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A REPORT ON THE KENOGAMI LAKE GOLD PROPERTY, LARDER LAKE MINING DIVISION, ONTARIO,

OF

R.J. KASNER.

Sudbury, Ontario
January 12, 1983

G.J. Hinse, P.Eng.

NTS 42A1/0203
Project 1112

OM82-6-I-176

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SUMMARY

The Kenogami Lake Gold property, comprising 57 contiguous mining claims, has recently been acquired by Mr. R.J. Kasner by staking during the latter part of 1981. The property lies in the northwest quarter of Eby township, Larder Lake Mining Division, approximately 16 kilometers southeast of the Town of Kirkland Lake. This report on the property is prepared by G.J. Hinse, P.Eng., at the request of Mr. R.J. Kasner.

The property area was first explored during the early 1900's as a follow up of the Cobalt discoveries and the ensuing boom. Although initial efforts were not encouraging, renewed exploration in later years prompted by the results obtained in the Porcupine camp led to several discoveries in the vicinities of the Town of Kirkland Lake. Early exploration on the property was not extensive due to the scarcity of rock outcrops. However, during the 1950's Sylvanite Gold Mines and Dominion Gulf Company carried out geological mapping, magnetic surveying and diamond drilling. Later work was done during 1979 to 1981 by the Ontario Geological Survey over a wide area including Eby township. This consisted of a magnetic and INPUT electromagnetic aerosurveys and deep overburden geochemical sampling - the latter suggesting that an auriferous source area could be present within the property area.

The rocks on the property consist of tholeiitic basalt with interflow sedimentary units belonging to the Larder Lake group and carbonate-rich sedimentary rocks belonging to the Temiscaming group. The property covers the projected extension of the Larder Lake "break", a highly auriferous structure that extends in Ontario and Quebec for over 250 kilometers. Within the property, past exploration of this structure has been hindered by lack of outcrops.

Along the Larder Lake "break", gold is associated with metasedimentary units contained within rocks of the Larder Lake group and located at the upper contact of this group with the predominantly clastic sedimentary rocks of the Temiscaming group. Within the property area, the extent and configuration of the gold-bearing metasedimentary units are unknown. Most importantly, as suggested by the deep overburden geochemical survey done by the Ontario Geological Survey, gold concentrations of stratabound character may well occur within these units, and they are accordingly of excellent exploration potential.

Past exploration for gold in the area has been limited in effectiveness by the scarcity of outcrop and the lack of appropriate geophysical methodry. Thus the Larder Lake "break" and the surrounding area have not been thoroughly evaluated. Accordingly, a program of combined electromagnetic, magnetic and humus geochemical surveying is recommended for the property, with included provision for test drilling.

The geophysical portion of the recommended program, termed Phase I., is estimated to cost $13,200. The humus geochemical survey and drilling provision, under Phase II. and Phase III. will involve the expenditure of an additional $41,000. and 111,300. The total program cost is thus estimated at $165,500.

A REPORT ON THE
KENOGAMI LAKE GOLD PROPERTY,
LARDER LAKE MINING DIVISION, ONTARIO,

OF

R.J. KASNER.

INTRODUCTION

This report on the Kenogami Lake Gold property of Mr. R.J. Kasner has been prepared by G.J. Hinse, P.Eng., at the request of Mr. R.J. Kasner. The property lies in the northwest quarter of Eby township, Kirkland Lake mining area of the Larder Lake Mining Division of Ontario.

The purpose of this report is to provide an assessment of the economic potential of the property, and to develop an appropriate exploration program for its further evaluation.

There are no producing mines in the immediate vicinity of the property, but the Kirkland Lake mining area lies about 16 kilometers to the northeast. Mining companies such as Dominion Gulf, Sylvanite, several junior exploration companies and prospectors have carried out exploration in the area in the past.

The property was acquired by Mssrs. R.J. Kasner and G.C. Kasner by staking at the beginning of 1982. It was not examined by the writer due to the lateness of the season. However, the writer has visited the Walters property on October 31, 1982. This property is located within one half mile of the Kenogami Lake Gold property. The writer is familiar with the area, maybe uniquely so, having conducted exploration and property evaluation therein in the past, and has experience to adequately qualify the conclusions and recommendations expressed herein.

Additional exploration data on the property and the area has been obtained from the assessment files and reports of the Ministry of Natural Resources of Ontario. These, and the writer's personal knowledge of the area are considered of sufficient detail and accuracy for the purpose of this report.

PROPERTY LOCATION AND ACCESS

The property includes 57 contiguous unpatented mining claims comprising an area of approximately 2,280 acres. It is situated in the northwest quarter of Eby township, District of Timiscaming, Larder Lake Mining Division, some 16 kilometers southeast of the mining center of Kirkland Lake, Northeastern Ontario (Figure 1.).

Access to the property is readily gained through concession roads and access roads to the south shore of Kenogami lake.

The land area is topographically of low relief, being part of the "The Little Clay Belt" of Abitibi. High areas, wooded dominantly by poplars and spruces, are interspersed with low areas where alders are abundant. Outcrop areas are sparse.

Electrical power and infrastructure suitable for support of a mining operation are available at the mining center of Kirkland Lake. There are no facilities in the immediate vicinity of the property.

LAND TENURE AND OWNERSHIP

The claims included in the R.J. Kasner Kenogami Lake Gold property are shown in Figure 1., and are listed as follows:

Claim Number	Location	Anniversary Date	Registered Owner
L 618673	NW¼ of N½, lot 8, conc. 5	January 28, 1983	R.J. Kasner
L 618674	SW¼ of N½, lot 8, conc. 5	"	"
L 618675	SE¼ of N½, lot 8, conc. 5	"	"
L 618676	NE¼ of S½, lot 8, conc. 5	"	"
L 618677	NW¼ of S½, lot 8, conc. 5	"	"
L 618678	SE¼ of S½, lot 8, conc. 5	"	"
L 620743	NE¼ of N½, lot 7, conc. 4	"	G.C. Kasner
L 620744	SE¼ of N½, lot 7, conc. 4	"	"
L 620745	NW¼ of N½, lot 7, conc. 4	"	"
L 620746	SW¼ of N½, lot 7, conc. 4	"	"
L 620747	NE¼ of N½, lot 8, conc. 4	"	"
L 620748	SE¼ of N½, lot 8, conc. 4	"	"
L 620750	SW¼ of N½, lot 8, conc. 4	"	"
L 620751	NE¼ of N½, lot 9, conc. 4	"	"
L 620752	SE¼ of N½, lot 9, conc. 4	"	"
L 620753	NW¼ of N½, lot 9, conc. 4	"	"
L 620754	SW¼ of N½, lot 9, conc. 4	"	"
L 620755	NW¼ of S½, lot 7, conc. 4	"	"
L 620756	SW¼ of S½, lot 7, conc. 4	"	"
L 620757	NW¼ of N½, lot 8, conc. 4	"	"
L 640893	NE¼ of N½, lot 9, conc. 5	"	R.J. Kasner
L 640894	SE¼ of N½, lot 9, conc. 5	"	"
L 640895	NE¼ of S½, lot 9, conc. 5	"	"
L 640896	SE¼ of S½, lot 9, conc. 5	"	"
L 640897	SW¼ of S½, lot 9, conc. 5	"	"
L 640898	NW¼ of S½, lot 9, conc. 5	"	"
L 640899	SW¼ of N½, lot 9, conc. 5	"	"
L 640900	NW¼ of N½, lot 9, conc. 5	"	"
L 640901	NE¼ of N½, lot 10, conc. 5	"	"
L 640902	SE¼ of N½, lot 10, conc. 5	"	"
L 640903	NW¼ of N½, lot 10, conc. 5	"	"
L 640904	SW¼ of N¼, lot 10, conc. 5	"	"
L 640905	SW¼ of N½, lot 7, conc. 5	"	"
L 640906	SE¼ of N½, lot 7, conc. 5	"	"
L 640908	NE¼ of N½, lot 11, conc. 5	"	"
L 640938	SW¼ of S½, lot 6, conc. 4	"	G.C. Kasner
L 640939	NW¼ of S½, lot 6, conc. 4	"	"
L 640940	SW¼ of N½, lot 6, conc. 4	"	"
L 640941	NW¼ of N½, lot 6, conc. 4	"	"
L 640942	NE¼ of S½, lot 6, conc. 4	"	"
L 640943	SE¼ of S½, lot 6, conc. 4	"	"
L 640944	SE¼ of N½, lot 6, conc. 4	"	"
L 640945	SW¼ of S½, lot 10, conc. 4	"	"
L 640946	NW¼ of S½, lot 10, conc. 4	"	"
L 640947	SE¼ of N½, lot 10, conc. 4	"	"
L 640948	NE¼ of N½, lot 10, conc. 4	"	"
L 640949	NW¼ of N½, lot 10, conc. 4	"	"
L 640950	SW¼ of N½, lot 10, conc. 4	"	"
L 640951	SE¼ of N½, lot 11, conc. 4	"	"
L 640952	NE¼ of N½, lot 11, conc. 4	"	"

Claim Number	Location	Anniversary Date	Registered Owner
L 640960	SW¼ of N½, lot 11, conc. 4	"	"
L 640961	NW¼ of N½, lot 11, conc. 4	"	"
L 640962	SW¼ of S½, lot 11, conc. 5	"	"
L 640963	SE¼ of S½, lot 11, conc. 5	"	"
L 640964	NE¼ of S½, lot 11, conc. 5	"	"
L 640965	NW¼ of S½, lot 11, conc. 5	"	"
L 640966	SE¼ of N½, lot 11, conc. 5	"	"

Note: L denotes claims belonging to the Larder Lake Mining Division of Ontario.

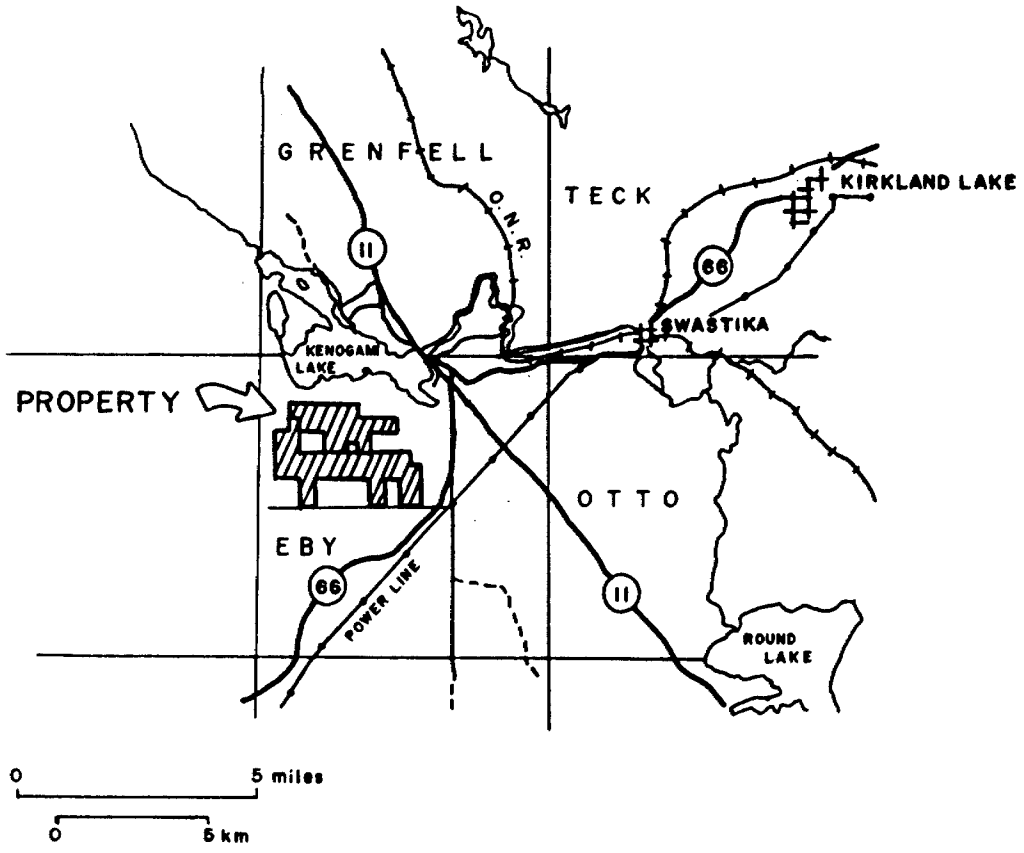
Total: 57 claims covering a total area of approximately 2,280 acres.

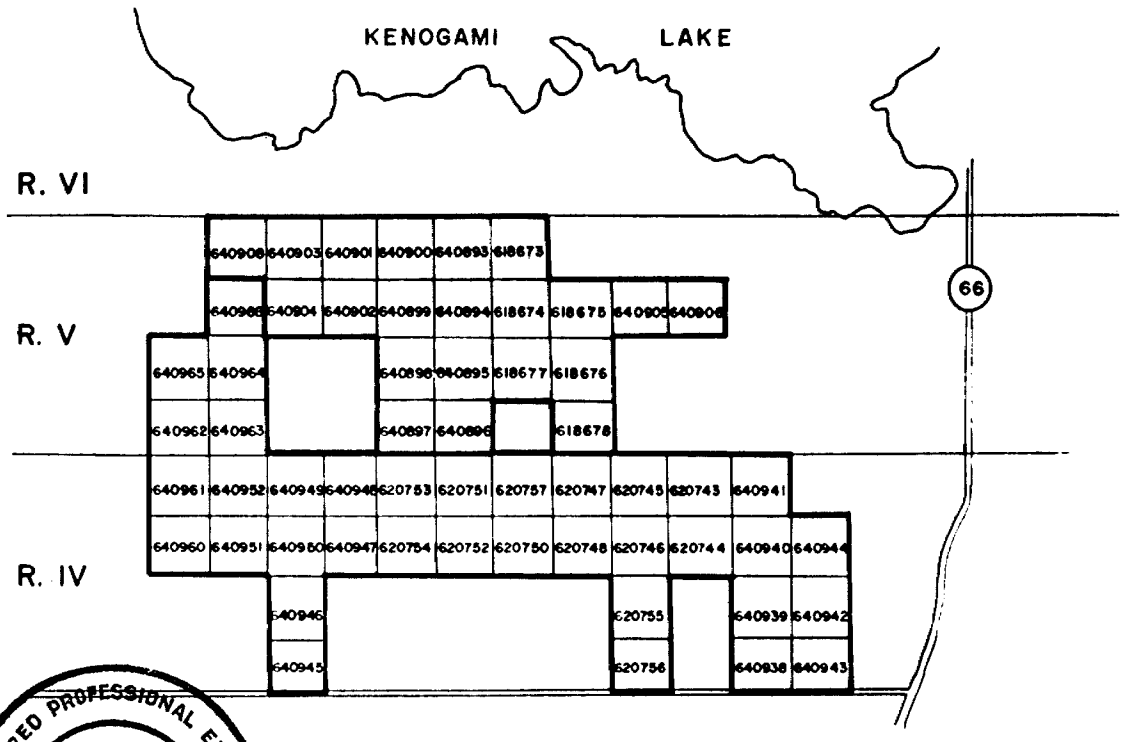
In our inspection of claim abstracts dated November 1, 1982, ownership of the claims was noted variously in the names of Mssrs. R.J. Kasner and G.C. Kasner. We have are advised that the ownership of the claims is as represented above and that transfers to Mr. R.J. Kasner are not in progress. The claims are due for renewal on their anniversary date of January 28, 1983. There are no assessment work credit for the claims at present, however, Mr. R.J. Kasner advised us that an airborne survey to consist of magnetic, horizontal loop and V.L.F. electromagnetic surveys is to be carried out this month. This work should be sufficient to cover the assessment work requirements for the coming year.

Property ownership is thus warranted secure and as stated. Ownership by Mr. R.J. Kasner is subject to the completion of transfer.

HISTORY OF PROPERTY

Following the discovery of silver at Cobalt in 1903 and during the boom days of Cobalt in 1906 - being the year of the gold rush into Larder Lake, many claims were staked for gold around Swastika and northeasterly to the lake now known as 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.





REGISTERED PROFESSIONAL ENGINEER
G. J. HINSE
PROVINCE OF ONTARIO

G. J. Hinse

G J HINSE - JANUARY 1983

Figure 1.

LOCATION AND PROPERTY MAP
of the
R. J. KASNER PROPERTY
EBY TOWNSHIP ONTARIO

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The first gold discovery in the vicinity of Kirkland Lake was made in the autumn of 1911 by W.H. Wright, later to be organized into the Wright-Hargreaves mine. In the following year, gold was found on the Tough-Oakes claims. Shipment of high grade gold ore from that property led to the discovery of a number of promising veins on the following properties: Burnside, Sylvanite, Wright-Hargreaves, Lake Shore, Teck-Hughes, Orr, Kirkland Lake and Hunton. During the following years, several mines were brought to production and by the early 1920, Kirkland Lake was a fully integrated gold producing camp with all facilities. Steady expansion was in progress during the next 20 years.

Early work in the property area consisted of of surface work mainly done by prospectors. Ultimately, a few junior exploration companies were organized to carry further work and diamond drilling. However, the property area exhibiting few outcrops was not suitable to prospecting with the results that little or no work is recorded on the property, even in spite of the fact that it covers the extension of the much favorable Larder Lake "break" structure.

During the 1940's, Sylvanite Gold Mines Limited held 9 claims covering parts of lots 7 and 8, concession 5, Eby township. Work done consisted of geological mapping and four drill holes, one of those aimed at testing the projection of the Larder Lake "break" structure at the north end of 7, concession 5. Quartz veining was cut in a zone of green carbonate confirming the presence of the "break", but the results were not considered as encouraging.

In the early 1950's, Dominion Gulf Co. held 13 claims covering parts of lots 7 to 11, concession 5, Eby township. Geological mapping and magnetic surveying was done on lines 400 feet apart followed by two drill holes.

The township and adjoining area was covered in 1979 with an INPUT aeromagnetic and electromagnetic survey done by the Ontario Geological Survey. No anomalous response was indicated in the property area.

In 1980-81, the Ontario Geological Survey carried a program of deep overburden drilling and geochemical sampling in several townships of the Kirkland Lake area, this including Eby township. Two overburden holes were drilled along the concession road on the south boundary of the property and one hole along the north boundary.

Subsequent to the release of the results of the above work and with the resurgence of interest in gold deposits, Mssrs. Robert and Glenn Kasner of Kenogami Lake acquired the property area by staking during the last part of 1981.

GENERAL GEOLOGY

The consolidated rocks of the region are of Precambrian age with the exception of some rare kimberlite dikes of Mesozoic age east of Kirkland Lake. The Precambrian rocks are characteristic of many Archean greenstone belts of the Canadian Shield. In general, Archean volcanic and sedimentary rocks, now substantially deformed and commonly of greenschist or lower facies, have been intruded by dikes and sills to batholiths of granite. Gabbro and diabase dikes of the Matachewan, Nipissing and/or Abitibi swarms are generally present and as well as the Timiskaming type. Several windows of flat-lying Proterozoic rocks of the Huronian Supergroup extend into the area from the south.

Outcrops are not plentiful in the property area, where observed, they consist mainly of tholeiitic basalt and tuffs belonging to the Larder Lake group with intercalated metasedimentary units of carbonate and volcanically-derived clastics. These rocks are in contact to the north, close to the north boundary and within the property area, with sedimentary rocks of the Timiscaming group. The older rocks are intruded by syenite and north-south striking diabase dikes of the Matachewan or Nipissing swarms. The Larder Lake group is composed mainly of tholeiitic basalt while the Temiscaming group is composed of mainly of conglomerate. Although there are no ultramafic exposed in outcrop area, their presence within the Larder Lake group is predictable and as rule,

CONC. VI

81-02

81-01

SEDIMENTS

SEDIMENTS

SEDIMENTS

Ba

Db

Cg

Dominion Gulf Drilling

py mag

Sylvanite Drilling

Pits

qv Pit

Sy

qv

Pit

Pit

qcv

Pit

Pit

qcv

Ba, Rh

Ba, Tf

CONC. V

CONC. IV

10

9

8

7

6

80-25

80-24

P

LEGEND

- Db Diabase
- Sy Syenite
- Cg Conglomerate
- Rh Rhyolite
- Tf Tuff
- Ba Basalt
- Outcrop
- Lava flow
- Schistosity
- Jointing
- Geology Contact
- Fault
- Anticline
- Syncline
- Drill hole
- qv quartz vein
- qcv quartz-carbonate vein
- Basal Till Hole

N

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G. J. Hinge

G. J. HINGE - JANUARY 1983

GENERAL GEOLOGY
of the
R. J. KASNER PROPERTY

EBY TOWNSHIP ONTARIO

Scale 1" = 1/4 Mile

0 1/4 1/2

Mile

PROJECT 1112 RTS 42A1 /6203

they would underlie the low areas. The basalt is pillowed and its strike varies from east west to slightly west of north. The upper contact of the Larder Lake with the Temiscaming to the north is an angular disconformity . A few folds are indicated by pillow tops.

As noted, the property area covers the extension of the Larder Lake "break" and carbonate alteration is pervasive within the Larder Lake group.

The property area covers the projected extension of the Larder Lake "break", a linear highly disturbed belt of auriferous Archean rocks which extends over a distance of approximately 250 kilometers. The gold deposits of the Val d'Or, Malartic, Cadillac, Rouyn, Arntfield, Larder Lake, Kirkland Lake and Matachewan areas, are intimately associated with this "break". While faulting along the "break" is pervasive, it discontinuous; and the "break" is better described as simply a tectonically disturbed belt of metasedimentary and metavolcanic rocks of Archean age. It is not as originally envisaged a linear discontinuity produced by a major fault structure. Although the disturbed belt is considered as continuous , it is locally obscured by younger sediments of the Huronian Supergroup.

In the property area, the "break" is characterized by a wide zone of folding in the Larder Lake rocks which are in strong angular disconformity with the sedimentary rocks to the north.

ECONOMIC GEOLOGY

General Considerations:

As noted the Larder Lake "break" is associated with many rich and extensive gold deposits and is thus a target favorable to the occurrence of economic gold mineralization. Deformation characteristic of the "break" has affected mostly zones of metasedimentary units intercalated within the Larder Lake group and those of the Timiscaming group. The

sedimentary units are composed of volcanically-derived clastics and carbonate rocks. Most of the known gold occurrences are associated with these sedimentary units which were deposited in paleobasins in a marine shelf environment.

Paleobasinal gold deposition occurred at time of volcanic quiescence which favored the accumulation of gold values and the formation of chemical sedimentary rocks. As the old volcanic center to the south was waning leading to an increase accumulation of sedimentary rocks on the marine shelf which extended gradually to the north. It follows that sedimentary units are intercalated within the volcanic rocks, their extent increasing up the stratigraphic pile. In paleobasins of the marine shelf, gold is associated with horizons rich in chert, feldspar, carbonate and pyrite. Mobilization and redistribution in the local sense may have affected the stratabound character of the mineralization resulting in places in stockworks configuration, nevertheless, found at stratigraphic contacts within the paleobasins. It follows, that gold values may be found within the Larder Lake rocks associated with metasedimentary units, and as noted before, these units maturing up the stratigraphic pile to the north. Then, undoubtedly, the major contact is the one between the Larder Lake and Temiscaming group, if found undisturbed. However, on the property area, this contact is the loci of a major angular disconformity. Nevertheless this type of contact could be very favorable as shown in the Timmins area, to major deposition of gold values.

Description of Prospects within the Property Area:

As noted the property covers the extension of the Larder Lake "break", a major auriferous structure extending for over 250 kilometers. However due to the scarcity of outcrop in the property area, this extension has not been defined with certainty. Nevertheless, work done in the immediate vicinity of the property in lots 6 and 7 in concessions 5 and 6 by Sylvanite Gold Mines Limited in 1945 and Burtho Gold Mines Limited in 1947 has indicated definitely the presence of the "break" at this

location. Drilling by Burtho intersected a zone of shearing, brecciation, carbonatization, local mud seams, and some quartz veins and stringers while Sylvanite reports that a grab sample from a pit in quartz-veined green carbonate rock near the northwest corner of concession 5, lot 7, returned an assay of 0.18 ounce of gold per ton.

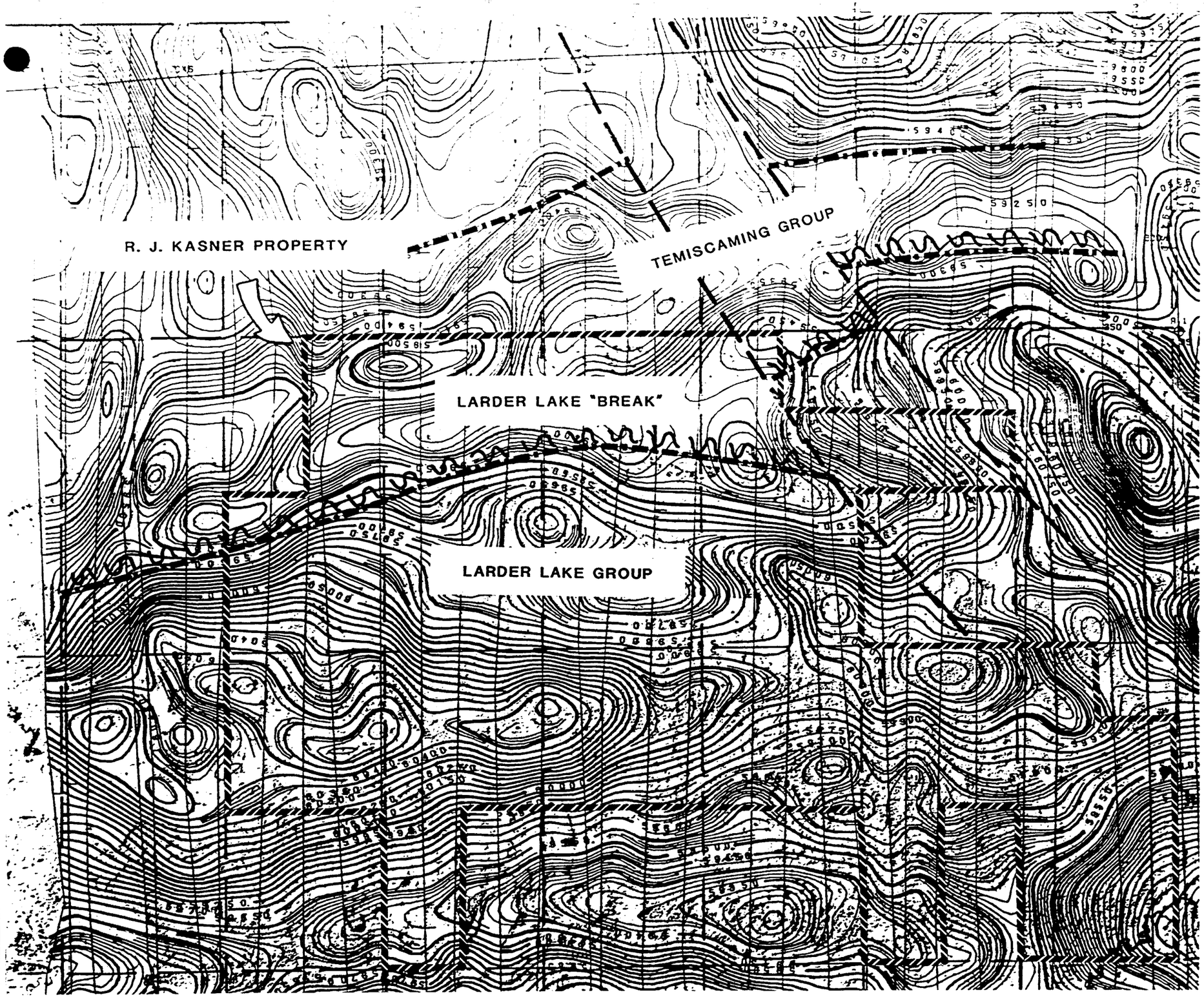
Old pits are indicated on map No. 2239 accompanying geological report No. 99 in lot 11, concession 4. It is reported that three grab samples taken from old filled-in pits on one of the Mundy Claims by Erie Canadian Mines Limited in 1938 from quartz stringers varying in width from ½ inch to 8 inches returned $0.40 and $0.80 cents worth of gold per ton (gold at about $35.00 U.S. per ounce).

Another pit with quartz veining is also indicated on the above-mentioned map in the southern portion of lot 7, concession 5. No information is available on the mineralization exposed at this location.

Geophysics:

Parts of the northern portion of the R.J. Kasner property was surveyed magnetically in 1952 by Dominion Gulf Co. along north-south lines 400 feet apart. This work was followed with two drill holes. The results indicate that the geological formation in the general area surveyed are more or less discontinuous and cut by several faults. However, the attitude of the line grid and the general interpretation is not compatible with the strike of the Larder Lake group. As noted, the Larder Lake volcanics strike slightly west of north in the vicinity of their contact with the Temiscaming sediments. Of importance here, the magnetic survey has defined an anomaly located in lot 10, concession 5 as being caused by a sill-like gabbro intrusion found at the upper contact of the Larder Lake volcanics with a carbonate zone which is interpreted as being representative of the Larder Lake "break".

The property area was covered in 1979 with an INPUT electromagnetic and magnetic aerosurvey done by the Ontario Ministry of Natural



N

Geological Contact

Inferred Fault

Scale 1: 20,000

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Figure 3.

AEROSURVEY MAP
of the
KENOGAMI LAKE GOLD PROPERTY
of
R. J. KASNER

0 200 400 600 800 1000
metres

G. J. HINSE - JANUARY 1963

PROJECT 1112 NTS 42A1/0203

Resources. No anomalous electromagnetic response was outline within the property. However, the magnetic results conform more or less with the geology as mapped by Lovell (1972) and it confirms the inference of the volcanic-sedimentary contact in the northern part of lot 8 to 11. Furthermore, the results also confirm the presence of a strong northwest trending fault found in lot 8 concessions 5 and 6. This fault was postulated by Lovell (1972) and shown on the geological map accompanying his report. Figure 3. shows a possible re-interpretation of the geological formation as to conform to the magnetic results. Essentially, this interpretation suggests that the Timiscaming sediments would be located further south in lot 8 and 9 concession 5.

Geochemical Sampling:

In 1980 and 1981, the Ontario Geological Survey carried a program of deep overburden drilling and geochemical sampling in several townships of the Kirkland Lake-Larder Lake area, this including Eby township. Although the program was of a reconnaissance nature with holes on a pattern of 2 miles, several interesting anomalies were outlined. Of particular interest to the R.J. Kasner property, two holes drilled along the concession 3-4 line, along the south boundary of the property yielded very encouraging results. These are described in Routledge (1981) page 87 as follow:

> "...Past experience in overburden drilling has shown that trace quantities of gold distributed throughout the overburden column are generally related to erratic occurrences of quartz veining in volcanic rocks throughout the Precambrian terrain. With the exception of Hole 80-24 most of these are therefore of little consequence. One gold grain in sample 24-02 (mafic glaciofluvial gravel) occur superjacent to tuffaceous andesite-basalt rock with minor carbonatization and quartz carbonate veinlets carrying very fine disseminated pyrite..."
>
> On page 115 of the same report, it is stated the following:
>
> "...sands and gravels in Holes 80-24, 80-25 and 80-26 carry gold, presumably derived from mineralization on or close to the Kirkland Lake-Larder Lake fault. Since Holes 81-1, 81-2 and 81-3 (in the north periphery of the property area) are largely barren the source area is interpreted to lie

between these holes and the 1980 holes to the south. The presence of As (arsenic) with the Au (gold) in Holes 80-24 and 80-25 is interpreted to indicate a position relatively close to the bedrock source..."

Three samples out of three of the +0.125 mm non-magnetic heavy mineral fraction of hole 80-024 have returned respectively 2000, 780, 1000 parts per billion of gold and the same samples of the -0.125 mm fraction have returned 40, 740, 120 parts per billion of gold. One sample out of one taken of the +0.125 non-magnetic heavy mineral fraction of hole 80-025 has returned 2100 parts per billion of gold while the -0.125 mm fraction returned 60 parts per billion of gold. Three holes were drilled further to the south, Holes 80-23, 80-26 and 80-28. Out of the three, two holes 80-26 and 80-28 returned anomalous gold values in heavy mineral fraction, particularly hole 80-26 which returned up to 11,000 parts per billion in the -0.125 mm fraction. As noted previously, the only indicator mineral associated with gold values may be arsenic.

Diamond Drilling:

In 1945, Sylvanite Gold Mines Limited did a program of diamond drilling located more or less along lot line 6 and 7, concession 5. The most northerly hole in the center of the N½ of the NW¼ of concession 5 was aimed at testing the projection of the Larder Lake "break". The hole cored mostly in basic volcanic rocks and intersected some quartz veining returning a few low values in gold. Three holes were also drilled in the S½ of the NW¼ of lot 7, concession 5. The holes intersected mostly basic volcanic rocks with no values. The last hole, though, cut across a carbonate shear along a core length of 30.0 feet with no values.

In 1952 two holes were put down by Dominion Gulf Co. near the center portion of lots 9 and 10, concession 5 as a follow up of a magnetic survey. One hole drilled a magnetic low near the west boundary of lot 10. This holes collared in basic volcanic rocks followed by sedimentary rocks of the Timiskaming group. The other hole, drilled near the west boundary of lot 9 intersected mainly basic volcanic rocks. None of the logs show any assay data. During the course of a geological survey

carried concurrently with the magnetic survey, the collars of the holes drilled by Sylvanite were picked up. Two other drill collars were also picked up. We have no information on these two holes.

EVALUATION REQUIREMENTS

The R.J. Kasner property area is underlain by basic volcanics of the Larder Lake group and sedimentary rocks of the Timiskaming group and it covers the extension of the auriferous Larder Lake "break". The lack of outcrop and effective geophysical data preclude any accurate estimation of the extent and configuration of the Larder Lake "break". Narrow quartz veining in green carbonate and metavolcanics have been observed, weakly auriferous in at least one location. Gold mineralization may also occur in other locations within the property area, a view confirmed to some extent by the results of the deep overburden drilling done by the Ontario Geological Survey.

The magnetic aerosurvey of the Ontario Geological Survey is helpful, suggesting at least an inferred configuration of the Larder Lake "break" on the property and the presence of cross-faults.

Accordingly it appears that gold concentrations of stratabound character may exist in the property area, and that the area is geologically more complex than presently recognized.

While there are no gold prospect offering justifiable target for immediate testing, we must assume that past work within the property dictated by rock exposures did not offer exceptionable targets. However, the presence of the Larder Lake "break" on the property and the strong suggestions of an auriferous source area to be found on the property as indicated by the anomalous gold values obtained in the overburden drilling are more than sufficient to undertake a program of exploration.

The gold orebodies associated with the Larder Lake "break" present some special exploration problems. They are in majority stratabound and were

originally discovered by systematic prospecting, trenching, and underground development. Little geophysical data exists. Such information as is available indicates that the gold ore zones are probably not easy to locate with applied geophysics and geochemical techniques.

As noted, the R.J. Kasner property is not well known geologically. It is believed that initial exploration should be carried out with the objective of tracing geophysically the zonal extent and configuration of the underlying rock types. It is our opinion that this can be most effectively and cheaply done by the application of electromagnetic and magnetic surveying, particularly VLF-EM where the use of filtering techniques will aid considerably in interpretation. Thick overburden may hinder the application of VLF-EM within a large part of the property area. However, sufficient information may be gained to offer significant aid in interpretation. Graphite is commonly associated with the "break" and the use of horizontal loop EM may help in interpretation. Of course, geochemical surveying will be necessary to locate on the property area the source of the deep overburden geochemical anomaly.

At this time, drilling requirements are difficult to estimate, but it will undoubtedly prove necessary to bring the evaluation program to a satisfactory conclusion. A drilling provision should therefore be added to the program to allow limited testing of the targets that may be defined geophysically and geochemically.

Considering the time frame in which work is required, this program could best be carried out through airborne survey with an helicopter. A total of some 160 kilometers of airborne line would be required with lines at 200 meter center. To effectively cover the strike of the Larder Lake rocks and that of the Timiscaming sediments, the general line alignment should be in the vicinity of 030 degrees east. This work with provision for compilation and interpretation will constitute Phase I. of the evaluation program.

The deep overburden gold geochemical anomalies outlined along the south boundary of the property will have be traced up ice to the property area. It is our opinion that this can best be done using humus geochemical surveying at 400 foot centers using minimum grid location. This work with some diamond drilling will constitute Phase II. of the evaluation program. It is estimated that initial drilling requirements will involve approximately 300 meters.

Phase III., consisting of further drilling if warranted by the results of the previous phases, is estimated at 1,500 meters of diamond drilling.

Estimated Cost of Program:

Phase I.	
Airborne geophysical surveying, 160 kilometers @ $50	8,000
Compilation, interpretation	2,000
Supervision, consulting services	2,000
10% contingencies	1,200
Total, Phase I.	$13,200
Phase II.	
Humus geochemical surveying at 150 meter centers, approximately 700 samples	10,500
Diamond drilling, 300 meters	22,500
Analytical cost	1,000
Supervision, consulting services	5,000
10% contingencies	2,000
Total, Phase II.	$41,000
Phase III.	
Diamond drilling, 1,500 meters	78,750
Analytical cost	4,250
Supervision, consulting services	20,000
10% contingencies	10,300
Total, Phase III.	$111,300
TOTAL ESTIMATED COST OF PROGRAM	$165,500

CONCLUSIONS AND RECOMMENDATIONS

The Kenogami Lake Gold property of Mr. R.J. Kasner is not well known geologically, but appears to be underlain by rocks favorable for the occurrence of stratabound gold mineralization. These rocks are structurally disturbed, and are known to contain auriferous quartz veining from which gold values have been reported in the vicinity of the property. Furthermore, geochemical indications suggests an auriferous source area to be present within the property. Past evaluation work has not been extensive, even in the area of the Larder Lake "break" projection, and a program of exploration on the property at this time is therefore fully warranted.

The exploratory program recommended consists largely of electromagnetic and magnetic surveying. Careful interpretation of the resulting geophysical data complemented by humus geochemical work will allow delineation of the important metasedimentary units, and the identification of target areas. A drilling provision is included in the program to allow initial testing of the most interesting anomalies that may be developed. Further drilling should be carried out if preliminary results are of sufficient interest.

The cost of the first phase of the recommended program is estimated at $13,200 while the cost of the second phase is estimated at $41,000 and the third phase $111,300, the total cost of the recommended program will thus be $165,500.

Respectfully submitted

January 12, 1983
Sudbury, Ontario



G.J. Hinse, P.Eng.

CERTIFICATE OF QUALIFICATIONS

I, G.J. Hinse, hereby certify that:

1) I reside at 9 Gloucester Ct., Sudbury, Ontario, P3E 5M2

2) I am a qualified geologist, having received my training at Laval University.

3) I am a registered Professional Engineer of the Province of Ontario.

4) I have been continuously engaged in my profession for the last twenty years.

5) The foregoing report to Mr. R.J. Kasner on its Kenogami Lake Gold property is based on a visit to the area during October 1982, the records of work done by previous owners, published and private geological maps and reports and assessment work files.

6) I do not have, nor do I expect to receive any interest in the property described in the foregoing report or in the securities of any company concerned with the above property.

7) I hereby consent to the use of the foregoing report by R.J. Kasner in a prospectus or a statement of material facts relating to the raising of funds for this project.

Sudbury, Ontario
January 12, 1983

REGISTERED PROFESSIONAL ENGINEER
G. J. HINSE
PROVINCE OF ONTARIO

G.J. Hinse, P.Eng.

APPENDIX I.

References and Sources of Information.

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References and Sources of Information:

Baker, C.L., 1980, Quarternary geology of the Kirkland Lake area, District of Timiscaming: Ont. Geol. Survey Prel. Map 2382.

Goodwin, A.M., 1979, Archean volcanic studies in the Timmins-Kirkland Lake-Noranda region of Ontario and Quebec: Geol. Survey of Canada, Bull. 278.

Lovell, H.L., 1972, Geology of the Eby and Otto area, District of Timiscaming: Ont. Dept. of Mines and Northern Affairs, Geol. Report 99.

Ploeger, F., Campbell, A., and Grabowski, G., 1979, Eby Township, District of Timiscaming: Ontario Geol. Survey Prel. Map 903. Kirkland Lake Data Series.

Routledge, R.E., Thomson, I., Thompson, I.S., and Dixon, J.A., 1981, Deep overburden drilling and geochemical sampling in Benoit, Melba, Bisley, Maisonville, Morrisette, Arnold, Grenfell, Lebel, Eby, Otto, Boston and McElroy townships, districts of Timiskaming and Cochrane: Ontario Geol. Survey, Open File Report 5356, pp. 1-123.

Thomson, J.E., 1948, Geology of Teck township and the Kenogami Lake area, Kirkland Lake Gold Belt: Ontario Dept. of Mines, v. 57, part V, pp. 1-53.

Todd, E.W., 1928, Kirkland Lake Gold Area, a detailed study of the central zone and vicinity: Ontario Dept. of Mines, v. 37, part II.

Ontario Geol. Survey, 1979, Airborne electromagentic and total intensity magnetic survey, Kirkland Lake area, Eby township, District of Timiskaming: Ontario Geol. Survey Prel. Map 2268.

Geol. Survey of Canada Map 289G (Rev.), Airborne magnetic survey, Kirkland Lake sheet, Timiskaming District, Ontario.

Ont. Min. of Natural Resources Map M-345, Claim map of the township of Eby, District of Timiskaming, Larder Lake Mining Division.

Other published and private geological maps and reports, Ontario Ministry of Natural Resources assessment files.

42A01SE0201 63.4278 EBY

900

OM 82-6-I-176

THIS SUBMITTAL CONSISTED OF VARIOUS REPORTS, SOME OF WHICH HAVE BEEN CULLED FROM THIS FILE. THE CULLED MATERIAL HAD BEEN PREVIOUSLY SUBMITTED UNDER THE FOLLOWING RECORD SERIES (THE DOCUMENTS CAN BE VIEWED IN THESE SERIES):

THE FOLLOWING REPORT WAS PREVIOUSLY SUBMITTED:

COMBINED HELICOPTER BORNE MAGNETIC, VLF-EM & ELECTRO-MAGNETIC SURVEY, AERODAT LTD., FEB/83 → SEE: 2.5481 MINING RECORDER, WORK OF REPORT #22-1983

THE REMAINDER OF THE REPORT WAS PLACED IN FILE #63.4278

63.4278

R. J. KASNER CO. LTD.

Suite 908, 111 Richmond Street West
Toronto, Ontario M5H 2G4
(416) 947-1465/6

P.O. Box 993
Kirkland Lake, Ontario P2N 3L1
(705) 642-3393

Ministry of Natural Resources
RECEIVED
MAY 16 1983
THE DIRECTOR
MINING TAXATION AND
OMEP OFFICE

May 10, 1983

Mr. Fred Pooley,
O.M.E.P.
Room 4649 Whitney Block
Queen's Park,
Toronto, Ontario,
M7A 1W3

Dear Sir:

Please find enclosed airborne data on a project in Eby Township. Two reports have already been sent for assessment credits, showing only claims owned by us. Therefore this report we are sending you covers the whole area flown and we consider it to be confidential.

You will note that the report was written for Lenora Explorations Ltd. as Lenora was the agent and a much larger group was flown. Also enclosed are geophysical and preliminary examination reports of the Eby Township and Hemlo property.

Best regards,

Yours sincerely,

R. J. Kasner
President

RJK:b

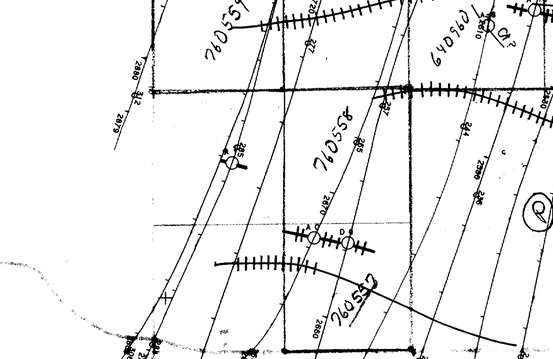
OM82-6-I-176

INTERPRETED CONDUCTOR AXIS

GENERAL ASSOCIATION WITH MAGNETIC TREND

Ct SUSPECTED CULTURAL CONDUCTOR

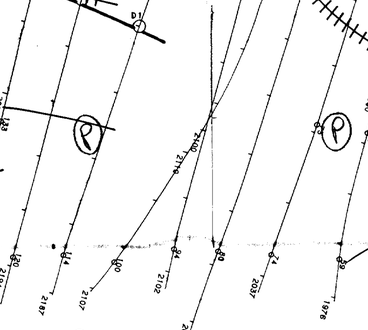
INTERPRETED VLF - EM CONDUCTOR



EM RESPONSE

Conductivity thickness in mhos

⑨	> 500
⑧	250 – 500
⑦	125 – 250
⑥	60 – 125
⑤	30 – 60
④	15 – 30
③	8 – 15
②	4 – 8
①	2 – 4
○	< 2
25	Inphase response



Horizontal control ..... MRS III

Average bird height ..... 30 m

Line spacing ..... 150, 200 m

LENORA EXPLORATION OM82-176

AIRBORNE ELECTROMAGNETIC SURVEY INTERPRETATION MAP

KIRKLAND LAKE AREA

ONTARIO

SCALE 1/10,000

0 330 660 1320 1/2 mile

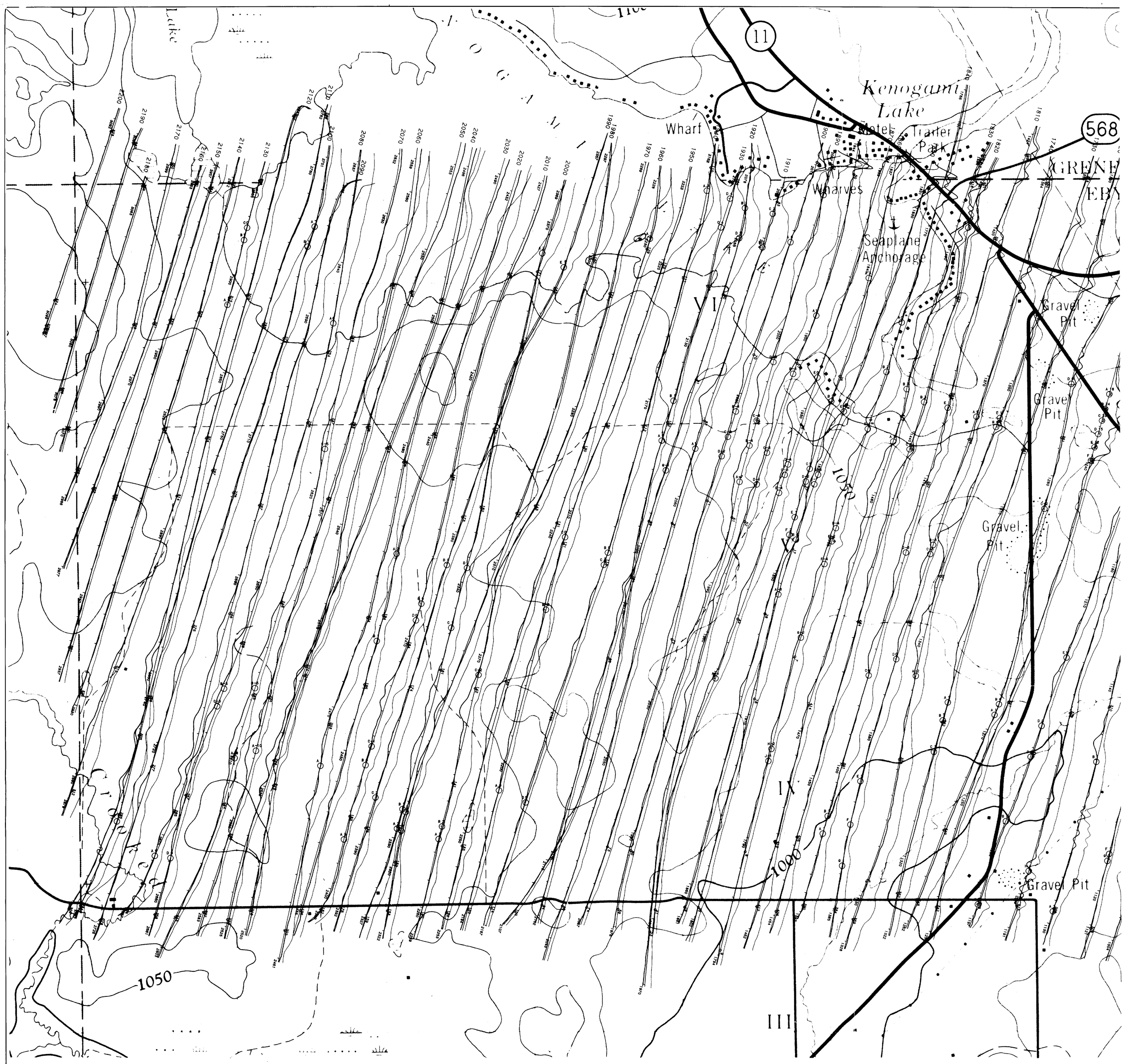
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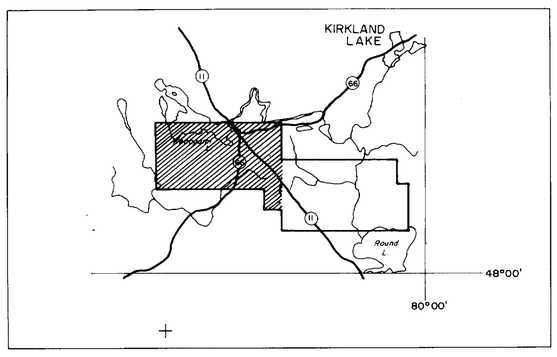
AERODAT LIMITED

DATE:	February, 1983
N.T.S. No:	42 A
MAP No:	1

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200





LENORA EXPLORATION GM82-176

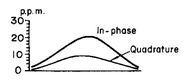
AIRBORNE ELECTROMAGNETIC SURVEY
PROFILES - 955 Hz (coaxial)

KIRKLAND LAKE AREA
ONTARIO

SCALE 1/10,000

0 330 660 1320 1/2 mile

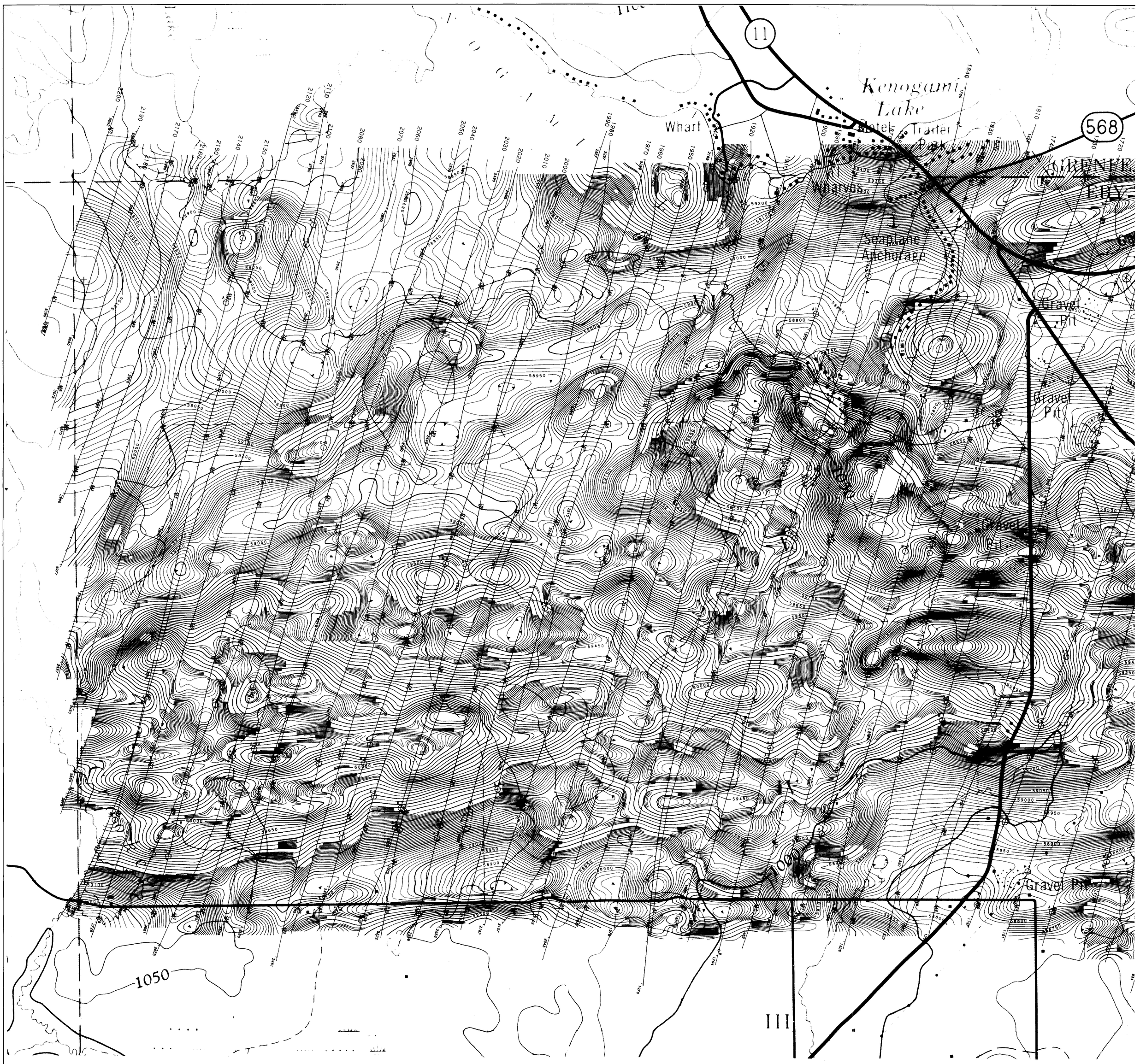
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AERODAT LIMITED

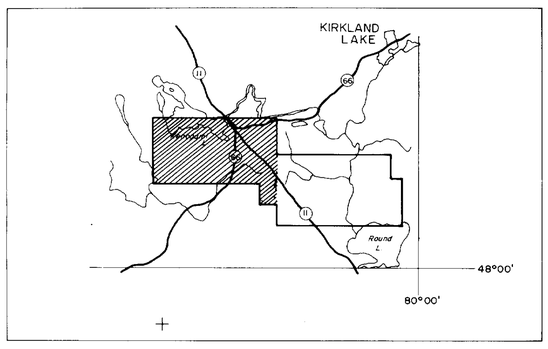
DATE:	February, 1983
N.T.S. No:	42 A
MAP No:	2

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LEGEND

500 gammas
100 gammas
50 gammas
10 gammas



LENORA EXPLORATION EM82-176

TOTAL FIELD MAGNETIC MAP

KIRKLAND LAKE AREA

ONTARIO

SCALE 1/10,000

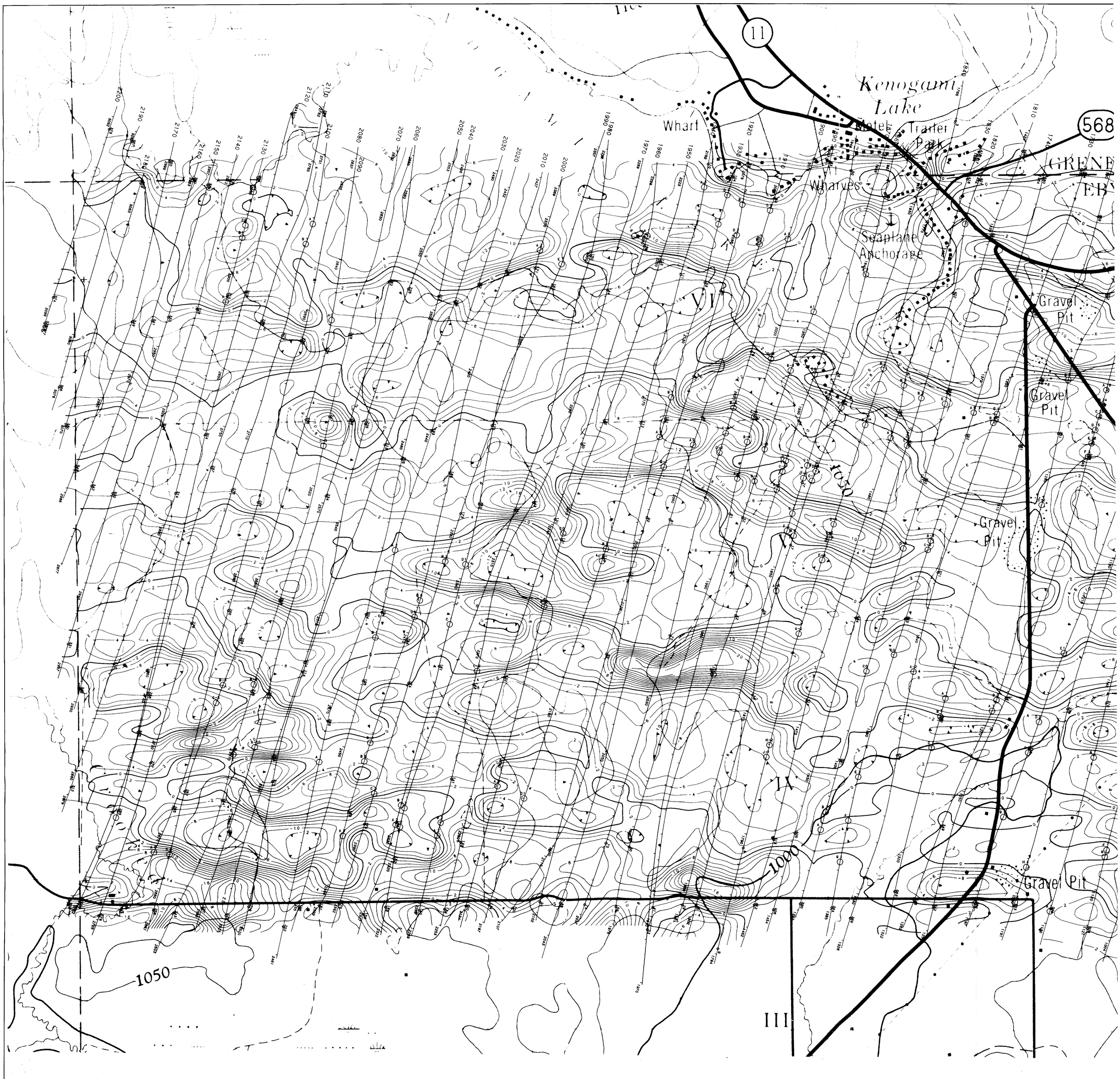
0 330 660 1320 1/2 mile

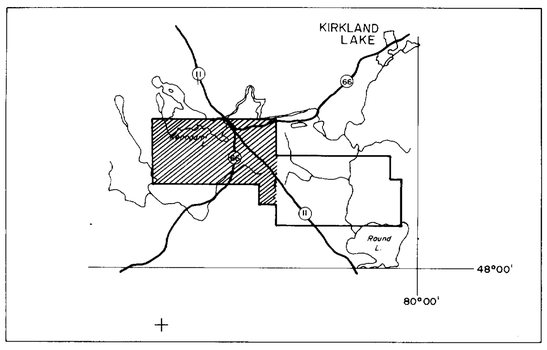
0 100 200 500 Kilometre

AERODAT LIMITED

DATE:	February, 1983
N.T.S. No:	42 A
AP No:	3

42A01SE0201 63.4278 EBY





LENORA EXPLORATION

OM82-176

VLF-EM TOTAL FIELD CONTOUR MAP
NAA (MAINE) 17.8 KHz.

KIRKLAND LAKE AREA
ONTARIO

SCALE 1/10,000

0 330 660 1320 1/2 mile

0 100 200 500 1 Kilometre

AERODAT LIMITED

DATE:	February, 1983
N.T.S. No:	42 A
MAP No:	4

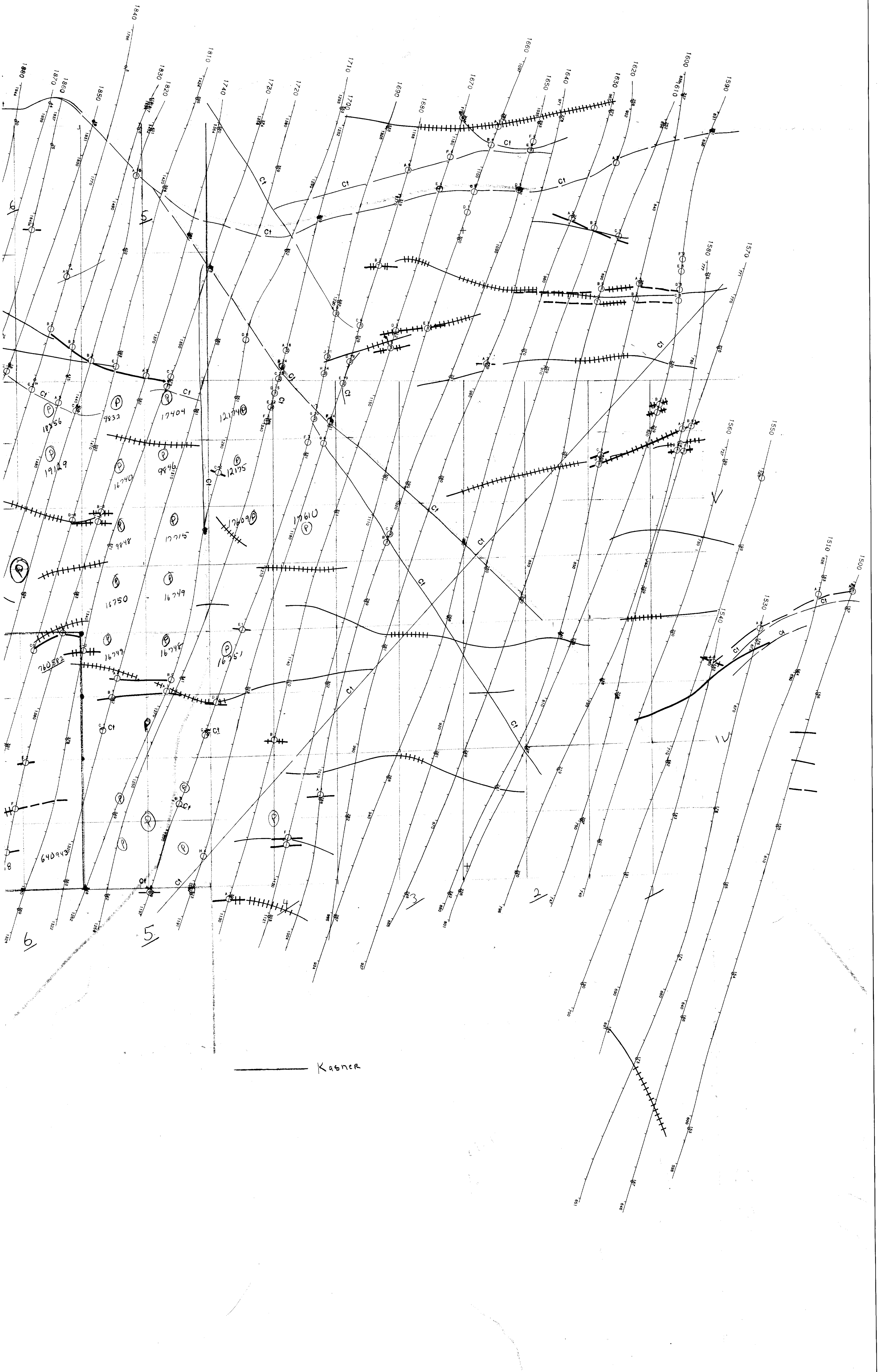
LEGEND

50 % .....

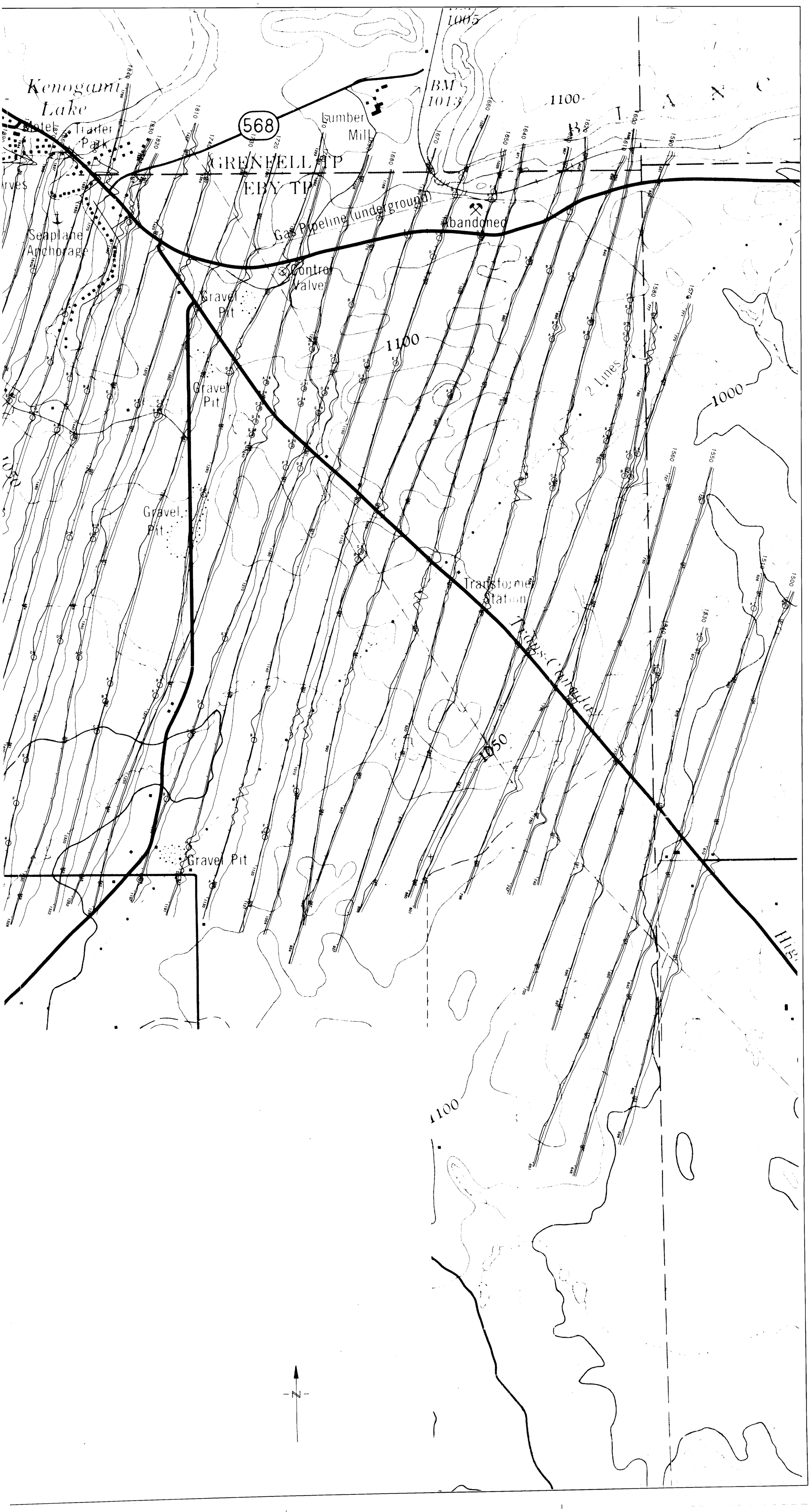
10 % .....


2 % .....

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1880
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1500
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19129
9832
17404
12174
9846
12175
16740
17609
17610
9848
17715
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16749
16748
16751
760582
640943
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1
V
IV
Kasner
N


Kenogami Lake
Motel
Trailer Park
568
GRENFELL TP
EBY TP
Lumber Mill
BM 1013
1005
1100
1000
1050
Seaplane Anchorage
Gas Pipeline (underground)
Abandoned
Control Valve
Gravel Pit
Gravel Pit
Gravel Pit
Gravel Pit
2 Lines
Transformer Station
Trans-Canada
Hi


Kenogami Lake
Motel
Trailer Park
568
Lumber Mill
BM 1013
1005
1100
GRENFELL TP
EBY TP
Seaplane Anchorage
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Kenogami Lake

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568

GRENFELL TP

EBY TP

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BM 1013

1005

1100

1000

Gas Pipeline (underground)

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Gravel Pit

2 Lines

Transformer Station

Trans Canada

Hi8

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