CONTENTED CLAIM REPORT #1

REPORT ON GEOLOGY AND GEOCHEMISTRY

FOR ASSESSMENT PURPOSES

CONTENTED CLAIM GROUP

ALBERNI MINING DIVISION

RECORD NUMBERS 1465, 1466

N.T.S. MAPSHEET 92F/2W

L.C.P. CO-ORDINATES: 54 39800 m North Latitude
3 61300 m East Longitude

Author: Craig Stewart

Owner: Mattagami Lake Exploration Ltd.

Operator: Noranda Exploration Company, Limited
(No Personal Liability)

Date: October, 1983

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I ABSTRACT

Geological and geochemical sampling during 1982 defined two zones of mineralization which were staked as the CONTENTED CLAIM GROUP. Zone 1 is comprised of several linear shear zones containing Po-Pyr-Cpy mineralization with associated Ag values in basalt. Zone 2 is a 10cm wide Po-Pyr-Cpy "vein" that appears to follow a basalt:basalt lapilli-tuff contact. Soil geochemistry was poor over Zone 1 indicating its sporadic nature whereas several strong copper anomalies, (up to 960 ppm), were defined in Zone 2. Detailed geological mapping and soil sampling, reconnaissance geology and a possible detailed I.P. survey wil be utilized to follow up these zones.

CHAPTER 1 INTRODUCTION

1.1 INTRODUCTION

The CONTENTED claim mineral group is comprised of the CONTENTED 1 and CONTENTED 2 claims totalling 35 units, (875 hectares). Staked during the 1982 field season, the claims cover Cu-Ag mineralization within sheared Karmutsen Basalts overlying granodiorites of the Island Intrusives. Field work to date has consisted of detailed geological mapping and soil sampling adjacent to zones of mineralization.

1.2 LOCATION AND ACCESS

Situated approximately 22km from Port Alberni on a bearing of 200 degrees, the CONTENTED claims are readily accessable via the MacMillan Bloedel Limited Sproat Lake Division logging road system. With an approximate road distance of 32km, access to the claim is excellent (Figures 1 & 2). To reach the claims follow Cous Creek Main to its junction with Canal Main, the latter taken to a point just beyond MacTush Creek and MacTush Creek Main Road. Off of Cous Creek Main, auxillary road systems 400 and 2500 will provide ready access to 60% of the claims, (Figure 2). The majority of the field work was carried out along roads 2500 and 2510.

1.3 CLAIM DESCRIPTION

The following claims comprise the CONTENTED Mineral Claim Group:

1) CONTENTED 1
   Record Number: 1465
   Units: 3N X 5E (Total 15)
   LCP Co-ordinates: 54/39800M North Latitude
   3/61300m East Longitude
   Expiry Date: July 29, 1983

2) CONTENTED 2
   Record Number: 1466
   Units: 4S X 5E (Total 20)
   LCP Co-ordinates: 54/39800m North Latitude
   36/30m East Longitude
   Expiry Date: July 29, 1983

1.2 PHYSIOGRAPHY

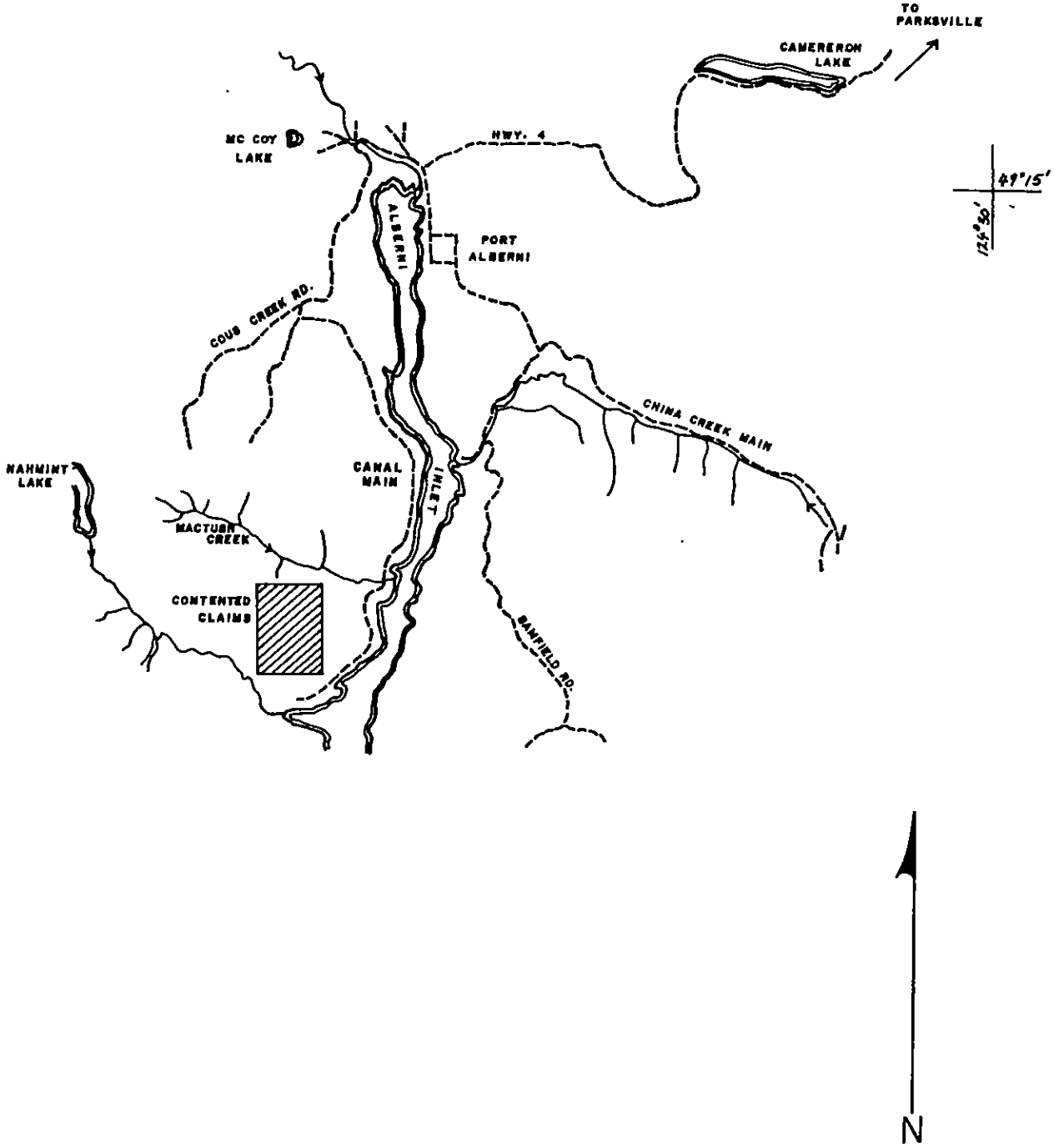
Area covered by the claim group is typically mountainous with elevations ranging from 150m to 1020m. As illustrated in Figure 3 (pouch) the claim group is bisected by a northeast-southwest trending stream valley, the back of which essentially forms the western claim boundary. Typically V-shaped with steep walls, the valley appears to be of fluvial rather than glacial origin. Mountain ridges rise from the valley to the north and south with maximum elevations attained of 1020m and 1004m respectively. Slopes vary from 20 degrees to vertical with the steepest areas along the CONTENTED 1 north and west claim boundaries. Numerous impassable cliffs are located throughout the claim group however, the

claims for the most part are readily accessable.

Drainage of the claim group is dominated by the southwest flowing creek responsible for forming the principle valley of the claim group. Numerous tributaries drain the valley sides but these are of a seasonal nature. The northern 30% of CONTENTED 1 drains to MacTush Creek, while the southern 30% of CONTENTED 2 drains to Nahmint River and Nahmint Bay; with all waters ultimately entering Alberni Inlet. With the exception of the main drainage channel, most streams are seasonal and have a very steep flow gradient; the combined effect being very poor sediment deposition. As a result silt and heavy mineral concentrate sampling are only marginally effective.

Soils are variably represented with best development along the valley bottom and flat ridge tops. Talus fines often dominate the valley sides as opposed to true soils resulting in 'C' horizon soils being predominant. The Ao horizon is characteristically thin while 'B' development varies widely. The majority of soil samples collected are 'B-C' composites.

Logging operations have removed 35-40% of the original climax rain forest, primarily within the main creek valley but also along the northern, eastern and southern claim boundaries. Regrowth is not substantial and with the exception of the valley bottom does not inhibit traversing. Unlogged areas are superb to work in due to the wide spacing of trees and lack of undergrowth.



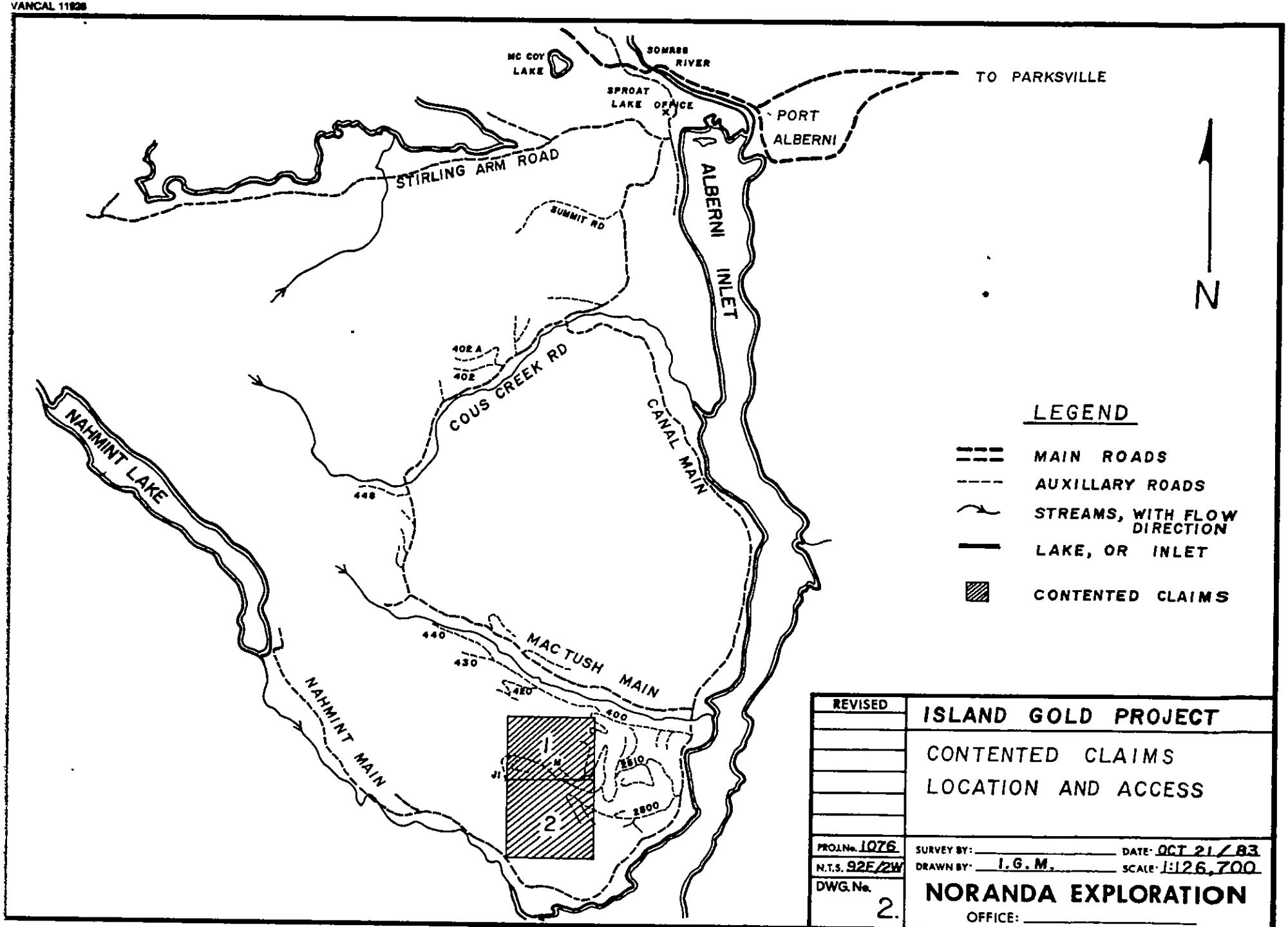
LEGEND

- ROADS
- STREAMS, WITH FLOW DIRECTION
- LAKE, OR INLET
- CONTENTED CLAIMS

REVISED	ISLAND GOLD PROJECT
	CONTENTED CLAIMS LOCATION MAP
PROJ. No. 1076	SURVEY BY: _____ DATE: OCT 24/83
N.T.S. 92F/2W	DRAWN BY: I. G. M. SCALE: 1:250,000
DWG. No. 1.	NORANDA EXPLORATION
	OFFICE: _____

VANCAL 11827

VANCAL 11928



REVISED	ISLAND GOLD PROJECT
	CONTENTED CLAIMS LOCATION AND ACCESS
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N.T.S. 92E/2W	DRAWN BY: I.G.M. SCALE: 1:126,700
DWG. No. 2.	NORANDA EXPLORATION OFFICE: _____

CHAPTER 2: GEOLOGY

2.1 REGIONAL GEOLOGY

Geologically, the CONTENTED claim group has been regionally mapped by J.E. Muller as Triassic Karmutsen volcanics and volcaniclastics overlying Jurassic Island Intrusives of biotite-hornblende granodiorite to quartz diorite composition. The Karmutsen Volcanics are mapped overall to include massive tholeiitic basalt, flow breccia, minor andesite bedded tuff, volcanic breccia and minor intravolcanic limestone.

With the exception of a fault zone along the Nahmint River to the south of CONTENTED 2, structure is not regionally significant.

2.2 GEOLOGY OF THE CONTENTED CLAIM GROUP

To date only a small portion of the CONTENTED claim group has been mapped in detail. The predominant lithology thus far encountered is a dark grey green basalt which has been variously altered. Minor amounts of rhyolite porphyry, granodiorite and basalt lapilli-tuff were also observed. A detailed description of the rock types is provided below.

BASALT: Dark grey green, weathers medium grey green and rust brown. Very fine to find grained with few minerals discernable. Epidote occurs as fracture fillings and crystal aggregates throughout. Outcrops exhibit blocky to tabular fracture patterns. The basalt unit is resistant and well-defined however, variations exist as a result of mechanical and chemical alteration.

a) Recrystallized Calcareous Basalt: Dark grey green, weathers light tan grey brown. Abundant calcite in matrix. Unit very well lithified. Evidence of recrystallization include presence of well defined fine-grained subhedral biotite, hornblende and plagioclase crystals in addition to distinct flow bands and separation of mafic/felsic components.

b) Sheared-Altered Basalt: Dark grey green, weathers light to medium grey, brown, rust and pale. Highly fractured, crumbly. More intensely sheared areas are typically dark brown, recessive crumbly, intensely fractured with well developed slickenside and very lustrous sheared surfaces. Majority of minerals are unrecognizable. Calcite occurrence varies from zone to zone with up to 10% in some.

Mineralization is generally associated with the shears and consists of pyrite, pyrrhotite and chalcopyrite as fine grained disseminations, fracture fillings, veinlets and pods of massive sulphides

c) Calcareous Basalt: Dark grey, weathers rusty brown. Fine grained, massive, resistant but variably sheared. Calcite to approximately 15% as very fine grained matrix material, fracture fillings and veinlets. Pyrite and chalcopyrite to 5% combined usually associated with the calcite.

RHYOLITE PORPHYRY: One exposure 20m long intruding the basalt. Light

greenish grey, weathers white and tan. Very resistant and highly siliceous with sharp conchoidal fracture patterns. Mafics 15-20% of rock composed of biotite (5%) as very fine grained, anhedral crystal aggregates and hornblende (10-15%) as prismatic, euhedral phenocrysts to 4mm in length, (average 1-2mm). Approximately 50% of unit composed of sub/to anhedral plagioclase and K-feldspar phenocrysts to 4mm. Matrix is aphanitic and highly siliceous.

Mineralization is lacking and alteration is restricted to a poorly defined, 30cm wide contact metamorphic aureole along the basalt/porphyry boundary.

GRANODIORITE: Only a cursory examination was performed along the western margin of the claim group. Most noteable feature is the intense shearing and fracturing. This unit is to be studied in detail as part of the proposed follow-up programme.

BASALTIC LAPILLI-TUFF?: Thought to form the footwall of Zone 2. Medium to dark grey-green, weathers darker green. Soft, fragmental with a calcareous matrix. Calcite and epidote occur as fracture filling. Chalcopyrite to 1% as disseminations and fine grained crystal aggregates.

Geological mapping on the CONTENTED claims was restricted to a 220m interval along road cut 2510 where mineralization was first encountered. As illustrated in Figure 4 (pouch), the zone is dominated by variously altered basalt with a small (20m wide) outcrop of rhyolite porphyry intruding it.

As previously indicated in the unit descriptions, the basalt varies widely in its competency and texture as a result of mechanical and chemical alteration. Mechanical shearing and the introduction of carbonate +/- silicate +/- epidote +/- sulphides has produced several zones of varied composition intimately related to one another; competent zones adjacent to highly sheared zones, carbonate rich basalt flanked by carbonate poor basalt. This extreme variability indicates a pulsing action by the introduced fluids which probably used the shear zones as conduits. The rhyolite porphyry appears to have had little effect on the basalt.

Structure is dominated by the presence of numerous well-defined shears which vary in width from 0.1m to 3.0m. Orientation is typically 110°-120° with dips of 70-90°SE. The majority of major shears occur over a 40m interval, (Figure 4) where 12 shears were mapped. This zone represents a good exploration target for further follow-up.

2.3 MINERALIZATION

Pyrite, pyrrhotite and chalcopyrite with associated malachite comprise the mineralization found to date on the CONTENTED claims. Two areas of occurrance have thus far been observed; Zone 1 along logging road 2510 consists of sulphides within sheared basalts, and Zone 2 consisting of a 10cm wide vein of massive sulphides adjacent road 2500, (Figure 3).

Zone 1 contains very fine to coarse grained, sporadic pyrite, pyrrhotite and chalcopyrite as disseminations, fracture fillings, veinlets and massive pods within sheared basalts. Disseminated and fracture filling sulphides are found in the more competent basalts whereas veinlets and

sulphide pods occur in the shear zones. These pods attain a width of 15cm and height of 1.0m and are 80-90% sulphides in composition. Hand specimen samples from these pods gave values up to 1.3 opt Ag and 5.8% Cu. Table 1 illustrates some of the values obtained. Sample locations are plotted on Figure 4.

TABLE 1: ZONE 1 ASSAY DATA

Sample Number	Rock Type	Sample Site	Assay Results
R-23381	Altered Sheared Basalt	Hand specimen	1.3opt Ag, 5.8% Cu
R-23382	Altered Sheared Basalt	" "	1.16opt Ag, 5.0% Cu
R-23383	Calcareous Basalt	" "	0.31% Cu
R-23398	Sheared Basalt	" "	0.10opt Ag, 1.28% Cu
R-23400	" "	12m Chip Sample	0.02opt Ag, 0.09% Cu
R-23401	" "	17m Chip Sample	0.02opt Ag, 0.16% Cu

Values indicated in Table 1 aptly illustrate the sporadic nature of the mineralization in Zone 1. Whereas the sulphide pods associated with the shear zones contain high grades, the host basalt is typically barren. Sweating out of the sulphides from the country rock and subsequent deposition along the shear zones would account for the observed mineralization. This is supported by the generally high copper background in the Karmutsen basalts and the common occurrance of sulphide pods within these basalts as a unit.

Zone 2 has had very little geological work conducted on it. A flat lying, massive sulphide 'vein', this 10cm wide zone of mineralization is dominated by pyrrhotite and pyrite but yielded assay values of 0.54opt Ag and 8.4% Cu. It is difficult to ascertain if this occurrance is a true vein structure or rather an exhalative lens of sulphide. Detailed geological mapping is required to determine the significance of this feature.

2.4 GEOLOGICAL SUMMARY

Two mineralized zones have been located to date on the CONTENTED claims within Karmutsen basalts in association with underlyng Island Intrusive granodiorites. Zone 1 consists of massive sulphide pods and disseminated sulphides associated with linear shears. Mineralization is considered a result of sweating out of sulphides from the country rock. Zone 2 appears to be a flat lying vein structure of massive Po-Pyr-Cpy mineralization. An exhalative origin for Zone 2 is under consideration.

CHAPTER 3: GEOCHEMISTRY

3.1 ANALYTICAL TECHNIQUES

During 1982 a total of 1 heavy mineral concentrate, 169 soil, 41 stream sediments and 35 rock samples were collected on the CONTENTED claims. The majority of soil, silt and pan samples were analyzed by Noranda Exploration Company, Limited for Ag,Cu,Pb,Zn utilizing an HClo3 digestion-extraction technique with readings obtained on Varian Techtron AA475 Atomic Absorption machine. Gold values were obtained either by atomic absorption of FADCP. The Au digestion-extraction medium for atomic absorption is Aqua-Regia-MIBK solution. DCP analysis was performed by X-ray Assay Laboratories while rock assays were carried out by Rossbacher Laboratory Ltd. Table 2 provides a detailed breakdown of sample numbers, elements and analytical techniques. Geochemical results are tabulated in Appendix 1, sample locations are plotted on Figures 3 and 4.

TABLE 2: ANALYTICAL TECHNIQUES

Sample Type and Number	Elements	Analytical Method
39 silt, 1 pan, 169 soil	Au	FADCP
24 silt, 169 soil	Ag,Cu,Pb,Zn	Atomic Absorption
13 rock	Ag,Au,Cu,Pb,Zn	" "
19 rock	Ag,Au,Cu,Pb,Zn	Assay
2 silt	Ag,Au,Cu,Mo,Pb,Zn	Atomic Absorption
3 rock	Ag,Au,Cu,Fe,Pb,Zn	" "

3.2 FIELD PROGRAMME AND RESULTS

Mineralized Zones 1 and 2 were both sampled in detail using soil geochemistry. The results are tabulated in Appendix 1 and as indicated only anomalous copper values were defined. Sample locations and anomalous values are illustrated in Figure 3.

Zone 1 was sampled along 3 parallel soil lines 100m apart with a sample interval of 50m. A bearing of 225 degrees was used; roughly perpendicular to the shear zone orientation. As illustrated in Figure 3, geochemical values over Zone 1 are poor with sporadic Cu anomalies peaking at 220ppm, one isolated gold value of 80ppb and no anomalous Ag. Based upon the values obtained from rock assays it is evident that the shear zones are not expressed at the surface and soil geochemistry is an inappropriate sampling technique for this zone. Further work to define the extent of Zone 1 will consist of a detailed I.P. survey with a dipole spacing of 25m. A close interval is required due to the low conductance and narrow width of the individual shears.

Geochemical information from the sampling of Zone 2 was far more siginificant than values obtained over Zone 1. Two contour grid lines 50m apart were sampled at 50m intervals over an approximate distance of 2.5km. A total of 108 soil, 3 rock and 2 silts were collected.

As illustrated in Figure 3 numerous copper anomalies greater than 100ppm were defined and a distinct cutoff point 150m from the end of road 2500 is observed. This abrupt cutoff may reflect a change in lithology. If the high background values for copper within the Karmutsen basalts is taken into account and a soil threshold of 200ppm is used, four areas

requiring follow up can be defined along road 2500 from NW to SE; Table 3.

TABLE 3: GEOCHEMICAL ANOMALIES, ZONE 2

Area	Maximum Anomalies (ppm)	Distance Along Contour
Area 1	P-22627 - 420 Cu, P-22628 - 220 Cu	50m
Area 2	P-22933 - 580 Cu P-22559 - 580 Cu P-22558 - 390 Cu P-22935 - 390 Cu	250m
Area 3	P-22554 - 960 Cu	Spot Anomaly
Area 4	P-22975 - 760 Cu P-22928 - 260 Cu	Spot Anomaly

As indicated above, Areas 1,3 and 4 are very localized spot anomalies whereas area 2 is a well defined anomaly extending 250m along contour and represents the most significant anomalous geochemical area. As such it will be concentrated on in subsequent follow up programs.

ADDENDUM TO CHAPTER 3.1, GEOCHEMICAL PROGRAMME

PART A; SAMPLING PROCEDURES

Samples collected on the CONTENTED claim group consisted of soil, rock, stream sediment and heavy mineral concentrates in various numbers as indicated in Section 3,1., Soil samples were predominantly red-brown 'B' horizon type obtained from a depth of 10-35 cm. Where soil horizons were poorly defined A/B or B/C combinations were collected. The samples were collected in brown Kraft bags, (9 x 12, 32 lb., open end), dried, and subsequently sent to the laboratory for sifting and analysis. At each sample station an orange and blue flag was marked with the year, type of sample and sample number. Silt, pan and rock sample locations were also marked in this manner.

Silt samples consist of the sand size, and less fraction of the sediment material. They, like the soils were collected in Kraft bags.

Heavy mineral concentrates were obtained by panning a relatively constant volume of material down to the magnetite, (or comparable) fraction; the result weighing between 50 and 100 g. The original volume was predetermined using a large marked sample bag, ($\sim$50 kg in weight).

Rock samples were of two types; whole and chip. Whole rock samples were approximately hand-sized and two were always collected; one for analysis and the second as an office sample for reference pending geochemical results.

Chip samples are, as implied, small pieces of rock chipped across a measured interval at an approximately equal, predetermined sample spacing. They are to be unbiased samples providing a representative geochemical values of the rock samples. An office sample for rock chips is not retained.

PART B

Figures 3A and 3B (pouch) have the geochemical values for the soil grids in plan view.

CHAPTER 4: CONCLUSION

Zone 2 is represented by several significant geochemical anomalies with values up to 760ppm Cu obtained, in the vicinity of a 10cm Po-Pyr-Cpy vein with assay values of 0.54 opt Ag and 8.1% Cu. Considered to lie along the contact between basalt lapilli-tuff, (footwall) and basalt (hanging wall), this mineralization shows potential as a massive sulphide target. This zone represents the primary target on the CONTENTED claims and will be followed up with detailed geological mapping and geochemical sampling with a subsequent I.P. survey if initial results are favorable.

Zone 1 possesses significant assay values in hand specimen (1.3 opt Ag, 5.8% Cu) however these are sporadic and limited to small massive sulphide 'pods' within shear zones. The potential of Zone 1 lies with the union of individual shears at depth to form a stronger zone with possible continuation into the underlying intrusive. An I.P. survey will be required to determine if such a zone exists.

On a general scale, mapping of the logging road system in conjunction with reconnaissance mapping and the detailed examination of the intrusive-volcanic contact is required.

CERTIFICATE OF QUALIFICATION

I, Craig Stewart, of the City of North Vancouver, Province of British Columbia do hereby certify that:

1. I am a geologist residing at #6, 1923 Purcell Way, North Vancouver.

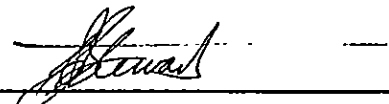
2. I am a graduate of the University of Alberta, Edmonton, with a B.Sc. (1980) in geology.

3. I have been practicing my profession since May, 1980 and am at present Project Geologist with Noranda Exploration Company, Limited.

4. I am a member of the Geological Association of Canada.

5. I am a member of the Canadian Institute of Mining and Metallurgy.

DATED: October 24, 1983



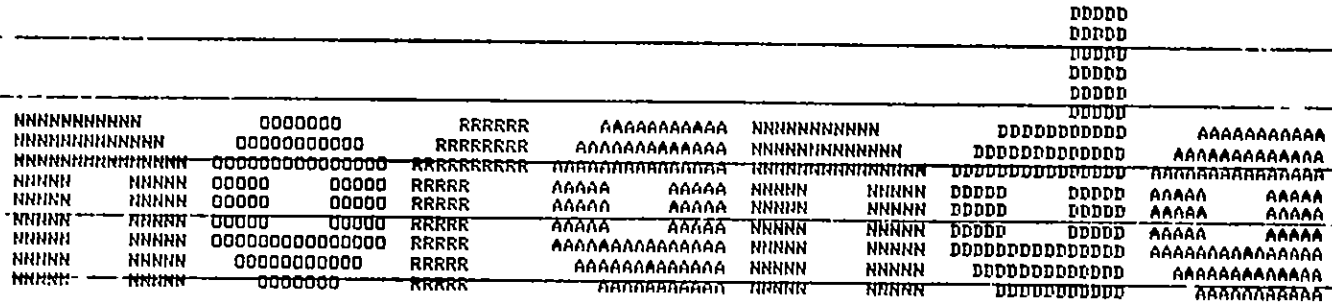
C. Stewart, B.Sc.

APPENDIX 1

GEOCHEMICAL RESULTS

MPLE DATA

CONTENTED CLAIM GROUP GEOCHEMICAL RESULT



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OCTOBER 20, 1983

CONTENTED CLAIM GROUP GEOCHEMICAL RESULT

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3222612	????	130	64	2	.2	540	8.5			
3222613	????	58	28	2	.2	210	6.3			
3222614	????	140	60	2	.4	310	7.6			
3222615	????	140	58	2	.2	370	6.0			
3222616	????	150	52	2	.2	710	6.0			
3222617	????	130	50	2	.2	870	5.1			
3222618	????	160	64	2	.2	940	5.3			
3222619	????	110	52	2	.4	350	8.0			
3222620	????	96	28	2	.4	130	13.0			
3222621	????	120	84	4	.2	740	5.9			
3222622	????	58	36	2	.2	190	4.3			
3222623	????	8	10	4	.2	270	2.3			
3222624	????	58	42	2	.2	280	4.4			
3222625	????	32	34	2	.2	210	4.7			
3222626	????	46	34	2	.2	180	7.3			
3222627	????	420	68	2	.4	2600	6.8			
3222628	????	220	90	4	.2	3900	6.1			
3222629	????	64	30	2	.2	200	9.0			
3222630	????	160	96	2	.2	450	9.5			
3222631	????	120	54	2	.4	300	7.9			
3222632	????	60	48	2	.2	280	8.3			
3222633	????	160	86	2	.4	420	7.3			
3222634	????	52	34	2	.2	130	8.0			
3222635	????	66	36	2	.2	240	7.5			
3222636	????	58	34	2	.2	170	7.2			
3222637	????	110	58	2	.2	1900	4.6			
3222638	????	84	44	2	.2	300	4.7			
3222639	????	62	34	2	.2	170	4.4			
3222640	????	62	40	2	.2	230	5.0			
3222641	????	54	30	2	.2	260	3.8			
3222642	????	140	48	2	.2	310	4.6			
3222643	????	86	40	2	.2	200	1.7			
3222644	????	100	52	2	.2	510	5.7			
3222645	????	130	66	2	.2	430	5.1			
3222646	????	78	50	2	.2	540	4.1			
3222647	????	120	60	2	.4	840	7.0			
3222677	????	20	28	2	.2				10	
3222678	????	18	20	2	.2				10	
3222679	????	14	14	2	.2				80	
3222680	????	32	28	2	.2				10	
3222681	????	24	34	2	.2				10	
3222682	????	10	14	2	.2				10	
3222683	????	24	20	2	.2				10	
3222684	????	56	48	2	.2				10	
3222685	????	40	36	2	.2				10	
3222686	????	20	22	2	.2				10	
3222687	????	40	34	2	.2				10	
3222767	????	52	30	2	.2				10	
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3223007	????	130	56	2	.2				10	
3223008	????	76	58	2	.2				10	
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CONTENTED CLAIM GROUP GEOCHEMICAL RESULT

NUMBER	TYPE	CU1A	ZN1A	PB1A	AG1A	MN1A	FE1A	AU9I	AU1E	MO1A
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3223011	????	40	26	2	.2				10	
3223012	????	66	42	2	.2				10	
3223013	????	120	50	2	.2				10	
3223014	????	34	26	2	.2				10	
3223015	????	22	14	2	.2				10	
3223016	????	60	34	2	.2				10	
3223017	????	18	14	2	.2				10	
3223018	????	28	28	2	.2				10	
3223019	????	140	78	2	.2				10	
3223020	????	20	20	2	.2				10	
3223021	????	280	70	2	.2				10	
3223489	????	52	30	2	.2				10	
3223490	????	18	22	2	.2				10	
3223491	????	34	28	4	.2				10	
3223492	????	130	48	8	.2				10	
3223493	????	56	56	2	.2				10	
3223494	????	22	18	2	.2				10	
3223495	????	14	16	2	.2				10	
3223496	????	26	26	2	.2				10	
3223497	????	24	26	2	.2				10	
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3223499	????	220	56	2	.2				10	

GCI# 00779

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8222305		????	1						
8222306		????	6						
8222307		????	1						
8222308		????	1.S.						
8222309		SILT	1						
8222310		ROCK		10					
8222311		????	2						
8222312		????	32						
8222313		????	9						
8222314		????	17						
8222315		????	1						
8222567	00824	SILT	4		82	52	16	.2	
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8222569		SILT		10	160	58.	2	.2	
8222570		SILT	2		100	42	2	.2	
8222571		SILT	1		52	40	4	.2	
8222572		SILT	1		30	36	2	.2	
8222573		SILT	1		16	32	2	.2	
8222574		SILT	3		34	38	2	.2	
8222575		SILT	16		48	44	2	.2	
8222576		SILT	1		56	38	2	.2	
8222577		SILT	1		68	46	2	.2	
8222578		SILT	1		46	54	2	.2	
8222579		SILT	1		68	60	2	.2	
8222580		SILT	1		32	38	2	.2	
8222581		SILT	1		58	48	2	.2	
8222582		SILT	8		170	96	2	.2	
8222583		SILT	1		98	58	2	.2	
8222584		SILT	4		200	72	2	.2	
8222585		SILT	1		160	76	2	.2	
8222586		SILT	1		170	76	2	.2	
8222587		SILT	9		290	76	2	.2	
8222588		SILT	1		290	88	2	.2	
8222589		SILT	7		270	80	2	.2	
8222590		SILT			180	74	2	.2	
8222591		SILT	7		150	66	2	.2	
8223375	00800	????		10					
8223376		????		10	4900	120	2	2.0	
8223377		????		10	160	90	2	.2	
8223378		????		10	72	76	2	.2	
8223379		????		10	7800	140	2	3.0	
8223380		????		10	1100	68	2	.2	
8223381		????		320	58000	720	2	38.0	
8223382		????		280	50?0	740	2	34.0	
8223383		????		10	3100	110	2	.2	
8223384		????		10	480	26	2	.2	1
8223385		????		10	36	24	2	.2	1
8223386		????		10	18	40	2	.2	
8223387		????		10	1100	36	2	.2	

Bacher Laboratory Ltd.
GEOCHEMICAL ANALYSTS & ASSAYERS

2226 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 298-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 82163

INVOICE NO. 2134

DATE RECEIVED

DATE ANALYSED 32/08/16

TO: NORANDA EXPLORATION CO LTD.
1050 Davie St.
Vancouver, B.C.

ATTN: 197 # 8-15 ISLAND GOLD C. STEWART

SAMPLE NO.:	% Pb	% Zn	% Cu	oz/T Ag	oz/T Au
23389	0.03	0.02	0.04	0.04	0.001
23390	0.02	0.02	0.06	0.02	0.001
23391	0.02	0.02	0.01	0.02	0.001
23392	0.02	0.02	0.03	0.02	0.003
23393	0.02	0.02	0.13	0.02	0.001
23394	0.02	0.02	0.02	0.02	0.001
23395	0.02	0.02	0.01	0.02	0.001
23396	0.02	0.02	0.02	0.02	0.001
23397	0.02	0.02	0.05	0.02	0.001
23398	0.02	0.02	1.23	0.10	0.001
23399	0.02	0.04	0.50	0.03	0.001
23400	0.02	0.02	0.09	0.02	0.005
23401	0.02	0.02	0.16	0.02	0.001
23402	0.02	0.02	0.01	0.02	0.001
23403	0.02	0.02	0.02	0.02	0.010
23404	0.02	0.04	1.63	0.20	0.004
23405	0.02	0.06	2.34	0.26	0.001
23406	0.02	0.02	0.01	0.02	0.001
23407	0.02	0.02	0.03	0.02	0.002

31/8/82

Certified by F. Bacher

NORANDA EXPLORATION CO. LTD.

LOCATION Island Gold (Mattagami)
MATERIAL Soil
N.T.S. 92 F/2 (All)

PROJECT 197 FF8-35 | SHEET 1
SAMPLE Nos. T.S. 18628
COLLECTOR C.S. DATE RECEIVED Aug / 6 / 82
ANALYST R.F DATE ANALYSED Aug / 11 / 82

REMARKS Cu, Zn, Pb, Ag in ppm.
(0.2g / 2 ml $HClO_4$ · HNO_3 → 5 ml)

T.T. No.	SAMPLE No.	1	2 Cu	3 Zn	4 Pb	5 Au	6 Ag	7	8	G.C.I. NUMBER
79	P 22906		22	24	2	10	0.2			
80	7		16	14	2	10	0.2			
1	8		18	22	4	10	0.2			
2	9		10	18	4	10	0.2			
3	10		38	30	2	10	0.2			
4	11		8	12	2	10	0.2			
5	12		20	28	2	10	0.2			
6	13		28	56	2	10	0.2			
7	P 22914		10	28	2	10	0.2			
8	P 22916		38	30	4	10	0.2			
9	17		54	42	2	10	0.2			
90	18		24	30	2	10	0.2			
1	19		40	20	2	10	0.2			
2	20		58	26	2	10	0.2			
3	21		8	8	2	10	0.2			
4	22		94	38	2	10	0.2			
5	23		50	24	2	10	0.2			
6	24		58	34	2	10	0.2			
7	25		130	36	2	10	0.2			
8	26		80	42	2	10	0.2			
9	P 22927		160	62	2	10	0.2			
100	Check NL-3		64	60	10	10	0.6			
1	P 22951		96	36	2	10	0.2			
2	2		18	32	2	10	0.2			
3	3		32	28	2	10	0.2			
4	4		12	18	2	10	0.2			
5	5		22	24	2	10	0.2			
6	6		26	34	2	10	0.2			
7	7		14	22	2	10	0.2			
8	P 22958		42	26	2	10	0.2			

/82

NORANDA EXPLORATION CO. LTD.

LOCATION Island Gold (Mattagami) | PROJECT 197 MP-35 | SHEET 2

MATERIAL Soil | SAMPLE Nos. T.S. 18628

COLLECTOR C.S. | DATE RECEIVED Aug. / 6 / 82

ANALYST R.F. | DATE ANALYSED Aug. / 11 / 82

REMARKS Cu, Zn, Pb, Ag in ppm.

(0.2g/2 ml $HClO_4 \cdot HNO_3$ → 5 ml)

T.T. No.	SAMPLE No.	1	2 Cu	3 Zn	4 Pb	5 Au	6 Ag	7	8	G.C.I. NUMBER
109	P 22959		18	34	2	10	0.2			
110	60		6	10	2	10	0.2			
1	61		8	24	2	10	0.2			
2	62		30	28	4	10	0.2			
3	63		28	30	2	10	0.2			
4	64		8	18	4	10	0.2			
5	65		10	18	2	10	0.2			
6	66		30	12	2	10	0.2			
7	67		14	16	2	10	0.2			
8	68		34	30	2	10	0.2			
9	69		84	30	2	10	0.2			
120	70		170	56	2	10	0.2			
121	P 22971		32	26	2	10	0.2			

NORANDA EXPLORATION CO. LTD.

LOCATION Island Gold (Mattagami) | PROJECT 197 #8-40 | SHEET 3

MATERIAL Soil / Silt | SAMPLE Nos. T.S. 18629

COLLECTOR C.S. | DATE RECEIVED Aug / 9 / 82

ANALYST K.F. | DATE ANALYSED Aug / 13 / 82

REMARKS Cu, Zn, Pb, Ag in ppm.

(0.2g / 2ml $HClO_4 \cdot HNO_3$ → 5 ml)

T.T. No.	SAMPLE No.	1	2 Cu	3 Zn	4 Pb	5 Au	6 Ag	7	8	G.C.I. NUMBER
43	P 22943		170	56	2	10	0.2			?
4	4		150	96	2	10	0.2			
5	5		160	54	2	10	0.2			
6	6		200	84	2	10	0.2			
7	7		130	74	2	10	0.2			
8	8		60	36	2	10	0.2			
9	9		140	62	2	10	0.2			
50	P 22950		84	32	2	10	0.2			
1	S 22589		270	80	2	7	0.2			
2	90		180	74	2		0.2			
3	91		150	66	2	7	0.2			
4	92		22	76	4	<2	0.2			
5	93		26	86	6	<2	0.2			
6	94		18	76	4	<2	0.2			
7	95		22	78	6	<2	0.2			
8	96		18	78	4	<2	0.2			
9	97		24	110	4	<2	0.2			
60	98		18	56	4	<2	0.2			
1	99		34	74	4	<2	0.2			
2	S 22600		38	74	6	<2	0.2			
3	1		14	56	4	<2	0.2			
4	2		24	86	6	<2	0.2			
5	3		16	80	4	<2	0.2			
6	4		14	80	4	<2	0.2			
7	5		26	84	8	<2	0.2			
8	6		14	58	6	<2	0.2			
9	7		32	100	4	<2	0.2			
70	8		34	92	8		0.2			
71	S 22609		56	100	12	<2	0.2			(?)

NORANDA EXPLORATION CO. LTD.

LOCATION Island Gold (Mattagami) | PROJECT 197 #8-40 | SHEET 2

MATERIAL Silt/Soil | SAMPLE Nos T.S. 18629

COLLECTOR C.S. | DATE RECEIVED Aug /7 /82

ANALYST R.F. | DATE ANALYSED Aug /13 /82

REMARKS Cu, Zn, Pb, Ag in ppm.

(0.2g/2 ml $HClO_4 \cdot HNO_3$ → 5 ml)

T.T. No.	SAMPLE No.	1	2 Cu	3 Zn	4 Pb	5 Au	6 Ag	7	8	G.C.I. NUMBER
13	S 22578		46	54	2	<2	0.2			824
4	79		68	60	2	<2	0.2			
5	80		32	38	2	<2	0.2			
6	81		58	48	2	<2	0.2			
7	S 22582		170	96	2	8	0.2			
8	S 22584		200	72	2	<2	0.2			
9	S 22583		98	58	2	<2	0.2			
20	S 22585		160	76	2	<2	0.2			
1	6		170	76	2	<2	0.2			
2	7		290	76	2	9	0.2			↓
3	S 22588		290	88	2	<2	0.2			(824)
4	P 22972		110	36	2	<2	0.2			?
5	3		98	50	2	<2	0.2			
6	P 22974		58	30	2	3	0.2			
7	P 22975		760	48	2	16	0.2			
8	P 22928		260	38	2	10	0.2			
9	29		16	20	2	10	0.2			
30	30		98	46	2	10	0.2			
1	31		170	48	2	10	0.2			
2	32		160	52	2	10	0.2			
3	33		580	58	2	10	0.2			
4	34		280	90	2	10	0.2			
5	35		390	58	2	10	0.2			
6	36		270	62	2	10	0.2			
7	37		270	68	2	10	0.2			
8	38		190	66	2	10	0.2			
9	39		170	58	2	10	0.2			
40	40		240	78	2	10	0.2			
1	41		330	66	2	10	0.2			↓
42	P 22942		260	66	2	10	0.2			?

NORANDA EXPLORATION CO. LTD.

LOCATION Island Gold (Mattagami) | PROJECT 197 #8-40 | SHEET 1

SAMPLE Nos. T.S. 18629

MATERIAL Soil/Silt | COLLECTOR C.S. | DATE RECEIVED Aug /9/82

N.T.S. 92 F/2 (All) | ANALYST R.F. | DATE ANALYSED Aug /12/82

REMARKS Cu, Zn, Pb, Ag in ppm

(0.2g/2 ml $HClO_4 \cdot HNO_3$ → 5 ml)

T.T. No.	SAMPLE No.	1	2 Cu	3 Zn	4 Pb	5 Au	6 Ag	7	8	G.C.I. NUMBER
134	P 22551		60	36	2	10	0.2			?
5	52		190	60	2	10	0.2			
6	53		160	48	2	10	0.2			
7	54		960	60	2	10	0.2			
8	55		170	60	2	10	0.4			
9	56		200	58	2	10	0.2			
140	57		210	48	2	10	0.2			
1	58		390	76	2	10	0.2			
2	59		580	72	2	10	0.2			
3	60		380	66	2	10	0.2			
4	61		200	50	2	10	0.2			
5	62		120	56	2	10	0.2			
6	63		86	46	8	10	0.2			
7	64		180	56	2	10	0.2			
8	65		130	72	2	10	0.2			↓
9	P 22566		120	42	2	10	0.2			(?)
150	Check NL-3		64	58	8		0.6			—
—	—		—	—	—		—			—
1	Check NL-3		64	56	6	4	0.8			—
2	S 22567		82	52	16	4	0.2			824
3	S 22568		60	46	2	4	0.2			
4	P 22569		160	58	2	10	0.2			
5	S 22570		100	42	2	2	0.2			
6	71		52	40	4	<2	0.2			
7	72		30	36	2	<2	0.2			
8	73		16	32	2	<2	0.2			
9	74		34	38	2	3	0.2			
10	75		48	44	2	16	0.2			
1	76		56	38	2	<2	0.2			↓
						<2				824

VL

NORANDA EXPLORATION CO. LTD.

LOCATION Island · Gold (Mattagami)
MATERIAL Soil / Silt
N.T.S. 32F/2, c/16

PROJECT 197 #8-56
SHEET 2
SAMPLE Nos. T.S. 18681
COLLECTOR C.S. DATE RECEIVED Aug /12/82
ANALYST R.F. DATE ANALYSED Aug /17/82

REMARKS Cu, Zn, Pb, Ag, Mn in ppm; Fe in %.
(0.2 g / 2 ml $HClO_4 \cdot HNO_3$ → 5 ml)

T.T. No.	SAMPLE No.	1 Cu	2 Zn	3 Pb	4 Ag	5 Au	6 Mn	7	8 Fe	G.C.I. NUMBER
95	P 22640	62	40	2	0.2	3	230		5.0	
6	1	54	30	2	0.2	24	200		3.8	
7	P 22642	140	48	2	0.2	2	310		4.6	
8	P 22644	100	52	2	0.2	<2	510		5.7	
9	P 22643	88	40	2	0.2	<2	200		4.7	
100	Check NL-3	66	58	8	0.6	—	420		2.7	
1	P 22645	130	66	2	0.2	4	430		5.1	
2	6	78	50	2	0.2	2	540		4.1	
3	P 22647	120	60	2	0.4	3	840		7.0	
4	S 23439	32	64	6	0.2	32	850		3.0	
5	S 23441	34	66	8	0.2	22	920		3.0	
6	S 23442	36	66	8	0.2	18	950		2.9	
7	P 23443	32	64	4	0.2	26	510		3.5	
8	4	84	64	8	4.2	1500	1300		3.5	
109	P 23445	1300	52	4	4.0	>19000	620		3.9	

APPENDIX 2

ASSESSMENT COSTS

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT - Contented Claim Group
TYPE OF REPORT - Geology and Geochem

DATE: October 1983

a) **Wages:**

No. of Days - 16 mandays
Rate per Day - $80.00
Dates From - July 10 - 26 1983
Total Wages - 16 X $80.00 $1,280.00

b) **Food and Accommodation:**

No. of Days - 16
Rate per Day - $45.00
Dates From - July 10 - 26 1983
Total Cost - 16 X $45.00 $ 720.00

c) **Transportation:**

No. of Days - 16
Rate per Day - $37.31
Dates From - July 10 - 26 1983
Total cost 16 X $37.31 $ 597.00

d) Analysis $2,857.00

e) **Cost of Preparation of Report:**

Author	500.00
Drafting	300.00
Typing	130.00

e) Other:

Supervision - 5 days $ 650.00

Total Cost $7,034.00

UNIT COSTS

Unit Costs for - Geology

No. of Days - 10
No. of Units - 10 mandays
Unit Costs - $175.21 / manday

Total Cost	10 X $175.21	$1,752.16

Unit costs for - Geochem

No. of Days -
No. of Units - 439 Samples
Unit costs - $12.03 / Sample

Total Cost	439 X $12.03	$5,281.84
Total		$7,034.00

NORANDA EXPLORATION COMPANY, LIMITED

DETAILS OF ANALYSES COSTS

Project: Contented Claim Group

Element	No. of Determinations	Cost per Determination	Total
Au	16	6.50	104.00
Au,Ag,Pb,Zn	193	3.80	733.40
Au	193	6.50	1,254.50
Ag,Au,Cu,Pb,Zn	13	8.30	166.00
Ag,Au,Cu,Pb,Zn	19	30.00	570.00
Mo,Fe	2	1.20	2.40
Ag,Au,Cu,Mo,Pb,Zn	3	8.90	26.70
Total			$2,857.00

ZONE 1

ZONE 2

AREA 1

AREA 2

AREA 3

AREA 4

CONTENTED CLAIMS

ALBERNI INLET

LEGEND

LOGGING ROADS

STREAMS, WITH FLOW DIRECTION

TOPOGRAPHIC CONTOURS (500' INTERVALS)

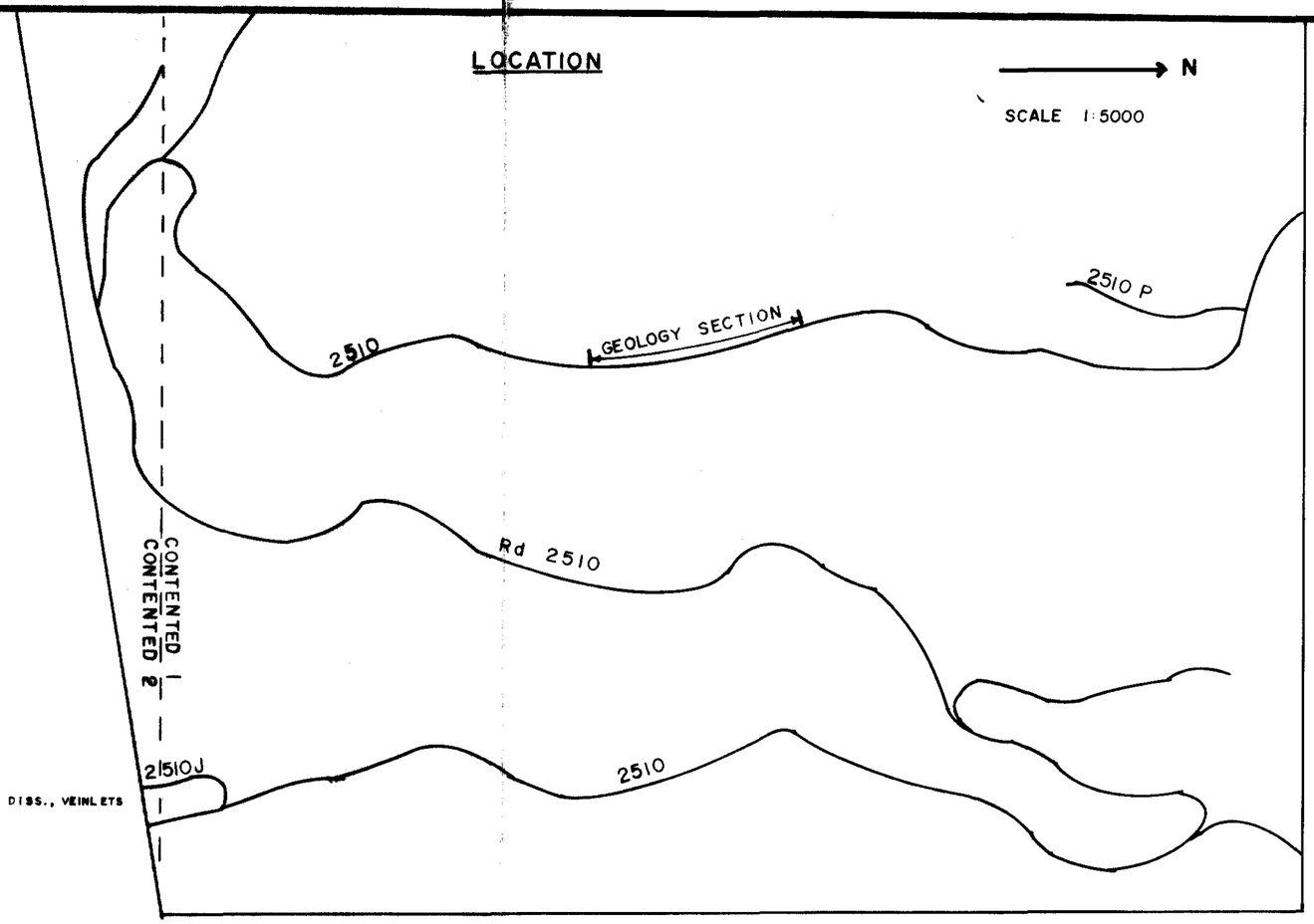
GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,044

Scale (Metres)

REVISED	
	CONTENTED CLAIMS
	SAMPLE LOCATIONS, ANOMALOUS GEOCHEMISTRY, CLAIM TOPOGRAPHY
PROJ. No. 12	SURVEY BY: DATE: OCT 23/83
N.T.S. 92F/2W	DRAWN BY: C. STEWART SCALE: 1:5,000
DWG. No. 3	NORANDA EXPLORATION
	OFFICE:

LOCATION



a DISS. PYR. & CPY. 2-3%, CPY. UP TO 15%
b DISS. PYR. & CPY. 2-3%, & VEINLETS
c CPY. WITH MALACHITE 2-3% AS V.F.G. X-TAL AGGREGATES, DISS., VEINLETS
d F.G. CPY. UP TO 3% AS FRAC. FILLINGS, VEINLETS
e CPY. & PY. 2-3%
f CPY. 2-3%
g CPY. 10-15%, PO., PYR.
h CPY. WITH MALACHITE 5-10%, PO., PYR.
i CPY. 4-20%, MAL., PO., PYR.
j ~~V.F.G. PYR., CPY. 5-10% COMBINED~~
k DISS. PYR. 5%; CPY. & MAL. 3%

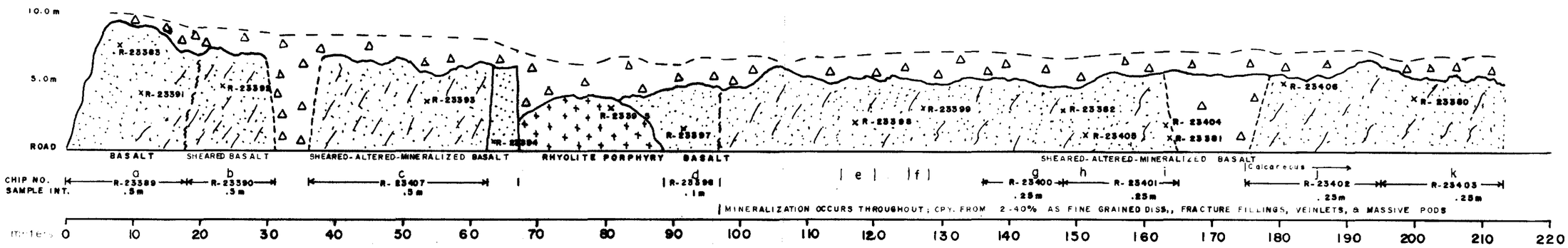
LEGEND

- △ TALUS, OVERBURDEN
- + RHYOLITE PORPHYRY
- :: BASALT
- GRADATIONAL CONTACT
- / SHEARING

← SOUTH~ ~ NORTH →

SHEAR ZONES:

S-97°	S-136°	S-110° D-45-70°SE	S-112°	S-112°	S-80° D-80°-90°SE	S-180° SE	S-10°	S-130° D-85°SE	S-85° D-70-90°SE	S-85° D-70-80°NE	S-48°	S-118°	S-118° D-70-90°SE	S-110° D-80-90°E
.5m	.07m	1.25m	3.0m	3.0m	1.0m		1.0m		1.0m	.1m	2.0m	.1m		1.0m



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,044

REVISED	ISLAND GOLD PROJECT
	CONTENTED 1 CLAIM; EASTERN HALF
	CROSS-SECTION OF ROAD CUT
PROJ. No. 1076	SURVEY BY: ..... DATE: .....
N.T.S. 92 F\2 W	DRAWN BY: ..... SCALE: .....
DWG. No. 4	NORANDA EXPLORATION
	OFFICE: .....

VANCAL 11919

3N 0E

3N 5E

4S 0E

4S 5E

5E 0N

5E 0S

CONTENTED 1

CONTENTED 2

MACKTUSH CREEK

Rd M400

Rd M420

Rd M410

Rd M410A

Rd 2510

Rd 2510 D

Rd 2510 J

Rd 2510 S

Rd 2500

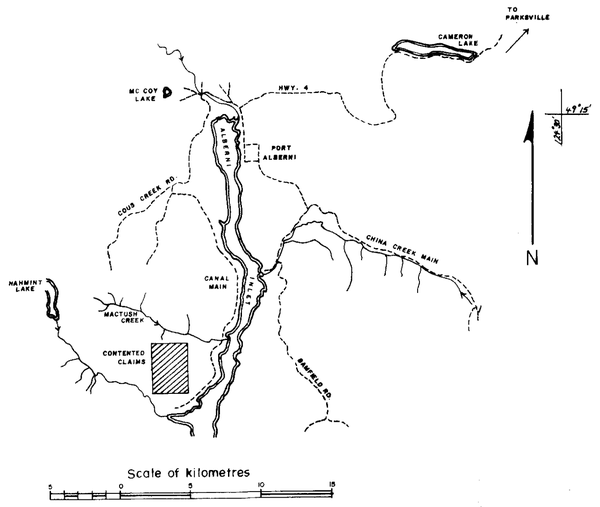
Rd 2525

Rd 2530

Rd 2520

NAHMINT MAIN

ALBERNI INLET



LEGEND

LOGGING ROADS

STREAMS, WITH FLOW DIRECTION

TOPOGRAPHIC CONTOURS (500' INTERVALS)

GEOCHEMICAL VALUES

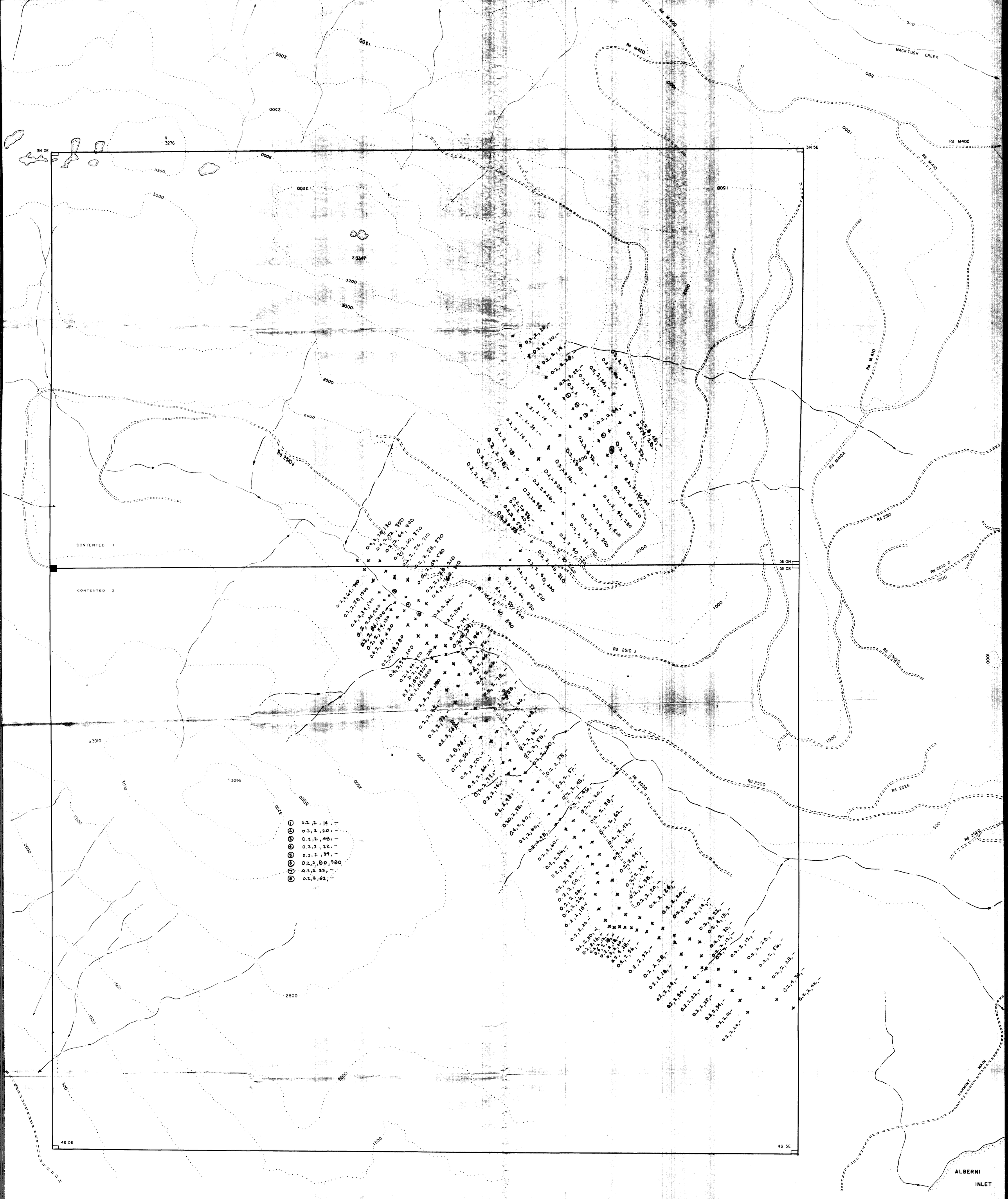
X 10,96,4,6.3 Au ppb, Cu ppm, Mo ppm, Fe %

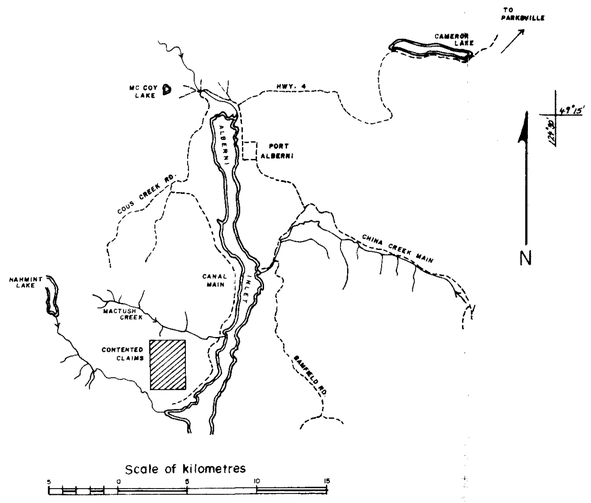
GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,044

Scale (Metres)

REVISED	
	CONTENTED CLAIMS GOLD, COPPER, MOLYBDENUM, IRON GEOCHEMICAL VALUES
PROJ. No. 12	SURVEY BY: ..... DATE: OCT 23/83
N.T.S. 92F/2W	DRAWN BY: C. STEWART SCALE: 1:5,000
DWG. No. 3A	NORANDA EXPLORATION
	OFFICE: .....





LEGEND

LOGGING ROADS

STREAMS, WITH FLOW DIRECTION

TOPOGRAPHIC CONTOURS (500' INTERVALS)

GEOCHEMICAL VALUES

X 0.2, 2, 34, 370 Ag ppm, Pb ppm, Zn ppm, Mn ppm

GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,044

Scale (Metres)

REVISED	
	CONTENTED CLAIMS
	SILVER, LEAD, ZINC, MANGANESE GEOCHEMICAL VALUES
PROJ. No. 12	SURVEY BY: DATE: OCT 23/83
N.T.S. 92F/2W	DRAWN BY: C. STEWART SCALE: 1:5,000
DWG. No. 3B	NORANDA EXPLORATION
	OFFICE: