REPORT ON RADIOMETRIC SURVEY
TOWNSHIP OF SALTER AND MAY
FOR

MR. RAYMOND SHUNCK
220 EAST FRONT STREET
PERRYSBURG, OHIO, U.S.A. 43551

MAY 27, 1977
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APPENDIX I

General Description and Applications TV-1
MAPS

- Radiometric survey of south west claim group
  Scale - 1 inch to 100 feet.

- Outcrop location map of south west claim group
  Scale - 1 inch to 100 feet

- Radiometric survey of north east claim group
  Scale - 1 inch to 100 feet.

- Outcrop location map of north east claim group
  Scale - 1 inch to 100 feet.
1. INTRODUCTION

The property consists of 8 mining claims on the border of May and Salter Townships in the Sudbury Mining Division. The claims are presently held by Mr. Raymond Shunck of Perrysburg, Ohio, U.S.A.

The ground has been staked for uranium which is associated with the Matinenda formation and copper which is associated with basic volcanic rocks. On the North shore of Salmay Lake (West Lake) there is an exposure of uranium bearing quartz pebble conglomerate, staked by Mr. Alexander of Massey, Ontario. The Alexander showing is adjacent to and on strike with radioactive indications on Mr. Shunck's claims to the south west.

The purpose of the present work was to determine if the radioactive horizon on the Alexander claims extended to Mr. Shunck's claims. To determine if this were so, the claims owned by Mr. Shunck have had a radiometric survey completed over them. The survey has indicated that the uranium bearing conglomerate on the Alexander claims pinches out to the south west and does not extend on to Mr. Shunck's property.

The value of Mr. Shunck's claims depends on the economic potential of the radioactive zone on the Alexander claims and it is advised that Mr. Shunck retain his claims until the potential of the Alexander property is known.
2. PROPERTY LOCATION AND ACCESS

The property consists of 8 contiguous mining claims on the border of Salter and May Townships in the Mining District of Sudbury, Ontario. The claims are accessible by a 2½ mile gravel road north from Highway 17 immediately east of the Town of Massey, Ontario.

In particular the claims consist of mining claims S-407730, S-407731, S-407732, S-407733 covering the southeast quarter of section 12 in Salter Township and mining claims S-407735, S-407736, S-407737, S-407738 covering the north half of Lot 12 Concession 5 of May Township.

3. TOPOGRAPHY

The claims, consisting of two contiguous blocks of ¼, occupy the area on and to the west of Salmay Lake (West Lake) and to the north of Salmay Lake.

Several areas of marked positive relief are prominent on the ground. The trends of these areas are indicated on the enclosed outcrop location map by hachured trend lines.

On the south west claims group a well exposed ridge of Matinenda quartzite forms the north west shore of Salmay Lake. The contact between the Matinenda formation
and the Keewatin volcanics to the north west of it, forms a topographic low paralleling the ridge. To the north west of the low, the ground rises to the north west.

On the north eastern claim group, to the north of Salmay Lake, a topographic high is expressed by a hill of Algoman granite, which lies in the central northern area of the claims. The terrain slopes downward in all directions from the top of the hill to the claim boundaries. The granite hill is the highest point of relief on both claim groups.

4. PREVIOUS WORK

The geology of the area has been described by Robertson (Geology of the Massey Area, 1976) whose nomenclature has been adopted for this report. Earlier work was by Robertson (O.D.M. Map P 378) and by Robertson and Siemiatkowska (O.D.M. Map P 702).

The ground presently held by Mr. Shunck has been staked many times in the past as indicated by the many old claim posts on the property. Past interest in both Uranium and copper is indicated by several old pits both in the Huronian rocks and the basic volcanics. On mining claim S-407731 a shallow test pit for Uranium was found on the contact between the Matinenda and Pecors formations. On mining claim S-407736 several very old test pits, one a small shaft, were found located on narrow sulfide bearing quartz veins.
The later work was probably done at the turn of the century. The claims appear to have been extensively prospected in the past.

On the north shore of Salmay Lake three shallow test pits have been blasted in a radioactive bed of quartz pebble conglomerate in the Matinenda formation. Two claims covering the showing on the north shore and the central area of Salmay Lake are owned by Mr. Alexander of Massey, Ontario.

5. PRESENT WORK

The purpose of the present work is as follows:

1. To determine if the radioactive quartz pebble conglomerate on the Alexander claims extends on to the Shunck claims to the south west.

2. To explore for other anomalous radioactive zones.

3. To delineate the Huronian-Keewatin contact.

The present work consisted of line cutting, a radiometric survey, the construction of an outcrop location map and a follow-up sampling program.

5a. LINE CUTTING

Two grids were cut and chained on the claims. On the south west claim group a base line was cut north easterly at an azimuth of 045°, for a distance of 3200 feet from the #3 post of claim S-407733. Cross section lines were cut at 90° to the base line at 400 foot intervals on the north west side and 200 foot intervals on the south east side.
On the north east claim group a base line was cut at an azimuth of 090° across the center of the claim group a distance of 2847 feet. Cross section lines were cut at 90° to the base line and at 400 foot intervals to the claim boundaries.

A total of 6047 feet of base line and -25,685 feet of cross section line was cut on the property.

The work was carried on from July 27, 1976 to August 11, 1976.

5b. RADIOMETRIC SURVEY

A radiometric survey was carried out with a McPhar T.V..-1 scintillometer. A description of the instrument is in the appendix. A map of the survey results has been plotted at a scale of 1 inch to 100 feet. Stations were read at 100, 50 and 25' intervals as required during the survey. A total of 702 stations were occupied. Because of a lack of anomalous readings in some areas and extremely erratic readings caused by geological conditions the data has not been contoured.

Three radiometric readings were taken at each station during the survey. The first reading (t₁ setting) measures radioactivity due to potassium, thorium, uranium and cosmic radiation. The second reading (t₂ setting) measures uranium plus thorium. The third reading (t₃ setting) measures thorium only.

For the sake of brevity all readings on the map
have been reduced by multiples of 100 and 10. To obtain full readings in counts per minute the \( t_1 \) setting should be multiplied by 100 and the \( t_2 \) and \( t_3 \) settings by a multiple of 10 each. The \( t_1 \), \( t_2 \) and \( t_3 \) settings are related by the relationship that the count on the \( t_2 \) setting due to uranium only is \( t_2 - 3.5 t_3 \).

A more detailed description of this relationship is given in the appendix.

5c. OUTCROP LOCATION MAP

An outcrop location map at a scale of 1 inch to 100 feet has been constructed of rock outcrops along the cross section lines and does not include all of the outcrop on the claim group. The purpose of the map is to help interpret readings that might be anomalous due to their geometry in relation to the stations read. Because of the large lateral extent of some of the outcrops, their extension between cross lines was facilitated by the use of aerial photos.

A detailed geological map of the claims has not been made but because of the abundance of rock outcropings observed during the radiometric survey it was possible to locate with reasonable accuracy the contacts of many of the formations that lie on the ground. The outcrop location map is not presented as a geological map but is here used to help interpret the radiometric survey.
5d. SAMPLING

Upon completion of the radiometric survey a sampling program was initiated to test any anomalous readings that were encountered. A total of 15 surface samples were taken and assayed for their \( \text{U}_3\text{O}_8 \) content by Technical Service Laboratories in Mississauga, Ontario. A copy of the assay results is appendixed to this report.

The field work was carried out on October 10 and 11, 1976.

6. GENERAL GEOLOGY

The property covers an area along the contact of the Huronian and Keewatin Supergroups as indicated by Robertson's map. The formations on the south west claim group comprise Keewatin volcanics to the north west and Huronian sediments to the south east. The formations trend north easterly and dip 85° south east.

The volcanic rocks are comprised of medium grained basalts and minor interflow sediments. These have been intruded by diabase. Rocks of the Huronian Supergroup constitute the Matinenda and Pecors formations. The Matinenda is composed of white quartzite, oligomictic quartz pebble conglomerate, impure quartzite and argillaceous quartzite.
General Geology con't

On the north east claim group Keewatin volcanic rocks underlie the southern part of the claim group and Algoman granite underlies the northern part of the claims. These in turn have been intruded by quartz diorite. On the north east claim group the quartz diorite is a major member about 1000 feet wide having intruded along the contact of the volcanics and granite. The formation strike N 70° E.

The Huronian rocks lie to the immediate south of the northeast claim group on the north shore of Salmay Lake. The strike of the Huronian sediments changes from north easterly on the north west shore of Salmay Lake to nearly N 70° E on the north shore. A bed of uraniferous quartz pebble conglomerate 4 to 5 feet wide lies within the Matinenda on the north shore of the Lake.

The Matinenda formation of the Huronian Supergroup and associated quartz pebble conglomerates form the basement of the Proterozoic sequence in the Elliot Lake - Blind River area. The Matinenda in particular serves as a marker horizon for prospecting for uranium in that all uranium values of economic importance have been found associated with quartz pebble conglomerates within the Matinenda formation.

7a. RADIOMETRIC INTERPRETATION - SOUTH WEST CLAIM GROUP

The survey indicates that the only radiometric readings of possible economic interest are associated with the Huronian rocks and in particular the Matinenda formation.
The basic volcanics occupying the north west area of the claim group do not indicate any anomalous radioactivity of note.

Background readings over the basic volcanics are highly variable as a result of windowing of rock and variations in both depth and type of overburden. Overburden varies from 0 feet in the north west to an excess of 25 feet in the south. It is composed of sandy glacial till with localized areas of muskeg in the lower areas of the center of the claim group.

Readings over the volcanics varied as follows:

<table>
<thead>
<tr>
<th>Setting</th>
<th>High C.P.M.*</th>
<th>Low C.P.M.*</th>
<th>Difference C.P.M.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bedrock</td>
<td>$t_2$</td>
<td>170</td>
<td>40</td>
</tr>
<tr>
<td>Overburden</td>
<td>$t_2$</td>
<td>150</td>
<td>50</td>
</tr>
<tr>
<td>Bedrock</td>
<td>$t_3$</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td>Overburden</td>
<td>$t_3$</td>
<td>40</td>
<td>10</td>
</tr>
</tbody>
</table>

*Counts per minute

The Matinenda formation is composed of white to gray quartzite interbeded toward the top with narrow beds, from a few inches to several feet wide, of impure quartzite and argillite. The formation varies in thickness from 200 to 300 feet. The central area of the formation on claim S-407731 is well exposed and essentially devoid of overburden. Toward
the north east and south west the Matinenda is drift covered.

Scintillometer readings over the Matinenda in places are highly erratic. This is apparently caused by micaceous and argillaceous impurities associated with trace elements of radioactive elements. In particular narrow argillaceous beds toward the top of the formation caused erratic readings. Assays of these high readings indicate only a trace of U₃O₈ (0.001 %). On cross section 16+00 north east 4+25 south east a reading of t₁ = 22,000  t₂ = 1000  t₃ = 300 counts per minute corresponded to an assay value of 0.012% by weight U₃O₈. The assay is associated with a bed of dark grey argillaceous quartzite 4 feet wide. The sample was taken from a relatively freshly blasted sample pit beside the station.

Readings over the Matinenda varied as follows:

<table>
<thead>
<tr>
<th>Setting</th>
<th>High C.P.M.*</th>
<th>Low C.P.M.*</th>
<th>Difference C.P.M.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bedrock</td>
<td>t₂</td>
<td>650</td>
<td>70</td>
</tr>
<tr>
<td>Overburden</td>
<td>t₂</td>
<td>450</td>
<td>50</td>
</tr>
<tr>
<td>Bedrock</td>
<td>t₃</td>
<td>150</td>
<td>10</td>
</tr>
<tr>
<td>Overburden</td>
<td>t₃</td>
<td>100</td>
<td>10</td>
</tr>
</tbody>
</table>

* Counts per minute
The Pecors formation lies stratigraphically above the Matinenda. The contact between the two is transitional over a thickness of 25 to 30 feet. The rocks are composed of impure quartzite and argillite. Radioactivity associated with the Pecors appears to be even more erratic than that of the Matinenda. Readings can change drastically over a distance of one to two feet. The formation is well exposed and overburden is minimal.

Readings over the Pecors formation varied as follows:

<table>
<thead>
<tr>
<th>Setting</th>
<th>C.P.M.*</th>
<th>C.P.M.*</th>
<th>C.P.M.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bedrock</td>
<td>$t_2$</td>
<td>2400</td>
<td>100</td>
</tr>
<tr>
<td>Overburden</td>
<td>$t_2$</td>
<td>750</td>
<td>70</td>
</tr>
<tr>
<td>Bedrock</td>
<td>$t_3$</td>
<td>200</td>
<td>40</td>
</tr>
<tr>
<td>Overburden</td>
<td>$t_3$</td>
<td>200</td>
<td>10</td>
</tr>
</tbody>
</table>

* Counts per minute

Assays of anomalous readings again indicate only a trace (0.001%) $\text{U}_3\text{O}_8$. The high readings are the result of minor traces of uranium that are associated with and have an affinity for the micaceous or argillaceous components of the formation.
7b NORTH EAST CLAIM GROUP

The geology consists of Keewatin basic volcanics on the south, intruded by Algoman granite on the north. The Algoman-Keewatin contact has been intruded by a linear mass of gabbro 900 to 1000 feet wide, which occupies the centre of the claim group. The granite and volcanics have also been intruded by narrow quartz veins which in some instances are sulfide bearing. The formations generally trend about N 70° E.

Overburden is very light and most of the area is barren of till. Some drift cover occupies the central western portion of the ground and is thought to be about 10 feet in thickness.

No anomalous radioactivity of any consequence was found to be associated with the rocks in this area.

Background radioactivity on the ground was again found to be somewhat variable as a whole and at times on any particular rock type. This is attributed mostly to minor amounts of drift cover and in a large part to mass and geometrical effects.

Variation in Radiometric readings for various rock types are listed below:

<table>
<thead>
<tr>
<th>Granite</th>
<th>Setting</th>
<th>High C.P.M.*</th>
<th>Low C.P.M.*</th>
<th>Difference C.P.M.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bedrock</td>
<td>t2</td>
<td>210</td>
<td>100</td>
<td>110</td>
</tr>
<tr>
<td>Overburden</td>
<td>t2</td>
<td>100</td>
<td>20</td>
<td>80</td>
</tr>
</tbody>
</table>
In some areas readings taken on till were higher than those taken over outcrop. This may be attributed in some instances to adsorption of radioactive materials from the underlying rocks below the till.
MATINENDA FORMATION:

The Matinenda formation is located on the north shore of Salmay Lake. The northern extent of these rocks appears to lie immediately to the south of the north east claim group. Increases in radioactivity toward the southern ends of cross section lines 20+00 E and 24+00 E may indicate the presence of the Matinenda immediately to the south or on the north side of the southern claim boundary.

The work was carried on from August 7 to 22, 1976.
8. CONCLUSIONS

The radiometric survey indicates that there are no values for uranium of economic importance on the ground presently held by Mr. Shunck. All apparent anomalous values indicated lie within the Matinenda and Pecors formations of the Huronian Supergroup and in each case the indications have been sampled and only trace amounts of uranium indicated (0.001%).

The highest uranium assay obtained was 0.012% by weight of $\text{U}_3\text{O}_8$ from a blasted pit on mining claim S-407731 from a bed of argillaceous quartzite 4 feet wide. The sample taken would not be considered leached. The possibility of leached values always exists and the sample results are not entirely representative.

All uranium values of economic interest within the Elliot Lake mining camp and within the Huronian sequence in the area have been associated with uranium bearing quartz pebble conglomerate within the Matinenda formation. There is no such conglomerate indicated on Mr. Shunck's claims.

Low percentages of radioactive materials have been known to be associated with the Pecors formation and have been explored by investigators in other areas with no indication of economic values of uranium present.
It has been suggested by other investigators that minor radioactive occurrences in the Pecors and Matinenda formations are the result of the reworking, by long shore currents, of pre-existing uranium deposits at the base of the Matinenda formation. As a result of this, the low uranium values are often highly dispersed in younger sediments.

The present survey only indicates anomalous surface radioactivity and does not infer any structural implications with depth. If the Alexander prospect was a main channel way of deposition there is the possibility that the conglomerate spreads or aprons out with depth, in which case it might extend onto Mr. Shunck's ground.

Any potential uranium values on the Shunck ground are directly related to the value of Mr. Alexander's showings.
9. RECOMMENDATIONS

Radiometric surveys for the most part are good indicators of anomalous radioactivity. However they can be affected by numerous variables such as leaching. It would be advisable to obtain fresh samples from depth, either by trenching or drilling shallow holes, to verify the conclusions in this report.

The writer suggests that the claims should be retained until the potential of Mr. Alexander's prospect is verified.

RESPECTFULLY SUBMITTED

VERDUN VENN, B.Sc., P.Eng

May 27, 1977

45 Pelican Drive,
Sault Ste. Marie, Ontario, Canada
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ROBERTSON, J.A.

Accompanied by maps 2308, 2309
Scale 1 inch to 1 mile and 2 charts.

1966 : Salter Township, District of Sudbury, Ontario Department of Mines,
Prelim. Geol. Map P 378,
Scale 1 inch to 1 mile. Geology 1966

ROBERTSON, J.A., and
SIEMIATKOWSKA, K.M.

1971 : May Township, District of Sudbury,
Ontario Department of Mines and
Northern Affairs,
Prelim. Geol. Map No. P 702,
Scale 1 inch to 1 mile.
Geology 1971. Geological compilation
by Robertson, J.A.
<table>
<thead>
<tr>
<th>SAMPLE NO</th>
<th>LOCATION</th>
<th>INSTRUMENT READING ON SAMPLE POINT</th>
<th>ASSAY</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>t₁  t₂  t₃  *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W.L.-1</td>
<td>C.S. 12+00 N.E. 1+95 S</td>
<td>200  100  23</td>
<td>0.001</td>
<td>- coarse quartzite minor sericite 3 feet wide</td>
</tr>
<tr>
<td>W.L.-2</td>
<td>C.S. 12+00 N.E. 3+84 S</td>
<td>93   40   9</td>
<td>0.001</td>
<td>- Argillite in Matinenda Quartzite 1/2 feet wide</td>
</tr>
<tr>
<td>W.L.-3</td>
<td>C.S. 12+00 N.E. 5+75 S 25 N.E.</td>
<td>170  72  20</td>
<td>0.001</td>
<td>- fine grained grey Quartzite, minor sulfides</td>
</tr>
<tr>
<td>W.L.-4A</td>
<td>C.S. 14+00 N.E. 5+49 S.E. 10'S.W.</td>
<td>67   40  10</td>
<td>0.001</td>
<td>- Argillite</td>
</tr>
<tr>
<td>W.L.-4B</td>
<td>C.S. 14+00 N.E. 5+49 S.E. 10'S.W.</td>
<td>67   40  10</td>
<td>0.001</td>
<td>- Quartzite: 1 foot wide</td>
</tr>
<tr>
<td>W.L.-5</td>
<td>C.S. 14+00 N.E. 3+81 S.F.</td>
<td>320  200  60</td>
<td>0.001</td>
<td>- Intercalated quartzite and argillite</td>
</tr>
<tr>
<td>W.L.-6</td>
<td>C.S. 14+00 N.E. 5+75 S.E.</td>
<td>330  230  50</td>
<td>0.005</td>
<td>-</td>
</tr>
<tr>
<td>SAMPLE NO.</td>
<td>LOCATION</td>
<td>INSTRUMENT READING ON SAMPLE POINT</td>
<td>ASSAY</td>
<td>REMARKS</td>
</tr>
<tr>
<td>------------</td>
<td>----------</td>
<td>-----------------------------------</td>
<td>-------</td>
<td>---------</td>
</tr>
<tr>
<td>W.L.-7</td>
<td>C.S. 18+00 N.E. 3+00 S.E. 50'S.W.</td>
<td>270 110 30</td>
<td>0.001</td>
<td>medium grained quartzite 1½ feet wide</td>
</tr>
<tr>
<td>W.L.-8</td>
<td>C.S. 18+00 N.E. 3+75 S.E. 75'S.W.</td>
<td>69 45 5</td>
<td>0.001</td>
<td>micaceous quartzite 1' foot wide</td>
</tr>
<tr>
<td>W.L.-9</td>
<td>C.S. 20+00 N.E. 3+30 S.E.</td>
<td>23 10 4</td>
<td>0.001</td>
<td>Pink micaceous quartzite</td>
</tr>
<tr>
<td>W.L.-10</td>
<td>C.S. 20+00 N.E. 5+60 S.E.</td>
<td>9 4 60 18</td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>W.L.-11</td>
<td>C.S. 18+00 N.E. 5+65 S.E.</td>
<td>200 90 93</td>
<td>0.001</td>
<td>fine grained argillaceous quartzite</td>
</tr>
<tr>
<td>W.L.-12</td>
<td>C.S. 24+00 N.E. 4+15 S.E.</td>
<td>100 70 10</td>
<td>0.001</td>
<td>quartzite</td>
</tr>
<tr>
<td>W.L.-13</td>
<td>C.S. 24+00 N.E. 5+10 S.E.</td>
<td>110 75 15</td>
<td>0.001</td>
<td>dark grey to black argillaceous quartzite</td>
</tr>
<tr>
<td>W.L.-14</td>
<td>C.S. 16+00 N.E. 4+25 S.E.</td>
<td>220 100 30</td>
<td>0.012</td>
<td>Argillaceous quartzite (pit sample), 4 feet wide Minor seams of pyrite on fractures</td>
</tr>
</tbody>
</table>

* Counts per minute

\[ t_1 = \frac{t_1}{t_1} (K + U + Th) \times 100 \]
\[ t_2 = \frac{t_2}{t_2} (U + Th) \times 10 \]
\[ t_3 = \frac{t_3}{t_3} (Th) \times 10 \]
The gamma ray detecting principle lies in the sodium iodide crystal. Gamma rays entering the crystal, interact with the crystal atoms, resulting in free electrons and light emission. The optically coupled photomultiplier converts the light emission to electrical pulses. The magnitudes of the electrical pulses bear a relationship to the energy levels the intercepted gamma rays.

Various radioactive elements have characteristic gamma energy spectrums. The nature of the spectrum for a given element can be used to advantage in identifying it in the presence of other radioactive elements.

Thorium emits gamma rays with energy levels exceeding 2.5 Mev. The highest energy radiation from potassium is about 1.6 Mev. The three vertical lines marked t₁, t₂ and t₃ show the location of the threshold settings of the TV-1 scintillometer after the instrument has been calibrated. Threshold t₃ at 2.5 Mev. allows only those electrical pulses to be registered whose amplitudes correspond to gamma rays with energy levels above 2.5 Mev. t₂ similarly responds to gamma energy levels above 1.6 Mev. When both thorium and uranium are present during a measurement, then the reading at t₂ contains counts resulting from
Appendix I con't

both elements whereas $t_3$ contains counts from thorium only. It is possible then, to subtract the count due to thorium in the $t_2$ reading, leaving the count from uranium only. The count representing thorium in the $t_2$ reading is a fixed multiple of the $t_3$ reading. In the TV-1 scintillometer, this multiple is 3.5. That is, the count in $t_2$ due to uranium is $t_2 - 3.5 t_3$. A thorium calibrating source and calibration procedure, provided with the instrument, ensures that this is always the case.

Once the count in $t_2$ has been resolved into net count for uranium, it is possible to arrive at a quantitative estimate of the material grade.
**GEOLOGICAL - GEOCHEMICAL DATA STATEMENT**

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT

FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT

TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey: **RADIOMETRIC**

Township or Area: May and Salter Townships

Claim holder(s): Raymond Shunck

Author of Report: V.R. Venn

Address: 45 Pelican Drive, Sault Ste. Marie, Ont.

Covering Dates of Survey: July 28/76 - Aug. 27/76

(linecutting to office)

Total Miles of Line cut: 7.6

---

**SPECIAL PROVISIONS**

CREDITS REQUESTED

Geophysical

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

ENTER 20 days for each additional survey using same grid.

- Electromagnetic
- Magnetometer
- Radiometric
- Other
- Geological
- Geochemical

---

**AIRBORNE CREDITS**

(Special provision credits do not apply to airborne surveys)

Magnetometer: _____ Electromagnetic: _____ Radiometric: _____

(enter days per claim)

---

DATE: 

SIGNATURE: Author of Report or Agent

---

**PROJECTS SECTION**

67. 1102

Res. Geol. 
Qualifications: 63. 1102.

---

Previous Surveys

---

Checked by: date

---

GEOLOGICAL BRANCH

Approved by:

---

GEOLOGICAL BRANCH

Approved by: date

---

**PROJECTS UNIT**

MINING CLAIMS TRAVERSED

List numerically

| Claim Number | Covered
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>S-407730</td>
<td>3/3 not covered</td>
</tr>
<tr>
<td>S-407733</td>
<td>3/3 not covered</td>
</tr>
<tr>
<td>S-407735</td>
<td>3/3 not covered</td>
</tr>
<tr>
<td>S-407736</td>
<td>3/3 not covered</td>
</tr>
<tr>
<td>S-407737</td>
<td>3/3 not covered</td>
</tr>
<tr>
<td>S-407738</td>
<td>3/3 not covered</td>
</tr>
</tbody>
</table>

Area of claim: 3 not covered = 1

8x40 = 320/ (8+1)

= 35.5 days

TOTAL CLAIMS: 8
GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS
Number of Stations 702
Number of Readings 2106
Station interval 25, 50, 100
Line spacing 200 and 400
Profile scale or Contour intervals See report
(specify for each type of survey)

MAGNETIC
Instrument
Accuracy: Scale constant
Diurnal correction method
Base station location

ELECTROMAGNETIC
Instrument
Coil configuration
Coil separation
Accuracy
Method: □ Fixed transmitter □ Shoot back □ In line □ Parallel line
Frequency
(specify V.L.I. station)
Parameters measured

GRAVITY
Instrument
Scale constant
Corrections made
Base station value and location
Elevation accuracy

ELECTRICAL POLARIZATION: RESISTIVITY
Instrument
Time domain Frequency domain
Frequency Range
Power
Electrode array
Electrode spacing
Type of electrode
SELF POTENTIAL

Instrument ____________________________ Range ____________________________

Survey Method __________________________________________________________

Corrections made __________________________________________________________

RADIOMETRIC

Instrument: McPhar Model T.V.-1

Values measured: Counts per minute

Energy windows (levels): $t_1$ at 0.2 MeV; $t_2$ at 1.6 MeV; $t_3$ at 2.5 MeV.

Height of instrument: ground

Background Count: See report

Size of detector: 1 inch in diameter, 1 ½ inches thick

Overburden: Glacial till 0 - 10 feet (see report)

(type, depth - include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey ____________________________

Instrument ____________________________

Accuracy ____________________________

Parameters measured ____________________________

Additional information (for understanding results) ____________________________

AIRBORNE SURVEYS

Type of survey(s) ____________________________

Instrument(s) ____________________________ (specify for each type of survey)

Accuracy ____________________________ (specify for each type of survey)

Aircraft used ____________________________

Sensor altitude ____________________________

Navigation and flight path recovery method ____________________________

Aircraft altitude ____________________________ Line Spacing ____________________________

Miles flown over total area ____________________________ Over claims only ____________________________
For additional information, see maps:

MAY-0014 #1-4
LOKE DI A BASE Dikes ©

Highest point on claims

Granite Intrusives

Extensive Rock Outcrop

Shaft S Quartz Vein

WEST LOKE

MINING DISTRICT OF SUDBURY

MAY TOWNSHIP

MINING CLAIMS

ROCK OUTCROP LOCATION MAP

LEGEND

Scale 1 : 10000

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