Kian A. Jensen
Exploration and Consulting Serv

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MAGNETIC SURVEYS

for

PAMOUR PORCUPINE MINES LIMITED

on the

MATHESON TOWNSHIP PROJECT

in

MATHESON TOWNSHIPS

PORCUPINE MINING DIVISION

DISTRICT OF COCHRANE

ONTARIO

by

Kian A. Jensen
Consulting Geologist/Geophysicist

August, 1986

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INTRODUCTION

During, August, 1986, linecutting and a total field magnetic survey was conducted on the 4 contiguous unpatented mining claims known as the Matheson Township Project.

The project area is located approximately 18 miles east of Timmins, Ontario. The claims cover the land and water portion of the the South Half of Lot 6, Concession I, Matheson Township, Porcupine Mining Division, Ontario.

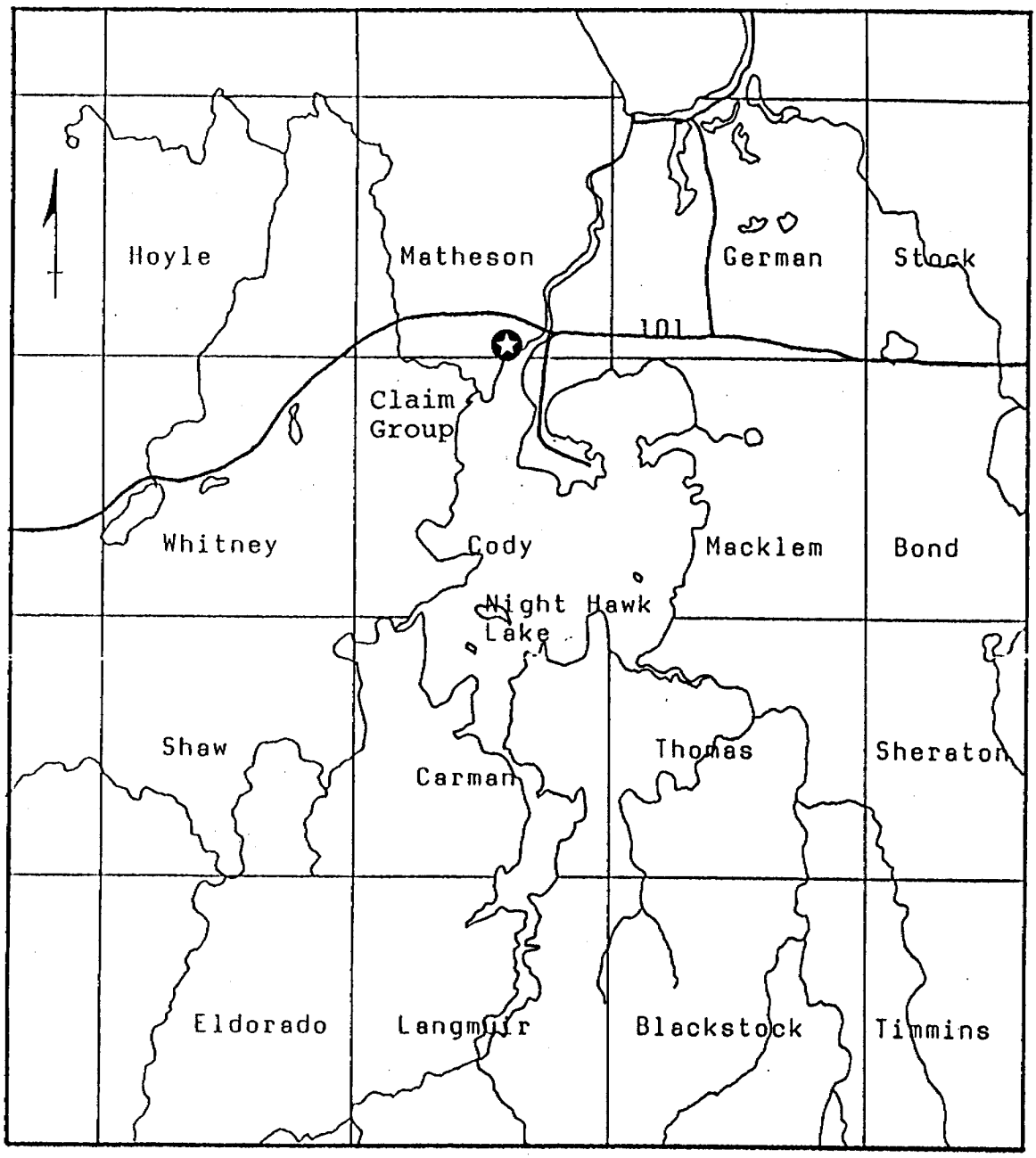
The purpose of the geophysical survey was to identify the lithological units, location of the major structural events, and to identify favourable gold bearing mineralization. In this area, gold is associated with quartz-carbonate veins and sulphide mineralization associated with the medisedimentary conglomerate units.

LOCATION and ACCESS

The Matheson Township Project is located approximately 18 miles east of Timmins, Ontario, covering 4 contiguous unpatented mining claims in the South Half of Lot 6, Concession I, Matheson Township, Ontario. The claim group is located on the west side of Matheson Creek near the mouth of Night Hawk Lake as shown in Figure 1.

Access to the claim group is via Highway 101 eastwards from Timmins to a gravel road south on the Lot 6 and 7 boundary line. Winter access is by skidoo from Highway 101.

Additional access during the summer is from the Fredrick House Landing by Highway 101 to Matheson Creek. This route is not recommended during the winter months due to the generally poor ice conditions at the mouth of Night Hawk Lake.



LOCATION MAP Scale: 1 inch to 4 miles

Figure 1: Location Map of the Matheson Township Property, Matheson Township, Porcupine Mining Division, Ontario.

PROPERTY

The Matheson Township Property consists of 4 contiguous unpatented mining claims in Matheson Townships, Porcupine Mining Division, District of Cochrane, Ontario. The recording dates and claim numbers for the group are as follows:

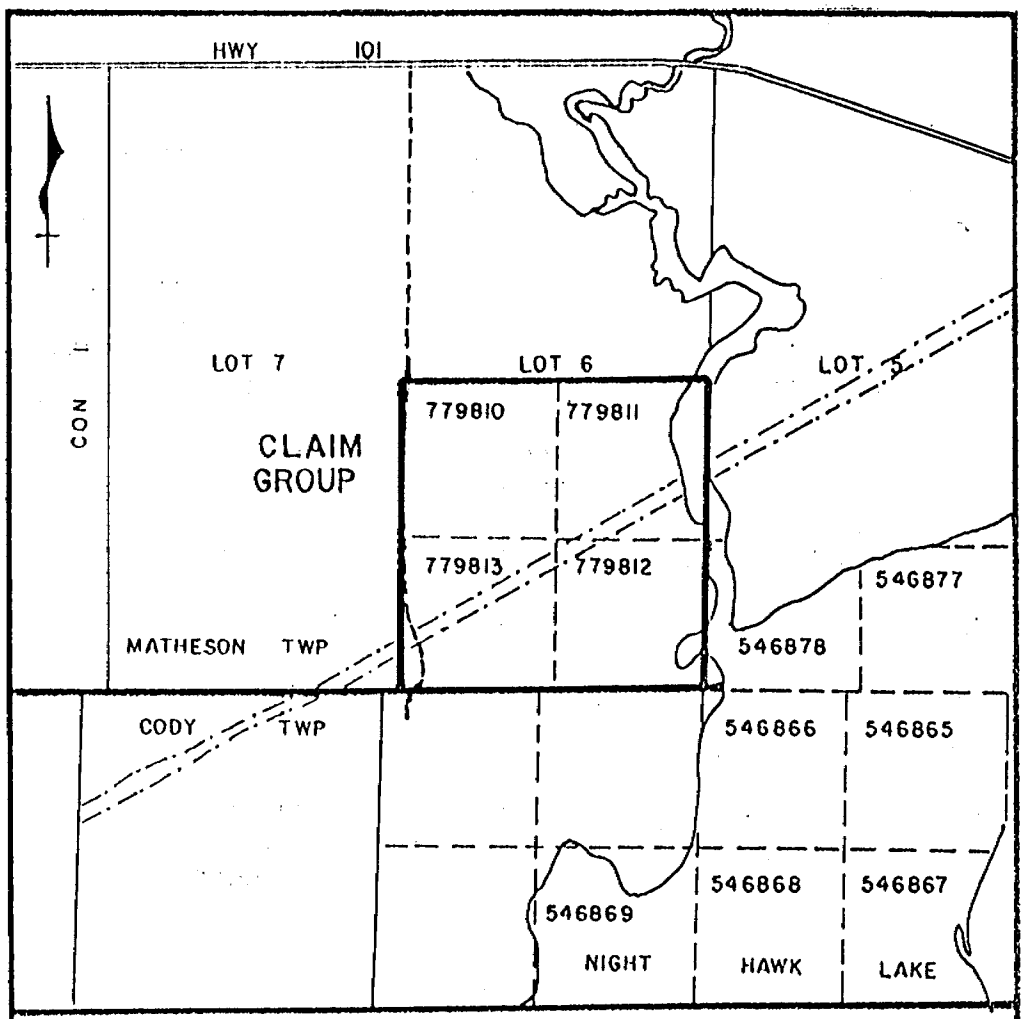
P-779810 to P-779813 incl. October 6, 1983

The claim group is held 100% by Pamour Incorporated, formally Pamour Porcupine Mines Limited. Figure 2 illustrates the location and shape of the project area.

GENERAL GEOLOGY

The majority of the underlying rock units are Archean younger metasedimentary rocks and older metasedimentary to tuffaceous metasedimentary rocks with isolated mafic to intermediate metavolcanics. The metavolcanics consist of massive and pillow units which appear to pinch out to the east in the vicinity of Lot 11 in Cody Township. Serpentinized peridotite occurs on the south side of the Destor-Porcupine Fault. Occassionally, north trending diabase dikes cut the known lithological units

The regional geology of the area indicates the possibly of older metasedimentary slates to the north and younger metasedimentary conglomerates to the south.



LOCATION MAP AND CLAIM MAP

Scale: 1:20,000

Figure 2: Location of the Matheson Township Property, Matheson Township.

Structurally, the Destor-Porcupine Fault is located approximately 1500 feet to the south of the Cody-Mateson Township boundary. Several north-northwest to northwest trending faults which displaces the Destor-Porcupine Fault strike onto the eastern portion of the claim group.

PREVIOUS EXPLORATION ACTIVITIES

Research of the assessment files at the Resident Geologist's office in Timmins, Ontario, indicated a minor amount of information on file. The property itself has explored by Pamour Porcupine Mines Limited utilizing a Percussion Overburden Sampling program during 1984. The company has also conducted a reverse circulation overburden drilling program during 1986, however, the results are not known by the author.

The surrounding unpatented claims have been surveyed by magnetic and electromagnetic surveys, overburden drilling, and diamond drilling by Kidd Creek Mines Limited, Falconbridge Limited, Placer Development Limited, and Comstate Resources Limited.

GEOPHYSICAL SURVEY

INTRODUCTION:

The linecutting was conducted by B.McCombe of Timmins, Ontario, from August 14 to 23, 1986. The baseline has a bearing of due east, with north-south grid lines spaced 400 feet apart. Line 0 was established on the boundary of Lots 6 and 7, and Tie Line 26+50 South is along the Cody-Matheson Township Boundary. A total of 4.08 line miles of grid was established and picketed at 100 foot intervals.

On completion of the linecutting, the author conducted a total field magnetic survey utilizing a Geometric G-816 proton procession magnetometer. The survey was done on August 25 and 26, 1986. Data reduction, drafting, interpretation and report was completed by the author from August 26 to 29, 1986.

MAGNETIC SURVEY:

The magnetic base station was established on the Baseline at 0+00 with an averaged value of 59,188 gammas. The Baseline and Tie Line 26+50 South were surveyed at intervals of 100 feet in a looping fashion to establish accurate control stations at the north and south ends of each grid line. Upon completion of this phase of the survey, the grid lines were surveyed at 100 foot intervals.

The data was corrected for the daily drift and the tie-ins with the control stations. The data presented on the base map has a base level of 59,000 gammas removed from all the obsevered readings.

INTERPRETATION:

It appears from the magnetic survey that the gradient decreases northwards at a rate of approximately 20 to 30 gammas per 100 horizontal feet from the South Tie Line to 13+00 South, and between 6 to 12 gammas per 100 horizontal feet northwards from 13+00 South.

It is suspected that the northern portion of the claim group is underlain by younger metasediments, probably greywackes and conglomerates, while the area approximately south of 13+00 South is underlain by tuffaceous metasediments and intermediate to mafic metavolcanics.

Structurally, it appears that two North-Northwest trending fault zones may exist between Lines 4+00 and 8+00 East and east of Line 20+00 East. A third fault may trend northwestwards from Line 20+00 East at 18+00 South to Line 4+00 East at 2+00 South. The later fault appears to have a small displacement, 50 to 100 feet, while the north-northwest faults appear to display a displacement of several 100 feet with the east side moving northwards.

CONCLUSIONS

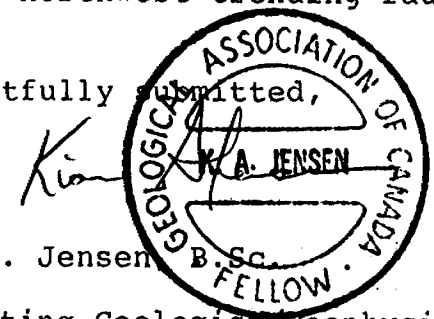
Based upon the limited amount of information available on this property and the surrounding properties, and the present magnetic survey, the interpretation indicates that the northern portion of the claim group is underlain by metasedimentary rocks to the north and intermediate to mafic metavolcanics to the south.

The contact between these units appear where the horizontal gradient changes from 6 to 12 gammas to 20 to 30 gammas per 100 horizontal feet.

The most southerly central portion of the claim group may be underlain by either more magnetic mafic metavolcanics, altered ultramafic metavolcanics, or a decrease in the overburden over a bedrock ridge.

It appears that the claim group is traversed by at least three faults, the west and east portions by north-northwest trending faults and the central portion by a northwest trending fault.

Respectfully submitted,



Kian A. Jensen, B.Sc.
Consulting Geologist/Geophysicist

RECOMMENDATIONS

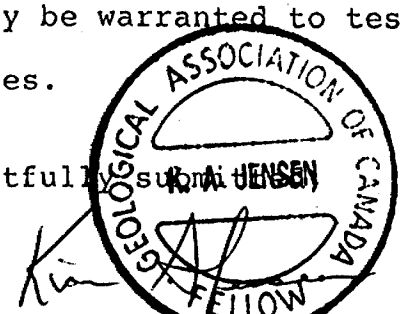
It is recommended by the author to compile all available information on the claim group and the surrounding area to indicate the more favourable location of the contact between the mafic metavolcanics and the metasedimentary units.

It may be benefical to conduct either an electromagnetic survey or an induced polarization survey to assist in locating the conductive portions of the contact between the metasedimentary and metavolcanic units, and possible sulphide horizons within the metasedimentary unit.

An overburden drilling program is recommended to test the contact area and the area of the suspected conglomerate horizon for gold bearing geochemical dispersion trains.

Upon completion of the above recommendations, an initial limited diamond drilling program may be warranted to test the geophysical and geochemical anomalies.

Respectfully submitted,



Kian A. Jensen, B.Sc.

Consulting Geologist/Geophysicist

Kian A. Jensen
Exploration and Consulting Services

CERTIFICATE

With reference to my report on the Magnetic Survey Report for Pamour Incorporated, formally, Pamour Porcupine Mines Limited, Dated August 29, 1986 .....

I, Kian A. Jensen, of the City of Timmins, Ontario, do hereby certify the following to be true and accurate to the best of my knowledge:

1) That I received an Honour B.Sc. degree in Earth Science, Geology Major from the University of Waterloo in 1975,

2) That I have been employed as a geologist and/or geophysicist by various exploration companies and consulting companies since 1978,

3) That I have been and still am a member in good standing in the following associations:

a) Society of Exploration Geophysicist - Associate, 1981
b) Geological Association of Canada - Fellow, 1983

4) That I am the author of the corresponding report, and have been actively exploring and prospecting in the Timmins area since 1981,

5) That I have no interest direct or indirect in the mining claims comprising the property described in this report or in the shares of any company or companies in this joint venture on this property or the surrounding properties, nor do I expect to receive any directly or indirectly.

Dated this 29th day of August, 1986
Timmins, Ontario.

GEOLOGICAL ASSOCIATION OF CANADA
K. A. JENSEN
FELLOW

Kian A. Jensen, B.Sc.
Consulting Geologist/Geophysicist

Qual. 2.3969

1.0 GENERAL INFORMATION

1.1 INTRODUCTION

The Model G-816/826 Portable Proton Magnetometer is a complete system designed for man-carry field applications requiring simple operation and stable measurements of the total intensity of the earth's magnetic field. The G-816/826 is accurate and has a sensitivity of ± 1 gamma over a range from 20,000 to 90,000 gammas. Since the instrument measures total field intensity, the accuracy of each measurement is not affected by sensor orientation. The inherent simplicity of the G-816/826 Proton Magnetometer allows rapid, accurate measurements to be obtained from a rugged, compact field instrument. This is a precision instrument and reasonable attention must be given to handling, battery condition, and magnetic environment.

1.2 MAGNETIC ENVIRONMENT

It is important that the earth's magnetic field is not perturbed by allowing unwanted magnetic objects to come close to the sensor. Such objects include rings, keys, watches, belt buckles, pocket knives, metal pencils, zippers, etc. When the sensor is used on the staff, one gamma surveys are easily performed provided the sensor is kept at a distance of three feet (.9 m) from the operator. When the sensor is used in the backpack, certain articles of clothing and some types of batteries within the console will cause a five to ten gamma heading error in the readings. The G-816/826, however, still provides one gamma sensitivity and repeatability despite the presence of such a base line shift. The backpack feature is recommended for use in difficult terrain where "hands free" operation is required.

Prior to survey use, objects that are suspected to be magnetic may be checked in the following manner:

1. Attach sensor to staff and connect coiled signal cable to console. Sensor should not be moved or turned during the test, and the suspected article should be far away initially.

2. Cycle the magnetometer a few times by depressing the READ button--releasing--and waiting for a reading each cycle.

3. Observe measurement readings. Each reading should repeat to ± 1 gamma. (A slow shift may occur over several minutes due to a diurnal change in the earth's field.)

4. Place the suspected article at the distance from the sensor expected during actual survey operation.

5. Cycle magnetometer several times and note the readings.

6. Remove the article and repeat steps 2 and 3 to check for diurnal shifts in the earth's field. If a diurnal shift is present, repeat entire test.

7. If the readings obtained in step 5 differ by more than ± 1 gamma (± one count) from those obtained in steps 3 and 6, then the article is magnetic.

IF THE ARTICLE IS HIGHLY MAGNETIC, OR IF THE SENSOR IS INSIDE OR NEAR A BUILDING OR VEHICLE, THE PROTON PRECESSION SIGNAL WILL BE LOST, GIVING COMPLETELY ERRATIC READINGS AND LOSS OF ± 1 COUNT REPEATABILITY.

The magnetometer should not be operated in areas that are known sources of radio frequency energy, power line noise (transformers), in buildings or near highly magnetic objects. The sensor should always be placed on the staff above the ground, or in the "backpack." The sensor will NOT operate properly when placed directly on the ground.

1.3 SPECIFICATIONS

Sensitivity:	± 1 gamma throughout range.
Range:	20,000 to 90,000 gammas (worldwide).
Tuning:	Multiposition switch with signal amplitude indicator light on display.
Gradient Tolerance:	Exceeds 800 gammas/feet.
Sampling Rate:	Manual push button, one reading each six seconds.
Output:	Five digit numeric display with readout directly in gammas.
Power Requirements:	Twelve 1.5 volt "D" cell universally available flashlight-type batteries. Charge state or replacement signified by flashing indicator light on display.
Temperature Range:	Console and sensor: -40° to +85° C.
	Battery pack: 0° to +50° C (limited use to -15° C; lower temperature battery belt operation - optional).
Accurary (Total Field):	± 1 gamma through 0° to +50° C temperature range.

Sensor:	High signal, noise cancelling, mounted on staff or attached to backpack.
Size:	Console: 3.5 x 7 x 11 inches (9 x 18 x 28 cm) Sensor: 3.5 x 5 inches (9 x 13 cm) Staff: 1 inch diameter x 8 ft. length (3 cm x 2.5 m)

Weight:

	Lbs.	Kgs.
Console (w/batteries):	5.5	2.5
Sensor and signal cable:	4	1.8
Aluminum staff:	2	.9
	11.5	5.2

1.4 INVENTORY INSPECTION

When received from the manufacturer, the G-816/826 Magnetometer should include the following items:

1.	G-816/826 Magnetometer console	1 each
2.	Sensor	1 each
3.	Collapsible sensor staff	1 each
4.	Signal cable-staff (long)	1 each
5.	Signal cable-backpack (short)	1 each
6.	Adjustable carrying harness	1 each
7.	Batteries: Type D Premium Carbon Zinc with cardboard jacket (12 each within console)	24 each
8.	Applications Manual for Portable Magnetometers	1 each
9.	Operator's Manual	1 each
10.	Storage/Carrying Case	1 each

Ministry of Northern Development and Mines

Ontario

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

42A11SE0047 2.9437 MATHESON

900

300/86

Mini

Type of Survey(s): Magnetic Geophysical | Matheson

Claim Holder(s): Pamour Inc.

Prospector's Licence No.: T498

Address: P.O. Bag 2010 Timmins Ont.

Survey Company: 1

Date of Survey (from & to): 1 8 86 (Day Mo. Yr.) 30 8 86 (Day Mo. Yr.)

Total Miles of line Cut: 4.5

Name and Address of Author (of Geo-Technical report): Kian Jensen c/o Pamour Inc P.O. Bag 2010 Timmins.

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	
	- Magnetometer	40
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

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

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

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P	779810	
	779811	
	779812	
	779813	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

RECEIVED
OCT 01 1986
MINING LANDS SECTION

RECORDED
SEP 17 1986
ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES OFFICE
NOV 17 1987
RECEIVED

PORCUPINE MINING DIVISION
RECEIVED
SEP 17 1986

Total number of mining claims covered by this report of work: 4

Expenditures (excludes power stripping)

Type of Work Performed:

Performed on Claim(s):

Calculation of Expenditure Days Credits

Total Expenditures: $ ÷ 15 = Total Days Credits

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

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
160	Oct 17/86	Stanley
	Date Approved as Recorded: 86.10.7	Branch Director

Date: Sept 17/86

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. VAN HEES P.O. Bag 2010 Timmins Ont.

P4N 7K7

Date Certified: Sept 17/86

Certified by (Signature)

MAP SYMBOLOGY

Aerial Cableway
Boundary
International
Interprovincial
District, Township Indian Reserve
Approximate
Lot, Concession
Approximate
Park Boundary
Bridge
Road, Railroad
Building
Chimney
Cliff, Pit, Pile
Contours
Interpolated
Approximate
Depression
Control Points
Horizontal
Vertical
Culvert
Falls
Double line river
Fence, Hedge, Wall
Feature Outline (Construction Features, etc.)
Flooded Land
Lock
Marsh or Swamp
Mast
Mine Head Frame
Outcrop

Pipeline (above ground)
Railroad
Single Track
Double Track
Abandoned
Turntable
Road
Highway, County Township
Access (road of doughtful maintenance or significant driveway)
Trail, Bush Road (portage, alley)
Rapids
Double line river with multiple rapids
Double line river with multiple rapids
Reservoir
River, Stream, Canal
Approximate (seasonal)
Direction of flow
Rock (significant)
Shoal
Spot Elevation (lake elevations)
Tower
Transmission Line
Poles
Pylons
Tunnel
Utility Poles
Wharf, Dock, Pier
Wooded Area

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M.+ S. – MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File

EVELYN TWP.

HOYLE TWP.

GERMAN TWP.

CODY TWP.

LEGEND

HIGHWAY AND ROUTE No.
OTHER ROADS
TRAILS
SURVEYED LINES
TOWNSHIPS, BASE LINES, ETC.
LOTS, MINING CLAIMS, PARCELS, ETC.
UNSURVEYED LINES
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC.
RAILWAY AND RIGHT OF WAY
UTILITY LINES
NON PERENNIAL STREAM
FLOODING OR FLOODING RIGHTS
SUBDIVISION OR COMPOSITE PLAN
RESERVATIONS
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES
TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" , SURFACE RIGHTS ONLY	◒
" , MINING RIGHTS ONLY	◒
LEASE, SURFACE & MINING RIGHTS	■
" , SURFACE RIGHTS ONLY	■
" , MINING RIGHTS ONLY	■
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	OC
RESERVATION	R
CANCELLED	⊕
SAND & GRAVEL	S

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1

Metres 500 0 1000 Metres
Chains 10 0 10 20 30 40 50 60 70 Chains
Feet 500 0 1000 2000 3000 4000 5000 Feet

SCALE 1:20 000
GRID ZONE : 17

NOTES

FLOODING RIGHTS ON THE FREDERICK HOUSE RIVER TO 903' CONTOUR RESERVED TO H.E.P.C.

TOWNSHIP

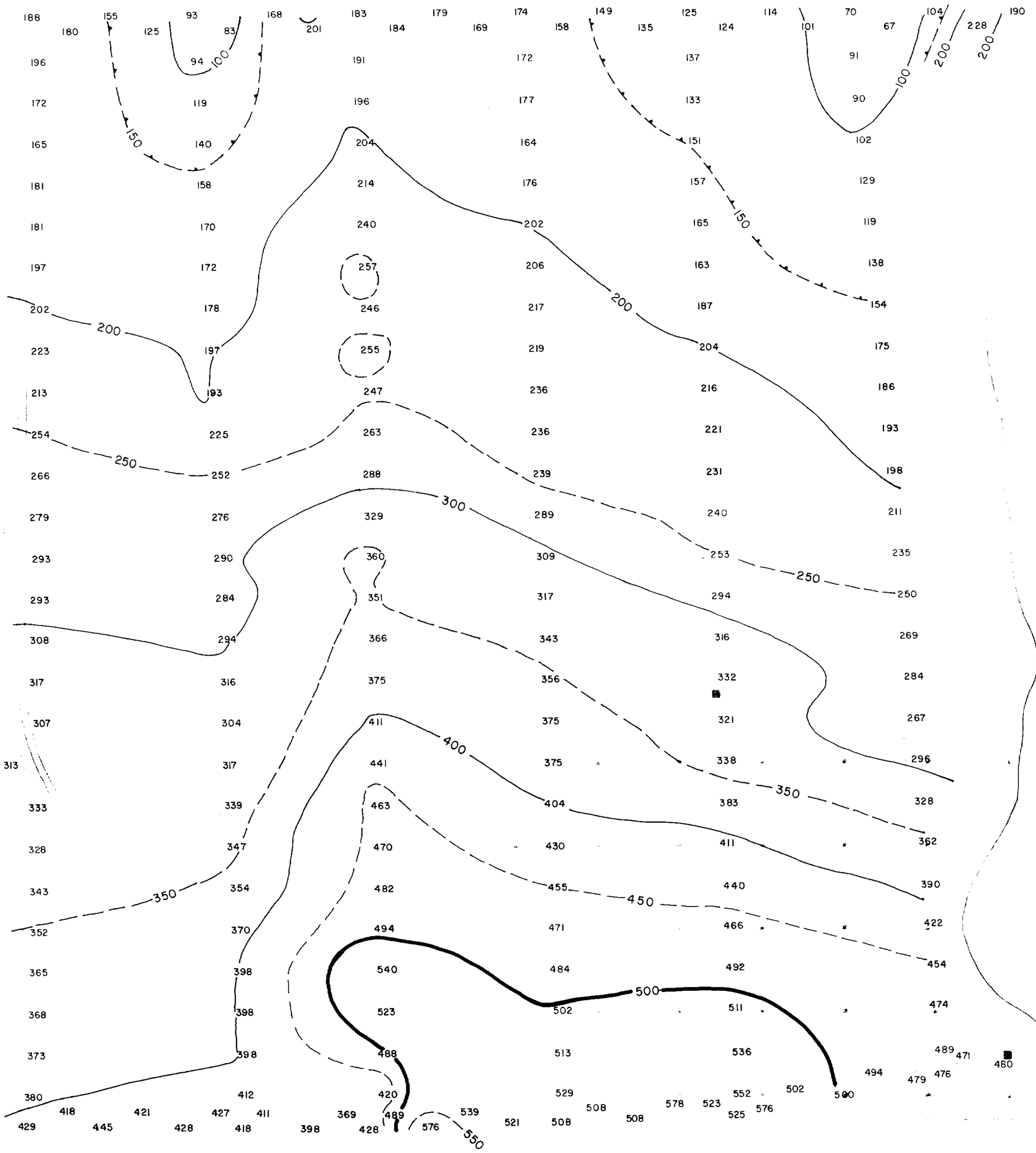
MATHESON

M.N.R. ADMINISTRATIVE DISTRICT
TIMMINS
MINING DIVISION
PORCUPINE
LAND TITLES / REGISTRY DIVISION
COCHRANE

Ontario Ministry of Natural Resources — Land Management Branch

ORIGINAL COMPILATION JULY 1984
REVISED

Number G-3982



Instrument: Geometrics G-816
Base Level: 59,000 gammas
Base Station: 59,188 gammas at B.L. and 0+00
— — — 50 gammas
——— 100 gammas
▬▬▬ 500 gammas

MAGNETIC SURVEY

29437

K.A. Jensen
August 25, 26, 1986

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