2.3401

42A06NE1306 2.3401 SHAW

Ø1Ø

RECEIVED

AUG - 1 1980

MINING LANDS SECTION

VLF EM AND MAGNETIC SURVEY OF BROWN McDADE OPTION AND ROSARIO CLAIMS SHAW TWP. PORCUPINE MINING DIVISION

by

R. Middleton and R. Markov
Rosario Resources Canada Ltd.
1407 - 7 King St. E.
TORONTO, Ontario

June, 1980

INTRODUCTION

A detailed VLF EM and magnetometer survey was carried out in June, 1980 in order to trace stratigraphy which may be favourable for gold mineralization. The shallow overburden in the area allowed for utilization of the VLF EM technique.

Location

The 34 claim property is situated 1 mile southeast of Goose Lake in lots 5 and 6 of Shaw Twp. (refer to 1" to ½ mi. location may in the appendix). The property is accessible by road and trail from the west end.

The property is reached by taking the road known locally as Springs Road going south from South Porcupine towards the Langmuir mine (for approximately 3 mi.). The road and trail leading to the west end of the property branches eastwards from the Springs Road about 1/8 - ¼ mile south of the pump house for the Tisdale water supply.

Property

The property consists of two groups of claims referred to as the Brown McDade option and the Rosario claims mainly in Shaw township.

The Brown McDade option consists of 12 contiguous and unpatented claims acquired under option agreement in March, 1980. The claims are located on the western half of the property and are listed as follows:

> P. 500904 to P. 500911 inclusive; P. 500913 - P. 500915 inclusive and P. 500971.

The Rosario claims consist of 21 contiguous and unpatented claims acquired by staking and are located in the eastern half of the property. These claims include P. 528600 to P. 528609, P. 539931, and P. 528853 to P. 528862.

One claim, P. 522258 (a Rosario claim) was also surveyed. It is located in Whitney township south of Goose Creek.

Previous Work

Work was done on selected parts of the property by several individuals and companies. There has been to date no detailed geological or geophysical survey of this claim group. O.G.S. published Annual Reports by A.G. Burrows, vol. 24, part 3 in 1915 with maps 24 D and E, 1" = 2,000' covering the property as well as the Porcupine gold area, followed by A.R. vol. 33, part 2, and accompanying map 33 A, 1" to 2,000' in 1924. In 1939 M.E. Hurst published a map, 1" to 2,000' of the Porcupine area O.G.S. map 47 A. O.G.S. has also released an open file report 5012, by H.D. Carlson, Geology of Ogden, Deloro and Shaw townships in 1967 with accompanying preliminary map P-343.

From a brief report by D.K. Burke (1938)[1], Erie Canadian Mines Ltd. did some "trenching and test pitting of the heavily mineralized iron formation" (believed to be near the common boundary between present claims P. 500909 and P. 500913). He also made note of a "carbonated greenstone cut by a stockwork of quartz streaks and stringers showing some mineralization" (possibly located in the NE corner of P. 500915 or SE corner of P. 500914). The trench and pit locations are sketched on 1" to 50' maps with some geology, and the area is referred to as the Wilson Property. Two grab samples were assayed yielding trace values in gold. The same group of claims were later held under patent by Ester Porcupine Mines Ltd.[2], in 1945. A brief report by P.H. Bromley indicated that grab samples from two pits (in the vicinity of P. 500913 and P. 500909) "were reported to have assayed up to $17.00 per ton" gold from "two parallel pyritized carbonate zones." The report states that "sampling has proven that gold bearing solutions have been active" however no assay values were included in the report.

In 1945 Conwest Exploration Company Ltd.[2] drilled three diamond drill holes with a total footage of 2,175 ft. in the north half of lots 3 and 4, concession 6 and H.L. Garvie logged the core. Seven samples of core were assayed for

---

1 Timmins File T-199
2 Timmins File T-433

gold. A 2.5 ft. sample assayed at 0.005 oz./ton "in a slightly sheared and silicified porphyry with scant pyrite" at 585.5 in drill hole 2; other samples yielded nil values.

Trend Exploration and Development Ltd.[3] contracted Geo-Technical Development Co. Ltd. to conduct a ground magnetometer survey using a Sharpe A-2 magnetometer. The survey area is mainly to the south and east of the present survey area and so only covers present claim P. 528862. S.S. Szetu presented the data in 1" to 200' maps with accompanying geological interpretation.

In 1964 James H. Dillon[4] (also known as Dillon-Young Claims or Round Lake Mines) contracted Bradley Brothers Ltd. to drill two diamond drill holes near pits in the vicinity of present claims P. 500909 and P. 500913. The results were logged by R.M. Williams. Only information on D.D.H. #2 was available from the Timmins assessment files. In 1967, in the vicinity of P. 500910, Baderski and Sons Ltd., drilled a 554' diamond drill hole. A.J. O'Donnell logged the core; he made note of "carbonated grey green andesite with stringers and disseminated pyrite and pyrrhotite at irregular angles to core", "slight shearing" and mentioned that two samples of this core would be submitted for gold and silver assay (one of these from a 31' "banded silicious irong formation with occasional irregular stringers of pyrite and pyrrhotite"). No results of the assays were included in the report. He also made note of "minor carbonate ankerite" at the bottom of the iron formation. In 1968 J.H. Dillon contracted John Gaze to drill 5 winkie holes for a total of 550' drilling, all holes in what is believed to be present claim P. 500909 (NW corner). In the drill logs Gaze noted carbonated andesites with quartz stringers, quartz veining and occasionally "some slight mineralization". Three core samples over a total length of 2.5' were assayed for Au with Nil results. In 1969 Dillon had trenching work done in the SE corner of P. 500910 area. He later contracted John Gaze to drill 8 winkie holes, totalling 880' in what appears to be the south boundary area of present claim P. 500915. The holes were mainly in andesite with one intersecting

---

3 Timmins File T-715
4 Timmins File T-518

diabase. He reported some quartz stringers, minor amounts of pyrite and mainly narrow widths of bleached andesite (core samples filed in the Regional Core Library).

Hollinger Mines Ltd.[5] conducted a magnetometer survey in 1971 using an ABEM MZ-4 torsion wire magnetometer on lots 3 and 4, concession 6.

SURVEY PROCEDURE AND INSTRUMENTATION

Magnetics

A Barringer GM 122 and a McPhar GP70 proton magnetometer were used to measure total field magnetics at 100' stations (with 50' and occasionally 25' readings when necessary for detailing). The instrument specification sheets are in the appendix. The magnetic data is plotted on a 1" to 200' map for the Brown McDade Option (west sheet) and a separate map for the Rosario claims (east sheet). The data has been contoured at 20 γ intervals where possible in lower gradient areas. The contoured data is shown on separate maps entitled, Total Field Magnetics (all four magnetics maps are in the back of the report).

Due to severe and unpredictable magnetic storm conditions a magnetic field monitoring procedure had to be improvised and implemented. The Barringer magnetometer was used to monitor the magnetic field at 13E/TL 26S (main base station value at 58890 γ) with 12E (58877 γ) read by the McPhar magnetometer (values established by repeatability with Barringer magnetometer) so that a difference factor (a constant) for the instruments could be calculated. The McPhar instrument was then used to establish other base stations along TL 26S, TL 62S and BLO on the grid with the Barringer instrument simultaneously monitoring the field at 3 minutes to 1 minute intervals as dictated by the activity of the field. The repeatability of values at reliable (low gradient stations) averaged $\pm 1 - 2\ \gamma$. The monitoring procedure was similarly implemented at other established reliable base stations on the tie line when required.

---

5 Timmins File T-472

VLF EM

A Geonics VLF EM 16 was used in the survey to measure the percent Inphase and out of phase components of the secondary field radiating from conductors energized by primary fields from a radio wave transmitting station. Cutler Maine, NAA, transmitting at 17.8 KHZ , was the station selected for the survey as it had the best coupling angle to stratigraphic conductors in the area, that is 111^{O} Azimuth station direction and a strike of stratigraphy roughly 130^{O}.

Readings were taken at 100' stations with occasional detailing at 50' stations for narrow conductors. In the survey an attempt was made to locate the exact position of cross over points. The data is presented on maps (1" = 200') for each claim group, including VLF EM Profiles at 1" to 40%, VLF EM Data and Filtered VLF EM Data (Fraser 1969) contoured at 20% contours (these are located in the back of the report).

Statistics and Dates of Survey

A grid totalling 31 miles of line was cut on the property at predominantly 400' centres. The base line, 0, originated at the Whitney-Shaw township line near the intersection of the old hydroline and roughly paralled this ole line at 129^{O} Az. Detailing lines at 200' centres were cut west of L 4W near the township line.

Line 12E was used as transit line to cut tie lines 26S and 62S, as L 20E and L 16E were flooded out. Line 20E south of TL 26 was flooded to 58S.

The west part of the property was surveyed June 1 to June 6, 1980 and the east part (and P. 522258) was surveyed June 7 to June 22, 1980. The VLF EM was operated by T. Dubanow, C. Galinski and R.A. Markov; 1,603 readings were taken. The magnetometer was operated by S. Hurdle, C. Galinski, J. Webster and R.A. Markov; 1,664 readings were taken. A rough base map was prepared by R.A. Markov. Drafting of data, contouring, and final inking of maps was done by summer students S. Hurdle, J. Webster, T. Dubanow and C. Galinski, June 23 to July 7, 1980.

GEOLOGY

Stratigraphic units that occur on the property are described in Field Trip Stop 1, p. 164 in the Toronto '78 Field Guide, Pyke et al (1978).

The claims are underlain by calc alkali andesites (Deloro Group), primarily outcropping on the Brown McDade part of the area which inturn are overlain by and intermixed with oxide (hematite-magnetite chert jasper) iron formation. All of the volcanics and iron formation dip at 10^{o} - 40^{o} northeast. On the southern part of the Brown McDade claims, several outcrops of peridotite (intrusive sill?) can be seen which may be part of a sill that occurs stratigraphically above the oxide iron formation on the west boundary of claim P. 500906 but appears to be below another oxide horizon to the northeast.

The central part of the properties mainly underlain by quartz eye porphyry which is for the most part a volcanic tuff with high level fine grained felsic intrusive phases in the Mt. Logano area. Fragments of carbonate and fuchite have been noted in the porphyry and these fragments are stretched into the shallow dipping stratigraphy - schistosity. A sulphide chert horizon with an overlying and possibly underlying carbonate zone occurs stratigraphically at the base of the quartz eye porphyry (parallel to and northeast of VLF EM conductor I). The northern part of the Rosario claims are underlain by tholeiite - komatiite lavas that have a higher magnetic susceptibility than quartz eye porphyry.

A major ENE diabase dike in excess of 500 feet wide cuts all rocks and strikes across the entire property. This dike has pinkish-hematized "granophyric" phases and gabbroic phases and has a high magnetic susceptibility.

INTERPRETATION

Brown McDade Option

Magnetics

The Total Field Magnetics Map shows zones of uniform magnetics in lower gradient areas that have been contoured at 20 γ intervals. There are several magnetically higher gradient zones, contoured at 100 γ to 500 γ intervals that parallel or cross cut stratigraphy.

The lower gradient magnetic area in the west part of P. 500971 and P. 500913 appears to be associated with a quartz eye porphyry. To the south magnetic highs to 64,000 gammas at 38S to 40S on the grid may be delineating a north-west trending oxide iron formation. This iron formation may be facies changing to the east as this would explain the gradual change in character of the magnetics. South of this area at L 20E/65S centered in P. 500908 magnetic highs in the order of 63,000 gammas appear to correspond to a peridotite (intrusion). At L 12E/70S a slightly lower magnetic area (in contrast with the peridotite) having a NW trend appears to correspond with a thin cherty iron formation within andesitic lava flows.

A N 70^{O}E trending diabase dike (see L 32E/21S to L 36E/14S) is characterized by magnetically high centres. This dike continues to cross cut stratigraphy southwestward across P. 500905 and may be one of the ENE dikes typical of the Timmins area and the western Abitibi greenstone belt.

A north - south trending fault characterized by magnetically low alignment cuts through the centre of P. 500971 and P. 500913. This fault is part of a major lineament which continues northward to cross the township line between Whitney and Shaw at about 2E. This fault is known to continue across Whitney township.

VLF EM Interpretation

The VLF EM Profiles at 1" to 40% on the west sheet were used mainly in the interpretation. The conductors were labelled on the map by letter for reference.

Conductor A (L 18W/57S to 12W/6050S) is weak and associated with a magnetic low. It is near a known northwest trending lineament, however the VLF response is typical of a clay edge or bedrock ridge effect.

Conductor B (L0E/5980S to L 8E/6250S) is weak and adjacent to a magnetic high and may possibly be due to a northwest trending fault cutting the ENE diabase dike.

A cherty banded iron formation is in outcrop 200' south of conductor C (L 12E/68S to L 16E/6975S) which in turn is associated with a magnetically lower zone south of the peridotite such that conductor C may be the hanging wall expression of this siliceous phase of the iron formation and may therefore be real. This conductor increases in strength eastwards as seen on line 16E.

Conductor D (L 16E/63S to L 24E/64S) is a weak conductor adjacent to a magnetic high. This may be an expression of the north edge contact of the perilotite or possibly a continuation of conductor B shear zone or topographic effect due to erosion of a fault.

The one line conductor E (L 24E/13 + 50S) is in a slightly higher magnetic area. It may represent an edge of a NS trending diabase dike or a topographic effect between outcrop ridges.

The following conductors are in Rosario held claims shown on the Brown McDade Option sheet (west sheet). Conductor F (L 12E/2 + 30N to L 20E) flanks the south edge of a magnetic high. The inphase and out of phase response levels out past the cross over, a response that is typical of deeper overburden. The conductor may be a clay edge, but from the magnetic characteristics the conductor may represent a contact zone showing the north margin of the "porphyry" adjacent to mafic lavas. Conductor G (L 6W to 2W/0) is a sharp conductor (narrow) showing a response typical of a stronger conductor and has no obvious magnetic correlation. This could be caused by grounded (old power line) wire or it could be real. Conductor H (L 10W/4 + 50N to 6W/4+ 50N) is a weaker conductor than G, but it also has a quadrature response characteristic of a real conductor on line 8W. This conductor flanks a magnetic high. H may be a clay edge or a real conductor adjacent to deepening overburden.

Conductor I (L 12E/32S to 40E/33S) is a conductor that traverses both Brown McDade claims and Rosario claims to the east (to L 72E/29 + 25S). It has magnetic highs and lows associated with it possibly due to dipole effect. This conductor is probably real and may be associated with the NW trending iron formation. It is uncertain at this time whether the response is the expression of the hanging wall oxide iron formation, footwall of the sulphide iron formation or the graphitic zone associated with the top of the iron formation. Alternatively this conductor could be a structure crosscutting the iron formation at an acute angle. The conductor strength is variable; it seems to be stronger on L 12E, L 36E and L 44E with a general increase in strength to the east. The higher positive inphase response is not typical of a conductor dipping shallow to the north. This could be due to higher magnetic permeability (magnetite) in the conductor.

Rosario Claims

Magnetics

Total Field Magnetics are presented in the back of the report on the east sheet for the Rosario claims.

The oxide iron formation (mentioned in Brown McDade Magnetics Section) at about 29S to 32S continues south eastwards (also traced by conductor "I" in the VLF interpretation). At L 48E to L 52E on this same horizon a magnetically higher zone may be delineating a facies change to a pyrrhotite rich phase of the iron formation. The lower magnetics eastwards may be due to a facies change to a pyrite rich phase of a sulphide iron formation. Alternatively the magnetics could be delineating a break cross cutting stratigraphy at an acute angle. The directional bias of the survey would not show offsets generally characteristic of such lineaments.

To the north, Mt. Logano, a quartz eye "porphyritic" body, as mentioned previously is seen as a magnetically low gradient zone in P. 528603, P. 528607, P. 528855, and P. 528859. Southeastwards on P. 528862, P. 528857 and P. 528856, a magnetically high area, the contact of which is roughly outlined by the 59300 gamma contour may be associated with an area of mafic flows (iron thoeliite or komatiitic lavas) or a gabbroic intrusive.

The magnetically active area within claims P. 528600, P. 528605, P. 528853, and P. 528858 is probably associated with more mafic lavas, tholeiitic and komatiitic in composition.

The diabase dike mentioned previously continues northeastwards to crosscut the stratigraphy across P. 528602, P. 528606, P. 528854 and P. 528858.

The grid line direction and spacing has created a directional bias to the northwest that is visible in the contoured total field magnetics maps.

VLF EM

The VLF EM Profiles (east sheet) contain the majority of the Rosario claims.

Conductor I, discussed previously, is increasing in strength eastwards and from the magnetic response could be facies changing (see magnetic interpretation). J (L 44E/43S to 52E/40S) is probably real and may be the hanging wall of an oxide iron formation. An iron formation was noted during the survey to be on strike at about L 54E/42S. Conductor K (L 44E/37 + 50S) is a one line, sharp, narrow, weaker conductor that is real. This is probably the response of the banded oxide iron formation visible on the outcrop to the south of the cross over, so the VLF may be seeing the north contact of this conductor.

Conductor L is poor (L 36E/7S to 40E/6 + 50S) and may be a fault offset diabase dike, or topographic effect. One line conductor M (L 60E/8S) is weak and probably due to topographic effect. Curved conductor N (L 44E/1 + 50N to 64E/0 + 50S) has no magnetic association and appears to encircle Mount Logano and is probably due to a bedrock ridge effect. Conductor 0 (L 52E/32N) is a one line conductor probably outlining the edge of the diabase dike.

Conductor P (L 36E/19N to 40E/18 + 50N) is a slightly stronger conductor with an associated magnetic high. This could be a real conductor on the contact between porphyry and mafic lavas. Conductor S (L 64E/1S to 76E/0) is on the edge of a magnetic high, and has a quadrature response. This could be a real conductor or power line effect. Conductor T (L 72E/19S to 80E/15S) could be real, it is on the south edge of a magnetic high, although the north edge of the conductor response is typical of deeper overburden.

Conductors Q (L 40/1350N) and R (L 44E/1N) both flank magnetic highs in the vicinity of the diabase dike and so may be seeing the dike contacts.

CONCLUSIONS

Brown McDade Option

Conductor I and an adjacent sulphide chert horizon should be investigated for gold mineralization by drilling a number of vertical diamond drill holes centred down dip from the conductor axis. Areas previously tested by other companies appear to be east of the conductor axis, therefore conductor I itself has not been property investigated. The holes should be drilled to sufficient depth to test carbonate horizons possibly above and below the chert horizon therefore the initial hole should be drilled to intersect the lower oxide iron formation horizon.

Rosario Claims

Conductor I on Rosario claims should also be drilled as well as F, P (on line 40E) and T. Care should be taken in checking for repeated horizons due to folding and the detailed geological mapping now underway will be helpful in sorting out this problem.

Respectfully submitted,

R.S. Middleton
Exploration Manager

R.A. Markov
Project Geologist

RSM-RAM/lyd

References

BURROWS, A.G., The Porcupine Gold Area, Ontario Bureau of Mines Annual Report, 1915, Volume 24, part 3, P. 1-57, colour map 24D.

BURROWS, A.G., The Porcupine Gold Area, Ontario Department of Mines Annual Report, 1924, volume 33, part 2, P. 1-84, colour map 33A.

CARLSON, H.D., Geology of Ogden, Deloro and Shaw Townships, District of Cochrane, Ontario, Ontario Department of Mines, Open File Report No. 5012, 1967, Map P. 00343.

HURST, M.E., Porcupine Area, District of Cochrane, Ontario, Ontario Department of Mines, colour map 47A, 1939, 1" to 1,000'.

FRASER, D.C., Contouring of VLF EM Data, Geophysics, 1969, Volume 34, No. 6, P. 958-967.

PYKE, D.R.,
MACVEIGH, J.G.,
MIDDLETON, R.S.,
Volcanic Stratigraphy and Geochemistry in the Timmins Mining Area, Toronto '78 Field Trip Guidebook.

File 23401

Ontario

42A06NE1306 2.3401 SHAW

900

RECEIVED

AUG - 4 1980

MINING LANDS SECTION

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) VLF EM + Magnetometer

Township or Area Shaw

Claim Holder(s) Rosario Resources Canada
1407 - 7 King St. E. Toronto

Survey Company Rosario

Author of Report R. Middleton + R. Markov

Address of Author Box 1367 Timmins

Covering Dates of Survey June 1 - July 21 /80 (linecutting to office)

Total Miles of Line Cut 31

MINING CLAIMS TRAVERSED
List numerically

See attached list
(prefix) (number)

If space insufficient, attach list

TOTAL CLAIMS 33

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	20
—Radiometric	
—Other	
Geological	
Geochemical	

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

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

DATE: July 15/80 SIGNATURE: R Middleton
Author of Report or Agent

Res. Geol. ____ Qualifications 2.706

Previous Surveys

File No.	Type	Date	Claim Holder
			L.D.

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations MAG 1664 Number of Readings MAG 1664 1603 VLF

Station interval 50' + 100' Line spacing 200' + 400'

Profile scale 1" = 40% VLF

Contour interval 20 gammas (magnetometer), 20 units Fraser Filter

MAGNETIC

Instrument Barringer GM122

Accuracy – Scale constant 1 γ

Diurnal correction method Base station magnetometer 2 minute readings

Base Station check-in interval (hours) 1 hour

Base Station location and value On TL26S at cross lines

ELECTROMAGNETIC

Instrument EM 16

Coil configuration N/A

Coil separation N/A

Accuracy 1%

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

Frequency 17.8 KHz NAA (specify V.L.F. station)

Parameters measured In phase - out of phase

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

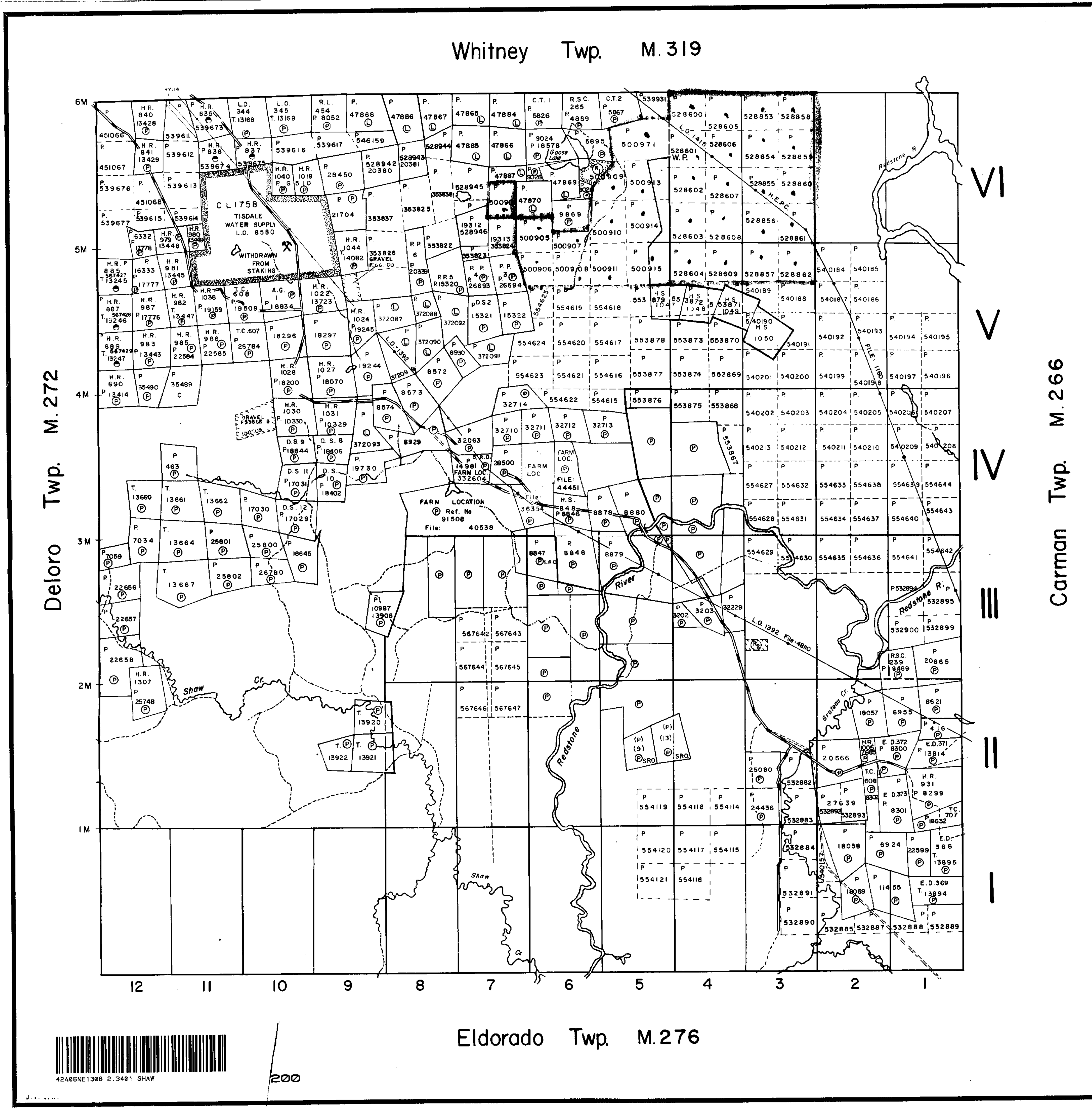
Electrode array

Electrode spacing

Type of electrode

SHAW TWP. GROUND MAGNETICS

Claim No.	Days Credit	Claim No.	Days Credit
P. 500904	20 days	P. 528855	20 days
P. 500905	20 days	P. 528856	20 days
P. 500906	20 days	P. 528857	20 days
P. 500907	20 days	P. 528858	20 days
P. 500908	20 days	P. 528859	20 days
P. 500909	20 days	P. 528860	20 days
P. 500910	20 days	P. 528861	20 days
P. 500911	20 days	P. 528862	20 days
P. 500913	20 days	P. 539931	20 days
P. 500914	20 days		
P. 500915	20 days		
P. 500971	20 days		
P. 528600	20 days		
P. 528601	20 days		
P. 528602	20 days		
P. 528603	20 days		
P. 528604	20 days		
P. 528605	20 days		
P. 528606	20 days		
P. 528607	20 days		
P. 528608	20 days		
P. 528609	20 days		
P. 528853	20 days		
P. 528854	20 days		



THE TOWNSHIP OF SHAW

2.3401

DISTRICT OF COCHRANE

PORCUPINE MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

PATENTED LAND	P
CROWN LAND SALE	C.S.
LEASES	L
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C.
PATENTED S.R.O.	

NOTES

400' Surface Rights Reservation along the shores of all lakes and rivers.

Unpatented Mining Claims in the Subdivided Portion of Shaw TP. are subject to Section 118 of the Mining Act M. of N. R. File No. 83.5

This Township lies within the Municipality of CITY of TIMMINS.

RESERVATIONS:

R1 – Reserved for recreational purposes under Sec. 3 P.L.A. File 188543

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

	File	Date	Disposition
R2 – W.97/77	86555	15/12/77	S.R.O.

DATE OF ISSUE
AUG 11 1980
SURVEYS AND MAPPING BRANCH

PLAN NO.- M.311

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

LEGEND:

Claim Line

Creek

Road

Power Line

Ⓟ Patented Land

Ⓛ Leases

LEGEND

in phase, quadrature

210

WHITNEY
SHAW
P.47865
P.47884
CT 1
P.5826
R.S.C
P.4889
C.T. 2
P.5867
P.47885
P.47866
P.9024
P.18578
GOOSE LAKE
P.5895
P.500971
P.47887
P.9026
P.47869
P.500909
P.528945
P.500904
P.47870
P.9026
P.9869
P.500910
P.
19312
528946
P.
19313
353824
P.500905
P.500907
P.353823
P.500911
P.P.3
26694
P.P.4
26693
P.500906
P.500908
P.554618
P.15322
P.15321
L0
L4E
L8E
L12E
L16E
L20E
L24E
L28E
L32E
L36E
L40E
L44E
L4W
L8W
L12W
L14W
L16W
L18W
L10W
L6W
L2W
TL62S
BL 0
7
6
5
LEGEND:
Claim Line
Creek
Road
Power Line
Patented Land
Leases
IRON BAR
LEGEND
in phase, quadrature

† Fraser, D.C., Contouring of VLF-EM Data, Geophysics, Vol. 34, No. 6 (Dec. 1969) pp. 958-967.


WHITNEY
SHAW
CT 1
R.S.C
C.T. 2
P.47865
P.47884
P.5826
P.4889
P.5867
P.539931
P.47885
P.47866
P.9024
P.18578
GOOSE LAKE
P.5895
P.500971
P.47887
P.9026
P.47869
P.500909
P.500913
P.528945
P.500904
P.47870
P.9026
P.9869
P.500910
P.500914
P. 19312 528946
P. 19313 353824
P.500905
P.500907
P.353823
P.500911
P.500915
P.P.3 26694
P.500906
P.500908
P.P.4 26693
P.554618
P.553879
P.15322
P.15321
L0
L4E
L8E
L12E
L16E
L20E
L24E
L28E
L32E
L36E
L40E
L44E
L4W
L8W
L12W
L14W
L16W
L18W
L10W
L6W
L2W
L2E
L28W
7
6
5
N
Cutler, Maine
LEGEND:
Claim Line
Creek
Road
Power Line
Patented Land
Leases
IRON BAR
LEGEND
20% contour line
60% contour line
† Fraser, D.C., Contouring of VLF-EM Data, Geophysics, Vol. 34, No. 6 (Dec., 1969) pp. 958 - 967.
ROS
FIL
OPER.
SCALE
DRAWN BY

L28W
L20W
L16W
L12W
L8W
L4W
L0
L4E
L8E
L12E
L8E
L12E
L16E
L20E
L24E
L28E
L32E
L36E
L40E
L44E
L48E
L52E
WHITNEY
SHAW
F
P
O
Q
R
L
N
S
M
I
K
J
T
L52E
L56E
L60E
L64E
L68E
L72E
L76E
L80E
L84E
BL 129°
4
3
LEGEND:
Claim Line
Creek
Road
Power Line
Patented Land
Leases
LEGEND
+40%
0
-40%
quadrature
in phase
conductor axis
N


WHITNEY
SHAW
C.T.1
P.5826
R.S.C
P.4889
C.T.2
P.5867
P.47865
P.47884
P.47885
P.47866
P.9024
P.18578
GOOSE LAKE
P.5895
P.47887
P.9026
P.47869
P.528945
P.500904
P.47870
P.500909
P.500913
P.500971
P.539931
P.9869
P.500910
P.500914
P. 19312 528946
P. 19313 353824
P.500905
P.500907
P.353823
P.500911
P.500915
P.P.3 26694
P.P.4 26693
P.500906
P.500908
P.554618
P.553879
P.15322
P.15321
A
B
C
D
E
G
H
I
7
6
5
LEGEND:
Claim Line
Creek
Road
Power Line
Patented Land
Leases
IRON BAR
LEGEND
quadrature
in phase
conductor axis
N
Cutler Maine
ROS
VL
OPER.
SCALE
DRAWN

L28W
L20W
L16W
L12W
L8W
L4W
L0
L4E
L8E
L12E
L8E
L12E
L16E
L20E
L24E
L28E
L32E
L36E
L40E
L44E
L48E
L52E
WHITNEY
SHAW
L52E
L56E
L60E
L64E
L68E
L72E
L76E
L80E
L84E
BL 129°
4
3
LEGEND:
Claim Line
Creek
Road
Power Line
Patented Land
Leases
ROS
OPER.
SCALE
DRAWN B

WHITNEY
SHAW
C.T.1
R.S.C
C.T.2
P.47865
P.47884
P.5826
P.4889
P.5867
P.539931
P.47885
P.47866
P.9024
P.18578
GOOSE LAKE
P.5895
P.500971
P.47887
P.9026
P.47869
R1
P.500909
P.500913
P.528945
P.500904
P.47870
P.9026
P.9869
P.500910
P.500914
P.19312
528946
P.19313
353824
P.500905
P.500907
P.353823
P.500911
P.500915
P.P.3
26694
P.500906
P.500908
P.P.4
26693
P.554618
P.553879
P.15322
P.15321
L0
L4E
L8E
L12E
L16E
L20E
L24E
L28E
L32E
L36E
L40E
L44E
L18W
L16W
L14W
L12W
L8W
L4W
TL62S
7
6
5
LEGEND:
Claim Line
Creek
Road
Power Line
Patented Land
Leases
IRON BAR
MAGNETICS BASE STATION

LEGEND:

- Claim Line
- Creek
- Road
- Power Line
- Ⓟ Patented Land
- Ⓛ Leases

LEGEND

20 gamma contour line
100 gamma contour line
500 gamma contour line
1000 gamma contour line
△ magnetics base station

290

WHITNEY
SHAW
C T 1
R.S.C
C.T. 2
P.47865
P.47884
P.5826
P.4889
P.5867
P.539931
P.47885
P.47866
P.9024
P.18578
GOOSE LAKE
P.5895
P.500971
P.47887
P.9026
P.47869
P.500909
P.500913
P.528945
P.500904
P.47870
P.9026
P.9869
P.500910
P.500914
P. 19312 528946
P. 19313 353824
P.500905
P.500907
P.353823
P.500911
P.500915
P.P.3 26694
P.P.4 26693
P.500906
P.500908
P.554618
P.553879
P.15322
P.15321
7
6
5
LEGEND:
Claim Line
Creek
Road
Power Line
Patented Land
Leases
IRON BAR
LEGEND
20 gamma contour line
100 gamma contour line
500 gamma contour line
1000 gamma contour line
magnetics base station

LEGEND:

m Line

k

d

er Line

nted Land

es

R Middleton

ROSARIO RESOURCES CANADA LTD.	
SHAW TWP.	
VLF-EM DATA NAA 17.8 kHz.	
OPER. : T.D., C.H.G., R.A.M.	INST. : Geonics EM16
SCALE : 1" = 200'	DATE : June/1980

DRAWN BY C.H.Galinski, J.L.Webster. East Sheet


ROSARIO RESOURCES CANADA LTD.
SHAW TWP.
Brown McDade Option
VLF-EM DATA
NAA 17.8 kHz.
OPER. T.D., C.H.G., R.A.M.
INST. Geonics EM 16
SCALE 1" = 200'
DATE June/1980
DRAWN BY T.Dubanow
West Sheet
LEGEND
in phase, quadrature
END:
n Line
k
r Line
nted Land
es
AR
Cutler, Maine
N
C.T 1
P.5826
R.S.C
P.4889
C.T. 2
P.5867
P.539931
P.528600
P.528601
P.528602
P.528603
P.528604
P.553872
P.553879
P.554618
P.9024
P.18578
GOOSE LAKE
P.5895
P.500971
P.500909
P.500913
P.9026
P.47869
P.47870
P.9869
P.500910
P.500914
P.500905
P.500907
P.500911
P.500915
P.500906
P.500908
P.522258
L28W
L20W
L10W
L8W
L6W
L4W
L2W
L0
L2E
L4E
L8E
L12E
L16E
L20E
L24E
L28E
L32E
L36E
L40E
L44E
VI
V
6
5
822


L16W
L12W
L8W
L4W
L0
L4E
L8E
L12E
L16E
L20E
L24E
L28E
L32E
L36E
L40E
L44E
L48E
L52E
WHITNEY
SHAW
VI
V
BL 129°
TL 26S
L60E
L64E
L68E
L72E
L76E
L80E
L84E
4
3
N
Cutler, Maine
Pond
GEND:
im Line
eek
ad
wer Line
tented Land
ases
LEGEND
20% contour line
60% contour line
† Fraser, D.C., Contouring of VLF-EM Data, Geophysics, Vol. 34, No. 6 (Dec. 1969) pp. 958-967.
R Middleton
ROSARIO RESOURCES CANADA LTD.
SHAW TWP.
FILTERED† VLF-EM DATA
OPER. : T.D., C.H.G., R.A.M.
INST. : Geonics EM 16
SCALE : 1" = 200'
DATE : June/1980
DRAWN BY : C.H.Galinski
East Sheet


C T 1
P.5826
R.S.C
P.4889
C.T. 2
P.5867
P.539931
P.528600
P.9024
P.18578
GOOSE LAKE
P.5895
P.500971
P.528601
P.9026
P.47869
P.500909
P.500913
P.528602
P.47870
P.9026
P.9869
P.500910
P.500914
P.528603
P.500905
P.500907
P.500911
P.500915
P.528604
P.500906
P.500908
P.554618
P.553879
P.553872
L28W
L 20W
L12E
L16E
L20E
L24E
L28E
L32E
L36E
L40E
L44E
L8E
L4E
L2E
L0
L2W
L4W
L6W
L8W
L10W
BL 0
VI
V
6
5
15322
N
Cutler, Maine
GEND :
aim Line
eek
ad
wer Line
tented Land
ases
BAR
LEGEND
20% contour line
60% contour line
1 Fraser, D.C., Contouring of VLF-EM Data. Geophysics, Vol. 34, No. 6 (Dec. 1969) pp. 958 - 967.
ROSARIO RESOURCES CANADA LTD.
SHAW TWP.
Brown McDade Option
FILTERED' VLF-EM DATA
NAA 17.8 kHz.
OPER. TD, CH.G, RAM
INST. Geonics EM 16
SCALE 1" = 200'
DATE June/1980
DRAWN BY T.Dubanow
West Sheet

ROSARIO RESOURCES CANADA LTD.

SHAW TWP.

VLF-EM PROFILES

NAA 17.8 kHz.

OPER.	T.D., C.H.G., R.A.M.	INST.	Geonics EM 16
SCALE	1" = 200'	DATE	June/1980

DRAWN BY: C.H. Galinski   East Sheet

GEND:
n Line
k
l
er Line
nted Land
es

L10W
L8W
L6W
L4W
L2W
L0
L2E
L4E
L8E
L28W
L20W
H
G
F
E
I
B
C
D
VI
V
C.T.1
P.5826
R.S.C
P.4889
C.T.2
P.5867
P.539931
P.528600
P.528601
P.528602
P.528603
P.528604
P.553872
P.553879
P.554618
P.9024
P.18578
GOOSE LAKE
P.5895
P.500971
P.500909
P.500913
P.500914
P.500915
P.500910
P.500911
P.500907
P.500908
P.500905
P.500906
P.9026
P.47869
P.47870
P.9026
P.9869
L12E
L16E
L20E
L24E
L28E
L32E
L36E
L40E
L44E
L62S
L26S
322
6
5
N
Cutler Maine
GEND:
m Line
ek
d
er Line
nted Land
ses
BAR
LEGEND
+40% 0 -40%
quadrature
in phase
conductor axis
R Middleton
ROSARIO RESOURCES CANADA LTD.
SHAW TWP.
Brown McDade Option
VLF-EM PROFILES
NAA 17.8 kHz.
OPER. T.D., C.H.G., R.A.M.
INST. Geonics EM 16
SCALE 1" = 200'
DATE June/1980
DRAWN BY: C.H.Galinski
West Sheet

END:

n Line

k

er Line

nted Land

es

R Middleton

ROSARIO RESOURCES CANADA LTD.	
SHAW TWP.	
MAGNETICS DATA	
OPER. C.G.S.H, J.W, R.M, T.D, R.S.M	INST. Barringer GM122 Proton Magnetometer
SCALE : 1" = 200'	DATE : June/1980

DRAWN BY S.C.Hurdle East Sheet

EGEND:

aim Line

eek

ad

wer Line

tented Land

ases

N BAR

GNETICS BASE STATION

R Middleton

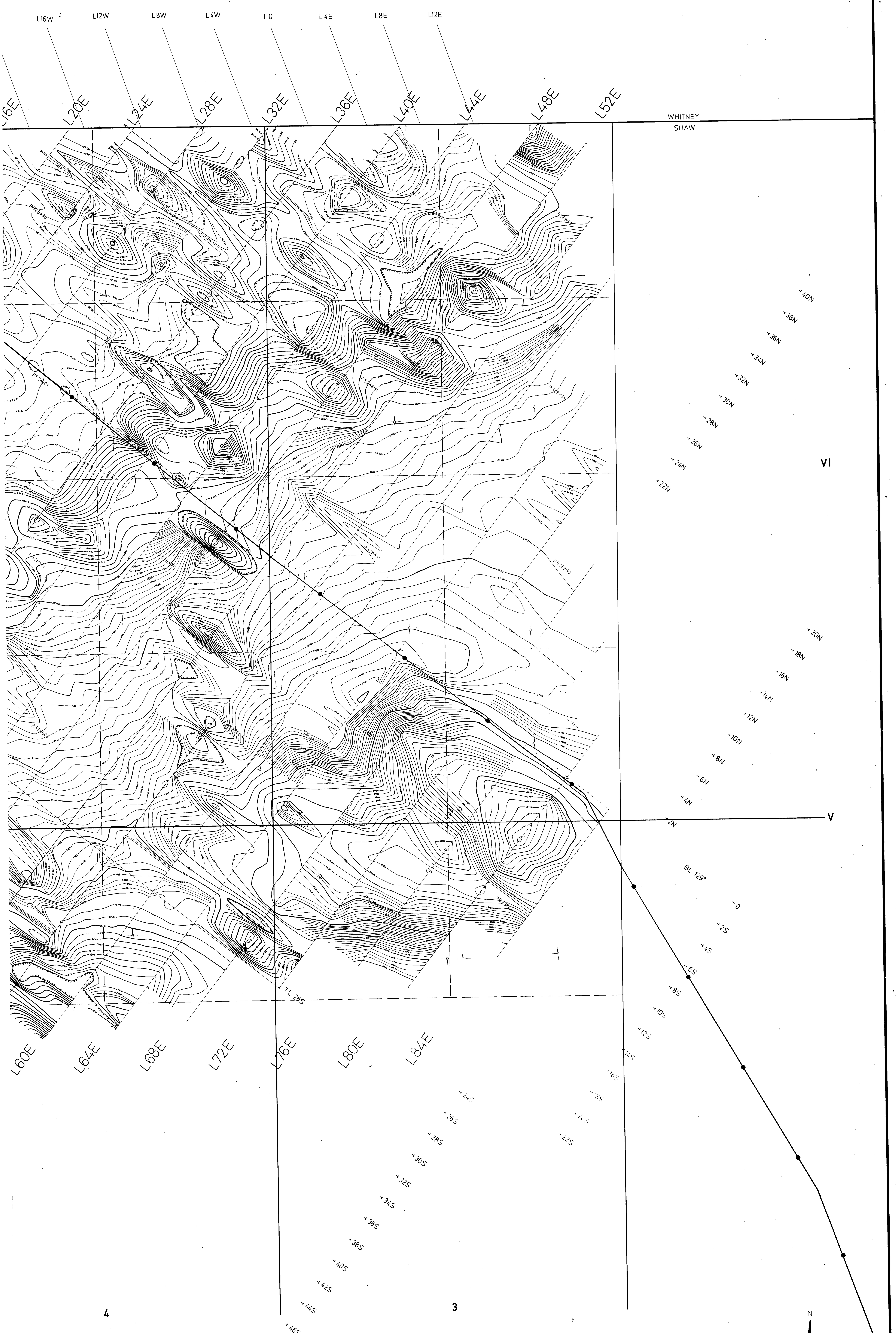
ROSARIO RESOURCES CANADA LTD.

SHAW TWP.
Brown McDade Option

MAGNETICS DATA

OPER.	C.G, SH, J.W, R.M, T.D, R.M	INST.	Barringer GM122 Proton Magnetometer
SCALE	1" = 200'	DATE	June/1980

DRAWN BY: J.L.Webster   West Sheet



N

GEND:

im Line

ek

d

ver Line

ented Land

ses

LEGEND

20 gamma contour line

100 gamma contour line

500 gamma contour line

1000 gamma contour line

△ magnetics base station

R Middleton
R. Markard

ROSARIO RESOURCES CANADA LTD.

SHAW TWP.

TOTAL FIELD MAGNETICS

OPER.	: C.G., S.H., J.W., R.M., T.D., R.M.	INST.	: Barringer GM122 Proton Magnetometer
SCALE :	1" = 200'	DATE :	June/1980

DRAWN BY: S.C. Hurdle, J.L. Webster

East Sheet

ND:

Line

Line

d Land

LEGEND

20 gamma contour line

100 gamma contour line

500 gamma contour line

1000 gamma contour line

△ magnetics base station

R Middleton

ROSARIO RESOURCES CANADA LTD.

SHAW TWP.

Brown McDade Option

TOTAL FIELD MAGNETICS

OPER: C.G.,S.H.,J.W.,R.A.M.,T.D.,R.S.M.	INST: Barringer GM122 Proton Magnetometer
SCALE: 1" = 200'	DATE: JUNE/1980
DRAWN BY: S. Hurdle	WEST SHEET