2.54171

Claim L1239350
& L3010057

Re-Do Claim Lines

Eby Township

NTS - 42 A/1

80°10'W 48°04'N

Prepared by : Eric Marion
June 2013

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Kirkland Lake Resident Geologists District

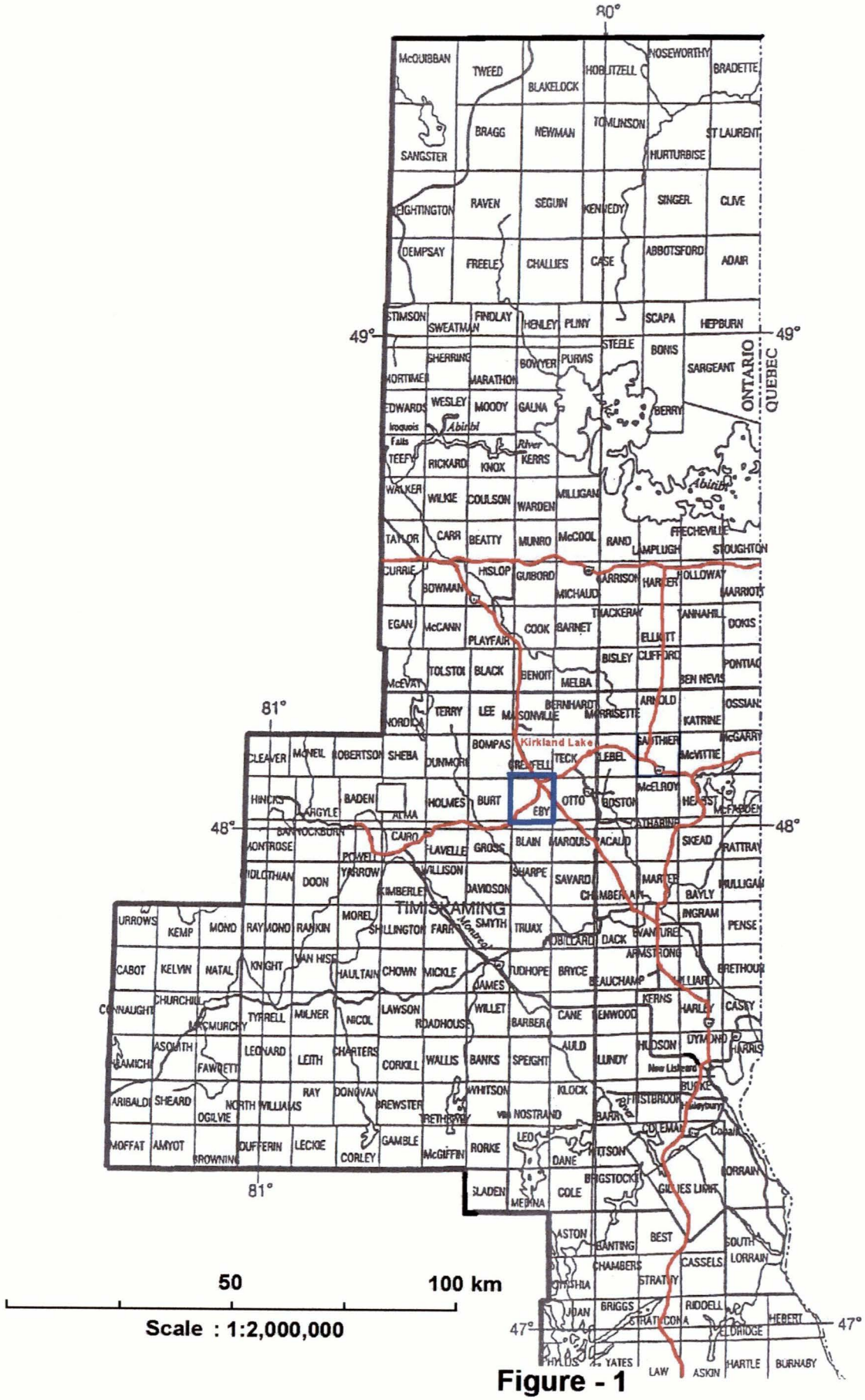


Figure - 1

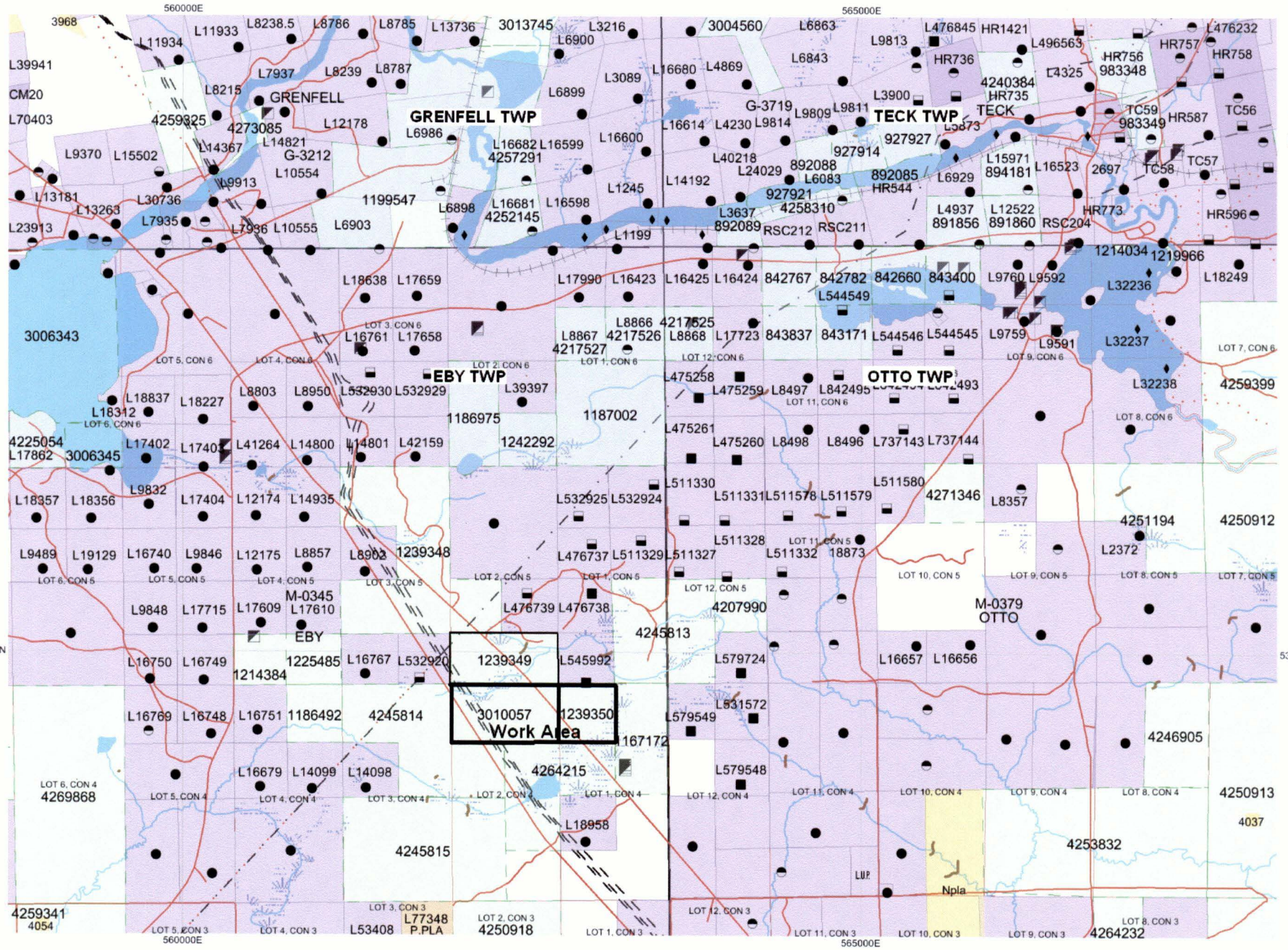

560000E
565000E
5325000N
GRENFELL TWP
TECK TWP
EBY TWP
OTTO TWP
GRENFELL
EBY
OTTO
TECK
Work Area
M-0345
M-0379
NA
Npla
LUP
LOT 5, CON 6
LOT 4, CON 6
LOT 3, CON 6
LOT 2, CON 6
LOT 1, CON 6
LOT 12, CON 6
LOT 11, CON 6
LOT 9, CON 6
LOT 8, CON 6
LOT 7, CON 6
LOT 6, CON 6
LOT 5, CON 5
LOT 4, CON 5
LOT 3, CON 5
LOT 2, CON 5
LOT 1, CON 5
LOT 12, CON 5
LOT 11, CON 5
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LOT 8, CON 5
LOT 7, CON 5
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LOT 3, CON 4
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LOT 2, CON 3
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LOT 12, CON 3
LOT 11, CON 3
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LOT 9, CON 3
LOT 8, CON 3
3010057
1239350
1239349
4245813
4245814
4245815
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4207990
4271346
4251194
4250912
4250913
4246905
4253832
4264232
4259399
4259341
4250918
3006343
3006345
4225054
4269868
1186975
1187002
1242292
1239348
1225485
1214384
1186492
1199547
4273085
4259325
4257291
4252145
4217525
4217526
4217527
1214034
1219966
4037
4054
Geo-Claims UTM Zone 17
5000m grid

Figure - 2

PROPERTY LOCATION

The claim is located in the Larder Lake mining division approximately 12 kilometers south-west of the town of Kirkland Lake. The group sits midway in the eastern end of Eby Township with Highway 11 passing through the claims. This is in the Kirkland Lake Resident Geologists District and can be found on NTS-42 A/1 with the geographic center being at approximately 80°09'36"W and 48°04'15"N.

ACCESS

Heading south on Hwy.#11 from the intersection of Hwy.#66 and trans-Canada Hwy.#11 at Kenogami for 3.4 kilometers will bring you to the approximate geographic center of the claim area. Many hunting trails, transmission lines and a gas pipeline give improved access to much of the surrounding area.

CLAIMS

These are two staked mining claims totalling 3 claim units in Temiskaming District, in the subdivided Township of Eby, recorded on Plan M-0345 of Eby Township. The claims and descriptions are as follows:

CL# L1239350--Lot 1, Con.4, NW1/4 of the N1/2 - 1 unit
L3010057-- Lot 2, Con 4, N1/2 of the N1/2 - 2 units

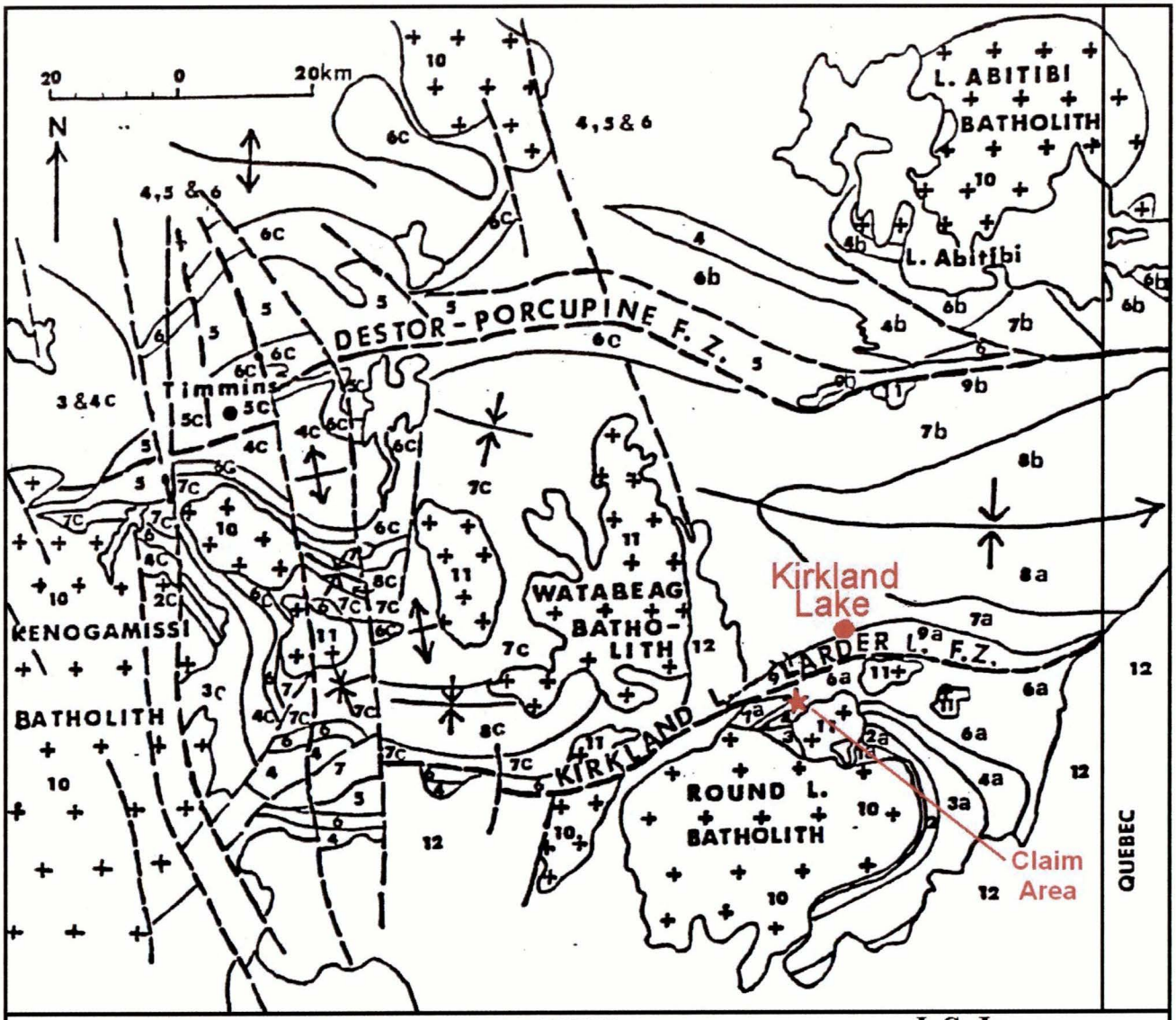
GENERAL GEOLOGY

To save confusing, the above staked claim area shall be referred to as the "ECM claims" or by actual claim number. The ECM claims lay within the Abitibi Greenstone Belt, a region of predominantly volcanic rocks and related interflow sediments at the south central region of the Superior Province.Several eras of intrusion and deformation have affected most of the lithologies present. Major structural deformation zones,(locally the Larder-Cadillac Deformation Zone or LCDZ), parallel each other west to east across the belt and have acted as a control on gold deposition. The Abitibi Belt is host to many large gold and base metal deposits on both sides of the Ontario-Quebec border along these structural trends and has an exploration history going back well into the 1800's. A band of altered mainly fluvial sediments of Temiskaming age, folded and upturned to a near vertical position, coincide with the main structural trend of the LCDZ less than 4500 meters to the north of the ECM claim group. The ECM claims lay amongst the southern splay fauls of LCDZ. The round Lake batholith, a large Archaen aged granitic intrusive occurs about 4.5 kilometers to the south-west of the ECM claims. 400m to the south east of the ECM claim group is the "Otto Stock", an almost circular, somewhat zoned mafic (sanukitoid?) intrusive of some 10 kilometer diameter.Thin bands of clastic sediments and iron formation belonging to the older Skead group trend east-west through the map area and wrap around the Otto Stock and have also been injected with sills and dikes of related syenites. To the south-west of the ECM claim group, a roughly 10 kilometer wide north-south finger of Huronian aged sediments filling a paleo depression of probable structural origin overlie the volcanics. Field work by the OGS has shown LCDZ strain and faulting affecting these much younger overlying sediments.

The Temiskaming Rift is a regional graben feature strinking at about 330° across this part of Ontario.This young rift system has a definite control association with diamond bearing intrusives such as kimberlites. Several NNW-SSE trending fault features passing through the area have been identified as probable Temiskaming Rift associated features.

The Kirkland Lake Break is located about 9500 meters north east of the ECM claims, laying on the east side of the Amikougami Fault, a late off-setting cross fault. The Macassa Mine, the last

General Geology of the Kirkland Lake Area



LEGEND L.S. Jensen

Proterozoic

Keeweenawan diabase (not shown)

12 Cobalt Group

Archean

Matachewan diabase (not shown)

Granitic rocks

11 Granodiorite, monzonite, quartz monzonite, syenite

10 Massive to gneissic quartz diorite, tonalite, trondhjemite

Upper Supergroup

9 9a* Timiskaming Group, 9b** Destor-Porcupine Complex

8 8a, 8n, Blake River Group, 8c*** Blake River (Upper Fm., Tisdale Group)

7 7a, 7b, Kinojevis Group, 7c Kinojevis Group, (Middle Fm., Tisdale Group)

6 6a Larder Lake Group, 6b Stoughton Roquemaure Group, 6c Lower Fm., Tisdale Group

5 5c Porcupine Group

Lower Supergroups

4 4a Skead Group, 4b Hunter Mine Group, 4c Upper Fm., Deloro Group

3 3a Catherine Group, 3c Middle Fm. Deloro Group

2 2a Wabewawa Group, 2c Lower Fm. Deloro Group

1 1a Pacaud tuffs****

*a refers to Kirkland Lake Area, south limb of synclinorium (Jensen 1978c, 1979).
**b refers to Kirkland Lake Area, north limb of synclinorium (Jensen 1976, 1978b).
***c refers to Timmins Area (Pyke, 1980).
**** (Goodwin, 1965).

Figure - 3

operating producer of the historic Kirkland Lake camp which has produced in excess of 28 million ounces of gold, has its #3 shaft at this area. Although there have been several postulated correlations of the economic faults, to fault or vein features to the west of this north south fault, no economically encouraging "ore blocks" have been defined to the west of the Amikougami Fault. Available geologic reports and publications appear to have differing information and estimation of the amout of and direction of off-set by the Amikougami Fault. The east-north east trending Kirkland Lake Break is mapped as merging with the Larder Cadillac break about 3400 meters directly north of these claims.

CLAIM GEOLOGY / LOCAL GEOLOGY

O.D.M. Map M-2239 of Eby Twp. shows the claims unit to be underlain by basaltic/andesitic volcanic rocks intruded by thin mafic syenite dikes. Shearing at about 080° and carbonate alteration are shown as occurring on the southern area of L1239350. A gabbroic unit outcrops on the road cut just north of the south line of 1239350. The gabbros are medium to coarse grained, are slightly gossaned on the surface but contain very little sulphide mineralization.Low gold values were reported from exploration on the east end of 3010051 in 1941.

Several occurances of gold are located in the immediate area around the claim.Most notably of the gold occurances in the area is the workings of the Gateford Mine about 6.5 kilometers east north east of this claim, on the west shore of Otto Lake. These holdings include the workings of the Swastika Mine which is the site of the first discovery west of Larder Lake in 1906, three years before the major discoveries 4½ north east in what was to become the historic Kirkland Lake gold camp. The property is underlain by volcanic rock cut by syenite dikes. Gold occurs in very rich thin flat laying quartz veins associated with galena and molybedenite. Initial production at the Swastika Mine began in 1911 and was sporadic unill about 1950. About 1 million dollars of gold from about 100,000 tons of ore were produced from the combined Gateford holdings.

In 1911 gold was discovered on the "Baldwin" property 3000 meters north of the the ECM claims . The property was developed with a shaft to 400 feet, 920 feet of crosscutting, and 1120 feet of drifting. Fine grained native gold associated with molybedenite and chalcopyrite occurs in several east-west oriented quartz stringers within a carbonate schist. Shoots also occur in red syenite porphyry dykes and light pink fine grain syenite. The shaft and workings are in the Temiskaming aged sediments.

In 1939 gold was discovered 2700 meters north -west of the ECM claims on the Rogick-Elliott-Clark claims. Extensive trenching and drilling showed gold values up to about ½ ounce per ton in gold bearing zones up to 20 feet wide, associated with sheared contacts of red syenitic dykes and carbonate rock. In the late 60's early 70's much of the surface exposures have been removed by open cutting. No report of recovered gold was disclosed.

In around 1948, drilling about 2200 meters north east of the ECM claims, on the "Todora" claims encountered molybedenite and chalcopyrite with gold in quartz stringers and quartz porphyry in sheared volcanic rocks and iron formation. About 800 meters farther east the 112 foot "Cheltonia" shaft was sunk south of the zone but crosscutting did not go far enough to encounter the shearing. Grab samples from pits in the shaft area reported up to 13% copper.

In 1944, the "Lumsden" shaft was sunk on a red porophyry dike about 1.4 kilometer north west of the ECM claims . A pinkish quartz vein at the botton of the shaft assayed about .17 ounces per to across five feet. No reported follow up drilling or work. This is probably represents the west continuation of the Todora geology described previously. This would indicate about 1.2 kilometers of this zone would be present across claim L1239348.

PREVIOUS WORK

In 1919 Eby Township was included in mapping by H. C. Cooke of the Geological Survey of Canada while mapping the Kenogami, Round, and Larder Lakes areas.

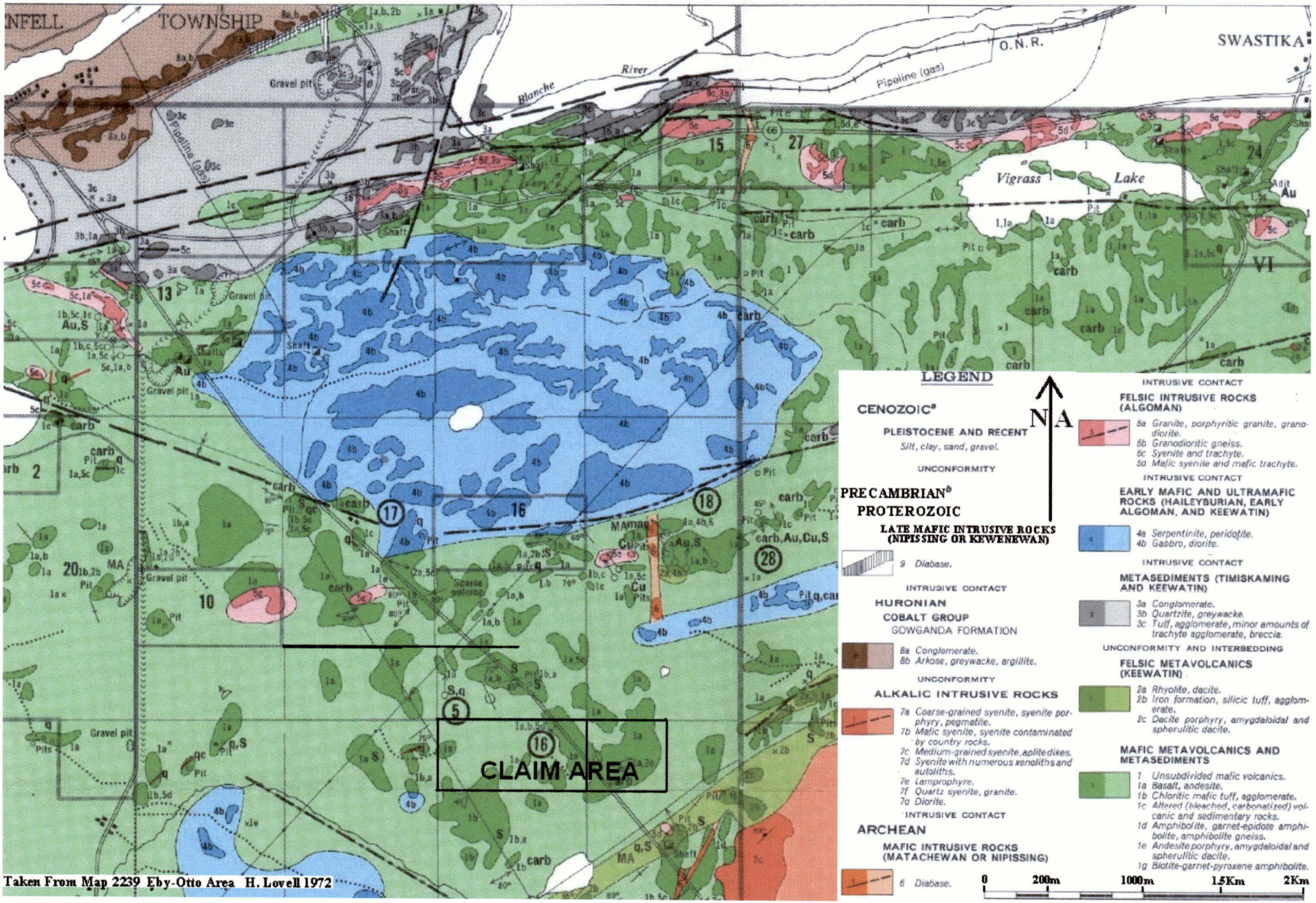

TOWNSHIP
SWASTIKA
O.N.R.
Blanche River
Pipeline (gas)
Gravel pit
Vigrass Lake
CLAIM AREA
Taken From Map 2239 Eby-Otto Area H. Lovell 1972
LEGEND
NA
CENOZOIC[a]
PLEISTOCENE AND RECENT
Silt, clay, sand, gravel.
UNCONFORMITY
PRECAMBRIAN[b]
PROTEROZOIC
LATE MAFIC INTRUSIVE ROCKS (NIPISSING OR KEWENEWAN)
9 Diabase.
INTRUSIVE CONTACT
HURONIAN
COBALT GROUP
GOWGANDA FORMATION
8a Conglomerate.
8b Arkose, greywacke, argillite.
UNCONFORMITY
ALKALIC INTRUSIVE ROCKS
7a Coarse-grained syenite, syenite porphyry, pegmatite.
7b Mafic syenite, syenite contaminated by country rocks.
7c Medium-grained syenite, aplite dikes.
7d Syenite with numerous xenoliths and autoliths.
7e Lamprophyre.
7f Quartz syenite, granite.
7g Diorite.
INTRUSIVE CONTACT
ARCHEAN
MAFIC INTRUSIVE ROCKS (MATACHEWAN OR NIPISSING)
6 Diabase.
INTRUSIVE CONTACT
FELSIC INTRUSIVE ROCKS (ALGOMAN)
5a Granite, porphyritic granite, granodiorite.
5b Granodioritic gneiss.
5c Syenite and trachyte.
5d Mafic syenite and mafic trachyte.
INTRUSIVE CONTACT
EARLY MAFIC AND ULTRAMAFIC ROCKS (HAILEYBURIAN, EARLY ALGOMAN, AND KEEWATIN)
4a Serpentinite, peridotite.
4b Gabbro, diorite.
INTRUSIVE CONTACT
METASEDIMENTS (TIMISKAMING AND KEEWATIN)
3a Conglomerate.
3b Quartzite, greywacke.
3c Tuff, agglomerate, minor amounts of trachyte agglomerate, breccia.
UNCONFORMITY AND INTERBEDDING
FELSIC METAVOLCANICS (KEEWATIN)
2a Rhyolite, dacite.
2b Iron formation, silicic tuff, agglomerate.
2c Dacite porphyry, amygdaloidal and spherulitic dacite.
MAFIC METAVOLCANICS AND METASEDIMENTS
1 Unsubdivided mafic volcanics.
1a Basalt, andesite.
1b Chloritic mafic tuff, agglomerate.
1c Altered (bleached, carbonatized) volcanic and sedimentary rocks.
1d Amphibolite, garnet-epidote amphibolite, amphibolite gneiss.
1e Andesite porphyry, amygdaloidal and spherulitic dacite.
1g Biotite-garnet-pyroxene amphibolite.
0 200m 1000m 1.5Km 2Km

Figure - 4

In 1935, W. S. Dyer of the Ontario Department of Mines mapped Eby Township as part of the Geology and ore deposits of the Matachewan-Kenogami area.

In 1967 Eby Township was mapped by H. L. Lovell of the Ontario Department of Mines. The report and colored geology map was released in 1972 as Geological Report 99.

In 2001, B. R. Berger, Geologist in the Precambrian Geological Section O.G.S., D. Guindon, District Geologist Kirkland Lake Region O. G. S. and G. Grabowski, District Geologis tKirkland Lake Region O. G. S. reported in ONTARIO GEOLOGICAL SURVEY Open File Report 6070 (Summary of Field Work and Other Activities 2001, Project Unit 10), that a Geological Reconnaissance along Highway 66, from Matachewan to Swastika had begun.The purpose of this multi-year project is to re-map andimprove the geological database. Berger reports that the Otto Stock, in Otto and Eby townships is characterized by nepheline-bearing syenite, quartz syenite and includes previously unrecognized mafic and ultramafic alkalic gabbro, hornblendite and lamprophyre phases. Also Berger states that in the southern part of the map area, calc-alkaline felsic intrusions (gneiss, tonalite, quartz monzonite and granodiorite) are found. The mafic and ultramafic phases of the alkalic intrusions are commonly enriched in platinum group elements (PGE) and the hornblendite, alkalic gabbro and lamprophyre of the Otto Stock are potential host rocks of this tyPe of mineralization.Sample 01-BRB-019 taken on an occurance of "hornblendite" on the highway rock cut about 500 meters south of L1239350 showed values at 169.8 ppb Au, 164.16 ppb Pd, 54.68 ppb pt and 6830 ppm Cu.

Undoubtably the area was looked at by many prospectors in the early part of the 1900's as the Boston Creek Area, the Swastika Area and then the Kirkland Lake Camp were being opened up and gold discoveries were drawing many to the area. As for submitted assessment work on file for the area, several work programs have been conducted on the claim area over the last half century century. Gold values in numerous areas are reported in rock grabs, pits and drill core in the Kirkland Lake resident Geologists assessment files. Early prospecting and mapping programs tended to follow along the belt of rocks along the Larder Cadillac Break to the north of the ECM claims

In around 1941, Erie Canadian Mines which was the exploration arm of Sylvanite Mines reported gold values across 2 to 4 feet in a 10 to 20 foot wide quartz veined schisted zone and a 5 foot wide zone on the central area of NE¼ of the N½ of Lot 2 Con. IV (This is now the east half of claim L3010051). No follow up work or drilling was reported.

Through the 1980's James Reed performed sampling, stripping and geophysics on the area of L3010051. No anomolous gold values were reported. No follow up drilling performed. (ref : KL 2349)

In 1988, Butte Canyon resources held both of the claims of the ECM claims area as part of a larger holding. . J. R. Lawton and I. D. Trinder completed geological mapping,lithogeochemical sampling program, Mag, VLF and horizontal loop electromagnetic surveys on 31 claims (in lots 1, 2 and 3 Con III, Con IV and Con V in Eby Township) The HLE Survey indicates several parallel conductive trends having very high conductivity characteristics, suggesting cross-faulting.The highest gold value returned was 81 ppb Au Platinum-palladium analytical results are quite interesting and indicate a couple of anomalous zones. Five samples from three separate areas gave values of 250ppb and 145 ppb from Zone 1, 225 ppb from Zone 2, and 387 ppb and 390 ppb from Zone 3. No drilling follow up work on these areas has been reported. (ref : KL 309)

In 1992, Nick Rigas worked part of an OPAP grant on a group of 5 claims of which the area of 3010057 of the ECM claims was included. Limited samples were taken from a cherty horizon which has been injected with several narrow quartz stringers and containing an appreciable amount of pyrite but showed very low values. (ref : KL 3454)

In 1994-96, Doug Robinson and conducted linecutting, magnetometer, max-min surveys, geological mapping, hand stripping, and sampling on the area of L3010051 of the ECM claims as part of a program on a larger claim group. The program defined an east- west zone of carbonate alteration. Reported gold values were low. Numerous drill targets were defined by the program but no drill program was conducted. (ref : KL 3773)

From 2002 to 2005, the author of this report prospected performed some minor hand stripping and sampled areas of the ECM claims block as part of a larger claim group.. Gold values were generally low.

In 1957, a report by George H. Salton summarized work done from 1955 to 57 by a Finnish group holding the claims of Lot 1 Con 3, headed up by a Mr Ahola. Two pits had been sunk to depths of 22 and 25 feet on the same rock structore about 200 feet apart and one of the workings was 18 feet long.The main showing on which these two shafts were put down, consists of a 15 to 20 foot wide band of quartz filled and pyritized tuffs. The owners reported gold sampling up to $7.00/ton (at $34.95/oz). The only sample taken by Salton gave .01 oz/ton.These workings tie on and are on the south side of the swamp, south of L1239350 of the ECM claims, on the SW1/4 of the N1/2 of Lot 1, Con 3

In 2003-04, Serge Nadeau, under hire to GLR Resources, conducted soil and tree geochemical sampling on the claim L1167172 (Lot 1 Con 4 W1/2 of the N1/2) contiguous to the east side of L1239350 of the ECM claims. The south half of L1167172 claim covers the area of the "Ahola " shafts. This sampling was done along two 800 meter north-south lines coinciding with the claim lines of L1167172.The west line of sampling, designated Line -400, was along the east claim line of L1239350 for 400M. from station 400N to 800N.

"*On line -400 between stations 400N and 65 ON both soil and tree samples present elevated values in Au, Ag, As, Mo, Se and Zn. This grouping of elements is typical of gold mineralization elsewhere in the Kirkland Lake Mining Camp. Background values for Au in trees by INAA are generally 5 ppb Au or lower thus values reaching 200 to 300 ppb Au range are statistically considered anomalous. Tree samples with similar Au contents in the 200-350 ppb range were reported in trees collected over Au deposits (see case studies in Nadeau, 2003).*"and further "*On line O between stations 650N and 750N similar variations in Au, Ag, As, Mo,Se and of Zn, Cu and Pb are seen although with much smaller enrichments than at line -400. This grouping of elements may be reflecting the extension to the East of the signature of gold mineralization? from line -400 or may be characterizing a different style of mineralization.*"

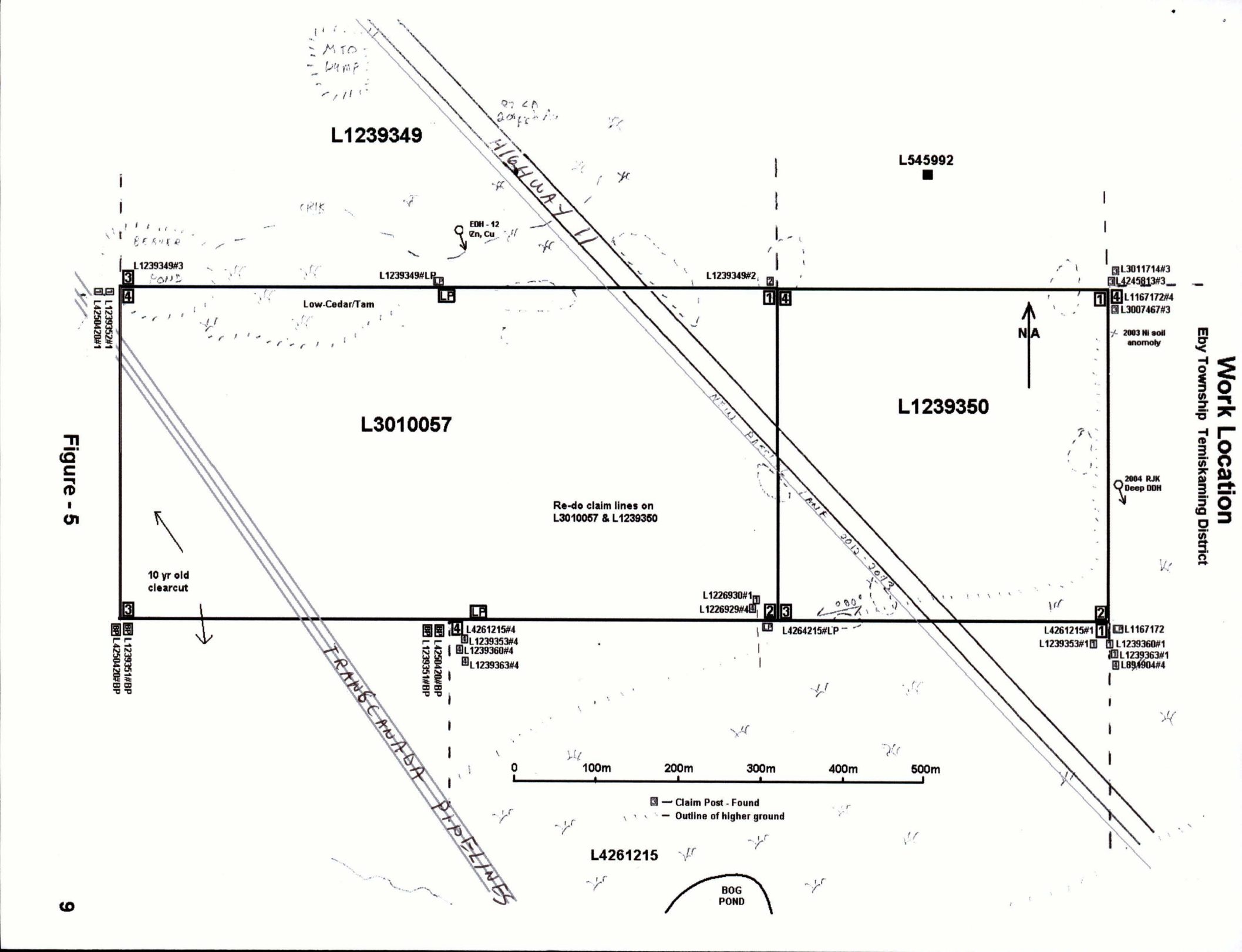
Later drilling by GLR resources, east of line-400 did not encounter the possible source of the anomoly. As the overburden was deeper than anticipated and the drill hole was collared slightly south of the anomoly, the hole may have overshot the target. Furthermore, the above mentioned anomoly was not the primary target of the hole. Heavy shearing at the bedrock of this hole is likely north-south as indicated by topography in the immediate area may offset the source of the anomoly if one does indeed exist. So all in all, the anomoly remains unexplained.

PRESENT WORK

During the late fall of 2012, 2.8 kilometers of claim line we redone as well as some minor mapping of the various previous claim markings on the boundaries of L3010057 and L1239350. As most archived assessment work is mapped in relation to the position of the claim corner posts, this info may be useful for locating purposes.

RESULTS/CONCLUSIONS

All the claim posts for the redone claim lines were found and ribboned for visibility.



Work Location

Eby Township Temiskaming District

Figure - 5

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Ministry of Northern Developement and Mines
:Resident Geologist Files, literally hundreds of files of submitted assesment work files covering many claim areas in Bernhardt Township, Eby Township, Grenfell Township, Gauthier Township, Lebel Township, Morrisette Township, Otto Township, Teck Township,