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GEOPHYSICAL REPORT
ON THE
GNAT PASS PROPERTY
LIARD MINING DIVISION

SUB-RECORDER
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BRITISH COLUMBIA

NTS 104I/4W

58°8'N, 129°50'E

FOR

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EQUITY SILVER MINES LIMITED
#13 - 1155 Melville Street
Vancouver, British Columbia
V6E 4C4

PREPARED BY:

STETSON RESOURCE MANAGEMENT CORP.
#13 - 1155 Melville Street
Vancouver, British Columbia
V6E 4C4

J.F. WETHERILL, B.A. Sc.

19,138

GEOLOGICAL BRANCH
ASSESSMENT REPORT

October 4, 1989

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1.0 INTRODUCTION

This report discusses the geophysics of a precious metal prospect covered by the Gnat Pass property under option to Equity Silver Mines Limited. The data presented are the results of an exploration program conducted by Stetson Resource Management Corp. Further exploration is recommended to test coincident magnetic and VLF electromagnetic anomalies outlined by the surveys.

1.1 Location and Access

The Gnat property is situated in the Liard mining division, approximately 40 kilometers south of Dease Lake. Modified grid and Crown granted claims cover a total area of 22.5 square kilometres centred at latitude 58°8' and longitude 129°50'W.

Access to the property is via the Cassiar Stewart highway which extends from Dease Lake to Stewart. The highway crosses the western claims in the group, and a 5 kilometer four wheel drive tote road accesses the Crown granted claims.

Groceries, fuel, lumber and general supplies are available to a limited extent in Dease Lake. The remainder may be trucked from Smithers to Dease Lake.

1.2 Physiography, Vegetation and Climate

The Gnat Pass property is located in the Hotailuh mountain range near the northeastern edge of the Stikine Plateau. The region has a relatively dry climate, and snow cover in winter is moderate. The property covers sub-alpine terrain at or near treeline elevations, ranging from 1210 meters at Upper Gnat Lake to 1800 meters on the eastern property area.

Vegetation varies on the property. Treeline is at an elevation of 1500 meters above which alpine tundra covers the area. Eastern slopes below 1500 meter in elevation are covered by moderate stands of Engelmann spruce, fir, and lodge pole pine. The Gnat Pass valley is covered by alpine grasses and scrub bush.

EQUITY SILVER MINES

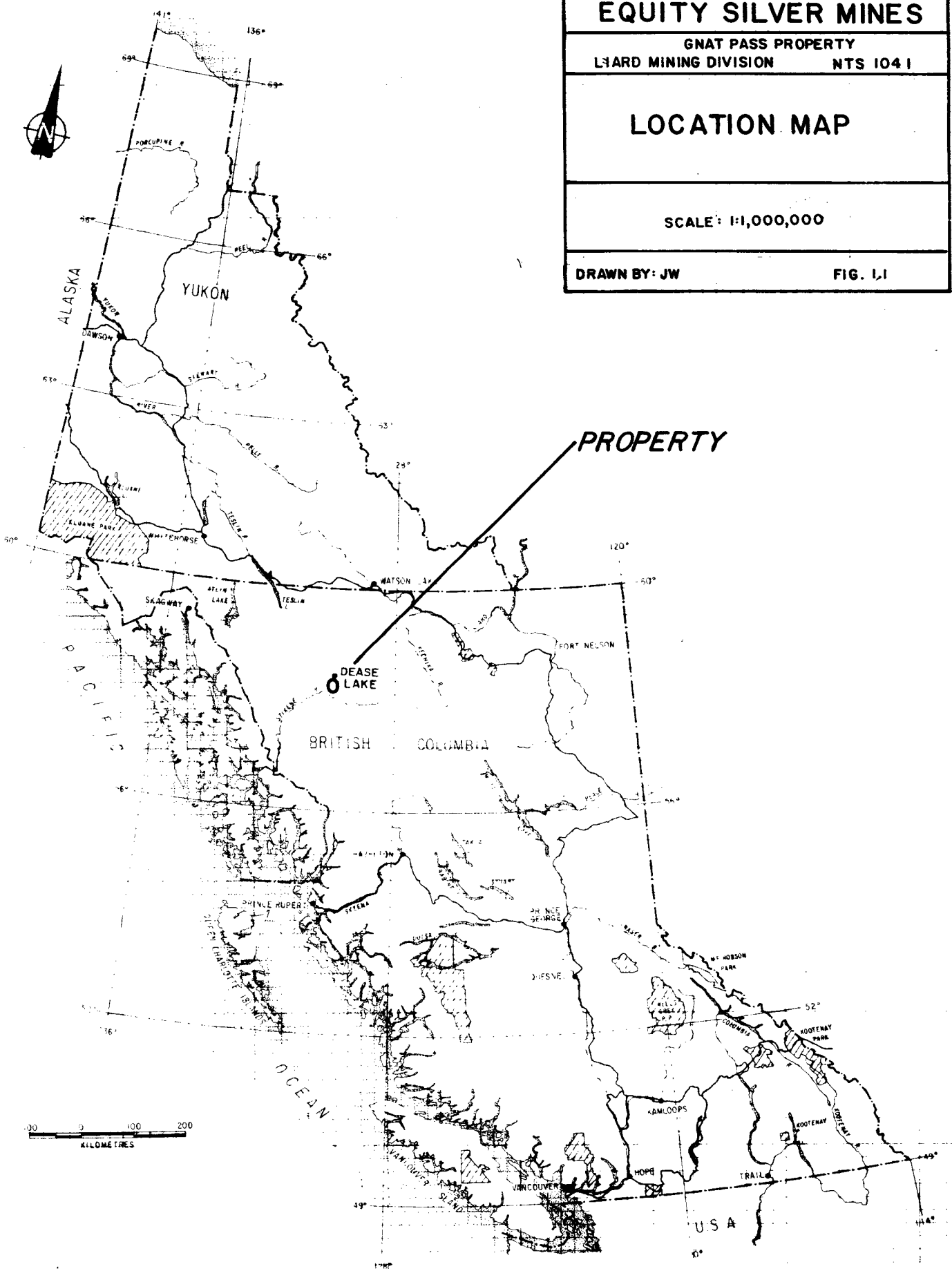
GNAT PASS PROPERTY
LYARD MINING DIVISION NTS 1041

LOCATION MAP

SCALE: 1:1,000,000

DRAWN BY: JW

FIG. 1.1



0 100 200
KILOMÈTRES

1.3 Property

TABLE 1

The property is covered by 5 contiguous "Modified Grid" mineral claims and 13 Crown granted mineral claims, as per Table 1.

<u>Claim</u>	<u>Units</u>	<u>Record No.</u>	<u>Expiry Date</u>
Pass 38	18	4781	July 6, 1990
Pass 39	18	4782	July 6, 1990
Pass 41	20	4784	July 6, 1990
Pass 42	20	4785	July 6, 1990
Pass 43	14	4786	July 6, 1990

<u>Claim</u>	<u>Lot No.</u>	<u>Units</u>
Mac	Lot 3545	1
New Deal No. 2	Lot 3546	1
New Deal No. 1	Lot 3547	1
New Deal No. 3	Lot 3548	1
New Deal No. 4	Lot 3549	1
Dalvenie No. 2	Lot 3537	1
Dalvenie No. 3	Lot 3538	1
Dalvenie No. 4	Lot 3539	1
Dalvenie No. 5	Lot 3540	1
Dalvenie No. 6	Lot 3541	1
Dalvenie No. 7	Lot 3542	1
Dalvenie No. 8	Lot 3543	1
Dalvenie No. 9	Lot 3544	1

1.4 History

In 1960, Cassiar Asbestos Corp. staked several copper showings near Gnat Lake discovered during a regional prospecting program. These claims were restaked in 1963 and actively explored from 1965 to 1968. A total of 17,384 meters of diamond drilling were completed in 102 holes, blocking out the Gnat Pass deposit. The deposit and the surrounding ground are currently covered by the Troy claims and the northern portion of the Pass property.

The southern portion of the property covers and surrounds ground initially staked by Joseph Clearihue during the 1899 Dease Lake gold rush. Several periods of restaking occurred until the Dalvenie Syndicate of Victoria had the claims Crown

Granted in 1935 following an extensive trenching program. In 1935, prospectors' samples from the property returned values up to 1.10 oz/ton Au, 15.5 oz/ton Ag, and 6.45% Cu but the exact locations of the samples are unknown.

2.0 1989 GEOPHYSICAL PROGRAM

In 1989, an exploration program was undertaken by a geophysical field crew employed by Stetson Resource Management Corp. Approximately \$18,000 was spent on a geophysical survey carried out between June 28 and July 5, 1989.

The survey involved grid preparation of 38.4 kilometres of blazed, flagged, picketed and cut line, spaced 100 and 50 meters with survey stations established at 12.5 meter intervals. Magnetic and VLF electromagnetic surveys were conducted simultaneously using an EDA Omni Plus System.

2.1 Geology

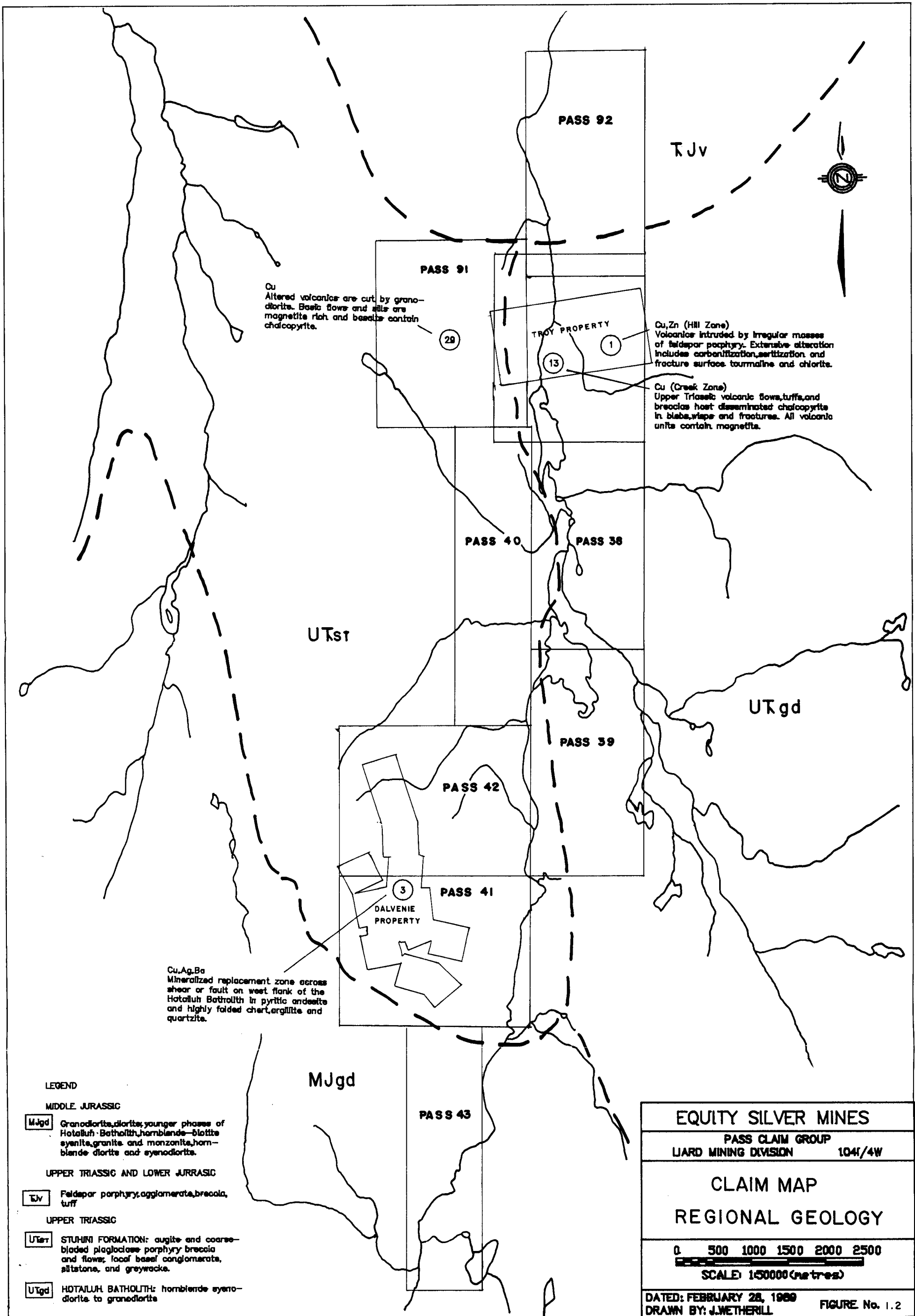
Gabrielse (1969) indicates the property covers Upper Triassic Stikine Formation augite and plagioclase porphyry breccia and flows, which are in contact with the western flank of the Hotailuh Batholith of hornblende syenodiorite to granodiorite.

Triassic rocks covered by the property comprise folded thin bedded siltstones, quartzites, cherts and argillites associated with minor volcanic beds. The rocks have been intruded by hornblendite and gabbro of Jurassic-Cretaceous age which outcrop as discordant masses of thin sills paralleling bedding planes of the Jurassic units. The texture of the intrusive ranges from coarse equicrystalline to coarse porphyritic.

2.2 Mineralization/Alteration

On the Dalvenie claims, chlorite alteration has been reported, particularly in fault zones and proximal wallrocks. Areas of the property separated from these zones remain relatively unaltered.

Mineralization is hosted by smokey quartz in the diabase dyke fault zone on the Dalvenie claims, and comprises massive pyrite with blebs of



EQUITY SILVER MINES	
PASS CLAIM GROUP	LIARD MINING DIVISION 1041/4W
CLAIM MAP	
REGIONAL GEOLOGY	
0 500 1000 1500 2000 2500 SCALE: 1:50000 (metres)	
DATED: FEBRUARY 28, 1989	
DRAWN BY: J.WETHERILL	
FIGURE No. 1.2	

chalcopyrite, arsenopyrite and fractures surface bornite and hematite. Minor occurrences of siderite and sphalerite were also observed. Values of 3.4% Cu, 0.08 oz/ton Au, and 0.9 oz/ton Ag., were obtained from the main fault zone trenches.

COST STATEMENT

Project Preparation

Printing	\$ 48.00
Maps	\$ 36.70
Drafting	\$ 193.50
J. Wetherill 3 days @ \$225/ day	\$ 675.00
M. Djordjevich 2 days @ \$175/ day	\$ 400.00
	=====
	\$1,353.20

Field Personnel

GEOLOGIST

J. Wetherill 5 days @ \$225.00	\$1,125.00
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FIELD TECHNICIANS

M. Pym 5 days @ \$175/day	\$ 875.00
B. Campbell 5 days @ \$175/day	\$ 875.00
C. Milonas 5 days @ \$175/day	\$ 875.00
R. Herzig 5 days @ \$175/day	\$ 875.00
W. Lander 5 days @ \$175/day	\$ 875.00
D. Weber 3 days @ \$175/day	\$ 525.00

EDA OPERATOR:

M. Djordjevich 5 days @ \$250/day	\$1,000.00
	=====
	\$ 7,025.00

Support

General Supplies	\$ 980.00
Gasoline & Propane	\$ 330.18

Equipment Rental:

Bronco with winch: 5 days @ \$60/day	\$ 300.00
116 km @ \$0.15/km	\$ 17.40
F250 4 x 4: 5 days @ \$60/day	\$ 300.00
85 km @ \$0.15/km	\$ 12.75
Generator : 5 days @ \$25/day	\$ 125.00
Chainsaws: 2 x 5 days @ \$25/day/saw	\$ 250.00
EDA Omni Plus: 5 days @ \$250/day	\$ 1,250.00
Radio Rental and Licenses:	
5 days @ \$25.00/day	\$ 125.00
	=====
	\$ 5,850.33

General

Communication (B.C. Tel)	\$ 38.00
Insured Freight	\$ 720.33
	=====
	\$ 758.33

Report Writing

Geologist 2 days @ \$225/day	\$ 450.00
Geophysicist	\$ 975.00
Drafting 1 days @ \$200/day	\$ 200.00
Reproduction	\$ 48.65
Supplies, Typing, Copying	\$ 116.80
	=====
	\$ 1,790.45

12% Administrative Overhead	\$16,777.31
	=====

TOTAL	\$18,790.59
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ar-gnat

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1936 Eagle-McDame Area, Cassiar District British
Columbia: Geological Survey of Canada, Memoir
194, 16 Pages.

Mandy, J.T

1935 Dease Lake Area (Dalvenie); British Columbia
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22-23.

Jeffery, W.G.

1966 June, Stikine, September, Etc. (Dease Lake
Mines Ltd.), Minister of Mines and Petroleum
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Road, M.A.

1966 Copper Pass Mines Ltd., Geologic Report No. 1,
Dalvenie, Mac, and New Deal Claims: BCDM
Assessment Rpt #898

STATEMENT OF QUALIFICATIONS

NAME: Wetherill, J.F.

PROFESSION: Geologist - Engineer in Training

EDUCATION: 1987 B.A.Sc. Geology -
University of British Columbia

EXPERIENCE: 1987 - Present: Geologist with
Stetson Resource Management Corp.
Field Supervisor for exploration
programs involving geology, geo-
chemistry, and geophysics in B.C.
and Yukon.

1986, June - August: Field Assistant
-Geologist involved with geological,
geochemical and geophysical aspects
of exploration programs in B.C.

APPENDIX REPORT ON
GEOPHYSICAL SURVEYS

GNAT PASS CLAIM GROUP
LIARD MINING DIVISION, B.C.

FOR
STETSON RESOURCE MANAGEMENT CORP.

BY
INTERPRETEX RESOURCES LTD.

Vancouver, B.C.
September, 1989

T.R. Matich

1.0 SUMMARY

Geophysical results over the Gnat Pass grid show a number strong VLF-EM conductors coincident with magnetic low lineaments. These geophysical anomalies, particularly those with long strike length, are interpreted to represent conductive structural features, perhaps faults or shear zones. Magnetic low lineaments observed on the Gnat Pass grid generally trend north-south. The long, narrow magnetic lows are believed to be due to oxidization within shear zones.

The VLF-EM method was quite responsive on the Gnat Pass grid. Conductors are primarily interpreted to represent conductive structures. Conductor intersections and stronger anomalies within long conductors may represent structural traps or fault dilations and are interpreted to be the best candidates for economic mineralization in the area.

The strong conductor system "C6" is believed to have delineated the surface location of the Delvini shear zone. This interpretation was based on the strong VLF-EM conductance observed for a strike length of over one km. coupled with the close correlation with magnetic lineament "L4". The highest priority target on the Gnat Pass grid is the intersection of the parallel legs making up the southern portion of "C6".

The best geophysical target on the Upper Gnat Pass grid is a strong VLF-EM anomaly at 450E on line 500N. This anomaly is believed to represent a fault intersection. The single conductor continuing north from the intersection is considered a secondary exploration target.

2.0 INTRODUCTION

A detail geophysical program, consisting of electromagnetic (VLF-EM) and magnetic surveys, was carried out on two grids located on the Gnat Pass claim group in the Liard Mining Division near Dease Lake, B.C. The Gnat pass grid had survey lines oriented at azimuth 107 degrees. The Upper Gnat Pass grid had east-west trending survey lines. The survey was carried out in July, 1989.

3.0 OBJECTIVES

- to establish a correlation between magnetic minerals and mineralized trends,
- to test the effectiveness of VLF-EM in following possible mineralized trends and to establish new unrecognized conductive trends,
- to establish geophysical areas of interest for future exploration.

4.0 SURVEY SPECIFICATIONS

Survey Parameters

- Gnat Pass Grid - survey line separation - 50 m.
 - survey station spacing - 12.5 m.
 - VLF-EM and magnetic survey total 38.3 km.
- Upper Gnat Pass Grid
 - survey line separation - 100 m.
 - survey station spacing - 12.5 m.
 - VLF-EM and magnetic survey total 11 km.

Equipment Parameters

- VLF-EM and Magnetic Surveys
 - Scintrex Omni Plus combined VLF-EM and magnetometer
 - Dip Angle (in-phase) and Quadrature (out-of-phase) measured in percent at each station
 - VLF-EM Field Strength measured at each station
 - transmitting stations used - NPM (23.4 kHz) - Lualualei, Hw.
 - NSS (21.4 kHz) - Annapolis, Md.
- earth's total magnetic field measured in gammas (nT)
 - magnetic variations controlled by automatic magnetic base station recording every 30 seconds
 - instrument accuracy +/- 0.1 nT.

Equipment Specifications - see Appendix I

5.0 DATA

Calculations

Total Field Magnetic Survey

Total field magnetic readings were individually corrected for variations in the earth's magnetic field using magnetic base station values. The formula used for magnetic corrections was;

$$CTFR = TFR + (DBL - BSR)$$

where: CTFR = Corrected Total Field Reading

TFR = Total Field Reading

DBL = Datum Base Level = 58400 gammas

BSR = Base Station Reading

Presentation

Gnat Pass Grid

- Lualualei VLF-EM in-phase, out-of-phase and field strength readings are presented in profile form on Figure # G-1 at a scale of 1:2500
- Magnetic data were profiled and are presented on Figure # G-2 at a scale of 1:2500
- Magnetic data were contoured and are presented on Figure # G-3 at a scale of 1:2500
- The geophysical interpretation is presented on Figure # G-4 at a scale of 1:2500

Upper Gnat Pass Grid

- Annapolis VLF-EM in-phase, out-of-phase and field strength readings are presented in profile form on Figure # G-5 at a scale of 1:2500
- Magnetic data were profiled and are presented on Figure # G-6 at a scale of 1:2500
- Magnetic data were contoured and are presented on Figure # G-7 at a scale of 1:2500
- The geophysical interpretation is presented on Figure # G-8 at a scale of 1:2500
- Field readings and calculated values are listed in Appendix II

6.0 INTERPRETATION

6.1 Gnat Pass Grid

6.1.1 Discussion of Results

Total field magnetic data over the Gnat Pass grid were noise free with no cultural sources observed. Magnetic readings range from 55400 nT to 63800 nT within a stable background of approximately 58600 nT. The magnetic datum value for the total field magnetic profile map, Figure #

G-2, was determined by statistical analysis to be 58600 nT. This datum value, which graphically shows if a magnetic reading is above or below the mean value for the grid, was also the threshold between dashed and solid contours on the total field magnetic contour map, Figure # G-3. Two magnetic units have been defined on the Gnat Pass grid based on magnetic intensity and activity.

Magnetic contours show three areas of high magnetic intensity and high magnetic activity located in the southwest and northwest corners of the grid as well as the east central portion of the grid. These areas are labeled magnetic unit "M2" on the magnetic contour map. Magnetic readings range from 59000 nT to 63000 nT within "M2" and the unit is characterized by steep gradients.

Magnetic unit "M1" covers the majority of the Gnat Pass grid and is characterized by relatively quiet magnetic activity with values ranging from 57500 nT. to 59000 nT. Within "M1", there appears to be a "transition zone" between "M1" and "M2". This "transition zone" trends northwest from the center of the grid and is seen on the magnetic contour map as an area of solid contours (above mean values) exhibiting slightly higher magnetic activity than the lower intensity portions of "M1".

Five magnetic low lineaments, generally trending north-south, have been delineated on the Gnat Pass grid. These magnetic lineaments are labeled "L1" to "L5" on the magnetic contour map, Figure # G-3. Lineament "L1" is located in the northwest corner of the grid and separates magnetic unit "M2" from "M1". Extending for 300 meters, "L1" continues off the grid to the north and ends abruptly by running into a weak magnetic high at line 900N.

Magnetic lineament "L2" is a deep, north trending low feature which is flanked to the west by a moderate magnetic high. "L2" continues off grid to the north and ends abruptly to the south by running into a strong, localized high on line 950N.

Lineament "L3" is a 50 meter wide magnetic low separating a narrow, strong high to the west from an area of generally higher intensity referred to above as a "transition zone".

"L4" has a strike length of 1.2 km. and is the dominant magnetic lineament observed on the grid. From the south edge of the grid, "L4" trends north as two parallel magnetic low features which gradually converge to form a single low at 60W on line 500N. "L4" continues north as a single magnetic low feature and runs off the grid at line 1000N. "L5" is a magnetic low feature which terminates as it enters the "transition zone".

VLF-EM data were noise free and no cultural sources were observed. Data quality was good and duplicate readings at baseline 0 and at 500W show that in-phase and quadrature results were virtually identical when surveyed on different days. Field strength readings are dependent on

transmitter power output and weather conditions therefore, these results are time dependent. For this reason level changes in field strength data result from data acquired on different days and does not indicate instrument inaccuracy. Only NPM, Lualualei, Hawaii data were interpreted due to weak responses obtained from the NSS, Annapolis, Maryland transmitter.

Several conductor systems with long strike length have been delineated on the Gnat Pass grid. The conductor systems are labeled "C1" to "C7" on the VLF-EM profile map, Figure # G-1. Conductor system "C1" trends northwest from line 400N to line 1300N as a series of broken and offset conductors. "C1" is intersected by "C5" at 440W on line 1200N. In-phase and field strength response range from weak to strong with weak, positive quadrature. Conductor system "C1" is located wholly within a low intensity area of "M1".

Conductor system "C2" consists of three short conductors located in the north of the grid. Although the strike length is short, strong positive quadrature response coupled with moderate to strong in-phase and field strength response indicate that "C2" is a strong conductor.

"C3" is a moderate, north trending conductor characterized by weak to moderate in-phase and field strength response and negligible quadrature response. "C3" is coincident with magnetic lineament "L2".

Conductor "C4" is characterized by strong in-phase and field strength response and weak quadrature response. "C4" may be the northward continuation of system "C6".

Conductor system "C5" is a series of broken up conductors which extend almost across the entire grid. Characterized by moderate to strong in-phase and field strength and variable quadrature, anomalies within "C5" are interpreted to form one conductive system due to similar anomalous response as well as similar strike direction. From line 600N to line 800N, "C5" is coincident with a narrow, active magnetic high trend.

The dominant conductive feature on the Gnat Pass grid, conductor system "C6" has a strike length of 1.2 km. and shows good correlation with magnetic lineament "L4". "C6" consists of three legs which exhibit similar character. The first and second legs are parallel conductors which extend north from line 200S to line 500N where they merge at 60W to form the third leg. The first leg follows the baseline and is characterized by strong in-phase and quadrature response. The second leg, which lies approximately 200 meters west of the baseline, is also characterized by strong in-phase and field strength response, however the second leg exhibits weak quadrature response. The third leg exhibits VLF-EM response similar to the second leg.

Conductor "C7" lies parallel to and approximately 100 meters west of "C6". This moderate, north trending conductor shows some correlation with lineament "L5" and exhibits moderate in-phase response and good, positive quadrature response.

6.1.2 Conclusions

Geophysical results over the Gnat Pass grid show a number of strong VLF-EM conductors coincident with magnetic low lineaments. These geophysical anomalies, particularly those with long strike length, are interpreted to represent conductive structural features, perhaps faults or shear zones.

Magnetic units outlined on the Geophysical Interpretation Map define areas of varying magnetic susceptibilities. Magnetic units represent areas of different magnetic mineral content, thereby suggesting different rock types. Generally, the more magnetically active areas represent higher mafic mineral content. For this reason, the more magnetically active unit "M2" is interpreted to define an area underlain by mafic or ultramafic rock. Strong localized magnetic highs within the relatively inactive magnetic unit "M1" probably represent mafic dykes. If coincident with a strong conductor the localized magnetic highs might represent massive pyrrhotite mineralization.

Magnetic low lineaments observed on the Gnat Pass grid generally trend north-south. The long, narrow magnetic lows are believed to be due to oxidization within shear zones or fault controlled acidic intrusions. The coincidence of strong conductors with the magnetic low lineaments supports the oxidization interpretation.

Magnetic lineament "L1" forms a boundary between magnetic units "M1" and "M2" and may represent a geological contact. Since "L1" ends abruptly to the south, a cross-cutting fault, possibly reflected by conductor "C1", may have terminated "L1". Little or no magnetic indication of the inferred cross-cutting fault would be seen since the low magnetic susceptibilities near "C1" would not be significantly altered due to weathering (i.e. oxidization).

Magnetic lineament "L2" consists of a deep magnetic low flanked to the west by a magnetic high. The strong magnetic low indicates that "L2" represents weathered structure, an interpretation supported by the presence of conductor "C3". The associated magnetic high might be due to a fault controlled mafic dyke. Based on its abrupt discontinuation at line 1000N, "L2" may be terminated to the south by a cross-cutting fault.

Lineament "L3" is also a magnetic low feature flanked to the west by a magnetic high and is interpreted to be a structural feature. The northern end of "L3" is intersected by conductor "C5". The intersection is thought to be interesting because of the possibility of dilation forming structural traps.

Lineament "L4", a magnetic low feature, is clearly visible on the grid for a strike length of 1.2 km. "L4" is interpreted to be a weathered, major shear zone based on its consistent magnetic low signature over a long strike length as well as its coincidence with conductor "C6".

Lineament "L5" is a long magnetic low feature coincident with conductor "C7". "L5" is thought to represent a weathered structural feature, possibly associated with "L4".

The VLF-EM method was quite responsive on the Gnat Pass grid. Conductors are primarily interpreted to represent conductive structures. Conductor intersections and stronger anomalies within long conductors may represent structural traps or fault dilations and are interpreted to be the best candidates for economic mineralization in the area. Conductors are generally well defined with little superimposed of anomalies observed, suggesting that there is no brecciation in the area.

Conductor system "C1" trends northwest and is believed to represent a structural feature, an interpretation supported by the termination of "L1" and "L3" as they intersect "C1". The best target along "C1" is the intersection of "C1" and "C5". On line 800N, "C1" exhibits a significantly stronger anomaly than on other lines. This anomaly may represent fault dilation and is also considered a good target.

"C2" is the shortest conductor system on the grid, however "C2" also exhibits one of the strongest quadrature responses and is considered one of the strongest conductors discovered on the grid.

"C3" is a moderate conductor system but is considered important due to its correlation with lineament "L2". "C3" is interpreted to be a structural feature, possibly a splay fault of "C6".

"C4" is a strong conductor thought to be the northern continuation of "C6". Conductor "C4" is weaker than "C6" and is considered a secondary target, however if "C6" is found to be mineralized, then "C4" would be considered an important target.

Conductor system "C5" consists of a number of short conductors all trending generally in the same direction. Aside from the previously discussed intersection with "C1", the most interesting conductor in the system is the conductor which intersects lineament "L3". At this intersection the quadrature response, although narrow, is quite strong, indicating high conductance. The southern end of this leg of "C5" is coincident with a localized magnetic high suggesting either the presence of a mafic dyke or fault controlled massive sulphides containing high concentrations of magnetic pyrrhotite. Conductor "C5" is interpreted to be a structural feature, probably a fault, and the leg intersecting "L3" is thought to be the best candidate for sulphide mineralization.

The strong conductor system "C6" is believed to have delineated the surface location of the Delvini shear zone. This interpretation was based on the strong VLF-EM conductance observed for a strike length of over one km. coupled with the close correlation with magnetic lineament "L4". The easterly leg of the parallel conductors exhibits stronger conductance and is believed to represent the main shear zone. The westerly leg is believed to represent a splay fault of the main

structure. The intersection of the parallel legs exhibits the strongest response in "C6" and is considered to be interesting because of the possibility that this intersection represents a structural trap. To the north of the intersection, "C6" shows strong conductance and therefore this portion of "C6" is also considered a primary exploration target.

Conductor "C7" is interpreted to be a structural feature possibly related to conductor "C6". The best target within "C7" is on line 200N where a significantly stronger in-phase response is observed.

Conductor "C8" exhibits strong quadrature response suggesting that this conductor represents a conductive, possibly mineralized, structure. There appears to be some correlation between this conductor and a magnetic low feature, however the steep and variable magnetic gradients within "M2" make the interpretation of magnetic lineaments in this unit difficult.

6.2 Upper Gnat Pass Grid

6.2.1 Discussion of Results

Total field magnetic readings over the Upper Gnat Pass grid appear noise free and no cultural sources were observed. Magnetic readings range from 57360 nT to 60600 nT. The magnetic datum value for the total field magnetic profile map, Figure # G-6, was determined by statistical analysis to be 58300 nT. This datum value, which graphically shows if a magnetic reading is above or below the mean value for the grid, was also the threshold between dashed and solid contours on the total field magnetic contour map, Figure # G-7.

The magnetic contour map shows that the Upper Gnat Pass grid is divided into two magnetic zones. The northern portion as well as the extreme southern portion of the grid exhibit little magnetic activity. Values in this zone range from 58000 nT to 58300 nT.

The central portion of the grid exhibits steep magnetic gradients and variable intensity. The most intense highs usually have a short wavelength, approximately 12 meters. Longer wavelength highs appear to form lineaments with strike lengths of up to 400 meters. Four magnetic high lineaments are labeled on the magnetic contour map, Figure # G-7, and the magnetic profile map, Figure # G-6. The magnetic lineaments generally trend NNW and, except for "L4", show no correlation with VLF-EM conductors.

Magnetic lineament "L1" exhibits the largest magnetic highs on the grid, over 2000 nT, and has a wavelength of approximately 50 meters. To the south, "L1" stops abruptly on line 100N with no trace of the lineament observed on line ON.

Magnetic lineament "L2" exhibits weaker magnetic highs with more short wavelength noise than "L1". Lineaments "L3" and "L4" are parallel highs which exhibit weaker intensity and shorter wavelengths than "L1" and "L2".

VLF-EM data were noise free and no cultural sources were observed. Data quality was good and duplicate readings at baseline 0 show that in-phase and quadrature results were virtually identical when surveyed on different days. Field strength readings are dependent on transmitter power output and weather conditions therefore these results are time dependent. For this reason, level changes in field strength data result from data acquired on different days does not indicate instrument inaccuracy. Only NPM, Lualualei, Hawaii data were interpreted due to weak responses obtained from the NSS, Annapolis, Maryland transmitter.

One conductor system has been delineated on the Upper Gnat Pass grid. The conductor system is labeled "C1" on the VLF-EM profile map, Figure # G-5. Conductor system "C1" consists of two converging legs which merge to form a single conductor at 475E on line 500N. The converging legs of the system are characterized by broad, weak in-phase and field strength response with little quadrature response. At the intersection of the converging legs, "C1" exhibits strong in-phase and field strength response. Quadrature response is weak and follows the in-phase response (positive quadrature). To the north, "C1" gradually dies off until line 900N where no response is observed.

6.2.2 Conclusions

The Upper Gnat Pass grid generally exhibits weaker VLF-EM response than the Gnat Pass grid. A conductor intersection within conductor "C1" is interpreted to represent a conductive structural feature, possibly a structural trap or fault dilation. The conductor intersection is considered to be the best candidate for economic mineralization on the grid.

Strong magnetic high lineaments observed on the Upper Gnat Pass grid are interpreted to represent mafic or ultramafic dykes with relatively short strike lengths.

The relatively inactive magnetic areas to the north and extreme south of the Upper Gnat Pass grid are thought to represent weakly magnetized rock, possibly sediments or acidic intrusives. The abrupt change between active and inactive magnetic areas suggests that the magnetically active area was faulted off to the north and south.

7.0 RECOMMENDATIONS

VLF-EM and magnetic methods have delineated magnetic and conductive trends which have outlined several targets on the Gnat Pass grid warranting follow-up exploration. Surface geological investigations are recommended to determine the importance of the following targets which are listed in order of priority.

Conductor "C6" is, geophysically, the most promising exploration target on the grid based on the strength of the VLF-EM anomalies and the coincidence with magnetic lineament "L4". The highest priority target on the Gnat Pass grid is the intersection of the parallel legs making up the southern portion of "C6". Detailed investigations are recommended for the following targets within conductor "C6":

- 60W, Line 500N
- 50W, Line 550N
- 25W, Line 600N
- 40W, 90W, Line 450N
- 130W, Line 350N

Conductor "C5" is believed to be an important exploration target due to the intersection with "C1" and "L3" as well as its correlation with a localized magnetic high. Detailed investigations are recommended for the following targets within conductor "C5":

- 440W, Line 1200N (intersection with "C1")
- 475W, Line 650N (magnetic high)
- 475W, Line 600N (magnetic high)
- 500W, Line 800N (intersection with "L2")

"C2" is considered next in priority for follow-up exploration because of the strong conductance exhibited by this conductor. The following targets are recommended for surface investigation within "C2":

- 250W, Line 1150N
- 250W, Line 1250N

The remaining exploration targets are considered secondary to those listed previously and due to the numerous strong conductors discovered in the present survey secondary exploration targets are listed according to conductor labels rather than precise ground locations.

Conductor "C5" may be associated with primary target "C6" and is coincident with magnetic lineament "L5" and therefore is considered the first secondary target.

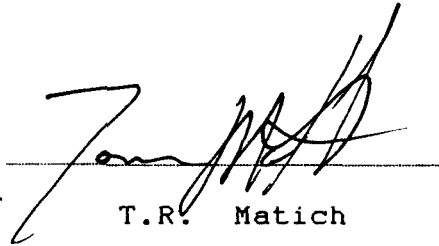
Conductor "C3" may also be associated with "C6" and has magnetic correlation, but shows weaker conductance than "C5".

Conductors "C1", "C4" and the unlabeled conductor in "M2" all warrant further exploration.

Geophysical targets on the Upper Gnat Pass grid are significantly fewer than on the Gnat Pass grid. The best target on the grid is an interpreted fault intersection at 450E on line 500N. The single conductor north of the intersection is considered a secondary exploration target.

Respectfully Submitted

INTERPRETEX RESOURCES LTD.
Vancouver, British Columbia

A handwritten signature in black ink, appearing to read 'Tom Matich', is written over a horizontal line. The signature is stylized and cursive.

T.R. Matich

Geophysicist

CERTIFICATE

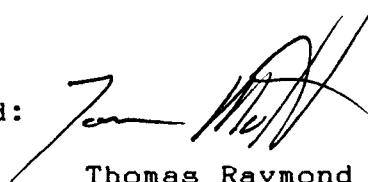
I, Thomas Raymond Matich, Geophysicist of Surrey, British Columbia, Canada, hereby certify that:

1. I received a B.Sc. degree in Geophysics from the University of British Columbia in 1982.
2. I currently reside at 13914 116 Ave, in the Municipality of Surrey, in the Province of British Columbia.
3. I have been practising my profession since graduation.
4. I hold no direct or indirect interest in, nor expect to receive any benefits from, the mineral property or properties described in this report.
5. This report may be used for the development of the property, provided that no portion will be used out of context in such a manner as to convey meanings different from that set out in the whole.
6. Consent is hereby given to the company for which this report was prepared to reproduce the report or any part of it for the purposes of development of the property, or facts relating to the raising of funds by way of a prospectus and/or statement of material facts.

Date: Sept 26, 1989

Surrey,
British Columbia

Signed:



Thomas Raymond Matich
B.Sc.

AUTHOR'S NOTE

Data interpreted in this report were accumulated without supervision by Interpretex Resources Ltd. and were supplied by the Client to the writer(s). These data and the locations on the ground from which these data were accumulated are, except when specified otherwise by the writer(s), assumed to be reliable and correct and were interpreted using this assumption.

APPENDIX I

INSTRUMENT SPECIFICATIONS

OMNI PLUS VLF Magnetometer System



Specifications*

Frequency Tuning Range	15 to 30 kHz, with bandwidth of 150 Hz; tuning range accommodates new Puerto Rico station at 28.5 kHz
Transmitting Stations Measured	Up to 3 stations can be automatically measured at any given grid location within frequency tuning range
Recorded VLF Magnetic Parameters	Total field strength, total dip, vertical quadrature (or alternately, horizontal amplitude)
Standard Memory Capacity	800 combined VLF magnetic and VLF electric measurements as well as gradiometer and magnetometer readings
Display	Custom designed, ruggedized liquid crystal display with built-in heater and an operating temperature range from -40°C to $+55^{\circ}\text{C}$. The display contains six numeric digits, decimal point, battery status monitor, signal strength status monitor and function descriptors.
RS232C Serial I/O Interface	2400 baud rate, 8 data bits, 2 stop bits, no parity
Test Mode	A. Diagnostic Testing (data and programmable memory) B. Self Test (hardware)
Sensor Head	Contains 3 orthogonally mounted coils with automatic tilt compensation
Operating Environmental Range	-40°C to $+55^{\circ}\text{C}$; 0 - 100% relative humidity; Weatherproof
Power Supply	Non-magnetic rechargeable sealed lead-acid 18V DC battery cartridge or belt; 18V DC disposable battery belt; 12V DC external power source for base station operation only.
Weights and Dimensions	
Instrument Console	2.8 kg, 128 x 150 x 250 mm
Sensor Head	2.1 kg, 130 dia. x 130 mm
VLF Electronics Module	1.1 kg, 40 x 150 x 250 mm
Lead Acid Battery Cartridge	1.8 kg, 235 x 105 x 90 mm
Lead Acid Battery Belt	1.8 kg, 540 x 100 x 40 mm
Disposable Battery Belt	1.2 kg, 540 x 100 x 40 mm

*Preliminary

EDA Instruments Inc.,
4 Thorncliffe Park Drive,
Toronto, Ontario
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Cables: Instruments Toronto
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In USA,
EDA Instruments Inc.,
5151 Ward Road,
Wheat Ridge, Colorado
U.S.A. 80033
(303) 422-9112

Printed in Canada

OMNIV 'Tie-Line' Magnetometer



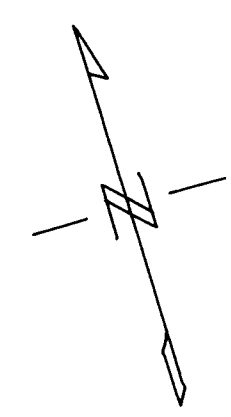
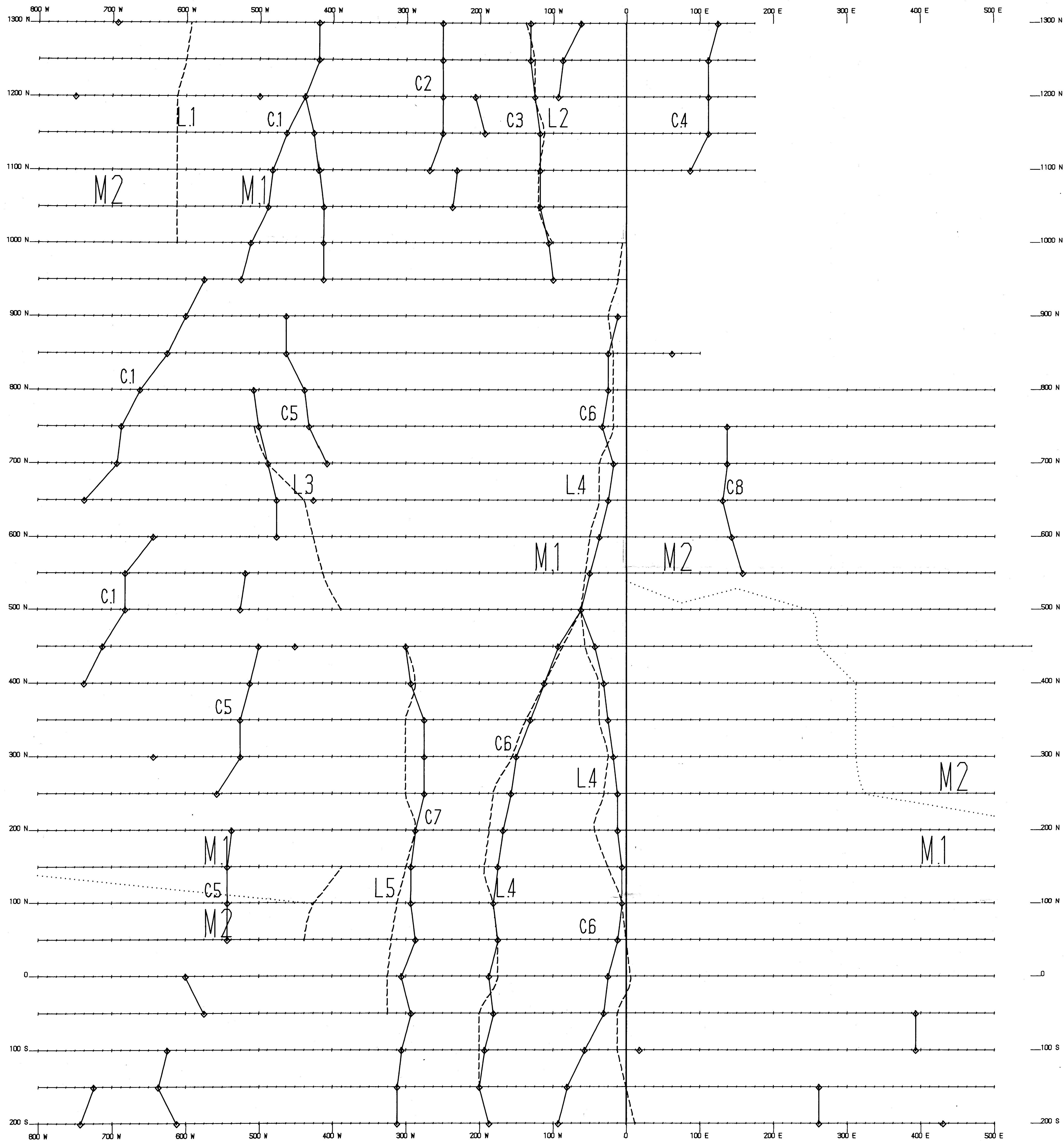
Specifications

Dynamic Range	18,000 to 110,000 gammas. Roll-over display feature suppresses first significant digit upon exceeding 100,000 gammas.
Tuning Method	Tuning value is calculated accurately utilizing a specially developed tuning algorithm
Automatic Fine Tuning	± 15% relative to ambient field strength of last stored value
Display Resolution	0.1 gamma
Processing Sensitivity	± 0.02 gamma
Statistical Error Resolution	0.01 gamma
Absolute Accuracy	± 1 gamma at 50,000 gammas at 23°C ± 2 gamma over total temperature range
Standard Memory Capacity	
Total Field or Gradient	1,200 data blocks or sets of readings
Tie-Line Points	100 data blocks or sets of readings
Base Station	5,000 data blocks or sets of readings
Display	Custom-designed, ruggedized liquid crystal display with an operating temperature range from -40°C to +55°C. The display contains six numeric digits, decimal point, battery status monitor, signal decay rate and signal amplitude monitor and function descriptors.
RS 232 Serial I/O Interface	2400 baud, 8 data bits, 2 stop bits, no parity
Gradient Tolerance	6,000 gammas per meter (field proven)
Test Mode	A. Diagnostic testing (data and programmable memory) B. Self Test (hardware)
Sensor	Optimized miniature design. Magnetic cleanliness is consistent with the specified absolute accuracy.
Gradient Sensors	0.5 meter sensor separation (standard), normalized to gammas/meter. Optional 1.0 meter sensor separation available. Horizontal sensors optional.
Sensor Cable	Remains flexible in temperature range specified, includes strain-relief connector
Cycling Time (Base Station Mode)	Programmable from 5 seconds up to 60 minutes in 1 second increments
Operating Environmental Range	-40°C to +55°C; 0-100% relative humidity; weatherproof
Power Supply	Non-magnetic rechargeable sealed lead-acid battery cartridge or belt; rechargeable NiCad or Disposable battery cartridge or belt; or 12V DC power source option for base station operation.
Battery Cartridge/Belt Life	2,000 to 5,000 readings, for sealed lead acid power supply, depending upon ambient temperature and rate of readings
Weights and Dimensions	
Instrument Console Only	2.8 kg, 238 x 150 x 250mm
NiCad or Alkaline Battery Cartridge	1.2 kg, 235 x 105 x 90mm
NiCad or Alkaline Battery Belt	1.2 kg, 540 x 100 x 40mm
Lead-Acid Battery Cartridge	1.8 kg, 235 x 105 x 90mm
Lead-Acid Battery Belt	1.8 kg, 540 x 100 x 40mm
Sensor	1.2 kg, 56mm diameter x 200mm
Gradient Sensor (0.5m separation - standard)	2.1 kg, 56mm diameter x 790mm
Gradient Sensor (1.0m separation - optional)	2.2 kg, 56mm diameter x 1300mm
Standard System Complement	Instrument console; sensor; 3-meter cable, aluminum sectional sensor staff, power supply, harness assembly, operations manual.
Base Station Option	Standard system plus 30 meter cable
Gradiometer Option	Standard system plus 0.5 meter sensor

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Printed in Canada



Scale 1:2500
 25 50 75 100 125
 (metres)

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19,138

LEGEND

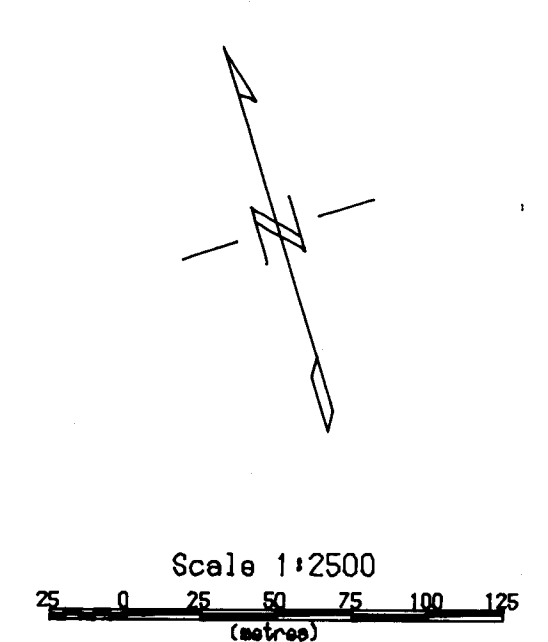
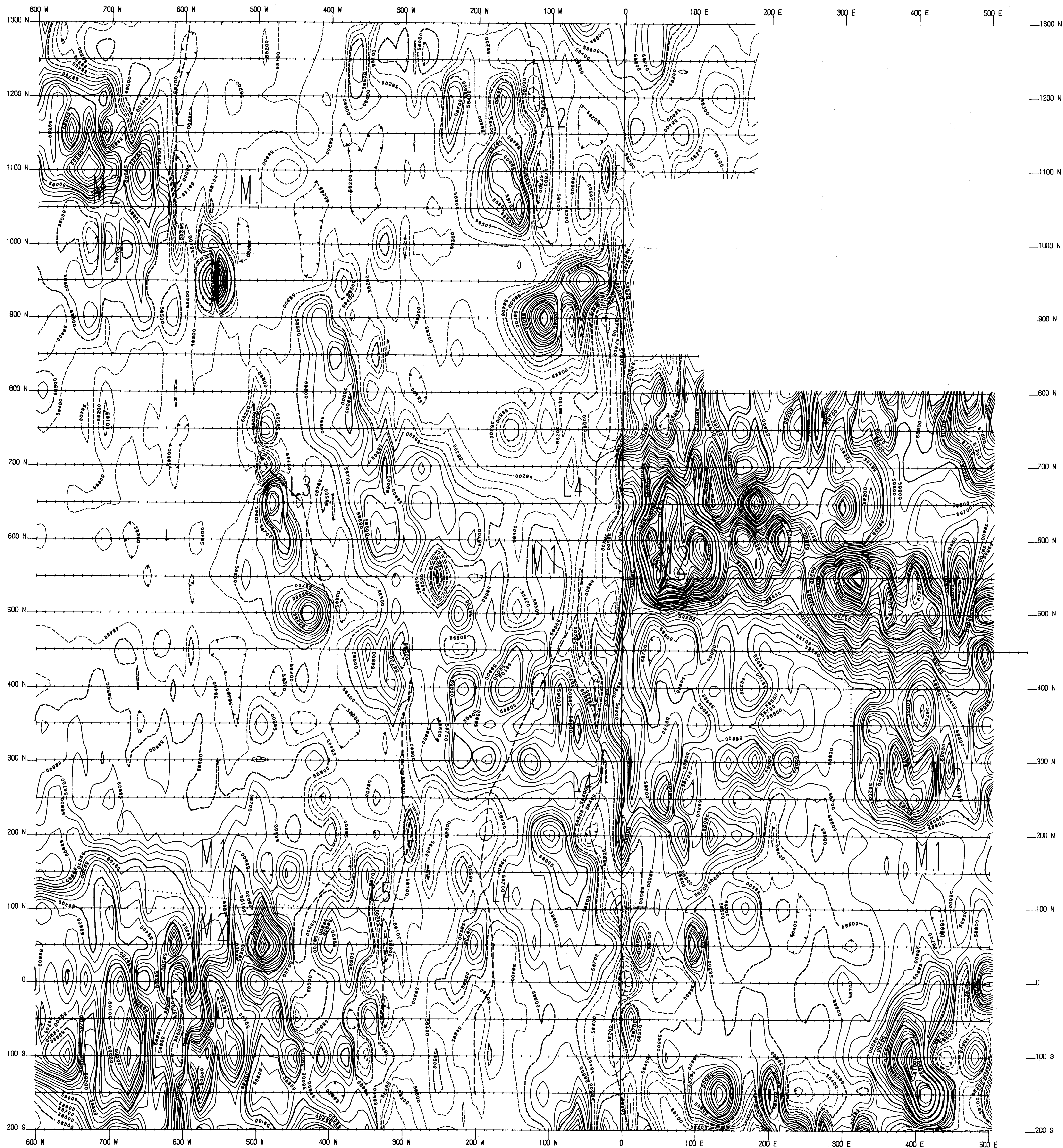
- ◊—◊ VLF-EM Conductor
- - - - - Magnetic Lineament
- Magnetic Unit Boundary
- M1
- M2

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Geophysical Interpretation Map

Gnat Pass Grid
 Liard Mining Division
 NTS: 104 1/4W Figure G-4
 Surveyed by Stetson Resource Management Corp.

Interpretex Resources Ltd.



LEGEND

- Contour Interval
- < 58600 > 58600
- nT nT
- 100 nT
- 500 nT
- Magnetic Lineament
- M1 Magnetic Unit Boundary
- M2

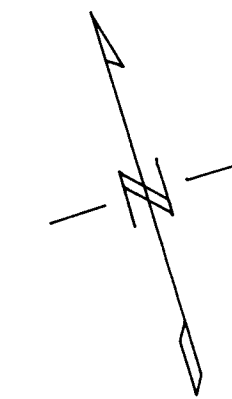
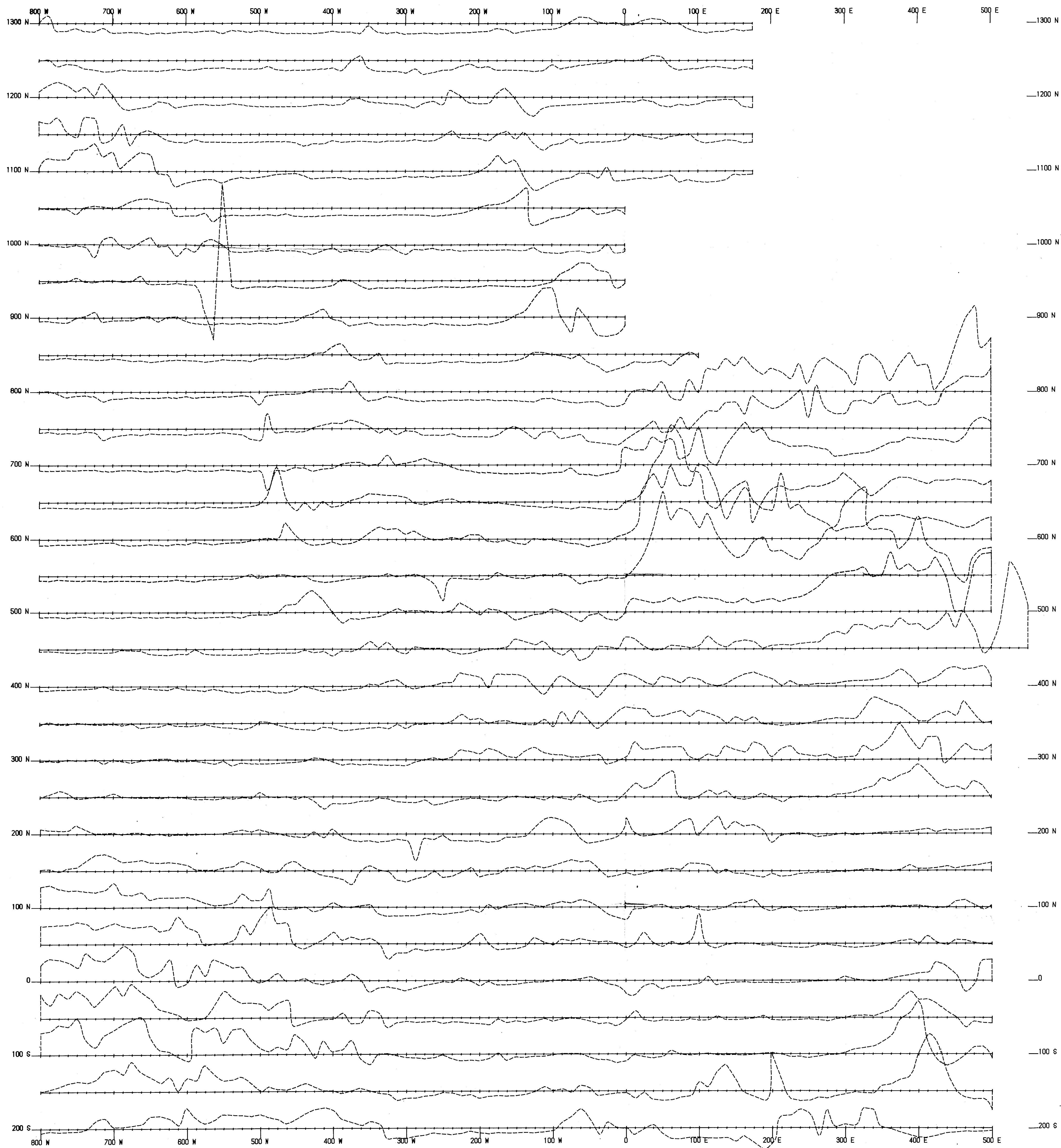
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Total Field Magnetic Contours

Gnat Pass Grid
Liard Mining Division
NTS: 104 1/4W Figure # 6-2
Surveyed by Stetson Resource Management Corp.
Interpretex Resources Ltd.



Scale 1:2500
 25 0 25 50 75 100 125
 (metres)

LEGEND
 - - - - - Total Magnetic Field Strength
 1 cm. = 1000 nT
 Total Magnetic Field Datum Value = 58600 nT

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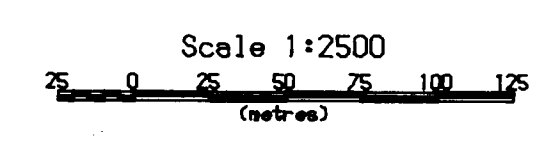
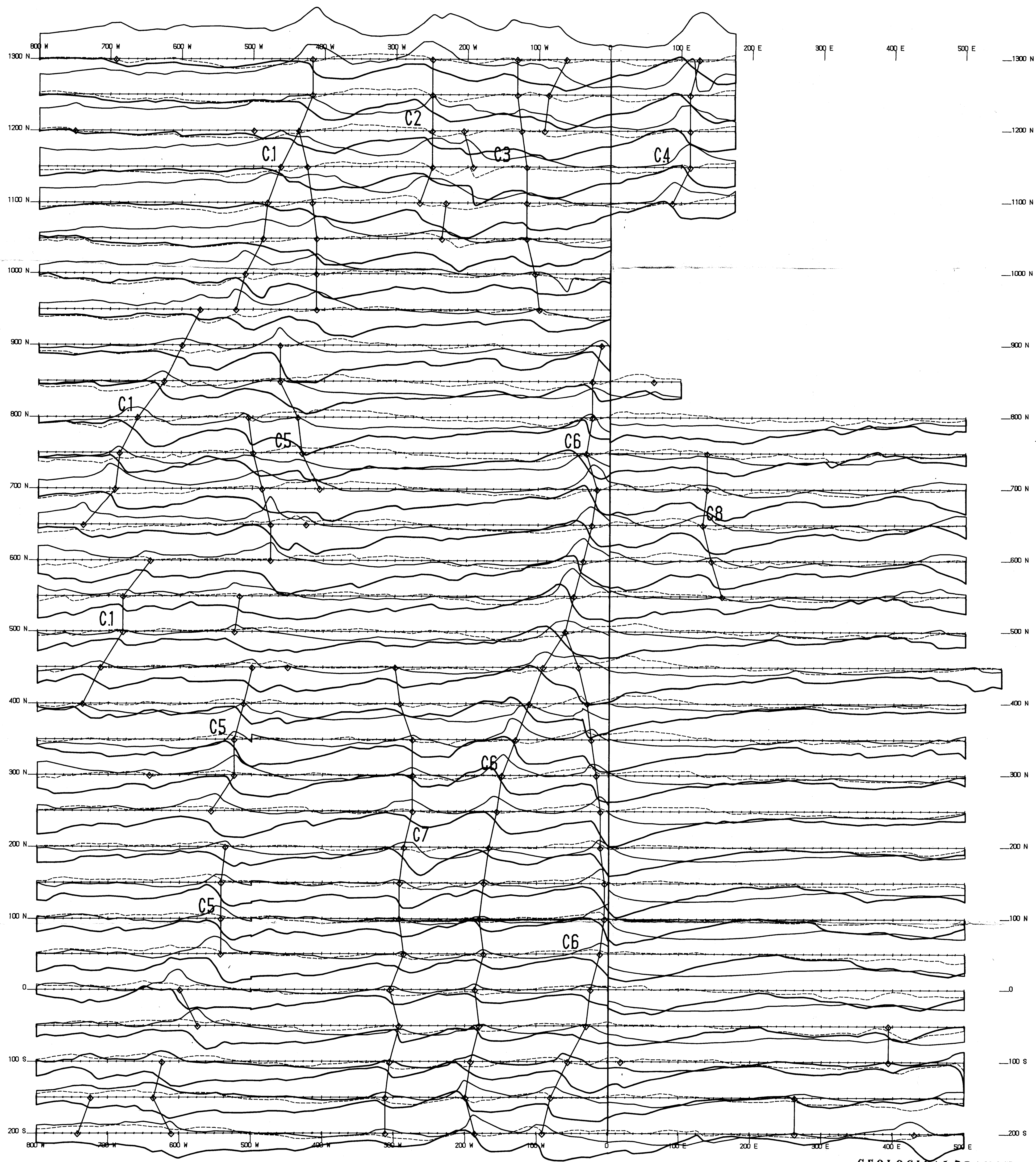
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Total Field Magnetic Profiles

Gnat Pass Grid
 Liard Mining Division
 NTS: 104 1/4W Figure # G-2
 Surveyed by Stetson Resource Management Corp.

Interpretex Resources Ltd.



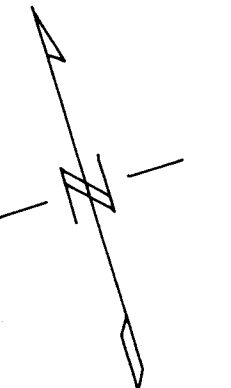
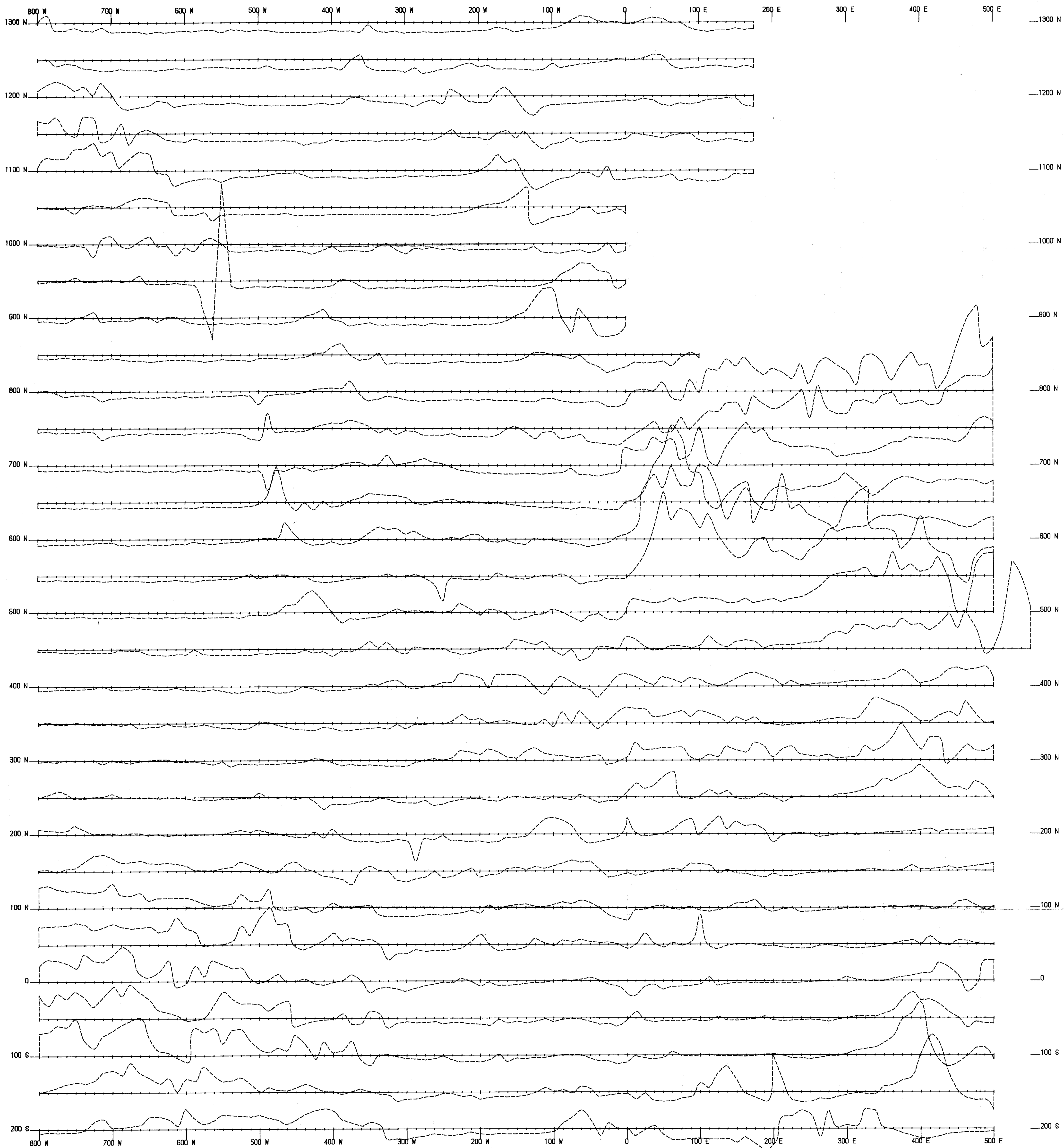
LEGEND

- Anomalous Inflection (In-Phase)
- In-Phase } 1 cm. = 30 γ
- Quadrature
- Field Strength 1 cm. = 5 units
- VLF-EM Conductor

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 VLF-EM Profiles
 NPM, Lualaba, Hu.
 Gnat Pass Grid
 Liard Mining Division
 NTS: 104 1/4W Figure # G-2
 Surveyed by Stetson Resource Management Corp.
 Interpretex Resources Ltd.



Scale 1:2500
 0 25 50 75 100 125
 (metres)

LEGEND
 - - - - - Total Magnetic Field Strength
 1 cm. = 1000 nT
 Total Magnetic Field Datum Value = 58600 nT

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 ASSESSMENT REPORT**

19,138
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 Total Field Magnetic Profiles

Gnat Pass Grid
 Liard Mining Division
 NTS: 104 1/4W Figure # G-2
 Surveyed by Stetson Resource Management Corp.
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