>Co (ppm)</u>
NLR 88-038	11,895	303	16	8.4	183
NLR 88-039	15,273	339	16	11.4	294
NLR 88-040	8,163	234	30	6.6	138
NLR 88-041	11,330	53	74	12.1	131
NLR 88-042	8,705	239	16	5.7	115

S A M P L E R E S U L T S

<u>Sample Number</u>	<u>Cu (ppm)</u>	<u>Zn (ppm)</u>	<u>Pb (ppm)</u>	<u>Ag (ppm)</u>	<u>Co (ppm)</u>
NLR 88-052	64	126	23	0.1	15
NLR 88-053	93	144	23	0.3	14
NLR 88-054	93,947	99,999	431	150.4	645
NLR 88-055	31,571	99,999	4775	60.9	246
NLR 88-056	191	1721	67	0.4	2
NLR 88-058	33,565	75,214	158	15.7	150
NLR 88-059	5317	3795	503	3.3	21
NLR 88-060	5057	41,600	5516	20.0	10

Sample No.	Cu ppm	Zn ppm	Pb ppm	Ag ppm	Co ppm
NLR 88-035	26	15	6	0.1	1
NLR 88-036	145	35	2	0.3	9
NLR 88-037	456	49	16	0.1	66
NLR 88-068	758	142	6	0.6	48
NLR 88-069	20	120	10	0.1	2
NLR 88-073	725	369	10	0.6	553
NLR 88-074	43,937	1109	16	30.9	748
NLR 88-075	16,691	2461	12	5.7	760
NLR 88-076	5152	461	11	5.1	1342
NLR 88-077	1066	51	16	0.2	69
NLR 88-078	4618	440	244	1.5	4907
NLR 88-079	798	37	5	0.5	55
GVN 88-400	571	82	8	0.4	18
GVN 88-401	8205	6166	13	5.0	193
GVN 88-404	80	87	4	0.1	27

S A M P L E R E S U L T S

<u>Sample Number</u>	<u>Cu (ppm)</u>	<u>Zn (ppm)</u>	<u>Pb (ppm)</u>	<u>Ag (ppm)</u>	<u>Co (ppm)</u>
NLR 88-061	1809	2372	169	1.6	18
NLR 88-062	1483	2008	66	0.9	28
NLR 88-063	169	576	20	0.1	5
NLR 88-064	2482	1648	172	2.8	47
NLR 88-065	1270	5918	23	0.9	34
NLR 88-066	28,629	6058	38	13.2	201
NLR 88-067	284	2186	503	1.2	14