Geologic Report and Assay Report
Mining Claims 728084, 728085, 728086, 728089, 728094, 728095,
728099, 728106, 728107

Cliff Lake-Clay Lake
Kenora Mining District
Northwestern Ontario

Prepared by: Lorne Rosenthal, BSc. Honors, MSc.
Harbinger Exploration
Introduction

This report is a summary of a reconnaissance geologic survey which was conducted over a series of nine contiguous mining claims located in the Cliff Lake-Clay Lake area of northwestern Ontario. The claims are owned and being maintained in good standing by Lorne Rosenthal of Harbinger Exploration Ltd.

Location

The property is located between Cliff and Cedar Lakes of northwestern Ontario, approximately 15 miles north of Vermilion Bay. The property is accessed via Highway 105 which cuts through the property. Excellent exposure of the bedrock are present along the highway and pipeline access routes and most emphasis was placed on examining these outcrops in detail. Several cross strike traverses were made along existing cutlines and claim line to supplement the highway and pipeline exposures. In addition to the geologic mapping, a total of 25 rock samples were sent in for assay/analysis and their location is shown on the accompanying map. Several north-south lines were cut and flagged at 10 yard intervals and VLF survey readings were taken along these lines although there was not a sufficient number of lines surveyed across the claims to qualify for special provisions. The profiles of these VLF surveys are enclosed as an appendix to this report, as are a geologic map and a sample description and an assay list.

Geology

Regional Geology

The property is underlain by a highly metamorphosed Early Precambrian (Archaen) supracrustal sequence which is located just north of the boundary between the Kenora-Wabigoon Greenstone Belt and the English River Gneissic Belt. Previous geologists had considered the area to be part of the English River Gneissic Belt primarily on the basis of the high (Amphibolite Facies) metamorphic grade. However recent compilation mapping in the area has outlined the preponderance of mafic and intermediate volcanic sequences and indicated that
the area may in fact be a more highly metamorphosed equivalent of the adjacent Kenora - Wabigoon Greenstone Belt (C.E. Blackburn, pers. comm., 1984). Moreover, Noranda geologists working in the area consider the volcanics to represent part of a previously unrecognized Lac Seul Metavolcanic Belt and their company has directed considerable effort at exploring this area for base metal potential.

The most extensive compilation mapping completed in this area was published by Breaks and Bond (1978, ODM, P. 1201-P. 1204). They recognized a highly metamorphosed supracrustal complex in the area between Cedar and Cliff Lakes which had been extensively intruded by a late post tectonic granite-granodiorite phase. Most importantly they reported numerous exposures of mafic and intermediate volcanics and their metamorphosed equivalents in the area. This exploration venture was mounted to explore several extensive gossan zones which were observed to contain heavily disseminated to massive pyrrhotite (with traces chalcopyrite) which returned anomalous gold values up to 650 ppb on assay.

Local Geology

On the basis of this reconnaissance geologic evaluation of the property, the bedrock was divided into two major groups, namely, the early supracrustal suite and the late felsic intrusive.

A. The Early Supracrustal Suite

This suite is represented by a complex sequence of gneisses which vary in composition very dramatically across only a few meters of stratigraphic interval. On the basis of gross composition, this suite was divided into three groups:

1. Amphibolites and Hb-BioGneiss (Color Index 50%)

These are dark coarse grained gneisses which contain hornblende biotite and plagioclase and subordinate amounts of quartz. Some units are essentially massive, exhibiting only a crude layering, whereas others exhibit well defined gneissosity which may have epidote rich selvage edges preserved. These rocks are commonly interbedded with magnetite chert iron
formation which may contain up to 25% pyrrhotite. This rock type is interpreted as metamorphosed mafic flows and is associated with interflow sediments.

(ii) Quartz - Feldspar - Hornblende ± Biotite Gneiss (Color Index 15 - 50)

This rock type consists of pink to grey coarse grained gneisses which display well defined compositional layering on a 10 cm scale. These gneisses are commonly interbedded with the mafic gneisses described above and probably represent metamorphosed intermediate volcanic material. The distinct absence of garnets and most other aluminosilicates (staurolite, etc.) suggests that these do not represent metamorphosed sedimentary strata.

(iii) Quartz - Feldspar - Biotite Gneiss (Color Index -15)

This rock type is similar to that of group (ii) and is commonly intimately interbedded with rock types (i) and (ii). The preponderance of quartz and potassic feldspar and the absence of aluminosilicate rich phases (i.e. garnets, staurolite, etc.) suggest that this is a highly metamorphosed felsic volcanic sequence.

B. Late Felsic Intrusive

(iv) Quartz - Feldspar - Biotite ± Hornblende Granite Granodiorite

This rock type is characterized by a massive pink to grey coarsely crystalline highly porphyritic granite to granodiorite. The rock is almost totally devoid of gneissosity/layering and contains 20 - 40% very coarse (to 5 cm) potassic feldspar phenocrysts in a matrix of feldspar, quartz, and biotite. This granitic phase appears to have postdated most of the tectonism which affected the early supracrustal suite and exhibits conchordant and dischordant relationships to the gneissic sequence.

Structure

A very pronounced NW - 33 strike with near vertical dip was recorded in most measurements of gneissosity across the
study area. In most cases, the relict sedimentary bedding (eg) iron formation laminae, paralleled this regional gneissosity. The advanced stages of metamorphism (incipient migmatization) in many outcrops produced very complex gneissic patterns in an outcrop scale and precluded a detailed evaluation of the structural history of the area.

**Mineralization**

This exploration programme was mounted to investigate a series of heavy gossan zones which outcrop along the highway 105 and along a pipeline access which traverses the highway. Initial sampling of the material returned assays of 0.01 to 0.02 oz/ton from a massive to heavily disseminated sulphide zone which displayed both dischordant and conchordant relationships to a sequence of highly metamorphosed mafic flows and inter flow sediments. The geophysical grid was cut to establish whether the sulphide zone had a geophysical signature and if there existed other zones on the claim group which could contain economic concentrations of gold or base metals.

**Geophysical Grid**

Several widely spaced north-south lines were cut, flagged, and surveyed with the VLF unit to tie into a detailed grid which was also surveyed with the VLF unit. The location of the three VLF lines considered in this report are shown on the geologic map and the profiles for each of these lines are included in the appendix. The location of the crossovers is also marked on the geologic map.

**Assay Data**

A total of 25 hand samples were sent in for fire assay gold analysis and five of these were analyzed by neutron activation for Cu, Zn, and Ni. A short description of each sample and the analytical data are included at the back of the report. The samples were selected on lithology basis primarily to determine if any particular lithologies were preferentially concentrated in either gold or base metals. Despite the fact that many
samples look similar in hand samples, a very erratic gold distribution was noted (2 - 480 ppb). Although no ore grade gold assays were recovered, it is apparent that gold concentrating processes were active in the area and higher grade concentrations may exist elsewhere in the claim group. More significantly, the anomalously high values of Cu and Zn may suggest that a stratabound volcanogenic massive sulphide deposit similar to those found in the Manitouwadge area of Ontario may be present on the claim group.

Results and Recommendations

The geophysical data has outlined several anomalies which are within a sequence of interbedded mafic, intermediate, and felsic volcanic which could be conducive to development of a massive sulphide deposition. Moreover, the geochemical anomalies are broadly coincident with these anomalies outlined by VLP. Each of the conductors should be checked for a coincident Mag or SP response. If either of these surveys confirms that sulphide mineralization is present, then the conductor should be tested with a drill hole.
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<thead>
<tr>
<th>Sample #</th>
<th>Lithology</th>
<th>Au (ppb)</th>
<th>Cu (ppm)</th>
<th>Zn (ppm)</th>
<th>Ni (ppm)</th>
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<td>J-1</td>
<td>Silicified mafic disseminated tuff?, estimate 2% disseminated po</td>
<td>15</td>
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<td>J-4</td>
<td>Silicified mafic tuff with 5%-10% very fine disseminated po</td>
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<td>J-8</td>
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<td>J-10</td>
<td>Hb-Plag Qtz gneiss, very fine dissemination and lamination of po, estimate 5% sulphide.</td>
<td>49</td>
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<td>J-12</td>
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<td>J-14</td>
<td>Massive po from vein 1&quot; thick</td>
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<td>Sample #</td>
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<td>Zn (ppm)</td>
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<td>J-23</td>
<td>as J-16</td>
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<td>2000</td>
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<td>J-24</td>
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<td>75</td>
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<td>55</td>
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<td>C-4</td>
<td>Massive amphibolite with 5% vitreous quartz veinlets and 5% disseminated pyrrhotite</td>
<td>28</td>
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<td>-</td>
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<td>J-A</td>
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<td>J-B</td>
<td>Qtz-Plag-po gneiss, 20% disseminated po</td>
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<td>J-C</td>
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<td>J-F</td>
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## GEOCHEMICAL LABORATORY REPORT

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| K-5 | 10.0 |
| K-6 | 4.0  |
| K-7 | 7.0  |
| K-8 | 6.0  |
| K-9 | 17.0 |
| K-10|      |
| K-11| 4.0  |
| K-12| 6.0  |
| K-13| 9.0  |
| K-14| -A 12.0 |
| K-15|      |
| K-16|      |
| J-1 | 4.0  |
| J-2 | 6.0  |
| J-3 | 9.0  |
| J-4 | 15.0 |
| J-5 | 21.0 |
| J-6 | 7.0  |
| J-7 | 10.0 |
| J-8 | 49.0 |
| J-9 | 41.0 |
| J-10| 6.0  |
| J-11| 10.0 |
| J-12|      |
| J-13|      |
| J-14|      |
| J-15|      |
| J-16|      |
| J-17|      |
| J-18|      |
| J-19|      |
| J-20|      |
| J-21|      |
| J-22|      |
| J-23|      |
| J-24|      |
| CLG | 11.0 |
| C-4 | 28.0 |

Arbitrary order: 71339-84  

**AUTHORITY:** L. ROSENTHAL  

**ATTN:** L. ROSENTHAL  

**SERVICES FOR THE EARTH AND ENVIRONMENTAL SCIENCES**
## GEOCHEMICAL LABORATORY REPORT

### SAMPLE TYPE: ROCK

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### FOOTNOTES:

- ? = QUESTIONABLE PRECISION
- # = INTERERENCE
- T = TRACE
- ND = NOT DETECTED
- IS = INSUFFICIENT SAMPLE
- WA = NOT ANALYZED
- W = REPLACING SAMPLE
**ATTN: L. ROSENTHAL**

***FINAL REPORT***

**GEOCHEMICAL LABORATORY REPORT**

**SAMPLE TYPE: ROCK**

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**SIGNED:**

[Signature]

L. Douglas Readi  
LABORATORY MANAGER

**FOOTNOTES:**

? = QUESTIONABLE PRECISION; A = INTERFERENCE; TR = TRACE; ND = NOT DETECTED;  
IS = INSUFFICIENT SAMPLE; NA = NOT ANALYZED; NA = NO SAMPLE
VLF EM-16 Survey
Mining Claims 728087, 088, 090, 091, 097, 098, 104, 105
Cliff Lake - Clay Lake Map Sheets
Kenora Mining District
Northwestern Ontario

Prepared by: Lorne Rosenthal, BSc. Honors, MSc.
Harbinger Exploration
Introduction

This report is a summary of data and interpretations which have been generated by a VLF EM-16 survey which was conducted on mining claims 728087, 728088, 728090, 728091, 728097, 728098, 728104, 728105 in the Cliff Lake - Clay Lake area of northwestern Ontario. The claims are owned and being maintained in good standing by Lorne Rosenthal of Harbinger Exploration Ltd.

Location

The property is located between Cliff and Cedar Lakes of northwestern Ontario, approximately 15 miles north of Vermilion Bay, Ontario. The property is accessed via Highway 105 which bisects the property into eastern and western blocks. A total of 8 miles of line were cut at 100 yard intervals and the lines were flagged and survey readings taken at 10 yard intervals.

Personnel

The lines were cut by Lorne Rosenthal, Alex Rosenthal, John Rosenthal, and Mark Rosenthal. All survey readings were taken by Mark Rosenthal between June 1 and June 15, 1984. The data was plotted and interpreted by Lorne Rosenthal.

Instrumentation

The instrument used to conduct the survey was a VLF EM-16 unit rented from Geonics of Toronto, Ontario. All north south lines were run using the Maryland NSS 21.4 kHz base station, and all readings were taken facing north.

Geology

The claim group is underlain by an Early Precambrian (Archaen) supracrustal sequence dominated by highly metamorphosed (amphibolite facies) mafic volcanics and iron formation and lesser amounts of intermediate to felsic volcanics. Previous government mapping had included this
area in the English River Gneissic Belt although more recently, regional compilation mapping in the area has indicated that the volcanics described may in fact be a northward extension of the Kenora-Wabigoon Greenstone belt (Blackburn, C.E. pers. comm. 1984).

A reconnaissance map of the area has recently been compiled by Breaks and Bond 1978 (ODM P-1201) and a more localized geologic map of this area has been compiled by the author for the area immediately surrounding the claim group. This survey was initiated to investigate the continuity of a zone of heavy sulphide mineralization which displayed both conchordant and dischordant relationships to a Magnetite chert iron formation which was interbedded with the mafic and intermediate volcanic sequence in the area. Several anomalous gold assays (to maximum 650 ppb) were taken from silicified shear zones on the claims and it was felt that economic concentrations of gold might be found on the claim group. A VLF survey was employed to delineate any major shear/sulphide zones which may traverse the property. Magnetometer and SP surveys were run as a followup to this VLF survey.

Data/Result

VLF profiles of the raw data are plotted on the lines on the accompanying map. In addition, the location of the crossovers is plotted on Map B. Three separate conductor axes were outlined by the survey. The first conductor lies approximately 200-300 yards north of Trail Lake and can be correlated for a strike length of at least 400 yards. Subsequent magnetometer and SP surveys showed coincident anomalies along this conductor axes and this is considered as a high priority drill target. Although this zone is approximately on strike with the iron formation that outcrops along the highway, there is a very distinct offset between lines C3 and D and this author believes these two zones lie at different stratigraphic levels.
The second conductive zone is parallel to and coincident with the gas pipeline which cuts across the south end of 728098. This coincidence is unfortunate as it is difficult to determine if the VLF instrument is responding to the pipeline or to the heavily disseminated to massive pyrrhotite mineralization which outcrops along the pipeline and from which the samples with anomalous gold values were taken. This zone should also be considered as a prospective drill target although this appears to be on strike with the sulphide outcrop on the highway which recovered only traces values of gold on assay.

The third conductive zone is recorded as a series of weak crossovers on lines D1, D2, and D3 in the central portion of claim 728091. This conductor is associated with a weak though consistent magnetic response and should be considered as a low priority drill target.

Recommendations

The conductor which strikes across claim 728098, just north of Trail Lake should be tested with a drill hole. If any encouraging signs of mineralization are encountered, then the other two conductors could also be tested.

Respectfully submitted,

Lorne Rosenthal

Lorne Rosenthal, BSc. Honors, MSc.
October 2, 1984
MINING LANDS SECTION

Control Sheet

File No 27306

TYPE OF SURVEY

- GEOPHYSICAL

- GEOLOGICAL

- GEOCHEMICAL

- EXPENDITURE

MINING LANDS COMMENTS:


Signature of Assessor

[Signature]

Date

[Date]
Dear Sir:

RE: Notice of Intent dated September 11, 1985
Geological, Geophysical (Electromagnetic) Surveys and Data for Assaying on Mining Claims K 728084, et al, in Clay Lake, Cliff Lake and Squint Lake Areas

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,

S.E. Yundt
Director
Land Management Branch
Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1N3
Phone: (416)965-4888

cc: Loren Rosenthal
63 Bonin Bay
Winnipeg, Manitoba
R3V 1P8

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

Resident Geologist
Kenora, Ontario

Encl.
## Technical Assessment

### Work Credits

**Recorded Holder**
LORNE ROSENTHAL

**Township or Area**
CLAY LAKE, CLIFF LAKE AND SQUINT LAKE AREAS

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<th>Mining Claims Assessed</th>
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<td>Radiometric</td>
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<td>Induced polarization</td>
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**Section 77 (19)** See "Mining Claims Assessed" column

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<tbody>
<tr>
<td>Geochemical</td>
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- **Man days** ☑
- **Airborne** ☐
- **Special provision** ☐
- **Ground** ☑

- **☐ Credits have been reduced because of partial coverage of claims.**
- **☐ Credits have been reduced because of corrections to work dates and figures of applicant.**

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

**No credits have been allowed for the following mining claims**

- **☑ not sufficiently covered by the survey**
- **☐ Insufficient technical data filed**

- K 728084-85
- 728087-88
- 728090-91
- 728097-98
- 728104-05

**NO CREDIT FOR ELECTROMAGNETIC SURVEY AS RECORDED ON REPORT OF WORK #185-84 AS INFORMATION REQUESTED WAS NEVER RECEIVED.**

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) — 80.
Recorded Holder
LORNE ROSENTHAL

Township or Area
CLAY LAKE, CLIFF LAKE, AND SQUINT LAKE AREAS

<table>
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<th>Type of survey and number of Assessment days credit per claim</th>
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<tr>
<td>Induced polarization</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Section 77 (19) See &quot;Mining Claims Assessed&quot; column</td>
<td></td>
</tr>
<tr>
<td>Geological</td>
<td>12.4 days</td>
</tr>
<tr>
<td>Geochemical</td>
<td></td>
</tr>
<tr>
<td>Man days ☑</td>
<td></td>
</tr>
<tr>
<td>Airborne ☐</td>
<td></td>
</tr>
<tr>
<td>Special provision ☐</td>
<td></td>
</tr>
<tr>
<td>Ground ☑</td>
<td></td>
</tr>
<tr>
<td>☐ Credits have been reduced because of partial coverage of claims.</td>
<td></td>
</tr>
<tr>
<td>☐ Credits have been reduced because of corrections to work dates and figures of applicant.</td>
<td></td>
</tr>
</tbody>
</table>

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

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical — 80; Geological — 40; Geochemical — 40; Section 77(19)—60; 828 (83/6)
Recorded Holder
LORNE ROSENTHAL
Township or Area
CLAY LAKE AREA

<table>
<thead>
<tr>
<th>Type of survey and number of Assessment days credit per claim</th>
<th>Mining Claims Assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geophysical</td>
<td>$363.60 SPENT ON SAMPLE ASSAYS ON MINING CLAIMS:</td>
</tr>
<tr>
<td>Electromagnetic</td>
<td>K 728090</td>
</tr>
<tr>
<td>Magnetometer</td>
<td>728097</td>
</tr>
<tr>
<td>Radiometric</td>
<td>728104</td>
</tr>
<tr>
<td>Induced polarization</td>
<td>810695</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

Section 77 (19) See "Mining Claims Assessed" column

Geological                                                  

Geochemical                                                  

- 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.

24% ASSESSMENT WORK DAYS ARE ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT.

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

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 — 90; Geological — 40; Geochemical — 40; Section 77(19) — 60; 828 (83/8)
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. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact Mr. R.J. Pichette at 416/965-4888.

Yours sincerely,

[Signature]

S.E. Fundt
Director
Land Management Branch
Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3

[Postmark: Sept. 26/85]

Encls.

cc: Loren Rosenthal
63 Bonin Bay
Winnipeg, Manitoba
R3V 1P8

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

Our File: 2.7306

Your Files 183, 185/84

1985 09 11
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 Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.
**Ministry of Natural Resources**

**Report of Work**

(geophysical, geological, geochemical and expenditures)

---

**Type of Surveys:**
- Geology
- Mineral Exploration

**Claim Holder:**
- Lorne Rosenthal

**Address:**
- 1652 Westmount Rd NW

**Survey Company:**
- Western Exploration

**Name and Address of Author of Geo Technical report:**
- Lorne Rosenthal

---

**B. Mining Claims Traversed (List in numerical sequence):**

<table>
<thead>
<tr>
<th>Claim</th>
<th>Prefix</th>
<th>Number</th>
<th>Exp. Days Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>K</td>
<td>728084</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>728085</td>
</tr>
<tr>
<td></td>
<td></td>
<td>728086</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>728087</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>728088</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>728089</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>728090</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>728091</td>
<td></td>
</tr>
</tbody>
</table>

---

**Expenditures (excludes power stripping):**

<table>
<thead>
<tr>
<th>Type of Work Performed</th>
<th>Performed on Claim(s)</th>
<th>Calculation of Expenditure Days Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Days Credits</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

---

**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:**
- Lorne Rosenthal
- 1652 Westmount Rd NW

**Date:**
- 27/3/89

---

**Instructions:**
- Please type or print.
- If number of mining claims traversed exceeds space on this form, attach a list.

---

**Date:**
- Aug 9 1984

---

**Date Certified:**
- July 25, 1984

---

**Name of Person Certifying:**
- Lorne Rosenthal
Ministry of Natural Resources

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

Instructions: Please type or print.

- If number of mining claims traversed exceeds space on this form, attach a list.
- Only days credits calculated in the "Expenditures" section may be entered in the "Expends. Days Cr." columns.
- Do not use shaded areas below.

Ontario

Report of Work
(Mining Act)

Type of Survey(s)

Special Provisions

For first survey:
Enter 40 days. (This includes line cutting)

For each additional survey:
using the same grid:
Enter 20 days (for each)

Man Days

Complete reverse side and enter totals here

Geophysical

- Electromagnetic
- Magnetometer
- Radiometric
- Other

Geochemical

Expenditures (excludes power stripping)

Type of Work Performed

Calculation of Expenditure Days Credits

Total Expenditures + 15 = Total Days Credits

Instructions

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

Date Approved as Recorded

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

Lorne Rosenfeld

Date Certified

Aug. 1, 1984

Note: Special provisions to airborne surveys.

Geophysical

- Electromagnetic
- Magnetometer
- Radiometric
- Other

Geochemical

Total Number of Mining Claims Covered by this Report of Work.

4

Uns

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

Lorne Rosenfeld

Date Certified

Aug. 1, 1984

Note: Special provisions to airborne surveys.

Geophysical

- Electromagnetic
- Magnetometer
- Radiometric
- Other

Geochemical

Total Number of Mining Claims Covered by this Report of Work.

4

Uns
1985 08 19

MINISTRY OF NATURAL RESOURCES

Dear Sir:

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Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3

cc: Lorne Rosenthal
1652 Westmount Road NW
Calgary, Alberta
T2N 3M1

cc: Mr. G.H. Ferguson
Mining & Lands Commissioner

Ends.

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1652 Westmount Road NW
Calgary, Alberta
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