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6/87

INDUCED POLARIZATION SURVEY

EMERSON CLAIMS

HOUSTON AREA, B C

NTS: 93L/7W

Omineca Mining Division

FILMED

by

R M CANN

LORNEX MINING CORPORATION LTD

and

ALAN SCOTT, GEOPHYSICIST

SCOTT GEOPHYSICS LTD

Latitude: 54025'^{48"}N
Longitude: 126054'^{53'12"}W

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

Owner and Operator

Lornex Mining Corporation Ltd
Box 10335 Pacific Centre
1650, 609 Granville Street
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V7Y 1G5

16,238

September 1987

TABLE OF CONTENTS

		<u>Page No:</u>
	SUMMARY	
1	INTRODUCTION	1
	1.1 General	1
	1.2 Location, Access and Physiography	1
	1.3 Claim Status	2
	1.4 History	2
2	IP SURVEY	4
	2.1 Instrumentation and Survey Procedures	4
	2.2 Discussion of Results	4
3	RECOMMENDATIONS	6
4	REFERENCES	7
5	STATEMENT OF QUALIFICATIONS	8
6	COST STATEMENT	9

LIST OF FIGURES

<u>Figure No:</u>		<u>Location</u>
1	Location and Claim Map	After p 1
2	Grid Location Map	Pocket
3	IP/Resistivity Pseudosections - Lines 0, 1+00N, 2+00N; Scale: 1:2,000	Pocket
4	IP/Resistivity Pseudosections - Lines 2+00N, 4+00N, 6+00N; Scale: 1:2,000	Pocket

EMERSON OPTION - IP/RESISTIVITY SURVEY 1987

SUMMARY

Scott Geophysics Ltd conducted 4.4km of IP/Resistivity surveys on the Emerson 1 claim, located near Houston B C during the period May 27-30 1987. Work was aimed at locating the source of a previously defined Ag-Au-Pb-Zn soil geochemical anomaly.

Geophysical work has defined two strong chargeability anomalies which are separated by a linear resistivity-low anomaly. This resistivity anomaly probably represents a wide fault and/or deeper overburden.

All these features represent potential sources for the soil anomaly and should be tested by diamond drilling.

EMERSON OPTION - IP/RESISTIVITY SURVEY 1987

1 INTRODUCTION

1.1 General

The Emerson Group was originally presented to Lornex by C M Rebagliati acting as an agent for BP Resources Canada Ltd and was subsequently optioned from BP under a letter agreement dated July 21 1986.

The property was optioned on the basis of a strong silver-lead-gold (-zinc) in soil anomaly and because of the strong geological similarities to silver-gold-lead-zinc prospects at Bob Creek, Fenton Creek and Owen Lake. To evaluate the geochemical anomaly, in 1986 Lornex carried out a programme of chip sampling of the existing trenches and 238m of new backhoe trenching along the anomaly.

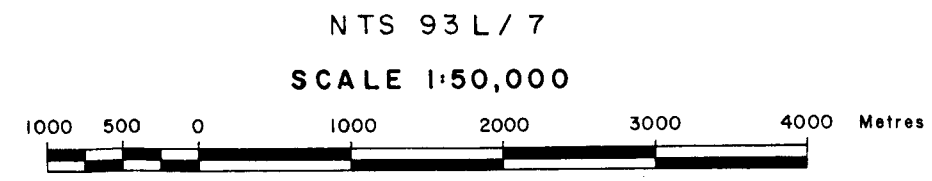
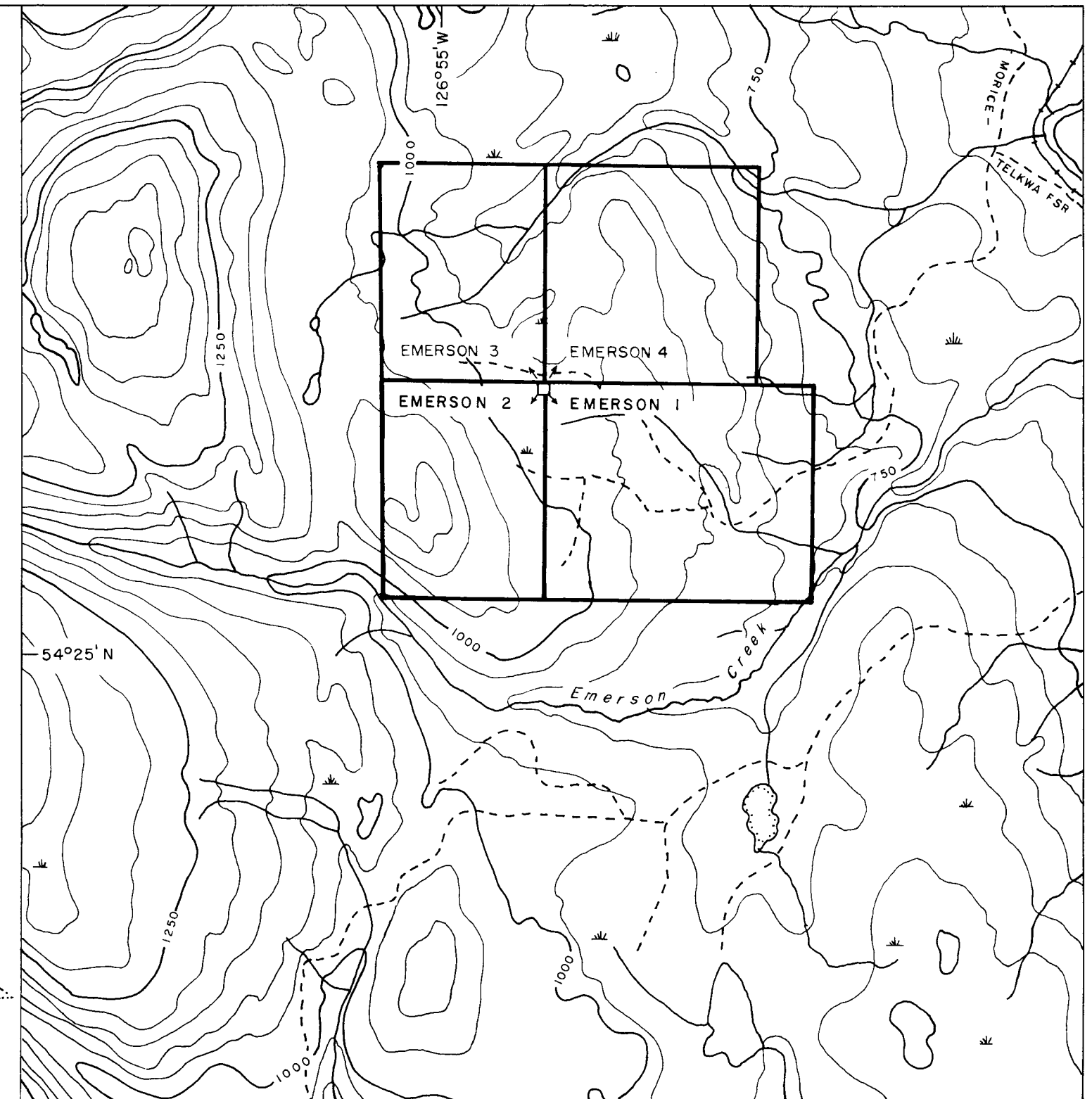
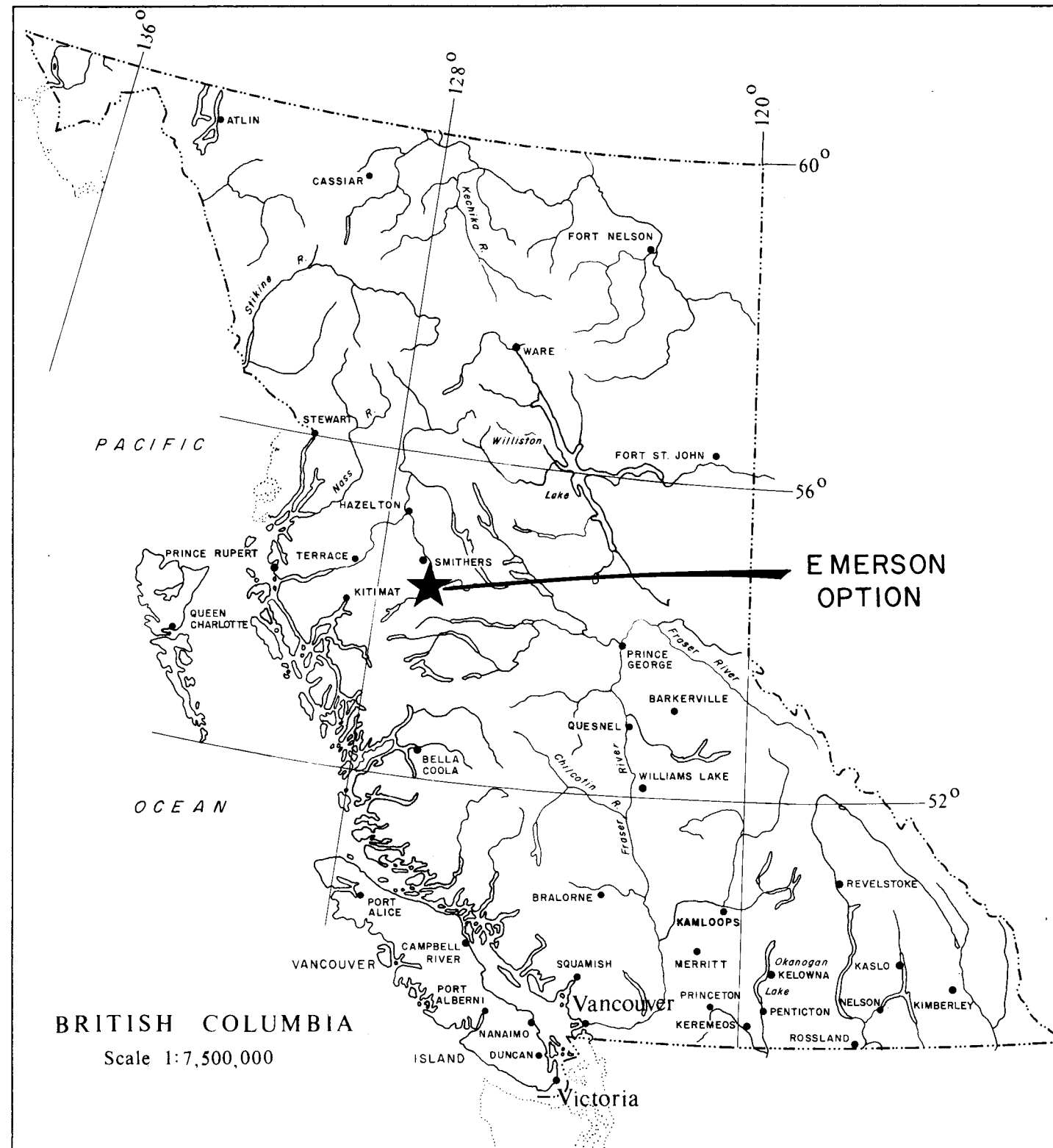
Trenching located some erratic galena-sphalerite-tetrahedrite stringers in altered tuff but generally indicated the source of the geochemical soil anomaly to lie to the northeast (Cann, 1986).

This current IP survey was designed to locate drill targets which might be the source of geochemical anomalies.

1.2 Location, Access and Physiography

Emerson is located in central British Columbia, 15km west-northwest of Houston (NTS: 93L/7). Access is via a four-wheel drive road which branches southwest from the Morice-Telkwa forest service road at the 15km marker, (Figure 1).

Topography is subdued on the property, consisting of flat to gentle northeast facing slopes. Elevations vary from 800m asl on the east edge of the claims to 1200m asl on the west side.



LORNEX MINING CORPORATION		
EMERSON OPTION		
LOCATION AND CLAIM MAP		
DATE NOV. 1986.	DRAWN BY R.M.C. / J.S.	DWG. L FIG. 1

Much of the central portion of the claim block was clear-cut logged approximately 20 years ago and is now covered with immature pine. Unlogged areas are covered with mature fir and spruce.

1.3 Claim Status

Emerson consists of four contiguous modified grid claims (Figure 1), located within the Omineca Mining Division, as described below:

<u>Claim</u>	<u>Units</u>	<u>Record No:</u>	<u>Recorded</u>	<u>Expiry Date (1)</u>
Emerson 1	20	7108	July 2 1985	1994
Emerson 2	12	7205	Aug 7 1985	1993
Emerson 3	12	8125	Jan 15 1987	1988
Emerson 4	16	8126	Jan 15 1987	1988

(1) Before filing of 1987 assessment work.

1.4 History

Mineralization was discovered in 1966 by W Smith of Telkwa, B C while fire-fighting in the area. Smith staked by Lybdenum 1-3 claims and optioned them to Amax who added the Barr 1-42 claims. From 1966-68 Amax conducted geological mapping, soil geochemical surveys, 11km of IP, 1220m of bulldozer trenching and 939m of diamond drilling in four holes. The property was subsequently returned to Smith because of the low molybdenum grades.

In 1977, K W Livingstone staked the Jailbird and Jailbird 2 claims to cover ground originally covered by the lapsed Barr and Lybdenum claims. Work conducted in 1977 consisted of rock geochemical sampling in Amax' trenches.

In 1982 the area was restaked as the Gooch 1-4 claims by the Saskatchewan Mining Development Corporation who carried out soil, silt and rock sampling over much of the property to evaluate the precious metal potential. SMDC's work defined a zone of anomalous Au, Ag, As and Mo in soil within a broad area of advanced argillic alteration. No follow-up was conducted due to SMDC withdrawing from exploration in western Canada.

When the Gooch claims lapsed, BP Selco restaked the area as the Emerson Group. In 1985, BP collected 662 soil samples to further define soil anomalies located by SMDC. This work defined two interconnected anomalies - one in the area of Amax' trenching and a second anomaly to the southwest in an overburden covered area (Rebagliati and Gravel, 1985).

2 IP SURVEY

2.1 Instrumentation and Survey Procedures

Induced polarization and resistivity surveys were conducted over 4.38 line-km on the Emerson 1 claim (Figure 2). Work as conducted under contract by Scott Geophysics Ltd during the period May 27-30 1987. In preparation for the IP survey, 6.1km of grid were cut and picketed by Van Alphen Exploration Services Ltd of Smithers B C.

A Scintrex IPR11 time domain microprocessor based induced polarization receiver and a Scintrex 2.5 kw IPC7 transmitter were used for the survey. Readings were taken using a two second alternating square wave. The chargeability for the eighth slice (690 to 1050 milliseconds after shut off, midpoint at 870 milliseconds) is the value that has been plotted on the accompanying plans and pseudosections.

The survey data was archived, processed and plotted using a Sharp PC7000 microcomputer running Scintrex Soft II and proprietary software. All chargeability values were analyzed for their special characteristics using a curve matching procedures (Soft II).

The pole dipole electrode array was used on the survey, with an "a" spacing of 20 metres and "n" separations of 1 to 5. The current electrode was to the west of the receiving electrodes on all survey lines.

2.2 Discussion of Results

IP/resistivity results are presented in pseudosections in figures 3 and 4. A very strong, broad chargeability high was outlined west of the baseline in the central survey area. This anomaly has coincident low resistivity and is characterized by long time constants. Sparse outcrop confirms that this area contains abundant disseminated pyrite within felspar porphyry.

A second, moderately strong chargeability high was outlined in the southeast corner of the survey area and is open to the south. This anomaly is coincident with relatively high resistivity and is characterized by short time constants on lines 1100N and 2000N but by long time constants on line ON. No outcrop exists in this area.

Separating these two chargeability anomalies is a broad linear zone of low resistivity trending subparallel with the baseline. The resistivity low may represent an area of deep overburden and/or a major fault.

3 RECOMMENDATIONS

Evaluation of soil geochemical results together with current geophysical results suggests anomalous values in soil may originate from mineralization associated with the southeast chargeability anomaly and/or the linear resistivity low. These features should be tested by diamond drilling.

4 REFERENCES

- Cann, R M 1986: Geology, Geochemistry and Trenching, Emerson
Option, Houston B C, Lornex Mining Corporation Ltd.
- Rebagliati, C M 1985: Geology and Geochemistry on the Emerson Claim
and Gravel, J Group, Selco Division, BP Minerals Ltd

5 STATEMENT OF QUALIFICATIONS

- 1 I am a geologist residing at 1260 Silverwood Crescent, North Vancouver, British Columbia and am employed by Lornex Mining Corporation Ltd of 1650, 609 Granville Street, Vancouver British Columbia.
- 2 I am a graduate of the University of British Columbia with a B Sc (Geology) in 1976 and an M Sc (Geology) in 1979.
- 3 I have practiced my profession with Rio Algom, Lornex and other companies since graduation.
- 4 I am a Fellow of the Geological Association of Canada.
- 5 I personally supervised the IP/resistivity programme conducted by Scott Geophysics Ltd on the Emerson 1 claim from May 27 to May 30 1987.

Robert M Cann

Vancouver
September 1987

Statement of Qualifications

I, Alan Richard Scott, of 4013 West 14th Avenue, Vancouver, B.C., V6R 2X3, hereby state that:

- 1 I graduated from the University of British Columbia with a B. Sc. in Geophysics in 1970.
- 2 I am a member of the Society of Exploration Geophysicists and the B.C. Geophysical Society.
- 3 I have been practicing as a Professional Geophysicist in the Mining Exploration Industry for 17 years.
- 4 I personally supervised the Induced Polarization survey work on the Emerson Property.

A handwritten signature in black ink, appearing to read 'Alan Scott', written over a horizontal line.

Alan Scott, Geophysicist

September 10, 1987

6 COST STATEMENT

Salaries:

R Cann May 26-30 @ \$150/day	\$750.00	
Benefits 25% of salaries	<u>\$187.50</u>	
		\$ 937.50

Contractors:

IP- Scott Geophysics Ltd	6,773.00
May 27-30 1987; 4.4 km	

Line-cutting - Van Alphen Exploration	2,043.50
May ; 6.1 km	

Airfare	320.00
Truck Rental 5 days @ \$50/day	250.00
Motel and Meals	265.00

Report preparation, drafting	<u>\$ 150.00</u>
	<u><u>\$10,739.00</u></u>