010

REPORT ON

MAGNETIC SURVEY

FOR

MINING CLAIMS P.591322 to 591324
P.591575 to 591 580

DELORO TOWNSHIP

PORCUPINE MINING DIVISION

DISTRICT OF COCHRANE

ONTARIO

BY

PAMOUR PORCUPINE MINES, LIMITED

EXPLORATION DEPARTMENT

MAY, 1982

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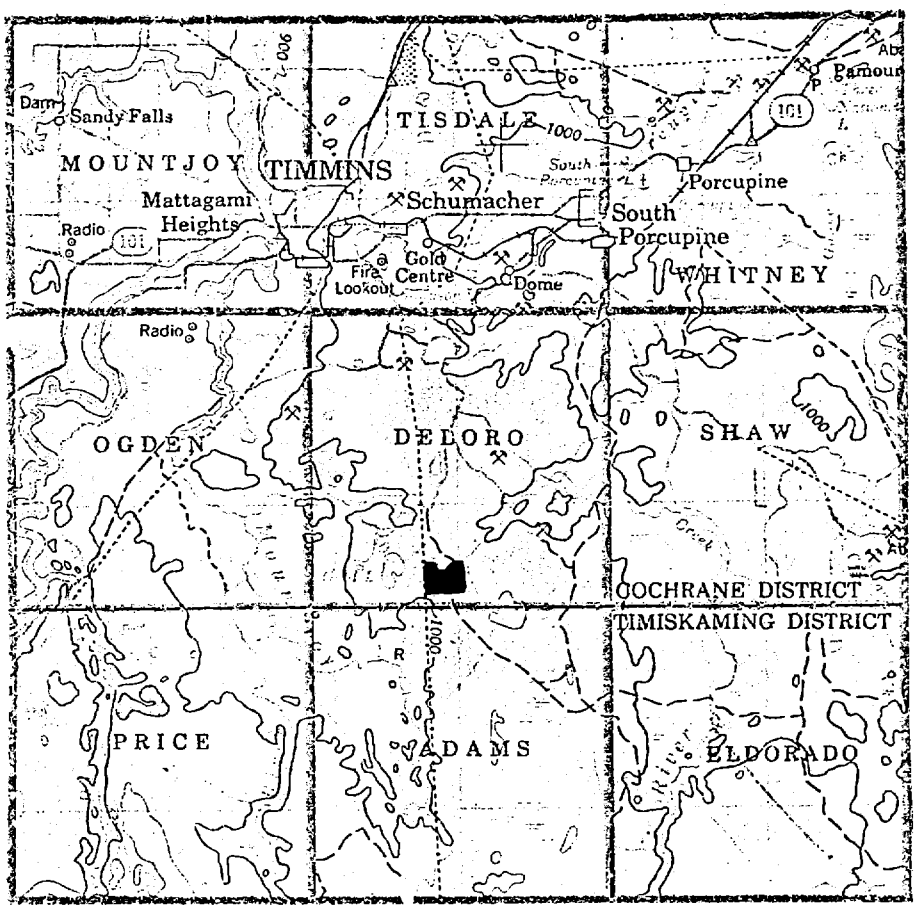


LOCATION MAP

Scale: 1 inch = 4 miles

INTRODUCTION

A total field magnetic survey was conducted on nine contiguous claims, approximately 6.5 miles south of the Buffalo Ankerite mine, in the southern part of Deloro Township, Ontario.

The purpose of the magnetic survey was to assist in defining the carbonate-magnesite zone and to locate any iron formation which might be gold bearing.

The grid layout was done during the 1982 field season. The magnetic survey was conducted by Pamour Exploration personnel, Danny Pietracupa and Nick Bedard, from May 25 to 27, 1982 under the supervision of Kian Jensen, staff Geophysicist-Geologist. A summary of the survey statistics is found in Appendix A.

LOCATION AND ACCESS

The nine claims are located in the southern portion of Deloro Township about one quarter to one mile north of the three mile post on the Deloro-Adams Township line.

Access to the claim group is from the Buffalo Ankerite mine. The road leads south for about 6½ miles to the open pit in clain P.591324. In places, the road has been flooded by beaver dams.

PROPERTY

The property is owned 100% by:

Pamour Porcupine Mines, Limited
P.O. Bag 2010
Timmins, Ontario
P4N 7X7

and consists of the following:

Present Claim	Former Claim
P.591322	P.21349
P.591232	P.21280
P.591324	P.25167
P.591575	P.21710

Present Claim	Former Claim
P.591576	P.25168
P.591577	HR 1203
P.591578	P.18693
P.591579	P.21279
P.591580	P.21325

PREVIOUS WORK

The nine claims is part of the former 59 patent claims of Porcupine Southgate Mine (option to Canadian Magnesite).

During 1945 to 1947, Porcupine Southgate Mines and Balmoral Porcupine Mines drilled extensively for gold mineralization, a total of 42,603 feet.

In 1959, Nicolet Asbestos Mines held the option and conducted geological mapping and limited diamond drilling.

During the early 1960's to 1981, Canadian Magnesite held the above mentioned 59 patent claims and an additional 10 unpatented claims in Adams Township. This company conducted geological mapping, bulk sampling and metallurgical testing.

Pamour Porcupine Mines, Limited acquired the claims on June 1 and June 6, 1982.

GEOLOGY

The geology consists of medium to coarse grained carbonate zone (magnesite) in claims 591322 and 591324 flanked on the north by mafic to intermediate volcanics and chlorite schists which was intruded by an east-west diabase. To the west of this zone, the majority of the outcrop consists of volcanics, schist and ultrabasic intrusives, while the southern part is predominately volcanics intruded by ultrabasic units.

In the assessment reports, iron formation is present on the northern boundary of former claim HR 1203 (TRS 1590) now P.591577.

GEOPHYSICAL SURVEY

The purpose of the total field magnetic survey was to define the lithological contacts with emphasis on the carbonate (magnesite) zone and the iron formation, and to locate any structural features.

The grid was cut at a line separation of 400 feet with stations every 100 feet. The baseline and tie line were also observed every 100 feet. Where a dramatic magnetic increase was observed, detailed readings were taken. A total of 7¼ miles were surveyed to establish 487 magnetic stations.

INSTRUMENT SPECIFICATIONS

The specifications for the Geometrics proton magnetometer is in Appendix B.

PROCEDURES

Before commencing with the survey, a base station was established at 6+00N on Line O which has a value of 59222 gammas. Both the tie line (6+00E) and the baseline (1+00E) were tied to the base station.

Upon completion of the above, both the tie line and baseline were observed in a looping fashion (approximately 800 feet long loops). With these secondary control observations, the north-south lines were observed with tie ins before and after each traverse.

The data was corrected for the base station tie in, daily and hourly drift, and instrument diurnals. The accuracy of the tie-ins after corrections was ± 2 gammas.

DATA PRESENTATION

The total field magnetic intensity readings were contoured at a 100 gamma interval on the base map, scale 1 inch to 200 feet.

INTERPRETATION

The interpretation of the magnetic survey is compiled on a base map and is located in the back folder.

It appears that the chlorite and carbonated volcanics have been intruded by an ultramafic (probably peridotite) in the north central part of the claims. The other large body intrusive is probably a porphyry with sulphides.

An east-west diabase dike is a very prominent magnetic feature. It appears that at the eastern and western parts of the diabase dike has been faulted. The eastern fault may be an extension or parallel fault of the Shaw Creek Fault while the western one may be a branch fault of the McKay Lake Fault. Also, the western portion of the diabase appears to be nearly vertical while the part east of the Shaw Creek Fault appears to be dipping to the north (approximately 60° - 70°).

The prominent magnetic lows in the range of 59100 to 59300 gammas is attributed to the large carbonate (magnesite) bodies.

The remainder of the area is believed to be composed of chloritic and/or carbonated mafic volcanics, and dacites, however, magnetically it is very difficult to separate these units.

In the northeastern corner of the claims, there may exist a narrow band of iron formation.

CONCLUSIONS AND RECOMMENDATIONS

The total field magnetic intensity survey has helped to define large units and locate two possible fault zones. However, a total field survey was not able to define accurately the chloritic volcanics and dacites.

It would appear that the majority of the rocks have been altered by chloritization and carbonatization and may indicate a more complex cycle of geological events.

It is recommended to conduct an VLF-EM survey which may assist in locating sulphide zones.

Geological mapping should commence as soon as possible. This will also help to refine the magnetic interpretation. Detail prospecting may be warranted upon the completion of the EM and geological surveys.

I hereby submit that this report and accompanying maps are accurate and true to the best of my knowledge and that they were completed by myself this 29th day of May, 1982.

Kian Jensen.

Kian Jensen, B.Sc.,
Exploration Geophysicist-
Geologist.

KJ/cn

CURRICULUM VITAE

NAME: JENSEN, Kian A.

ADDRESS: 374 Patricia Boulevard, Timmins, Ontario P4N 6Y6

TELEPHONE: (705) 264-5748

BIRTHDATE: September 24, 1951

SEX: Male

STATUS: Married

EDUCATION: University of Waterloo, 1971 - 1975, B.Sc. Honour Earth Science, Geology Major

RELATED EXPERIENCE

March 2 to Present — PAMOUR PORCUPINE MINES LIMITED, PAMOUR NO. 1

Employed as a geologist/geophysicist in the Exploration Department, Pamour No. 1. Responsible for conducting ground geophysical surveys, interpretation and reports. Other duties include geological mapping, drill core logging, ore calculations, and property evaluation.

September 1978 to February 1981 — GEOTERREX LIMITED, 2060 Walkley Road, Ottawa

Employed as a geophysicist/party chief conducting various types of ground geophysical surveys. Other responsibilities included training personnel, logistic reports, job proposals, billings, data reduction and interpretation. Clients and types of surveys involved in are as follows:

Amoco Oil Limited - gravity survey

Ontario Hydro - seismic survey

Urangeschellshaft Canada Limited - Max-Min and horizontal PEM surveys

Energy, Mines and Resources, Earth Physics Branch - inertial gravity survey

Geoterrex Limited, Calibogie test site - CEM, Max-Min, Proton magnetic and horizontal PEM surveys

Newmont Exploration of Canada Limited - drillhole PEM survey

Newmont Exploration of Canada Limited - EMP survey

E & B Exploration of Canada Limited - gravity survey

Energy, Mines and Resources, Earth Physics Branch - inertial gravity survey

Geoterrex Limited, Calibogie test site - Elfast turam, IP and DEEPEM surveys

Abitibi-Price Inc. - interpretation of drillhole PEM survey

May to September 1978 — RAYROCK RESOURCES LIMITED (MINES), 1011-2200 Yonge Street, Toronto

Employed as a field geologist conducting a reconnaissance geochemical survey for uranium in central North West Territories. Other responsibilities included rock sampling, reconnaissance mapping, claim work, and assisted in compiling airborne radiometric results.

September 1974 to April 1975 — B.Sc. Thesis, "A Geophysical Investigation for Buried Bedrock Valleys in the Belwood Lake Area".

This involved data acquisition, computer modelling, and interpretation of gravity and resistivity surveys.

September 1974 to April 1975 — UNIVERSITY OF WATERLOO, Waterloo, Ontario

Employed to sort and catalogue rock suites and set up museum displays of ore suites from Canadian mines.

May to September 1974 — CANADIAN OCCIDENTAL PETROLEUM LIMITED, 311-215 Carlingview Drive, Rexdale, Ontario

Employed as a field geologist conducting reconnaissance and detail geochemical surveys for base metals in south-central British Columbia. Other responsibilities included claim work, rock sampling, and the preparation of geochemical anomaly maps.

October to December 1973 — UNIVERSITY OF WATERLOO, Waterloo, Ontario

Employed as a geophysical assistant conducting gravity, resistivity, and seismic surveys.

OTHER EMPLOYMENT

October 1977 to May 1978 — GOLDEN TRIANGLE SECURITIES AND INVESTIGATIONS, 52A Francis Street, Kitchener, Ontario

Employed as a security guard at Pirelli Cables in Guelph, Ontario.

June 1975 to September 1977 — TOWERS DEPARTMENT STORES, 1013 Ontario Street, Stratford, Ontario

Employed as a department manager responsible for staff schedules, ordering, inventory, and sales.

MEMBERSHIPS

Society of Exploration Geophysicists (1981) - Associate Member

Prospector's Licence (Individual) - A44525

REFERENCES

Carlson, H.D.

1967 : Geology of Ogden, Deloro and Shaw Townships, District of Cochrane, Open File Report No. 5012, Accompanied by Maps P.341,P.342 and P.343; scale 1 inch to ¼ mile. Reissued 1967.

Geological Survey of Canada

1970 : Timmins Sheet, Timmiskaming and Cochrane Districts, Ontario; Geophysical Paper 293(REV), Aeromagnetic Map 293(REV), scale 1 inch to 1 mile.

APPENDIX A

Date	Personnel	Function
May 15, 1982	Ed van Hees Danny Pietracupa	Line Cutting
May 16, 1982	Danny Pietracupa	Line Cutting
May 17, 1982	Kian Jensen Danny Pietracupa	Line Cutting
May 18, 1982	Danny Pietracupa Nick Bedard	Line Cutting
May 19, 1982	Danny Pietracupa Nick Bedard	Line Cutting
May 20, 1982	Danny Pietracupa Nicl Bedard Kian Jensen	Line Cutting Compilation
May 25, 1982	Danny Pietracupa Nick Bedard	Data Acquisition
May 27, 1982	Danny Pietracupa Nick Bedard	Data Acquisition
May 27, 1982	Danny Pietracupa	Data Reduction Compilation
May 29, 1982	Kian Jensen	Interpretation Report

Ministry of Natural Resources
Ontario

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

2.4

42A06NW0136 2.4972 DELORO

900

#194 Deloro Twp.

The Mining Act — 2.4972 — Do not use shaded areas below.

Type of Survey(s): Magnetic 12N-200FT	Township or Area: Deloro Twp 42A/6NW
Claim Holder(s): Pamour Porcupine Mines	Prospector's Licence No.: T498
Address: P.O. Bag 2010 Timmins	
Survey Company: Same.	Date of Survey (from & to): 15 5 82 / 28 5 82 (Day / Mo. / Yr.)
Name and Address of Author (of Geo-Technical report): K. Jensen.	Total Miles of line Cut: 9 miles

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	40
For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

RECORDED
MAY 28 1982
Receipt No. .....

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P	591322	
	591323	
	591324	
	591525	
	591526	
	591527	
	591528	
	591529	
	591580	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

RECEIVED
JUN 14 1982
MINING LANDS SECTION

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

RECEIVED
PORCUPINE MINING DIVISION
MAY 28 1982
AM PM

Calculation of Expenditure Days Credits

Total Expenditures $ ____ + 15 = Total Days Credits ____

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

Total number of mining claims covered by this report of work: 9

For Office Use Only		
Total Days Cr. Recorded: 360	Date Recorded: May 28/82	Mining Recorder
	Date Approved as Recorded: 82.06.14	Branch Director of Mining Recorder

Date: 28/5/82 — Recorded Holder or Agent (Signature)

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: E. JAN HEES 165 Tamarack St. Timmins, Ont

Date Certified: 28/5/82 — Certified by (Signature)

1362 (81/9)

Ontario Ministry of Natural Resources

Geotechnical Report Approval

File 2.4972

Mining Lands Comments

☑ To: Geophysics Mr. Barlow

Comments

☑ Approved ☐ Wish to see again with corrections | Date May 11/83 | Signature R Barlow

☐ To: Geology - Expenditures

Comments

☐ Approved ☐ Wish to see again with corrections | Date | Signature

☐ To: Geochemistry

Comments

☐ Approved ☐ Wish to see again with corrections | Date | Signature

☐ To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

1593 (81/10)

1982 09 16 2.4972

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

Dear Sir:

We have received reports and maps for a Geophysical (Magnetometer) Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims P 591322 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 very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1316

J. Skura:sc

cc: Pamour Porcupine Mines
Timmins, Ontario
Attn: Mr. K.A. Jensen.

Pamour Porcupine Mines, Limited
Administration Building
P.O. Bag 2010
Timmins, Ontario, Canada P4N 7X7

pamour

July 22, 1982

Mr. E. F. Anderson,
Director,
Land Management Branch,
Whitney Block, Room 6450,
Queen's Park,
Toronto, Ontario,
M7A 1W3

Re: Magnetic Survey for Assessment Work on Mining Claims P.591322 to 591324 incl. and P.591575 to 591580 incl. in Deloro Township, District of Cochrane.

Dear Sir:

Please find enclosed the report and maps pretaining to the magnetic survey for the above mentioned claims.

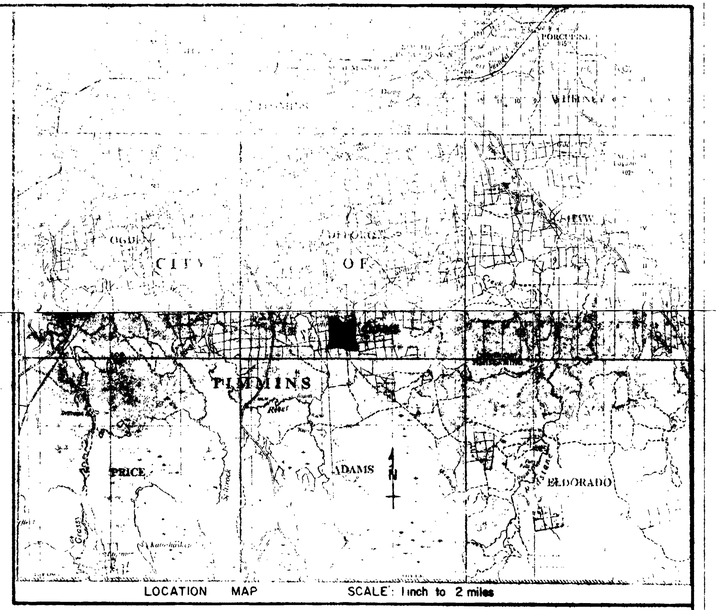
If any problems arise in regards to the report, please contact either myself of Mr. E. Van Hees.

Yours truly

qual on 2.3969

Kian A. Jensen, B.Sc.
Geophysicist/Geologist
Exploration Department

N



591575
591576
591577
591578
591322
591324
591579
591323
591580

MAGNETIC (TOTAL FIELD) SURVEY

▲ BASE STATION
MAGNETIC LOW

BASE LEVEL 59000 GAMMAS
CONTOUR INTERVAL 100 GAMMAS

INSTRUMENT: E.G. & G. PROTON MAGNETOMETER
G-826A PROTON MAGNETOMETER

PAMOUR PORCUPINE MINES LIMITED

PAMOUR EXPLORATION

MAGNESITE PROJECT

DELORO TOWNSHIP, ONTARIO
PORCUPINE MINING DIVISION

MAGNETIC SURVEY

CLAIM NUMBERS: P-591322 to 591324, P-591575 to 591580

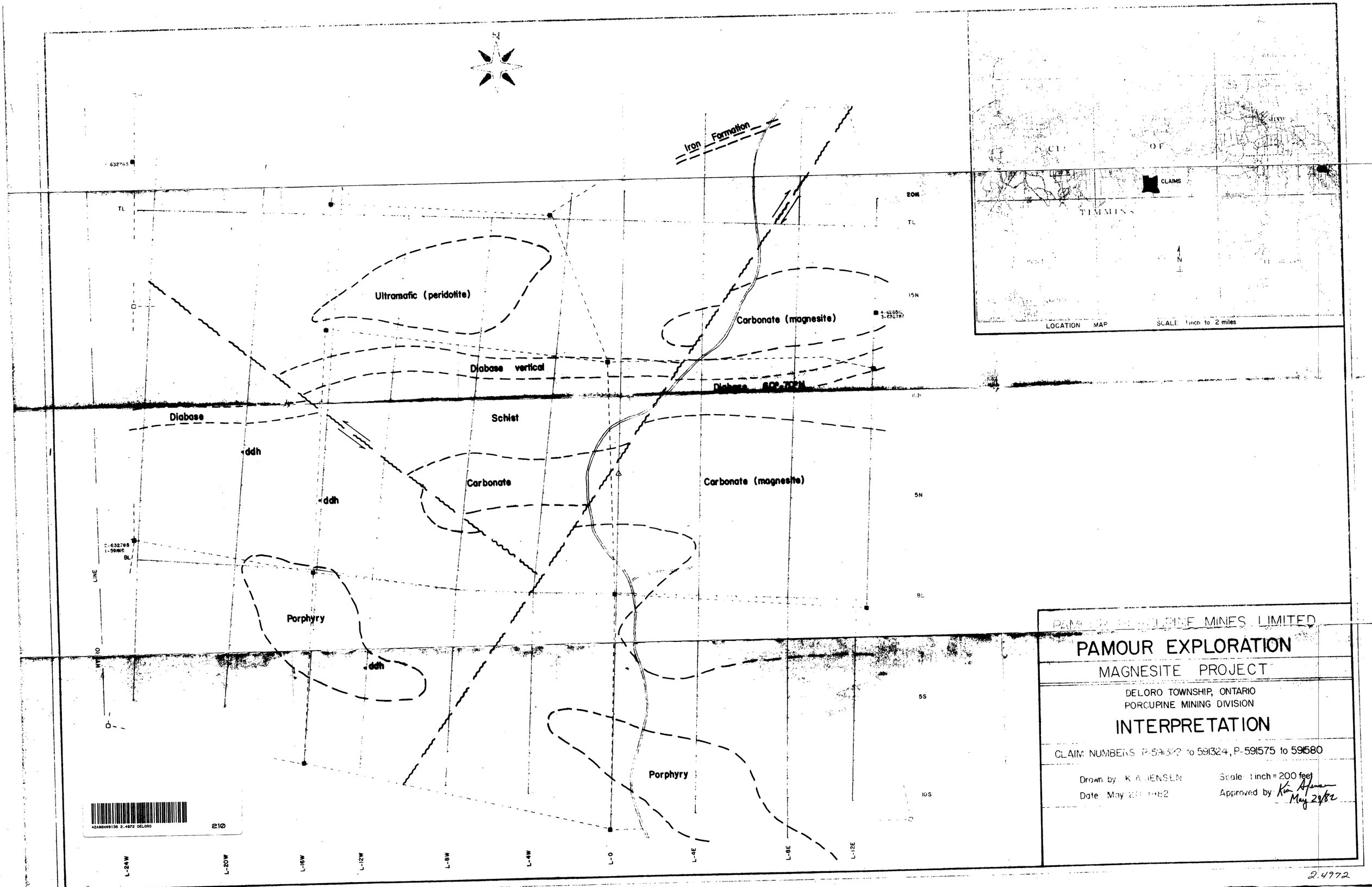
Drawn by: K.A.JENSEN
Date: May 20, 1982

Scale: 1 inch = 200 feet
Approved by: Ken Jensen
May 29/82

42A8GNW8136 2.4972 DELORO

200

2.4972


Iron Formation
Ultramafic (peridotite)
Carbonate (magnesite)
Diabase vertical
Diabase
Schist
Carbonate
Carbonate (magnesite)
Porphyry
Porphyry
ddh
ddh
ddh
TL
20N
15N
10N
5N
BL
5S
10S
LINE
L-24W
L-20W
L-16W
L-12W
L-8W
L-4W
L-0
L-4E
L-8E
L-12E
LOCATION MAP
CLAIMS
TIMMINS
SCALE 1 inch to 2 miles
PAMOUR PORCUPINE MINES LIMITED
PAMOUR EXPLORATION
MAGNESITE PROJECT
DELORO TOWNSHIP, ONTARIO
PORCUPINE MINING DIVISION
INTERPRETATION
CLAIM NUMBERS P-591322 to 591324, P-591575 to 591580
Drawn by K.A. JENSEN
Date May 28, 1982
Scale 1 inch = 200 feet
Approved by
May 29/82
2.4972
210