REPORT

on

THE GEOLOGY AND GEOPHYSICS

of

THE ANGLE BAY PROPERTY

of

AMERICAN PLATINUM INC.

LAC DES ILES ULTRAMAFIC COMPLEX
NORTHWESTERN ONTARIO

BY: Dave Saunders BSc. and
Ian Spence BSc.

December, 1986
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INTRODUCTION

1.1. Introduction and Location.

The Angle Bay Property is located at the southeast end of Lac des Iles, in the District of Thunder Bay in northwestern Ontario. The property is approximately 80 km north of the City of Thunder Bay.

The property consists of 15 unpatented claims (Appendix 2) tied onto the eastern boundary of the Boston Bay platinum-palladium prospect. This prospect is presently being explored and developed by Madeleine Mines Ltd.

The Angle Bay Property is accessible by logging road and use of a boat or snowmachine. Future all weather road access to the Madeleine Mines property crosses through the length of the Angle Bay Property.

The geology of the property includes the strike extension of an igneous contact which hosts the PGM mineralization at Madeleine’s "Roby Zone" (see Map. 2). The Roby Zone drilled to the 500 foot level is estimated to contain 22.5 million tons grading 0.18 oz/ton total PGE and is also open along strike. Platinum:palladium ratios are estimated at 1:7. This zone is being promoted as the largest open pit platinum mine in the world.

Several samples from the Angle Bay Property yielded significantly anomalous PGM values. Two new showings were discovered which returned values of 0.11 and 0.17 oz/ton PGM from host rocks similar to those of the Roby Zone. Platinum:palladium ratios are also 1:7.
1.2 WORK SUMMARY

The Angle Bay Property was mapped and prospected at 1:2500 scale during the months of September and October 1986. Lines were cut and chained at 50 metre spacings north of the baseline and at 100m south of the baseline. These lines were also utilized for the geological mapping and the geophysical surveys.

A total of 104 samples were taken during mapping, most of these being grab samples. Ten of the samples yielded anomalous platinum-palladium values. Mineral soil samples were taken over an area of the grid which has the best potential for PGM mineralization. Results for the soil survey are pending in a separate report.

All previous drilling on the property was located, including a collar for a hole with no published information. Most of the core from these holes is on file at the N.M.D. Core Library and will provide significant information to the western portion of the Property.

2. PROPERTY GEOLOGY

2.1 General Geology

The property is underlain by gabbro and pegmatitic gabbro units with an ultramafic clinopyroxenite unit at the eastern end of the property (Map 3: back pocket). Gabroic units are generally medium grained generally altered to sericitized plagioclase and uralitized pyroxenes. Pegmatitic and anorthositic gabbros occur as isolated layers or as "blobs" suspended in gabbroic matrix.

Magnetic oxide rich gabbros occur as irregular concordant units up to 100 metres thick within the entire sequence. Magnetite in these gabbros appears to be of primary magmatic origin whereas in the ultramafic units, magnetite appears to be derived from a secondary serpentinization. Massive oxide horizons were not observed in the field.

Igneous layering was best defined in the western portion of the property where steeply dipping anorthositic layers were mapped and sampled. The igneous stratigraphy appears in general to dip steeply to the south throughout the property. The authors feel the stratigraphy may be on overturned package, although structural overprinting and faulting are not dominant characteristics of the rock package underlying the property.

Very coarse grained gabbros (pegmatitic gabbros) are common units throughout the western and central portion of the property. These units give a
lower magnetic response than the gabbros and ultramafic rocks of the property.

A "granophyric" phase of pegmatitic gabbro near the contact of the ultramafics in the north central portion of the property appears to have excellent potential for platinum group mineralization. This unit is a magnetic low and yielded numerous samples anomalous in PGM content (see Table 1, page 5).

2.2 Granitic Rocks

Mafic and ultramafic rock units are in contact with granitic rocks along the length of the property. The contact roughly follows the base line at the eastern end of the property where the granites contact the ultramafic clinopyroxenite. The granite contact swings to parallel the baseline between 1+00N and 2+00N along the central and western portion of the property where the granites contact the gabbric units. A fine to medium grained marginal phase gabbro occurs as a unit generally 50 metres thick for the length of the central and western granite-gabbro contact.

The granites are generally medium grained tonalitic material with a gneissic character adjacent to the contact. Biotite content in the tonalites generally varies between 15-20%.

2.3 Ultramafic Rock Units

The most common ultramafic rock type is clinopyroxenite. This rock type occurs as two general types, one being a discrete mappable unit and the other as a phase (often a liquid accumulation) within the gabbro units throughout the property.

At the eastern end of the property a discrete unit of clinopyroxenite extends for three claim lengths just north of the baseline at L 14E and curves to follow the lake at L 5E. This unit may be a cumulate phase of the northern ultramafic center of the Lac des Iles complex and may be discordant with the gabbros which underly the rest of the property. Generally, serpentinization and uralitization is not complete within this unit. This indicates a lack of fluid available for alteration during the cooling process. Serpentinization and free magnetite is, however, common adjacent to the granitic rocks near the baseline.

The "Eastern" clinopyroxenite has a magnetic expression resulting from the presence of magnetite released in the partial serpentinization of the olivine-rich matrix. This unit varies in cumulate olivine-pyroxene to matrix ratios and phases approach wehrlite in composition.
Clinopyroxenite is also a common component of the gabbroic units which host the mineralization discovered on the property. Here, the clinopyroxenes are uralitized and generally occur as phases of the dominant gabbroic rock types. Clinopyroxenites grade into melagabbros which grade into the gabbroic units although sharp, irregular (reintrusive?) contacts can be found.

Melagabbros (10% plagioclase) and clinopyroxenite are the matrix of a brecciated unit, the clasts of which can yield anomalous PGM values. This unit was identified late in the field season and requires further study to determine the extent of the unit and potential for mineralization.

2.4 Gabbroic Units

The most common rock type on the property is a medium to coarse grained gabbro. The primary mafic mineral is uralitized clinopyroxene. Orthopyroxene, generally bronzite, occasionally occurs in sufficient concentration to class the rock as a norite. Gabbro-norites are relatively common, although discrete units were not observed to be mappable. Further detailed mapping will be required to identify the presence of two pyroxene gabbro horizons.

Primary magnetite is a common component of several gabbro units and is often found in sufficient quantities to give a magnetic expression to the unit. The magnetite occurs as discrete interstitial grains and as fracture fillings.

An unusual brecciated anorthositic gabbro unit was discovered near L4E 3+50N. A zone of mixing between gabbros, melagabbros and anorthositic gabbros results in a "globule breccia" unit. Anorthositic clasts are mineralized in PGMs and the melagabbro matrix is slightly anomalous. The disruption process may indicate the presence of a volatile phase related to the anomalous mineralization discovered within the "clasts".

2.5 Pegmatitic Gabbros

Very coarse grained gabbros (pegmatitic gabbros) are common units throughout the western and central portion of the property. Pegmatitic gabbros are intimately associated with the gabbroic units and probably represent late cooling phases of the gabbros. This rock type appears to give a low magnetic response and can yield anomalous PGM values where highly altered or in the presence of orthopyroxene (ie coarse norite).

In the stratigraphy hosting anomalous mineralization, the Pegmatitic gabbros appear to be
thoroughly hydrothermally altered, i.e. sericitized and uralitized. The term granophyric is used to describe the appearance of this unit. Reintrusive contacts and stringers of pegmatitic gabbro are common features near anomalous samples. Pyroxene crystals often form irregular clusters and sulphides are found as disseminations and patchy stringers.

The pegmatitic gabbros forming the unit just north of the granite contact appear to be less altered. Clots of magnetite or disseminated sulphides were found in this unit although PGM contents were not anomalous.

2.6 Mineralization

Anomalous PGM mineralization appears to be associated with a granophyric phase of pegmatitic gabbro and the anorthositic "clasts" of a "raft breccia" unit. These two rock units may be related although further mapping will be required to demonstrate this. Assay results for samples considered to be anomalous are tabulated below.

TABLE 1 LIST OF ANOMALOUS SAMPLES

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The granophyric phase (7667, 7508, 7668) is typically coarse grained, with irregular fabric is altered (uralitized and sericitized). Sulphide mineralization is pyrite, pyrhotite and chalcopyrite, typically as disseminations or as stringers. This host rock is comparable to those of the Roby Zone. Most anomalous samples came from this rock type.

The "raft breccia" unit consists of a dark green clinopyroxenitic to melagabbro matrix (7673) with anorthositic globules or rafts "suspended" throughout (7507, 7671, 7672). This may be a local rock type or a mappable unit. Pyrite mineralization within the anorthositic clasts was highly anomalous in PGM content. The matrix clinopyroxenite was also anomalous in PGMs and contains magnetite. Further sampling and
mapping will determine the significance of this rock type.

3. GEOPHYSICS:

A total field magnetic survey and gradiometer survey was undertaken on the property using a EDA OMNI-IV magnetometer in gradiometer mode. See Appendix 1 for details and a complete report.

The magnetic surveys were effective in outlining the igneous stratigraphy across the property. In general, the pegmatitic gabbros give a low magnetic response whereas the ultramafics and oxide-rich gabbros demonstrate high magnetism. The highest PGM mineral potential exists in areas of low magnetism.

CONCLUSIONS AND RECOMMENDATIONS.

1) Significant PGM mineralization occurs on the property.

2) Grab sample assaying 0.17 and 0.11 oz/ton total PGM were taken from pegmatitic gabbro and gabbro breccia units similar to those which underlie Madeleine Mines "Roby Zone".

3) It is therefore recommended that a stripping program be initiated using a bulldozer and high pressure water hoses.

4) It is also recommended that a test soil geochemical survey be completed over the anomalous area between lines 1+00 East and 4+50 East to provide an expanded data base for other portions of the property.

5) A very detailed magnetic survey (5 meter centers) is recommended for the area in the vicinity of the anomalous samples.

6) A Diamond Drill program can be outlined at this stage however if time does not permit the stripping program, the detailed soil and magnetic surveys should be conducted. These surveys would hopefully provide enough data about the structure in and around the anomalous samples to better locate a diamond drill program.

Respectively Submitted:

David Saunders BSc.
APPENDIX 1

REPORT ON THE TOTAL FIELD AND VERTICAL GRADIOMETER SURVEYS ON THE ANGLE BAY PROPERTY

INTRODUCTION

Phantom Exploration Services Ltd. was contracted by American Platinum Inc. to conduct the exploration program at the Angle Bay Property. Proton magnetometer surveys (total field and gradiometer) were conducted over the grid at a station intervals of 12.5 metres. Line spacing was at 50 metres north of the baseline and at 100 metres south of the baseline. These surveys were undertaken to determine the magnetic trends present on the property.

Geologic mapping and prospecting used the same reference grid as the geophysics.

LOCATION AND ACCESS

The claim group is located approximately 80 km north of Thunder Bay in the Mining District of Thunder Bay. Access to the claim group was by road 160 km from Thunder Bay, followed by a 15 minute boat trip to the base camp on Lac des Iles.

The base camp was established on claim 873411, on the lake approximately 2 km east of the exploration camp used by Madeleine Mines. Access to the lake is through Madeleine's drill road or at a landing 5 km west on the SW part of Lac des Iles. Future all weather road access will eliminate the need of using the lake, as the access corridor passes 300 metres south of the new showings.

LINECUTTING

A total of 42 km of line was cut over the 15 claim property. Picket stations were established at 25 metre intervals along the grid lines.
spacings were at 50 metres north of the baseline and 100 metres south of the baseline. The baseline was cut at 055 degrees azimuth to parallel the regional trends of the rock units (after Sutcliffe, 1986). Grid lines were normal to the baseline at 325 degrees azimuth.

THEORY OF OPERATION

The Proton Magnetometer

The Proton Precession Magnetometer is so named because it utilizes the precession of spinning protons or nuclei of the hydrogen atom in a sample of hydrocarbon fluid to measure the total magnetic field intensity. The spinning protons in a sample of kerosene behave as small, spinning magnetic dipoles. These magnets are temporarily polarized by application of a uniform magnetic field generated by a current in a coil of wire. When the current is removed, the spin of the protons causes them to precess about the direction of the ambient (earth's) magnetic field. The precessing protons then generate a small signal whose frequency is precisely proportional to the total magnetic field intensity and independent of the orientation the coil (sensor). The proportionality which relates frequency to the field intensity is called the gyromagnetic ratio of the proton. The precession frequency, typically 2000 Hz, is measured as the absolute value of the total magnetic field intensity with an accuracy of 1 gamma.

The total magnetic intensity, as measured by the proton magnetometer is the magnitude of the earth's field vector independent of its direction. The measurement can be expressed as a length (50,000 gammas) of the earth's field vector. A local disturbance, say 10 gammas, would add (or subtract) to the undisturbed field of 50,000 gammas in the usual manner of vector addition. Since the proton magnetometer measures only the magnitude of the resultant vector (whose direction is almost parallel to the undisturbed total field vector), that which is measured is very nearly the component of the disturbance vector in the direction of the undisturbed total field. Thus the change in total field intensity is called the anomaly.

The Vertical Gradiometer

A Gradiometer is so named because it measures the gradient of the total magnetic field. It is a differential magnetometer where the spacing between sensors is fixed and small with respect to the distance to sources whose gradients are to be measured. The difference in intensity divided by the distance between the sensors is then the vertical gradient measured at
the midpoint of the sensor spacing.

The vertical gradient has a number of properties that are useful in mineral exploration. 1) Gradient anomalies tend to resolve complex anomalies into their various constituents and on the same basis automatically remove the regional gradient to better define the shallower anomalies which would be of interest. 2) The magnetic time variations including the effects of magnetic storms are removed since the readings are taken simultaneously and such effects on the two readings are identical.

SURVEY PROCEDURE

The Proton Magnetometer (Total Field and Gradiometer)

The magnetometer data was collected at 12.5 metre intervals using an EDA OMNI IV Proton Magnetometer. The field data from the surveys was then referred to a base station recorder (EDA OMNI IV) which operated continuously throughout the survey. The purpose of the recorder was to correct the fluctuations in the earth's magnetic field as the survey took place. Data was corrected, then plotted on a map scale of 1:2500 and contoured at appropriate intervals.

DISCUSSION OF RESULTS

The Proton Magnetometer Survey (Total Field)

The total field survey was extremely useful in outlining the different lithologies as well as a number of magnetic trends which occur within these units on the claim group.

In general the property can be divided into three magnetic divisions according to rock type:

1) The Felsic Intrusives (granite, hybrid granites, etc.) have a distinctively flat magnetic response with only spot values of no greater than 2000 gammas above background within them. These highs do not show line to line continuity and therefore are likely due to boulders of mafic or ultra mafic material from the intrusives to the north. They are found mostly to the south of the baseline and show very little difference between them and the pegmatitic gabbros which come in contact with them.

2) The Mafic Intrusives (gabbros, melagabbros, pegmatitic gabbros, norites etc.) are by far the most abundant rock type on the property. They occur in contact with the felsic intrusives to the south and the ultra mafics to the east and north). Area wise this unit occurs from approximately 6+00 East to
11+50 West (the west side of the claim group) and North of the baseline.

The most dramatic magnetic response within this unit was >20,000 gammas on Line 3+50 West at 5+25 North. This was part of a very strong magnetic trend striking at approximately 055 degrees and located from 4+00 North to 7+00 North and between lines 2+00 East to 11+00 East. Geological mapping revealed that this was due to a number of magnetite horizons within a coarse grained gabbros.

There is another weaker trend approximately 100 meters to the south of this major response and is located from 2+00 North to 3+50 North and between lines 11+00 West and 1+00 East. The strike is is about 045 degrees and meets the stronger trend in the vicinity of 1+00 East. This junction could be interrupted a number of different ways i.e. a nose of a fold like structure, or a truncation of the unit in a cross bed sense. Whatever model is chosen, it is important to note that anomalous rock samples were taken from the mag low between the two trends as well as in the vicinity of the junction. (see Sample Location Map)

The majority of the Pegmatitic Gabbros on the property show very little magnetic response. Spot highs within this unit rarely exceed 2200 gammas and there is very little difference in characteristics between the Felsic Intrusives and this unit. The contact zone between these units is masked because of a 100 to 200 meter zone of granitization between the two units which was observed by the geological survey. This unit, however, is important since many of the anomalous rock samples were found within it between lines 2+00 East and 4+50 East. Unfortunately the total field data taken in this area is not definitive enough for any useful conclusions to be drawn from it and as a result a much tighter survey, say at 5 meter centers, would obviously provide a much improved picture of the area.

3) The Ultramafic Rocks (peridotites, websterites, wehrlite, serpentized peridotites, etc.) have a strongly characteristic magnetic signature associated with them. The geologic contact of the ultramafics is clearly visible as a 3-5000 gamma high which occurs on the baseline near the eastern boundary of the property. From here it follows the baseline to Line 9+50 East where it swings northwest to the lake and then follows along the lake shore. The magnetic trend described believed to be due to the concentration on magnetite produced from the serpentinization of an olivine-peridotite along the contact. Behind this prominent feature, the magnetics reveal a rather flat area in the northeast portion of the claim group which was mapped as containing clinopyroxenites, gabbros, and melagabbros. The absence of concentrated magnetite
would explain the flat response.

The Vertical Gradiometer

The Vertical Gradiometer survey was conducted over the property in the hopes that specific marker horizons within the intrusive might be identified. This would lead to a better understanding of the stratigraphy of the intrusive and provide a focus for further exploration.

For the purpose of comparison, the divisions used with the discussions for the Total Field data will be used here.

1) As expected, the data for the Felsic Intrusives showed very little change in vertical gradient. There are a few spot highs but again these are thought to be the result of boulders from the mafic or ultramafic intrusions. The magnetic similarities between the Felsic Intrusives and the Pegmatitic Gabbro is also evident from the Gradiometer Data as there does not seem to be any appreciable differences between the two rock types.

2) The gradiometer data over the Mafic Intrusives was successful in better defining the strong magnetic trend in the northern portion of the claim group. It is quite clear from the data that the intense total field anomaly located between Lines 2+00 East and 11+00 West and between 2+00 North and 8+00 North is due to as many as 10 narrow anomalous horizons. Geological information from this area has confirmed the presence of a number of narrow magnetite bearing seams within a coarse grained gabbro.

The data, however, was not detailed enough around the anomalous area between 2+00 East to 5+00 East to be able to draw any useful conclusions. It would be recommended to conduct a tighter survey in this vicinity.

3) The data over the ultramafics was useful in determining the axis of the contact between it and the gabbro, however once off the serpentinized unit very little response was encountered.

The Gradiometer Survey was extremely useful in delineating several parallel magnetic trends within areas of high field gradients. The strike of these anomalous horizons is about 045-055 degrees azimuth (perpendicular to grid lines), with local variations.
CONCLUSIONS AND RECOMMENDATIONS

1) The Proton Magnetometer surveys were successful in defining a number of magnetic trends on the property. These trends are typified by broad, intense highs (generally several thousand gammas above background) along their strike lengths. These magnetic highs correspond to magnetite rich gabbro and ultramafic units.

2) It is therefore recommended that a extremely detailed magnetic survey be undertaken in the vicinity 2+00 East and 5+00 East from 2+00 North to the lakeshore or property boundary.

Respectfully Submitted

Ian Spence
Geologist

[Signature] 2.5.92
### APPENDIX 2.

**LIST OF CLAIMS**

| TB 845318                      | 1. |
| TB 873411                      | 2. |
| TB 873412                      | 3. |
| TB 873413                      | 4. |
| TB 873414                      | 5. |
| TB 873415                      | 6. |
| TB 873416                      | 7. |
| TB 908327                      | 8. |
| TB 909807                      | 9. |
| TB 909808                      | 10. |
| TB 909809                      | 11. |
| TB 909810                      | 12. |
| TB 909811                      | 13. |
| TB 909812                      | 14. |
| TB 909813                      | 15. |
May 6, 1987

Your File: 359
Our File: 2.9794

Mining Recorder
Ministry of Northern Development and Mines
435 James Street South
P.O. Box 5000
Thunder Bay, Ontario
P7C 5G6

Dear Madam:

RE: Notice of Intent dated April 15, 1987
Geophysical (Magnetometer) and Geological Surveys on Mining Claims TB 873411, et al, in the Lac Des Iles Area

The assessment work credits, as listed with the above-mentioned Notice of Intent, have been approved as of the above date.

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

Yours sincerely,

Gary L. Weatherson, Manager
Mining Lands Section
Mineral Development and Lands Branch
Mines and Minerals Division

Whitney Block, Room 6610
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

SH/mc
cc: Richard Middaugh
R.R.#14
Thunder Bay, Ontario
P7B 5E5

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

Encl.
**Ministry of Northern Development and Mines**  
**Technical Assessment Work Credits**  
**Ontario Data**  
**April 15, 1987**  
**File 2.9794**  
**Mining Recorder's Report of Work No. 359**

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Section 77 (19) See “Mining Claims Assessed” column

| Geological | 20 days |
| Geochemical |         |

Man days [ ]  
Airborne [ ]

Special provision [X]  
Ground [X]

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

No credits have been allowed for the following mining claims

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

GRADIOMETER CREDITS NOT ALLOWED; GRADIOMETER/MAGNETOMETER SURVEYS USING SAME SENSOR ARE CONSIDERED AS ONE SURVEY.

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

Ministry of Northern Development and Mines
Ontario

Mining Act

Type of Survey:
Geological and Geophysical

Geological and Geophysical

Name and Address of Author (for Geotechnical report):
Richard Middaugh

Address:
RH #14 Thunder Bay, Ont.

Note: Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." column.

Date of Survey (from & to):
Day, Mon, Year

Total Miles of Line Cut:
40.8 km

Ministry of Natural Resources - Ministry of Natural Resources

Name and Address of Author (for Geotechnical report):
Ian Spence

South Marks StThunder Bay, Ontario

Credits Requested per Claim in Columns at right:
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Received:
THUNDER BAY MINING DIVISION
RECEIVED
RECEIVED

THUNDER BAY MINING DIVISION
RECEIVED

Calculation of Expenditure Days Credits:
Total Expenditures + 15 = Days Credits

Expenditures (excludes outdoor supplies):

<table>
<thead>
<tr>
<th>Days Credit</th>
<th>Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986</td>
<td></td>
</tr>
</tbody>
</table>

Received:

For Office Use Only:

Received Date:
Signed:

Received by:

Certified and Approved:

[Signature]
[Date]

Received by:

Certified and Approved:

[Signature]
[Date]

Received by:

Certified and Approved:

[Signature]
[Date]
Type of Survey(s): Geophysical and Geological

Township or Area: Loc. No. 10E

Claim Holder: J. P. Mickleburgh

Survey Company: Phantom Exploration Services

Author of Report: J. SPENCE D. SAUNDERS

Address of Author: 1111 Avis Ave

Covering Dates of Survey: Oct 86 - Dec 86

Total Miles of Line Cut: 50 km

<table>
<thead>
<tr>
<th>SPECIAL PROVISIONS CREDITS REQUESTED</th>
<th>DAYS per claim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geophysical</td>
<td></td>
</tr>
<tr>
<td>Electromagnetic</td>
<td></td>
</tr>
<tr>
<td>Magnetometer</td>
<td>40</td>
</tr>
<tr>
<td>Radiometric</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>20</td>
</tr>
<tr>
<td>Geological</td>
<td>20</td>
</tr>
<tr>
<td>Geochemical</td>
<td></td>
</tr>
</tbody>
</table>

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

Magnetometer: ...

Electromagnetic: ...

Radiometric: ...

DATE: Feb 12/87

SIGNATURE: Author of Report or Agent

Res. Geol.: Qualifications:

Previous Surveys

<table>
<thead>
<tr>
<th>File No.</th>
<th>Type</th>
<th>Date</th>
<th>Claim Holder</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

TOTAL CLAIMS: 15

837 (85/12)
<table>
<thead>
<tr>
<th>GEOPHYSICAL TECHNICAL DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GROUND SURVEYS</strong> – If more than one survey, specify data for each type of survey</td>
</tr>
</tbody>
</table>

| Number of Stations | 4,000 |
| Station interval   | 12.5 meters |
| Profile scale      | N/A |
| Contour interval   | 100 |

**MAGNETIC**

| Instrument | CMNT IV EDAPROTON Magnetometer |
| Accuracy - Scale constant | 0.1 Gamma |
| Diurnal correction method | Base Station |
| Base Station check-in interval (hours) | Na, Sensor 10G every 20 sec. |
| Base Station location and value | 7°N 65°E 700 m 622108 |

**ELECTROMAGNETIC**

| **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**

| **Method** | ☐ Time Domain | ☐ Frequency Domain |
| Parameters – On time | Frequency |
| – Off time | Range |
| – Delay time | |
| – Integration time | |
| Power | |
| Electrode array | |
| Electrode spacing | |
| Type of electrode | |
SELF POTENTIAL
Instrument ____________________________ Range ____________________________
Survey Method ____________________________ Corrections made ____________________________

RADIOMETRIC
Instrument ____________________________ Values measured ____________________________
Energy windows (levels) ____________________________ Height of instrument Background Count ____________________________
Size of detector ____________________________ Overburden (type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)
Type of survey ____________________________ Instrument ____________________________
Parameters measured ____________________________ Accuracy ____________________________
Parameters measured ____________________________ Additional information (for understanding results) ____________________________

AIRBORNE SURVEYS
Type of survey(s) ____________________________ Instrument(s) ____________________________
Accuracy ____________________________ (specify for each type of survey)
Aircraft used ____________________________ (specify for each type of survey)
Sensor altitude ____________________________ Navigation and flight path recovery method ____________________________
Aircraft altitude ____________________________ Line Spacing ____________________________
Miles flown over total area ____________________________ Over claims only ____________________________
# GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken:

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<table>
<thead>
<tr>
<th>Numbers of claims from which samples taken</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Total Number of Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

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<table>
<thead>
<tr>
<th>Type of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Nature of Material)</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Average Sample Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

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<table>
<thead>
<tr>
<th>Method of Collection</th>
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</thead>
<tbody>
<tr>
<td></td>
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<table>
<thead>
<tr>
<th>Soil Horizon Sampled</th>
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</thead>
<tbody>
<tr>
<td></td>
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<table>
<thead>
<tr>
<th>Horizon Development</th>
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<tbody>
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<td></td>
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<table>
<thead>
<tr>
<th>Sample Depth</th>
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<tbody>
<tr>
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<table>
<thead>
<tr>
<th>Terrain</th>
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<tbody>
<tr>
<td></td>
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</table>

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<table>
<thead>
<tr>
<th>Drainage Development</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

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<table>
<thead>
<tr>
<th>Estimated Range of Overburden Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

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| SAMPLE PREPARATION                            |
| (Includes drying, screening, crushing, ashing) |
|                                              |

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<table>
<thead>
<tr>
<th>Mesh size of fraction used for analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
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<table>
<thead>
<tr>
<th>GENERAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

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### ANALYTICAL METHODS

Values expressed in:

- per cent □
- p. p. m. □
- p. p. b. □

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, (circle)

Others:

Field Analysis (tests)

- Extraction Method
- Analytical Method
- Reagents Used

Field Laboratory Analysis

- No. (tests)
- Extraction Method
- Analytical Method
- Reagents Used

Commercial Laboratory (tests)

- Name of Laboratory
- Extraction Method
- Analytical Method
- Reagents Used

General:

---

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RECEIVED
FEB 17, 1967
MINING LANDS SECTION
MAGNETOMETER SURVEY

INSTRUMENT: EDA OMNI IV MAG
ACCURACY: 0.1
SENSOR SEPARATION (vert, grad.) 0.0 meters
REFERENCE FIELD: 61000 G
DATUM: MNBG 8
CONT. INTERVAL: 200 G
POLARITY LOW

BASE STATION RECORDER INFORMATION
INSTRUMENT: EDA Omniv
RECORDING INTERVAL: 10 sec

TOPOGRAPHY
- CLAY BAY
- SHORELINE
- STREAM
- SWAMP

AMERICAN PLATINUM
ANGLE BAY EXTENSION
LAC DES ILES AREA

TOTAL FIELD MAG. SURVEY
DATE: FEB. 1987
SCALE: 1:2500
N.T.S. 52-M-4
PHANTOM EXPLORATION SERVICES LTD.