

84-1033-13340

GEOLOGY, ROCK AND SOIL GEOCHEMISTRY

KILLARNEY SHOWING
BRIAN BORU PROSPECT

GAM I - IV CLAIMS

Omineca Mining Division
British Columbia

Latitude -- 55 deg. 04' N
Longitude -- 127 deg. 38' W

Work completed August 16-23, 1984

By: Dennis Gorc, Geologist

Noranda Exploration Company, Limited
(no personal liability)

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

13,340

September 1984

S. 93 M/4E

Nov 15/84

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
LOCATION AND ACCESS	1
CLAIMS	1
REGIONAL GEOLOGY	2
ECONOMIC GEOLOGY OF ROCHER DEBOULE STOCK	3
GEOLOGY OF KILLARNEY SHOWING	3
ALTERATION	4
MINERALIZATION	
Sphalerite-pyrite-pyrrhotite	5
Pyrite	8
GEOCHEMISTRY	
Soil Geochemistry	8
General Comments on Soil Survey	9
Soil Sampling in 1984	9
Rock Geochemistry	11
CONCLUSIONS	13
REFERENCES	15

FIGURES: (Figures 3-6 in pocket)

1.	Location Map	Scale 1:8,000,000
2.	Claim Map	Scale 1:50,000
3.	Regional Geology	Scale 1:63,360
4.	Sample Location - Geology	Scale 1:2,500
5.	Compilation of Previous Work	Scale 1:2,500
6.	Detail Map - Killarney Showing,	Scale 1:500

Tables:

1.	Claim Data	2
2.	Assay results - sphalerite/pyrite mineralization	6
3.	Soil Geochemistry	10
4.	Rock Geochemistry	12

Appendices:

Appendix A	- Analytical sheets, Assays Bondor Clegg	
Appendix B	- Analytical Method - Noranda Lab	
Appendix C	- Analytical sheets, Bondor Clegg	
	Soil geochem Sb, Sn	
Appendix D	- Analytical sheets, Rossbacher Laboratory	
	Rock Geochem	
Appendix E	- Cost Statement	
Appendix F	- Statement of Qualifications	

INTRODUCTION

The Brian Boru prospect consists of four mineralized areas referred to as the Brian Boru, Jones, Killarney and South Oxidation zone showings.

During August 16th-24th, 1984, D. Gorc and L. Warner examined the Killarney showing collecting 57 rock samples and 15 soil samples. Rock samples were analyzed for Cu, Pb, Zn, Ag, As, and Mn with fourteen samples also analyzed for Sb and Sn. Soil samples were analyzed for Cu, Pb, Zn, Ag, As, Sb and Sn. The other showings were not visited.

Detail geological mapping in the vicinity of the Killarney showing is not possible since there are few outcrops. However, examination of talus enabled rock types and alteration assemblages to be noted.

This work was carried out by employees of Noranda Exploration Company Limited, No Personal Liability, under the direction of R. MacArthur. This report was prepared by D. Gorc and is included here verbatim.

LOCATION AND ACCESS

The Killarney showing is located along the south fork of Brian Boru creek on map sheet 93 M/4E approximately 19.5 km south of New Hazelton, B.C.

The property is near latitude 55 deg. 04' N and longitude 127 deg. 38' W.

The Killarney showings occur along a moderately steep forested slope with few outcrops. Elevations range from 1200 m to 1650 m.

Access is by helicopter from Smithers, B.C. located about 40 km southeast. The nearest road is along Juniper Creek about 6 km northwest of the showing.

CLAIMS

In 1979, Asarco, Ltd. staked the GAM I, II, III, & IV claims (26 units) to cover the Brian Boru prospect. These claims overlap the Brian Boru No. 1 (Lot 607) and Brian Boru No. 2 (Lot 608) Crown Grants which were originally granted in 1916 or 1917.

The GAM claims were grouped on August 7, 1980.

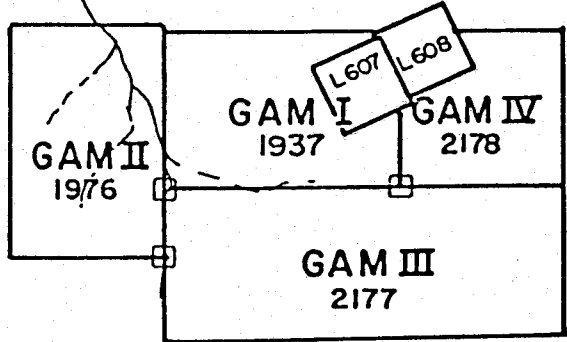
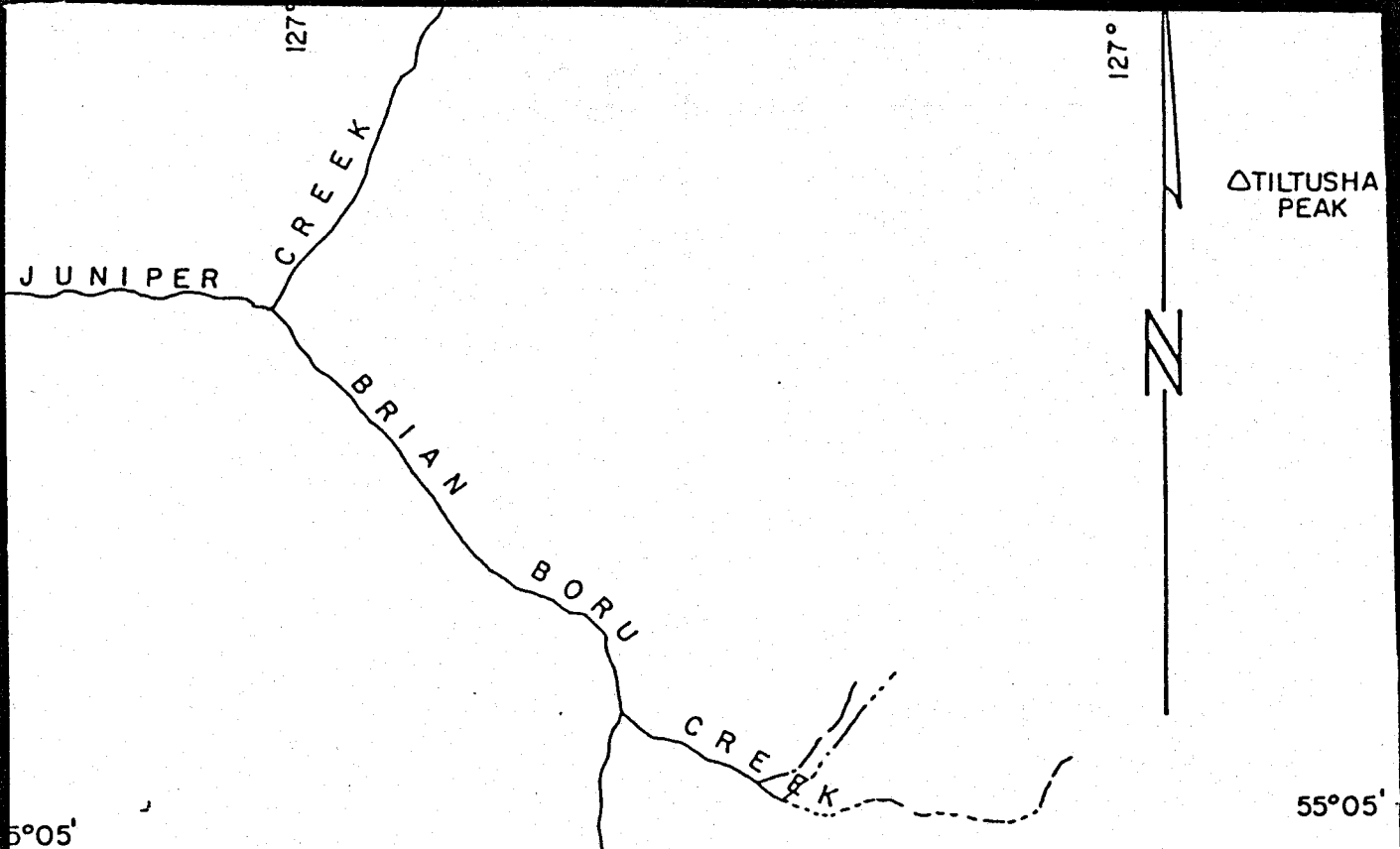


Revised Nov 15/64

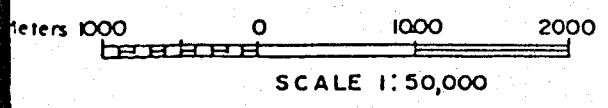
0 100 200 KILOMETRES
SCALE: 1:8,000,000

REVISED	LOCATION MAP BRIAN BORU PROSPECT	
PROJ. No. _____	SURVEY BY: _____	DATE: _____
N.T.S. 93M/4E	DRAWN BY: S.K.B.	SCALE: 1:8,000,000
DWG. No. _____	NORANDA EXPLORATION	
Fig. 1		
OFFICE: _____		PRINCE GEORGE, B.C.

VANCAL 11927



Rev Nov 15/84



REVISED		
	BRIAN BORU PROSPECT OMINECA M.D. CLAIM MAP	
PROJ.No. _____	SURVEY BY: _____	DATE: _____
N.T.S. 93M/4E.	DRAWN BY: _____	SCALE: 1: 50,000
DWG.No.	NORANDA EXPLORATION	
Fig. 2	OFFICE: _____	

Table 1 -- CLAIM DATA

<u>Claim Name</u>	<u># Units</u>	<u>Tag #</u>	<u>Mining Div.</u>	<u>Record #</u>	<u>Record Date</u>
GAM I	6	125187E	Omineca	1937	Aug. 9/79
GAM II	6	07902	"	1976	Aug. 23/79
GAM III	10	01919	"	2177	Oct. 30/79
GAM IV	4	01920	"	2178	Oct. 30/79
BORU GRP.					Aug. 7/80

HISTORY

Most of what are now called the Brian Boru, Jones and South Oxidation Zone showings were first discovered in 1914-1915. Small open cuts, pits and adits exposed small irregular sphalerite-pyrite veins and veinlets containing variable amounts of lead, silver, arsenic and gold.

In 1926, the Killarney showings were discovered and several open pits and a short adit dug.

In 1979, Asarco, Inc. staked the GAM claims. In 1980 they geologically mapped the property on a 1:5,000 scale and established a flagged grid over the Killarney showing. Soil sampling and a magnetometer survey were completed over the grid. In 1981, VLF, Magnetic and I.P. geophysical surveys were completed over the Killarney and Jones showings.

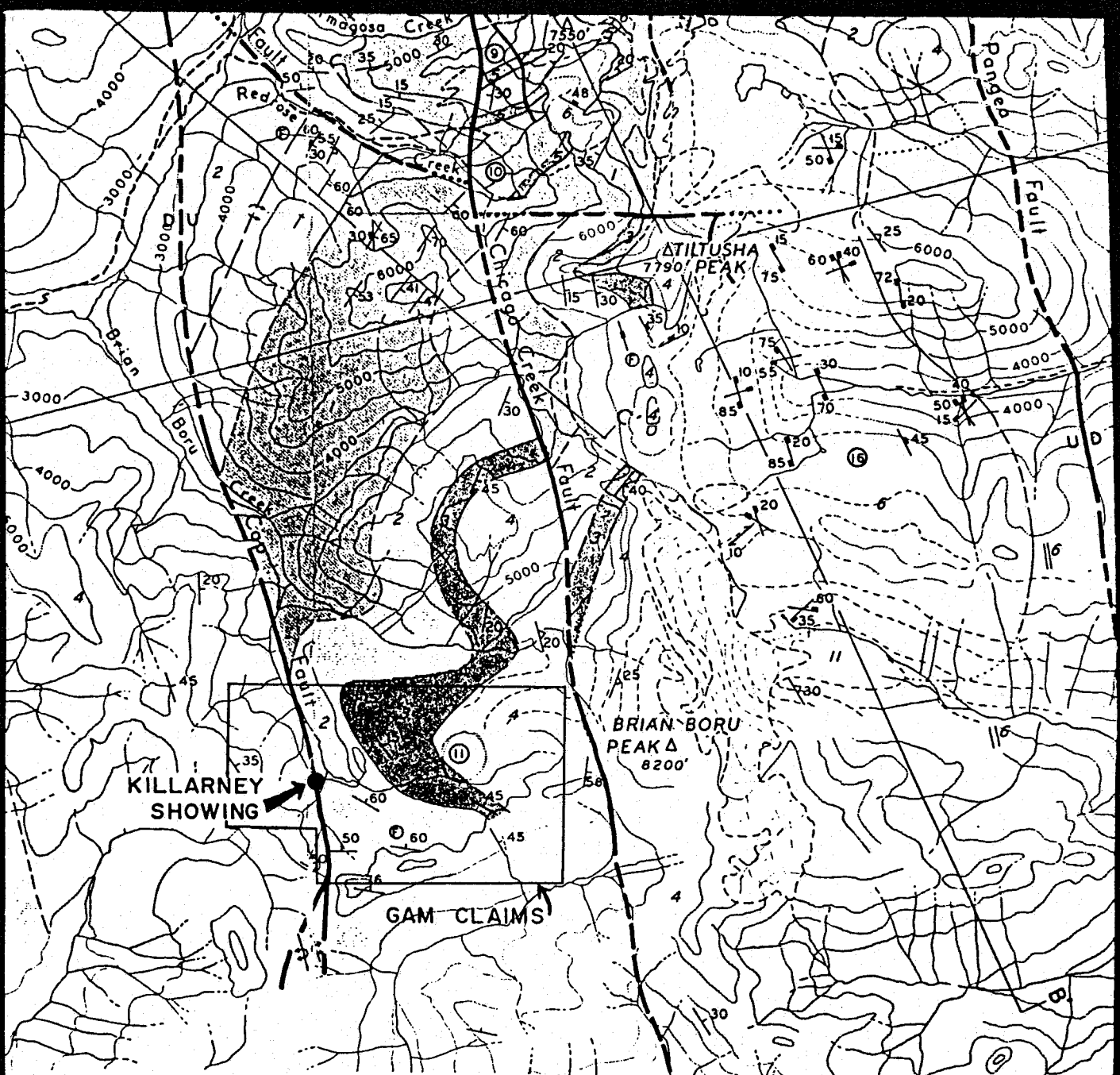
REGIONAL GEOLOGY

The GAM claims are underlain by rocks of the later lower and early upper Cretaceous Brian Boru and Red Rose formations about 5.7 km west of the south end of the Rocher Deboile Stock. The showings are hosted by the Brian Boru formation.

In the vicinity of the Killarney showings, the two formations are separated by the NNW trending Cap fault. Brown (1960) believed the fault to be a normal fault dipping 50 deg. to 70 deg. westerly but recent mapping by Richards (1978) show much of the Cap fault to be a thrust fault. A dip-slip displacement of 1500 m to 3000 m along the fault was estimated by Brown (1960).

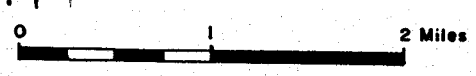
The Brian Boru formation was described by Brown (1960) to consist largely of porphyritic andesite flows and breccias with minor tuffs. However, recent mapping by Richards (1977) has indicated rhyolitic pyroclastics and flows also occurring.

The Red Rose formation consists of greywacke, shale and siltstone with minor conglomerate and coal. Brown (1960) suggests a conformable contact between the Brian Boru and underlying Red Rose formations.



- LEGEND**
- PLEISTOCENE AND RECENT**
 11 Drift and alluvium
- PALEOCENE OR LATER**
 10 Andesite, basalt flows and dykes
- PALEOCENE**
 9 Greywacke, shale, conglomerate, coal
- CRETACEOUS**
 BULKLEY INTRUSIONS (5-8)
 6 ROCHER DEBOULE STOCK: 6- porphyritic granodiorite; 7- quartz monzonite; 8 Undivided
 Diorite dykes
- UPPER JURASSIC AND LOWER CRETACEOUS**
 HAZELTON GROUP (IN PART) (1-4) 4a Related sill
 4 BRIAN BORU FORMATION: varicoloured porphyritic andesitic flows and breccias, tuffs, minor volcanic sandstone and conglomerate
 RED ROSE FORMATION (1-3)
 MEMBER D: conglomerate, greywacke, shale, and hornfelsic equivalents
 1, 2 MEMBER B: shale, siltstone, and hornfels. 2- MEMBERS A and C: greywacke, shale, siltstone, and hornfelsic equivalents; minor conglomerate and coal

Nov 15/64



REVISED	BRIAN BORU PROSPECT	
	REGIONAL GEOLOGY (GEOLOGY BY A. SUTHERLAND BROWN 1960)	
PROJ. No. _____	SURVEY BY: _____	DATE: _____
N.T.S. _____	DRAWN BY: _____	SCALE: 1 in. = 1 mile
DWG. No. _____	NORANDA EXPLORATION	
Fig. 3	OFFICE: _____	

One should note that the early geological mapping by Armstrong (1944) and Brown (1960) considered the Brian Boru and Red Rose formations as part of the Hazelton Group. However, recent mapping by Richards (1978) and Tipper (1979) consider the formations as being separate from the Hazelton Group.

The Late Cretaceous Rocher Deboule stock consists of porphyritic granodiorite and quartz monzonite. Porphyritic andesite dykes and fine grained diorite dykes also occur.

Hornfelsing is common within sediments adjacent to the stock.

ECONOMIC GEOLOGY OF ROCHER DEBOULE STOCK

At least 40 mineral prospects occur within or near the Rocher Deboule Stock. Most mineralization occurs along shear or fracture zones within quartz veins or vein-like replacements.

Metals occurring include Cu, Mo, W, Sn, Co, U, As, Au, Ag, Sb, Bi, Pb, Zn. The two major producing mines, the Rocher Deboule and the Red Rose Mines, were principally W-Cu deposits.

These showings can be divided in two groups; W-Cu mineralization occurring within or adjacent to the Rocher Deboule Stock, and Pb-Zn-Ag mineralization occurring further from the stock. The Brian Boru prospect would be classified within the latter group.

GEOLOGY OF KILLARNEY SHOWING

The Killarney showings are hosted by fractured and bleached Brian Boru volcanics. Exposures along the ridge to the west of the showings and in angular talus near the showing indicate a rhyolitic volcanic sequence consisting of acid pyroclastics and flows.

Acid Pyroclastics

The pyroclastics range in texture from agglomerate with clasts to 10 cm across to fine lapilli tuff with clasts of 2-3 mm. Lapilli tuff with clasts 1-2 cm across would be the most common pyroclastic.

Clasts of black argillaceous sediments are commonly found within the pyroclastic rocks. Whether such rocks are fragments of the underlying Red Rose formation is not known.

Both angular and subrounded clasts occur within the pyroclastic rocks. In some uses, volcanic breccia would be a more appropriate description. The appearance of the pyroclastics suggest some explosive activity in their formation.

Rhyodacite Flows

Such rocks are very fine grained, siliceous, hard and competent. They are medium to dark grey in colour and are characterized by small lath-like phenocrysts of plagioclase and occasional phenocrysts of hornblende. The hornblende phenocrysts often have a thin rim of rusty alteration. These rocks contain traces of disseminated pyrite. Many of these rocks may be fine grained tuffs.

Rhyolite Flows

These rocks are almost identical to the rhyodacite rocks except that they have a much lighter grey colour and generally contain more disseminated pyrite which can be as high as 2-3%. These rocks also contain hornblende phenocrysts. Occasional flecks of dark mineral may be sphalerite. In some cases, such rocks could be bleached rhyodacite, especially where there is high disseminated pyrite.

Greywacke

Abundant greywacke assigned to the Red Rose Formation is found in to the north and east of Brian Boru Creek. The greywacke is dark grey, massive and evenly textured except for occasional thin (1-2 cm) pebble layers. Thin carbonaceous layers were noted and are the likely source for the I.P. response obtained over these rocks. Neither sulphides or alteration were noted within these rocks.

Greywacke talus identical to that of the Red Rose formation is commonly found within the Killarney grid. Whether these rocks are part of the Brian Boru or of the Red Rose formation is not known.

Shale

Black argillaceous rocks were also noted east of Brian Boru Creek. The shales are soft and weathered into 3-5 cm thick plates. Occasional fossils were seen along bedding surfaces. No sulphides or alteration were noted within these rocks.

ALTERATION

The Killarney pyrite-sphalerite mineralization is hosted by bleached volcanic rocks altered to clay minerals and sericite. The proportion of clay minerals to sericite is difficult to estimate. The altered rock is characteristically light grey to white in colour, soft with up to 2% disseminated pyrite. Original pyrite content was higher since much of the pyrite has been leached out. Occasional pyrite veinlets also occur. Occasional flecks of a green translucent mineral may be fluorite.

Although this alteration is most noticeable within the mineralized rock in the Killarney showing, it is also present in talus throughout the grid and in several outcrops (sample sites 14810, 14825) along the eastern edge of the grid. The distribution of such alteration is impossible to map since such talus is mixed with unaltered volcanic and sedimentary talus.

One of the characteristics of rocks affected by this alteration is a rusty brown rim of highly weathered rock. Such rims are generally 1-2 cm thick but are often 10 cm or more thick. Some of the rhyolite flow rocks also exhibit such weathered rims suggesting that some of these rhyolites may represent a less intense form of the same alteration.

Manganese stain is also common on weathered surfaces.

MINERALIZATION

Sphalerite-Pyrite-Pyrrhotite

Sphalerite-pyrite-pyrrhotite mineralization occurs as open-space fillings in fractured and altered volcanic. Sphalerite and pyrite are the predominant sulphides with all sphalerite of the iron-rich "blackjack" variety. Small amounts of galena and chalcopyrite also occur. These sulphides occur within a gangue of quartz and occasional siderite. An unidentified silvery grey mineral (stibnite?) was also noted. Such mineralized open space fillings are rarely more than 2-3 cm across. The mineralization is generally slightly magnetic.

Such mineralization was discovered in three locations on the GAM grid:

1. adit and open cuts of original discovery,
2. L 9900E BL,
3. along upper part of "Chopper" Creek.

Talus of massive pyrite-pyrrhotite mineralization was found at the base of an open cut near L 9900E, 10100S. Such talus was found over an area 4 m X 4 m. The mineralization consisted largely of pyrite with lesser pyrrhotite and sphalerite and minor chalcopyrite and galena.

Samples of this mineralized rock returned the following assays:

Table 2 Assay Results - Sphalerite-Pyrite Mineralization

<u>Adit Area</u>		<u>ASSAY</u>				
<u>Sample No.</u>	<u>Zn(%)</u>	<u>Pb(%)</u>	<u>Cu(%)</u>	<u>Sn(%)</u>	<u>Ag (gm/t)</u>	<u>Au (gm/t)</u>
39254 *	2.13	0.23	0.01	0.01	11.1	0.17
39255 *	0.42	0.36	0.02	0.11	16.6	0.17
39258 *	0.32	0.20	0.01	0.01	6.0	0.14
14770	0.34	0.26	0.02	1.79	16.5	--
14771	1.83	0.33	0.02	0.06	23.3	--
14774	0.90	0.68	0.02	0.01	43.2	--
14785	1.43	0.07	0.02	0.02	7.5	--

Geochem

<u>Sample No.</u>	<u>As (ppm)</u>	<u>Sb (ppm)</u>	<u>Mn (ppm)</u>
39254 *	--	--	--
39255 *	--	--	--
39258 *	--	--	--
14770	400	44	7500
14771	1000	67	8300
14774	120	46	3600
14785	145	17	3200

Massive Sulphide - L 9900E, 10100S

<u>Sample No.</u>	<u>Zn(%)</u>	<u>Pb(%)</u>	<u>Cu(%)</u>	<u>Sn(%)</u>	<u>Ag (gm/t)</u>	<u>Au (gm/t)</u>
14789	0.09	0.06	0.09	0.01	26.4	--

Geochem

	<u>As (ppm)</u>	<u>Sb (ppm)</u>	<u>Mn (ppm)</u>
14789	270	375	820

Chopper Creek

<u>Sample No.</u>	<u>Zn(%)</u>	<u>Pb(%)</u>	<u>Cu(%)</u>	<u>Sn(%)</u>	<u>Ag (gm/t)</u>	<u>Au (gm/t)</u>
14817	6.33	0.04	0.01	0.01	19.9	--
14818	0.26	0.04	0.01	0.01	13.4	--
14822	1.75	0.71	0.01	0.01	58.6	--
14823	0.42	0.24	0.01	0.01	40.5	--
14824	0.02	0.01	0.01	0.01	8.9	--
14828 (ppm)	5000	5200	70	--	20	--

Sample No.	Geochem		
	As (ppm)	Sb (ppm)	Mn (ppm)
14817	95	49	7600
14818	85	75	9100
14822	25	61	6400
14823	48	130	20000
14824	58	29	6500
14828	50	--	3720

Additional Areas

Sample No.	Zn(%)	Pb(%)	Cu(%)	Sn(%)	Ag (gm/t)	Au (gm/t)
39256 *	0.84	0.06	0.01	0.02	7.9	0.07
14791	0.69	0.10	0.01	0.01	49.7	--
14792	0.33	0.02	0.01	0.01	3.8	--
14793	0.62	0.03	0.01	0.01	4.1	--
14784	0.03	0.01	0.01	--	0.7	--

	Geochem		
	As (ppm)	Sb (ppm)	Mn (ppm)
39256 *	--	--	--
14791	950	125	930
14792	41	40	6300
14793	58	17	4200
14784	145	17	

NOTE: Sample marked (*) were previously submitted as assessment work.

The following conclusions can be made from the above table:

1. Silver values range up to 58.6 gm/t and average 19.9 gm/t although there are discrepancies, most silver values correlate with lead values.

eg: Sample #	Pb %	Ag gm/t
14785	0.07	7.5
39254	0.23	11.1
14771	0.33	23.3
14822	0.71	58.6

Some of the high silver values may correspond with high arsenic values.

eg: Sample #	Pb %	Ag gm/t	As (ppm)
14791	0.10	49.7	950

2. Zinc values range up to 6.33% Zn and average 1.04% Zn.

3. Lead values range up to 0.71% Pb and average 0.19% Pb.
4. Copper values are low with a high of 0.03% Cu and averaging 0.01% Cu.
5. Tin values are sporadic ranging up to 1.79% Sn and averaging 0.11% Sn. High tin values are restricted to the adit area.
6. All four samples which were analysed for gold returned only trace amounts.
7. The mineralization is anomalous in arsenic, antimony, and manganese, although all three elements returned wide ranges in values. Arsenic (25 - greater than 1000 ppm), antimony (17 - 375 ppm), manganese (930 - greater than 20,000 ppm).

Pyrite

There would appear to be two generations of pyrite mineralization; one associated with the clay-sericite alteration and another associated with the rhyolitic volcanics. Pyrite occurs predominantly as fine disseminations, but pyrite veinlets are common within the bleached altered rock. Pyrite content varies from trace to 3% pyrite. Disseminated small black flecks may be sphalerite. Geochemical results returned from samples of the pyrite mineralizations are recorded in Table 4.

GEOCHEMISTRY:

Soil Geochemistry

In 1980, Asarco Inc. conducted a soil survey on the Killarney grid. Several areas up to 300 m X 200 m of soils anomalous in lead, zinc and silver were defined.

In 1984, attempts were made to find mineralization underlying the most anomalous soils. The most prominent soil anomalies are near the following grid locations:

1. adit area L 9900E, 10150S
2. L 9900E BL
3. along north bank of Chopper Creek
4. L 9750E, 9800S
5. L 9650E, 9750S
6. L 9650E, 9550S
7. L 9650E, 10100S

Observations from each of these areas are as follows:

Soil anomaly L 9900E BL - Talus of zinc-pyrite mineralization identical to that found at the adit was found.

Along "Chopper" Creek - Talus of zinc-pyrite mineralization identical to the adit area was noted along the creek bed of

"Chopper" Creek. The highly anomalous soils reflect the mineralized talus which has been transported a short distance down the creek valley.

Soil anomaly L 9750E, 9800S - This area is on a forested steep slope (35 deg.). No outcrop was seen but talus of bleached altered volcanic containing low (less than 1%) disseminated pyrite was sampled.

Soil anomaly L 9650E, 9750S - This is located in alpine terrain with no outcrop nearby. "Soil" in this area would consist of fine talus.

Soil anomaly L 9650E, 9550S - This occurs along the bank leading into "North" Creek. Several outcrops of bleached altered volcanic containing low disseminated pyrite (less than 1%) occur nearby.

Soil anomaly L 9650E, 10100S - A rusty outcrop of bleached altered volcanic containing 3% disseminated pyrite occurs 30 to 40 m above this sample site.

General Comments on Soil Survey

1. L 9650E marks the approximate start of alpine terrain. The alpine slopes are steeper than the forested slopes below. There is little soil developed along L 9600E and L 9650E and "soils" would consist of fine talus.
2. Two areas of calcrete were noted; L 9900E, 9950E and L 9800E, 10130S. In both areas the calcrete was broken up into large blocks but occasionally was seen in place occurring as a layer up to 0.75 m thick between a 10-20 cm thick soil and organic layer and the underlying talus. If widespread, such deposits could render conventional soil geochem ineffective. The calcrete is beige in colour and vuggy. A sample of the calcrete returned 8 ppm Cu, 5 ppm Pb, 91 ppm Zn and 0.4 ppm Ag. This suggests it is not acting as a sponge for Zn etc. as is sometimes the case.
3. Soil development is variable in the forested area. In many areas, soil development is poor and consists of brown clay. In the area south of the baseline, areas are saturated with water due to seepage. Angular talus is everywhere, embedded in the soils.

Soil Sampling in 1984

A total of sixteen soil samples were collected at locations as indicated on Figure 4. The sample number and the suffix S are indicated beside the sample location.

Samples were collected from the "B" horizon where possible, by digging a small hole with a grub hoe. Samples were placed in

"Hi wet strength Kraft 3 1/2 X 6 1/8" open end" envelopes on which sample numbers were marked.

The samples were air dried and shipped to the Noranda geochem lab in Vancouver.

The samples were analysed for Cu, Zn, Pb, Ag, As at the Noranda Lab. The procedure is described in Appendix B. Analysis for Sb and Sn were carried out by Bondor Clegg in North Vancouver, B.C. using x-ray fluorescence techniques. Analytical sheets are attached as Appendix C.

Geochemical results returned are as follows:

Table 3 Soil Geochemistry

Sample #	Zn(ppm)	Pb(ppm)	Ag(ppm)	Cu(ppm)	As(ppm)	Sb(ppm)	Sn(ppm)
14757	76	14	0.2	32	16	38	5
14758	110	16	0.2	34	10	31	" 5
14759	370	54	0.2	26	28	39	" 5
14760	260	68	0.2	26	26	53	" 5
14762	220	60	2.4	30	36	66	" 5
14764	110	50	0.4	20	16	29	" 5
14767	550	78	0.6	46	42	21	" 5
14772	680	50	3.0	52	40	4	" 5
14773	560	48	2.0	20	34	12	" 5
14775	170	44	1.0	34	32	14	" 5
14776	1100	150	1.2	36	56	22	" 5
14780	230	96	4.0	24	50	27	" 5
14781	310	260	1.2	24	72	50	" 5
14783	340	100	1.8	26	42	38	" 5
14787	660	48	0.6	26	26	21	" 5
14802	150	32	1.4	24	24	27	" 5

Observations concerning the above soil geochemical results are as follows:

1. The two easternmost soil samples (14757, 58) returned low geochemical values. These samples were taken the furthest distance from the Cap Fault.
2. Soil samples taken below outcrops of pyritic rhyolitic volcanics (14759, 62, 64, 14802) are anomalous in zinc, lead, arsenic and antimony with one sample anomalous in silver.
3. The most anomalous samples are from the adit area (14767, 72, 73, 76, 87).
4. Sample 14780 was taken south of "Chopper" creek, in an area which returned relatively low metal values in the 1980 Asarco soil survey. Sample 14780 returned anomalous values.
5. The geochemical values returned from the two soil samples taken north of "Chopper" Creek confirm previous results.

6. All samples returned less than 5 ppm Sn including several soil samples taken in the vicinity of the adit where relatively high tin values were obtained in some rocks.

Rock Geochemistry

The Killarney zinc-silver-lead mineralization is geochemically anomalous in gold, arsenic, antimony, copper and maganese. It is possible that the bleached, pyritic rock hosting the mineralization is geochemically anomalous in the above elements. If so, then sampling of similar rock throughout the property may provide a tool in defining the boundaries of the target area.

Thirty two rock samples of the bleached, altered rock were collected and analysed for Cu, Pb, Zn, Ag, As and Mn. In addition, 11 samples of the pyritic rhyolite volcanic rock were also taken and analysed for the same elements. Analytical sheets from Rossbacher Laboratory Ltd. are attached as Appendix "D".

Table 4 Rock Geochemistry

Bleached, Altered Volcanic

<u>Sample #</u>	<u>Zn(ppm)</u>	<u>Pb(ppm)</u>	<u>Cu(ppm)</u>	<u>Ag(ppm)</u>	<u>As(ppm)</u>	<u>Mn(ppm)</u>
14599	98	158	36	1.0	76	800
14768	114	44	18	0.6	42	320
14769	3740	960	40	5.2	44	15600
14777	170	40	34	0.4	92	840
14778	80	12	10	0.2	28	380
14779	110	22	10	0.2	34	1200
14782	560	18	30	0.4	24	400
14788	138	18	38	0.4	46	1240
14790	384	24	18	0.2	28	1100
14794	426	20	30	0.2	20	960
14795	120	16	12	0.6	18	1040
14796	230	12	24	0.8	22	2840
14797	242	68	28	0.6	32	1880
14798	620	54	30	0.4	44	1240
14799	1630	84	22	0.2	50	2100
14800	1980	1100	34	2.2	68	2320
14801	270	110	10	2.6	90	1480
14803	94	12	6	0.2	22	620
14804	56	20	12	0.2	40	60
14806	58	8	14	0.2	22	360
14808	54	4	24	0.8	50	920
14809	68	20	30	0.6	32	800
14810	100	8	34	0.4	34	940
14811	78	10	34	0.4	28	960
14812	154	16	28	0.6	56	720
14813	114	12	28	0.4	46	1460
14814	50	32	10	0.2	26	320
14815	136	34	32	0.8	34	1200
14816	138	30	44	1.2	30	1300
14825	80	56	22	0.6	44	660
14826	1360	620	32	8.0	38	7200
14827	1630	350	20	2.8	46	3620

Pyritic Rhyolitic Volcanic

<u>Sample #</u>	<u>Zn(ppm)</u>	<u>Pb(ppm)</u>	<u>Cu(ppm)</u>	<u>Ag(ppm)</u>	<u>As(ppm)</u>	<u>Mn(ppm)</u>
14600	840	520	38	1.8	20	680
14751	78	56	34	0.4	24	840
14752	108	90	12	0.6	34	320
14753	80	28	24	0.4	20	880
14754	94	32	16	0.6	30	620
14755	84	40	22	0.8	30	660
14756	72	12	16	0.2	40	720
14765	86	22	30	0.4	52	1220
14766	72	12	22	0.2	44	620

Greywacke (from adit area)

<u>Sample #</u>	<u>Zn(ppm)</u>	<u>Pb(ppm)</u>	<u>Cu(ppm)</u>	<u>Ag(ppm)</u>	<u>As(ppm)</u>	<u>Mn(ppm)</u>
14786	154	30	26	0.4	36	2140

The following are comments concerning the above table of geochemical values:

1. The samples of bleached, altered volcanic returned anomalous values in zinc and lead and sporadically anomalous values in silver, arsenic and manganese.
2. Several samples of rhyolitic volcanics returned anomalous lead but with one exception, zinc values were low.
3. All copper values are low with no values greater than 44 ppm Cu.
4. Two areas of especially anomalous rock geochemistry stand out:
 - (a) near "Chopper" Creek where zinc ranges from 120 to 1630 ppm, and lead ranges from 12 to 1100 ppm
 - (b) at the north end of the grid near L 9650E, 9550S.

<u>Sample #</u>	<u>Zn (ppm)</u>	<u>Pb (ppm)</u>	<u>Ag (ppm)</u>
14826	1360	620	8.0
14827	1630	350	2.8

CONCLUSIONS:

1. The Killarney showing occurs near the Cap Fault about 5.7 km west of the southern tip of the Rocher Deboule Stock. The mineralization is hosted by the Brian Boru Formation.
2. The Brian Boru Formation consists of acid pyroclastics and rhyolitic flows. The Red Rose Formation consists of greywacke and shale with occasional carbonaceous layers.
3. Two types of mineralization occur:
 - (a) zinc-pyrite-pyrrhotite filling open spaces in bleached altered volcanic rock
 - (b) disseminated pyrite with occasional pyrite veinlets within bleached, altered rock and rhyotic volcanic rocks.
4. Average grade from the zinc-pyrite-pyrrhotite mineralization is 1.04% Zn, 0.19% Pb, 19.9 gm/t Ag, 0.11% Sn, and 0.01% Cu. The mineralization is geochemically anomalous in As, Sb, and Mn.

5. Rock samples of bleached, altered volcanic are anomalous in zinc and lead and sporadically anomalous in silver, arsenic and manganese.

Ronald
Mather
Nov 15/84

REFERENCES

Government Publications:

- Armstrong, J.E.; "Preliminary Map, Hazelton, British Columbia", Geological Survey of Canada, Paper 44-24, 1944.
- Brown, A.J Sutherland; "Geology of Rocher Deboule Range", B.C. Department of Mines, 1960.
- Kindle, E.D.; "Mineral Resources, Hazelton, Smithers Areas, Cassiar and Coast Districts - British Columbia", Geological Survey of Canada, Memoir 223, 1954.
- O'Neill, J.J.; "Preliminary Report on the Economic Geology of the Hazelton District, British Columbia", Geological Survey of Canada, Memoir 110, 1919.
- Richards, T.A.; "Geology of Hazelton (West Half) Map Area", Geological Survey of Canada - Open File 720, 1977.
- Richards, T.A.; "Geology of Hazelton (West Half) Map Area", Geological Survey of Canada, Paper 78-1A, pg. 59-60, 1978.
- Richards, T.A.; "Hazelton East Half", Geological Survey of Canada Paper 74-1A, pg. 35-37, 1974.
- Tipper, H.W. et al; "Parsnip River, British Columbia, Sheet 93", Geological Map Survey of Canada Map 1424A, 1979.
- Map 69-1; "Geological Compilation of the Smithers, Hazelton and Terrace Areas", British Columbia Dept. of Mines and Petroleum Resources, 1969.
- B.C. Minister of Mines Reports, 1915, pg. K 191-193.
- B.C. Minister of Mines Reports, 1926, pg. A 127-128.

Corporate Reports:

- Olson, D.H.; "Report on Soil Geochemistry - Brian Boru Prospect, Brian Boru Group, GAM I - IV claims, Omineca Mining Division, 93 M/4E", Asarco Incorporated, Oct. 21, 1980.

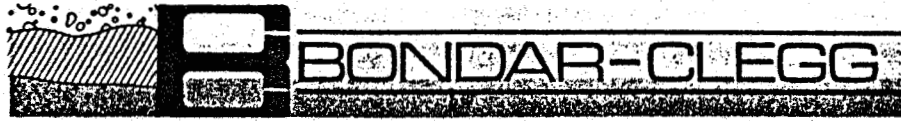
Olson, D.H.; "Memorandum to R.E. Gole - Brian Boru Prospect, Brian Boru Group, 93 M/4E", Asarco Incorporated, April 2, 1981.

Perkins, E.W.; "Report on Geophysical Surveys, Brian Boru Prospect, Jones Showing - Omineca Mining Division, British Columbia", Asarco Incorporated, October 7, 1981.

Perkins, E.W.; "Report on Geophysical Surveys, Brian Boru Prospect, Killarney Showing, Omineca Mining Division, British Columbia", Asarco Incorporated, October 15, 1981.

APPENDIX A

Analytical sheets. Assays Bondor Clegg



KILLARNEY L.W.

REPORT: 424-2780

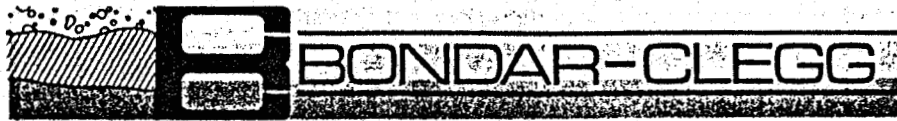
PROJECT: 40 8409-008

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Ag GHT	Cu PCT	Pb PCT	Zn PCT	Sn PCT	NOTES
R 14770		16.5	0.02	0.26	0.34	1.79	
R 14771		23.3	0.02	0.33	1.83	0.06	
R 14774		43.2	0.02	0.68	0.90	<0.01	
R 14784		0.7	<0.01	0.01	0.03	<0.01	
R 14785		7.5	0.02	0.07	1.43	0.02	
R 14789		26.4	0.09	0.06	0.09	<0.01	
R 14791		49.7	0.01	0.10	0.69	<0.01	
R 14792		3.8	<0.01	0.02	0.33	<0.01	
R 14793		4.1	<0.01	0.03	0.62	<0.01	
R 14817		19.9	0.01	0.04	6.33	0.01	
R 14818		13.4	<0.01	0.04	0.26	<0.01	
R 14822		58.6	<0.01	0.71	1.75	<0.01	
R 14823		40.5	<0.01	0.24	0.42	<0.01	
R 14824		8.9	<0.01	0.01	0.02	<0.01	

RECEIVED
 SEP 13 1984

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Canada V7P 2R5
Phone: (604) 985-0681
Telex: 04-352667



Certificate
of Analysis

REPORT: 424-2780

FROM: NORANDA EXPLORATION COMPANY, LTD.
DATE: 10-SEP-84 PROJECT: 40 8409-008

SUBMITTED BY: UNKNOWN

ORDER	ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATION
01	Ag	.7 GMT			-150	ROCK OR BED ROCK	ASSAY PREP
02	Cu	.01 PCT			-150		
03	Pb	.01 PCT			-150		
04	Zn	.01 PCT			-150		
05	Sn	.01 PCT			-150		

REPORT COPIES TO: NORANDA EXPLORATION LTD.
NORANDA EXPLORATION LTD.

INVOICE TO: NORANDA EXPLORATION LTD.

Registered Assayer, Province of British Co



KILLARNEY L.W.

REPORT: 124-2780

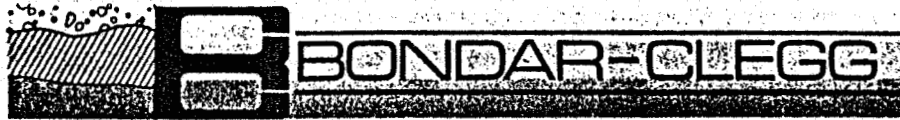
PROJECT: 40 8409-008

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Pb PPM	As PPM	Sb PPM	NOTES
R 14770		7500	400	44	
R 14771		8300 >	1000	67	
R 14774		3600	120	46	
R 14784		2500	52	28	
R 14785		3200	145	17	
R 14789		820	270	375	
R 14791		930	950	125	
R 14792		6300	41	40	
R 14793		4200	58	17	
R 14817		7600	95	49	
R 14818		9100	85	75	
R 14822		6400	25	61	
R 14823		> 20000	48	130	
R 14824		6500	58	29	

10/5/824

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Canada V7P 2R5
Phone: (604) 985-0681
Telex: 04-352667



Geochemical
Lab Report

REPORT: 124-2780

FROM: NORANDA EXPLORATION COMPANY, LTD.
DATE: 06-SEP-84 PROJECT: 40 8409-008

SUBMITTED BY: UNKNOWN

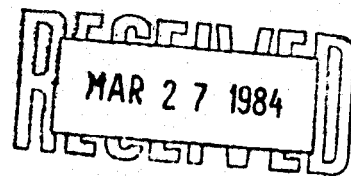
ORDER	ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATIO
01	Rn	1 PPM	HN03-HCL HOT EXTR	Atomic Absorption	-150	ROCK OR BED ROCK	AS RECEIVED, NO SP
02	As	2 PPM	NITRIC PERCHLOR DIG	Colourimetric	-150		
03	Sb	2 PPM		X-RAY Fluorescence	-150		

REPORT COPIES TO: NORANDA EXPLORATION LTD.
NORANDA EXPLORATION LTD.

INVOICE TO: NORANDA EXPLORATION LTD.

APPENDIX B

Analytical Method - Noranda Lab



ANALYTICAL METHOD DESCRIPTIONS FOR GEOCHEMICAL ASSESSMENT REPORTS

The methods listed are presently applied to analyse geological materials by the Noranda Geochemical Laboratory at Vancouver.

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 geochemical analysis.

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

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 0.4 g and chemical quantities are doubled relative to the above noted method for digestion.

The concentrations of Ag, Cd, Co, Cu, Fe, Mn, Mo, Ni, Pb, V and Zn can be determined directly from the digest (dissolution) with a conventional atomic absorption spectrometric procedure. 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 dissolution with an AA-475 equipped with electrodeless discharge lamp (EDL).

Arsenic - As: 0.2 - 0.3 g sample is digested with 1.5 ml of perchloric 70% and 0.5 ml of conc. nitric acid. A Varian AA-475 equipped with an As-EDL is used to *measure* arsenic content in the digest.

Barium - Ba: 0.1 g sample digested overnight with conc. perchloric, nitric and hydrofluoric acid; Potassium chloride added to prevent ionization. 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 with an AA-475 complete with EDL.

Gold - Au: 10.0 g sample is digested with aqua regia (1 part nitric and 3 parts hydrochloric acid). Gold is extracted with MIBK from the aqueous solution. AA is used to determine Au.

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 the use of 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 from a perchloric-nitric decomposition, usually from the multi-element digestion, is buffered. The aqueous solution is exposed to laser light, and the luminescence of the uranyl ion is quantitatively measured on the UA-3 (Scintrex).

* N.B. If additional elemental determinations are required on panned samples, state this at the time of sample submission. Requests after gold determinations would be futile.

LOWEST VALUES REPORTED IN PPM

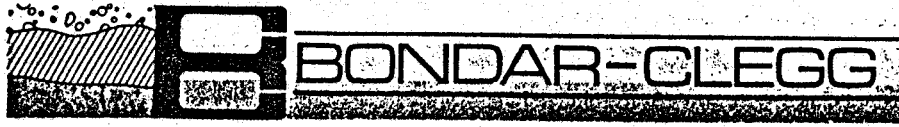
Ag - 0.2	Mn - 20	Zn - 1	Au - 0.01
Cd - 0.2	Mo - 1	Sb - 1	W - 2
Co - 1	Ni - 1	As - 1	U - 0.1
Cu - 1	Pb - 1	Ba - 10	
Fe - 100	V - 10	Bi - 1	

EJvL/ie
March 14, 1984

APPENDIX C

Analytical sheets, Bondor Clegg

Soil Geochem Sb, Sn



KILLARNEY L-CC

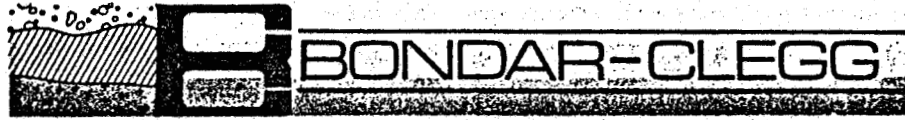
REPORT: 124-3012

PROJECT: 40 8409-008

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Sb PPM	Sn PPM	NOTES
S 14751		38	<5	
S 14758		31	<5	
S 14759		39	<5	
S 14760		53	<5	
S 14762		66	<5	
S 14764		29	<5	
S 14767		27	<5	
S 14772		4	<5	
S 14773		12	<5	
S 14775		14	<5	
S 14776		22	<5	
S 14780		27	<5	
S 14781		50	<5	
S 14783		38	<5	
S 14787		21	<5	
S 14802		27	<5	

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Canada V7P 2R5
Phone: (604) 985-0681
Telex: 04-352667



Geochemical
Lab Report

REPORT: 124-3012

FROM: NORANDA EXPLORATION COMPANY, LTD.
DATE: 19-SEP-84 PROJECT: 40 8409-008

SUBMITTED BY: UNKNOWN

ORDER	ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATION
01	Sb	2 PPM		X-RAY Fluorescence		PREPARED PULP	AS RECEIVED, NO SP
02	Sn	5 PPM		X-RAY Fluorescence			

REPORT COPIES TO: NORANDA EXPLORATION LTD.
NORANDA EXPLORATION LTD.

INVOICE TO: NORANDA EXPLORATION LTD.

APPENDIX D

Analytical sheets, Rossbacher Laboratory

Rock Geochem

RECEIVED
 SEP 24 1984
 ROSSBACHER LTD.

ROSSBACHER LABORATORY LTD.

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

CERTIFICATE OF ANALYSIS

TO : NORANDA EXPLORATION LTD.
 1050 DAVIE STREET
 VANCOUVER, B.C.
 PROJECT No.: 40 8409-008

KILLARNEY L.W.

CERTIFICATE No.: 84380 - 1
 INVOICE No.: 4430
 DATE ANALYSED: SEPT. 7, 1984
 FILE NAME: NOR380

PRE FIX	SAMPLE NAME	PPM Cu	PPM Mn	PPM Ag	PPM Zn	PPM Pb	PPM As
A	14599	36	800	1.0	98	158	76
A	14600	38	680	1.8	840	520	20
A	14751	34	840	0.4	78	56	24
A	14752	12	320	0.6	108	90	34
A	14753	24	880	0.4	80	28	20
A	14754	16	620	0.6	94	32	30
A	14755	22	660	0.8	84	40	30
A	14756	16	720	0.2	72	12	40
A	14765	30	1220	0.4	86	22	52
A	14766	22	620	0.2	72	12	44
A	14768	18	320	0.6	114	44	42
A	14769	40	15600	5.2	3740	960	44
A	14777	34	840	0.4	170	40	92
A	14778	10	380	0.2	80	12	28
A	14779	10	1200	0.2	110	22	34
A	14782	30	400	0.4	560	18	24
A	14786	26	2140	0.4	154	30	36
A	14788	38	1240	0.4	138	18	46
A	14790	18	1100	0.2	384	24	28
A	14794	30	960	0.2	426	20	20
A	14795	12	1040	0.6	120	16	18
A	14796	24	2840	0.8	230	12	22
A	14797	28	1880	0.6	242	68	32
A	14798	30	1240	0.4	620	54	44
A	14799	22	2100	0.2	1630	84	50
A	14800	34	2320	2.2	1980	1100	68
A	14801	10	1480	2.6	270	110	90
A	14803	6	620	0.2	94	12	22
A	14804	12	60	0.2	56	20	40
A	14806	14	360	0.2	58	8	22
A	14808	24	920	0.8	54	4	50
A	14809	30	800	0.6	68	20	32
A	14810	34	940	0.4	100	8	34
A	14811	34	960	0.4	78	10	28
A	14812	28	720	0.6	154	16	56
A	14813	28	1460	0.4	114	12	46
A	14814	10	320	0.2	50	32	26
A	14815	32	1200	0.8	136	34	34
A	14816	44	1300	1.2	138	30	30
A	14825	22	660	0.6	80	56	44

CERTIFIED BY :

J. Rossbach

ROSSBACHER LABORATORY LTD.

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

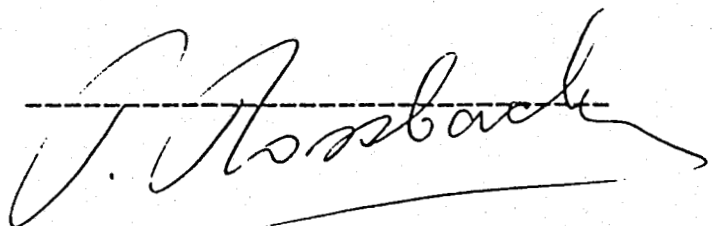
CERTIFICATE OF ANALYSIS

CLIENT : NORANDA EXPLORATION LTD.
1050 DAVIE STREET
VANCOUVER, B.C.
PROJECT No.: 40 8409-008

CERTIFICATE No.: 84380 - 2
INVOICE No.: 4430
DATE ANALYSED: SEPT. 7, 1984
FILE NAME: NOR380

RE IX	SAMPLE NAME	PPM Cu	PPM Mn	PPM Ag	PPM Zn	PPM Pb	PPM As
A	14826	32	7200	8.0	1360	620	38
A	14827	20	3620	2.8	1630	350	46

CERTIFIED BY :



APPENDIX E

Cost Statement

NORANDA EXPLORATION COMPANY, LIMITED

COST STATEMENT

DATE: SEPTEMBER, 1984

PROJECT - BRIAN BORU, GAM I - IV CLAIMS

a) **Wages:**

D. Gore - 19 days @ \$120.00	\$ 2280.00	
L. Warner - 9 days @ \$ 75.00	<u>675.00</u>	
	\$ 2955.00	\$ 2955.00

b) **Food and Accommodation:**

28 MD @ \$26.70/MD	\$ 747.60	\$ 747.60
--------------------	-----------	-----------

c) **Transportation:**

Plane - Vancouver to P.G. return	\$ 257.05	
Truck 9 days @ \$50/day	450.00	
Helicopter Aug. 17 & Aug. 23	<u>1139.77</u>	
	\$ 1846.82	\$ 1846.82

d) **Analysis:**

Rock Assays

14 X Cu, Zn, Pb, Sn, Ag		
14 X \$ 36.75	\$ 514.50	

Geochem

57 X As, Mn		
57 X \$ 5.45	\$ 310.65	

43 X Cu, Zn, Pb, Ag		
43 X \$ 4.80	\$ 206.40	

14 X Sb		
14 X \$ 4.25	\$ 59.50	

Soils

16 X Cu, Zn, Pb, Sn, Sb, Ag, As		
16 X \$ 12.40	<u>\$ 198.40</u>	

e) **Report Preparation**

\$ 1289.45	\$ 1289.45
\$ 600.00	\$ 600.00

GRAND TOTAL \$ 7438.87

APPENDIX F

Statement of Qualifications

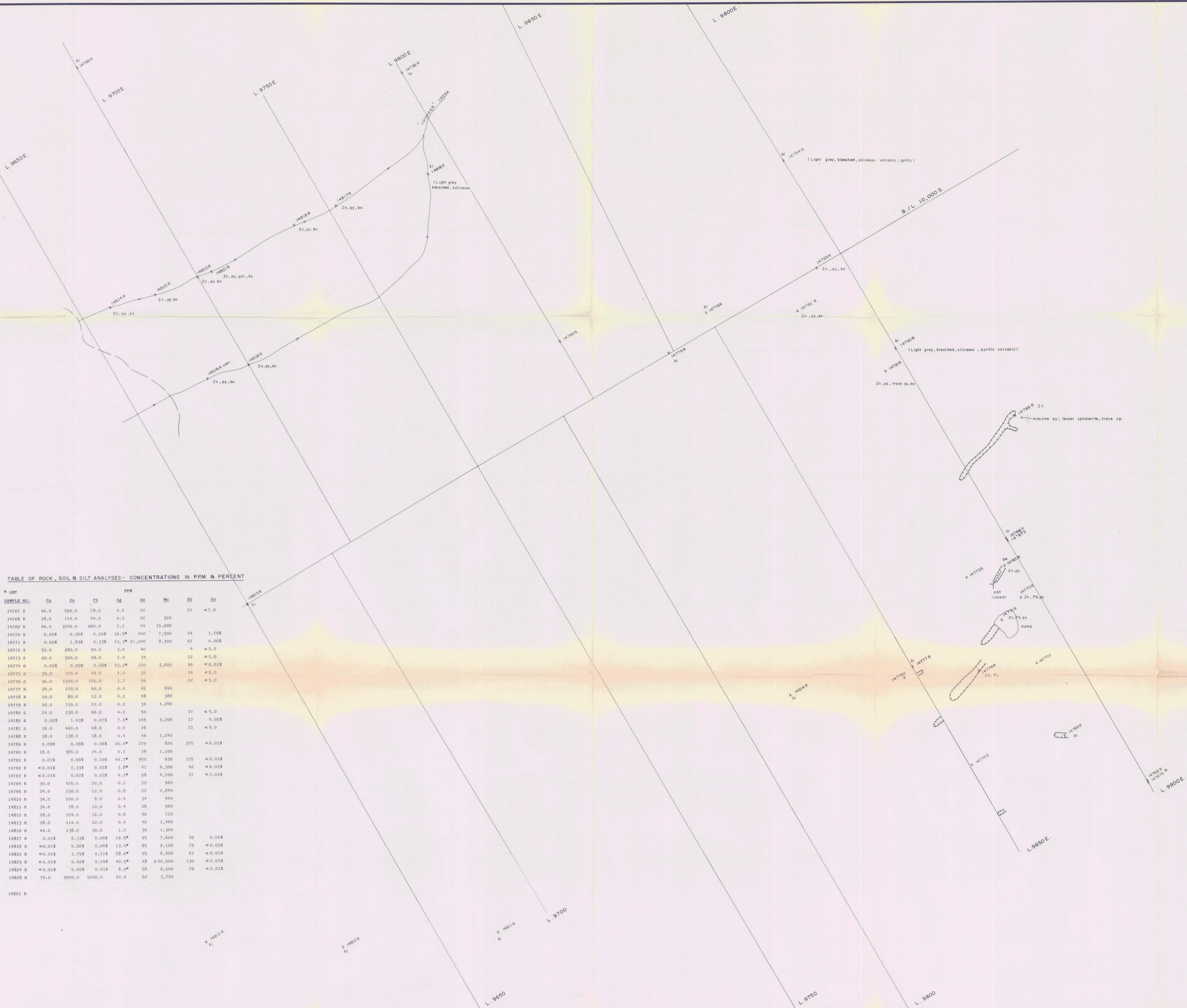
STATEMENT OF QUALIFICATIONS

I, Ronald G. MacArthur hereby certify that:

1. I am a graduate of Dalhousie University with a Bachelor of Science Degree in Geology (1972).
2. I have been employed as a Geologist by Noranda Exploration since 1972, and currently hold the position of District Geologist, Central Cordillera District.
3. I am a member of the Canadian Institute of Mining and Metallurgy.
4. I am a member of the Geological Association of Canada.
5. I supervised the work carried out by Noranda Employees on the GAM I - IV claims during 1984.



Ronald G. MacArthur
District Geologist,
Central Cordillera District
NORANDA EXPLORATION COMPANY, LIMITED
(No Personal Liability)



LEGEND

- X 14790R X ROCK SAMPLE LOCATION
- X 14780S X SILT SAMPLE LOCATION
- TRENCH
- ADIT

ROCK TYPES

- x Ry Rhyolite
- x Rd Rhyodacite
- x Zn Zinc - Pyrite mineralization (Open space filling)
- x bl Bleached altered volcanic
- x gw Greywacke

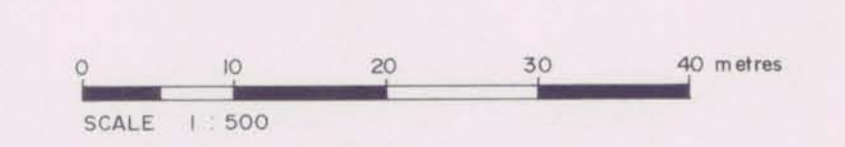
TABLE OF ROCK, SOIL & SILT ANALYSES - CONCENTRATIONS IN PPM & PERCENT

* QRT SAMPLE NO.	PPM									
	Ca	Zn	Pb	As	Se	Mn	Sb	Cd	Co	Cr
14767 S	46.0	950.0	78.0	0.6	42		21	<5.0		
14768 R	18.0	114.0	44.0	0.6	42	330				
14769 R	40.0	3740.0	960.0	5.2	44	15,600				
14770 R	0.02%	0.34%	0.26%	16.5*	100	7,500	44	1.79%		
14771 R	0.02%	1.83%	0.33%	23.3*	>1,000	8,300	67	0.66%		
14772 S	52.0	680.0	50.0	3.0	40		12	<5.0		
14773 S	20.0	560.0	48.0	2.0	34		12	<5.0		
14774 R	0.02%	0.90%	0.68%	43.2*	120	3,600	46	<0.01%		
14775 S	34.0	170.0	44.0	1.0	12		14	<5.0		
14776 S	36.0	1100.0	150.0	1.2	56		22	<5.0		
14777 R	34.0	170.0	40.0	0.4	92	840				
14778 R	10.0	80.0	12.0	0.2	28	380				
14779 R	10.0	110.0	22.0	0.2	34	1,200				
14780 S	24.0	230.0	96.0	4.0	50		27	<5.0		
14785 R	0.02%	1.43%	0.07%	7.5*	145	3,200	17	0.02%		
14787 S	26.0	660.0	48.0	0.6	26		21	<5.0		
14788 R	38.0	138.0	18.0	0.4	46	1,240				
14789 R	0.09%	0.09%	0.06%	26.4*	270	820	375	<0.01%		
14790 R	18.0	384.0	24.0	0.2	28	1,100				
14791 R	0.01%	0.69%	0.10%	49.7*	950	930	125	<0.01%		
14792 R	<0.01%	0.33%	0.02%	3.8*	41	6,300	40	<0.01%		
14793 R	<0.01%	0.62%	0.03%	4.1*	58	4,200	17	<0.01%		
14794 R	30.0	426.0	20.0	0.2	20	960				
14796 R	24.0	230.0	12.0	0.8	22	2,840				
14810 R	34.0	100.0	8.0	0.4	34	940				
14811 R	34.0	78.0	10.0	0.4	28	960				
14812 R	28.0	154.0	16.0	0.6	56	720				
14813 R	28.0	114.0	12.0	0.4	46	1,460				
14816 R	44.0	138.0	30.0	1.2	30	1,300				
14817 R	0.01%	6.33%	0.04%	19.9*	95	7,600	49	0.01%		
14818 R	<0.01%	0.26%	0.04%	13.4*	85	9,100	75	<0.01%		
14822 R	<0.01%	1.75%	0.71%	58.6*	25	6,400	61	<0.01%		
14823 R	<0.01%	0.42%	0.24%	40.5*	48	>20,000	130	<0.01%		
14824 R	<0.01%	0.02%	0.01%	8.9*	58	6,500	29	<0.01%		
14828 R	70.0	5000.0	5200.0	20.0	50	3,720				

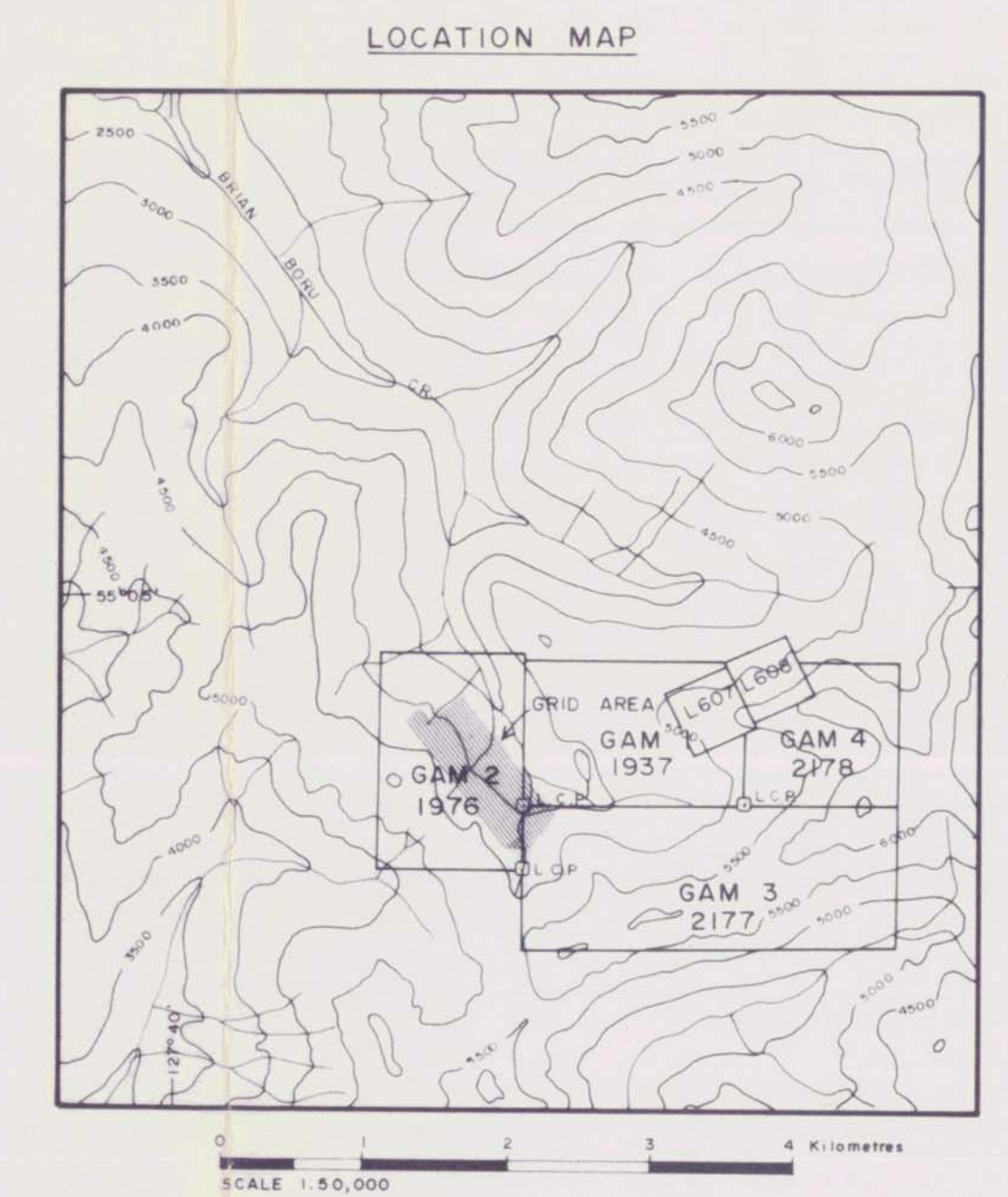
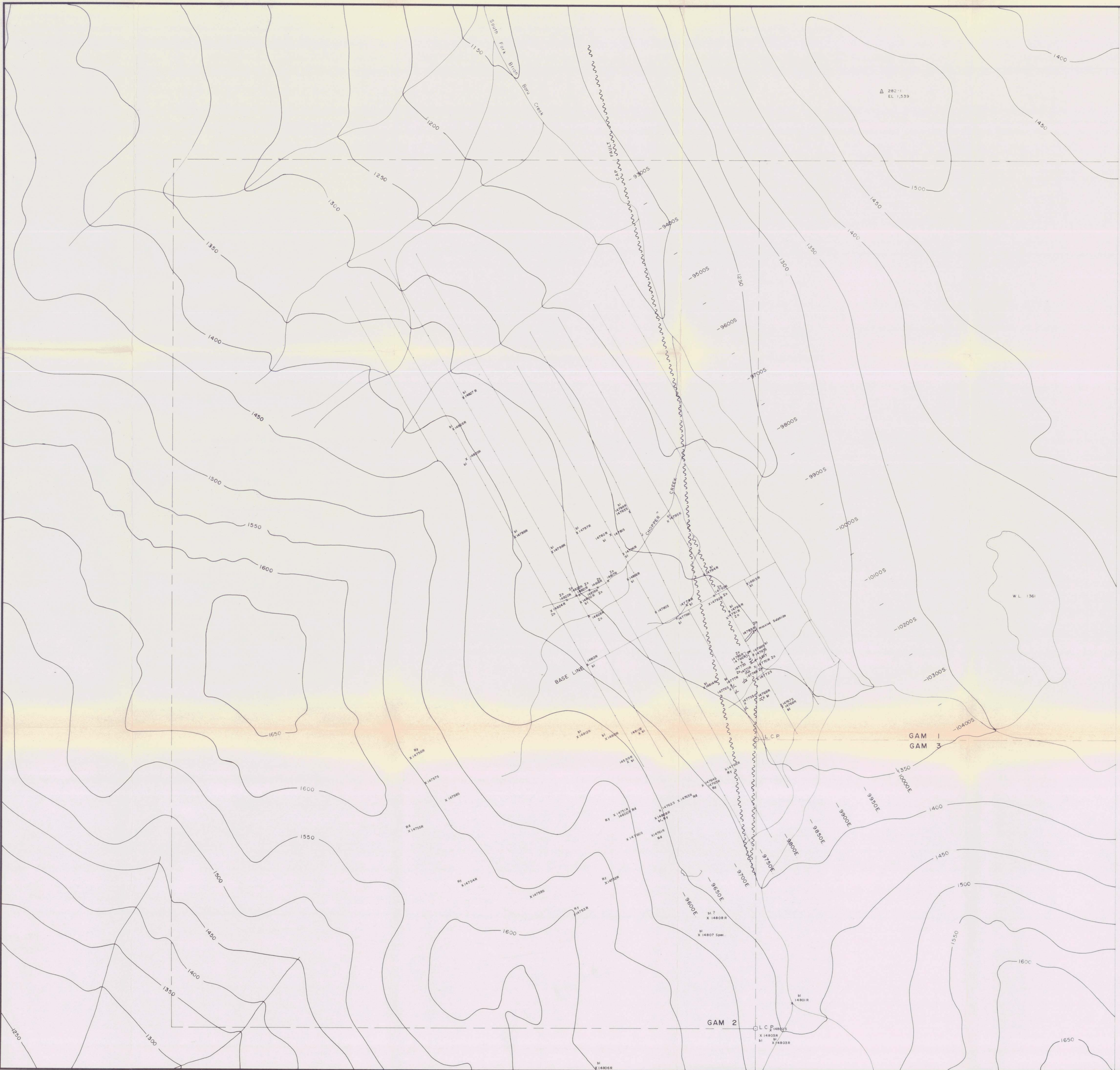
GEOLOGICAL BRANCH ASSESSMENT REPORT

13,340

*Paul Martin
Nov 15/84*



REVISED	BRIAN BORU PROSPECT	
	DETAIL MAP	
	KILLARNEY SHOWING	
PROJ. No.	SURVEY BY: D. GORB	DATE: AUG. 23, 1984
N.T.S. 93M/4E	DRAWN BY: S.K.B.	SCALE: 1:500
DWG. No.	NORANDA EXPLORATION	
FIG 6	OFFICE: PRINCE GEORGE, B.C.	



- ROCK TYPES**
- X Ry Rhyolite
 - X Rd Rhyodacite
 - X Zn Zinc - Pyrite mineralization (Open space filling)
 - X bl Bleached altered volcanic
 - X gw Greywacke

- LEGEND**
- LAKE
 - L.C.P. & CLAIM BOUNDARY
 - GRID SAMPLE LOCATION
 - TRIANGULATION POINT
 - OPEN CUT

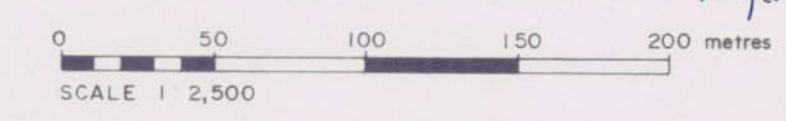
TABLE OF ROCK, SOIL & SILT ANALYSES - CONCENTRATIONS IN P.P.M. & PERCENT

* GR. ID	PPM							
	Ca	Co	Cu	Fe	Mn	Ni	Pb	Zn
14747 S	16.0	580.0	18.0	0.6	42	31	41.0	
14748 N	18.0	115.0	81.0	0.6	42	310		
14749 N	40.0	2740.0	860.0	5.2	40	15,000		
14750 N	0.025	0.285	0.285	10.1*	400	7,000	41	1,700
14751 N	0.025	1.815	0.335	23.1*	31,000	8,300	41	0.065
14752 S	32.0	680.0	50.0	3.0	40		4	45.0
14753 S	20.0	560.0	82.0	2.0	30		17	45.0
14754 N	0.025	0.205	0.085	13.1*	100	1,500	41	0.015
14755 S	38.0	370.0	84.0	1.0	37		18	45.0
14756 S	38.0	4100.0	1000.0	1.1	10		27	45.0
14757 N	34.0	170.0	45.0	0.1	32	800		
14758 N	18.0	80.0	32.0	0.2	28	300		
14759 N	10.0	110.0	77.0	0.3	28	1,200		
14760 S	24.0	230.0	90.0	4.0	50		27	45.0
14761 N	0.025	1.415	0.015	7.5*	145	3,200	17	0.025
14762 S	16.0	660.0	82.0	0.6	36		23	45.0
14763 N	38.0	135.0	18.0	0.4	40	1,200		
14764 N	0.025	0.095	0.085	20.1*	270	820	375	0.015
14765 N	18.0	284.0	24.0	0.2	28	1,300		
14766 N	0.015	0.055	0.105	49.1*	950	330	125	0.015
14767 N	40.015	0.315	0.025	3.8*	41	6,300	40	0.015
14768 N	40.015	0.015	0.015	0.1*	58	6,300	17	0.015
14769 N	0.015	0.020	0.010	0.1	20	600		
14770 N	24.0	230.0	12.0	0.8	22	2,800		
14771 N	34.0	100.0	8.0	0.4	34	900		
14772 N	28.0	88.0	10.0	0.4	28	900		
14773 N	28.0	155.0	16.0	0.6	56	720		
14774 S	28.0	114.0	12.0	0.4	46	1,400		
14775 N	44.0	130.0	30.0	1.2	39	1,200		
14776 N	0.015	0.335	0.045	19.0*	95	7,000	49	0.015
14777 N	40.015	0.205	0.015	13.1*	85	9,100	75	0.015
14778 N	40.015	1.755	0.715	18.0*	21	6,300	61	0.015
14779 N	40.015	0.405	0.145	40.5*	48	200,000	130	0.015
14780 N	40.015	0.025	0.015	8.0*	58	6,300	29	0.015
14781 N	18.0	3000.0	3000.0	20.0	30	3,100		
14782 N	38	80	158	1.0	70	800		
14783 N	38	80	158	1.8	30	600		
14784 N	38	18	50	0.4	24	800	18	4
14785 P	12	108	90	0.6	34	320		
14786 P	24	80	28	0.4	20	800		
14787 N	16	84	32	0.6	30	620		
14788 N	22	84	40	0.8	30	660		
14789 N	16	72	32	0.2	10	720		
14790 S	32	70	18	0.2	18			
14791 N	14	110	16	0.2	10		31	4
14792 S	26	370	54	0.2	28		39	4
14793 S	26	240	68	0.2	28		13	5
14794 S	22	220	60	2.1	36		46	4
14795 S	20	110	30	0.1	11		22	1
14796 S	20	80	10	0.4	50	1,200		
14797 N	22	72	12	0.2	44	420		
14798 S	24	370	260	1.2	22		50	4
14799 S	30	560	18	0.4	28	800		
14800 S	20	380	100	1.8	42		38	4
14801 N	0.015	0.015	0.015	0.1*	52	2,300	28	0.015
14802 N	28	28	60	0.6	30	1,800		
14803 N	30	620	54	0.4	44	1,740		
14804 N	22	1,430	84	0.3	30	2,100		
14805 N	34	1,090	1,100	2.2	68	2,100		
14806 N	30	270	110	2.6	90	1,480		
14807 S	24	150	30	1.4	14		27	4
14808 N	6	34	12	0.2	22	620		
14809 N	14	58	8	0.2	22	350		
14810 N	24	54	4	0.8	20	100		
14811 N	10	68	10	0.4	10	800		
14812 N	10	50	12	0.2	26	300		
14813 N	12	136	14	0.8	14	1,200		
14814 N	10	14	14	0.4	14	800		
14815 N	10	1,300	600	8.0	38	1,200		
14816 N	20	1,430	300	2.8	46	1,620		

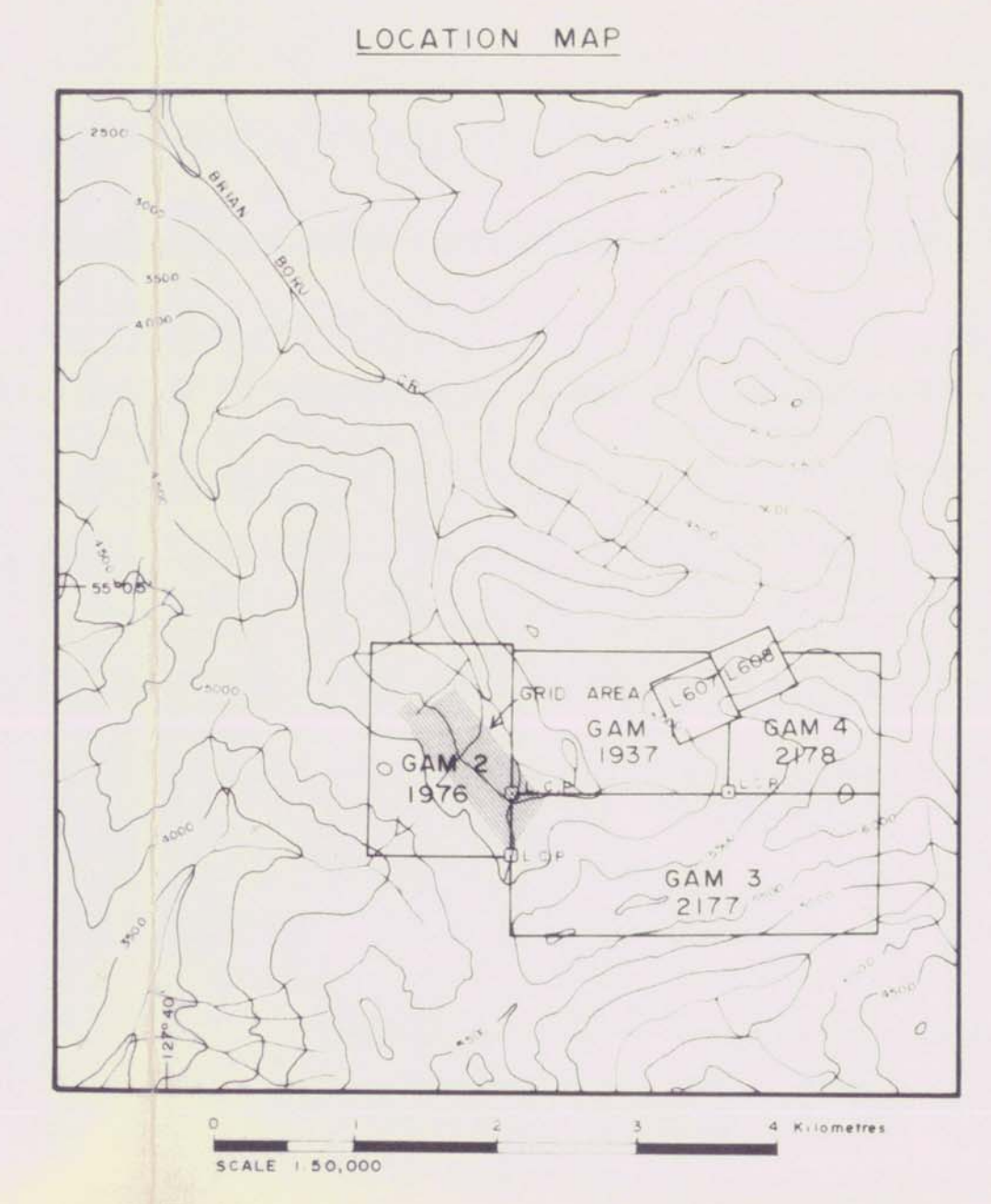
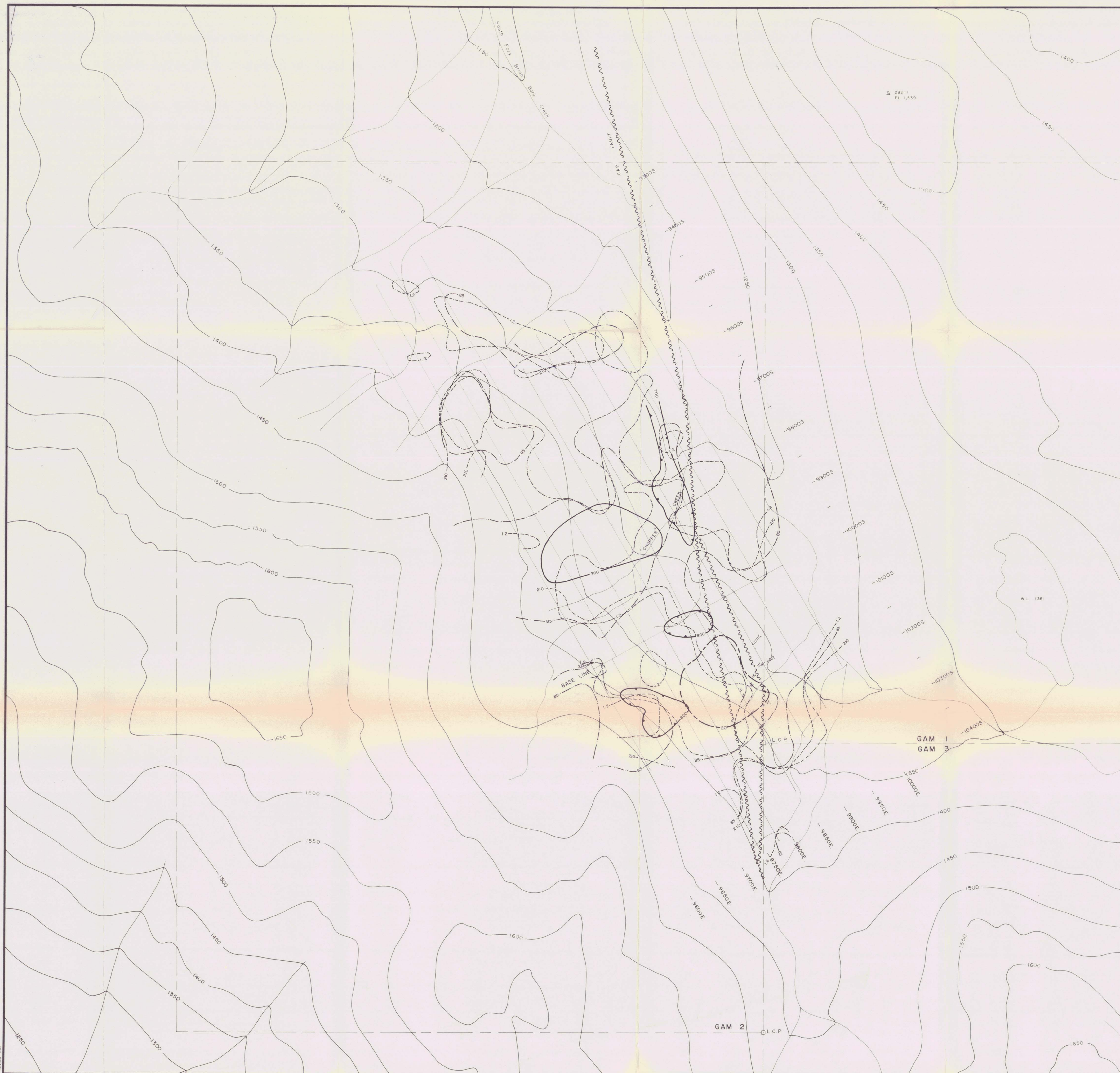
GEOLOGICAL BRANCH ASSESSMENT REPORT

13,340

Rock
15/84



REVISED	BRIAN BORU PROSPECT	
	KILLARNEY SHOWING	
	SAMPLE LOCATIONS	
PROJ. No.	SURVEY BY: D. GORC	DATE: AUG. 1984
N.T.S. 93M/4E	DRAWN BY: S.K.B.	SCALE: 1:2500
DWG. No.	NORANDA EXPLORATION	
FIG. 4	OFFICE: PRINCE GEORGE	B.C.



LEGEND

- LAKE
- L.C.P. & CLAIM BOUNDARY
- GRID SAMPLE LOCATION
- TRIANGULATION POINT
- Pb CONTOUR IN P.P.M.
- Zn CONTOUR IN P.P.M.
- Ag CONTOUR IN P.P.M.
- I.P. CONTOUR IN MILLIVOLTS/VOLT N = 1
(MICROVOLTS)
- MAG. CONTOUR IN GAMMAS
- FAULT

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

13,340

NOTE: Soil geochemical and geophysical anomalies after Assra Ltd. (1980, 1981)

R. M. ...
 SCALE 1:5000

REVISED	BRIAN BORU PROSPECT	
	KILLARNEY SHOWING	
	COMPILATION MAP OF	
	GEOPHYSICS & GEOCHEMISTRY	
PROJ. No.	SURVEY BY: D. GORC	DATE: AUG. 1984
N.T.S. 93M/4E	DRAWN BY: S. K. B.	SCALE: 1:2500
DWG. No.	NORANDA EXPLORATION	
FIG. 5	OFFICE: PRINCE GEORGE, B.C.	