

86-931-15464

# G. SALAZAR S. & ASSOCIATES LTD.

INTERNATIONAL GEOLOGICAL CONSULTANTS

312 CEDARBRAE CRES. S.W.

CALGARY, ALBERTA, CANADA T2W 1Y4

TELEPHONE (403) 281-6889

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

# 15,464

ASSESSMENT REPORT

On The

**FILMED**

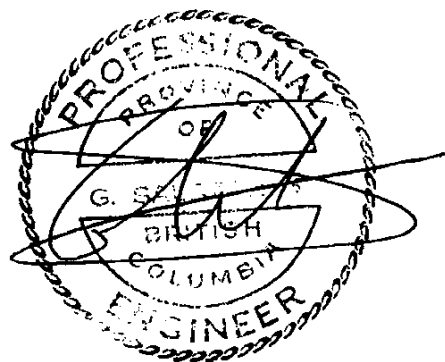
REDTOP PROJECT

For

**SUB-RECORDER  
RECEIVED  
JAN 20 1987  
M.R. # \_\_\_\_\_ \$ \_\_\_\_\_  
VANCOUVER, B.C.**

*Operator:* AMANDA RESOURCES LTD.  
*Owners:* F.B. WHITING  
C.A. WHITING  
AMANDA RES. LTD.  
By

G. SALAZAR S., P.Eng. (B.C.)



January 3, 1987

N.T.S.: 93L/9W  
PROVINCE: British Columbia.  
COUNTRY: Canada.  
LATITUDE: 54° 07' N 36.0'  
LONGITUDE: 126° 20' W 19.7'  
MINING DIVISION: Omineca

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## SUMMARY:

This report covers work carried out by G. Salazar S. & Associates Ltd. and Interpretex Resources Ltd. in the Redtop claims and at the request of Dr. F. B. Whiting, president of AMANDA RESOURCES LTD.

Work on the project started in September 9, 1986 and was completed on October 14, 1986. It consisted of the following:

### Linecutting:

Baselines: Three northerly trending (total: 9,000m) and one easterly trending (2,000m).

Crosslines: 23 easterly trending lines, 200m. apart, for a total of 37,996m.

Magnetometer Survey: 42.496 km.

VLF-EM Survey: 37.996 km.

Claim Surveying and prospecting.

The magnetometer survey confirmed the presence of a magnetic low feature centered along the northern half of Redtop Creek. This magnetic low, first proposed by Reader based on airborne magnetic data, was also described by him as the strike extension of the rhyolitic tuffs hosting the ore at the Topley-Richfield gold prospect.

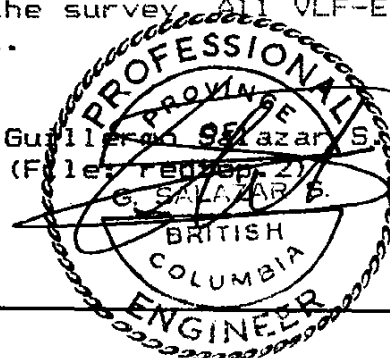
The magnetic low described above appears to be fault bounded along its eastern side. The magnetic lineament defining this possible fault also defines the location of the strongest VLF lineament found.

The magnetic survey also defined an area underlain by volcanics and sediments to the east and north of the magnetic low, as well as deep overburden or a sedimentary package to the west of it. It is strongly recommended that some of the more distinct magnetic features be used to define depth of overburden and to source prior to testing any of the indicated anomalies.

The VLF-EM survey was hampered by too much water content on the overburden at the time of the survey. All VLF-EM anomalies are, therefore, considered suspect.

January 3, 1987

Guillermo Salazar S., P.Eng.  
(File: redtop-2)





INTRODUCTION:

The work subject of this report was carried out at the request of Dr. F. B. Whiting, president of AMANDA RESOURCES LTD. ("Amanda"). It was supervised by the writer with the assistance of those named in Appendix No. 2.

PROPERTY DESCRIPTION:

Table No. 1 summarizes the pertinent title data related to this property. It was extracted from a report prepared by Barchan Geological Services Limited for Orion Resources Ltd. dated February, 1986.

TABLE No. 1: CLAIM STATUS

CLAIM NAME	CLAIM TYPE	No. UNITS	RECORD No.	RECORD DATE	EXPIRY DATE	OWNER (1)
Redtop #1	MGS	20	7440	12-11-85	1986	CAW
Redtop #2	"	16	7101	06-20-85	1987	ORL
Redtop #3	"	18	7102	06-20-85	1987	ORL
Redtop #1Fr.	Fr.	1	6820	11-28-84	1986	FBW
Redtop #2Fr.	Fr.	1	6821	11-28-84	1986	FBW
TOTAL:		56 units				

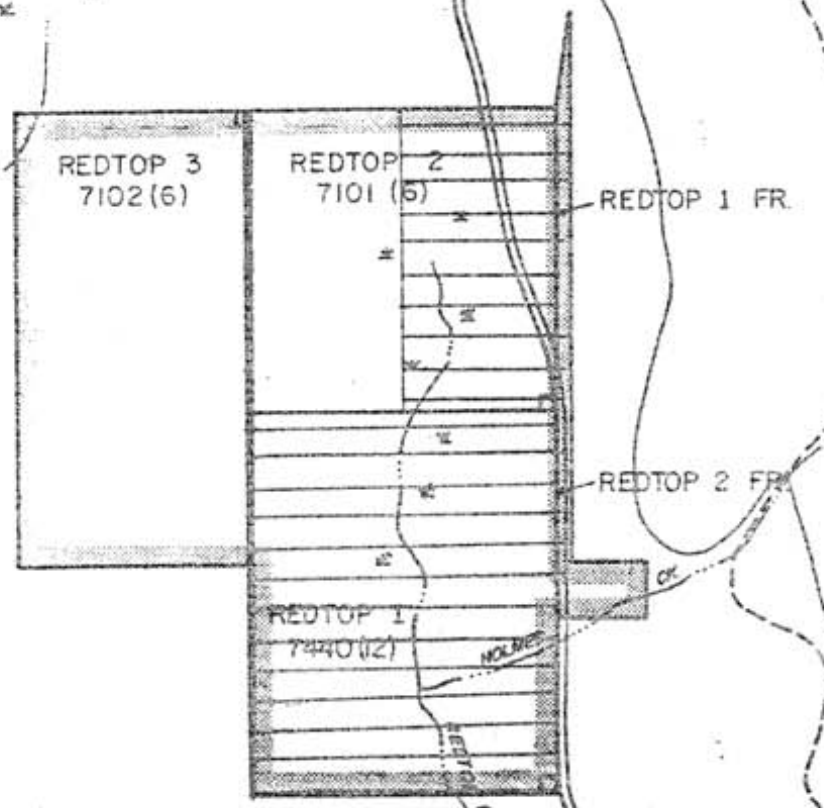
(1): CAW: Cora A. Whiting ORL: Orion Resources Ltd.  
FBW: Francis B. Whiting.

The expiry dates shown above do not included the work described in this report, which was recorded with the Gold Commissioner's office at Smithers this fall.

According to Dr. Whiting, Amanda has entered into an option agreement with the owners of record.

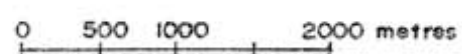
LOCATION:

The claims are located approximately 12.0km north of the village of Topley, immediately west of the highway connecting



**LEGEND:**

- CLAIM BOUNDARY
- DISUSED ROAD
- PAVED HIGHWAY
- CREEK
- TOPOGRAPHY (feet)
- SWAMP



MODIFIED AFTER BARCHAN GEOLOGICAL SERVICES LTD.

G. SALAZAR S. & ASSOCIATES LTD.



**AMANDA RESOURCES LTD.**

**REDTOP PROPERTY CLAIM MAP IDEALIZED GRID**

Revised by	Date	NTS93L-99	Date 10-88	<b>G. SALAZAR S. &amp; ASSOCS. LTD.</b> INT. GEOL. CONSULTANTS 312 CEDARBRAE CRESC. S.W. CALGARY ALBERTA
		Work by:	G. Salazar S.	
		Drafted by:		
		Figure No.:	2	

Granisle to Topley. Topley is located on the Yellowhead highway, half way between Prince George and Prince Rupert. It is approximately 640.0km. northwest of Vancouver and 240.0km. west of Prince George. See Figure No. 1.

The claims are about two kilometers north of the Topley Richfield and Golden Eagle Mines, the only significant gold producers in the immediate area.

#### ACCESS:

The village of Topley, B.C. is connected to the port of Prince Rupert and to the city of Prince George by the Yellowhead Highway (# 16) and by a Canadian National Railroad trunkline connecting the two cities. Scheduled daily commercial air service is available from Vancouver to Smithers, which is 84.0 km. northwest of Topley by road. The paved highway connecting Topley to the Granisle Copper-Gold mine passes through the eastern edge of the claims.

#### PHYSIOGRAPHY AND CLIMATE:

The region north of Topley lies within the Nechako Plateau and is, characteristically, an area of gently rolling topography with occasional peaks reaching elevations to 1,500.m. The topography on the claims is flat, ranging in elevation from 1,000.m. to 1,070.m. Tachek Mountain is the height of land at 1,656.m. and is about 5.0km east of the claims. Clear cut logging of marginal timber has been carried out in the north end of the property. The area on either side of Redtop Creek is primarily a swampy lowland.

The claims area is drained by Redtop and Holmes creeks which flow to the south into the Bulkley River.

Warm summers and cold winters characterize the weather of the interior plateau of British Columbia. Precipitation is moderate. Occasional very low temperatures in winter are interspersed with warmer periods. Moderate depths of snow cover the region from about November through April.

#### PREVIOUS EXPLORATION:

Reader (1986) reports that two waves of exploration activity have occurred in the area north of Topley.

The Topley-Richfield prospect, found in 1926, prompted a



spur of activity in the area between it and Topley that lasted until the Great Depression. At the Topley-Richfield, the ores are reported to occur within highly altered volcanic rock (coined "topleyite" at the time) in laminations, quartz veins and shears carrying exceptional grades of gold and silver. Reader quotes H. Lang (1941) and reports a shipment of such ore from the Golden Eagle as follows: 1,016 lbs. grading 0.20 oz/ton gold, 253.0 oz/ton silver, 0.9% copper, 11.1% lead and 11.4% zinc.

In 1969, prospecting for porphyry-type copper and molybdenum deposits in the area was intensified with the release of airmagnetic map No. 53126. This work resulted in the staking of the Summit 1-49 claim group which extended westward from Tachek Mountain to encompass portions of today's Redtop group of claims. Exploration at this time included airborne and ground electromagnetics and magnetics, geochemistry, induced polarization and diamond and rotary drilling. Weak copper and molybdenum mineralization was discovered along the fringes of the granitic intrusion. Reader lists all assessment reports covering the work done in this period. Much of this earlier work was concentrated in the vicinity of the Topley intrusive contact, thus little or no drilling was undertaken on the ground now covered by the Redtop claims.

The renewed interest for gold prompted Cobre Explorations Ltd. and Cominco Ltd. to carry out over 20,000.0ft. of drilling at the Topley-Richfield mine. Cobre reports that 170,000 tons grading 0.124 oz/ton gold and 5.6 oz/ton silver were proven up by drilling a westerly dipping horizon of rhyolitic (?) tuffs, flows (?) and breccias. Here, the ore occurs in stratabound laminations that may be of volcanogenic origin.

Reader's (1986) detailed "Summary of Indirect Exploration Over The Redtop Claims" ( pp.7-8 ) succinctly describes all the work done on the property.

#### WORK DONE IN 1986:

Crews from G. Salazar S. & Associates Ltd. moved into the area on September 7th, 1986. The following work was carried out on behalf of the Company:

#### Linecutting:

Baselines: Three northerly trending (total: 9,000m)  
and one easterly trending (2,000m).  
Crosslines: 23 easterly trending lines, 200m.

apart, for a total of 37,996m.

Pickets were placed every 50.0m. along baselines and every 100.0m. along crosslines. Lines were cleared with sandwicks and axes and bearings were measured with Silva compasses. Baseline distances were measured with a 50.0m. wire chain while a hipchain was used to measure the distances along all crosslines. No slope correction of distances was deemed necessary.

The grid was laid out by placing a 2,000.0m. long westerly trending baseline which started from the LCP for claim Redtop #1 and ended at station L0+00N/O+00E. From this point, the O+00E baseline was cut to L24+00N for a distance of 2,400.0m. The baseline was then moved 1,000.0m. east and extended to L45+00N along L10+00E. A northerly trending baseline was also established along the Topley to Granisle Highway. This baseline started from the same LCP described above and continued northerly to L45+00N. Until the eastern baseline was properly established, all crosslines were started from the O+00E baseline.

Magnetometer Survey: 42.496 km.

For this survey, a Geometrics G-856 magnetometer was set as a base station at the LCP for claim Redtop #1. Automatic base station readings were taken every 30 seconds while the field unit recorded readings every 25.0m. Detailed coverage with a spacing of 5.0m. was started wherever the field man encountered a magnetic gradient greater than 200.0 gammas between stations.

Raw field and base data was processed daily with a Hewlett-Packard #85 computer using a program specially designed by Geometrics to produce diurnally corrected field data. The established procedure was:

The data was checked for spurious readings by running a statistical package that reported the high, low, mean and median values as well as the standard deviation and noise levels. During the length of the survey, the latter two parameters remained virtually unchanged for the raw base data.

The raw base data was then smoothed by averaging the data in 300 second intervals with a 90 second rolling gate. The computer then diurnally corrected the field data by using the smoothed base data.

The diurnally corrected field data is presented in Figure No. 3 as fence diagrams on an ideal grid where the separation between stations is 25.0m. Here, each line is used as the base for the fence with a constant value of 57,500 gammas.

The vertical magnetic scale is 1.0cm equals 1,000.0 gammas. The fence diagram method of presentation was chosen in order to reduce the grid bias that would result otherwise.

VLF-EM Survey: 37.996 km.

Amanda engaged Interpretex Resources Ltd. of Vancouver, B.C., to carry out a Very Low Frequency Electromagnetic (VLF-EM) survey over the grid. An EM-16 unit reading Seattle was used for the survey. Appendix No.3, written by Edwin Rockel, describes this survey in detail.

#### Claim Surveying and prospecting.

All claim posts found during gridding were located with respect to the grid and are plotted on Figure No. 4. The LCP for claim Redtop #3 was located with respect to the north end of the L10+00E baseline and to the locations of the north corners of Redtop #2.

The following old claim posts were found:

1. Initial Post for Zac 1 and 2, tag Nos. 917578-79, staked on November 13, 1971.
2. Initial Posts for Cleo 23 and 24 and final posts for Cleo 21 and 22. The former were staked due west, left and right, respectively, by Roy Woolverton. An Underhill & Underhill Tag #213 has been nailed to the top of the post. Several other posts of this claim group were also found.
3. Several of the Redtop claim posts were found and tied in to our grid.

Difficulty was found in matching the road layout and survey with the compass readings recorded along the west side of the highway. The need to rely on the best available survey instead of compass readings in this area was confirmed when we secured access to a copy of the topographic map used by Forestry, which is at a scale of 1:20,000. Perhaps these compass variations are due to the road fill.

No outcrops were found along the cut lines or during prospecting and surveying.

Field work was completed on October 16, 1986.

#### REGIONAL GEOLOGY:

The REDTOP property is situated near the western fringe

of the Intermontane Belt. The Triassic age Takla Group rocks form the basement in the Topley area. They consist of mafic volcanics and submarine sedimentary sequences including volcanically derived sandstone, argillite, siltstone and limestone. The Hazelton group rocks overlie the Takla group along an angular unconformity. These are an extensive sequence of submarine and sub aerial volcanics and related sediments that were localized by a major zone of crustal weakness called the Skeena Arch. The Topley plutons are the intrusive equivalents to the Hazelton volcanics.

Tertiary granitic intrusions to the north, west and south of the Topley area were emplaced at the same time as basalt fissure eruptions emplaced the Endako Group flows which cover most of this area. Glacial deposits have further enhanced the subdued topography.

#### LOCAL GEOLOGY & MINERALIZATION:

The previously postulated lack of outcrop was confirmed once again this season. Thus, Reader's statement that ... "the discussion of mineral potential is tentative and based on the results of adjacent drilling, extrapolation of nearby surface geology to the east and geophysical surveys..." is confirmed. Further, his description of the property's geology and potential also stand and is, therefore, hereby quoted.

... "H.W. Tipper (1976) shows the claims to be covered mainly by Quaternary glacial drift with a small area overlapping the REDTOP #1 on its southern half presumed to be a platter of flood basalts belonging to the Tertiary China Nose breccias. Lay (1926) in discussing the Topley district refers to the Beaver Dam property which, according to his map and descriptions, must lie on the REDTOP #1 claim. In the banks of Redtop Creek [within the Beaver Dam property] was discovered an outcrop of rock indistinguishable from the "topleyite" which hosts the Topley-Richfield mine ore. The rock samples taken by Lay did not grade, but the outcrop is evidence for [of] felsic horizons on the REDTOP property. Otherwise, one shallow drillhole reported by Ducanex Resources Ltd. (GEM, 1972) near the claim boundary between REDTOP #1 and REDTOP #2 is said to have intersected the Tertiary basalts." [See Figure No. 4].

"...Ducanex Resources Ltd. reports intersecting graphitic siltstone and limestone in drillholes east of the REDTOP #1 Fraction (GEM, 1972). These are attributed to the Triassic Takla formation and would therefore be the oldest

rocks in an upright section dipping to the west..[as is at the Topley-Richfield mine]. These sediments are then cut off abruptly further east by a large body of granitic composition belonging to the family of Jurassic Topley Intrusions..."

The mineral deposits sought are similar to those present at the Topley-Richfield mine. A description of the geological setting there is, therefore, appropriate. The following is also extracted from Reader (1986):

"The Topley-Richfield mine workings penetrated varied rocks belonging to the Hazelton Group volcanics. Attitudes on bedding taken from within the mine and in rare outcrops on surface vary in strike from north to northwest and in dip from 35 to 85 [degrees] (MMAR, 1928, Tipper, 1976)..."

'Lang (1941) summarizes the mineralogy of the groups of mines and showings north of Topley by defining three types of deposit[s]: 1)veins and replacements containing pyrite, chalcopyrite, sphalerite, galena, and tetrahedrite in a gangue of quartz and calcite, 2) veins containing specularite and some pyrite and chalcopyrite in a gangue of quartz and epidote, and 3) veins containing galena and chalcopyrite in a gangue of carbonate and barite.'

'Recent drilling at the Topley-Richfield mine has provided new insight to the nature of the ore types and their genesis in the area. Whiting (1981) and Cominco (1983) conclude that the '65 foot mineralized replacement zone' of Lay (1926) is in fact an altered zone of fragmental rhyolite which hosts stratabound and laminated sulphides considered to be sedimentary in nature.'..."

#### GROUND MAGNETIC SURVEY:

The magnetic signature found over the Redtop claims is presented in Figure No. 3 as fence diagrams. Figure No. 4, in turn, represents a preliminary interpretation of this data. Also included in this last figure are previous results and the strongest VLF-EM features found and reported by Interpretex (See Appendix B).

The low magnetic feature centered along the northern half of Redtop Creek and possibly bound by Holmes Creek to the south is located where Reader reported such a magnetic low to occur (See his Figure No. 4 and page 8). It is this magnetic low which he linked to the low that runs over the rhyolitic tuff

hosting the ore at the Topley-Richfield mine.

This low magnetic feature, as reported in our Figures No. 3 and 4, has finite east and west walls. The eastern wall is much stronger and may represent a fault. According to Interpretex's interpretation of the VLF-EM survey, a weak VLF-EM anomaly coincides with this magnetic lineament between Lines 16+00N and 26+00N.

The magnetic signature of the area to the west of the magnetic low described above has an unusually flat magnetic signature which may represent sediments and/or deep overburden.

The area to the north and east of the magnetic low and labelled "volcanics" in our Figure No. 4, in turn, may represent a stack of volcanics and sediments. Some of the features recorded within this zone require detailed analysis for depth and size of source body, in particular the features found along the east baseline between Lines 10+00N and 12+00N and Lines 22+00N and 24+00N.

This survey did not find the magnetic high feature reported to hook around the northern edge of the magnetic low feature reported above.

The magnetic data should be carefully analysed to determine the following:

1. Depth of overburden in the vicinity of certain features.
2. Better determination of the western boundary of the "volcanics".
- and 3. Careful comparative analysis of the magnetic signature of the "volcanics" to the north and south of L22+00N to determine if there is, in effect, different aged volcanics in this environment, as seems to be the case according to the drillhole data reported by others.

#### VERY LOW FREQUENCY ELECTROMAGNETIC SURVEY (VLF-EM):

A detailed description of this survey is found as Appendix B.

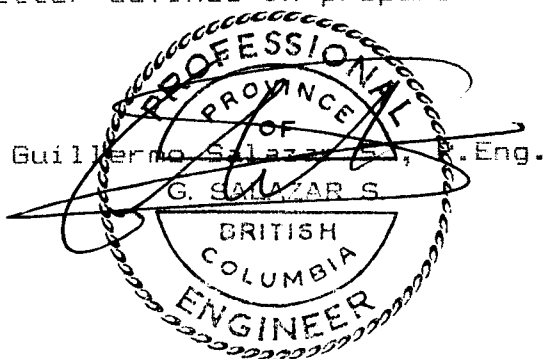
The survey was hampered by the unusually high water content of the clayey surface soils which made survey conditions less than favourable for the geophysical method in use. This is confirmed in Interpretex's interpretation and conclusions, where they state that ... "All VLF-EM anomalies show low conductance,

are shallow and exhibit poor profile character, thus conductivity observed within the present survey area is believed to result from conductive overburden such as clay layers..."

**RECOMMENDED PROGRAM:**

Detailed investigation of the magnetic signatures reported should be carried out to determine the depth of overburden and potential significance of these features. Should the magnetic low found over the center of the claims not be related to a thicker overburden load, this area and, specially, its eastern boundary should be better defined in preparation for drill-testing.

January 3, 1987



REFERENCES:

1. Carter, N.C. (1981): Porphyry Copper and Molybdenum Deposits, West-Central British Columbia, B.C. Ministry of Energy, Mines and Petroleum Resources Bulletin 64.

2. Cobre Exploration Ltd. (1981): Corporate brochure summarizing exploration results on the Topley-Richfield property.

3. Reader, J.F. (1986): "Examination of the Redtop Property - Topley Area, Omineca Mining Division, British Columbia; an Engineering Report prepared by Barchan Geological Services for Orion Resources Ltd.

4. Rockel, E.R. (1986): Geophysical Survey Results - Redtop Project. Included as Appendix B, this report.

5. Whiting, F. B. (1981): The Richfield, Gold-Silver-Lead-Zinc property - unpublished report.

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## APPENDIX No. 1

### G. SALAZAR S. CERTIFICATE

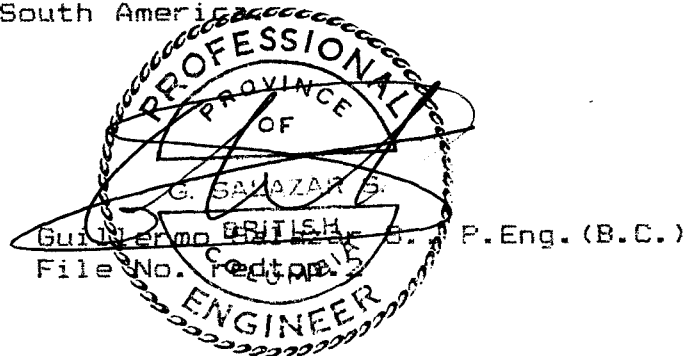
I, Guillermo Salazar S., of 312 Cedarbrae Crescent SW, Calgary, Alberta T2W-1Y4, hereby certify that:

1. I attended and graduated from the Universidad Nacional de Ingenieria de Lima, Peru with a Bachelor's of Science and a Engineering Degrees in Mining Engineering and Mining Geology in 1967. I also attended Harvard University from which I was awarded a Master's of Arts degree in Economic Geology in 1969.

2. I am a registered Professional Engineer in the Province of British Columbia and Professional Geologist in the Province of Alberta. I am also a member in good standing of the Society of Economic Geologists of America and of the Society of Mining Engineers of the AIME.

3. I have in excess of fifteen years of experience in my field in the U.S.A., Canada and South America.

Calgary, Alberta.



January 3, 1987

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## APPENDIX No.2

AMANDA RESOURCES LTD.

Statement of Expenditures

at the

REDTOP GROUP OF CLAIMS

For The Period Of

September 12th to October 16, 1986

MOBE/DEMOBE: \$825.70

### FIELD COSTS:

#### 2.1: Salaries:

G. Salazar S., general supervision, surveying, mapping, sampling and prospecting; September 12, 14, 22, October 2-4, 6, 7 and 9:

9 days @ \$350.00 /d \$3,150.00

C. Armstrong, magnetometer operator, linecutter; October 1-9 and 12; 10 days @ \$150.00/d \$1,500.00

J.W. Johnson, linecutter, September 22, October 1, 3-4, four days @ \$125.00/d \$500.00

S. Robinson, linecutter, September 13-15, 22, 28-30, October 1, 3-4, 5(1/4), 6-7;  
12.25 days @ \$125.00/d \$1,531.25

M. Roney, linecutter, September 28, October 1, 3-6; six days @ \$125.00/d \$750.00

R. Wilson, linecutter, September 13-15, 22, 29-30, October 1, 3-4, 5(1/4), 6-7;  
11.25 days @ \$125.00/d \$1,406.25

=====  
\$8,837.50

2.2: Room:

Charges against this project are appropriated according to the number of actual man and room days chargeable. Room charges for T. Matich (See Interpretex contract, item 2.7) are also included.

Total Room Days: 80	Room days charged: 29	
$\$2,392.84 \times 29/80 =$		\$867.40

2.3: Board:

(As per room charges)

Total Meals: 390	Meals charged: 147
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Meals bought at hotel: \$2,155.56
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Groceries: \$657.98
---------------------

TOTAL: \$2,813.54
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Redtop charges: $\$2,813.54 \times 147/390 =$	\$1,060.49
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2.4: Transportation:

Trucks:

4x4: September 22, October 2, 4, 6-7, 9; six days @ \$50.-	\$300.00
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Crew carrier: September 13-15, 22, 28-30, October 1-12; 19 days @ \$15.-/day	\$285.00
---	----------

Gasoline:	\$339.03
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Freight:	\$221.45
----------	----------

=====	\$1,145.48
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2.5: Equipment Rental:

Linecutting: 34.5 days @ \$7.50/day	\$258.75
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Magnetometers:

Unit #1; 12 days	\$500.00
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Unit #2; 12 days	\$500.00
------------------	----------

Computer, 8 days @ \$15.00	\$120.00
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=====	\$1,120.00
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2.6: Consumables:

String, flagging, pens	\$374.75
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Pickets	\$215.63
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Sundry	\$12.61
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Telephone	\$35.79
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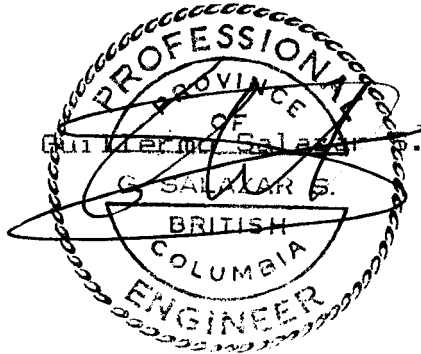
=====	\$638.78
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2.7: Other Contractors:

Interpretex Resources Ltd. charges	\$1,409.50
G. Salazar S. report and draughting:	\$2,500.00
	=====

TOTAL: \$18,404.85

Calgary, November 12, 1986



G. Salazar S., P.Eng.

APPENDIX No. 3

Geophysical Report on the

REDTOP PROJECT

by

E.R. Rockel (Interpretex Resources Ltd.)

# GEOPHYSICAL SURVEY RESULTS REDTOP PROJECT

## 1. SUMMARY

VLF EM response in this area is typified by inconsistent VLF EM anomaly profile character showing low conductance and shallow depth, suggesting conductive overburden as the cause. Magnetic information may be useful in estimating depth of overburden and establishing regional geologic trends.

If other information supports continuing exploration in this area then a deep penetrating low frequency electromagnetic system such as Elfast Turam is worth consideration. Based on present VLF EM data, no additional work is warranted.

## 2. SURVEY SPECIFICATIONS

### 2.1 Survey Parameters

- survey line separation - 200 meters and 400 meters
- survey station spacing - 25 meters for all electromagnetic survey
- base line direction - North-South
- survey lines were perpendicular to the base line
- readings taken using Seattle VLF transmitter
- survey total: VLF-EM - 31.825 kilometers

### 2.2 Equipment Parameters

#### VLF Electromagnetic Survey

- Geonics EM-16 used for all survey
- transmitting station: - Seattle, Washington
- in-phase (dip angle) and out-of-phase (quadrature) components measured in percent at each station
- direction faced: - westerly

## 3. DATA

### 3.1 Calculations

- VLF Electromagnetic Survey
  - Fraser Filter values (after Fraser, 1969) were calculated for in-phase readings for all lines in the area

### 3.2 Presentation

- VLF Electromagnetic Survey
  - VLF EM in-phase readings plus calculated Fraser Filter and first derivative values are presented in an appendix in the form of tables showing values located with respect to line number and station number
  - VLF EM in-phase and out-of-phase readings are presented in profile form on a plan map at a scale of 1:7,500
  - VLF EM Fraser Filter values are presented as contours on plan maps at a scale of 1:20,000
  - VLF EM Fraser Filter values are presented in the form of a 3-D plot as a visual aid
- Interpretation
  - significant results of the geophysical survey are presented on the VLF EM profile map at a scale of 1:7,500

## 4. INTERPRETATION

### 4.1 Discussion of Results

On this project topographic effect on VLF EM data is evident in the east part of the area. Topographic effects may be seen on VLF EM data in this region in the form of a negative bias in the readings when the operator was facing down hill. Most of the effect of topography is filtered out when the Fraser Filter is applied to the VLF EM in-phase data.

VLF EM data were interpreted using plotted profiles as well as the Fraser Filter contours. Fraser Filter contours outlined a few weak anomalous trends. Profiles, in most cases, showed a somewhat inconsistent character which made correlation of anomalies and continuation of conductor axes from line to line difficult.

### 4.2 Conclusions

VLF EM profile character which is inconsistent from line to line is typical of overburden conductivity. Unpredictable changes in thickness, width and conductance of flat lying conductive overburden within short distances plus edge effects from meandering conductive layers will limit the accuracy of any line to line interpretation of conductor axes. In the present case an attempt was made to interpret the continuation of conductivity between some anomalies with character slightly similar or where anomalies seemed to form a trend. The above comments regarding accuracy must be considered when assessing all interpreted conductors in this area. The addition of magnetic information could enhance the accuracy of trend determination by establishing regional geologic trends or by correlating magnetic anomalies with VLF EM anomalies.

All VLF EM anomalies show low conductance, are shallow and exhibit poor profile character, thus conductivity observed within the present survey area is believed to result from conductive overburden such as clay layers.

## 5. RECOMMENDATIONS

Magnetic information within the survey area should be examined to determine if geological trends can be identified and if possible calculate a depth to magnetic bodies as an aid in estimating depth of overburden. Deep conductive overburden will prevent penetration by higher frequency electromagnetic methods, therefore if geological, geochemical or geophysical information (other than VLF EM data) suggests more exploration is warranted then a deep penetrating low frequency method such as Elfast Turam should be considered. Based only on the present VLF EM information no additional work is justified in this area.



## REFERENCES

1. Fraser, D.C., 1969. Contouring of VLF EM Data, Geophysics, Vol. 34, No. 6, December, 1969, Tulsa, Oklahoma.

### Present Survey Expenditures

1. Mobilization-demobilization	
- air fare	\$ 374.00
- personnel and equipment (2 days)	\$ 540.00
2. Survey Cost	
- personnel and equipment	
- Trac Lake - 9 days x \$270/day	\$2,430.00
- Redtop - 2 days x \$270/day	\$ 540.00
3. Interpretation	
- Trac Lake - 2.5 days x \$275/day	\$ 687.50
- Redtop - 1.5 days x \$275/day	\$ 412.50
	-----
TOTAL COST	\$4,984.00
	-----
LESS ADVANCE	(\$2,000.00)
	-----
TOTAL OWING	\$2,984.00

## PERSONNEL

The following personnel worked on the property and/or were engaged in supervision for all or part of the days noted (includes mobilization and demobilization):

Name	Position	Dates
T. Matich Surrey, B.C.	Geophysicist - Trac Lake - Redtop	Sept. 30 - Oct. 9/86 Oct. 10 - Oct. 12/86

The following personnel were involved in data preparation or reporting of the project for part or all of the days noted:

Name	Position	Dates
E.R. Rockel Richmond, B.C.	Consulting Geophysicist - Trac L. - Redtop	Oct. 22, 23, 27 & 28/86 Oct. 24, 26 & 29/86

**VLF Electromagnetic Value Tables**

INTERPRETEX RESOURCES LTD.

VLF EM Matrix for IN-PHASE readings

EM-16 In Phase values in %, Line Spacing 200 m., station interval 25 m.

GRID: "Redtop"

FACING: westerly

TRANSMITTER: Seattle

File Name: VLF45-12 STATION #'s are all eastings

WINDOW: #1 In Phase values vs. Station

STA	InP	InP	InP	InP	InP	InP	InP	InP	InP	InP	InP	InP	InP	InP	InP	InP	InP	InP	
	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
	45	42	40	38	36	34	32	30	28	26	24	22	20	18	16	14	12		
	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	
2275							*												
2250							-17	*											
2225							-19	-22	*	*									
2200				*	*		-17	-16	-17	-14	*	*							
2175				-13	-13		-18	-13	-10	-14	-12	-16							
2150				-17	-15		-17	-14	-12	-13	-16	-27							
2125				-15	-16		-16	-11	-10	-13	-12	-22	*						
2100				-12	-13		-13	-10	-5	-11	-12	-19	-17		*				
2075				-10	-12		-17	-11	-6	-13	-9	-12	-19	*	-13				
2050				-9	-12		-11	-6	-6	-12	-8	-10	-19	-18	-15	*			
2025	*	*	*	-14	-8		-9	-4	-8	-10	-8	-9	-12	-19	-9	-15	*	*	
2000	-10	-12		-9	-11		-7	-8	-6	-8	-6	-9	-9	-6	-20	-8	-12	-13	-11
1975	0	-12		-8	-12		-8	-8	-5	-7	-9	-7	-10	-2	-8	-9	-9	-12	-13
1950	-13	-16		-10	-6		-7	-2	-6	-7	-6	-5	-7	-4	-1	-9	-10	-11	-10
1925	-11	-12		-8	-7		-11	-7	-5	-7	-4	-5	-7	-5	-6	-7	-9	-10	-11
1900	-13	-13		-8	-6		-13	-13	-2	-2	-5	-5	-5	-4	-10	-5	-11	-11	-10
1875	-13	-14		-7	-7		-6	-13	-1	-5	-7	-6	-2	-5	-12	-10	-7	-9	-13
1850	-10	-12		-6	-6		-2	-6	-2	-5	-10	-8	-6	-5	-11	-11	-9	-8	-13
1825	-7	-11		-4	-4		-3	-13	-6	-6	-11	-8	-5	-3	-7	-6	-10	-9	-13
1800	-8	-9		-4	-4		-4	-10	-6	-7	-7	-3	-8	-2	-3	-4	-10	-10	-13
1775	-6	-9		-3	-1		-7	-8	-7	-6	-6	-9	-8	-3	-2	-10	-11	-10	-11
1750	-6	-7		-4	-6		-6	-9	-8	-8	-6	-12	-7	-6	-6	-8	-13	-12	-10
1725	-12	-6		-6	-4		-8	-7	-9	-2	-10	-7	-7	-8	-10	-10	-10	-11	-11
1700	-7	-5		-7	-3		-6	-7	-7	-8	-10	-9	-6	-10	-12	-10	-12	-8	-12
1675	-5	-7		-13	-4		-7	-5	-6	-4	-12	-12	-9	-8	-11	-8	-11	-9	-12
1650	-5	-9		-11	-6		-4	-7	-3	-5	-13	-10	-9	-9	-12	-7	-13	-7	-11
1625	-4	-5		-8	-11		-6	-7	-5	-2	-13	-7	-8	-10	-8	-5	-13	-8	-9
1600	-6	-9		-7	-7		-9	-6	-4	-4	-12	-4	-7	-9	-6	-5	-10	-9	-9
1575	-9	-3		-6	-7		-6	-6	-5	-4	-7	-6	-8	-10	-5	-3	-11	-9	-10
1550	-12	-6		-3	-5		-7	-10	-4	-5	-5	-5	-9	-7	-5	-4	-10	-8	-11
1525	-12	-5		-4	-5		-10	-6	-4	-6	-3	-4	-6	-7	-5	-2	-7	-6	-8
1500	-15	-8		-6	-4		-7	-5	-6	-7	-3	-5	-7	-6	-5	-1	-6	-7	-7
1475	-11	-3		-4	-4		-6	-6	-5	-6	-4	-2	-7	-5	-6	-1	-6	-6	-9
1450	-6	-6		0	-6		-6	-6	-3	-6	-8	-3	-7	-6	-7	-1	-8	-7	-9
1425	-8	-7		-2	-4		-7	-7	-4	-4	-7	-6	-7	-5	-7	-2	-6	-5	-8
1400	-6	-4		-3	-7		-4	-6	-3	-7	-7	0	-4	-4	-6	-3	-5	-6	-9
1375	-6	-4		-5	-9		-3	-7	-3	-10	-6	-2	-2	-4	-5	-7	-6	-7	-6
1350	-5	-2		-6	-5		-4	-3	-4	-10	-5	-1	-4	-5	-4	-4	-6	-7	-8
1325	-8	-3		-6	-8		-4	-3	-3	-7	-5	-2	-3	-5	-5	-3	-6	-6	-9
1300	-5	-4		-3	-6		-2	-3	-6	-4	-4	-2	-3	-3	-5	-6	-5	-6	-11
1275	-3	0		-6	-5		-1	0	-4	-3	-2	-4	-4	-5	-5	-6	-8	-6	-11
1250	-5	-6		-4	-8		-3	-2	-2	2	-5	-6	-3	-3	-5	-6	-10	-5	-9
1225	-6	-4		-4	-6		-5	-2	-2	1	-4	-4	-2	-4	-4	-6	-8	-4	-6
1200	-6	-3		-2	-5		-5	-2	-3	2	-2	-5	-1	-3	-3	-6	-8	-4	-6
1175	-5	-5		-3	-5		-2	-1	3	1	-1	-2	-1	-2	-3	-7	-11	-4	-6
1150	-4	-2		-4	1		3	-1	0	-3	-3	-3	-3	-5	-3	-7	-10	-3	-6

1125	-5	-3	-3	7	3	-4	-1	0	-5	-3	-2	-3	-3	-5	-9	-5	-6	
1100	-2	-3	-2	-1	2	-5	-1	-2	-5	0	-1	-2	-3	-5	-9	-5	-6	
1075	-4	-3	-2	-1	0	-4	-3	-1	-4	-1	-1	-1	-3	-4	-9	-4	-5	
1050	-4	-3	-3	-3	1	-1	-3	-2	-1	-1	-3	0	-3	-2	-10	-3	-5	
1025	-4	-1	-1	-3	0	2	-2	-1	-1	-1	-4	-2	-4	-3	-10	-3	-6	
1000	-4	-5	-1	-2	-2	0	-1	-5	-1	-2	-5	-3	-4	-4	-5	0	-7	
975	*	*	*	*	*	*	*	*	*	*	*	-5	-3	-2	-4	-5	0	-4
950												-3	-2	-2	-7	-6	-2	-2
925												-2	-4	-3	-2	-2	-3	-3
900												-3	-4	-3	-1	-4	-5	-3
875												-3	-2	-3	-11	-2	-3	-4
850												-1	-4	-2	-6	-2	1	-4
825												0	1	0	-2	-2	0	-3
800												0	0	1	0	-2	-2	-3
775												-1	-2	2	-1	-3	-2	-3
750												-1	-2	4	-1	-3	-1	-5
725												-2	-3	3	-1	-2	-1	-4
700												-3	-3	2	-2	-2	-2	-3
675												-3	-4	-4	-2	-2	-2	-2
650												-1	-4	-2	-2	-3	-1	-5
625												-1	-2	-3	-2	-3	-2	-4
600												-2	-2	-5	-2	-3	-2	-2
575												-3	-3	-5	-1	-2	-3	-2
550												-3	-3	-5	1	-2	-2	-2
525												-3	-3	-4	0	-2	-2	-2
500												-3	-3	-3	0	-2	-2	-2
475												-4	-2	-4	0	-3	-3	-2
450												-7	-2	-3	0	-1	-3	-3
425												-6	-3	3	-1	-3	-4	-1
400												-4	-4	-2	-1	-2	-3	0
375												-2	-3	-2	0	-2	-3	1
350												-2	-1	-3	1	-2	-3	1
325												-2	-1	-2	-3	-2	-2	-3
300												-3	-2	-1	-2	-1	-1	-2
275												-6	-1	-1	-2	0	-1	-3
250												-8	-1	-3	-1	0	-1	-3
225												-7	-3	-4	-1	0	-3	-3
200												-1	-3	0	-1	-1	-2	-2
175												-3	-1	-1	1	-1	-4	-2
150												-9	-1	-3	2	-1	-3	-1
125												-9	3	-2	1	-2	-1	-1
100												-7	5	-2	0	-3	-2	-1
75												-6	6	-3	0	-3	-1	-1
50												-1	3	-4	0	-1	-1	-1
25												-2	0	-4	-1	-1	-5	0
0												-2	0	-2	-3	-2	-6	0

\* \* \* \* \*

INTERPRETEX RESOURCES LTD.

VLF EM Matrix for FRASER FILTER Values

Fraser Filter Values calculated using a 25 m. station interval

GRID: "Redtop"      FACING: westerly      TRANSMITTER: Seattle

File Name: VLF45-12      STATION #'s are all eastings

WINDOW:      #2 Fraser Filter value vs. Station

LINE:	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
	L -	L -	L -	L -	L -	L -	L -	L -	L -	L -	L -	L -	L -	L -	L -	L -	L -
	45	42	40	38	36	34	32	30	28	26	24	22	20	18	16	14	12
STATN	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth	Nth
2237.5	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	0	0	0	0	0	0
2212.5	0	0	0	ERR	ERR	-1	ERR	ERR	ERR	ERR	ERR	0	0	0	0	0	0
2187.5	0	0	0	ERR	ERR	-1	-6	ERR	ERR	ERR	ERR	0	0	0	0	0	0
2162.5	0	0	0	ERR	ERR	-1	-2	-3	-1	ERR	ERR	ERR	0	0	0	0	0
2137.5	0	0	0	-2	1	-3	-3	-4	-2	-2	-1	ERR	0	ERR	0	0	0
2112.5	0	0	0	-6	-3	-2	-2	-6	-1	-4	-10	ERR	ERR	ERR	0	0	0
2087.5	0	0	0	-5	-3	-1	-2	-2	1	-4	-11	ERR	ERR	ERR	ERR	0	0
2062.5	ERR	ERR	ERR	1	-3	-6	-6	2	-1	-3	-7	-3	ERR	ERR	ERR	ERR	ERR
2037.5	ERR	ERR	ERR	3	-5	-6	-4	2	-5	0	-2	-11	ERR	-6	ERR	ERR	ERR
2012.5	ERR	ERR	ERR	0	-3	-2	1	1	-4	0	0	-13	-5	-4	ERR	ERR	ERR
1987.5	ERR	ERR	ERR	-4	0	-4	1	-1	-1	-3	-1	-7	-17	1	-5	ERR	ERR
1962.5	8	2	1	-6	2	-4	0	-1	-3	-3	-3	1	-12	-1	-1	-2	-2
1937.5	6	-2	-1	-3	5	6	-2	-3	-3	-1	-3	2	4	-3	1	-1	-1
1912.5	1	-1	-2	0	1	10	-5	-4	1	1	-4	0	9	-1	-1	-1	1
1887.5	-1	1	-2	0	-9	-1	-2	1	5	2	-2	1	4	5	-2	-2	3
1862.5	-5	-2	-3	-2	-8	-4	3	2	5	3	2	-1	-2	1	1	-2	2
1837.5	-5	-3	-3	-3	-1	2	5	2	1	-2	3	-3	-7	-6	2	1	0
1812.5	-2	-3	-2	-3	3	-1	3	1	-5	-2	3	-2	-7	-2	1	2	-1
1787.5	-2	-2	-1	-1	3	-3	2	1	-3	6	1	2	-1	5	2	2	-3
1762.5	2	-3	2	3	2	-1	2	-2	2	4	-1	5	6	2	1	2	-2
1737.5	4	-3	3	0	1	-2	1	-2	5	-3	-1	5	8	1	-1	-2	1
1712.5	-3	-1	6	-2	-1	-2	-2	1	3	1	1	2	4	0	0	-3	2
1687.5	-5	3	6	2	-2	-1	-4	-1	3	3	3	-1	1	-3	1	-2	0
1662.5	-2	1	-1	6	-2	1	-3	-3	2	-2	1	1	-2	-3	2	-1	-2
1637.5	0	-1	-5	5	2	1	0	-2	0	-6	-2	1	-5	-3	-1	1	-3
1612.5	3	-1	-3	-2	3	-1	1	1	-4	-4	-1	0	-5	-2	-3	2	-1
1587.5	6	-3	-3	-3	-1	2	0	2	-7	0	1	-1	-2	-2	-1	0	2
1562.5	5	-1	-3	-2	1	2	-1	2	-6	-1	0	-3	-1	-1	-2	-2	0
1537.5	3	2	1	-2	2	-3	1	2	-3	-1	-2	-2	0	-2	-5	-2	-3
1512.5	1	0	2	-1	-2	-3	2	1	-1	-1	-1	-2	1	-2	-3	-1	-2
1487.5	-6	-2	-3	1	-3	1	-1	-1	3	-2	1	-1	2	-1	1	0	2
1462.5	-7	1	-5	1	0	1	-2	-2	5	1	0	0	2	1	1	-1	1
1437.5	-2	1	1	1	-1	1	-1	-1	1	1	-2	-1	0	2	-2	-1	-1
1412.5	-1	-3	3	3	-3	0	-1	4	-1	-4	-5	-2	-2	4	-2	1	-1
1387.5	-2	-3	3	2	-2	-2	0	5	-2	-2	-3	0	-2	3	1	2	-2
1362.5	1	-2	2	-2	1	-4	1	0	-2	1	1	1	-1	-2	1	0	1
1337.5	1	1	-1	0	-1	-2	1	-5	-1	1	0	-1	1	-1	-1	-1	3
1312.5	-3	-1	-2	-1	-3	-2	2	-6	-2	2	0	-1	1	3	1	-1	3
1287.5	-3	-1	1	-1	-1	-2	-2	-6	-1	3	1	0	0	2	4	-1	0
1262.5	2	3	-1	2	3	1	-3	-6	2	2	-1	-1	-1	0	3	-2	-4
1237.5	2	1	-2	-1	3	1	-1	-2	-1	-1	-2	-1	-2	0	-1	-2	-5
1212.5	0	-1	-2	-2	-1	-1	-2	0	-3	-2	-2	-1	-2	1	1	-1	-2
1187.5	-2	0	1	-4	-6	-1	-5	3	-1	-2	1	0	-1	1	3	-1	0
1162.5	-1	-2	1	-10	-7	1	1	3	3	-1	2	2	0	-1	0	0	0
1137.5	-1	-1	-1	-6	-2	4	3	0	3	-1	-1	-1	0	-2	-2	2	0
1112.5	-2	1	-2	6	2	2	2	0	1	-3	-2	-3	0	-2	-1	1	-1

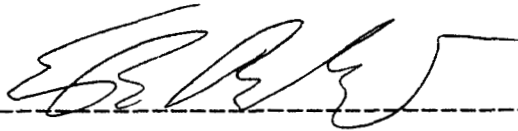
1087.5	1	0	0	6	2	-2	2	1	-3	-1	1	-2	0	-2	1	-2	-1	
1062.5	1	-1	0	2	1	-6	1	0	-4	1	3	-1	1	-2	1	-2	0	
1037.5	0	0	-2	1	2	-4	-2	2	-2	1	3	2	1	1	-2	-2	2	
1012.5	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	2	2	-1	2	-6	-3	0
987.5	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	-1	0	-2	2	-2	-1	-4
962.5	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	-3	0	-1	1	-1	3	-3
937.5	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	-2	2	1	-5	-3	3	0
912.5	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	-1	2	1
887.5	0	0	0	0	0	0	0	0	0	0	0	-1	-1	-1	8	-1	-3	1
862.5	0	0	0	0	0	0	0	0	0	0	0	-3	-2	-2	-2	-1	-5	0
837.5	0	0	0	0	0	0	0	0	0	0	0	-2	-4	-3	-9	0	0	-1
812.5	0	0	0	0	0	0	0	0	0	0	0	0	-1	-3	-4	1	3	-1
787.5	0	0	0	0	0	0	0	0	0	0	0	1	3	-3	0	1	1	1
762.5	0	0	0	0	0	0	0	0	0	0	0	1	2	-2	1	0	-1	2
737.5	0	0	0	0	0	0	0	0	0	0	0	2	1	1	1	-1	0	-1
712.5	0	0	0	0	0	0	0	0	0	0	0	2	1	5	1	-1	1	-2
687.5	0	0	0	0	0	0	0	0	0	0	0	-1	1	6	1	1	0	0
662.5	0	0	0	0	0	0	0	0	0	0	0	-2	-1	2	0	1	-1	2
637.5	0	0	0	0	0	0	0	0	0	0	0	-1	-2	1	0	1	1	-1
612.5	0	0	0	0	0	0	0	0	0	0	0	2	-1	3	-1	-1	1	-3
587.5	0	0	0	0	0	0	0	0	0	0	0	2	1	1	-2	-1	1	-1
562.5	0	0	0	0	0	0	0	0	0	0	0	1	1	-1	-2	-1	-1	0
537.5	0	0	0	0	0	0	0	0	0	0	0	0	0	-2	0	0	-1	0
512.5	0	0	0	0	0	0	0	0	0	0	0	1	-1	-1	1	1	1	0
487.5	0	0	0	0	0	0	0	0	0	0	0	3	-1	0	0	0	1	1
462.5	0	0	0	0	0	0	0	0	0	0	0	3	0	-4	1	-1	1	0
437.5	0	0	0	0	0	0	0	0	0	0	0	-1	2	-5	1	1	1	-2
412.5	0	0	0	0	0	0	0	0	0	0	0	-4	1	2	0	0	-1	-3
387.5	0	0	0	0	0	0	0	0	0	0	0	-3	-2	3	-2	-1	-1	-2
362.5	0	0	0	0	0	0	0	0	0	0	0	-1	-3	1	1	0	-1	2
337.5	0	0	0	0	0	0	0	0	0	0	0	1	-1	-1	3	-1	-2	4
312.5	0	0	0	0	0	0	0	0	0	0	0	3	1	-2	1	-2	-2	2
287.5	0	0	0	0	0	0	0	0	0	0	0	5	-1	1	-1	-2	-1	1
262.5	0	0	0	0	0	0	0	0	0	0	0	3	1	3	-1	-1	1	1
237.5	0	0	0	0	0	0	0	0	0	0	0	-3	2	0	-1	1	2	-1
212.5	0	0	0	0	0	0	0	0	0	0	0	-6	0	-3	-1	1	1	-1
187.5	0	0	0	0	0	0	0	0	0	0	0	2	-2	0	-3	1	1	-1
162.5	0	0	0	0	0	0	0	0	0	0	0	8	-3	2	-2	1	-1	-1
137.5	0	0	0	0	0	0	0	0	0	0	0	2	-6	0	1	2	-2	-1
112.5	0	0	0	0	0	0	0	0	0	0	0	-3	-5	0	2	2	-1	0
87.5	0	0	0	0	0	0	0	0	0	0	0	-5	-1	2	1	-1	-1	0
62.5	0	0	0	0	0	0	0	0	0	0	0	-6	5	2	1	-2	2	-1
37.5	0	0	0	0	0	0	0	0	0	0	0	-2	5	-1	2	-1	5	-1
12.5	0	0	0	0	0	0	0	0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR



Respectfully submitted

**INTERPRETEX RESOURCES LTD.**

Vancouver, British Columbia

A handwritten signature in black ink, appearing to read 'E.R. Rockel', is written over a horizontal dashed line.

**E.R. ROCKEL**


Consulting Geophysicist

**CERTIFICATE**

I, Edwin Ross Rockel, Geophysicist of Vancouver, British Columbia, Canada, hereby certify that:

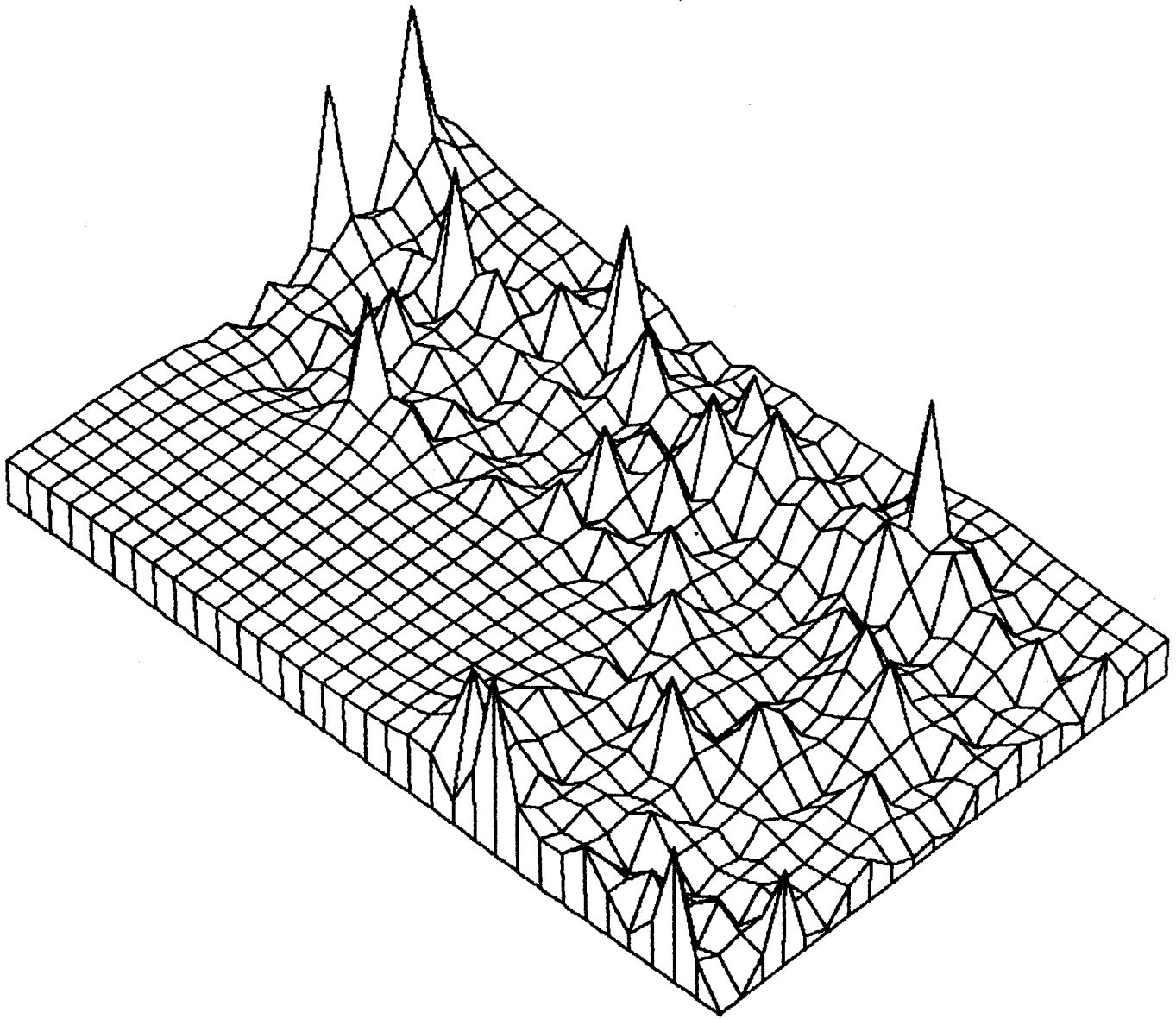
1. I received a B.Sc. degree in Geophysics from the University of British Columbia in 1966.
2. I have been practising my profession since graduation.
3. I am a Professional Geophysicist registered in the Province of Alberta.
4. I am a Professional Engineer registered in the Province of Saskatchewan.
5. I hold no direct or indirect interest in, nor expect to receive any benefits from, the mineral property or properties described in this report.

Date: Oct. 29/86

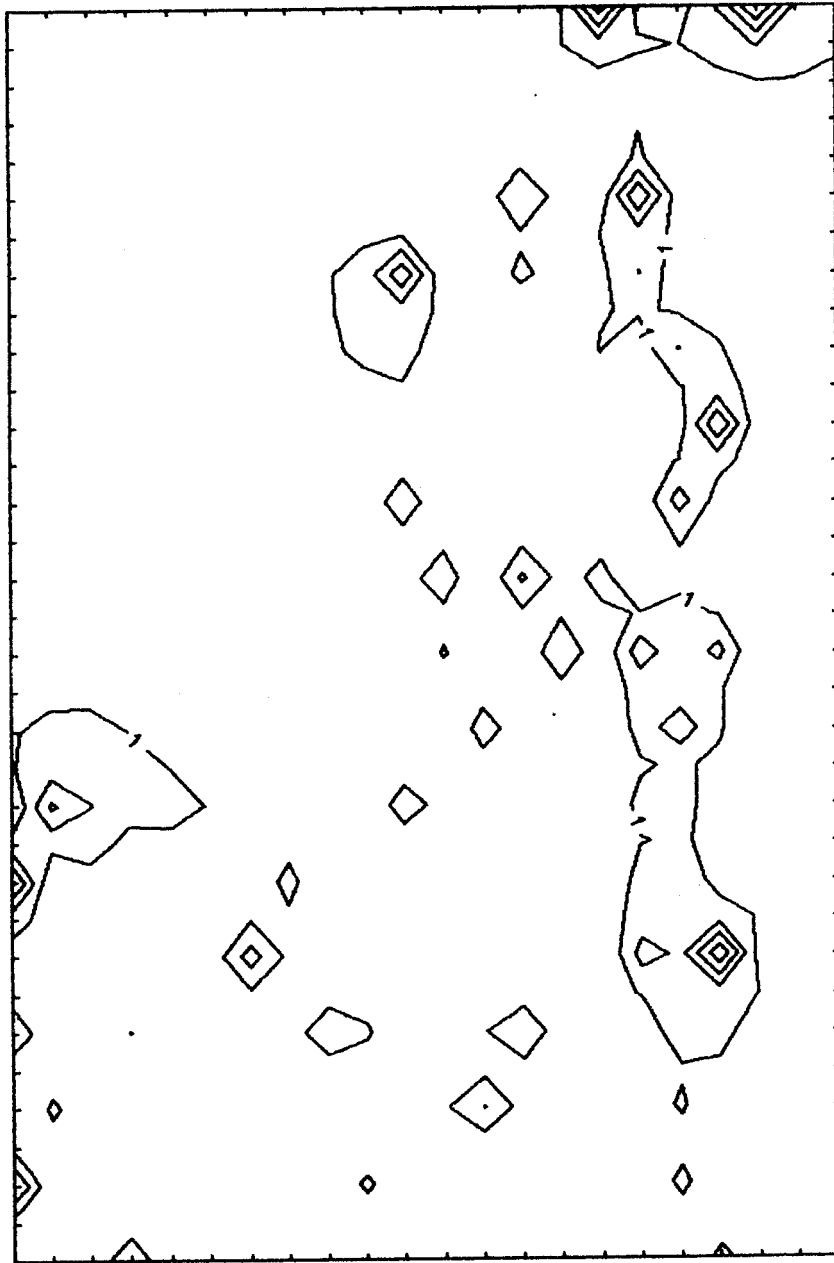
Signed: 

Vancouver,  
British Columbia

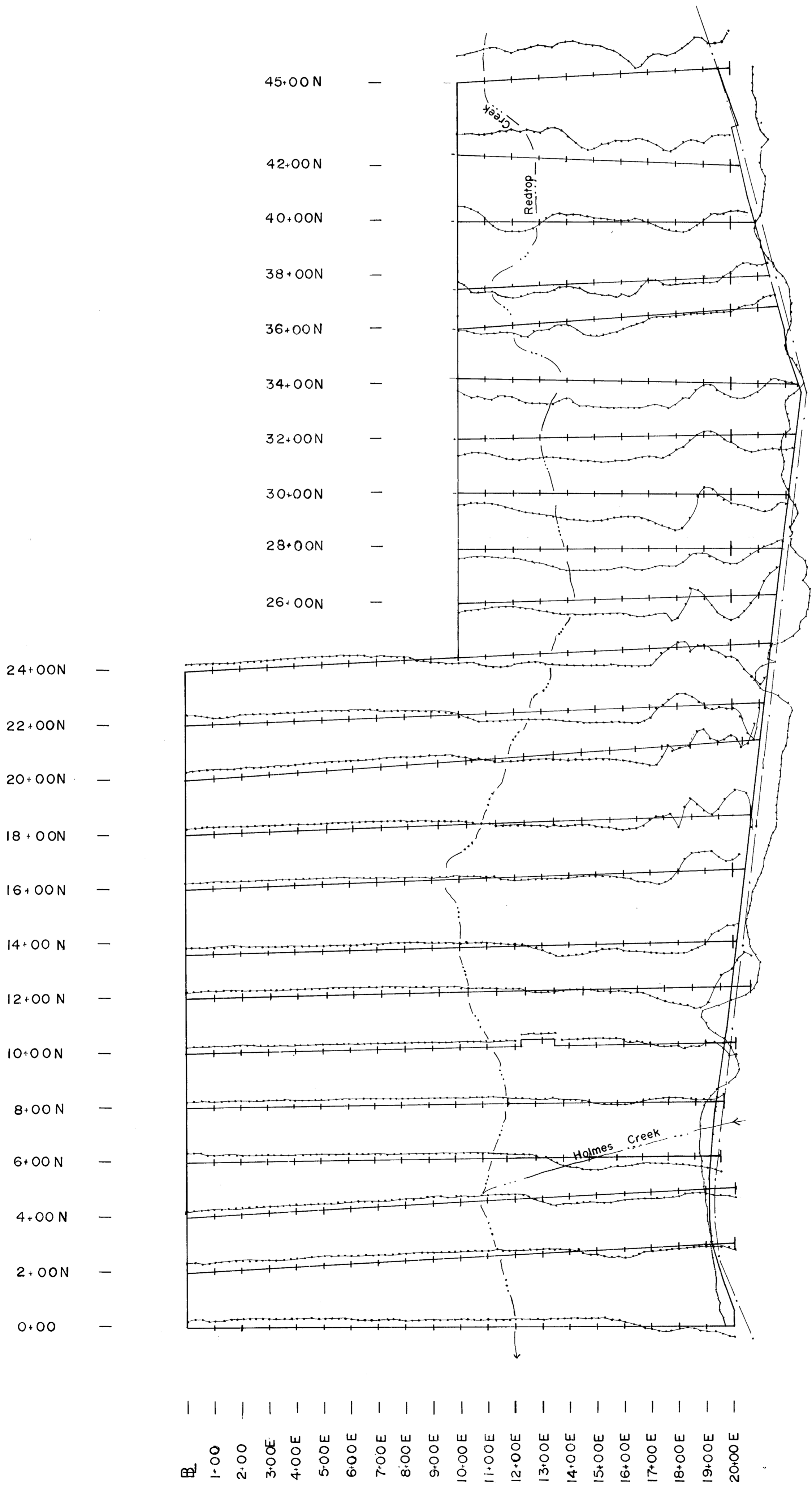
Edwin Ross Rockel  
B.Sc., P.Geoph., P.Eng.



REDTOP VLF-EM FRASER FILTER 3D PLOT L-45N-12N



REDTOP VLF-EM FRSR FLTR CNTRS L-45N-12N, SZ 6.5

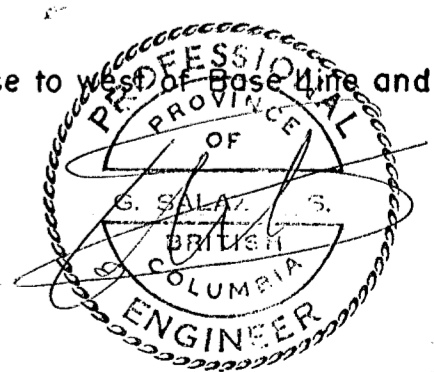


15,464

ASSESSMENT REPORT  
GEOLOGICAL BRANCH  
LEGEND

- · — · — · HIGHWAY
- · · · · · CREEK
- | — | — | — | GRID LINE WITH STATIONS
- — — — — MAGNETIC DATA  
GRID LINE = 57500 GAMMA'S  
1mm = 100 GAMMA'S

magnetic readings increase to west of base line and to north of grid line

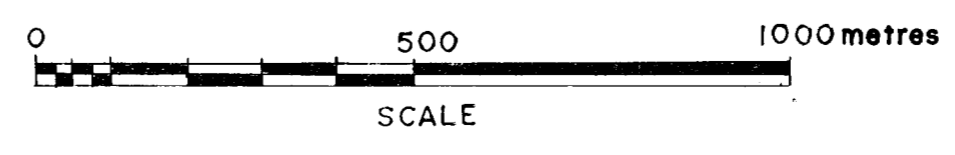


AMANDA RESOURCES LTD.

REDTOP PROPERTY  
GROUND MAGNETIC SURVEY

NTS 93L/7W Date 10-31-86  
Work by: G. Salazar S., P. Eng.  
Revised by:  
Drafted by: J. C. ARMSTRONG  
Figure No. 3  
SCALE 1:10,000

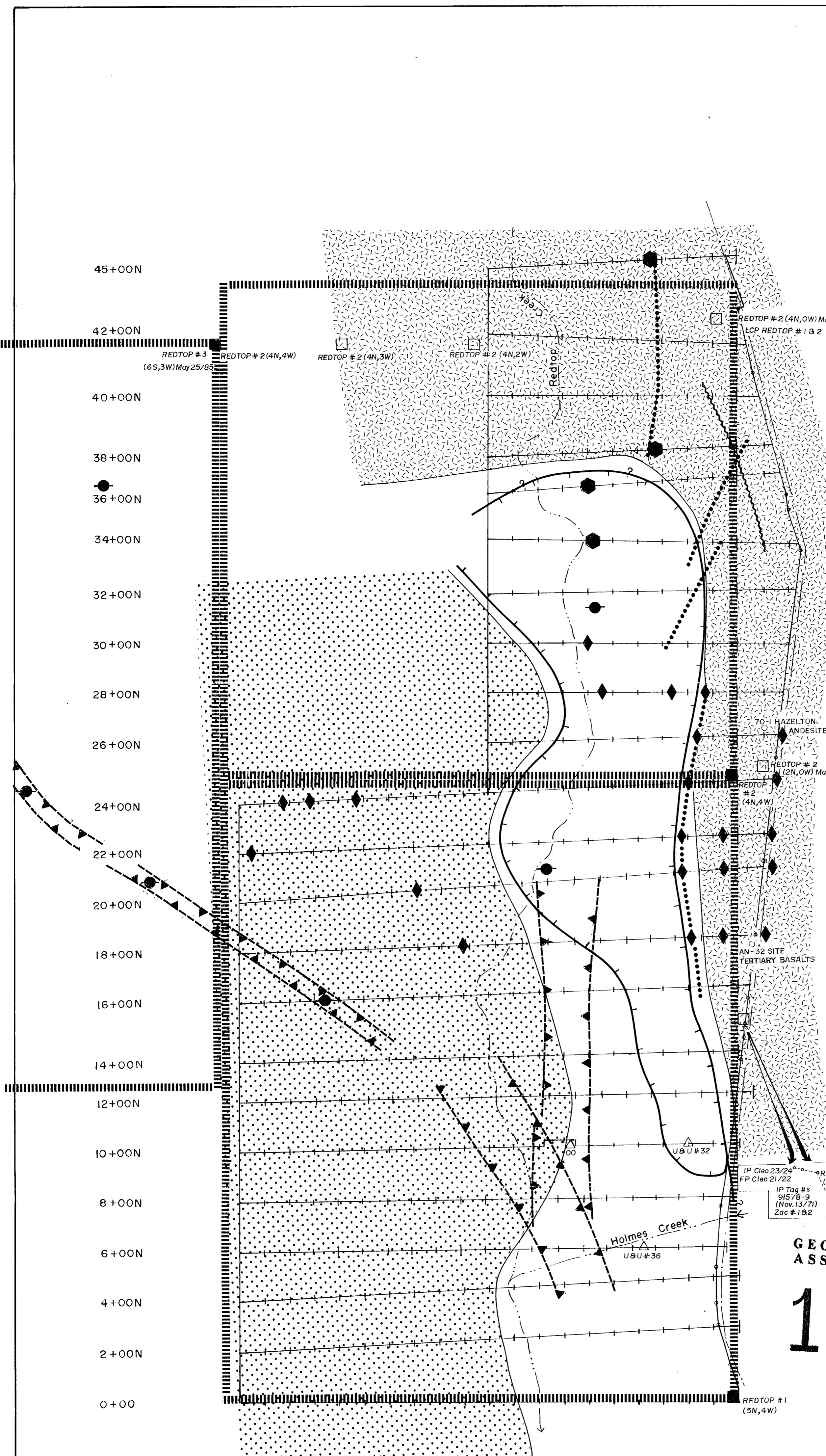
**G. SALAZAR S. & ASSOCS. LTD.**  
INTERNATIONAL  
GEOLOGICAL CONSULTANTS  
312 Cedarbrae Cresc. S.W.  
Calgary Alberta





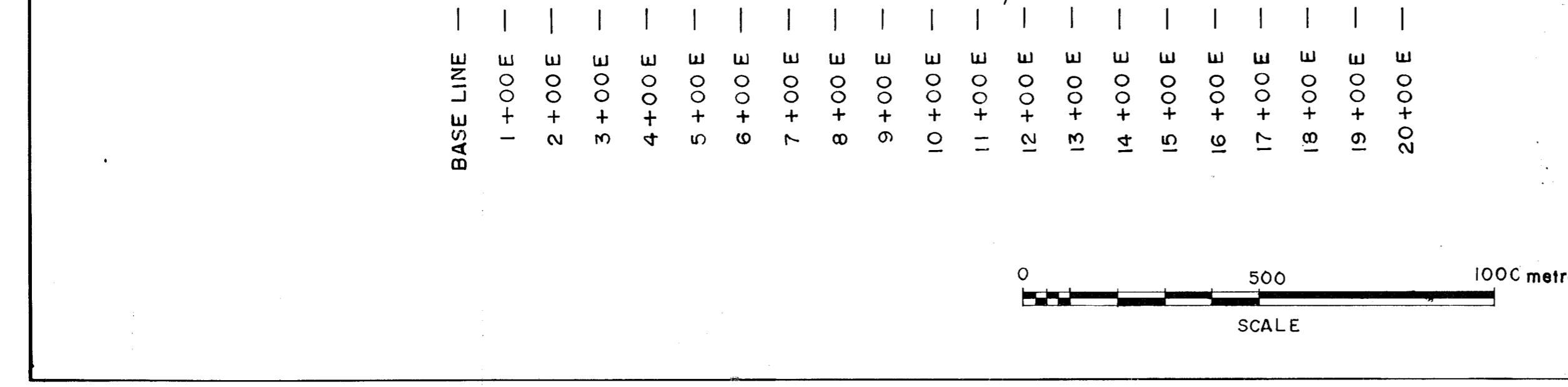
LEGEND

- AIRBORNE VLF CONDUCTOR
- AIRBORNE VLF ANOMALY
- MAGNETIC SURVEY INTERPRETATION (by G.S.S.)
- MAGNETIC LOW
- MAGNETIC LINEAMENT
- SINGLE POINT MAGNETIC ANOMALY
- VLF SURVEY INTERPRETATION (by INTERPRETEX RESOURCES LTD.)
- VLF LINEAMENT (WEAK)
- SINGLE POINT WEAK ANOMALY
- VOLCANICS ?
- DEEP OVERBURDEN +/-OR SEDIMENTS
- HIGHWAY
- CREEK
- GRID LINE WITH STATIONS
- SURVEY STATION
- LEGAL CORNER POST
- REDTOP CLAIM POST
- ALL OTHER CLAIM POSTS (U&U = UNDERHILL & UNDERHILL SURVEY)
- CLAIM BOUNDARY



GEOLOGICAL BRANCH ASSESSMENT REPORT

15,464



AMANDA RESOURCES LTD.	
REDTOP PROPERTY COMPILATION & CLAIM SURVEY	
NTS 93L/7W Date: 10-31-86	G. SALAZAR S. & ASSOCS. LTD. INTERNATIONAL GEOLOGICAL CONSULTANTS 312 Cedarbrae Cresc. S.W. Calgary Alberta
Work by: G. Salazar S., P. Eng.	
Revised by:	
Drafted by: J.C. ARMSTRONG	
Figure No. 4	
SCALE 1:10,000	

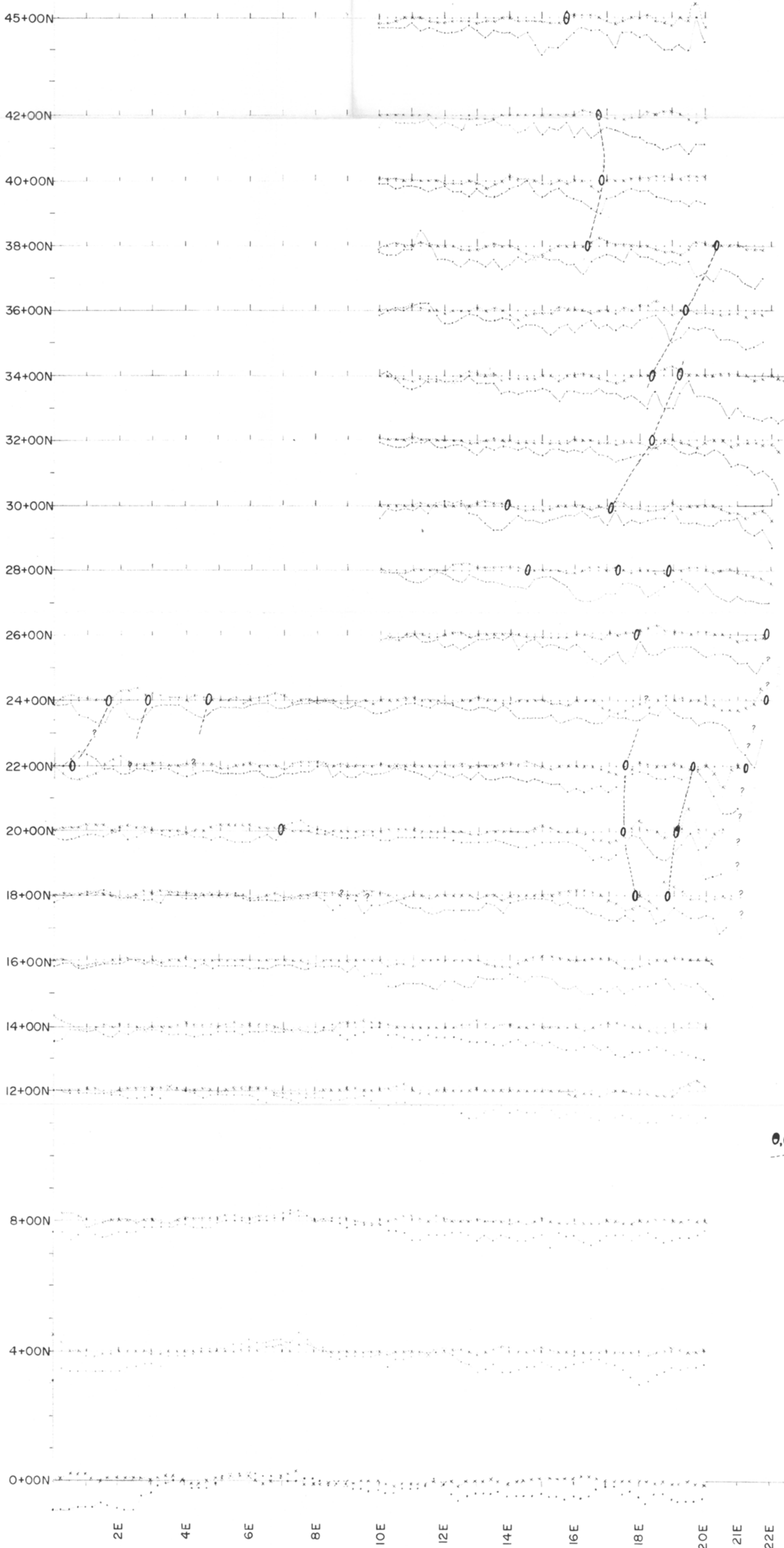
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

15,464



AMANDA RESOURCES LTD.	
REDTOP PROPERTY	
VLF - EM SURVEY	
NTS 93L/9W	Date: 10-31-86
Work by: Interpretex Resources	G. SALAZAR S. & ASSOCS. LTD.
Revised by:	INTERNATIONAL
Drafted by:	GEOLOGICAL CONSULTANTS
Figure No. 5	312 Cedarbrae Cresc. S.W.
SCALE 1:7500	Calgary Alberta

WORK BY INTERPRETEX RESOURCES LTD.



REDTOP  
VLF-EM Survey

—•—•— In Phase  
x-x-x-x-x Quadrature  
1 cm = 10 %

Transmitter Station Seattle  
Operator Facing Westerly

LEGEND

- 0,0 VLF-EM Conductor (Medium, Weak)
- VLF-EM Interpreted Conductor Axis