REPORT ON
CAULFIELD RESOURCES INC. OPTION
INDUCED POLARIZATION
HEMLO PROPERTY
THUNDER BAY MINING DIVISION
MOLSON LAKE AREA
NTS 42-C-12
FOR
VULCAN RESOURCES INC.

RECEIVED
JUN 30 1983
MINING LANDS SECTION

June 13, 1983

David R. Bell Geological Services Inc.
per: Don B. Sutherland, P. Eng.
Geophysical Consultant

TABLE OF C

SUMMARY

An induced polarization survey has outlined three highly chargeable horizons crossing the full width of the 15 claim property. Two of these horizons on the central part of the property are 500 feet apart and have intercalated zones of high chargeability. This double IP trend is interpreted to be caused by graphitic tuffs and parallel pyritic tuffs which may be favourable host rocks for gold mineralization.

A very strong IP anomaly occurs along the southern four claim area that is interpreted to be a sulphide (pyritic) zone similar in physical property character to the Corona and Golden Sceptre pyritic zones in that the zone is highly chargeable with a relatively high resistivity.

A diamond drill program of 6 to 7 holes for 3,400 feet is proposed with 2 geological section holes for an additional 1,350 feet. Total cost of this drilling program would be approximately $100,00.00 to $135,000.00.

INTRODUCTION

Purpose of Survey

An induced polarization survey was run over the southern portion of the Caulfield Resources Ltd. claim option for Vulcan Resources Inc. to cover extensions of horizons outlined by previous VLF-EM and magnetic surveys. Some of these horizons are associated with slightly anomalous gold values in soil samples taken in late November and early December, 1982, L.J. Nelson (1983).

The main purpose of the IP program was to outline disseminated sulphide zones which may be similar to those hosting the gold deposits on the Golden Sceptre, International Corona and Goliath Gold properties to the east.

Location and Access

The property is located 25 miles east of Marathon, Ontario in the Molson Lake Area claim sheet region, Thunder Bay Mining Division. Access is by helicopter from local charter operators based in Marathon and near White Lake to the east of Manitouwadge Corners. The distance to highway 17 is only 1.5 miles and it would be possible to construct a road to the property. At present a drill road extends from highway 17 through the Interlake property to the east boundary of the Caulfield-Vulcan claims.

Property

The property consists of 15 unpatented claims as follows:

Claim No.	Recording Date	Work Filed
393034	August 27, 1981	20 days EM, 20 days Mag
393035	August 27, 1981	20 days EM, 20 days Mag
393036	August 27, 1981	20 days EM, 20 days Mag
393037	August 27, 1981	20 days EM, 20 days Mag
393038	August 27, 1981	20 days EM, 20 days Mag
393043	August 27, 1981	20 days EM, 20 days Mag
393044	August 27, 1981	20 days EM, 20 days Mag
393045	August 27, 1981	20 days EM, 20 days Mag
393046	August 27, 1981	20 days EM, 20 days Mag
393047	August 27, 1981	20 days EM, 20 days Mag
393048	August 27, 1981	20 days EM, 20 days Mag
393049	August 27, 1981	20 days EM, 20 days Mag
393050	August 27, 1981	20 days EM, 20 days Mag
393051	August 27, 1981	20 days EM, 20 days Mag
393052	August 27, 1981	20 days EM, 20 days Mag

Previous Work

A VLF EM and Magnetic survey was run over the whole property in 1982 and this survey was filed for assessment credit on August 11, 1982. A soil sampling program was done but had not been filed for assessment at the time of writing, L.J. Nelson (1983).

A detailed proton precession magnetometer and VLF EM (Radem) survey was done on the southern four claims in December 1982 to cover a zone that was later found to be a high chargeability anomaly, L.J. Nelson (1983).

Survey Statistics and Coverage

The IP Survey was carried out with 3 men on December 9-12, 1982 and January 21 to 25, 1983 and then on May 9 to 19, 1983 using 4 men.

Lines were run on 400 foot line spacings with readings taken at 100 foot intervals. A total of 453 chargeability readings and 453 resistivity readings were taken for both "n" spacings.

The southern portion of the property was read including claims numbered:

393036
393037
393038
393044
393045
393046
393047
393048
393049
393050
393051

Claims 393043, 393052, 393034 and 393035 were not surveyed.

GEOLOGICAL SETTING

The northern part of the property is underlain by sediments and volcanic tuffs where as the central part has a graphitic tuff horizon with associated pyrrhotite-pyrite mineralization and a parallel mafic volcanic unit. These latter two horizons can be traced in part with the magnetic data as anomalous highs up to 1400 gammas above background. Strong VLF EM conductors are associated with the north and south contacts of the graphitic horizon. Dips of schistosity are 80° north and the strike is north 70° east.

The southern part of the property is predominately intermediate to felsic crystal tuffs with some sedimentary components. The regional geology is described by T. Muir (1982).

INSTRUMENTATION AND SURVEY PROCEDURE

The survey was carried out using a Crone N IV IP, time domain receiver and a Phoenix IPT-1 transmitter. A dipole-dipole array with an "a" spacing of 100 feet and an "n" spacing of 1 and 2 was used. This gave a theoretical depth of exploration of 100 and 150 feet. Readings were taken every 100 feet for each "n" spacing.

A square wave signal with 2 seconds on - 2 seconds off was transmitted via stainless steel stake electrodes and the voltage readings were made using porous copper sulphate filled electrodes. Three cycles of the transmitted signal were averaged by the receiver to give the chargeability reading. Instrument specifications are given in the Appendix.

INTERPRETATION

Anomaly 1 and 2

Two parallel chargeable horizons trend parallel to the base line at 10N and 5N and are associated with a magnetic high region and two VLF EM conductors. This zone includes a graphitic tuff horizon to the north and pyritic tuffs plus possible graphite to the south. The low resistivity values on the most northern of the two conductors reflects the graphite zone. This horizon extends to the west off the property to a point where anomalous gold values have been located (.059 oz Au in pyritic tuff). Therefore, units within this overall chargeability anomaly should be tested for gold values.

Anomaly 3

To the north of the IP anomaly at 10N a broad area of chargeabilities in to 10-20 millisecond range is associated with high resistivities and shallow overburden. This high background is probably due to a chargeable bedrock but emphasized by the shallow overburden and therefore is a low priority target.

Anomaly 4

A weak IP trend occurs at 7 south on line 12 east and extends to 5 south on line 0+00 and is interpreted to reflect a specific rock unit that is more chargeable. This horizon is a low priority target.

Anomaly 5

The most interesting IP anomaly geophysically is the very high chargeability trend extending from 16S on line 32E to 11S on 4E. Values up to 90 ms have been obtained suggesting a zone of fine disseminated sulphide. Resistivity values are relatively high suggesting a low graphite content. However a narrow conductive zone may occur on 16E and 20E at 13+50S to 14+15S respectively as suggested by single values in the 700 ohm metre range. Diamond drill holes 4, 5 and 6 on 4E, 16E and 24E are highly recommended to test the IP anomaly.

Anomaly 6

Another IP anomaly may be developing to the south of Anomaly 5 on lines 24E-28E at 19+00S and this should be tested as part of a cross section on 24E.

CONCLUSIONS AND RECOMMENDATIONS

Three strong IP anomaly trends, Anomalies 1, 2 and 5 have been outlined by the IP survey.

The most northern trend, Anomaly 1, is a graphitic zone whereas Anomaly 2 which is parallel and 500 feet south, is interpreted to be both graphite and pyritic-pyrrhotitic tuffs. A cross section of 3 holes should be drilled to test these units and the chargeable zones between the main anomaly peaks.

The strongest IP anomaly, Anomaly 5, occurs on the southern 4 claims on the property and this zone is interpreted to be disseminated pyrite with possible semi-massive pyrite lenses. This horizon is hosted in intermediate volcanic tuffs and possibly associated porphyry zones. Three holes are recommended to test this horizon at wide spacings to determine the possibility of zoneation of gold values.

Anomaly 6 is an imcomplete indication of a strong anomaly near the south boundary of the claims. It is also considered to be a first priority geophysical target and drill hole 6A has been spotted to test it. Its location, near the south boundary, warrants consideration but with prevailing northerly dips the anomalous source may lie entirely within the claims.

Anomalies 3 and 4 are weak responses with low priorities but will be tested by drill holes 7 and 8 which are essentially geological holes.

If any encouragement is obtained in the above program the IP surveying should be extended to cover the western and northern parts of the property.

Respectfully submitted,
David R. Bell Geological Services Inc.

Don B. Sutherland, B.A., M.A. P. Eng.

REGISTERED PROFESSIONAL ENGINEER
D. B. SUTHERLAND
PROVINCE OF

TABLE 1 Proposed Drilling Schedule

IP ZONE	DDH NO.	COLLAR	AZIMUTH	DIP	LENGTH
1	427-83-1	L16E/12+50N	Grid South	-50°S	500'
1 & 2	427-83-2	L16E/10N	Grid South	-50°S	800'
2	427-83-3	L16E/7N	Grid South	-50°S	550'
5	427-83-4	L4E/9+50S	Grid South	-50°S	450'
5	427-83-5	16E/12S	Grid South	-50°S	600
5	427-83-6	24E/13S	Grid South	-50°S	800+
6	427-83-6A	24E/18S	Grid South	-50°S	300
					3,700 feet

Possible Additional Drilling for Geological Information

4	427-83-7	L12E/2+50S	Grid South	-50°S	850'
3	427-83-8	L32/18N	Grid South	-50°S	500

REFERENCES

Muir, T.L. (1982) Geology of the Hemlo Area, District of Thunder Bay, O.G.S. Report 217

Nelson, L.J. (1983) Progress Report on Caulfield Resources Ltd. Soil Geochem Survey Hemlo Property April 22, 1983

Nelson L.J. (1983) Progress Report on Caulfield Resources Inc. Ground Geophysics (Proton Mag, Radem, IP Survey) Hemlo Property, April 22, 1983

CERTIFICATE

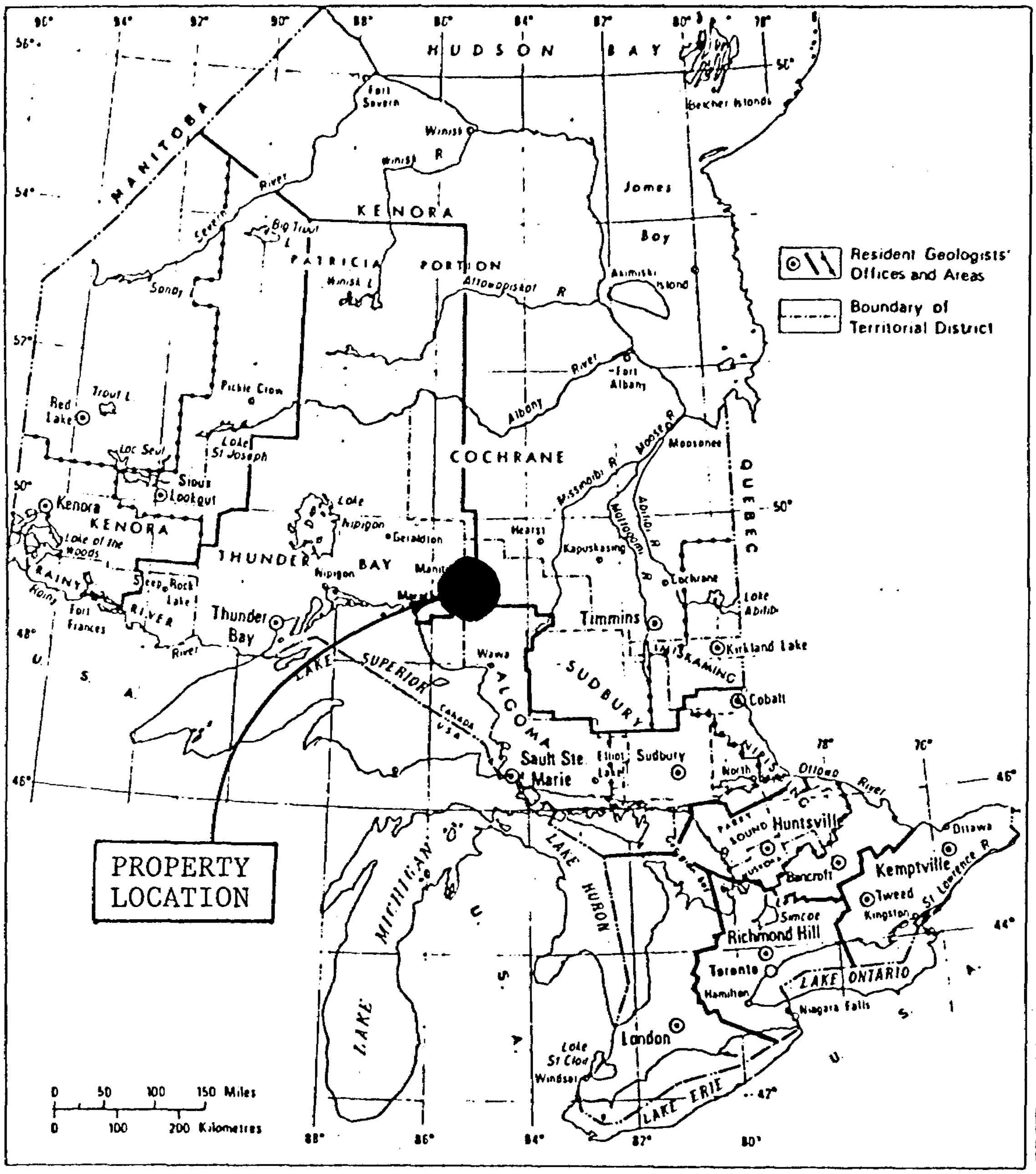
I, Don Benjamin Sutherland, of the City of Toronto, Province of Ontario, do hereby certify that:

1. I am a geophysicist residing at 975 Mount Pleasant Road, Toronto, Ontario.
2. I am a graduate of the University of Toronto, with a B.A. Degree (1952) in Physics and Geology and an M.A. Degree (1953) in Physics.
3. I am a member of the Canadian Institute of Mining and Metallurgy and the Canadian Exploration Geophysicists Society.
4. I am a Professional Geophysicist and Consultant registered in the Province of Ontario.
5. I have no direct or indirect interest, nor do I expect to receive any directly or indirectly in the property or securities of Caulfield Resources Incorporated and/or Vulcan Resources Inc.
6. The statements made in this respect are based on a study of published geological literature and unpublished private reports.
7. Permission is granted to use in whole or in part for assessment and qualification requirements but not for advertising purposes.

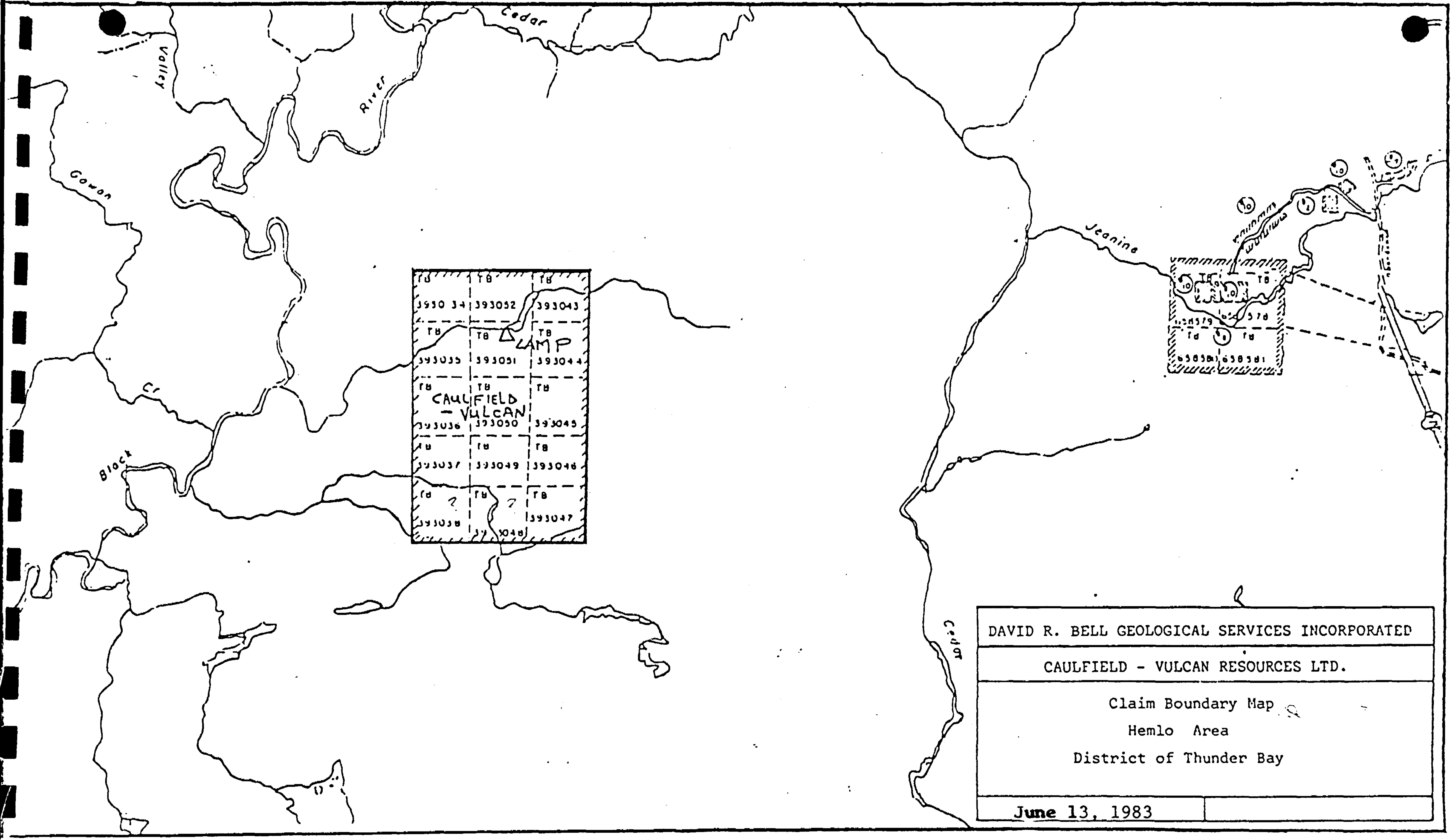
Timmins, Ontario
June 13, 1983

Don B. Sutherland, B.A., M.A., P.Eng.

REGISTERED PROFESSIONAL ENGINEER
D. B. SUTHERLAND
PROVINCE OF ONTARIO



VULCAN RESOURCES INC.	
CAULFIELD RESOURCES LTD.	
PROPERTY LOCATION MAP	
	1" = 150 miles


Cedar
Valley
River
Gowan
Cr
Black
Jeanine
Cedar
TB
393034
393052
393043
393035
393051
393044
CAMP
CAULFIELD
- VULCAN
393036
393050
393045
393037
393049
393046
393038
393048
393047
DAVID R. BELL GEOLOGICAL SERVICES INCORPORATED
CAULFIELD - VULCAN RESOURCES LTD.
Claim Boundary Map
Hemlo Area
District of Thunder Bay
June 13, 1983

Ontario

File ____________

Ministry of Natural Resources

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) Induced Polarization & Resistivity

Township or Area Rous Lake Area

Claim Holder(s) Caulfield Resources Inc. [illegible] 1520

[illegible] V7Y 1G5

Survey Company Rayan Exploration Ltd.

Author of Report Don B. Sutherland

Address of Author 975 Mount Pleasant Rd., Toronto

Covering Dates of Survey Dec.9-12/82, Jan.21-25/83
(linecutting to office) May9-19/83

Total Miles of Line Cut N.A.

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	
–Magnetometer	
–Radiometric	
–Other IP	20
Geological	
Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer ______ Electromagnetic ______ Radiometric ______
(enter days per claim)

DATE: June 13/83 SIGNATURE: [signature]
Author of Report or Agent

REGISTERED PROFESSIONAL ENGINEER
D. B. SUTHERLAND
PROVINCE OF ONTARIO

Res. Geol. ____________ Qualifications ____________

Previous Surveys

File No.	Type	Date	Claim Holder

OFFICE USE ONLY

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
TB	393036
TB	393037
TB	393038
TB	393044
TB	393045
TB	393046
TB	393047
TB	393048
TB	393049
TB	393050
TB	393051

If space insufficient, attach list

TOTAL CLAIMS 11

837 (5/79)

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Number of Stations 227 (n=1 & 2 Number of Readings 453 Charg. 453 Res.

Station interval 100 Line spacing 400 feet

Profile scale

Contour interval Chargeability 10 milliseconds. Resistivity 1,000, 2,000, 5,000, 10,000 ohm metres

MAGNETIC

Instrument

Accuracy – Scale constant

Diurnal correction method

Base Station check-in interval (hours)

Base Station location and value

ELECTROMAGNETIC

Instrument

Coil configuration

Coil separation

Accuracy

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency

(specify V.L.F. station)

Parameters measured

GRAVITY

Instrument

Scale constant

Corrections made

Base station value and location

Elevation accuracy

INDUCED POLARIZATION RESISTIVITY

Instrument Crone N IV IP Receiver, Phoenix IPT-1 Transmitter

Method ☒ Time Domain ☐ Frequency Domain

Parameters – On time 2 seconds Frequency

– Off time 2 seconds Range

– Delay time 0.45 seconds

– Integration time 0.45-90.0 M; 0.90-1.35N

Power 1 KVA motor generator

Electrode array dipole-dipole

Electrode spacing 100 feet

Type of electrode Tx-stainless steel; Rx porous pots-copper sulphate

IPT-1

Variable Frequency, Time Doma
and Phase IP Transmitter

- Reliable: Backed by twenty years experience in the design and worldwide operation of induced polarization and resistivity equipment
- Versatile: Can be used for resistivity, variable frequency IP, time domain IP or phase angle IP measurements
- Stable: Excellent current regulation
- Lightweight, portable
- Wide selection of power sources
- Low cost

Specifications

Power Sources	: Internal DC power module containing 8 45V dry cell batteries, or internal AC power module with external 1 KVA, 2 KVA or 3 KVA motor generator.
Ammeter Ranges	: 30 mA, 100 mA, 300 mA, 1A, 3A and 10A full scale.
Meter Display	: A meter function switch selects the display of current level, regulation status, input frequency, output voltage, control battery voltage or line voltage.
Current Regulation	: The change in output current is less than 0.2% for a 10% change in input voltage or electrode impedance.
Output Waveform	: Either DC, single frequency, two frequencies simultaneously, or time domain (50% duty cycle). Frequencies of 0.078, 0.156, 0.313, 1.25, 2.5, and 5.0 Hz are standard, whereas 0.062, 0.125, 0.25, 1.0, 2.0, and 4.0 Hz are optionally available. The simultaneous transmission mode has 0.313 and 5.0 Hz as standard, whereas 0.156 and 2.5 Hz are optional.
Frequency Stability	: ± 1% from -40° to +60°C is standard. A precision time base is optionally available for coherent detection and phase IP measurements.
Protection	: Current is turned off automatically if it exceeds 150% full scale or is less than 5% full scale.
Case	: Non-conductive, high impact resistant plastic.
Dimensions	: 20 x 40 x 55 cm (9 x 16 x 22 inches).
Weight	: 14 kg (31 lb) with DC power module. 16 kg (35 lb) with AC power module.
Standard Accessories	: Pack frame, manual. At least one of the two possible power modules is required. The AC power module in turn requires one of the external 1KVA, 2KVA or 3KVA motor generators and a connecting cable.

DC POWER MODULE (BPS-1)

Output Voltage	: 8 x 45V dry cell batteries (Eveready 482, Mallory 202 or equivalent) are switched in series or parallel to provide output voltag of 90V, 180V, and 360V.
Output Power	: Recommended maximum output power is 30 watts. Absolute maximum output pow is 100 watts.
Battery Life	: Normal field operation, with low output pow results in an average battery life expectancy one month. Operation with the absolute maximum output power results in much shor battery life.
Control Supply	: 4 x 6V lantern batteries (Eveready 409, Mall 908 or equivalent) connected in series/paral are used to provide the 40 to 70 mA required the control circuitry. Average battery life expectancy is six months.
Operating Temperature	: 0°C to +60°C.

AC POWER MODULE (AC-3)

Output Voltage	: 0V, 75V, 150V, 300V, 600V and 1200V.
Output Power	: Maximum continuous output power is 3 k This requires the 3KVA motor generator.
Input Power	: 350 to 1000 Hz, 60V (45V to 78V) 3 phase is standard. 120V (90V to 156V) and/or single phase may be link selected inside the module
Current Regulation	: Achieved by feedback to the alternator of the motor generator unit.
Operating Temperature	: -40°C to +60°C.
Thermal Protection	: Thermostat turns off at 65°C and turns back o at 55°C internal temperature.

PHOENIX

PHOENIX GEOPHYSICS LIMITED

Geophysical Consulting and Contracting, Instrument Manufacture, Sale and Lease.

Head Office: 200 Yorkland Blvd. Willowdale, Ont., Canada, M2J 1R6. Tel: (416) 493-6350
1424 - 355 Burrard St. Vancouver, B.C., Canada, V6C 2G8. Tel: (604) 684-2285
2430 N. Huachuca Dr., Tucson, Arizona, U.S.A. 85705. Tel: (602) 884-8542

CRONE GEOPHYSICAL COMPANY

NEWMONT TYPE N-IV I.P. RECEIVER

DIMENSIONS: 8" x 4.3" x 12.3" (20 cm x 11 cm x 31 cm)
WEIGHT: 10 lbs., 4.5 kg. (including batteries)
POWER SUPPLY: 5 standard "D" cells, 1.5 volts each, 60 MA drain, 1 of 9 volt standard cell for S.P.

MEASUREMENTS:

Primary Voltage Vp - .0005 - 60 volts, accuracy ± 5%.

Chargeability "M & N" - Both samples of the decay curve "M" and "N" are taken for 3 current cycles then are automatically averaged, adjusted to the $33^{M}{}_{1}$ standard and stored. Measuring cycles both using a 2.0 second off, 2.0 second on current period are:

NORMAL: .45 sec. delay; .45 - .90 sec "M"; .90 - 1.35 sec "N"; ".35 switch": .35 sec. delay; .35 - .70 sec "M"; .70 - 1.05 sec. "N".

SELF POTENTIAL - Range 0 - 1 volt digital, calibrated readout.
Range 0 - 2 volts uncalibrated. Automatic buckout switched in after manual adjustment.

LAND 1

Ministry of Natural Resources
Ontario

Report of Work
(Geophysical, Geological, Geochemical and Expenditures)

Ref. 2.56

#203

Project #427

The Mining Act

42C12NW0132 2.5667 MOLSON LAKE

900

in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

Type of Survey(s)	Township or Area
Induced Polarization	Holson Lake Area (G-603)

Claim Holder(s)	Prospector's Licence No.
Caulfield Resources Inc.	T1239

Address c/o David R. Bell Geological Services Inc.
Box 1250, Timmins, Ontario P4N 7J5

Survey Company	Date of Survey (from & to)	Total Miles of line Cut
Rayan Exploration Ltd.	09 12 82 (Day Mo. Yr.) – 09 05 83 (Day Mo. Yr.)	N/A

Name and Address of Author (of Geo-Technical report)
Don G. Sutherland 975 Mount Pleasant Road, Toronto, Ontario

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other IP	20
	Geological	
	Geochemical	

Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

RECEIVED
JUL 15 1983
MINING LANDS SECTION

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures $ ÷ 15 = Total Days Credits

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Date	Recorded Holder or Agent (Signature)
July 8, 1983	R. A. Markov

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
TB	393036	
	393037	
	393038	
	393044	
	393045	
	393046	
	393047	
	393048	
	393049	
	393050	
	393051	

See reverse work sheet

Total number of mining claims covered by this report of work. 11

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
220	July 11/83	Audrey M. Hayes
	Date Approved as Recorded	Branch Director

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying
R.A. Markov P.O. Box 1250, Timmins, Ontario P4N 7J5

Date Certified	Certified by (Signature)
July 8, 1983	R. A. Markov

1362 (81/9)

Ministry of Natural Resources

Ontario

Geotechnical Report Approval

File 2.5667

July 20/83

Mining Lands Comments

☑ To: Geophysics Mr. Barlow.

Comments		
☑ Approved ☐ Wish to see again with corrections	Date Sept 2/83	Signature

☐ To: Geology - Expenditures

Comments		
☐ Approved ☐ Wish to see again with corrections	Date	Signature

☐ To: Geochemistry

Comments		
L.D.		
☐ Approved ☐ Wish to see again with corrections	Date	Signature

☐ To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

1983 07 18 2.5667

Mrs. Audrey Hayes
Mining Recorder
Ministry of Natural Resources
P.O. Box 5000
Thunder Bay, Ontario
P7C 5G6

Dear Sir:

We have received reports and maps for a Geophysical (Induced Polarization) survey submitted under Special Provisions (credit for Performance and Coverage) on mining claims TB 393036 et al in the Area of Rous Lake.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-1380

A. Barr:mc

cc: Caulfield Resources Inc.
Suite 1520
609 Granville Street
Vancouver, B.C.
V7Y 1G5

cc: Mr. Don B. Sutherland
975 Mount Pleasant Road
Toronto, Ontario
M5P 2L8

2.5667

203

1983 11 01 2.5667

Mrs. Audrey Hayes
Mining Recorder
Ministry of Natural Resources
P.O. Box 5000
Thunder Bay, Ontario
P7C 5G6

Dear Madam:

RE: Geophysical (Induced Polarization) Survey on Mining Claims TB 393036 et al in the area of Molson Lake

The Geophysical (Induced Polarization) survey assessment work credits as listed with my Notice of Intent dated October 12, 1983 have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Totonto, Ontario
M7A 1W3
Phone: 416/965-1380

D. Kinvig:sc

cc: Caulfield Resources Inc
Vancouver, B.C.

cc: Mr. Don B. Sutherland
Toronto, Ontario

cc: Resident Geologist
Thunder Bay, Ontario

Ministry of Natural Resources
Ontario

Technical Assessment Work Credits

File
2.5667

Date	Mining Recorder's Report of Work No.
1983 10 12	203

Recorded Holder
CAULFIELD RESOURCES INCORPORATED
Township or Area
MOLSON LAKE AREA

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic ______ days	
Magnetometer ______ days	TB 393038 393046 to 50 inclusive
Radiometric ______ days	
Induced polarization 20 days	
Other ______ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological ______ days	
Geochemical ______ days	
Man days ☐ Airborne ☐	
Special provision ☒ Ground ☒	
☒ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

10 days Induced Polarization	5 days Induced Polarization
TB 393045 393051	TB 393036 - 37 393044

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☐ Insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical — 80; Geological — 40; Geochemical — 40; Section 77(19)—60:

828 (83/6)

Ontario

'Ministry of
Natural
Resources

Nov 1, 1983

Your file: 203

Our file: 2.5667

October 12, 1983

Mrs.Audrey Hayes
Mining Recorder
Ministry of Natural Resources
P.O. Box 5000
Thunder Bay, Ontario
P7C 5G6

Dear Madam:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact Mr. F.W. Matthews at 416/965-1380.

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1316

D. Kinvig:sc

Encls:

cc: Caulfield Resources Inc
Suite 1520
609 Granville, Street
Vancouver, B.C.
V7Y 1G5

cc: Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario
FILE

cc: Mr. Don B. Sutherland
975 Mount Pleasant Road
Toronto, Ont
M5P 2L8

845

Ministry of Natural Resources
Ontario

Notice of Intent for Technical Reports

October 12, 1983

2.5667

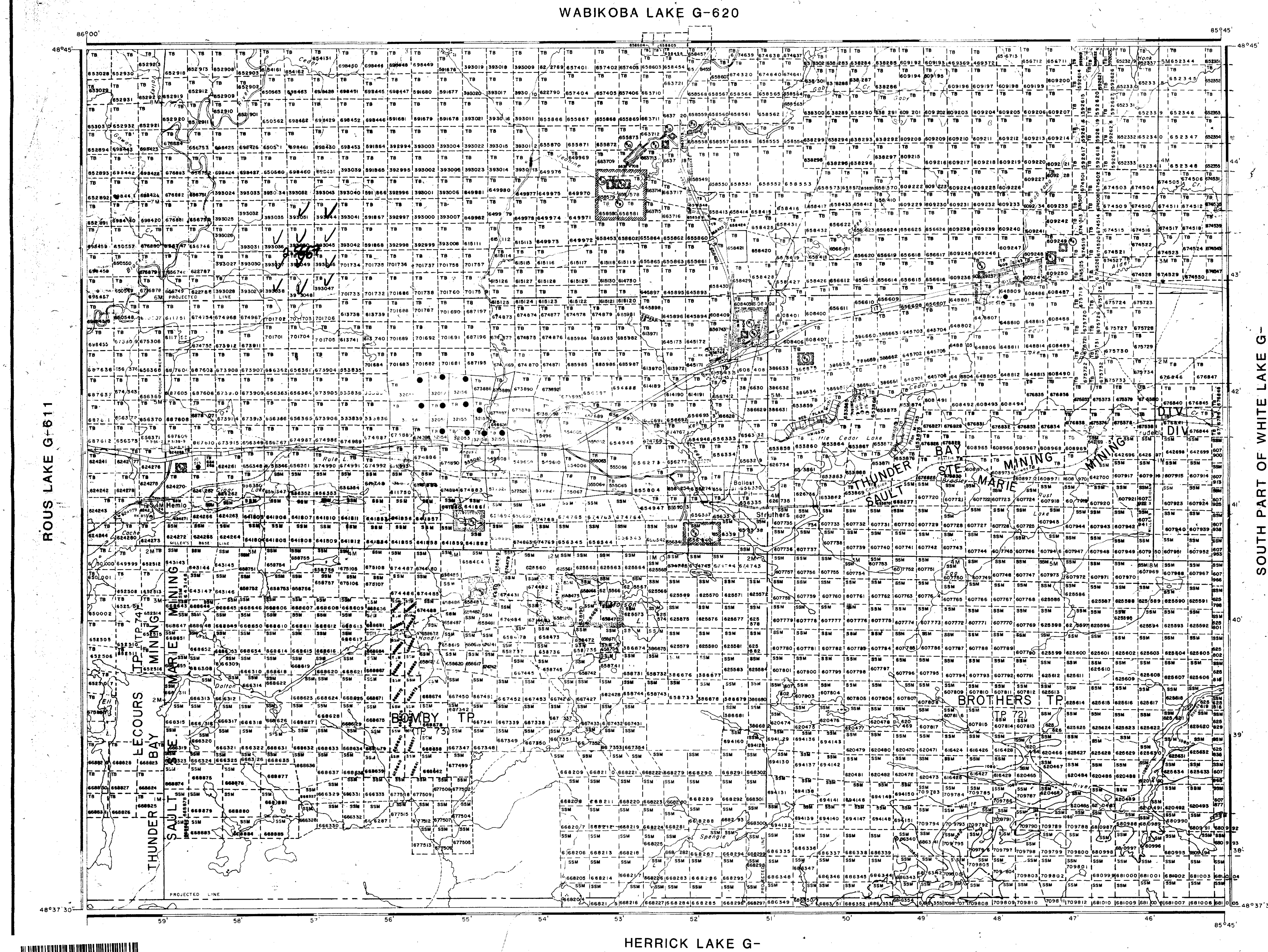
An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on his record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted direct to the Lands Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

						2.5667		
	T.P.			T.P.				
TB-393036	3/4		393047	✓				
37	3/4		48	✓				
393038	✓		49	✓				
393044	3/4		50	1/4	✓			
45	1/2		393051	1/2				
393046	✓							
						O.K.		



SAND and GRAVEL

DATE OF ISSUE
JUL 21 1983
Ministry of Natural Resources
TORONTO

- G1 M.T.C. PIT 340
- G2 M.T.C. PIT 341
- G3 M.T.C. PIT 343
- G4 M.T.C. PIT 344
- G5 M.T.C. PIT 346
- G6 M.T.C. PIT 342
- G7 M.T.C. PIT 514
- G8 M.T.C. PIT 1342
- G9 M.T.C. PIT 347
- G10 GRAVEL FILE 143647

Areas withdrawn from staking under Section 43 of the Mining Act. (R.S.O. 1970)

Order No.	File	Date	Disposition
R1 W. 38/81	143647	13/4/81	S.R.O.
R2 W. 11/82	163606	20/4/82	S.R.O.

FLOODING RIGHTS TO CONTOUR ELEVATION 1080' RESERVED TO ONTARIO HYDRO FILE 113986

LEGEND

HIGHWAY AND ROUTE No
OTHER ROADS
TRAILS
SURVEYED LINES
TOWNSHIPS, BASE LINES, ETC
LOTS, MINING CLAIMS, PARCELS, ETC
UNSURVEYED LINES
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC
RAILWAY AND RIGHT OF WAY
UTILITY LINES
NON PERENNIAL STREAM
FLOODING OR FLOODING RIGHTS
SUBDIVISION OR COMPOSITE PLAN
RESERVATIONS
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES
TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" , SURFACE RIGHTS ONLY	
" , MINING RIGHTS ONLY	
LEASE, SURFACE & MINING RIGHTS	■
" , SURFACE RIGHTS ONLY	
" , MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	OC
RESERVATION	(R)
CANCELLED	⊗
SAND & GRAVEL	(S)

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC 1

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000
METRES 0 200 1000 (1 KM) 2000 (2 KM)

AREA

MOLSON LAKE

M.N.R. ADMINISTRATIVE DISTRICT
TERRACE BAY/WAWA
MINING DIVISION
SAULT STE. MARIE/THUNDER BAY
LAND TITLES / REGISTRY DIVISION
THUNDER BAY

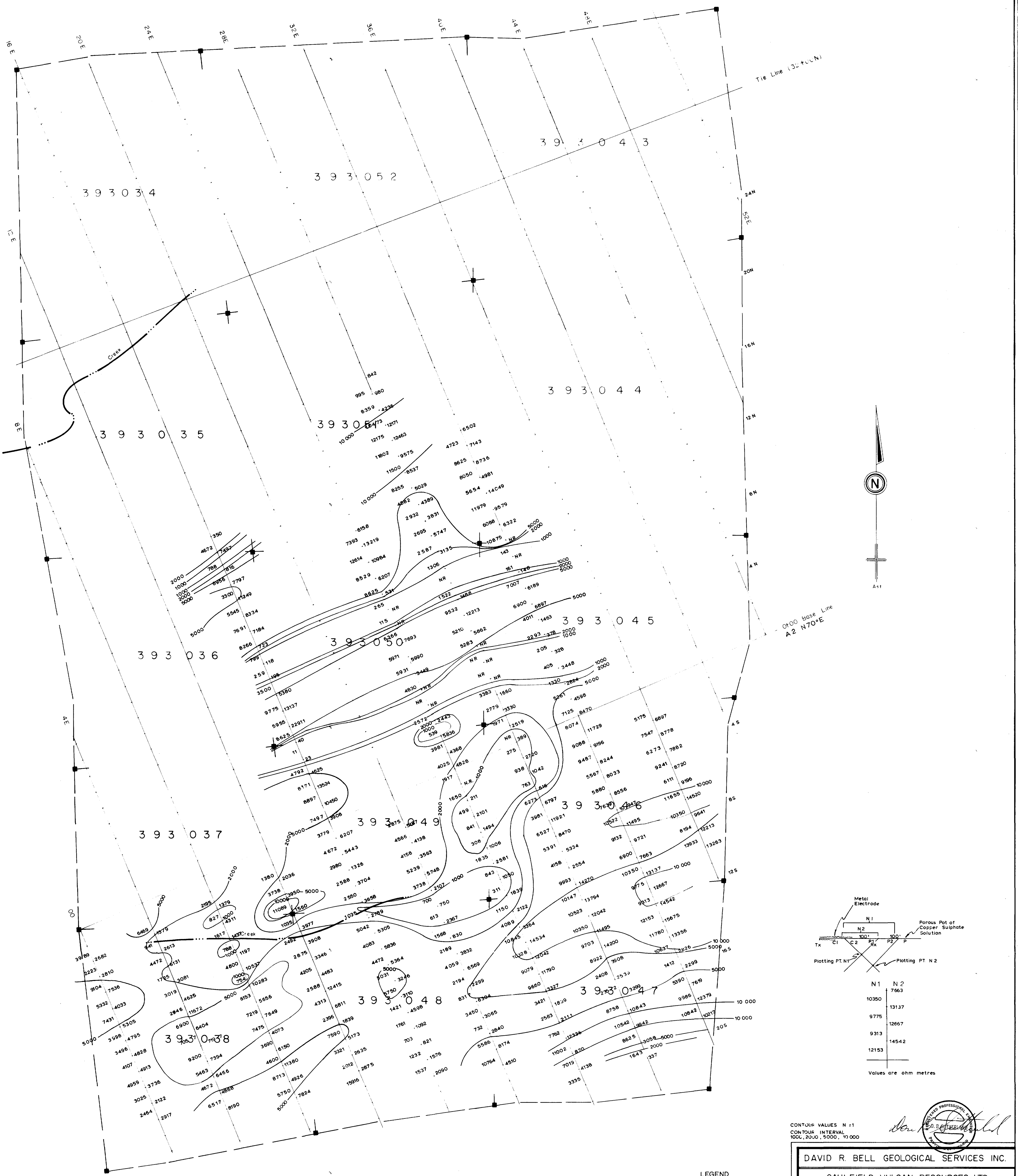
Ontario
Ministry of Natural Resources
Land Management Branch

Date FEBRUARY 1982
Number G-603

486854

42C12NW0132 2.5667 MOLSON LAKE

200



LEGEND

Transmitter	: Pheonix I.P.T.I. 1
Receiver	: Crone I.P. 4
Array	: Dipole-Dipole
a-Spacing	: 100 Ft.
spread	: N1 and N2

DAVID R. BELL GEOLOGICAL SERVICES INC.

CAULFIELD-VULCAN RESOURCES LTD.

INDUCED POLARIZATION SURVEY

RESISTIVITY

HEMLO AREA

Thunder Bay Mining Division

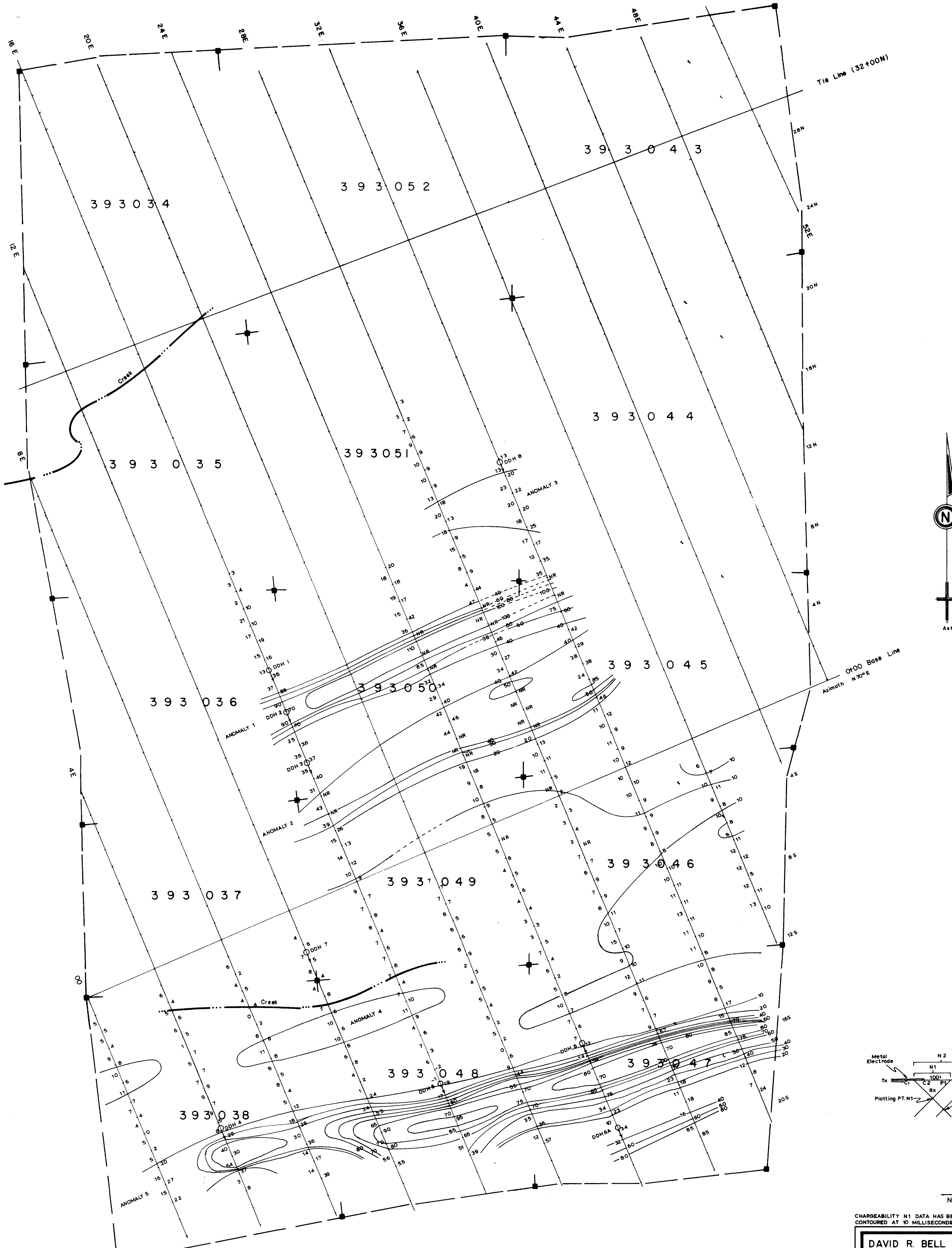
Ontario

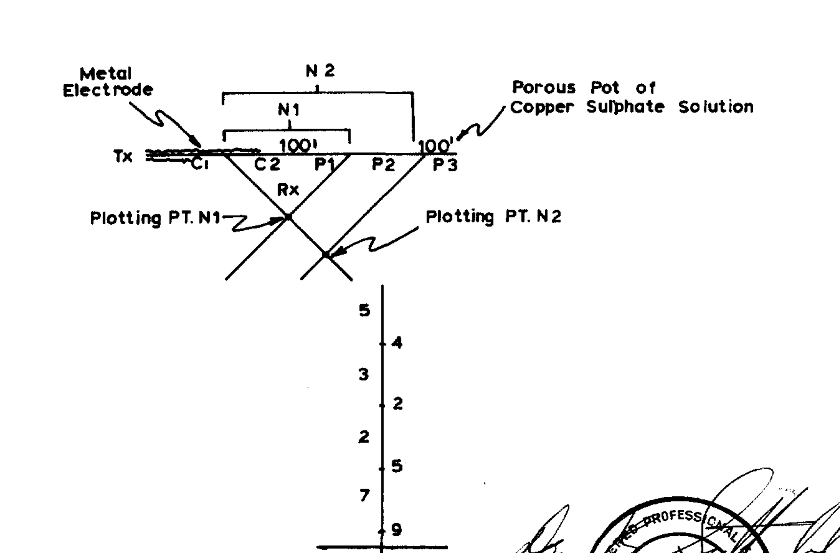
Scale 1" = 200'

June 13, 1983

42C12NW0132 2.5667 MOLSON LAKE

210





CHARGEABILITY N1 DATA HAS BEEN CONTOURED
CONTOURED AT 10 MILLISECONDS AT INTERVALS

LEGEND

Transmitter : Phoenix I.P.T.I.1
Receiver : Crone I.P. 4
Array : Dipole-Dipole
a-Spacing : 100 Ft.
Spread : N1 and N2

DDH. I Proposed Drill Hole

D. B. SUTHERLAND
REGISTERED PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO

DAVID R. BELL GEOLOGICAL SERVICES INC.

CAULFIELD-VULCAN RESOURCES LTD.

INDUCED POLARIZATION SURVEY

CHARGEABILITY

HEMLO AREA

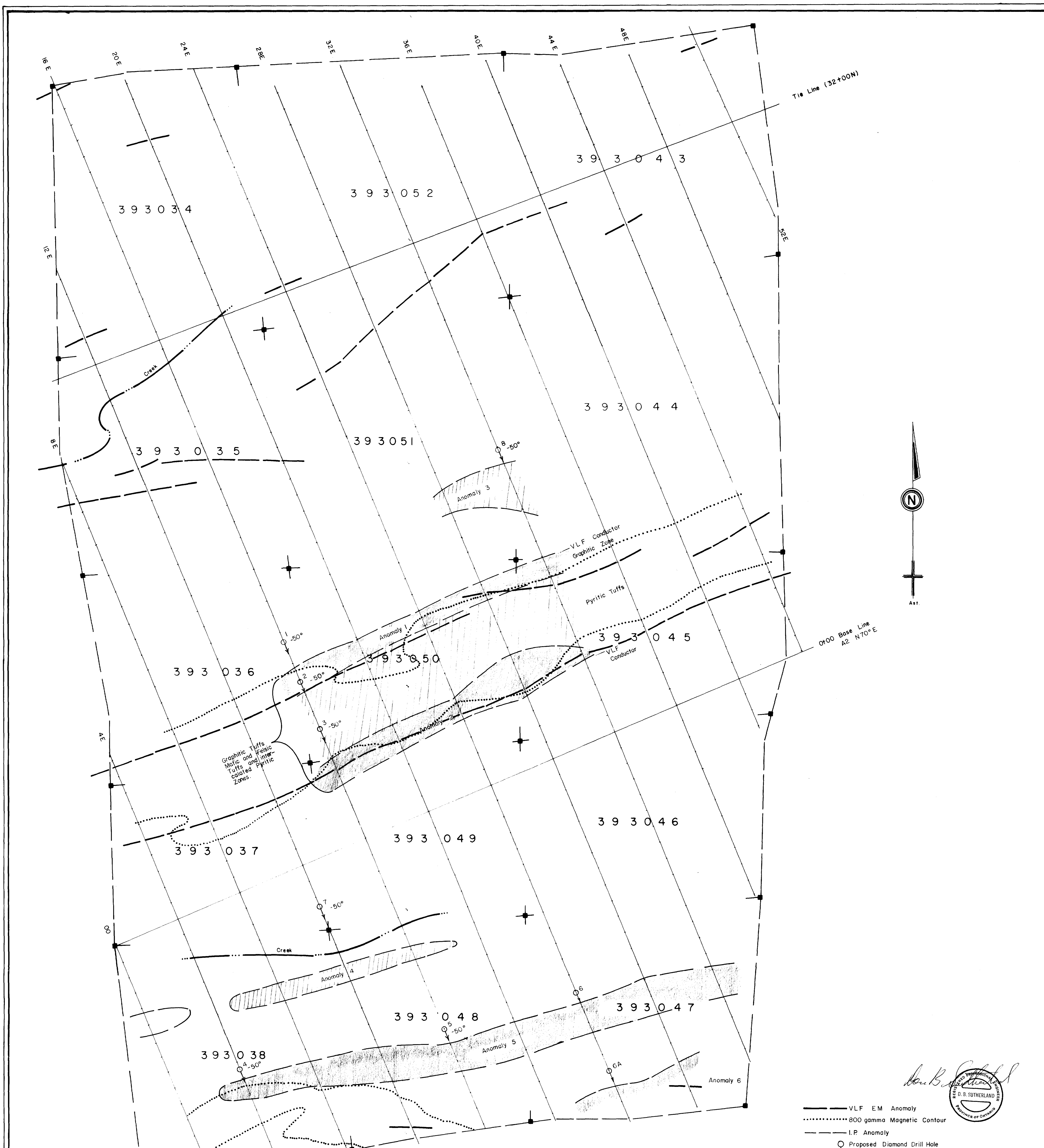
Thunder Bay Mining Division
Ontario

Scale 1" = 200"

June 13, 1983

25667

220



DAVID R. BELL GEOLOGICAL SERVICES INC.

CAULFIELD-VULCAN RESOURCES LTD.

I.P Interpretation and
Proposed Diamond Drill Hole Locations
HEMLO AREA

Thunder Bay Mining Division
Ontario

Scale 1"=200"

June 13, 1983

25667

230