42A01SE0089 2.17119 OTTO

ASSESSMENT REPORT: EBY WEST & OTTO TP PROPERTIES

Douglas Robinson

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A. INTRODUCTION

This 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 1995	Line	From	To	Length
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.

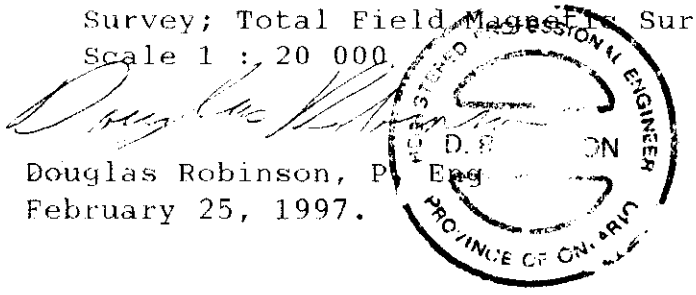
Map P. 717 - Ontario Department of Mines and Northern Affairs; Preliminary Map P. 717; Geochemical Distribution of Acid Soluble Copper in Felsic Plutonic Rocks; Otto Township and Parts of Eby, Marquis and Boston Townships.
Scale 1 inch = 1/2 mile

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 Magnetics Survey.
Scale 1 : 20 000



Douglas Robinson, P. Eng.
February 25, 1997.

CERTIFICATE OF QUALIFICATIONS

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

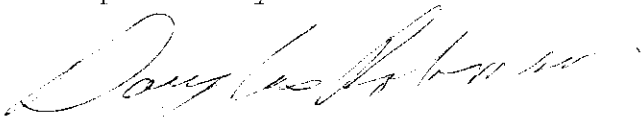
1. I am a registered professional Engineer of the province of Ontario, No. 39322011.

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

Acad. # 2.2146

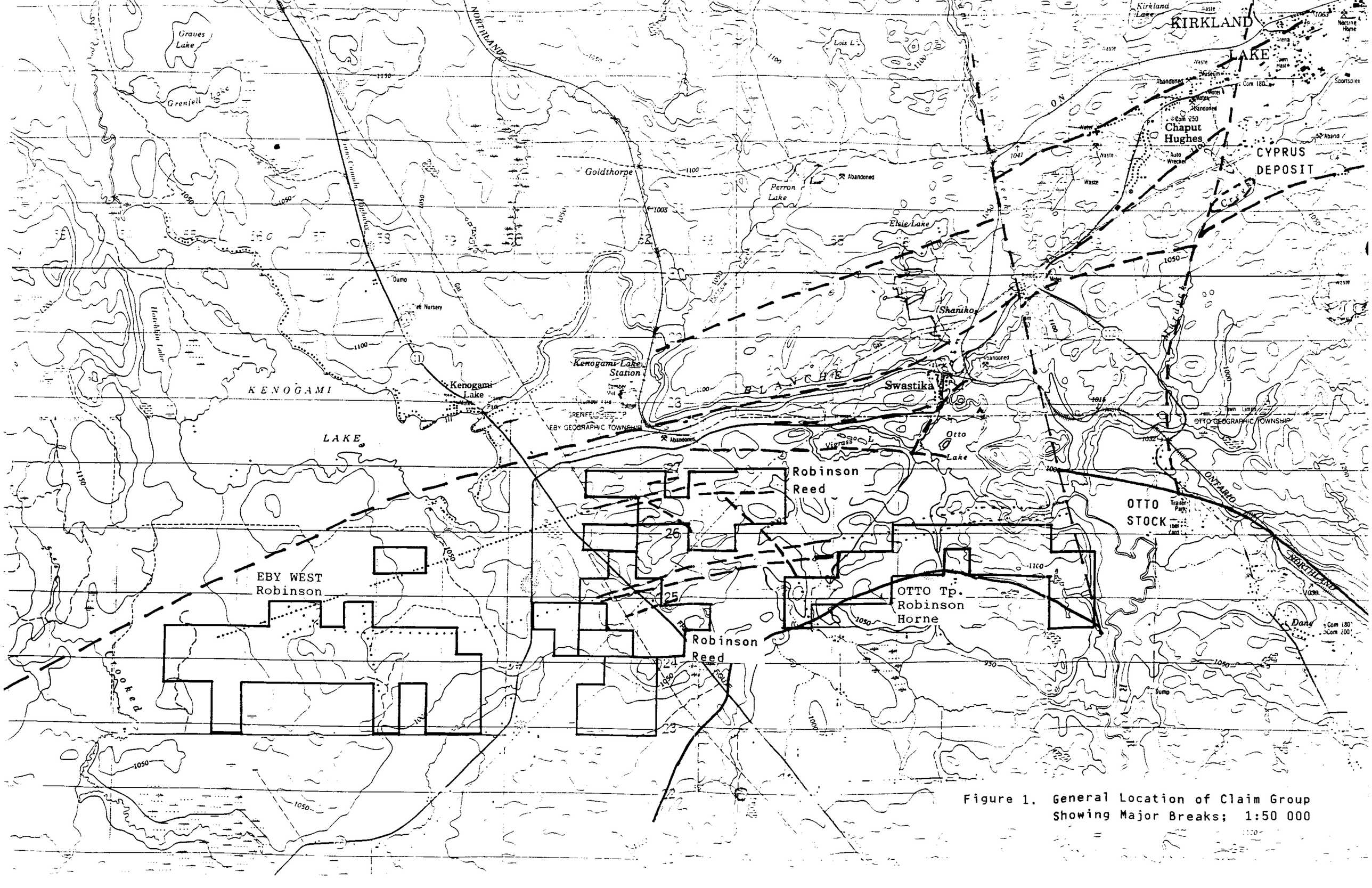


Figure 1. General Location of Claim Group Showing Major Breaks; 1:50 000

VI

V

IV

10 11 12 9 8 7 6 5 4 3

FILE 16864

1186394 Kenogami 1186393 1186326 1186327 1186329

1186601 1186396 1186395 1186392 1186391

1200610

1187142

Lake

TRANS CANADA PIPELINE

1202847

1202820

1202833

1200632

1205770 1206403 1206404

1205789 1205784

1205791 1205790 1205788 1205787 1205783 1205782 1205781

1205792 1205793 1205794 1205795 1205796 1205798

1205799 1205800

1202474 1202479 1205797

1206669

1200631

935419 935418 935417

1202471 1202470 1202472 1202473 1200895

738868 738577

532930 532929

MAY 15 1996

LARDER LAKE MINING RECORDER'S OFFICE

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

12 11 10 9 8 7 6 5 4

VI

V

IV

N.O.N.R. lateral f...62526 L.O. 1656 66 842782 842660 843400 842767 843837 843171 544549 544544 544546 544545 842495 842494 842493 737144 737143 475259 475260 511330 511331 511579 511580 1186485 511327 511328 511332 18873 643393 642796 1206408 1206407 643018 579724 1206295 8020'98 620944 579,548 1131943 1131944 CL 4614 S.R.O. CL 4615 L.O. 9592 32236 32237 32238 9591 9359 8759 L. Vigrass Lake M.R.O. Hydro 16425 16424 8868 17723 8497 8498 8496 475261 S.R.O. 9357 1211456 1206406 2372 1211454 1213818 1211455 18249 18248 16459 16458 982696 982693 982695 982692 982694 982691 982690 982689 982637 982698 917317 891866 891867 891868 891869 Gravel Pit No 245 16442 16549 16443 15871 16497 104573 S.R.O. DATE OF ISSUE MAY 15 1996 LINDER LAKE MINING RECORDER'S OFFICE River M.R.O. 550779 550935

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

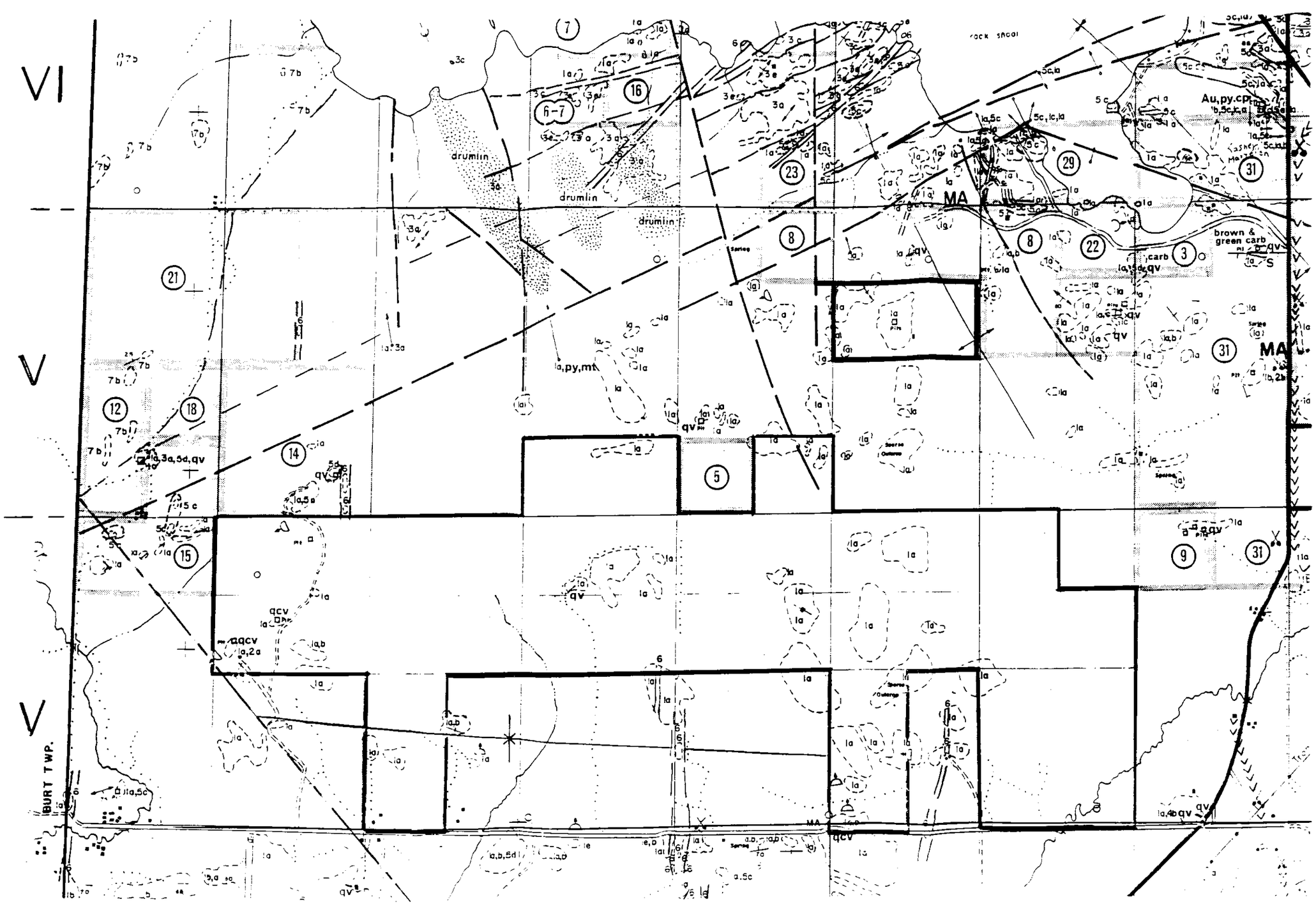


Figure 3a. Geology by Township: P.448: Scale 1:20000

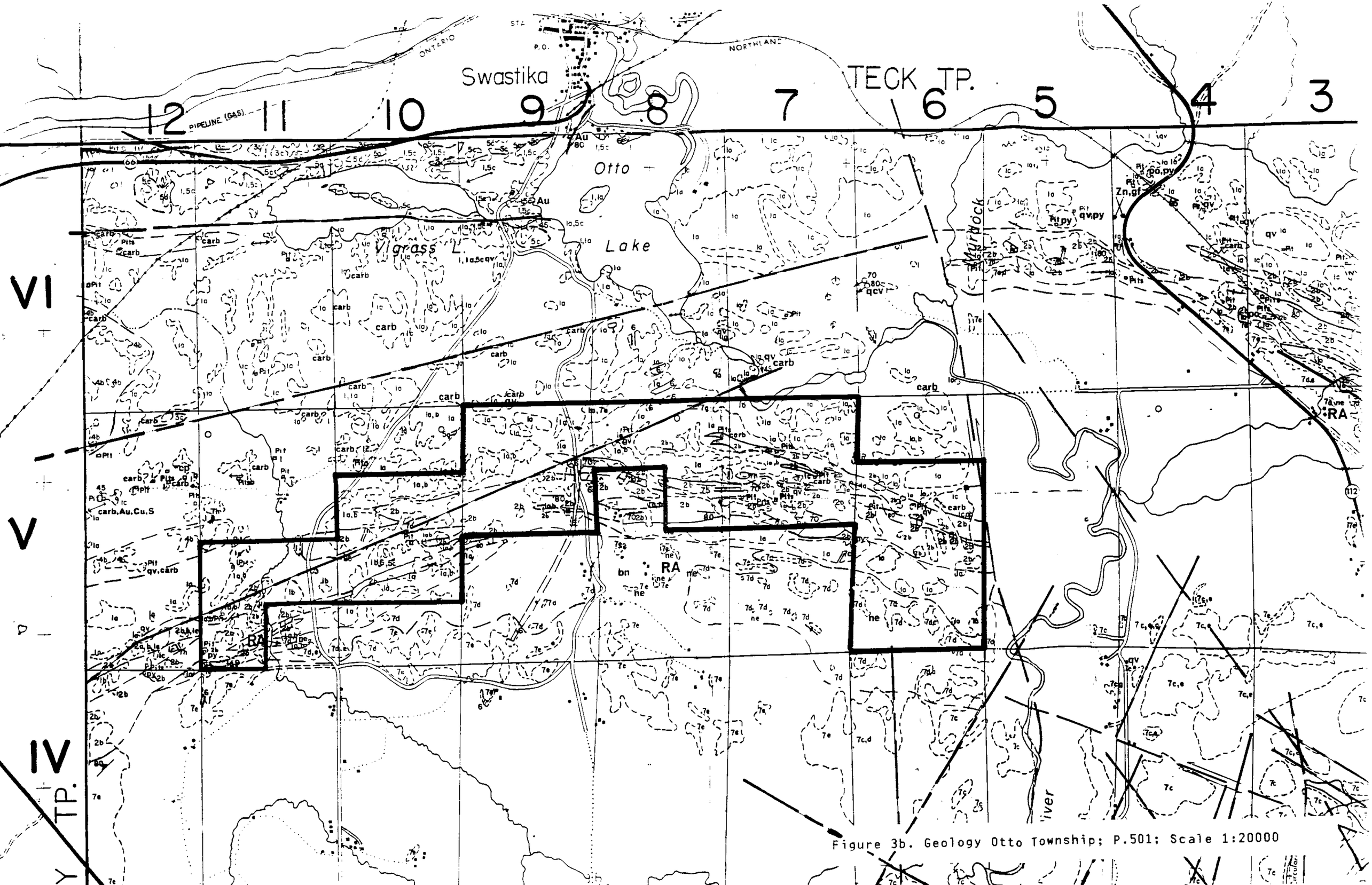


Figure 3b. Geology Otto Township; P.501; Scale 1:20000

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

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

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

ROBINSON

N: D. ROBINSON

J: EBY-OTTO

4617-RG1

I.C.A.P. TOTAL OXIDE ANALYSIS

Lithium MetaBorate Fusion

AMPLE #	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 %
)	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	160	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
D	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	360	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 :

GW-4617-RG

796

Swastika Laboratories

A Division of TSL/Assayers Inc.

Assaying - Consulting - Representation

Established 1928

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	-	-	-	-	-	Results
20020	-	-	-	-	-	-	to
20021	5	-	-	-	-	-	follow
20022	10	-	-	-	-	-	
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 Northern Development and Mines

Mining Act

Notice of Intention to Perform Assessment Work

David Turcotte & Carol Turcotte of Otto Twp

being the registered holder(s) of the surface rights of:

W ½ of S ½ Lot 11, Conc 5 Otto Twp

Lot/Concession/Township/Area

recorded as Mining Claim(s)

1206408 & 1206295

I, Douglas Robinson of Box 218 (24 Victoria Ave) Swastika ONTARIO

being the holder of the above-mentioned mining claim(s) give notice as follows:

1. A review of the parcel register/abstract of title for the above-mentioned lands confirms that you are the registered holder of the surface rights to the lands.

2. It is my intention to carry out ground assessment work on the lands, commencing on/or about _____, in accordance with the **Mining Act**.

Dated at Swastika, this 2nd day of July 19 96

Douglas Robinson

Signature of Recorded Holder of Mining Claim(s)

Note: The Mining Act reads as follows:

If there is an owner of the surface rights of the land comprising a mining claim, where a holder of the mining claim first proposes to do ground assessment work on such land, the holder shall give notice in the prescribed form to the owner of the surface rights of the holder's intention to perform the work.

A person who has given notice under this section may enter on the lands and perform the work at any time immediately following the day the notice is given.

Certificate Confirming Notice of Intention to Perform Assessment Work

Transaction Number

I, Douglas Robinson of Swastika certify that the annexed notice of my intention to perform assessment work was given to the holder of the surface rights on 1206408 1206295

ed at Swastika this 4 day of July 96

Douglas Robinson

Signature of Recorded Holder of Mining Claim(s)

0242 (03/91)

Ministry of Northern Development and Mines

Ontario

Mining Act

Notice of Intention to Perform Assessment Work

— Gilbert Dugas & Rosemarie Dugas of OTTO Twp

being the registered holder(s) of the surface rights of:

E ½ of S ½ Lot 11, Conc 5 Otto Twp.

Lot/Concession/Township/Area

recorded as Mining Claim(s)

1206408

I, Douglas Robinson of Box 218 E24 Victoria Ave) ONTARIO Swastika

being the holder of the above-mentioned mining claim(s) give notice as follows:

1. A review of the parcel register/abstract of title for the above-mentioned lands confirms that you are the registered holder of the surface rights to the lands.

2. It is my intention to carry out ground assessment work on the lands, commencing on/or about July 5, 1996, in accordance with the **Mining Act**.

Dated at Swastika, this 2nd day of July 19 1996

Douglas Robinson

Signature of Recorded Holder of Mining Claim(s)

Note: The Mining Act reads as follows:

If there is an owner of the surface rights of the land comprising a mining claim, where a holder of the mining claim first proposes to do ground assessment work on such land, the holder shall give notice in the prescribed form to the owner of the surface rights of the holder's intention to perform the work.

A person who has given notice under this section may enter on the lands and perform the work at any time immediately following the day the notice is given.

Certificate Confirming Notice of Intention to Perform Assessment Work

Transaction Number

Douglas Robinson of Swastika certify that the annexed notice of my intention to perform assessment work was given to the holder of the surface rights on 1206408

at Swastika, this 3 day of July 19 96

1206408

Douglas Robinson

Signature of Recorded Holder of Mining Claim(s)

0303/91)

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)
W9780.00124
Assessment Files Research Imaging

Personal informati
Mining Act, the infc
Questions about
933 Ramsey Lake

42A01SE0089 2.17119 OTTO

65(2) and 66(3) of the Mining Act. Under section 8 of the
ment work and correspond with the mining land holder.
of Northern Development and Mines, 6th Floor,

900

2.17119

Instructions:
- Please type or print in ink.

lim, use form 0240.

1. Recorded holder(s) (Attach a list if necessary)

Name	Client Number
Douglas Robinson, and Betty Robinson ~~Joseph Horne~~ ARR	222886 · Betty 302217
Address	Telephone Number
Box 218 Swastika, ONTARIO P0K-1T0	705-642-9153
	Fax Number
Name	Client Number
Joseph Horne	145866
Address	Telephone Number
302-1 Lakeshore Road Kirkland Lake Ont P2N-3G3	705-568-6435
	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
(Geology) (Mag) (EM) Max Min Terrain Measurement Line Cutting & (Assays)	Commodity
	Total $ Value of Work Claimed $ 9549
Dates Work Performed From 19 Day Aug Month 1996 Year To 31 Day Jan Month 1997 Year	NTS Reference
Global Positioning System Data (if available) Township/Area Otto	Mining Division Larder Lake.
M or G-Plan Number M-379	Resident Geologist District Kirkland 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.

RECEIVED
FEB 28 1997
MINING LANDS BRANCH

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

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

RECEIVED '97 FEB 26 PM 3 52 LARDER LAKE MINING DIVISION

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 25/97
Agent's Address	Telephone Number / Fax Number
Box 218 Swastika, ONT P0K-1T0	705-642-9153

0241 (02/96)

Deemed- May 27/97

5. Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoin... the mining land where work was performed, at the time work was performed. A map showing the contiguous lin... 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	2.17119 0	0 $4,892
eg	1234568	2	$ 8, 892	$ 4,000		
1	1206408	2	6000	800	0	5200
2	1206295	1	3549	400	0	3149
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
		Column Totals	9549	1200	0	8349

I, Douglas Robinson (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.

RECEIVED
FEB 28 1997
MINING LANDS BRANCH

Signature of Recorded Holder or Agent Authorized In Writing: Douglas Robinson — Date: Feb 25, 1997

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):

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.

RECEIVED

For Office Use Only

Received Stamp

97 FEB 26 PM 3 51
MINING DIVISION
TIMMINS, ONTARIO

Deemed Approved Date: 97 May 28	Date Notification Sent
Date Approved	Total Value of Credit Approved
Approved for Recording by Mining Recorder (Signature)	

0241 (02/96)

Ontario

Ministry of Northern Development and Mines

Statement of Costs for Assessment Credit

Transaction Number (office use)

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.

Work Type	Units of Work 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	9.932 Km	260.5	2595
EM-2 Frequency	5.600 Km	200	1120
Mag	9.975 Km	80	798
Geology + Drafting	8.00 day	300	2400
Supervision + Logistics	2.5	300	750
Report	4	300	1200
Assays	34+7(41)	13.12	538
Associated Costs (e.g. supplies, mobilization and demobilization).			
Aluminum Tags for Pickets			17
Transportation Costs			
Equipment Freight			131
Food and Lodging Costs			
		Total Value of Assessment Work	9549

2.17119

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, Doug 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 _____ (recorded holder, agent, or state company position with signing authority) I am authorized to make this certification.

Signature	Date
Doug Robinson	Feb 25/97

0212 (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: 2.17119

Subject: Transaction Number(s):		Status
	W9780.00124	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 Steve Beneteau by e-mail at beneteau_s@torv05.ndm.gov.on.ca or by telephone at (705) 670-5855.

Yours sincerely,

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

Correspondence ID: 10961
Copy for: Assessment Library

Work Report Assessment Results

Submission Number: 2.17119

Date Correspondence Sent: June 16, 1997 **Assessor:** Steve Beneteau

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9780.00124	1206408	OTTO	Approval After Notice	June 16, 1997

Section:

12 Geological GEOL

As discussed in our telephone conversation on May 06, 1997, assessment credit for the line cutting and geology survey will be approved. The technical information submitted for the magnetometer and HLEM survey is being returned to you for submission at a later date. The following assessment credit is approved for this submission:

Line cutting	$2,595.00
Geology/Drafting	$2,400.00
Assays	$ 538.00
Aluminum tags	$ 17.00
TOTAL	$5,550.00

Note, the assessment credit has been distributed as outlined on the attached Credit Distribution form.

Correspondence ID: 10961

Work Report Assessment Results

Submission Number: 2.17119

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 Robinson
DOUGLAS RAYMOND ROBINSON
SWASTIKA, ONTARIO

BETTY (ELIZABETH) JOY ROBINSON
SWASTIKA, ONTARIO

JOSEPH DANIEL HORNE
KIRKLAND LAKE, ONTARIO

Correspondence ID: 10961

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: 2.17119

Transaction Number: W9780.00124

Claim Number	Value Of Work Performed
1206408	3,487.00
1206295	2,063.00
Total: $	5,550.00

Correspondence ID: 10961

42A01SE0089 2.17119 OTTO
200

TECK TP. - M.392

12 11 10 9 8 7 6 5 4 3 2

VI

V

IV

III

II

I

EBY TP. - M.345

BOSTON TP. - M.332

MARQUIS TP. - M.362

CL 4615

CL 9293

CL 5029

CL 7678

1214034 S.R.O. 1219966

1217884

1211456

1213818

1211455

1206406

1206408

1206407

1206295

1186485

1165511

1165512

1186775

2.17119 GEOL

DANE TOWNSITE Not Open for Staking O.C. Jan 10, 1911

Blanche River

Round Lake

Rosegrove Beach

T.C.P.L. R/W

Gravel Pit No. 1563

M.T.C. Gravel Pit No. 1566

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.

2.17119

OTTO

CAPUER LAKE MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

PATENTED LAND	● or (P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
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	C.
PATENTED S.R.O.	

NOTES

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

(R1) SURFACE AND MINING RIGHTS WITHDRAWN FROM STAKING SEC. 36/80, W.9/86, JAN. 24, 1986
O-L26-90 NR OPENS W9/86 DEC. 14, 1990

* APPLICATION UNDER THE PUBLIC LANDS ACT SEC. 31 (b) OF THE MINING ACT

CL 5029 DISPOSITION OF CROWN LAND
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)

NOTICE OF FORESTRY ACTIVITY

THIS TOWNSHIP / AREA FALLS WITHIN THE TIMISKAMING MANAGEMENT UNIT


AND MAY BE SUBJECT TO FORESTRY OPERATIONS. THE MNR UNIT FORESTER FOR THIS AREA CAN BE CONTACTED AT: P.O. BOX 129
SWASTIKA, ONT.
P0K 1T0
705-642-3222

PLAN NO. M-379

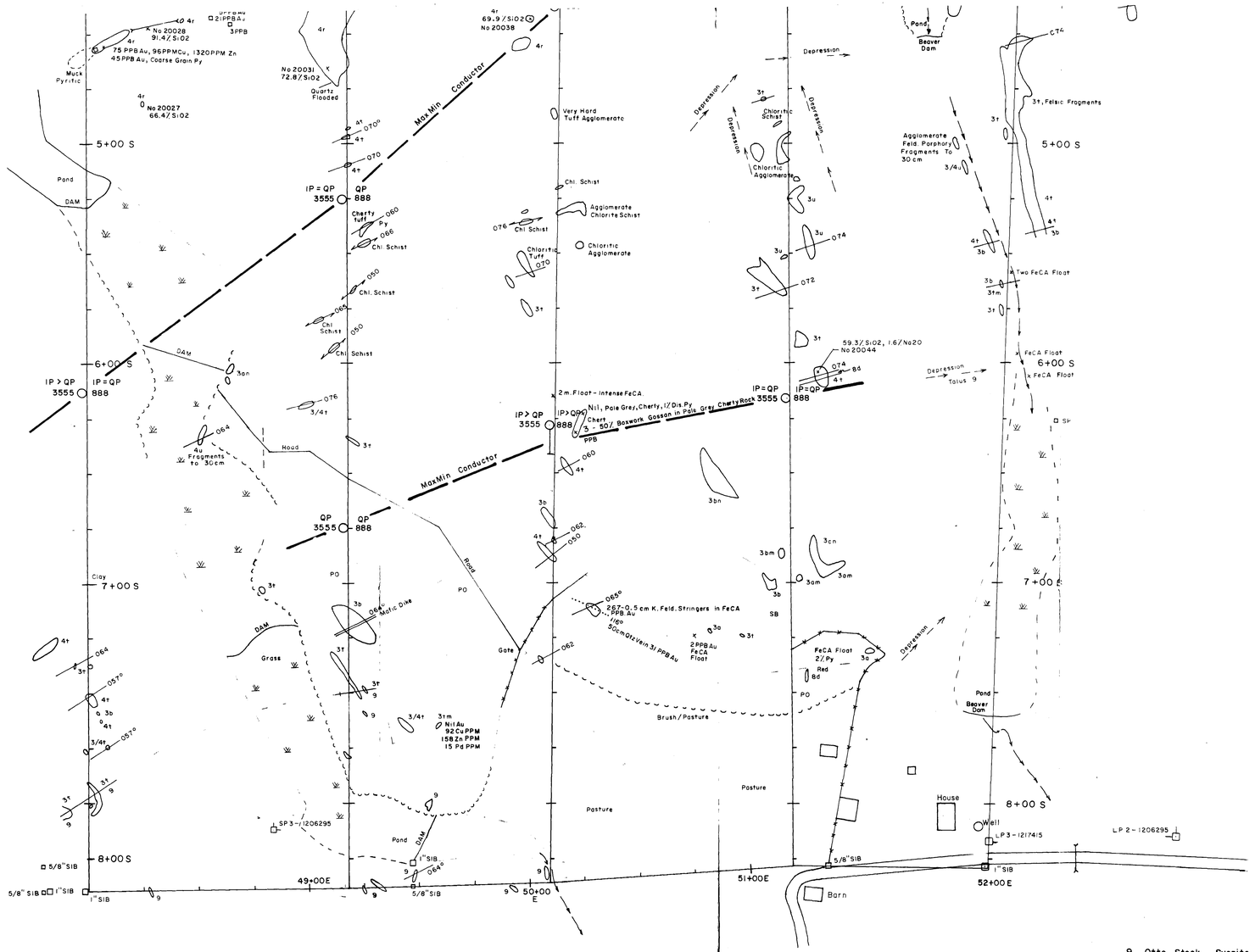
MINISTRY OF NORTHERN DEVELOPMENT AND MINES

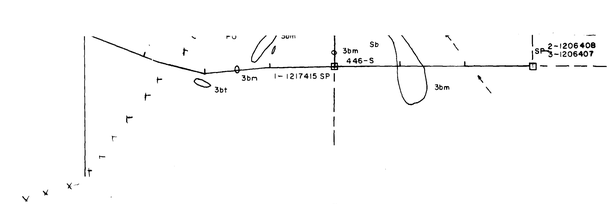
CIRCULATED NOV.3/88
ARCHIVED ON JUNE 01/95

TRIM LINE



2.17119
N
47+85E
49+00E
50+00E
51+00E
52+00E
53+30E
54+00E
55+00E
56+00E
1+00 S
2+00 S
3+00 S
4+00 S
Stong Ground Lineament
MaxMin Conductor
Lineament
072° 2m Wide Line
5/8" SIB
SP-4-1206408
Pit FeCA 15cm Quartz Vein
Intense SiA FeCA
Float FeCA
A- SP 737093
B- SP1-1045444
C- LP1-1167801
4m High Knob
Trench No Outcrop
Old Road
Clean Sand
LnP 1206408 SP
Drained Pond
Dry No Outcrop
Grass
SP-1-1137018
Pond
Beaver Dam
Folded Qtz V To 4cm
1996 Claim Line
1-1206408
3-1206406 SP
4-1206407
Down Fence Along Line
End of Ridge
Sand Pebbles
Trail
Cliff
3m Cliff
IP 888
QP 3555
QP IP 3555 888 QP
Chlorite Schist CaA
2m Angular Talus Red Feldspar Atn.
FeCA Float
4u Chloritic Matrix 3cm Fragments
Intense Red Feld Atn. No 20030 57.5/SiO2, 5.9/K20
N.Wall Chlorite Schist S Wall 4r
26-Limonite 46-50/Py 3- 3/Dis.Py
Chl Matrix Frag to 3cm
Nil - 6cm Gouge
Red Feldspar Atn
SP 3-1206408 4-1206295
10 PPB
5 PPB
2 PPB, Rusty, Magnetic
Chloritic Agglomerate
Chloritic
3tu 2m Fragments
SP-Ln-1206408 1-1206295
SP-4-1217415
Depression
Parking
Barn
House
Pasture
Fence
Road
Sharp Contact
035 Fault





FeCA Fe-Carbonate Alteration

ChlA Chlorite Alteration

SiA Silicification

888 MaxMin EM Response (888 Hz.)
IP - In Phase QP - Quadrature Phase

1" SIB □ 1 inch Square Iron Bar

LP-2-1206295 □ No 2 Claim Post
LP = Loose Post SP = Stump Post
Ln = Line Post

SB Spruce

PO Poplar

AS Alder

9 Otto Stock, Syenite

8 Feldspar Porphyry, Syenite Dikes

7

6

5

4 Felsic Volcanics

3 Fe Tholeiitic Volcanics

2 Mg Tholeiitic Volcanics

1

a very fine grained
b maximum grain size 0.5 mm.
c maximum grain size 1.5 mm
d maximum grain size 1.5 mm.
m magnetic
n non-magnetic
r rhyolite
t tuff
u agglomerate

GEOLOGY

AMIKOUGAMI CREEK PROPERTY

J. Horne & D. Robinson

SCALE 1: 1000

0 20 40 60 80 100 m

GRID TRUE NORTH
Mag. Declination 10°W

OTTO Twp.

Supervised By Douglas Robinson, 1996

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