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**ASSESSMENT REPORT**

**ON A  
 GEOLOGICAL MAPPING  
 AND  
 SOIL SAMPLING PROGRAM  
 ON THE  
 GNAT PASS PROPERTY  
 NAT 1-8 MINERAL CLAIMS  
 DEASE LAKE AREA  
 LIARD MINING DIVISION, B.C.**

NTS: 104I/4W, 104I/5W  
 LATITUDE: 58° 15'30"N  
 LONGITUDE: *129° 10'* 50"W  
 OWNER: W.R. Gilmour  
 OPERATOR: Discovery Consultants  
 AUTHORS: E.D. Harrington, B.Sc.  
 T.H. Carpenter, P.Geol.  
 DATE: October 26, 1994

**GEOLOGICAL BRANCH  
 ASSESSMENT REPORT**

**23,576**

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## SUMMARY

Sulphide copper mineralization occurs on the Nat 1-8 claims in the Dease Lake area of the Liard Mining Division, B.C. Exploration work has been carried out intermittently on the property from 1960 to the present and has delineated unclassified reserves of 22.7 million tonnes grading 0.44 per cent copper.

In 1993 programs of geological mapping and soil sampling were carried out using hip-chain and compass for control.

The results of the survey are presented and discussed in the following report.

## LOCATION AND ACCESS

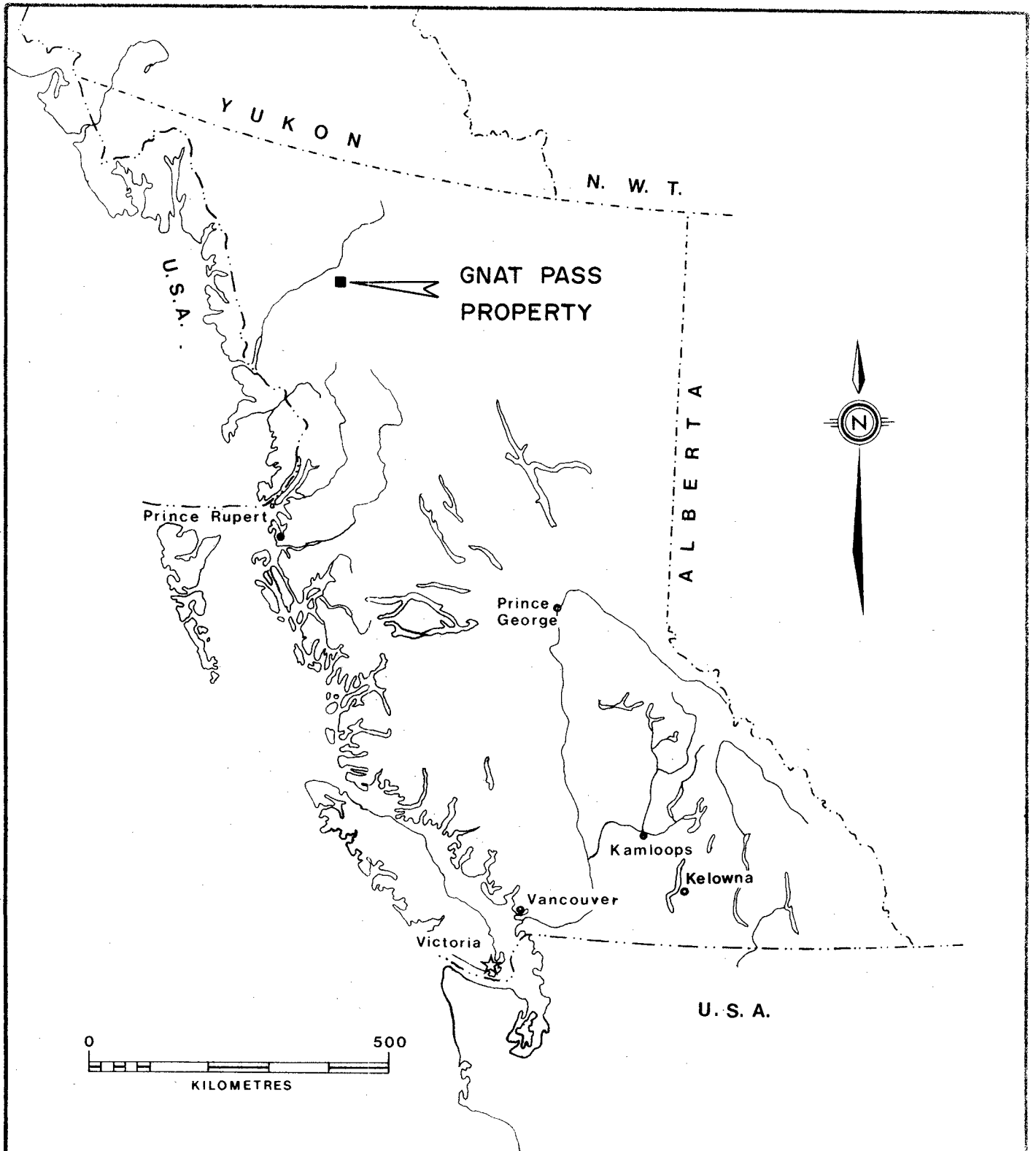
The Gnat Pass property is centered at latitude 58°15'30"N and longitude 130°50'W on the Tanzilla Plateau along the eastern edge of the Stikine Range.

The property is located 23.5 km south of the town of Dease Lake just to the east of Highway #37 (the Cassiar-Stewart highway). Gnat Creek flows north through the western extremity of the claim block at the north end of Lower Gnat Lake.

Access to the property is excellent using the Cassiar-Stewart highway which lies less than 100 meters from the western edge of the claim block. Numerous drill roads criss-cross the property and are useable by foot or 4-wheel-drive vehicle after crossing Gnat Creek.

## TOPOGRAPHY

The four westernmost claim blocks overlie a flat river plain covered with grass and scrub alders. The four eastern claims overlie a knoll with elevations ranging from 1200 metres above sea level at the plateau floor to about 1410 metres above sea level at the top. Vegetation here is generally mature fir and spruce trees.



**DISCOVERY**

Consultants

PREDATOR SYNDICATE

GNAT PASS PROPERTY

LOCATION MAP

DATE: JAN. 20/1994

PROJECT: 608

SCALE: As Shown

N.T.S.: 1041/5W

M.D.: LIARD

FIGURE: 1

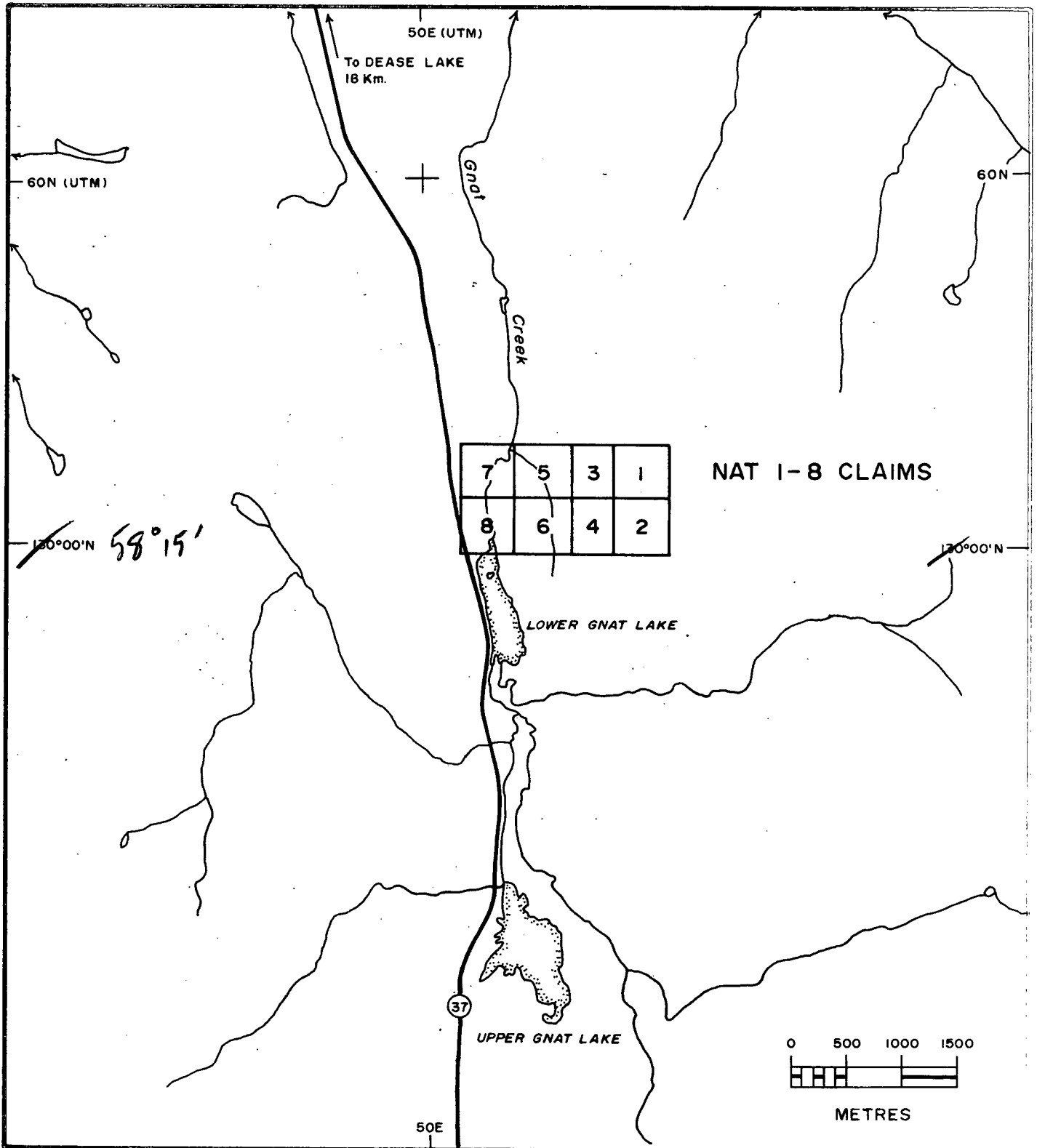
## PROPERTY

The Gnat Pass property consists of eight two-post claims designated Nat 1-8 inclusive located by R. Wymer on August 20, 1993 and recorded in Vernon, B.C. on September 1, 1993.

<u>Claim Name</u>	<u>Record No.</u>	<u>Owner of Record</u>	<u>Anniversary Date *</u>
NAT 1	320615	W.R. Gilmour	August 20, 1999
NAT 2	320616	W.R. Gilmour	August 20, 1999
NAT 3	320617	W.R. Gilmour	August 20, 1999
NAT 4	320618	W.R. Gilmour	August 20, 1999
NAT 5	320619	W.R. Gilmour	August 20, 1999
NAT 6	320620	W.R. Gilmour	August 20, 1999
NAT 7	320621	W.R. Gilmour	August 20, 1999
NAT 8	320622	W.R. Gilmour	August 20, 1999

The claims are owned by W.R. Gilmour in trust for the Predator Syndicate.

\* Pending acceptance of this report.



**DISCOVERY**

Consultants

PREDATOR SYNDICATE

GNAT PASS PROPERTY

CLAIM LOCATION MAP



## HISTORY

Mineralization was first discovered in the property area in 1960 but only intermittent work was done up to 1964 when fairly extensive exploration of the wide-spread, low-grade copper mineralization commenced.

In 1965 geological mapping, geophysical and geochemical surveys were carried out. Four trenches totalling 800 feet (244 metres) were made by bulldozer and 4,600 feet (1402 metres) of diamond drilling was done in ten holes.

In 1966, 8,900 feet (2713 metres) of diamond drilling in fourteen holes was completed, in addition to geological mapping and magnetometer and geochemical surveys.

In 1967, geological mapping, geochemical, IP and magnetometer surveys were carried out, as well as 22,036 feet (6717 metres) of diamond drilling in forty-one holes.

In 1968, 21,726 feet (6622 metres) of diamond drilling in thirty-seven holes was completed.

No record of any geological information obtained from these drill holes is available.

There is no record of further work on the property. However on-site inspection indicates a further seven (at least) diamond drill holes apparently drilled in 1989.

The British Columbia Mineral Inventory File (Minfile) states that the property contains unclassified reserves of 22.7 million tonnes grading 0.44 percent copper.

## GENERAL GEOLOGY

The Nat property lies in a north-trending valley near the north end of Lower Gnat Lake. A substantial portion of the property is covered by extensive overburden obscuring the geology.

Regional mapping indicates that the area is underlain by rocks of the Upper Triassic Stuhini Group consisting of andesite and basalt flows, tuffs and breccias, with some sediments intruded by small stocks and sills of porphyritic andesite and basalt. The property is adjacent to hornblende quartz monzonite and granodiorite of the Jurassic-Triassic Hotailuh batholith which occurs to the south.

On the slopes east of the property, beds of greywacke and basic volcanics are reported to dip between 35 and 40 degrees to the north-east. Major north-trending faults cutting the area are inferred.

Carbonate alteration is widespread, both disseminated throughout the rocks and as veinlets. Sericite and silicification are patchy, while iron-oxide staining and hematite are widespread. Chlorite occurs as fracture fillings in the volcanics, as do dense black veinlets of tourmaline. Rocks of all types usually exhibit some degree of cataclastic textures and variable evidence of deformation due to movement.

Mineralization consists of chalcopyrite, pyrite and traces of bornite. The sulphides commonly occur as blebs, stringers and

skins on fracture surfaces in the altered andesitic greenstones and dark-green porphyritic andesites. Magnetite is common in the volcanic rocks and tends to concentrate with chalcopyrite.

## WORK COMPLETED

The work carried out on the property consisted of soil sampling, geological mapping, core logging and rock and core sampling. Due to time constraints the mapping and sampling programs were carried out using hip-chain and compass traverses as controls.

### 1. Soil Sampling

#### a). Program Parameters

The soil sampling program was carried out using a shovel and 9 cm x 25 cm kraft paper bags. The "B" horizon was sampled. Samples were shipped to Bondar-Clegg Laboratories in Vancouver, B.C., where analysis was carried out for Au and twenty-seven other elements (Appendix I). Samples were taken at 50 meter intervals along the common claim line of the Nat claims and at 100 meter intervals for 500 meters north and south from the Initial Posts for the Nat 5 and 6 and the for Nat 7 and 8 claims (Figure 3).

#### b). Program Results

Analysis of the soil samples indicates some anomalous areas as well as interesting associations.

The section from BL3+50W to BL6+50W is moderately anomalous in copper (131 ppm to 1041 ppm) and also shows weak gold (6-18 ppb), nickel (28-44 ppm), cobalt (12-16 ppm) and manganese (533-

1674 ppm) association.

The sample taken at BL8+00W returned a 30 ppb gold value associated with the highest copper value obtained (4802 ppm).

The five samples CL-1, 1+00S to CL-1, 5+00S are weakly to moderately anomalous in copper (44-515 ppm). The highest gold value obtained in the soil survey (174 ppb Au) occurs at CL-1,4+00S.

The sample taken at CL-2, 2+00S is not anomalous in gold but has the highest values obtained for lead (56 ppm), zinc (660 ppm), cadmium (216 ppm), cobalt (20 ppm), manganese (4165 ppm) and barium (247 ppm).

## 2. Geological Mapping

### a). Program Parameters

The mapping program was designed to obtain a brief overview of the property geology and to locate diamond drill hole sites in order to relate information from core (located on site) to the surface geology. The rock and core sampling carried out in conjunction with the mapping and core logging was to provide multi-element information about all rock types available.

### b). Program Results

To the west, along Gnat Creek the claims are underlain by andesitic tuffs with minor intrusions of pink leucocratic felsite. Samples N014-N016 all exhibit chalcopyrite and pyrite disseminations as well as Cu stain. Cu values in these rocks

ranged from 3901 ppm to 11148 ppm. Samples N013 and N014 also had values of 24 ppb Au, 39ppm Bi and 40 ppb Au, 39 ppm Bi respectively. The rocks are generally well fractured and in places exhibit an irregular, northwesterly trending schistosity. Alteration is ubiquitous and comprises carbonate filled fractures and weak to strong iron-oxide staining.

In the hill zone to the east, the rock types are predominantly fine to medium grained andesitic tuff, dark green porphyritic andesite and very fine-grained, pink, leucocratic felsite. One outcrop of quartz monzonite was observed at the northern extremity of the claim group. All the rock types exhibit some degree of brecciation and are generally fractured and broken although no dominant direction is evident. One outcrop of feldspar porphyry was noted along the common claim line at 6+50W. This porphyritic rock has been described as "an irregular mass generally fine-grained but with a high textural variation, cutting all the volcanic rocks".

The pink, leucocratic felsite is very silicious and exhibits medium to strong iron oxide staining. There is much more of this rock type evident in the examined drill core than observed in outcrop. Dense, black, tourmaline stringers are quite common in the felsite in drill core and generally show strong sulphide mineralization (ie: G89-3-3 and G89-4-1 returned 3229 ppm Cu and 7011 ppm Cu respectively). The origin of this felsite is not clear and could be a product either of highly altered volcanic rocks or feldspar porphyry.

Samples NO23, NO24, and NO25 were taken from altered, dark-green to black andesitic bedrock. Sample NO23 showed comparatively massive sulphide mineralization and returned anomalous values of 535 ppb Au, 8.68 per cent Cu, 2593 ppm Mo and 136 ppm Bi.

Strong gouge development evidenced in the drill core indicates at least a moderate degree of faulting in the area, as does the pervasive brecciation. The major fault-trend appears to be north-south with inferred cross-faulting trending NE to SW and NW to SE. The direction of movement is not known.

On the property is located a quantity of crushed rock and core samples for which the locations are not known. A grab sample was taken from the bags of crushed rock. A selection of mineralized core fragments was also taken. The samples returned 10,756 ppm Cu and 1,461 ppm Cu respectively.

## CONCLUSIONS

Sulphide mineralization consisting primarily of chalcopyrite and pyrite appear to occur in all the observed rock types. Trace amounts of pyrite usually occur as disseminations throughout the rocks while larger concentrations of pyrite and chalcopyrite occur as stringers within the rocks or as a component of a fracture breccia filling. This would seem to indicate that the sulphides are to some extent structurally controlled being remobilized from the local rocks or introduced from "outside".

The anomalous soil samples are generally associated with high to anomalous manganese values. This could indicate that the mineralization is associated with fault structures which are a strong feature of the Gnat Pass area.



## RECOMMENDATIONS

Further work is warranted and should consist of detailed soil sampling and more extensive mapping and rock sampling in order to further define the extent of the copper mineralization and any possible gold association. An induced potential (IP) survey should be carried out to define areas of potentially mineralized alteration and an electromagnetic (EM) survey conducted to delineate possible mineralized structures such as faults and/or fracture systems.

If results of the above programs warrant, further diamond drilling should be undertaken.

Respectfully submitted,

  
E.D. Harrington, B.Sc.

  
T.H. Carpenter, P.Geo.

Vernon, B.C.  
October 26, 1994

## REFERENCES

British Columbia Ministry of Energy, Mines and Petroleum Resources (MEMPR) Annual Reports.

1965 p.15

1966 p.19-20

1967 p.27

1968 p.36

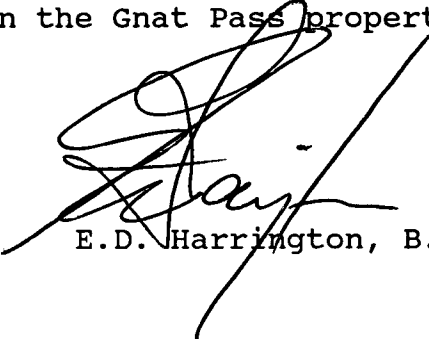
## STATEMENT OF COSTS

1.	Professional Services		
	K.L. Daughtry, P.Eng.		
	Supervision		
	0.5 days @ \$450/day	\$ 225.00	
	W.R. Gilmour, P.Geo.		
	Report writing		
	0.5 days @ \$400/day	200.00	
	E.D. Harrington, B.Sc.		
	Travel - 1 day @ \$308/day	308.00	
	Field Work - mapping & sampling		
	(August 20-22)		
	2.5 days @ \$308/day	770.00	
	Data compilation, report writing		
	3 days @ \$280/day	<u>840.00</u>	\$ 2343.00
2.	Field Personnel		
	Bob Wymer		
	Travel - 1 day @ \$240/day	240.00	
	Rock & Soil Sampling (August 20-22)		
	2.5 days @ \$240/day	<u>600.00</u>	840.00
3.	Transportation (4x4 vehicle)		300.00
4.	Meals & Lodging		350.00
5.	Geochemical Analysis		
	<u>Soil samples</u>		
	Au geochem + 28 element ICP		
	56 @ \$13.70/sample	767.20	
	<u>Rock samples</u>		
	Au geochem + 28 element ICP		
	42 @ \$15.60/sample	<u>655.20</u>	1422.40
6.	Drafting		400.00
7.	Data compilation, secretarial		400.00
8.	Field supplies		75.00
9.	Printing, data processing, telephone & shipping		<u>225.00</u>
		sub-total	6355.40
10.	G.S.T.		<u>444.88</u>
		Total	<u>\$6800.28</u>

## STATEMENT OF QUALIFICATIONS

I, EDWARD D. HARRINGTON, OF 3476 DARTMOOR PLACE, VANCOUVER, BRITISH COLUMBIA; do hereby certify that:

1. I am a geologist in mineral exploration.
2. I have been practising my profession for thirteen years in Canada and the Sultanate of Oman.
3. I am a graduate of Acadia University, Wolfville, N.S. with a Bachelor of Science degree in Geology.
4. This report is based upon knowledge of the Gnat Pass property gained from examination, mapping and sampling of the property, from the study of reports on the area, and from the conduct of the work herein described.
5. I hold no beneficial interest in the Gnat Pass property.



E.D. Harrington, B.Sc.

Vernon, B.C.  
October 26, 1994

## STATEMENT OF QUALIFICATIONS

I, THOMAS H. CARPENTER of 3902 14th Street, Vernon, B.C.,  
V1T 3V2, DO HEREBY CERTIFY that:

1. I am a consulting geologist in mineral exploration associated with Discovery Consultants, Vernon, B.C.
2. I have been practising my profession for 23 years.
3. I am a graduate of the Memorial University of Newfoundland with a Bachelor of Science degree in geology.
4. I am a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of British Columbia.
5. This report is based upon knowledge of the Gnat Pass property gained from supervision.
6. I hold no interest either directly or indirectly in the Gnat Pass property.

T. H. Carpenter  
A circular professional seal for the Association of Professional Engineers and Geoscientists of British Columbia. The seal contains the text: "PROFESSIONAL", "PROVINCE OF", "T. H. CARPENTER", "BRITISH COLUMBIA", and "GEOSCIENTIST".  
T.H. Carpenter, P.Geo.

Vernon, B.C.  
October 26, 1994

**APPENDIX 1**

**SOIL SAMPLING - ANALYTICAL PROCEDURES AND RESULTS**

# ANALYTICAL PROCEDURES

## Geochemical Analysis

by Bondar-Clegg :

ELEMENT		LOWER DETECTION LIMIT	EXTRACTION	METHOD
Au	Gold	5.0 ppb	fire-assay	atomic absorption
Ag	Silver	0.2 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Al*	Aluminium	0.02 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
As	Arsenic	5.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Ba*	Barium	5.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Bi	Bismuth	5.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Ca*	Calcium	0.05 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Cd	Cadmium	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Co*	Cobalt	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Cr*	Chromium	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Cu	Copper	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Fe*	Iron	0.01 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Hg■	Mercury	0.010 ppm	HNO <sub>3</sub> -HCl leach	cold vapour atomic absorption
K*	Potassium	0.05 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
La*	Lanthanum	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Mg*	Magnesium	0.05 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Mn*	Manganese	0.01 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Mo*	Molybdenum	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Na*	Sodium	0.05 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Ni*	Nickel	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Pb	Lead	2.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Sb*	Antimony	5.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Sn*	Tin	20.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Sr*	Strontium	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Te*	Tellurium	10.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
V*	Vanadium	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
W*	Tungsten	10.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Y	Yttrium	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Zn	Zinc	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma

- Please note: certain mineral forms of those elements above marked with an asterisk will not be soluble in the HNO<sub>3</sub>/HCl extraction. The ICP data will be low biased.

- Please note: Hg will only be analysed upon request.

Date of Report: 93.09.21

Project 608

Gnat Pass

File: SOIL\_93.WK3

Soil Sampling Results  
1993

Reference: v93-00905.0

Sample ID	Cu ppm	Au ppb	Mo ppm	Ag ppm	Pb ppm	Zn ppm	Cd ppm	As ppm	Sb ppm	Bi ppm	Ni ppm	Co ppm	Cr ppm	Fe %	Mn ppm
CL-1 1+00S	273	6	6	<0.2	11	76	<1.0	8	<5	<5	25	8	38	2.48	461
CL-1 2+00S	500	5	2	<0.2	7	70	<1.0	<5	<5	<5	55	14	31	3.56	671
CL-1 3+00S	44	6	4	<0.2	12	102	<1.0	<5	<5	<5	19	14	42	3.76	1046
CL-1 4+00S	515	174	5	<0.2	7	52	<1.0	6	<5	<5	21	9	26	2.43	1400
CL-1 5+00S	222	<5	7	<0.2	5	22	<1.0	11	<5	<5	11	6	25	0.97	1648
CL-1 1+00N	14	<5	2	<0.2	7	41	<1.0	<5	<5	<5	15	5	30	2.54	221
CL-1 2+00N	11	<5	2	<0.2	8	58	<1.0	<5	<5	<5	14	5	51	2.92	453
CL-1 3+00N	47	<5	2	<0.2	9	32	<1.0	9	6	<5	11	2	10	0.59	161
CL-1 4+00N	37	<5	3	<0.2	7	147	<1.0	<5	<5	<5	28	9	31	2.74	461
CL-1 5+00N	9	6	1	<0.2	4	90	<1.0	<5	<5	<5	27	7	42	3.74	450
CL-2 1+00S	10	<5	2	<0.2	12	54	<1.0	<5	<5	<5	12	5	57	3.01	361
CL-2 2+00S	24	<5	3	<0.2	56	660	21.6	<5	<5	<5	12	20	29	2.75	4165
CL-2 3+00S	65	<5	6	<0.2	4	78	<1.0	<5	<5	<5	24	6	38	2.78	309
CL-2 4+00S	101	11	11	<0.2	3	10	<1.0	10	<5	<5	7	3	18	0.24	55
CL-2 5+00S	28	7	2	<0.2	9	82	<1.0	<5	<5	<5	21	7	49	4.43	537
CL-2 1+00N	12	<5	3	<0.2	6	58	<1.0	<5	<5	<5	23	8	36	3.65	393
CL-2 2+00N	11	<5	2	<0.2	5	39	<1.0	<5	<5	<5	13	5	40	3.52	570
CL-2 3+00N	18	<5	3	<0.2	6	41	<1.0	<5	<5	<5	19	7	41	3.56	622
CL-2 4+00N	23	<5	1	<0.2	9	99	<1.0	<5	<5	<5	21	9	59	4.11	361
CL-2 5+00N	9	<5	2	<0.2	10	144	<1.0	<5	<5	<5	13	7	33	3.70	545
BL00+00	17	n/a	2	<0.2	9	27	<1.0	<5	<5	<5	11	4	12	1.19	297
BL00+50	16	<5	2	<0.2	15	29	<1.0	9	<5	<5	7	4	23	2.30	221
BL01+00	9	<5	2	<0.2	10	112	<1.0	<5	<5	<5	19	8	38	4.61	517
BL01+50	9	<5	2	<0.2	5	66	<1.0	<5	<5	5	52	15	41	4.55	487
BL02+00	12	<5	3	<0.2	10	53	<1.0	<5	<5	<5	21	7	46	4.98	285
BL02+50	11	<5	3	<0.2	8	71	<1.0	<5	<5	<5	31	12	47	4.96	548
BL03+00	12	<5	4	<0.2	11	33	<1.0	<5	<5	<5	7	3	26	2.30	139
BL03+50	131	6	5	<0.2	13	46	<1.0	9	<5	<5	28	16	42	3.49	809
BL04+00	903	18	7	<0.2	6	21	<1.0	<5	<5	<5	14	12	27	1.69	1674
BL04+50	1041	17	3	<0.2	6	28	<1.0	7	<5	<5	14	8	22	1.97	927
BL05+00	800	12	2	<0.2	6	32	<1.0	<5	<5	<5	16	6	24	2.20	533
BL05+50	128	<5	2	<0.2	<2	54	<1.0	<5	<5	<5	44	14	38	3.56	680
BL06+00	254	<5	3	<0.2	6	62	<1.0	<5	<5	<5	42	15	44	4.33	616
BL06+50	232	12	5	<0.2	4	43	<1.0	<5	<5	<5	28	12	43	2.79	686
BL07+00	47	<5	18	<0.2	11	41	<1.0	<5	<5	<5	17	11	49	4.53	340
BL07+50	65	<5	4	<0.2	10	76	<1.0	<5	<5	<5	32	12	56	4.71	687
BL08+00	4802	30	7	<0.2	4	48	<1.0	<5	<5	9	29	14	53	3.42	777
BL08+50	83	<5	4	<0.2	7	88	<1.0	<5	<5	<5	50	16	40	4.26	512



Project 608

Gnat Pass

Soil Sampling Results  
1993 (Part 2)

Sample ID	Ba ppm	V ppm	Sr ppm	Y ppm	La ppm	Te ppm	Sn ppm	W ppm	Al %	Mg %	Ca %	Na %	K %
CL-1 1+00S	161	50	66	19	19	<10	<20	<20	1.72	0.47	1.13	0.02	0.05
CL-1 2+00S	242	45	43	21	27	<10	<20	<20	1.94	0.90	0.89	0.05	0.04
CL-1 3+00S	144	73	27	2	5	<10	<20	<20	1.75	0.35	0.22	0.01	0.05
CL-1 4+00S	203	38	161	13	10	<10	<20	<20	1.12	0.37	2.15	0.01	0.04
CL-1 5+00S	96	19	65	4	6	<10	<20	<20	0.55	0.27	1.61	<0.01	0.02
CL-1 1+00N	61	66	20	3	7	<10	<20	<20	0.86	0.32	0.28	0.01	0.04
CL-1 2+00N	105	78	16	1	4	<10	<20	<20	0.65	0.27	0.14	0.01	0.04
CL-1 3+00N	91	14	161	6	7	<10	<20	<20	0.32	0.20	3.00	0.02	0.04
CL-1 4+00N	132	65	46	11	14	<10	<20	<20	1.50	0.54	0.57	0.02	0.09
CL-1 5+00N	52	52	5	3	9	<10	<20	<20	2.30	0.37	0.07	0.01	0.03
CL-2 1+00S	80	79	13	1	4	<10	<20	<20	0.66	0.31	0.16	0.01	0.04
CL-2 2+00S	247	70	14	2	5	<10	<20	<20	0.52	0.13	0.21	0.01	0.06
CL-2 3+00S	98	43	23	9	12	<10	<20	<20	2.00	0.40	0.55	0.01	0.03
CL-2 4+00S	54	9	88	5	4	<10	<20	<20	0.45	0.20	2.95	0.01	0.01
CL-2 5+00S	69	86	10	2	6	<10	<20	<20	1.33	0.44	0.12	0.01	0.04
CL-2 1+00N	73	55	8	4	9	<10	<20	<20	1.85	0.21	0.08	0.02	0.03
CL-2 2+00N	49	62	8	3	6	<10	<20	<20	1.10	0.15	0.08	0.01	0.02
CL-2 3+00N	72	61	13	4	9	<10	<20	<20	1.67	0.27	0.13	0.01	0.03
CL-2 4+00N	66	102	16	2	5	<10	<20	<20	1.41	0.68	0.20	0.02	0.04
CL-2 5+00N	63	53	6	3	8	<10	<20	<20	1.29	0.16	0.07	0.01	0.02
BL00+00	167	21	42	8	11	<10	<20	<20	0.52	0.09	0.34	<0.01	0.03
BL00+50	49	70	23	1	4	<10	<20	<20	0.61	0.10	0.20	0.01	0.04
BL01+00	77	63	10	3	9	<10	<20	<20	1.96	0.24	0.08	0.02	0.03
BL01+50	61	58	10	5	10	<10	<20	<20	3.89	0.95	0.25	0.03	0.02
BL02+00	76	77	10	2	7	<10	<20	<20	2.34	0.30	0.09	0.02	0.03
BL02+50	68	72	9	2	5	<10	<20	<20	2.58	0.38	0.10	0.02	0.03
BL03+00	69	74	14	1	5	<10	<20	<20	0.83	0.14	0.07	0.01	0.03
BL03+50	85	70	24	13	18	<10	<20	<20	1.59	0.77	0.32	0.02	0.05
BL04+00	127	24	102	18	18	<10	<20	<20	1.09	0.23	1.34	0.01	0.03
BL04+50	112	30	86	15	14	<10	<20	<20	1.09	0.31	1.21	0.01	0.03
BL05+00	88	35	65	11	11	<10	<20	<20	1.09	0.32	0.90	0.01	0.02
BL05+50	126	56	46	9	14	<10	<20	<20	2.03	0.81	0.72	0.03	0.04
BL06+00	79	72	24	5	9	<10	<20	<20	1.95	0.74	0.32	0.03	0.04
BL06+50	105	55	44	4	6	<10	<20	<20	1.32	0.57	0.71	0.02	0.04
BL07+00	45	106	23	<1	4	<10	<20	<20	0.97	0.36	0.41	0.02	0.04
BL07+50	191	95	16	3	11	<10	<20	<20	1.72	0.38	0.16	0.03	0.05
BL08+00	78	68	40	18	17	<10	<20	<20	1.70	0.91	0.84	0.03	0.06
BL08+50	90	59	21	4	8	<10	<20	<20	3.35	0.70	0.39	0.02	0.03



Project 608

Gnat Pass

Soil Sampling Results  
1993 (Part 2)

Sample ID	Ba ppm	V ppm	Sr ppm	Y ppm	La ppm	Te ppm	Sn ppm	W ppm	Al %	Mg %	Ca %	Na %	K %
BL09+00	66	75	11	3	7	<10	<20	<20	1.98	0.50	0.13	0.01	0.03
BL09+50	69	98	23	1	3	<10	<20	<20	0.85	0.31	0.24	0.01	0.04
BL10+00	87	66	14	3	7	<10	<20	<20	1.47	0.50	0.24	0.01	0.05
BL10+50	161	42	54	8	10	<10	<20	<20	1.02	0.39	0.80	0.02	0.04
BL11+00	149	43	46	31	32	<10	<20	<20	1.19	0.44	0.62	0.01	0.04
BL11+50	124	43	44	23	25	<10	<20	<20	1.11	0.42	0.61	0.01	0.05
BL12+00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
BL12+50	93	76	15	8	12	<10	<20	<20	2.34	0.45	0.21	0.02	0.03
BL13+00	117	66	11	2	6	<10	<20	<20	1.12	0.18	0.09	0.01	0.04
BL13+50	43	47	7	2	4	<10	<20	<20	1.38	0.38	0.07	<0.01	0.03
BL14+00	164	92	16	2	6	<10	<20	<20	0.77	0.20	0.21	0.01	0.05
BL14+50	70	59	8	5	9	<10	<20	<20	2.37	0.38	0.14	0.01	0.03
BL15+00	149	74	14	2	6	<10	<20	<20	0.97	0.26	0.20	0.01	0.03
BL15+50	61	53	11	9	14	<10	<20	<20	2.59	0.53	0.19	0.02	0.03
BL16+00	66	55	7	4	9	<10	<20	<20	1.87	0.33	0.11	0.01	0.03
BL16+50	65	151	17	3	8	<10	<20	<20	1.38	0.46	0.22	0.01	0.04
BL17+00	74	73	7	4	10	<10	<20	<20	1.55	0.25	0.06	0.01	0.04
BL17+50	79	104	12	8	5	<10	<20	<20	1.22	0.52	0.30	0.01	0.08
BL18+00	101	55	51	2	4	<10	<20	<20	0.75	0.45	0.86	0.01	0.09
n =	57												
min :	43	9	5	<1	3	<10	<20	<20	0.32	0.09	0.06	<0.01	0.01
max :	247	151	161	31	32	<10	<20	<20	3.89	0.95	3.00	0.05	0.09
25% ile :	66	45	10	2	5	<10	<20	<20	0.86	0.24	0.12	0.01	0.03
50% ile :	80	62	16	4	8	<10	<20	<20	1.33	0.37	0.22	0.01	0.04
75% ile :	124	74	44	8	11	<10	<20	<20	1.87	0.47	0.62	0.02	0.04
95% ile :	191	102	88	19	19	<10	<20	<20	2.58	0.81	1.61	0.03	0.06
Duplicate:													
*****													
CL-1 1+00N	65	68	20	3	8	<10	<20	<20	0.94	0.35	0.28	0.01	0.05
BL01+00	84	70	12	3	10	<10	<20	<20	2.10	0.25	0.09	0.02	0.04
BL11+00	135	41	42	29	30	<10	<20	<20	1.11	0.41	0.57	0.01	0.04

**APPENDIX 2**

**ROCK AND CORE SAMPLES - LOCATION AND DESCRIPTIONS**

### Gnat Creek Rock Samples

- N001 - 2+95W, 0+35N - Dark gy. porphyritic andesite. Green Cu staining. Hematite on fractures.
- N002 - 3+16W, 0+55N - Dark gy. porphyritic andesite. ≤4mm siliceous stringers with hematite stain.
- N003 - 3+55W, 0+10N - Porphyritic andesite. ≤5mm siliceous stringers. Trace chalcopyrite with hematite stain. Appears brecciated.
- N004 - 4+40W, 0+00N - Fine grained (crystalline). Trace pyrite. Hematite on fractures. Pink. Very siliceous.
- N005 - 4+45W, 0+00N - Pink siliceous breccia? Hematite stain.
- N006 - 5+40W, 0+05N - Fine grained grey/green andesite. Chalcopyrite and pyrite. Trace hematite. Disturbed but in place.
- N007 - 5+75W, 0+055 - Fine grained, dark grey. Trace chalcopyrite.
- N008 - 5+75, 0+005 - Fine grained (appears coarser than N007). Scattered chalcopyrite ≤ $\frac{1}{2}$ . Red garnet?
- N009 - 6+50W, 0+00 - Fine grained andesite tuff. ≤2mm. Trace pyrite. Hematite stain. Vugs.
- N010 - 6+50W, 0+01N - M. gr. feldspar porphyry. ≤3mm trace pyrite. Hematite on fractures.
- N011 - 7+20W, 0+05W - Coarse siliceous breccia. Strong hematite, chalcopyrite, bornite pyrite. Disturbed but close to source. Trend 035° 2-3m wide 4-5m long.
- N012 - 8+50W, 1+30N - Dark green andesite tuff. Quartz stringers. Carbonate on some fracture surface. Grab sample from around trench.

- N013 - 16+20W, 1+00N - Andesite tuff. Well fractured. By creek. Fe stain. Copper stained clay. Possible porphyry.
- N014 - 16+20W, 1+20N - As above. Stringers. Copper stain. Scattered pyrite. Carbonate on fractures. Possible porphyry.
- N015 - 16+25W, 1+40N - Fine gr. tuff. Fe stain. Trace chalcopyrite-pyrite.
- N016 - 16+20W, 2+25N - Fine grained dark grey andesite tuff cutting creek. Trace pyrite & Cu stain.
- N017 - 17+20W, 2+20N - Hematite staining. Grab sample from pit.
- N018 - 2+50W, 0+10S - Grab by DDH? Fe stain Cu stain. Andesite tuff?
- N019 - 3+25W, 0+10S - Leucocratic (quartz) feldspar stringers. Pyritic.
- N020 - -4+55W, 1+45N - Fine grained pinkish grey lenses. Breccia. Trace pyrite/hematite fracture filling.
- N021 - -7+80W, 4+00N - Fine grained leucocratic. Weak breccia. Pyrite in fractures. Minor Cu skin.
- N022 - 7+75W, 4+20N - Weathered monz? Rusty.
- N023 - - Grab from trench Massive pyrite (chalcopyrite?). Strong Fe staining.
- N024 - 7+20W, 4+15N - Grab as above. Pyrite and chalcopyrite  $\leq \frac{1}{2}\%$ . Soft dark green - black altered andesite? Strong Fe staining. Minor Cu stain.
- N025 - - Grab as above. Black altered andesite. Fractured with carbonate filling. Minor pyrite. Quartz stringers.

## Gnat Creek Core Samples

- G89-3-1 - Box 2. Grab 21.2-24.33 m. Black tuff. Strongly gouged with minor quartz vein. No visible mineralization.
- G89-3-2 - Box 3. 38.71-44.9 m. Grab. Fine grained. Black soft "argillaceous". Carbonate stringers. Scattered pyrite. Strong gouge.
- G89-3-3 - Box 13-14. 78.33-84.43 m. Pink siliceous rocks with black veins @ 45° w ≤.5% pyrite (chalcopyrite?). Vuggy carbonate fractures. Minor scattered pyrite. Weak breccia.
- G89-4-1 - Grab. 178.62 - 181.68 m. Very siliceous altered rock. Breccia. Black stringers with pyrite/chalcopyrite. ≤ 1% pyrite in stringers.
- G89-4-2 - Grab. 194.92 - 196.0 m. Siliceous andesitic tuff. ≤1% pyrite in stringers.
- G89-4-3 - 124.38 - 125.0 m. Similar to G89-4-2
- G89-6-1 - Box 1. Grab. 10.28 - 18.31 m. Siliceous breccia. Scattered pyrite in fractures. Leucocratic.
- G89-6-2 - Box 5. Grab. 37.06 - 38.71 m. Black siliceous tuff. 10 mm quartz stringers. Pyrite scattered. Weak breccia.
- G89-6-3 - Box 8. Grab 49.37-55.17 m. Siliceous buff tuff. Minor pyrite in fractures.
- G89-6-4 - Box 13-14. Grab. 84.43-94.60 m. Light-medium grey siliceous andesite porphyry. Pheno ≤3mm. Trace pyrite.

- G89-6-5 - Box 16. Grab 105-106. Tuff with black bands with blebs of pyrite  $\leq 1-2\%$  and quartz stringers.
- G89-7-1 - Box 19. 123.5-127.1 m. Grab. Calcite stringers and gouge in fine grained grey tuff. Siliceous.
- G89-7-2 - Box 20. 127.1-129.78 m. Grab. Very siliceous fine grained pink rock. Disseminated crystalline pyrite.
- G89-7-3 - Box 24. 156.49-153.1 m. Grab. Brecciated contact. Porphyry? & monzonite.
- G89-7-4 - Box 1. 9.50-15.94 m. Grab. Buff. Siliceous. Wk to mod breccia. Trace disseminated chalcopyrite.



**APPENDIX 3**

**ROCK AND CORE SAMPLES  
ANALYTICAL PROCEDURES AND RESULTS**

# ANALYTICAL PROCEDURES

## Geochemical Analysis

by Bondar-Clegg :

ELEMENT		LOWER DETECTION LIMIT	EXTRACTION	METHOD
Au	Gold	5.0 ppb	fire-assay	atomic absorption
Ag	Silver	0.2 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Al*	Aluminium	0.02 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
As	Arsenic	5.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Ba*	Barium	5.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Bi	Bismuth	5.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Ca*	Calcium	0.05 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Cd	Cadmium	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Co*	Cobalt	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Cr*	Chromium	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Cu	Copper	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Fe*	Iron	0.01 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Hg	Mercury	0.010 ppm	HNO <sub>3</sub> -HCl leach	cold vapour atomic absorption
K*	Potassium	0.05 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
La*	Lanthanum	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Mg*	Magnesium	0.05 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Mn*	Manganese	0.01 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Mo*	Molybdenum	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Na*	Sodium	0.05 %	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Ni*	Nickel	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Pb	Lead	2.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Sb*	Antimony	5.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Sn*	Tin	20.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Sr*	Strontium	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Te*	Tellurium	10.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
V*	Vanadium	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
W*	Tungsten	10.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Y	Yttrium	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma
Zn	Zinc	1.0 ppm	HNO <sub>3</sub> -HCl hot extr	ind. coupled plasma

- Please note: certain mineral forms of those elements above marked with an asterisk will not be soluble in the HNO<sub>3</sub>/HCl extraction. The ICP data will be low biased.

- Please note: Hg will only be analysed upon request.

Date of Report: 93.09.22

Project 608

Gnat Pass

File: ROCK\_93.WK3

Rock Sampling Results  
1993

Reference: v93-00907.0(1,6)

Sample ID	Cu ppm	Cu %	Au ppb	Mo ppm	Ag ppm	Pb ppm	Zn ppm	Cd ppm	As ppm	Sb ppm	Bi ppm	Ni ppm	Co ppm	Cr ppm	Fe %
689-3-1	54		12	2	1.1	40	26	<1	73	47	6	8	5	66	1.71
689-3-2	209		10	2	<0.2	27	26	<1	17	<5	7	24	30	65	4.55
689-3-3	3229		18	6	<0.2	9	36	<1	58	6	12	5	23	26	3.26
689-4-1	7011		44	34	0.6	7	31	<1	77	<5	19	8	6	48	4.87
689-4-2	10507		24	124	<0.2	10	44	<1	<5	<5	37	11	10	29	8.65
689-4-3	14916		158	18	0.7	21	82	<1	11	<5	38	7	7	34	6.93
689-6-1	3960		25	13	0.3	5	37	<1	77	<5	8	7	15	23	3.42
689-6-2	369		<5	5	<0.2	6	40	<1	20	8	9	3	17	17	4.28
689-6-3	198		6	<1	<0.2	26	55	<1	19	<5	6	3	11	27	2.53
689-6-4	1086		<5	2	0.5	42	188	<1	25	<5	<5	4	4	41	2.34
689-6-5	2409		59	16	0.7	157	452	<1	13	<5	8	5	12	27	4.34
689-7-1	140		<5	10	0.3	19	30	<1	42	7	<5	7	9	89	1.93
689-7-2	22		<5	2	<0.2	4	24	<1	30	<5	7	2	8	19	2.60
689-7-3	47		<5	1	<0.2	12	23	<1	20	<5	<5	7	7	58	1.37
689-7-4	862		6	7	<0.2	8	27	<1	20	<5	7	3	8	41	2.69
N-001	5193		92	19	0.9	7	73	<1	11	<5	21	10	36	19	4.56
N-002	825		8	2	<0.2	4	27	<1	18	<5	<5	6	10	41	2.20
N-003	3850		20	11	0.5	7	128	<1	10	<5	9	5	6	35	3.73
N-004	581		<5	<1	<0.2	4	23	<1	8	5	<5	3	3	25	2.03
N-005	2008		<5	6	<0.2	2	37	<1	6	<5	<5	4	6	30	3.03
N-006	1029		9	2	<0.2	5	25	<1	12	<5	6	3	11	40	3.31
N-007	1563		12	5	<0.2	5	57	<1	15	<5	12	7	13	17	4.42
N-008	594		<5	1	<0.2	7	45	<1	9	<5	12	27	20	172	5.11
N-009	240		10	<1	<0.2	6	35	<1	11	<5	9	27	18	96	4.08
N-010	62		<5	2	<0.2	5	15	<1	9	<5	<5	6	4	47	1.34
N-011	3062		15	16	0.6	7	20	<1	10	<5	13	6	5	61	2.46
N-012	191		<5	<1	<0.2	116	176	<1	9	<5	12	45	19	167	4.22
N-013	7837		24	17	<0.2	11	22	<1	11	<5	39	15	10	38	>10.00
N-014	11148		40	63	0.2	5	31	<1	<5	<5	39	13	14	21	9.02
N-015	3901		<5	14	<0.2	5	23	<1	16	<5	16	11	12	29	7.24
N-016	5509		13	18	0.2	4	31	<1	7	<5	22	14	16	30	6.69
N-017	1183		<5	9	<0.2	3	19	<1	9	<5	8	6	6	37	3.08
N-018	5189		24	88	0.7	10	21	<1	9	<5	13	4	4	76	1.35
N-019	424		18	62	<0.2	4	10	<1	13	<5	<5	5	4	66	1.68
N-020	2131		21	44	0.3	7	29	<1	62	<5	7	7	21	28	4.17
N-021	5258		14	2	0.7	4	13	<1	11	<5	14	3	6	43	3.67
N-022	271		<5	2	<0.2	4	39	<1	20	<5	<5	5	6	55	2.25
N-023	>20000	8.68	535	2593	10.1	9	<1	<1	32	<5	136	5	4	98	8.11
N-024	4479		26	17	0.6	3	14	<1	42	<5	13	11	6	150	2.28
N-025	3225		16	12	0.4	4	25	<1	127	<5	9	6	4	78	2.26
CRUSHED ROCK	10756		65	23	<0.2	13	69	1	40	<5	<5	23	56	91	7.22
HIGH GRADE	1461		10	21	<0.2	8	67	<1	23	<5	<5	22	20	94	4.48

Project 608

Snat Pass

Rock Sampling Results  
1993 (Part 2)

Sample ID	Mn ppm	Ba ppm	V ppm	Sr ppm	Y ppm	La ppm	Te ppm	Sn ppm	W ppm	Al %	Mg %	Ca %	Na %	K %
689-3-1	980	54	14	274	3	1	<10	<20	<20	0.85	0.43	10.00	0.02	0.36
689-3-2	698	35	46	93	10	1	<10	<20	<20	1.10	0.57	1.72	0.03	0.54
689-3-3	693	25	70	92	7	4	<10	<20	<20	0.99	0.94	4.82	0.02	0.10
689-4-1	759	35	30	58	7	3	<10	<20	<20	0.95	0.86	1.89	0.03	0.12
689-4-2	1167	48	84	73	7	3	<10	<20	<20	0.75	0.90	1.49	0.04	0.11
689-4-3	770	25	44	56	7	6	<10	<20	<20	0.57	0.98	1.37	0.04	0.08
689-6-1	695	47	57	41	9	21	<10	<20	<20	0.98	0.78	1.80	0.05	0.35
689-6-2	1014	33	146	46	8	11	<10	<20	<20	2.19	1.23	2.51	0.08	0.24
689-6-3	815	34	32	55	12	14	<10	<20	<20	0.77	0.74	1.61	0.08	0.22
689-6-4	481	53	22	27	6	17	<10	<20	<20	0.43	0.46	0.70	0.08	0.22
689-6-5	1005	51	119	105	8	5	<10	<20	<20	1.31	1.21	1.69	0.14	0.27
689-7-1	918	62	16	261	12	4	<10	<20	<20	0.68	0.39	7.15	0.03	0.21
689-7-2	1298	409	20	272	9	7	<10	<20	<20	1.21	0.98	4.14	0.01	0.41
689-7-3	1121	86	27	373	7	9	<10	<20	<20	0.53	0.17	7.74	0.05	0.22
689-7-4	582	48	63	96	10	14	<10	<20	<20	1.00	0.83	1.74	0.12	0.18
N-001	1061	110	112	31	9	14	<10	<20	<20	2.30	1.17	0.47	0.08	0.40
N-002	316	64	27	23	10	8	<10	<20	<20	0.86	0.24	0.26	0.07	0.27
N-003	708	46	43	11	12	17	<10	<20	<20	0.67	0.16	0.30	0.15	0.16
N-004	810	56	10	67	12	19	<10	<20	<20	0.53	0.51	2.30	0.13	0.29
N-005	990	52	19	67	10	11	<10	<20	<20	0.55	0.84	3.11	0.09	0.18
N-006	521	50	65	18	10	15	<10	<20	<20	1.00	0.31	0.53	0.14	0.21
N-007	988	49	76	29	14	3	<10	<20	<20	1.63	1.28	0.95	0.15	0.23
N-008	638	46	149	28	6	3	<10	<20	<20	1.48	1.40	1.91	0.14	0.36
N-009	576	48	167	29	6	2	<10	<20	<20	1.36	1.21	1.80	0.16	0.28
N-010	280	56	21	18	2	3	<10	<20	<20	0.77	0.40	0.26	0.16	0.16
N-011	697	67	18	51	2	2	<10	<20	<20	0.37	0.97	3.74	0.11	0.19
N-012	1570	70	152	87	3	<1	<10	<20	<20	2.31	1.57	8.41	0.12	0.25
N-013	392	23	95	20	11	<1	<10	<20	<20	0.96	0.44	0.88	0.05	0.01
N-014	933	32	100	28	7	<1	<10	<20	<20	2.81	1.43	2.68	0.02	0.19
N-015	275	111	63	14	7	14	<10	<20	<20	1.16	0.50	0.61	0.02	0.27
N-016	432	80	105	22	12	8	<10	<20	<20	1.36	1.00	0.70	0.05	0.30
N-017	480	114	45	16	11	17	<10	<20	<20	0.74	0.23	0.62	0.10	0.24
N-018	323	112	35	28	6	9	<10	<20	<20	0.55	0.20	0.40	0.08	0.26
N-019	75	96	18	21	3	9	<10	<20	<20	0.73	0.05	0.16	0.11	0.37
N-020	975	89	35	47	18	16	<10	<20	<20	0.48	0.30	1.30	0.08	0.22
N-021	562	79	37	38	12	17	<10	<20	<20	0.51	0.39	1.53	0.08	0.15
N-022	361	82	24	22	7	10	<10	<20	<20	0.82	0.07	0.20	0.12	0.30
N-023	175	9	14	10	4	<1	16	<20	<20	0.31	0.05	0.23	0.02	0.11
N-024	294	24	37	25	5	1	<10	<20	<20	0.57	0.44	0.85	0.07	0.16
N-025	667	110	24	142	4	<1	<10	<20	<20	0.24	1.10	4.34	0.02	0.06
CRUSHED ROCK	787	51	109	110	8	6	<10	<20	<20	1.51	1.33	3.74	0.05	0.21
HIGH GRADE	1118	91	106	105	9	7	<10	<20	<20	1.85	1.72	4.23	0.07	0.26

Date of Report: 93.09.22

Project 608

Gnat Pass

File: ROCK\_93.WK3

Rock Sampling Results  
1993

Reference: v93-00907.0(.1,.6)

```

=====
Sample ID      Cu      Cu      Au      Mo      Ag      Pb      Zn      Cd      As      Sb      Bi      Ni      Co      Cr      Fe
              ppm      %      ppb      ppm      ppm      ppm      ppm      ppm      ppm      ppm      ppm      ppm      ppm      ppm      %
=====

```

## Duplicate:

~~~~~

```

689-3-1 prep      -          12      4      -      -      -      <1.0      -      -      5      8      4      78      1.54
689-6-2          342          5      5      <0.2      5      39      <1.0      16      5      8      3      17      17      4.50
N-010            64          -      2      <0.2      2      15      <1.0      17      5      5      6      3      48      1.38

```

Project 608

Gnat Pass

Rock Sampling Results  
1993 (Part 2)

```

=====
Sample ID      Mn      Ba      V      Sr      Y      La      Te      Sn      W      Al      Mg      Ca      Na      K
              ppm      ppm      ppm      ppm      ppm      ppm      ppm      ppm      ppm      %      %      %      %      %
=====

```

## Duplicate:

~~~~~

```

689-3-1 prep  911      -      14      279      4      2      <10      <20      <20      0.74      0.37 >10.00      0.02      0.32
689-6-2      1015     33      147      45      8      11      <10      <20      <20      2.23      1.23      2.67      0.08      0.24
N-010        285      60      21      19      2      3      <10      <20      <20      0.81      0.41      0.26      .017      0.17
N-016

```

**APPENDIX 4**

**DRILL LOG DESCRIPTIONS**

## Core Logs

### G 89-3

Box 1	~14.0 - 19.12 -	Fine-medium grained Tuff. Medium - dark grey. Core moderately well broken with gouge material scattered throughout. Fe stained fractures.
Box 2	19.12 - 25.67 -	As above. Strong gouge 21.2 - 24.33 with occasional quartz vein (largest 4cm).
Sample #1		
Box 3	25.67 - 30.51 -	Tuff ? Core is composed of coarser fragments at 28.65. Irregular fragments $\leq$ 8 mm.
Box 4	30.81 - 35.94 -	As above with local porphyry.
Box 5	35.94 - 38.71 -	As above.
	38.71 - 41.56 -	Soft block "argillaceous" rock. Mixed contact with above. Scattered blebs of pyrite. Probably altered Tuff. Very minor carbonate stringers.
Sample #2		
Box 6	41.56 - 46.83 -	As above.
Box 7	46.83 - 52.20 -	Mixed contact between above and very siliceous buff to light grey breccia.
Box 8	52.20 - 57.00 -	Siliceous buff to light grey weak breccia "cooked tuff?". Scattered pyrite. Minor chlorite/sericite alteration on some fractures.
Box 9	57.00 - 61.69 -	As above.
Box 10	61.69 - 67.23 -	As above. Medium grey And. tuff 62.58-63.78.
Box 11	67.23 - 72.24 -	As above.
Box 12	72.24 - 77.07 -	As above.



Box 13      77.07 - 78.33 -      As above.  
78.33 - 82.60 -      Pink sil. rocks. Numerous black stringers @ 45° with ≤.5% pyrite. Minor clay alteration on some fractures.

Sample #3

Box 14      82.60 - 84.43 -      Vuggy carbonate stringers.  
84.43 - E.O.H.

G89-6

Sample #1

Box 1      10.28 - 18.31 -      Sil. breccia with pyrite fracture filling (minor). Pink - buff. Possibly cooked Tuff?. Core well broken.  
Box 2      18.31 - 23.47 -      Same.  
Box 3      23.47 - 18.90 -      Same. Weakly effervescent fractures.  
Box 4      28.90 - 33.88 -      Same.

Sample #2

Box 5      33.88 - 37.06 -      Same. ~1.5 m lost  
37.06 - 38.71 -      Black sil. And. tuff. Weak-moderate. Brecciated as above. Scattered pyrite (Chalco?) in fractures.  
Box 6      38.71 - 42.73 -      Grey to buff coloured siliceous tuff. Weak.  
Box 7      42.73 - 49.29 -      Breccia. Trace pyrite (chalco). Weakly effervescent fractures.

Sample #3

Box 8      49.29 - 55.17 -      Minor limonite skins on some fractures.  
Box 9      55.17 - 61.45 -      54.57 - ~.5m well broken core.  
Box 10      61.45 - 67.12

Box 11 67.12 - 73.72  
Box 12 73.72 - 79.90 - 73.85 - 78.33 - Core well broken.  
Box 13 79.90 - 84.43

Sample #4

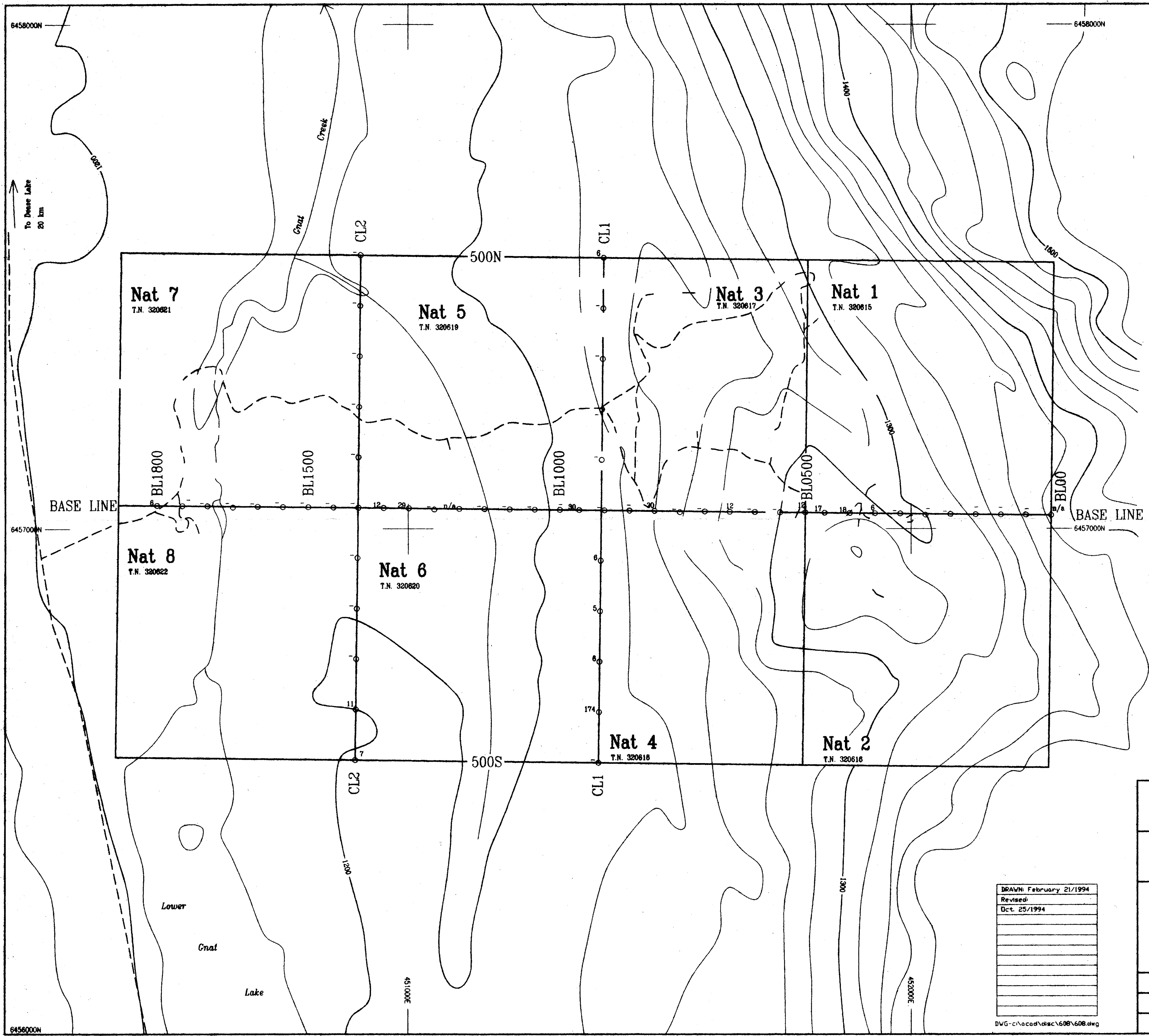
84.43 - 91.57 - Medium to dark grey siliceous And.  
porphyry (Tuff?). Trace pyrite.  
Box 14 91.57 - 94.60 - As above.  
94.60 - 98.36 - Buff to light grey siliceous Tuff.  
Box 15 98.36 - 104.41 Mixed porph. & tuff. Silicified.  
Trace scattered pyrite.  
Box 16 104.41 - 101.78  
Box 17 101.78 - 117.96 ~3-4m lost core. Medium grey  
silicified tuff. Breccia.

G89-7

Box 1 ~9.5 - 15.74 Very siliceous buff to grey  
coloured rx. Disseminated trace  
chalco. Weak to moderate breccia.  
Rusty fractures.  
Sample #4  
Box 2 15.94 - 21.37 As above.  
Box 3 21.37 - 22.62 As above.  
Box 4 22.62 - 26.97 Medium grained, quartz monzonite.  
28.04 - 30.30 Mixed Monzonite & Tuff. Brecciated  
sections with rounded monzonite  
fragments in dark grey matrix.  
30.30 - 32.61 F.gr. - m.gr. Tuff. Medium grey.  
Box 5 32.61 - 38.71 As above. Rocks become darker  
towards lower contact.  
Box 6 38.71 - 39.37 As above.  
39.37 - 43.81 Black, soft "argillaceous" rocks.  
Minor carbonate on fractures.  
Box 7 43.81 - 50.02 As above.

Box 8	50.02 - 59.45	As above.
	57.10 - 59.45	Core badly broken.
<u>G89 - 7</u>		
Box 9	- 67.06	Medium - dark grey granular looking rocks. Andesite tuff? Minor carbonate stringers.
Box 10	67.06 - 67.40	As above.
	67.40 - 73.04	Black soft "argillaceous" rocks. Weak disseminated local pyrite as above.
Box 11	73.04 - 78.78	As above.
Box 12	78.78 - 80.35	Medium grey porphyry? Andesite coarser towards lower contact.
	80.35 - 85.40	As above.
	85.40 - 86.24	Black "argillaceous" rocks.
Box 13	86.24 - 92.25	Medium grey tuff. From 87.48 - 92.05 rock is leached and "rotten" with occasional gouge.
Box 14	92.25 - 98.05	Tuff becoming finer grained with carbonate stringers weakly scattered. Minor sections of "argillaceous" rx. Occasional gouge.
Box 15	98.05 - 103.75	Tuff. Definite banding @ 0-10° to core axis. Minor carbonate stringers.
Box 16	103.75 - 109.03	As above.
<u>G 89 - 7</u>		
Box 17	- 114.69	Light-medium grey felsic tuff. Occasional quartz stringer. Minor.
Box 18	114.69 - 120.26	Carbonate skins on fractures. Generally medium grained.
Sample #1		

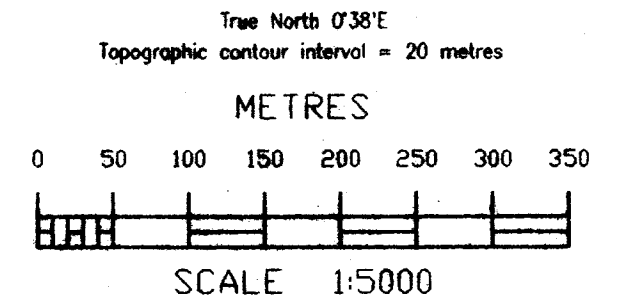
Box 19	120.26 - 127.10	≤3mm but becomes progressively finer grained towards contact @ 127.10.
Sample #2		
Box 20	127.10 - 129.78	Very siliceous buff coloured rock. Pyrite crystals scattered throughout (very minor). Fine grained.
	129.78 - 132.97	F. gr. to m. gr. felsic tuff. Light grey.
Box 21	132.97 - 138.65	As above.
Box 22	138.65 - 144.50	As above.
Box 23	144.50 - 146.00	As above.
	146.00 - 149.97	Brecciated contact with quartz monzonite. Chunks of monzonite (≤10cm) generally exhibiting rounded edges in dark grey matrix.
Sample #3		
Box 24	149.97 - 155.46	As above.
Box 25	155.46 - 160.63	As above.
E.O.H.		



**LEGEND**

- Soil sample location
- 25 Values shown in parts per billion Gold
- Indicates value less than detection limit for element

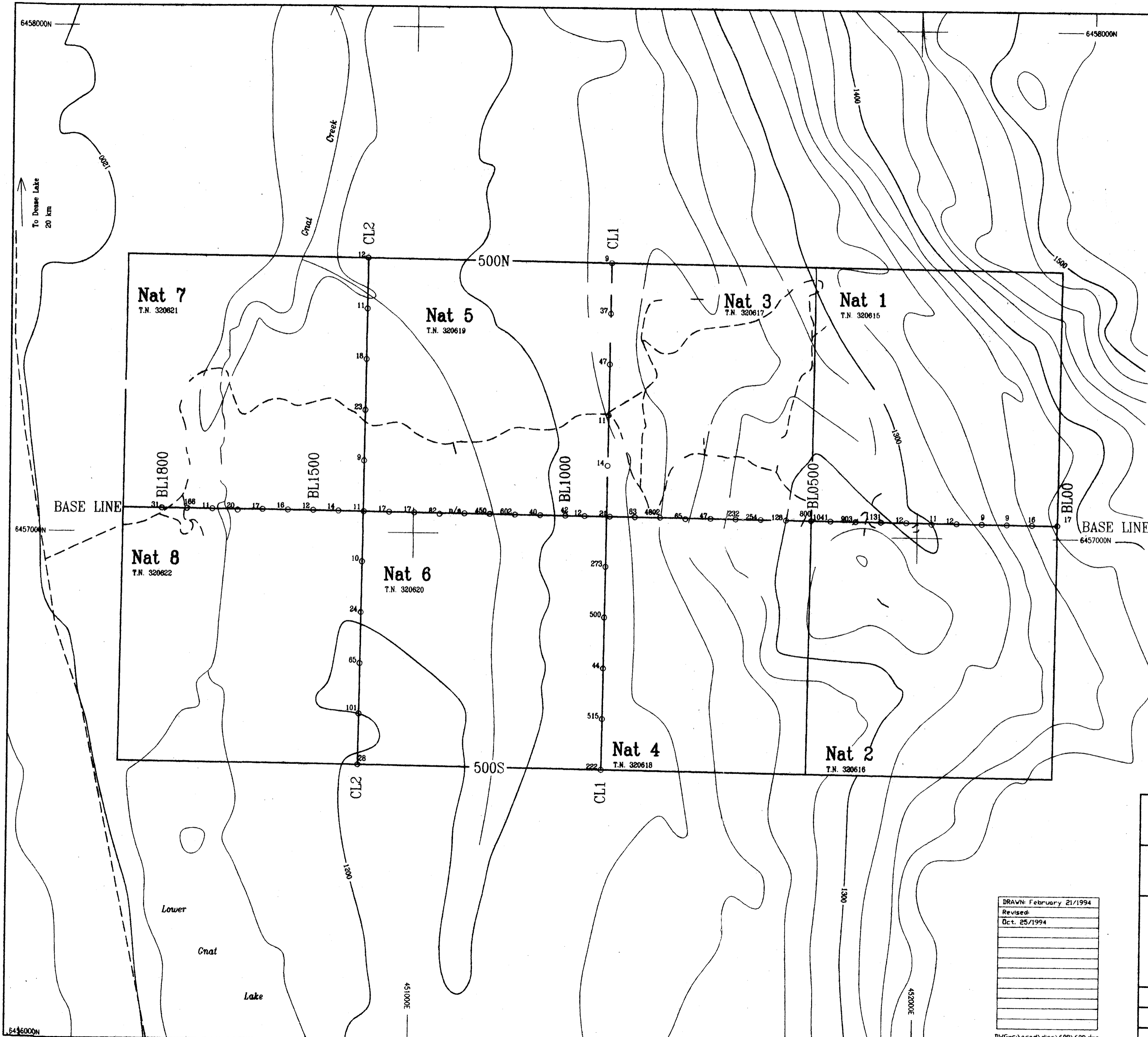
**AR  
23576**



DRAWN: February 21/1994
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Oct. 25/1994

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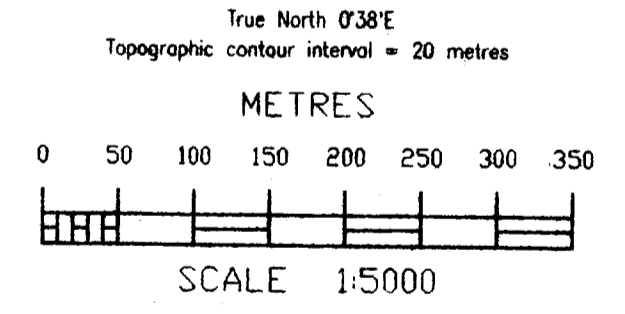
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<b>PREDATOR SYNDICATE</b>	
<b>GNAT PASS PROPERTY</b>	
<b>SOIL SAMPLING</b>	
<b>GOLD VALUES</b>	
Date: Oct. 26/1994	Scale: 1:5000
Project: 608	NTS: 1041/5W
M.D.: Liard	Figure: 8



**LEGEND**

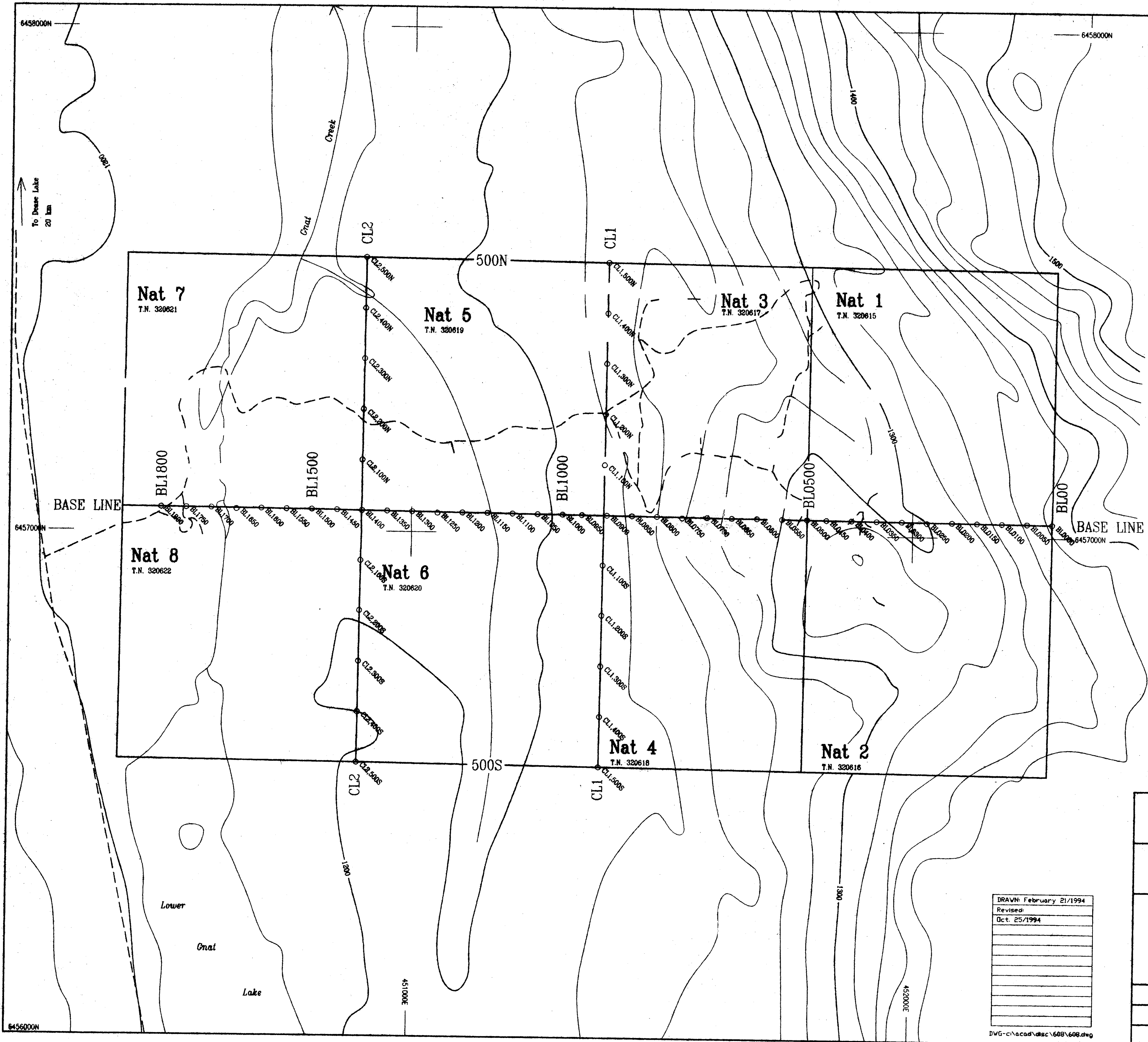
- Soil sample location
- 25 Values shown in parts per million Copper

AR  
23576



DRAWN: February 21/1994
Revised:
Oct. 25/1994

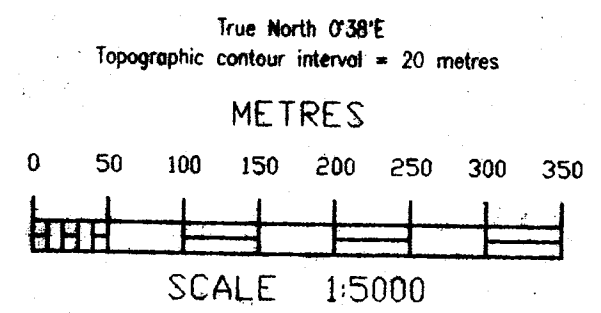
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PREDATOR SYNDICATE	
GNAT PASS PROPERTY	
SOIL SAMPLING	
COPPER VALUES	
Date: Oct. 26/1994	Scale: 1:5000
Project: 608	NTS: 1041/5W
M.D.: Liard	Figure: 7



**LEGEND**

○ ??? Soil sample location

**AR  
23576**



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Revised:
Oct. 25/1994

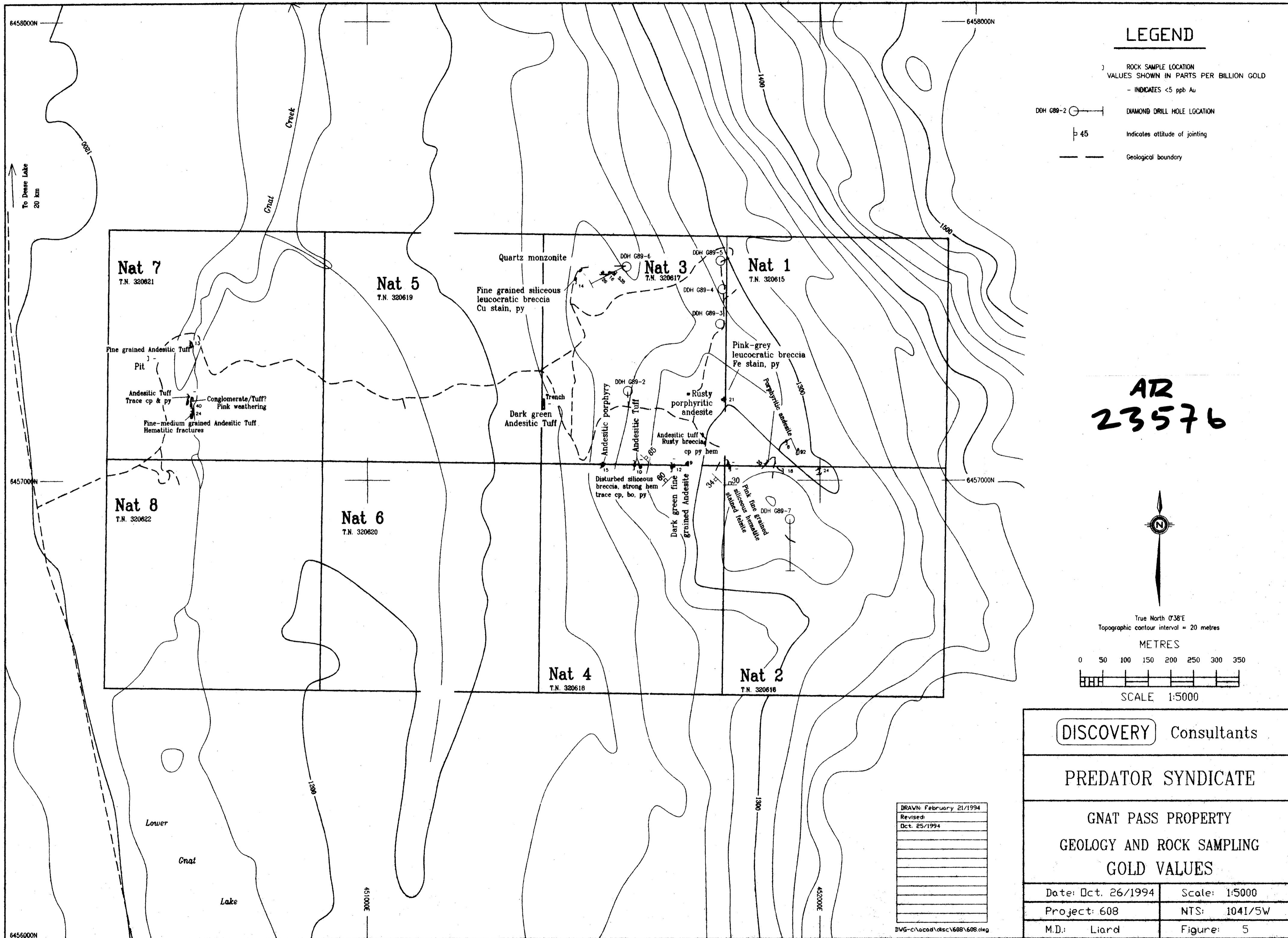
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**DISCOVERY** Consultants

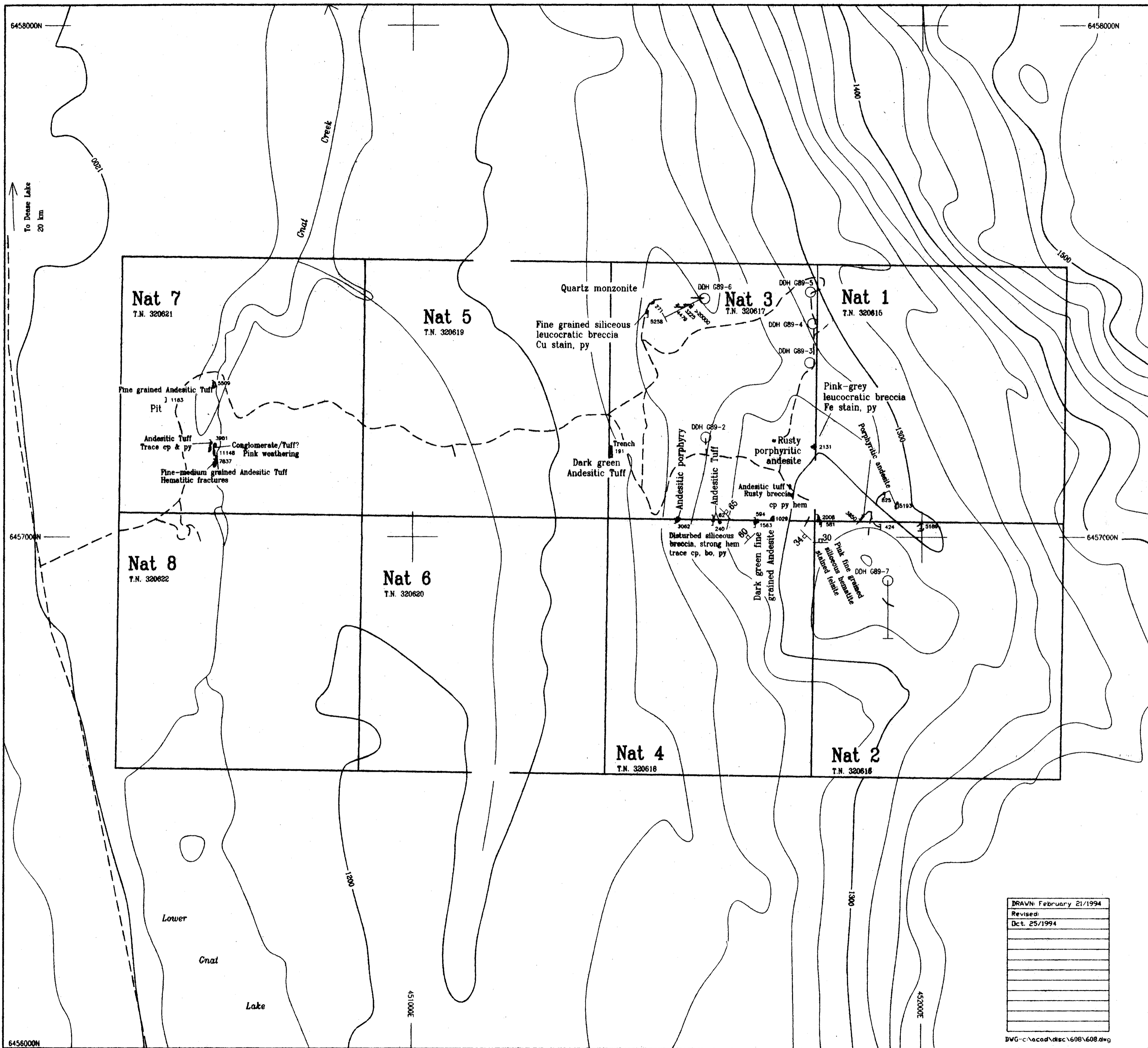
**PREDATOR SYNDICATE**

**GNAT PASS PROPERTY  
SOIL SAMPLING  
SAMPLE LOCATION MAP**

Date: Oct. 26/1994	Scale: 1:5000
Project: 608	NTS: 1041/5W
M.D.: Liard	Figure: 6







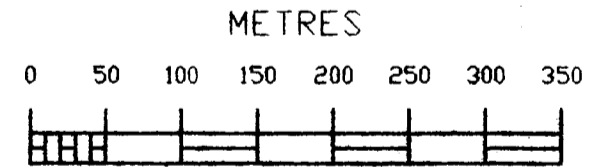
**LEGEND**

- 1 ROCK SAMPLE LOCATION  
VALUES SHOWN IN PARTS PER MILLION COPPER
- DDH G89-2 DIAMOND DRILL HOLE LOCATION
- 45 Indicates attitude of jointing
- Geological boundary

**AR23576**



True North 0°38'E  
Topographic contour interval = 20 metres



SCALE 1:5000

**DISCOVERY** Consultants

**PREDATOR SYNDICATE**

**GNAT PASS PROPERTY  
GEOLOGY AND ROCK SAMPLING  
COPPER VALUES**

Date: Oct. 26/1994	Scale: 1:5000
Project: 608	NTS: 1041/5W
M.D.: Liard	Figure: 4

DRAWN: February 21/1994
Revised:
Oct. 25/1994

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