

'81-#329-#9165

RECONNAISSANCE GEOPHYSICAL SURVEYS

TUR CLAIMS

ROSEBUD LAKE AREA

NEAR NELWAY, BRITISH COLUMBIA

NELSON MINING DIVISION 82F/3E

117° 15' W

49° 03' N

OWNED BY

EDWIN R. ROCKEL

OPERATOR AND CONSULTANT

INTERPRETEX RESOURCES LTD.

CALGARY, ALBERTA

REPORT PREPARED BY

E. R. ROCKEL, B.SC., P. GEOPH.(ALBERTA)

SUBMITTED


MAY 25, 1981

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. [REDACTED]

Respectfully Submitted

INTERPRETEX RESOURCES LTD.

THE ASSOCIATION OF
PROFESSIONAL ENGINEERS,
GEOLOGISTS and GEOPHYSICISTS
OF ALBERTA
PERMIT NUMBER
P 3100
INTERPRETEX
RESOURCES LTD.



Edwin R. Rockel, B.Sc., P.Geoph.

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SUMMARY

Interesting geophysical response on the TUR #2-5 claim group observed in proximity to known mineralization suggests additional exploration.

A more organized geophysical program is recommended to determine the continuation of known anomalies. Additional VLF-EM and magnetic surveys are suggested for orientation.

INTRODUCTION

The TUR #1 claim is situated approximately 2 km east of the Nelson-Nelway Highway and approximately 3 km south of the South Salmo River.

The TUR # 2 to 5 claims are located approximately 3 km east of the Nelson-Nelway Highway and about 1½ km south of the South Salmo River.

A road to Rosebud Lake plus farming and logging roads provide access to the claims.

TUR #1 claim is situated partly on flat ground and partly on hilly terrain near the Lone Silver mineral occurrence.

TUR # 2 to 5 claims are partly on flat ground and partly on a well forested upland area.

Outcrop exposure on all claims is limited to logging road cuts where glacial material was thin. Glacial outwash is prevalent throughout the claims and cover is thickest in low lying areas.

TUR #1 claim is not connected to other TUR claims. TUR #1 record number is 1683. The two post claims TUR # 2 - 5 have been assigned record numbers 1684 to 1687 respectively. All claims were recorded on May 26, 1980 at Nelson.

The TUR claims are owned by Edwin R. Rockel of Calgary, Alberta.

The operator of the 1980 program was Interpretex Resources Ltd., Calgary, Alberta, a firm specializing in geophysical and geological consulting and contracting for mineral exploration.

TUR #1 claim was acquired to cover mineral occurrence 19 (Lone Silver Au, Pb, Zn, Ag) and TUR # 2 - 5 claims were acquired to cover mineral occurrences 62 and 257 (Ag, Pb, Zn, Au and Cu) as identified on Mineral Inventory Map 82 F/SW (M1).

A location/index map is included in this report as Figure 1.

GEOLOGY AND MINERALIZATION

The most significant geological aspect, in the writer's opinion is the proximity of the claimed areas to a possible intersection between the Black Bluff Fault and the Styx Creek Fault. Major fault intersections of this kind may provide structural traps for secondary mineralization.

SURVEY SPECIFICATIONS

1. Survey Parameters

Survey lines were chained and flagged during the survey. Survey stations were located at 25 meter intervals. The following coverage was obtained during the survey:

Magnetometer Survey	- 1.35 km
VLF-EM Survey	- <u>1.35 km</u>
Total coverage	2.70 km

2. Equipment Parameters

G-816 Total Field Magnetometer:

- (i) measured total magnetic field
- (ii) magnetic variations controlled using "tie-back" method and linear diurnal curves
- (iii) instrument accuracy ± 1 gamma
- (iv) station repeatability ± 3 gammas

EM-16, VLF-EM:

- (i) station used NAA, Cutler, Maine
- (ii) direction operator faced - southerly

DATA

1. Calculations

No corrections were made to VLF-EM data.

During the magnetic survey the tie-back method was used to control magnetic variations. The data was corrected for diurnal variations of the earth's magnetic field using linear diurnal curves.

2. Presentation

All data are presented in profile form at a scale of 1:5000 on plan maps containing claim boundaries.

INTERPRETATION

1. Discussion of Results

Results from the TUR #1 Claim do not show significant conductivity or magnetic anomalies.

Results from the TUR #2 to TUR #5 Claims show two conductors on Line 3 at Stations 0+75W and 2+00W. Small magnetic highs are associated with the anomalies. The conductor at Station 2+00W is strong and shows relatively high conductivity.

2. Conclusions

No conductivity or significant magnetism exist in TUR #1 Claim area in the region of the geophysical survey.

The small magnetic high associated with the conductor at Line 3, Station 0+75W may be a local pod of pyrrhotite creating high frequency anomalies on both VLF-EM and magnetic profiles.

The stronger anomaly at Line 3, Station 2+00W may reflect massive sulphides containing minor amounts of magnetic material.

RECOMMENDATIONS

In the light of interesting electromagnetic and magnetic relationships additional prospecting and geological investigation is required. Furthermore a geophysical orientation survey is recommended to further define the strike of significant conductivity. When the trends, both structural and mineralogical, are determined, a grid should be cut in the appropriate places for a more organized geophysical and geochemical exploration program.

VLF-EM and magnetic surveys are recommended for the orientation survey with follow-up using Max-Min II or Elfast Turam.

CERTIFICATE


I, Edwin R. Rockel, hereby certify that:

1. I am a Consulting Geophysicist and owner of Interpretex Resources Ltd. of P.O. Box 6107 Station A, in the city of Calgary, in the province of Alberta.
2. I currently reside at 344 Parkland Way S.E., in the city of Calgary, in the province of Alberta.
3. I obtained a Bachelor of Science degree in Geophysics and Geology in 1966 from the University of British Columbia.
4. I have been practising my profession as an Exploration Geophysicist since 1967.
5. I am a Professional Geophysicist registered in the province of Alberta.

DATE

May 14, 1981

CALGARY, ALBERTA


EDWIN R. ROCKEL, B.SC., P.GEOPH.
INTREPRETEX RESOURCES LTD.

APPENDIX 1

GEOPHYSICAL DATA SHEETS

LINE NO. 2		FIELD BASE READING _____		OPERATOR ADJUST _____			
TIME	STATION	READING	BASE STN. READING	TOTAL CORR.	FINAL VALUE	REMARKS	
2:58	0100E	57824	57824			BASE B	
3:01 1/2		881					
03 1/2		882					
5		892					
6 1/2	1E	884					
8 1/2		892					
10		886					
12		854					
16	2E	831					
18		826					
20		863					
21 1/2		819				Dir A.	
24	3E	836					
26 1/2		838				Az 2	
28 1/2		831				80°	
31		840					
33	4E	804				clim line	
36		870					
38		860					
41 1/2		824					
44 1/2	5E	840					
47		824					
49 1/2		816				Az 80°	
54		812					
56	6E	827					
4:00 1/2		832				end	

DATUM LEVELS: BASE STN: _____ FIELD BASE _____

JOB NO. TUR 2-5 AREA Ro DATE Aug 2/80

INST. TYPE G-816 SERIAL NO. _____

OPERATOR A.H. PAGE NO. 1

MAGNETICS PROTON
 FLUXGATE

CAN-LAKE
EXPLORATIONS LTD.

LINE NO. 3 Az 220		FIELD BASE READING _____		OPERATOR ADJUST _____			
TIME	STATION	READING	BASE STN. READING	TOTAL CORR.	FINAL VALUE	REMARKS	
4:06	0 W	57838					
4 1/2		817					
11 1/2		809					
13 1/2		841					
16	1 W	810					
19 1/2		57727					
21 1/2		7775					
23 1/2		7779					
25 1/2	2 W	7778					
29 1/2		7765				clim line	
32		7762					
34		7773					
37 1/2	3 W	7782				Red Jct.	
						91	
						new R-Az 230	
5:10	A	57840				BASE	

DATUM LEVELS: BASE STN: _____ FIELD BASE _____

JOB NO. 80-8006 AREA TUR 2-5 DATE Aug. 3/80

INST. TYPE G-816 SERIAL NO. _____

OPERATOR A.H. PAGE NO. 1

MAGNETICS PROTON
 FLUXGATE

CAN-LAKE
EXPLORATIONS LTD.

LINE NO. <u>2</u>		STATION		
STATION	IN-PHASE	OUT of PHASE	FREQUENCY	REMARKS
5+25	+38	-3		
	+41	-2		
	+41	-2		
6E	+43	-3		
	+46	-3		
END OF LINE				
7E				
8E				
JOB. NO.: <u>TUR 2-5</u> AREA: <u>P. 20-1-1</u> DATE: <u>Aug 3/80</u> INST. TYPE: _____ SERIAL NO.: _____ OPERATOR: _____ PAGE NO.: <u>2</u> V.L.F. CAN-LAKE EXPLORATIONS LTD.				

LINE NO. <u>2</u>		STATION <u>Other</u>		
STATION	IN-PHASE	OUT of PHASE	FREQUENCY	REMARKS
0+00E	+6	+3		
0+25E	+8	+3		
	+10	+2		
	+15	+5		
1E	+12	+1		
	+10	0		
	+8	0		
	+6	-1		
2E	+3	-1		
	+7	-2		
	+10	-1		
	+21	+2		Δ ↓ to line
3E	+24	+3		" " " "
	+24	+3		" " " "
	+25	+1		" " " "
	+24	-1		" " " "
4E	+24	-3		
	+27	-4		
	+30	-4		
	+34	-4		
5E	+36	-3		
next page				
Facing East				
JOB. NO.: <u>TUR 2-5</u> AREA: <u>Rail 112</u> DATE: <u>Aug 3/80</u> INST. TYPE: <u>EM-16</u> SERIAL NO.: _____ OPERATOR: <u>E.R.</u> PAGE NO.: <u>1</u> V.L.F. 80-8-06 CAN-LAKE EXPLORATIONS LTD.				

APPENDIX 2

INSTRUMENT SPECIFICATIONS

GEONICS LIMITED
VLF EM 16

Source of Primary Field: VLF transmitting stations

Transmitting Stations Used: Any desired station frequency can be supplied with the instrument in the form of plug-in tuning units. Two tuning units can be plugged in at one time. A switch selects either station.

Operating Frequency Range: About 15-25 Hz

Parameters Measured: (1) The vertical in-phase component (tangent of the tilt angle of the polarization ellipsoid).
(2) The vertical out-of-phase (quadrature) component (the short axis of the polarization ellipsoid compared to the long axis).

Method of Reading: In-phase from a mechanical inclinometer and quadrature from a calibrated dial. Nulling by audio tone.

Scale Range: In-phase $\pm 150\%$; quadrature $\pm 40\%$

Readability: $\pm 1\%$

Reading Time: 10-40 seconds depending on signal strength

Operating Temperature Range: -40 to 50° C.

Operating controls: ON-OFF switch, battery testing push button, station selector, switch, volume control, quadrature, dial $\pm 40\%$, inclinometer dial $\pm 150\%$

Power Supply: 6 size AA (penlight) alkaline cells. Life about 200 hours

Dimensions: 42 x 14 x 9 cm (16 x 5.5 x 3.5 in)

Weight: 1.6 kg (3.5 lbs)

Instrument Supplied With: Monotonic speaker, carrying case, manual of operation, 3 station selector plug-in tuning units (additional frequencies are optional), set of batteries

Shipping Weight: 4.5 kg (10 lbs.)

Name and Address of Manufacturer: Geonics Limited
1745 Meyerside Drive/Unit 8
Mississauga, Ontario
L5T 1C5

MODEL G-816
PORTABLE PROTON MAGNETOMETER

Sensitivity:	±1 gamma throughout range															
Range:	20,000 to 90,000 gammas (worldwide)															
Tuning:	Multi-position switch with signal amplitude indicator light on display															
Gradient Tolerance:	Exceeds 800 gammas/ft															
Sampling Rate:	Manual pushbutton, one reading each 6 seconds															
Output:	5 digit numeric display with readout directly in gammas															
Power Requirements:	Twelve self-contained 1.5 volt "D" cell universally available flashlight-type batteries. Charge state or replacement signified by flashing indicator light on display.															
Temperature Range:	Console and sensor: -40° to +85°C Battery pack: 0° to +50°C (limited use to -15°C; lower temperature battery belt operation - optional)															
Accuracy (Total Field):	±1 gamma through 0° to ±50°C temperature range															
Sensor:	High signal, noise cancelling, interchangeably mounted on separate staff or attached to back back															
Size:	Console: 3.5 x 7 x 11 inches (9 x 18 x 28 cm) Sensor: 3.5 x 5 inches (9 x 13 cm) Staff: 1 inch diameter x 8 ft. length (3 cm x 2.5 m)															
Weight:	<table border="0" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th style="text-align: right;">Lbs.</th> <th style="text-align: right;">Kgs.</th> </tr> </thead> <tbody> <tr> <td>Console (w/batteries)</td> <td style="text-align: right;">5.5</td> <td style="text-align: right;">2.8</td> </tr> <tr> <td>Sensor and signal cable:</td> <td style="text-align: right;">4</td> <td style="text-align: right;">1.8</td> </tr> <tr> <td>Aluminum staff:</td> <td style="text-align: right;"><u>2</u></td> <td style="text-align: right;"><u>.9</u></td> </tr> <tr> <td></td> <td style="text-align: right;">11.5</td> <td style="text-align: right;">5.2</td> </tr> </tbody> </table>		Lbs.	Kgs.	Console (w/batteries)	5.5	2.8	Sensor and signal cable:	4	1.8	Aluminum staff:	<u>2</u>	<u>.9</u>		11.5	5.2
	Lbs.	Kgs.														
Console (w/batteries)	5.5	2.8														
Sensor and signal cable:	4	1.8														
Aluminum staff:	<u>2</u>	<u>.9</u>														
	11.5	5.2														

APPENDIX 3

STATEMENT OF EXPENDITURES

STATEMENT OF EXPENDITURES

ROSEBUD PROJECT

Labour Costs

Geophysicist (E. R. Rockel)	
1.0 day @ \$350.00/day	\$350.00
Sr. Geophysical Asst. (H. Rockel)	
1.0 day @ \$160.00/day	160.00
Jr. Geophysical Asst. (W. A. Hall)	
1.0 day @ \$125.00/day	125.00

Report

E. R. Rockel	
1.0 day @ \$300.00/day	<u>300.00</u>

Total Labour 935.00

Other Costs

Mobilization/Demobilization/Vehicles	90.00
Travel, Field Support @ \$20/day/man	60.00
Equipment Rentals	112.50
Report, Materials, Maps	<u>50.00</u>

Total Other Costs 312.50

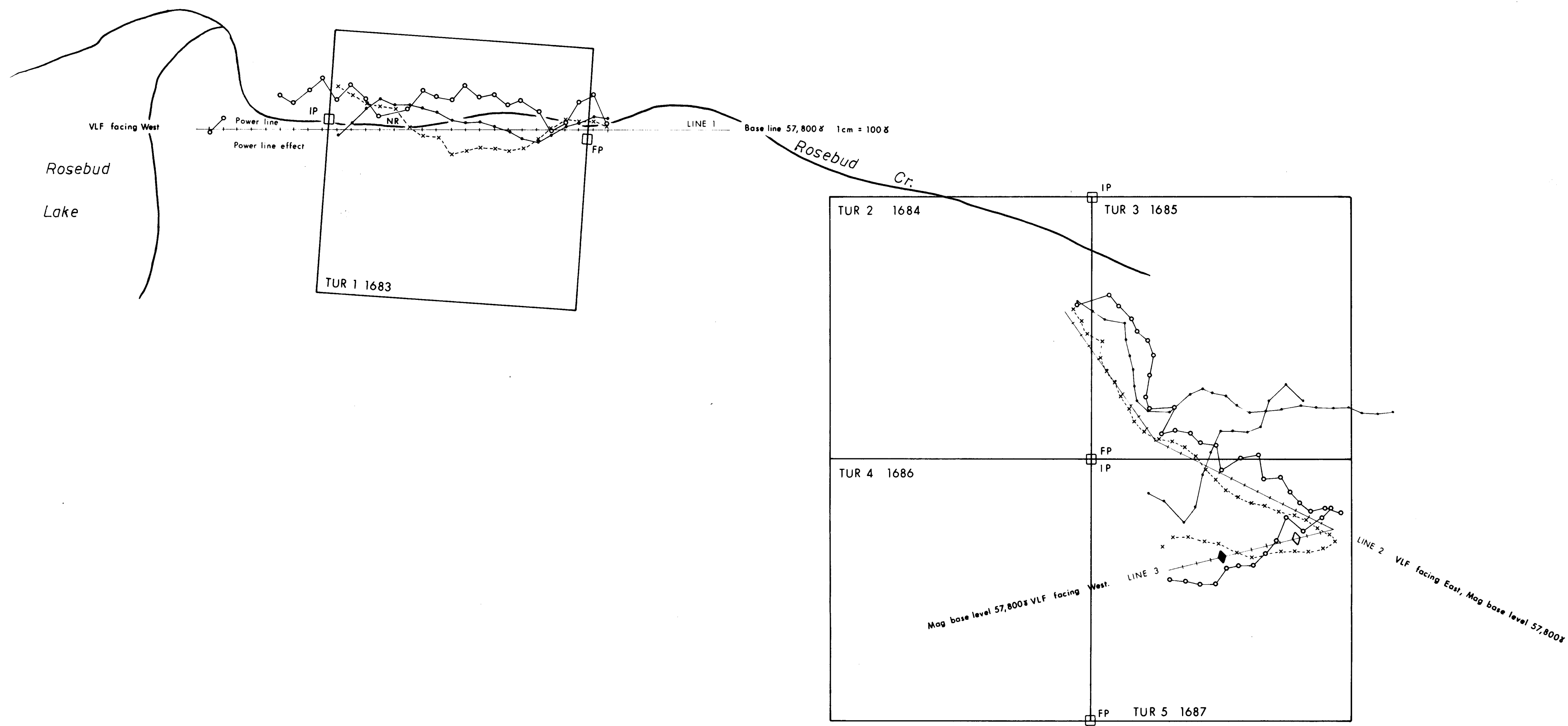
GRAND TOTAL \$1,247.50

Apportionment

TUR #1	\$200.00
TUR # 2 to 5	\$1,047.50

Dates

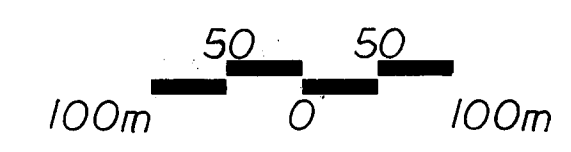
July 31 - Mobilization
Aug. 3 - Geophysical Survey
Aug. 4 - Demobilization



LEGEND

- In-Phase in % (VLF-EM)
 - Out-of-Phase in % (VLF-EM)
 - Magnetic Profile in gammas (total field)
 - Claim Post
 - Claim Boundary
 - Survey Line
 - VLF-EM Conductor (Confident, Questionable)
- 1 cm = 10 % ±

THE ASSOCIATION OF
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PERMIT NUMBER
P 3100
INTERPRETEX
RESOURCES LTD.



ROSEBUD LAKE, B.C.
TUR # 1, 2, 3, 4 and 5 Claims
VLF - EM and Magnetic Survey
EM-16 and G-816

EM and Magnetic Profile Map

Interpretex Resources Ltd.	Scale: 1:5000	Project: 80-8-06
	Date: March 1981	Figure: # 2
	Drawn by: J. Cooney	Area: 83F / 3W