

April 27, 1992

Martin C. Peter  
1373 Dovercourt Rd.  
North Vancouver, B.C.

*Owner / operator / author*

LOG NO:	92 05 06	RD.
ACTION:		
FILE NO:		

Geophysical and Geochemical

Report of the Axel & Claim

NTS 92P 9E

Lat. 51 degrees 33' N, Long. 120 degrees 05' W

LOG NO:	OCT 0 8 1992	RD.
ACTION:	<i>YACI CLAIM</i>	
FILE NO:		

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**22,296**

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Introduction

Twenty-four km. of line was chained and flagged over the entire Axel 2 claim near Clearwater, B.C. This was followed by a magnetometer survey and a localized VLF EM-16 survey. Several geochemical rock and soil samples were also taken and minor hand-trenching was carried out.

The Axel 2 claim was staked on May 25, 1991 to cover an interesting alteration zone which was uncovered by recent logging road construction. This alteration zone, which consists of chloritized basalt of the Fennell Formation, is well pyritized and contains variable amounts of chalcopyrite and sphalerite. The mineralization appears to be syngenetic with the host rock and may well be associated with massive sulphides. The presence of the Chu Chua massive sulphide (Cu-Zn) deposit 20 km. to the south, in a similar setting in basaltic rocks, provides a model for the possibility of further occurrences within the Fennell Formation.

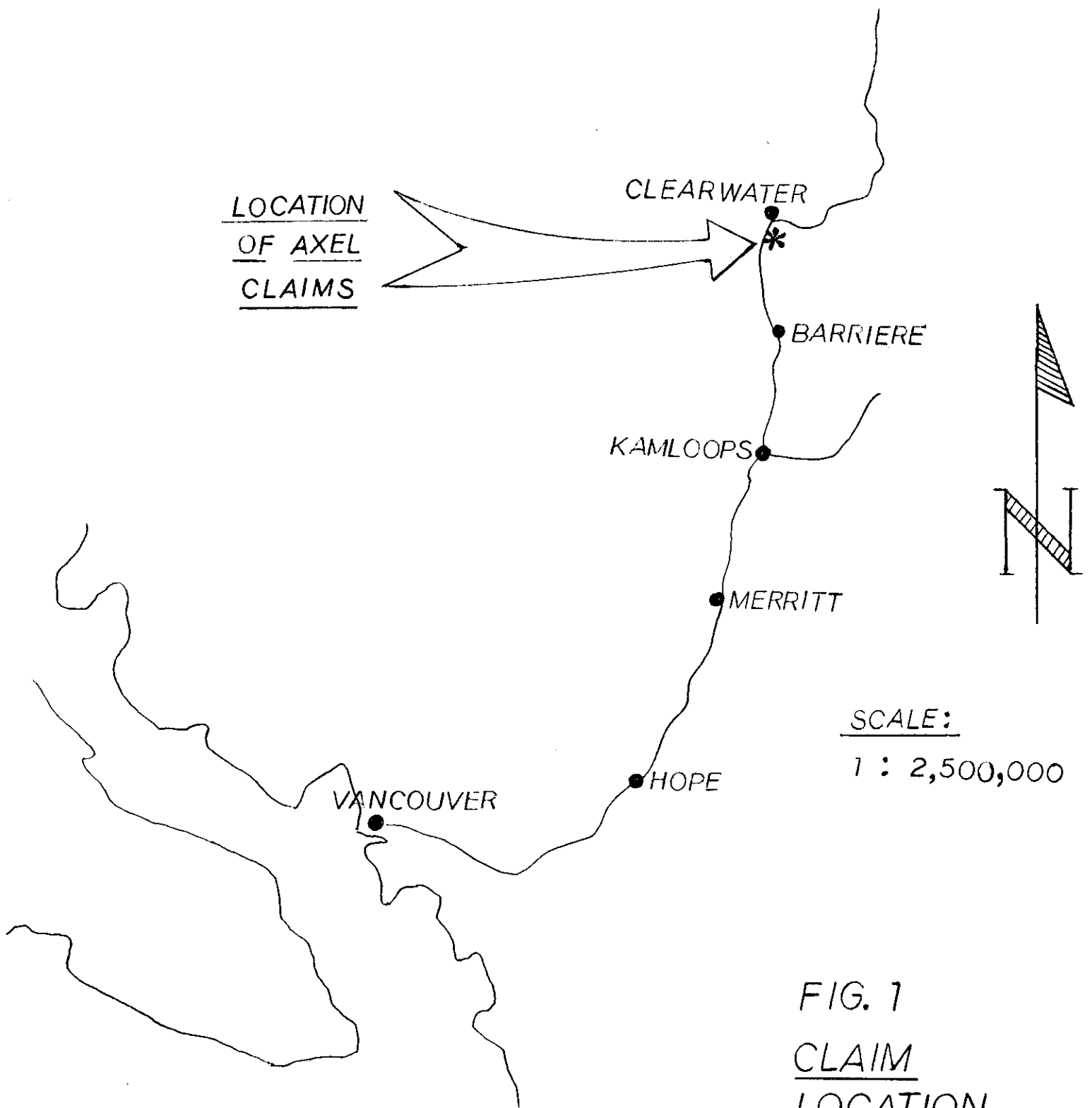
The purpose of the present program is to define the extent and orientation of the alteration zone, as well as to search for further mineral occurrences in the region. To this end, Axel 3 to 7 were subsequently staked to cover possible strike extensions, as well as other areas of favorable geology.

General

The Axel group consists of 7 claims totaling 37 units in the Kamloops mining district (see fig. 2). All claims are owned by Martin C. Peter.

The claims are as follows:

Name	type	# units	staking date
Axel 2	4-post	9	May 25, 1991
3	'	6	July 14, 91
4	'	6	Aug. 3, 91
5	'	8	Aug. 4, 91
6	'	6	Oct. 13, 91
7	2-post	1	Oct. 13, 91
Frac	2-post	1	July 14, 91



LOCATION  
OF AXEL  
CLAIMS

CLEARWATER

BARRIERE

KAMLOOPS

MERRITT

HOPE

VANCOUVER

SCALE:  
1 : 2,500,000

FIG. 1  
CLAIM  
LOCATION  
MAP

The Axel group is approximately 6 km. south of the town of Clearwater, B.C. and is easily accessible via the E. Blackpool logging road which leaves the main road on the east side of the North Thompson River just a few km. south of town.

The claims are situated on the west face of the valley slope at an altitude of between 900 and 1200 meters. Forest cover is mixed old growth. Weyerhaeuser Canada Ltd. has recently built a network of roads through the claims to gain access to scattered pockets of old growth Douglas Fir. Isolated patches of thick growth cedar saplings and alder thickets can hinder travel through the underbrush; however, these areas present no major problem. Most of the terrain slopes to the west on the Axel 2 and in a few places it is steep, although the entire claim is easily accessible.

Precipitation levels are much higher than in Kamloops and some years the snow persists until June at the higher elevations.

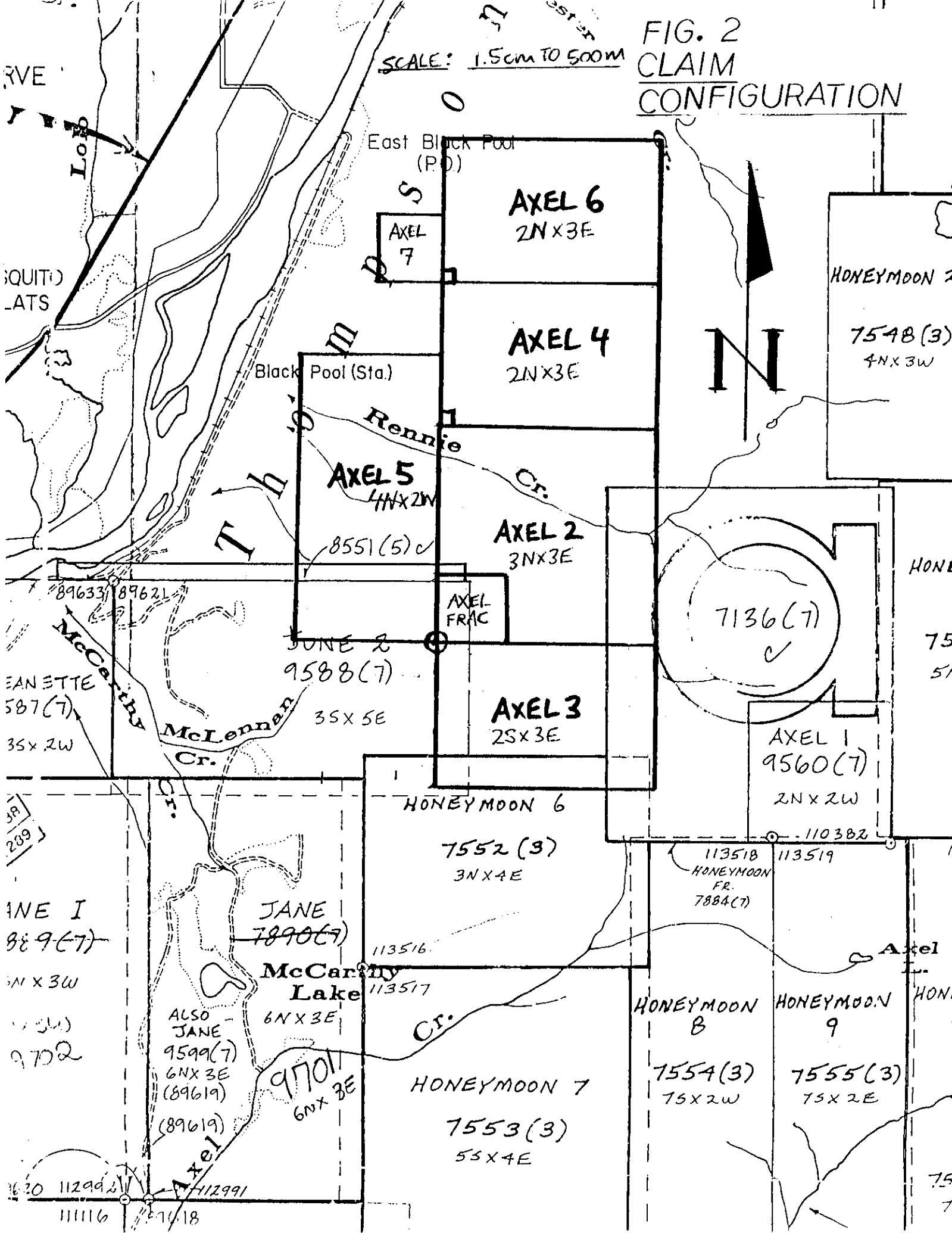
#### Property History

A large portion of the Fennell Formation south of Clearwater and including the area of the Axel group, was covered by an airborne DIGHEM geophysical survey flown for Craigmont Mines Ltd. in 1979. In 1971-1972 Noranda undertook a work program on the Pest Claims, mainly in the headwater regions of Rennie and Bester Creeks, just NE of the Axel 2 claim. Several coincident copper and zinc soil anomalies were defined and an EM survey delineated several conductors, some related to the geochemical anomalies. A rough access road was pushed north from the McCarthy Mountain microwave station road, however, no follow-up work was subsequently recorded and the claims were allowed to lapse.

To the north of the Axel claim group, Nels Vollo did a geophysical-geochemical survey on his BN-1 to BN-3 claims during 1986-1987. This defined several distinct conductors, some of which are

FIG. 2  
CLAIM  
CONFIGURATION

SCALE: 1.5cm TO 500m



apparently due to argillite. No major soil anomalies were uncovered and the claims were dropped.

There is no record of work having taken place on the Axel 2 claim, but approximately 900 m west of the Axel 2 LCP, and just north of the CL, some work has been done. The work was perhaps done during the 1920s or 1930s, to expose a sizeable quartz vein. Several pits were blasted on this decidedly barren-looking vein.

#### Geology and Mineralization

According to Schiarizza and Preto (1987), the Axel group is underlain by rocks of the lower Fennell Formation, which are Devonian to Permian in age. These include bedded chert, gabbro, diabase, pillowed basalt, clastic metasediments, quartz-feldspar porphyry and intraformational conglomerate.

On the Axel claims basalt is the most common rock. It is typically aphanitic, exhibiting a pale grey-green coloration. Diorite and Argillite are also common rock types, but no bedded chert was noted as outcrop. Although none was seen in place, intra-formational conglomerate float is fairly common along the western boundaries of Axel 4 and 6. A 50m width of quartz-feldspar porphyry is exposed as a small cliff on Axel 5, along the northern boundary of Axel 5, halfway between the two corner posts. From several argillite beds in the region strike appears to be between 340-360 degrees and dips are approximately 45 degrees to the east.

At this point in time three areas of specific interest exist on the Axel claim group. The most important of these is termed the GOSSAN zone, (see fig. 3) after a capping of ferricrete disturbed by road building activities. Road construction has uncovered a small area of mineralized basalt at the south-western corner of Axel 2 on L4N, 180 m west of the claim line. The basalt is characterized by a pervasive chlorite and epidote alteration, pyritization and the introduction of

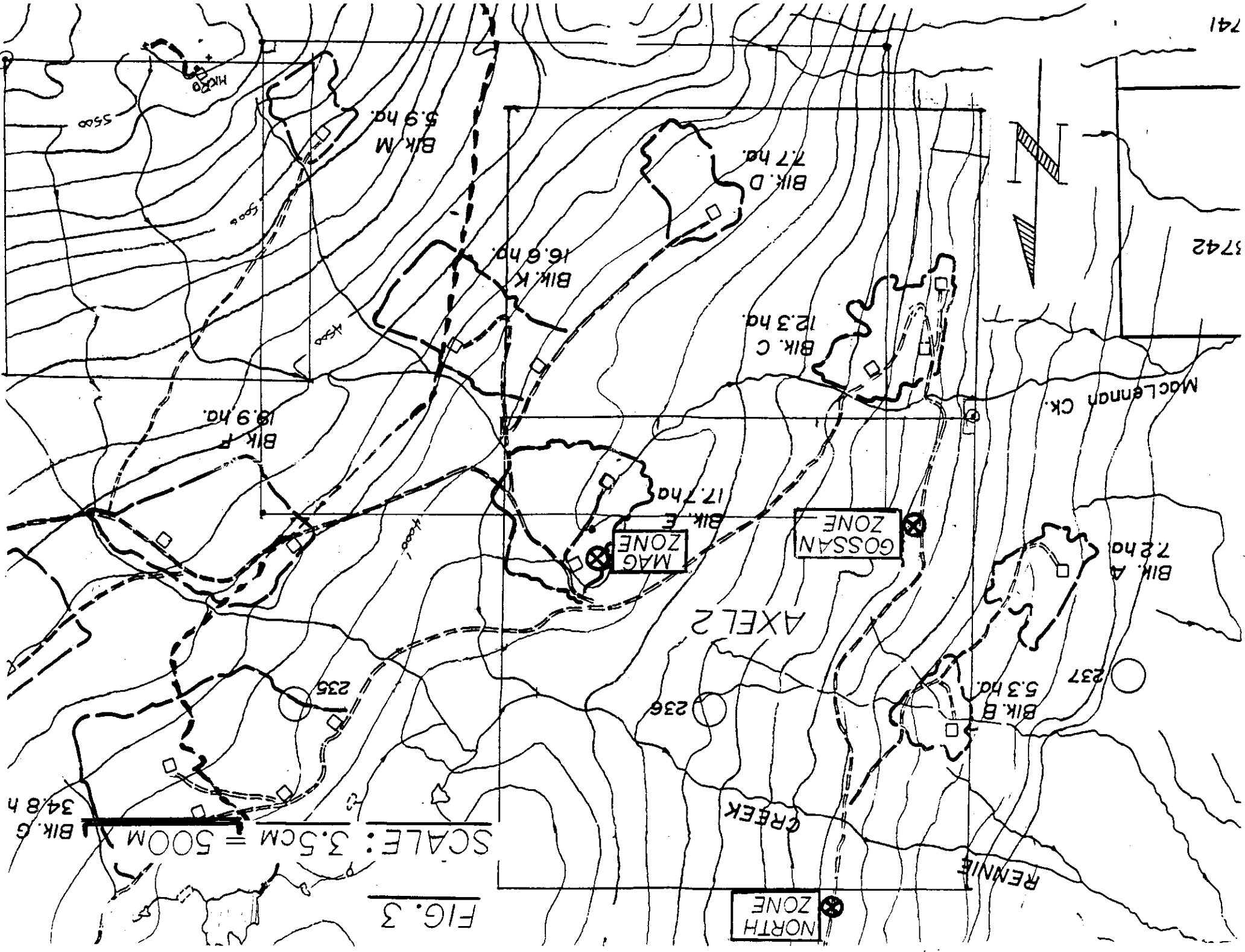


FIG. 3

SCALE: 3.5 CM = 500 M

BIK. G  
34.8 h

NORTH  
ZONE

AXEL 2

GOSSAN  
ZONE

MAG  
ZONE

MOCLENNAN CK.

RENNIE

CREEK

BIK. A  
7.2 ha

BIK. B  
5.3 ha

236

237

BIK. E  
17.7 ha

BIK. F  
18.9 ha

BIK. C  
12.3 ha

BIK. K  
16.6 ha

BIK. D  
7.7 ha

BIK. M  
5.9 ha

5500

5500

4500

4000

235

4000



variable amounts of chalcopyrite and pyrrhotite. The sulphides are fine-grained and occur mainly in wispy veins, they are also disseminated, and coat fracture surfaces. In places where the basalt is very fractured, much of the pyrite has weathered producing material which is sooty black or sandy in appearance.

Quartz veins are not apparent in any of the outcrop exposures along the road. However, a few fragments of float uncovered on the side of the road, just to the south of the GOSSAN outcrop, consist of chunks of massive quartz and calcite up to 30 cm. in diameter. Within these chunks are disseminations and pockets of chalcopyrite and pyrrhotite, with some malachite staining.

On the strength of geophysical data (discussed later), a shallow pit was dug by hand downhill from the road, 170 m south-west of the GOSSAN outcrop. Here a layer of ferricrete lies below a thin organic layer and below this is rock similar to that exposed by the road. However, it is much more intensely mineralized and fractured, and a rosy colored sphalarite is in evidence. No sphalerite was noted in the rocks at the roadside.

South of the GOSSAN outcrop, mineralization is in evidence for 250m along the road, but it is sporadic. Unmineralized basalt separates two mineralized areas along this stretch. Much of the area is still covered with overburden, especially the area immediately to the south of the GOSSAN zone.

A second location of interest is what will be referred to as the NORTH zone. Although no bedrock exposure has been found here, large boulders of limonite-coated basalt and diorite are spread out along the main road, about 250m-350m north of Rennie Creek. These boulders and numerous other float rocks contain a fair amount of pyrite and minor chloropyrite.

Pyrrhotite is uncommon here but the pyrite, like that at the

GOSSAN zone, is fine-grained. Pieces of argillite float also contain chalcopyrite and a few pieces of highly silicified, sericitized (basalt protolith?) float were found, containing 5-10% pyrite and some associated chalcopyrite.

A third area of interest is present in the south-eastern section of the Axel 2 claim on L4N, on a small knoll by station 11+75 E. It was located due to a strong magnetic anomaly discovered from compass needle deviation, while flagging the line. There is some bedrock exposure at the site. This consists of basalt altered with pyrite and chlorite, giving it a spotted appearance. Cubic pyrite is also present, as well as a small amount of pyrrhotite and rare chalcopyrite. Geophysical definition with a magnetometer shows a ridge of high values trending E-SE for about 50m from station 11+75 E. Many of the magnetometer readings are quite high and there is an associated trough of low readings immediately adjacent to the north. 150 m south of this magnetic anomaly, by the west side of a short spur road leading off of the main road, a small vein or fracture, filled with fine-grained pyrite and chalcopyrite has been exposed. This vein seems isolated, as no other bedrock mineralization was noted in the immediate area. However, at the landing of the spur, several fist sized pieces of massive pyrrhotite float have been found. The pyrrhotite also contains some quartz and blebs of chalcopyrite. It can be postulated that the source of this float is the magnetic anomaly 175m to the north.

#### Geophysical

In preparation for geophysical work, 24 km. of line was chained and flagged, essentially covering the entire Axel 2 claim (3N by 3E). The baseline is the western boundary of the claim and lines were run to the east at 100 m intervals towards the north. Stations were flagged along the lines at 25m intervals.

A hand held magnetometer survey, using a Geometrics 837 Unimag Proton Magnetometer, was completed over the entire grid (see Table 1). However, due to the time constraints a follow up EM survey using a Ronka EM-16 receiver, (NLQ Seattle Wash as transmitter) was only conducted over areas of selected magnetic disturbances. Significant magnetic anomalies were only obtained in 3 distinct areas. Namely, the previously mentioned Mag zone, the Gossan zone and the North zone. Other magnetic anomalies evident over the survey area are very localized and are not deemed significant at this time.

#### **Gossan Zone**

Magnetic anomalies in this area are probably caused by pyrrhotite. Several magnetic anomalies are present both east and west of the road, straddling the mineralized outcrops uncovered on the road. None of these anomalies are very intense, but a narrow anomalous zone spanning 100m in a north-south direction, (from L2N to 3N at approx 62 m west of the baseline) coincides exactly with a weak but definite EM anomaly (Fraser-filtered values) spanning 200m (from L2N to 4N)(see fig 4).

As previously mentioned a shallow pit was dug over these coincident anomalies at 23.5 m north of L250N station at 62.5 E, exposing mineralized rock similar to that uncovered at the road on L4N.

#### **North Zone**

The magnetic signature over the North zone differs from that over the Gossan zone, in that high values are very localized, not diffuse. There are two distinct narrow zones, both about 30m long and only 5m wide. Each flanks 2 separate weak EM anomalies which are about 150 m in length (see fig. 5).

These anomalies are of interest because they occur just to the west of the altered mineralized float rocks of the North zone. However, this relationship may be coincidental and the mag high may be

caused by intrusive sills of Gabbro. The EM anomalies may be registering conductive argillite, commonly present in the region.

### Geochemical

Five rock samples and 4 soils were taken by the Gossan zone. Two rock samples were taken from the north zone and a rock sample was taken from the vicinity of the Mag zone, from chloritized basalts just off of the spur road.

#### Comments:

1) GOSSAN ZONE: all soils from the Gossan zone are anomalous for Cu and Zn. Sample #2 (3810 ppm) which was taken downslope from the pit, registered 2880ppm Cu and 1400 ppm Zn. However, whole rock analysis shows that barium is very low. There also seems to be no sodium depletion or potassium enrichment. Gossan rock samples taken from the road show elevated levels of Cu (as high as 2520 ppm) and moderately elevated levels of Zn (as high as 476 ppm). Once again whole rock analysis exhibits little sodium depletion.

2) NORTH ZONE: of the 2 rock samples taken, one originates from basalt float and the other from argillite float. Both show elevated levels of barium with the basalt sample yielding 1.475% Ba, 2.5% K<sub>2</sub>O (potassium enrichment) and 1.09% Na<sub>2</sub>O (sodium depletion). No copper or zinc values are available for this sample. The argillite sample contains elevated copper and zinc.

### Conclusions and Recommendations

Several encouraging mineralized targets occur on the Axel 2 claim. The Gossan and the North zone are suggestive of mineralization associated with hydrothermal alteration. The Mag zone could be an intrusive, pyrrhotite-rich quartz vein.

Exploration here is still in it's infancy, with no detailed regional mapping having been carried out by the undersigned. No systematic exploration appears to have been done by previous claim

holders either and the surrounding area remains largely untested.

All three areas of interest mentioned warrant further investigation. The Gossan zone and North zone are deemed to have the most potential and in particular, the Gossan area requires further definition. The lack of geophysical anomalies limits the extent of this zone to the north and east. However, grid coverage should be expanded towards the west (on the Axel 5 claim) and to the south (on the Axel 3). Further hand-trenching is also recommended directly over the coincident mag and EM anomalies, to ascertain whether massive sulphides are present.

As for the North zone area, grid coverage should be expanded to the north, roughly on strike from the float occurrences. The presence of silicified mineralized rock could suggest the proximity of a favorable horizon, which may trend onto the Axel 4 and 6 claims. Consideration may also be given to hand-trenching the small, distinct magnetic anomalies west of the road to determine their cause.

Table 1 - Magnetometer Readings

Station	L1N	L2N	L3N	L4N	L5N	L6N	L7N	L8N	L9N	L10N	L11N	L12N	L13N	L14N	L15N
0+00 E	5765	5787	5764	5764	5761	5772	5772	5761	5763	5767	5766	5764	5771	5764	5760
25	66	88	57	62	60	71	69	65	58	68	61	63	62	62	56
50	66	55	61	62	62	72	71	62	56	68	61	64	63	57	52
75	64	5816	96	64	61	71	70	60	61	64	64	64	61	56	56
1+00	5764	5767	5756	5772	5761	5775	5768	5759	5761	5767	5766	5763	5758	5757	5753
25	68	84	65	42	61	72	70	61	60	62	60	63	60	61	56
50	54	77	74	61	61	72	68	61	58	64	67	64	63	55	56
75	98	76	67	55	64	70	68	56	58	64	62	64	62	57	55
2+00	5767	5784	5788	5755	5764	5773	5768	5759	5759	5764	5762	5764	5763	5756	5754
25	60	88	62	60	78	71	69	59	60	65	62	57	64	62	39
50	61	61	67	57	81	72	67	59	59	66	63	59	64	65	67
75	56	79	63	53	79	73	70	60	59	62	61	62	59	58	75
3+00	5761	5778	5764	5760	5780	5771	5764	5758	5760	5765	5762	5763	5764	5758	5751
25	60	80	64	52	79	75	70	56	56	65	64	62	56	70	45
50	58	75	63	61	78	71	72	61	60	63	62	62	69	59	67
75	59	77	65	52	80	69	72	60	59	67	62	65	34	65	75
4+00	5761	5777	5773	5759	5782	5769	5764	5756	5757	5767	5760	5764	5757	5760	5771
25	55	75	73	57	80	69	61	58	54	64	65	66	54	61	52
50	51	84	67	55	78	71	61	55	49	61	66	61	56	55	55
75	60	45	68	59	79	68	63	58	52	63	64	56	57	60	63
5+00	5758	5776	5763	5761	5780	5771	5762	5757	5751	5766	5763	5761	5760	5757	5753
25	58	74	64	55	79	68	64	60	47	68	63	58	61	55	50
50	59	63	64	62	79	71	60	57	51	68	64	61	60	56	48
75	64	71	63	60	82	71	62	59	50	65	65	61	57	58	47
6+00	5759	5776	5763	5755	5778	5771	5761	5760	5751	5764	5764	5764	5761	5762	5748
25	59	72	65	57	78	73	61	57	49	64	64	66	61	57	60
50	61	76	67	59	85	69	59	58	51	65	64	62	62	56	55
75	65	72	64	58	85	70	63	56	49	61	65	64	61	56	57
7+00	5759	5771	5762	5760	5783	5770	5759	5755	5747	5764	5763	5763	5742	5757	5755
25	64	77	73	57	82	72	60	59	51	66	63	65	42	57	56
50	61	73	68	62	83	71	57	55	51	64	65	63	60	56	57
75	61	72	65	58	82	71	63	57	50	64	62	64	61	56	57
8+00	5761	5775	5759	5758	5781	5771	5761	5755	5751	5769	5761	5763	5759	5752	5754
25	60	76	70	55	82	71	59	55	53	63	63	62	62	57	56
50	60	78	65	52	80	71	63	54	52	65	60	61	60	59	55
75	59	76	64	61	79	72	62	54	50	63	63	62	57	60	54
9+00	5762	5774	5762	5759	5778	5771	5761	5754	5749	5765	5760	5763	5758	5760	5752
25	5800	5773	62	56	78	70	60	57	50	63	60	62	57	58	55
50	5761	74	64	54	56	69	61	57	48	68	61	62	57	57	55
75	62	75	64	49	69	69	63	54	51	64	63	62	62	60	54
10+00	5761	5775	5762	5757	5776	5772	5763	5756	5750	5764	5763	5764	5762	5763	5750
25	62	78	67	55	72	72	61	59	48	69	63	64	60	59	54
50	59	88	65	59	76	70	63	53	47	68	63	60	59	58	54
75	62	65	66	55	73	69	64	56	49	64	61	60	59	57	57

11+00	5761	5779	5768	5762	5773	5771	5762	5757	5749	5767	5762	5760	5758	5758	5755
25	60	73	63	51	70	71	63	55	51	65	60	62	59	56	55
50	69	77	65	52	72	69	63	56	63	64	61	62	61	59	51
75	61	79	62	5336	73	68	62	53	50	64	62	61	61	58	55
12+00	5754	5777	5763	5180	5777	5767	5766	5756	5748	5763	5761	5763	5761	5758	5754
25	55	77	64	5630	78	68	65	57	53	63	62	60	62	58	54
50	56	80	63	72	72	67	67	56	51	67	56	62	61	60	54
75	84	78	64	69	72	69	62	55	52	65	57	64	62	56	53
13+00	5746	5777	5763	5758	5772	5769	5763	5753	5752	5765	5758	5761	5762	5753	5752
25	58	78	67	58	72	67	67	61	53	62	63	63	61	56	52
50	61	72	65	60	78	68	66	62	50	69	58	61	58	54	48
75	61	77	63	60	76	69	65	58	48	66	63	60	56	69	58
14+00	5762	5779	5763	5759	5776	5769	5766	5759	5753	5768	5765	5762	5758	5761	5754
25	58	78	60	56	73	69	67	60	54	66	60	63	63	56	59
50	59	80	64	60	75	69	63	59	54	69	60	63	57	60	56
75	57	78	63	59	78	69	65	58	56	66	61	63	61	56	56
15+00	5758	5779	5762	5758	5777	5768	5763	5756	5755	5764	5764	5757	5758	5756	5756

Statement of Expenditures

All work completed by Martin C. Peter:

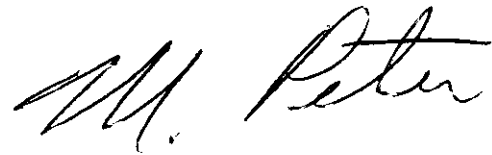
1.) Grid chaining and flagging, VLF-EM survey and magnetometer survey, hand-trenching & geochemical sampling ( 18 days total during period from Aug. 5, 1991 - Oct 13, 1991).	- 18 days @ \$200.00 = \$3,600.00
2.) Report preparation -	3 days @ \$200.00 = \$600.00
3.) Geochemical analysis	
a) 1 rock (24 elements) - Chemex Labs Ltd. -	\$18.75
b) 2 whole rock (& 8 elements) - Chemex Labs Ltd. -	\$58.70
c) 1 whole rock (& 3 element assay) - Min-en Labs Ltd.-	\$49.50
d) 4 soil samples - Min-en Labs Ltd.-	\$25.00
4.) Vehicle Expenses - 5 round trips from Vancouver to Clearwater and to & from claim area.	- 5,000 km. @ \$.20 = \$1,000.00
5.) Flagging tape and topefil thread and other supplies -	\$244.54
6.) Geometrics 837 Unimag Magnetometer rental - 1 week -	\$234.75
7.) Accommodation -	\$126.00
8.) Meals -	\$360.00
Total	\$6,317.24 =====



Statement of Qualifications

I Martin C. Peter of the District of North Vancouver, British Columbia do hereby state that:

- 1) I am a graduate of the University of British Columbia with a B.Sc. degree (zoology) obtained in 1985.
- 2) I have worked a total of 8 field seasons in mineral exploration throughout B.C. as a Geologist's Assistant for: Lacana Mining Corp., Newmont Mines Ltd., Brinco mining Ltd., Corporation Falconbridge Copper Ltd. (now Minnova) and the Hughes-Lang Group.
- 3) Since 1988, I have actively carried out mineral exploration within the Fennell Formation, south of Clearwater and north-east of Barriere, British Columbia.

A handwritten signature in cursive script, appearing to read "M. Peter". The signature is written in dark ink on a white background.

References

- 1) Shiariazza, P. and Preto, V.A. (1987):  
Geology of the Adams Plateau - Clearwater - Vavenby Area, B.C.  
Ministry of Energy, Mines and Petroleum Resources, Paper 1987-2
- 2) Craigmont Mines Ltd. AR 7659, 1979.
- 3) Noranda Exploration Ltd. AR 3818, 1972.
- 4) N.B. Vollo, AR 15398, 1986.
- 5) N.B. Vollo, AR 160042, 1987.

Sept. 16, 1992

Amendment to Report # 22296

A Unimag Model G-87 portable proton magnetometer was used throughout the magnetic survey undertaken on the Axel-2 claim. The Unimag provides 10 gamma resolution over a range of 20,000 to 100,000 gammas, and the instrument measures total field intensity. The operating principle behind the proton magnetometer is well documented in literature and will not be discussed in this report.

Data is displayed on a 4 digit LED readout after pressing a button on top of the Unimag. Since the instrument has a 10 gamma resolution, only the 4 most significant digits are displayed. For example if the earth's field intensity in a given location is 57560 gammas, the Unimag readout will display the number 5756, with the least significant digit being omitted. However, the readout 5756 actually represents a 10 gamma measurement of the earth's field ranging from 57555 gammas to 57565.

Values obtained were not corrected for diurnal variation. The lack of correction is apparent on some lines where the readings were taken on consecutive days; however, these anomalous conditions are readily ascertained as being an artifact of the lack of diurnal correction. Accuracy was not a major concern in this survey since the target being pursued, (a volcanogenic massive sulphide in a mafic host) will likely contain at least locally elevated concentrations of magnetic minerals, which show up quite well with the Unimag. While this may not hold true for every VMS occurrence in this environment the Unimag was chosen as being a good regional prospecting tool given the limited budget available for the project.





# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
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British Columbia, Canada V7J 2C1  
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V7N 1L1

Page Number : 1-A  
Total Pages : 1  
Certificate Date: 04-OCT-91  
Invoice No. : 19122232  
P.O. Number :

Project :  
Comments :

## CERTIFICATE OF ANALYSIS A9122232

SAMPLE DESCRIPTION	PREP CODE	Al2O3 %	BaO %	CaO %	Fe2O3 %	K2O %	MgO %	MnO %	Na2O %	P2O5 %	SiO2 %	TiO2 %	LOI %	TOTAL %	Ag ppm
EZ NZ - N. ZONE SWZ  L SOUTH OF GOSSAN ZONE	208 294	14.96	0.05	9.36	11.46	0.17	6.33	0.16	3.44	0.19	48.18	1.71	2.87	98.87	< 0.5
	208 294	11.63	0.34	10.57	8.01	< 0.01	5.77	0.13	0.04	0.16	39.85	1.18	21.79	99.47	< 0.5
	208 294	16.16	< 0.01	9.44	11.78	< 0.01	5.59	0.17	2.46	0.21	49.11	1.95	3.14	100.05	< 0.5
WHOLE ROCK															



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
212 Brooksbank Ave., North Vancouver  
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Page Number : 1-B  
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Certificate Date: 04-OCT-91  
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Comments :

## CERTIFICATE OF ANALYSIS A9122232

SAMPLE DESCRIPTION	PREP CODE	Co ppm	Cu ppm	Fe %	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm						
EZ NZ - N. ZONE SWZ  L SOUTH OF GOSSAN ZONE	208 294	30	92	4.31	450	1	56	12	112						
	208 294	24	60	4.88	890	< 1	54	< 2	56						
	208 294	23	96	5.03	700	< 1	23	< 2	154						

COMP: MARTIN PETER  
PROJ: AXEL  
ATTN: M. PETER

MIN-EN LABS - WHOLE ROCK ANALYSIS  
705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2  
(604)980-5814 OR (604)988-4524

FILE NO: 1V-1236-RL1  
DATE: 91/10/17  
\* ROCK \* (ACT:F26)

SAMPLE NUMBER	AL2O3 %	BA %	CAO %	FE2O3 %	K2O %	MGO %	MNO2 %	NA2O %	P2O5 %	SI02 %	SR %	TIO2 %	LOI %	S %
ROCK (PGZ) - FROM PIT @ GOSSAN ZONE	13.73	.005	5.19	16.48	.14	3.13	.11	3.47	.05	46.37	.015	1.76	8.00	4.82
WHOLE ROCK														



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221

to: PETER, MARTIN  
 193 E. ST. JAMES RD.  
 NORTH VANCOUVER, BC  
 V7N 1L1

Page Number : 1-A  
 Total Pages : 1  
 Certificate Date: 04-JUN-91  
 Invoice No. : 19115613  
 P.O. Number :

Project :  
 Comments :

## CERTIFICATE OF ANALYSIS A9115613

SAMPLE DESCRIPTION	PREP CODE		Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)	K % (ICP)	Mg % (ICP)	Mn ppm (ICP)
	208	294														
AX-91-1 <i>LGOSAN ZONE ON ROAD</i>	208	294	< 0.8	8.24	240	< 0.5	6	3.48	1.5	112	272	2520	10.75	0.28	3.32	800
	PREP CODE		Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm AAS	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)				
	208	294	< 1	3.76	112	760	< 8	176	0.96	280	< 10	56	<i>Generally, Cr amount over 100 ppm indicates a mafic</i>			

CERTIFICATION: \_\_\_\_\_



**MIN·EN LABORATORIES**  
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

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SMITHERS LAB.:  
3178 TATLOW ROAD  
SMITHERS, B.C. CANADA V0J 2N0  
TELEPHONE (604) 847-3004  
FAX (604) 847-3005

Geochemical Analysis Certificate

1V-1236-SG1

Company: MARTIN PETER  
Project: AXEL  
Attn: M.PETER

Date: OCT-17-91  
Copy 1. MARTIN PETER, NORTH VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 4 SOIL samples submitted OCT-07-91 by M.PETER.

Sample Number	CU PPM	PB PPM	ZN PPM	
#1 } FROM PIT	565	32	207	— FROM PIT
#2 } ARCA @	3810	38	428	— 10 m WEST OF PIT
#3 } @	85	12	91	— L3N 62.5m E
#4 } GOSSAN ZONE	222	13	137	— 10 m NE OF PIT

SOIL GEOCHEMISTRY

Assay Certificate

1V-1236-RA1

Company: MARTIN PETER  
Project: AXEL  
Attn: M.PETER

Date: OCT-17-91  
Copy 1. MARTIN PETER, NORTH VANCOUVER, B.C.

We hereby certify the following Assay of 1 ROCK samples submitted OCT-07-91 by M.PETER.

Sample Number	CU %	PB %	ZN %
ROCK - FROM PIT @ GOSSAN ZONE	.288 2880 ppm	.01	.14 1400 ppm

ROCK

Certified by

MIN·EN LABORATORIES

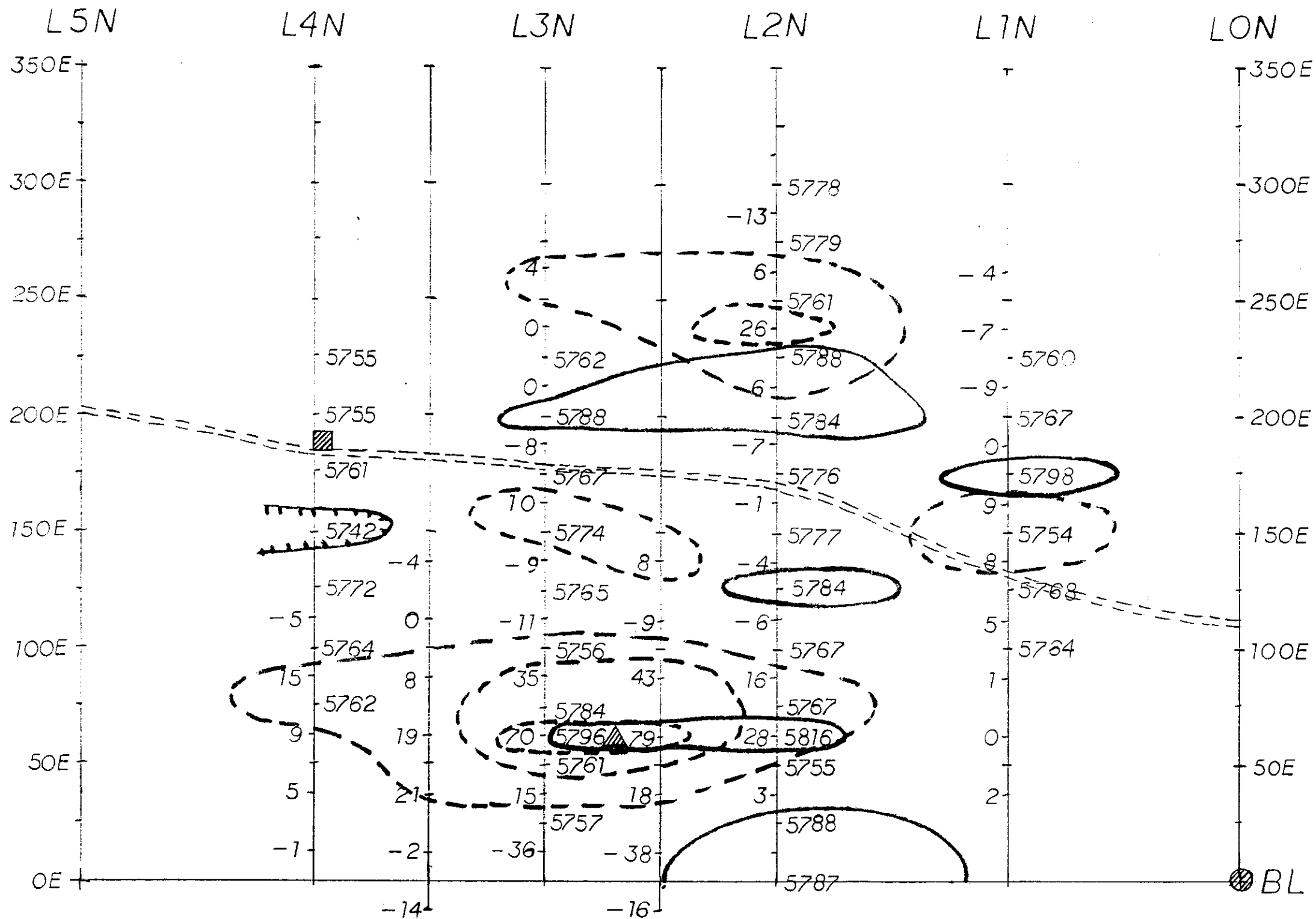
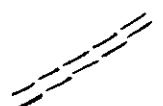

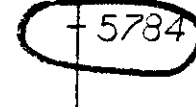





FIG.4  
GEOPHYSICAL  
CONTOUR MAP  
OF GOSSAN ZONE  
AREA

-  ROAD
-  EM VALUES
-  MAGNETOMETER READINGS
-  GOSSAN OUTCROP ON ROAD
-  HAND-TRENCHED PIT
-  LEGAL CORNER POST FOR AXEL 2 AND 3

1 INCH = 50m



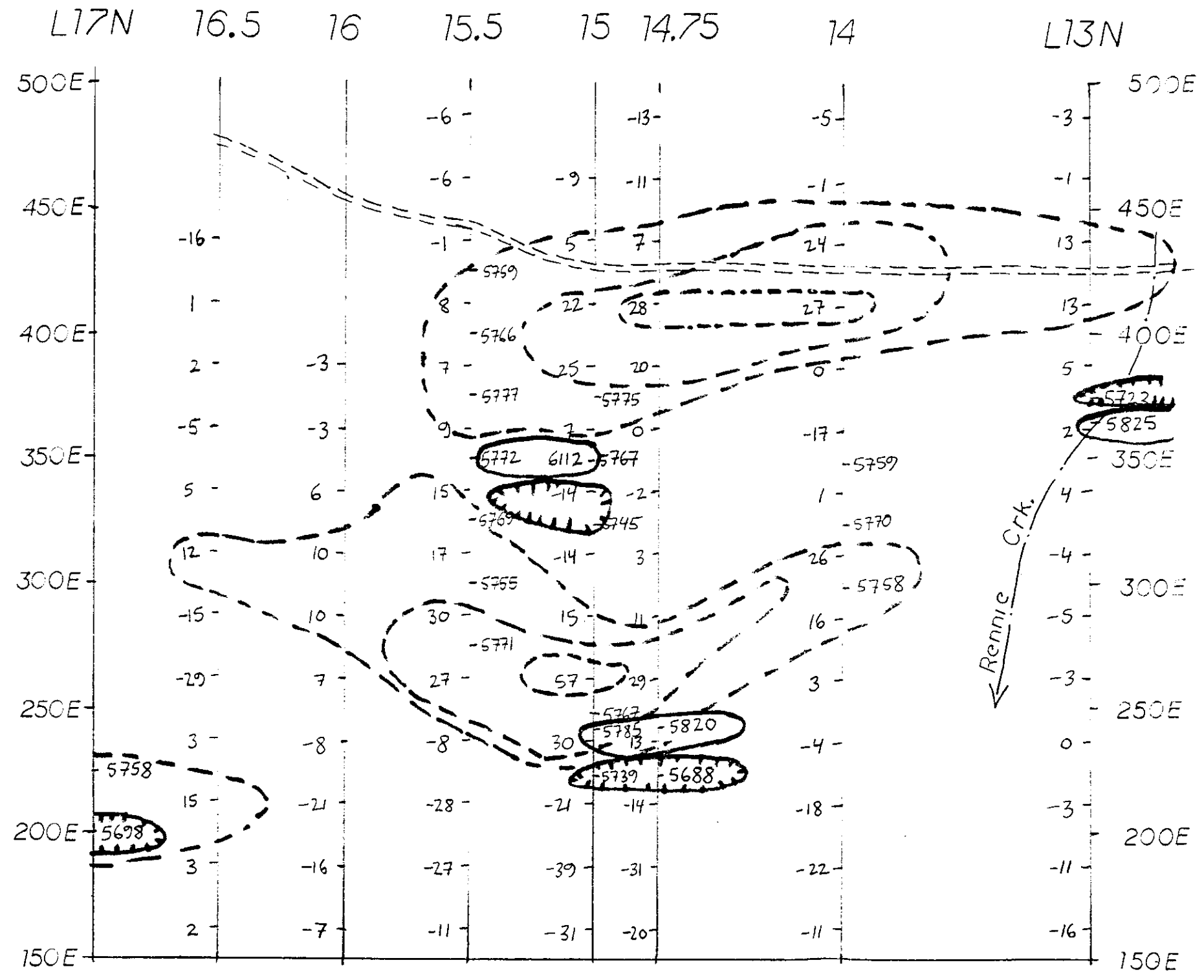
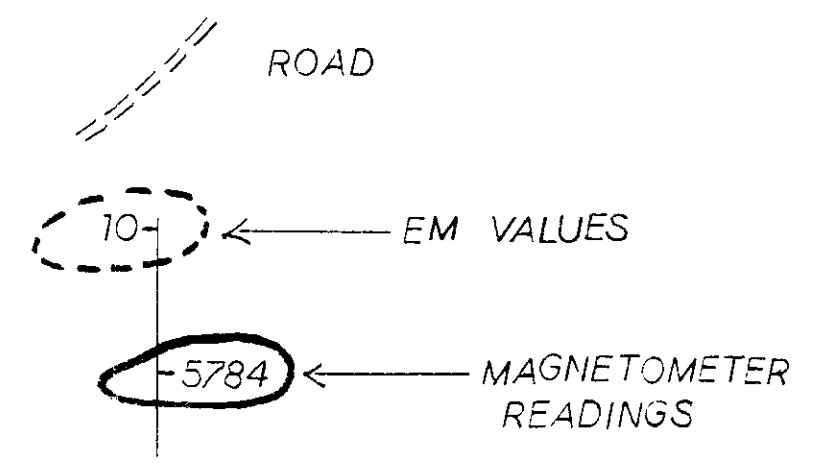
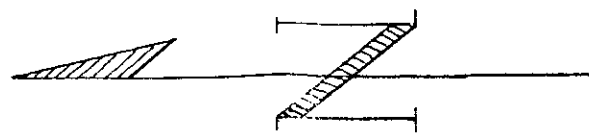
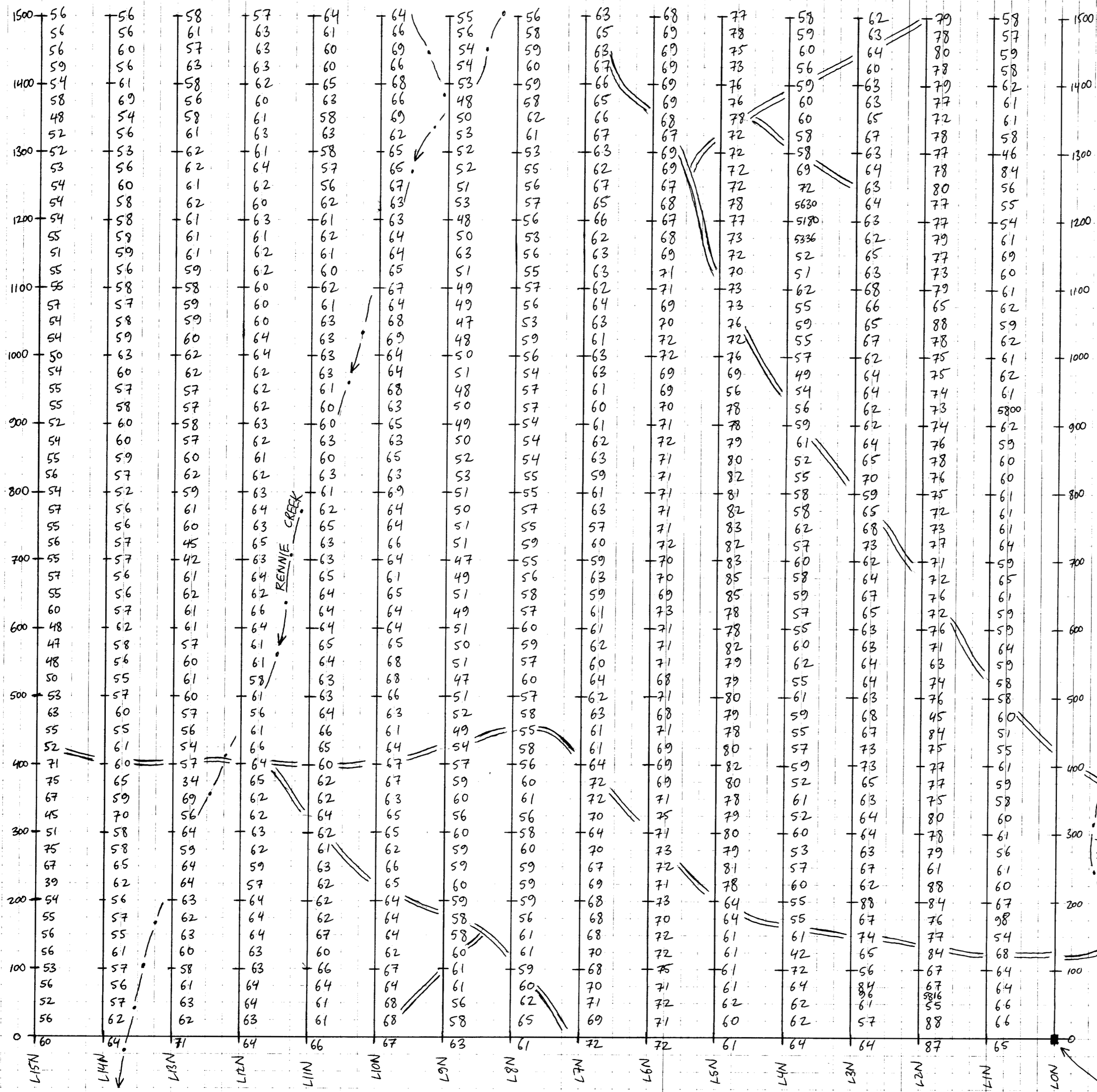


FIG.5  
GEOPHYSICAL  
CONTOUR MAP  
OF NORTH ZONE  
AREA



1 INCH = 50m





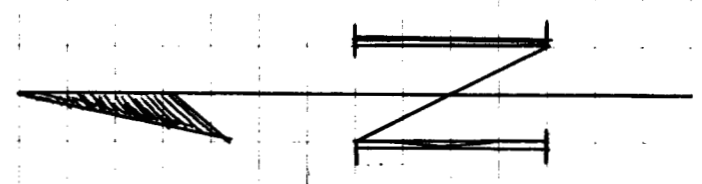
MAGNETOMETER READINGS  
ON AXEL 2 CLAIM - K.M.D.

NOTE: - ALL VALUES GIVEN (UNLESS OTHERWISE NOTED) ARE PRECEDED BY THE NUMBER '57'  
- ALL VALUES GIVEN END WITH A '0'  
FOR EXAMPLE - THE NUMBER '60' AS SHOWN IS ACTUALLY THE READING '57600' GAMMAS

SCALE: 1 INCH = 100 METERS.

— CREEK - YEAR-ROUND FLOW  
— ROAD - LOGGING - GOOD CONDITION

ALL VALUES REPRESENT THE TOTAL INTENSITY OF THE MAGNETIC FIELD. VALUES WERE NOT CORRECTED FOR DIURNAL VARIATION



AR 22296