2.4715

sherritt

010

GEOPHYSICAL REPORT
ELECTROMAGNETIC AND MAGNETOMETER SURVEYS
DAVIDSON-CARR PROPERTY
N.T.S. 52J/2 M-1740
Beckington Lake Area

- V. R. Venn -

sherritt

GEOPHYSICAL REPORT

Electromagnetic and Magnetometer Surveys

Beckington Lake Area
Mining District of Patricia
N.T.S. 52J/2NE M-1740

Mining Claims

Pa	487308	Pa	487317
	487309		487318
	487310		487671
	487311		487672
	487312		560609
	487313		560593
	487314		560594
	487315		560595
	487316		560598

Sherritt Gordon Mines Limited
Dryden, Ontario

April 15, 1982

V. R. Venn
Chief Geologist

SHERRITT GORDON MINES LIMITED

010C

INDEX

APPENDICES

APPENDIX A

Technical Data

APPENDIX B

General Description and Application of - MP2 Magnetometer

APPENDIX C

General Description and Application of Apex Max/Min Horizontal Loop.

SHERRITT GORDON MINES LIMITED

MAPS

1 - 1 Magnetometer Survey (proton)
Scale 1 inch to 200 feet
Contour interval 100 gammas

1 - Electromagnetic Survey (Horizontal Loop)
Scale: Horizontal - 1 inch to 200 feet
Vertical - 1 inch to 20%
Frequencies 888 Hz.

1 - Electromagnetic Survey (Horizontal Loop)
Horizontal Scale: 1 inch to 200 feet
Vertical Scale: 1 inch to 20%
Frequency 3555 Hz.

SHERRITT GORDON MINES LIMITED

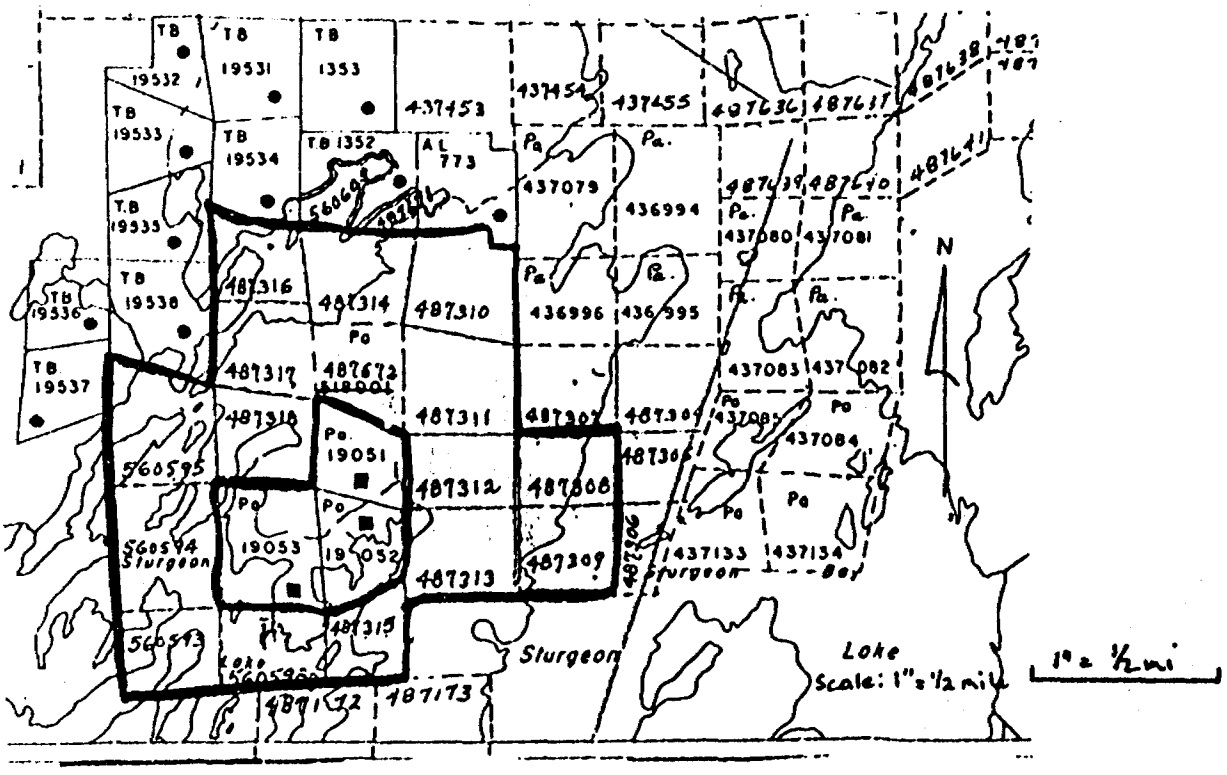
THE DAVIDSON-CARR PROSPECT

Project Number 1256

N.T.S. 52J/2NE M-1740

Beckington Lake Area

LOCATION MAP



Davidson-Carr Project

I INTRODUCTION

The property consists of 18 contiguous claims staked for gold mineralization in Beckington Lake Area on the North-East Arm of Sturgeon Lake. The claims are presently held under option from Mr. S. Johnson of Sioux Lookout, Ontario.

The area of the claim group embraces several old gold deposits. The Davidson-Carr located on the east side of the East Arm of Sturgeon Lake, lies directly across from the Powell Prospect, located on the west side of the same lake, a distance of about 1¼ miles. The Richelieu Property, not included in the present option, lies one mile to the southwest and on strike with the Powell Prospect. All of the gold deposits are associated with quartz veins intruding Archean Volcanic rocks.

The Davidson-Carr and the Powell Occurrances have had very limited work done on them prior to and after 1900. The work has involved limited trenching and some shaft sinking. The work is very poorly documented. The present work has involved linecutting and geophysical surveys, to help delineate any mineralization or associated geological structures on the ground. The present report on 18 claims is an addendum to work previously submitted on the total claim group of 34 claims.

II PROPERTY, LOCATION AND ACCESS

The property consist of 18 mining claims which form part of the total group of 34 claims located on the North-East Arm of Sturgeon Lake in Beckington Lake Area. Map M-1740; N.T.S. 52J/2NE.

The property is located 9 miles south-east of Savant Lake Station on the Canadian Pacific Railway. Access can be made by float plane or by a 3 mile bush road, south to Sturgeon Lake and thence by water to the North-East Arm of Sturgeon Lake.

III PREVIOUS WORK

Davidson-Carr - (O.D.M. Report, Volume XXXIX Part II 1980)

During the winter of 1928 - 1929, the Golden Centre Mining Company carried out considerable exploration work on this property under option. An inclined shaft was put down 165 feet and 150 feet to underground lateral work completed.

The main vein follows a drag fold at the contact between Keewatin greenstone and interbanded acid volcanic breccia, rhyolite, and tuff. Quartz porphyry dikes cut through the property. A slight fault occurs at the crest of the drag fold. Apparently the values are confined to the centre of the drag. The vein is 6 feet wide at the top of the shaft and has been traced for 600 feet on the surface. The width of the vein decreases at depth.

Powell Occurrance

- there is little if any work recorded on this ground. Several trenches and two shallow shafts in evidence on the property appear to have been completed prior to 1900.

IV GENERAL GEOLOGY

The general geology of the area of the claim group (Trowell, 1980, map 2420) consists of an area of intermediate to felsic Archean flows and associated volcanoclastics, striking N25°E and dipping 80°-85° north easterly. These rocks have in turn been intruded by a series of gabbroic rocks striking parallel to the flows but at times forming discordant relationships. These intrusive rocks have a strike length on the property of over 2 miles and vary in width from 50' to over 400'.

Gold mineralization in the area is generally known to be associated with quartz veins which intrude the Archean volcanics.

V PRESENT WORK

The present work comprises linecutting, proton magnetometer and horizontal electromagnetic surveys. The linecutting was completed by Mr. Alex Kozowy of Ignace, Ontario (Contractor) during February and March of 1981. The geophysical surveys were completed by Sherritt Gordon Mines Limited's own personnel during February 1982.

The present grid being reported on - 18 claims forms part

of a larger grid put in on a 34 claim group. Two parallel baselines 4,000 feet apart were cut at an azimuth of N25°E. Cross lines were cut at 90° to the baselines and at 400 foot intervals over the entire claim group. Pickets were erected on all lines at 100 foot intervals.

The magnetometer survey (proton precession) was completed at 100' intervals on all lines including baselines. Diurnal corrections were completed using a base recorder and day-to-day corrections applied to all readings. A map of the survey results has been plotted at a scale of 1" to 200' and contoured at 100 gamma intervals, 60,000 gammas have been subtracted from all readings.

The horizontal electromagnetic survey was completed over all lines and readings taken at 100' intervals using a 400' spread. Both % inphase and % outphase were read on the 888 Hz and 3555 Hz. Maps of each frequency were plotted at a scale of 1" to 200'.

For further technical data see Appendix A.

VI GEOPHYSICAL INTERPRETATION

The magnetometer survey indicates a series of lenticular, parallel to sub-parallel en echlon magnetic anomalies which are aligned with the regional strike of the volcanic rocks in the area (N25°E). The higher magnetics appear to form anomalous trends associated with wide gabbroic intrusions which parallel the regional geology. There are at least 4 to 5 such magnetic trends occuring separately or merging together on the claim group.

The background in the area of the more felsic volcanic rocks ranges from 100 up to about 500 gammas, total field. The high magnetic trends associated with the gabbroic intrusives tend to range from 400 gammas up to 10,000 gammas or more. These later intensities form individual magnetic highs several hundred feet long within the main magnetic trends. The delineation of the magnetic trends is in places not well defined particularily where the magnetic contrast between the felsic volcanic rocks and the gabbroic rocks is low. This tends to give a somewhat disjointed or en echlon appearance to the magnetics.

Magnetic anomalies within the gabbroic rocks and associated magnetic trends probably in part result from localized polarization of magnetite during intrusion or later metamorphism. In many instances the anomalies appear to be associated with geological contacts rather than effects from within the central part of the intrusion itself. In general the magnetic highs appear to be the result of structural implications and infer a very uneven distribution of magnetite within the gabbro-intrusives.

Magnetic lows are frequently encountered over the gabbro. They are possibly caused by narrow inclusions of the more felsic volcanic country rock within the intrusive. (L-456S to L-484S; 190 to 196E) The negatives, which range from a few hundred gammas up to several thousand gammas may result from the effects of a shallow lower negative magnetic pole associated with wedges of country rock of short vertical extent which have been included in

the gabbro during its emplacement. This in turn indicates a merging of the gabbro-intrusion at a shallow depth of possibly several hundreds of feet.

The horizontal electromagnetic survey does not seem to reveal any anomalous effects that can be attributed to sulfide mineralization. Generally the overburden is non-conductive, although some areas that appear swamp related have higher conductivities.

VII CONCLUSIONS

The present work has not indicated any mineral deposits of economic significance. Essentially it has served as a basis upon which further geological investigation can be directed. The most beneficial aspects of the present work relates to the magnetometer survey, which if coupled with further geological investigation may illucidate any relationship of the gold bearing quartz to structural control.

VII RECOMMENDATIONS

A detailed mapping study of the Powell Occurrence and its structural relationship to the Richelieu Occurrence are recommended. This might best be done using the magnetometer survey to relate any relationship between the two deposits. A thorough propsecting of the area directly between these two deposits is recommended along with detailed mapping and sampling of mineralized zones.

IX REFERENCES

O.D.M. Report, Volume XXXIX, Part II, 1980

Trowell 1980 Map 2420

Ontario Geological Series Map 2456

Aero Magnetic Map 1118G

X QUALIFICATIONS OF THE AUTHOR

1957 - BSc. Geological Engineering
Michigan College of Mining and Technology
Houghton, Michigan USA

1961 - Ontario Society of Professional Engineers

1957-1969 - Senior Geologist - Exploration
Algoma Ore Division
Algoma Steel Corporation Ltd.
Sault Ste. Marie, Ontario

1969-1981 - Teaching Master - Geology Department
Sault College of Applied Arts and Tech.
Sault Ste. Marie, Ontario

1981-present-Chief Geologist - Exploration
Sherritt Gordon Mines Limited
Dryden, Ontario

SHERRITT GORDON MINES LIMITED

APPENDIX A

LINECUTTING

2 Baselines - Azimuth - 025°
Total Length - 9,100' (1.72 miles)

crosslines @ 90° to baselines and 400' intervals
Total Length - 11.2 miles

Total Miles Line cut - 12.9 miles

GEOPHYSICS

Magnetometer Survey - proton procession
Type of Inst. - Sintrex MP-2
Sensitivity - 1 gamma
Total Stations 490

Base Recorder - Sintrex MB S-2
Sensitivity - 1 gamma
Diurnal corrections applied from base recorder and corrections made for day to day variations.

Total stations occupied 490
Total Miles Read 11.2

Horizontal Electromagnetic
Type of instrument - Apex Max/Min II
Sensitivity - 0.25% - 0.5%
Tilt - 1%

Stations Occupied - 490
No. Readings 1960

SHERRITT GORDON MINES LIMITED

APPENDIX A

Frequencies used - 888 Hz.; 3555 Hz
Survey method - In line

PERSONNEL

Linecutting: July 13 - July 31, 1981
Contractor - Kozy Explorations
Box 1260
Ignace, Ontario

Geophysics: Feb. 10 - Feb. 24, 1982
Geophysical Staff Sherritt Gordon Mines Limited,
2 Claybanks Road, Dryden, Ontario

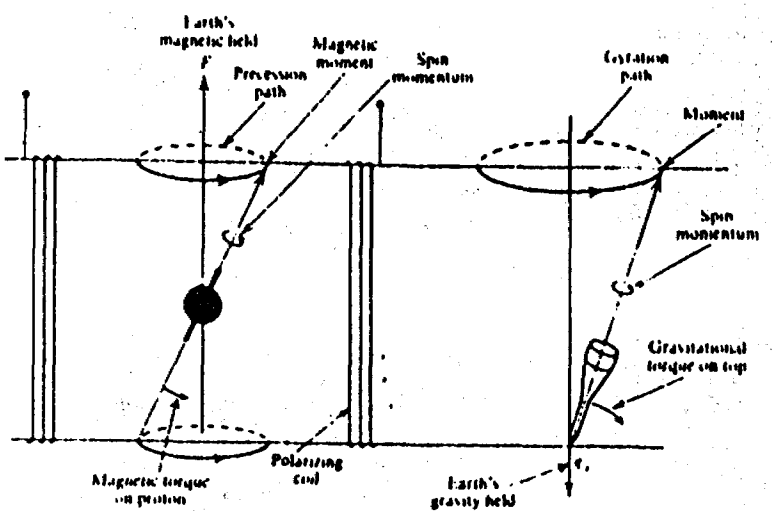
D. Hancock - foreman
K. Longe - assistant
S. Wilson - assistant

APPENDIX B

PROTON MAGNETOMETER
(Precession)

Precession of nuclei around a magnetic field direction is a well known phenomenon in nuclear physics. Some atomic nuclei have a net magnetic moment which coupled with their spin, causes them to precess about an axial magnetic field.

The proton magnetometer depends upon the measurement of the free- precession frequency of protons (hydrogen nuclei) which have been polarized in a direction approximately normal to the direction of the terrestrial field. When the polarizing field is suddenly removed, the protons precess like a spinning top, the earths field supplying the precessing force corresponding to that of gravity in the case of the top.



Proton precession and the spinning-top analogy.

The proton precesses at an angular velocity W, known as the Larmor precessing frequency, which is proportional to the magnetic field strength F, so that $W = \gamma_p \cdot F$

The constant γ_p is the gyromagnetic ratio of the proton, that is, the ratio of its magnetic moment to its spin angular momentum. The value of γ_p is known to an accuracy of $1/4 \times 10^{-4}$. Since precise frequency measurments are relatively easy the magnetic field can be determined to the same accuracy if it is possible to detect a

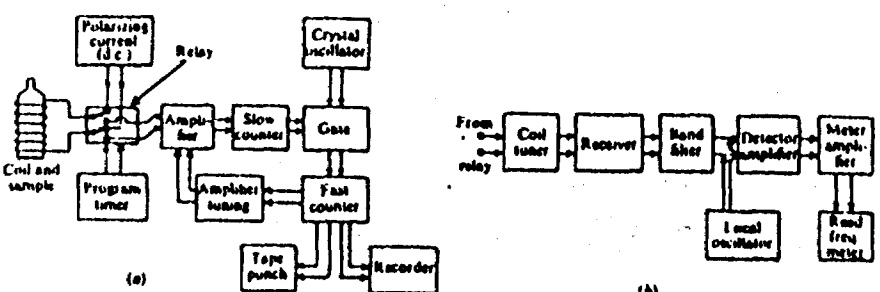
cont....

a signal derived from the precession of the proton.

The proton magnetometer consists of a source of proton (water or fluid rich in hydrogen), a polarizing magnetic field directed roughly normal to the earth's magnetic field, a pick up coil coupled tightly to the source (container of water), an amplifier to boost voltage in the pick-up coil and a frequency measuring device.

The polarizing field of 50-100 oerstiads is obtained by passing direct current through a solenoid wound around the bottle. When the solenoid current is turned off the proton precession about the earth's field is detected by a second coil as a transient voltage over an interval of about 3 seconds, modulated by the precession frequency. The modulation signal is amplified to a suitable level and the frequency measured. This in turn can be related to the earth's total field.

The proton magnetometer can measure the earth's total field to an accuracy of about 1 gamma. The instrument requires no orientation or leveling. It has no mechanical parts, so it is essentially trouble free.



Block diagram of nuclear precession magnetometer. (*a*) Recording magnetometer (from Dobrin, 1960); (*b*) portable direct-readout magnetometer.

APPENDIX C

THE MAX MIN II EM

The MaxMin II is a two-man continuously portable EM system. The MaxMin II system is designed to measure both the vertical and horizontal in-phase (IP) and quadrature phase (QP) components of the anomalous field from electrically conductive zones. More accurately, the directions of the measured components are perpendicular and parallel to the mean slope between the transmitting coil (Tx) and the receiving coil (Rx).

The plane of the Tx is kept parallel to the mean slope between the Tx and Rx at all times. This means that the MaxMin II is in effect a horizontal loop (HL) system, when the receiver measures anomalous components perpendicular to the mean slope between the coils. It is a minimum-coupled (Min-C) system, when the receiver measures anomalous components parallel to the mean slope between the coils.

Generally the MaxMin II is run in the HL mode with the MinC mode being used in the few instances, where it can improve on the data of the HL mode.

The MaxMin II has the following principal features designed into it:

(1) four system frequencies -222, 444, 888, and 1777 Hz - to deal effectively with a wide range of overburden and bedrock conductor conductivities,

(2) six Tx-Rx separations -100, 200, 300, 400, 600, and 800 ft. to cope with a wide range of problems from theesearch for large deep conductive zones to the resolution of shallow, parallel conductive zones

(3) built-in tilt meters to control the coil tilts in rough terrain, and thus reduce the 'noise' in the IP readings.

900

File _____

Ontario

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) Magnetometer, Electromagnetometer
Township or Area Beckington Lake (M-1740)
Claim Holder(s) SHERRITT GORDON MINES LTD.

Survey Company s SHERRITT GORDON MINES LTD.
Author of Report V.R. Venn
Address of Author Box 723, Dryden, Ontario
Covering Dates of Survey March 1981 to Feb. 22/82 (linecutting to office)
Total Miles of Line Cut 11.17

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	20
–Magnetometer	40
–Radiometric	
–Other	
Geological	
Geochemical	

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

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

DATE: April 22/82 SIGNATURE: _____ Author of Report or Agent

Res. Geol. _____ Qualifications 63-1102

Previous Surveys

File No.	Type	Date	Claim Holder

RECEIVED
APR 23 1982
MINING LANDS SECTION

RECEIVED
APR 23 1982
MINING LANDS SECTION

MINING CLAIMS TRAVERSED
List numerically

-Pa--487308

(prefix)	(number)
Pa	487306 ✓
	487309 ✓
	487310 ✓
	487311 ✓
	487312 ✓
	487313 ✓
	487314 ✓
	487315 ✓
	487316 ✓
	487317 ✓
	487318 ✓
	487671 ✓
	487672 1/2
	560609 3/4
	560593 ✓
	560594 ✓
	560595 ✓
	560598 1/2

TOTAL CLAIMS 18

If space insufficient, attach list

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 590 Number of Readings Mag.-590 ; EM-2000

Station interval 100' Line spacing 800

Profile scale 1"= 20%

Contour interval 100 gammas

MAGNETIC

Instrument Scintrex -MBS-2 Base station, Mp-2 Magnetometer

Accuracy -- Scale constant ± 1 gamma

Diurnal correction method looping and base recorder

Base Station check-in interval (hours) N/A

Base Station location and value N/A

ELECTROMAGNETIC

Instrument Apex Max-Min II

Coil configuration 1"=20%

Coil separation 400'

Accuracy

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

Frequency 888 hz 3555 hz (specify V.L.F. station)

Parameters measured In-phase Quadrature

GRAVITY

Instrument

Scale constant

Corrections made

Base station value and location

Elevation accuracy

INDUCED POLARIZATION

Instrument

Method ☐ Time Domain ☐ Frequency Domain

Parameters -- On time Frequency

-- Off time Range

-- Delay time

-- Integration time

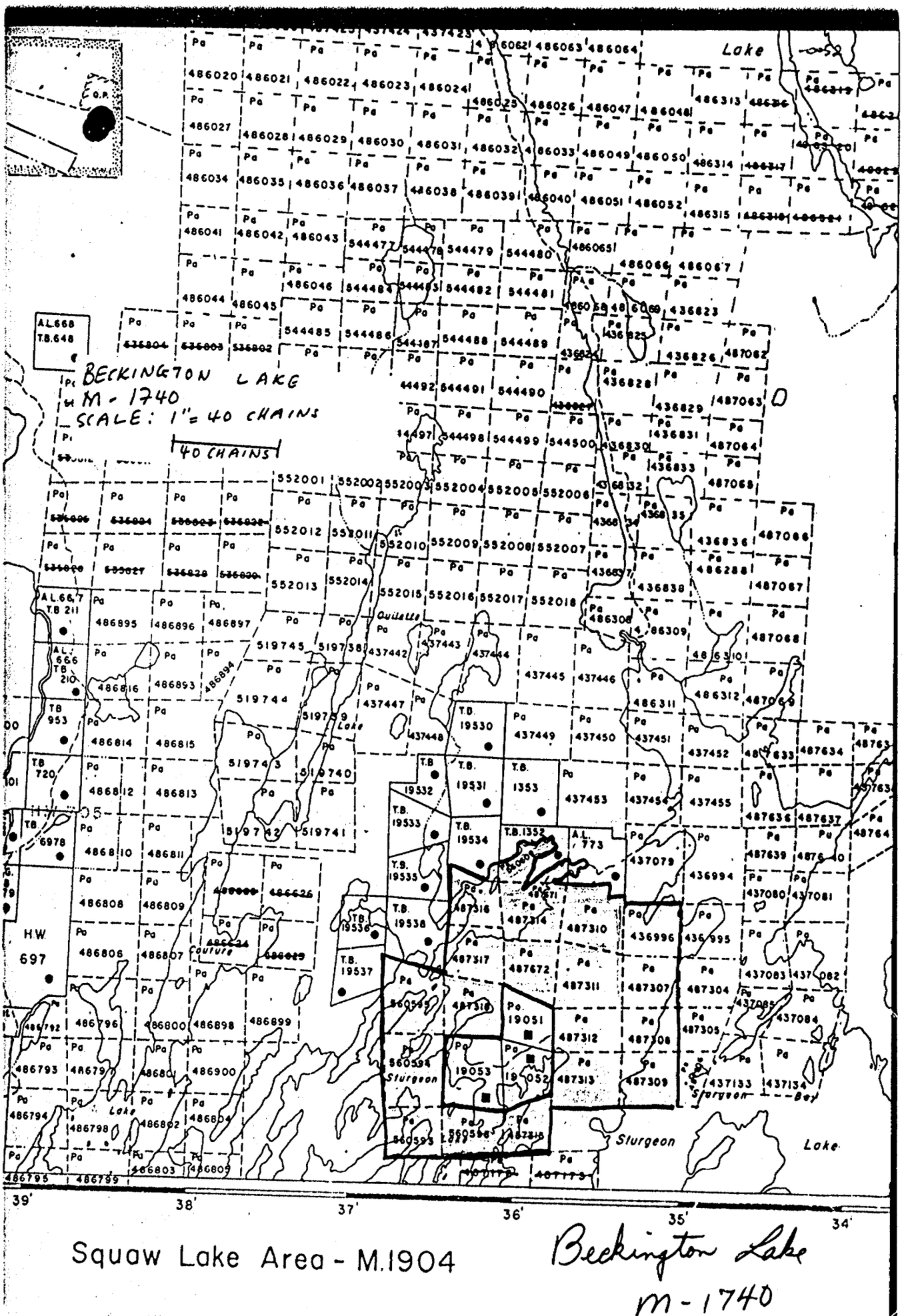
RESISTIVITY

Power

Electrode array

Electrode spacing

Type of electrode



Squaw Lake Area - M.1904

Beckington Lake
M-1740

EWM: MLB

82-28 82-2-0052

Ministry of Natural Resources
Ontario

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

2.4715
2.4715

The Mining Act

Instructions: -- Please type or print.
-- If number of mining claims traversed exceeds space on this form, attach list.
Note: -- Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
-- Do not use shaded areas below.

Type of Survey(s): GEOPHYSICAL

Township or Area: BECKINGTON LAKE M-1770

Claim Holder(s): SHERRITT GORDON MINES LTD.

Prospector's Licence No.: T-842

Survey Company: SHERRITT GORDON MINES LIMITED

Survey Dates (Prospecting to office): Day 03 Mo. 81 Yr. | Day 22 Mo. 02 Yr. 82

Total Miles of Line Cut: 16.5

Name and Address of Author (of Geo-Technical report): V.R. VENN BOX 723 DRYDEN, ONTARIO

Special Provisions Credits Requested

Instructions: For first survey: Enter 40 days. (This includes line cutting) For each additional survey: using the same grid: Enter 20 days (for each)

	Days per Claim
Geophysical	
- Electromagnetic	20
- Magnetometer	40
- Radiometric	
- Other	
Geological	
Geochemical	

Man Days

Instructions: Complete reverse side and enter total(s) here

	Days per Claim
Geophysical	
- Electromagnetic	
- Magnetometer	
- Radiometric	
- Other	
Geological	
Geochemical	

Airborne Credits

Note: Special provisions credits do not apply to Airborne Surveys.

	Days per Claim
Electromagnetic	
Magnetometer	
Radiometric	

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.

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
PA	487308				
	309				
	310				
	311				
	312				
	313				
	314				
	315				
	316				
	317				
	318				
	487671				
	672				
	560609				
	593				
	594				
	595				
	598				

RECEIVED
APR 30 1982
MINING LANDS SECTION

PORCUPINE MINING DIV.
RECEIVED
FEB 26 1982
A.M. 7 8 9 10 11 12 1 2 3 4 5 6 P.M.

487304

Total number of mining claims covered by this report of work: 18

For Office Use Only

Total Days Cr. Recorded: 1080

Date Recorded: February 26, 1982

Date Approved as Recorded:

Mining Recorder: A. Bowen

Regional/Branch Director:

Report Completed

Date of Report: Feb. 25, 1982

Recorded Holder or Agent (Signature): Janice Lavergne

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: Janice Lavergne

Sherritt Gordon Mines Box 723 Dryden

Date Certified: Feb. 25/82

Certified by (Signature): Janice Lavergne

62 (81/2)

Ministry of Natural Resources
Ontario

Technical Assessment Work Credits

-0052

File 2.4715

1983 06 17

Recorded Holder: SHERRITT GORDON MINES LTD

Township or Area: BECKINGTON LAKE AREA

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	PA 487308 to 14 inclusive 487316 to 18 inclusive 487671 560593 to 95 inclusive
Electromagnetic 20 days	
Magnetometer 40 days	
Radiometric ____ days	
Induced polarization ____ days	
Section ~~77(18)~~ 77(19) ____ days	
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.	
77(16)	

Special credits under section ~~77(18)~~ for the following mining claims

10 day Electromagnetic & 20 Days Magnetometer

PA 487315
487672
560598
560609

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(18)~~ 77(19)

828

	Mag.	E.M.		Mag.	E.M.	2.4715
PA.- 487308	✓	✓	PA.- 487317	~¼✓	✓	
09	✓	✓	487318	~✓	~✓	
10	✓	✓	487671	✓	✓	→ 2" small star
11	✓	✓	487672	½	½	
12	~¼✓	✓	560593	✓	✓	
13	✓	✓	94	✓	✓	
14	¼	¼	560595	✓	✓	
15	½	½	560598	~½	~½	
487316	✓	✓	560609	½	½	

D.F.

-0052

Ontario Ministry of Natural Resources

Geotechnical Report Approval

File 2.4715

Mining Lands Comments

☑ To: Geophysics Mr. Barlow.

Comments

☐ Approved ☐ Wish to see again with corrections | Date Jan 3/83 | Signature

☐ To: Geology - Expenditures

Comments

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

☐ To: Geochemistry

Comments

(1)

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

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

1693 (81/10)

RECEIVED

APR 23 1982

MINING LANDS SECTION

2283251

P 620979

Reference / Référence

Canada Post / Postes Canada

Certified Mail / Poste certifiée

Received by / Reçu par

Delivered by / Livré par

Date

From

SHERRITT GORDON MINES LIMITED
BOX 723
DRYDEN, ONTARIO
P8N 224

To / A

E.F ANDERSON
WHITNEY BLOCK, RM 6450
QUEEN'S PARK
TORONTO, ONT M7A 1W3

41-016-143(4-77)

Certified Mail Poste certifiée

1 Delivery Office / Bureau de livraison

-0052

sherritt

April 22, 1982

Mr. E. F. Anderson
Director
Lands Management Branch
Whitney Block, Rm. 6450
Queen's Park
Toronto, Ontario
M7A 1W3

Dear Sir:

Enclosed are work reports and maps on 18 mining claims in the Beckington Lake Area, M-1740, Mining District of Patricia.

We are applying for assessment credits under special provisions for magnetometer and electromagnetic surveys.

Mining Claims: Pa 487308 - 487318 inclusive.
Pa 487671 + 487672
Pa 560609 + 560593
Pa 560594 + 560595 + 560598

Enclosures: duplicated copies of one magnetometer map
duplicated copies of two electromagnetic maps 888Hz
duplicated copies of two electromagnetic maps 3555Hz.

Your truly,

V. R. Venn

Chief Geologist
Sherritt Gordon Mines Limited
Dryden, Ontario

VRV:jl

Encl.

Sherritt Gordon Mines Limited/Mining and Milling Division
Exploration Field Office
P.O. Box 723, Claybanks Road, Dryden, Ontario P8N 2Z4/Tel: (807) 223-5365

1982 05 11 2.4715

Mining Recorder
Ministry of Natural Resources
P.O. Box 669
Sioux Lookout, Ontario
P0V 2T0

Dear Sir:

We have received reports and maps for a Geophysical (Electromagnetic and Magnetometer) Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims Pa 467308 et al in the Area of Beckington 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: 416/965-1316

J. Skura/amc

cc: Sherritt Gordon Mines Ltd.
Dryden, Ontario

cc: Mr. V.R. Venn
Sherritt Gordon Mines Ltd.
Dryden, Ontario

Ministry of Natural Resources

Ontario

-0052

July 13/83

Your file:

1983 06 17

Our file: 2.4715

Mr. Albert Hanson
Mining Recorder
Ministry of Natural Resources
P.O. Box 669
Sioux Lookout, Ontario
P0V 2T0

Dear Sir:

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 approximately fifteen days from the above date, a letter of approval of these credits will be sent to you. Upon receipt of the approval letter, you may then change the work entries on the claim record sheets.

Yours very truly,

E.F. Anderson
Director
Lands Administration Branch

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

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

D. Kinvig:mc
Encl.

cc: Sherritt Gordon Mines Ltd
Box 723
Dryden, Ontario

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

-0052

Ministry of Natural Resources

Ontario

Notice of Intent

for Technical Reports

2.4715

1983 06 17

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.

2.4715 -0052

1983 07 18 2.4715

Mr. Albert Hanson
Mining Recorder
Ministry of Natural Resources
P.O. Box 669
Sioux Lookout, Ontario
P0V 2T0

Dear Sir:

RE: Geophysical (Electromagnetic and Magnetometer) Survey
on Mining Claims PA 487308 et al in the Area of Beckington Lake

---

The Geophysical (Electromagnetic and Magnetometer) Survey assessment work credits as listed with my Notice of Intent dated June 17, 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 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-1380

D. Kinvig:mc

Encl.

cc: Sherritt Gordon Mines Ltd
Box 723
Dryden, Ontario

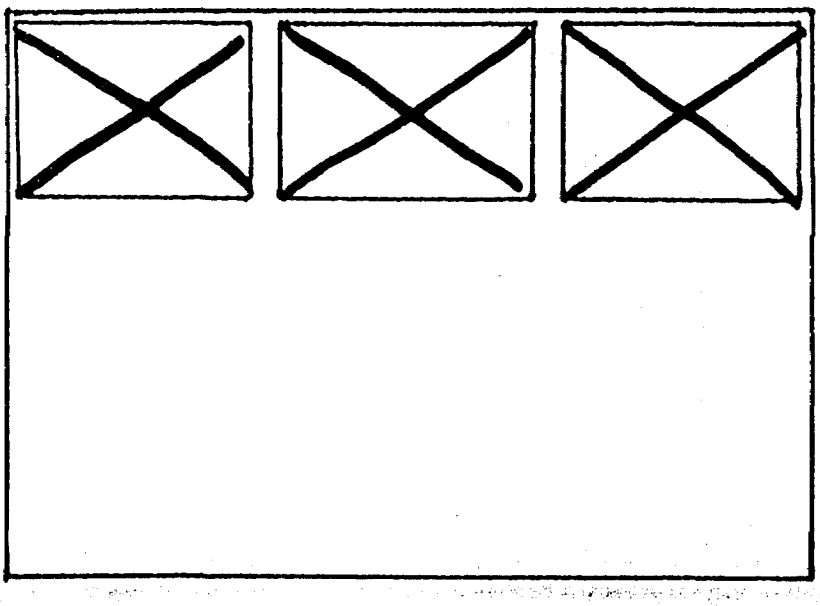
cc: Resident Geologist
Sioux Lookout, Ontario

SEE ACCOMPANYING MAP(S) IDENTIFIED AS

525/02NE-0052 #1-3

LOCATED IN THE MAP CHANNEL IN THE FOLLOWING SEQUENCE

(X)



FOR ADDITIONAL INFORMATION SEE MAPS:

52J/02NE-0052 # 4-5

456 452 448 444 440 436 432 428 424N

487313

487315

19052

560598

19053

560593

560594

560595

LAKE

LEGEND

- CLAIM LINE
- CLAIM POST
- SHORELINE
- LEASED GROUND
- 100 CONTOUR LINE
- DEPRESSION

NOTE - Contour Interval varies from 50 gammas to 1000 gammas where indicated. Plotted values reduced by 60,000 gammas.

SHERRITT GORDON MINES LIMITED

DRYDEN, ONTARIO

OUTSIDE EXPLORATION GEOPHYSICAL SURVEY

AREA STURGEON LAKE — CONTOUR INTERVAL

EQUIPMENT SCINTREX MP-2 MAGNETOMETER

N.T.S. 52J/2SE — CLAIM MAP NO. M-1740

SCALE 1"=200' — DATE MARCH 5, 1982

FOREMAN D. HANCOCK — DRAWN BY J.LAVERGNE

AREA COVERED BY MAP — LEASED LAND

scale 1:1/2 m.le

REGISTERED PROFESSIONAL ENGINEER MINING V. R. VENN PROVINCE OF ONTARIO

GRID — N — DECLINATION 2°E

ASTRO

52J/02NE-0052, #1

LEGEND
CLAIM POST
CLAIM LINE
SHORELINE
LEASED GROUND
IN-PHASE %
OUT-PHASE %
SHERRITT GORDON MINES LIMITED
DRYDEN, ONTARIO
OUTSIDE EXPLORATION GEOPHYSICAL SURVEY
AREA STURGEON LAKE
GROUP DAVIDSON-CARR
ELECTROMAGNETIC SURVEY MAX-MIN 2
FREQUENCY 888 Hz
COIL SEPERATION 400'
N T S 52-J-2
CLAIM MAP NO M-1740
SCALE 1" = 200'
DATE FEBUARY 27, 1982
FOREMAN D. HANCOCK
DRAWN BY J. LAVERGNE
STURGEON LAKE
487311
487314
487315
487316
487317
487318
487671
487672
560593
560594
560595
560598
560609
19051
19052
19053
B.L. 160E
GRID
ASTRO
DECLINATION 2°E
Feet
52J/02NE-0052,#5
52J/02NE-0052,#5

496N 492 488 484 480 476 472 468 464 460 456 452 448 444 440 N

210E 208 206E 204 202 BASE LINE 200E 198 196 194 192 190 188 186 184 182 180 178 176 174 172 170 168 166E

B.L. 200 E

436996

487307

487308

487309

487310

487311

487312

487313

BENT
11 CABLE

487314

487315

487672

487318

19051

19052

19053

560598

GRID

ASTRO

DECLINATION 2°E

LEGEND

- IN PHASE %
- OUT PHASE %
- CLAIM POST
- CLAIM LINE
- LEASED GROUND

2575

SHERRITT GORDON MINES LIMITED

DRYDEN, ONTARIO

OUTSIDE EXPLORATION GEOPHYSICAL SURVEY

AREA STURGEON LAKE GROUP DAVIDSON-CABR

ELECTROMAGNETIC SURVEY MAX-MIN 2

FREQUENCY 888 Hz COIL SEPERATION 400'

N.T.S. 52J/2SE CLAIM MAP NO. M-1740

SCALE 1"=200' DATE FEBUARY 5, 1982

FOREMAN D. BREEZE DRAWN BY J. LAVERGNE

E

AREA COVERED BY MAP

SCALE 1"=1/2mile

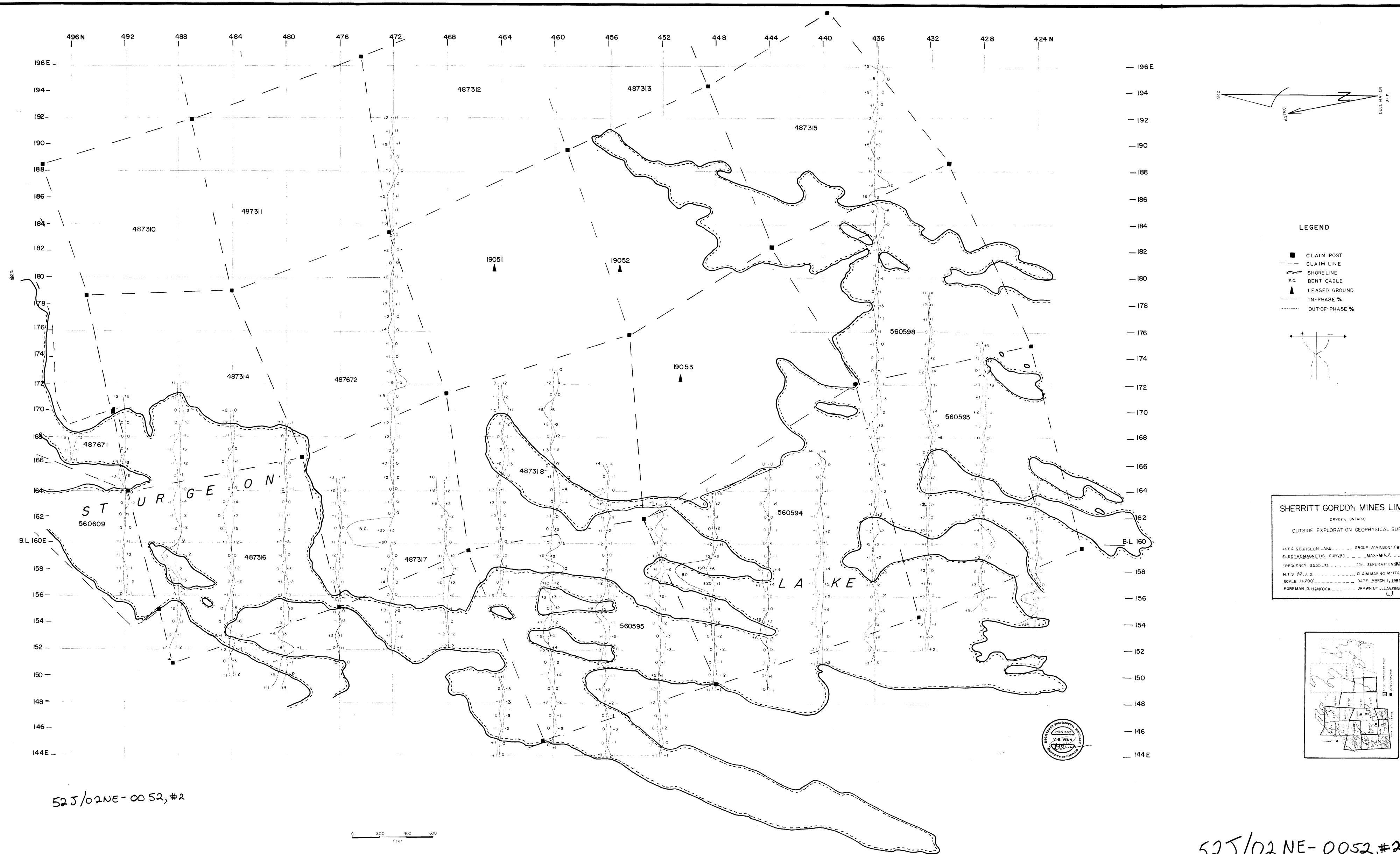
LEASED LAND

0 200 400 600 feet

REGISTERED PROFESSIONAL ENGINEER
MINING
V. R. VENN

52J/02NE-0052,#4

220



GRID — ASTRO — DECLINATION 24°E

LEGEND

- CLAIM POST
- CLAIM LINE
- SHORELINE
- B.C. BENT CABLE
- LEASED GROUND
- IN-PHASE %
- OUT-OF-PHASE %

SHERRITT GORDON MINES LIMITED

DRYDEN, ONTARIO

OUTSIDE EXPLORATION GEOPHYSICAL SURVEY

AREA STURGEON LAKE — GROUP DAVIDSON-CARR
ELECTROMAGNETIC SURVEY — MAX-MIN 2
FREQUENCY 3555 Hz — COIL SEPERATION 200'
N.T.S. 52-J/2 — CLAIM MAP NO. M-1740
SCALE 1"=200' — DATE MARCH 11, 1982
FOREMAN D. HANCOCK — DRAWN BY J.L. LAVERGNE

52J/02NE-0052,#2

52J/02NE-0052,#2

SHERRITT GORDON MINES LIMITED

DRYDEN, ONTARIO

OUTSIDE EXPLORATION GEOPHYSICAL SURVEY

AREA STURGEON LAKE — GROUP DAVIDSON/CABR.
ELECTROMAGNETIC SURVEY — MAX-MIN 2
FREQUENCY 3555 Hz. — COIL SEPERATION 400'
N.T.S. 52J/2SE — CLAIM MAP NO. M-1740
SCALE 1" = 200' — DATE FEBUARY 8, 1982
FOREMAN D. BREEZE — DRAWN BY J. LAVERGNE

REGISTERED PROFESSIONAL ENGINEER — MINING — V. R. VENN

52J/02NE-0052,#3

240

52J02NE0050 52J02NE0052 BECKINGTON LAKE

496N 492 488 484 480 476 472 468 464 460 456 452 448 444

210E 208 206 204 202 B.L. 200E 198 196 194 192 190 188 186 184 182 180 178 176 174 172 170 168 166 164 162 B.L.160 158 156 154 152 150 148 146 144E

436996

487307

487308

487309

487310

487311

487312

487313

19052

19051

19053

487672

487671

487314

560609

STU RGEON

487316

487317

487318

560595

L AKE

525/02NE-0052,#1

0 200 400 600
feet

52J02NE0050 52J02NE0052 BECKINGTON LAKE