



42A06NE0463 2.6755 DELORO

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VATCO EXPLORATION INCORPORATED

REPORT ON EXPLORATION

DELWOOD PROPERTY

DELORO TOWNSHIP

PORCUPINE MINING DIVISION

ONTARIO

RECEIVED

FEB 1 1984

MINING LANDS SECTION

McGill Exploration Limited

G. M. Thomas
Geologist

December 8, 1981
Timmins, Ontario



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(ii)

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2. VLF EM-16 Survey	1 : 1,250
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VATRI PROJECT - DELWOOD PROPERTY

FOREWORD:

The Vatri Project is a private exploration project being financed by Vatco Exploration Incorporated of Mississauga, Ontario. The purpose of the project is to locate gold deposits on the Vatri properties situated in Deloro, Macklem, Robb and Turnbull Townships in the vicinity of Timmins. By agreement, McGill Exploration Limited has committed to carry out the exploration work on the Vatri properties on behalf of Thomas Skimming & Associates Limited of Islington, Ontario.

Preliminary investigations conducted on the Vatri properties by Thomas Skimming & Associates in June, 1981 noted that the south-west corner of the Delwood property lies within 2000 feet of the old Faymar gold mine and that a considerable amount of trenching and pitting had been carried out on the Delwood claim group. In order to evaluate the current potential of the property an initial exploration program was proposed to test the old workings by re-sampling and to perform ground geophysical surveying to locate pyritic zones within the volcanic rocks. Geological mapping was recommended so that outcrops could be investigated to identify rock type and alteration phenomenon.

This report reviews the results of the work programs carried out by McGill on the Delwood property from August 1 to October 16, 1981.

SUMMARY:

A program of linecutting and ground geophysics took place on the Delwood claim group in August and September. Magnetic and VLF EM-16 surveys were carried out. Three distinct zones of anomalously high magnetic readings are correlated with iron formations. Zone 1 magnetic anomalies are flanked along strike by VLF conductor A.

Prospecting and sampling carried out on the old workings proves that erratic gold mineralization occurs in quartz veins and silicified basic volcanic rock. Sample 8710 taken from the trench at 8+04E/3+55N assayed 0.09 oz/ton Au.

Geological investigations indicate that the area is underlain by rocks of the Deloro Group; a terrane which has locally undergone intense hydrothermal alteration accompanied by appreciable epigenetic gold deposition.

A program of diamond drilling is proposed and recommended to test the bedrock lithologies and structures in the areas north and to the south-east of Boyd Lake.

The cost of the Vatri Project to November 30, 1981 is \$52,486.82. Of this amount, \$15,746.05 has been prorated to exploration programs carried out on the Delwood claim group.

PROPERTY:

The property consists of six unpatented mining claims situated in Deloro Township within the Porcupine Mining Division, District of Cochrane, Ontario (see Map 1. Property).

The claims are numbered as follows:

P.594839
P.594840
P.594841
P.594842
P.594843
P.594844

The property is accessible by gravel road heading south from the Buffalo-Ankerite headframe for a distance of about 2 miles. Claims P.594842 and P.594843 lie along the ingress road to the old Faymar minesite approximately $\frac{1}{4}$ mile off to the east.

The title holder of the property is Mr. Bruno Vatri of Etobicoke, Ontario.

Schedule A, annexed to this report, lists the recording dates of the staking and gives the status of each claim subject to the assessment of work performed. A report on geophysical surveys carried out on the property in August and September was submitted to the Ministry of Natural Resources on October 27, 1981. The Land Management Branch has advised that the property is in good standing and that a statement of work credits will be issued.

WORK HISTORY:

The Delwood property was first explored in earnest by Delwood Porcupine Mines Limited back in 1936. There were originally 4 patented claims numbered P.7051, P.7532, P.7952 and P.7953 which secured the property as it is presently staked out; except did not include the ground now covered by claim P.594843.

The company prospected and carried out trenching and sampling and succeeded in locating three weakly auriferous lenses of iron formation. Shaft sinking and pitting took place to determine the size of the formations and the extent of the mineralization. A total of 20 holes were diamond drilled to test the largest most prospective showing situated in the northwest corner of P7532 (currently P.549841). Eighteen of these holes were spotted at various bearings to penetrate a lenticular body of iron formation varying from 2 to 6 feet in width over a 400 foot strike length. A few interesting intersections were noted with values ranging from \$12.00 to \$18.00 across 5 feet; however 2 follow-up holes drilled to check the intersections reported from the earlier drilling showed that the iron formation, where cut, was neither mineralized or silicified.

A carbonate alteration zone was discovered by Delwood Porcupine Mines traversing claim P.7051 (now P.549842) and was considered to be the only formation on the property large enough to hold any promise. Surface samples were collected and 2 shallow holes were drilled into the "Mariposite Zone". Core intersections were analysed however failed to yield any values beyond a few cents.

There apparently has been no exploration ventures at Delwood since the days of the gold rush generated by the neighbouring Faymar operation that produced 119,181 tons of gold ore between 1940 and 1942. The potential of the property was last scutinized by Erie Canadian Mines Limited in 1940; however no work was undertaken. The claims were last staked by Frank Warne, South Porcupine on November 15 and 16, 1980.

EXPLORATION PROGRAMS

LINECUTTING:

In order to establish control for exploration survey work; a program of linecutting was carried out from August 13 to 22.

A baseline originating at Post #4 of claim P.594842 traverses the property at N.105°E. Picket lines were turned-off perpendicular to the baseline every 100 meters. Parallel to baseline, line 5+00N ties-in picket lines 1+00E to 10+00E.

A total of 12.4 kilometers of control line was cut and picketed at 25 meter intervals.

ELECTROMAGNETIC SURVEYING:

From August 29 to September 3, a VLF electromagnetic survey was performed on the Delwood picket lines to test the bedrock formations for buried zones of anomalous conductivity potentially related to the presence of metallic minerals.

VLF electromagnetic surveying utilizes the geophysical properties of electromagnetic waves transmitted from VLF radio stations operating for submarine communications around the world. The VLF waves propagate as concentric horizontal fields along and within the surface of the Earth. When these transmitted fields encounter conductive bodies in the ground; resultant secondary magnetic fields are produced. The secondary fields can be measured to locate the source of the conductive bodies.

A Geonics EM-16 receiver was tuned to transmitter NAA (17.8 kHz) in Cutler, Maine. The inphase and quadrature components of the secondary field were measured in percentages as a function of the tilt of the instrument relative to the horizontal (primary) field. Readings were taken facing northerly along the lines and recorded at 25 meter intervals.

The electromagnetic data is plotted in profile and is presented as Map 2. VLF EM-16 Survey.

A total of 4 zones of anomalous conductivity were outlined by the EM-16 survey. Each anomaly occurs within a drift covered area.

Anomaly A

Anomaly A is located on lines 4+00E, 5+00E and 6+00E at distances 1+20N, 1+15N and 1+25N (meters) north of baseline respectively. The anomaly trends slightly to the south of east and is evident for at least 200 meters and most apparently is continuous beneath Boyd Lake for a distance of some 400 meters.

Each profile shows a positive inphase crossover and a weakly negative quadrature anomaly.

Although it is likely that this anomaly is related to water laden overburden east of the lake and in part can be attributed to the lake water itself; the anomaly is not picked up on line 1+00E adjacent to the lake. It is conceivable that a fault or shear zone in the bedrock has resulted in the topographic depression where the lake has formed and that a structural discontinuity could be responsible for the conductive linear to the southeast of the lake. It is impossible to ascertain from the data whether the conductivity is directly related to a bedrock source.

Anomaly B

Anomaly B is located to the north of Boyd Lake on line 1+00E at 3+40N. It appears to be an isolated conductor.

It is a positive inphase crossover and a negative quadrature anomaly.

Judging from the geomorphology of the area, the anomaly is probably related to the A conductor; however would have to be offset or otherwise Anomaly A takes a swing to the north around 2+00E/2+25N (which is some point beneath the lake).

It should be noted that Anomaly B is situated about 80 to 90 meters west of the west boundary of claim P.594840.

Anomaly C

Anomaly C is located on lines 5+00E, 6+00E and 7+00E at 3+75N, 3+75N and 3+00N (meters) north of baseline respectively. The conductor trends slightly south of east (parallels Anomaly A across lines 5+00E and 6+00E) and then swings south to be intersected by line 7+00E at 3+00N.

The anomaly is a positive inphase crossover and a positive quadrature anomaly.

On the basis of the positive quadrature signal Anomaly C is attributed to conductive overburden.

Anomaly D

Anomaly D is located off the property on line 11+00E at 0+50S.

The quadrature response indicates that the source of th anomaly is shallow and probably related to the overburden.

MAGNETIC SURVEYING:

A magnetic survey was carried out on the Delwood control lines on September 22 and 23. The work was performed to define zones of anomalous magnetic susceptibility often associated with mineral deposits and their wall rocks.

The Scintrex MP-2 Proton Precession magnetometer was used to perform the survey. Base stations were established at each baseline/picket line intersection for the purpose of making diurnal corrections. All measurements were calculated relative to the base station readings. The total magnetic field of the Earth was measured to an accuracy of ± 5 gammas at 25 meter intervals.

The magnetic data has been plotted by computer and contoured as Map 3. Magnetic Survey.

The magnetic relief varies from an isolated low of 58,240 gammas at 1+00E/3+00S to a high of 62,902 gammas at 3+00E/3+75N. The background field is approximately 59,400 gammas.

There are three distinct zones featured by anomalous magnetic values.

Zone 1

Zone 1 trends slightly north of east as follows:

4+00E/0+25N	-	60,393	gammas
5+00E/0+75N	-	61,665	"
6+00E/1+00N	-	59,005	"
7+00E/2+50N	-	59,951	"

This zone is about 450 meters in length and 75 meters in width. A break evidently occurs in the trend at 6+00E/1+00N where the field drops abruptly to 59,005 gammas. The anomalous low is coincident VLF Anomaly A at 6+00E/1+25N. The conductor flanks the north side of the magnetic feature at 4+00E/1+20N, 5+00E/1+15N and 6+00E/1+25N.

The magnetic low could be due to bedrock alteration that might occur in a fault zone; however no discernible offset is inferred by the data. Zone 1 lies mainly in a drift covered area. The magnetic feature is attributed to the iron formation reported in the holes drilled by Delwood Porcupine Mines.

Zone 2

Zone 2 is subparallel to Zone 1. The anomalies are centred as follows:

6+00E/1+50S	-	59,851	gammas
6+00E/2+25S	-	59,954	"
7+00E/0+50S	-	60,432	"
8+00E/1+00S	-	59,988	"
9+00E/0+25S	-	59,800	"

The zone is roughly 350 meters long and about 100 to 150 meters wide. The area is almost entirely drift covered. Outcrops of intermediate volcanics were mapped in the vicinity of line 8+00E at the baseline and basic volcanics near line 7+00E/0+50S.

The anomaly is probably due to the presence of iron formation intercalated with the basement rocks.

Zone 3

Zone 3 is an area of strong magnetic highs situated to the north of Boyd Lake:

L1+00E/2+25N to 4+00N	-	60,983	gammas at 2+75N
L2+00E/2+25N to 4+25N	-	61,857	gammas at 3+50N
L3+00E/2+50N to 4+00N	-	62,902	gammas at 3+75N
L4+00E/3+00N to 5+00N+	-	61,582	gammas at 4+25N

The zone has a breadth of 150 to 175 meters for over 400 meters. It is completely overburdened covered. A portion of the zone apparently lies beneath Boyd Lake. Basic volcanic rocks outcrop in proximity to the anomaly on line 3+00E north of 4+00N; however cannot be observed within the zone and are not believed to correlate with the anomalies.

It is concluded that Zone 3 magnetic highs are caused by the existence of iron formation included in greenstone. The overall strength of the magnetic values north of Boyd Lake would indicate that in all probability the iron formation in this area is more extensive than elsewhere on the property.

Rather isolated magnetic highs are located at 7+00E/4+75N (59,710 gammas) and at 9+00E/4+50N (59,779 gammas). These anomalies lie to the north and east of two old exploratory shafts. The shafts are situated to the northeast along strike of Zone 2. The field in the area of the workings is featureless and averages about 59,450 gammas. Between Zones 1, 2 and 3, the magnetic field is consistently lower and averages around 59,350 gammas. The survey data primarily reflects the distribution of iron formations.

PROSPECTING AND SAMPLING:

A program of prospecting and sampling was carried out on the Delwood claims from October 5 to 16. During this period dynamite was used to pit and excavate many of the old workings in order to collect a suitable rock specimen for assay. This undertaking was hampered by overgrowth and the slump of overburden materials into the trenches. In all, 51 samples were collected and analysed for precious metals.

The laboratory results are appended to this report as Certificates Of Analyses. Assay sample locations are plotted on Map 4. Geology.

The highest concentration of gold in any sample analysed is 0.09 oz/ton Au. This was the content of gold in sample 8710 of quartz vein collected in place at 8+04E/3+55N. Adjacent samples 8708, 8711 and 8712 also taken in place from the old trench assayed 0.005, 0.002 and nil respectively. This vein has been traced along strike by the trench and is not overly continuous. It varies in width up to a couple of feet and dips to the north at 50° to 60°.

Sample 8699 (corresponding to site DL-28) carries 0.002 oz/ton Au. This sample of highly chloritized basic volcanic or greenstone was taken from tailings at 7+45E/4+25N and originated in the shaft at this site. Samples 8698 and 8700 (DL-27 and DL-28) of comparable lithology removed from the same tailings pile were not auriferous.

Sample 8740 (DL-72) of silicified greenstone taken from the floor of the trench at 7+77E/3+25N ran 0.002 oz/ton Au. Although the trench is almost completely overburdened filled; there is no evidence at site DL-72 to suggest the early work was carried out except to expose a section across the strike of the bedrock.

The rusty weathering quartz-carbonate lithology containing fuchsite (unit Vc on the map) was tested at 4+55E/0+03N, 4+65E/0+23N, 2+00E/1+62S, 1+50E/1+50S, 1+45E/1+40S, 2+39E/1+53S, 2+62E/1+54S and 3+05E/1+30S. Gold was not detected in samples 8696, 8697, 8723, 8724, 8725, 8726, 8727 and 8732 respectively. Samples 8696 and 8697 of the Vc lithology carried 0.01 and 0.03 oz/ton Ag.

The volcanic breccia and agglomerate outcropping in the vicinity of 0+75E/1+25S was tested on surface. Samples 8719 and 8739 contained only a trace of silver.

GEOLOGICAL SURVEYING:

A geological survey was carried out on the Delwood property in conjunction with the prospecting and sampling program. Outcrops were examined and mapped to provide a geological basis for the evaluation of the ground geophysical data and the analytical results of the sampling (see Map 4. Geology).

The property is underlain by mafic to intermediate volcanics with minor intercalated pyroclastic rock and iron formation. Collectively, these lithologies are known as the Deloro Group of the Keewatin system. The Deloro Group underlies that portion of Deloro Township south of the Porcupine-Destor fault zone. The rocks are Precambrian in age; the basement complex being in the Archean at least 2.5 billion years ago.

The volcanics trend east-northeast, are medium to dark green in colour, fine to medium-grained and tend to be andesitic in composition. The more basic varieties are typified by intense chloritization of feldspars and mafic minerals giving rise to greenstone as observed in the vicinity of the shaft at 7+25E/4+25N. Depending on the degree of hydrothermal alteration the greenstones are more or less schistose and saussaritized.

An assemblage of carbonatized volcanic rocks trend east-northeast across claim P.594842 and dip to the north at roughly 70°. This formation, derived from the volcanic rocks during metamorphism, is composed of quartz, carbonate, chlorite, sericite and often contains the green mica fuchsite. The formation, as observed in outcrop, enters the property from the west and extends for at least 500 meters until it disappears in the north-west corner of claim P.594841. On line 2+00E it is exposed for an apparent width of about 75 meters.

A minor pyroclastic unit outcrops at 0+75E/1+25S and apparently lies along the contact of the volcanics and the carbonatized volcanic assemblage. Vitreous to white, angular and subrounded quartz fragments up to a few centimeters in size are tightly packed and indurated with a silica cement. The lithology has characteristics of both an agglomerate and a volcanic breccia.

During the course of geological investigations; no oxide facies iron formations were observed in outcrop. Only traces of pyrite were observed in the quartz-carbonate-fuchsite formation and locally in association with quartz veining. No visible gold was seen.

CONCLUSIONS

- 1) Trenching and shaft sinking was carried out by Delwood Porcupine Mines Limited in 1936 to explore weakly auriferous pods of iron formation, quartz veins and a quartz-carbonate-fuchsite alteration zone. The company's most prospective showing was a lenticular bed of iron formation which was subsequently drill-tested with dubious results. The gold reportedly encountered in the iron formation occurred as scattered low values.
- 2) The magnetic survey data illustrates the situation of three subparallel zones within the volcanic rocks possessing anomalously high magnetic susceptibility. Zone 1 is spatially related to the band of iron formation diamond drilled by Delwood Porcupine Mines. It is evident that the anomalously high readings within Zone 1 are caused by the iron formation. Zone 2 and Zone 3 magnetic highs are therefore attributed to the presence of iron formations. The strength and breadth of the Zone 3 magnetic field would indicate that a body of iron formation lies beneath the drift covered area north of Boyd Lake. The Zone 3 signature infers the existence of the largest and most pervasive deposit of iron formation on the property.
- 3) Based on the work performed by Delwood Porcupine Mines; a body of iron formation such as indicated by the Zone 3 magnetic anomalies probably contains low-grade gold mineralization.
- 4) Locally, gold deposition in this terrane is known to reach economic proportions where intense hydrothermal alteration has prevailed; particularly where greenstones are observed to have been intruded by strataform sills of felsic porphyry and quartz veins ie: Faymar Mine, McLaren Porcupine glory hole. The gold however, is an epigenetic mineralization; therefore its metallogenesis is not principally dependent on host rock lithology.
- 5) VLF Anomalies A and B reflect the strike trends of the country rocks and may correlate with shear zones or fault structures within greenstones. These structures could be sulfide-bearing. Structural deformation may correlate to the placement of the iron formations. The geophysical data suggests that the rocks in the Boyd Lake area may have a complex geological history.
- 6) Geologically, a gold deposit of commercial significance could occur on the Delwood property.

RECOMMENDATIONS

- 1) An horizontal loop electromagnetic survey should be carried out north of baseline on lines 1+00E to 6+00E to gauge the depth, conductivity and conductivity widths of the VLF Anomalies.
- 2) Diamond drilling should be performed to test the stratigraphy across the strike of Zone 3 magnetic anomalies. Initially, one fence of holes should be spotted on line 3+00E north of Boyd Lake. The fence should bear south along the line at a low angle. It is estimated that a minimum of 1,000 feet of core drilling would be required to complete 5 to 6 holes spaced at intervals not exceeding 25 meters.
- 3) Prior to drilling, it is recommended that the mineral rights to adjacent claims T.R.P.993½(patented), P.8641(patented) and P.618276 (staked on June 1, 1981 for Amax) be acquired by purchase or option.

REFERENCES

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SCHEDULE A. ASSESSMENT DUE DATES

<u>Mining Claim</u>	<u>Recording Date</u>	<u>Due Date</u> [*]
P. 594839	Nov. 27, 1980	Nov. 27, 1982
P. 594840	Nov. 27, 1980	Nov. 27, 1982
P. 594841	Nov. 27, 1980	Nov. 27, 1982
P. 594842	Nov. 27, 1980	Nov. 27, 1982
P. 594843	Nov. 27, 1980	Nov. 27, 1982
P. 594844	Nov. 27, 1980	Nov. 27, 1982

*NOTE: Report of Geophysical Work (electromagnetic and magnetic) submitted under Special Provisions (credit for performance and coverage) on mining claims P.594839 to P.594844 inclusive in the Township of Deloro; dated October 27, 1981. Due dates listed are tentative subject to the issuance of assessment work credits.

APPENDIX: CERTIFICATES OF ANALYSES



SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0

TELEPHONE: (705) 642-3244

ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

Certificate No. 52584

Date: Oct. 23, 1981

Received Oct. 15, 1981 35 Samples of ore

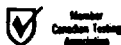
Submitted by McGill Exploration Limited, Kanata, Ontario Att: G.M. Thomas

proj. VATRI

SAMPLE NO.	GOLD Oz./ton	SILVER Oz./ton
8696	NIL	0.01
8697	NIL	0.03
8698	NIL	trace
8699	0.002	0.03
8700	NIL	0.01
8704	NIL	trace
8705	NIL	trace
8706	NIL	trace
8707	NIL	trace
8708	0.005	trace
8709	NIL	NIL
8710	0.09	0.03
8711	0.002	0.02
8712	NIL	NIL
8713	NIL	NIL
8714	NIL	NIL
8715	NIL	trace
8716	NIL	NIL
8717	NIL	trace
8718	NIL	NIL
8719	NIL	trace
8720	NIL	NIL
8721	NIL	NIL
8722	NIL	NIL
8723	NIL	NIL
8724	NIL	NIL
8725	NIL	NIL
8726	NIL	trace
8727	NIL	NIL
8728	NIL	0.08
8729	NIL	trace
8730	NIL	trace
8731	NIL	trace
8732	NIL	trace
8733	NIL	trace

Per *G. Lebel*
G. Lebel, Manager

ESTABLISHED 1928





SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0

TELEPHONE: (705) 642-3244

ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

Certificate No. 52601

Date: Oct. 26, 1981

Received Oct. 19, 1981 16 Samples of ore

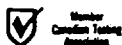
Submitted by McGill Exploration Limited, Kanata, Ontario

Proj. VATRI

SAMPLE NO.	GOLD Oz./ton	SILVER Oz./ton
8734	NIL	trace
8735	NIL	NIL
8736	NIL	NIL
8737	NIL	NIL
8738	NIL	NIL
8739	NIL	trace
8740	0.002	0.01
8741	NIL	trace
8742	NIL	-
8743	NIL	-
8744	NIL	-
8745	NIL	-
8746	NIL	-
8747	NIL	-
8748	NIL	-
8749	NIL	-

Per G. Lebel
G. Lebel, Manager

ESTABLISHED 1928





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VATCO EXPLORATION INCORPORATED

REPORT ON EXPLORATION

BIG DYKE PROPERTY

DELORO TOWNSHIP

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NOV 16 1981

MINING LANDS SECTION

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G. M. Thomas
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FOREWARD:

The Vatri Project is a private exploration project being financed by Vatco Exploration Incorporated of Mississauga, Ontario. The purpose of the project is to locate gold deposits on the Vatri properties situated in Deloro, Macklem, Robb and Turnbull Townships in the vicinity of Timmins. By agreement, McGill Exploration Limited has committed to carry out the exploration work on the Vatri properties on behalf of Thomas Skimming & Associates Limited of Islington, Ontario.

Preliminary investigations conducted on the Vatri properties by Thomas Skimming & Associates Limited in June, 1981 established the presence of economically important showings of gold-bearing iron formation and quartz-carbonate-fuchsite on the Big Dyke property. An initial exploration program was proposed to test by trenching and sampling the known zone of gold mineralization and to perform ground geophysical surveys and geological mapping.

This report reviews the results of the work programs carried out by McGill on the Big Dyke property from July 24 to September 30, 1981.

SUMMARY:

A program of linecutting and ground electromagnetic surveying defined 5 zones of anomalous conductivity. Anomalies A, B, D and E are attributed to conductive overburden. Anomaly C may be caused by a source at depth.

A magnetic survey was carried out on the property to delineate zones of anomalous magnetic susceptibility. A high at 1+00W/2+50N coincides with VLF Anomaly C.

Prospecting and geological investigations conducted in August and September indicate that native gold is concentrated up to 0.10 oz/ton Au in the Big Dyke quartz vein. Iron formations and altered volcanic rocks are also mineralized. Further work is recommended to test the potential along strike and down dip of two gold-bearing formations.

The cost of the Vatri Project to date is \$52,486.82. Of this amount, \$23,619.07 has been prorated to exploration programs carried out on the Big Dyke claim group.

PROPERTY:

The property consists of six unpatented mining claims situated in Deloro Township within the Porcupine Mining Division, District of Cochrane, Ontario (see Map 1. Property).

The claims are numbered as follows:

P.529005
 P.529006
 P.567521
 P.567522
 P.530598
 P.530599

A logging road, leading off the Langmuir Road from South Porcupine a distance of approximately 2 miles to the south-west, provides access to the property. The old road traverses claims P.530599 and P.529006.

The title holder of the property is Mr. Bruno Vatri of Mississauga, Ontario.

Schedule A, annexed to this report, lists the recording dates of the staking and gives the status of each claim subject to the assessment of work performed. A report on geophysical surveys carried out on the property in July and August was submitted to the Ministry of Natural Resources on October 16, 1981. This work is currently being assessed by the Ministry. The Land Management Branch has advised that the property is in good standing and that a statement of work credits will be issued.

WORK HISTORY:

The history of the Big Dyke prospect dates back to the early 1920's when Big Dyke Consolidated Gold Mines, Limited acquired property originally known as the McRae, Fishley and Williamson group of mining claims. With an authorized capital of \$10,000,000 of which 5,500,000 shares were issued at \$1.00 par value, work got underway in 1921.

Exploration was carried out initially to test the quartz dike which runs northeast through where is now the common boundary of claims

P.530598 and P.529005 and also to test the iron formation associated with sulphides and carbonate as evidenced by the workings in the south-east portion of P.529005. Four shafts were sunk vertically varying from 15 to 80 feet and 17 pits to an average depth of 5 feet. Fifteen trenches were also excavated. The impetus of the early development was to distinguish ore and the organization continued to do this with remarkable success until operations closed down in 1923.

In the years 1926 and 1944, it is on record that company officials announced to shareholders that underground development would resume just as soon as sufficient finances were procured; however, on February 8, 1961 the company's charter was cancelled for default in filing annual returns. Underground development work never did get underway.

Since the era of Big Dyke Consolidated the prospect has changed hands among local prospectors. The mineral rights to the prospect were last transferred by Woodrow Wilson to the current title holder on October 31, 1980.

EXPLORATION PROGRAMS

LINECUTTING:

In order to provide the required control for exploration survey work; a program of linecutting commenced on July 29 and was completed on August 14.

A baseline bearing N.60°E was cut for 900 meters across claims P.530599, P.529005 and P.529006. The orientation of the baseline roughly parallels the regional strike of the rocks.

Approximately 15 kilometers of picket line runs perpendicular to baseline at 100 meter and 50 meter spacings. The tighter line spacing serves for more detailed coverage of the iron formation-sulphide-carbonate zone in the south-east portion of P.529005 and over the quartz-carbonate-fuchsite zone in the south central portion of the same claim.

Parallel to baseline, line 5+00N is 900 meters in length and ties-in the picket lines on claims P.567522, P.530598 and P.567521. Offset 6+50N from 9+00W provides the required extension for picket lines 10+00W and 11+00W to cover the south-west portion of claim P.567521. The offset runs 325 meters beyond 9+00W.

A total of 16.8 kilometers of control line was cut and picketed at 25 meter intervals.

ELECTROMAGNETIC SURVEYING:

From August 22 to 25 a VLF electromagnetic survey was performed on the Big Dyke picket lines to test the bedrock formations for buried zones of anomalous conductivity potentially related to the presence of metallic minerals.

VLF electromagnetic surveying utilizes the geophysical properties of electromagnetic waves transmitted from VLF radio stations operating for submarine communications around the world. The VLF waves propagate as concentric horizontal fields along and within the surface of the Earth. When these transmitted fields encounter conductive bodies in the ground; resultant secondary magnetic fields are produced. The secondary fields can be measured to locate the source of the conductive bodies.

A Geonics EM-16 receiver was tuned to transmitter NAA (17.8 kHz) in Cutler, Maine. The inphase and quadrature components of the secondary field were measured in percentages as a function of the tilt of the instrument relative to the horizontal (primary) field. Readings were taken facing northerly along the lines and recorded at 25 meter intervals.

The electromagnetic data is plotted in profile and is presented as Map 2. VLF EM-16 Survey.

A total of 5 zones of anomalous conductivity were outlined by the EM-16 survey.

Anomaly A

Anomaly A is located on lines 6+00W, 6+50W, 7+00W, 7+50W, 8+00W and 9+00W at the respective distances 2+65S, 2+60S, 2+40S, 2+15S, 2+00S 1+80S (meters) south of baseline. The anomaly trends slightly north of east and is continuous through an area which is entirely overburden covered.

Inphase response is very strong and changes polarity rapidly on each survey line crossing the zone. The quadrature signal is positive on lines 7+50W and 8+00W, slightly positive to zero on line 7+00W and zero to slightly negative on lines 6+00W and 6+50W.

It is interpreted that Anomaly A is caused by a poor conductor of large dimensions at or near the surface. The source of the conductivity is most likely the overburden.

Anomaly B

Anomaly B is located on lines 2+00W, 3+00W, 4+00W and 5+00W at distances 4+65N, 4+90N, 5+20N and 5+45N (meters) north of baseline respectively. On line 6+00W at 5+65N the anomaly is discernible. The anomaly trends east-northeast and is a zone, continuous for about 300 meters.

The conductor is largely coincident with a beaver pond. Inphase and quadrature signals on lines 3+00W and 4+00W would indicate that the pond and the surrounding muskeg are causing the anomaly. The inphase response on line 5+00W at 5+45N to 6+25N suggests a broadening of the zone within this area of overburden. It is believed that the pond influences the crossover on line 2+00W at 4+65N.

Anomaly C

Lines 0+00 and 1+00W cross Anomaly C at 1+90N and 2+50N (meters) north of baseline respectively. The anomaly trends east-southeast for at least 100 to 150 meters.

The profile across the zone on line 1+00W shows a gradual positive inphase crossover and a negative quadrature anomaly. Profile 0+00 shows a similar however more subtle response. The quadrature anomaly is thought to be caused by a conductive source at depth.

Anomaly D

Anomaly D is an isolated response on line 7+50W at 0+50S within a drift covered area. The quadrature profile suggests that the source is a very poor conductor. The anomaly is probably related to surficial materials.

Anomaly E

Anomaly E is a weak conductive trend across line 7+50W at 2+30N and line 8+00W at 2+20N. The source of the anomaly is off the property situated 25 to 100 meters to the south-west of claim P.529005. The anomaly does not extend east to line 7+00W. It is not considered to be of bedrock origin.

MAGNETIC SURVEYING:

From August 8 to 18 a magnetic survey was conducted on the Big Dyke control lines to define zones of anomalous magnetic susceptibility often associated with mineral deposits and their wall rocks.

The Scintrex MP-2 Proton Precession magnetometer was used to perform the survey. Base stations were established at each baseline/picket line intersection for the purpose of making diurnal corrections and all measurements were calculated relative to the base station readings. The total magnetic field of the Earth was measured to an accuracy of ± 5 gammas at 25 meter intervals.

The magnetic data has been plotted by computer and contoured as Map 3. Magnetic Survey.

As illustrated by Map 3, the area covered by claims P.529005, P.529006 and P.530599 exhibits rather extraordinary magnetic topography. The field increases from a low of 57,822 gammas at 8+00W/3+25S to a high of 63,537 gammas at 3+50W/0+75N which is a difference of 5,715 gammas.

The magnetic signature of the property is characterized by the presence of iron formations recurring within a series of volcanic rocks which are more or less replete in magnetic minerals. The magnetic high beginning at 5+00W/0+75N, trending west and then south-west 5+50W/0+75N, 6+00W/0+75N, 6+50W/0+25N, 7+00W/0+00, appears to be caused by the iron formation which can be observed in outcrop at 5+50W/0+65N and at 6+45W/0+28N. South of baseline, the high trend 4+50W/0+50S, 5+00W/0+50S, 5+50W/0+75S, 6+00W/0+75S occurs within an area which is predominantly drift covered; however, isolated outcrops of basic volcanics are observed near 4+50W/0+50S and 5+50W/0+75S. The feature is attributed to the existence of iron formation within the basement rocks.

Isolated magnetic highs centred at 3+50W/0+75N, 5+00W/2+50N, 5+00W/6+50N, 5+00W/7+75N and 6+00W/4+00N are probably due to iron formations deposited locally as mapped within these areas.

The anomalous magnetic high at 1+00W/2+50N lies within the drift covered area spatially related to VLF Anomaly C.

The anomalous magnetic lows on the property may be due to the presence of iron formations composed essentially of hematite and chert. The jaspilite outcropping on the baseline at 4+10W registers about 59,000 gammas compared to the country rocks which average 59,300 to 59,600 gammas. The same lithology exposed at 1+95W/2+50N has a magnetic susceptibility of approximately 59,400 gammas; however, magnetic readings taken within the old trench at this site were roughly 200 gammas lower than survey measurements taken a few meters away along the control line. It is evident therefore, that in some places the iron formations are volumetrically devoid of magnetic minerals and in effect depress the total field.

The magnetic surveying did not delineate the Big Dyke quartz vein situated to the south of tie-line 5+00N or the quartz-carbonate-fuchsite zone stretching from 5+50W/0+60N to 4+50W/0+25N. These rock units may be too limited in extent to be defined by survey work at this scale within this terrane.

PROSPECTING AND SAMPLING:

In August and September a program of prospecting and sampling was carried out on the Big Dyke claim group. The purpose of the program was to explore the old workings on the property and to test the iron formations, quartz veins and quartz-carbonate lithologies for gold.

Explosives were utilized to excavate and pit at most sites. Drilling and blasting was performed to open up the quartz-carbonate-fuchsite formation crossing line 5+50W at 0+65N. Eighty samples weighing 5 to 10 pounds apiece were collected and analysed for precious metals.

The highest concentration of gold in any sample analysed is 0.10 oz/ton Au. This value was determined by the fire assay of grab sample 8670 taken from the Big Dyke quartz vein at 5+25W/4+25N. The vein was tested at neighbouring sites 5+20W/4+25N and 5+30W/4+25N; however, gold was not detected in samples 8665 and 8666. About 17 meters west and 5 meters south of site 8670, sample 8680 of vein material assayed 0.06 oz/ton Au. To the east of 8670, the quartz vein was tested at 4+50W/4+35N, 4+36W/4+37N, 4+30W/4+30N, 4+30W/4+39N, 4+28W/4+54N. Samples 8683, 8684, 8685, 8686 and 8687 ran nil, 0.002, nil, 0.005, 0.002 oz/ton Au respectively. The veining at this location contains secondary carbonate in the form of ankerite.

Sample 8663 of iron formation containing secondary carbonate and pyrite taken from tailings at 5+47W/1+05S assayed 0.09 oz/ton Au; however, samples 8661 and 8662 of corresponding lithology collected at 5+62W/1+05S and 5+62W/1+18S ran 0.03 and 0.002 oz/ton Au respectively. Sample 8656 of the vein material within the pit at 6+05W/2+04S assayed 0.05 oz/ton Au; however, adjacent sample 8675 is not auriferous.

The banded iron formation tested at 6+42W/0+28N and 1+95W/2+50N is barren. Sample 8625, (corresponding to fire assay number 8645) analysed by neutron activation, would indicate that in places not even a trace quantity of the element is present in the oxide facies iron formations.

Samples 8637 to 8643 taken at intervals for 5 meters across the quartz-carbonate-fuchsite zone, carried 0.005, 0.002, 0.002, nil, nil, nil oz/ton Au respectively. Sample 8632 taken about 20 meters east of the trench from the same formation does not contain gold; nor does grab sample 8631 from 5+48W/0+65N. Sample 8646, rich in fuchsite, collected from a test pit 10 meters west of the trench contains no gold.

Out of six tests of iron formation containing pyrite along 5+00W north of tie-line; only sample 8649 carries 0.02 oz/ton Au.

The presence of silver tends to be sympathetically related to the occurrence of gold; however, in the samples analysed the concentration of the element is negligible.

The laboratory results are appended to this report as Certificates Of Analyses. Assay sample locations are plotted on Map 4. Geology.

GEOLOGICAL SURVEYING:

A geological survey was carried out on the Big Dyke property in conjunction with the prospecting program. Outcrops were examined and mapped to provide a geological basis for the evaluation of the ground geophysical data and the analytical results of the sampling (see Map 4. Geology).

The property is underlain by mafic to intermediate lavas with intercalated fragmental lava, pyroclastic rock and banded iron formation. These lithologies comprise what is referred to as the Deloro Group of the Keewatin system. The Deloro Group underlies that portion of Deloro Township south of the Porcupine-Destor fault zone.

The volcanics range from basic to intermediate in composition and are the dominant lithologies comprising greater than 95% of the terrane. These are lavas medium to dark green, fine to medium-grained having generally massive to slightly schistose textures. Pillowed structures are observed locally as in outcrops near line 5+00W/2+25S. An interlense of breccia, very limited in extent, is included in basic volcanic about 20 meters north of the road on line 8+00W. At this site, a mosaic of angular felsic fragments ranging up to a few centimeters in size are set in a black, aphanitic groundmass concordant with the host rock. The interlense may be an isolated autoclastic phenomenon.

An assemblage of fragmental lava and related pyroclastic lithologies are interbedded in the volcanic pile as mapped south of the timber line on 6+00W. Outcrops in this area exhibit a wide variety of textures ranging from rocks possessing a sparse framework of semi-aligned lenticular blocks of cryptocrystalline silica averaging several centimeters in size contained in a light green matrix of fine-grained quartz and interstitial chlorite to a facies which is apparently similar in composition resembling a coarse tuff or lapilli. A tiny outcrop of grey

mudstone at 6+02W/0+60N would suggest that locally the formation may contain narrow clastic horizons. The outcrop of fragmental lithology beside line 2+00W/3+00N is distinctly agglomeratic.

Banded iron formation is intercalated with the volcanic rocks; however, by volume accounts for only a small percentage of the stratigraphy. The formation typically consists of alternating bands of dark grey to reddish-grey chert (jaspilite) which is a massive unit. The most prominent exposure on the property occurs at baseline/4+10W. On line 5+00W at 2+50N, beige and pinkish-brown coloured 'sugary-quartz' chert is exposed in outcrop which is a crumbly and friable facies compared to the jaspilite lithology.

The rocks on the property generally strike to the north-east and dip steeply to the north-west. As a whole they have undergone what appears to be one episode of deformation related to hydrothermal metamorphism. Where schistosity has developed it is roughly aligned to the strataform trend of the volcanics. The nature and extent of the lineation would not suggest that the rocks have undergone complex folding. The banded iron formations on the property are observed to be only mildly contorted. There is no sign of any major fault structure; however, topographic relief, generally less than 25 feet, is probably in part due to normal faulting with essentially down-dip displacement along bedding planes and foliation surfaces.

During metamorphism mineral compositions were altered appreciably as evidenced by the abundance of chlorite replacing the cafermic silicates. Secondary quartz has been introduced as stringers and small veins; by far the largest and most continuous being the Big Dyke quartz vein.

Secondary carbonates including ankerite $[\text{Ca}(\text{Fe}, \text{Mg}, \text{Mn})(\text{CO}_3)_2]$ have developed from the chemical breakdown of amphiboles, pyroxenes and feldspars. The most pronounced carbonatization on the property has resulted in the quartz-carbonate-fuchsite zone as shown on the map. The growth of fuchsite is probably related to the liberation of chromium from the breakdown of magnetite, pyroxene or amphibole in a hydrated zone within the volcanic pile. The element cannot be accepted by the carbonate and is therefore accommodated within the lattice of the alteration micas. Secondary carbonates (dolomite, ankerite) have also been observed crosscutting iron formation and are intimately associated with quartz in the Big Dyke quartz vein. Only very minor second generation carbonate in the form of calcite was observed on the property.

The introduction of sulphur into the rocks during metamorphism probably accounts for the presence of pyrite which occurs in minor amounts as disseminations of tiny cubic crystals within the basic to intermediate volcanics and as replacement layers and aggregates within the iron formation. Only small quantities of pyrite were observed in the quartz veins and where present was usually associated with carbonate. Minor pyrrhotite occurs with pyrite as a replacement mineral in iron formation along with traces of chalcopyrite.

Although no mineralogical testing was performed on any rock sample; the gold probably occurs as isolated grains of native gold and carries with the pyrite and carbonate replacement minerals. No visible gold was observed during the field program.

CONCLUSIONS

The following conclusions are made based on the exploration conducted on the property to date:

- 1) The development work carried out by Big Dyke Consolidated Gold Mines in the early 1920's was largely a promotional activity.
- 2) Native gold is concentrated locally up to 0.10 oz/ton Au in quartz veins, iron formations and in basic to intermediate volcanic rocks at sites where hydrothermal metamorphic conditions have resulted in alteration characterized by pyrite and ankerite as replacements. Sampling and assaying of the prospective lithologies within the alteration zones would indicate that the occurrence of gold tends to be sporadic.
- 3) Geological investigations would suggest that the metamorphic environment was of the greenschist facies; however deficient in water, carbon dioxide and sulfur judging from the paucity and localization of the replacement minerals. Except within the quartz-carbonate-fuchsite zone, outcrop examinations do not reveal evidence that would indicate sufficient hydration took place on a regional basis to cause any extensive remobilization of the trace metal constituents of the volcanic rocks. Many outcrops on the property appear relatively unaltered. It is conceivable that meteoric waters were essentially used in the hydration of the calcium silicates and were not available as solvents for mass transfer.
- 4) Geologically, a small, low grade epigenetic gold deposit could occur on the property; however the probability of locating an economic deposit is considered low.

RECOMMENDATION

It is noteworthy that the gold-bearing Big Dyke quartz vein and the quartz-carbonate-fuchsite zone have never been drill tested. To further elucidate the potential of these formations, along strike and down dip, a program of diamond drilling is recommended.

REFERENCES

- Boyle, R. W.
1979: The Geochemistry of Gold and its Deposits; Geol. Surv. Can., Bulletin 280.
- Carlson, H. D.
1967: Geology of Ogden, Deloro and Shaw Townships; Ontario Dept. of Mines, O.F. No. 5012 (unpublished report).
- Ferguson, S. A.
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- Lyons, T. J.
1923: Report on Development Work; Big Dyke Consolidated Gold Mines Limited, Toronto (private correspondence).
- Paterson, N. R. and Ronka, V.
1969: Five Years of Surveying with the VLF-EM Method; Geonics Limited, Toronto.
- Skimming, T.
1981: Report on Vatri Properties; Thomas Skimming & Associates Limited, Islington (private report).

SCHEDULE A. ASSESSMENT DUE DATES

<u>Mining Claim</u>	<u>Recording Date</u>	<u>Due Date</u> *
P. 529005	Sept. 4, 1980	Sept. 4, 1982
P. 529006	Sept. 4, 1980	Sept. 4, 1982
P. 567521	June 16, 1980	June 16, 1982
P. 567522	June 16, 1980	June 16, 1982
P. 530598	October 23, 1980	October 23, 1982
P. 530599	October 23, 1980	October 23, 1982

*NOTE: Report of Geophysical Work (electromagnetic and magnetic) submitted under Special Provisions (credit for performance and coverage) on mining claims P. 529005 et al in the Township of Deloro; dated October 16, 1981. Due dates listed are tentative subject to the issuance of assessment work credits.

APPENDIX: CERTIFICATES OF ANALYSES

X-RAY ASSAY LABORATORIES LIMITED
1885 LESLIE STREET, DON MILLS, ONTARIO M3B 3J4
PHONE 416-445-5755 TELEX 06-986947

CERTIFICATE OF ANALYSIS

TO: MCGILL EXPLORATIONS LTD.,
ATTN: GEORGE M. THOMAS
33 YOUNG ROAD,
KANATA, ONTARIO.

CUSTOMER NO. 203

DATE SUBMITTED
25-AUG-81

REPORT 12621

REF. FILE 8459-Q1

12 ROCKS PROJECT: VATRI

WERE ANALYSED AS FOLLOWS:

	UNITS	METHOD	DETECTION LIMIT
AU	PPB	FANA	1.000

DATE 18-SEP-81

X-RAY ASSAY LABORATORIES LIMITED

CERTIFIED BY 

SAMPLE	AU PP3
8619	2
8620	<1
8621	<1
8622	2
8623	<1
8624	1
8625	<1
8626	<1
8627	6
8628	<1
8629	10
8630	2

X-RAY ASSAY LABORATORIES LIMITED

1885 LESLIE STREET, DON MILLS, ONTARIO M3B 3J4

PHONE 416-445-5755

TELEX 06-986947

CERTIFICATE OF ANALYSIS

TO: MCGILL EXPLORATIONS LTD.,
ATTN: G.M. THOMAS
33 YOUNG ROAD,
KANATA, ONTARIO.

CUSTOMER NO. 203

DATE SUBMITTED
9-SEP-81

REPORT 12769

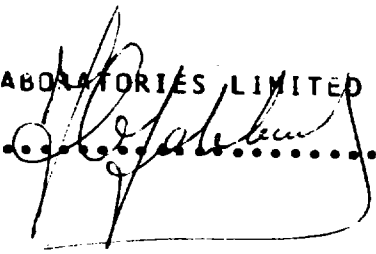
REF. FILE 8625-G4

6 ROCKS

WERE ANALYSED AS FOLLOWS:

	UNITS	METHOD	DETECTION LIMIT
AU	PPB	FANA	1.000

DATE 28-SEP-81

X-RAY ASSAY LABORATORIES LIMITED
CERTIFIED BY 

SAMPLE	AU PPB
8631	19
8632	7
8633	32
8634	3
8635	80
8636	<1



SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0

TELEPHONE: (705) 642-3244

ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

Certificate No. 52396

Date: Sept. 23, 1981

Received Sept. 17, 1981 35 Samples of ore

Submitted by McGill Exploration Limited, Kanata, Ontario Per: D. Lewis

Proj. # VATRI

SAMPLE NO.	GOLD Oz./ton	SILVER Oz./ton	SAMPLE NO.	GOLD Oz./ton	SILVER Oz./ton
8637	0.005	0.08	8655	NIL	NIL
8638	0.002	0.01	8656	0.05	0.01
8639	0.002	0.01	8657	0.002	0.01
8640	0.002	0.06	8658	0.01	0.03
8641	NIL	0.01	8659	NIL	NIL
8642	NIL	NIL	8660	NIL	trace
8643	NIL	0.02	8661	0.03	0.03
8644	NIL	NIL	8662	0.002	0.03
8645	NIL	NIL	8663	0.09	0.06
8646	NIL	0.02	8664	0.005	0.03
8647	NIL	NIL	8665	NIL	NIL
8648	NIL	trace	8666	NIL	NIL
8649	0.002	trace	8667	0.002	NIL
8650	NIL	NIL	8668	NIL	0.01
8651	NIL	0.01	8669	NIL	trace
8652	NIL	trace	8670	0.10	0.02
8653	0.005	0.05	8671	NIL	0.01
8654	NIL	0.01			

Per G. Lebel
G. Lebel, Manager

ESTABLISHED 1928





SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0

TELEPHONE: (705) 642-3244

ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

Certificate No. 52520

Date: Oct. 13, 1981

Received Oct. 6, 1981 27 Samples of ore

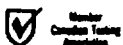
Submitted by McGill Exploration Limited, Kanata, Ontario

Proj. # VATRI

SAMPLE NO.	GOLD Oz./ton	SILVER Oz./ton
8672	NIL	NIL
8673	0.002	trace
8674	0.002	NIL
8675	NIL	NIL
8676	NIL	NIL
8677	0.002	NIL
8678	0.002	NIL
8679	NIL	NIL
8680	0.06	0.01
8681	0.002	NIL
8682	0.002	NIL
8683	NIL	0.01
8684	0.002	trace
8685	NIL	NIL
8686	0.005	0.01
8687	0.002	0.01
8688	0.005	NIL
8689	NIL	NIL
8690	0.005	0.01
8691	NIL	0.01
8692	0.005	0.03
8693	0.03	0.10
8694	NIL	NIL
8695	NIL	NIL
8701	NIL	NIL
8702	NIL	NIL
8703	0.002	NIL

Per G. Lebel
G. Lebel, Manager

ESTABLISHED 1928





The Mini

Type of Survey(s) **GEOLOGICAL**

Claim Holder(s) **BRUNO VATRI**

Address **UNIT 16 5500 TOMKEN ROAD MISSISSAUGA ONT. L4W1P2**

Survey Company **McGILL EXPLORATION LIMITED**

Name and Address of Author (of Geo-Technical report) **G. M. THOMAS 33 YOUNG ROAD KANATA ONTARIO K2L-1V9**

Township or Area **DELORO**

Inspector's Licence No. **M 21337**

Date of Survey (from & to)
Day | Mo. | Yr. | Day | Mo. | Yr.
1 8 81 16 10 81

Total Miles of line Cut

Credits Requested per Each Claim in Columns at right

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

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

Airborne Credits	Geophysical	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		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
P	594839				
	594840				
	594841				
	594842				
	594843				
	594844				

RECORDED
MAY 03 1984
Receipt No. *[Signature]*

RECEIVED
MAY 11 1984
MINING LANDS SECTION

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

FORCUPINE MINING DIVISION
RECEIVED

Calculation of Expenditures

Total Expenditures	MAY 03 1984	Total Days Credits
\$	A.M. 7 8 9 10 11 12 1 2 3 4 5 6	P.M.

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.

Date **April 30/84** Recorded Holder or Agent (Signature) *[Signature]*

All Revised Statements

Number of mining claims covered by this report of work: **6**

For Office Use Only		
Total Days Cr. Recorded	Date Recorded	Mining Recorder
120	May 3, 1984	<i>[Signature]</i>
	Date Approved as Recorded	Branch Director

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
RICHARD M. SPRAWLE, % C. VAN HESSERT & ASSOCIATES LTD. 306-45 RICHMOND ST. W. TORONTO ONT. M5H-1Z2

Date Certified **April 30/84** Certified by (Signature) *[Signature]*



Technical Assessment Work Credits

File 2.6755

Date 1984 09 13 Mining Recorder's Report of Work No. 185/84

Recorded Holder BRUNO VATRI
Township or Area DELORO TOWNSHIP

Table with 2 columns: Type of survey and number of Assessment days credit per claim; Mining Claims Assessed. Includes rows for Geophysical, Geological, and Geochemical surveys, and checkboxes for special provisions.

Special credits under section 77 (16) for the following mining claims
15 DAYS CREDIT
P 594840

No credits have been allowed for the following mining claims
not sufficiently covered by the survey
Insufficient technical data filed

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

Mining Lands Section

File No 26755

Control Sheet

TYPE OF SURVEY GEOPHYSICAL
 GEOLOGICAL
 GEOCHEMICAL
 EXPENDITURE

MINING LANDS COMMENTS:

-Maps not signed.

led

L.D.

J. Hurst

Signature of Assessor

84-09-06

Date

1984 09 28

Your File: 185/84 184/84
Our File: 2.6755

Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

RE: Notice of Intent dated September 13, 1984.
Geological Survey submitted on Mining Claims
P 529005 et al in the Township of Deloro.

The assessment work credits, as listed with the
above mentioned Notice of Intent, have been approved
as of the above date.

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

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1N3
Phone: (416) 965-6918

S. Hurst:sc

cc: Bruno Vatri
Unit 16
5500 Tomken Road
Mississauga, Ontario
L4W 1P2

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

cc: Resident Geologist
Timmins, Ontario



Sept 28/84

1984 09 13

Your File: 185/84
Our File: 2.6755

Bruce W. Hanley
Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

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

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

Yours sincerely,


S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3

RW S. Hurst:mc
Encls.

cc: Bruno Vatri
Unit 16
5500 Tomken Road
Mississauga, Ontario
L4W 1P2

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



Ministry of
Natural
Resources

Notice of Intent
for Technical Reports

1984 09 13

2.6755/185-84

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

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

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

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

C. VON HESSERT & ASSOCIATES LTD.
SUITE 306 - 45 RICHMOND STREET WEST
TORONTO, ONTARIO M5H 1Z2

(416) 863-6796

2.6755

September 4, 1984

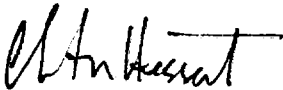
Ray Pichette
Ministry of Natural Resources
Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3

Dear Mr. Pichette:

Because Mr. George Thomas is not available to sign these maps himself, I have done so in his behalf. I, and my colleague Rick Sproule, have worked on the Vatco properties (now Legion Resources Limited) for several years and can attest to the accuracy of the maps.

If you have any difficulties, please give me a call.

Sincerely,



Christian von Hessert
Consulting Geologist

enclosure:

cc: B. Vatri

RECEIVED	
Land Management Branch	
DATE	<input type="checkbox"/>
REMARKS PLEASE	<input type="checkbox"/>
BY	
SEP -6 1984	
W. L. GOOD	<input checked="" type="checkbox"/>
W. J. BROOK	<input type="checkbox"/>
R. 6643	

August 24, 1984

File: 2.6755

Bruno Vatri
Unit 16
5500 Tomken Road
Mississauga, Ontario
L4W 1P2

Dear Sir:

RE: Geological Survey submitted on Mining Claims
P 529005 et al in the Township of Deloro.

Returned herein are the plans (in duplicate) for the
above mentioned survey. Please have the author of the
report sign each copy and return the material to this
office quoting File 2.6755.

For further information, please contact Mr. Ray Pichette
at (416)965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416)965-6918

D. Kinvig:sc

Encl:

cc: Mining REcorder
Timmins, Ontario
File: 185/84

1984 05 24

Your File: 184 & 185
Our File: 2.6755

Mr. Bruce W. Hanley
Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

We have received reports and maps for a Geological Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims P 529005 et al in the Township of Deloro.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-6918

A. Barr:mc

cc: Bruno Vatri
Unit 16
5500 Tomken Road
Mississauga, Ontario
L4W 1P2

cc: G.M. Thomas
33 Young Road
Kanata, Ontario
K2L 1V9

C. VON HESSERT & ASSOCIATES LTD.
SUITE 306 - 45 RICHMOND STREET WEST
TORONTO, ONTARIO M5H 1Z2

(416) 863-6796

May 16 1984

F. W. Mathews
Room 6450
Whitney Block
Queen's Park
Toronto, Ontario
M7A 1W3

Dear Mr. Mathews

Enclosed are two copies of technical data covering Report of Work forms that were submitted in early May of this year. As mentioned in a letter to you at that time, I believe that you may already have this information on file.

If there should be any problems with this submission please notify me at the above address.

Sincerely, yours



Richard Sproule
Geologist
C. von Hessert & Associates Ltd

cc: B Vatri
5500 Tomken Rd.
Mississauga, Ont.

Enclosures

RECEIVED

May 16 1984

MINING LANDS SECTION

600wN

T.L. 500wN

400wN

300wN

200wN

100wN

B.L. 1/4

100wS

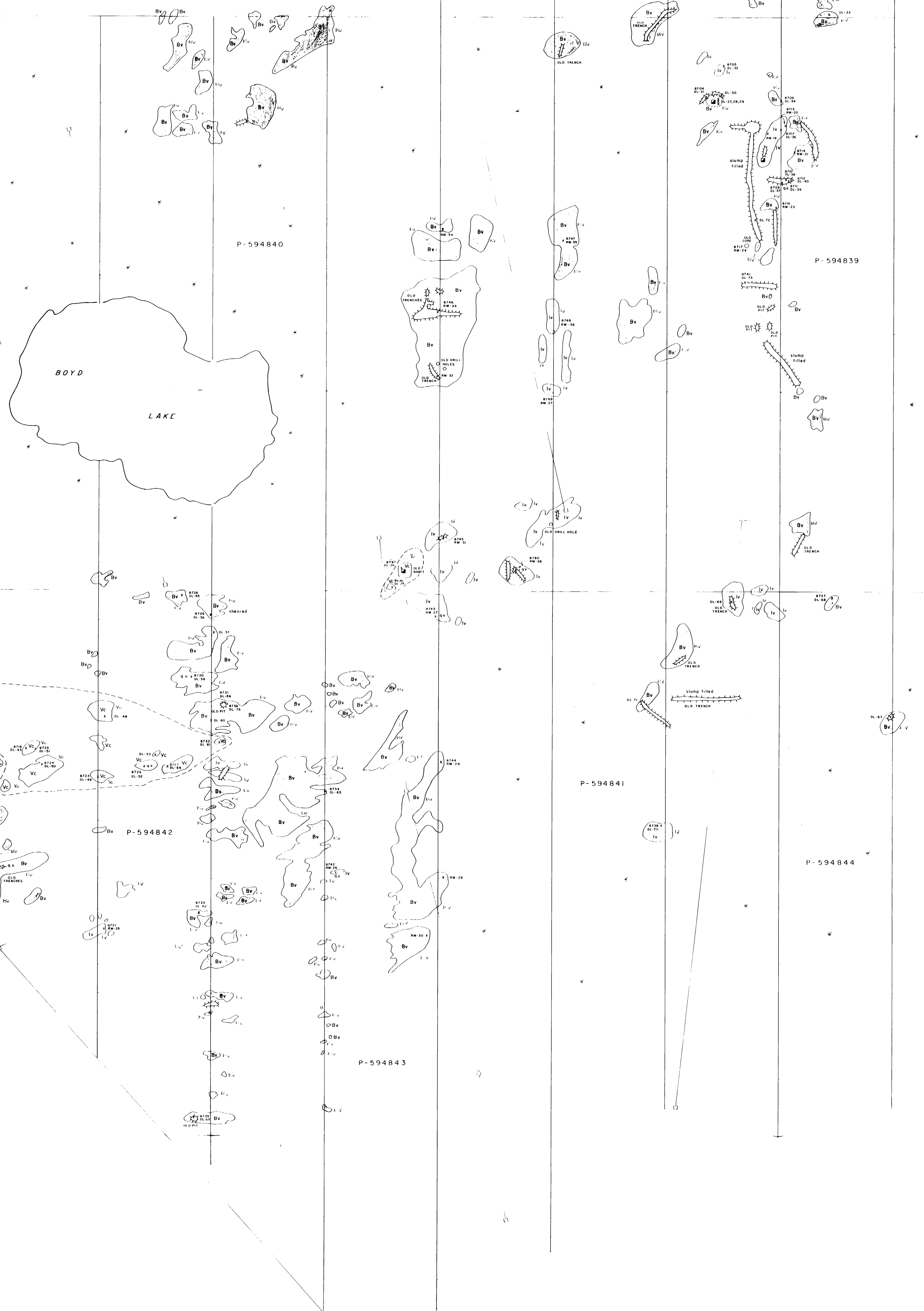
200wS

300wS

400wS

500wS

600wS



LEGEND

QUATERNARY
PLEISTOCENE AND RECENT
 MORaine

PRECAMBRIAN
KEEWATIN
 Vc RUSTY WEATHERING CARBONATE DERIVED FROM KEEWATIN LAVAS
 Vb VOLCANIC BRILLCIA AND PYROCLASTICS
 Iv INTERMEDIATE VOLCANIC
 Bv BASIC VOLCANIC

SYMBOLS

SWAMP, MUSKIEG
 SHAFT
 TRENCH
 PIT
 TAILINGS
 HULK SAMPLE NUMBER
 SAMPLE ASSAY NUMBER
 OUTCROP
 GEOLOGICAL BOUNDARY
 QUARTZ VEIN

1000mE

1100mE

600mN

500mN

400mN

300mN

200mN

100mN

BASE LINE

100mS

200mS

slump filled
OLD TRENCH

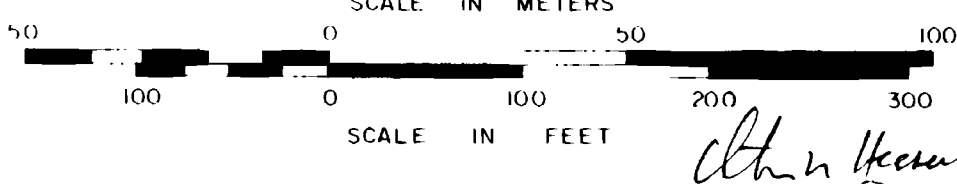
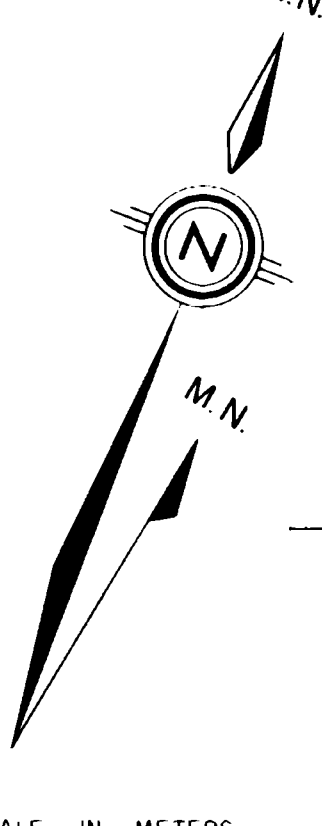
300mS

400mS

500mS

600mS

Bv



*John W. Hebert
for G.M. Thomas*

VATCO EXPLORATION INCORPORATED

VATRI PROJECT - DELWOOD PROPERTY

DELORO TOWNSHIP, ONTARIO
PORCUPINE MINING DIVISION

GEOLOGY

WORK CARRIED OUT BY MCGILL EXPLORATION LIMITED

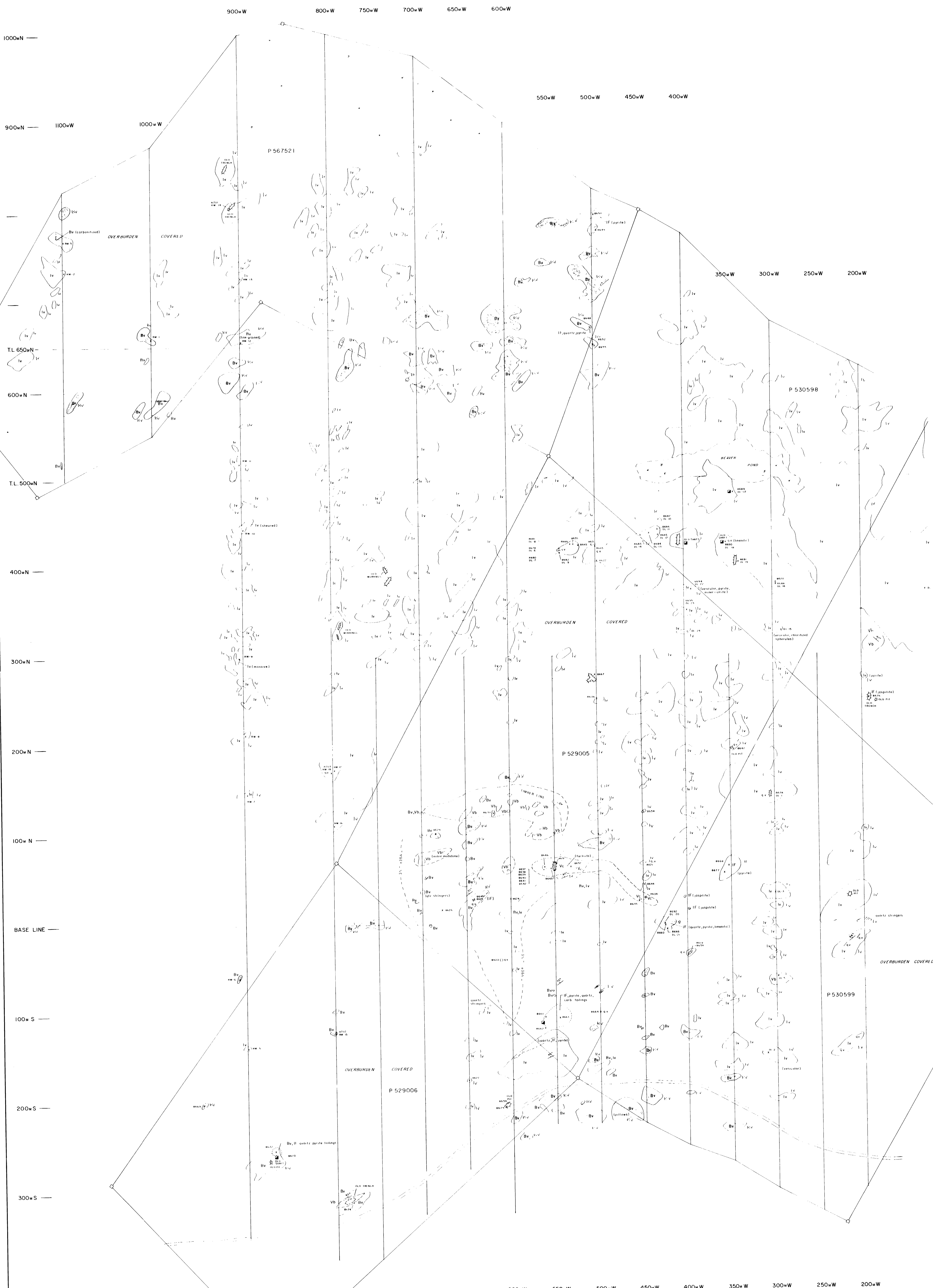
SCALE = 1:1250

DRAFTED BY - gmes

CHECKED BY - G.M. THOMAS

MAP NO 4

2.6/55



LEGEND

- QUATERNARY**
 PREISTOICEN AND RECENT
 MURKINE
- PRECAMBRIAN**
 KEEWATIN
 If IF
 Vc Vc
 Vd Vd
 Vf Vf
 Vg Vg
 Vh Vh
 Vi Vi
 Vj Vj
 Vk Vk
 Vl Vl
 Vm Vm
 Vn Vn
 Vo Vo
 Vp Vp
 Vq Vq
 Vr Vr
 Vs Vs
 Vt Vt
 Vu Vu
 Vv Vv
 Vw Vw
 Vx Vx
 Vy Vy
 Vz Vz
- hardly silicious thin formation
 MUSTY WEATHER CARBONATE DELIVERED FROM KEEWATIN VOLCANICS
 FRAGMENTAL LAVA, BRECCIA AND PYRCLASTICS
 INTERMEDIATE LAVA INCLUDING TUFF
 BASIC LAVA, IN PART FLOWS, FLOW LAVA, MURK BRECCIA (IN PART FLOWING FLOWS)

SYMBOLS

- [Symbol] SWAMP, MUSKEG
- [Symbol] ROAD
- [Symbol] SHAFT
- [Symbol] TRENCH
- [Symbol] PIT
- [Symbol] FILLING
- [Symbol] ROCK SAMPLE NUMBER
- [Symbol] SAMPLE ASSAY NUMBER
- [Symbol] OUTCROP
- [Symbol] GEOLOGICAL BOUNDARY
- [Symbol] STRIKE AND DIP OF BEDDING
- [Symbol] QUARTZ VEIN

