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A REPORT ON THE
EBY TOWNSHIP GOLD PROPERTY
LARDER LAKE MINING DIVISION
OF
MARY ELLEN RESOURCES

RECEIVED
1985
MINING LANDS SECTION

Kenogami, Ontario

November, 1985

S.J. Carmichael, B. Sc.

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Summary

The Mary Ellen Resources Ltd. (Kenogami, Ontario) Eby Township claim group comprising 58 contiguous, unsurveyed mining claims and 25 patented mining claims located in north-west Eby Township, District of Timiskaming, was worked on by the author and assistants from May 1985 to September 1985. The work consisted of a ground magnetometer, V.L.F., geological, selected humus geochemistry and surface stripping. An I.P. survey is being carried on the property at this time and an initial diamond drilling program is expected to begin in November of this year.

The property is underlain by volcanic and sedimentary rock, predominatley of Archean age. A small wedge of Proterozoic Huronian sediments occur to the northwest. The volcanic and sedimentary rocks are from both the Kinojevis and Larder Lake Groups and trend north-west to north north-west dipping steeply south.

The Kirkland-Larder Lake Break is postulated to pass through the north-west section of the property where it is obscurred by Pleistocene deposits. Volcanic and sedimentary rocks of the Larder Lake Group occur over the east and north-east section of the property and appear to bave been deposited on a shelf-type environment and within a local paleobasin. Late stage felsic intrusives have locally remobilized gold out of the sediments

into quartz veins and may indicate a syenite body at depth on the north-east section of the property.

Limited previous work done in the past, and at low gold prices ($35.00 oz/ton) makes the property a very attractive exploration target with potential to host gold mineralization of both epigenitic and syngentic origins. An I.P. survey being carried out at the time of this report may provide interesting drill targets, to the east and north east section of the property. The entire property should be brought to lease as soon as possible so that should funding become available, an extensive drill program to test the Kirkland-Larder Lake Break on the west part of the property may be undertaken.

A Report on the Eby Township Property

Of

Mary Ellen Resources Ltd.

Introduction

The Mary Ellen Resources Ltd. claim group located in Eby Township, District of Timiskaming, was worked on by the author and assistants from May 1985 to September 1985. The work consisted of ground magnetometer, V.L.F., geological and selected humus geochemical surveys. The geological survey was carried out at a scale of 1:1,250 metric with selected detailed work at a scale of 1:1250 metric. The V.L.F. survey was carried out at a scale of 1:5000 metric, the magnetometer survey carried out at a scale of 1:5,000, second derivative vertical magnetometer at a scale of 1:2500 metric and selected sections at a scale of 1:1250. The humus geochemical survey (pine needles) was carried out over the east section of the property and the results contoured at a scale of 1:1250. Three areas were stripped by bulldozer and washed with high pressure hoses. All work was carried out on lines spaced at 100 meters and detailed work on lines spaced at 50 meters. All lines were picketed at 25 meters with the baseline running east-west, cross lines north-south.

The property consists of 58 unpatented, unsurveyed mining claims and 25 patented mining claims with a total of 3,480 acres.

The purpose of this report is to summerise all exploration work done to date on the property and provide recommendations for future work to be done on the property.

Property Location, Access and Facilities

The Mary Ellen Resources Ltd. claim block is located in north-west Eby Township, concessions 4 and 5, lots 5-11, District of Timiskaming, Ontario. (National Topograpic System reference 42 A/SE). The property is located approximately 16 km west of the town of Kirkland Lake and may be reached via Highway 66 which passes through the east border of the property. A gravel road (the West Road) follows the concession 3/4 border providing access to the southern portion of the property. A logging road suitable for 2-wheel drive vechicles extends north of the West Road a distance of one kilometer providing access to this high outcrop density area. A gravel road (Boland Rd.) extends west from highway 66 south of Kenogami Lake as far as the buffalo farm. (P 18357, 18402, 9489) From this point a trail which follows the concession 5/6 border extends west to Burt Township and may be travelled by all terrain cycles. Kenogami Lake is located on the north section of the property and the Crooked Creek passes through the south-west section of the property providing easy access to water for diamond drilling. An esker trending north-south along Highway 66 would provide a supply of gravel for road building should the need arise. There are no facilities capable of supporting a mining operation on the property at this time,

however facilities are present in the town of Kirkland Lake to support such an operation.

Land Tenure and Ownership

The Mary Ellen Resources Ltd. Eby Township property comprises 58 contiguous unsurveyed mining claims and 25 patented mining claims with an area of approximately 3,480 acres. The claims are recorded in the Larder Lake Mining Division, are held by Mary Ellen Resources Ltd. and are prefixed with the letter "L".

L-618673 - 628678 inclusive	6 claims
L-620743 - 620748 "	6 claims
L-620750 - 620757 "	8 claims
L-640893 - 640906 "	14 claims
L-640908	1 claim
L-640938 - 640955 inclusive	15 claims
L-640960 - 640966 "	7 claims
L-760582	1 claim
	58 claims

In addition to the unsurveyed mining caims, the company also holds 25 optioned patented mining claims with the following numbers.

18402,18357,9489	3 claims(buffalo farm)
18837,18227,8803,8950,12174,12175	6 claims(Rogick,Elliot,Clark)
17402,17403,17404,19129,16740,9846 9848,17715,16750,16749,16767,16748, 16751	13 claims(C.Walters)
9851,16769,1835	3 claims(independant)
	25 claims

To date, 60 days work have been recorded on the unsurveyed claims which are under extension untill the 31st of October, 1985. The 60 days credited were the result of an airborne survey completed

in January of 1982. The combination of geological and geophysical surveys will leave the claims in good standing until January of 1986 with a comptemplated drill program which would bring the property to lease.

Surface Topograghy, Overburden and Foliation

The property is overlain for the most part by clay with the resulting foliage being for the most muskeg and spruce swamp. High outcrop density occurs to the east and to the south central portion of the property. The maximum relief on the property is generally less than 30 meters. A north-south trending esker traverses the east boundary of the property. The extreme north boundary of the property is overlain by boulders and till and may represent an ancient shorline of Lake Kenogami or drumlin material. A large swamp occupies the north east section of the property and was probably formed as a result of the South Bay Fault, a major east-west striking structure. Most of the north half of the property has been logged over in the past and logging operations are presently being carried out on the south-central portion of the property. There is little evidence that the property has been burned over in the past.

Background History

For a more in depth review of the history of the Kirkland Lake Mining camp, the reader is refered to O.D.M. Annual Report 57, Vol. LVII, Part V, 1948 by Jas. E. Thomson.

Following the discovery of silver at Cobalt in 1903, and during the boom days of Cobalt in 1906, the year of the gold rush into Larder Lake, many claims were staked around Swastika and north easterly towards Kirkland Lake. Following early prospecting, most of the claims were allowed to lapse. However, the Swastika property continued to be worked and by 1911 had produced some gold. During the same year, encouraging discoveries together with the success being obtained at Porcupine led to renewed interest in the older area.

The first discovery in the Kirkland Lake area was by H.W. Wright in 1911 and later led to the Wright-Hargreaves Mine. The following year gold was discovered in the Tough Oaks property. Shipment of high grade gold ore from that property led to the discovery of gold on the Burnside, Sylvanite, Wright-Hargreaves, Lake Shore, Orr, Kirkland Lake and Hunton.

During the following years, several mines were brought into production and by the early 1920's, Kirkland Lake was a fully integrated gold producing camp with all facilities. It was then recognized that a major east-west trending structure was present as far east as Malartic Quebec, passing through the Larder Lake area and as far west as Matachewan. In Ontario, this structure is called the Kirkland-Larder Lake Break and the Cadillac-Bouzan Break in Quebec. Many gold mines are situated along this structure, including the Kerr Addison, Omega, Upper Canada and Matachewan Consolidated deposits. A section of this structure

passes through the north east and north west section of the property, where it is buried under Pleistocene deposits.

The first government work done in Eby Township was by H.C. Cook (map No. 1926, report in Memoir 131, Geological Survey of Canada,1926). Followed by W.S. Dyer (map No. 44b report Vol. XLIV, Part 2, O.D.M. Annual Report, 1935), Jas. E. Thompson (map No. 1946-1, report in O.D.M. Vol. 57, part 5, 1950) and H.L. Lovell (map No. 2239, report No. 99, O.D.M., 1968). Additional mapping was completed by O.G.S. geologist L. Jensen (no map published at this time). A reverse circulation drilling program including three holes on the Eby Township property was completed in 1980 and 1981(K.L.I.P. open file report 5356 and open file reprot 5506, parts 1 and 2). An airborne E.M. and magnetometer survey was flown by the Ontario Geological Survey in 1979, completing the government work on the property.

Previous Work Done on the Eby Township Property

Considering the location of property, with the Kirkland-Larder Lake Break passing through the property, very little assesment work has been recorded on the property. This is no doubt due to the amount of overburden which has obscured the bedrock, particullarly along the break.

Despite the lack of bedrock exposure, early prospectors realized the potential of the property as there are numerous trenches, pits and shafts not refered to in any reports. The early prospectors must have realized that the Kirkland-Larder Lake Break passed

through the property as the shafts located on line 33+00W are very close to the interpreted postion of the break. Tree growth on the glacial till dump (no outcrop is exposed) indicates an age of least 30 years. This lack of exposure has generally discouraged systematic exploration of the property with the exception of three small claim groups held by junior companies.

The earliest known recorded work on the property was that of Erie Canadian Mines Ltd., a subidiary of Sylvanite Gold Mines Ltd. Erie optioned and prospected the Charles Walters group of claims in 1935. In 1939, D.M. Hogarth and associates optioned the property and completed two bulk samples. According to T.L. Wells, engineer in charge of development, bulk samples from the No. 1 trench at the east end of the carbonate body on claim 17404 gave returns of 2.74 oz and 0.06 oz Au/ton from narrow quartz stringers containing finely divided visible gold.(the volume of samples is not mentioned, but the size of the trenches would be estimated at least 100 tons) A drill hole under the trench failed to reveal interesting values, some of the other holes gave low values(gold at $35/oz). A quartz vein on claim No. 17403 carrying iron sulfides and molybdenite gave a return of 0.17 oz/ton Au. (circa 1935).

During the winter of 1938-39, Pioneer Gold Mines drilled six holes on claim 18227 (part of the Rogick-Elliot-Clark group). The drilling was done in an attempt to pick up a gold bearing vein which had been indicated by the presence of numerous float

samples. Apparently no results of consequence were obtained from this work. During the spring of 1939 (same claim), a green carbonate zone intruded by quartz-feldspar dikes was uncovered and visible gold was found at three locations on the dike, which is exposed a length of 10 meters and is 1 meter wide. Sylvanite Gold Mines optioned the claim and mapped them in detail. Beaucoeur Mines obtained an option and drilled at least nine holes. The highest grade intersections were in two of three holes drilled from one set, 0.64 oz/ton Au over 2 feet and 0.7 oz/ton Au over 10 feet. The casing from these holes is still preserved on the stripped green carbonate outcrop. In 1944, Siscoe Gold Mines obtained an option on the property and drilled four holes totalling 1,878 feet, 2 holes of which were on claim No. 18227 and returned low gold values, however the holes were drilled along strike and did not intersect the carbonate body, which strikes roughly north-south.

In 1945, Sylvanite Gold Mines held a group of claims in concession V, lot 7, (present claims L-821785, 640905, 618675, 618676, 618677, 618674) and completed 1,360 feet of diamond drilling. The drilling disclosed little gold, the best value being 0.02 oz/ton Au over 1.3 feet. The drilling appears to be in carbonatized volcanics and numerous pits with carbonate alterated volcanics were found by the author in the drilled area during the course of geological mapping. Sylvanite also reported an assay value of 0.18 oz/ton Au in a green carbonate grab sample (float)

from a pit located at the north west corner of claim P-18402.

Subsequent trenching over the supposed location of this pit by Mary Ellen Resources failed to reveal carbonate bedrock, but is the opinion of this author that the carbonate body may lie within 100 meters to the west, and is an extension of the carbonate body striking 040 degrees from the south shore of Kenogami Lake.

The last recorded work done on the property was that by the Dominion Gulf Company (circa. 1952) who held two claim groups, one five claim group, present claim numbers L-618673, 618674, 618675, 640905 and 616277. The second group consisted of eight claims, present numbers L-640903, 640901, 640900, 640904, 640966 640902, 640899 and 640898. Two holes were diamond drilled, one on present claim 640904 which intersected the presumed location of the Kirkland-Larder Lake Break, the other on claim 640894 which appears to have been drilled for assessment work only. The first drill hole intersected the contact zone between the Timiskaming Series and volcanics which in the opinion of the author is the Kirkland-Larder Lake Break.

As stated previously, numerous pits, shafts and trenches were found by the author during the course of geological mapping, 90% of which are over quartz veins and stringers in basalt, which carry at best trace values of gold.

Regional Geology

For a more detailed description, the reader is referred to any one of a number of government reports on the Atitibi Greenstone Belt. The following is a brief review of the regional geology as it pertains to the Mary Ellen Resources Ltd. property.

The Eby Township property is underlain by meta volcanic and meta sedimentary rock of both Archean and Proterozoic ages. The Archean rocks form part of the south limb of the east-west trending Abitibi Greenstone Belt. In general, the Abitibi Belt consist of at least two and probably three or more supergroups of volcanic and sedimentary rock. Each supergroup comprises a lower ultramafic suite of rocks, overlain in succession by a tholeiitic, calcalkalic and ultimately alkali rock types. In the Kirkland Lake area, the lower supergroup consists of a basal komatiitic volcanic suite called the Wabewawa Group overlain by tholeiitic rocks of the Catherine Group and calcalkaline rocks of the Skead Group. This supergroup formed part of a basin which extended north from what is now the Round Lake Batholith, a trondjemite body formed at the core of the Lower Supergroup. No rocks of this group are found on the Eby Township property, but probably exist at depth.

The second, on Upper Supergroup formed after the Lower Supergroup ceased activity and was probably formed to the north, and flooded south, or within the seaward margins of the older shelf. The base of the second, on Upper Supergroup consists of basal komatiitic succession referred to as the Larder Lake Group, which

forms the north-east quarter of the property. This sequence of ultramafic flows flooded the ancient shelf extending from the Round Lake Batholith, depressing the underlying strata, forming local basin like structures on the shelf extending from the older, more mature volcanic pile (Lower Supergroup) north, where it is cut off by the Kirkland-Larder Lake Break. The break probably marks a change from shelf to a deeper marine environment, much like the east coast of North America. Upon this shelf were deposited ultramafic volcanics, clastic and chemical sediments including cherts, iron formation, carbonate sediments, wackes, argillites and conglomerates. It is within the carbonate sediments that many gold deposits in the area are situated, including the Kerr Addison and Omega deposits of the Larder Lake Area.

The Larder Lake Group is in turn overlain by a thick succession of tholeiitic volcanics, referred to as the Kinojevis Group. During extrusion of these volcanics (north of the Kirkland Larder Lake Break), the deep basin side of the syncline was subsiding due to the weight of the overlying flows, such that generally, the Kinojevis Group are not found south of the break, which acted as a barrier and ponded the flows. However, in Eby Township, the Kinojevis Group appears to have had sufficient volume to flood over the 'break', and flow across the shelf from the north west. Ultimately, the volcanic highlands to the south impeded the tholeiitic flows such that they began to flow north eastward over the Larder Lake Group volcanics. The flow channel

may have orginated in a back basin type structure, now marked by a syncline on the south portion of the Eby Township property. The flows did not have enough volume to totally cover the underlying Larder Lake Group, thus a wedge of this group is still preserved on the north east section of the property. Evidence for this will be discussed later in this report.

The Kinojevis Group is inturn overlain by a calcalkaline suite of volcanics called the Blake River Group, however, these rock types are found to the north east and are not present on the Eby Township property.

The Upper Supergroup is topped by a series of clastic sediments and alkali volcanics called the Timiskaming Series. They are unconformably in faulted contact with the Kinojevis and Larder Lake Group volcanics. It is thought that the faulted contact between the two groups is represented by the Kirkland-Larder Lake Break and that the Timiskaming Series was deposited in grabben-like structures caused by an an inward collapse of the synclinorium to the north.

The entire structure was then intruded by syenite plugs and dikes, localized along deep-seated fractures. Associated with the syenitic intrusives are lamprophyre dikes. The final intrusive activity on the property is limited to diabase dikes.

Proterozoic glaciation deposited sediments of the Huronian Group, a small portion of which is preserved on the extreme north-west portion of the property.

Present Work

The Mary Ellen Resources Eby Township property was staked in January of 1982 and an airborne E.M. and magnetometer survey was completed in February, 1983. The results of the airborne survey verified the occurance of the Kirkland Larder Lake Break, and an initial reconnaissance geological survey by the author in the fall of 1983 indicated the occurance of interflow carbonate sediments and iron formation similar to gold bearing strata in the Larder Lake area. The lack of previous detailed exploration work in the past, in conjunction with anomalous gold values on the property makes the Eby Township property a good exploration target. Following the reccomendations of the companies consulting geologist, Guy Hinse, a program of detailed geological, ground magnetometer, V.L.F., selected geochemistry and surface stripping and washing was undertaken. A total of 73.29 miles of line were cut and chained at 100 meter intervals, picketed every 25 meters. Additional line cutting at 50 meter intervals over the patented ground was completed to facilitate more detailed work. An additional 35 miles of line were rechained from an old grid cut in 1983 at 200 meter spacing used during the reconaissance geological survey. Unfortunantly, the base line used for this old grid was turned off 3 degrees south of west, causing line convergence between the old grid and the new grid. This error was corrected for after four lines had been cut to the south.

The old baseline was used as a tie line, as was the West road which runs along the concession 3/4 line.

1. Humus Geochemical Survey

A surface geochemistry survey was conducted over fourteen claims on the east and north-east section of the property. The top two inches of humus were collected, the medium being pine needles from trees at least 10 years old and not greater than 20 years. The samples were analized at X-Ray Assay Laboratories of Don Mills Ontario for gold. A total of 676 samples were taken at 50 meter intervals on lines spaced at 50 meters. The detection limit was 1 ppb Au with an average background value of 2 ppb Au over the survey area. The results were then contoured and a number of anomalies were located, most of which were single-line, single station indicating that sub-surface ground water played a role in concentrating the gold.

The highest value was that of 94 ppb Au located on line 4+00W, 4+00S and is a single line anomaly. This station is located on an outcrop of high iron tholeiitic basalt and there does not appear to be an auriferous source for this anomaly.
A similar but weaker anomaly occurs on line 4+50W, 2+00S (13ppb) and also occurs within high iron tholeiites. A weaker anomaly (9 ppb) occurs on line 3+500W, 1+50S within volcanics, however the close proximity of iron formation to this anomaly may indicate that the gold concentration may have come from the iron formation.

The lack of overburden over these anomalies may have allowed easier concentration of gold into pine needles from the low background values of gold within the volcanics.

An anomaly of 12 ppb occurs on line 7+50W, 3+00N within a topographic low occupied by alders. If this anomaly was continues on adjacent lines,it may be an attractive drill target as it lies within a zone at possible sediments. The lack of continuity and location at this anomaly would indicate that concentration may have been due to ground water circulation.

The most interesting anomaly occurs on line 0+00 and 0+50E with values as high as 43 ppb. This amomaly exhibits some continuity, trending north south and is located over a possible carbonate horizon. The overburden at this location is sand, depth unknown and may be a continuation of an esker located 500 meters to the south, trending north south. The location of this anomaly, and it may be noted that no anomalous values occur to the south over similar overburden conditions, may represent an auriferous bedrock source and should be considered as a possible drill target. This anomalous zone may be traced as far north as 9+50N, L0+00 where a value of 18 ppb was obtained. Single-line anomalies may be found on line 12+00W, 6+00N (29 ppb) and 10+00W,5+75N (11 ppb). Investigation of these anomalies show deposits of glacial till at the base of slopes and may represent local ground water concentration.

2. Magnetometer Survey

The magnetometer survey was carried out on lines spaced at 100 meters with additional detailed work on lines spaced at 50 meters. Stations were read at 25 meter intervals with shorter intervals used over areas of extreme magnetic changes. A geometrics G-826 precision proton magnetometer was used with an accuracy of plus or minus 5 gammas. A base station was read on each line and diurnal fluctuations were corrected for which never varied more than plus or minus 100 gammas during the course of the survey.

The results were contoured at a 50 gamma interval and plotted at a scale of 1:5000 metric with additonal detailed plotting at a scale of 1:1250 over the patented claims to the east. Second vertical derivative color contoured sheets were made at a scale of 1:2500 (to correspond with the geological map) and at a scale of 1:1250 (detailed) over the east section of the property.

Two main magnetic features are indicated by the survey. The first is to the north west where broad magnetic low striking north east marks the Timiskaming Series sediments, the south contact of which is probably the Kirkland-Larder Lake Break.

The second area of interest is to the north east where a high magenetic zone trending north-west is flanked to the north by relative magnetic lows and may represent a sedimentary horizon. The high magnetics may be correlated with iron formation located

during the geological survey. The second derivative vertical magnetic plot, which filters out magnetic noise, indicates two or three parallel zones of iron formation striking north west bounded by sharp magnetic lows. The lows may be over enhancement by the computer or may reflect high fluctuations in the magnetics due to the iron formation, thus it is not clear whether the lows represent volcanic flows or sediments. The iron formation indicates the presence of shelf type sediments along with carbonate to the north on claim 17404, however komatiitic volcanics also occur with the carbonates and their low magnetic character does not allow differentiation of the two rock types. To the north on patented claim 18227, a general magnetic low trending north-south reflects the strike of carbonate body at that location and quartz-syenite dikes. The low may be caused by interflow sediments, low magnetic volcanics or a syenite plug which has produced numerouus dikes on this claim. To the west of this low, a wedge like magnetic high may represent high iron tholeiitic flows.

3. V.L.F. Survey

A ground V.L.F. survey was completed over the property using a Phoenix V.L.F.-2 instrument. Readings were taken at 25 meter intervals utilizing the Cutler Maine transmitting station with a frequency of 24.0 KHz. Due to variations in the strike of the geology, the orientation of the transmitter was not idealy suited

for the survey. The results of the survey were Fraser filtered and plotted at a scale of 1:5,000 metric.

Numerous conductors are shown on the Fraser filtered map, however, the majority of these are weak, discontinuous and are associated with low field strengths indicating that they may be overburden responses. The majority of the anomalies occur over the bedrock - overburden interface. There are three conductors supported by relatively high field strengths which may represent true conductors. The first conductor is located on the north-east section of the property, shows fair continuity is supported by a south flanking magnetic low. The conductor trends east-west and is folded to the south, which may represent a fault. The conductor quickly weakens to the west but continues to the east at a much weaker field strength. The proximity of this conductor to the magnetic low is interesting and may lie within a possible sedimentary unit. This conductor should be verified by either a horizontal loop or I.P. geophysical surveys.

A second weaker conductor striking roughly 110 degrees closely approximates the position of the South Bay Fault and is probably due to ground water within the shear zone. The shear zone was intersected by diamond drilling in 1938 (D.M. Hogarth et.al) and was refered to as a zone of talc-chlorite schist.

A third conductor of interest occurs on lines 14+00W, 15+00W, 16+00W, 17+00W, 18+00W and 19+00S between 5+50N and 6+50N. The conductor has moderate field strength and may be a true bedrock

conductor. The axis of the conductor also follows the steel fence marking the north boundary of the buffalo farm and the conductor may be due to the fence. In support of a bedrock conductor, the occurance of the shaft, magnetic low and apparent offset by a fault would support a bedrock conductor. A horizontal loop or I.P. survey would verify if it is a true bedrock conductor.

4. The Kirkland Lake Initiative Program (K.L.I.P.)

In the summer of 1980 and the winter of 1981, the Ministry of Natural Resources conducted a program of reverse circulation drilling in the Kirkland Lake area to provide geoscientific data for use in mineral exploration.

A total of 78 holes tested the basal till horizon during the program. Three holes (80-24,81-01,18-03) were drilled on the Mary Ellen Resources property, 18-01 and 81-03 on the north border, 80-24 on the south concession road. The results were very encouraging as hole # 8-24 to the south returned values of 1,000 ppb with some gold flakes on the -1.600 +0.1 mm non-magnetic heavy mineral fraction. Associated with the gold value was an arsenic value of 140 ppm. To the north, hole # 81-01 (along Boland Rd.) along with hole #81-03 returned only trace gold values in the till. The reason for this anomaly was given as follows; "Gold-quartz-sulfide mineraliztion may be distributed along the break N.N.W. of Hole 8-24. The mineral assemblages in Holes 80-24

and 80-25 are regarded as significant and further investigations are warranted in the area south of Kenogami Lake to trace the origin of the indicator minerals." (Routledge,1981,pp 87.88) The indicator minerals in Hole 80-24 include limonitized pyrite, trace chalcopyrite, pyrite with quartz, massive pyrite and hematite. In summation, Routledge added "Since Holes 81-1, 81-2, and 81-3 are largely barren, the source area is interpreted to lie between these holes and the 1980 holes the south."

5. Geological Survey

Geological mapping was carried out at a scale of 1:2,500 metric over the entire grid with additional detailed work over the east section of the property at a scale of 1:1250 with the grid lines spaced at 50 meters. Outcropping on the property is sporadic at best with two areas of high outcrop density; to the north east and south central. Maximum relief is less than 30 meters and most outcrops had to be stripped of moss. Numerous pits and trenches aided in the surface mapping. Rock types on the property are all of Pre Cambrian age, metamorphosed to sub-greenschist facies with original volcanic and sedimentary textures preserved. The majority of the rock types are Archean in age, with a small embayment of Huronian Cobalt Series argillites of Proterozoic age. The oldest exposed rocks are those of the Larder Lake Group which form the base of the Upper Supergroup of the Abitibi Belt. These are in turn overlain conformably by the Kinojevis Group and unconformably by

the Timiskaming Series. Intrusives on the property include quartz syenite, mafic syenite, lamprophyre, diabase and gabbroic dikes. The gabbroic dikes (one of which was found on the property) may in fact be a spinafex textured komatiitic flow. The lithologies from youngest to oldest are as follows:

Cenozoic	Pleistocene and Recent Deposits	
	unconformity	
Proterozoic	Huronian Group. Cobalt Series Sediments	
	unconformity	
Archean	Intrusive Contact	diabase gabbro ? mafic syenite quartz syenite lamprophyre
	unconformity	
	Timiskaming Series Sediments and Alkali Volcanics	
	uncomformity	
	Kinojevis Group Fe-rich Tholeiites and Interflow Sediments	
	Kinojevis Group Mg-rich Tholeiites and Interflow Sediments	
	Larder Lake Group Komatiites, Tholeiites and Interflow Sediments	

5(a) Proterozoic — Huronian Group, Cobalt Series

Two small isolated outcrops of Cobalt Series sediments are exposed on the extreme west border of the property (L 56+00W,57+

00W, 1+75S) and are relatively flat lying argillaceous units, light grey in color, finely bedded and probably represent paleo-glacial lacustrine deposits. The strike of the formations is 010 degrees with a dip of 10 degrees west, precluding the possibility that these are part of the Timiskaming Series. It is not clear if the outcrops are isolated embayments or part of the main Huronian outcropping to the west in Burt Township. The magnetic data would indicate that these two outcrops are probably part of the main group to the west.

5(b) Archean Timiskaming Series Sediments and Volcanics

Three outcrops of Timiskaming sediments were found on the property. The first is on line 53+00W on the baseline where the rock is typical Timiskaming conglomerate exhibiting characteristic jasper pebbles. The matrix is fine grained wacke-type material with a mixed variety of pebble to cobble size fragments. To the north along lines 47+00W, 48+00W, north concession trail, the Timiskaming contains more trachytic tuff with less conglomerate. Both the pebbles and tuffaceous fragments are deformed and stretched in a north north-east direction. Bedding appears to strike 020 degrees with vertical to sub-vertical dips. No tops indicators were made with any reliability.

The south contact of the Timiskaming is unconformably in faulted contact with both Kinojevis and Larder Lake Group volcanics which probably represents the Kirkland-Larder Lake Break. Though not exposed on surface, this contact was found by

the Dominion-Gulf D.D.H. 114-55-1 (circa. 1955), present line 47+50W, 0+75S in which the contact is refered to as a shear zone, 32' in width in which both the Timiskaming and volcanics have undergone brecciation and alteration. No assay values or indication that samples were taken are given in the logs.
The last exposure of Timiskaming occurs at the extreme north east corner of patented claim No. 18227 where it is highly sheared. The contact between the Timiskaming sediments and volcanics at this location probably represents a south branch of the 'Break' as ultramafic sediments of the Larder Lake group are exposed along Highway 11, 50 meters north of the property.

Kinojevis Group Volcanics and Interflow Sediments
High iron tholeiites underlie 80% of the property and probably represent tholeiitic flows of the Kinojevis Group.(L. Jensen, per. comm.)

Normally Kinojevis Group volcancis are absent south of the Larder Lake Break, however Larder Lake Group volcanics are generally void of iron tholeiites, thus the high volume of iron tholeiites on the property do not belong to the Larder Lake Group. There are two possibilities, the first is that the tholeiites belong to the Catherine Group tholeiites, part of the Lower Supergroup which would underlie the Larder Lake Group. The second possibility is that the volcanics belong to the Kinojevis Group. Flow incorperated carbonate (ie. L 15+00W, 0+50N), and fault derived carbonate (ie. L 21+00W, 0+50N)

would indicate that magnetic iron tholeiites flooded over the Larder Lake Group carbonate sediments, remobilizing the carbonate by flow incorperation, shearing of flow incorperated volcanics, or shearing through an underlying carbonate sediment, which has carbonatized the overlying flows. Mapping by O.G.S geologist L. Jensen supports this theory as he has been able to trace the flows to the north west indicating that there was sufficient volume to flow over the break and flow over the property from the south west. The volcanic highlands to the south, now represented by the Round Lake Batholith may have ponded the flows, forcing them to flow in a north-eastward direction. The contact, which may be a conformable one, is is interpreted to strike in a north-westerly direction from line 0+00E, 4+00S. The contact is based on the fact that iron formation absent from the Kinojevis Group, and such a high volume of iron is absent from the Larder Lake Group.

Volcanic flows of the Kinojevis Group consist for the most part dense black to dark green iron-rich tholeiites with lesser amounts of lighter green colored magnesium rich tholeiites. The The strike of flows is generally 120 degrees, dipping steeply south. A more north-westly strike, up to 160-170 degrees occurs as one moves towards the Kirkland-Larder Lake Break. Perhaps the Break may have undergone movement during later stages, resulting in a regional drag folding. The change in strike of the volcanics is very abrupt close to the break.

The flows are for the most part massive, exhibiting fine grained diabasic to coarse grained gabbroic textures. Often the flows are magnetic, caused by magnetite and trace amounts of pyrrhotite. Zones of flow top breccia are not uncommon, however pillow structures are rare and usually not well developed. Lack of exposure did not permit individual flows to measured, however it is estimated that they may be up to several hundred feet in thickness. The flows were deposited in a marine environment which appears to have deepened from south to north. Vesicles in pillowed flows to the south are generally larger(up to baseball size), than vesicles to the north. This change is best shown over the high outcrop exposure to the south.(ie L - 22+00W, 17+00S to 14+00S) Smaller vesicles are often filled with calcite.

Interflow units are rare, where exposed, they range from cherts to tuffs. These rock types are best exposed on line 23+00W, 17+50S, where a narrow chert horizon is overlain by a tuffaceous unit which exhibits excellent graded bedding. This unit thickens to the north-west where it achieves a maximum thickness of 100 meters and varies from a fine ash up to lapilli size fragments. Many of the fragments are silicious and may represent a calc-alkaline source to the south, which was venting at the same time of extrusion to the tholeiites. Aquamarine tuff (hyaloclastite) is generally absent, the best exposure of which is located at 21+75W, 17+50S.

Magnesium rich tholeiites account for less than 1% of total

exposure of the Kinojevis Group. Good exposure of an Mg-tholeiite is on line 47+00W, 22+00S, immediatly south of the syncline axis. The occurance of the more magnesium rich flows is significant in that it may represent a hiatus between eruption flows in which interflow sediments may be deposited. On the Eby Township property, such an interflow unit occurs on line 48+00W, 12+00S and consists of chert and tuffs. Two samples of this horizon, 2 meters thick, gave values of nil and 30 ppb gold.

An east-west trending syncline occurs to the south on the property and is marked by a topographic low. The eastward extension of the axis is not known, but it would appear to take a south-easterly strike, as a cherty interflow unit on the West Road, 19+00W, dips steeply south. The syncline may actual represent the original depression on the shelf on which the Kinojevis volcanics flowed from the west.

Numerous shear zones and interpreted faults were located, the majority of which appear to be strike faults with either vertical or oblique movement. It is not clear whether movement is reverse or normal, however the lack of slickensides would indicate that movement was minimal. Apart from the 'Break', the only other major fault within the Kinojevis Group is the '621' fault which has caused brecciation, silicification and carbonatization of the volcanics. This fault is roughly parallel to the Kirkland-Larder Lake Break and may be associated with the 'Break'.

Larder Lake Group Volcanics and Interflow Sediments

Volcanics and Sediments of the Larder Lake Group occupy the north east quarter of the property and offer the highest potential to host economical gold deposits. Rock types of this group include basaltic komatiites, high magnesium tholeiites, and lesser amounts of iron tholeiites. Though mapped as high iron tholeiites (V7) it is likely that most of these tholeiites are in fact komatiitic basalts which do not exhibit spinafex or polygonal jointing, characteristic of komatiites.

The flows generally strike north westerly to a north south direction of the contact with the Kirkland-Larder Lake Break, and dip steeply south. Typical komatiitic textures are rare, with a good spinafex textured flow on line 2+50W,6+75N, and a flow with polygonal jointing on line 2+25W,3+75N. These were the only two outcrops with good komatiitic textures. Whole rock geochemistry by O.G.S. geologist L. Jensen confirms the presence of komatiitic rocks on line 7+50W, 3+50W, where they appear to interlayered with tholeiitic rocks.

Magnesium rich tholeiites of the Larder Lake Group occur north of the South Bay Fault where they are often flow brecciated. There appears to be a distinct Mg-rich tholeiite trend north of this fault, to the south, the rock types appear to be more komatiitic and iron tholeiites, the fault perhaps marking the contact between the two.

Interflow sediments of the Larder Lake Group on the property

are varied and hold the greatest potential of hosting economic gold deposits. Interflow units include green, fuchsite-rich chemical carbonates, magnetite-hematite iron formation, pyritic cherts which may be a facies of the iron formation, tuffs and ultramafic sediments which range from dirty carbonates to conglomerates.

The iron formation consists finely bedded magnetite and hematite beds with lesser amounts of white chert, graphitic chert and possible jasper. Individual beds are on the cm. scale and often show slump structures and gouging by overlying flows. It appears as though there are three or four sub-parallel iron formation units, one of which persists a distance of 800 meters. Magnetic data indicates that the other iron formation units are less continuous. Generally the iron formation carries trace gold values, however a sample of pyritic magnetite chert 1 meter thick at 7+50W, 1+75N returned a value of 0.08 oz./ton Au. This area is one of the most complex on the property, with numerous faults and the gold mineralization may be secondary. Adjacent to and parallel to this chert zone are units of magnetic tuff and carbonates, locally brecciated. The thickness of the zone may be up to 25 meters and should be considered as a potential drill target.

The second derivative vertical magnetic sheet shows sharp magnetic lows adjacent to and parallel to the zones of iron formation, but this may be a result of computer enhancement.

Also located adjacent to the zone of pyritic chert is a narrow (0.5 meter thick) zone of black pyritic chert with coarse pyrite. This may be either secondary pyrite or perhaps a narrow zone of sulfide facies iron formation. The rock contains a highly unusual amount of specular hematite (25%) indicating that the pyrite may have been introduced as a secondary mineral. The strike of this zone is almost at right angles to the general trend of the iron formation which may be due to drag folding or is faulted-off block of the main north-west trending iron formation.

Green fuchsite-rich carbonate is interpreted by the author to represent chemically deposited sediments, three of which zones and possibly a fourth are present on the property. Generally, the carbonate zones closely follow the strike of volcanic flows, however the carbonate may have been deposits on local traps (basins on the ancient shelf) which may or may not reflect the general volcanic and flow sequences, such that after folding, they appear to cross cut stratigraphy. Flows which post date the carbonate sediments have gouged and locally remobilized the carbonate, causing extensive quartz veining in the sediments and carbonatization of the flows. In places, the sediments have been completely obliterated or remobilized into the volcanics, this of course depending upon the original thickness of the sediments, state of lithification of the sediments, and temperature, velocity of the flow and the volume of the volcanic flow.

The largest carbonate unit on the property is located on

claim 17404, striking 120 degrees, dipping steeply south with a width of 25-30 meters. A bulk sample from this body (circa 1939) returned assays of 2.74 oz/ton and 0.06 oz/ton Au. A second carbonate body 200 meters to the west and 225 meters to the north may represent either a west extension of the carbonate on patent 17404 or a parallel horizon. This zone does not appear to have been prospected. The maximum gold value returned during the geological survey by this author was 0.02 oz/ton Au in the carbonate. Due to the eratic gold values in the carbonate (the gold appears to be associated with quartz veining) they rarely represent ore, however they are important as a stratigraphic marker in that the carbonate was deposited in an environment conducive to the precipitation of gold.

In the Kerr Addison and Omega deposits to the east, the green carbonate either underlines or overlies the main gold ore, which is refered to as flow ore at Kerr and a mudstone at the Omega. At the Kerr deposit, the carbonate is mined and gold is returned, making the occuranace of the carbonate and encouraging factor.

The occurance of graphite within the carbonate units appears to be associated with gold values. On the Eby property, no graphitic units were found on surface, however to the east along highway 11, a graphitic zone occurs on the projected east extension of the carbonate body on patented 17404. The V.L.F. conductor west and south of this carbonate (line 3+00W+6+50W) may represent a

graphitic unit. A proposed I.P. survey over this area would verify the presence of a graphitic zone.

A second narrow carbonate zone occurs on patented claim 18227 where it is intruded by quartz syenite dikes. Work done Sylvanite Gold Mines in 1939 revealed visible gold on this outcrop. Beaucoeur Mines diamond drilling intersected the carbonate with a gold value of 0.7 oz./ton over 10'. Gold values were also found in quartz veins associated with the syenite dikes and the syenite itself. It is likely that the gold originated in the interflow sediments which include the carbonate.

Two smaller interflow carbonate zones were found, the first of which is on line 2+00W, 7+25N, striking 110 degrees dipping steeply south and returned trace gold when sampled. The second is also a narrow (1 meter wide) zone of dirty carbonate and possible pyritic dolomite on line 8+00W, 3+12N. It occurs on a steep south facing cliff so its exact thickness is not known. A sample of the pyritic dolomite returned trace gold values, the pyrite being coarse and angular. This carbonate may be related to part of the sedimentary package that includes iron formation.

Late Intrusives

Four types of intrusive rocks were found on the property which include quartz syenite, mafic syenite, lamprophyre and diabase, all of which occur as dikes. The mafic syenites and lamprophyres appear to be related to the same event as often

the syenites contain lamprophyric phases. The mafic syenite dikes are usually less than two meters in width and vary from fine to medium grained, the mafic mineral being a pyroxene. Often the mafic syenite approaches lamprophyric mineralogy with the addition of biotite as the mafic mineral, however these dike still retain pottasium feldspars and are thus syenites.

The lamprophyre dikes are less common than the syenites and occur adjacent to or are phases of the syenites. They are dark green to grey in color, medium to coarse grained, magnetic with up to 60-70% biotite.

The quartz syenites, though related to the mafic syenites and lamprophyres, probably post date the more mafic intrusives. They are most common on the north east part of the property. On patented claim 18227, numerous quartz syenite dikes indicate that a syenite plug may exit at depth. Previous drilling by Siscoe Gold Mines and Beaucoeur Mines indicated that many of these dikes carry ore grade gold values over narrow widths. The gold values may be due to remobilizing the gold out of interflow sediments and into quartz veining within the volcanics.

The last intrusive event on the property was the emplacement of diabase dikes. These are generally narrow, medium to coarse grained north east (010-020 degrees) trending dikes. The larger dikes are coarse grained gabbroic in nature and may carry 1-2% pottasium feldspar. The larger dikes also tend to show porphyritic textures. The trend of the dikes (north-east) would probably place

them in the Matachewan Diabase event.

5(c) Structural Geology

The main structural feature on the prpperty is the Kirkland-Larder Lake Break which passes through the north west part of the property. Because the break is obscured by overburden, the nature and extent of alteration of the host rocks is not known. Dominion Gulf D.D.H. #1, which intersected the break, reported brecciation and carbonatization over a width of 30 ' in both the Timiskaming sediments and volcanics. This would indicate that the fault underwent displacement after the deposition of the Timiskaming, which may be related to the regional drag folding of the volcanics.

The break itself is thought to be more of a hinge zone than a fault, in that movement along the fault was vertical and contemporaneous with the extrusion of volcanic flows to the north, causing downward displacement along the break by the shear weight of overlying flows. The break itself may not have been a linear feature but a zone in which the shelf extending from the south dropped off to a deeper marine environment. It is however, reasonable to place a line marking the break at the south Timiskaming / volcanic contact, at least on the west section of the property where lack of exposure does not permit a more detailed interpretation. To the north east, the Timiskaming / volcanic contact probably represents a south branch of the break as sheared ultramafic rocks and Timiskaming sediments are exposed

100 meters north of claim 18227 on highway 11. The break itself appears to have been block faulted in a north south direction as interpreted by magnetic data.

Due to a lack of exposure, secondary faults associated with movement along the break are difficult to assertain, however the '621' fault to the south west in part closely parallels the break, and the silicification and brecciation may be related to movement along the break. This fault cross cuts stratigraphy and appears to have a left lateral motion. The majority of faults on the property are strike-slip in nature, however movement appears to be minimal as indicated by a lack of slickenside striations.

Two major strike faults occur on the east and north east section of the property. The first fault strikes west - north-west from line 0+00 and the baseline. It may be traced from line to line by a zone of shearing accompanied by a narrow zone of hydrothermal alteraion and massive pyrite. The westward extension of this fault past line 7+50 W is not clear. The lack of slickenside striations does not indicate movement along this fault, however if the present topography is any indication, the north side of this fault been displaced down relative to the south side.

A second major strike fault occurs on line 0+00, 6+25 N striking north east and is referred to as the South Bay Fault (J.E. Thomson, 1944) and may represent movement along the carbonate/volcanic contact which may have acted as a plane of weakness.

Cross faulting on the property is infered by the magnetic survey and shows that movement along cross faults is minimal with an average of less than 25 meters. One such fault occurs on line 6+50W, 0+50N where the iron formation appears to be block faulted 25 meters to the north.

5(d) Alteration

All rocks on the property are metamorphased to sub-greenschist facies with most primary sedimentary and volcanic textures preserved. The most common alteration mineral of the volcanics is epidote which occurs is a replacement mineral of the feldspars, normally localized along joint planes and similar fractures. Shearing, which in cases masks the igneous textures has led to both quartz and calcite stringers.

Carbonatization of volcanics occurs of a number of locations on the property, all of which indicate a sedimentary source for the carbonate. Flow carbonatization occurs where a tholeiitic or komatiitic magma flows over a carbonate sediment, remobilizing the carbonate into the flow. Primary flow textures are preserved (ie. flow breccia, pillows, spinafex), an example of which occurs on line 15+25W,0+50N. In this case the entire sedimentary horizon has been destroyed by the overlying flow. Alteration is pervasive with the most intense alteration occuring at the flow-sediment contact. Sporadic alteration also occurs along a 200 meter wide zone trending north east over the central north portion of the

property which was the sight of drilling by Sylvanite Gold Mines (circa 1945). In this case, carbonatization has pervasively altered the host volcanics along shear zones. The shearing is weak and thus a mantle source for the carbonate is not favoured. The source for the carbonate may be sediments at depth, with the shearing remobilizing the carbonate out of the sediments up into the volcanics.

A third type of carbonatiztion occurs on claim 18495 at 30+00W, 5+75S. At this location, a mafic syenite dike was probably intruded through a carbonate sediment at depth and overlying volcanics, resulting in intense carbonate alteration of both the dike and volcanics. It is possible that there may be a small lens of sediment at this location, however the intrusive has obscured any recognizable sedimentary features.

Quartz veining is a common occurance with carbonatization with main carbonate mineral being ankerite and calcite. Quartz veining in sheared, non carbonatized basalts is common, thus the source of silica in the carbonatized zone is probably the volcanics with the carbonate minerals having a sedimentary source.

5(e) Economic Geology

Because the break passes through the property, the staked claims should be brought to lease as soon as possible as eventually this part of the break should be tested by diamond drilling, should funding become available.

A number of areas show enough potential to be drilled immediatly. The first is on patented claim 18227 where previous drilling indicates mineralized zones anomalous in gold. Surface sampling during the course of mapping returned gold values ranging from .002 oz/ton Av to 0.15 oz/ton (grabs) in a variety of rock types including quartz veins, silicified volcanics and possible sediments. Most samples taken returned low values, but none the less anomalous values. Initial drilling should concentrated along the green carbonate and drilled 090 degrees in an attempt to determine the extent of this carbonate zone. An I.P. survey being carried out on the property at the time of writing this report should give additional drill targets.

6 Summary and Conclusions

The Mary Ellen Resources Eby Township property comprising of 58 unpatented, unsurveyed mining claims and 25 patented mining claims shows potential to host economical concentrations of gold on two and perhaps three locations. The first area of interest is on patented claim 18227 where quartz-syenite dikes have remobilized gold out of the carbonate and associated sediments into quartz veins. The associated sediments also appear to host gold mineralization though the mineralization may be eratic.

The second area of potential is on claim 17404 where a carbonate body hosts eratic by economical concentrations of gold. Associated with the carbonate sediments are iron formation and cherts, which to the west are anomalous in gold. The area between the carbonate

and iron formation is drift covered making further interpretation difficult.

The third area of interest is along the Kirkland-Larder Lake Break which is covered by extensive Pleistocene drift on the north west section of the property.

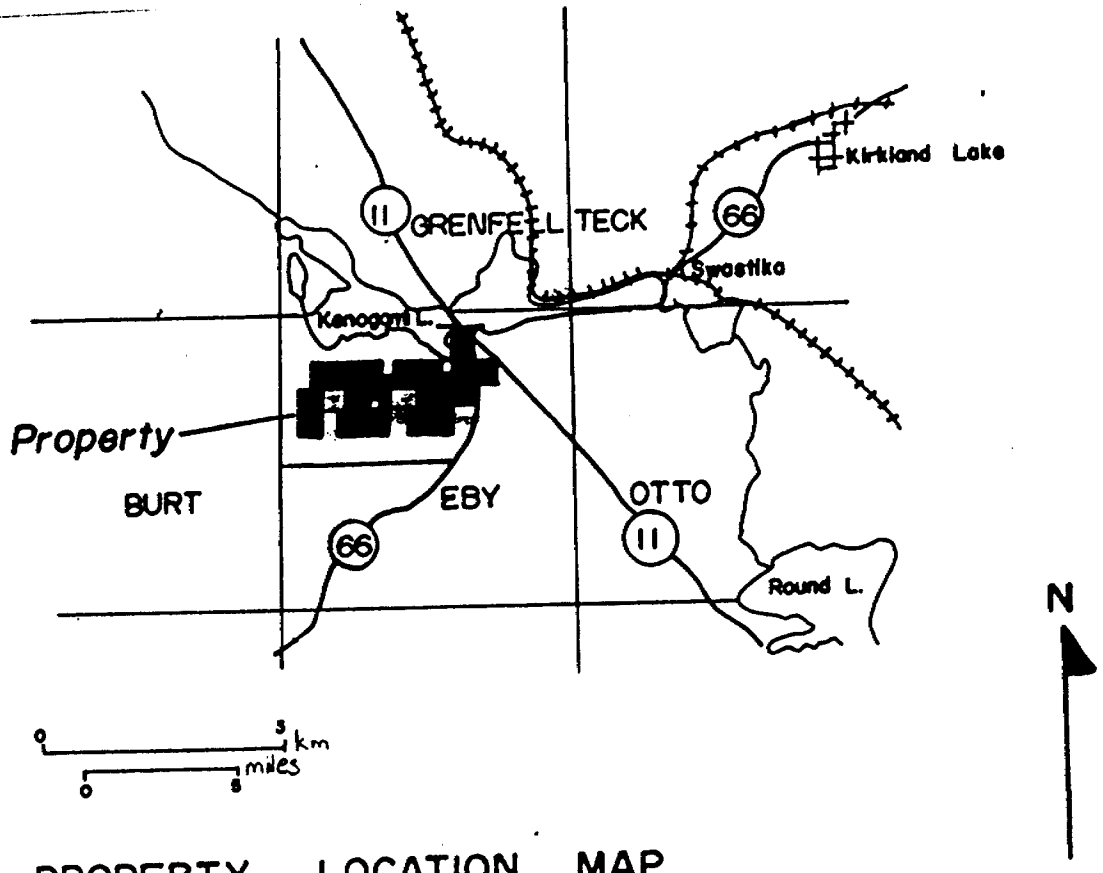
Initial drill targets on claim 18227 should be centered on the north-south trending carbonate, and an attempt to trace this zone both north and south. To the south, the zone probably takes a more south easterly strike which corresponds to the humus geochemistry anomalies. The results of the I.P. survey should provide additional drill targets in this area.

The carbonate and iron formation trending east-west extending south on claim 17404 may represent a deepening of the paleo-shelf to the south and drill targets should include the area immediatly to the south of the carbonate body on claim 17404. The I.P. Survey may provide drill targets for this area. To the west, a zone of iron formation anomalous in gold (0.08 oz/ton Au) may represent part of this sedimentary horizon and should be considered a potential drill target.

As stated previously, the entire property should be brought to lease so that in the future should funds become available an extensive drill program to test the Kirkland-Larder Lake Break to the west part of the property should be undertaken.

Respectfully submitted

S.J. Carmichael, B.Sc.



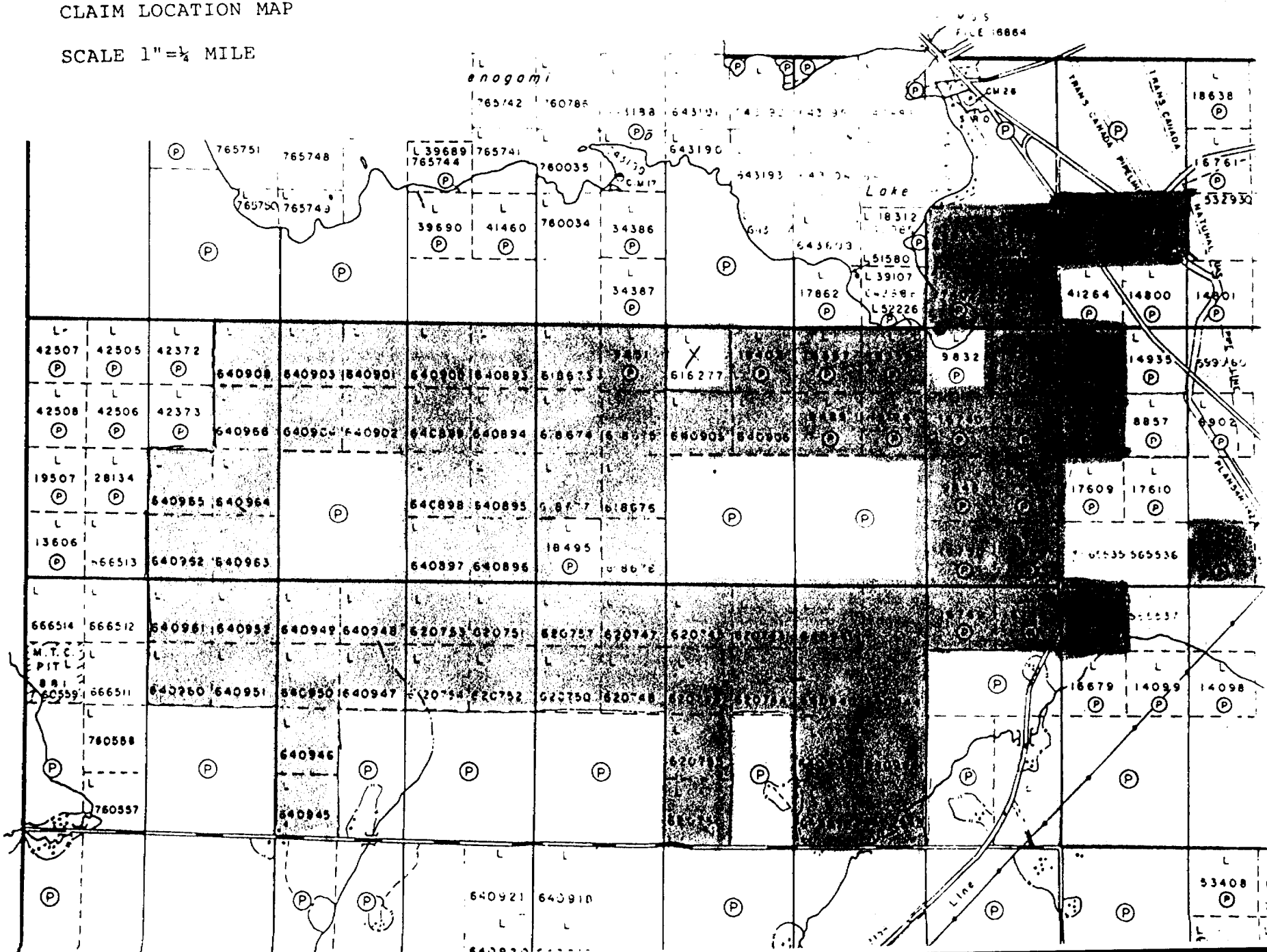
PROPERTY LOCATION MAP

FIGURE 1

Figure 2

CLAIM LOCATION MAP

SCALE 1"=¼ MILE



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Much thanks to L. Jensen, O.G.S. geologist whose insightfull knowldege of the area aided the author greatly with discussions on the regional geology and provided the author with whole-rock geochemistry results on the Eby Township property.

Certificate of Qualifications

I, Stewart J. Carmichael, of the town of Kirkland Lake, in the District of Timiskaming, in the Province of Ontario, Canada, do hereby certify that:

1. I am a geologist with Mary Ellen Resources Ltd. with an office in Kenogami, Ontario, address P.O. Box 546, Kirkland Lake, Ontario, P2N 3L1.
2. I am a graduate of McMaster University, Hamilton, Ontario having recieved the degree of Bachelor of Science, Geology, from the Faculty of Science in 1982. I have since practiced in the field of mineral exploration continuously since graduation.
3. I have knowledge of, and previous exploration experience in the region in which the Mary Ellen Resources Eby Group Property is located.
4. In addition to my personal knowledge of the area, I have made use of the records of the Ministry of Natural Resources of Ontario, and of Mary Ellen Resources Ltd. in the preparation of this report. I examined the property relevant to this study from May 28/1985 to August 26/1985.

Dated this 22 day of November 1985

Stewart J. Carmichael

Stewart J. Carmichael, B.Sc. Geology

42A01SE0186 2.8661 EBY

900

Mining Lands Section

File No 2.8661

Control Sheet

TYPE OF SURVEY

✓ GEOPHYSICAL

✓ GEOLOGICAL

____ GEOCHEMICAL

____ EXPENDITURE

MINING LANDS COMMENTS:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Signature of Assessor

_____

Date

March 19, 1986

Your File: #385
Our File: 2.8661

Mining Recorder
Ministry of Northern Development and Mines
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Madam:

RE: Notice of Intent dated February 7, 1986
Geophysical (Magnetometer) and Geological
Surveys submitted on Mining Claims L 618673,
et al, in Eby Township

Please disregard the above-noted Notice of Intent. Additional information has been submitted and the file reassessed at the request of the claim holder. The assessment work credits, as shown on Report of Work #385, have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

J.C. Smith, Supervisor
Mining Lands Section

Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

SH/mc

cc: Mary Ellen Resources
Suite 1000
609 Granville South
Vancouver, B.C.
V7Y 1G5

Glenn Kasner
P.O. Box 1053
Kirkland Lake, Ontario
P2N 3C1

Ministry of Natural Resources
Ontario

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

The Mining Act

28461

Nov 27 #385

Instructions: – Please type or print.
– If number of mining claims traversed exceeds space on this form, attach a list.
Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

(L 618673)

Type of Survey(s)	Township or Area
GEOLOGICAL - MAGNETOMETER VLF-EM.	EBY TOWNSHIP

Claim Holder(s)	Prospector's Licence No.
MARY EILEEN RESOLAGES	T-1566

Survey Company	Survey Dates (linecutting to office)	Total Miles of line Cut
SAME	28 / 05 / 85 to 30 / 08 / 85 (Day / Mo. / Yr.)	112.0

Name and Address of Author (of Geo-Technical report)
STUART CHARMICHEAL BOX 546 KIRKLAND LAKE ONT P2N3C1

Special Provisions Credits Requested

Instructions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	~~20~~ OK
	Geophysical - Magnetometer	20
For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	40
	Geochemical	

Man Days

Instructions		Days per Claim
Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	

RECEIVED
OCT 7 1985
MINING LANDS SECTION

Airborne Credits

Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	
	Magnetometer	
	Radiometric	

LAND DEPT. KE

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

RECEIVED
OCT - 7 1985
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

Calculation of Expenditure Days Credits

Total Expenditures			=	Total Days Credits
$	÷	15	=	

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

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	618673	
	618674	
	618675	
	618676	
	618677	
	618678	
	620743	
	620744	
	620745	
	620746	
	620747	
	620748	
	620750	
	620751	
	620752	
	620753	
	620754	
	620755	
	620756	
	620757	
	640893	
	640894	
	640895	
	640896	
	640897	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	640898	
	640899	
	640900	
	640901	
	640902	
	640903	
	640904	
	640905	
	640906	
	640908	
	640938	
	640939	
	640940	
	640941	
	640942	
	640943	
	640944	
	640945	
	640946	
	640947	
	640948	
	640949	
	640950	
	640951	
	640952	

Total number of mining claims covered by this report of work. 50

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
3480	OCT 7 - 1985	
	Date Approved as Recorded	Regional/Branch Director
	85/10/9	

Report Completed

Date of Report	Recorded Holder or Agent (Signature)
Oct 7 1985	Glenn Kasner

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying
GLENN KASNER P.O. BOX 1053 KIRKLAND LAKE P2N3C1

Date Certified	Certified by (Signature)
Oct 7 1985	Glenn Kasner

1362 (81/2)

Ministry of Natural Resources
Ontario

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

The Mining Act

Instructions: – Please type or print.
– If number of mining claims traversed exceeds space on this form, attach a list.
Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

Type of Survey(s): GEOLOGICAL - MAGNETOMETER VLF EM.
Township or Area: ERY TOWNSHIP
Claim Holder(s): MARY ELLEN RESOURCES
Prospector's Licence No.: T-1566
Survey Company: SAME
Survey Dates (linecutting to office): 28 Day | 05 Mo. | 85 Yr. | 30 Day | 08 Mo. | 85 Yr.
Total Miles of line Cut: 112.0
Name and Address of Author (of Geo-Technical report): STUART CHARMICHEAL BOX 546 KIRKLAND LAKE ONT P2N3L1

Special Provisions Credits Requested

Instructions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	~~20~~ 40K
	Geophysical - Magnetometer	20
For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	40
	Geochemical	

Man Days

Instructions		Days per Claim
Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	

Airborne Credits

Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	
	Magnetometer	
	Radiometric	

Expenditures (exclude power stripping)

Type of Work Performed:
Performed on Claim(s):
Calculation of Expenditure Days Credits
Total Expenditures: $ ____ + 15 = Total Days Credits

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

RECEIVED
OCT - 7 1985
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM
KIRKLAND LAKE

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	640960				
	640961				
	640963				
	640964				
	640965				
	640966				
	640962				
	760582				

Total number of mining claims covered by this report of work: 8

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
	OCT 7 - 1985	
	Date Approved as Recorded	Regional/Branch Director

Report Completed

Date of Report	Recorded Holder or Agent (Signature)
Oct 7/85	Glenn Kaner

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying: GLENN KANER P.O. BOX 1053 KIRKLAND LAKE ONT P2N3L1

Date Certified	Certified By (Signature)
Oct 7/85	Glenn Kaner

1362 (81/2)

KASNER GROUP OF COMPANIES

P.O. BOX 546
KIRKLAND LAKE, ONTARIO
P2N 3L1
TELEPHONE (705) 642-3291

SUITE 500 - 67 RICHMOND ST.
TORONTO, ONTARIO
M5H 1Z5
TELEPHONE (705) 361-0737

MINING EXPLORATION & DEVELOPMENT

MARCH 5 1986

RECEIVED
MAR 1 - 1986
MINING LANDS SECTION

DEAR SUSAN:

AS PER OUR RECENT TELEPHONE CONVERSATION PLEASE FIND ENCLOSED MAPS FOR WORK EB'Y TWP REPORT FILE 2.8661

YOURS TRULY

Norm Kasner

Mary Ellen Resources Ltd.

SUITE [redacted] - 67 RICHMOND ST. WEST
TORONTO, ONTARIO
M5H 1Z5

BOX 546
KIRKLAND LAKE, ONTARIO
P2N 3L1
(705) 642-3393

March 3, 1986

RECEIVED
MAR 07 1986
MINING LANDS SECTION

Ministry of Northern Development
Mining Lands Section,
Whitney Block, 6th Floor,
Toronto, Ontario.

Re: Magnetometer Survey Mining Claims L618673 et al, Eby Township, File Number 2.8661

Dear Mrs. Hurst,

As per our recent telephone conversation, please find enclosed two copies of the 1T05000 total field magnetometer survey which are to replace the copies that were sent to me and subsequently lost.

Yours truly,

Glenn Kasner

GK/sd

MARY ELLEN RESOURCES LTD.
44 VICTORIA STREET, SUITE 1816, TORONTO, ONTARIO M5C 1Y2 (416) 947-1465
705-642-3291
Box 546
Kirkland Lake

February 24, 1986

RECEIVED
FEB 25 1986
MINING LANDS SECTION

Ministry of Northern Development and Mines,
Land Management Branch,
Ministry of Natural Resources
6th Floor,Whitney Block,
Room 6610,
99 Wellesley Street West,
Queen's Park,
Toronto, Ontario
M7A 1W3

Re: Magnetometer Survey Mining Claims L618673 et al, Eby Township
File Number 2.8661

Dear Susan Hurst,

Further to our telephone conversation, please find enclosed four copies of a claim location map for claims in Eby Township. I have drawn on the new baseline which was previously omitted by our Geologist. This map ,when overlaid on the 1 to 5000 total field magnetometer, drawing number 9, conforms to claims covered by the magnetometer survey.
I have included two extra copies of the above and if this meets your approval could you have these extra copies sent to the O.M.E.P. Department as we have submitted the same reports to them.
Also, I have received your letter stating that the magnetometer plans have been forwarded to this office, at this time no maps have been received. When they arrive, I will send them back.
I trust that the above will be found satisfactory.

Yours truly,

Glenn Kasner

GLENN KASNER

Ontario

Ministry of
Northern Development
and Mines

February 14, 1986 File: 2.8661

Glenn Kasner
P.O. Box 1053
Kirkland Lake, Ontario
P2N 3C1

Dear Sir:

RE: Geophysical (Magnetometer) and Geological Surveys submitted on Mining Claims L 618673, et al, in the Township of Eby

---

Enclosed are the plans (in duplicate) for the magnetometer survey. In order to complete your submission, please show all claim lines and claim numbers on the plans and return them to this office quoting file 2.8661.

For further information, please contact Susan Hurst at (416) 965-4888.

Yours sincerely,

S.E. Yundt, Director
Land Management Branch

Mining Lands Section
Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416)965-4888

SH/mc
cc: Mary Ellen Resources
Suite 1000
609 Granville South
Vancouver, B.C
V7Y 1G5

Encl. Wrong see

cc: Mining Recorder
Kirkland Lake, Ontario

Stuart Carmichael
Box 546
Kirkland Lake, Ontario
P2N 3C1

February 14, 1986 File: 2.8661

Glenn Kasner
P.O. Box 1053
Kirkland Lake, Ontario
P2N 3C1

Dear Sir:

RE: Geophysical (Magnetometer) and Geological Surveys submitted on Mining Claims L 618673, et al, in the Township of Eby

---

Enclosed are the plans (in duplicate) for the magnetometer survey. In order to complete your submission, please show all claim lines and claim numbers on the plans and return them to this office quoting file 2.8661.

For further information, please contact Susan Hurst at (416) 965-4888.

Yours sincerely,

S.E. Yundt, Director
Land Management Branch

Mining Lands Section
Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416)965-4888

SH/mc
cc: Mary Ellen Resources
Suite 1000
609 Granville South
Vancouver, B.C
V7Y 1G5

cc: Mining Recorder
Kirkland Lake, Ontario

Stuart Carmichael
Box 546
Kirkland Lake, Ontario
P2N 3C1

Encl.

Ontario

Feb 2 2/86

Ministry of
Northern Development
and Mines

February 7, 1986

Your File: 385
Our File: 2.8661

Mining Recorder
Ministry of Northern Development and Mines
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

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

Yours sincerely,

S.E. Yundt, Director
Land Management Branch

Mining Lands Section
Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

SH/mc
Encls.

cc: Mary Ellen Resources Inc
Suite 500
67 Richmond Street West
Toronto, Ontario
M5H 1Z5

Glenn Kasner
P.O. Box 1053
Kirkland Lake, Ontario
P2N 3C1

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

Ontario

Ministry of
Northern Development
and Mines

Notice of Intent
for Technical Reports

1986 02 07

2.8661/385

An examination of your survey report indicates that the requirements of .The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on the record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted directly to the Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

Ministry of Northern Development and Mines
Ontario

Technical Assessment Work Credits

File: 2.8661

Date: 1986 02 07

Mining Recorder's Report of Work No.: 385

Recorded Holder: MARY ELLEN RESOURCES

Township or Area: EBY TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	L 618676-77-78 620745 to 748 inclusive 620750 to 757 inclusive 640895-96-97-98 640938 to 946 inclusive 640951-52 640960 to 964 inclusive 760582
Electromagnetic _____ days	
Magnetometer 20 days	
Radiometric _____ days	
Induced polarization _____ days	
Other _____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological _____ days	
Geochemical _____ days	
Man days ☐ Airborne ☐	
Special provision ☒ Ground ☒	
☐ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

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

No credits have been allowed for the following mining claims

☒ not sufficiently covered by the survey ☐ insufficient technical data filed

L 618673-74-75
620743-44
640893-94
640899 to 906 inclusive
640908
640947 to 950 inclusive
640965-66

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

828 (85/12)

Ministry of Northern Development and Mines
Ontario

Technical Assessment Work Credits

File: 2.8661

Date: 1986 02 07

Mining Recorder's Report of Work No.: 385

Recorded Holder: MARY ELLEN RESOURCES

Township or Area: EBY TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ days	
Magnetometer _____ days	
Radiometric _____ days	
Induced polarization _____ days	
Other _____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological 40 days	L 618673 to 678 inclusive 620743 to 748 inclusive 620750 to 757 inclusive 640893 to 908 inclusive 640938 to 952 inclusive 640960 to 966 inclusive 760582
Geochemical _____ days	
Man days ☐ Airborne ☐	
Special provision ☒ Ground ☒	
☐ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

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

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☐ insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

828 (85/12)

MARY ELLEN RESOURCES INC.

Suite 500
67 Richmond Street West
Toronto, Ontario
Canada * M5H 1Z5
(416) 361-0737

P.O. Box 546
Kirkland Lake, Ontario
Canada * P2N 3L1
(705) 642-3291

RECEIVED
LAND
MANAGEMENT BRANCH
JAN 21 '86
PREPARE REPLY ☐
COMMENTS PLEASE BY ☐
S. E. YUNDT
J. R. MORTON
J. C. SMITH ✓
W. P. BROOK
M. J. HOGAN
D. W. SCOTT
S. KEEN
Return To: R.6643

January 20, 1986

Land Management Branch
Ministry of Northern Affairs and Mines
Room 6643
99 Wellesley Street West
TORONTO, Ontario
M7A 1W3

RECEIVED
JAN 21 1986
MINING LANDS SECTION

Attention: S.E. Yundt,
Director

Dear Sirs:

Re: File 2-8661

Enclosed are maps (in duplicate) for the Geophysical and Geological Surveys submitted on mining claims L618673 et al. These maps were sent by Lands Management to Suite 1000, 609 Richmond Street West, Toronto. This address is unknown to us. Someone at that address sent the maps to the Company's registered office in Vancouver. The Company's solicitors then forwarded said maps to our office in Toronto.

We have advised our exploration manager of the requirements for completion of the maps. He, in turn, has advised us that he received a copy of your letter and has prepared and forwarded to your office a key map reflecting the claim lines and claim numbers as required.

We are therefore re-submitting these maps on the assumption that together with his current submission the date required for filing is complete. Should any further information be required please advise the writer, as noted below, or contact Mr. Glenn Kasner at (705) 642-3291.

Yours very truly,
MARY ELLEN RESOURCES INC.

Zbigniew Berezowski.

Per: Z. Berezowski (Mr.)

ZB/cac

Enclosure

Mary Ellen Resources Ltd.

28661

SUITE [redacted]67 RICHMOND ST. WEST
TORONTO, ONTARIO
M5H 1Z5

BOX 546
KIRKLAND LAKE, ONTARIO
P2N 3L1
(705) 642-3393

Dec. 9, 1985

Want to mail
Answer from
Vancouver
Dec. 19th

Ms. Susan Hurst,
Whitney Block, Room 6643,
Queens Park,
Toronto, Ontario
M7A 1W3

Dear Ms. Hurst,

Re: Geophysical and Geological Surveys submitted on Mining claims L-61873, et al in the Township of Eby

Please find enclosed two copies of the claim plan at a scale of 1:5000 metric to correlate with the scale of the magnetometer survey. Contary to your letter dated November 28, 1985, we did not receive copies of the plans and assume that you still have them.

Yours Sincerley

S. Carmicheal

S. Carmicheal

RECEIVED
DEC 17 1985
MINING LANDS SECTION

SC/ek

Returned Dec 12th Susan Hurst again

November 28, 1985

File: 2.8661

Mary Ellen Resources
Suite 1000
609 Richmond Street West
Toronto, Ontario
M5H 1Z5

To Suite 1000
609 Granville St.
Van. BC.
V7Y 1G5

Dear Sir:

RE: Geophysical (Magnetometer) and Geological Surveys submitted on Mining Claims L 618673, et al, in the Township of Eby

---

Enclosed are the plans (in duplicate) for the magnetometer Survey. In order to complete your submission, please show all claim lines and claim numbers on the plans and return them to this office quoting file 2.8661.

For further information, please contact Shuan Hurst at (416)965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-4888

SH/mc

cc: Mining Recorder
Kirkland Lake, Ontario

Stuart Carmichael
Box 546
Kirkland Lake, Ontario
P2N 3C1

Glenn Kasner
P.O. Box 1053
Kirkland Lake, Ontario
P2N 3C1

Encl.

Ontario

Ministry of Natural Resources

File _____

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) Geological, Geophysical

Township or Area Eby Township

Claim Holder(s) Mary Ellen Resources

Survey Company Same

Author of Report Stewart Carmichael

Address of Author Box 546, Kirkland Lake, Ont, P2N-3J1

Covering Dates of Survey 28/05/85 to 30/08/85 (linecutting to office)

Total Miles of Line Cut 112.0 miles

SPECIAL PROVISIONS CREDITS REQUESTED

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

ENTER 20 days for each additional survey using same grid.

DAYS per claim.

Geophysical
- –Electromagnetic _____
- –Magnetometer 20
- –Radiometric _____
- –Other _____

Geological 40

Geochemical _____

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____ (enter days per claim)

DATE: Nov. 22/85 SIGNATURE: S. Carmichael
Author of Report or Agent

Res. Geol. _____ Qualifications 27032.

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

L-618673 L-640895 L-640947
(prefix) (number)

618674 640896 640948
618675 640897 640949
618676 640898 640950
618677 640899 640951
618678 640900 640952
620743 640901 640953
620744 640902 640954
620745 640903 640955
620746 640904 640960
620747 640905 640961
620748 640906 640962
620750 640908 640963
620751 640938 640964
620752 640939 640965
620753 640940 640966
620754 640941 760582
620755 640942
620756 640943
620757 640944
640893 640945
640894 640946

TOTAL CLAIMS 58

If space insufficient, attach list

OFFICE USE ONLY

837 (5/79)

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Number of Stations 7,200 Number of Readings 1

Station interval 25 meters Line spacing 100 meters

Profile scale

Contour interval

MAGNETIC

Instrument Geometrics G-826 proton magnetometer

Accuracy – Scale constant ± 5 gammas

Diurnal correction method Base station check before and after each daily survey

Base Station check-in interval (hours) 6 hours

Base Station location and value B.L. 0+00, L. 0+00 58,607 gammas

ELECTROMAGNETIC

Instrument Phoenix V.L.F-2

Coil configuration

Coil separation Infinite

Accuracy

Method: ☒ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency Cutler Maine, 24.0 KHz (specify V.L.F. station)

Parameters measured Orientation, magnitude of the Major and Minor Axes of the Eclipse of Polarization

GRAVITY

Instrument

Scale constant

Corrections made

Base station value and location

Elevation accuracy

INDUCED POLARIZATION RESISTIVITY

Instrument

Method ☐ Time Domain ☐ Frequency Domain

Parameters – On time Frequency

– Off time Range

– Delay time

– Integration time

Power

Electrode array

Electrode spacing

Type of electrode

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

_____

Corrections made _____

_____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

_____

Additional information (for understanding results) _____

_____

_____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____

(specify for each type of survey)

Accuracy _____

(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

_____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

_____

_____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

_____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

_____

Drainage Development _____

Estimated Range of Overburden Thickness _____

_____

_____

SAMPLE PREPARATION
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

_____

_____

_____

General _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

ANALYTICAL METHODS

Values expressed in: per cent ☐
p. p. m. ☐
p. p. b. ☐

Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circle)

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____

_____

_____

_____

_____

_____

_____

_____

_____

Mary Ellen Resources Ltd.

SUITE 5[redacted]7 RICHMOND ST. WEST
TORONTO, ONTARIO
M5H 1Z5

BOX 546
KIRKLAND LAKE, ONTARIO
P2N 3L1
(705) 642-3393

November 22, 1985

Land Management Branch
Ministry of Natural Resources
6th Floor, Whitney Block
Rm. 6610
99 Wellesley St. West
Queens Park
Toronto, Ontario
M7A 1W3

Dear Sir:

Enclosed please find a report & maps of the Eby Gold Property Larder Lake Mining Division of Mary Ellen Resources, for assessment work.

Yours truly,

per S. Carmicheal

S. Carmicheal,
Geologist

RECEIVED
1985
MINING LANDS SECTION

RECEIVED
1985
MINING LANDS SECTION

2-8661

	L 11-1	M GL			CL 11-1	M GL
618673	✓	NC		640905	✓	NC
74	✓	NC		06	✓	NC
75	✓	NC		640908	✓	NC
76	✓	✓		38	✓	✓
77	✓	✓		39	✓	✓
78	✓	✓		40	✓	✓
620713	✓	~~NC~~		41	✓	✓
41	✓	NC		42	✓	✓
45	✓	✓		43	✓	✓
46	✓	✓		44	✓	✓
47	✓	✓		45	✓	✓
48	✓	✓		46	✓	✓
620750	✓	✓		47	✓	NC
51	✓	✓		48	✓	NC
52	✓	✓		49	✓	NC
53	✓	✓		50	✓	NC
54	✓	✓		51	✓	✓
55	✓	✓		52	✓	✓
56	✓	✓		640960	✓	✓
57	✓	✓		61	✓	✓
640893	✓	NC		963	✓	✓
94	✓	NC		64	✓	✓
95	✓	✓		65	✓	NC
96	✓	✓		66	✓	NC
97	✓	✓		962	✓	✓
98	✓	✓		760582	✓	✓
99	✓	NC				
900	✓	NC				
1	✓	NC				
2	✓	NC				
3	✓	NC				
4	✓	NC				

Grenfell Twp. M.351

Burt Twp. M.334

Otto Twp. M.379

Blain Twp. M.418

VI

V

IV

III

II

I

12 11 10 9 8 7 6 5 4 3 2 1

THE TOWNSHIP OF EBY

Jun. 8/86

DISTRICT OF TIMISKAMING

LARDER LAKE MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

PATENTED LAND	(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.

NOTES

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

AREAS WITHDRAWN FROM STAKING
under Sec. 43 of The Mining Act (R.S.O. 1970).

Order No.	File	Date	Disposition

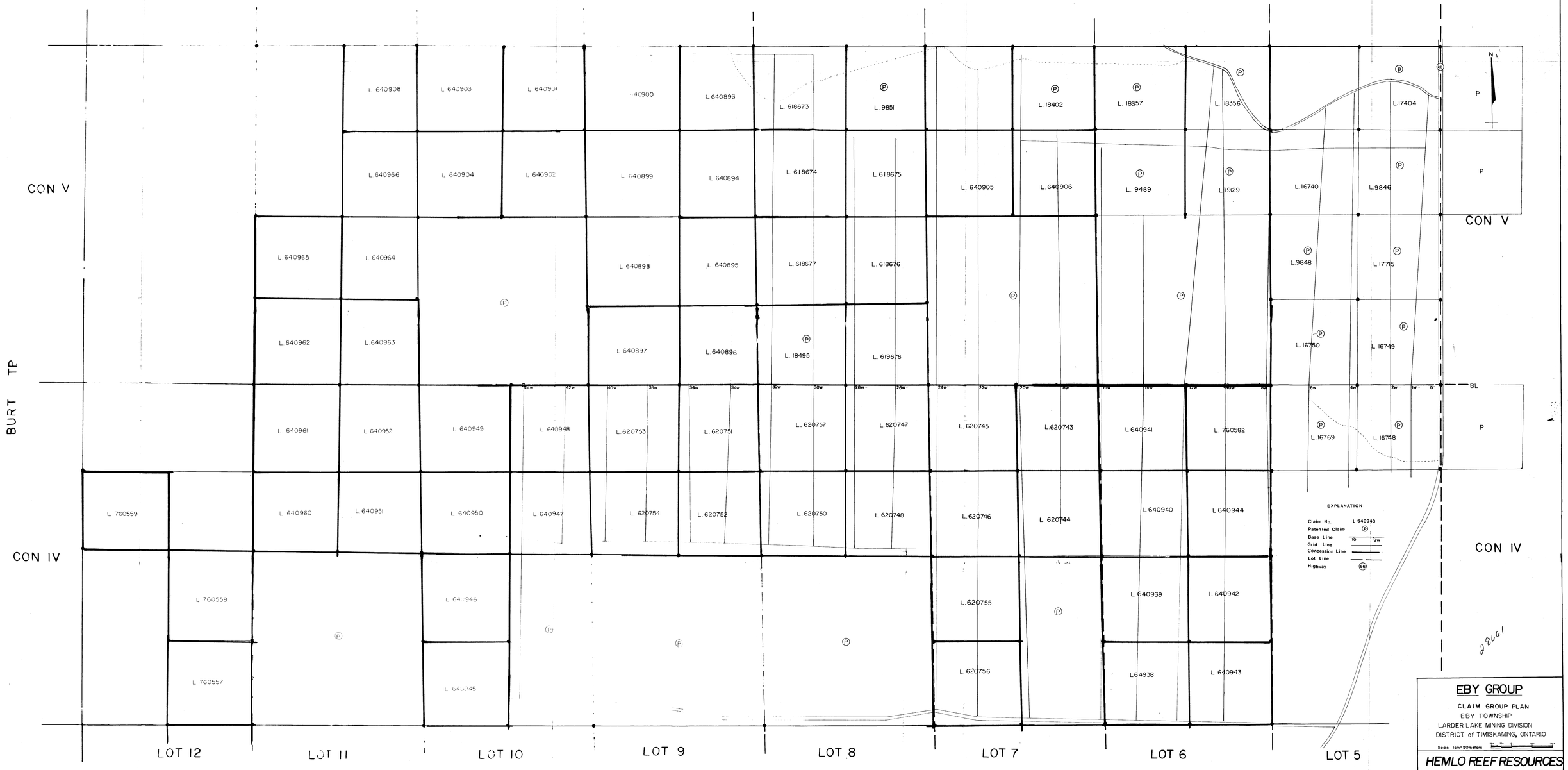
N½ Lot 7, Con. 3 - Canc. of Forfeiture - Sept 17/85

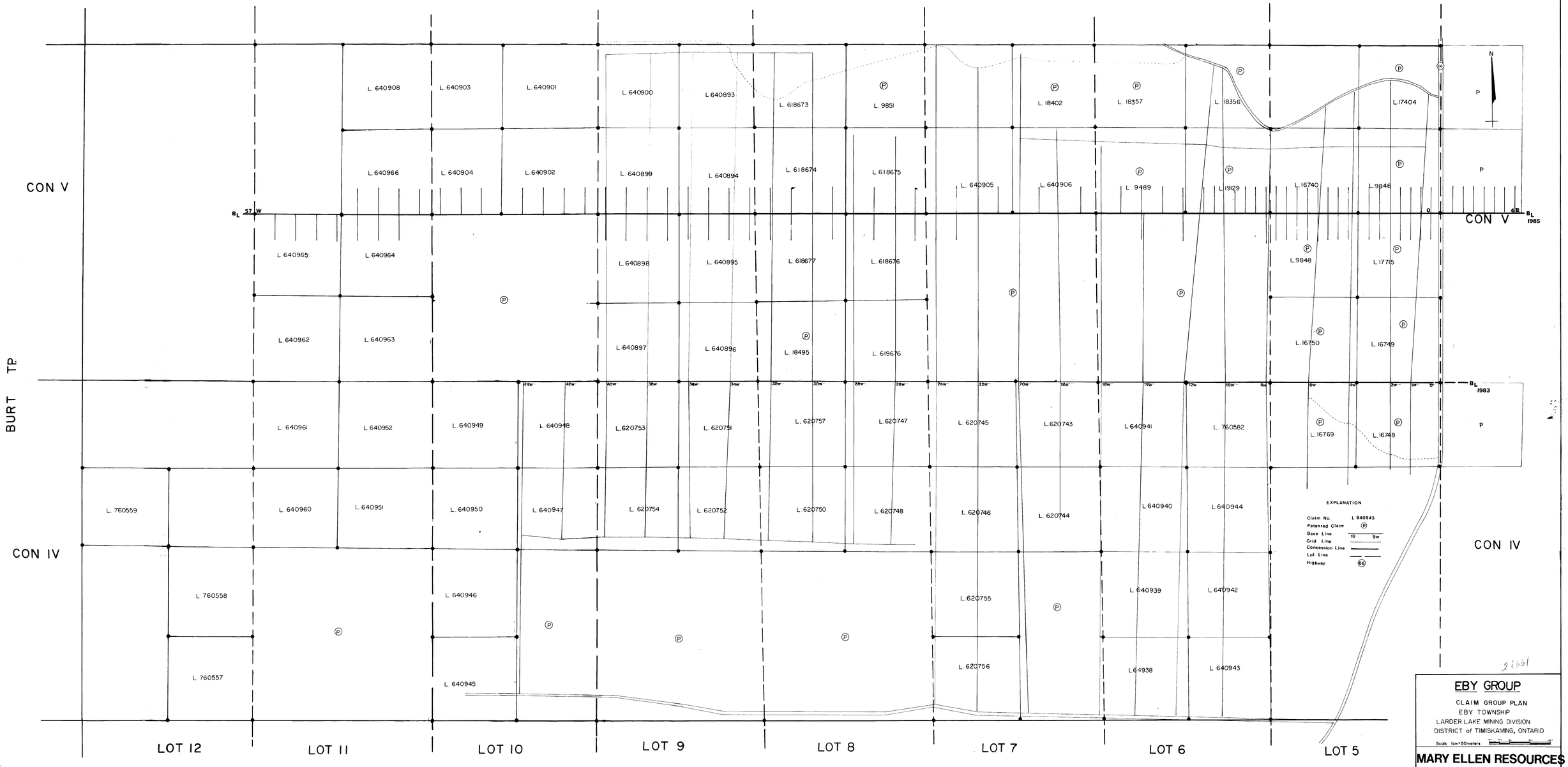
PLAN NO.- M-345

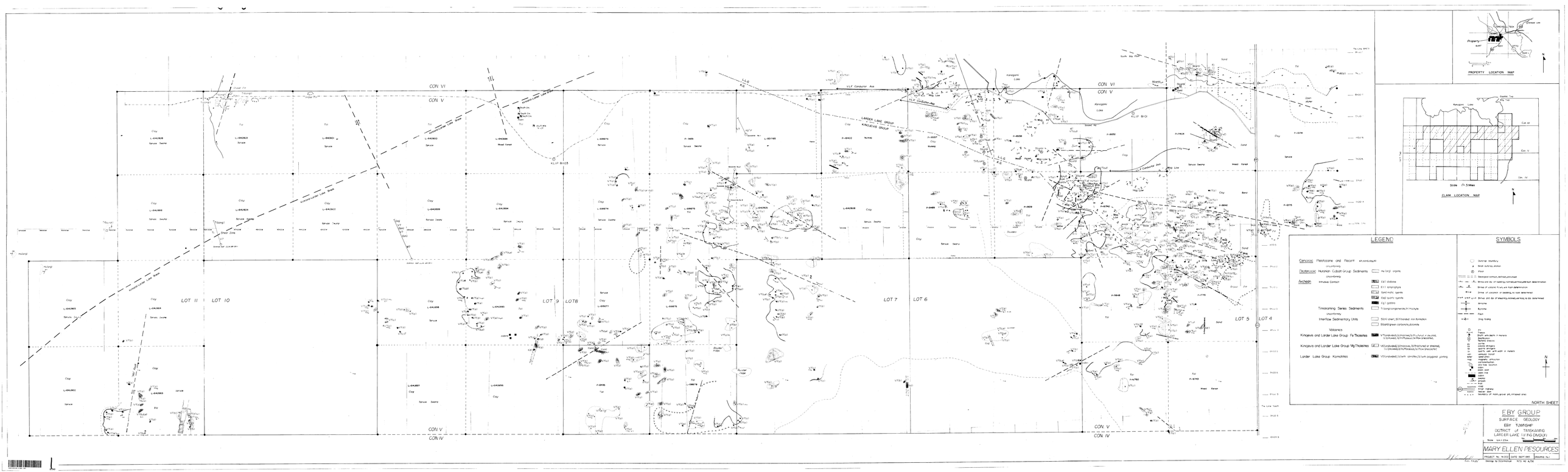
ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

42A01SE0186 2.8661 EBY

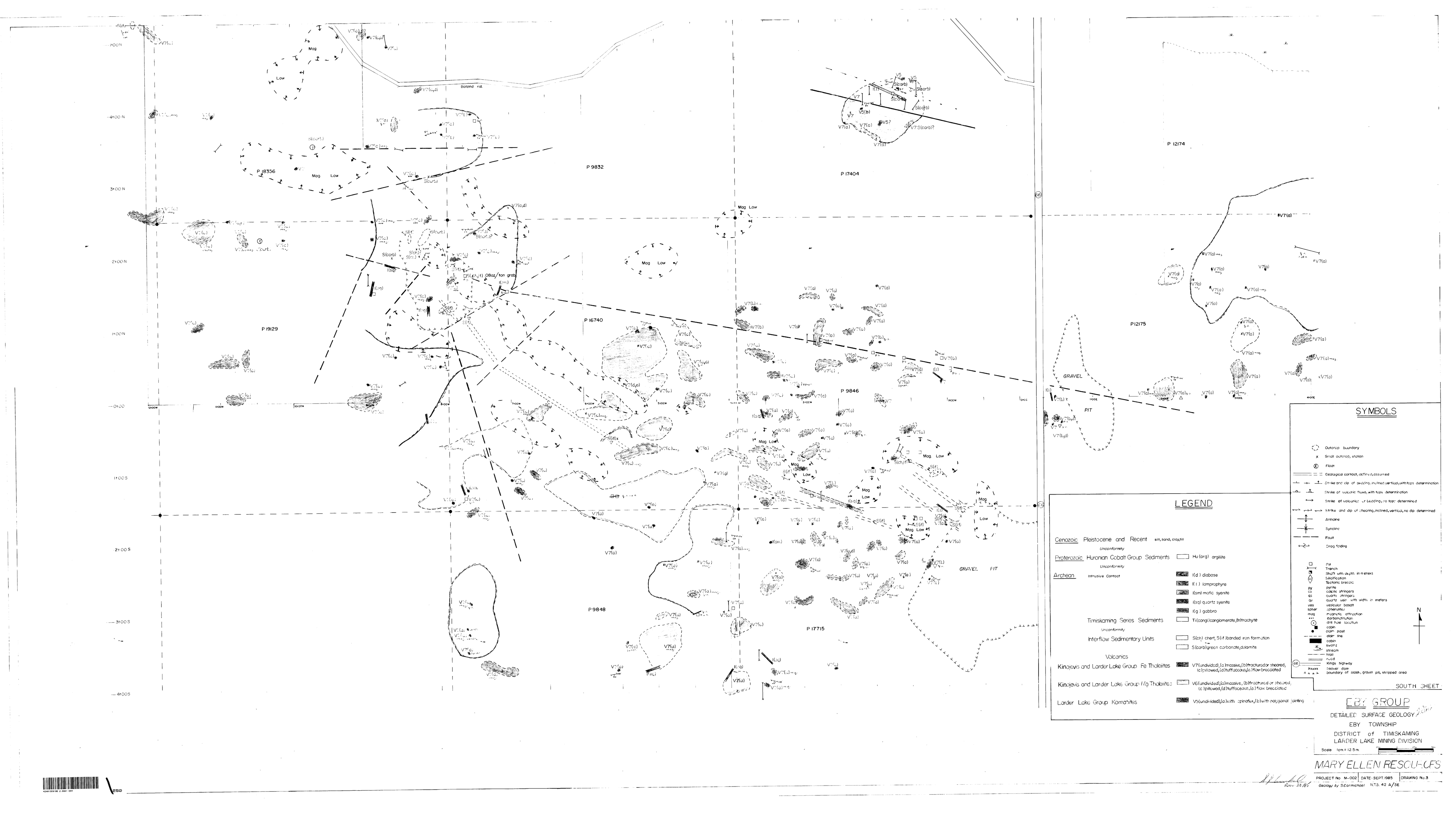
200


L 640908
L 640903
L 640901
40900
L 640893
L 618673
L 9851
L 18402
L 18357
L 18356
L 17404
L 640966
L 640904
L 640902
L 640899
L 640894
L 618674
L 618675
L 640905
L 640906
L 9489
L 19129
L 16740
L 9846
CON V
L 640965
L 640964
L 640898
L 640895
L 618677
L 618676
L 9848
L 17715
L 640962
L 640963
L 640897
L 640896
L 18495
L 619676
L 16750
L 16749
BURT TP
L 640961
L 640952
L 640949
L 640948
L 620753
L 620751
L 620757
L 620747
L 620745
L 620743
L 640941
L 760582
L 16769
L 16748
BL
L 760559
L 640960
L 640951
L 640950
L 640947
L 620754
L 620752
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L 620748
L 620746
L 620744
L 640940
L 640944
CON IV
L 760558
L 640946
L 620755
L 640939
L 640942
L 760557
L 640945
L 620756
L 64938
L 640943
LOT 12
LOT 11
LOT 10
LOT 9
LOT 8
LOT 7
LOT 6
LOT 5
EXPLANATION
Claim No. L 640943
Patented Claim
Base Line
Grid Line
Concession Line
Lot Line
Highway
N
EBY GROUP
CLAIM GROUP PLAN
EBY TOWNSHIP
LARDER LAKE MINING DIVISION
DISTRICT of TIMISKAMING, ONTARIO
Scale 1cm=50meters
HEMLO REEF RESOURCES
Drawn by: GK
DRAWING NO: 1
Date: JAN 1985


BURT TP.
CON V
CON IV
CON V
CON IV
BL 57 W
BL 1985
BL 1983
L. 640908
L. 640903
L. 640901
L. 640900
L. 640893
L. 618673
L. 9851
L. 18402
L. 18357
L. 18356
L. 17404
L. 640966
L. 640904
L. 640902
L. 640899
L. 640894
L. 618674
L. 618675
L. 640905
L. 640906
L. 9489
L. 19129
L. 16740
L. 9846
L. 640965
L. 640964
L. 640898
L. 640895
L. 618677
L. 618676
L. 9848
L. 17715
L. 640962
L. 640963
L. 640897
L. 640896
L. 18495
L. 619676
L. 16750
L. 16749
L. 640961
L. 640952
L. 640949
L. 640948
L. 620753
L. 620751
L. 620757
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L. 620745
L. 620743
L. 640941
L. 760582
L. 16769
L. 16748
L. 760559
L. 640960
L. 640951
L. 640950
L. 640947
L. 620754
L. 620752
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L. 620744
L. 640940
L. 640944
L. 760558
L. 640946
L. 620755
L. 640939
L. 640942
L. 760557
L. 640945
L. 620756
L. 64938
L. 640943
LOT 12
LOT 11
LOT 10
LOT 9
LOT 8
LOT 7
LOT 6
LOT 5
EXPLANATION
Claim No. L 640943
Patented Claim (P)
Base Line 10 9w
Grid Line
Concession Line
Lot Line
Highway (66)
N
P
EBY GROUP
CLAIM GROUP PLAN
EBY TOWNSHIP
LARDER LAKE MINING DIVISION
DISTRICT of TIMISKAMING, ONTARIO
Scale 1cm=50meters
MARY ELLEN RESOURCES
Drawn by: GK
DRAWING NO: 1
Date: JAN 1985
2661


CON VI
CON V
CON IV
LOT 11
LOT 10
LOT 9
LOT8
LOT 7
LOT 6
LOT 5
LOT 4
KIRKLAND LAKE BASIN
KINGSWAY
KLUP BH03
Kenogami Lake
Property
Claim
Scale 1" = 5 Miles
PROPERTY LOCATION MAP
CLAIM LOCATION MAP
LEGEND
SYMBOLS
Cenozoic Pleistocene and Recent sand,gravel,silt
Unconformity
Proterozoic Huronian Cobalt Group Sediments
Unconformity
Archean Intrusive Contact
Timiskaming Series Sediments
Unconformity
Interflow Sedimentary Units
Volcanics
Kinojevis and Larder Lake Group Fe Tholeiites
Kinojevis and Larder Lake Group Mg Tholeiites
Larder Lake Group Komatiites
Hollinger Unconformity
Diabase
Gabbro
Syenite
Felsic intrusive rocks
Mafic intrusive rocks
Ultramafic intrusive rocks
Overburden boundary
Swamp
Creek
Geological contact, formation
Strike and dip of bedding, schistosity, foliation determination
Strike of volcanic flow, vein determination
Strike of unconformity, bedding not determined
Strike and dip of shearing, schistosity, foliation determined
Anticline
Syncline
Fault
Drag folding
Pit
Quarry
Shaft with depth in meters
Excavation
Adit
Surface workings
Diamond drill hole
Trench
Test pit with width in meters
Mineral occurrence
Mineralization
Magnetic attraction
Electromagnetic
Drill hole location
Cabin
Cabin, ruins
Cabin fire
Tower
Power line
Airport
Road
Highway
Logging road
Boundary of claim, power pit, stripped area
NORTH SHEET
EBY GROUP
SURFACE GEOLOGY
EBY TOWNSHIP
DISTRICT of TIMISKAMING
LARDER LAKE MINING DIVISION
Scale 1cm = 25m
MARY ELLEN RESOURCES
PROJECT No. M-002 DATE SEPT 1980 DRAWING No.1
Surveyed by Mary Ellen Resources Ltd. and by Fox
Geology by Scarsbrook M.Sc. and by Fox

EBY GROUP
SURFACE GEOLOGY
TRENCH 15
OUTLET LAKE
LOT 9, CON V
LOT 10, CON IV
MARY ELLEN RESOURCES
SOUTH SHEET
LEGEND
SYMBOLS
PROPERTY LOCATION MAP
CLAIM LOCATION MAP
Scale 1:1000
Scale 1:5000
Bedrock
Overburden
Sand
Clay
Boulders
Gravel
Trench
Outcrop
Lot 9
Lot 10
CON V
CON IV
CON III


P 18356
P 19129
P 9832
P 17404
P 16740
P 9846
P 9848
P 17715
P 12174
P12175
Mag Low
Boland Rd.
GRAVEL
PIT
SYMBOLS
Outcrop boundary
Small outcrop, station
Float
Geological contact, definite, assumed
Strike and dip of bedding, inclined, vertical, with tops determination
Strike of volcanic flows, with tops determination
Strike of volcanic or bedding, no tops determined
Strike and dip of shearing, inclined, vertical, no dip determined
Anticline
Syncline
Fault
Drag folding
Pit
Trench
Shaft with depth in meters
Silicification
Tectonic breccia
pyrite
calcite stringers
quartz stringers
quartz vein with width in meters
vesicular basalt
spherulites
magnetic attraction
carbonatization
drill hole location
cabin
claim post
clear line
cabin
sword
stream
trail
road
Kings highway
beaver dam
boundary of slash, gravel pit, stripped area
LEGEND
Cenozoic Pleistocene and Recent silt, sand, clay, till
Unconformity
Proterozoic Huronian Cobalt Group Sediments
Hu (arg) argillite
Unconformity
Archean Intrusive Contact
I(d) diabase
I(l) lamprophyre
I(sm) mafic syenite
I(sq) quartz syenite
I(g) gabbro
Timiskaming Series Sediments
T1(cong) conglomerate, fbritrachyte
Unconformity
Interflow Sedimentary Units
S(ch) chert, S(if) banded iron formation
S(carb) green carbonate, dolomite
Volcanics
Kinojevis and Larder Lake Group Fe Tholeiites
V7(undivided), (a) massive, (b) fractured or sheared, (c) pillowed, (d) fluffaceous, (e) flow brecciated
Kinojevis and Larder Lake Group Mg Tholeiites
V6(undivided), (a) massive, (b) fractured or sheared, (c) pillowed, (d) fluffaceous, (e) flow brecciated
Larder Lake Group Komatiites
V5(undivided), (a) with spinifex, (b) with polygonal jointing
SOUTH SHEET
CBX GROUP
DETAILED SURFACE GEOLOGY
EBY TOWNSHIP
DISTRICT of TIMISKAMING
LARDER LAKE MINING DIVISION
Scale 1cm = 12.5m
MARY ELLEN RESOURCES
PROJECT No M-002
DATE SEPT 1985
DRAWING No. 3
Geology by S.Carmichael
N.T.S. 42 A/SE

12+00W 11+00W 10+00W 9+00W 8+00W 7+00W 6+00W 5+00W 4+00W 3+00W 2+00W 1+00W 0+00

14+00N 13+00N 12+00N 11+00N 9+00N 8+00N 7+00N 6+00N

South Branch Kirkland-Larder Lake Ereuk

P 11837

P 11827

ROGICK - ELLIOT - CLARK

GEORGE WALTERS

P 11403

P 11404

SOUTH BAY FAULT

KENOGAMI LAKE

KENOGAMI LAKE

OPEN WATER

OPEN WATER

108oz/ton Grab

150z/ton float grab

1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Outcrop boundary
Small outcrop, station
Float
Geological contact, defined, assumed
Strike and dip of bedding, inclined, vertical, with tops determination
Strike of vulcanic flows, with tops determination
Strike of volcanics or bedding, no tops determined
Strike and dip of shearing, inclined, vertical, no dip determined
Anticline
Syncline
Fault
Drag folds

Pit
Trench
Shaft with depth in meters
Silicification
Volcanic breccia
py pyrite
cc calcite stockwork
qv quartz-carb veins
qv quartz veins
vbx volcanic fluidal
spher spherulites
mvc microvariolitic amygdaloidal
dh drill hole location
claim
claim post
claim line
metal
power
stream
trail
road
Kirkland Lake
bound. det.
boundary of claim, grass pit, stripped area

N

LEGEND

Cenozoic Pleistocene and Recent silt, sand, clay, till

Unconformity

Proterozoic Huronian Cobalt Group Sediments Hu(arg) argillite

Unconformity

Archean Intrusive Contact

I(d) diabase
I(l) lamprophyre
I(sm) mafic syenite
I(sq) quartz syenite
I(g) gabbro

Timiskaming Series Sediments

Unconformity

T(cong) conglomerate, (tr) trachyte

Interflow Sedimentary Units

S(ch) chert, S(if) banded iron formation
S(carb) green carbonate, dolomite

Volcanics

Kinojevis and Larder Lake Group Fe Tholeiites V7(undivided), (a) massive, (b) fractured or sheared, (c) pillowed, (d) tuffaceous, (e) flow breciated

Kinojevis and Larder Lake Group MG Tholeiites V6(undivided), (a) massive, (b) fractured or sheared, (c) pillowed, (d) tuffaceous, (e) flow breciated

Larder Lake Group Komatiites V5(undivided), (a) with spinafex, (b) with polygonal jointing

NORTH SHEET

EBY GROUP 32nf

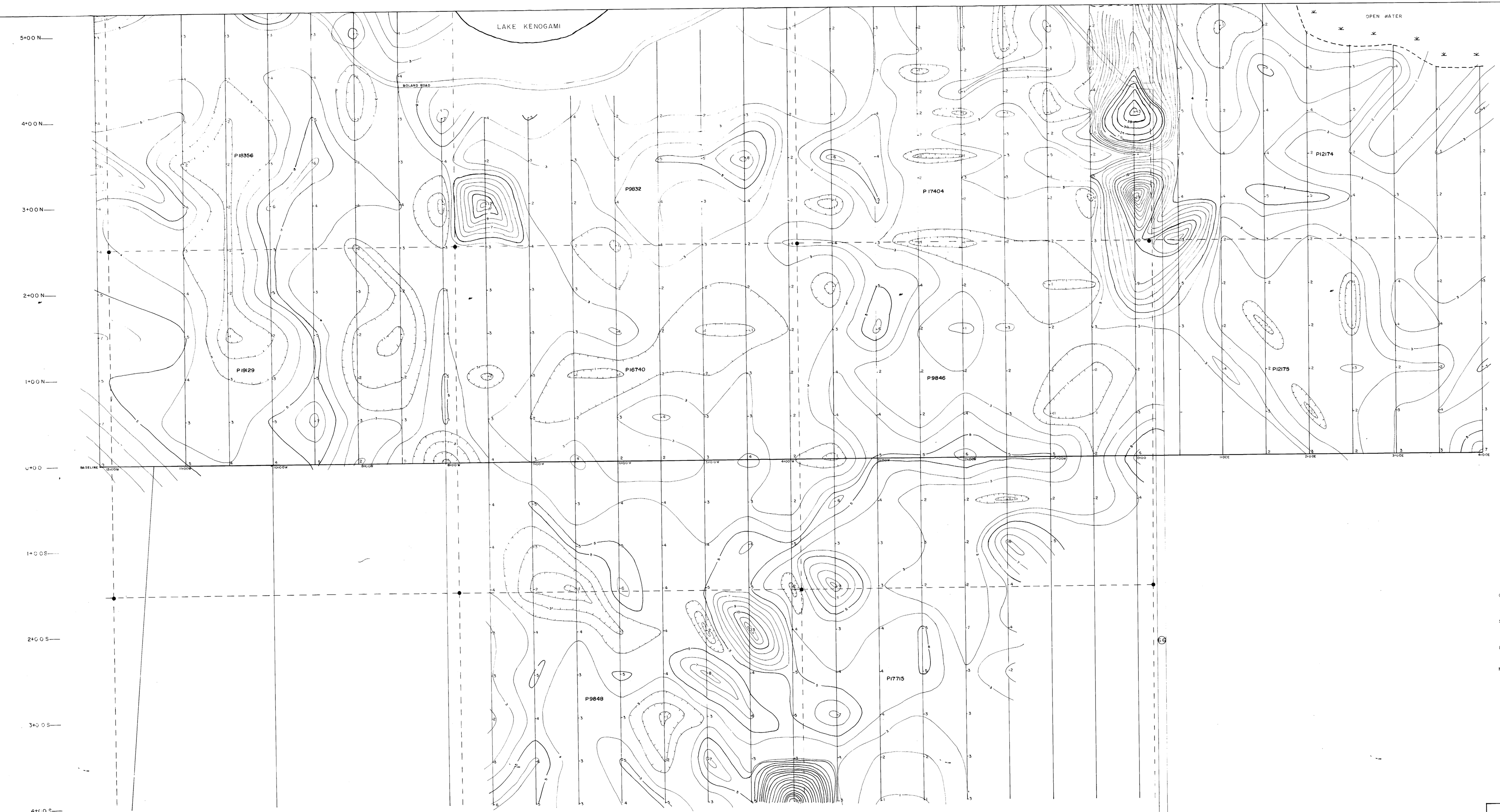
DETAILED SURFACE GEOLOGY
EBY TOWNSHIP
DISTRICT of TIMISKAMING
LARDER LAKE MINING DIVISION

Scale 1cm = 12.5m

MARY ELLEN RESOURCES

PROJECT No. M-002 | DATE: SEPT. 1985 | Drawing No. 4

Nov 28/85 Geology by S.Carmichael N.T.S. 42 A/5E



SYMBOLS

CONTOUR INTERVAL = 1 P.P.B. / 5 P.P.B.

STATION LOCATION WITH ASSAY VALUE

RELATIVE LOW

MARSH, MUSKEG

28661

SOUTH SHEET

EBY GROUP

HUMUS GEOCHEMISTRY SURVEY

EBY TOWNSHIP

DISTRICT of TIMISKIMING

LARDER LAKE MINING DIVISION

Scale 1cm = 12.5m

MARY ELLEN RESOURCES

PROJECT No. M-002 | DATE: SEPT. 1985 | DRAWING No. 3

N.T.S. 42 A/9E

D. J. Cunningham Nov. 22/85

12+00W 11+00W 10+00W 9+00W 8+00W 7+00W 6+00W 5+00W 4+00W 3+00W 2+00W 1+00W 0+00 1+00E 2+00E 3+00E 4+00E

14+00N
13+00N
12+00N
11+00N
10+00N
9+00N
8+00N
7+00N
6+00N
280

TIE LINE 13+84 N

P18857

P18227

P17402

P17403

P17404

LAKE KENOGAMI

LAKE KENOGAMI

ROAD ROAD

ROAD ROAD

OPEN WATER

OPEN WATER

TIE LINE 8+17N

N

SYMBOLS

CONTOUR INTERVAL - 1PPB
5PPB

STATION LOCATION WITH ASSAY VALUE 3

RELATIVE LOW

MARSH, MUSKEG

28661

NORTH SHEET

EBY GROUP

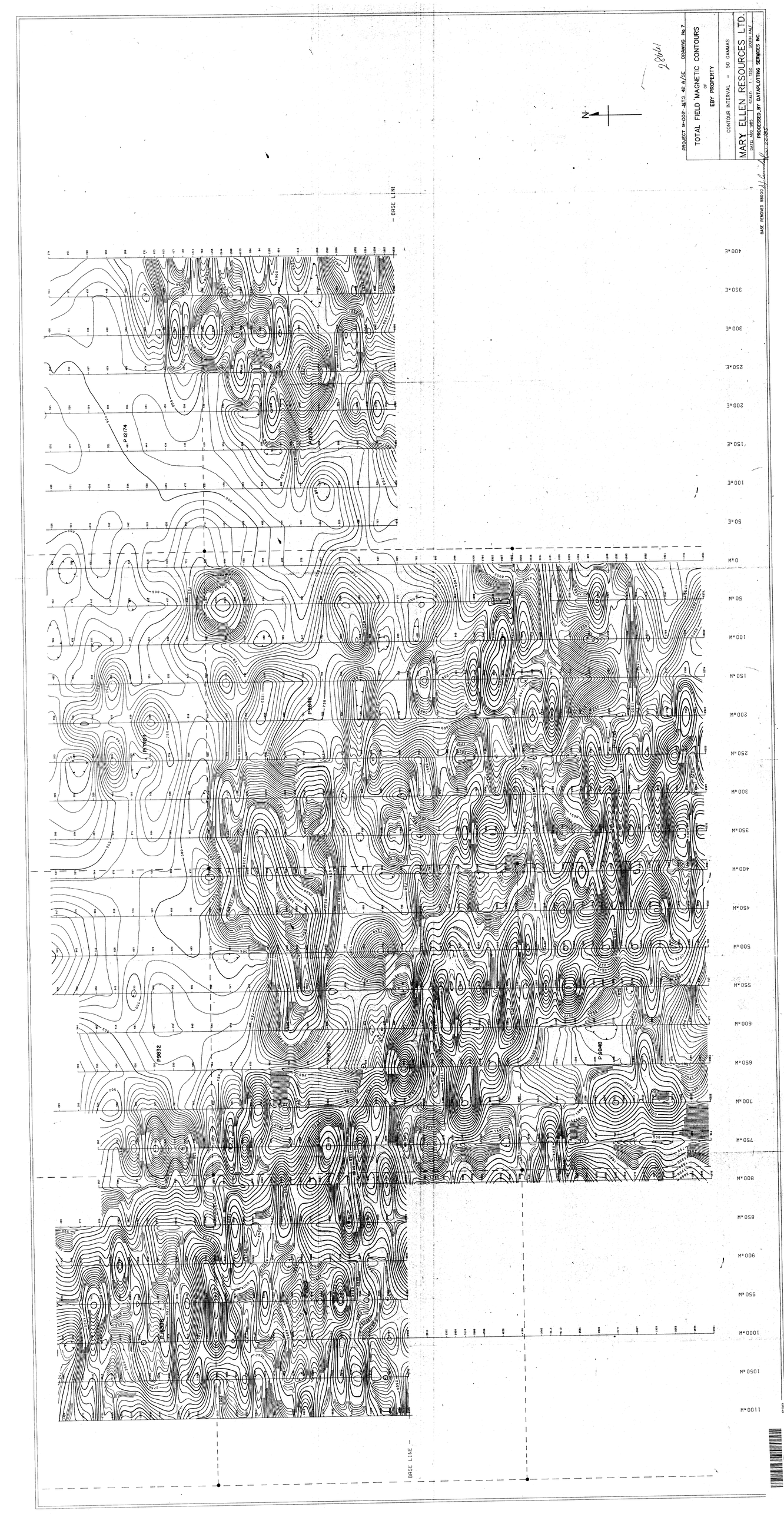
HUMUS GEOCHEMISTRY SURVEY
EBY TOWNSHIP
DISTRICT of TIMISKIMING
LARDER LAKE MINING DIVISION

Scale 1cm=12.5m

MARY ELLEN RESOURCES

PROJECT No. M-002 | DATE: SEPT. 1985 | DRAWING No. 6

N.T.S. 42 A/SE


PROJECT M-002- ATS 42 A/SE DRAWING No.7
TOTAL FIELD MAGNETIC CONTOURS
OF
EBY PROPERTY
CONTOUR INTERVAL - 50 GAMMAS
MARY ELLEN RESOURCES LTD.
DATE: AUG 1985 SCALE: 1:250 FOOT
PROCESSED BY DATAPLOTTING SERVICES INC.
BASE REMOVED 58000
BASE LINE
BASE LINE
N
P 12174
P 12174
P7499
P9846
P9832
P9740
P9848
P9846
P9848
400°E
350°E
300°E
250°E
200°E
150°E
100°E
50°E
0°W
50°W
100°W
150°W
200°W
250°W
300°W
350°W
400°W
450°W
500°W
550°W
600°W
650°W
700°W
750°W
800°W
850°W
900°W
950°W
1000°W
1050°W
1100°W

PROJECT No. M-002 N.T.S. 42 A/SE DRAWING No.8

TOTAL FIELD MAGNETIC CONTOURS
OF
EBY PROPERTY

CONTOUR INTERVAL - 50 GAMMAS

MARY ELLEN RESOURCES LTD.

DATE: AUG 1985 | SCALE: 1 : 1250 | NORTH HALF

PROCESSED BY DATAPLOTTING SERVICES INC.

BASE REMOVED 58000 gl Gamsby Nov. 22 '85

2 8061

N

P 12174

P 18227

P 17403

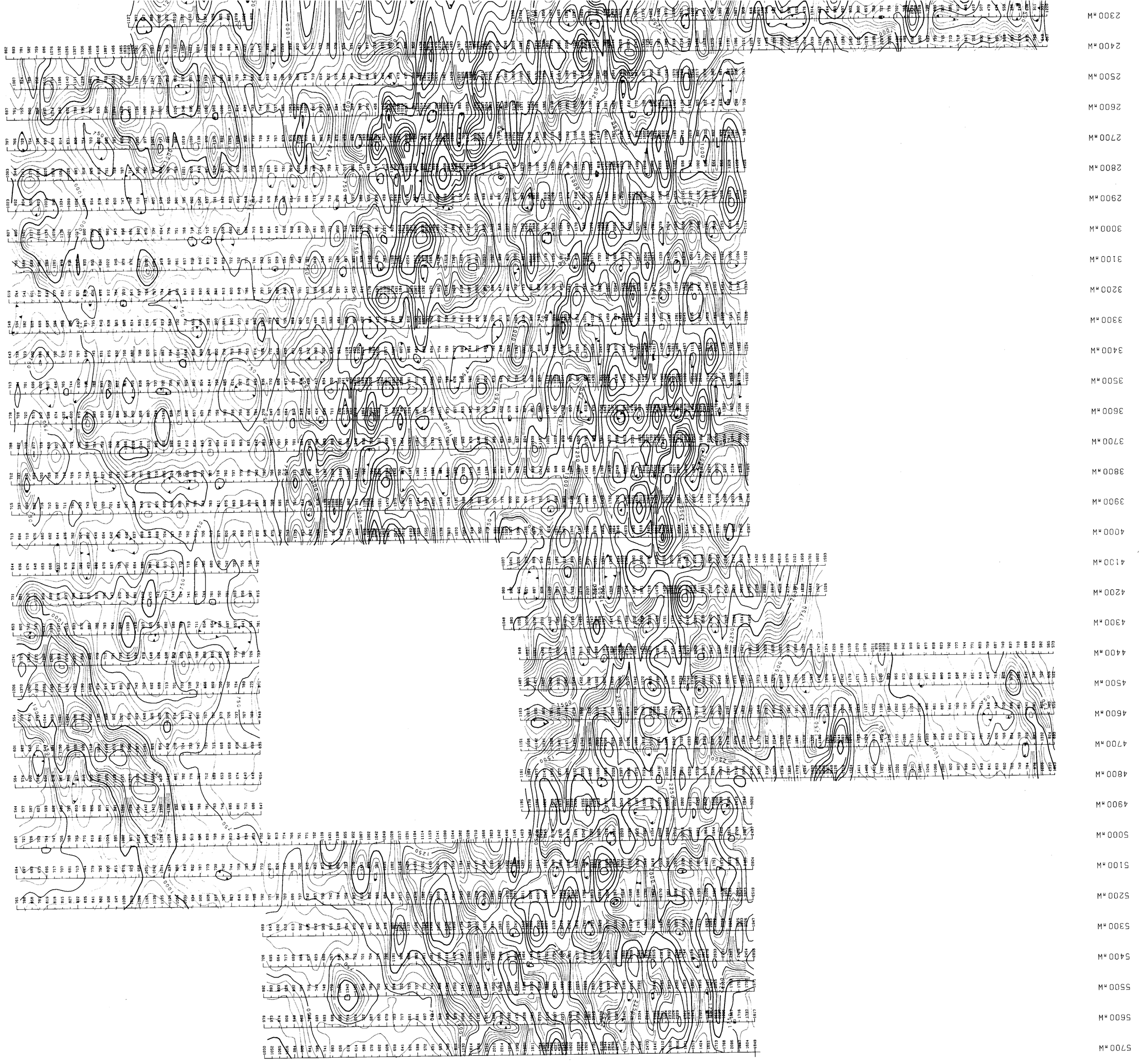
P 17404

P 18337

P 17402

- 1000 mN
- 500 mN
- 1000 mN
- 500 mN

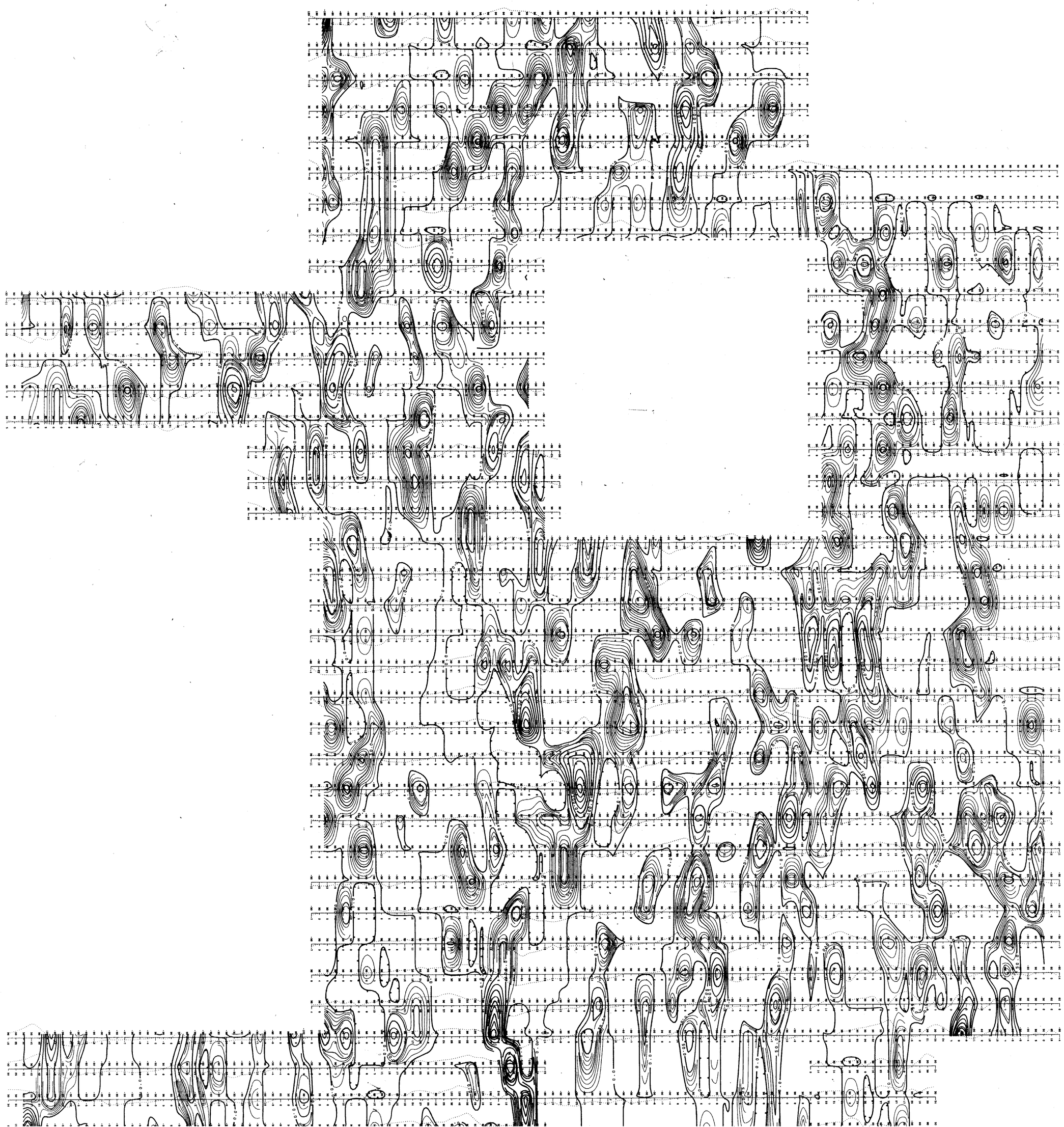
400 mE 350 mE 300 mE 250 mE 200 mE 150 mE 100 mE 50 mE 0 mW 50 mW 100 mW 150 mW 200 mW 250 mW 300 mW 350 mW 400 mW 450 mW 500 mW 550 mW 600 mW 650 mW 700 mW 750 mW 800 mW 850 mW 900 mW 950 mW 1000 mW 1050 mW 1100 mW


2200 mW
2300 mW
2400 mW
2500 mW
2600 mW
2700 mW
2800 mW
2900 mW
3000 mW
3100 mW
3200 mW
3300 mW
3400 mW
3500 mW
3600 mW
3700 mW
3800 mW
3900 mW
4000 mW
4100 mW
4200 mW
4300 mW
4400 mW
4500 mW
4600 mW
4700 mW
4800 mW
4900 mW
5000 mW
5100 mW
5200 mW
5300 mW
5400 mW
5500 mW
5600 mW
5700 mW
1000 mN
500 mN
BASE LINE
500 mS
1000 mS
1500 mS
2000 mS
2500 mS

4242858 2.2651 SHT

2500 mS — 2000 mS — 1500 mS — 1000 mS — 500 mS — BASE LINE — 500 mN — 1000 mN —

5700 mW
5600 mW
5500 mW
5400 mW
5300 mW
5200 mW
5100 mW
5000 mW
4900 mW
4800 mW
4700 mW
4600 mW
4500 mW
4400 mW
4300 mW
4200 mW
4100 mW
4000 mW
3900 mW
3800 mW
3700 mW
3600 mW
3500 mW
3400 mW
3300 mW
3200 mW
3100 mW
3000 mW
2900 mW
2800 mW
2700 mW
2600 mW
2500 mW
2400 mW
2300 mW
2200 mW



N

Claim boundary

Fault

Diorite

No. 9

V.G.
.06/2.0
.03/3.2

No. 13

S-4

Grabs
.185
.200

Lamp

Sy.

.64
2.0

.702
10.0

Grab
.47

Grab
.32

Sy.

Sy.

P-14

.04/5.0

.03/4.0

.12/2.5
.05/2.5
.05/2.5

P-12

Grab
.117

Vein?

Shear

Grabs
.34
.80

shear

S-3

checked assays
.02/2.5
.66/2.5
.01/2.5
.02/2.5
.05/1.0
.01/1.5

.16/5.0
.11/5.0

.03/2.5
.09/2.5
.03/2.5
.04/2.5

OFFICE

P-9

Qtz floats containing course gold

.05/1.7

.06/.9
.06/1.2

P-10

Grab samples
.05
.08
.10

BUNKHOUSE

COOKERY

.06/2.0
.07/2.5
.04/2.5
.04/2.5

.05/1.6
.07/2.5
.04/2.5

.07/4.0

P-11

GARAGE

.04/5.5
.03/4.5

.04/2.5
.06/2.5
.04/2.5
.07/2.5

.05/2.0
.03/4.5

P-13

EBY ROAD (gravelled)

Claim boundary

LEGEND

- Porphyry, veined types
- Porphyry, unaltered & earlier types
- Alteration, carbonate & mica
- Alteration, silicified & mineralized
- Lava, pillowed, massive,
- Banded tuff
- Conglomerate

2.8661

PLAN SHOWING GEOLOGY
on part of claim L 18227
ROGICK - CLARK GROUP

EBY TOWNSHIP
LARDER LAKE MINING DIVISION
DISTRICT OF TIMISKAMING, ONTARIO

50 0 50 100

Scale: 1 inch to 50 feet

Traced by: M.M.G.	Traced for: G.C.K.	Date: December 1983

Approved by S.J. Carmichael Nov. 22/85

42A01SE0186 2.8661 EBY

TOTAL FIELD MAGNETIC CONTOURS
OF
EBY PROPERTY

CONTOUR INTERVAL - 50 GAMMAS

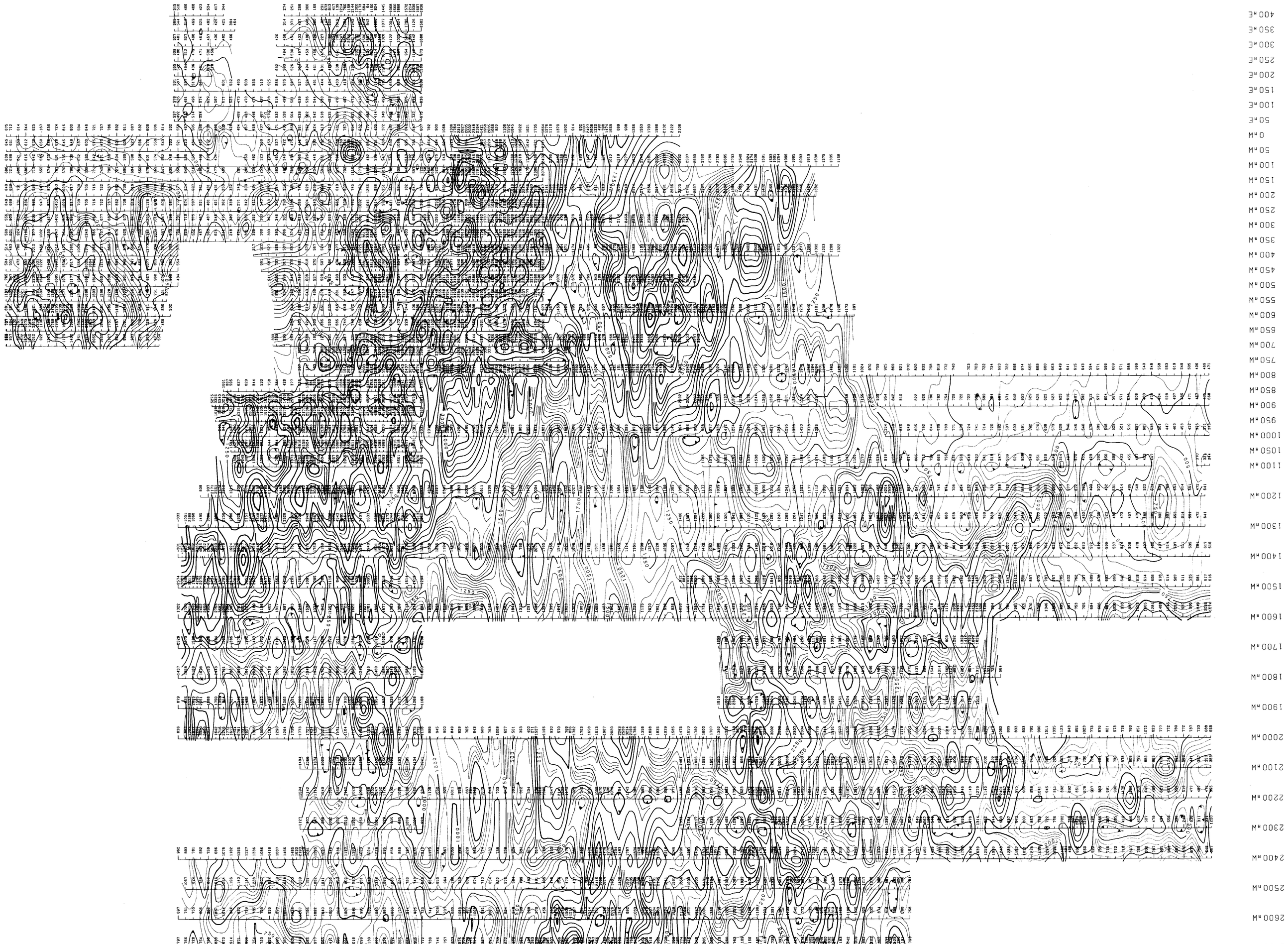
MARY ELLEN RESOURCES LTD.

DATE: AUG. 1985 SCALE: 1 : 5000

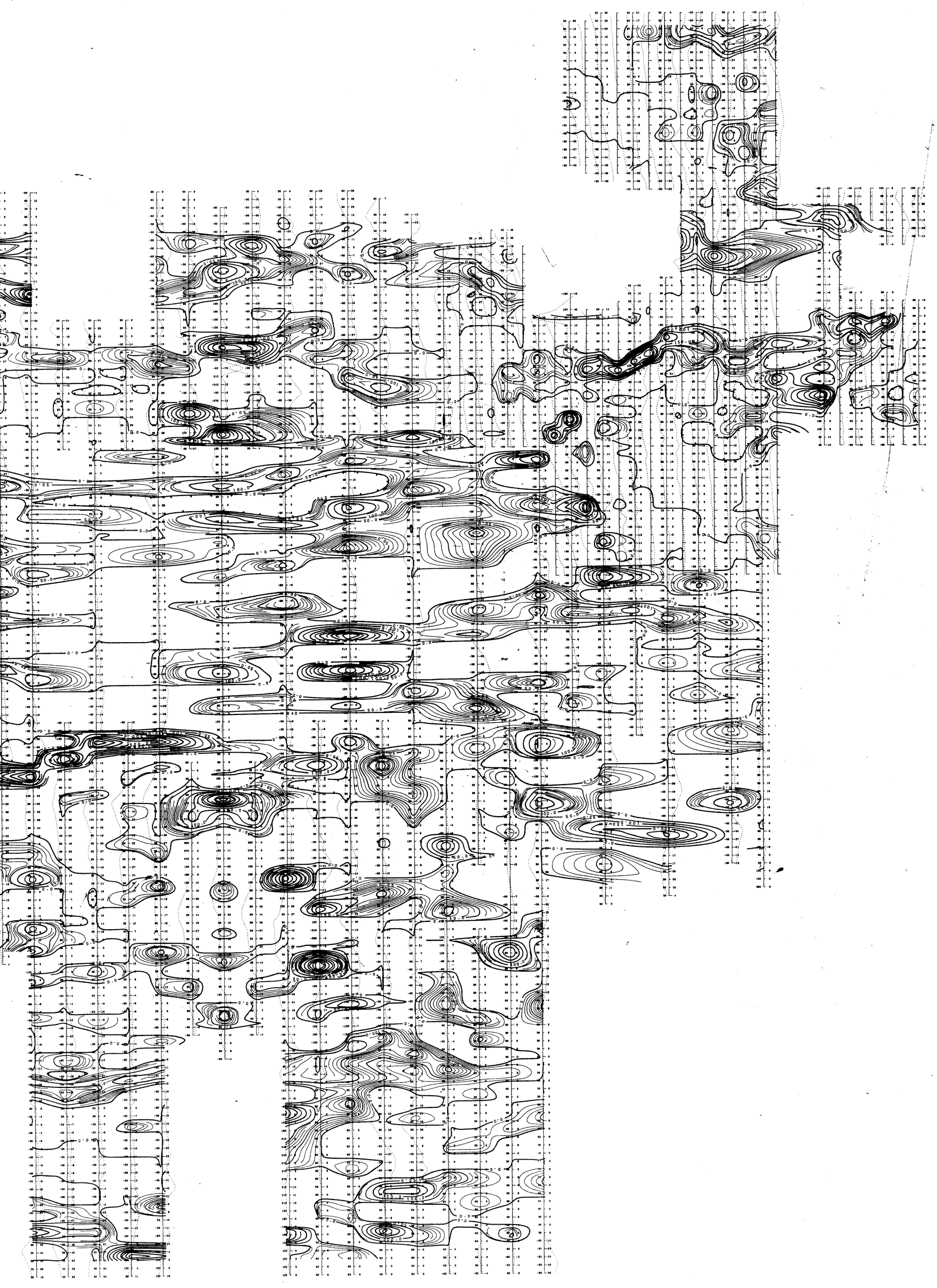
PPG (SSE) BY DATAPLOTTING SERVICES INC.

9 Tbl

1000 mN | 500 mN | BASE LINE | 500 mS | 1000 mS | 1500 mS | 2000 mS | 2500 mS



2500 mW 2400 mW 2300 mW 2200 mW 2100 mW 2000 mW 1900 mW 1800 mW 1700 mW 1600 mW 1500 mW 1400 mW 1300 mW 1200 mW 1100 mW 1050 mW 1000 mW 950 mW 900 mW 850 mW 800 mW 750 mW 700 mW 650 mW 600 mW 550 mW 500 mW 450 mW 400 mW 350 mW 300 mW 250 mW 200 mW 150 mW 100 mW 50 mW 100 mE 150 mE 200 mE 250 mE 300 mE 350 mE 400 mE



1000 mN
500 mN
BASE LINE
500 mS
1000 mS
1500 mS
2000 mS
2500 mS

N

PROJECT M-002 N.T.S. 42 A/SE DRAWING No.10

VLF – FRASER FILTERED CONTOURS
OF
EBY PROPERTY

PROFILES – 50/CM
CONTOUR INTERVAL – 10

MARY ELLEN RESOURCES LTD.

DATE: AUG 1985 | SCALE: 1 : 5000

PROCESSED BY DATAPLOTTING SERVICES INC.

S. J. Cannuck Nov 22/85