Cleaver Twp.

McNeil Twp.

Zavitz Twp.

Argyle Twp.

Montrose Twp.

Nighthawk R.

Hincks L.

McWilliams L.

Austen L.

Little Esker L.

Dokis L.

Esker Cr.

Whitefish R.

1M 2M 3M 4M 5M 6M

90M 91M 92M 95M

THE TOWNSHIP OF HINCKS

DISTRICT OF TIMISKAMING

LARDER LAKE MINING DIVISION

SCALE: 1-INCH=40 CHAINS

AUG 28 1986

LEGEND

PATENTED LAND
CROWN LAND SALE
LEASES
LOCATED LAND
LICENSE OF OCCUPATION
MINING RIGHTS ONLY
SURFACE RIGHTS ONLY
ROADS
IMPROVED ROADS
KING'S HIGHWAYS
RAILWAYS
POWER LINES
MARSH OR MUSKEG
MINES

NOTE

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

Areas withdrawn from staking under Section 43 of the Mining Act (R.S.O. 1970).

Order No	File	Date	Disposition
(R) W 27/78	188522	May 31, 1978	S.R.O.

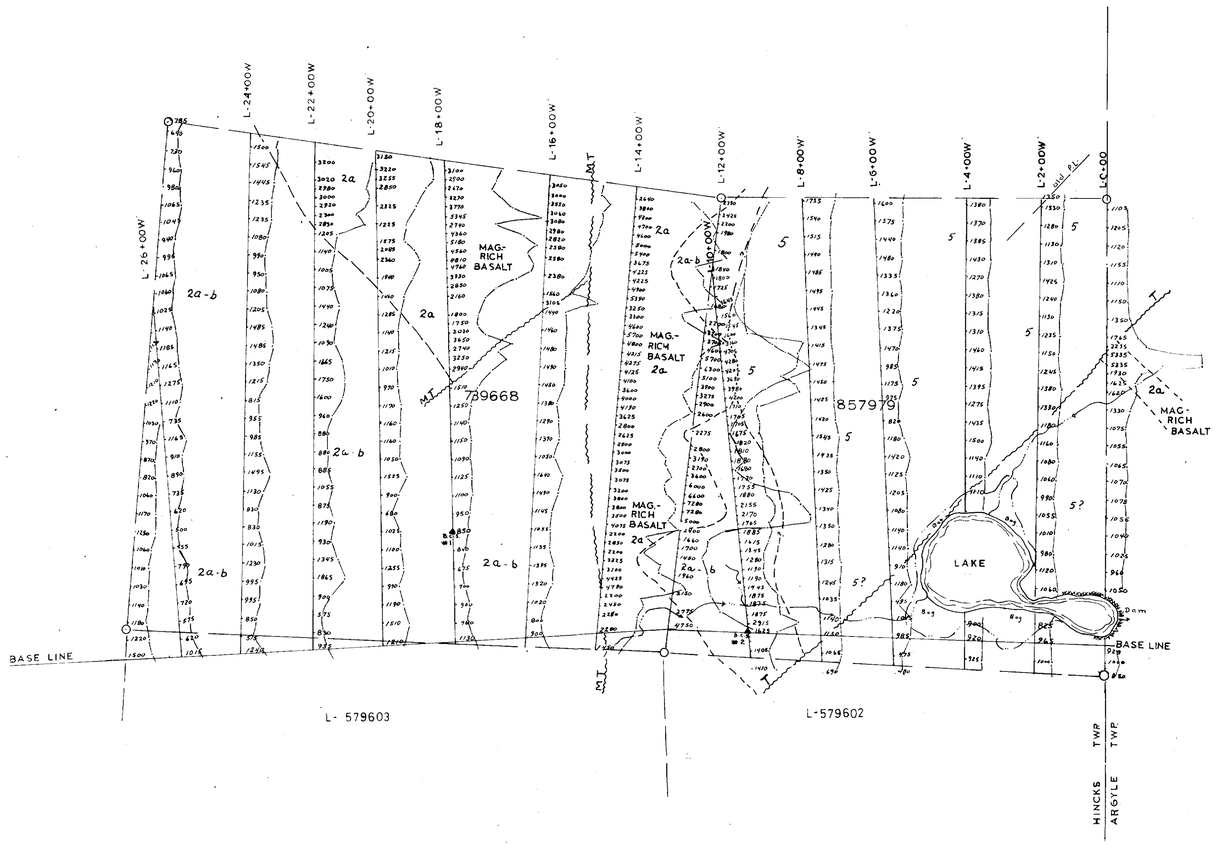
PLAN NO - M.223

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

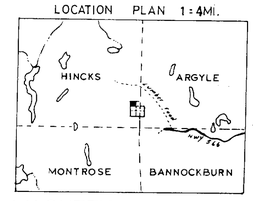
#11

42A02SW8418 2.9366 HINCKS

200



LOCATION PLAN 1:4MI.



GEO-MAGNETIC PROFILE PLAN
INSTRUMENT - MF1 FLUXGATE MAGNETOMETER
SERIAL NO. 409107
PROFILE - 1" = 4000 g OPERATOR - BRANT HALEY

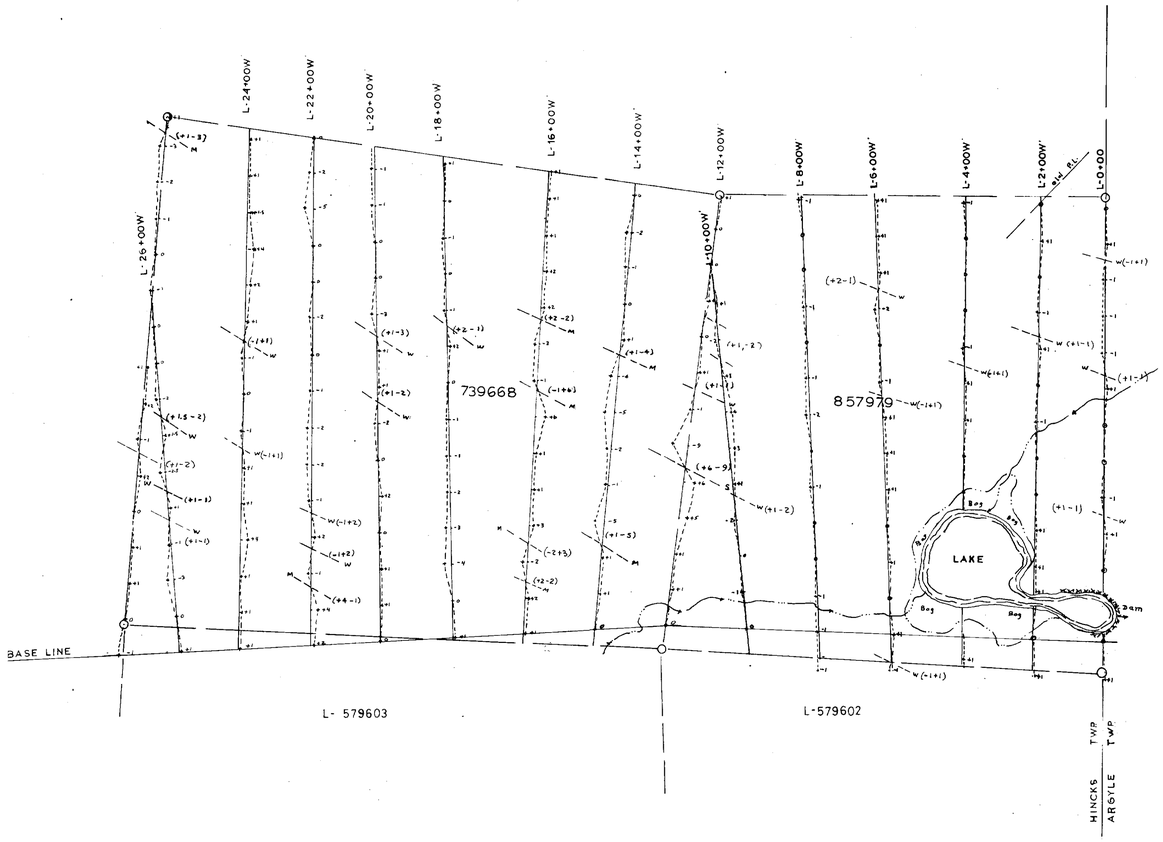
MANVILLE CANADA INC.

ONT. 1=200'

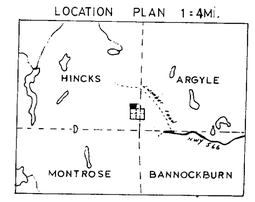
AUG 11 1986

McGILL GR. - ARGYLE & HINCKS TWP.

J7366



29366



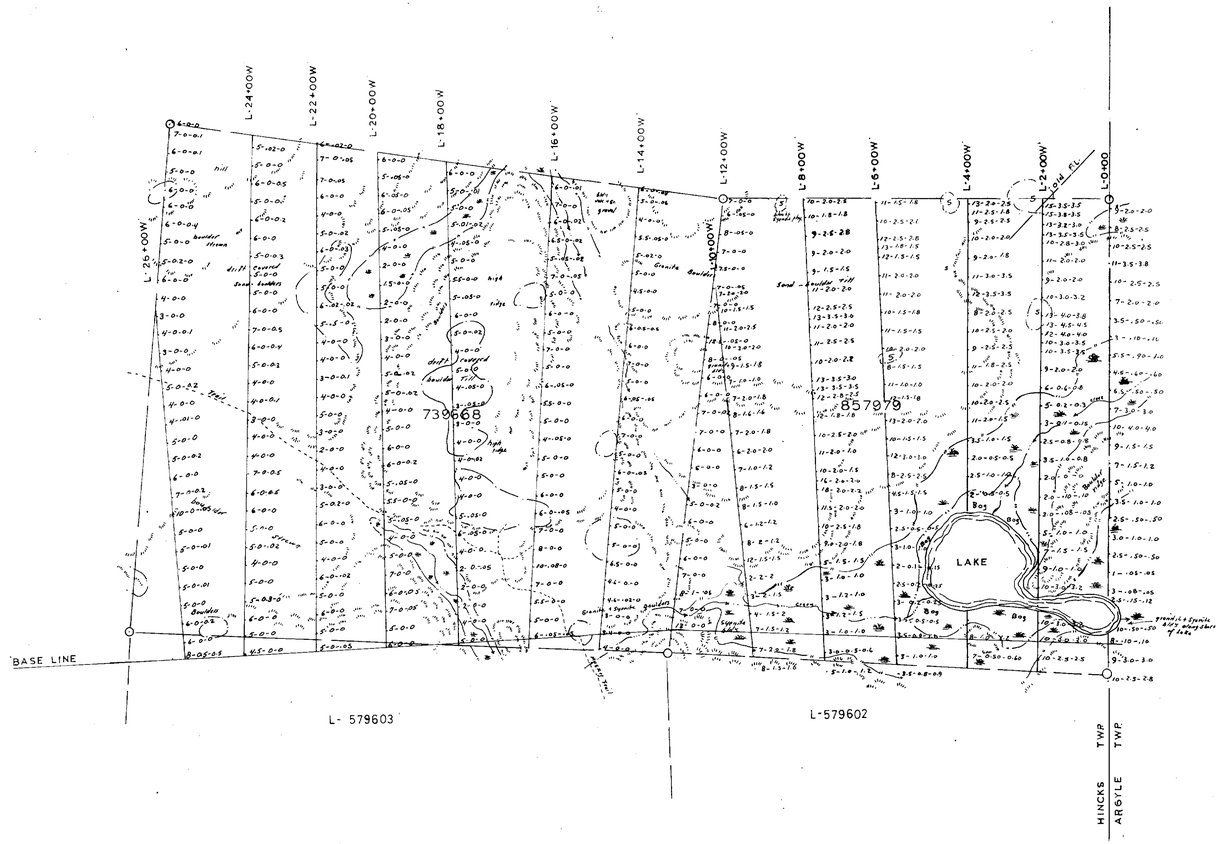
ELECTRO-MAGNETIC PROFILE PLAN
INSTRUMENT - McPHAR R.EM. UNIT - SERIAL NO. 30-6507
INLINE METHOD - 200' SPACING - PROFILE 40° = 1"
OPERATOR - R. KALTWASSER

MANVILLE CANADA INC.

ONT. 1=200'

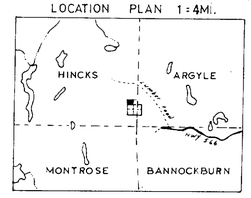
AUG 11 1986

McGILL GR. - ARGYLE & HINCKS TWP.



2.9366

LOCATION PLAN 1:4Mi.



RADIOMETRIC SURVEY PLAN

READINGS IN C.P.S.

TOTAL	U + TH	TH.
10	0·06	0·04

MANVILLE CANADA INC.

710123

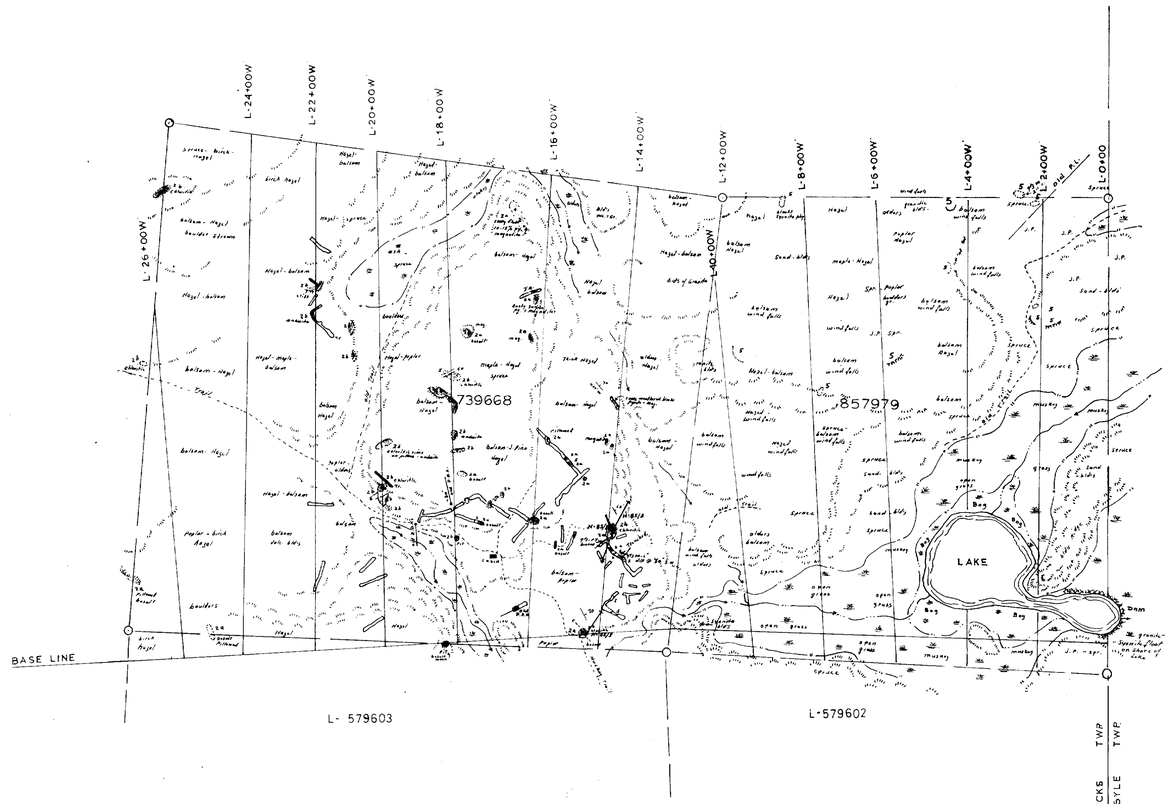
ONT. 1=200'

AUG 11 1986

McGILL GR.- ARGYLE & HINCKS T.W.P.

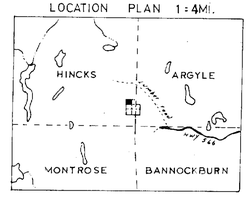
42A02SW8418 2.9366 HINCKS

230



97366

LOCATION PLAN 1:4MI.



C

240

GEOLOGY & TOPOGRAPHIC PLAN

ONT. 1=200'

AUG 11 1986

MANVILLE CANADA INC.

McGILL GR.- ARGYLE & HINCKS TWP.

REPORT ON GEOLOGICAL AND GEOPHYSICAL SURVEYS
McGILL GROUP 2 CLAIMS
HINCKS TOWNSHIP
LARDER LAKE MINING DIVISION
PROVINCE OF ONTARIO.

by

F.J. Evelegh

Manville Canada Inc.
Exploration Department

August 11, 1986
Matheson, Ontario.

Table of Contents

- 0 - 0 - 0 -

List of Maps Accompanying this Report:

Geology and Topographic Plan - scale 1" = 200'

Geo-Magnetic Profile Plan " 1" = 200'

Electromagnetic Profile Plan " 1" = 200'

Radiometric Survey Plan " 1" = 200'

Legend Sheet

- 0 - 0 - 0 -

REPORT ON GEOLOGICAL AND GEOPHYSICAL SURVEYS
McGILL GROUP 2 CLAIMS
HINCKS TOWNSHIP
LARDER LAKE MINING DIVISION
PROVINCE OF ONTARIO

Introduction:

The following report describes the geological and geophysical surveys which were carried out during the field seasons of 1985 and 1986 on two mining claims recorded in the name of Manville Canada Inc. and located in Hincks Township, Larder Lake Mining Division.

Cutting and chaining of the grid lines on claim L-739668 was completed by Company personnel during June, 1985. The work on claim L-857979 was contracted to Evergreen Enterprise of Timmins and was completed in early December of 1985.

Geological mapping was conducted by R. Kaltwasser, Senior Fieldman, assisted by B. Haley, Fieldman and geophysical operator - both Company employees. The writer examined key outcrops, the precious metals occurrences and typical rock specimens.

Magnetometer surveying was carried out by B. Haley using a Fluxgate model MF-1 unit.

Electromagnetic surveying was conducted by R. Kaltwasser, assisted by B. Haley. A McPhar vertical loop unit was used for this work.

Radiometric surveying was completed by B. Haley using a Sharpe's G.I.S. - 2 Gamma Ray Integrating Spectrometer.

Interpretation of the data and compilation of the report were the responsibility of the writer, Exploration Manager with Manville Canada Inc., based at Matheson, Ontario.

Property:

The two claims surveyed are contiguous, are situated in Hincks Township, and are numbered L-739668 and 857979. The former was staked on January 25th, 1985, by R. Kaltwasser and was recorded on the 28th. Transfer to Manville Canada Inc. was completed on February 8th of the same year. The latter was staked by R. Kaltwasser on August 9th, recorded on the 20th and transferred on August 26th, 1985.

Acreage totals approximately 80.

Location and Accessibility:

The two claims surveyed adjoin the main McGill Group along its north boundary. The No's. 1 and 2 posts for claim L-857979 are on the Hincks-Argyle Townships line. The Montrose Township boundary is located approximately 1 1/4 miles south of the property.

Access is provided by a bush road which branches off from Highway No. 568 at a distance of approximately sixteen miles west of Matachewan. The claims are situated two miles to the northwest of this highway.

Topography:

The property is mainly covered by overburden. Boulder till and sand form low, northerly-trending rolling ridges with scattered outcrop areas throughout the central part of claim 739668 and the northern section of 857979.

The southeastern part of the map area is an open marsh with two intermittent streams draining into a small lake.

Second growth balsam, spruce and birch, with thick undergrowth which makes traversing difficult, cover the group.

Previous Work:

In 1919 the Geological Survey of Canada published Memoir 115 entitled "Geology of Matachewan District, Northern Ontario" compiled by H.C. Cooke. Gold occurrences discovered in the area to the east of Hincks-Argyle Townships are described in this report.

A report on the "Bannockburn Gold Area" which includes the McGill claims, was compiled by H.C. Rickaby and published in the Forty-First Annual Report of the Ontario Department of Mines in 1932. Map No. 41a, on a scale of one inch equals 3/4's of a mile, accompanies this report. Showings on the McGill claims are described on pages 19 and 20 of this report.

Aeromagnetic Maps on scales of one inch equals 1/2 and one mile have been published jointly by the O.D.M. - G.S.C. These plans have been used extensively for interpreting the ground magnetometer survey results.

Map No. 2205 - The Timmins-Kirkland Lake Sheet of the Geological Compilation Series, on a scale of one inch equals four miles, also covers the area.

Previous Work: (cont'd)

In 1974 the Ontario Department of Mines issued Preliminary Maps Nos. 1017 and 1018 - Airborne Electromagnetic and Total Intensity Magnetic Survey - for Hincks and Argyle Townships. These plans give excellent detail over the McGill claims.

Petromet Resources Ltd. explored a large block of claims in Argyle, Bannockburn and Hincks Townships during the early 1980's. A geological map, on a scale of 1:2500, issued in October, 1982, is on file in the Resident Geologist's office in Kirkland Lake. This map covers part of the Manville holdings.

During the summer of 1981 a north-south grid, at 400' spacing, was established on the main McGill claims and magnetic and electromagnetic surveys completed. The results of this work were compiled in a report which was submitted to the Ministry of Natural Resources for assessment purposes in November, 1981.

Three diamond drill holes were completed during October, 1983, for a total of 326 feet. A Winkie rig, owned by Manville Canada Inc., was used for this work. Drilling was concentrated in the east-central part of the main claims to test quartz-filled fracture zones for gold mineralization. Assays ranged from nil to 0.02 ozs.

During the field season of 1984 geological and radiometric surveys were carried out on the main McGill block. The results of this work were compiled in a report which was submitted to the Ministry on September 19th of that year.

Three Winkie holes, totalling 368 feet, were drilled during 1985 to test mineralized zones on claim 739668. An assay of 0.38 ozs Au/1.0' was obtained from Hole No. 85-3.

Line Cutting and Chaining:

A base line was started from a point located 80 feet south of the No. 3 post of claim 739668 along the west boundary of claim 579603 and was cut and chained, on a bearing of N87°E, to the common boundary of claims 739668 and 857979. From this claim line the bearing was changed to S88°E, to pass south of the small lake, and the base line was extended to the Argyle-Hincks Townships boundary. The 0+00 point was established at this junction.

Right-angled offset lines, spaced at 200' intervals, were cut to the north and south of this base line to the claim boundaries. Marked pickets were established every 100' along these offset lines by chainage.

Line Cutting and Chaining: (cont'd)

Total miles of base (0.52), tie (0.23) and picket lines (3.79) cut and chained was 4.54.

General Geology:

The Geology of Argyle and Hincks Townships is described in the Forty-First Annual Report of the Ontario Department of Mines compiled by H.C. Rickaby in 1932. Several reports on the Matachewan Area have been issued since that date, however, the majority cover the Townships to the east of Argyle.

The following "Table of Formations" has been taken from page 5 of Geological Report 51 on the Matachewan Area compiled by H.L. Lovell and published by the O.D.M. in 1967.

Table of Formations

Cenozoic:

Recent : Swamp, and stream deposits
Pleistocene: Sand, gravel, clay

Unconformity

PRECAMBRIAN:

Proterozoic:

Mafic Intrusive Rocks (Nipissing):
Diabase

Intrusive Contact

Huronian:

Cobalt Group (Gowganda Formation):
Argillaceous and arkosic quartzite, conglomerate, argillite, arkose

Unconformity

Archean:

Mafic Intrusive Rocks (Matachewan):
Diabase, undifferentiated

Intrusive Contact

Silicic Intrusive Rocks (Algoman):
Granite; granodiorite and granitic gneiss; syenite porphyry and coarse-grained syenite; syenite; mafic syenite, lamprophyre, quartz diorite and diorite

Intrusive Contact

Ultramafic and Mafic Intrusive Rocks (Haileyburian):
Serpentinite, diorite

Intrusive Contact

General Geology: (cont'd)

Sedimentary Rocks (Timiskaming):
Conglomerate; greywacke and interbedded argillite and quartzite; arkose

Unconformity

Volcanic Rocks (Keewatin):
Basalt and andesite; bleached, silicified, sericitized volcanic agglomerate; rhyolite and dacite; carbonatized and amygdaloidal volcanic rocks; amphibolite.

On the McGill group small, scattered (often moss-covered) bedrock exposures were found on the northerly trending ridges. Basalts, andesites and chloritic schists, cut by narrow granitic and lamprophyre dykes, were mapped on claim 739668. Hornblende granite and granite porphyry outcrop in the northern part of claim 857979.

Geological Survey:

Detailed geological mapping and prospecting were carried out on claim 739668 during the field season of 1985 and on claim 857979 in July of 1986. The results of this work are shown on the accompanying Geologic and Topographic Plan on a scale of 1" = 200'.

Rock types, structures and economic geology are described in the following paragraphs.

Interbedded basalts and andesites underlie the greater part of claim 739668. The basalts are dark green to black in colour on the fresh surface and are fine to medium grained, often brittle, with narrow cherty-appearing sections. Strike is N40° to 50°W with a northeasterly dip of approximately 70°. In general, the basaltic flows are mineralized with varying amounts of magnetite. An extremely magnetite-rich horizon, offset by two cross structures, has been delineated by the magnetometer survey in the northern and eastern part of the claim. This flow or series of narrow flows is in contact with relatively non-magnetic basalts and andesites to the south and a granitic plug to the east.

The pillowed andesites, in places altered to chloritic schists, are massive, fine to medium grained, are grey-green on the weathered surface and dark green on a fresh break. The pillows have been squeezed and elongated and are rimmed with chlorite. No top determinations were made due to this deformation, however, they are believed to face to the northeast. Narrow horizons within the andesitic flows are highly chloritized and schistose giving a dark green, soft, felt-like appearance

Geological Survey: (cont'd)

to the rocks. Narrow, quartz-filled fractures pod-shaped and en echelon, occur within the schists. No magnetite was noted in the andesites.

Claim 857979 appears to be underlain by a granite plug. This rock type is massive, coarse grained with prominent feldspars, moderate to low hornblende and only minor amounts of quartz. Few outcrops were discovered due to the heavy mantle of overburden - mainly a granite-rich boulder till. This granite intrudes the volcanics to the west as feldspar-rich, porphyritic dikes.

Structurally, no fault zones were noted during the course of the geological mapping. The zones shown on the accompanying Magnetometer Profile plan were outlined by magnetic and topographic data.

Narrow, siliceous zones, mineralized with disseminated pyrite, occur in the southeast corner of claim 739668. Gold assays, over narrow widths from surface grab samples and diamond drill cores, ranged up to 0.38 ozs/ton.

As shown on the accompanying Geologic and Topographic map extensive trenching has been carried out in the central and southeastern parts of this claim. Since the trenches now have slumped walls and, in places, are overgrown with birch and spruce trees it is estimated that they were excavated, no doubt by hand labour, during the late 1930's or early 1940's. The extent of this work leads one to believe that precious metals values were being discovered.

Magnetometer Survey:

A magnetometer survey was conducted on the claims by B. Haley during mid 1985-86. Readings were recorded using a Fluxgate Magnetometer - Model MF-1, Serial No. 409107, having sensitivities of 20, 50, 200, 500 and 2,000 gammas as per division for the corresponding scales.

Prior to the survey the instrument had been checked and adjusted so that a gamma value of 1220 corresponds closely with an absolute value of 57,599 ± 15. Munro-Beatty sill base station No. 2 was used for this purpose.

Base control stations were established on the claims as follows; -

B.C.S. No. 1 - 300'N of base line on line 18W - 850 gammas
B.C.S. No. 2 - on base line at line 10W - 1,625 gammas

Magnetometer Survey: (cont'd)

During the course of the survey the base control station was observed at two to three hour intervals as a check on the working condition of the instrument and to record the daily diurnal variation.

Stations were spaced at 50' and 25' intervals along the grid lines, depending upon the detail required, and a total of 465 was recorded during the course of this work.

The results of the survey are shown on the accompanying Geo-Magnetic Profile Plan on a scale of one inch equals 200 feet. Profiles have been plotted on a scale of one inch equals 4,000 gammas.

All available geological and geophysical data (listed previously) had been reviewed and air photos studied prior to compiling this report.

Readings over the northwesterly striking magnetite-rich basalts in the central and northwestern parts of the property range in value from slightly less than 2,000 to 7,280 gammas; the average varies from 3,000 to 5,000 gammas. Over the basalts and andesitic flows the gamma values range from less than 1,000 to 2,000; the average falls between 900 and 1,200 gammas.

On claim 857979, over the feldspar-rich porphyritic granite, the gamma values vary from 480 to 1,755 with the average ranging from 1,100 to 1,400 gammas.

A major, northerly trending fault zone has been delineated by magnetic and topographic data adjacent to the east boundary of claim 739668. This structure extends through the main McGill group to the south. A branch fault, striking in a southwesterly direction, offsets the magnetite-rich basalt in the north part of claim 739668.

The northeasterly trending structure in the southeast section of claim 857979 is sharply defined topographically.

Electromagnetic Survey:

Electromagnetic surveying was conducted on the property by R. Kaltwasser assisted by B. Haley. Both men are employed by Manville Canada Inc. at Matheson, Ontario.

Field work was carried out during the field season of 1985-86, using a McPhar vertical loop reconnaissance electromagnetic unit operating on a frequency of 1,000 cycles per second.

Electromagnetic Survey: (cont'd)

The McPhar unit is suitable for use as both a reconnaissance and relatively detailed instrument. In this survey, the transmitter was held vertically at a distance of 200 feet from the receiver; the receiver was then tilted about the axis joining the two coils until a null was observed. Both transmitter and receiver were moved on the same picket line, 200 feet apart, and readings were recorded at 100' intervals. Under these operating conditions a depth penetration of 100 feet was attained. Note that the transmitter was stationed to the north of the receiver throughout the survey.

A total of 198 stations was recorded during the course of the survey.

The results of this work are shown on the accompanying Electro-Magnetic Profile Plan on a scale of one inch equals 200 feet. Profiles have been plotted on a scale of one inch equals 40°.

Numerous, scattered, single line weak crossovers of no apparent significance were recorded during the course of the survey. These are more prevalent over the volcanics on claim 739668 than over the granite on 857979.

However, crossovers of moderate to strong conductance have been outlined on line 12W (+6, -9); on line 14W (+1, -5), and (+1, -4); on line 16W (-1, +6) and immediately north of the base line on line 22W (+4, -1). These conductors are all on claim 739668; no zones of interest were recorded over the granite on claim 857979.

Detailed surveys are planned to further explore the north-westerly trending conductors in the eastern part of claim 739668.

Radiometric Survey:

Radiometric surveying was conducted by B. Haley. A Sharpe's GIS-2 Gamma Ray Integrating Spectrometer (Serial No. 710123) was used for this work.

Readings were recorded with the ratemeter set on the 10 scale range at an 8 second meter time constant. Counts per second were taken with the threshold control setting at 0.30 (0.30 MeV), 5.00 (1.7 MeV) and 7.65 (2.5 MeV). With the threshold control set to 0.30 nearly all the gamma rays are counted; if the control is set to 5.00 only those due almost entirely to Uranium and Thorium will be counted, and, finally, with the setting at 7.65 only those due to Thorium will be counted.

Radiometric Survey: (cont'd)

All three counts were recorded at each station and have been plotted on the accompanying Radiometric Survey Plan on a scale of 1" = 200'. Note that all pertinent topographic data has been marked on this map.

Stations were spaced at 25' and 50' intervals along the picket lines and a total of 1,131 readings was recorded with the probe at ground level.

The results of the radiometric survey show total counts over the volcanics in the western part of the property, on claim 739668, to range from 3.0 to 10.0 c.p.s. - average 4.0 to 6.0 - with highs being over ridges strewn with granitic boulders. There is no apparent difference over outcrop areas and overburden-covered sections. U + Th and Th counts are near zero at most stations.

Over swampy areas on both claims the total counts range from 1.5 to 3.5 c.p.s. with U + Th and Th again being extremely low.

Total counts over granite outcrops and boulders on the northerly trending ridges on claim 857979 vary from 7.0 to 16.0 c.p.s. with the average being in the 9.0 to 11.0 range. U + Th and Th increased to 4.5 c.p.s.

Conclusions and Recommendations:

The results of the exploration programs completed to date - which include magnetic, electromagnetic, radiometric and geological surveys, limited diamond drilling, prospecting, sampling and assaying - show gold values ranging up to 0.38 ozs/ton over narrow widths, from grab and drill core samples on claim 739668 of McGill Group 2.

Electromagnetic surveying has delineated several moderate to strong conductors over the altered intermediate to basic flows on the same claim.

It is therefore proposed that detailed geophysical surveying, followed by a basal till geochemical survey, power stripping, plugger work, and, if warranted, additional diamond drilling be carried out over zones of interest in the southern and eastern parts of claim 739668.

Submitted: August 11th, 1986

by: F.J. Evelegh
Exploration Manager

GEOL. LEGEND

Quartz diabase, diabase.

5 Granite 5a, Syenite 5b, Feldspar porphyry 5c, Quartz feldspar 5d, Felsite 5e, Lamprophyre 5f.

Diorite 4a, Gabbro diabase 4b, Breccia 4e
Peridotite & Dunite (Serpentinized)
(Asb. - Asbestos recognized

Pyroxenite 4d.

3 Rhyolite fragmental lava

2 Andesite-basalt-pillow lava 2b, 2a
Diabasic lava 2, Spherulitic lava 2c,
Fragmental lava 2d, Tuff & chert 2e,
Talc-chlorite schist 2f.

1 Greywacke 1a, Arkose 1b, Quartzite 1c,
Argillite or shale 1d, Conglomerate 1e,
Iron formation 1f, Chlorite schist 1g.

Carbonate rock

Quartz veins

GEO-MAG SYMBOLS

Contour interval 500 gammas

BCS#1 Magnetic Base Control Station

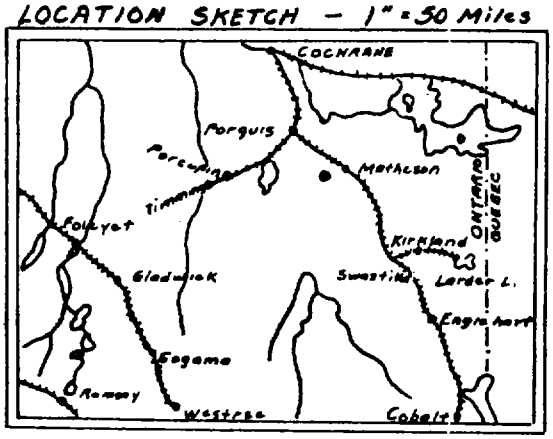
Geological Contact

Fault Zone G- Geological
M- Magnetic
T- Topographic

Mag. Profile

MANVILLE CANADA INC.

LOCATION SKETCH - 1" = 50 Miles



TOPO-SYMBOLS

Outcrop

Higher ground

Scarp

Muskeg or Swamp

Creek

Drill hole

Bush road

Direction in which lava flows face, indicated by shape of pillows

Strike - Dip of Schistosity

ELECTRO-MAG SYMBOLS

GEONICS IS UNIT

Conductive Zone (Red)
Magnetic Conductor (Blue)
Rii
Scale - 20 units = 1 inch
West & South - Fem. (Red)
East & North - Mag. (Blue)

Scale - 40 units = 1 inch

Conducting Zone - S = Strong
M = Medium
W = Weak

RONKA H.L. UNIT

In phase curve

Out phase curve

NPCS Not proper coil spacing

East - Positive. West - Negative

McPHAR V.L. UNIT

Dip angle profile

North & East - Positive
South & West - Negative

Geol. Survey by-
Mag. Survey by -
E.M. Survey by -

LEGEND SHEET
PROVINCE OF ONTARIO

AUG 11 1986

Ministry of Natural Resources
Ontario

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

3161

Mini

42A02SW8418 2.9366 HINCKS

900

Type of Survey: Geological and Geophysical

HINCKS

Claim Holder(s): Manville Canada Inc.

Prospector's Licence No.: T-1330

Address: P.O. Box 610 Matheson, Ontario POK 1NO

Survey Company: same as above

Date of Survey (from & to): 14 Day 6 Mo. 85 Yr. | 23 Day 7 Mo. 86 Yr.

Total Miles of line Cut: 4.54

Name and Address of Author (of Geo-Technical report): F.J. Evelegh P.O. Box 610 Matheson, Ontario POK 1NO

Credits Requested per Each Claim in Columns at right

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

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

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

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	739668	
	857979	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

RECEIVED
AUG 12 1986
MINING LANDS SECTION

LARDER LAKE MINING DIVISION
RECEIVED
AUG 13 1986
10.00 am

Total number of mining claims covered by this report of work: 2

Expenditures (excludes power stripping)

Type of Work Performed:

Performed on Claim(s):

Calculation of Expenditure Days Credits

Total Expenditures: $ ÷ 15 = Total Days Credits

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

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
200	AUG 13 1986	Acting
	Date Approved as Recorded	Branch Director
	16.8.86	

Date: Aug 11/86

Recorded Holder or Agent (Signature): F. Evelegh

Certification Verifying Report of Work

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

Name and Postal Address of Person Certifying: F.J. Evelegh, Box 610, Matheson, Ontario POK 1NO

Date Certified: Aug 11/86

Certified by (Signature): F. Evelegh
F.J. Evelegh

1362 (81/9)

Ontario

Ministry of Northern Development and Mines

Geophysical-Geological-Geochemical Technical Data Statement

File _____

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

Type of Survey(s) Geological & Geophysical

Township or Area Hincks

Claim Holder(s) ~~Manville Canada Inc.~~
Box 610, Matheson, Ontario POK 1NO

Survey Company same as above

Author of Report F.J. Evelegh

Address of Author same as above

Covering Dates of Survey 14/6/85 to 11/8/86
(linecutting to office)

Total Miles of Line Cut 4.54

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	20
–Magnetometer	40
–Radiometric	20
–Other	--
Geological	20
Geochemical	--

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

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

DATE: August 11/86 SIGNATURE: _____
Author of Report or Agent

Res. Geol. _____ Qualifications 3.1067

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
L –	739668
L –	857979

If space insufficient, attach list

TOTAL CLAIMS 2

OFFICE USE ONLY

837 (85/12)

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations Mag-465; E.M.-198; Rad-377; Number of Readings Mag-476; E.M.-206; Rad.-113

Station interval Mag & Rad 25' & 50'; E.M.100' Line spacing 200'

Profile scale Mag 1" = 4,000 gammas; E.M. - 1" = 40°

Contour interval

MAGNETIC

Instrument Fluxgate Magnetometer Model MF-1, Serial No. 409107

Accuracy – Scale constant see attached photocopy

Diurnal correction method All readings corrected to value of Base Station No. 1

Base Station check-in interval (hours) 2

Base Station location and value

B.C.S. No. 1 - 300'N of base line on line 18W - 850 gammas

B.C.S. No. 2 - on base line at line 10W -1,625 gammas

ELECTROMAGNETIC

Instrument McPhar Dual Frequency Electromagnetic Unit, Serial No. 30-6507

Coil configuration Vertical

Coil separation 200'

Accuracy

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

Frequency 1,000 c.p.s. (specify V.L.F. station)

Parameters measured Dip angle & width of null

GRAVITY

Instrument

Scale constant

Corrections made

Base station value and location

Elevation accuracy

INDUCED POLARIZATION RESISTIVITY

Instrument

Method ☐ Time Domain ☐ Frequency Domain

Parameters – On time Frequency

– Off time Range

– Delay time

– Integration time

Power

Electrode array

Electrode spacing

Type of electrode

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

_____

Corrections made _____

_____

RADIOMETRIC

Instrument Sharpe's G.I.S. - 2, Gamma Ray Integrating Spectrometer

Values measured Total - Uranium + Thorium - Thorium, in counts per second

Energy windows (levels) 0.30 1.7 2.5 MeV

Height of instrument ground level Background Count 2.0 - 0.1 - 0.1

Size of detector 2" x 2" sodium iodide crystal

Overburden humitic material, clay, sand, boulder till

(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 _____

SPECIFICATIONS OF FLUXGATE MAGNETOMETER MODEL MF-1

Ranges:	Plus or minus — 1,000 gammas f. sc. 3,000 " 10,000 " 30,000 " 100,000 " Sensitivity 20 gammas/div. 50 " 200 " 500 " 2,000 "
Meter:	Taut-band suspension 1000 gammas scale 1⅞" long — 50 div. 3000 gammas scale 1 11/16" long — 60 div.
Accuracy:	1000 to 10,000 gamma ranges ± 0.5% of full scale 30,000 and 100,0000 gamma ranges ± 1% of full scale
Operating Temperature:	—40°C to +40°C —40°F to +100°F
Temperature Stability:	Less than 2 gammas per °C (1 gamma /°F)
Noise Level:	Total 1 gamma P-P
Long Term Stability:	± 1 gamma for 24 hours at constant temperature
Bucking Adjustments: (Latitude)	10,000 to 75,000 gammas by 9 steps of approximately 8,000 gammas and fine control by 10 turn potentiometer. Convertible for southern hemisphere or ± 30,000 gammas equatorial.
Recording Output:	1.7 ma per oersted for 1000 to 100,000 gamma ranges with maximum termination of 15,000 ohms.
Response:	DC to 5 cps (3db down)
Connector:	Amphenol 91-MC3F1
Batteries:	12 x 1.5V-flashlight batteries "C" cell type) (AC Power supply available)
Consumption:	50 milliamperes
Dimensions:	Instrument — 6½" x 3½" x 12½" 165 x 90 x 320 mm Battery pack — 4" x 2" x 7" 100 x 50 x 180 mm Shipping Container — 10" dia x 16" 254 mm dia. x 410 mm
Weights:	Instrument — 5 lbs. 12 oz. 2.6 kg. Battery Pack — 2 lbs. 4 oz. 1.0 kg. Shipping — 13 lbs. 6.0 kg.

SCINTREX LIMITED
79 Martin Ross Avenue, Downsview, Ontario, Canada

Mining Lands Section

File No 2.9366

Control Sheet

TYPE OF SURVEY

✓ GEOPHYSICAL

✓ GEOLOGICAL

____ GEOCHEMICAL

____ EXPENDITURE

MINING LANDS COMMENTS:

D. Hurst

Signature of Assessor

Aug 28/86.

Date