EXPLORATION REPORT ON
HOUCK AND MCQUESTEN TOWNSHIP PROPERTY
MCQUESTEN AND HOUCK TOWNSHIPS
THUNDER BAY MINING DIVISION
ONTARIO

F.J. SHARPLEY

DECEMBER 1994
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SUMMARY

The Houck and McQuesten Township Property consists of 18 non-patented mining claim units located in the Geraldton area of the Thunder Bay Mining Division of Ontario. The property lies along the northwest trending Sudbury diabase dike swarm and the northeast trending Marathon diabase dike swarm.

During the period from September to November 1994, line cutting, magnetometer and VLF-EM surveys were carried out on the property to investigate interesting airborne magnetic anomalies for kimberlite potential.

The main magnetic feature located on the grid has a diameter of 300 by 100 metres with an amplitude of 2000 to 3000 gammas. This magnetic intrusion is probably of mafic to ultramafic or kimberlitic in composition. If this body is of interest then several other weaker and smaller bodies may be of interest.

A program of geochemical till sampling and a resistivity survey is recommended to determine if this is a kimberlite of possible economic interest.
TB-1191397: 9 units - Houck Township
(Map No. G-487)

The claims total 720 acres or 292.37 hectares and are registered in the name of Seal River Explorations Limited.

2.2 Location and Access

The property is located 12 km northeast of Geraldton in northwestern Ontario. Access is from Highway 11 to Geraldton and then along the Trans Canada Pipeline pumping station road where the property is two km south along the west boundary of Houck Township and the east boundary of McQuesten Township.

2.3 Topography

The topography on the property is mainly wet open swamp. Glaciofluvial deposits occur on the east and west sides of the property rising to 15 metres above the swamp. There are three small pot hole lakes on the north boundary of claim TB-1191396. A small lake 1/2 mile long occurs south of the No. 3 post of claim TB-1191397. The swamp forms 70 percent of the property. The glaciofluvial deposits are sand gravel and boulders. The forest cover is mainly spruce.
The climate is typical of northern Ontario with snow cover and cold weather from mid November until May.

3.0 EXPLORATION HISTORY

An airborne magnetic and electromagnetic survey with lines spaced at 200 metre intervals of the Tashota-Geraldton-Longlac Area was carried out by the O.G.S. in 1989. Houck and McQuesten Townships are covered on Map 81327.

The Grenville Lake area was mapped by G.P. Beakhouse of the O.G.S. in 1989 on a scale of one inch to one-half mile (Map 2513).

There is no record of mineral exploration on the property.
4.0 GEOLGY

4.1 Regional Geology

The Houck-McQuesten Township Property lies in the Wabigoon Subprovince of the Superior Province of the Precambrian Shield. The property area lies within the eastward trending Dionne Lake metavolcanic belt which is composed of mafic and felsic units that are intruded by gabbro lenses and swarms of diabase dikes. The Sudbury diabase swarm (1238 Ma) strikes northwest and the Marathon diabase swarm (2219 Ma) strikes northeast.

4.2 Property Geology

The Houck-McQuesten Township Property lies within the Dionne Lake metavolcanic belt and probably straddles the contact between the mafic unit to the north and the felsic unit to the south. The strike is east-northeast with a steep dip to the north however there are no known outcrops. Northwest trending diabase dikes flank the property to the east and west.

Glaciofluvial deposits occur on the west side of the property and on the southeast side.
5.0 MINERALIZATION

5.1 REGIONAL MINERALIZATION

The Beardmore-Geraldton metavolcanic-metasedimentary belt lies just to the south of the Houck-McQuesten Township Property. Total production within the Beardmore-Geraldton Belt from 1934 to date has exceeded 4.1 million ounces of gold and 300,000 ounces of silver. Production has come from nineteen gold mines, of which nine are in the Geraldton area.

Gold is associated with (1) Vein Type Deposits (2) Iron Formation Replacement Sulphide - Vein Related Deposits and (3) Domain Boundary Fault - Related Deposits (OGS OFR 5630 Mason and White 1986).

5.2 Property Mineralization

There is no record of mineralization on the property.
6.0 CURRENT WORK CARRIED OUT

6.1 Line Cutting

During the period from September 29 to October 26, 1994 a total of 20.23 line kilometres of picket line was cut with a chain saw by Steve Bortnick of Bracebridge, Steve Simonitis and Gunter Otto of Geraldton, Ontario. The lines are spaced at 100 metre intervals and the stations at 25 metre intervals.

6.2 Magnetometer Survey

A Scintrex integrated portable IGS-2 control console with a MP-3 proton total field magnetometer was used for the survey. Magnetic diurnal variations were monitored by establishing base stations at 100 metre intervals along the baseline. Readings were taken along grid lines spaced at 100 metre intervals with readings at 12.5 metre intervals along the line. Magnetic diurnal variations were monitored by looping lines and checking into established baseline base stations at intervals of less than one and one half hours. Approximately 20.23 line kilometres of data were recorded in this way by Steve Bortnick from October 27 to November 1, 1994.

 Corrections to the magnetic field values recorded during the field survey were made using the approximate time and diurnal change information. The values were then plotted on the computer
by R.W. Woolham at a scale of 1:5000 and contoured at 100 gamma intervals. The base value used is 59000 gammas.

6.3 VLF-EM Survey

The VLF-EM survey was carried out using a Scintrex integrated portable IGS-2 system control console with a VLF-3 electromagnetic sensor to measure the secondary component produced by the VLF transmitter station at Cutler, Maine (NAA-24.0 KHz). Measurements of the in-phase and quadrature values were taken every 12.5 metres along the survey lines spaced at 100 metres on the grid. A total of 20.23 line kilometres of data was collected by Steve Bortnick during the period from October 27 to November 1,1994.

The results are plotted in profile at a scale of 1:5000. A conductive response is indicated in a change of gradient from a positive to negative proceeding in a north direction, as shown on the map. The Fraser filter values were calculated for the in-phase profiles. The values were plotted and contoured at 2 unit intervals. The results are compiled by R.W. Woolham using a computer and shown on maps at a scale of 1:5000.
7.0 DISCUSSION OF RESULTS

7.2 Magnetometer Survey

A strong isolated twin peaked ground magnetic anomaly occurs on claim L-1191396 between lines 5+00W to 8+00W at from 0+25S to 1+30N over a strike length of 300 metres and a width of 100 metres with an amplitude of 2000 and 3000 gammas above background. This anomaly corresponds with the airborne magnetic anomaly over a diameter of 450 x 650 metres and an amplitude of 160 gammas.

A small weak magnetic anomaly occurs on line 4+00W at 3+50S over a strike length of 170 metres and a width of 50 metres with an amplitude of 400 gammas above background.

On claim L-1191397 three small weak magnetic anomalies of about 100 metres in diameter with an amplitude of 200 or 300 gammas above background at 3+00E-8+75S, 4+00E-11+00S and 5+00E-6+65S.

The anomalies are all in wet swamp, therefore probably deep overburden.

7.3 VLF-EM Survey

The VLF-EM anomalies encountered are all weak anomalies in wet swamp were there probably is deep overburden.
8.0 CONCLUSIONS AND RECOMMENDATIONS

Several VLF-EM and magnetic zones have been encountered on the property. The VLF-EM conductors are weak and are probably caused by swamp.

The main magnetic feature located on the grid between lines 5+00W to 8+00W at from 0+25S to 1+30N appears to be caused by a magnetic intrusion of mafic to ultramafic or kimberlitic composition. If this body is of interest then several other weaker and smaller bodies may be of interest.

Geochemical samples of the glaciofluvial material on the western edge and the southeast edge of the grid would help determine if favorable diamond indicator minerals are present. A gravity or IP resistivity survey would help to determine if the body is kimberlitic.

Respectfully submitted,

F.J. Sharpley
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2150G - 1"= 1 mile; 1:63,360
2151G - 1"= 1 mile; 1:63,360

Thorleifson L.H., Kristjansson P.J.

MNDM GDIF - 46
(1989) McQuesten Township

MNR Claim Map: G.79: Martin Lake Area
G.22: Castlewood Lake Area

MNR Claim Map: G-189: Alfred Lake and McQuesten Twp.


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(1988) 88-4926-12-29...30
CERTIFICATE OF QUALIFICATION

I, Frederick James Sharpley of the City of Burlington, Province of Ontario, do hereby certify:

1) That I am a consulting geologist and reside at 2372 Sinclair Circle, Burlington, Ontario, L7P 3C3.

2) That I graduated from the University of Saskatchewan, Saskatoon, Saskatchewan, holding a degree of Bachelor of Arts, Geology (1959).

3) That I am a Fellow of the Geological Association Of Canada.

4) That I have practised my profession as a mineral exploration geologist for a period of 35 years.

5) That I personally was involved with the technical supervision of the work and the report.

6) That I have a financial interest in the Houck-McQuesten Township Property.

Burlington Ontario

F.J. Sharpley
APPENDIX I:
LIST OF FIGURES
Fig. 1
Seal River Explorations Ltd
Houck & McQuesten Tpplp
Gepoldon Area
Houck & McQuesten Wp., Ontario
Location Map
November, 1994
F.J. Sharpley
APPENDIX II:
INSTRUMENT SPECIFICATIONS
Scintrex has used low power consumption microprocessors and high density memory chips to create the IGS Integrated Portable Geophysical System; instrumentation which will change the way you do geophysics.

Here are the main benefits which you will derive from the IGS family of instrumentation:

- Depending on your choice of optional sensors you can make single or certain combinations of magnetic, VLF, electromagnetic, time domain induced polarization/resistivity, frequency domain induced polarization/resistivity and gravity measurements. Thus, you may optimize the IGS system for different geophysical conditions and production requirements.

- You will save time and money in the acquisition, processing and presentation of ground geophysical survey data.

- You will achieve an improvement in the quality of data through enhanced reading resolution, an increase in the number of different parameters measured and/or a higher density of observations. Further, errors which occur in manual transcription and calculation will be eliminated.

- Your operator will appreciate the simplicity of operation achieved through automation.

- Since add-on sensors are relatively less expensive, your investment in a range of IGS instrumentation may be much less than it would be with a number of different instruments, each dedicated to a different measurement.

The Scintrex IGS-2/MP-4/VLF-4/EM-4 permits one operator to efficiently measure magnetic, VLF and EM fields and to record data in computer compatible solid-state memory.
System Options and Accessories

A. Console and Power Supply

A-1 IGS-2 System Control Console with 16K RAM memory and manual. Note that no battery pack is included so that one of Items A-2, A-3 or A-4 should be selected unless the IGS is to be run from an external 12 V DC power source. The battery packs are interchangeable by the user.

A-2 Non-rechargeable Battery Pack includes battery holder and 10 disposable 'C' cell batteries. Used in normal portable operation unless temperatures are below -20°C in which case the Rechargeable Battery Pack and Charger should be chosen.

A-3 Rechargeable Battery Pack and Charger includes battery holder, 6 rechargeable non-magnetic batteries, charger and one spare cap for the battery charging plug. This is the best battery pack for portable total field and gradiometer magnetics since the non-magnetic property of these batteries ensures a minimum of noise. Also used for light duty (slow cycling) magnetic base station applications and in cold weather where disposable batteries lose power.

A-4 Heavy Duty Rechargeable Battery Pack includes heavy duty rechargeable batteries installed in a console with a built-in charger. Useful for rapid cycling base station or mobile applications.

A-5 Low Temperature Battery Extender Kit designed so that battery pack can be worn inside coat in cold weather conditions. Kit includes bottom cover for console, console to battery pack interconnecting cable, cover for battery pack and waist belt.

B. Memory Expansion Options

B-1 IGS Memory Expansion I. An additional 16K RAM is added to the existing memory board for a system total of 32K RAM.

B-2 IGS Memory Expansion II. A further 16K RAM is added to the existing memory board for a system total of 48K RAM.

B-3 IGS Memory Expansion III. An additional board is required on which memory can be added in up to six 16K RAM groups. Not available with all sensor options.

B-4 Further Memory Expansion. Memory expansion to a system total of 192K RAM is feasible for some applications.

B-5 Spare section for Portable Total Field Sensor Staff (0.5 m length).

C. Accessories

C-1 RS-232 Cable and Adaptors. Includes a special RS-232 data transfer cable and two IGS-2 to RS-232 cable adaptors. Used for communicating between the IGS-2 and peripheral devices such as a digital printer, microcomputer, cassette recorder, modem or a second IGS-2 (or MP-3 Proton Magnetometer) for diurnal corrections.

C-2 Minor Spare Parts Kit consisting of two keyboard diaphragms and two 2A quick acting fuses.

C-3 Display Heater Option. Required to heat the LCD display on the IGS-2 Control for operation at temperatures below -20°C.

C-4 Digital Printer for use with 110 V AC power supply and with X-on/X-off interfacing for use with IGS-2, MP-3 or VLF-3 instruments, one box of paper, ribbon and manual. Note that the RS-232 Cable and Adaptor are required.

C-5 Conversion of Digital Printer for use with 220 V AC power supply.

C-6 VLF-4 VLF Electromagnetic Sensor Option

C-7 VLF EM Primary Field Drift Correction Option consisting of two program EPROMS which replace the standard VLF program EPROMS in each of the portable and base station VLF units.

C-8 VLF Electric Field Sensor Option for VLF resistivity measurements. Includes two capacitive electrodes with integral preamplifiers and 5 m of cable. Longer cable lengths on request.

C-9 EM-4 Genie/Horizontal Loop Electromagnetic Sensor Option

C-10 EM-4 Signal Processing Boards for mounting either inside IGS-2 System Control Console or the EM-4 Genie/Horizontal Loop Expansion Module, one program EPROM for mounting inside IGS-2, one receive coil, one interconnecting cable, manual.

C-11 EM-4 Tilimeter/Intercom Module. Permits Horizontal Loop measurements to be made with magnetics but without VLF.

C-12 EM-4 Genie/Horizontal Loop Expansion Module. Permits Horizontal Loop measurements to be made with both magnetics and VLF.

C-13 Genie/Horizontal Loop Portable Electromagnetic Transmitter complete with heavy duty battery pack, battery charger, manual.

C-14 TM-2 Tilimeter/Intercom Module used with TM-2 when Horizontal Loop measurements are to be made.

C-15 Transmitter-Receiver Interconnecting Cables for Horizontal Loop measurements are made to order, in any lengths up to 300m.

D. MP-4 Proton Magnetometer Sensor Option


D-2 Portable Total Field Sensor Option including sensors for total field measurements, sensor staff, two sensor cable assemblies, backpack sensor harness, spare non-magnetic sensor clamp screw.

D-3 Base Station Sensor Option, including 50 m sensor cable assembly, sensor for total field measurements, sensor tripod, external power cable, analog chart recorder cable and spare non-magnetic sensor clamp screw.

D-4 Gradiometer Sensor Option including sensor cables, two 0.5 m staff extenders to complement Portable Sensor Option and spare non-magnetic sensor clamp screw.

D-5 Spare section for Portable Total Field Sensor Staff (0.5 m length).

G. Carrying Cases

A variety of carrying cases are available to suit different combinations of control and sensor options.
Summary of Important Features of Scintrex IGS Sensors

**IGS - One Control Console for Six Sensors**

Block Diagram showing how the IGS-2 can be complemented by optional sensors to make magnetic, VLF, electromagnetic, induced polarization or gravity measurements.

**Magnetics**
- 0.1 gamma resolution over 20K to 100K gamma range
- Total field and vertical gradient measurements
- High gradient tolerance
- Same console for portable, base station or mobile survey applications
- Keyboard selectable automatic or manual tuning
- Automatic diurnal correction without a microcomputer
- Base station cycling as fast as each 2 seconds.

**VLF**
- Measures both VLF-magnetic and VLF-electric fields
- Values are normalized by the horizontal vector amplitude, to overcome errors due to varying primary field strengths
- Calculates resistivity and phase angle
- Digital tuning to any VLF station
- Automatic measurement of up to three VLF stations
- Automatic tilt compensation
- Signal/noise enhancement through automatic signal stacking
- Automatic gain adjustment
- Optional Primary Field Drift Correction Option permits automatic base station corrections to be made

**Electromagnetics**
- Processes two frequencies simultaneously for Horizontal Loop and/or Genie amplitude ratio
- Accurate Genie measurements may be made in rough terrain
- Transmitter-receiver separation can be measured electronically
- High levels of noise rejection
- Portable or fixed source transmitters may be used
- The lightweight receive coil may be backpack mounted or set on the ground
- Automatic gain adjustment

**Time Domain Induced Polarization**
- Measures the primary voltage, self potential and time domain induced polarization characteristics of the received waveform.
- Calculates the resistivity, statistical and Cole-Cole parameters and records them in memory with the measured data and time.
- Measures individual dipoles or dipole pairs.
- Simultaneously measures two dipoles. After completing one dipole pair measurement, the IGS-2/IP-4 can automatically cycle through up to three additional dipole pairs for a total of eight dipoles.
- Automatically terminates measurements over an operator set statistical accuracy or when a preset number of pulses have been measured. A reading can also be terminated manually.
- Continuously averages primary voltage, self potential and individual transient window measurements for each cycle.
- Automatically rejects individual values which are more than four standard deviations from the previous average.
- Provides full interpretation of spectral IP data including the determination and removal of EM coupling.
- Normalizes automatically for the width of each window and for the primary voltage.
- Adjusts the gain of its input amplifiers to accommodate the differences in primary voltage from 50 microvolts to 14 volts full scale.
The IPRF-3 Frequency Domain Induced Polarization/Resistivity Receiver Option consists of: 1) a choice of portable total field, portable vertical gradiometer, marine, airborne and base station sensors, 2) an electronic circuit board and 3) a program EPROM.

The VLF-4 VLF Electromagnetic Sensor Option consists of: 1) a dual coil backpack mounted sensor for VLF-magnetic measurements, 2) two electronic circuit boards and 3) a program EPROM. An additional choice is to add a dipole with capacitive electrodes in order to measure VLF electric fields, permitting resistivity to be calculated.

The EM-4 Genie/Horizontal Loop Electromagnetic Sensor Option comprises: 1) a unique receive coil 25 cm in diameter and weighing only 1.8 kg which can be either backpack mounted or placed on the ground, 2) two electronic circuit boards which may either be installed inside the IGS-2 Console or in the EM-4 Genie/Horizontal Loop Expansion Module and 3) a program EPROM. If Horizontal Loop measurements are to be made then an EM-4 Tiltmeter/Intercom Module is also required. Further, if all of MP-4, VLF-4 and EM-4 are to be used, the EM-4 Genie/Horizontal Loop Expansion Module is used in place of the Tiltmeter/Intercom Module.

The IP-4 Time Domain Induced Polarization/Resistivity Receiver Option comprises: 1) an IP-4 Input Module, 2) two electronic circuit boards installed inside the IGS-2 Console, 3) IP/Resistivity Program EPROMs and 4) a Field Wire Terminator.

The IPRF-3 Frequency Domain Induced Polarization/Resistivity Receiver Option consists of: 1) an IPRF-3 Console, 2) three circuit boards installed inside the IGS-2 Console and 3) an IP/Resistivity Program EPROM.

The CG-4 Autograv Automated Gravity Meter Option contains: 1) a CG-4 carrying case, 2) a CG-4 Autograv Automated Gravity Meter Sensor which is installed inside the carrying case, 3) a CG-4 Autograv Automated Gravity Meter Program EPROM, 4) an electronic circuit board installed inside the IGS-2 Console, 5) a tripod with built-in bubble level and 0.5 m leg extensions, 6) a 6.0 Ah spare battery, 7) a battery charger, 8) a minor spare parts kit and 9) a specially designed transport case.

IGS Sensor Configurations

IGS-2/MP-4. The MP-4 Proton Magnetometer Sensor Option can be added to the IGS-2 System Control Console. This IGS-2/MP-4 combination is a 0.1 gamma magnetometer and/or vertical gradiometer with a performance identical to the MP-3 Proton Magnetometer.

IGS-2/VLF-4. The IGS-2 can be used for VLF electromagnetic measurements by the addition of the VLF-4 VLF Electromagnetic Sensor Option. This combination, designated as IGS-2/VLF-4, performs identically to the Scintrex VLF-3.

IGS-2/MP-4/VLF-4. This combination, comprising one console with two sensors, permits both magnetic and VLF measurements to be made.

IGS-2/EM-4. When the EM-4 Genie/Horizontal Loop Electromagnetic Sensor Option is added to the IGS-2, the result is an advanced EM receiver.

IGS-2/MP-4/EM-4. Efficient electromagnetic and proton magnetic surveying can be carried out with this configuration.

IGS-2/VLF-4/EM-4. Electromagnetic measurements at both ends of the geophysical spectrum are possible.


IGS-2/IP-4. The IP-4 Time Domain Induced Polarization/Resistivity Receiver Option is used with the IGS-2 Console for IP and resistivity surveys for base metal and precious metal exploration, geoelectrical surveying for groundwater or geothermal resources.

IGS Software

IGS-2/IPRF-3. With the addition of the IPRF-3 Frequency Domain Induced Polarization/Resistivity Receiver Option to your IGS-2 Console, IP and resistivity surveys for base metals, precious metal occurrences and geoelectrical surveying for groundwater or geothermal resources can be conducted.

IGS-2/CG-4. The IGS-2 can be used to perform gravity measurements by adding the CG-4 Autograv Automated Gravity Meter option. This combination meets all of the specifications of the Scintrex CG-3.

IGS-2/MP-4/CG-4. In cases where it is desired to have magnetic observations at gravity stations, for either portable or base station applications, the MP-4 Proton Magnetometer Sensor Option may be added to an IGS-2/CG-4 Autograv.

For complete information on Magnetometer, VLF, Electromagnetic, Induced Polarization and Automated Gravity Meter operations, see the Scintrex brochures dedicated to each specific method:

- Scintrex MP-3 and IGS-2/MP-4
- Scintrex VLF-3 and IGS-2/VLF-4
- Scintrex IGS-2/EM-4
- Scintrex IGS-2/IP-4
- Scintrex IGS-2/IPRF-3
- Scintrex CG-3 and IGS-2/CG-4.

IGS Software

When a VLF-4 is equipped with software for automatic cycling base station applications, the resulting designation is VLF-4C. The use of the VLF-4C is fully described in the Scintrex brochure entitled "VLF EM Primary Field Drift Correction Option for VLF-3 and VLF-4".

Scintrex supplies fully documented software written for the IBM PC computer and certain other microcomputers which use the MS-DOS operating system. This software is designed to permit: 1) archiving of data, 2) processing of magnetic, VLF, electromagnetic data, induced polarization, resistivity and gravity data and 3) profile and contour outputs on digital printers.
Typical User Comments about the Scintrex IGS System.

The heart of the Scintrex Integrated Portable Geophysical System is the IGS-2 System Control Console. This instrument contains a powerful CMOS microprocessor, EPROM and RAM memory and peripheral electronics which permit a single operator to execute three major functions. First, he can control a variety of sensors, either individually or in combination. Second, at the push of a button, he can record data in solid-state memory. Then, at the end of a day's surveying, he can use the IGS-2 to playback, calculate, list and plot data on a simple digital printer, often to report level quality.

To perform ground geophysical surveys, the IGS-2 System Control Console is complemented by specially designed IGS Sensor Options which permit the IGS-2 to become a magnetometer, a VLF receiver, an EM receiver, a time domain induced polarization receiver, a frequency domain induced polarization receiver, an automated gravity meter or combinations of these. These Sensor Options comprise an external sensor as well as electronic circuit boards and software program EPROMS which may be installed inside an IGS-2 console either at the Scintrex plant or by the end user.

"The two main advantages are the ability to take readings faster at much closer spacing and the ease in the correction of the data."

"Compared with analog instrumentation, the reading accuracy is demonstrably better and for multi-parameter measurements, the reading speed is much greater."

"We will probably add the VLF E-field capability next year to help discriminate overburden responses and get resistivity information."

"We can take two stations of VLF data in the time it takes to read and record one with the EM-16."

"I would estimate that IGS VLF dip angles are accurate to ±1/2° or better, whereas analog units are ±1° with a good operator and ±3° with an inexperienced one."

"I estimate that the IGS has reduced the cost of a combined mag/VLF survey by 50%. Regardless of line and station spacing, an IGS operator can survey approximately two-thirds as much as two operators on two instruments. In addition, with our in-house computer and plotting facilities, manual data entry is eliminated."

The above statements were all made by experienced exploration geophysicists and are documented in Scintrex files.
**Report of Work Conducted After Recording Claim**

Ministry of Northern Development
and Mines

Ontario

**Mining Act**

**Transaction Number**: WR540-06

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**Recorded Holder(s)**: Seal River Explorations Limited

**Client No.**: 192826

**Address**: 2372 Sinclair Circle, Burlington ON L7P 3C3

**Telephone No.**: 905-335-9609

**Mineral Division**: Thunder Bay

**Township/Area**: Houck and McQuesten

**Plat or G Plan No.**: G-487 & G-189

---

**Date Work Performed**:
- **From**: September 29, 1994
- **To**: November 1, 1994

**Work Performed (Check One Work Group Only)**

<table>
<thead>
<tr>
<th>Work Group</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geotechnical Survey</td>
<td>Magnetometer, VLF-EM Surveys</td>
</tr>
<tr>
<td>Physical Work, Including Drilling</td>
<td>(w/o) (mag)</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td></td>
</tr>
<tr>
<td>Other Authorized Work</td>
<td></td>
</tr>
<tr>
<td>Assays</td>
<td></td>
</tr>
<tr>
<td>Assignment from Reserve</td>
<td></td>
</tr>
</tbody>
</table>

**Total Assessment Work Claimed on the Attached Statement of Costs**: $10,805.80

---

**Note**: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

---

**Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steve Bertnicks</td>
<td>34 Shoreline Dr., Bracebridge ON P1L 1Z4</td>
</tr>
<tr>
<td>F.J. Sharpley (Author)</td>
<td>2372 Sinclair Circle, Burlington ON L7P 3C3</td>
</tr>
</tbody>
</table>

---

**Certification of Beneficial Interest**: I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder’s name or held under a beneficial interest by the current recorded holder.

**Recorded Holder or Agent (Signature)**: [Signature]

---

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

**Name and Address of Person Certifying**:

**Telephone No.**: 905-335-9609

**Date**: January 3, 1995

**Certified By (Signature)**: [Signature]

---

**For Office Use Only**

**Total Value C. Recorded**: $10,805

**Data Recorded**: January 26, 1995

**Mining Recorder**: [Signature]

**Received Stamp**: [Stamp]
<table>
<thead>
<tr>
<th>Task Number</th>
<th>Task Name</th>
<th>Task Filed</th>
<th>Task Due Date</th>
<th>Task Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td></td>
<td></td>
<td>10/05</td>
<td>10/05</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
<td>10/05</td>
<td>10/05</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td>10/05</td>
<td>10/05</td>
</tr>
</tbody>
</table>

**Note 2:** If work has been performed on patented or leased land, please complete the following:

- I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.

- In the event that you have not specified your choice of priority, option one will be implemented.
### Statement of Costs for Assessment Credit

**État des coûts aux fins du crédit d'évaluation**

**Ministry of Northern Development and Mines**

Ministère du Développement du Nord et des mines

Ontario P3E 6A5, telephone (705) 670-7264.


### 1. Direct Costs/Coûts directs

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Amount Montant</th>
<th>Totals Total global</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages Salaries</td>
<td>Labour Main-d'œuvre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field Supervision</td>
<td>Supervision sur le terrain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractor's and Consultant's Fees</td>
<td>Line Cutting</td>
<td>5259</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mort. &amp; LF Report</td>
<td>4046</td>
<td></td>
</tr>
<tr>
<td>Supplies Used</td>
<td>Fournitures utilisées</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment Rental</td>
<td>Rental location de matériel</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Direct Costs**

Total des coûts directs 1085

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

### 2. Indirect Costs/Coûts indirects

**Note: When claiming Rehabilitation work Indirect costs are not allowable as assessment work.**

Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Amount Montant</th>
<th>Totals Total global</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>Transport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food and Lodging</td>
<td>Nourriture et hébergement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobilization and Demobilization</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sub Total of Indirect Costs Total partiel des coûts indirects

Amount Allowable (not greater than 20% of Direct Costs)

Montant admissible (n'excédant pas 20 % des coûts directs)

Total Value of Assessment Credit (Total of Direct and Allowable indirect costs)

Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)

### Certification Verifying Statement of Costs

I hereby certify:

that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

That as [President of Company]

I am authorized (Recorded Holder, Agent, Position in Company)

to make this certification

### Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.

2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

### Certification Verifying Statement of Costs

J'atteste par la présente :

que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de [Title], [Name], je suis autorisé (titulaire enregistré, représentant, poste occupé dans la compagnie) à faire cette attestation.

Signature [Signature]

Date 01/03/95

Note: Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.
February 22, 1995

Dear Mr. Weirmeir:

Subject: APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIMS
1191396 & 1191397 IN HOUCK & McQUESTEN TOWNSHIPS

Assessment work credits have been approved as indicated on the report of work form. The credits have been approved under Section 14 (Geophysical) of the Mining Act Regulations.

The approval date is February 21, 1995.

If you have any questions regarding this correspondence, please contact Steven Beneteau at (705) 670-5858.

Yours sincerely,

Ron C. Gashinski
Senior Manager, Mining Lands Section
Mining and Land Management Branch
Mines and Minerals Division

Enclosure:

cc: Resident Geologist
Thunder Bay, Ontario

Assessment Files Library
Sudbury, Ontario
January 03, 1995

The Mining Recorder
Thunder Bay Mining Division
435 James St. S.
Thunder Bay, Ontario
P7E 6E3

Re: Assessment Work
McQuesten & Houck Townships, Ontario

Dear Sir:

Enclosed are two copies of Report of Work Conducted after Recording Claim together with sketches and Statement of Costs. Two copies of Report on Exploration by F.J. Sharpley is enclosed.

Your truly,

Seal River Explorations Limited

F.J. Sharpley

[Stamp: RECEIVED]
FEB 9  1995
MINING LANDS BRANCH

[Stamp: RECEIVED]
JAN  6 1995  P.M.
7/89.12345/21.2345
The information that appears on this map is based on the information made available to the Ministry of Natural Resources. Accuracy is not guaranteed. The Ministry of Natural Resources, Development and Mines, Land Titles/Registry Division, Thunder Bay, is not responsible for errors or omissions made on the map. The information shown herein is subject to the provisions of the Ontario Crown Lands Act, R.S.O. 1970, Chap. 360, Subsec. 2.

The surface rights lying within 250 m of the center-line of the Trans Canada Pipeline Right-of-Way are withdrawn from staking out, prospecting, sale or lease by Order in Council, Ontario, dated September 20, 1991. Section 2 of the National Energy Act applies to this area.

The information that appears on this map is based on the information made available to the Ministry of Natural Resources. Accuracy is not guaranteed. The Ministry of Natural Resources, Development and Mines, Land Titles/Registry Division, Thunder Bay, is not responsible for errors or omissions made on the map. The information shown herein is subject to the provisions of the Ontario Crown Lands Act, R.S.O. 1970, Chap. 360, Subsec. 2.

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SEAL RIVER EXPLORATIONS LTD.

HOUCK/McQUESTON TMP., PROPERTY
HOUCK AND McQUESTON TOWNSHIPS
GERALDTON AREA, THUNDER BAY M.D.

MAGNETOMETER SURVEY
Magnetic values in nanotesla
Instrument: Scintrex 108-2

Survey by S. Berlance, Nov., 1994, 1994 Grant 51-125
SEAL RIVER EXPLORATIONS LTD

HOUCK/McQUESTON TWP. PROPERTY
HOUCK AND McQUESTON TOWNSHIP,
GERALDTON AREA, THUNDER BAY M.D.

VLF ELECTROMAGNETIC SURVEY

Inphase = solid line, Quadrature = dashed
Scale: 10 units/cm, Instrument: Scintrex 155

Survey by S. Burton, Nov., 1994, D.P.R. Cmns. 34-1-
SEAL RIVER EXPLORATIONS LTD.
HOUCK/McQUESTON TWP. PROPERTY
HOUCK AND McQUESTON TOWNSHIPS
GERALDTON AREA, THUNDER BAY N.O.

VLF ELECTROMAGNETIC SURVEY
Fraser filter of inphase values
Sample interval = 2 units, Instrument: Scintrex ISS-Z
Survey by S. Bortnick, Nov., 1994, OPAP Grant 9H35