86-1001-15500

GEOLOGY AND GEOCHEMISTRY REPORT 1986

on the

TUT 1-6 CLAIMS

(Moon Lake Project)

Atlin Mining Division

N.T.S. 104 M/15E

Latitude 59°48.8'N

Longitude 134°41.5' W

Owner/Operator: Noranda Ex. Co. Ltd.

Authors: S.J. Mackay
W. Reid

Date: January, 1987

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CHAPTER ONE: INTRODUCTION

1-1: INTRODUCTORY STATEMENT

During the 1986 field season Noranda Exploration conducted follow-up work in the Tutshi and Moon Lakes area which eventually led to the discovery of several anomalous gold zones and the subsequent staking of 115 units known as the TUT 1-6 claims.

1-2: LOCATION AND ACCESS

The TUT 1-6 claims are located 40 kilometres south of Carcross at the south east end of Tutshi Lake on mapsheet N.T.S. 105 M/15 at latitude 59°48′N and longitude 134°45′W (Figure 1). The Skagway road is situated 2 kilometres west of the edge of the claim block. Access to date has been by Bell 206 series helicopters based in Whitehorse, 105 kilometres to the north or by a Hughes 500D which was based in the Wheaton River valley. A large gravel patch,situated on the Skagway road across from the Moon Lake valley,was used as a staging point for crews and camp gear.

The Venus Mine mill, with a capacity of 150 tons per day, is located approximately 30 kilometres north of the property along the Skagway road.

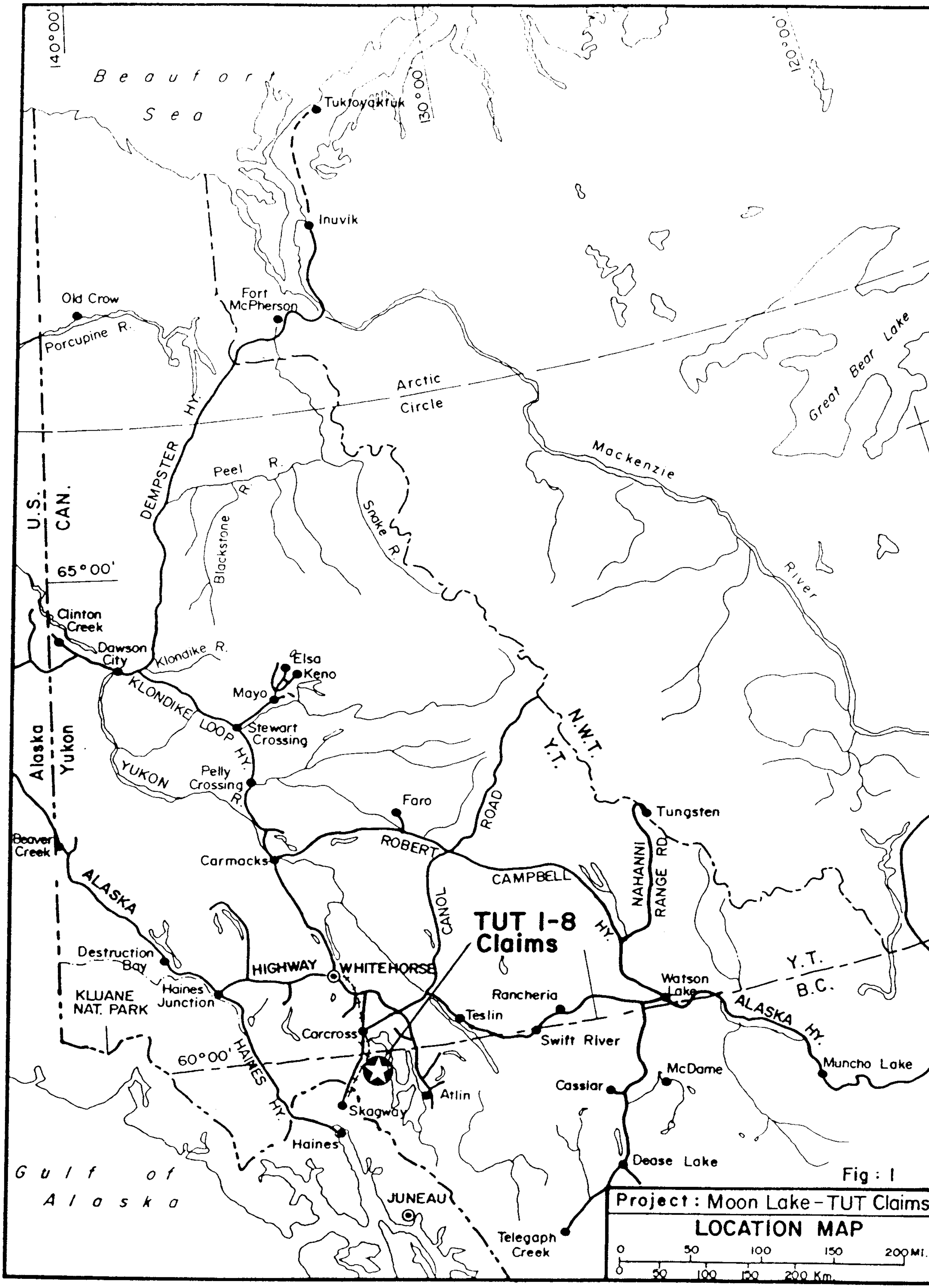


Fig : I

Project : Moon Lake - TUT Claims

LOCATION MAP

0 50 100 150 200 MI.
0 50 100 150 200 Km.

1-3: PHYSIOGRAPHY AND VEGETATION

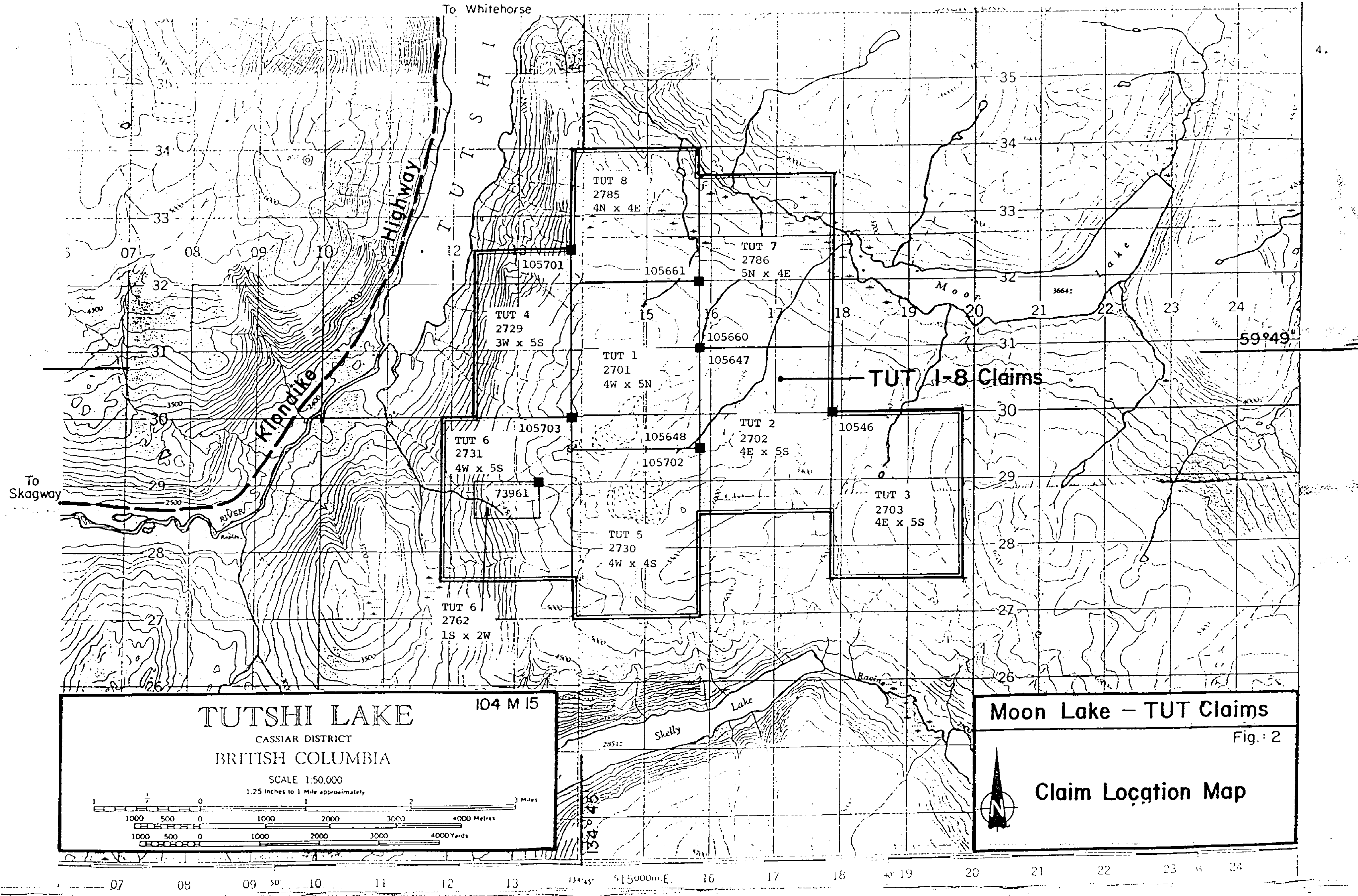
The TUT claims lie at the western edge of the intermontane belt. The majority of the property is accessible by wide, gently sloping valleys and most ridges can easily be walked. The central portion of the claims is dominated by rugged alpine terrain, typical of the coast mountains. Maximum relief on the property is 4,000 feet and 5% of the property is covered by glaciers.

Vegetation in the alpine is limited to lichen growth. Grasses and short shrubs occur lower in the valleys and in Moon Lake valley, itself, vegetation consists of patchy conifer growth. Swampy areas occur around Moon Lake.

1-4: HISTORY OF THE CLAIMS

The initial Moon Lake TUT 1-3 block was staked August 10, 1986 and consisted of 60 units (Figure 2). The ground was staked in order to cover a large carbonate alteration zone as well as the source area for several float pieces found to be anomalous in gold.

Following encouraging results from the initial program an additional 55 units, the TUT 4-6, were added September 13, 1986. This block now covers several old showings known as the Jessie, Great Northern and Big Thing (British Columbia - Report of Minister of Mines, 1929).


To Whitehorse
To Skagway
Klondike Highway
TUTSHI
RIVER
Moon Lake
Skelly Lake
TUT 8
2785
4N x 4E
TUT 7
2786
5N x 4E
TUT 4
2729
3W x 5S
TUT 1
2701
4W x 5N
TUT 2
2702
4E x 5S
TUT 3
2703
4E x 5S
TUT 5
2730
4W x 4S
TUT 6
2731
4W x 5S
TUT 6
2762
1S x 2W
105701
105661
105660
105647
105703
105648
105702
10546
73961
TUT 1-8 Claims
59°49'
TUTSHI LAKE
CASSIAR DISTRICT
BRITISH COLUMBIA
104 M 15
SCALE 1:50,000
1.25 Inches to 1 Mile approximately
Moon Lake – TUT Claims
Fig.: 2
Claim Location Map

1-5: PREVIOUS EXPLORATION

Past exploration in the area dates back to 1901 with the discovery of the Venus vein system near Tagish Lake 25 kilometres to the north by J.M. Pooley. The Jessie showing covered by TUT 1 and 4 was originally staked as the Great Northern group by Joe Bussinger in 1906. Exploration of the showing was limited to hand and blast trenching and was not reported until 1929 when a group of engineers from Timmins, Ontario expressed interest in the property. Average assays of the ore zone were reported to be 0.15 oz/t gold, 23.6 oz/t silver and 4.9% copper across a 6 foot wide shear zone in andesites.

No further exploration is reported in this area until 1981 when both Dupont and Kennco staked the area east of Tutshi Lake between Moon Lake and Skelly Lake. Acquisition of the ground was based on encouraging results from regional geochemical programs. Work during the 1981 field season for both companies consisted of limited soil, silt and rock sampling as well as some geological mapping. No work was recorded by Kennco on its Moon 1-7 claims, however B.C. Department of Mines reports indicated the claims covered a zone of minor sulphide mineralization in a sheared granodiorite. The claims were allowed to lapse in 1982. Dupont recorded work on its Skelly claims but not on its Skel 1 and 2. Results were discouraging and both claim groups were allowed to lapse in 1982.

In 1985 Noranda initiated a regional program in the area aimed at evaluating the Triassic volcanics for their potential to host massive sulphides. Whole rock analysis was done on 45 rock samples taken at various locations throughout the package of Triassic volcanics. Results were inconclusive. During this program pods and lenses of massive pyrrhotite were found in a sequence of cherts, shales and tuffs in Moon Creek, to the north of the present claims. These pods returned values of up to 130 ppb Au. Due to the narrow width of the volcanic belt and the high degree of exposure, the proposed airborne EM and MAG survey was never flown.

1-6: 1986 WORK PROGRAM

From June 20 to June 23, a two man crew conducted an initial program of exploration aimed at resampling the Po showing found in 1985 as well as silt sampling and prospecting the surrounding area. This recce work also concentrated on the south side of the Moon Valley where earlier work had located an area of alteration characterized by Na depleted volcanics. Snow conditions allowed for only a limited amount of the area to be examined. Several carbonate altered rocks found in float returned weakly anomalous gold values of up to 450 ppb Au. Other anomalies were 6,000 ppm Cu and 7,800 ppm Zn from different rock samples.

Based on these results, a second two man fly camp was established at the west end of Moon Lake from July 19 to 21. A program of rock, soil and silt sampling as well as some regional mapping was carried out aimed at locating the source of the anomalous float pieces. Results proved to be encouraging with the finding of a 75 metre wide carbonate alteration zone traced for several hundred metres which has anomalous gold and copper associated with it. One float sample taken in "Nasty Cirque" returned gold values of up to 44,000 ppb Au. On the basis of these results, the TUT 1 to 3 were staked.

From August 21 to September 2, a crew of 3 to 5 people conducted a detailed exploration program on the TUT 1 to 3 claims. The program consisted of the establishment of a 4.9 kilometre long baseline and 11.4 kilometres of cross lines. The grid was soil sampled at various intervals for a total of 524 soils and geologically mapped at a 1:2,500 scale. The rest of the property was mapped at a 1:10,000 scale.

A detailed rock sampling program was undertaken consisting of chip/grab samples, outcrop samples and float samples. In order to chip sample more inaccessible areas of Nasty Cirque, a short program of mountaineering was done. A total of 146 rock samples were analyzed.

Initial results from the program were encouraging, therefore on September 13, 1986 the TUT 4 to 6 claims were staked. This provided adequate coverage of the Jessie and Big Thing showings as well as other areas of potential mineralization.

Personnel for the 1986 program were as follows:

Wayne Reid	Senior Project Geologist
Steve Mackay	Geologist - Crew Chief
Craig Hart	Geologist - Crew Chief
Gordon MacKay	Senior Assistant
Robert Copland	Assistant - Mountaineer
Jurg Hofer	Assistant - Mountaineer
Larry Lebedoff	Field Assistant

CHAPTER TWO: GEOLOGY

2-1: REGIONAL GEOLOGY

The TUT claims are located along the western margin of the Whitehorse Trough. The trough represents a 650 kilometre long Mesozoic sedimentary basin. Regional mapping by Bultman (1979) and Christie (1957) indicates the trough is a northwest trending synclinorium. The Lower and Middle Jurassic Laberge Group crops out in the central axial portion of the trough, to the east of the claims. The Upper Triassic volcanic, volcaniclastic and pyroclastic rocks of the Stuhini Group form the margin of the trough and unconformably or conformably underlie the Laberge Group, depending on the location. To the west of the Triassic volcanics is a sequence of Pre-Permian greenschist facies metamorphic rocks consisting of gneiss, quartzite, chlorite schist and recrystallized limestone. This sequence has been intruded by the main body of the Cretaceous Coast Range plutonics, comprised mainly of granodiorite. Contacts are often faulted and highly irregular. Several intrusive bodies occur within the trough itself. One of the largest is Jack Peak occurring north of the claims between Tutshi Lake and Moon Lake.

2-2: PROPERTY GEOLOGY

The TUT claims cover a sequence of Upper Triassic volcanics known as the Stuhini volcanics. The rocks are dominated by a sequence of basic to intermediate volcanic pyroclastics, epiclastics and minor flows with some local felsic sequences. Within this sequence occur shallow water limestones as well as some local non-volcanic clastic rocks.

Rocks in the area generally trend northwest and dip northeast at 45°. In areas of intense shearing, they are generally vertical.

The entire sequence of rocks is cut by dykes of felsic to basic composition ranging in age from Late Jurassic to Tertiary. Some of these dykes and sills have been structurally deformed while others have not.

A large zone of carbonate alteration occurs on the property. It is up to several hundred metres wide and has been traced for approximately 5 kilometres. It is generally sheared and brecciated with alteration ranging from weak argillic to intense carbonate with no relict rock fragments.

The following gives the formations for the property and details for the various units:

Unit 6 consists of green to gray coloured dykes of intermediate composition. They are generally fine grained, 0.5 metres to 5 metres wide, vertical and trend northwest to north-south. They often occur parallel to each other in groupings of several dykes, especially in the eastern claims in an area locally referred to as the "Ditch". They are generally unaltered, rarely fractured and locally siliceous.

81 and RL-82 were also completed and later incorporated into the grid. Sample intervals along the lines ranged from 10 metres over the carbonate alteration to 50 metres in other portions of the grid with the average being 25 metres. All samples were analyzed for Cu, Pb, Zn, Ag, As and Au (Appendix 2).

Soil horizon development is only evident in the lower valleys. There, the B horizon was sampled at a depth of 20 to 30 cm. Along the steeper slopes and more alpine portions of the grid, samples generally consisted of a heterogenous B/C mixture or a fine grained talus.

Copper appears to show the strongest correlation with the alteration zone and again, as with silt sampling, shows a strong correlation with gold values as do zinc and silver. Lead and arsenic show the least degree of correlation. While copper effectively traces the alteration zone, the gold in soil values indicates several linear anomalies within the alteration package or near its margin. The most significant of these is a 2,000 ppb Au anomaly at L-18200E/79925N. Some of these anomalies have known mineralized occurrences near them such as 1,500 ppb Au on RL-82 station 1+50. This occurs at the waterfall within a sulphide bearing silicified section of the alteration zone. Other significant anomalies such as 1,700 ppb Au at L-16400E/79200N have an unknown source but are possibly related to another zone of alteration within the volcanics. Several high silver in soil anomalies up to 18.0 ppm Ag at L-17600E/80025N and 12.0 ppm Ag at 80000N also occur within the carbonate alteration zone.

Two talus fines samples, TF-78464 with 850 ppb Au and TF-78463 with 140 ppb Au, were taken at Nasty Cirque below Gossan 2. These anomalous values are likely related to the weak gold values obtained on the upper part of the ridge at that location.

CHAPTER FOUR: MINERALIZATION AND ROCK GEOCHEMISTRY

Mineralization on the claims generally consists of two main types. The first type is associated with the alteration zone in the eastern half of the claims and partially covered by the main grid. The alteration zone (Unit 4d) consists of a heavily carbonate altered basic volcanic with local patches of silicification and lesser chlorite alteration. Values up to 6,400 ppb Au and 4% Cu have been obtained from grab samples within this orange weathering zone. Typically the rock is partially sheared and contains up to 5% stringers and dissemination of pyrite and chalcopyrite.

The second type of mineralization is restricted to the Nasty Cirque and Jessie showings. Values up to 78 gm/T Au, 617 gm/T Ag, >1,000 ppm As, 0.3% Cu and 5% combined Pb-Zn have been obtained from grab samples of well brecciated, foliated to mylonitized siliceous rock with up to 15% sulphide matrix. The Jessie showing analyzed 4.13 gm/T Au over 4.0 metres and areas in the Cirque showed up to 1,300 ppb Au over 7.0 metres (see Figures 5 and 6).

A total of 224 rock samples were taken during the course of the program (146 of which were taken since the claims were staked). Results are presented in Appendix 3 and sample locations on Figure 6.

In general, the two types of mineralization can be characterized by:

1) Cu-Au associated with altered basic volcanics with lesser Pb-Zn-Ag correlations.

2) Au-As-Pb-Zn-Ag mineralization associated with mylonitized to foliated breccias with lesser Cu association.

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

The TUT claims are underlain by a variably altered and foliated sequence of submarine deposited basic volcanics and associated sedimentary rocks. These have been cut by a number of different types of felsic to mafic dykes.

Structural controls on the mineralization appear to be quite important in localizing alteration and sulphide mineralization, however this is poorly understood as field work to date has been fairly limited and widespread.

Due to the size of the alteration zone, up to 300 metres wide and 5 kilometres long, and the high grade Au values obtained in some samples, the area deserves a systematic and concentrated exploration effort in 1987.

This should include:

1) Airborne EM, Mag and VLF over the claim blocks at 200 metre line separation to help map the different lithologies and alteration zones as well as locating new ore zones.

2) Expanded detailed, soil geochemistry, geology and ground geophysics on target areas already known and those located by the airborne. Detailed prospecting and sampling would be part of this program.

3) Some blast trenching followed by diamond drilling on the targets defined. Some of these targets are already defined and require only limited ground work prior to testing.

4) Some effort should be made toward getting a cat trail into the property from the south side of Tutshi Lake.

Respectfully submitted,

Wayne Reid	Steve Mackay
Senior Project Geologist	Geologist

REFERENCES

British Columbia Report of Minister of Mines, 1929.

Bultman, B.B., 1979. Geology and Tectonic History of the Whitehorse Trough west of Atlin, B.C. Unpublished Ph.D. Thesis, Yale University.

Christie, R.L., 1957. Bennett Map Sheet Geology (104M). G.S.C. Map 19-1957.

Schroeter, T.G., 1985. Bennett Project (104M). BCMEMPR Geological Fieldwork, Paper 1986-1, pp. 184-189.

STATEMENT OF QUALIFICATIONS

I, Wayne Reid, of the City of Whitehorse in the Yukon Territory, do hereby certify that:

1. I have been employed as a Geologist by Noranda Exploration Company, Limited (No Personal Liability) since 1976.

2. I am a graduate of Memorial University of Newfoundland with a Bachelor of Science Degree in Geology.

3. I am a Fellow of the Geological Association of Canada, a member of the Yukon Professional Geoscientists and the Prospectors and Developers Association.

4. I helped plan and supervise part of the work described in this report.

GEOLOGICAL ASSOCIATION OF CANADA
N. WAYNE REID
FELLOW

N. Wayne Reid
Senior Project Geologist

STATEMENT OF QUALIFICATIONS

I, Steve Mackay of the city of Calgary, Alberta, do hereby certify that:

1. I was employed as a geologist by Noranda Exploration Company, Limited (NPL) during the 1984, 1985 and 1986 field seasons.

2. I am a graduate of the University of Alberta with a Bachelor of Science Degree in Geology.

3. I am a member of the Canadian Institute of Mining and Metallurgy and a member in training of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.

4. I helped supervise and perform the work described in this report.

Steve Mackay

Steve Mackay
Geologist

STATEMENT OF COSTS

PROJECT: MOON LAKE - TUT Claims

Labour:			
	58 mandays @ $130		7540.00
Helicopter:			
	8 hours @ $550		4400.00
Ground Transport:			520.00
Supplies & Lodging:			2320.00
Analysis:			
	3 silts @ 9.00	18.00	
	146 rocks @ 12.00	1752.00	
	524 soils @ 9.00	4716.00	
			6486.00
Report writing, drafting, etc.:			2500.00
		TOTAL	$23766.00

APPENDIX 1

SILT SAMPLE GEOCHEMICAL RESULTS

NORANDA VANCOUVER LABORATORY

PROPERTY/LOCATION:MOON LAKE /NBC GENERAL CODE :8607-110

Project No. :373 Sheet:1 of 1 Date rec'd:JUL 23
Material :SOIL/SILT Geol.:SM Date compl:AUG 07
Remarks :

Values in PPM, except where noted.

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au
65	SOIL 73565	12	64	12	0.2	60	10
66	73566	30	84	24	0.4	70	10
67	73567	32	120	36	0.2	82	10
68	73568	16	140	10	0.4	66	10
69	73569	28	110	18	0.2	98	10
70	90132	26	96	28	0.2	52	10
71	90133	22	70	10	0.2	68	10
72	90134	24	58	12	0.2	68	10
73	90135	24	70	20	0.4	80	10
74	90136	26	64	22	0.2	94	10
75	90145	4	44	6	0.2	180	10
76	90146	120	220	48	1.6	16	30
77	90147	170	250	56	3.2	24	10
78	90148	110	220	80	1.6	40	20
79	90149	120	230	74	1.6	36	20
80	SOIL 90150	110	180	32	1.0	26	10
81	SILT 73559	54	90	42	0.4	90	10
82	78406	130	90	24	1.0	56	60
83	78408	38	84	20	0.4	66	30
84	78409	38	170	16	0.4	80	10
85	78416	45	190	18	1.0	80	10
86	90144	16	62	20	0.2	240	10
87	90154	86	130	40	0.6	70	380
88	SILT 90130	48	94	16	0.2	40	10

8607-110

ROSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVENUE
BURNABY, B.C. V5B 3N1
TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

TO : NORANDA EXPLORATION CO. LTD.
1050 DAVIE STREET
VANCOUVER B.C.
PROJECT: 373 8607-110 Moon Lk (SMc)
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86270
INVOICE#: 6552
DATE ENTERED: 86-08-05
FILE NAME: NOR86270
PAGE # : 1

PRE FIX	SAMPLE NAME	PPM Cu	PPM Ag	PPM Zn	PPM Pb	PPB Au	PPM As
T	90126	22	0.2	96	8	5	4
T	90127	48	0.2	64	4	5	2
T	90128	4	0.2	82	6	5	2
T	90129	38	0.2	106	6	5	2
T	90130	6	0.2	108	6	5	2
T	90137	24	0.2	74	6	5	12
T	90138			MISSING			
T	90139	24	0.2	62	8	10	22
T	90140	12	2.4	90	140	690	208
T	90141	8	0.2	72	6	30	4
T	90142	4	0.2	38	12	20	28
T	90143	40	7.0	1120	164	44000	228
T	90151	28	0.2	114	6	40	4
T	90152	12	0.2	328	60	20	2
T	90153	690	2.8	106	2040	30	2
T	90154	6	0.2	42	16	5	2
T	90155	378	3.4	44	6	520	28
T	73555	50	0.2	104	4	5	124
T	73556	12	0.2	90	6	10	2
T	73557	18	0.2	142	10	5	2
T	73558	114	0.6	74	6	10	850
T	73560	28	0.2	66	6	10	4
T	73561	650	15.0	90	278	430	122
T	73562	5600	5.2	96	30	30	6
T	73563	5400	3.2	72	38	10	18
T	73564	3120	3.0	184	22	5	126
T	73570	28	0.4	20	8	5	36
T	73571	94	0.2	172	4	5	92
T	73572	8	0.2	76	6	10	2
T	73573	8	0.8	48	46	5	24
T	73574	4	0.2	28	2	5	16
T	73575	14	0.2	48	4	5	10
T	78401	9200	11.8	106	48	130	14
T	78402	5800	17.6	250	136	2300	12
T	78403	950	2.0	120	16	5	2
T	78404	550	232.0	4900	9600	480	14
T	78405	25200	32.8	90	92	250	122
T	78406	32	0.6	64	36	5	2
	78410	54	1.8	42	8	200	110
	78411	24	0.4	142	30	5	30

CERTIFIED BY : [signature]

ROSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVENUE
BURNABY, B.C. V5B 3N1
TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

TO : NORANDA EXPLORATION CO. LTD.
1050 DAVIE STREET
VANCOUVER B.C.
PROJECT: 373 8607-110
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86270
INVOICE#: 6552
DATE ENTERED: 86-08-05
FILE NAME: NOR86270
PAGE # : 2

PRE FIX	SAMPLE NAME	PPM Cu	PPM Ag	PPM Zn	PPM Pb	PPB Au	PPM As
T	78412	8	0.4	36	10	10	12
T	78413	1400	0.4	54	6	5	12
T	78414	10	0.6	152	32	10	18
T	78415	30	0.2	24	4	5	8

CERTIFIED BY : [signature]

APPENDIX 2

SOIL SAMPLE GEOCHEMICAL RESULTS

File

NORANDA VANCOUVER LABORATORY
****

PROPERTY/LOCATION:MOON LK CODE :8609-047

Project No. :368 Sheet:1 of 10 Date rec'd:SEP 08
Material :SOIL/TF/SILT Geol.:CH/SM Date compl:SEP 11
Remarks :

Values in PPM, except where noted.

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au
2	14600E-78500N	70	130	46	0.2	68	10
3	78550	54	120	52	0.4	130	10
4	78600	82	130	28	0.2	120	10
5	78650	20	76	26	0.4	46	10
6	78700	18	110	48	0.2	44	10
7	78750	26	120	36	0.2	140	10
8	78800	160	160	24	0.4	130	10
9	78850	130	150	20	0.2	410	10
10	78900	220	670	160	1.0	1100	10
11	78950	84	200	40	0.2	390	10
12	79000	84	140	20	0.2	180	10
13	79050	110	180	22	0.2	84	10
14	79100	100	160	14	0.2	56	10
15	14600E-79150N	110	200	38	0.2	130	30
16	16000E-80000N	40	78	12	0.2	28	30
17	80050	30	110	110	0.2	84	100
18	80100	30	92	54	0.4	62	10
19	80150	36	150	70	0.4	100	90
20	80175	74	110	22	0.6	42	50
21	80200	74	76	16	0.2	40	10
22	80225	210	92	16	0.2	40	20
23	80250	220	98	16	0.2	36	10
24	80275	250	110	18	0.2	48	20
25	80300	220	110	18	0.2	38	90
26	80325	250	120	20	0.2	40	10
27	80350	210	140	18	0.2	40	10
28	80375	110	90	10	0.2	28	10
29	16000E-80400N	100	86	12	0.2	36	10
30	15500E-79000N	60	88	16	0.2	24	10
31	79050	66	96	20	0.2	38	10
32	79100	56	98	18	0.2	42	10
33	79150	66	92	22	0.2	58	10
34	79200	54	110	26	0.2	52	10
35	79250	42	86	28	0.2	50	10
36	79300	48	100	20	0.2	52	10
37	79350	40	98	22	0.2	64	10
38	79400	50	92	16	0.2	60	10
39	79450	42	76	16	0.2	66	10
40	79500	60	110	20	0.2	52	40
41	79550	50	110	16	0.2	50	10
42	79600	36	88	14	0.2	38	10
43	79650	46	110	18	0.2	60	10
44	79700	32	70	8	0.2	22	10
45	79750	42	130	18	0.2	56	10
46	79800	42	60	10	0.2	42	10
47	79850	34	54	10	0.2	40	10
48	79900	44	72	12	0.2	46	10
49	15500E-79950N	36	70	10	0.2	32	10

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au
50	15500E-80000N	40	54	10	0.2	36	10
51	18600E-79700N	88	140	16	0.2	30	10
52	79750	330	120	16	0.2	26	20
53	79800	330	90	12	0.8	16	20
54	79850	550	120	16	1.2	28	20
55	79900	92	90	10	0.2	28	10
56	79950	170	150	20	0.6	20	20
57	80000	150	130	18	0.2	28	10
58	80050	110	150	32	0.4	32	10
59	80100	48	80	14	0.2	30	10
60	80150	56	84	20	0.2	28	10
61	80200	58	98	16	0.2	28	10
62	80250	86	110	20	0.2	26	10
63	18600E-80300N	70	94	14	0.2	26	10
64	19100E-80000N	120	110	20	0.2	50	10
65	80025	78	74	12	0.2	40	20
66	80050	110	92	16	0.2	50	10
67	80075	72	84	14	0.2	50	10
68	80100	60	90	14	0.2	60	10
69	80125	54	84	12	0.2	56	10
70	80150	84	74	10	0.2	48	10
71	80175	76	80	8	0.2	40	20
72	80200	84	110	10	0.2	40	10
73	80225	160	130	16	0.2	32	30
74	80250	120	140	10	0.2	22	20
75	80275	66	70	10	0.2	80	10
76	80300	66	88	12	0.2	54	10
77	80325	64	120	12	0.2	52	10
78	80350	54	80	12	0.2	50	10
79	80375	70	92	14	0.2	56	10
80	80400	190	120	12	0.2	56	10
81	80425	92	160	16	0.2	52	10
82	80450	74	76	10	0.2	70	10
83	80475	44	74	14	0.2	60	10
84	80500	56	80	12	0.2	90	10
85	80525	62	96	8	0.2	22	10
86	80550	54	170	16	0.2	30	10
87	80575	72	100	14	0.2	20	10
88	19100E-80600N	68	92	12	0.2	36	10
89	13800E-78200	110	210	30	0.2	92	10
90	78250	68	160	12	0.2	60	10
91	78300	86	200	20	0.2	100	10
92	78350	100	210	20	0.2	120	10
93	78400	74	140	24	0.2	60	10
94	78450	60	96	14	0.2	90	10
95	78500	60	92	22	0.2	62	10
96	78550	52	100	22	0.2	58	10
97	78600	60	100	14	0.2	86	10
98	78650	88	98	18	0.2	96	10
99	13800E-79700N	80	110	20	0.2	100	10
100	CHECK NL-5	26	62	66	1.4	58	-
101	13800E-79750	62	130	30	0.2	330	10
102	78800	42	170	160	2.0	730	20
103	78850	58	130	46	0.2	260	10
104	78900	76	240	140	2.0	1900	20
~~105~~	~~13800E-79000N~~	~~86~~	~~430~~	~~110~~	~~1.0~~	~~360~~	~~20~~
106	16400E-79100N	62	1000	570	1.6	120	190

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au
107	16400E-79150N	240	580	130	3.0	190	700
108	79200	50	200	110	0.8	130	1700
109	79250	34	190	54	1.4	270	20
110	79300	110	170	42	2.0	330	50
111	79350	48	160	28	0.6	270	10
112	79400	44	130	22	0.2	140	10
113	79450	40	92	24	0.2	60	10
114	79500	42	80	24	0.2	50	10
115	79550	32	110	30	0.2	36	10
116	79600	22	64	20	0.2	52	10
117	79650	22	62	26	0.2	28	50
118	79700	32	90	24	0.2	42	10
119	79750	24	54	20	0.2	38	10
120	79800	38	58	16	0.2	30	10
121	79850	36	54	18	0.4	50	10
122	79900	26	64	12	0.2	42	10
123	79950	26	62	12	1.4	44	10
124	16400E-80000N	46	86	16	0.2	46	10
125	14500E-79450N	50	140	14	0.2	48	10
126	79550	30	52	12	0.2	150	10
127	79600	26	64	12	0.2	46	10
128	79650	30	100	14	0.2	56	10
129	79700	32	58	12	0.2	38	10
130	79750	30	68	12	0.2	48	10
131	79800	40	88	12	0.2	68	10
132	79850	26	90	14	0.2	82	10
133	79900	36	86	12	0.2	86	10
134	79950	28	88	16	0.2	60	10
135	14500E-80000N	46	130	16	0.2	120	10
136	18800E-79700N	230	130	14	0.2	22	10
137	79750	190	100	12	0.2	24	10
138	79800	360	120	18	0.2	32	10
139	79850	210	100	10	0.2	24	10
140	79900	100	98	6	0.2	28	10
141	79950	160	110	14	0.2	32	10
142	80000	240	140	22	0.6	40	10
143	80050	140	110	14	0.2	48	10
144	80100	86	120	38	0.4	80	10
145	80150	68	92	14	0.2	150	10
146	80200	150	120	20	0.4	40	30
147	80250	46	90	14	0.2	66	10
148	18800E-80300N	60	78	12	0.2	44	10
149	18900E-79700N	70	96	8	0.2	36	10
2	79750	100	66	10	0.4	24	10
3	79800	120	100	10	0.2	34	20
4	79850	220	140	28	0.2	32	10
5	79950	210	110	14	0.6	26	10
6	80000	180	110	12	0.4	36	10
7	80050	64	150	60	0.2	68	10
8	80100	58	120	46	0.4	60	10
9	80150	74	90	40	0.8	60	10
10	80200	34	54	8	0.6	42	10
11	80250	56	84	10	0.2	40	20
12	80300	52	100	14	0.6	32	10
13	80350	64	94	8	0.8	52	10
14	80400	56	82	10	0.6	54	10
15	18900E-80450N	54	72	8	0.6	50	10

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au
16	18900E-80500N	32	94	30	0.2	82	10
17	19000E-79500N	62	78	10	0.2	30	10
18	79550	80	44	2	0.8	22	10
19	79600	46	70	6	0.2	42	10
20	79650	140	66	4	0.2	32	10
21	79700	58	58	8	0.4	22	10
22	79750	76	68	8	0.4	24	10
23	79800	54	80	8	0.4	38	10
24	79850	150	100	16	0.4	34	10
25	79900	38	130	120	0.8	26	10
26	79950	30	68	6	0.2	30	10
27	80000	80	96	8	0.2	32	10
28	80025	40	60	10	0.2	30	10
29	80050	56	66	46	0.2	38	10
30	80075	56	66	38	0.2	32	10
31	80100	88	64	8	0.4	44	10
32	80125	82	76	60	1.0	48	10
33	80150	68	84	52	0.2	54	40
34	80175	70	68	32	0.6	54	10
35	80200	46	62	30	0.2	38	10
36	80225	50	54	4	1.0	42	10
37	80250	44	70	6	0.6	28	10
38	80275	28	72	6	0.6	32	30
39	80300	34	44	4	0.4	10	10
40	80325	370	78	10	0.8	34	10
41	80350	50	70	10	0.2	34	10
42	80375	46	68	8	0.2	36	10
43	80400	160	130	18	0.4	22	10
44	80425	54	90	10	0.2	28	10
45	80450	46	76	8	0.2	20	10
46	80475	50	74	8	0.2	36	10
47	80500	50	88	6	0.4	46	10
48	80525	56	72	8	0.2	34	10
49	19000E-80550N	46	76	8	0.6	34	10
50	19200E-80050N	64	76	6	0.4	24	10
51	80100	70	78	6	0.2	30	10
52	80125	54	82	6	0.4	40	10
53	80150	48	82	8	0.2	46	130
54	80175	46	72	6	0.2	32	10
55	80200	56	86	6	0.2	60	10
56	80225	64	98	6	0.2	52	10
57	80250	58	80	12	0.2	46	10
58	80275	44	74	6	0.2	60	10
59	80300	72	78	8	0.2	54	10
60	80325	60	94	8	0.2	70	10
61	80375	50	70	16	0.2	62	10
62	80400	160	80	4	0.4	88	10
63	80450	36	90	14	0.4	62	10
64	80425	50	68	10	0.2	42	10
65	80500	80	82	34	0.6	64	10
66	80550	70	100	6	0.2	28	10
67	80600	68	80	6	0.2	30	10
68	80350	54	66	8	0.2	54	10
69	80650	60	120	6	0.2	30	10
70	19200E-80700N	58	120	4	0.2	12	10
71	19300E-79300N	44	72	6	0.2	58	10
72	19300E-79350N	54	70	8	0.2	50	10

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au
73	19300E-79400N	56	82	6	0.2	40	10
74	79450	160	82	4	0.6	22	10
75	79500	94	68	2	0.2	26	10
76	79600	170	92	18	0.4	28	10
77	79650	150	92	4	0.4	30	10
78	79700	160	110	22	0.4	28	10
79	79750	230	94	2	0.4	46	10
80	79800	180	94	2	0.4	30	10
81	79900	190	92	2	0.4	20	70
82	79950	160	86	2	0.4	24	10
83	80000	110	68	1	0.2	8	20
84	80025	96	120	2	0.4	18	10
85	80050	90	92	2	0.4	16	10
86	80075	120	92	2	0.4	28	10
87	80100	78	78	2	0.2	28	10
88	80125	82	80	2	0.2	22	10
89	80150	92	84	2	0.4	24	10
90	80175	96	82	2	0.2	20	10
91	80200	68	74	4	0.2	44	10
92	80225	54	60	2	0.2	28	10
93	80250	110	92	8	0.4	46	10
94	80275	86	88	4	0.2	44	10
95	80300	66	88	6	0.4	50	10
96	80325	120	94	4	0.2	30	10
97	80350	92	82	2	0.2	32	10
98	80375	130	96	2	0.4	20	10
99	80400	86	88	2	0.4	32	10
100	CHECK NL-5	26	62	68	1.8	62	–
101	80425	110	90	4	0.6	26	10
102	80450	50	90	12	0.4	72	10
103	80525	32	62	1	0.4	18	10
104	80500	42	120	8	0.4	52	10
105	80550	66	110	4	0.4	34	10
106	80575	76	110	8	0.4	38	10
107	19300E-80600N	68	110	6	0.4	40	10
108	19400E-80250N	290	90	2	0.4	30	10
109	80275	130	90	4	0.2	16	10
110	80300	130	66	1	0.2	24	10
111	80325	120	70	4	0.4	28	10
112	80350	110	74	2	0.4	22	10
113	80375	90	90	1	0.2	22	10
114	80400	120	80	1	0.4	20	10
115	80425	160	96	2	0.4	18	10
116	80450	58	60	1	0.2	24	10
117	80475	64	80	1	0.6	28	10
118	80500	40	62	1	0.4	28	10
119	80525	64	100	4	0.4	42	10
120	80550	94	94	8	0.6	46	10
121	19400E-80600N	94	100	6	0.4	40	10
122	17100E-79950N	60	110	18	0.6	30	10
123	79962.5	170	120	28	0.8	160	340
24	79975	70	90	10	0.8	40	80
125	79987.5	60	88	10	0.6	34	10
126	80000	76	60	20	0.8	22	10
127	80012.5	100	100	10	1.0	28	10
128	80025	100	96	10	2.0	24	210
129	17100E-80037.5N	92	90	10	0.8	30	10

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au
130	17100E-80050N	130	90	12	1.0	28	10
131	80075	120	82	6	1.0	20	10
132	17100E-80100N	78	70	10	0.6	18	10
133	17000E-79950N	64	110	38	0.8	34	10
134	79962.5	60	110	34	0.8	30	10
135	79975	96	110	24	0.6	36	10
136	79987.5	250	120	16	0.8	30	140
137	80000	150	120	24	1.0	40	50
138	80012.5	450	82	6	1.2	100	90
139	80025	240	90	12	1.2	92	60
140	80037.5	200	92	8	1.0	48	20
141	17000E-80050N	220	80	8	0.8	24	10
142	17200E-79800N	110	150	44	1.0	38	20
143	79825	78	130	30	1.0	24	30
144	79850	82	120	26	0.6	32	40
145	79875	80	110	20	0.6	20	40
146	79900	88	140	46	0.8	42	50
147	79925	110	130	24	0.8	40	20
148	79950	32	130	34	0.4	36	10
149	79962.5	26	56	8	0.6	32	10
2	79975	76	110	20	0.6	20	10
3	79987.5	100	94	16	0.4	10	50
4	80000	80	94	14	0.2	16	10
5	80012.5	120	84	16	0.4	12	400
6	80025	74	140	46	1.6	24	10
7	80037.5	60	120	46	1.4	8	10
8	80050	110	150	82	2.8	32	10
9	80075	82	110	34	1.0	12	10
10	80100	88	120	44	1.2	24	10
11	17200E-80125N	90	140	60	1.2	30	20
12	17300E-79875N	450	140	20	0.4	28	40
13	79887.5	230	130	18	0.4	24	80
14	79900	140	100	16	0.2	22	90
15	79912.5	50	66	10	0.2	26	30
16	79925	390	140	32	0.4	16	70
17	79937.5	130	80	18	0.2	18	80
18	79950	88	76	12	0.2	1	70
19	79962.5	48	100	12	0.4	14	10
20	79975	84	78	14	1.0	12	10
21	79987.5	54	120	18	0.2	6	10
22	80000	66	100	20	0.2	18	10
23	80012.5	32	62	22	0.2	2	10
24	80025	36	82	30	0.2	16	10
25	80037.5	28	66	16	0.2	18	10
26	80050	32	96	22	0.2	24	10
27	80075	50	110	40	1.0	18	10
28	80100	66	140	30	0.8	30	10
29	80125	58	70	16	0.4	50	10
30	80150	64	100	18	1.6	34	10
31	17300E-80175N	58	80	22	0.6	28	20
32	17400E-79925N	240	94	20	0.6	34	110
33	79950	130	100	28	0.6	24	50
34	79962.5	100	100	32	0.6	20	30
35	79975	56	140	64	0.6	32	20
36	79987.5	110	250	210	1.0	26	20
37	80000	60	76	16	0.2	20	10
38	17400E-80012.5N	22	50	6	0.2	16	10

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au
39	17400E-80025N	26	72	10	0.2	22	10
40	80037.5	34	66	18	0.2	20	50
41	80050	36	56	18	0.4	24	10
42	80075	60	94	24	0.2	40	10
43	80100	42	70	20	0.2	26	10
44	80125	40	62	12	0.2	34	10
45	80150	34	66	18	0.2	32	10
46	80175	28	54	12	0.2	22	10
47	17400E-80200N	60	60	22	0.4	20	10
48	17500E-80000N	62	190	52	1.0	14	100
49	80012.5	70	300	62	2.6	8	20
50	80025	82	140	64	1.0	14	10
51	80037.5	56	110	50	0.4	60	10
52	80050	38	82	30	0.2	70	10
53	80062.5	44	66	20	0.2	56	10
54	80075	38	62	12	0.2	34	10
55	80100	34	60	14	0.2	24	10
56	80125	50	80	20	0.2	60	10
57	80150	34	74	22	0.2	140	10
58	80175	60	80	24	0.4	20	10
59	17500E-80200N	36	66	16	0.2	28	10
60	17575E-79900N	130	190	48	1.0	2	10
61	79912.5	160	170	48	1.0	6	10
62	79925	120	140	30	0.6	4	10
63	79937.5	130	120	32	0.4	2	10
64	79950	150	130	86	0.6	1	10
65	79987.5	150	200	48	1.8	14	10
66	17575E-80000N	190	300	76	8.8	24	10
67	17600E-80000N	180	300	78	12.0	14	10
68	80012.5	140	300	100	2.6	4	20
69	80025	160	300	120	18.0	18	60
70	80037.5	170	250	84	2.0	8	20
71	80050	130	200	46	1.0	20	20
72	80062.5	100	150	100	1.0	30	80
73	80075	78	170	62	0.8	100	30
74	17600E-80100N	70	74	22	0.2	14	10
75	17800E-79800N	62	60	14	0.2	10	10
76	79825	140	88	12	0.2	24	30
77	79850	82	78	10	0.2	14	20
78	79875	90	80	10	0.2	34	20
79	79900	60	90	14	0.2	32	20
80	17800E-80100N	50	70	12	0.2	36	20
81	17900E-79700N	46	56	16	0.2	32	10
82	79725	44	60	12	0.2	14	10
83	79750	58	80	10	0.2	50	20
84	79775	44	62	12	0.2	34	10
85	79800	64	74	12	0.2	36	30
86	79825	90	88	14	0.2	32	20
87	79850	86	120	12	0.2	28	30
88	79875	110	120	16	0.4	22	10
89	79925	120	170	40	0.8	14	20
90	79950	96	170	48	1.4	20	120
91	79975	96	220	66	1.6	28	30
92	80000	46	110	32	0.4	16	10
93	80025	40	82	10	0.2	22	20
94	80050	44	96	22	0.2	40	10
95	17900E-80075N	50	84	18	0.2	420	10

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au
96	17900E-80100N	80	100	44	0.4	50	30
97	80125	30	90	20	0.2	24	20
98	17900E-80150N	70	76	18	1.2	28	10
99	18000E-79800N	120	100	20	0.2	26	10
100	CHECK NL-5	26	66	74	1.2	58	-
101	79825	100	74	12	0.2	50	10
102	79850	72	80	8	0.2	28	10
103	79875	70	100	14	0.2	34	20
104	79950	96	130	24	0.6	22	10
105	79975	86	100	24	0.6	18	20
106	80000	80	88	18	0.4	10	20
107	80025	70	120	36	0.4	8	10
108	80050	110	88	24	1.2	16	20
109	80075	90	160	440	2.8	36	10
110	80100	120	80	26	0.8	24	50
111	80125	70	76	24	0.4	44	30
112	18000E-80150N	44	52	22	0.2	52	20
113	18100E-79700N	76	84	12	0.2	38	20
114	79725	80	76	8	0.2	14	10
115	79750	86	88	10	0.2	32	10
116	79775	110	76	14	0.4	30	10
117	79800	140	210	72	0.6	6	10
118	79825	160	390	70	0.8	18	10
119	79850	160	230	36	0.6	24	10
120	79875	190	280	78	0.8	16	20
121	79900	110	76	10	0.4	14	20
122	79925	140	76	12	0.4	28	20
123	79950	98	82	10	0.4	26	20
124	79975	120	140	28	0.6	18	10
125	80000	36	54	6	0.4	12	10
126	80025	64	82	34	0.6	28	10
127	80050	64	94	24	0.8	26	10
128	80075	32	42	14	0.2	18	10
129	80100	46	72	40	0.2	46	10
130	80125	58	52	18	0.2	60	10
131	18100E-80150N	46	62	16	0.2	160	10
132	18200E-79700N	190	76	16	0.4	62	110
133	79725	130	170	46	0.4	40	60
134	79750	94	74	14	0.4	24	20
135	79775	100	140	20	0.2	20	10
136	79800	92	76	14	0.2	20	10
137	79825	76	84	8	0.2	8	10
138	79850	100	150	18	0.2	14	10
139	79875	230	270	68	2.4	8	10
140	79900	110	160	110	3.0	10	30
141	79925	150	290	150	7.6	16	2000
142	79950	120	100	32	1.4	18	10
143	79975	140	96	22	0.2	26	20
144	80000	88	66	24	0.2	20	130
145	80025	90	64	26	0.2	32	20
146	80050	60	60	14	0.4	70	10
147	80075	36	52	20	0.2	100	10
148	80100	62	72	18	0.2	160	10
149	80125	76	64	20	0.2	82	10
2	18200E-80150N	74	76	26	0.2	110	10
3	18300E-79700N	96	80	22	0.6	24	10
4	18300E-79750N	74	76	24	0.2	30	30

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au
5	18300E-79800N	40	52	46	0.2	30	10
6	79825	100	100	14	0.2	16	10
7	79850	66	72	14	0.2	30	10
8	79900	86	140	26	0.2	28	20
9	79925	64	66	30	0.2	76	50
10	79875	58	88	24	0.2	32	10
11	79950	52	68	64	0.2	24	10
12	79975	50	86	38	0.2	16	10
13	80000	36	120	46	0.2	96	10
14	80025	48	52	14	0.2	44	10
15	80050	170	64	14	0.2	40	10
16	80075	92	92	18	0.2	64	10
17	80100	86	72	44	0.2	40	10
18	80125	170	68	22	0.4	26	10
19	18300E-80150N	120	66	22	0.4	18	10
20	15900E-79400N	16	88	30	0.4	110	540
21	79450	16	70	24	0.2	70	170
22	79500	34	110	28	0.4	88	110
23	79550	64	54	20	0.2	76	10
24	79600	24	140	90	0.2	120	20
25	79650	74	130	220	0.2	1900	10
26	79700	42	68	72	0.2	130	10
27	79750	24	76	52	0.2	110	10
28	79800	18	60	30	0.2	44	10
29	79850	28	58	18	0.2	40	10
30	79900	40	70	18	0.2	66	10
31	79950	210	64	8	0.2	26	10
32	15900E-80000N	62	52	12	0.2	30	10
33	RL81 000	40	86	28	0.4	240	10
34	10	70	120	30	0.6	64	30
35	20	140	220	120	1.8	28	20
36	30	72	80	140	1.2	58	220
37	40	140	270	120	2.0	24	30
38	50	140	240	120	2.6	20	30
39	60	110	200	110	2.4	24	50
40	70	120	240	130	2.2	24	30
41	80	120	220	110	2.4	22	50
42	90	120	140	26	0.8	28	30
43	100	86	110	24	0.8	28	20
44	110	120	180	48	1.2	24	10
45	RL81 120	490	150	32	2.0	10	20
46	RL82 000	38	64	22	0.2	96	10
47	25	8	68	40	0.2	190	10
48	50	60	170	74	0.8	60	40
49	75	98	120	40	0.6	16	50
50	100	130	94	18	0.4	26	40
51	125	190	160	38	0.6	12	30
52	150	330	180	70	1.4	12	1500
53	175	250	140	40	0.2	12	650
54	200	250	120	24	0.4	14	110
55	250	300	98	16	0.4	16	80
56	300	350	120	14	1.2	26	250
57	350	140	100	26	0.4	32	160
58	400	130	120	28	1.0	52	20
59	450	90	78	18	0.2	18	10
60	500	92	84	30	0.2	12	70
61	RL82 550	54	90	26	0.4	30	10

T.T. No.	SAMPLE No.	Cu	Zn	Pb	Ag	As	PPB Au
62	RL82 600	100	80	18	0.2	24	70
63	RL82 650	40	72	26	0.2	30	10
64	BL80000N-18250E	34	46	32	0.2	18	10
65	BL80000N-18150E	80	100	38	0.6	16	30
66	17500E-79913N	300	98	28	1.8	22	30
67	79900	310	98	26	1.4	16	20
68	79925	220	96	24	0.4	6	10
69	79875	490	98	34	2.2	30	470
70	79888	470	86	34	2.2	20	220
71	79975	170	350	120	2.4	12	10
72	17500E-79988N	120	260	130	9.0	14	10
73	17800E-79775N	130	74	14	0.2	10	10
74	72667 TF	2400	160	30	0.4	64	30
75	78464	100	380	140	2.2	150	850
76	78463	24	140	140	0.8	46	140
77	78472	110	100	100	0.4	20	10
78	91892	140	120	22	0.2	38	10
79	91897	68	78	18	0.2	38	10
80	91896	44	56	32	0.2	44	10
81	97533	54	110	56	0.6	250	10
82	97538	110	130	14	0.2	260	30
83	97539	86	82	18	0.2	30	10
84	97540	80	100	22	0.2	22	10
85	91899	22	66	12	0.2	58	10
86	91900 TF	54	60	26	0.2	70	10
97	72664 SILT	94	120	30	0.2	40	280
88	72666	62	190	16	0.2	40	10
89	91898 SILT	64	130	38	0.2	4	10

APPENDIX 3

ROCK SAMPLE DESCRIPTIONS AND

GEOCHEMICAL RESULTS

NORANDA EXPLORATION COMPANY, LIMITED

ROCK SAMPLE DESCRIPTIONS AND GEOCHEMICAL RESULTS

PROJECT: MOON LAKE 368 N.T.S. 104 M/15

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au	ppm As	ppm Co	ppm Sb	ppm Ba
35957		Chip		174	12	60	.4	5	16			
35958		"		132	8	90	.6	5	24			
35959		"		12	8	74	.6	5	6			
35960		"		6	4	74	.4	5	14			
35961		"		86	2	54	.4	5	4			
35962		"		10	2	68	.6	5	2			
35963				18	8	90	.6	5	58			
35964	3 m chip/grab samples across sheared sericite			10	4	10	.6	5	4			
35965	altered felsic dyke cut by discontinuous			14	4	36	.6	5	4			
35966	quartz veins and stringers.			16	2	20	.4	5	12			
41700	Quartz carbonate altered tuff; 1% pyrite.	Float	20x20x 10 cm	6	12	82	.6	5	112			
46258	Slightly clay altered gossaned granitic fragment.			6	12	74	.2	5	60			
46259	Silicified int. volcanic with 5% Py as diss. cubes. Minor carbonate alteration.			6	22	70	.4	20	46			
46260	Minor carbonate alteration; veinlets through intermediate to felsic pyroclastic; 5% Py.			6	62	68	.2	580	26			
46261	Coarse-grained tuffaceous volcanic sediment; minor pyrite.			30	16	106	.4	5	72			
46262	Azurite fracture filling of buff coloured sugar texture silica.			4	8	12	.4	5	6			
46263	Same as 46262.			4	16	98	.2	5	22			
46264	Fuchasite or malachite stained cherty volcanic felsic.			96	6	50	.8	5	52			
46265	Grey, silicified felsic rock with minor Py.			10	6	46	.4	5	54			
46266	Grey silicified felsic rock with pyrite stringers along fractures.			6	8	26	.2	5	10			
46267	Silicified clay altered rock with minor sulphides, pyrite and hematite?			18	20	82	.8	80	80			
46268		Chip		28	6	46	.6	5	20			
46269		"		48	6	70	1.6	350	98			
46270		"		60	10	52	3.4	180	18			
46271		"		14	510	122	15.4	1520	194			
46272		"		20	36	78	.8	90	18			
46273		"		10	96	282	.8	40	26			
46274		"		36	6	40	.4	5	6			
46275		"		2060	3040	4200	14.2	780	2			

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au	ppm As	ppm Co	ppb Hg	ppm Ba
7505	10% Py in silicified clay altered felsic volcanic.	Grab talus below		42	340	680	2.6	1500	220		40	440
47506	Gossaned felsic volcanic.	44 ppb Au area		20	2	16	.2	10	2		340	100
40507	10% Py in silicified clay altered felsic.			36	88	18	1.2	250	460		40	120
47508	Gossaned rhyolite, minor diss. Py.			34	6	28	.2	10	28		80	200
47509	As 47508.			82	10	30	1.8	70	40		20	680
47510	As 47508.			18	2	56	.2	10	2		20	60
47511	As 47508.			16	2	44	.2	10	24		320	300
47512	As 47508.			14	4	32	.2	10	2		120	580
71709		Chip		10	22	64	.4	5	2			
71710		"		6	38	54	.2	5	12			
71711		"		6	34	58	.4	5	16			
72534	Moon Lake Po showing - Heavily altered sheared basic volcanic tuff and shales.			38	24	108	.6	5	24			
72535	Chip sample across weathered section of Po showing. 1 metre perpendicular to bedding (?) Shears (?)		1 m	82	20	98	.4	5	28			
72536	Same as 72535 - 2-3 cm cherty veins.		1 m	130	44	86	.4	5	24			
72537	Float from Cr. 17. Carbonate altered volcanic Calcite and Quartz veining. Minor sulphides.	Float		48	106	222	1.0	5	12			
72538	Fine-grained mudstone; 75% diss. sulphides. Some lighter coloured (fragments ?); float from Cr. 16.	Float		86	2	56	.4	10	104			
72539	Float - Cr. 16. Qtz rich with minor chlorite and 2-5% sulphides.	Float		8	14	100	.2	240	8			
72541	Hornfels - silicified clastic with ~5% pyrite			36	10	78	.2	5	26			
72542	Massive Po in dark cherty chlorite mudstone.			20	12	258	.2	5	24	58		
72543	Slightly calcareous siltstone with minor Py veins.			22	4	100	.2	5	30	20		
72544	Feldspar prophyry dyke; ~5% Py and Po.			12	8	78	.2	5	2			
72545	Breccia siliceous matrix; andesite fragments; 5% diss. sulphides in fragments.			40	24	78	.2	5	12			
.546	Siltstone; minor Py; some epidote. Across Cr. from Po showing.			54	18	88	.2	5	16			
72547	Float - from spring or frost heave. Banded quartz.			10	6	24	.2	5	2			

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au	ppm As	ppm Co	ppm Sb
72548	Volcanic breccia siliceous matrix; andesite fragments.			24	8	100	.2	5	14		
72549	Float - Quartz with 5% arsenopyrite and minor pyrite.			14	48	26	.4	5	4180		
72550	Float - Quartz vein in mafic volcanic; ~1% chalcopyrite.			6000	4	108	8.6	70	6		
72551	Float - Silicified; calcareous (?)			34	58	296	.4	60	16		
72552	Float - Pyrite in Qtz rich coarse rhyolite tuff; minor sphalerite.			38	4	7800	1.8	5	60		
72656	Rhyolite with azurite and quartz	o/c		42	8	66	.4	5	22		
72657	Silicified rhyolite; 4% pyrite.	o/c		4	6	34	.4	5	2		
72658	Mafic Volcanic; 5% pyrite + pyrrhotite; some quartz.	Float o/c		114	20	96	4.2	180	76		
72659	Silicified rhyolite; 1% pyrite.	o/c		8	56	22	1.2	210	404		
72660	Silicified volcanic; 2% pyrite.	o/c		18	20	78	1.0	250	136		
72661	Extreme silicified, brecciated volcanic? 2% pyrite.	Float		46	16	370	2.8	530	34		
72662	Silicified volcanic? Some malachite; large pyrite cubes 10%; vein material.	o/c		870	14	96	3.0	370	34		
72663	Altered quartz rich volcanic? Pyrite, chal-copyrite, galena 2%.	Float subcrop		38	950	1820	4.0	150	68		
72665	Quartz rich material with pyrite and chalco-pyrite 6%. Large weathered boulder.	Float 1x1x1m		8	56	32	.8	20	6		
73555	Basic volcanic with some silicification; slight reaction to HCl; 2% pyrrhotite.	Float		50	4	104	.2	5	124		
73556	Quartz carbonate alteration with quartz and calcite veins; 5% chloritized	Float		12	6	90	.2	10	2		
73557	Quartz carbonate alteration with pervasive silicification; chlorite veins.	Float		18	10	142	.2	5	2		
73558	Silicification of a basic volcanic; 1-2% sulphides; minor chalcopyrite.	Float		114	6	74	.6	10	850		
73560	Carbonate alteration; pervasive + veins; minor chlorite.	o/c		28	6	66	.2	10	4		
73561	Quartz carbonate alteration; pervasive. Minor pyrite, chalcopyrite, azurite, and malachite.	o/c		650	278	90	15.0	430	122		
73562	Quartz carbonate alteration with chalcopyrite 1%, pyrite and malachite.	o/c		5600	30	96	5.2	30	6		

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au	ppm As	ppm Co	ppm Sb	pp
73563	Quartz carbonate alteration with chalcopyrite 1% and malachite.	o/c		5400	38	72	3.2	10	18			
73564	Carbonate alteration; basic volcanic with carbonate veins; 1% chalcopyrite; minor malachite.	o/c		3120	22	184	3.0	5	126			
73570	Silicified volcanic; 5% sulphides. Cr. 15			28	8	20	.4	5	36			
73571	Basic volcanic with rhyolite clasts; 5% sulphides (pyrite).			94	4	172	.2	5	92			
73572	Quartz carbonate alteration; pervasive silicification.			8	6	76	.2	10	2			
73573	Quartz carbonate alteration; minor sulphides.			8	46	48	.8	5	24			
73574	Silicification; chloritization; minor sulphides.			4	2	28	.2	5	16			
73575	Felsic volcanic; stringers of chlorite; minor pyrite.			14	4	48	.2	5	10			
73727	Gossaned silicified pod? with 10% Py. Likely from within carbonate alt'n zone.	Float		346	40	90	6.8	40	20			
73729	Carbonate alt'n with pod of 25% Py with associated silicification.	Float		70	30	30	6.2	3500	114			
73730	1 m chip across sheared silicified and Py/Po bearing basic volcanic gossaned. 2 m from contact with grey dyke.	Chip		72	118	114	1.6	5	19000			
73731	Silicified carbonate altered pod of basic volcanic caught up in shear zone.			4	4	66	.4	5	46			
73732	Fractured and silicified basic volcanic with 25% Py and Po as fracture and bleb-like fillings.			126	18	96	1.4	5	308			
73744	3 cm blebs of aspy/py vugs with extreme weathering + gossaning in 10 cm wide vein (?) fracture controlled, ~10 m perpendicular to structure (10 m away from 73745).			16	37	51	<0.7 g/t	.017 g/t	0			
73745	Continuation of shear zone upslope; significant silicification and fracturing. Typically dark green with light coloured flaser bands. Some orange weathering carbonate(?) veining. No sulphides (20 m along strike).			12	9	61	<0.7 g/t	.07 g/t	13			
73746	Dark grey silicified fragments in a light grey silicified matrix. 2% sulphides (py) occur as stringers and diss. Rock ~30% frags ~2 cm rust blebs away from showing.			45	16	20	<0.7 g/t	.07 g/t	250			

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au	ppm As	ppm Co	ppm Sb	[illegible]
73747	Silicified, sheared and flaser banded dark green rock with minor brecciation (dark frags lt. matrix) and (1% Py.			54	169	248	2.4 g/t	.41 g/t	110			
73748	Buff orange weathering silicified carbonate in darker silica rich matrix. Calcite in fractures; ~80% frags; (1% sulphides.			180	600	740	4.5 g/t	.24 g/t	12			
73749	Brecciated qtz fragment (silicified) dark green rock. Qtz fragments appear low T i.e. agate (banded). Matrix is green-soft chlorite Fragments up to 5 cm ~50% by volume. Slight foliation.			4	23	76	(0.7 g/t	.17 g/t	6			
73750	Super sulphide rich breccia, mainly in matrix Some stringers; sulphides up to 70% of rock, very fine-grained; 80% Py/Po, 10% Bo/Cpy, 7% Gn, 3% Sph and others.			1570	5.99%	8.72%	293.8 g/t	91.51 g/t	1000			
78401	Quartz carbonate alteration; 2-3% chalcopyrite; 1% malachite.	o/c		9200	48	106	11.8	130	14			
78402	Quartz vein in silicified basic volcanic; 1% chalcopyrite.			5800	136	250	17.6	2300	12			
78403	Limy volcanic breccia; strong reaction to HCl Chalcopyrite.			950	16	120	2.0	5	2			
78404	Quartz carbonate alteration; 2% galena with chalcopyrite; malachite.	Float		550	9600	4900	232.0	480	14			
78405	Minor pervasive quartz carbonate alteration; 5% combined chalcocite, chalcopyrite, malachite, and bornite. Minor pyrite.	Float		25200	92	90	32.8	250	122			
78407	Quartz carbonate alteration; 3-5% malachite.	Float		32	36	64	.6	5	2			
78410	Extensive pervasive silicification; 5% pyrite Minor malachite. (Float from scree)	Float		54	8	42	1.8	200	110			
78411	Quartz rich felsic volcanic with mica and chlorite.	o/c		24	30	142	.4	5	30			
78412	Silicified with chlorite stringers; minor sulphides. (Float from scree)	Float		8	10	36	.4	10	12			
78413	Fragmental with chloritized matrix; pyroclastic with chalcopyrite; silicified.	Float		1400	6	54	.4	5	12			
78414	Pyroclastic with chloritized matrix; silicified; 5-7% pyrite. (Float from scree)	Float		10	32	152	.6	10	18			
78415	Silicified volcanic; 5% pyrite. (Float from scree)	Float		30	4	24	.2	5	8			
78462	Dark brown rusty weathering; dark grey fine-grained (hornfelsed?) rock; may be sedimentary with (1% diss. Py.			32	12	96	1.2	5	96			

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au	ppm As	ppm Co	ppm Sb	ppm Ba
78466	Similar to 78462 with silicification and minor Qtz stringers (metamorphic); slight shear fabric.			74	16	64	1.2	70	50			
78467	Fine-grained gabbroic intrusion with minor Py			92	52	90	3.0	290	50			
78468	Silicified int. volcanic with minor Py, re-crystallized?, sericite.			338	24	96	5.4	50	40			
78469	Bright orange weathering carbonate rock (vein); lots of barite but no crystals with 5% banded fine-grained galena; also fragments of blue quartz.			342	2200	40000	12.2	200	2			>10000
78470	Thin (2 cm) brecciated quartz (blue) vein with carbonate and minor sulphides.			14	30	176	1.0	550	80			280
78471	Orange creamy buff; argillite altered, bleached rock; high porosity; minor carbonate and barite.			12	34	144	.2	5	8			
78473	Similar to 78471 with grey silicification; minor dissem. Py.			20	60	134	.4	5	34			
78474	Intense altered basic volcanic with silicificated brecciated quartz; minor carbonate and minor foliation with quartz strings and 2% Cpy, 1% malachite.			23800	44	50	10.0	4200	20			
78475	1.5 m wide brecciated blue quartz vein with Py + Po up to 20%; large recrystallized crystals.			458	2	112	3.6	150	88			
78478	Intense sheared and silicified andesite; well developed banding; minor brecciation and sulphides.	Chip	1 m	200	1620	1620	5.8 g/t	4.22 g/t	70			
78479	Intense silicification and brecciation. 30% sulphides, pyrite, galena, sphalerite and chalcopyrite occurring in a silicified chlorite clay matrix around brecciated silicified fragments up to 5 cm in size.	Chip	1 m	590	4040	5800	51.4 g/t	6.48 g/t	56			
78480	Intense silicification and brecciation; less sulphide content.	Chip	1 m	640	4700	6200	26.7 g/t	4.15 g/t	61			
78481	Banded green and purple silicified sheared andesite. Local brecciation; white silicified fragments and sulphides.	Chip	1 m	220	1250	1470	10.3 g/t	1.68 g/t	13			
78482	Silicified, carbonate breccia fragments, orange weathering with calcite and chlorite along fractures. Cut by 10 cm wide massive sulphide vein consisting of 60% pyrite, 25% galena, 8% sphalerite, 5% chalcopyrite and 2% miscellaneous sulphides.	Grab		3200	6.51%	8.20%	617.5 g/t	78.24 g/t	>1000			

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au	ppm As	ppm Co	ppm Sb	[illegible]
78483	Silicified carbonate breccia, subround to angular fragments up to 2 cm in size. Calcite and chlorite filled interstitial spaces and fractures.	Grab		135	690	960	35.3 g/t	.55 g/t	20			
81376	Fine-grained mafic volcanic; 10-20% pyrite; minor Qtz veining (from Po showing).			22	40	168	.2	5	4			
81377	Massive Po with 2% Pyrite.			120	40	172	.2	5	2	18		
81382	Qtz veining along foliation in Pyrite rich schist. Cr. 16 (float)			24	6	72	.2	5	10			
81386	Altered zone ~20% pyrite.			172	64	408	.2	5	38			
81387	Very fine-grained siliceous, minor pyrite with chlorite halos.			8	14	52	.2	5	2			
81392	Float Cr. 16 - Carbonate alteration veins and pervasive; silicification; minor sulphides.			44	8	74	.2	5	88			
81395	Float - Carbonate alteration veining and pervasive in felsic (?). Minor silicification and quartz veining; ~5% sulphides (Py).			130	52	28	5.2	450	152			
90126	Quartz vein breccia with chlorite altered fragments. Minor hematite, pyrite and carbonate. Heavily gossaned surface.	Float grab		22	8	96	.2	5	4			
90127	Stockwork type quartz veining through intermediate green and purple basic volcanic tuff?	Float grab		48	4	74	.2	5	2			
90128	Quartz carbonate sealed breccia vein through intermediate, basic? hematite rich volcanic. Breccia fragments are coated with concentric radiating quartz crystals.	Float grab		4	6	82	.2	5	2			
90129	Quartz vein float 15 cm, gossaned surface with no visible sulphides.			38	6	106	.2	5	2			
90131	Quartz carbonate, chlorite vein in fault zone 120/90.	o/c	20 cm	6	6	108	.2	5	2			
90137	Volcanic tuffaceous cong-breccia with 10% Py diss. and in blebs. Very little gossan.	o/c	2 m	24	6	74	.2	5	12			
90139	Siliceous rock with 10% Py in cubes and blebs Gossaned.	Float		24	8	62	.2	10	22			
90140	Gossanous quartz carbonate veining.	Float		12	140	90	2.4	690	208			
90141	Sucrasic textured quartz vein with minor very fine diss. Py.			8	6	72	.2	30	4			
90142	Siliceous rhyolitic fragmental; typical rock on west face of west cirque.	o/c		4	12	38	.2	20	28			

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au	ppm As	ppm Co	ppm Sb	pp B
90142	Sheared chlorite hematite altered silicified basic tuff. Cut by quartz veinlets. Minor carbonate.	o/c		28	6	114	.2	40	4			
90143	Light grey siliceous alt'd volcanic with 10% diss., euhedral and fracture filling Py with minor Gn and Sph.			40	164	1120	7.0	44000	228			
90152	Quartz carbonate vein. Gossaned.	Talus		12	60	328	.2	20	2			
90153	Same as 90151 except with 1% malachite stain and more intense silicification, sericitization.	o/c		690	2040	106	2.8	30	2			
72662	Quartz breccia vein with minor green clay alteration.	o/c		6	16	42	.2	5	2			
90155	Quartz breccia vein with 1% Py, Cp and chalcocite, minor malachite and green clay alt'n.	o/c	1.5 m	378	6	44	3.4	520	28			
91801	Resample of light grey siliceous 90143 alt'd volcanic with 10% diss., euhedral and fracture filling Py with minor Gn and Sph.			44	462	3100	4.8	16000	224	Mo 21		
91889	Rusty weathering felsite? in otherwise basic volcanics. Argillic alteration or silicified. Gossanous.	Grab		88	650	880	2.8	400	34			
91890	Dark grey silicified volcanic; pervasive silica flooding with 2% Py and 2% sericite, typically on joint; not rusty. Weak foliation Orange calcite stringers.	o/c	8 m	32	96	150	.8	100	12			
91891	Sheared (schistose) felsite with up to 5% Py. Rusty quartz blebs (grey); some (5%) sericite	Float	0.5 m	44	6	28	.6	5	6			
91893	Similar to 91891 with 8% Py.	o/c	10 m	18	2	62	.4	5	8			
91894	Similar to above; darker grey with more sericite and larger crystal size.	o/c	15 m	28	4	298	.6	5	12			
91895	Ferrocrete gossan - conglomerate.	o/c	10 m	44	42	112	1.6	5	12			
91945	Walls of brecciated blue quartz vein consist of quartz-carbonate veining with lithic inclusions and 0-5% Cpy.			690	10	88	2.4	5	14			
91946	Bleached white, highly porous quartz sinter with up to 50% fine-grained Py; orange weathering. Big Thing showing.			10	84	75	2.4 g/t	.27 g/t	6			
91947	Dark green/grey sheared, rusty weathering, fine-grained recrystallized rock, Gd?/andesite? Big Thing showing.			54	41	82	(0.7 g/t	.1 g/t	10			
97501				1720	2420	23000	7.8	520	4			
97502				4800	12	84	6.6	680	54			

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au	ppm As	ppm Co	ppm Sb	ppm Ba
97526	Mega-crystalline carbonate rock with 2 cm lath-like barite crystals, blebs and stringers of fine-grained galena?/chalcocite. Ba ~10%.	o/c	10 m	88	1560	3320	4.2	20	2			>10000
97527	Brecciated blue/grey quartz vein in carbonate matrix with barite as above; minor malachite. Ba ~10%.	o/c	10 m	94	48	226	1.4	20	2			
97528	Similar to above with ankerite veining, extreme silicification + 5% Py as selvages around later calcite? veinlets.			244	20	82	1.6	300	88			
97529	Quartz-carbonate altered + brecciated with argillite alt'n; original mineralogy gone, only green clays. Minor malachite staining; some silicification + Ba.			3420	18	136	23.4	140	14			>10000
97530	Extremely bleached and bleached fine-grained light grey felsic; high porosity with vuggy quartz + calcite; ~1-2% Py in vugs (Aspy?).			204	4	20	2.8	10	12			
97531	Rusty quartz-carbonate altered volcanic with 10% blue quartz, 3% Py, 2% Cpy and malachite.			18200	4	86	15.8	110	316			
97532	Rusty weathering siliceous brecciated rhyolite(?), dark grey with 1-2% diss. blebs of Py.			58	8	32	.2	5	146			
97533	Light grey, fine-grained silicified rock (rhyolite?) with fine-grained diss. (1% Py.											
97534	West side of gossan - highly silicified green sheared intermediate volcanic. Occasionally weathering surface is rusty; no sulphides.	Chip	3 m	26	6	64	.2	5	16			
97535	Middle of gossan - same as 97534.	Chip	5 m	6	6	68	.2	5	54			
97536	East side of gossan - same as above except contains portion of light green, orange weathering fine-grained rhyolite dyke ~2 m wide.	Chip	3 m	6	6	70	.2	5	30			
97537	1 cm blebs of Cpy and malachite with Py in basic volcanics.	o/c	3 m	>40000	18	58	16.6	6400	18			
97542	Brecciated and altered int-felsic volcanic.	Grab	5 m	88	4	50	.4	5	448			
97543	Rusty weathering.	Grab	5 m	82	6	44	.2	5	510			
97544	Gossan #36.	Grab	5 m	114	8	44	.4	5	60			
97545	Brecciated fragments of white (bleached) fine grained clay altered clasts approx 30% (bVol) silicified and set in a fine-grained dark grey/green siliceous matrix with 5% diss. blebs of Py. Occasional blebs of Gn/Sph (1cm On weathering surface, fragments weather buff orange, matrix is dark green and Py is yellow			0.32%	2.47%	2.83%	120.7 g/t	29.42 g/t	180	Mo 14		

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au	ppm As	ppm Mo	ppm Sb
97546	As 97545 except less fragments, more matrix,			0.23%	4.99%	6.02%	189.3	57.26	320	16	
	silica rich (some quartz stringers).						g/5	g/t			
	DITCH CHIP SAMPLES:										
41701	Intense carbonate, chlorite and clay altera-			334	18	144	.4	5	58		
41702	tion of basic volcanic conglomerate and			350	60	104	3.2	20	24		
41703	associated pyroclastics. Local areas of			496	48	100	4	40	28		
41704	intense silicification, pyrite, pyrrhotite			1240	24	106	3.4	60	38		
41705	and chalcopyrite mineralization. Strongly			1620	30	154	4.6	40	32		
41706	sheared.			390	12	116	1.6	20	24		
41707				600	10	170	1.6	5	30		
41708				1440	2	154	2.8	40	26		
41709				840	20	102	6.2	80	40		
41710				610	12	148	1.4	5	2		
41711				306	8	186	.9	5	20		
41712				690	8	204	1.4	5	12		
41713				176	12	110	1	5	4		
73726	2 m vertical chip sample across sheared			2260	18	166	3.2	5	118		
	section of carbonate alt'n; 2% diss. Py + Po,										
	minor Cp and malachite.										
73728	3 m chip/grab across silicified section of	Chip		570	14	164	3.4	5	96		
	basic volcanic which is locally carbonate										
	altered; 5% Py/Po diss. and stringers.										
	RIDGE GOSSAN CHIP SAMPLES:										
41714	Intense bright orange weathering carbonate			40	10	86	.4	5	10		
41715	alteration with associated brecciation, quartz			176	412	246	.8	5	14		
41716	carbonate and barite veining; same relict			64	18	170	.2	5	8		
41718	volcanic conglomerate displaying intense			54	24	118	.8	5	18		
41719	chlorite and clay alteration.			68	30	164	.8	5	12		
41720				70	22	144	.6	5	18		
41721				124	38	248	1.4	5	10		
41722				58	12	108	.2	5	4		
41723				86	14	86	.8	5	4		
41724				66	8	92	.6	5	4		
41725				74	12	126	1.4	5	4		
97503				140	238	296	2.8	5	2		
	GOSSAN NO. 1 CHIP SAMPLES:										
72776	Sheared banded intermediate, locally felsic		1 m	4	6	24	.4	5	28		
72777	volcanic tuff. Development of flaser fabric.		1 m	6	6	46	.4	5	26		
72778	Silicified and chlorite altered. Cut by		1 m	6	6	40	.6	5	24		
72779	rhyolite dyke.		2 m	10	6	54	.6	5	24		
72780			2 m	4	4	32	.6	5	20		
72781			2 m	2	6	42	.2	5	8		
72782			2 m	2	4	34	.4	5	12		
72783			2.5 m	2	4	40	.2	5	8		
72784			2.5 m	4	4	70	.2	5	6		
	GOSSAN NO. 2 CHIP SAMPLES:										
72668	Sheared and gossaned basic volcanic with	Grab		54	60	352	4.2	300	96		
72669	disseminated pyrite, pyrrhotite and local	Chip	4 m	56	22	44	3.4	280	112		
72670	arsenopyrite.		4 m	50	22	50	2.6	980	80		
72671			4 m	48	16	42	3.2	1840	56		
72785			3 m	46	30	90	3	1580	242		
72786			4 m	64	78	112	5.6	1040	136		
72787			4 m	48	40	134	1.6	150	36		

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au	ppm As	ppm Co	ppm Sb	[illegible]
72788			3 m	56	38	112	2.8	310	38			
72789			3 m	36	14	162	1.4	110	56			
72790			3 m	60	20	84	3	120	36			
72791			3 m	48	50	86	6.8	130	114			
72792			3 m	30	32	88	2	200	92			
72793		Grab		14	194	342	3.4	60	50			
72794		Chip	5 m	20	134	292	2.8	340	168			
73733	Ridge near gossan 2 for climbing. Sheared and clay altered intermediate volcanic; 15% Py diss. Heavy gossan; minor AsPy?	Grab		34	466	24	31.0	2240	20000			
90151	Sheared basic tuff, chlorite, hematite, silica +/- carbonate alteration (ridge gossan)			28	6	114	.2	40	4			
97503	Ridge gossan			140	238	296	2.8	5	2			
72787	Gossan #2			48	40	134	1.6	150	36			
78476	L-80000N, 17000E			304	22	80	1.0	5	150			
78477				254	36	146	.8	5	800			

APPENDIX 4

ANALYTICAL METHOD

ANALYTICAL METHOD DESCRIPTIONS FOR GEOCHEMICAL ASSESSMENT REPORTS

Revised: 01/86

The methods listed are presently applied to analyse geological materials by the Noranda Geochemical Laboratory at Vancouver. (March, 1984).

PREPARATION OF SAMPLES

Sediments and soils are dried at approximately 80°C and sieved with a 80 mesh nylon screen. The -80 mesh (0.18 mm) fraction is used for analysis.

Rock specimens are pulverized to -120 mesh (0.13 mm). Heavy mineral fractions (panned samples) are analysed in its entirety, when it is to be determined for gold without further sample preparation. See addendum.

ANALYSIS OF SAMPLES

Decomposition of a 0.200 g sample is done with concentrated perchloric and nitric acid (3:1), digested for 5 hours at reflux temperature. Pulps of rock or core are weighed out at 0.2 g or less depending on the matrix of the rock, and twice as much acid is used for decomposition than that is used for silt or soil.

The concentrations of Ag, Cd, Co, Cu, Fe, Mn, Mo, Ni, Pb, V and Zn (all the group A elements of the fee schedule) can be determined directly from the digest (dissolution) with an atomic absorption spectrometer (AA). A Varian-Techtron Model AA-5 or Model AA-475 is used to measure elemental concentrations.

ELEMENTS REQUIRING SPECIFIC DECOMPOSITION METHOD

Antimony - Sb: 0.2 g sample is attacked with 3.3 mL of 6% tartaric acid, 1.5 mL conc. hydrochloric acid and 0.5 mL of conc. nitric acid, then heated in a water bath for 3 hours at 95°C. Sb is determined directly from the acid solution with an AA-475 equipped with electrodeless discharge lamp (EDL).

Arsenic - As: 0.2 - 0.4 g sample is digested with 1.5 mL of 70% perchloric acid and 0.5 mL of conc. nitric acid. A Varian AA-475 equipped with an As-EDL measures the arsenic concentration of the digest.

Barium - Ba: 0.1 g sample is decomposed with conc. perchloric, nitric and hydrofluoric acid. Atomic absorption using a nitrous oxide-acetylene flame determines Ba from the aqueous solution.

Bismuth - Bi: 0.2 g - 0.3 g is digested with 2.0 mL of perchloric 70% and 1.0 mL of conc. nitric acid. Bismuth is determined directly from the digest into the flame of the AA instrument c/w EDL.

Gold - Au: 10.0 g sample (Pan-concentrates see below) is digested with aqua regia (1 part nitric and 3 parts hydrochloric acid). Gold is extracted with Methyl iso-Butyl ketone (MIBK) from the aqueous solution. Gold is determined from the MIBK solution with flame AA.

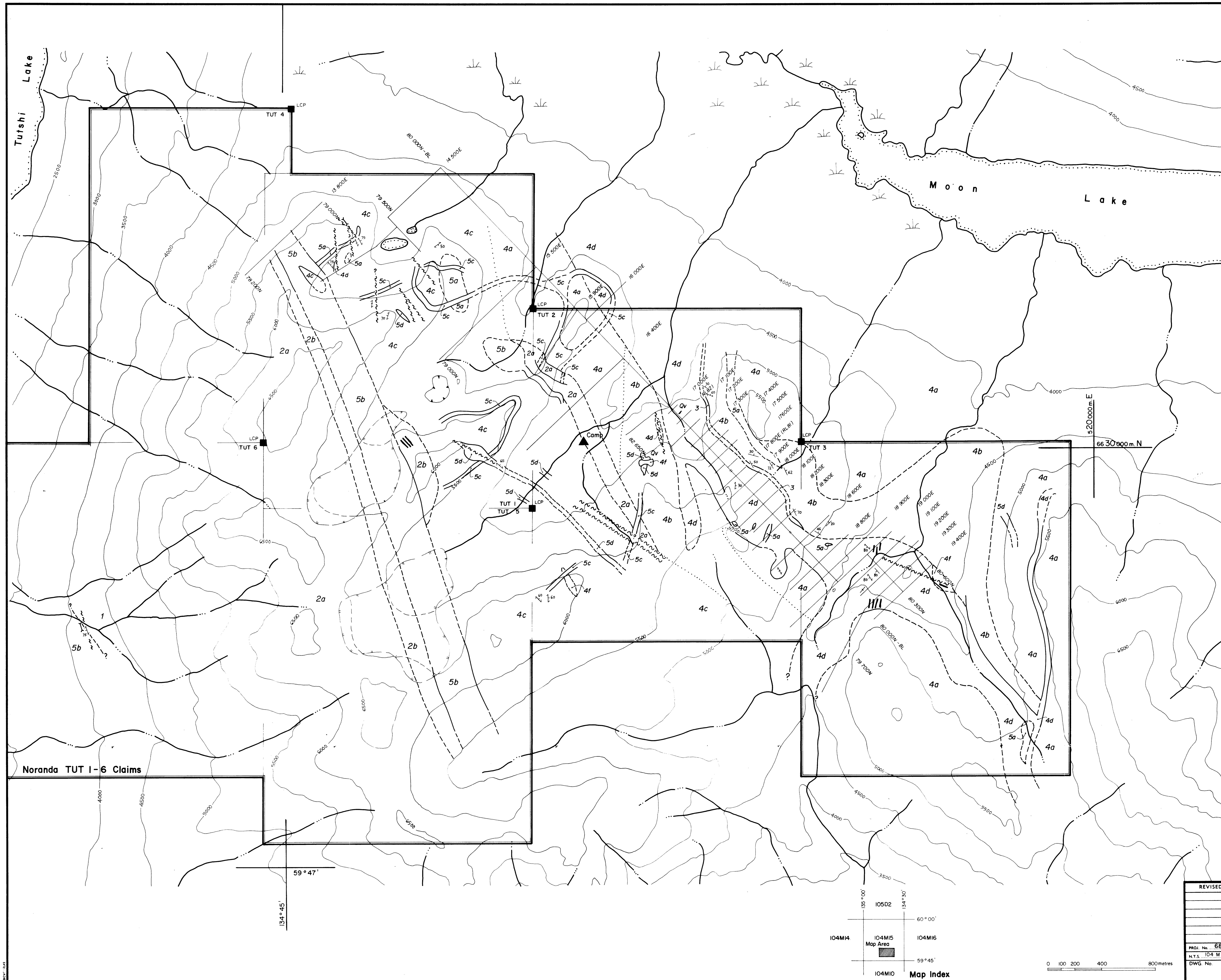
Magnesium - Mg: 0.05 - 0.10 g sample is digested with 4 mL perchloric/nitric acid (3:1). An aliquot is taken to reduce the concentration to within the range of atomic absorption. The AA-475 with a nitrous oxide flame determines Mg from the aqueous solution.

Tungsten - W: 1.0 g sample sintered with a carbonate flux and thereafter leached with water. The leachate is treated with potassium thiocyanate. The yellow tungsten thiocyanate is extracted into tri-n-butyl phosphate. This permits colourimetric comparison with standards to measure tungsten concentration.

Uranium - U: An aliquot, taken from a perchloric-nitric (3:1) decomposition, usually from the multi-element digestion, is diluted with water and a phosphate buffer. This solution is exposed to laser light, and the luminescence of the uranyl ion is quantitatively measured on the UA-3 (Scintrex).

LOWEST VALUES REPORTED IN PPM

Ag - 0.2	Mn - 20	Zn - 1	Au - 0.01 (10 ppb)
Cd - 0.2	Mo - 1	Sb - 1	W - 2
Co - 1	Ni - 1	As - 1	U - 0.1
Cu - 1	Pb - 1	Ba - 10	
Fe - 100	V - 10	Bi - 1	



Legend

TERTIARY

//	Gray intermediate, locally siliceous fine grained dyke 0.5m. - 5.0m. wide.

CRETACEOUS and/or JURASSIC

5a	"Snowflake" porphyry, diorite, pink to dark grey.
5b	Porphyritic granodiorite
5c	Granitic dykes, light grey fined grained, generally sub horizontal.
5d	Fine grained felsic dykes, locally silicified, forms quartz sericite schist where sheared.

TRIASSIC

4a	Generally fine grained green basic tuffs, local breccias and minor volcanoclastics, often occurs with 4b.
4b	Generally green and maroon basic volcanic conglomerates w/ interbedded shale and fine grained volcanoclastics, often occurs with 4a.
4c	Sheared and foliated chlorite rich intermediate to basic tuffs, displays well developed flaser fabric.
4d	Intense carbonate ± chlorite, ± clay, ± silica alteration of basic volcanic, brecciated and cut by numerous carbonate, barite and quartz veins. Weathers bright orange.
4e	Moderate degree of 4d.
4f	Chlorite and clay alteration with local carbonate development.
3	Limestone, black to grey, 5-20cm. thick beds crystallaline.
2a	Black shale, locally fossiliferous, graphite and Po rich Interbedded with laminated lithic sandstone.
2b	Hornfelsed version of 2a.

PRE-PERMIAN ?

I	Coast metamorphics, chlorite schist/gneiss.

Symbols

- Geological Contact (defined, approximate, inferred)
- Shear zone
- Bedding (inclined, vertical)
- Foliation (inclined, vertical)
- Dykes
- Trench, old workings
- Qv Quartz vein

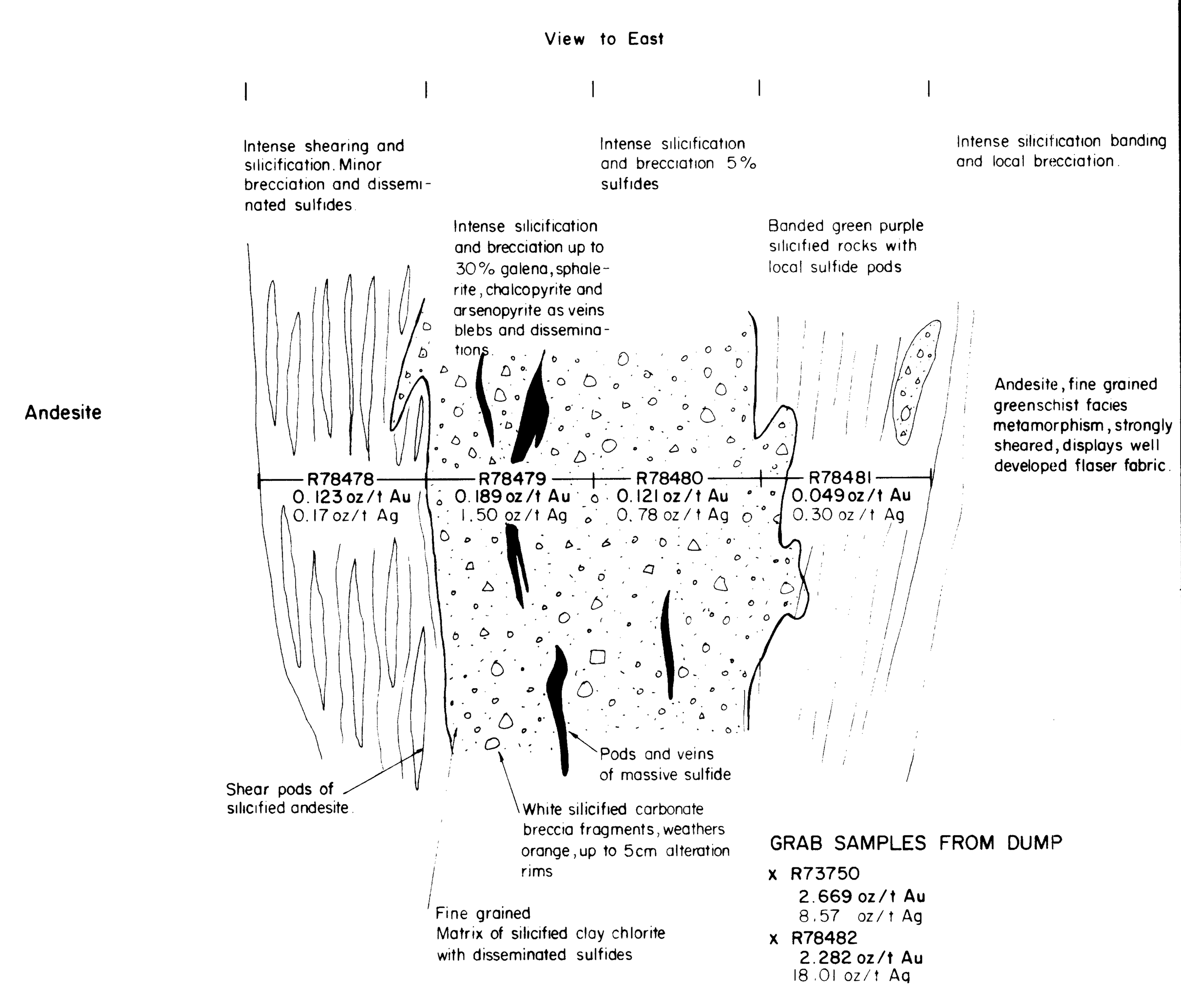
GEOLOGICAL BRANCH ASSESSMENT REPORT

15,500

Fig. : 3

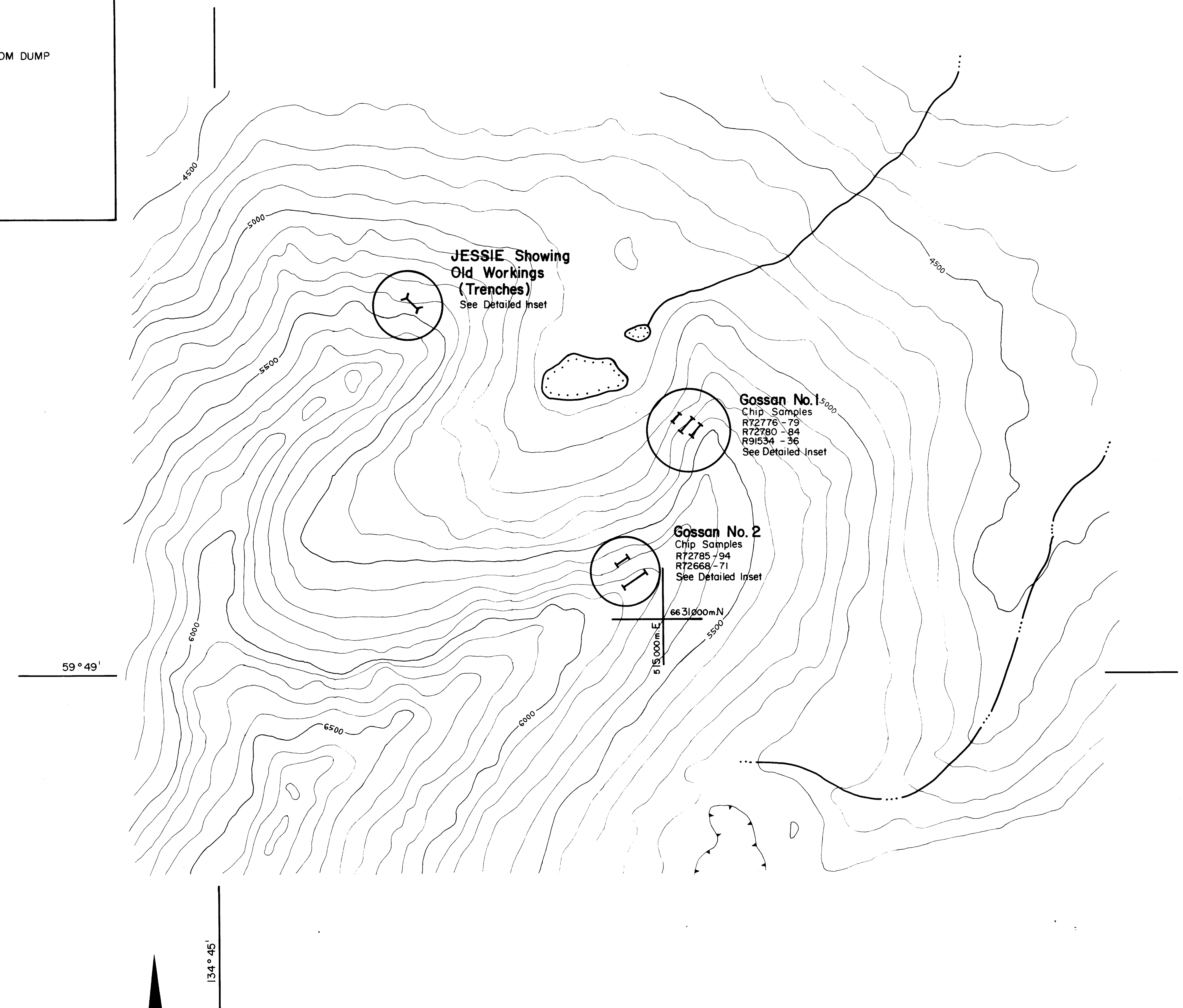
REVISED	Moon Lake (TUT Claims)	
	Regional Geology (& Grid Location Map)	
PROJ. No. 68	SURVEY BY: SM, CH	DATE: SEP 86
N.T.S. 104 M 15	DRAWN BY: AI	SCALE: 1:10,000
DWG. No.	**NORANDA EXPLORATION** OFFICE: Whitehorse	

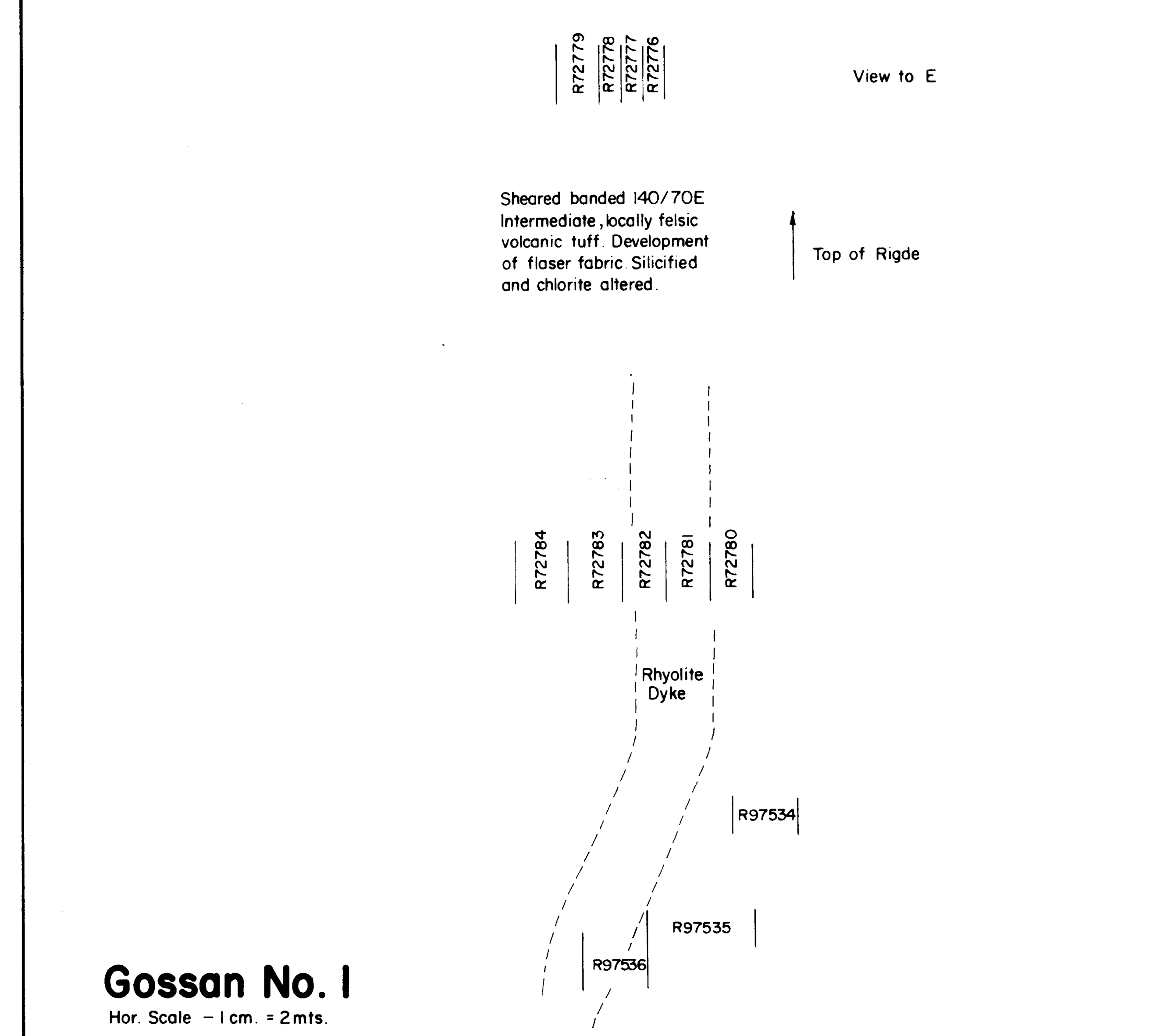
Legend
TERTIARY
Gray intermediate, locally siliceous fine grained dyke 0.5m. - 5.0m. wide.
CRETACEOUS and/or JURASSIC
5a "Snowflake" porphyry, diorite, pink to dark grey.
5b Porphyritic granodiorite
5c Granitic dykes, light grey fined grained, generally sub horizontal
5d Fine grained felsic dykes, locally silicified, forms quartz sericite schist where sheared.
TRIASSIC
4a Generally fine grained green basic tuffs, local breccias and minor volcanoclastics, often occurs with 4b.
4b Generally green and maroon basic volcanic conglomerates w/ interbedded shale and fine grained volcanoclastics, often occurs with 4a.
4c Sheared and foliated chlorite rich intermediate to basic tuffs, displays well developed flaser fabric.
4d Intense carbonate ± chlorite, ± clay, ± silica alteration of basic volcanic, brecciated and cut by numerous carbonate, barite and quartz veins. Weathers bright orange.
4e Moderate degree of 4d
4f Chlorite and clay alteration with local carbonate development.
3 Limestone, black to grey, 5-20cm. thick beds crystallaline.
2a Black shale, locally fossiliferous, graphite and Po rich interbedded with laminated lithic sandstone.
2b Hornfelsed version of 2a.
PRE-PERMIAN ?
1 Coast metamorphics, chlorite schist/gneiss.
Symbols
Outcrop contact
Geological contact (defined, assumed)
Shear zone
Ridge crest
Creek, drainage
Dyke
Bedding (incl., vert.)
Foliation (incl., vert.)
Cleavage (incl., vert.)
Lineation
Rock & Silt sample location & no.
"The Ditch"
Hor. Scale - 1cm. = 4mts.
View S
L19 000E 80 300N
50 % Talus
Intense carb, chl and clay alteration of basic volcanic congls and associated pyroclastics cut by intermediate dykes. Local areas of intense silicification, py, pyr and cpy mineralization. Strongly sheared and foliated at 136°-170° dipping 90°-80° SW.
"Ridge Gossan"
Hor. Scale - 1cm. = 8mts.
View S/SE
Ridge Top
L17 800E 80 065N
L17 790E 80 000N
90% Talus
No Sample R41717
Intense bright orange carb alteration w/associated brecciation; qtz, carb and barite veining; some relict volc congl displaying intense chl and clay alteration as well as slickensides.
"The Ditch" (See Inset)
"Ridge Gossan" (See Inset)
GEOLOGICAL BRANCH ASSESSMENT REPORT
15,500
Fig. 4
Moon Lake (TUT Claims)
(MAIN GRID)
Geology
PROJ. No. 68
N.T.S. 104 M 15
SURVEY BY: SM, CH
DRAWN BY: AI
DATE: SEP 86
SCALE: 1:2500
NORANDA EXPLORATION
OFFICE: Whitehorse



JESSIE Showing

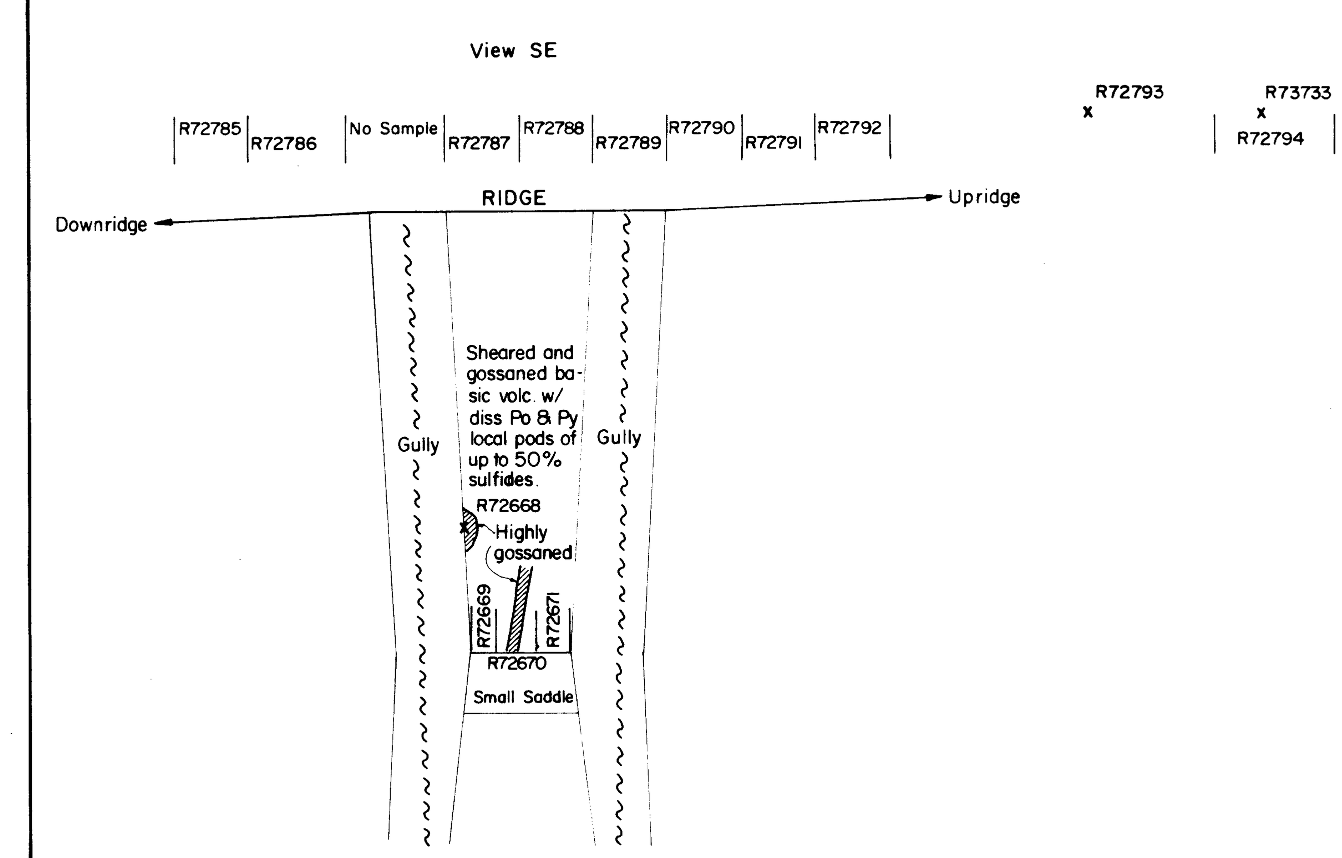
Scale - 1cm. = 25cm.





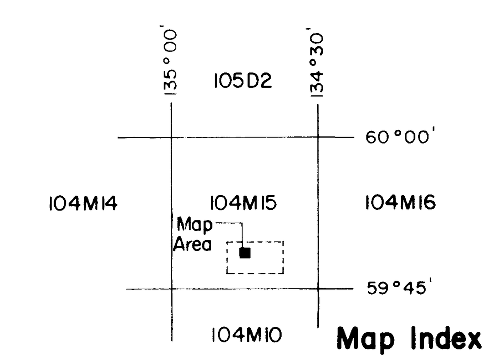
Gossan No. 1

Hor. Scale - 1cm. = 2mts.



Gossan No. 2

Hor. Scale - 1cm. = 2mts.



0 50 100 200 400 metres

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,500

Fig : 5

REVISED	Moon Lake (TUT Claims)
	"Nasty" Cirque Geology & Compilation
PROJ. No 68 / N.T.S. 104 M 15 / DWG No	SURVEY BY SM / DRAWN BY AI / DATE SEP 86 / SCALE 1:5 000
	NORANDA EXPLORATION, OFFICE Whitehorse


Tutshi Lake
Moon Lake
Noranda TUT 1-6 Claims
TUT 1
TUT 2
TUT 3
TUT 4
TUT 5
TUT 6
LCP
Camp
520 000 m E
6630 000 m N
59°47'
134°45'
Symbols
Sample location & numbers
Rock (R)
Silt (S) / Pan Conc. (H)
Talus Fine (TF)
Rock Chip, Grab (R/P)
Soil (P)
N
GEOLOGICAL BRANCH
ASSESSMENT REPORT
15,500
Fig. 6
Map Index
105D2
104M14
104M15
Map Area
104M16
104M10
135°00'
134°30'
60°00'
59°45'
0 100 200 400 800 metres
REVISED
Moon Lake (TUT Claims)
Sample Location Map
PROJ. No. 68
N.T.S. 104 M 15
DWG. No.
SURVEY BY SM, CH
DRAWN BY AI
DATE SEP 86
SCALE 1:10,000
NORANDA EXPLORATION
OFFICE Whitehorse


GEOLOGICAL BRANCH
ASSESSMENT REPORT
15,500
Fig : 7
Moon Lake (TUT Claims)
(West Grid)
Soil Geochem Results
(Cu/Zn/Pb)
REVISED
PROJ. No. 68
N.T.S. 104 M 15
DWG. No.
SURVEY BY SM, CH
DRAWN BY AI
DATE OCT 86
SCALE 1:2500
NORANDA EXPLORATION
OFFICE Whitehorse
Cu/Zn/Pb
(in ppm)
0 25 50 100 200 metres
80 000N - BL
Baseline
80 000N
Joins at 17 000E
of Main Grid
80 400N
79 500N
79 200N
79 000N
78 500N
79 400N
79 000N
(Offset)
78 200N
(Offset)
13 800E
14 500E
14 600E
15 500E
15 900E
16 000E
16 400E
CP
TUT 2
Camp
Chaining approximate
86/430/110
76/240/140
58/130/46
42/170/160
62/130/30
80/110/20
88/98/18
60/180/14
52/100/22
60/92/22
60/96/14
74/140/24
100/210/20
86/200/20
68/160/12
110/210/30
46/130/16
28/88/16
36/86/12
26/90/14
40/88/12
30/68/12
32/58/12
30/100/14
26/64/12
30/52/12
50/140/14
110/200/38
100/160/14
110/180/22
84/140/20
84/200/40
220/670/160
130/150/20
160/160/24
26/120/36
18/110/48
20/76/26
82/130/28
54/120/52
70/130/46
40/54/10
36/70/10
44/72/12
34/54/10
42/60/10
42/130/18
32/70/8
46/110/18
36/88/14
50/110/16
60/110/20
42/76/16
50/92/16
40/98/22
48/100/20
42/86/28
54/110/26
66/92/22
56/98/18
66/96/20
60/88/16
62/52/12
210/64/8
40/70/18
28/58/18
18/60/30
24/76/52
42/68/72
74/130/220
24/140/90
64/54/20
34/110/28
16/70/24
16/88/30
100/86/12
110/90/10
210/140/18
250/120/20
220/110/18
250/110/18
220/98/16
210/92/16
74/76/16
74/110/22
36/150/70
30/92/54
30/110/110
40/78/12
46/86/16
26/62/12
26/64/12
36/54/18
38/58/16
24/54/20
32/90/24
22/62/26
22/64/20
32/110/30
42/80/24
40/92/24
44/130/22
48/160/28
110/170/42
34/190/54
50/200/110
240/580/130
62/1000/570

16 000E
0.2/36/10
0.2/28/10
0.2/40/10
0.2/40/10
0.2/38/90
0.2/48/20
0.2/36/10
0.2/40/20
0.2/40/10
0.6/42/50
0.4/100/90
0.4/62/10
0.2/84/100
80 400N
14 500E
14 600E
15 500E
15 900E
16 400E
Joins at 17000E of Main Grid
Baseline 80 000N
80 000N - BL
0.2/120/10
0.2/60/10
0.2/86/10
0.2/82/10
0.2/68/10
0.2/48/10
0.2/38/10
0.2/56/10
0.2/46/10
0.2/150/
0.2/48/10
0.2/36/10
0.2/32/10
0.2/46/10
0.2/40/10
0.2/42/10
0.2/56/10
0.2/22/10
0.2/60/10
0.2/38/10
0.2/50/10
0.2/52/40
0.2/66/10
0.2/60/10
0.2/64/10
0.2/52/10
0.2/50/10
0.2/52/10
0.2/58/10
0.2/42/10
0.2/38/10
0.2/24/10
0.2/30/10
0.2/28/30
0.2/26/10
0.2/66/10
0.2/40/10
0.2/44/10
0.2/110/10
0.2/130/10
0.2/1900/10
0.2/120/20
0.2/76/10
0.4/88/10
0.2/70/170
0.4/110/540
79 400N
CP TUT 2
0.2/46/10
1.4/44/10
0.2/42/10
0.4/50/10
0.2/30/10
0.2/38/10
0.2/42/10
0.2/28/50
0.2/52/10
0.2/36/10
0.2/50/10
0.2/60/10
0.2/140/10
0.6/270/10
2.0/330/50
1.4/270/20
0.8/130/1700
3.0/190/700
1.6/120/190
79 000N
Camp
13 800E
79 000N (Offset)
1.0/360/20
2.0/1900/20
0.2/260/10
2.0/730/20
0.2/330/10
0.2/100/10
0.2/96/10
0.2/86/10
0.2/58/10
0.2/62/10
0.2/90/10
0.2/60/10
0.2/120/10
0.2/100/10
0.2/60/10
0.2/92/10
78 200N (Offset)
79 500N
79 200N
78 500N
Chaining approximate
0.2/130/30
0.2/56/10
0.2/84/10
0.2/180/10
0.2/390/10
1.0/1100/10
0.2/410/10
0.4/130/10
0.2/140/10
0.2/44/10
0.4/46/10
0.2/120/10
0.4/130/10
0.2/68/10
GEOLOGICAL BRANCH ASSESSMENT REPORT
15,500
Ag/As/Au
in ppb
in ppm
0 25 50 100 200 metres
Fig.: 8
REVISED
Moon Lake (TUT Claims)
(West Grid)
Soil Geochem Results
(Ag/As/Au)
PROJ. No. 68
N.T.S. 104 M 15
DWG No
SURVEY BY SM, CH
DRAWN BY AI
DATE OCT 86
SCALE 1: 2500
NORANDA EXPLORATION
OFFICE: Whitehorse

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,500

Fig. : 9

MOON LAKE

(East Grid)

SOIL GEOCHEMISTRY

AG, AS IN PPM. AU IN PPB.

PROJ. NO. 368

N.T.S. 104M15 W

DWG. NO.

SURVEY BY: W.R.

DATE: OCT.15.1986

DRAWN BY: EDP/VAN

SCALE: 1:2500

NORANDA EXPLORATION

OFFICE: WHITEHORSE

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,500

Fig. :10

MOON LAKE
(East Grid)
SOIL GEOCHEMISTRY
CU, ZN, PB IN PPM.

PROJ. NO. 368
N.T.S. 104M15 W
DWG. NO.

SURVEY BY: W.R.
DATE: OCT.15.1986.
DRAWN BY: EDP/VAN
SCALE: 1:2500

NORANDA EXPLORATION
OFFICE: WITEHORSE