42A01SE0090 2.17120 EBY



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# ASSESSMENT REPORT: EBY WEST & OTTO TP PROPERTIES

Douglas Robinson


A. INTRODUCTION . . . . . 1

B. PROJECT LOCATION (Figure 1) . . . . . 1
Eby West Property 1
Otto Township Property 1

C. PROPERTY . . . . . 2
Eby West Property (Figure 2a) 2
Otto Township Property (Figure 2b) 2

D. ACCESS (Figure 1) . . . . . 3
Eby West Property 3
Otto Township Property (Amikougami Creek) 3

E. REGIONAL GEOLOGY . . . . . 3
Eby West Property (Figures 2a & 3a) 3
Otto Township Property (Figures 2b & 3b) 4

F. PROSPECTING TARGETS . . . . . 4

G. SUMMARY OF PREVIOUS WORK . . . . . 5
Eby West Property 5
Otto Township Property 5

H. TYPE AND AMOUNT OF PROSPECTING-EXPLORATION WORK 6
Eby West Property 6
Otto Township Property 6

I. LINE CUTTING . . . . . 7
Eby West Property 7
Otto Township Property 7
Lines List: Eby West Grid and Otto Township Grid 7

J. MaxMin HORIZONTAL LOOP EM SURVEY . . . . . 9
Eby West and Otto Township Properties 9
EM Traverse List: Eby West Property 10
EM Anomaly LIST: Eby West Property 11
Otto Township 17
EM Traverse List: Otto Township Property. 17
EM Anomaly List: Otto Township Property 18

K. MAGNETIC SURVEY . . . . . 20
Magnetic Traverse List: Eby West Property 21
Magnetic Traverse List: Otto Township Property 22

L. GEOLOGICAL SURVEY . . . . . 22
Eby West Property 22
Otto Township Property 23


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M. RECOMMENDATIONS . . . . . 25
Eby West Property 25
Otto Township Property 25

N. LIST OF REFERENCES . . . . . 26
EBY TOWNSHIP 26
OTTO TOWNSHIP 27

FIGURES

Figure 1. General Location of Claim Group
Showing Major Breaks; 1:50 000

Figure 2a. Claim Map Eby Township; Scale 1:20000

Figure 2b. Claim Map Otto Township; Scale 1:20000

Figure 3a. Geology Eby Township; P.448; Scale 1:20000

Figure 3b. Geology Otto Township; P.501; Scale 1:20000

Figure 3c. General Geology; Legend
Eby Twp. Map P.448 & Otto Twp Map P.501

MAPS

GEOLOGY EBY WEST GROUP Scale 1:1000. (Lines 12-22W)

GEOLOGY EBY WEST GROUP Scale 1:1000. (Lines 22-32W)

GEOLOGY EBY WEST GROUP Scale 1:1000. (Lines 32-42W)

GEOLOGY EBY WEST GROUP Scale 1:1000. (Lines 24-31W north sheet)

COMPILATION EBY WEST PROPERTY (Magnetic and EM Anomalies)
Scale 1:5000

GEOLOGY AMIKOUGAMI CREEK PROERTY (Otto Tp. Scale 1:1000,
(Lines 21-31)

## A. INTRODUCTION

This exporation program was funded by OPAP grants OP95-289 and OPG 96-227. Line-cutting, geological mapping, a magnetometer survey, a MaxMin EM survey and preparation of this technical report were performed on the Eby West property in Eby Tp. and the Amikougami Creek property in Otto Tp. Douglas Robinson, the author of this report, and David Robinson supervised the field work which was between May 4, 1995 and February 24, 1997.

The geophysics and geological mapping were conducted to define target areas for advanced gold exploration on both properties. EM conductors identified on the Eby West property represent potential structures that could host gold deposits. Several EM conductors associated with felsic volcanics of the Amikougami Creek property represents both potential volcanogenic base metal targets and gold targets.

## B. PROJECT LOCATION (Figure 1)

**Eby West Property**

This property consists of 22 claims totalling 36 claim units in lots 6 to 11 in Concessions IV and V of Eby Township (Plan # M-345) of the Larder Lake Mining Division. This property is located at Latitude 48°04'00" and Longitude 80°14'00" (UTM Zone: 531824N, 574057E). "Figure 2a. Claim Map", and "Figure 3a. Geology Otto Township" provide additional information regarding location.

**Otto Township Property**

This property consists of 9 claims totalling 25 claim units in lots 6 to 11 in Concession V of Otto Township (Plan # M-379) of the Larder Lake Mining Division. This property is located at Latitude 48°05'00" and Longitude 80°08'00". "Figure 2b. Claim Map", and "Figure 3b. Geology Eby Township" provide additional information regarding location.

## C. PROPERTY

**Eby West Property (Figure 2a)**

The Eby Township property includes the following 20 claims comprising 34 claim units.

1205781 - NW 1/4 of N 1/2 of Lot 6, Conc IV, Eby Tp (1 unit)
1205782 - NE 1/4 of N 1/2 of Lot 7, Conc IV, Eby Tp (1 unit)
1205783 - NW 1/4 of N 1/2 of Lot 7, Conc IV, Eby Tp &
- NE 1/4 of N 1/2 of Lot 8, Conc IV, Eby Tp (2 unit)
1205784 - NE 1/4 of S 1/2 of Lot 8, Conc V, Eby Tp (1 unit)
1205787 - NW 1/4 of N 1/2 of Lot 8, Conc IV, Eby Tp (1 unit)
1205788 - NW 1/2 of N 1/2 of Lot 9, Conc IV, Eby Tp (2 unit)
1205789 - S 1/2 of S 1/2 of Lot 9, Conc V, Eby Tp (2 unit)
1205790 - N 1/2 of N 1/2 of Lot10, Conc IV, Eby Tp (2 unit)
1205791 - N 1/2 of N 1/2 of Lot11, Conc IV, Eby Tp (2 unit)
1205792 - S 1/2 of N 1/2 of Lot11, Conc IV, Eby Tp (2 unit)
1205793 S 1/2 of N 1/2 of Lot10, Conc IV, Eby Tp (2 unit)
1205794 - S 1/2 of N 1/2 of Lot 9, Conc IV, Eby Tp (2 unit)
1205795 - S 1/2 of N 1/2 of Lot 8, Conc IV, Eby Tp (2 unit)
1205796 - S 1/2 of N 1/2 of Lot 7, Conc IV, Eby Tp (2 unit)
1205797 - S 1/2 of Lot 6, Conc IV, Eby Tp (4 unit)
1205798 - S 1/4 of N 1/2 of Lot 6, Conc IV, Eby Tp (2 unit)
1205799 - NW 1/4 of S 1/2 of Lot10, Conc IV, Eby Tp (1 unit)
1205800 - SW 1/4 of S 1/2 of Lot10, Conc IV, Eby Tp (1 unit)
1202474 - NW 1/4 of S 1/2 of Lot 7, Conc IV, Eby Tp (1 unit)
1202479 - SW 1/4 of S 1/2 of Lot 7, Conc IV, Eby Tp (1 unit)

The work was performed on claims 1205783, 1205784, 1205787, 1205788, 1205789, 1205790, 1205793 and 1205794, 125795 and 1205796 (Figure 2a).

**Otto Township Property (Figure 2b)**

The Otto Township property includes 9 claims comprising 25 claim units. The work was performed on the following two claims:

1206408 - N 1/2 of S 1/2 of Lot 11, Conc V, Otto Tp (2 unit)
1206295 - SW 1/4 of S 1/2 of Lot 11, Conc V, Otto Tp (1 unit)

Joseph Horne, co-holder of this property, extended the grid to the east and conducted similar OPAP funded exploration.

## D. ACCESS (Figure 1)

**Eby West Property**

To access the Eby Township property, travel south 4.0 km along Highway 66 from the intersection with Highway 11. Turn right onto the West Road and proceed west. The best points of access are located 3.0 and 4.6 km west of Highway 66. At 3.0 km west of Highway 66 an old logging road accesses the east end of the grid. At 4.6 km west of Highway 66, a dry forest access road to the north gives excellent access across the west end of the property. This road was flagged to the 56+00E of the 0+00N base line. An old winter access road (wet) provides foot access to the central portion of the grid.

**Otto Township Property (Amikougami Creek)**

To access the Otto Township property, travel south 3.2 km along the Otto Township #1 Road. Park on the straight stretch of road beside a field on the east side of the road. This place is located in the east end of the proposed exploration area.

## E. REGIONAL GEOLOGY

**Eby West Property (Figures 2a & 3a)**

Stratigraphically the project area falls within the Kinojevis Group which consists mainly of Mg-rich and Fe-rich tholeiitic basalt lavas with some tholeiitic dacite and rhyolite towards the top of the group.

Structurally the project falls within the projection of Larder Lake-Kirkland Lake Deformation Zone which consists of a series of east trending breaks with associated Fe-carbonate alteration. These breaks and associated alteration zones appear to extend from beneath Lake Kenogami to the linear swamp along the concession IV-V line. This area is along the projection of a strong break identified during 1994 OPAP mapping of the Reed and Robinson properties 1.6 to 4 km east of the junction of Highway 11 and Highway 66. At that location a series of east trending alteration zones and a series of crosscutting south east trending alteration zones are associated with a strong

deformation zone identified. These alteration and deformation zones appear to project from south of Vigrass Lake in Otto Township though the midpoint of Lot 2 Concession VI Eby Township to the swamp along the northern portion of this property.

**Otto Township Property (Figures 2b & 3b)**
Stratigraphically the project area falls within the Larder Lake Group volcanics and older Skead Group volcanics south of the Larder Lake Group. The Larder Lake Group is mainly ultramafic and basaltic komatiite and Mg-rich tholeiitic basalt with minor Fe-rich tholeiitic and calcalkalic basalt and andesite. Calcalkalic dacite and rhyolite tuff are near the base. Stratigraphically below and to the south is the Skead Group consisting of mainly coarse fragmental calcalkalic basalt, andesite, dacite and rhyolite. The younger Temiskaming Group volcanics and sediments are located north of the property. The Temiskaming group is comprised of mafic to felsic trachyte volcanics and wacke, arkose and siltstone sediments. South of the property is the Otto Stock syenite.

Structurally the north part of the grid falls at the south edge of the Larder Lake-Kirkland Lake deformation zone. This zone consists of a series of east trending breaks with associated Fe-carbonate alteration. These deformation zones extend from the Blanche River 2800 meters to the north, to the north edge of the grid were the associated alteration was identified during mapping in 1996.

## F. PROSPECTING TARGETS

The expected gold targets could be hosted in wide alteration/deformation zones or narrow high grade vein deposits within narrow alteration zones. The deposits associated with the Larder Lake Main Break are commonly associated with alteration/deformation zones parallel to or splaying off the Larder Lake Break. For example, the high grade vein deposits at Kirkland Lake are associated with the Kirkland Lake Break to the north of the Larder Lake Break. Sulphide contents of expected deposits could range from minor disseminated pyrite to massive sulphides.

The Otto Tp. grid is also targeted for Base Metal exhalite deposits associated with felsic volcanics and volcano-clastic sediments.

## G. SUMMARY OF PREVIOUS WORK

**Eby West Property**

Prior to 1985 very little assessment work was recorded on this property. A few test pits and possibly a drill hole are present on the east end of the property. The only systematic work done on the property was done in 1985 by Mary Ellen Resources. At this time a metric grid having a 100 m line spacing with pickets established at 25 m was cut. VLF and magnetometer surveys at 25 m station intervals and geological mapping were performed. The bulk of the detailed work was performed on the ground to the north along the then known deformation zone cutting the south east bay of Kenogami Lake.

This property lay dormant from 1985 to 1995 at which time the author staked the ground when it came open. In 1995 the author initiated mapping and geophysics over the central portion of the property.

**Otto Township Property**

KL-0235 is the only assessment file relating to this proposed area of exploration in Otto Township. This file documents trenching to the south and a single trench to the west of the claim group. No geological mapping or assays relating to this assessment work are recorded. This report made reference to a rhyolite outcrop at the extreme north west corner of the claim group. This rhyolite was identified 400 metres to the south at 4+55S of Line 47+85E. Work done by Minorex Ltd. was done far to the east of the area explored.

## H. TYPE AND AMOUNT OF PROSPECTING-EXPLORATION WORK

**Eby West Property**

In 1995 23.964 line km of grid with line spacing of 100 m was cut to control detailed geological mapping and associated hand stripping, a magnetometer survey and a MaxMin EM survey. Lines were cut by Douglas Robinson, David Robinson and Graham Robinson. All mapping was performed by the author. A 23.900 km magnetometer survey was performed by Douglas Robinson, David Robinson and Graham Robinson December 18-22, 1995. David Robinson and Graham Robinson performed 16.250 km of MaxMin survey July 28-Aug 3, 1995.

In 1996 an additional 7.274 km of grid was cut prior to detailed geological mapping, a gradiometer magnetometer survey and an EM survey. A 7.025 km high density magnetometer survey was done with readings recorded at approximately 1 metre intervals. A 7.900 km MaxMin EM survey was performed using two frequencies to identify and to distinguish between shear related and sulphide/graphite related conductors. Detailed geology, and hand stripping were also conducted on the area covered by the cut grid.

**Otto Township Property**

In 1996 a metric grid totalling 9.932 km, detailed geological mapping, gradiometer magnetometer surveys and EM surveys were performed. 9.975 km of high density magnetometer surveying was done with readings recorded at approximately 1 metre intervals. 5.600 km of MaxMin EM surveying was performed using two frequencies to identify and to distinguish between shear related and sulphide/graphite related conductors. Geology, lithological sampling, gold sampling and hand stripping were also conducted on the area covered by the cut grid.

## I. LINE CUTTING

**Eby West Property**

In 1995 a metric grid totalling 23.964 line km; with line spacing of 100 m and a 25 m picket interval, was cut to control detailed geological mapping hand stripping, a magnetometer survey and a MaxMin EM survey. Lines were cut by Timothy Fielding, David Robinson and Graham Robinson. In 1996 this grid was extended by 9.932 km with line spacing of 50 m and 25 m station interval was cut by David Robinson, Timothy Fielding, Graham Robinson, Barry Deibel-Gilmour and Canadian Gems and Minerals. This grid is the westward extension of a grid cut during 1995.

**Otto Township Property**

A 7.274 km of metric grid with line spacing of 50 m and 25 m station interval was cut by David Robinson, Timothy Fielding and Graham Robinson. The east coordinates of this grid were established to be roughly equivalent to the Allsopp grid directly to the north and the Reed-Robinson grid 800 meters to the north. The base line was spotted at a 1 inch square iron bar located at the northeast corner of claim 1206408. This base line ended 1.5 metres north of the square iron bar at the north west corner of the same claim. Lines 47+85E and line 52+00E both ended within two metres of 1 inch square iron bars located at the south corners of claim 1206295. The grid was extended north to the south tie line of the Allsopp grid. This was done with permission from Mr Allsopp for the mutual benefit of the author and Mr Allsopp. The intercept coordinates of the Allsopp grid are recorded along the north edge of the geology map.

**Lines List: Eby West Grid and Otto Township Grid**

| Grid | Line | From | To | Length |
|---|---|---|---|---|
| 1995 | | | | |
| Eby W | 14+00W | 1189S | 425N | 1614 |
| Eby W | 15+00W | 400S | 450N | 850 |
| Eby W | 16+00W | 425S | 825N | 1250 |
| Eby W | 17+00W | 425S | 825N | 1500 |
| Eby W | 18+00W | 425S | 825N | 1250 |

| | | | | |
|---|---|---|---|---|
| Eby W | 19+00W | 425S | 825N | 1250 |
| Eby W | 20+00W | 425S | 825N | 1250 |
| Eby W | 21+00W | 425S | 450N | 875 |
| Eby W | 22+00W | 425S | 450N | 875 |
| Eby W | 23+00W | 425S | 450N | 875 |
| Eby W | 24+00W | 450S | 850N | 1300 |
| Eby W | 25+00W | 450S | 875N | 1325 |
| Eby W | 26+00W | 450S | 875N | 1325 |
| Eby W | 27+00W | 475S | 800N | 1275 |
| Eby W | 28+00W | 475S | 750N | 1225 |
| Eby W | 29+00W | 000N | 800N | 800 |
| Eby W | 4+00S TL | 1400W | 2975W | 1575 |
| Eby W | 0+00N BL | 1400W | 2900W | 1500 |
| Eby W | 4+00N TL | 1400W | 2950W | 1550 |
| Eby W | 7+50N BL | 2400W | 2900W | 500 |
| | | | Total | 23964 |

1996

| | | | | |
|---|---|---|---|---|
| Eby W | 3000W | 800N | 000N | 800 |
| Eby W | 3100W | 800N | 000N | 800 |
| Eby W | 3200W | 400N | 000N | 400 |
| Eby W | 3300W | 400N | 000N | 400 |
| Eby W | 3400W | 380N | 000N | 380 |
| Eby W | 3500W | 375N | 000N | 375 |
| Eby W | 3600W | 375N | 000N | 375 |
| Eby W | 3700W | 372N | 000N | 372 |
| Eby W | 3800W | 372N | 000N | 372 |
| Eby W | 3900W | 400N | 000N | 400 |
| Eby W | 0000N | 4500W | 3100W | 1400 |
| Eby W | 0400N | 3900W | 2900W | 1000 |
| Eby W | 0800N | 3100W | 2900W | 200 |
| Otto | 4800E | 089N | 850S | 939 |
| Otto | 4850E | 089N | 425S | 514 |
| Otto | 4900E | 093N | 850S | 943 |
| Otto | 4950E | 090N | 425S | 515 |
| Otto | 5000E | 087N | 850S | 937 |
| Otto | 5050E | 088N | 425S | 513 |
| Otto | 5100E | 050N | 850S | 900 |
| Otto | 5200E | 050N | 830S | 880 |
| Otto | 5300E | 000N | 425S | 425 |
| Otto | 5400E | 000N | 425S | 425 |

| | | | | |
|---|---|---|---|---|
| Otto | 5500E | 000N | 425S | 425 |
| Otto | 5600E | 000N | 475S | 475 |
| Otto | 000N | 5600W | 4785W | 815 |
| Otto | 0400S | 5600W | 4775W | 825 |
| Otto | 0800S | 5201W | 4800W | 401 |
| TOTAL | | | | 17206 Metres |

| | | |
|---|---|---|
| Eby West Total 1995 | 23.964 | Km. |
| Eby West Total 1996 | 7.274 | Km. |
| | (31.238) | Km. |
| Otto Tp. Total 1996 | 9.932 | Km. |
| Total | 41.270 | Km. |

## J. MaxMin HORIZONTAL LOOP EM SURVEY

**Eby West and Otto Township Properties**

Metric grids with a 100 metre line spacing and 25 m station interval were used for positional control during this survey. The MaxMin EM survey was directed to locating the surface trace and character of conductive formations within the grid area. Frequencies 3555 and 888 Hz were selected to identify structurally related and sulphide/graphite conductive sources.

Terrain corrections were performed by recording a running average slope of four station intervals. The coils were maintained coplanar using the average slopes determined in the field during the traverses.

A separate data profile sheet was plotted for each line. Each sheet records the terrain profile, In Phase response (IP), and Quadrature Phase (QP) response for both frequencies. This presentation was used to facilitate interpretation of the multi-frequency data and to allow easy reproduction using standard xerox machines. The profiles were plotted at 1:2500 scale and Xerox reduced for enclosure in this report. These data profile sheets can be reproduced at 1:2500 scale by xeroxing at 1.55 times.

**Magnetic Traverse List: Otto Township Property**

| Line Number | Survey Limits | Traverse Length Metres |
|---|---|---|
| 47+85E | 850S-075N | 925 |
| 48+50E | 425S-075N | 500 |
| 49+00E | 850S-075N | 925 |
| 49+50E | 425S-075N | 500 |
| 50+00E | 850S-075N | 925 |
| 50+50E | 425S-075N | 500 |
| 51+00E | 850S-050N | 875 |
| 52+00E | 850S-050N | 900 |
| 53+30E | 425S-000N | 425 |
| 54+00E | 425S-000N | 425 |
| 55+00E | 475S-000N | 475 |
| 56+00E | 475S-000N | 475 |
| 0+00N BL | 4775E-5600E | 825 |
| 4+00S TL | 4775E-5675E | 900 |
| 8+50S TL | 4800E-5200E | 400 |
| 15 Lines | Total | 9975 METRES |

Otto Tp grid has a relatively low background magnetic field with locally strong magnetic relief. The strong magnetic relief is in large part related to high background levels of pyrrhotite in the rocks. Possible sedimentary magnetite bearing horizons may also cause some of the magnetic relief. Some of the volcanics also appear to be magnetic due to magnetite concentrations. Magnetic lows were identified and are discussed in the preceding EM section of this report.

## L. GEOLOGICAL SURVEY

### Eby West Property

Tholeiitic volcanics and interflow tuffs and metasediments are the dominant rock type within the claim group (MNDM map "Map 2239"). It was not possible to differentiate any significant mappable units within the volcanic flows, however numerous very fine to coarse tuff beds and local pillows and flow tops indicate a consistent northwest strike. The volcanics range from very fine to 2 mm crystalline massive flows, with local flow texturing including a few pillowed flows. 0.5 cm quartz boudins are common in some of the tuff beds indicating

considerable shearing. Some of the flows are magnetic due to the presence of tiny magnetite crystals. The magnetometer survey confirms the northwest trend of the volcanic flows.
A linear east-west swampy depression along the Concession IV-V line and a broad swampy area of claim 1205789 are areas of low total magnetic field with low magnetic relief. This disruptive magnetic signature appears to be related to destructive alteration controlled by deformation zones that host ore deposits in the Larder Lake-Kirkland Lake mining camp. No outcrops were observed in these areas. Strong EM conductors within these magnetic lows appear to be strong structures that control alteration. These potential structures and the inferred alteration are targets for gold hosted in quartz veins or disseminated sulphides.

1994 mapping by the Author within Lots 1 and 2 of Concession IV of Eby Township indicate previously unknown major deformation zones exist 1.2 km and 2.9 km south of the Blanche River. These deformation zones are hosted in Fe carbonate-albite-sericite alteration zones parallel to the Larder Lake Break. The author staked the Eby West Group to cover the west projection of these alteration zones.

**Otto Township Property**

A massive white weathered silicious unit through the centre of the property unit mapped as "4r" (rhyolite) marks the change between massive dark green mafic volcanics to the north and mafic to felsic pyroclastic sediments to the south. This unit is bounded to the north and south by a strongly chloritic, often schistose, fine to coarse pyroclastic. This pyroclastic consists of massive chlorite matrix with felsic clasts to 1-40 cm. At 4785E-613S, 4900E-525S, 5000E-437S and 5200E-300S this south chlorite unit is a MaxMin response that appears to have responded to a sulphide source. This is a target for advanced gold and base metal exploration. At 5100E-265S, 5200E-225E, and 5330E-175S a strong 3555 hz response indicates a strong structure may be located within the chlorite unit along the north contact of rhyolite unit "4r". This area is a target for advanced gold exploration to identify favourable alteration and Au mineralization.

Minor sections of red potassic alteration (K-feldspar) were

observed within the chloritic unit along the north edge of the rhyolite unit.

South of the rhyolite unit the rocks are interbanded mafic to felsic tuffs that have high background levels of pyrite and pyrrhotite. Located at 4900E-675S, 5000E-628S and 5100E-616S is a strong EM response that appears to have a sulphide source. A cherty horizon at this location on line 50+00E is sulphide rich with a box-work limonite gossan. This location is the strongest and widest portion of this conductor and is a target for advanced exploration for gold and base metals.

The rhyolite unit and related chlorite contact zones and the mafic-felsic pyroclastic sediments strike east northeast and appear to be of the Skead Group volcanics. To the north the rocks are massive dark green mafic volcanics that appear to be Larder Lake Group. The trend of these volcanics was not established.

The south edge of the map is the Otto syenite stock. This unit is coarsely porphyritic and has mafic xenoliths aligned parallel to its contact with the volcanics to the north. The volcanics near the stock appear to be hornfelsed.

Along line 47+85E at 0+50N strong silicification and Fe-carbonate alteration with associated quartz veining to 15 cm was identified.

Assay values for gold are entered directly on the geological map as PPB Au. The locations of whole rock samples, their sample numbers and $\%SiO_2$ are recorded on the geological map. The best gold value was 267 ppb Au in wall rock beside a 50 cm quartz vein located 7+10S east of line 49+00E. This sample had minor disseminated pyrite in potassic alteration. Several Fe-carbonate float were identified in the area near this vein, but their source was not identified. The best base metal value was 1320 ppm Zn, 96 ppm Cu and 75 ppb Au in cherty grey rock (91.4% $SiO_2$) along the transition between the rhyolite unit and chlorite unit to the north (Line 5 m east of 47+85E at 4+55S).

## M. RECOMMENDATIONS

### Eby West Property

The eby west grid should be extended with blanket grid, geology, magnetic, and EM coverage at a 100 m line spacing. North of the 0+00N base line this coverage should be expanded to 50 m spacing as the strike of many of the EM responses identified. East-west grid lines at 2+00S, 2+00N and 3+75N should be cut and surveyed by IP, EM and magnetometer. The IP coverage would define areas of high background disseminated sulphides that are not detected by EM surveys.

In advance of any diamond drilling the target areas should be surveyed by EM and magnetometer at a 50 m line spacing to 200 m from the target to define the probable strike of the target and establish the optimum hole location.

On the basis of the available information the following holes are recommended:

1. Line 1600W at 280N -60° to 300 m.
   (anomaly 1500W-365N & 1500W-385N is also an excellent target)
2. Line 2500W at 450N -60° to 500 m.
3. Line 2800W at 300N -60° to 250 m.
   (Line 2700W at 275N -60° to 350 m. alternate location).
4. Line 3500W at 175N -60° to 350 m. or
   225N -60° to 225 m after mag and EM surveys to the east and west. Note! The target anomaly may be at low angle to the line 3500W.

### Otto Township Property

Otto township exploration recommendations are discussed under section "L Geological Survey".

## N. LIST OF REFERENCES
## EBY TOWNSHIP


MEMOIR 131 - Canada Department of Mines
Kenogami, Round, and Larder Lake Areas, Timiskaming District, Ontario, By H. C. Cooke, 1922.

Geological Report 99 - Ontario Department of Mines Preliminary Geology of the Eby and Otto Area, District of Temiskaming By H. L. Lovell, 1972.

Mineral Resources Circular No. 39 - Mineral Resources and Mining Properties in the Kirkland Lake-Larder Lake area. By W. S. Savage, 1964.

Map P. 448 - Ontario Department of Mines Preliminary Geological Map No. P. 448; Eby Township.
Scale 1 inch = 1/2 mile

Map P. 903 - Preliminary Map P.903; Kirkland Lake Data Series; Eby Township.
Scale 1 : 15 840

Map P. 2268 - Ontario Geological Survey Preliminary Map P.2268 Kirkland Lake Area; Eby Township; Airborne Electromagnetic Survey.

Map P. 2268 - Ontario Geological Survey Preliminary Map P.2268; Kirkland Lake Area; Eby Township; Airborne Electromagnetic Survey; Total Field Magnetic Survey.
Scale 1 : 20 000

**OTTO TOWNSHIP**

Map P. 330 - Ontario Department of Mines Preliminary Geological Map No. P. 330; Otto Township (North Half)
Scale 1 inch = 1000 feet

Map No. 501 - Preliminary Map No. 501; Otto Township and Northern Part of Marquis Township.
Scale 1 inch = 1/4 mile.

Map P. 717 - Ontario Department of Mines and Northern Affairs; Preliminary Map P. 717; Geochemical Distribution of Acid Soluble Copper in Felsic Plutonic Rocks; Otto Township and Parts of Eby, Marquis and Boston Townships.
Scale 1 inch = 1/2 mile

Map P. 718 - Ontario Department of Mines and Northern Affairs; Preliminary Map P. 718; Geochemical Distribution of Acid Soluble Lead in Felsic Plutonic Rocks. Otto Township and Parts of Eby, Marquis and Boston Townships.
Scale 1 inch = 1/2 mile

Map P. 719 - Ontario Department of Mines and Northern Affairs; Preliminary Map P. 719; Geochemical Distribution of Acid Soluble Molybdenum in Felsic Plutonic Rocks. Otto Township and Parts of Eby, Marquis and Boston Townships.
Scale 1 inch = 1/2 mile

Map P. 2269 - Ontario Geological Survey Preliminary Map P.2269; Kirkland Lake Area; Otto Township; Airborne Electromagnetic Survey.

Map P. 2269 - Ontario Geological Survey Preliminary Map P.2269; Kirkland Lake Area; Otto Township; Airborne Electromagnetic Survey; Total Field Magnetic Survey.
Scale 1 : 20 000

Douglas Robinson

Douglas Robinson, P. Eng
February 25, 1997.

Mad. # P. 2146

VI

V

IV

1200610

1186394 Kenogami

1186393

1186395

1186396

1186601

1186326

1186327

1186329

1187142

Lake

1186392

1186391

1202820

1202847

1202833

1200632

1200631

935419

935418

935417

1205789

1205784

1205791

1205790

1205788

1205787

1205783

1205782

1205781

1205792

1205793

1205794

1205795

1205796

1205798

1205799

1205800

1205797

1202474

1202479

1205770

1206403

1206402

1206669

1200895

1202470

1202471

1202472

1202473

532930

532929

738868

738577

M.N.R. FILE 16864

TRANS CANADA PIPELINE

CL 8095

CL 7694 P.U.

CL 7695 P.U.

CM 26

CM 17

M.R.O.

MAY 15 1996

LARDER LAKE MINING RECORDER'S OFFICE

Figure 2a. Claim Map by Township; Scale 1:20000

CERTIFICATE OF QUALIFICATIONS

I, Douglas Robinson, of 24 Victoria Avenue, Swastika, Ontario hereby certify that:

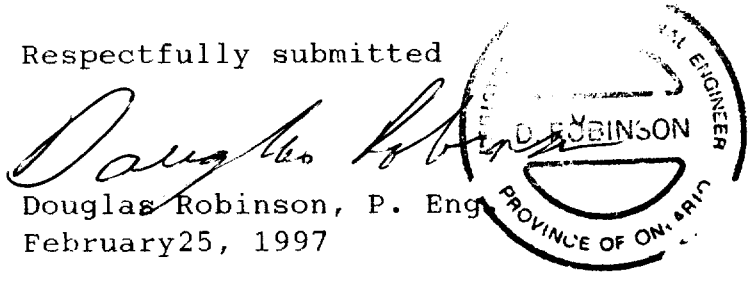
1. I am a registered professional Engineer of the province of Ontario, No. 39322011.

2. I am a graduate of Queen's University in Kingston Ontario with an Honours Bachelor of Science, Geological Engineering 1975, and Northern college, School of Mines in Haileybury, Ontario 1970.

3. I have been practising my profession since graduation.

4. The information contained in this report is the result of work done by myself or by persons under my supervision.

Respectfully submitted




Douglas Robinson, P. Eng.
February25, 1997

12 11 10 9 8 7 6 5 4

VI V IV

Figure 2b. Claim Map Otto Township; Scale 1:20000

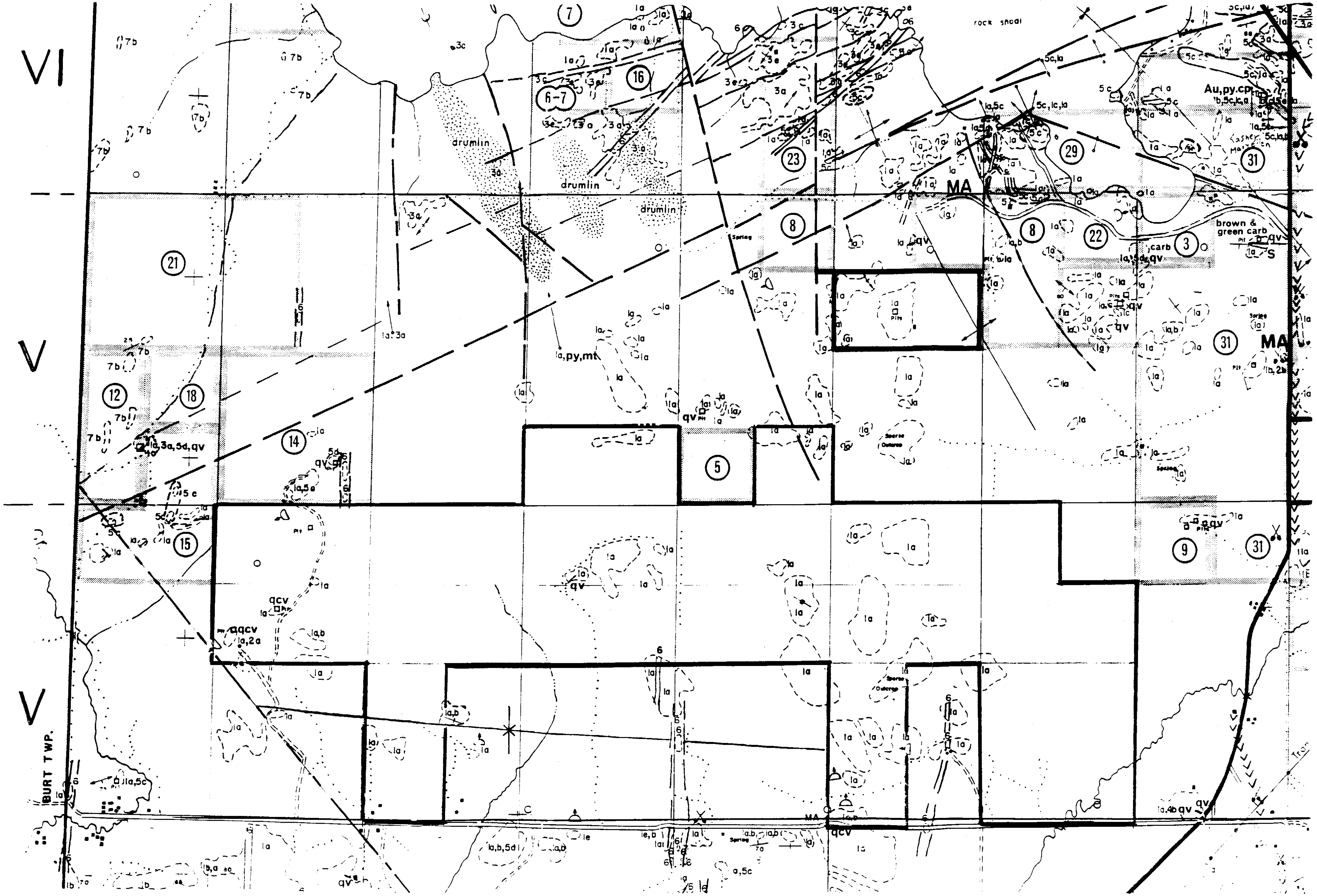



Figure 3a. Geology Eby Township: P.448: Scale 1:20000

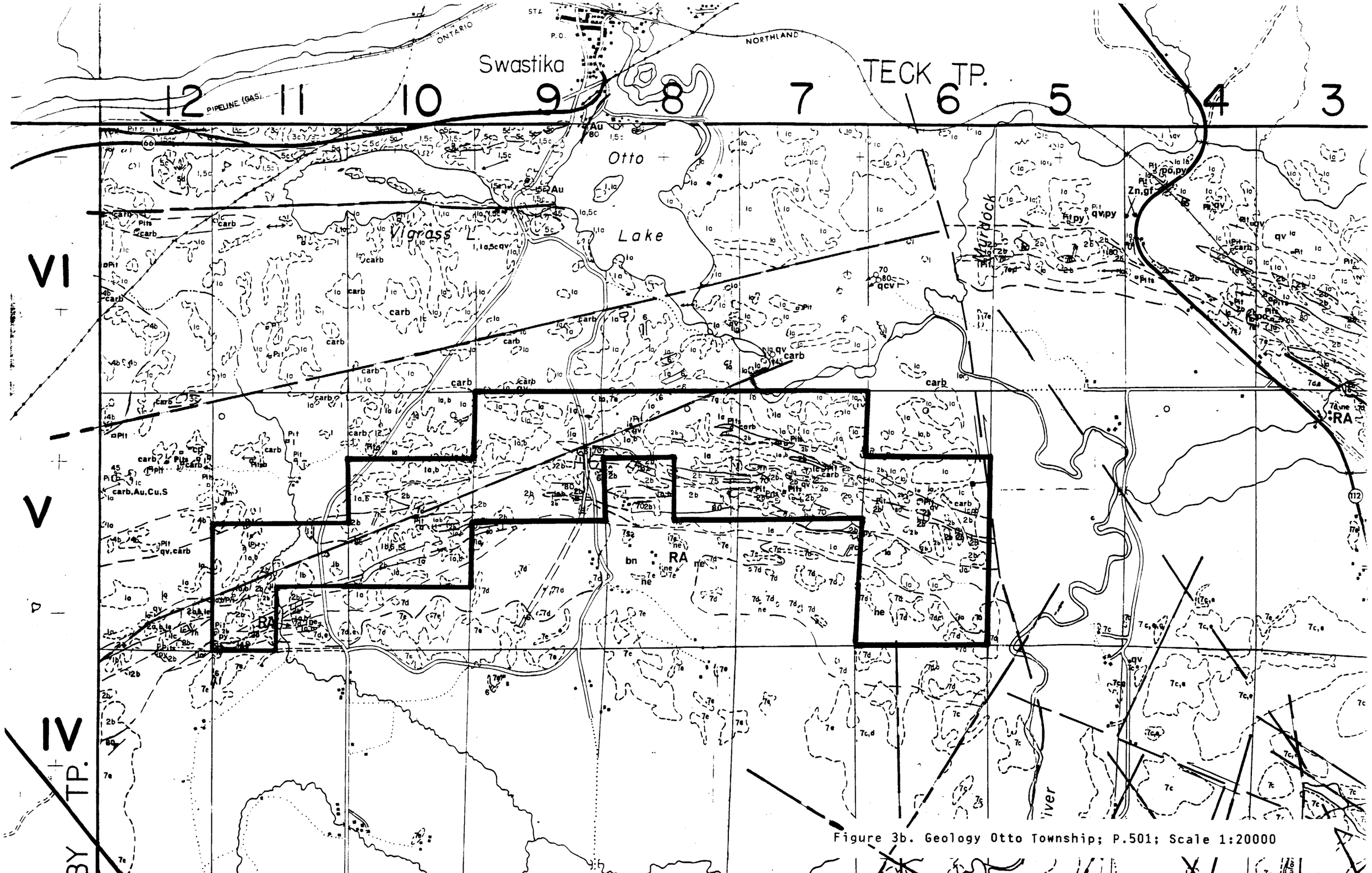



Figure 3b. Geology Otto Township; P.501; Scale 1:20000

**Map P. 448** - Ontario Department of Mines
Preliminary Geological Maps of Eby & Otto Townships.
Scale 1:20000 (from 1 inch = 1/2 mile)

LEGEND

PRECAMBRIAN
PROTEROZOIC
8 MAFIC INTRUSIVE ROCKS

HURONIAN
COBALT GROUP
7 GOWGANDA FORMATION

ARCHEAN
MAFIC INTRUSIVE ROCKS
6 Diabase

FELSIC INTRUSIVE ROCKS (ALGOMAN)
5c Syenite and Syenite Porphyry
5d Mafic syenite, lamprophyre, and hybrid syenite and country rocks

MAFIC AND ULTRAMAFIC INTRUSIVE ROCKS
(HAILEYBURIAN, EARLY ALGOMAN, AND SOME KEEWATIN)
4b Gabbro and Diorite

METASEDIMENTS (TIMISKAMING OR KEEWATIN)
3

FELSIC VOLCANIC ROCKS (KEEWATIN)
2a Rhyolite and dacite

MAFIC VOLCANIC ROCKS (KEEWATIN)
1a Basalt and andesite (pillowed and massive)
1b Mafic agglomerate and tuff

**Figure 3c. General Geology; Legend**
**Eby Twp. Map P.448 & Otto Twp Map P.501**

. ROBINSON
IN: D. ROBINSON
OJ: EBY-OTTO

-4617-RG1


**TSL/ASSAYERS Laboratories**
1270 FEWSTER DRIVE. UNIT 3 MISSISSAUGA.ONTARIO L4W-1A4
PHONE #: (905)602-8236 FAX #: (905)206-0513


REPORT No. : M8302
Page No. : 1 of 1
File No. : NV14RA
Date : NOV-15-1996

## I.C.A.P. TOTAL OXIDE ANALYSIS

Lithium MetaBorate Fusion

| SAMPLE # | SiO2 % | Al2O3 % | Fe2O3 % | CaO % | MgO % | Na2O % | K2O % | TiO2 % | MnO % | P2O5 % | Ba ppm | Sr ppm | Zr ppm | Y ppm | Sc ppm | Nb ppm | Be ppm | Ni ppm | Cr ppm | Cu ppm | V ppm | Co ppm | Zn ppm | LOI % | TOTAL % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 73.24 | 12.35 | 3.49 | 1.12 | 1.05 | 3.33 | 3.66 | 0.50 | 0.08 | 0.24 | 940 | 260 | 130 | 14 | 7 | < 30 | < 1 | 35 | 220 | 20 | 50 | 5 | 140 | 1.21 | 100.26 |
| 7 | 66.37 | 14.60 | 6.64 | 3.11 | 1.52 | 3.99 | 1.48 | 0.61 | 0.21 | 0.28 | 310 | 360 | 170 | 18 | 11 | < 30 | < 1 | 15 | 275 | 25 | 70 | 5 | 150 | 1.23 | 100.06 |
| 8 | 91.47 | 1.40 | 4.22 | 0.26 | 0.19 | 0.44 | 0.28 | 0.06 | 0.09 | 0.02 | 100 | 50 | 30 | 4 | < 1 | < 30 | < 1 | 15 | 170 | 15 | 10 | < 5 | 10 | 1.90 | 100.34 |
| 0 | 57.52 | 15.38 | 6.49 | 6.32 | 0.77 | 3.40 | 5.88 | 0.80 | 0.13 | 0.14 | 3580 | 6560 | 440 | 24 | 5 | < 30 | 22 | 5 | 140 | 90 | 165 | 10 | < 5 | 1.00 | 97.83 |
| 1 | 72.80 | 12.72 | 4.30 | 3.15 | 0.72 | 3.41 | 1.56 | 0.52 | 0.11 | 0.24 | 580 | 770 | 160 | 14 | 7 | < 30 | 2 | 10 | 290 | 15 | 45 | 10 | 85 | 1.09 | 100.60 |
| 8 | 69.85 | 13.68 | 2.47 | 2.17 | 0.97 | 4.36 | 2.30 | 0.30 | 0.05 | 0.10 | 380 | 380 | 80 | 4 | 4 | < 30 | < 1 | 10 | 185 | 10 | 35 | < 5 | 15 | 1.90 | 98.16 |
| 4 | 59.29 | 9.81 | 13.18 | 1.58 | 2.92 | 1.65 | 1.60 | 1.19 | 0.12 | 0.16 | 360 | 140 | 110 | 18 | 27 | < 30 | < 1 | < 5 | 95 | 150 | 190 | < 5 | 20 | 7.12 | 98.63 |

SIGNED :

3x-38
GW-4617-KG

796

# Swastika Laboratories

A Division of TSL/Assayers Inc.

Established 1928

**Assaying - Consulting - Representation**

## *Geochemical Analysis Certificate*

**6W-4819-RG1**

Company: **D. Robinson**
Project: Otto
Attn: D. Robinson

Date: NOV-20-96

*We hereby certify* the following Geochemical Analysis of 6 Rock samples submitted NOV-18-96 by .

| Sample Number | Au PPB | Au Check PPB |
|---|---|---|
| 20047 | 2 | 2 |
| 20048 | Nil | - |
| 20049 | 2 | - |
| 20050 | Nil | 3 |
| 20051 | Nil | - |
| 20052 | Nil | - |

One assay ton portion used.

*Certified by* _____

**P.O. Box 10, Swastika, Ontario P0K 1T0**
**Telephone (705) 642-3244 FAX (705) 642-3300**

# Swastika Laboratories

A Division of TSL/Assayers Inc.

Established 1928

**Assaying - Consulting - Representation**

## *Geochemical Analysis Certificate*

**6W-4617-RG1**

Company: **D. ROBINSON**
Project: Eby-Otto
Attn: D. Robinson

Date: NOV-13-96

*We hereby certify* the following Geochemical Analysis of 28 Core samples submitted OCT-31-96 by .

| Sample Number | Au PPB | Au check PPB | Ag PPM | Cu PPM | Zn PPM | Pd PPB | WRA |
|---|---|---|---|---|---|---|---|
| 20019 | 2 | - | - | - | - | - | - |
| 20020 | - | - | - | - | - | - | Results |
| 20021 | 5 | - | - | - | - | - | to |
| 20022 | 10 | - | - | - | - | - | follow |
| 20023 | 45 | - | - | - | - | <5 | |
| 20024 | 5 | - | - | - | - | - | |
| 20025 | 21 | 19 | - | - | - | <5 | |
| 20026 | 3 | 7 | - | - | - | <5 | |
| 20027 | - | - | - | - | - | - | |
| 20028 | - | - | - | - | - | - | |
| 20029 | 79 | - | 0.3 | 96 | 1320 | - | |
| 20030 | - | - | - | - | - | - | |
| 20031 | - | - | - | - | - | - | |
| 20032 | Nil | 3 | 0.2 | 92 | 158 | 15 | |
| 20033 | Nil | - | - | - | - | - | |
| 20034 | 31 | - | - | - | - | - | |
| 20035 | 267 | 255 | - | - | - | - | |
| 20036 | 2 | - | - | - | - | - | |
| 20037 | 3 | 7 | - | - | - | <5 | |
| 20038 | - | - | - | - | - | - | |
| 20039 | 26 | - | - | - | - | - | |
| 20040 | 46 | 27 | - | - | - | <5 | |
| 20041 | 3 | - | - | - | - | - | |
| 20042 | - | - | - | - | - | - | |
| 20043 | 2 | - | - | - | - | - | |
| 20044 | 3 | - | - | - | - | - | |
| 20045 | Nil | - | - | - | - | - | |
| 20046 | 115 | 111 | - | - | - | - | |

One assay ton portion used.

*Certified by* G. Leboy

**P.O. Box 10, Swastika, Ontario P0K 1T0**
**Telephone (705) 642-3244 FAX (705) 642-3300**

Ontario Ministry of Northern Development and Mines

# Declaration of Assessment Work Performed on Mining Land

**Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990**

Transaction Number (office use): W9780.00122
Assessment Files Research Imaging

Personal informa
Mining Act, the ir
Questions about
933 Ramsey Lak

42A01SE0090 2.17120 EBY

and 66(3) of the Mining Act. Under section 8 of the
ent work and correspond with the mining land holder.
of Northern Development and Mines, 6th Floor,

900

2.17120

**Instructions:** - For work performed on Crown Lands before **recording** a claim, use form 0240.
- Please type or print in ink.

**1. Recorded holder(s)** (Attach a list if necessary) Eby West Project

| Name | Client Number |
|---|---|
| Douglas Robinson | 222886 |
| **Address** | **Telephone Number** |
| Box 218 | 705-642-9153 |
| Swastika, Ontario P0K-1T0 | **Fax Number** |
| **Name** | **Client Number** |
| **Address** | **Telephone Number** |
| | **Fax Number** |

**2. Type of work performed:** Check (✓) and report on only ONE of the following groups for this declaration.

☒ Geotechnical: prospecting, surveys, assays and work under section 18 (regs) ☐ Physical: drilling, stripping, trenching and associated assays ☐ Rehabilitation

| Work Type | Office Use |
|---|---|
| Line cutting, Geology Mag, EM-Max Min-2 Frequency Terrain Measurement | **Commodity** |
| **Dates Work Performed** From 04 (Day) 05 (Month) 95 (Year) To 24 (Day) 02 (Month) 97 (Year) | **Total $ Value of Work Claimed** $40,923 |
| **Global Positioning System Data (if available)** | **NTS Reference** |
| **Township/Area** Eby | **Mining Division** Larder Lake |
| **M or G-Plan Number** M-345 | **Resident Geologist District** K. Lake |

Please remember to: - obtain a work permit from the Ministry of Natural Resources as required;
- provide proper notice to surface rights holders before starting work;
- complete and attach a Statement of Costs, form 0212;
- provide a map showing contiguous mining lands that are linked for assigning work;
- include two copies of your technical report.

**3. Person or companies who prepared the technical report** (Attach a list if necessary)

| Name | Telephone Number |
|---|---|
| Douglas Robinson Consulting | 705-642-9153 |
| **Address** | **Fax Number** |
| Box 218 Swastika Ont P0K-1T0 | |
| **Name** | **Telephone Number** |
| **Address** | **Fax Number** |
| **Name** | **Telephone Number** |
| **Address** | **Fax Number** |

RECEIVED
FEB 28 1997
MINING LANDS BRANCH

**4. Certification by Recorded Holder or Agent**

I, Douglas Robinson (Print Name), do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

| Signature of Recorded Holder or Agent | Date |
|---|---|
| Douglas Robinson | Feb 25, 1997 |
| **Agent's Address** | **Telephone Number** / **Fax Number** |
| Box 218 Swastika Ont P0K-1T0 | 705-642-9153 |

0241 (02/96)

Doc mort - Apr. 91 107

**5. Work to be recorded and distributed.** Work can only be assigned to claims that are contiguous (adjoining) to the mining land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

| | Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map. | Number of Claim Units. For other mining land, list hectares. | Value of work performed on this claim or other mining land. | Value of work applied to this claim. | Value of work assigned to other mining claims. | Bank. Value of work to be distributed at a future date. |
|---|---|---|---|---|---|---|
| eg | TB 7827 | 16 ha | $26, 825 | N/A | $24,000 | $2,825 |
| eg | 1234567 | 12 | 0 | $24,000 | 0 | 0 |
| eg | 1234568 | 2 | $ 8, 892 | $ 4,000 | 0 | $4,892 |
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | See attached sheet | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| | | Column Totals | | | | |

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FEB 28 1997
MINING LANDS BRANCH

2.12120

I, _____ (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

| Signature of Recorded Holder or Agent Authorized in Writing | Date |
|---|---|
| | |

**6. Instructions for cutting back credits that are not approved.**

Some of the credits claimed in this declaration may be cut back. Please check ( ✓ ) in the boxes below to show how you wish to prioritize the deletion of credits:

- ☒ 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- ☐ 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- ☐ 3. Credits are to be cut back equally over all claims listed in this declaration; or
- ☐ 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

Priority for deletion of credits shall be from claim "F" to claim A without allowing any claims to lapse

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

**For Office Use Only**

Received Stamp

RECEIVED
LARDER LAKE
MINING DIVISION
FEB 25 1997

| Deemed Approved Date | Date Notification Sent |
|---|---|
| May 26/97 | |
| Date Approved | Total Value of Credit Approved |
| Approved for Recording by Mining Recorder (Signature) | |

0241 (02/96)

Ontario Ministry of Northern Development and Mines

# Schedule for Declaration of Assessment Work on Mining Land

Transaction Number (office use): W9780.00122

A = B + C

| | Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map. | Number of Claim Units. For other mining land, list hectares. | A: Value of work performed on this claim or other mining land | B: Value of work applied to this claim | C: Value of work assigned to other mining claims | D: Bank. Value of work to be distributed at a future date |
|---|---|---|---|---|---|---|
| | | | | | 2.17120 | |
| S | 1202474 | 1 ✓ | 0 | 400 | | 0 |
| T | 1202479 | 1 | 0 | 400 | | 0 |
| I | 1205781 | 1 | 0 | 800 * | | 0 |
| H | 1205782 | 1 ✓ | 0 | 1600 * | | 0 |
| G | 1205783 | 2 | 5000 | 800 * | DRR | 4200 |
| F | 1205784 | 1 ✓ | 3000 DRR | 800 * | 200 | 2000 DRR |
| E | 1205787 | 1 ✓ | 3000 DRR | 1600 * | | 1400 |
| D | 1205788 | 2 ✓ | 6000 | 1600 * | | 4400 |
| C | 1205789 | 2 ✓ | 6000 | 1600 * | 1800 | 2600 |
| B | 1205790 | 2 ✓ | 6000 | 1600 * | DRR 0 | 4400 |
| A | 1205791 | 2 | 0 | 1600 * | | 0 |
| J | 1205792 | 2 | 0 | 1600 * | | 0 |
| K | 1205793 | 2 | 0 | 1600 * | | 0 |
| L | 1205794 | 2 ✓ | 4000 | 800 | 3200 | 0 |
| M | 1205795 | 2 ✓ | 6000 | 800 | 5200 | 0 |
| N | 1205796 | 2 ✓ | 1123 DRR | 800 | | 323 |
| O | 1205797 | 4 | 0 | 1600 | | 0 |
| P | 1205798 | 2 | 400 | 800 | | 0 |
| Q | 1205799 | 1 | 400 | 400 | | 0 |
| R | 1205800 | 1 | 0 | 400 | | 0 |
| | | | | | (10400) | |
| | Column Totals | | 40923 | 21600 | 10400 DRR | 19323 |

* units x 400 x 2

RECEIVED
FEB 28 1997
MINING LANDS BRANCH

0290 (02/96)

Ontario Ministry of Northern Development and Mines

# Statement of Costs for Assessment Credit

Transaction Number (office use): W9780.00122

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

2.17120

| Work Type | Units of Work<br>Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc. | Cost Per Unit of work | Total Cost |
|---|---|---|---|
| Lines | 31.238 Km | 260.50 | 8138 |
| EM 2 Fregrencies | Max Min 24.150 Km | 250.00 | 6038 |
| Terrain Measurement | 24.150 Km at 3 days 285/day | | 855 |
| Mag | 30.925 Km | 100 | 3092 |
| Geology | 23 day | 285 | 6555 |
| Supervision/ Logistics | 16 day | 285 | 4560 |
| Report | 21 day | 285 | 5985 |
| Drafting | 17.5 | 285 | 4965 |
| **Associated Costs (e.g. supplies, mobilization and demobilization).** | | | |
| Supplies Mylar, Drafting & Report Paper pens | | | 100 |
| Batteries for Max Min | | | 15 |
| **Transportation Costs** | | | |
| 1373 Km | | 0.30 | 412 |
| Freight Max Min. & Mag. | | | 208 |
| **Food and Lodging Costs** | | | |
| | | **Total Value of Assessment Work** | 40923.00 |

RECEIVED
FEB 28 1997
MINING LANDS BRANCH

**Calculations of Filing Discounts:**

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK × 0.50 = Total $ value of worked claimed.

**Note:**
- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

**Certification verifying costs:**

I, Douglas Robinson (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work form as Douglas Robinson (recorded holder, agent, or state company position with signing authority) I am authorized to make this certification.

Signature: Douglas Robinson Date: Feb 25 1997

212 (02/96)

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Ontario

Geoscience Assessment Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (705) 670-5853
Fax: (705) 670-5863

June 16, 1997

Roy Spooner
Mining Recorder
4 Government Road East
Kirkland Lake, ON
P2N 1A2

Dear Sir or Madam:

Submission Number: 2.17120

| Subject: Transaction Number(s): | | Status |
|---|---|---|
| | W9780.00122 | Approval After Notice |

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

NOTE: This correspondence may affect the status of your mining lands. Please contact the Mining Recorder to determine the available options and the status of your claims.

If you have any questions regarding this correspondence, please contact Bruce Gates by e-mail at gates_b@torv05.ndm.gov.on.ca or by telephone at (705) 670-5856.

Yours sincerely,

ORIGINAL SIGNED BY
Ron C. Gashinski
Senior Manager, Mining Lands Section
Mines and Minerals Division

Correspondence ID: 10959
Copy for: Assessment Library

# Work Report Assessment Results

**Submission Number:** 2.17120

**Date Correspondence Sent:** June 16, 1997 **Assessor:** Bruce Gates

| Transaction Number | First Claim Number | Township(s) / Area(s) | Status | Approval Date |
|---|---|---|---|---|
| W9780.00122 | 1205783 | EBY | Approval After Notice | June 14, 1997 |

**Section:**

12 Geological GEOL

The requested revisions for this submission, as outlined in the 45 Day Notification dated April 30, 1997, have not been received within the time period specified.

As discussed in our May 6th phone conversation assessment credit is approved for the line cutting and geology surveys only. Assessment credit is not approved for the MAG and EM surveys and all technical data not necessary for completeness of the geology report is being returned.

The following assessment work credit is allowed for this submission:

| | |
|---|---|
| Line Cutting | $8138 |
| Geology | $6555 |
| Report | $2500 |
| Supervision(10%) | $1719 |
| Supplies/Mileage | $ 206 |
| | ------ |
| Total | $19,188 |

Assessment work credit has been approved as outlined on the attached Distribution of Assessment Work Credit sheet.

The MAG and EM surveys can be resubmitted provided the requested corrections have been addressed.



Correspondence ID: 10959

# Work Report Assessment Results

**Submission Number:** 2.17120

**Correspondence to:**

Mining Recorder
Kirkland Lake, ON

Resident Geologist
Kirkland Lake, ON

Assessment Files Library
Sudbury, ON

**Recorded Holder(s) and/or Agent(s):**

DOUGLAS RAYMOND ROBINSON
SWASTIKA, ONTARIO



Correspondence ID: 10959

# Distribution of Assessment Work Credit

The following credit distribution reflects the value of assessment work performed on the mining land(s). Please contact the Mining Recorder to determine if this affects the status of your claims.

**Date:** June 16, 1997

**Submission Number:** 2.17120

---

**Transaction Number:** W9780.00122

| Claim Number | Value Of Work Performed |
|---|---|
| 1202474 | 340.00 |
| 1202479 | 341.00 |
| 1205783 | 2,056.00 |
| 1205784 | 1,715.00 |
| 1205787 | 1,715.00 |
| 1205788 | 2,741.00 |
| 1205789 | 2,741.00 |
| 1205790 | 2,398.00 |
| 1205794 | 1,715.00 |
| 1205795 | 2,398.00 |
| 1205796 | 1,028.00 |
| 1205798 | 0.00 |
| 1205799 | 0.00 |
| **Total: $** | 19,188.00 |



Correspondence ID: 10959

Grenfell Twp. M.351

Burt Twp. M.334

Otto Twp M.379

Blain Twp. M.418

THE TOWNSHIP OF

# EBY

DISTRICT OF TIMISKAMING

LARDER LAKE MINING DIVISION

SCALE: 1-INCH=40 CHAINS

2.17120

## LEGEND

| | |
|---|---|
| PATENTED LAND | (P) |
| CROWN LAND SALE | C.S |
| LEASES | (L) |
| LOCATED LAND | Loc. |
| LICENSE OF OCCUPATION | LO |
| MINING RIGHTS ONLY | M.R.O. |
| SURFACE RIGHTS ONLY | S.R.O. |
| ROADS | |
| IMPROVED ROADS | |
| KING'S HIGHWAYS | |
| RAILWAYS | |
| POWER LINES | |
| MARSH OR MUSKEG | |
| MINES | |
| CANCELLED | |

## NOTES

400' surface rights reservation along the shores of all lakes and rivers

AREAS WITHDRAWN FROM STAKING

Surface Rights Withdrawn under Sec. 36, The Mining Act R.S.O. 1980, ORDER NO. W-01/91/ONT (Trans Canada Pipeline Right of Way and Buffer Zone particularly 40.25 meters or 132 ft. on either side of centre line of right of way)

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

PLAN NO - M - 345

MINISTRY OF NORTHERN DEVELOPMENT AND MINES

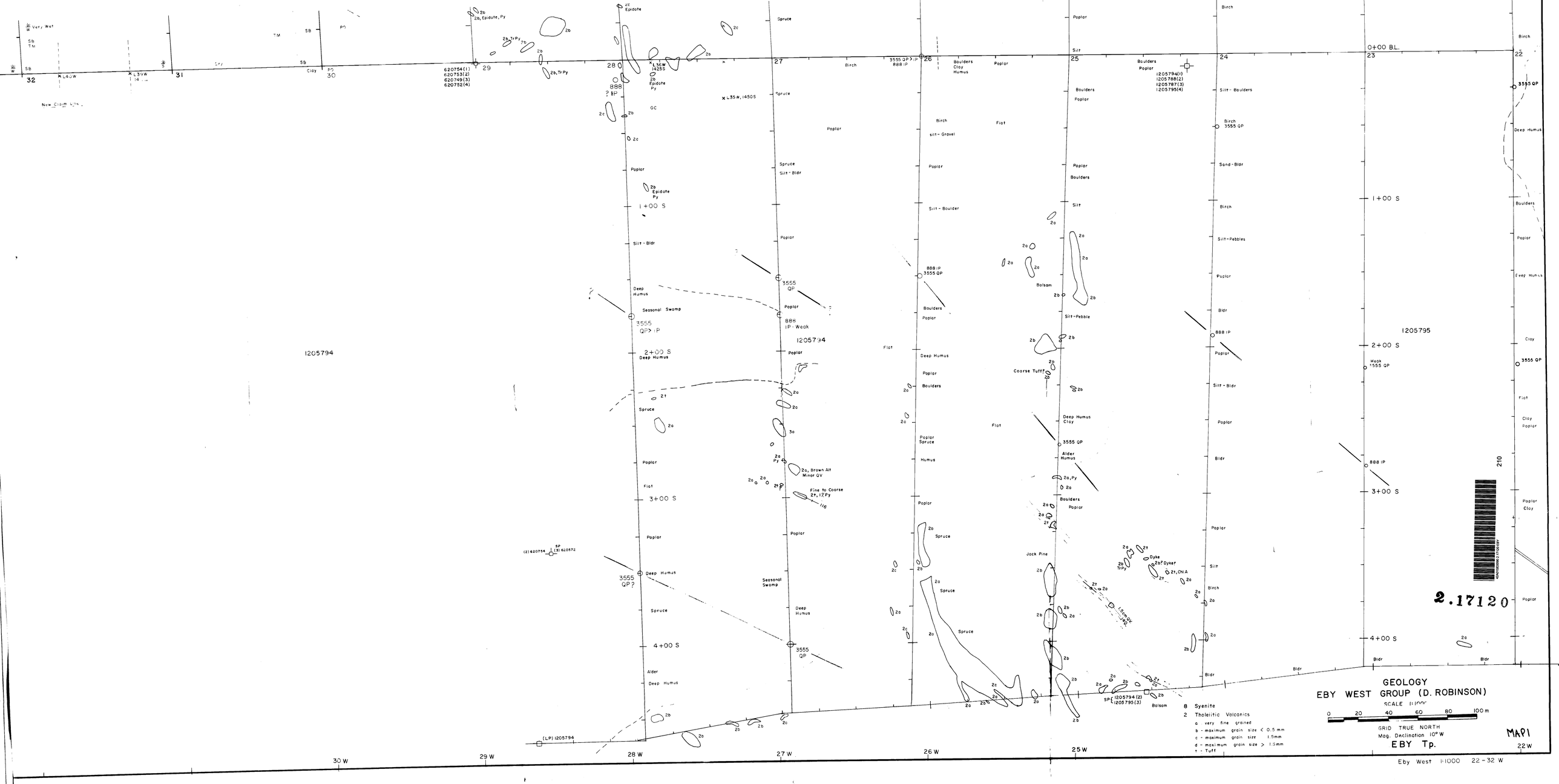
2.17120 GEOL


COPY OF THIS MYLAR ARCHIVED APR.27/92
ARCHIVED JANUARY 26, 1995
ARCHIVED ON JUNE 01/95
ARCHIVED JULY 19, 1996

K. Kotanen

Rec'd Jan. 25/89

M.354


1205794
1205795
620754(1)
620753(2)
620749(3)
620752(4)
1205794(1)
1205788(2)
1205787(3)
1205795(4)
(LP) 1205794
SP (2) 620754 (3) 620572
SP 1205794(2) 1205795(3)
0+00 BL.
1+00 S
2+00 S
3+00 S
4+00 S
GEOLOGY
EBY WEST GROUP (D. ROBINSON)
SCALE 1:1000
GRID TRUE NORTH
Mag. Declination 10° W
EBY Tp.
MAP1
8 Syenite
2 Tholeiitic Volcanics
a - very fine grained
b - maximum grain size < 0.5 mm
c - maximum grain size 1.5mm
d - maximum grain size > 1.5mm
t - Tuff
Eby West 1:1000 22-32 W
2.17120



1205789
1205788
1205787
N
3555 QP
Approximate Location
3555 QP > IP
3555 IP = QP
Strong
3555 QP
888 IP
3555 IP = QP
SP No Tag
Old Blazed Lines
1205788(1)
1205789(2) SP
1205787(4)
Conductive
3555 IP = QP
888 IP > QP
TARGET
3555
QP > IP
4+00N
3+00 N
2+00 N
1+00 N
Seasonal Swamp
Spruce
Poplar
Tamarack
Alder
Clay - Pebbles
Sand - Gravel
Silt - Bldr
Pillows
112 Linear Fabric
Recent Pit
2b, CaA, Imm Magnetite Xls
ChlA, Feld A, Py
QV in Talus
Strong Epidote
Sand - Pebble
Boulders
Sandy - Gravel
Silt - Sand
3555 QP
Weak ?

# GEOLOGY
# EBY WEST GROUP (D. ROBINSON)

SCALE 1:1000

0 20 40 60 80 100m

GRID TRUE NORTH

Mag. Declination 10°W

EBY Tp.

FeCA Ferruginous Alteration

CaA Calcite Alteration

3555 QP ⊕ IP Maxmin Response: 3555 Hz
Quadrature Phase ⊕ In Phase

8 Syenite

2 Tholeiitic Volcanics
a - very fine grained
b - maximum grain size < 0.5mm
c - maximum grain size 1-5mm
p - maximum grain size > 5mm
t - Tuff

220

2.17120

Cedar
Spruce
Tamarack
Humus
Clay
Wet Swamp
Seasonal Swamp
Tilt
Old Picket
Dry Flat
Wet Holes
Alder
Poplar
Birch
Silt - Blder
Strong
Conductive
Hem A, K A
Zc, TrPy
SP No Tag
SP (205789(1))
1205789
3555 IP = QP
3555 QP IP
3555 QP
3555 IP Strong
3555 QP Strong
3555 Weak QP
888 IP = QP
888 IP 3555 IP = QP
Approximate Location 3555 QP > IP
3555 IP = QP
8+00 N
7+00 N
6+00 N
5+00 N
4+00 N
S1/2, Lot 9, Conc. V
N1/2, Lot 10, Conc. IV
N1/2, Lot 9, Conc. IV
L32W
L31W
L30W
L29W
L28W
L27W
L26W
L25W
L24W
Eby West 1:1000
24 - 31 W

MAP 3

# GEOLOGY
## EBY WEST GROUP (D. ROBINSON)

SCALE 1:1000

0 20 40 60 80 100 m

GRID TRUE NORTH
Mag. Declination 10°W

EBY Tp.

FeCA Fer-Carbonate Alteration
CaA Calcite Alteration
888 IP,OP MaxMin Anomaly, In-Phase, Out-of-Phase 888 Hz

B Syenite
2 Tholeiitic Volcanics
a - very fine grained
b - maximum grain size < 0.5 mm
c - maximum grain size 1.5mm
d - maximum grain size > 1.5mm
t - Tuff

2.12120

230

21 20 19 18 17 16 15 14

N

4+00 N 3+00 N 2+00 N 1+00 N

1205784 1205787 1205783


Birch Seasonal Swamp Spruce Low Ridge Flat Boulders Dry Sand-Pebbles Poplar Clay Maple Boulders Jack Pine Conductive Strong Narrow Old Picket Large Boulders Talus Alder Cedar Tamarack Road Two Old Pickets Seismic Line Cut Line

3555 GP 888 IP 3555 GP Narrow 3555 GP Strong 3555 UP

1205787(1) 1205784(3) SP 1205783(4)
1205784(2) 1205783(LmP) SP

Qtz. Ribbing
Vein, Alteration
Red Syenite Py
Pit-Red Kfs
Pit 330cmGV, 2j
Patchy FeCA
Chl, CaA Red Hematite Seams
Chl Alt.
Angular FeCA Float
Calcite Stringers Coarse Py
2a, Calcite, Py
2a, Py
2a, TrPy
2t, Py
OC? 2t, Py
Py Veins
Py
High Point
Two Old Pickets
L24W, 10+50S 3555 STRONG UP 888 Weak UP
L24W, 1125-S
L24W, 1125 S
L24W, 1200S
L24W, 1225S
L23W, 1200S
L22W, 1125 S
L22W, 10+50S


22-W
21-W
20-W
19-W
18-W
17-W
16-W
15-W
14-W
0+00 N-BL
1+00 S
2+00 S
3+00 S
4+00 S
1205795
1205796
1202474
Seasonal Swamp
Birch
Poplar
Balsam
Spruce
Alder
Tamarack
Willow
Deep Humus
Clay
Flat
Boulders
Jack Pine
Old Picket
Down Picket
Road
Depression
Shallow Depression
Dry
Pebble Till
Fragmental
EBY WEST 1:1000 12-22-W



371 N
372 N AT 3799 W
374 N AT 3699 W
375 N AT 3699 W
L47W 1000-S
L47W 1025-S
L46W 1025-S
1125-S
LP-1205790-SF
3555 IP > QP
IP = QP 3555
3555 QP
3555 IP = QP
3555 QP > IP
1205790
L46W Clearly Legible
L46W
L43W Clearly Legible
Very Wet
Sparse SB
Dense SB
Open SB
Pure SB
42 E
41 E
40 E
39 E
38 E
37 E
36 E
35 E
34 E
33 E
32 E
LP-1205790
LP-1205793 SF

1205792

1205793

1205793

N1/2, Lot 11, Conc. IV

S1/2, Lot 11, Conc. IV

N 1/2, Lot 10, Conc. IV

S1/2, Lot 9 Conc. IV

2.17120

1205799

N

888 Max. Min. E.M. Response (888 Hz)
IP In Phase QP Quadrature Phase

1" SIB □ 1 inch Square Iron Bar

SP-2-1205790 □ No. 2 Claim Post
LP = Loose Post SP = Stump Post
Ln = Line Post

SB Spruce
PO Poplar
AS Alder
TM Tamarack

8 Syenite
2 Tholeiitic Volcanics
a very fine grained
b maximum grain size < 0.5mm
c maximum grain size < 1.5mm
d maximum grain size > 1.5mm
t Tuff

GEOLOGY
EBY WEST GROUP (D. ROBINSON)
SCALE 1:1000
0 20 40 60 80 100m
GRID TRUE NORTH
Mag. Declination 10°W
EBY Tp.

MAP 4

42A01S02002 2.17120 EBY

240

Eby West 1:1000 32-42 W