010

Comstate Resources Ltd

Geological Report

Reid Property

Reid Township

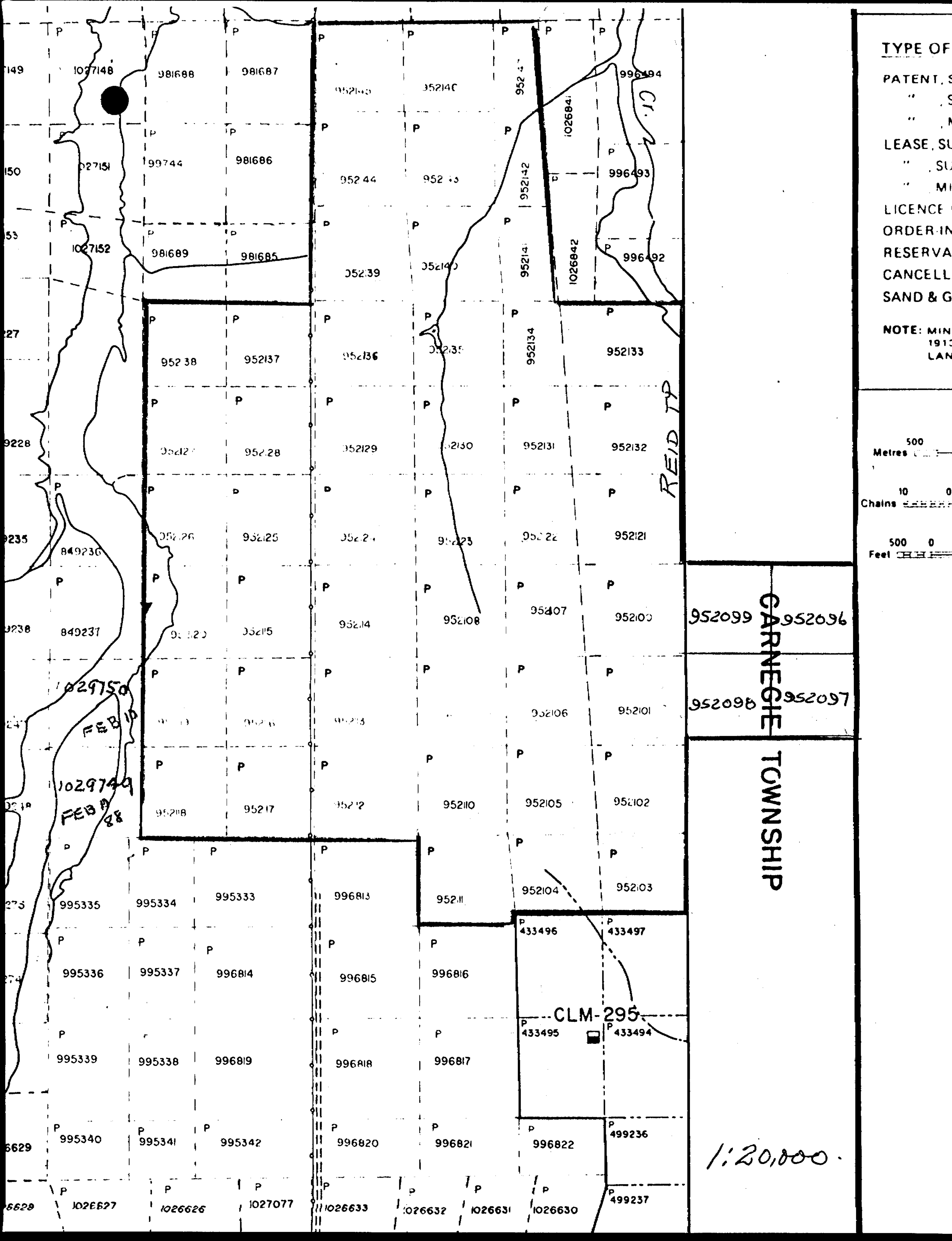
Porcupine Mining Division

March 8, 1988

D. R. Pyke, Ph.D.

D R Pyke

Contents



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952097
GARNEGIE
TOWNSHIP
REID TP
Cr.
1029750
FEB 10
1029749
FEB 8
88
995335
995334
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996813
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CLM-295
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499237
1026627
1026626
1027077
1026633
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1026631
1026630
1:20,000.

Comstate Resources Ltd

Geological Report

Reid Property

Introduction

The property consists of 52 contiguous claims in the NE part of Reid Township; four of the claims extend east into Carnegie Township. The property, 22 miles NW of the Timmins City centre, is within the District of Cochrane, Porcupine Mining Division, and comprises the following claims:

. P952096 - P952147 inclusive

Access

Access to the property is good; a gravel logging road extends west from highway 655 in the north east part of Carnegie Township, to the Power Line which traverses the west side of the property. The power line road is driveable to the southern most part of the property.

Previous Work

Geological maps of the area consist of two government compilations by Bright and Hunt, (1971) and Hunt and Maharaj, (1979), respectively.

In 1964, Mespi Mines Ltd flew an airborne magnetic and electromagnetic survey over a large block of ground extending from Kamiskotia to Carnegie - Kidd Townships. Part of the survey covered the

southern portion of the current property.

In 1964, Texore Mines Limited held 20 claims in the NE part of the property, between the Power Line and Jocko creek. Ground magnetic and electromagnetic surveys were undertaken and two strong conductors were delineated. Although five diamond drill holes were recommended there is no record of any follow-up work being done on the property.

In 1965, Canadian Javelin Limited held the NE part of the property between the Power Line and the Mattagami River. An airborne magnetic and electromagnetic survey was flown over this and a small group of contiguous claims to the west. Follow-up ground magnetic and electromagnetic surveys led to the drilling of one diamond drill hole (H-1/1) for 599 feet, just to the east of the Mattagami River.

In 1967, International Nickel Company Limited sunk 2 holes (628' and 785' respectively) in the central portion of the current property. Precise locations of the drilling are uncertain, but presumably the holes were drilled to test EM conductors.

In 1965, Terra Nova Exploration Ltd conducted horizontal and vertical loop electromagnetic surveys over a block of 10 claims in NE Reid Township. The southern boundary of the claims extended into the present property. Two weak conductors were attributed to conductive overburden.

In 1970, Hollinger Mines Ltd, as a result of an airborne electromagnetic survey in the north Timmins area, acquired a small claim group in the SW corner of the current property. Subsequent ground magnetic and electromagnetic surveys led to the drilling of one diamond drill hole for 542 feet.

In 1970, Mattagami Lake Mines Ltd flew an airborne magnetic and

electromagnetic(INPUT) survey over two areas north of Timmins, one of which included the southern portion of the property currently held by Comstate. Following this, in 1971, Mattagami flew an airborne Turair electromagnetic and magnetic survey covering much of the eastern part of Reid Township. Four diamond drill holes totalling 2409 feet were drilled in 1972, on that portion of the ground now held by Comstate.

Over the period 1972-74, Newmont Mining Corporation of Canada Limited conducted magnetic and induced polarization surveys over much of the south half of the property. One diamond drill hole (534') was sunk in the SE part of the property.

In 1976, Great Plains Development Company of Canada Ltd held 4 claims previously held by Terra Nova. Magnetic and electromagnetic surveys reconfirmed the work of Terra Nova, and no further work was undertaken.

During 1978 - 1982, Gulf Minerals Canada Limited undertook a large multi-facetted exploration program which in part, covered the eastern half of Reid Township. This included overburden drilling (reverse circulation), an airborne magnetic and electromagnetic (INPUT) survey, ground magnetic and electromagnetic (Max-Min) surveys, and subsequent follow-up diamond drilling. Six diamond drill holes were sunk on the current property, totalling 3486 feet.

Present Survey

The present survey was done intermittently between May 21 - July 27, 1987, by D. Pyke and B. Raine.

The Power Line was established as a base line, and E-W traverses were done at approximately 400 foot intervals across the entire claim group. All E-W claim lines were traversed, and many of the N-S lines. A hip chain was utilized to measure all distances.

Geology

Little is known of the detailed geology because of the absence of outcrop on the claim group, and the paucity of diamond drilling, other than in the locale of known conductors. Even within the "conductive areas", accurate location of some of the previous drill holes is not possible from available data, and at best can only be approximated. Nevertheless, a general reconstruction of the geology can be made from existing geophysical and drill hole information(see Figure 1).

The southerly, and most continuous conductive zone (centered on Line 56S) is mainly within ultramafic rocks, with lesser intercalated felsic volcanics and minor graphitic argillite-tuff. The ultramafic rocks are interpreted to be largely or wholly komatiitic volcanics. Talc - carbonate alteration , although present, is not pervasive, and the felsic volcanics are generally highly sericitized(Assessment Files). The more northerly, less continuance conductive zone (centered on Line 40S) immediately east of the Power Line is largely within mafic volcanics, with lesser rhyolite. The conductor appears to be caused by graphitic argillite. The conductive zone is close to a mafic - felsic volcanic contact - i.e. rhyolitic volcanics occur almost exclusively to the north of the conductor, whereas basaltic rocks are more common to the south. Chloritization and shearing of the basaltic rocks is common.

The magnetic high (Bright and Hunt, 1971), which crosses the Base Line at Line 80S, is interpreted to reflect underlying ultramafic rocks.

Diamond drilling immediately south of the property is largely within felsic volcanic tuffs; similar rocks are interpreted to underlie much of the southern part of the property.

Northerly trending linear magnetic highs reflect the precense of diabase dikes, and offsets along these possibly indicate NW trending cross faults.

Conclusions and Recommendations

Details on the geology of the property are lacking, in spite of a number of previous surveys. However, the general stratigraphy appears favorable for both gold and massive sulphide deposition. Detailed magnetic and Max-Min surveys have been recommended and are in the final stages of completion. It is recommended that all former drill sites be tied into the now established grid, and available drill core from the property be relogged. This will assist in prioritizing drill targets for the next phase of exploration.

D R Pyke

References

Bright, E.G., and Hunt,D.S.

1971: Reid Township: Ontario Dept. Mines and Northern Affairs, Prelim. Map P. 700

Hunt, D. S., and Maharaj, Deosaran

1979: Reid Township: Ontario Geological Survey, Prelim. Map P.700(Rev)

Ontario

Ministry of Natural Resources

File _____

GEOPHYSICAL – GEOLOGI
TECHNICAL DATA

42A14SW0102 2.10913 REID

900

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

Type of Survey(s) GEOLOGICAL

Township or Area REID - Carnegie

Claim Holder(s) COMSTATE Resources

Survey Company COMSTATE Resources

Author of Report D. R. Pyke

Address of Author 31 DeJAIR CRES. THORNHILL ONT

Covering Dates of Survey MAY 21/87 - MARCH 7/88
(linecutting to office)

Total Miles of Line Cut _____

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 _____
--Magnetometer _____
--Radiometric _____
--Other _____
Geological 20
Geochemical _____

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

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

DATE: May 10/88 SIGNATURE: D R Pyke
Author of Report or Agent

Res. Geol. _____ Qualifications 2.3899

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
P	952096
P	952097
P	952098
P	952099
P	952100
P	952101
P	952102
P	952103
P	952104
P	952105
P	952106
P	952107
P	952108
P	952109
P	952110
P	952111
P	952112
P	952113
P	952114
P	952115
P	952116

TOTAL CLAIMS 52

If space insufficient, attach list

OFFICE USE ONLY

837 (5/79)

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 _____

Reid - Carnegie Claims (cont'd)

P 952117
P 952118
P 952119
P 952120
P 952121
P 952122
P 952123
P 952124
P 952125
P 952126
P 952127
P 952128
P 952129
P 952130
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P 952142
P 952143
P 952144
P 952145
P 952146
P 952147

D Lyke

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 _____

Instrument _____

Accuracy _____

Parameters measured _____

_____

Additional information (for understanding results) _____

_____

_____

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 _____

Ministry of Natural Resources
Ontario

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

PORCUPINE MINING DIVISION
RECEIVED
JAN 14 1988

DOCUMENT No. W8806.013

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.

Type of Survey(s): GEOLOGICAL 2.10913
Township or Area: REID - CARNEGIE
Claim Holder(s): COMSTATE RESOURCES LTD
Prospector's Licence No.: T-1127
Address: 31 DELAIR CRES. THORNHILL ONT L3T 2N3
Survey Company: COMSTATE RESOURCES Ltd
Date of Survey (from & to): 21 05 87 (Day Mo. Yr.) 27 07 87
Total Miles of line Cut:
Name and Address of Author (of Geo-Technical report): D. R. PYKE 31 DELAIR CRES THORNHILL ONT L3T 2N3

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

RECEIVED
MAR 14 1988
MINING LANDS SECTION

RECORDED
JAN 14 1988

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.

Date: Jan 12/87
Recorded Holder or Agent (Signature): W R Pyke

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P	952096	
	952097	
	952098	
	952099	
	952100	
	952101	
	952102	
	952103	
	952104	
	952105	
	952106	
	952107	
	952108	
	952109	
	952110	
	952111	
	952112	
	952113	
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	952138	
	952139	
	952140	
	952141	

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES OFFICE
MAR 24 1988

Total number of mining claims covered by this report of work: 52

For Office Use Only
Total Days Recorded: 1040
Date Recorded: RECEIVED JAN. 14/88
Date Approved as Recorded: 18 March 88
Mining Recorder: S Whitt
Branch Director: A Plant

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: 31 DELAIR CRES THORNHILL Ont. L3T 2N3
Date Certified: Jan 12/87
Certified by (Signature): W R Pyke

COMSTATE RESOURCES MINING CLAIMS CONT'D.

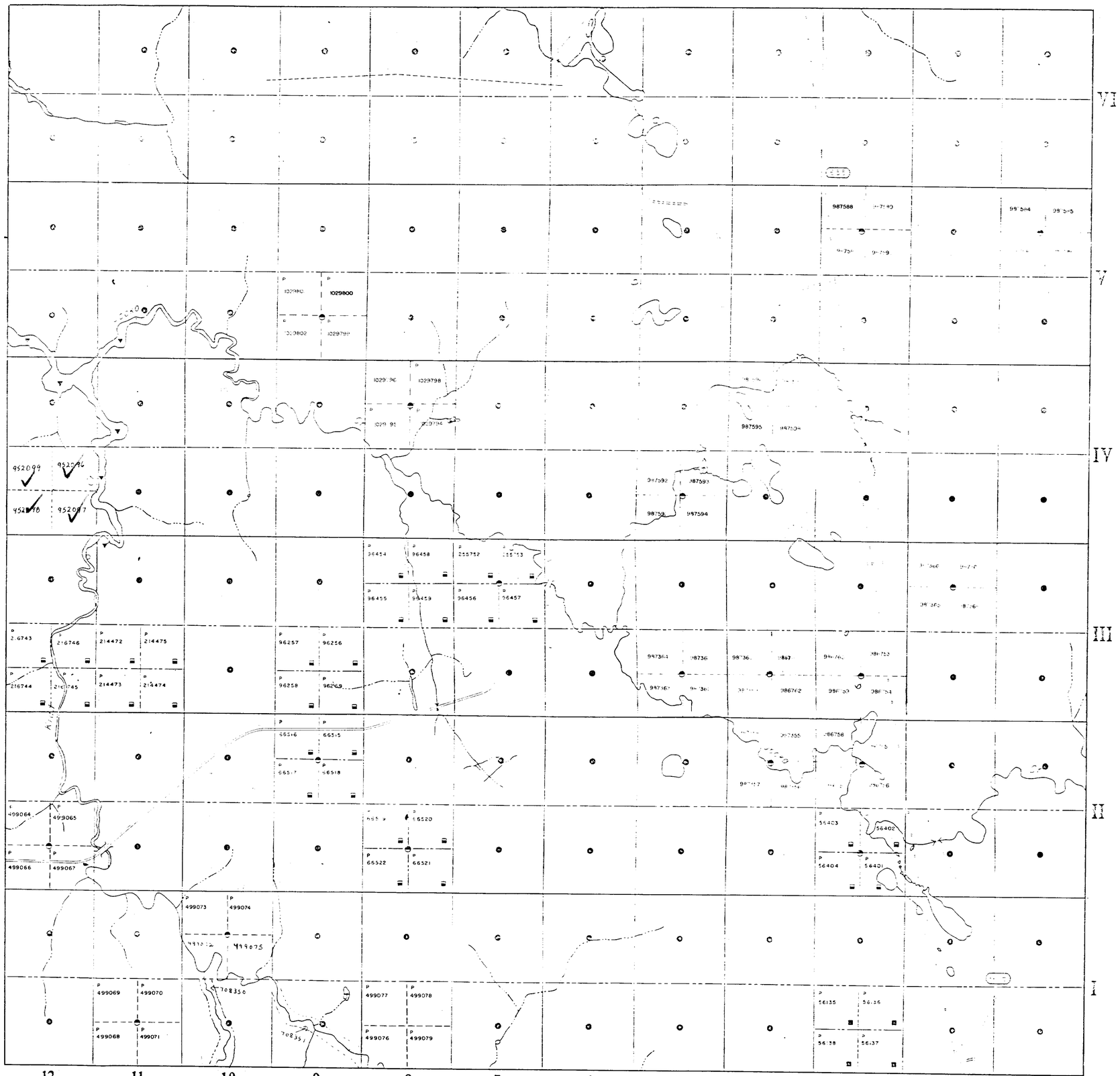
P952142
P952143
P952144
P952145
P952146
P952147

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

CRAWFORD TOWNSHIP



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
TRIGONOMETRICAL BENCHMARK

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	C
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. 1910, CHAP. 30, SEC. 63, SUBSEC. 1.

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

SCALE 1:20 000

PORCUPINE MINING DIVISION
RECEIVED
DEC 24 1987

TOWNSHIP
CARNEGIE

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

Ontario Ministry of Natural Resources
Ministry of Northern Development and Mines

Date OCTOBER, 1985
Number G-3930

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

NOTES

TOWNSHIP SUBDIVISION ANNULLED AUGUST 19, 1953.

FLOODING ON MATTAGAMI RIVER. L.O. 7085.

MAHAFFY TOWNSHIP

THORBURN TOWNSHIP

CARNEGIE TOWNSHIP

MACDIARMID TOWNSHIP

5M 4M 3M 2M 1M

23M 22M 21M 20M 19M

CLM 263

CLM 264

CLM 265

CLM-295

Thorburn Cr.

Mattagami River

Lochie River

Cr.

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.

500 0 1000 Metres Metres

10 0 10 20 30 40 50 60 70 Chains Chains

500 0 1000 2000 3000 4000 5000 Feet Feet

SCALE 1:20 000

TOWNSHIP

REID

M.N.R. ADMINISTRATIVE DISTRICT

TIMMINS

MINING DIVISION

PORCUPINE

LAND TITLES / REGISTRY DIVISION

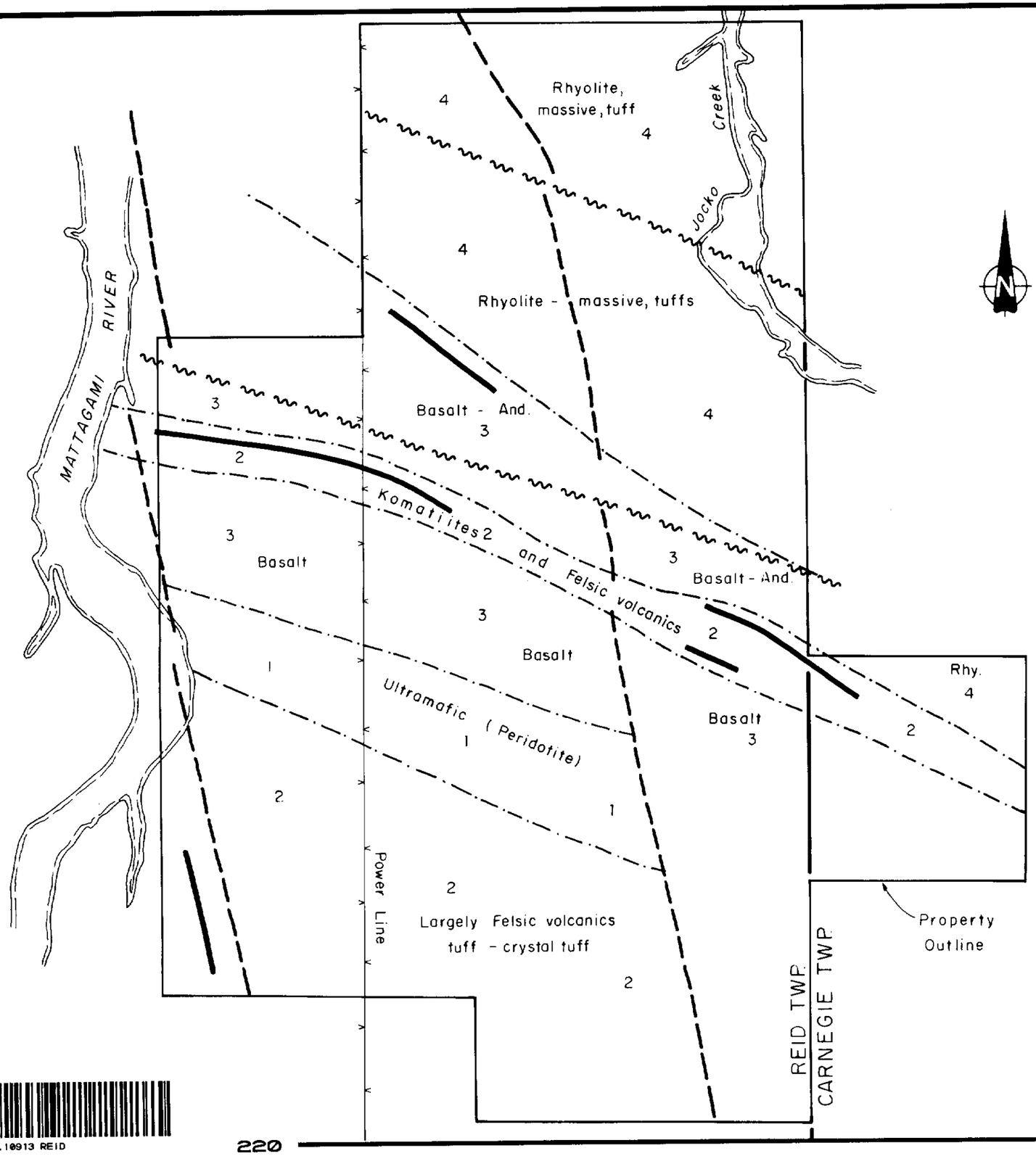
COCHRANE

Ministry of Natural Resources — Ontario

Ministry of Northern Development and Mines

Date SEPTEMBER, 1986

Number G-3966



LEGEND

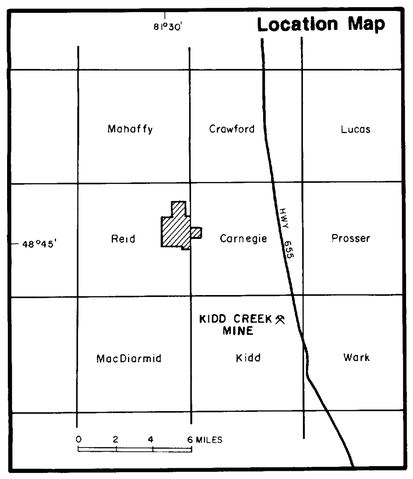
- Diabase dyke
- Rhyolite — 4
- Basalt - Andesite — 3
- Komatiites, Felsic Volcanics — 2
- Ultramafic intrusive — 1
- Geological boundary
- Fault
- Airborne Electromagnetic conductor

2.10913

Fig 1 Generalized geology of the Reid Township property

0 ½ 1 MILES

Location Map



REID TOWNSHIP
CARNEGIE TOWNSHIP

MATTAGAMI RIVER

Jocko Creek

Jocko Creek

H-1-71

R-1-71

W.P

BASE LINE

R-80-D-4
R-80-D-3
32912
R-80-D-6
R-80-D-9
TA2-72-2
TA2-72-3
TA2-72-1
R-80-D-11
32911
R75-8
R-80-D-12
R-80-D-13
C-1-72

Felsic volcanics

Mafic volcanics

Komatiites and Felsic volcanics

Ultramafics (peridotite)

Largely Felsic volcanics, tuff - crystal tuff

952145 952146 952147 952144 952143 952142 952139 952140 952141 952138 952137 952135 952136 952134 952133 952127 952128 952129 952130 952131 952132 952126 952125 952124 952123 952122 952121 952120 952115 952114 952108 952107 952100 952119 952113 952109 952116 952106 952101 952098 952097 952118 952117 952112 952110 952105 952102 952111 952104 952103 952099 952096

00 4S 8S 12S 16S 20S 24S 28S 32S 36S 40S 44S 48S 52S 56S 60S 64S 68S 72S 76S 80S 84S 88S 92S 96S 100S 104S 108S 112S 116S 120S 124S

0 500 1000 1500 FEET

Legend

4	Felsic volcanics
3	Mafic volcanics
2	Komatiites and felsic volcanics
1	Ultramafic intrusive (peridotite)

SYMBOLS

- Geological boundary
- Diamond drill hole (from assessment files)
- Claim post and claim line
- Axis of electromagnetic conductor (from assessment files)
- Beaver Dam
- Logging road
- Power line
- Topographic high
- Vegetation boundary
- Creek, swamp and shoreline

2.10913

COMSTATE RESOURCES LTD.

REID TOWNSHIP PROPERTY

Reid Township, Ontario

GEOLOGICAL MAP

SCALE 1 Inch = 400 feet

Project 6.141 — May-July 1987

42A14SW0182 2.10913 REID

230