



42A06SE1006 2.7504 DELORO

010

COMSTATE RESOURCES LTD.
GEOLOGY OF SE DELORO PROPERTY
(CLAIMS P628544-547 inclusive; P779553)
DELORO TOWNSHIP
TIMMINS AREA

November, 1983

RECEIVED
DEC 03 1984
MINING LANDS SECTION

D.R. Pyke, Ph.D.



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010C

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GEOLOGY OF
SE DELORO PROPERTY

INTRODUCTION

This report covers the geology of the following 5 claims in southeast Deloro Township:

P628544
P628545
P628546
P628547
P779553

The claims are currently held by D.R. Pyke and form only part of a large group of contiguous claims in southeastern Deloro Township.

LOCATION AND ACCESS

The property is located approximately 8 miles south of Timmins along the Deloro-Adams township boundary. (Figure 1). A logging road extending east from Pine St. South near the west boundary of Deloro Township leads to a bush road which crosses the base line of the property at line 16W.

PREVIOUS WORK

Deloro Township was first mapped by Burrows (1911, 1912, 1924) and later by Hurst (1939) and Carlson (1967).

Previous recorded exploration work on the property consists of minor mapping on the west boundary of claim P779553 by Porcupine Southgate Mines Ltd. in 1945 (File T-108). In 1980, Amax Minerals Exploration Ltd. conducted an airborne magnetic survey of Deloro Township and much of the surrounding area (File 2.3367). In 1983, Comstate Resources Ltd. did an airborne magnetic and INPUT survey of the south portion of Deloro Township and the north part of Adams Township. Also in 1983, Comstate completed a ground magnetic and VLF survey of claims P628544-547 inclusive.

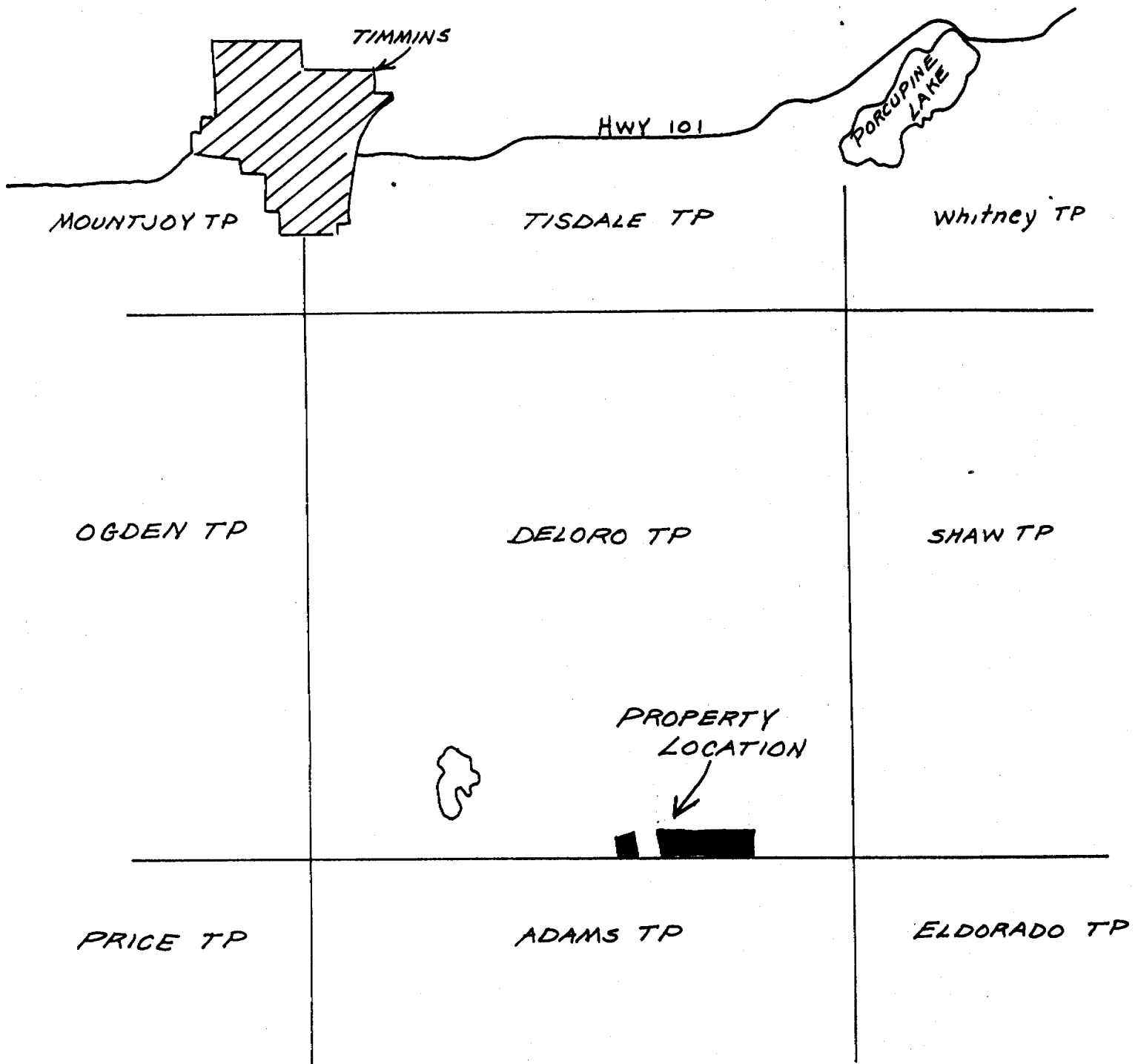
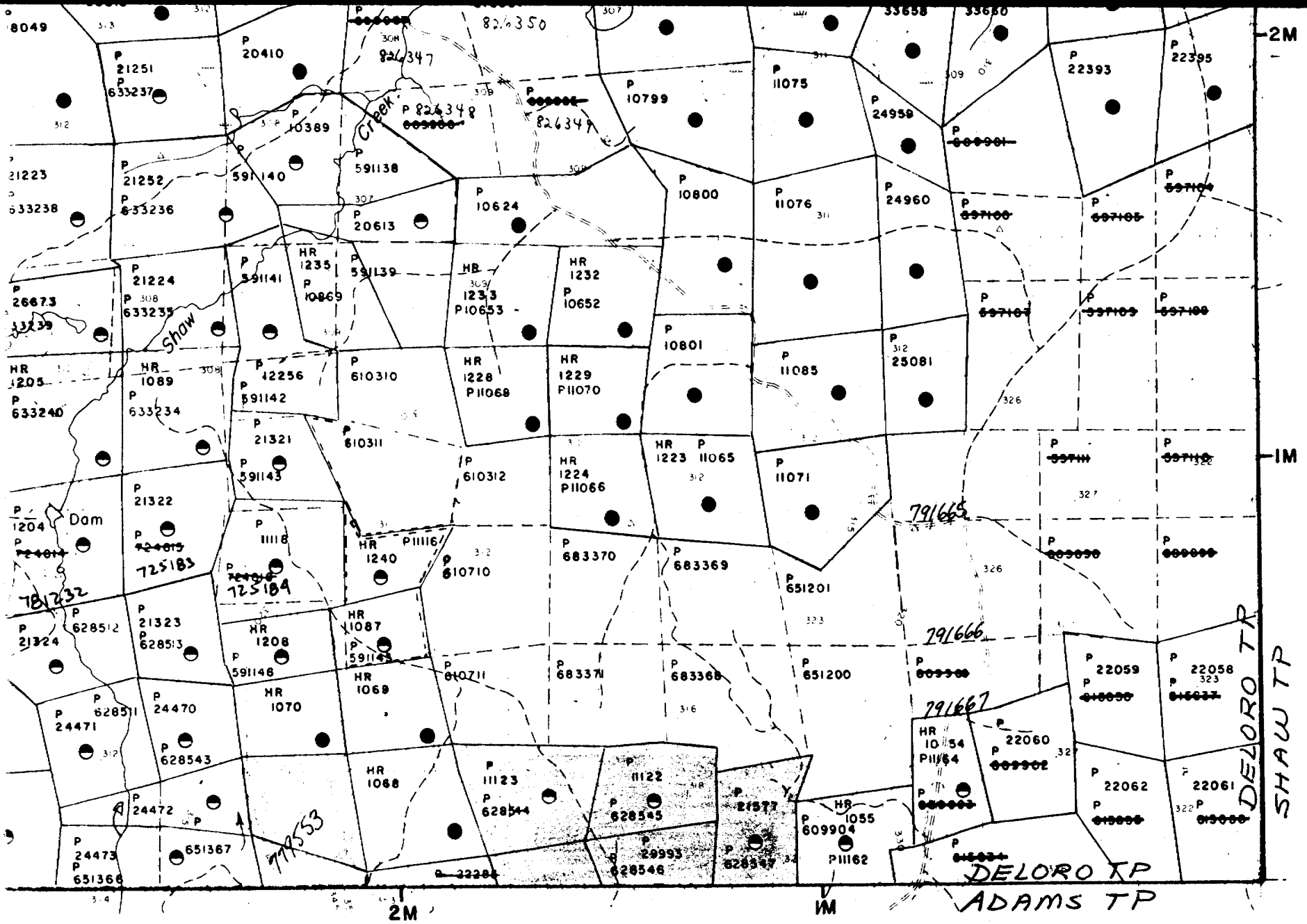


Figure 1 - PROPERTY LOCATION



8049

2M

P 21251
P 633237

P 20410

826347

826350

P 10799

P 11075

33658

33650

P 22393

P 22395

P 21252

591140

591138

P 10624

P 10800

P 11076

P 24958

P 667100

P 667100

P 667100

P 21224

P 591141

HR 1235
P 10869

P 591139

HR 1233
P 10653

HR 1232
P 10652

P 10801

P 11085

P 25081

P 667100

P 667100

P 667100

HR 1205
P 633240

HR 1089
P 633234

P 12256
P 591142

P 610310

HR 1228
P 11068

HR 1229
P 11070

P 10801

P 11085

P 25081

P 667100

P 667100

P 667100

P 21322

P 591143

P 610311

P 610312

HR 1224
P 11066

HR 1223
P 11065

P 11071

P 667100

P 667100

P 21322

P 11118

HR 1240
P 11116

P 610710

P 683370

P 683369

P 651201

791668

P 667100

P 667100

P 21324

P 628512

P 21323

P 628513

HR 1208
P 591143

HR 1087
P 591143

P 610711

P 683371

P 683368

791666

P 667100

P 667100

P 24471

P 628511

P 24470

P 628543

HR 1070

HR 1069

P 610711

P 683371

P 683368

791667

P 22059

P 22058

P 24472

P 628543

P 24472

P 628544

HR 1068

P 11123

P 11122

P 21577

HR 1054
P 11154

P 22060

P 22062

P 24473

P 651367

P 24472

P 628544

HR 1068

P 11123

P 11122

P 21577

HR 1055
P 609904

P 22062

P 22061

P 651366

P 651367

P 24472

P 628544

HR 1068

P 11123

P 11122

P 21577

HR 1055
P 609904

P 22062

P 22061

DELORO TP
SHAW TP

DELORO TP
ADAMS TP

2M

1M

G - ●

GENERAL GEOLOGY

The claims are near the southwest margin of the Shaw Dome, of which a portion straddles the contact between the Deloro and Tisdale Group volcanic rocks. The general contact has not yet been mapped in detail, but would appear to be in part, transitional in nature, in that it represents an intercalation of calc-alkaline volcanic rocks of the Deloro Group, with overlying komatiitic volcanics at the base of the Tisdale Group. Large sill-like intrusions of dunite-peridotite with minor associated gabbro underlie much of the central portion of the township.

PROPERTY GEOLOGY

Outcrop is particularly sparse on the four eastern most claims of the property, which appear to be underlain by calc-alkaline andesitic volcanic rocks. Claim P779553 is largely underlain by serpentized and carbonatized komatiitic volcanic rocks; minor iron formation and acidic pyroclastic rocks border the east margin of the claim.

KOMATIITIC VOLCANIC ROCKS

Large outcrop areas of peridotitic komatiite underlie most of claim P779553. Foliations trend east-west, however, one flow contact was recognized and this trends north and faces west. A north trend to the stratigraphy would be supported by the komatiite - iron formation contact near the east boundary of claim P779553.

The ultramafic flows are generally carbonatized, weather earthy orange brown color, and are grey green to light brown grey on fresh surfaces. Some appear medium to coarse grained because of the presence of up to 50 percent equant carbonate crystals in a fine to medium grained granular matrix. Polysuturing is common, and spinifex texture is locally developed. One to two percent fine-to coarse-grained disseminated pyrite is common.

IRON FORMATION

Iron formation forms an area of intermittent outcrop near the east margin of claim P779553. The iron formation is composed dominantly of fine grained, white to orange brown weathering chert. Minor pyrite is common, locally forming 15 percent of the rock. Interlayered with the chert are minor dacitic-rhyolitic tuffs varying in thickness from a few centimeters to 3 meters.

ANDESITIC VOLCANIC ROCKS

Calc-alkaline andesitic volcanic rocks outcrop on the eastern portion of the property. The outcrops between lines 60E and 76E are composed of a dark green to rusty weathering, dark green fresh, massive, tuff to tuff breccia. The weathered surface has somewhat of a fine granular appearance, and locally light buff weathering felsic fragments ranging in size from one centimeter to as large as one meter are present. The rock typically has a rusty rind up to 1 cm. thick. Pyrite is ubiquitous, averages one percent by volume and commonly forms cubes to 2 mm in size.

Massive and pillowed volcanic flows outcrop in the northeast corner of claim P628547. The rocks weather light grey green, are mottled dark to light green on fresh surfaces, and when broken commonly display a rusty ankeritic rim. The pillows are vesicular and elongated in a northerly direction; tops appear to be to the east.

DIABASE

A north trending dike of porphyritic, fine-to medium-grained, dark green diabase forms a north trending dike along the east margin of claim P779553.

STRUCTURE

Little information is currently available on the structure. Mapping of the contiguous claims will hopefully lead to a more meaningful evaluation of the stratigraphy and structure. Nevertheless, two possible top determinations, one on claim P779553 and the other on claim P628547 indicate opposite facings and suggest the presence of a northerly trending anticlinal axis on, or adjacent to this property.

CONCLUSIONS AND RECOMMENDATIONS

The Deloro Group - Tisdale Group volcanic contact is present on the property (i.e. the calc-alkaline and iron formation - komatiite transition). Local folding has produced a north trending anticlinal structure along this margin of the Shaw Dome. It is recommended that mapping of the adjoining claims be undertaken to better understand and evaluate the geology in the general SE Deloro Township area.

D. R. Lyke

REFERENCES

Burrows, A.G.

1911: The Porcupine gold area: Ont.
Bureau of Mines, Vol. 20, pt. 2

1912: The Porcupine gold area, Second
Report; Ont. Bureau of Mines,
Vol. 21, pt. 1, p.205-249.

1924: The Porcupine gold area;
Ont. Dept. of Mines, Vol. 33,
pt. 2, 112 p.

Carlson, H.D.

1967: Geology of Ogden, Deloro and
Shaw Townships: Ontario Dept. of
Mines, Open File Report 5012, 117 p.

Hurst, M.E.

1939: Porcupine area District of Cochrane;
Ontario Dept. of Mines, Map 47a.



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900

Mining Lands Section

File No 2.7504

Control Sheet

TYPE OF SURVEY GEOPHYSICAL
 GEOLOGICAL
 GEOCHEMICAL
 EXPENDITURE

MINING LANDS COMMENTS:

Cgd.

L.D.

Dennis K.
Signature of Assessor

Dec. 4/04
Date

W.R. # 439/84
27504

Instructions: - Please type or print.
- If number of mining claims traversed exceeds space on this form, attach a list.
Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
- Do not use shaded areas below.

The Mining Act

Type of Survey(s) **GEOLOGICAL** Township or Area **DEORO**

Claim Holder(s) **D. R. PYKE** Prospector's Licence No. **K19126**

Address **31 DELAIR CRES. THORNHILL ONT L3T 2M3**

Survey Company **COMSTATE RESOURCES LTD** Date of Survey (from & to) **6 10 83 22 09 84** Total Miles of line Cut **4.8**

Name and Address of Author (of Geo-Technical report) **D. PYKE 31 DELAIR CRES THORNHILL ONT L3T 2M3**

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	
	- Other	
For each additional survey: using the same grid: Enter 20 days (for each)	Geological	40
	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			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
P	628544				
	628545				
	628546				
	628547				

RECORDED
1 OCT 16 1984
Receipt No. _____

PORCUPINE MINING DIVISION
RECEIVED
OCT 16 1984
P.M.
7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 | 4 | 5 | 6

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.

Total number of mining claims covered by this report of work. **4**

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
160	Oct. 16/84	<i>[Signature]</i>
	Date Approved / Recorded	Branch Director
	84.17.5	<i>[Signature]</i>

Date **OCT 1/84** Recorded by (holder or Agent Signature) **DR Pyke**

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 **D. R. PYKE P.O. Box 1142 TIMMINS ONT PAN 7H9**

Date Certified **OCT 1/84** Certified by (Signature) **DR Pyke**

Note to go with W.R. # 439/84 - covering Claims P620544 to P628547 inclusive.



Ministry of Natural Resources Ontario

Report of Work

(Geophysical, Geological, Geochemical and Expenditures) # 508/84

- Instructions: - Please type or print.
 - If number of mining claims traversed exceeds space on this form, attach a list.
 Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
 - Do not use shaded areas below.

Mining Act

Type of Survey(s) Geological	Township or Area DE LORO
Claim Holder(s) D. R. PYKE	Prospector's Licence No. K19126
Address 31 DELAIR CRES THORNHILL ONT L3T 2M3	
Survey Company D. R. PYKE & ASSOCIATES INC	Date of Survey (from & to) 13 10 84 15 10 84 Day Mo. Yr. Day Mo. Yr.
Name and Address of Author (of Geo-Technical report) D. PYKE 31 DELAIR CRES - THORNHILL ONT.	
Total Miles of line Cut 1.5	

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	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	40
	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	779553				

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MINING LANDS SECTION

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditure: \$ ÷ 15 = Total Days Credits:

RECEIVED
P.M. 12:34:56

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. **1**

For Office Use Only

Total Days Cr. Recorded: **40**

Date Recorded: **Nov 27/84**

Date Approved: **84.12.7**

Mining Recorder: *[Signature]*

Branching Order: *[Signature]*

Date: **Nov 26/84**

Recorded Holder or Agent (Signature): *[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
D. R. PYKE 31 DELAIR CRES THORNHILL ONT

Date Certified: **Nov 26/84**

Certified by (Signature): *[Signature]*

RECEIVED	
Land Management Branch	
CHECKED BY	<input type="checkbox"/>
COMMENTS PLEASE	<input type="checkbox"/>
BY	
DEC - 3 1984	
S. B. YOUNG	
J. H. ...	
J. C. ...	
W. L. GOOD	
...AN	
...ROOK	
R. 8643	

LANDS MANAGEMENT BRANCH
 MINING LANDS SECTION
 TRM 6610
 WHITNEY BLOCK
 QUEEN'S PARK
 TORONTO M7A 1W3

31 DELAIR CRES
 THORNHILL ONT
 L3T 2M3

Nov 29/84

RECEIVED

DEC 03 1984

MINING LANDS SECTION

RE: CLAIMS P628544-547; P779553
DELORO TR., PORCUPINE MINING DIVISION

ENCLOSED IS A GEOLOGICAL REPORT
 AND ACCOMPANYING MAP FOR THE
 ABOVE CLAIMS

Sincerely

W.R. Pyke



GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL
TECHNICAL DATA STATEMENT

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

Type of Survey(s) GEOLOGICAL

Township or Area DELORO

Claim Holder(s) D. R. PYKE

Survey Company D. R. PYKE & ASSOCS. INC.

Author of Report D. R. PYKE

Address of Author 31 DELAIR CRES THORNHILL ONT

Covering Dates of Survey OCT 83 - NOV 84
(linecutting to office)

Total Miles of Line Cut 6.3

MINING CLAIMS TRAVERSED
List numerically

P	628544
(prefix)	(number)
P	628545
P	628546
P	628547
P	779553

SPECIAL PROVISIONS
CREDITS REQUESTED

DAYS
per claim

ENTER 40 days (includes
line cutting) for first
survey.

ENTER 20 days for each
additional survey using
same grid.

Geophysical _____

-Electromagnetic _____

-Magnetometer _____

-Radiometric _____

-Other _____

Geological 40

Geochemical _____

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

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

DATE: Nov 29/84 SIGNATURE: [Signature]
Author of Report or Agent

Res. Geol. _____ Qualifications 23877

Previous Surveys

File No.	Type	Date	Claim Holder

TOTAL CLAIMS 5

If space insufficient, attach list

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations _____ Number of Readings _____

Station interval _____ Line spacing _____

Profile scale _____

Contour interval _____

MAGNETIC

Instrument _____

Accuracy – Scale constant _____

Diurnal correction method _____

Base Station check-in interval (hours) _____

Base Station location and value _____

ELECTROMAGNETIC

Instrument _____

Coil configuration _____

Coil separation _____

Accuracy _____

Method: Fixed transmitter Shoot back In line Parallel line

Frequency _____
(specify V.L.F. station)

Parameters measured _____

GRAVITY

Instrument _____

Scale constant _____

Corrections made _____

Base station value and location _____

Elevation accuracy _____

INDUCED POLARIZATION
RESISTIVITY

Instrument _____

Method Time Domain Frequency Domain

Parameters – On time _____ Frequency _____

– Off time _____ Range _____

– Delay time _____

– Integration time _____

Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

Corrections made _____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth - include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey Geological

Instrument _____

Accuracy _____

Parameters measured _____

Additional information (for understanding results) CUT LINES @ 200ft & 400ft spacings were used for mapping control.

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____
(specify for each type of survey)

Accuracy _____
(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

General _____

ANALYTICAL METHODS

Values expressed in: per cent
p. p. m.
p. p. b.

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, (circle)

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

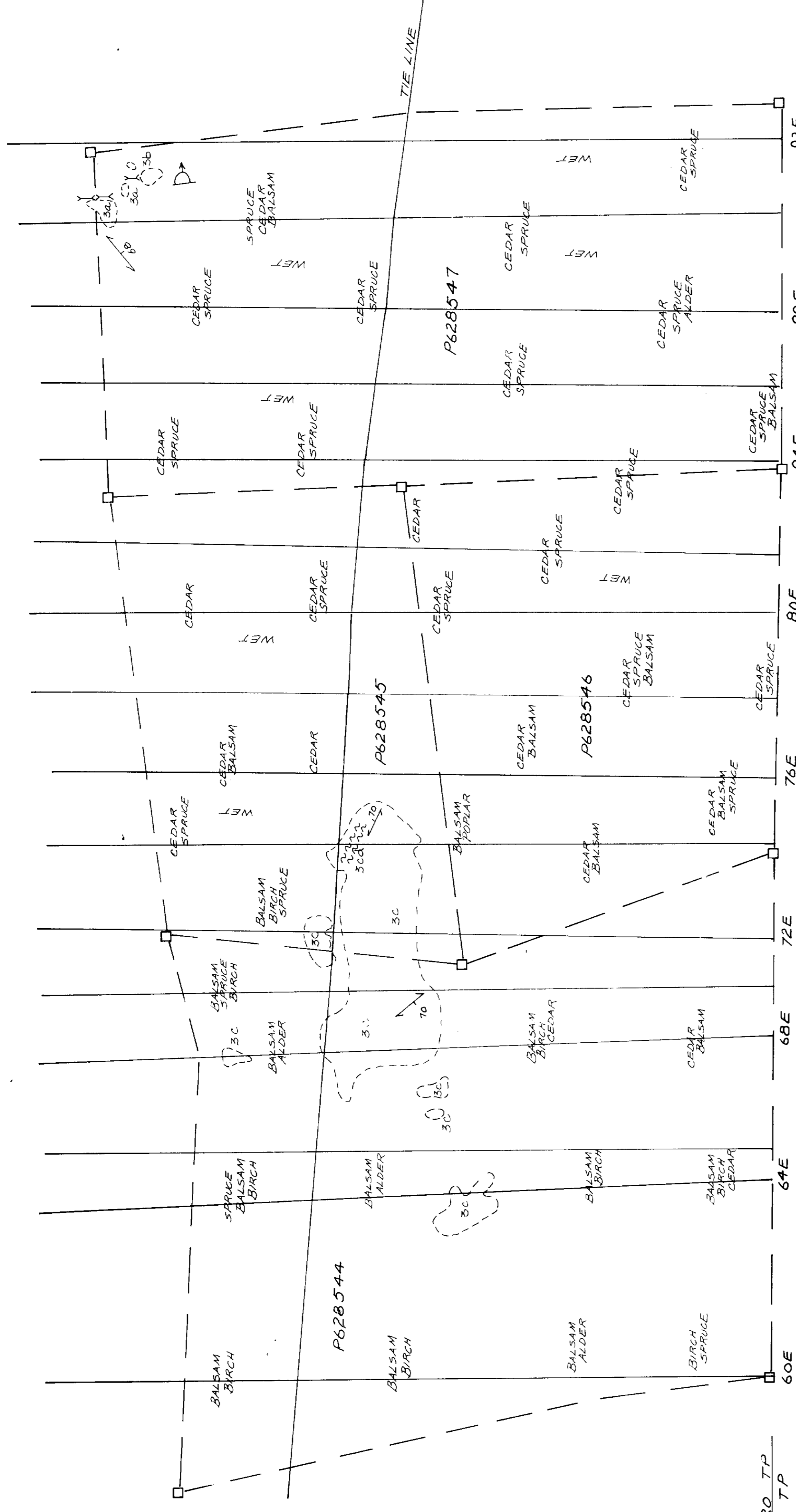
Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____

20N
16N
12N
8N
4N
0N



DELORO TP
ADAMS TP

LEGEND

EARLY PRECAMBRIAN (ARCHEAN)

MMFC INTRUSIVES

4 Diabase

3

3a Massive
3b Pillowed
3c Tuff breccia
3d Carbonatized

2

CHEMICAL METASEDIMENTS

2 Cherty pyrite bearing iron formation with minor inter-layered ductile pyroclastics

1

ACMATIC METAVOLCANICS

1a Massive
1b Polysutured
1c Spinifer textured
1d Carbonatized
1e Serpentinized
1f Schistose/foliated

SYMBOLS

Outcrop area

Geological contact

Flow top and facing

Top of flow from pillow shape

Felation

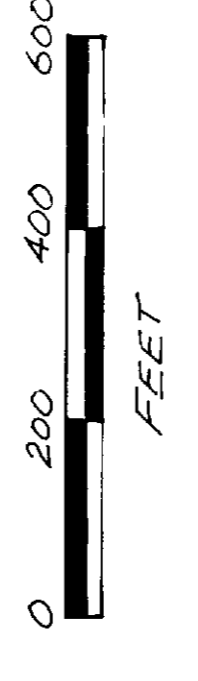
Shearing

Claim post

Claim line

9V Quartz vein

Trench



COMSTATE RESOURCES
GEOLOGY
SE DELORO TWP
NOVEMBER, 1984
CLAIMS - P628544 to 547
P779553

Handwritten signature and date: 11/10/84

