2510

GEOLOGICAL AND GEOCHEMICAL EXAMINATION

OF

ZETT, EAGLE AND JAY CLAIM GROUPS

MARA, B.C.

(50° 119° NE)

D. Arscott
Associated Geological Services Ltd.,

for

A. Beaudoin and Associates

13th to 22nd August, 1969

View from North End Ultramafic to-
wards Mara Lake.

TABLE OF CONTENTS

INTRODUCTION

At the request of A. Beaudoin and Associates a geological examination of the Zett, Eagle, and Jay claim groups was carried out by Associated Geological Services Ltd., between the 13th and 22nd of August, 1969.

The examination included both reconnaissance and detailed work in geological mapping, soil sampling and silt sampling.

LOCATION AND ACCESS

The three adjoining claim groups lie at an average altitude of 4200 feet, 3 miles southeast of Mara, and 30 miles North-northeast of Vernon, B.C.

Access is via logging roads from Mara on Highway 97A.

ORGANIZATION OF FIELD WORK

The claim location lines, and a base line joining them, were marked at 100 foot intervals, and were sufficiently well located that the whole property could be tied into a single grid system. All grid points were established by chain and compass, and the locations marked with red flagging.

Soil samples were dug from just below the humus with shovels, and transferred to paper bags, a complete record being made of soil type, and drainage direction for each sample.

The samples were sun dried and the minus 80 mesh fraction analyzed by Bondar-Clegg and Company of North Vancouver, using the atomic absorption method.

Silt samples were similarly treated.

The rock samples taken were of the grab type, but may be considered representative, in that it is impossible to determine useful metal content in hand specimens (very fine sulphide disseminations).

In all phases of sampling and mapping, emphasis was placed on areas already known to be mineralized. These were covered by detail (400 foot by 100 foot) grids. The remainder of the property was mapped and prospected on claim lines, road cuts, and creek beds.

GEOLOGY

The claims are underlain by high grade gneisses of the Monashee Group, of Precambrian age. These are intruded by a diorite stock, and by ultramafic bodies of uncertain age.

Lithology:

The rock types seen during mapping and prospecting were designated, and are described as follows:

Granite gneiss	-	white, medium to coarse grained, grading into, and interbedded with, white pegmatite. The gneiss resembles a granite, but has a mild foliation, as a result of aligned biotite crystals. (0 to 10% mafic). A reddish weathering is very common.
Feldspar gneisses	-	medium grained, 10 to 50% mafic, strongly banded. Mafic constituents are hornblende and/or biotite.
Feldspar hornblende gneiss) Feldspar biotite schist)		medium grained, 50 to 75%. mafic, strongly banded.
Hornblende gneiss	-	medium grained, over 75% hornblende, with feldspar. Often quite magnetic.

Ultramafic	-	dark green peridotite to pyroxenite. In the most common form, coarse pale green pyroxene (enstatite?) crystals lie in a dark green olivene-pyroxene groundmass. One almost black, fine-grained variety of the ultramafics has been identified as hazelwoodite. All varieties are moderately magnetic, due to the presence of disseminated pyrrhotite.
Diorite	-	medium grained, extremely uniform, 25 to 40% mafic, with a small proportion of potassium feldspar. A very faint flow foliation is present in a few places.
Limestone	-	white crystalline, occurring in small lenses in the gneisses up to 100 feet wide, and consisting largely of calcite and diopside.
Argen gneiss	-	a granitic gneiss with "eyes" of white feldspar up to 1/2" in length.

Alteration:

Alteration is mainly present close to large shear zones, but is quite widespread at the south end of the property (Eagle claims). It is frequently intense enough to make the original rock type unidentifiable.

Chlorite is the most common alteration product, but extensive kaolinization has occurred in some of the more feldspathic rocks (e.g. near road station 34, - 44 W/4S) the north end ultramafic plug (8 W /90N), and the diorite (except at contacts), are essentially unaltered. The south end ultramafics are highly chloritized, and have developed a talc schist where sheared at road station 16.

Metamorphism:

The gneisses are the product of regional high grade metamorphism, as shown by the occasional presence of certain indicator minerals, such as red-brown garnet, and sillimanite.

There is no evidence of contact metamorphism, although there is considerable contortion of gneisses close to the diorite stock, and some apparent injection of diorite along the gneissosity, no new minerals have been formed. This, and the essentially isotropic nature of the diorite, show the intrusion to have occurred after the regional metamorphism.

Structure:

The overall trend of the gneisses is fairly consistently east-west.

Metamorphism has been strong enough to obliterate all original structure. A few drag folds and lineations were mapped but are in insufficient quantity to interpret the regional structure.

Major shearing is common, particularly along the larger creeks (NE trending). Minor faults and shears are abundant.

MINERALIZATION

1. Nickel

Nickel is present in sulphide form, associated with pyrrhotite, as very fine disseminations in most of the ultramafic rocks on the property. The occurrences are as follows:-

a) North end ultramafic - this is an irregularly shaped plug outcropping over an area of 1000 feet by 500 feet, and carrying very consistent nickel assays. Seven representative grab samples averaged 0.28% nickel. There is no evidence of zoning, i.e. no changes of texture or nickel content from the edges to the centre of the body.

Actual size of the ultramafic may be much larger, judging by the soil sample results in the area.

There may be some contributing silver values (see spectrographic analysis on sample 1052).

b) South end ultramafics - the area covered by ultramafics in this case is much less clear due to the heavy overburden, and strong alteration encountered. It is clear, however, that two bands of ultramafic cross the south access road and carry some nickel (0.18% over 10 feet +, at road station 20, and 0.10% over 15 feet + at station 16). Also, a pinkish highly altered rock of granitic appearance at station 28, carries 0.19% nickel over 25 feet +. Soil sampling suggests that the nickel-bearing body through station 16 may be a dyke 200 feet wide and over 2000 feet in length.

Mapping showed more ultramafics to the north of this area across Bongard Creek, but, because of intense alteration, the rock identity is in some doubt.

c) one thousand feet NE of 0N, 42E some ultramafic is exposed in the sides of a creek, with associated float along a hundred feet of the old sheep trail. A sample of this rock (hazelwoodite) assayed = 0.26% nickel.

d) some ultramafic at 84N 59E may or may not be in place. It is magnetic and almost certainly carries nickel.

e) the diorite stock in the Jay claim group carries very minor and erratic quantities of nickel.

2. Copper

Very little copper is present on the property. The diorite was hoped to be a possible carrier of copper, especially at its altered and contorted contacts, but no significant amounts of copper were discovered.

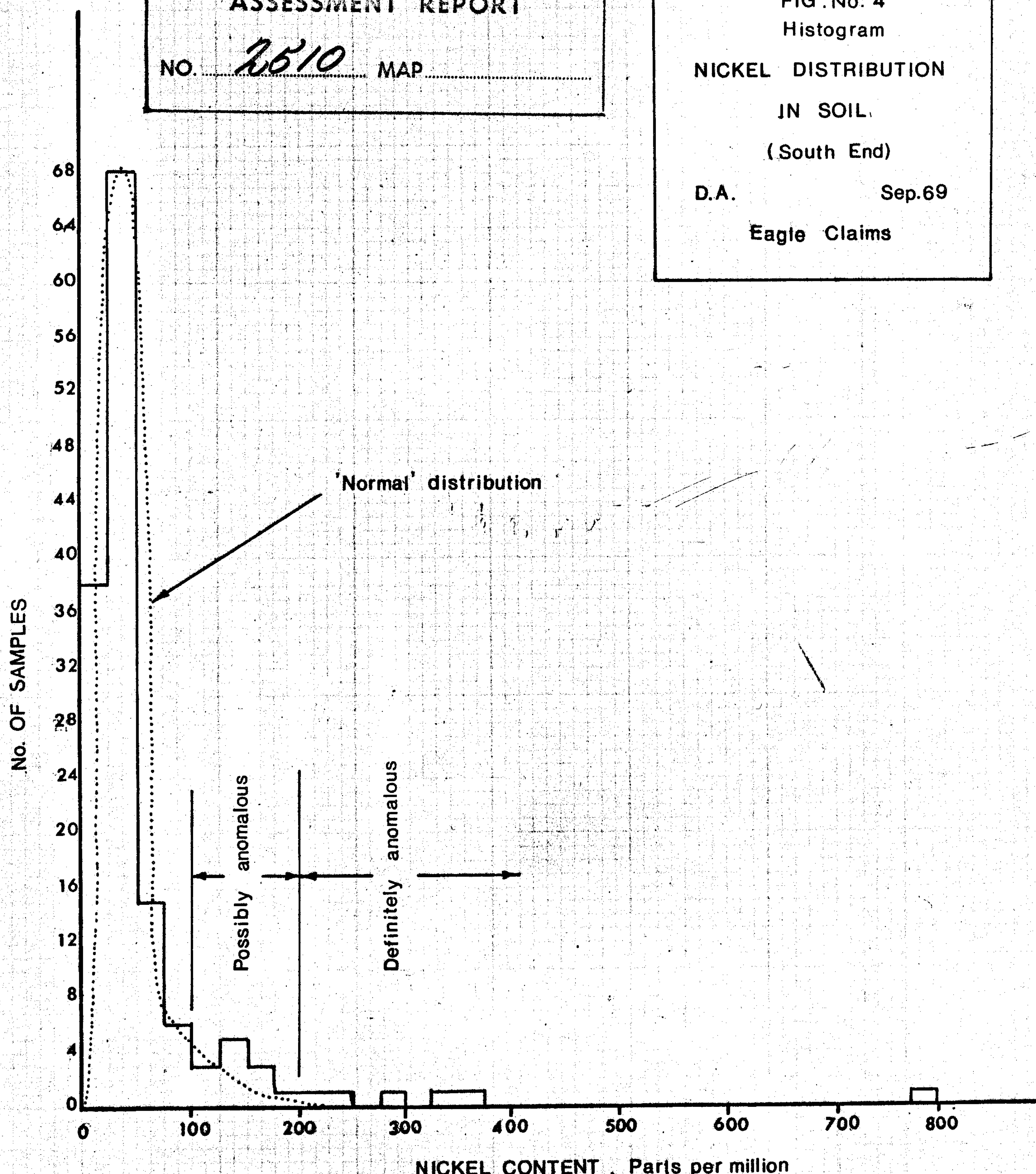
GEOCHEMISTRY

Soil Sampling:

The soil sampling results correlate extremely well with the mapping, especially at the north end.

This correlation, and statistical analysis, (see Figs. 3 and 4), give a threshold value of between 100 and 200 parts per million nickel. Any soil carrying over 200 parts per million is definitely anomalous. In fact, the following precise comparison can be made.

FIG. No. 4
Histogram
NICKEL DISTRIBUTION
IN SOIL
(South End)
D.A. Sep.69
Eagle Claims



Station	Rock Sample Assay	Soil Contents
8W/88N	0.27%	1290 ppm
8W/91N	0.24%	300 ppm
12W/87N	0.20%	61 ppm

Two important facts have originated from the soil sampling:

a) The north end ultramafic plug almost certainly extends to the north under overburden. (See Figure 2.), and is open, to a lesser degree to the west.

b) The south end anamaly is similarly open to the north east.

In view of the lesser overburden over the diorite, and the low rock assay results, the soil anomaly over the diorite is considered insignificant, both for nickel and for copper.

Soil type has very little effect on soil metal content.

Silt Sampling:

Nickel content in the silts proved to be quite consistent in areas where two samples were taken close together, which helps to confirm field and laboratory techniques.

It is suspected that the nickel is not very mobile in this area, as nickel from the south end ultramafic does not show up in Bongard Creek 500 feet downslope.

The threshold value appears to lie at about 60 parts per million nickel, and the following highs are noted:

a) A single high of 176 ppm on a stream draining the diorite area. In view of the lack of known nickel in that area, this may result from some local ultramafic float.

b) A single value of 70 ppm on south Ptamigan Creek, where this crosses one of the claim location lines. This creek has not been prospected.

c) Generally increasing values on the North Ptamigan, up to where this crosses the main access road. Highest values are in the 60 to 70 ppm range, and lie just downstream from a graphite showing represented by rock sample 1076. As that sample shows only a trace of nickel, some nickel source may lie above the showing.

SUMMARY

Geological mapping has partially outlined nickel bearing ultramafics, and geochemical sampling has suggested extensions under overburden.

The best ultramafic body so far investigated has surface dimensions in excess of 1000 feet by 500 feet, with a consistent nickel content averaging 0.28%.

Strong alteration and irregular contacts do not permit a good evaluation of the ultramafics at the south end of the property. They may occupy a larger area, but grades are somewhat lower (0.18%, 0.19% Nickel).

Soil sampling provides an excellent field tool for further work.

CONCLUSIONS AND RECOMMENDATIONS

Ultramafics on the property carry significant nickel values. A large tonnage of ultramafics, at or near surface, is required to make these values economic.

Emphasis in any further work should be placed on locating more ultramafics, in the same region.

The exact tonnage to be aimed for is very difficult, to assess but should be high, for the following reason: Market conditions may change radically within 3 to 5 years, when the metallurgical process for extracting nickel from silicates is perfected. At that time, large quantities of low grade silicate - nickel will be competing on the market with the sulphide-nickel sources.

With this in mind, I would recommend a mainly regional approach to further exploration, along the following lines:

1. Air magnetometer survey, flight line spacing and altitude should be sufficient to pick up surface ultramafic bodies of at least 500 feet in width. NS flight lines would cross the ultramafics at a sufficiently good angle for interpretation and would be more economic to fly (roughly parallel to the topographic contours). This would make possible more precise altitude control, and facilitate anomaly interpretation (better resolution).

2. A small amount of detail work on the Zett and Eagle claims. Soil sampling and related mapping should be used to check the extensions of the soil anomalies.

3. Follow up work to the air magnetometer survey, in the form of prospecting and soil sampling.

APPENDICES

APPENDIX I

STATEMENT OF QUALIFICATIONS

I, David Philip Arscott, with business and home address in Vancouver, am a Professional Engineer registered in the Province of British Columbia.

I have had three years experience in various phases of mineral exploration in Canada, with emphasis on geochemistry and geological mapping, and personally supervised all work described in the accompanying report.

To the best of my knowledge, the statements of costs are true and accurate.

David Arscott

David Philip Arscott, M. Sc. P. Eng.,

Vancouver, British Columbia.

ASSOCIATED GEOLOGICAL SERVICES LTD. / ~~807 Bank of Canada Bldg., Vancouver 1, B.C. / Telephone (671) 682-4314~~

Consulting / Property Examinations / Geological Surveys / Geo-chemical Surveys / Mine Development / Project Management

#17, 558 Howe Street, Vancouver 1, B.C.

APPENDIX II

A. Beaudoin,
Marine Building,
355 Burrard Street
VANCOUVER 1, B.C.

INVOICE NO. 254

September 15, 1969

RE: MARA LAKE PROJECT

Period August 1 to 31, 1969

Salaries	2,111.45
U.I.C.	17.87
Pension Plan	34.00
4% Holiday Pay	84.45
4½W.C.B.	89.73
Expenses T.D.Wilkinson	1.20
Van Cal	7.09
Bondar Clegg	381.40
T.S.L.	290.00
Office Services	30.00
	3,047.19
ADD 15%	457.08

$3,504.27

See Sept. 30 Invoice

18.

ASSOCIATED GEOLOGICAL SERVICES LTD. / ~~807, Bank of Canada Bldg., Vancouver 1, B.C. / Telephone (671) 682-4314~~

Consulting / Property Examinations / Geological Surveys / Geo-chemical Surveys / Mine Development / Project Management

#17, 558 Howe Street, Vancouver 1, B.C.

Oct 2nd
- Armand will send some money week of Oct 6

A. Beaudoin,
Marine Building,
355 Burrard Street,
Vancouver 1, B.C.

INVOICE NO. 275
September 30, 1969

RE: MARA LAKE PROJECT

Period September 1 to 15, 1969

Salaries	458.75	
U.I.C.	1.81	
Pension Plan	4.26	
4% H.Pay	18.35	
4¼% W.C.B.	19.49	
Office Services	25.75	
Rileys	35.76	
B.C.Industries	4.10	
Zettergren Bros	110.00	
Expenses		
H.Madeisky	2.65	
T.D.Wilkinson	1.00	
	681.92	
ADD 15%	102.29	$784.21
Balance owing Invoice 254		3,504.27
Less advance		1,000.00
TOTAL DUE AND OWING		$3,288.48

XXXXXXXXXXXXXX
#17 - 558 Howe Street

XXXXX
688-4745

INVOICE NO. 282

October 20, 1969

Mr. A. Beaudoin,
#1424 - 355 Burrard St.,
Vancouver 1, B. C.

RE: MARA PROJECT

Period September 16 to 30, 1969

Salaries	$ 81.96	
W.C.B. 4½%	3.42	
Holiday Pay 4%	3.28	
U.I.C.	.23	
C.P.P.	.35	
C.P. Airlines	66.00	
B. C. Telephone	2.95	
Office Services	25.75	
Prints	12.14	
Add. 15% = $ 29.41	$ 196.08	= $ 225.49
Balance Owing from Inv. #275		3,288.48
TOTAL DUE AND OWING		$ 3,513.97

Paid 21 Oct 69

APPENDIX IIa

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.
TO WIT:

In the Matter of

I, DAVID PHILIP ARSCOTT

of 1924 McNICHOL AVENUE, VANCOUVER 9,

in the Province of British Columbia, do solemnly declare that the following list represents the exact wages paid for work by Associated Geological Services Ltd. on the Zett, Eagle and Jay Claim groups.

Employee	Position	Address	No. days worked	Wages
David Arscott	Geologist	1924 McNichol Ave. Vancouver, B.C.	20½	898.10
John Wilson	Soil Sampler	201-1122 Gilford Str. Vancouver, B.C.	19	441.25
William Zettergreen	Soil Sampler	Mara, B.C.	13	325.00
Leslie Zettergreen	Soil Sampler	Mara, B.C.	13	325.00
Albert Zettergreen	Soil Sampler	Mara, B.C.	11	275.00
Tom Drews	Draughtsman	"Tandean", Coal Harbour	7½	166.71
Peter Dunsford	Draughtsman	2564 Panarama Drive North Vancouver, B.C.	2½	87.50
Hans Madeisky	Assistant Geologist	2311 Cyprus Street Vancouver, B.C.	3 3/4	112.00
Jiro Hamaguchi	Expediter	1475 Tyrol Ave. West Vancouver, B.C.	½	10.23
Pat Fitzgibbon	Expediter	1924 McNichol Ave.	½	11.37
		TOTAL		$ 2,652.16

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City of Vancouver, in the Province of British Columbia, this 21 day of May 1970, A.D.

David Arscott

Joan Turner

A Commissioner for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia. Sub-mining Recorder

APPENDIX III

TSL Laboratories Limited

325 HOWE STREET - VANCOUVER 1, B.C.

TELEPHONE 688-3504

ASSAYERS
CHEMISTS
GEOCHEMISTS

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM ASSOCIATED GEOLOGICAL SERVICES LTD.

REPORT NO. V-6427

SAMPLE(S) OF ROCK Submitted on August 26, 1969.

Sample No.	Copper (Cu)%	Zinc (Zn)%	Nickel (Ni)%	
1052	----	----	0.39	- "peak"
1053	----	----	0.27	8W/88N
1054	----	----	0.26	90N/9W
1055	----	----	0.24	91N/8W
1056	----	----	0.25	89N/1W
1057	----	----	0.35	89N/8W black
1058	----	----	0.20	88N/12W
1059	0.01	trace	----	
1o60	trace	----	trace	
1061	0.04	----	trace	
1062	trace	----	0.01	
1063	trace	----	trace	
1064	trace	----	trace	
1065	trace	----	trace	
1066	----	----	0.26	Brash Cr.? black

DATE August 28, 1969.

SIGNED [signature]

PULP AND REJECTS DISCARDED AFTER 3 MONTHS ● DIVISION OF TECHNICAL SERVICE LABORATORIES

T S L

Laboratories Limited

325 HOWE STREET - VANCOUVER 1, B.C.
TELEPHONE 688-3504

ASSAYERS
CHEMISTS
GEOCHEMISTS

CERTIFICATE OF ANALYSIS

REPORT NO. V-6428

SAMPLE(S) FROM ASSOCIATED GEOLOGICAL SERVICES LTD.

SAMPLE(S) OF ROCK

Sample No.	Gold (Au)oz:ton	Silver (Ag)oz:ton	Copper (Cu)%	Nickel (Ni)%	Molybdenum (Mo)%
1067	trace	trace	trace	----	----
1068	trace	trace	trace	0.10	----
1069	trace	trace	trace	0.06	----
1070	trace	trace	trace	0.01	----
1071	----	----	----	0.18	----
1072	----	----	trace	0.19	----
1073	----	----	----	0.02	----
1074	----	----	----	trace	----
1075	trace	trace	trace	trace	----
1076	trace	trace	trace	----	0.01
1077	----	----	0.07	0.01	----

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

DATE September 15, 1969.

SIGNED R.B. Fletcher

PULP AND REJECTS DISCARDED AFTER 3 MONTHS

DIVISION OF TECHNICAL SERVICE LABORATORIES

23.

TSL Laboratories Limited

325 HOWE STREET - VANCOUVER 1, B.C.

TELEPHONE 688-3504

ASSAYERS
CHEMISTS
GEOCHEMISTS

CERTIFICATE OF ANALYSIS

Semiquantitative Spectrographic

SAMPLE(S) FROM ASSOCIATED GEOLOGICAL SERVICES LTD.

REPORT NO. V-6427

SAMPLE(S) OF ROCK

	Sample 1052	Sample	Sample		Sample 1052	Sample	Sample
Antimony	–			Phosphorus	–		
Arsenic	–			Platinum	–		
Barium	–			Rhenium	X		
Beryllium (BeO)	–			Rhodium	–		
Bismuth	–			Rubidium	X		
Boron	–			Ruthenium	–		
Cadmium	–			Silver	.1 oz t		
Cerium (CeO_2)	–			Strontium	.01%		
Caesium	X			Tantalum (Ta_2O_5)	–		
Chromium	.5-1%			Tellurium	–		
Cobalt	.03%			Thallium	–		
Columbium (Cb_2O_5)	–			Thorium (ThO_2)	–		
Copper	.01%			Tin	–		
Gallium	–			Titanium	.01%		
Germanium	–			Tungsten	–		
Gold	–			Uranium (U_3O_8)			
Hafnium	–			Vanadium	.005%		
Indium	–			Yttrium (Y_2O_3)	–		
Iridium	–			Zinc	<.01%		
Lanthanum (La_2O_3)	–			Zirconium (ZrO_2)	<.001%		
Lead	.01%			ROCK FORMING METALS			
Lithium (Li_2O)	–			Aluminum (Al_2O_3)	.5-1%		
Manganese	.05%			Calcium (CaO)	.2%		
Mercury	–			Iron (Fe)	MH		
Molybdenum	.001%			Magnesium (MgO)	MH		
Neodymium (Nd_2O_3)	–			Silica (SiO_2)	H		
Nickel	.5%			Sodium (Na_2O)	.05-.1%		
Palladium	–			Potassium (K_2O)	–		

Figures are approximate:

CODE

H — High — 10 — 100% approx.
MH — Medium High — 5 — 50% approx.
M — Medium — 1 — 10% approx.
LM — Low Medium — .5 — 5% approx.
L — Low — .1 — 1% approx.
TL — Trace Low — .05 — .5% approx.
T — Trace — .01 — .1% approx.
FT — Faint Trace — approx. less than .01%.
PT — Possible Trace — Presence not certain.
– — Not Detected — Elements looked for but not found.
X — Not looked for

DATE September 3, 1969.

SIGNED [signature]

DIVISION OF TECHNICAL SERVICE LABORATORIES

24.

TSL Laboratories Limited

325 HOWE STREET - VANCOUVER 1, B.C.
TELEPHONE 688-3504

ASSAYERS
CHEMISTS
GEOCHEMISTS

CERTIFICATE OF ANALYSIS

Semiquantitative Spectrographic

SAMPLE(S) FROM ASSOCIATED GEOLOGICAL SERVICES LTD.

REPORT NO. V-6428

SAMPLE(S) OF ROCK

	Sample 1068	Sample 1076	Sample		Sample 1068	Sample 1076	Sample
Antimony	–	–		Phosphorus	–	–	
Arsenic	–	–		Platinum	–	–	
Barium	.005%	.2%		Rhenium	X	X	
Beryllium (BeO)	–	–		Rhodium	–	–	
Bismuth	–	–		Rubidium	X	X	
Boron	–	–		Ruthenium	–	–	
Cadmium	–	–		Silver	<.1 oz:t	<.1 oz:t	
Cerium (CeO_2)	–	–		Strontium	.02%	.2%	
Caesium	X	X		Tantalum (Ta_2O_5)	–	–	
Chromium	.1%	.01%		Tellurium	–	–	
Cobalt	–	–		Thallium	–	–	
Columbium (Cb_2O_5)	–	–		Thorium (ThO_2)	–	–	
Copper	.003%	.001%		Tin	–	–	
Gallium	–	.002%		Titanium	.1%	LM 1%	
Germanium	–	–		Tungsten	–	–	
Gold	–	–		Uranium (U_3O_8)	–	–	
Hafnium	–	–		Vanadium	.02%	.03%	
Indium	–	–		Yttrium (Y_2O_3)	–	.002%	
Iridium	–	–		Zinc	–	–	
Lanthanum (La_2O_3)	–	–		Zirconium (ZrO_2)	–	.01-.02%	
Lead	.005%	.03%		ROCK FORMING METALS			
Lithium (Li_2O)	–	–		Aluminum (Al_2O_3)	M 4%	MH	
Manganese	.03%	.01%		Calcium (CaO)	LM 1-2%	.5-1%	
Mercury	–	–		Iron (Fe)	LM 1-2%	LM 2%	
Molybdenum	–	.003%		Magnesium (MgO)	MH	LM 2%	
Neodymium (Nd_2O_3)	–	–		Silica (SiO_2)	MH	H	
Nickel	.04%	.01%		Sodium (Na_2O)	.1-.2%	M 5%	
Palladium	<.005 oz:t	<.005 oz:t		Potassium (K_2O)	–	LM 3%	

Figures are approximate:

CODE

H — High	— 10 — 100% approx.	LM — Low Medium	— .5 — 5% approx.	FT — Faint Trace	— approx. less than .01%.
MH — Medium High	— 5 — 50% approx.	L — Low	— .1 — 1% approx.	PT — Possible Trace	— Presence not certain.
M — Medium	— 1 — 10% approx.	TL — Trace Low	— .05 — .5% approx.	— — Not Detected	— Elements looked for but not found.
		T — Trace	— .01 — .1% approx.	X — Not looked for	

DATE September 4, 1969.

SIGNED [signature]

DIVISION OF TECHNICAL SERVICE LABORATORIES

BONDAR-CLEGG & COMPANY LTD.

geologists • geochemists • analysts

1500 PEMBERTON AVENUE, NORTH VANCOUVER, B.C.
PHONE 988-5315

APPENDIX IV

25.

GEOCHEMICAL LAB REPORT

No: 29-328

Extraction: HNO_3 -HCl

Method: Atomic Absorption

Fraction Used: -80 mesh

From: Associated Geological Services

Date: September 2 1969

Analyst: D.M.

SAMPLE NO.		Ni ppm	Cu ppm	SAMPLE NO.	Ni ppm	Cu ppm	REMARKS
0E 84N		13	Red. bn loam	12W 86N	48	Lt. bn silt	ND - Not Detected
0E 85N		18	Gy. loam	12W 87N	61	Bn. loam	Soil Descriptions
0E 86N		46	Bn. loam	12W 88N	1260	Black humous	Bn - brown
0E 87N		79	Lt. bn silt	12W 89N	260	Gy. sndy loam	Lt. - light
0E 88N		57	"	12W 90N	890	Red loam	Gy. - grey
4W 84N		45	Bn. loam	12W 91N	235	Bn loam	Sndy - sandy
4W 85N		26	Gy. Sndy loam	12W 92N	70	Lt. bn loam	cl - clay
4W 86N		250	Bn. loam	12W 93N	68	"	
4W 87N		39	Gy. silt	12W 94N	30	Gy silt	
4W 88N		140	Gy. silt	16W 84N	38	"	
4W 89N		145	Red bn. loam	16W 85N	280	Bn loam	
4W 90N		61	Bn. loam	16W 86N	49	Lt. bn. loam	
4W 91N		113	Bn. loam	16W 87N	40	Gy. bn silt	
4W 92N		65	Lt. bn. loam	16W 88N	75	Bn. loam	
4W 93N		33	Gy silt	16W 89N	60	Red loam	
4W 94N		40	Lt. bn loam	16W 90N	33	Bn. loam	
8W 84N		80	Red bn loam	16W 91N	35	Red. bn. loam	~~Red. bn. loam~~
8W 85N		300	Grey loam	16W 92N	75	Bn. loam	~~Grey "~~
8W 86N		97	Brown loam	16W 93N	230	"	~~Brown "~~
8W 87N		220	Lt. bn. silt	16W 94N	39	Red. bn loam	
8W 88N		1290	"	28W 0N	19	gy. sndy silt	
8W 89N		425	bn. loam	28W 1N	28	sndy clay	
8W 90N		1380	gy. sndy loam	28W 2N	30	sndy gravel	
8W 91N		300	gy silt	28W 3N	34	"	
8W 92N		700	"	28W 4N	30	sndy clay	
8W 93N		540	"	28W 5N	44	"	
8W 94N		580	black loam	28W 6N	33	"	
12W 82N		58		28W 7N	30	"	
12W 83N		83		28W 8N	20	Lt. bn Sndy. cl	
12W 84N		69	Bn loam	28W 9N	32	"	
12W 85N		73	Bn. sndy loam	28W 10N	36	"	

GEOCHEMICAL LAB REPORT

SAMPLE NO.		Ni ppm	Cu ppm	SAMPLE NO.	Ni ppm	Cu ppm	REMARKS
28W 1S		69	brown gy. snd	36W 5N	42	Gy sndy clay	
28W 2S		80	brown loam	36W 6N	34	gy clay	
28W 3S		10	gy silt	36W 7N	18	dk. bn clay	
28W 4S		50	gy. bn silt	36W 8N	60	lt. bn loam	
28W 5S		85	gy silt	36W 9N	30	"	
28W 6S		450	"	36W 10N	64	"	
28W 7S		145	"	36W 1S	245	gy. silt	
28W 8S		140	gy. sand	36W 2S	39	bn. silt	
28W 9S		195	sand & bk. silt	36W 3S	30	reddish bn. silt	
28W 10S		28	gy silt	36W 4S	29	"	
32W 0N		29	bn. loam	36W 5S	14	bn. sndy silt	
32W 1N		15	Red bn. snd-cl.	36W 6S	35	bn. fine sand	
32W 2N		10	"	36W 7S	22	"	
32W 3N		95	"	36W 8S	36	bn. silt	
32W 4N		28	"	36W 9S	38	gy. silt	
32W 5N		12	"	36W 10S	27	bn. fine sand	
32W 6N		45	clay	40W 0N	29	bn. silt	
32W 7N		30	Sndy. clay	40W 1N	145	Black clay	
32W 8N		34	"	40W 2N	75	"	
32W 9N		28	"	40W 3N	32	Lt. bn loam	
32W 10N		62	Redish sndy clay	40W 4N	13	"	
32W 1S		50	~~Sndy clay~~ bn lm	40W 5N	28	Red bn. loam	
32W 2S		71	bn. sndy loam	40W 6N	130	Lt. bn. loam	
32W 3S		18	gy silt	40W 7N	28	"	
32W 4S		205	bn. gy silt	40W 8N	44	"	
32W 5S		160	dk. gy. silt	40W 9N	40	"	
32W 6S		170	bn. loam	40W 10N	30	"	
32W 7S		170	bn. gy sndy. silt	40W 1S	13	bn. silt	
32W 8S		17	gy. bn silt	40W 2S	41	"	
32W 9S		57	gy. silt	40W 3S	32	lt. bn. sndy silt	
32W 10S		14	bn. silt	40W 4S	25	lt. bn. silt	
36W 0N		340	dk. gy silt	40W 5S	105	"	
36W 1N		360	Lt. bn sndy cl	40W 6S	55	bn silt	
36W 2N		790	"	40W 7S	97	"	
36W 3N		79	"	40W 8S	140	"	
36W 4N		24	Red bn sndy cl	40W 9S	69	gy. sndy loam	

GEOCHEMICAL LAB REPORT

SAMPLE NO.		Ni ppm	Cu ppm	SAMPLE NO.	Ni ppm	Cu ppm	REMARKS
40W 10S		39		46E 83N	88	137	
42E 80N		14	30	46E 84N	16	19	
42E 81N		60	65	46E 85N	80	65	
42E 82N		11	13	46E 86N	45	35	
42E 83N		25	12	46E 87N	84	162	
42E 84N		145	37	46E 88N	22	24	
42E 85N		135	41	46E 89N	19	15	
42E 86N		240	95	46E 90N	25	12	
42E 87N		125	67	46E 91N	7	6	
42E 88N		123	86	46E 92N	16	10	
42E 89N		30	199	46E 93N	19	12	
42E 90N		160	480	48W 0N	30	bn. silt	
44W 0N		20	gy silt	48W 2N	19	Lt. bn sndy loam	
44W 1N		27	sndy loam	48W 3N	18	"	
44W 2N		34	"	48W 4N	18	"	
44W 3N		36	"	48W 5N	16	Red bn. sndy. loam	
44W 4N		20	"	48W 6N	19	"	
44W 5N		18	Red bn sndy loam	48W 7N	35	"	
44W 6N		40	Lt. bn. sndy loam	48W 8N	45	"	
44W 7N		36	"	48W 9N	34	"	
44W 8N		31	"	48W 10N	38	Lt. bn. sndy. loam	
44W 9N		27	"	48W 1S	280	bn. silt	
44W 10N		15	"	48W 2S	30	bn. sndy	
44W 1S		38	dk. gy. loam	48W 3S	35	"	
44W 2S		60	humus	48W 4S	59	"	
44W 3S		90	gy. loam	48W 5S	17	bn. silt	
44W 4S		110	"	48W 6S	10	"	
44W 5S		72	lt. bn. silt	48W 7S	20	dk. bn humus	
44W 6S		22	bn. sndy silt	48W 8S	40	bn. silt	
44W 7S		49	lt. bn sandy.	48W 9S	5	red. bn silt	
44W 8S		70	gy. clay loam	48W 10S	28	bn. sndy	
44W 9S		120	"	50E 80N	5	12	
44W 10S		40	bn. silt	50E 81N	2	4	
46E 80N		16	15	50E 82N	8	12	
46E 81N		11	15	50E 83N	27	27	
46E 82N		12	18	50E 84N	125	216	

BONDAR-CLEGG & COMPANY LTD.

GEOCHEMICAL LAB REPORT

SAMPLE NO.		Ni ppm	Cu ppm	SAMPLE NO.	Ni ppm	Cu ppm	REMARKS
50E 85N		26	22	54E 86N	68	46	
50E 86N		150	215	54E 87N	40	31	Silts
50E 87N		175	142	A 1	31	29	
50E 88N		290	312	A 2	37	31	
50E 89N		36	52	A 3	170	96	
50E 90N		2	5	A 4	34		
50E 91N		17	15	A 5	24		
50E 92N		25	19	A 6	29		
50E 93N		19	17	A 7	28		
52W 0N		17		A 8	26		
52W 1N		20	Red bn. sndy. loam	A 9	30		
52W 2N		30	"	A 10	53		
52W 3N		58	Lt. bn sndy. loam	A 11	26		
52W 4N		44	"	A 12	28		
52W 5N		35	"	A 13	25		
52W 6N		21	Dark bn. sndy loam	A 14	25		
52W 7N		40	"	A 15	23		
52W 8N		27	silt (creek)	A 16	22		
52W 9N		40	Lt. bn. sndy loam	A 17	27		
52W 10N		41	"	A 18	29		
52W 1S		16		A 19	30		
52W 2S		27		A 20	26		
52W 3S		18		A 21	31		
52W 4S		26		A 22	40		
52W 5S		30		A 23	39		
52W 6S		60		A 24	31		
52W 7S		31		A 25	37		
52W 8S		33		A 26	30		
52W 9S		14		A 27	32		
52W 10S		16		J 1	30		
54E 80N		9	12	J 2	41		
54E 81N		40	27	J 3	44		
54E 82N		40	54	J 4	24		
54E 83N		10	12	J 5	45	* Small Sample	
54E 84N		32	24	J 6	31		
54E 85N		20	19	J 7	30		

Report No. 29-328 BONDAR-CLEGG & COMPANY LTD. Page No. 5 29.

GEOCHEMICAL LAB REPORT

SAMPLE NO.		Ni ppm	Cu ppm	SAMPLE NO.			REMARKS
J 8		31					
J 9		28					
J 10		27					
J 11		27					
J 19		31					
J 20		30					
J 21		70					
J 22		29					
J 23		33					
Z 1		65					
Z 2		67					
Z 3		63					
Z 4		62					
Z 5		58					
Z 6		53					
Z 7		43					
Z 8		45					
Z 9		24					
Z 10		35					

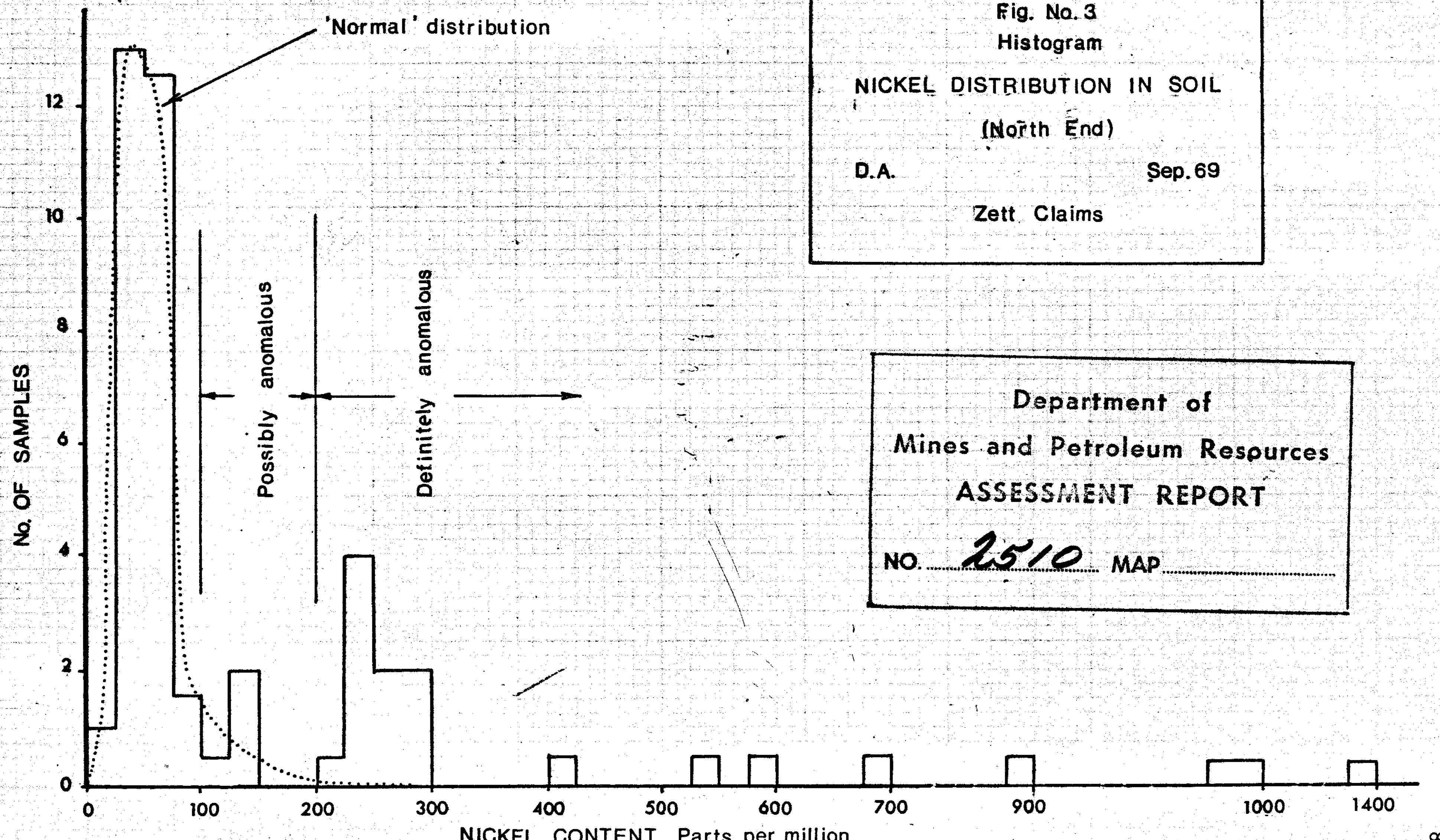
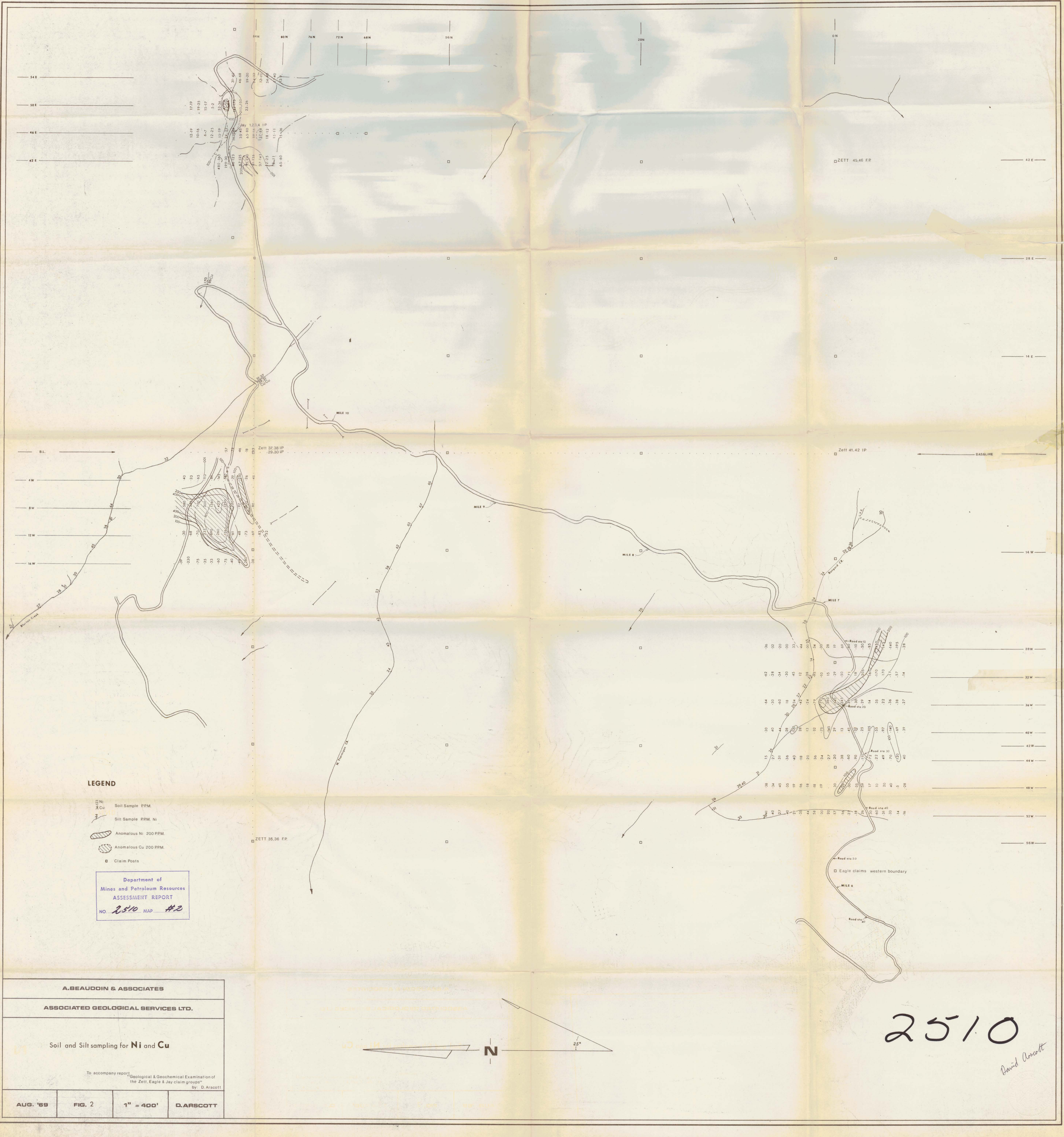


Fig. No. 3
Histogram
NICKEL DISTRIBUTION IN SOIL
(North End)

D.A. Sep. 69

Zett Claims

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2510 MAP



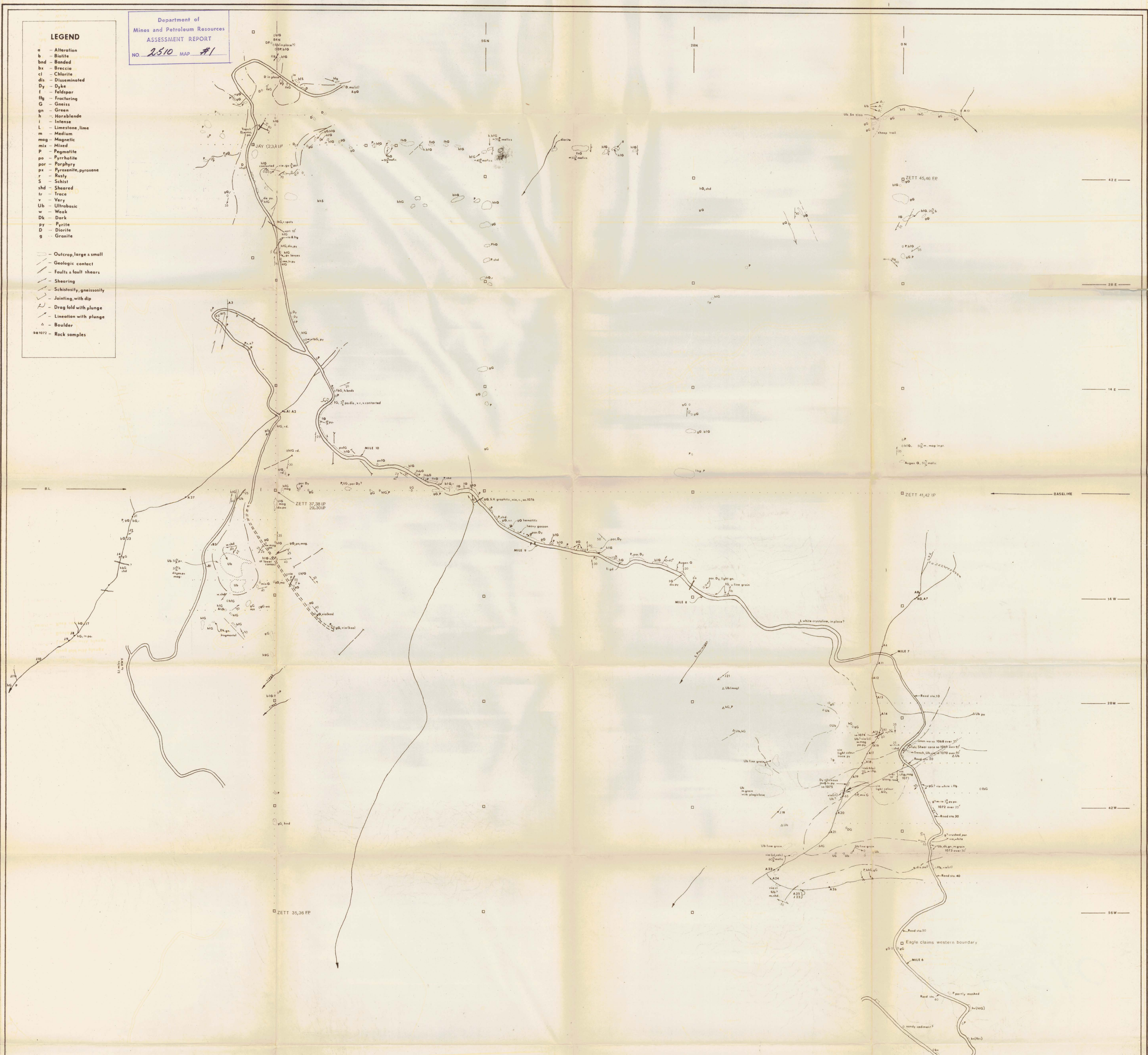
A.BEAUDOIN & ASSOCIATES

ASSOCIATED GEOLOGICAL SERVICES LTD.

Soil and Silt sampling for **Ni** and **Cu**

To accompany report "Geological & Geochemical Examination of the Zett, Eagle & Jay claim groups" by: D. Arscott

AUG. '69	FIG. 2	1" = 400'	D.ARSCOTT



A.BEAUDOIN & ASSOCIATES

ASSOCIATED GEOLOGICAL SERVICES LTD.

GEOLOGY of Zett, Eagle & Jay Claims

To accompany report
"Geological & Geochemical Examination of the Zett, Eagle & Jay claim groups"
by: D.Arscott

AUG. '69	FIG. 1	1" = 400'	D.ARSCOTT

2510

David Arscott