RECONNAISSANCE GEOPHYSICAL SURVEYS

T FOX, SNARLY AND JR CLAIMS

(FOX GROUP)

ROSEBUD LAKE AREA

NEAR NELWAY, BRITISH COLUMBIA

NELSON MINING DIVISION

82 F/3E and 3W

Lat: 49°02'N Long: 117°14'W

OWNED BY
W. ARTHUR HALL

OPERATOR AND CONSULTANT
INTERPRETEX RESOURCES LTD.
CALGARY, ALBERTA

MINITAL RESOURCES BRANCH
ASSESSMENT REPORT
NO

REPORT PREPARED BY
E. R. ROCKEL, B.Sc., P. Geoph. (Alberta)

OCTOBER 25, 1982

Respectfully Submitted

INTERPRETEX RESOURCES LTD.

EDWIN R. ROCKEL, B.Sc., P. Geoph. Consulting Geophysicist

THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS and GEOPHYSICISTS OF ALBERTA
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### 1. SUMMARY

A relatively high conductance VLF-EM anomaly possibly associated with a magnetic low has been located on the Fox Group.

Follow-up of the observed conductor is warranted to establish the strength and validity of the anomaly. A further orientation VLF-EM survey is recommended to establish the anomaly trend. Detailed electromagnetic surveys and geological and geochemical investigations are recommended to follow.

#### 2. INTRODUCTION

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The Fox Group of claims are situated approximately 1 km east of the Nelson-Nelway highway and approximately 4 km south of the South Salmo River.

A road to Rosebud Lake provides access to the claims.

The claims are partly situated on flat ground in the northwest with upward slopes and hilly terrain towards the south and east.

No outcrop exposure was observed during the surveys. Glacial outwash is prevalent throughout the claims and cover is thickest in low lying areas.

The two-post claims T FOX #1 through #4 have been assigned record numbers 2477 to 2480 respectively. JR claim record number is 2481 and SNARLY claim record number is 2482. All claims were recorded on September 25, 1981 at Nelson.

All claims in the Fox Group are owned by W. Arthur Hall of Calgary, Alberta.

The operator of the 1982 program was Interpretex Resources Ltd., Calgary, Alberta, a firm specializing in geophysical and geological consulting and contracting for mineral exploration.

The Fox claim group was acquired to cover a possible projection on strike of occurrences on the Lone Silver claims to the north.

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

# 3. MINERAL CLAIMS

<u>Claim</u>	Record <u>Number</u>	Month of <u>Record</u>	<u>0wn</u>	er
T FOX #1	2477	Sept.	₩. A.	Hall
T FOX #2	2478	Sept.	W. A.	Hall
T FOX #3	2479	Sept.	W. A.	Hall
T FOX #4	2480	Sept.	W. A.	Hall
JR	2481	Sept.	W. A.	Hall
SNARLY	2482	Sept.	W. A.	Hall

## 4. GEOLOGY AND MINERALIZATION

Although no geological evidence of economic mineralization has been found to date, it is expected that Ag, Pb, Zn mineralization may occur in relation to mineral occurrences to the north.

#### 5. SURVEY SPECIFICATIONS

#### 5.1 Survey Parameters

Survey lines were chained and flagged during the survey. Survey stations were located at 50 metre intervals for reconnaissance. The following coverage was obtained during the survey:

Magnetometer Survey - 1.40 km (within claim boundaries)

VLF-EM Survey - 1.30 km (within claim boundaries)

Total Coverage - 2.70 km (within claim boundaries)

### 5.2 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 NPG, Seattle, Washington
- (ii) direction operator faced southerly

#### 6. DATA

#### 6.1 <u>Calculations</u>

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.

### 6.2 Presentation

All data are presented in profile form at a scale of 1:5,000 on plan map Figure 2 containing claim boundaries.

#### 7. INTERPRETATION

#### 7.1 Discussion of Results

No VLF-EM readings were possible near the northern claim boundary due to noise from high tension power lines. Magnetic readings were taken throughout; however, those readings taken in the vicinity of the power line may have been influenced by the high voltage AC current in the power lines.

A VLF-EM conductor is present between stations 12+00S and 12+50S. Profiles suggest relatively high conductance at a depth of about 100 metres or more. A slight magnetic depression is contiguous with the conductor.

Profiles indicate conductivity to the south of the claimed area. This conductivity will not be discussed here.

### 7.2 <u>Conclusions</u>

The conductive response observed within the claimed area may be related to the magnetic depression mentioned above. If so, it could represent a fault zone possibly mineralized with non-magnetic but conductive minerals.

### 8. RECOMMENDATIONS

The conductor described between station 12+00S and 12+50S should be followed up to determine if economic minerals may be present.

Additional prospecting and geological investigation is required along with a geophysical orientation survey in order to further define the strike of the conductivity. When the basic trends have been determined, a grid should be cut in the appropriate places for a more detailed geophysical and geochemical exploration program.

VLF-EM and magnetic surveys are recommended for the orientation survey with follow-up using MaxMin 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.
- I currently reside at #4, 12625 24th Street S.W., 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.

Nov. 9/87

Edwin R. Rockel, B.Sc., P. Geoph. Interpretex Resources Ltd.

# APPENDIX I

GEOPHYSICAL DATA SHEETS

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		57656		- 4	662	
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		57668		-4	674	
		57671		- U	677	
		57670		- 4	676	
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EXPLORATIONS LTD.

APPENDIX II 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 ±150%; quadrature ±40%

Readability:

±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 ±40%, inclinometer dial ±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

## APPENDIX III

## STATEMENT OF EXPENDITURES

# Labour Costs

Geophysicist (E. R. Rockel) 1.5 days @ \$350.00/day	\$525.00
Junior Assistant (W. A. Hall) 1 day @ \$125.00/day	125.00
Junior Geophysicist (H. M. Rockel) 1 day @ \$160.00/day	160.00

# Other Costs

Mobilization/Demobilization/Vehicle	s 125.00
Travel, Field Support @ \$25.00/day/man	75.00
Geophysical Instrument Rental	180.00
Report, Materials, Maps	60.00
То	tal \$1250.00

#### Dates

June 26, 1982 Oct. 20, 1982 (Report)

