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MINING LANDS SECTION

REPORT

ON

GARRISON TOWNSHIP PROJECT

FOR

WINDJAMMER POWER AND GAS LIMITED

Toronto, Ontario, Canada
October, 1980

D. Jones, M.Sc.
J. M. Siriunas, P. Eng.
M P H CONSULTING LTD.

SUMMARY

Initial gold exploration has been completed on the Garrison Township project of Windjammer Power and Gas Limited during 1980. The work consisted of Induced Polarization and Magnetometer surveys, geological mapping and diamond drilling.

The main exploration targets in the project area consist of:

1) syngenetic gold occurrences associated with Archean volcano-chemical sediments, and

2) epigenetic "vein-type" gold occurrences associated with later Archean granitoid intrusives.

The property is located in close proximity to the Destor-Porcupine Fault, a structure which has been intermittently traced for approximately 150 km from the Timmins area of Ontario to the Cléricy Township area of Quebec. The fault appears to be coincident with a band of altered (carbonated) mafic to ultramafic volcanics which may have been a source rock for gold. A variety of clastic and chemical metasediments and mafic to felsic metavolcanics occur regionally.

Recommendations for further work are made.

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1. PREAMBLE

This report presents the results of the exploration programme carried out on behalf of Windjammer Power and Gas Limited of Calgary, Alberta by M P H Consulting Limited of Toronto on the former's Garrison Township project. The purpose of the programme which included geological mapping, magnetic and induced polarization surveys and diamond drilling was to explore for and evaluate the potential of the property for gold mineralization.

The close relationship of gold-bearing, pyritiferous, synvolcanic chemical sediments and highly altered (i.e. carbonated) ultramafic and mafic volcanics, as suggested by authors such as Pyke (1976), Fripp (1976) and Fyon and Crocket (1980) intimates that this region (in close proximity to the Destor-Porcupine Fault) may be a favourable locale for economic gold deposits of this origin. Fairly large granitoid intrusives which are present may also introduce gold or remobilize and concentrate pre-existing gold into epigenetic "vein" deposits.

Induced polarization and magnetic surveys were carried out on approximately 22 km of survey lines in two grids, one at either end of the property. The mineral association that would be expected with a gold occurrence (syn/epigenetic disseminated pyrite) should give rise to the following geophysical signature:

a) high chargeability

b) a corresponding relative apparent resistivity low.

Magnetic information aids in the recognition of incidental structural and stratigraphic features.

This report describes the exploration techniques employed, outlines the ground exploration to date, both geophysical and geological, and details the results of diamond drilling the ground targets.

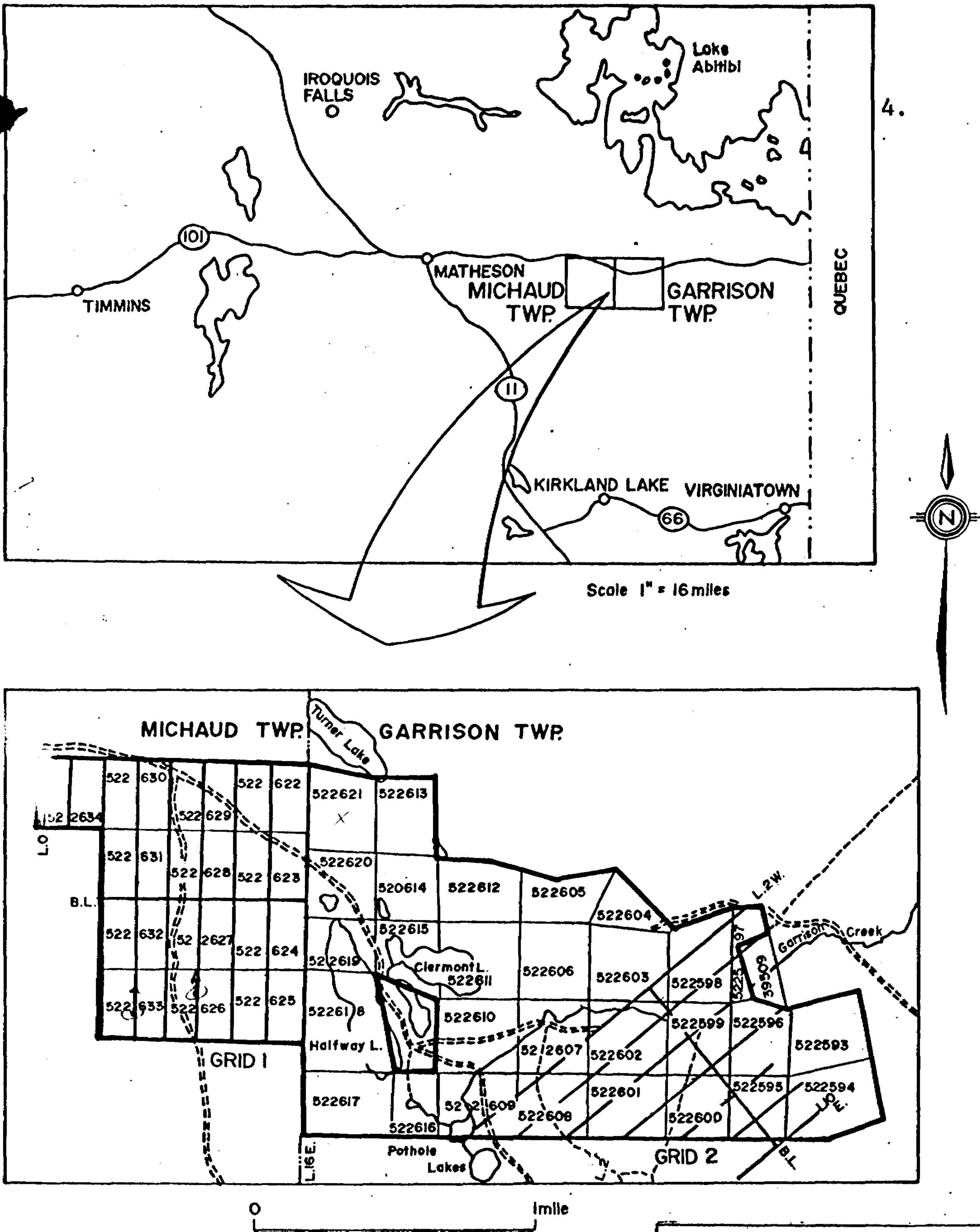
2. LOCATION AND ACCESS

The property straddles the township line between Garrison and Michaud Townships in the District of Cochrane, Larder Lake Mining Division, northeastern Ontario.

The property is located approximately 102 km east of Timmins and 37 km due north of Kirkland Lake. Highway 101 traverses the northern part of the townships.

The property consists of 42 contiguous claims numbered 522593 to 522634 inclusive. One patented claim located in the centre of the property was owned by Buffonta Mines Limited. In Michaud Township the claims cover Lot 1 and the NW 1/4, NE 1/4 and SE 1/4 of the N 1/2 and the NE 1/4 and the SE 1/4 of the S 1/2 of Lot 2 in Concession III. Garrison township is unsubdivided.

Access to the property is via unmaintained forest access roads running south from Highway 101 approximately 6 km east of Perry Lake (see Figure 1).



- - · - - · - -	Township Line
———	Claim Line
━━━	Property Line
———	Grid Line

WINDJAMMER POWER & GAS

GARRISON TOWNSHIP PROJECT
LOCATION MAP

Project No:	By:
Scale:	Drawn:
Drawing No:	Date:

MPH Consulting Limited

Figure 1

3. PREVIOUS WORK

Michaud and Garrison Townships were mapped for the Ontario Department of Mines in 1946 and 1947 by J. Satterly (Satterly, 1948, 1949). General geology and the discussion of some of the previous work in the townships are drawn largely from his accounts.

Work for assessment credit has been performed on the Windjammer property and its immediate area by a number of companies and syndicates in the past. A brief summary of activities follows.

Anglo-Huronian Limited worked a large block of claims which includes ground covered by the present claims 522629, 522630 and 522634 in Michaud Township. A magnetometer survey was carried out followed by diamond drilling to test the magnetic anomalies that were located. A south trending 1051 foot (320 m) diamond drill hole on present claim 522629 intersected mafic metavolcanics ("greenstone") and syenitic dykes. Some of the metavolcanics are reported to be strongly sheared and contain pyrite mineralization. No specific assay results are reported.

Broulan Porcupine Mines Limited worked a block of claims along the Michaud-Garrison Township boundary which included parts of current claims 522614, 522615, 522619, 522620, 522621, 522622, 522623 and 522624. Two diamond drill holes totalling 1805 feet (550 m) were drilled on present claim 522621. The holes intersected a thickness of 365 feet (111 m) of green carbonate rocks (altered ultramafic rocks) which coincide with the Destor-Porcupine Fault. The best reported gold value was 0.05 oz Au/ton over 1.5 feet (0.46 m) in "carbonate rock". A three (3) foot (0.91 m) section of syenite was also reported to carry 0.05 oz Au/ton.

Garrison Creek Consolidated Mines Limited (Hoyle Exploration) worked several claims in Garrison Township which include the area covered by present claims 522597, 522598, 522603, 522604, 522605, 522606, 522612 and parts of claims 522599, 522602, 522607, and 522611. Work undertaken on the property included a magnetometer survey and over 12,000 feet (3657.6 m) of diamond drilling. None of the drilling is believed to have been carried out on the portion of ground currently being held by Windjammer Power and Gas Limited. The main aim of the exploration was to investigate the gold potential of the Destor-Porcupine Fault. No significant information relating to gold assays is reported.

Golden Croesus Mines Ltd. conducted magnetometer and horizontal loop electromagnetic surveys over the eastern part of the property in Garrison Township. One diamond drill hole intersected mafic volcanics in the vicinity of current claims 522595 and 522596.

Moneta Porcupine Mines Limited worked the patented ground immediately adjoining to the west (the "Miller claims"). Outcrops of talcose and carbonated metavolcanic rocks occur on the property. This is one of the few localities were the rocks of the Destor-Porcupine Fault have been viewed on surface. Over 11,000 feet (3352.8 m) of diamond drilling was undertaken seeking gold values in pyrite-bearing quartz-(green) carbonate rocks. The magnitude of gold assays obtained is not reported.

The group of claims which includes present claims 522622 through 522633 inclusive, in Michaud Township has been worked by Wright-Hargreaves Mines Limited on option from Wadge Mines Limited (the "Caswell option"). More recently the ground has also been worked as the Dalhousie property. At least six diamond drill holes are known to have been drilled on the ground in the vicinity of present claims 522623, 522627 and 522628. Four of these holes were within metasediments and iron formation and the other two intersected mafic metavolcanics with some shearing and serpentinization present. Gold mineralization is suspected to have been encountered but the nature of its occurrence is not reported.

The Buffonta Mines Ltd. property, just to the east of the Windjammer Power and Gas Ltd. claims is currently being worked for gold by Kerr Addison Mines Ltd. Extensive drilling has recently been completed in a re-evaluation of the gold potential of pyritiferous carbonatized zones or "veins" within the tholeiitic mafic volcanic rocks of the Kinojevis group. The gold-bearing zones are shallow-dipping and sheet-like and were probably epigenetically developed during the emplacement of a nearby granitic stock.

4. SURVEY PARAMETERS

4.1 Linecutting

The linecutting on the property was carried out by Ingamar Exploration Limited. Approximately 22 km of linecutting was completed on two grids, one at either end of the property.

Grid 1 - A baseline was established with starting point 4 + 00E near Post 4 of claim number 522632 and was driven due east at 90^{o} for a distance of 1200 m. Crosslines were established on this baseline at 200 meter intervals. A 400 m long offset baseline at 4 + 00N was cut to establish crosslines on claim 522634.

Grid 2 - This grid is located at the eastern extremity of the property (see Figure 1). A baseline was established with a starting point near Post 1 of claim number 522602 and was cut for a total length of 1200 meters at an azimuth of 140^{o}. Crosslines were established on this baseline at 200 meter intervals.

On both grids the station interval was 25 meters. Approximately 22 km of line was cut, chained and picketed.

4.2 Induced Polarization Survey

For routine coverage of this property a pole-dipole survey array was utilized with a dipole 'a' spacing of 25 meters and a dipole separation 'n' of 4 and 5. Approximately 20 km of surveying was carried out in this fashion.

Approximately 1 km of detailed anomaly surveying was carried out on the property following the systematic grid coverage. A dipole-dipole array was used for this with a dipole 'a' length of 25 meters and a dipole 'n' separation of 1, 2, 3, 4 and 5.

4.3 Magnetic Survey

Approximately 20 km of magnetic surveying was conducted on the property. Routine station separation used for the survey was 25 meters. In anomalous areas 12.5 m stations were employed.

4.4 Geological Survey

All the grid and most of the claim lines were systematically traversed in an attempt to locate areas of bedrock outcrop in both grid areas.

4.5 Personnel

The following M P H Consulting Limited personnel were employed on the project for various lengths of time during the exploration programme:

Geophysicist	D. Jones, M.Sc.
Geologist	J. M. Siriunas, M.A.Sc., P. Eng.
Geophysical Party Chief	D. Morrison
Instrument Operator	D. Hall
Instrument Operator	P. O'Donnell
Helper	W. Keeshig
Helper	S. Henshall
Draughtsperson	E. Jones

5. GEOLOGY

5.1 General Geology

Michaud and Garrison Townships are underlain by rocks of Archean age. The largest proportion of these rocks are mafic metavolcanics. In the southern portions of the townships are the south-facing flows and minor sediments of the Kinojevis group (Jensen, 1979). In the northern parts of the townships, east-west trending, north-facing bands of metasediments, ultramafic rocks and mafic to felsic metavolcanic rocks outcrop. Granitic or syenitic stocks occupy the central parts of each township.

Much of the area, especially in Michaud Township, is covered by Pleistocene age deposits of sand, gravel and boulders.

The most prominent feature in the townships is the east-west trending Destor-Porcupine "Fault", a zone of carbonated and talcose ultramafic and Mg-rich basaltic lavas (Fyon and Crocket, 1980) which divides the townships into north and south halves. The zone itself dips steeply to the north and marks the abrupt change from south-facing stratigraphy (to the south) to the north-facing stratigraphy (to the north). This change is one of the prime reasons cited as evidence for suggesting that a fault coincides with the zone of carbonated rock (Ferguson, 1968).

Gold has been found in a variety of subeconomic occurrences in both townships. Gold is known to be associated with interflow cherts, quartz-feldspar porphyries, quartz veins or quartz-carbonate veins, stringers or bodies (Satterly, 1949).

5.2 Field Geology

Grid 1 - No outcrop was observed on this portion of the property. The eastern part of the grid is covered by a large esker, while the northern part is covered by deposits of sand (dunes) and jackpine forest. The southwest is overlain by spruce swamp presumably over sand deposits. A large portion of the grid has been cut-over and reforested. Overburden thickness is generally about 30 m though previous drilling indicates that depths to bedrock may reach 100 m. Large boulders of a variety of rock types are found scattered throughout the sandy areas. From previous drilling on adjoining ground to both the east and west and nearby outcrops, the Destor-Porcupine Fault zone of talcose and carbonated rocks is known to cross the central part of the grid, striking at about 60°. It is thought to be about

100 m wide across the property.

Grid 2 - The only area of outcrop observed on this grid was in the extreme eastern part of the grid outside the property boundary. The rock type observed here was a mafic metavolcanic, massive to pillowed in nature. The remainder of the grid is covered by spruce swamp with a few pine covered east-west trending ridges or dunes of sand.

6. GEOPHYSICAL SURVEYS

6.1 Induced Polarization Survey

A Scintrex IPR-8 Time Domain Induced Polarization Receiver was used for data gathering with a Huntec 2.5 kw Time Domain Transmitter transmitting a 2-second on 2-second off square wave as a signal generator.

A pole-dipole array was used as a survey technique with a dipole 'a' spacing of 25 meters. For this array, one of the current electrodes is fixed at a large distance (approximately 20 times the 'a' separation) from the nearest point of the remainder of the array. The remainder of the surveying array is then moved along the survey lines with readings taken at preselected intervals. For routine coverage, readings with a dipole separation ('n') of 4 and 5 were taken at each station. The reading with a dipole separation of n = 5 gives a deeper depth of penetration than that with n = 4.

The main advantage of the technique is that only one current electrode requires moving, thus reducing possible contact problems. The major disadvantage is that the anomalies are asymmetric due to the non-symmetrical nature of the array.

For detailed surveying of selected anomalies, a dipole-dipole array was used with a dipole length 'a' of 25 meters and dipole separation 'n' of 1 through 5.

Radio contact using walkie-talkies enabled synchronization of current on-off times between operators to ensure the safety of personnel. The technical specifications of the survey equipment are presented in Appendix 1.

Two values are of interest in Time Domain Induced Polarization surveying:

a) the apparent resistivity of the ground
b) the chargeability or polarizability of the ground.

The apparent resistivity values of the ground is not directly measured but is obtained by calculations from observed data.

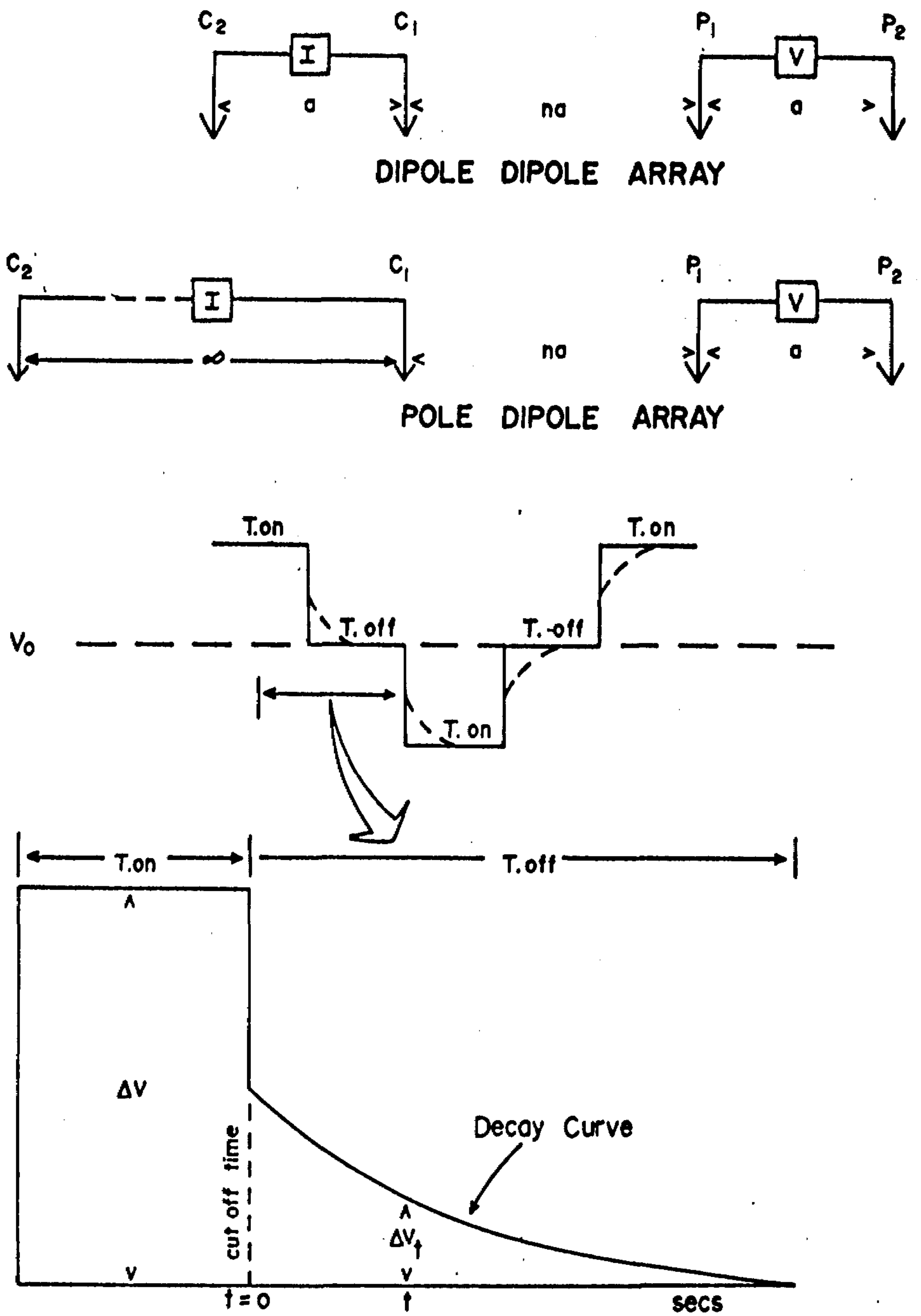
At each station, six chargeability values (M1 through M6) which describe a decay curve were observed. In addition a secondary voltage value was taken.

The apparent resistivity value of the ground is found from a mathematical formula utilizing the secondary voltage value coupled with the current output from the transmitter at the same instant, and a geometrical constant dependent on the array type being used and the value of 'n'.

The decay curve constructed from the six chargeability observations is generally in the form of an exponential decay and can be split into two portions - a fast decay portion and a slow decay portion. The fast decay portion is generally due to inductive effects. Apparent chargeability, by definition, is the value of the slow decay rate at zero time.

This slow decay rate predominates at later times on the decay curve and for this reason only the M6 values have been used to construct the chargeability field maps for this project. The plotting point for both the chargeability and apparent resistivity values were generally taken as being at the mid-point of the survey array.

The basic principles of the Induced Polarization method are displayed in Figure 2.



Apparent Resistivity $\rho a = \frac{V}{I} \cdot G$
where G is a geometrical factor dependant on survey array

——— Transmitter waveform
– – – Signal "seen" at reciever

T.on = 2 secs.
T.off = 2 secs.

Chargeability at time t $M_t = \frac{\Delta V_t}{\Delta V}$

PRINCIPLE OF TIME DOMAIN I.P.

Figure 2

6.2 Magnetometer Systems

A McPhar GP-70 proton precession field magnetometer was used to survey the grid. This system utilizes the precession of protons in a hydrocarbon fluid. These spinning magnetic dipoles (protons) are polarized by applying a magnetic field using a current within a coil of wire. When the current is discontinued the protons precess about the earth's magnetic field and in turn generate a small current in the wire. This frequency of precession is proportional to the earth's total magnetic field.

This instrument is read directly in gammas which is the absolute value of the earth's total field for that station.

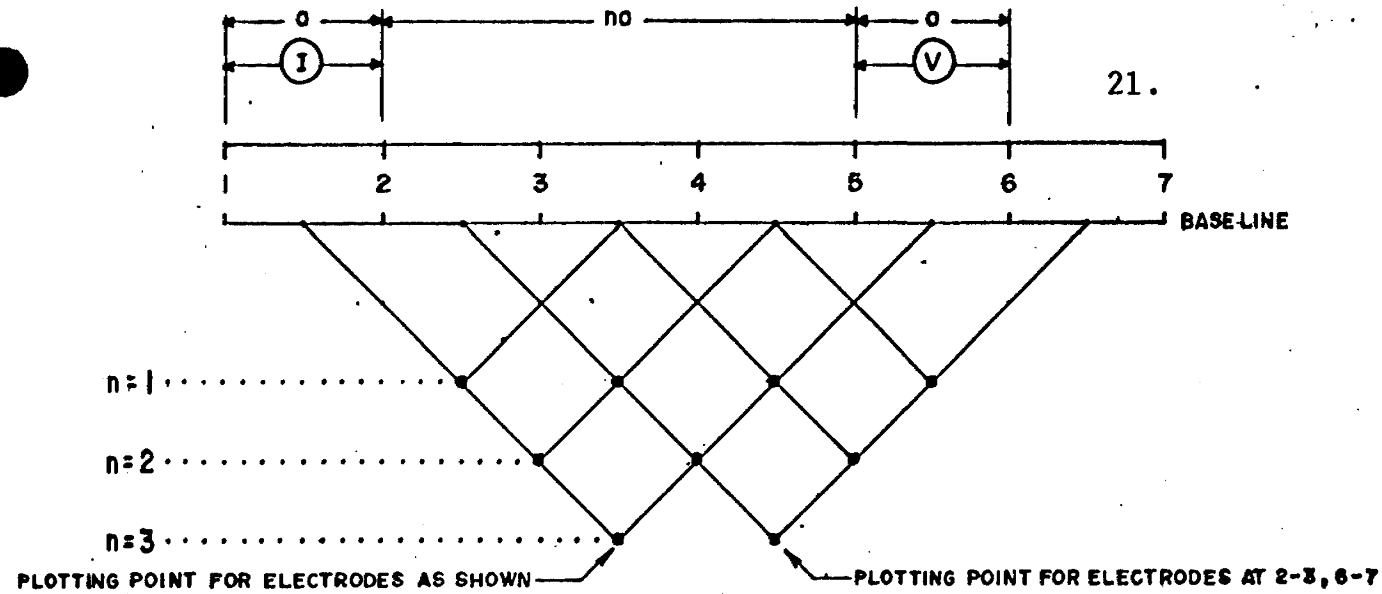
Correction of the magnetic data for instrument and diurnal drift was done by re-occupying previously established base stations periodically (approximately every 2 hours) during the course of the survey. In this manner a drift curve for the instrument can be established and adjustment of the field readings can be made such that they are all related to an established datum. Instrument specifications are presented in Appendix 1.

7. PRESENTATION OF DATA

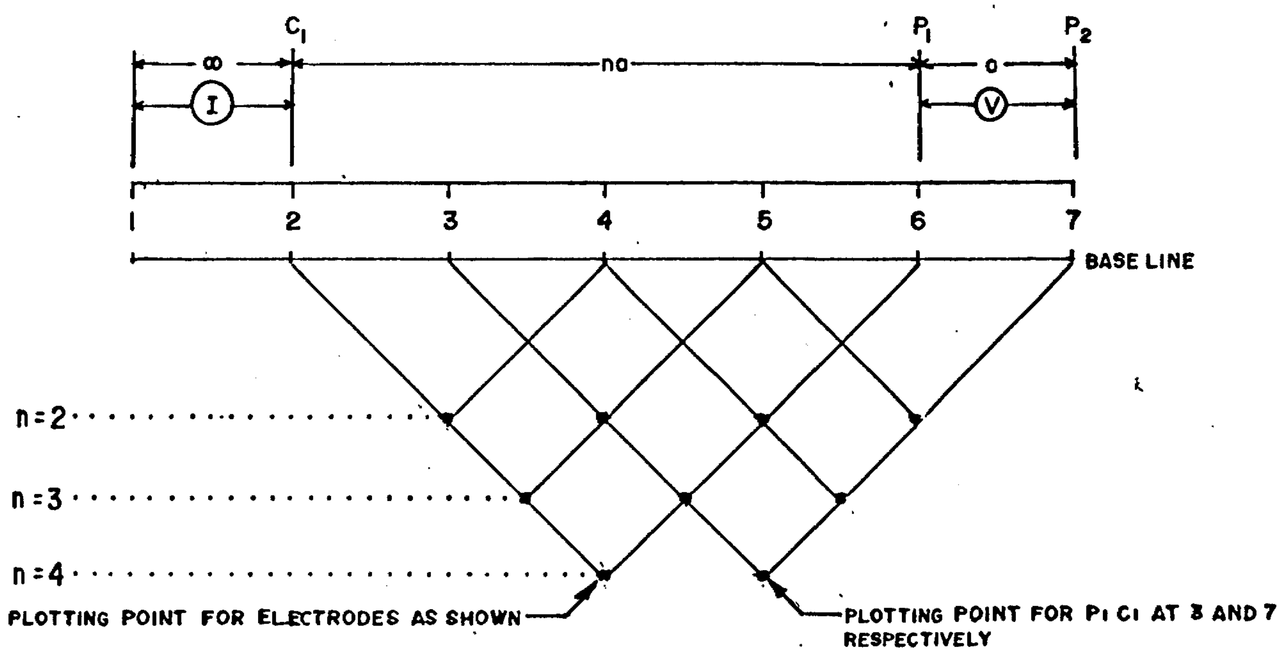
The data from the Induced Polarization surveying are presented as a series of equal value contour lines superimposed on a map containing the apparent resistivity or chargeability values from the area.

Detailed profiles of some lines are presented in pseudosection form. To obtain this form of presentation, data for each station is plotted on a vertical section at the point of intersection of 45^{o} lines drawn from the baselines or surface starting at the mid-point of the current and potential electrodes. In this way the readings appear at points directly below the centre of the electrode spread at a vertical distance which increases with the 'n' value for the spread. The result is a form of a two-dimensional plot in vertical section. (Figure 3)

The magnetic data are shown as a series of isomagnetic contours superimposed on a map of corrected magnetic values recorded at each station. Contour intervals were chosen to suitably highlight the magnetic features of the survey area.



DIPOLE DIPOLE ARRAY



POLE DIPOLE ARRAY

PLOTTING POINTS FOR VARIOUS ARRAYS

Figure 3

8. GEOPHYSICAL INTERPRETATION

Grid 1 (Western Grid Michaud Township)

8.1 Magnetic Survey

Three major magnetic features were located on this grid.

Anomaly 'A' - is a strong (5000 gammas above background) linear feature located in the southern portion of this grid and striking at approximately 070°. The truncation and deviation of the magnetic contours indicate that the feature is possibly structurally controlled at its western end (Map 1). The ground mapping of the anomaly does not substantiate this theory, due to the lack of data. However, airborne magnetic data from this region does outline a major northwest-southeast structure in this vicinity. Within this strong, linear magnetic feature two localized magnetic highs were located at approximately 5+75S, on line 6+00E (Anomaly 'A-1'), and between lines 12+00E and 14+00E at 4+00S (Anomaly 'A-2'). Anomaly 'A' is open eastward.

The amplitude and linearity of the Anomaly 'A' suggests that iron formation is a likely source of this feature.

The second magnetic feature, Anomaly 'B' is a lower amplitude (500 - 1000 gammas) linear magnetic feature lying at the same attitude as Anomaly 'A'. One localized magnetic high of approximately 3000 gammas is located within the linear feature at approximately 4+50N on line 14+00E. This linear feature (Anomaly 'B') lies immediately north of and parallel to the Destor-Porcupine Fault which, based on diamond drilling information from the immediate area, is projected to transect the northern portion of this grid.

Anomaly 'C' - is a partly mapped circular magnetic feature located at 7+00N on Line 4+00E. It is likely that the anomaly is due to a variation in the magnetic background of the bedrock stratigraphy.

8.2 Induced Polarization Survey

The IP survey conducted on this grid reflected the structural trend outlined by the magnetics.

Anomaly 'A' - The IP chargeability survey (Map 2) outlined one large chargeability feature of approximately 20 milliseconds exactly coincident with magnetic Anomaly 'A'.

Based on the limited information available from the survey the western end of this feature appears sharply curtailed, indicating confirmation of the northwest-southeast structural feature postulated from the magnetic data.

The chargeability anomaly is open to the east.

Within this large chargeability feature a localized chargeability high of 75 milliseconds was observed at approximately 5+75S on line 6+00E, and is directly coincident with a local magnetic high 'A-1'. The apparent resistivity survey (Map 3) shows that a relative apparent resistivity low is coincident with the feature.

Detailing of this anomaly on line 6+00E using a double dipole array outlined a strong ($\sim$ 100 milli-seconds), wide anomaly extending to depth. A coincident well formed apparent resistivity low was also observed.

Inspection of the pseudosection suggests that the polarizable source is a steep southward dipping, broad zone at a depth of approximately 50 meters.

No chargeability or apparent resistivity correlation was observed with magnetic Anomaly 'A-2'.

At the eastern extent of this chargeability zone a small, one line anomalous zone was observed within the linear structure and is possibly continuous eastward. No associated apparent chargeability was observed.

The high chargeability anomalous values found coincident with 'A-1' and the lack of high chargeability when coincident with 'A-2' suggests a possible change from sulphide to oxide iron formation as one proceeds west to east along Anomaly 'A'.

Anomaly 'B' - Several small (5 milliseconds) chargeability zones were mapped within magnetic Anomaly 'B'. Although barely above background, they are of interest in that Anomaly 'B' is paralleling the Destor-Porcupine Fault. No apparent resistivity signature was associated with any of the chargeability zones or with magnetic Anomaly 'B', (Maps 1, 2 and 3).

The detailing survey one line 8+00E from 1+00N to 6+50N was conducted to provide information on a small chargeability zone identified within the magnetic outline north of the Destor-Porcupine Fault.

The detailing showed an extremely small (5.4 milli-second) deep chargeability zone. No corresponding apparent resistivity signature was observed.

The lack of chargeability values corresponding with the localized magnetic high within Anomaly 'B' indicates that magnetite rich mafic flows is likely the main cause of the anomaly.

Anomaly 'C' - No chargeability or apparent resistiviy anomaly was found coincident with magnetic Anomaly 'C'.

Grid 2 (Eastern Grid Garrison Township)

The magnetic survey outlined a major northeast-southwest magnetic low crosscutting the regional (east-west) magnetic trend (Map 4). No causative source can be assigned to the magnetic low at this time. No discrete magnetic anomalies were outlined on this grid.

The Induced Polarization Survey conducted on this grid showed an east-west structural trend with no evidence of the northeast-southwest feature outlined by the magnetics.

Map 5 presents the chargeability data from the survey area. No high values were recorded and the vast majority of the chargeability values are background levels and vary from 1.5 to 2.5 milliseconds. No discrete chargeability anomalies were defined with the higher chargeability values (up to 7 milliseconds) located at the eastern perimeter of the grid.

The apparent resistivity data (Map 6) mirrored the chargeability map, in that an east-west structure was defined. Low apparent resistivity values were observed in the western portion of the grid whereas the higher apparent resistivity values were located at the eastern perimeter of the grid.

No discrete resistivity anomalies were observed.

9. DIAMOND DRILLING

9.1 General

The geologic environment [including the close proximity to the Destor-Porcupine Fault and the interpreted presence of volcano-chemical sediments (iron formation)] was thought to be adequate to warrant the drill testing of the geophysical anomalies located on Grid 1.

Two diamond drill holes were drilled between the dates of September 9th and September 24th, 1980. Drilling was carried out by Moderne Diamond Drilling Inc., P. O. Box 218, Val d'Or, Quebec. A summary of drilling information is as follows:

DDH - 1: total depth, 650 feet (198.12 m) including 135 feet (41.15 m) overburden; dip at collar -55^{o}; core size, BQ, diameter 1 13/16 inches (46 mm); location, 6+00E, 6+50S, claim 522633.

DDH - 2: total depth, 555 feet (169.16 m) including 161 feet (49.07 m) overburden; dip at collar, -55^{o}; core size, BQ, diameter 1 13/16 inches (46 mm); location, L8+00E, 5+37S, claim 522626.

9.2 Geology

Both diamond drill holes intersected essentially the same stratigraphy. Rock types included a greenish-grey medium to coarse grained greywacke which becomes conglomeratic near the presumed base of the unit (i.e. down the hole). Underlying these clastic metasediments was a thick unit of jasper-bearing oxide (magnetite, specularite) facies iron formation. The overall width is approximately 80 m and the iron formation dips steeply (75^{o} - 80^{o}) to the south. The iron formation is not continuous for its total width; there is an approximately 10 m section of fine grained clastic material (greywacke) containing thin (1 cm) bands of magnetite, that separates the iron formation into an (stratigraphically) upper and lower part. Bands of clastic material are common in the upper portion while jasper is more common in the lower part. A narrow band of sulphide (pyrite, pyrrhotite) facies iron formation was intersected in Hole 1 within the lower part of the iron formation. No carbonate facies iron formation was noted in either diamond drill hole. The lowermost unit encountered was a section of pillowed mafic metavolcanics. Diamond drill logs and sections are included in Appendix 2.

9.3 Assays

A total of 28 samples were submitted for assay for Au and Ag.

10. CONCLUSIONS

This exploration programme has focused on the geophysical and geological investigation of the Windjammer property. The main conclusions derived from the field work and the study of previous geological reports and literature and their relevance to the gold potential of the property are:

1) The geophysical work conducted on the property has outlined one major chargeability and magnetic anomaly in Grid 1. The anomaly which is at least 1000 meters long was interpreted to reflect an iron formation possibly varying from magnetite-rich to pyrite or pyrrhotite-rich along strike. The anomaly is also open to the east.

2) No anomalies that could be related to pyrite (i.e. gold-bearing) mineralization were detected on Grid 2. A magnetic low which cuts across the regional magnetic trend is probably the result of minor structural or stratigraphic variations in the underlying bedrock.

3) Diamond drilling confirmed the presence of iron formation in Grid 1. A narrow zone of sulphide mineralization within the iron formation coincided with the highest values of the chargeability anomaly. However, the magnitude of the anomaly would appear larger than that which can be explained by the mineralization (i.e. sulphides) encountered in Hole 1.

4) The depth of overburden in the area is much deeper than expected and may reach up to 100 m in the northern and eastern parts of Grid 1. It is possible that the Induced Polarization survey was testing the bedrock response only at the widest surveying dipole spread (see Map D2).

5) The iron formation lies approximately 600 meters south of the assumed location of the Destor-Porcupine Fault at the contact between mafic metavolcanic rocks (reportedly locally altered to tal-chlorite schist) and coarse grained clastic sediments (greywacke and conglomerate). The interface between volcanics and sediments, though as of yet not thoroughly explained geologically is noted as an important environment for gold mineralization throughout the Porcupine and Larder Lake gold camps. The Destor-Porcupine zone represents altered (i.e. carbonated) rocks that may have been altered as a mineralizing system was active. It is suspected that the mafic metavolcanic rocks stratigraphically below the iron formation should exhibit a similar (though more talcose) alteration assemblage especially in the vicinity of syngenetic mineralization.

The noted absence to date of carbonate-rich sediments (with dolomite, ankerite, siderite) within the iron formation suggests that the system may differ in chemistry from the typical models for gold deposits of the Timmins and Kirkland Lake areas or that this facies (possibly with higher gold values) may exist further along strike.

11. RECOMMENDATIONS

The following recommendations are made to further evaluate the gold potential of the property:

1) Additional diamond drill core should be split and submitted for assay. Of particular interest will be the "upper" iron formation in Holes 1 and 2 and the "lower" iron formation in Hole 2 especially at and near the contact with the underlying metavolcanics. Approximately 60 to 70 specimens should be involved in this sampling.

2) Intermediate lines (100 m spacing) should be cut on the existing Grid 1. The grid should also be extended to the east where the anomaly is thought to persist. Claims 522605 - 522607 inclusive, 522610 - 522615 inclusive and 522618 - 522621 inclusive should be covered by this extension.

3) Induced Polarization and Magnetometer surveys should be carried out on the new portions of Grid 1 to refine existing anomalies and to possibly extend the existing anomalies to the east.

4) Diamond drilling is the best method in this area for collecting geological information and for sampling the geophysical targets. Continued investigation of the geophysical anomalies should be carried out in that manner. This would commence with the drilling of the third hole

originally proposed (L 16+00E, 2+87S). The collar of this hole, however, should be relocated further to the east to where the overburden thickness is expected to be significantly less than might be encountered on L 16+00E. The locations for additional diamond drill holes in the vicinity of lines 6+00E and 8+00E should be based on the results of subsequent geophysical surveys.

Respectfully submitted,

D. Jones, M.Sc.

J. M. Siriunas, P. Eng.

CERTIFICATE

I, David Jones of Toronto, Ontario hereby certify that:

1) I hold a Bachelor of Technology degree in Applied Physicis from the University of Bradford, England and a Master of Science degree in Applied Geophysics from McGill University in Montreal,

2) I have practised my profession in exploration continuously since graduation.

3) I have based conclusions and recommendations contained in this report on my experience. All geophysical field work conducted on the property during June/July, 1980 was carried out under my supervision.

4) I hold no interest, directly or indirectly in this property other than professional fees, nor do I expect to receive any interest in the property or in Windjammer Power and Gas Limited or any of its subsidiary companies.

Toronto, Ontario, Canada
October, 1980

David Jones, M.Sc.

D Jones

CERTIFICATE

I, J. M. Siriunas, of 110 - 77 Coe Hill Drive, Toronto, Ontario, certify that:

1) I hold a Bachelor of Applied Science Degree in Geological Engineering and a Master of Applied Science Degree in Geology from the University of Toronto.

2) I am a member of the Association of Professional Engineers of Ontario and have practiced my profession continuously since graduation.

3) I have based my conclusions and recommendations contained in this report on my experience and knowledge of the geology and gold potential of north-eastern Ontario and on observations made while on the property and while supervising the diamond drilling during the month of September, 1980.

4) I hold no interest, directly or indirectly in this property other than professional fees, nor do I expect to receive any interest in the property or in Windjammer Power and Gas Limited or any of its subsidiary companies.

John Siriunas

Toronto, Ontario, Canada
October, 1980

J. M. Siriunas, M.A.Sc., P. Eng.

REFERENCES

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Fripp, R.E.P. 1976	Stratabound gold deposits in Archean banded iron formations, Rhodesia; Econ. Geol. V. 71, No. 1, pp 58 - 75.
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Ploeger, F. and Grabowski, G. 1979	Garrison Township, District of Cochrane; Ontario Geological Survey, Map P.868, Kirkland Lake Data Series Scale 1:15840.
Ploeger, F. and Grabowski, G. 1980	Michaud Township, District of Cochrane; Ontario Geological Survey, Map P.871, Kirkland Lake Data Series Scale 1:15840.
Pyke, D.R. 1976	On the relationship between gold mineralization and ultramafic volcanic rocks in the Timmins area, northeastern Ontario; C.I.M. Bull. Sept. 1976, pp 79-87.
Satterly, J., 1948	Geology of Michaud Township: O.D.M. Annual Report V.57, part 4, 27 p.
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DIAMOND DRILL RECORD

NAME OF PROPERTY MICHAUD-GARRISON
HOLE NO. 1 LENGTH 650'
LOCATION Grid 1 BICHAUD TWP.
LATITUDE 6 + 50 S DEPARTURE 6 + 00E
ELEVATION N/A AZIMUTH 0° DIP -55°
STARTED 17 Sept. 1980 FINISHED 24 Sept. 1980

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
135'	-57°	--			
400'	-44°	--			
650'	-28°	--			

HOLE NO. 1 SHEET NO. 1/2
REMARKS

LOGGED BY JMS

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	% SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	TOTAL	ASSAYS %	%	Au OZ/TON	Ag OZ/TON	
0	135	OVERBURDEN: sand, few boulders										
135	351	METASEDIMENTS: medium to coarse grained greenish-grey greywacke, occasional conglomeratic pebble especially near contact with following rock type.										
351	461	IRON FORMATION: oxide (magnetite) facies; banded - bands of magnetite, jasper and clastic material; some specularite present; bands of clastic material usual wider than bands of magnetite or jasper; magnetite still contained in clastic-rich bands; clastic bands light grey in colour and very fine grained.										
461	493	METASEDIMENTS: fine-grained greywacke identical to intercalated clastic bands within preceding iron formation; magnetite not usually present except within discrete magnetite bands, banding (= bedding) at 60° to axis of the core.										
493	601	IRON FORMATION: oxide (magnetite) facies; jasper rich in general; some specularite present; abundant clastic material from about 498' - 523'; jasper fragment breccias cemented by quartz-carbonate at 538' - 539', 545' - 546', 570' quartz-carbonate (white to pink and occasionally vuggy) stringers usually parallel the axis of the core and contain some pyrite; pyrite usually found as relatively large cubes, heterogeneously distributed; banding generally perpendicular to the axis of the core while partings (usually with quartz and/or carbonate along the partings) parallel to the core axis;	1-1	1	493	498	5					
			1-2	1	498	503	5					
			1-3	1	503	508	5					
			1-4	1	508	513	5					
			1-5	1	513	518	5					
			1-6	1	518	523	5					
			1-7	1	523	528	5					
			1-8	1	528	533	5					
			1-9	1	533	538	5					
			1-10	1	538	543	5					
		586.5' - 587': semi-massive sulphide (pyrite and pyrrhotite) facies iron formation with quartz cemented jasper fragments; sulphides are very fine grained and banded (= bedded); also jasper bands alternating with sulphide bands at ~60° to core axis.	1-11	1	543	548	5					
			1-12	1	548	553	5					
			1-13	1	553	558	5					
			1-14	1	558	563	5					
			1-15	1	563	568	5					
			1-16	1	568	573	5					

LANGRIDGE LIMITED — TORONTO — 366-1168

FORM 1

DIAMOND DRILL RECORD

NAME OF PROPERTY MICHAUD-GARRISON

HOLE NO. 1 SHEET NO. 2/2

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	% SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	TOTAL	ASSAYS %	%	Au OZ TON	Ag OZ TON
601	650	MAFIC METAVOLCANICS: medium grey-green colour; soft; possibly	1-17	1	573	578	5				
		pillowed; slightly chloritic along partings;	1-18	1	578	583	5				
			1-19	1	583	586.5	3.5				
		601' - 602' contact zone with preceding iron formation;	1-20	30	586.5	587	0.5				
		brecciated and carbonate cemented; fine grained pyrite and	1-21	1	587	592	5				
		pyrrhotite bands.	1-22	1	592	597	5				
			1-23	1	597	601	4				
650		END OF HOLE.	1-24	5	601	602	1				

LANGRIDGES – TORONTO – 366-1168

FORM 2

DIAMOND DRILL RECORD

NAME OF PROPERTY MICHAUD-GARRISON
HOLE NO. 2 LENGTH 555'
LOCATION Grid 1, Michaud Twp.
LATITUDE 5 + 37S DEPARTURE 8 + 00E
ELEVATION N/A AZIMUTH 0° DIP -55°
STARTED 9 Sept. 1980 FINISHED 17 Sept. 1980

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
161'	-55°	-			
350'	-55°	-			
555'	-38°	-			

HOLE NO. 2 SHEET NO. 1/

REMARKS

LOGGED BY JMS

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	% SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS Au OZ/TON	ASSAYS Ag OZ/TON
0	161	OVERBURDEN: sand with a few boulders									
161	187	METASEDIMENTS: fairly coarse grained greyish-green greywacke; mainly coarse quartz fragments rather angular in finer grained matrix; occasional subrounded rock fragments to about 2 cm in size; 1% pyrite disseminated throughout; magnetite present from 183'; 186' - 187' conglomerate (basal unit?); matrix supported; clasts probably all mafic metavolcanics.	2-1	1	182	187	5				
187	354	IRON FORMATION: oxide (magnetite) facies; variable amounts of jasper and clastic sedimentary material (greywacke) occur throughout the intersection;	2-2	1	205	210	5				
		specularite is also noted usually occurring in the jasper-rich portions of the iron formation; bedding angle variable from 40° - 65° to the axis of the core; magnetite remains present in the clastic-rich portions of the core; clastic-rich portions are fine grained and light grey in colour and contrast distinctly with the bands of magnetite and/or jasper (typical banded iron formation); bands vary in width from mm or less to about 5 cm, the clastic -rich portions being wider in general than the strictly chemical-sedimentary bands (magnetite, japser); very hard drilling; bands are very microfaulted in sections especially 240'-243', 260' - 263', 327' - 333'; from about 274' clastic-rich sections become dominant rock variety; pyrite is found scattered heterogenously throughout generally as cubic xls up to 2 mm in size but the overall amount of pyrite present is very minor; few quartz-carbonate stringers cross-cut the stratigraphy almost perpendicular to the bedding; no portions of carbonate facies iron formation were noted.	2-3	1	240	245	5				

LANGRIDGE LIMITED—TORONTO—366-1168

FORM 1

DIAMOND DRILL RECORD

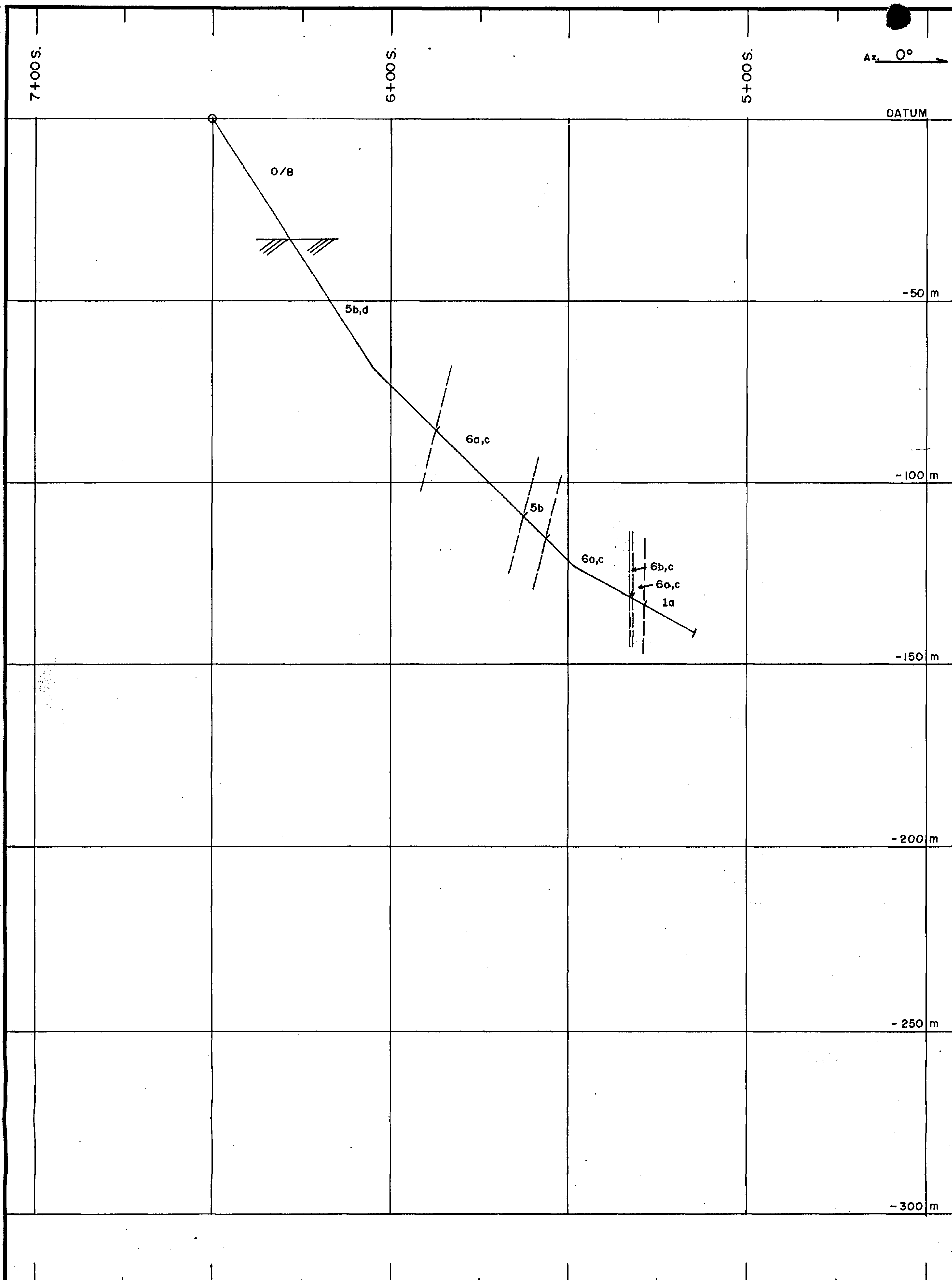
NAME OF PROPERTY MICHAUD-GARRISON

HOLE NO. 2 SHEET NO. 2/2

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	% SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS Au OZ TON	ASSAYS Ag OZ TON	
354	392	METASEDIMENTS: fine grained greywacke identical to the clastic-rich portions of the preceding iron formation; generally does not contain magnetite though small bands of magnetite occur throughout; trace pyrite content; small breccia zone at 386'.										
392	488	IRON FORMATION: oxide (magnetite) facies similar to 187' - 354'; clastic material is less abundant and red jasper is more abundant; specularite also present; small breccia zone at 413'; late quartz-(carbonate) stringers appear more abundant throughout this intersection; lower contact is arbitrary as bands of magnetite are found within following rock type to about 500'.										
488	555	MAFIC VOLCANIC: light green; fine grained; relatively hard; possible pillow rims observed; occasional patches of fine grained pyrite present; relatively abundant quartz-(carbonate) stringers, vuggy in spots attitude about 45° to core axis; small band of magnetite-jasper iron formation around 549'; partings slightly chloritic in spots.	2-4	1	549	550						
555		END OF HOLE										

LANGRIDGES – TORONTO – 366-1168

FORM 1



LEGEND

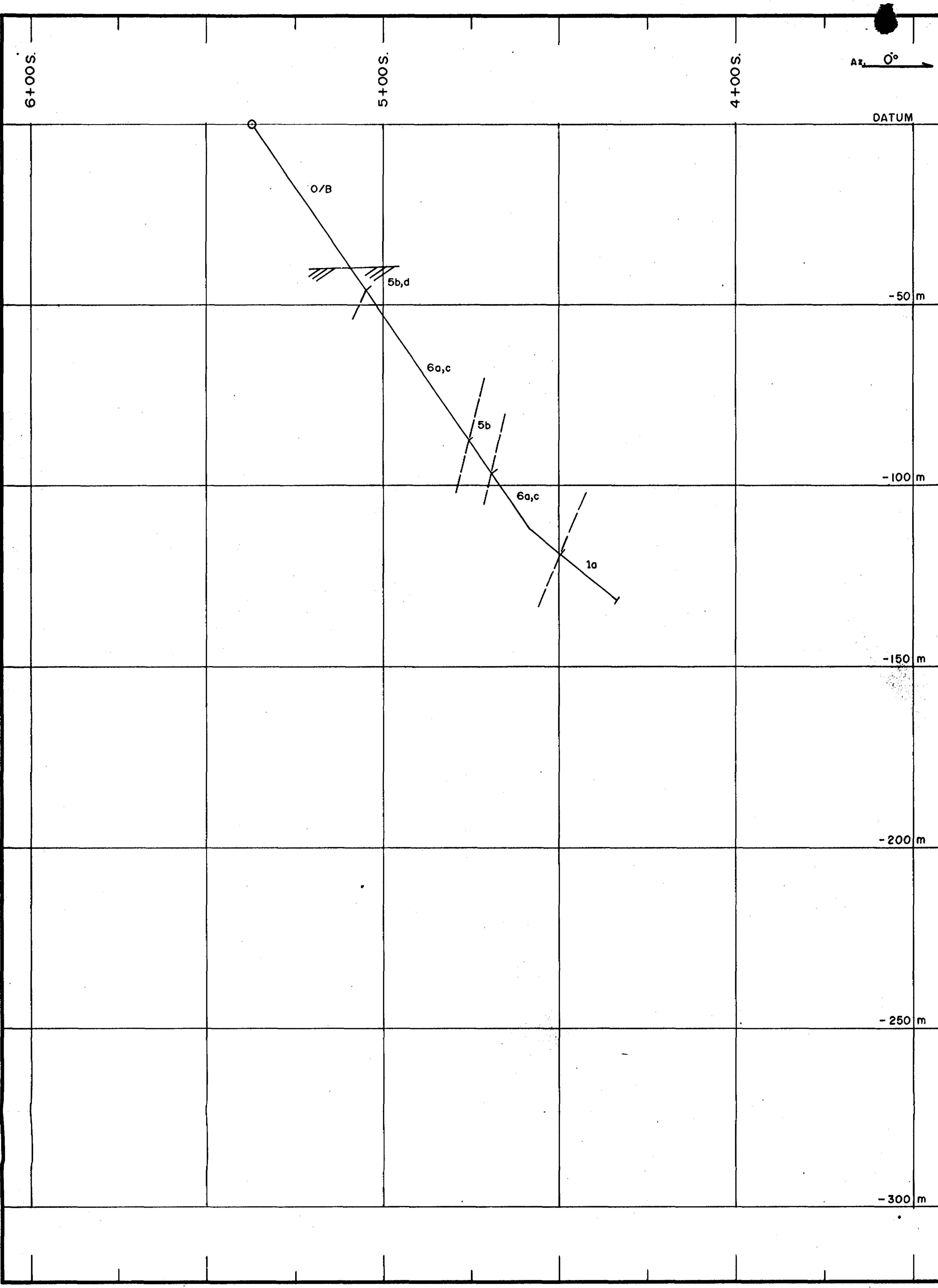
6	CHEMICAL AND VOLCANO METASEDIMENTS; oxide facies iron formation (6a), sulphide facies iron formation (6b), chert or jasper (6c), graphitic tuffs/sediments (6d)
5	METASEDIMENTS; argillite (5a), greywacke (5b), interbedded argillite and tuff (5c), conglomerate (5d)
4	ULTRAMAFIC METAVOLCANICS; carbonatized ultramafic (4a), talc-carbonate schist (4b)
3	FELSIC METAVOLCANICS; rhyodacitic tuff (3a), quartz/feldspar porphyry (3b), quartz/feldspar porphyry breccia (3c)
2	INTERMEDIATE TO FELSIC METAVOLCANICS; flow (2a), tuff (2b), agglomerate/breccia (2c)
1	MAFIC TO INTERMEDIATE METAVOLCANICS; flow (1a), tuff (1b), agglomerate/breccia (1c)

WINDJAMMER POWER & GAS

GARRISON TOWNSHIP PROJECT
D.D.H .... 1 ....
DRILL SECTION ON LINE ... 6+00E ...
GRID .... 1 .... TWP. MICHAUD ....

Project No: C504	By: J.M.Siriunas
Scale: 1:1000	Drawn: B.S.Petrovich
Drawing No:	Date: Aug.1980

MPH Consulting Limited



LEGEND

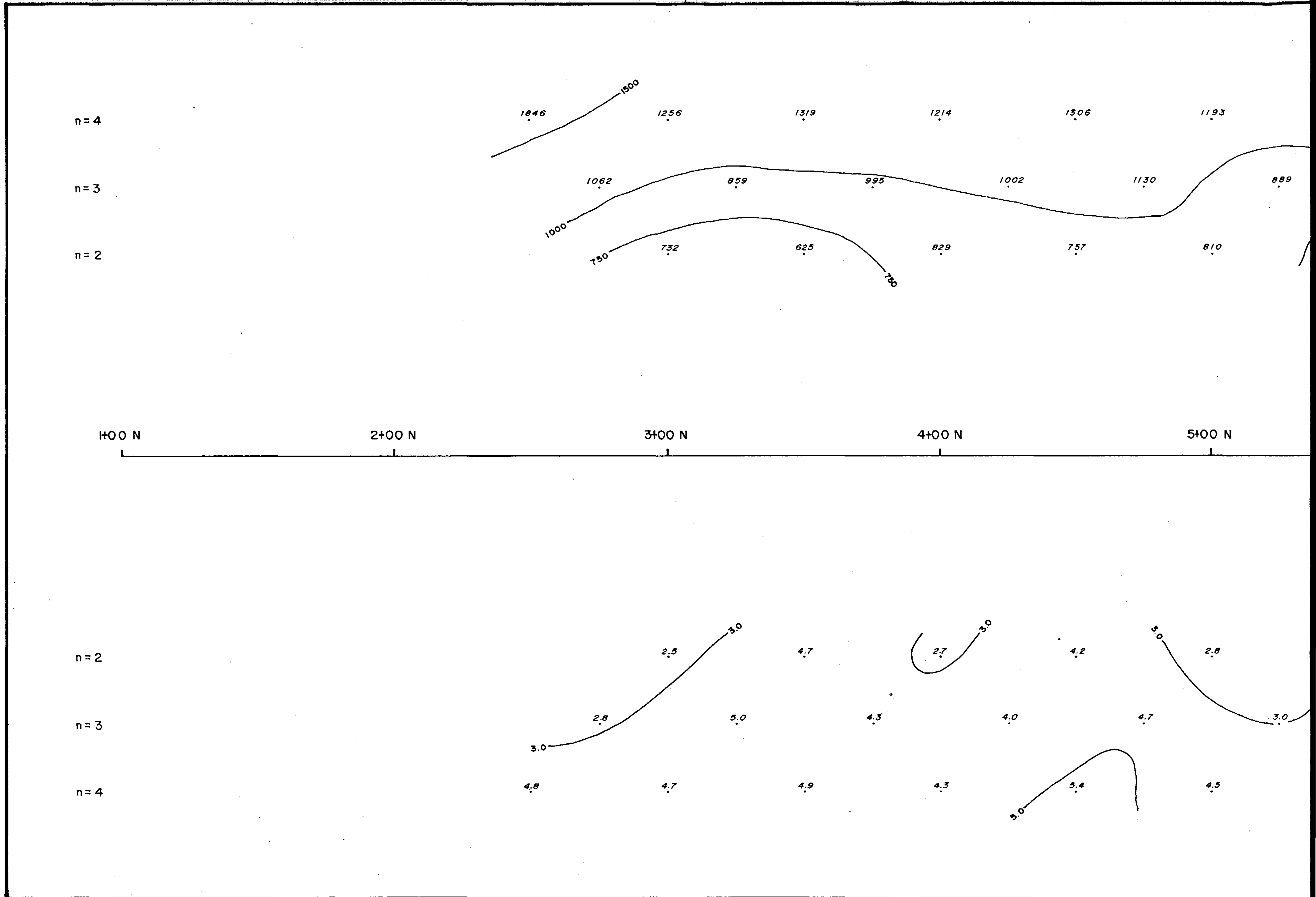
6	CHEMICAL AND VOLCANO METASEDIMENTS; oxide facies iron formation (6a), sulphide facies iron formation (6b), chert or jasper (6c), graphitic tuffs/sediments (6d)
5	METASEDIMENTS; argillite (5a), greywacke (5b), interbedded argillite and tuff (5c), conglomerate (5d)
4	ULTRAMAFIC METAVOLCANICS; carbonatized ultramafic (4a), talc-carbonate schist (4b)
3	FELSIC METAVOLCANICS; rhyodacitic tuff (3a), quartz/feldspar porphyry (3b), quartz/feldspar porphyry breccia (3c)
2	INTERMEDIATE TO FELSIC METAVOLCANICS; flow (2a), tuff (2b), agglomerate/breccia (2c)
1	MAFIC TO INTERMEDIATE METAVOLCANICS; flow (1a), tuff (1b), agglomerate/breccia (1c)

WINDJAMMER POWER & GAS

GARRISON TOWNSHIP PROJECT
D.D.H ...2...
DRILL SECTION ON LINE .8+00E....
GRID....1........ TWP. MICHAUD......

Project No: C504	By: J.M.Sirlunas
Scale: 1:1000	Drawn: B.S.Petrovich
Drawing No:	Date: Aug.1980

MPH Consulting Limited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n = 2
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1256
1319
1214
1306
1193
1500
1062
859
995
1002
1130
889
1000
732
625
829
757
810
750
1+00 N
2+00 N
3+00 N
4+00 N
5+00 N
n = 2
n = 3
n = 4
2.5
4.7
2.7
4.2
2.8
2.8
5.0
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4.7
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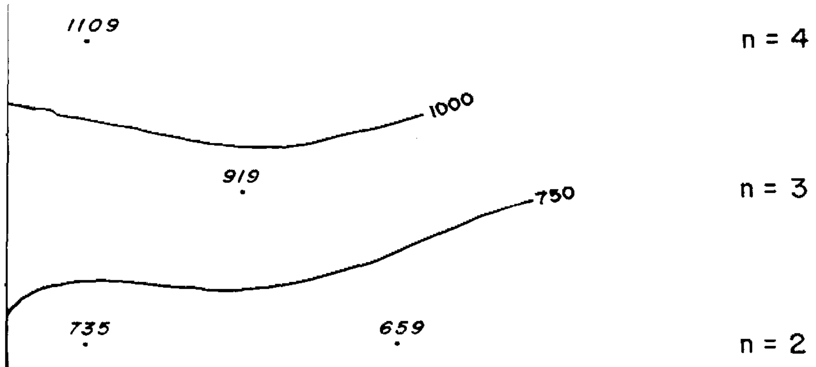
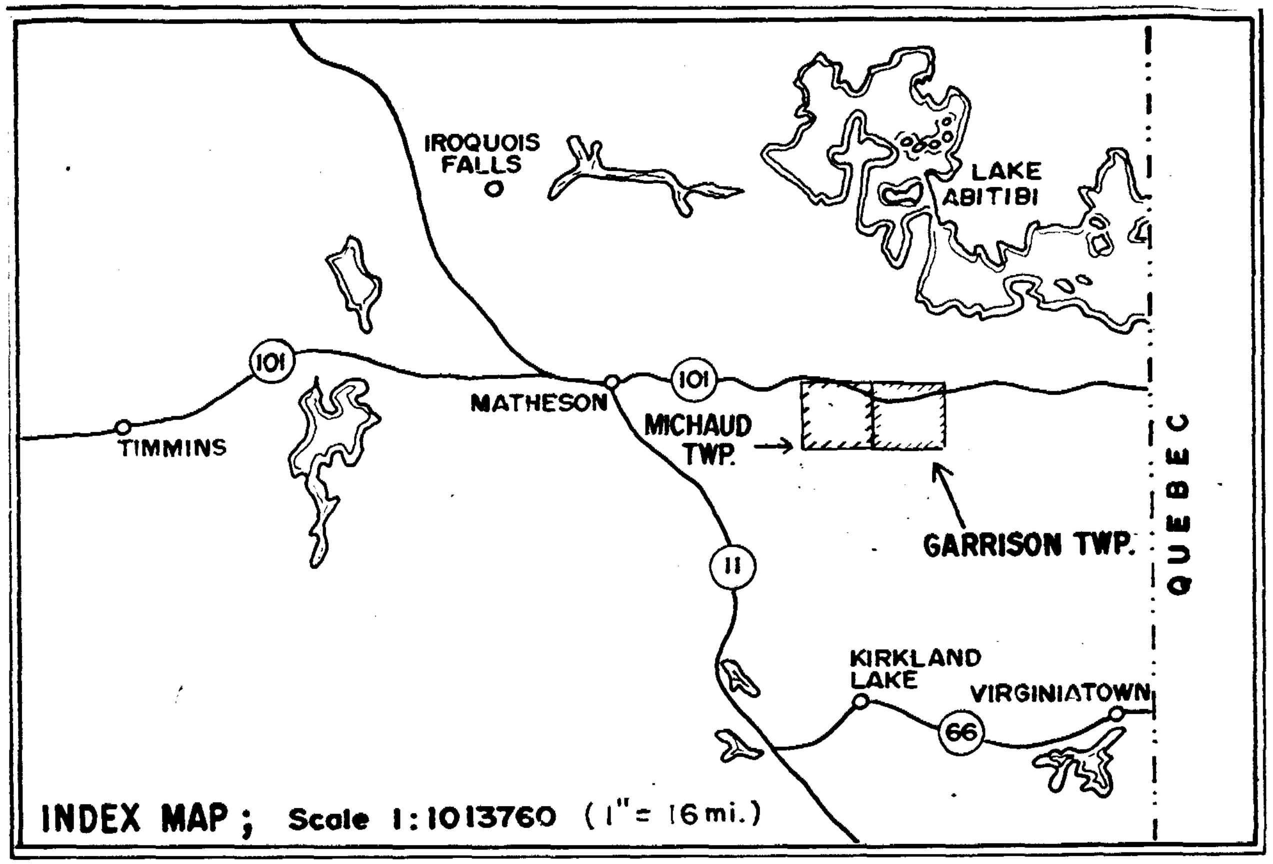
4.3
5.4
4.5
5.0

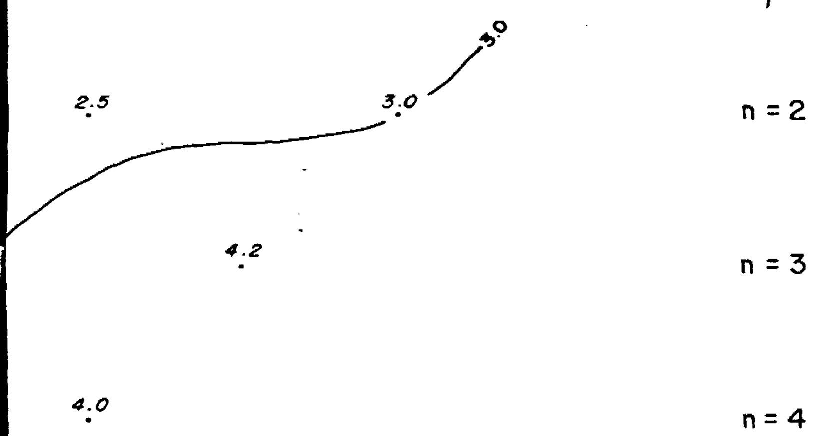


6+00 N 6+50 N

LINE 8+00 E



INDEX MAP; Scale 1:1013760 (1" = 16 mi.)



LEGEND

POLE DIPOLE ARRAY

C2 C1 na P1 a P2

STATION LOCATION

a = 50m n = 2,3,4,

500 APPARENT RESISTIVITY CONTOUR LEVEL

10.0 M_4 CHARGEABILITY CONTOUR LEVEL

1+00N. 2+00N. STATION LOCATION

0 25m. 50m.

WINDJAMMER POWER & GAS

GARRISON TOWNSHIP PROJECT
GRID I

DETAIL PSEUDO SECTIONS

Project No: C-504	**By:** D.J.
Scale: 1:1250	**Drawn:** D.R.
Drawing No: D.2	**Date:** July, 1980

MPH Consulting Limited

APPENDIX 3

TECHNICAL DATA STATEMENT

File

Ministry of Natural Resources

Ontario

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) IP, MAGNETICS, GEOLOGY

Township or Area GARRISON AND MICHAUD TWPS.

Claim Holder(s) Mr. Joseph Sabo A-44332
Calgary, Alberta

Survey Company M P H CONSULTING LIMITED

Author of Report DAVID JONES

Address of Author 141 Adelaide St. West, Toronto, Ont.

Covering Dates of Survey June 25 - Oct. 1, 1980 (linecutting to office)

Total Miles of Line Cut 13.67 (22 km)

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	
--Radiometric	
--Other	
Geological	
Geochemical	

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

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

DATE: Oct 29/80. SIGNATURE: D Jones
Author of Report or Agent

Res. Geol. ____ Qualifications 2.2759

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix) (number)

522594 (½)
522597
522598 (½)
522599
522600
522601
522602
522603 (¼)
522604
522622
522623
522624
522625
522626
522627
522628
522629
522630
522631
522632
522633
522634

If space insufficient, attach list

TOTAL CLAIMS 20¼

837 (5/79)

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations Magnetics 1825, IP 912 Number of Readings Mag 1825, IP 709

Station interval 25 meters Line spacing 200 meters

Profile scale

Contour interval IP Chargeability, IP Resistivity 250 ohm. m., magnetics 100 gammas
variable as per map

MAGNETIC

Instrument McPhar, GP 70 Proton Magnetometer

Accuracy – Scale constant 1 gamma

Diurnal correction method Constant Slope correction

Base Station check-in interval (hours) 2 hours

Base Station location and value Grid 1 L8+00E, BL 59128 gammas
Grid 2 L2+00E, B1 59170 gammas

ELECTROMAGNETIC

Instrument

Coil configuration

Coil separation

Accuracy

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

Frequency
(specify V.L.F. station)

Parameters measured

GRAVITY

Instrument

Scale constant

Corrections made

Base station value and location

Elevation accuracy

INDUCED POLARIZATION RESISTIVITY

Instrument Receiver, Scintrex IPR8 ; Transmitter, Huntec 2.5 kw

Method ☒ Time Domain ☐ Frequency Domain

Parameters – On time 2 seconds Frequency

– Off time 2 seconds Range

– Delay time 130 milliseconds

– Integration time 130 - 1560 milliseconds 6 channels, 260 millisecond each

Power 2.5 kw

Electrode array pole-dipole

Electrode spacing 25 meter

Type of electrode stainless steel

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 ____________________

____

____

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____

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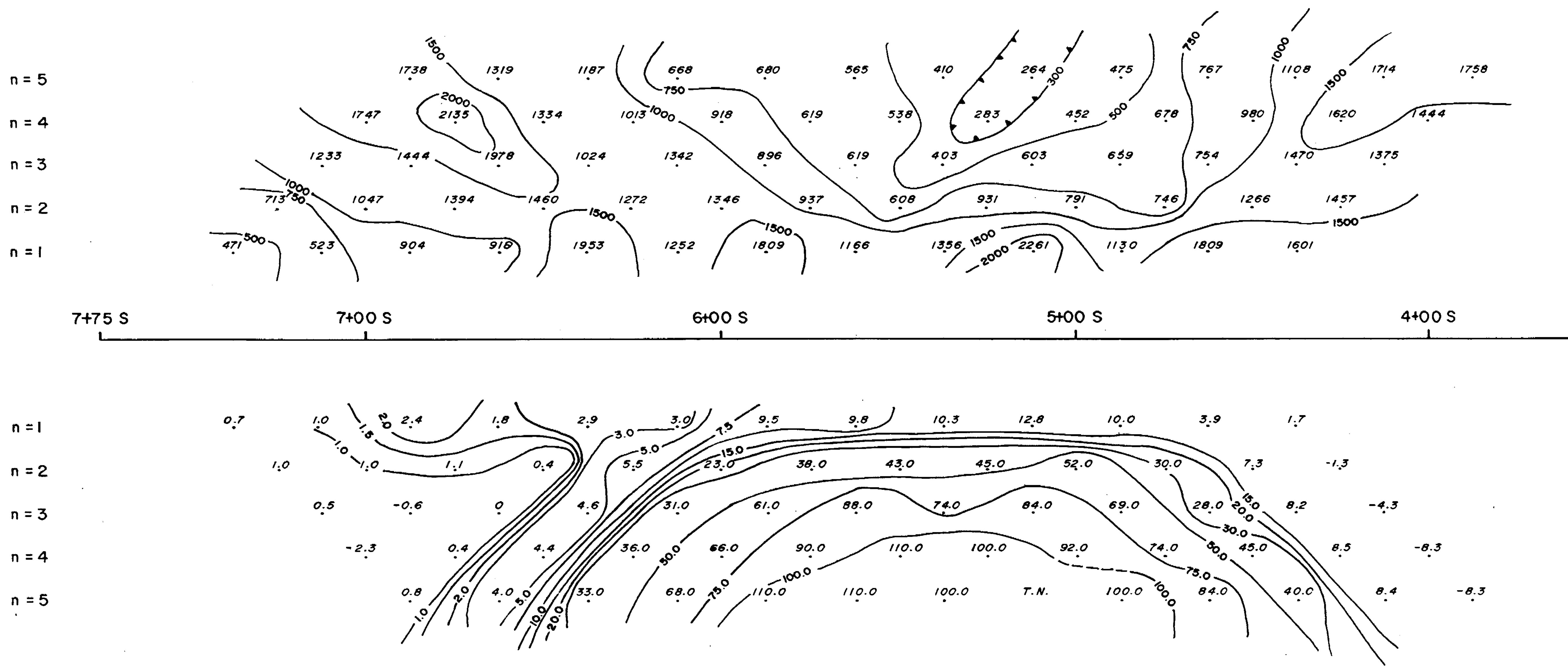
____

____

APPENDIX 4

MAPS



n = 5
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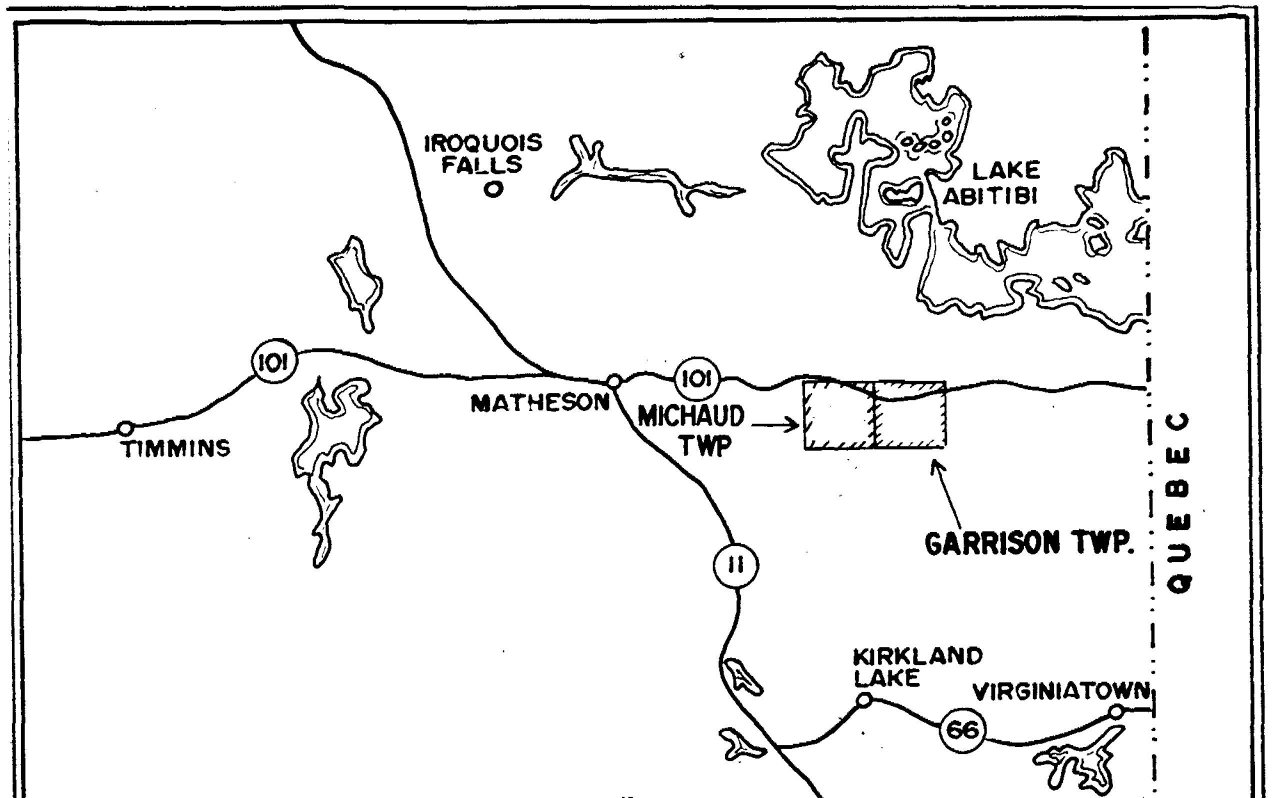
n = 2
n = 1
7+75 S
7+00 S
6+00 S
5+00 S
4+00 S
T.N.



INDEX MAP; Scale 1:1013760 (1" = 16 mi.)

n = 5

n = 4

n = 3

n = 2

n = 1

3+00 S

LINE 6+00 E

n = 1

n = 2

n = 3

n = 4

n = 5

LEGEND

DOUBLE DIPOLE ARRAY

C_1 a C_2 na P_1 a P_2

STATION LOCATION

a = 25 m n = 1,2,3,4,5

500 APPARENT RESISTIVITY CONTOUR LEVEL

10.0 M_4 CHARGEABILITY CONTOUR LEVEL

4+00S. 3+00S. STATION LOCATION

0 25m. 50m.

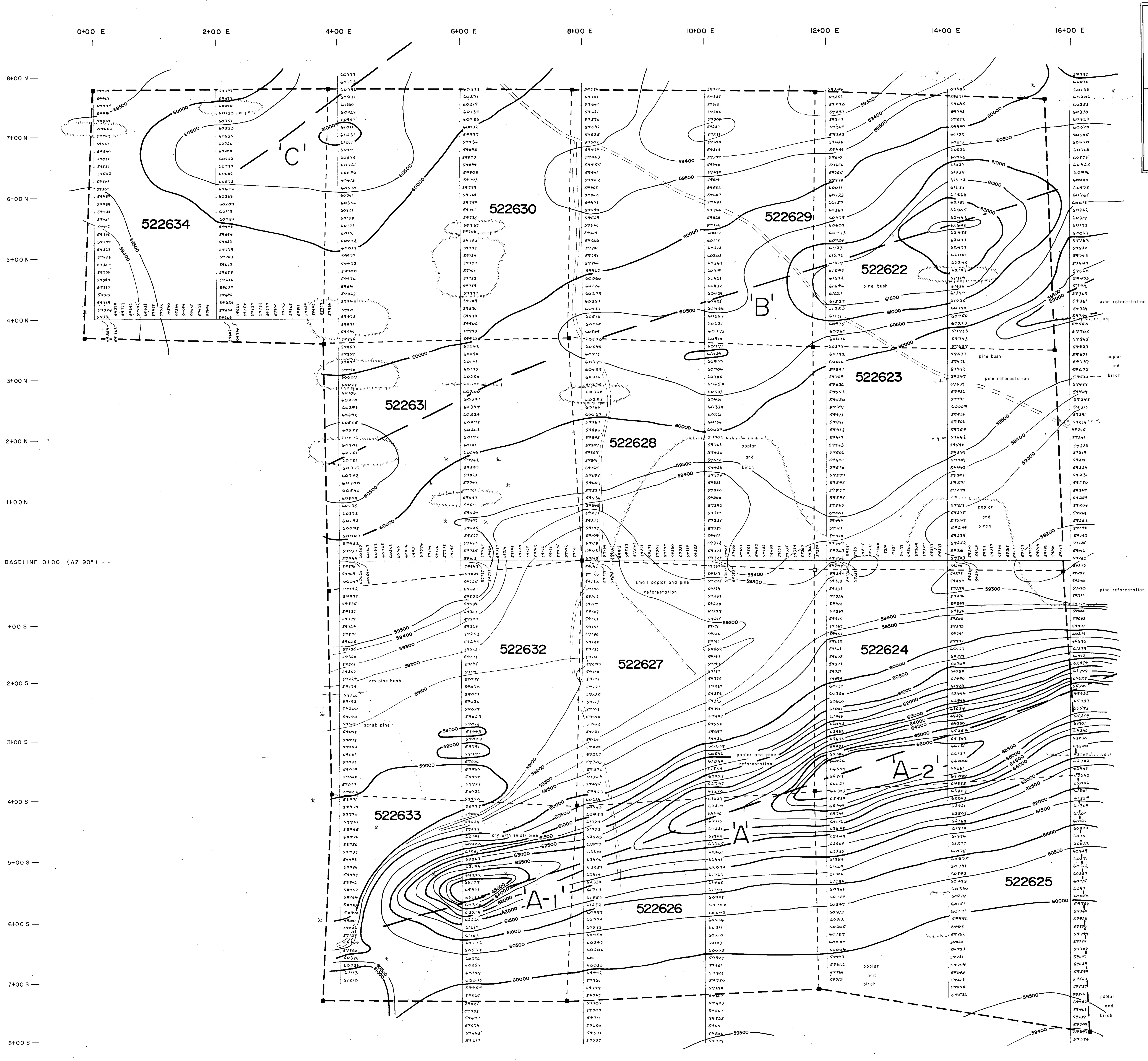
WINDJAMMER POWER & GAS

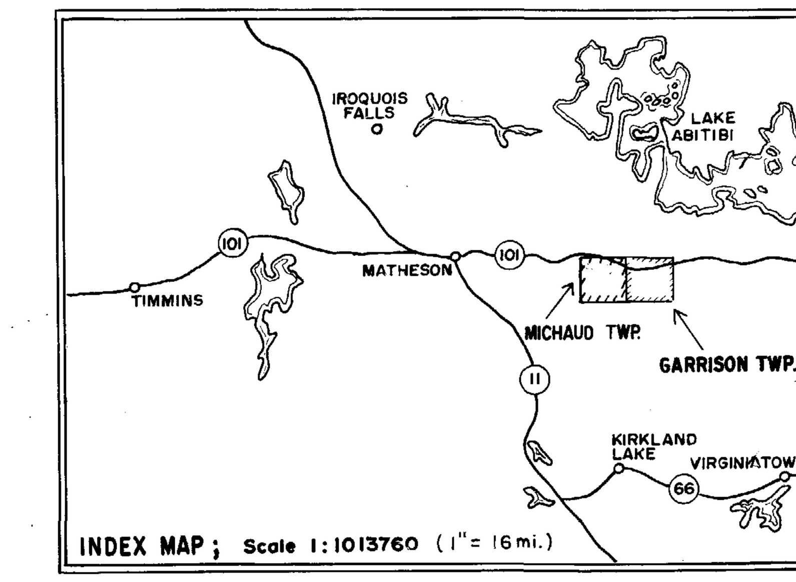
GARRISON TOWNSHIP PROJECT
GRID I

DETAIL PSEUDO SECTIONS

Project No: C-504	**By:** D.J.
Scale: 1:1250	**Drawn:** D.R.
Drawing No: D.1	**Date:** July, 1980

MPH Consulting Limited





LEGEND

Magnetic Value in Gammas — 60849

Magnetic Contour

Magnetic Depression

Instrument: McPhar G.P. 70 Proton Magnetometer

Contours: 1000 gammas, 500 gammas, 100 gammas

ROAD

HILL, RIDGE

CREEK

SWAMP

PROPERTY BOUNDARY

CLAIM LINE

CLAIM POST

UNLOCATED POST

0 50 m 100 m

WINDJAMMER POWER & GAS

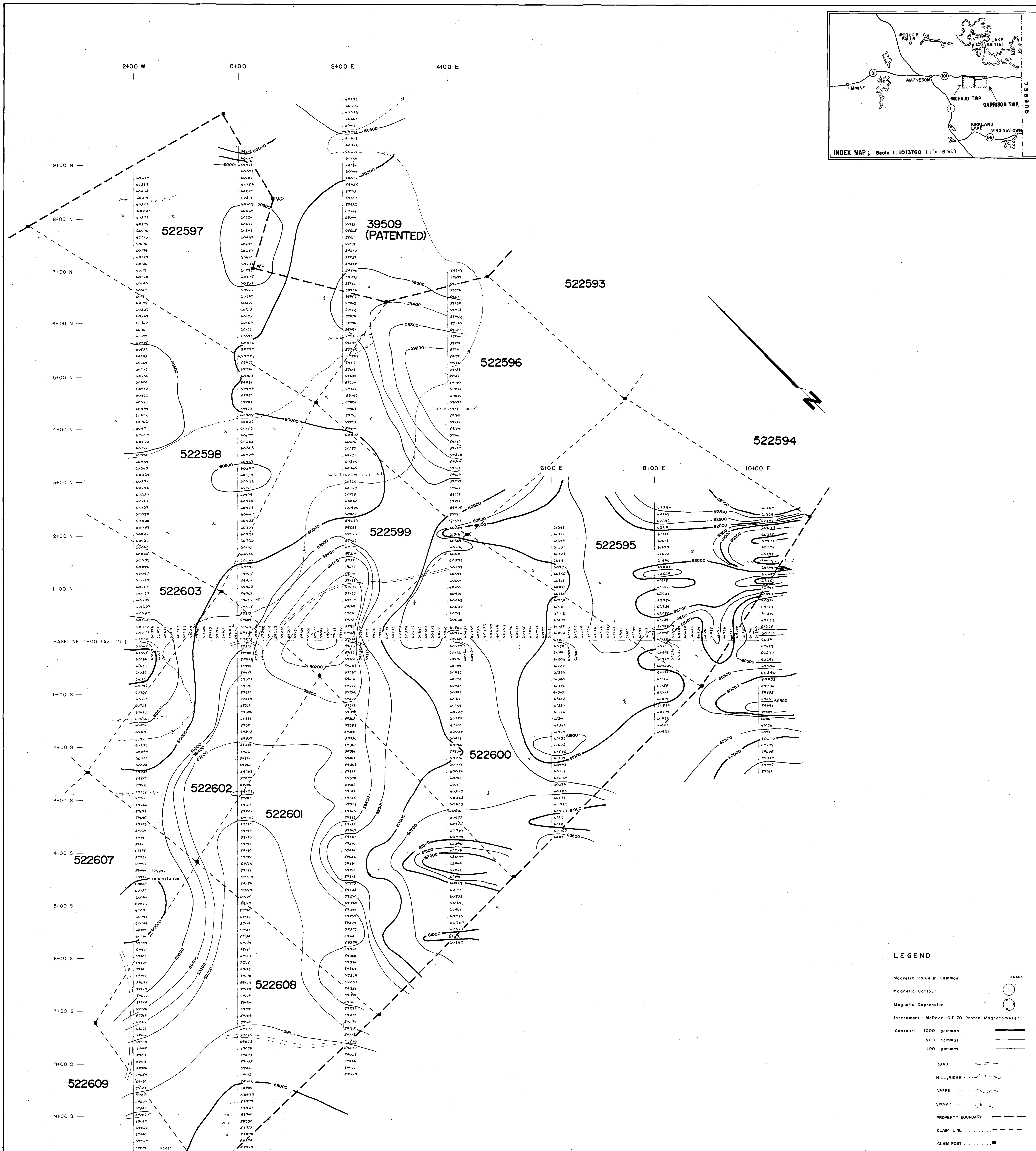
GARRISON TOWNSHIP PROJECT
GRID I

MAGNETIC SURVEY

Project No: C-504	By: D.J.
Scale: 1:2500	Drawn: D.R.
Drawing No: 1	Date: July, 1980

MPH Consulting Limited

200



WINDJAMMER POWER & GAS

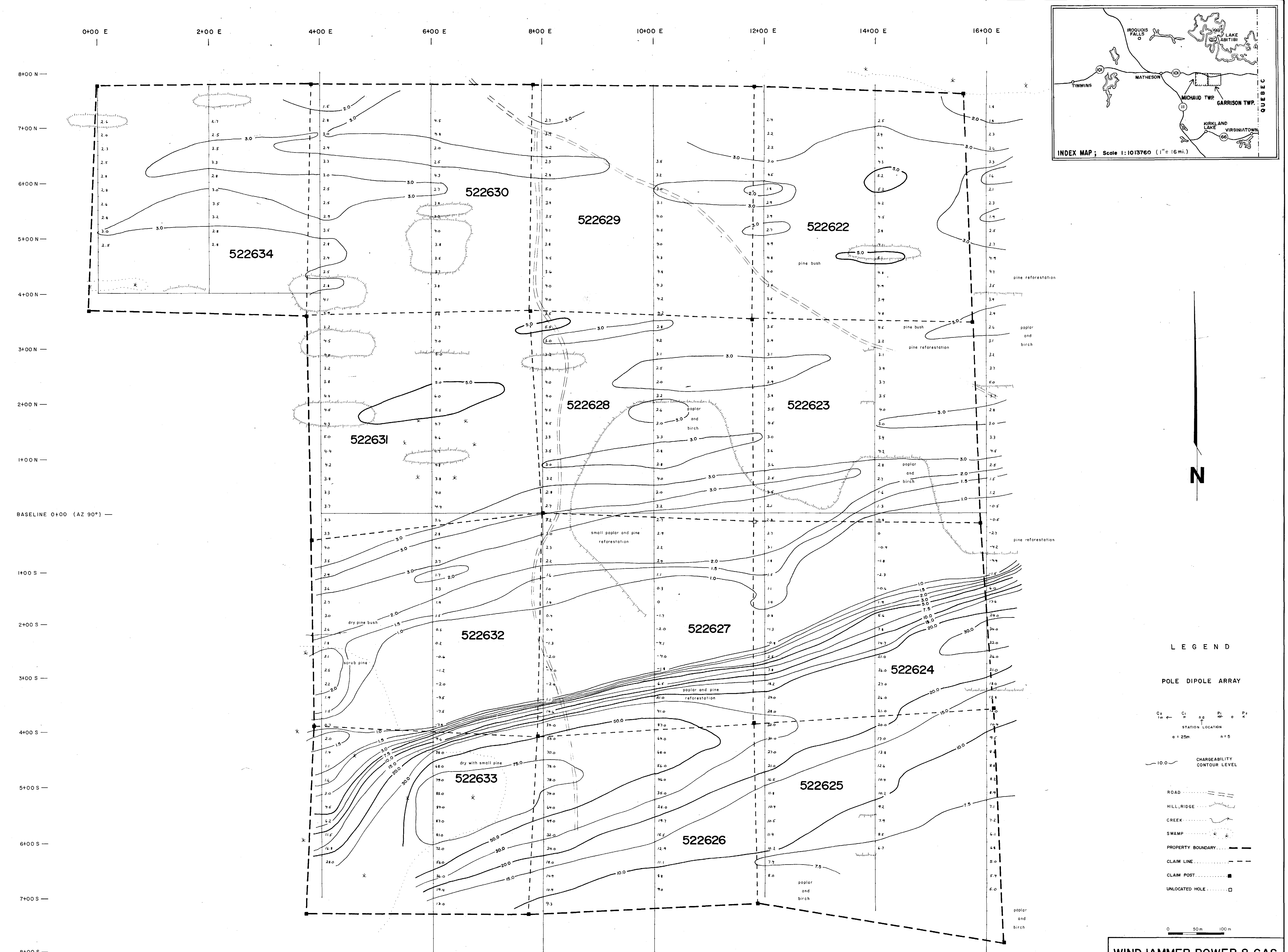
GARRISON TOWNSHIP PROJECT
GRID 2
MAGNETIC SURVEY

Project No: C-504	**By:** D.J.
Scale: 1:2500	**Drawn:** D.R.
Drawing No: 4	**Date:** July, 1980

MPH Consulting Limited

32D05NW8161 2.3528 GARRISON

210



WINDJAMMER POWER & GAS

GARRISON TOWNSHIP PROJECT
GRID I

N5 IP CHARGEABILITY SURVEY

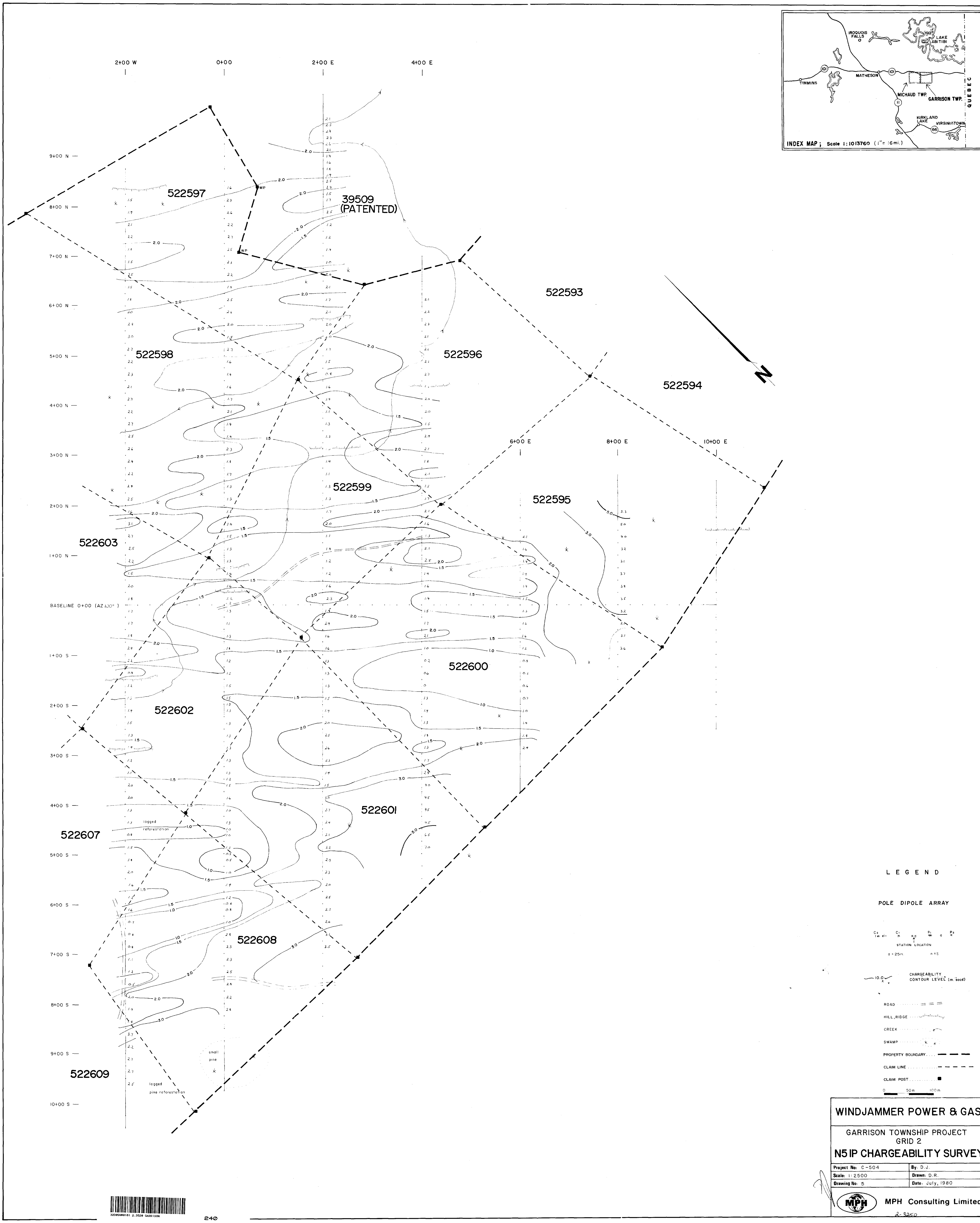
Project No: C-504	By: D.J.
Scale: 1:2500	Drawn: D.R.
Drawing No: 2	Date: July, 1980

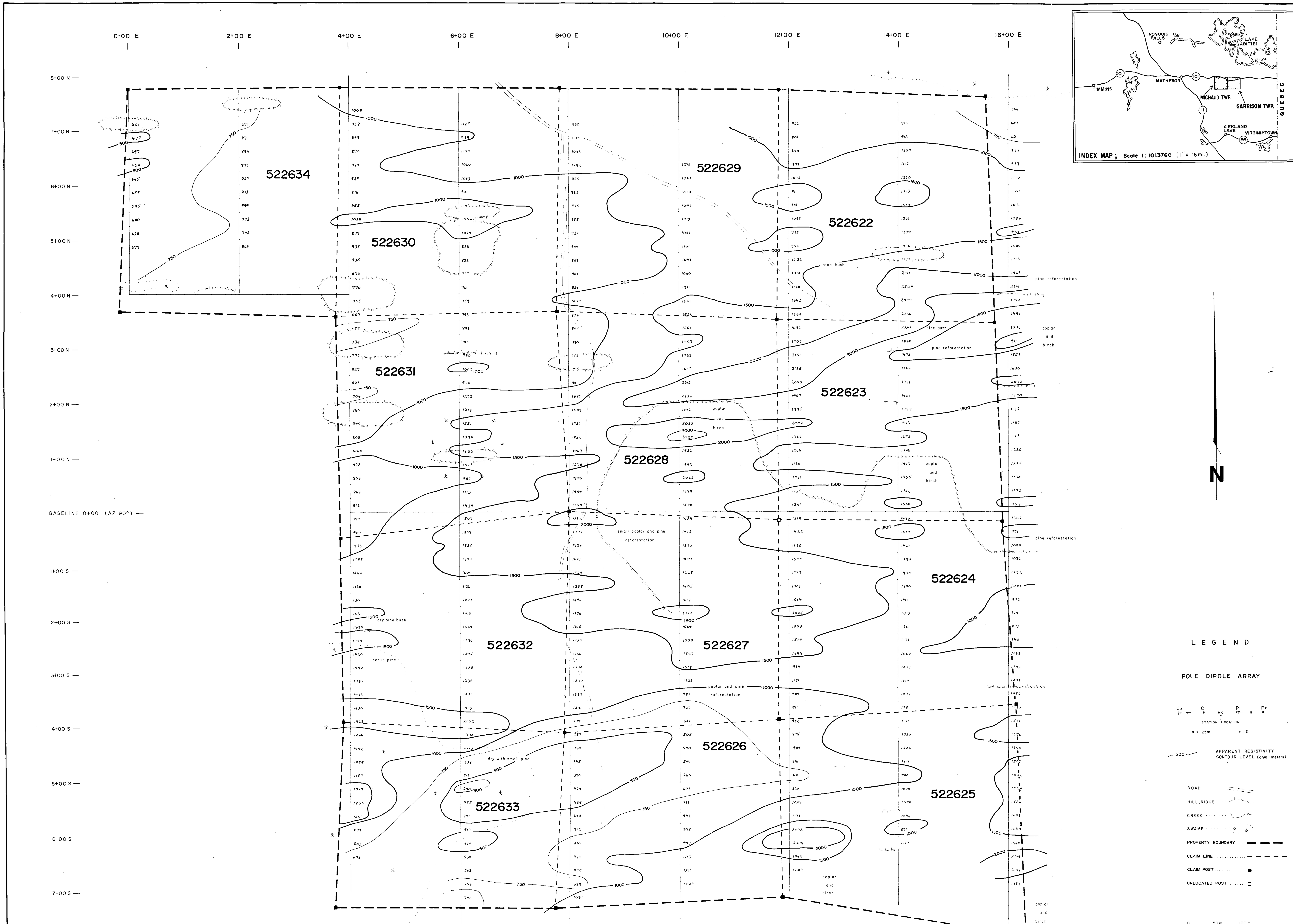
MPH Consulting Limited

2.3520

220

32D05NE0181 2.3520 GARRISON


WINDJAMMER POWER & GAS
GARRISON TOWNSHIP PROJECT
GRID 2
N5 IP CHARGEABILITY SURVEY
Project No: C-504
By: D.J.
Scale: 1:2500
Drawn: D.R.
Drawing No: 5
Date: July, 1980
MPH Consulting Limited
INDEX MAP ; Scale 1:1013760 (1" = 16mi.)
IROQUOIS FALLS
LAKE ABITIBI
TIMMINS
MATHESON
MICHAUD TWP.
GARRISON TWP.
KIRKLAND LAKE
VIRGINIATOWN
QUEBEC
LEGEND
POLE DIPOLE ARRAY
STATION LOCATION
CHARGEABILITY CONTOUR LEVEL (m. secs)
ROAD
HILL, RIDGE
CREEK
SWAMP
PROPERTY BOUNDARY
CLAIM LINE
CLAIM POST
522593
522594
522595
522596
522597
522598
522599
522600
522601
522602
522603
522607
522608
522609
39509 (PATENTED)
BASELINE 0+00 (AZ 100°)
logged reforestation
logged pine reforestation
small pine
240



WINDJAMMER POWER & GAS

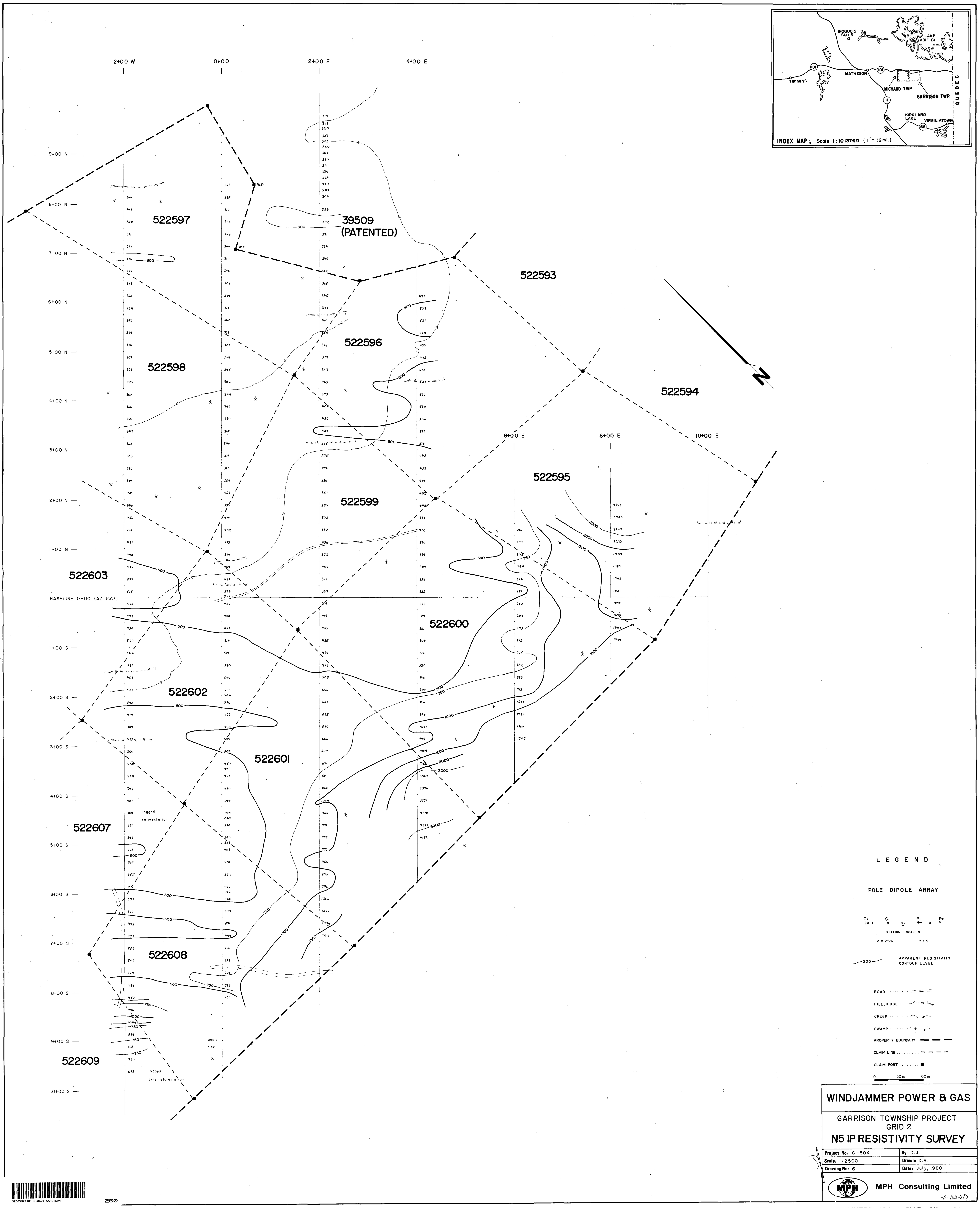
GARRISON TOWNSHIP PROJECT
GRID 1

N5 IP RESISTIVITY SURVEY

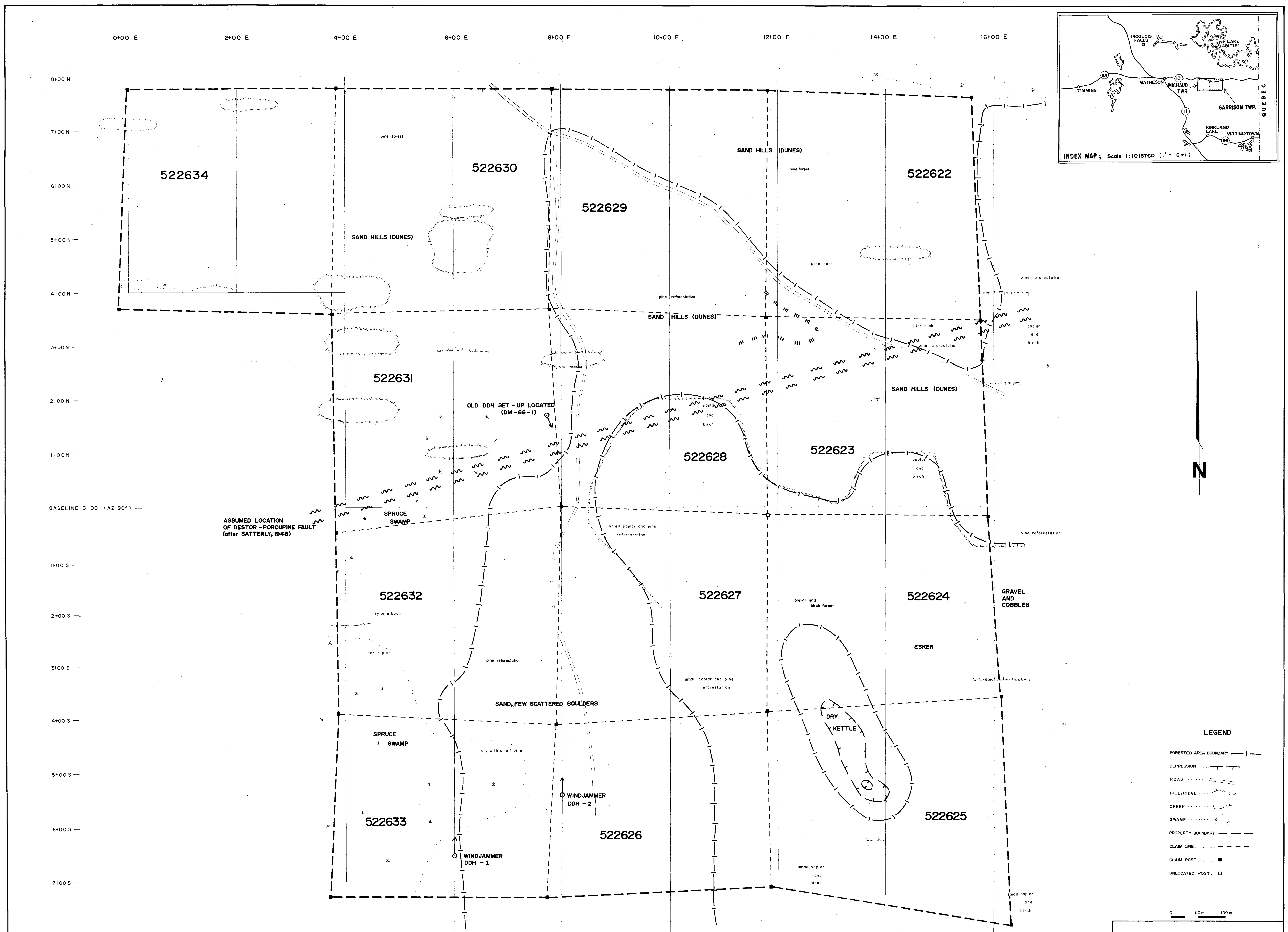
Project No: C-504	By: D.J.
Scale: 1:2500	Drawn: D.R.
Drawing No: 3	Date: July, 1980

MPH Consulting Limited

250



2+00 W
0+00
2+00 E
4+00 E
6+00 E
8+00 E
10+00 E
9+00 N
8+00 N
7+00 N
6+00 N
5+00 N
4+00 N
3+00 N
2+00 N
1+00 N
BASELINE 0+00 (AZ 140°)
1+00 S
2+00 S
3+00 S
4+00 S
5+00 S
6+00 S
7+00 S
8+00 S
9+00 S
10+00 S
522597
39509
(PATENTED)
522593
522596
522598
522594
522595
522599
522603
522600
522602
522601
522607
522608
522609
W.P.
N
logged
reforestation
small
pine
logged
pine reforestation
INDEX MAP ; Scale 1:1013760 (1" = 16 mi.)
IROQUOIS FALLS
LAKE ABITIBI
TIMMINS
MATHESON
MICHAUD TWP.
GARRISON TWP.
KIRKLAND LAKE
VIRGINIATOWN
QUEBEC
LEGEND
POLE DIPOLE ARRAY
STATION LOCATION
a = 25m.
n = 5
APPARENT RESISTIVITY CONTOUR LEVEL
ROAD
HILL, RIDGE
CREEK
SWAMP
PROPERTY BOUNDARY
CLAIM LINE
CLAIM POST
0 50m 100m
WINDJAMMER POWER & GAS
GARRISON TOWNSHIP PROJECT
GRID 2
N5 IP RESISTIVITY SURVEY
Project No: C-504
By: D.J.
Scale: 1:2500
Drawn: D.R.
Drawing No: 6
Date: July, 1980
MPH Consulting Limited
2.3520
260



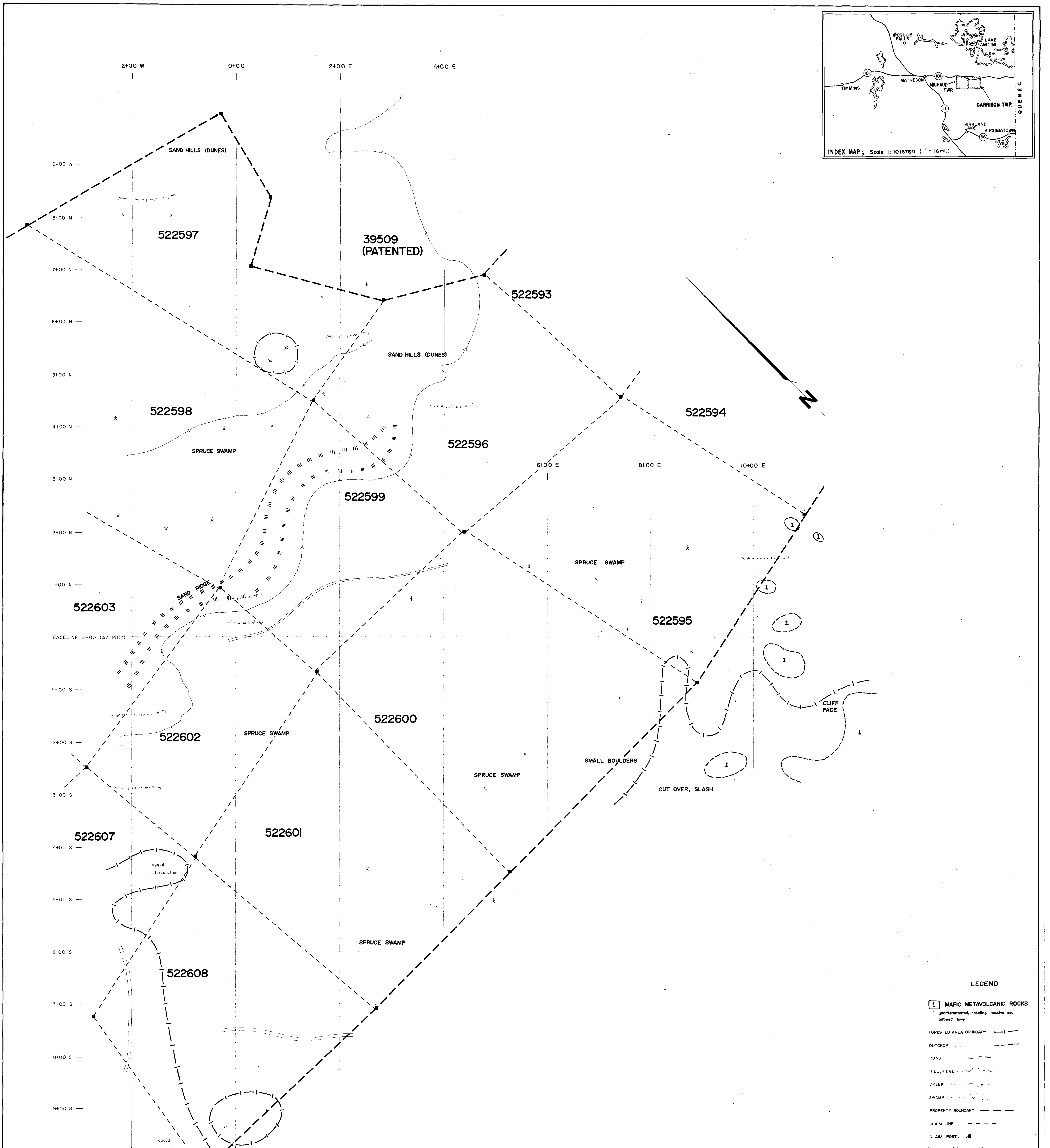
WINDJAMMER POWER & GAS

GARRISON TOWNSHIP PROJECT
GRID I

GEOLOGY & DDH LOCATIONS

Project No: C-504	By: D.J., J.M.S.
Scale: 1:2500	Drawn: D.R.
Drawing No: 7	Date: July, 1980

MPH Consulting Limited



WINDJAMMER POWER & GAS

GARRISON TOWNSHIP PROJECT
GRID 2

GEOLOGY

Project No: C-504	**By:** D.J., J.M.S.
Scale: 1:2500	**Drawn:** D.R.
Drawing No: 8	**Date:** July, 1980

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280