

42A06NE0357 2.10457 SHAW

### GEOPHYSICAL REPORT

ON

DELORO-SHAW TOWNSHIPS PROPERTY

FOR

TYRANEX GOLD INC.

RECEIVED

007 1 6 1987

MINING LANDS SECTION

JOHN GRANT J. Q. Grant, F.G.A.C., C.E.T.

October 15, 1987



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#### **APPENDICES**

Appendix A EDA Omni Plus Magnetometer System

#### INTRODUCTION

Tyranex Gold Inc. holds a group of 10 contiguous unpatented mining claims in Shaw and Deloro Townships, Porcupine Mining Division, Timmins, Ontario.

The property is well situated in the Timmins camp with a past history of gold exploration going back to the early 1930's.

It was during this time that a 125 foot shaft was sunk with some 900 feet of drifting. Also, a number of pits and trenches were dug to sample numerous quartz veins on the property.

It was due to this history and reactivated interest and exploration in the area by Loki Resources and Eldor Resources that Tyranex decided to perform their 1987 project.

#### PROJECT

The property under discussion consists of 10 contiguous mining claims, 3 of which are in Shaw Township and 7 are in Deloro Township. Both townships are in the Porcupine Mining Division, Timmins, Ontario.

A list of the claims and their location are below as recorded on the Ministry of Natural Resources Plan Maps G-3999 and G-3993.

Claim Number	Loc	cation
P-946130	Shaw '	<b>rownshi</b> p
P-946129	11	11
P-946128	Ħ	11
P-946131	Deloro	Township
P-946132	11	11
P-946133	11	11
P-946134	11	11
P-946135	11	11
P-946136	II .	11
P-946137	11	11

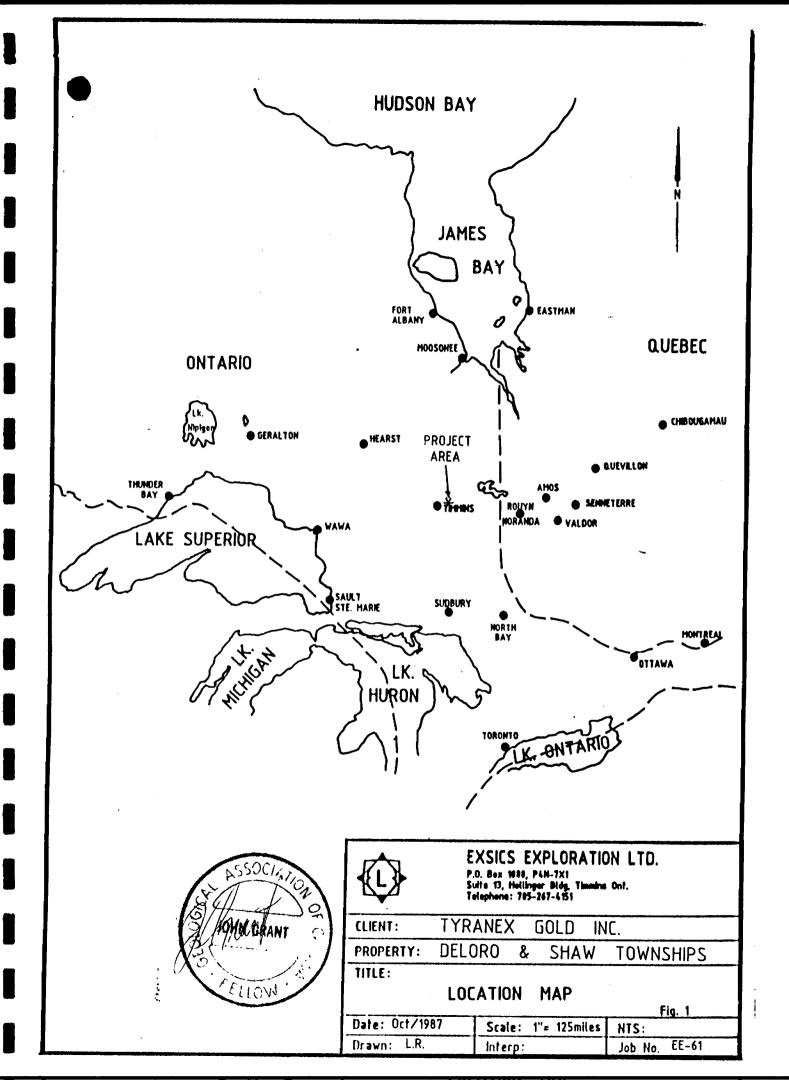
Refer to Figure 3, Claim Block Sketch.

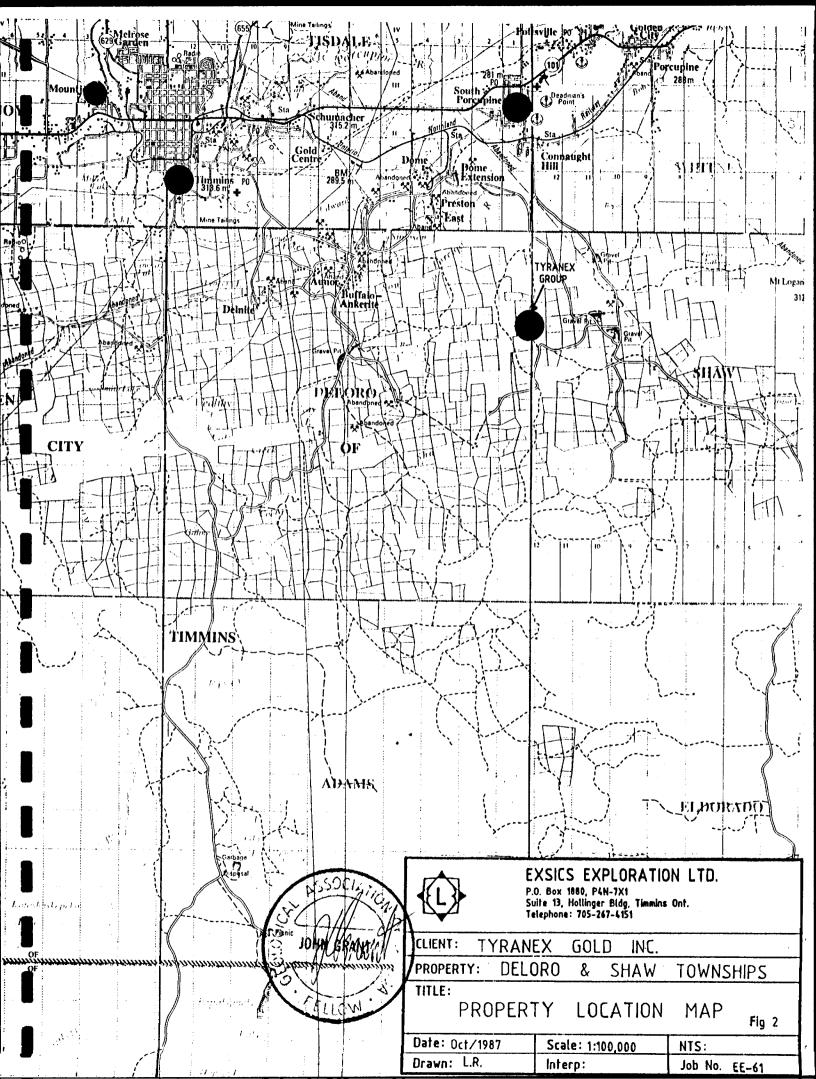
#### LOCATION

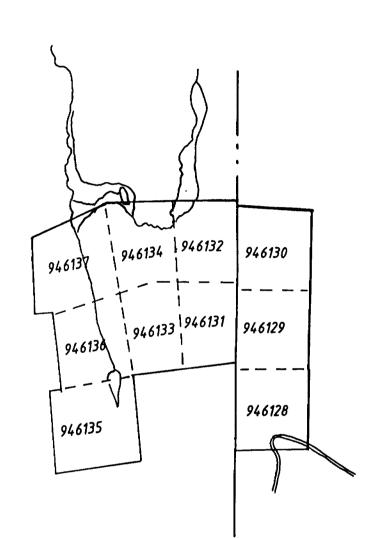
The property is located about 8 miles (12 km) southeast of the City of Timmins and about 4.5 miles (7.25 km) south of the Town of South Porcupine, in the northeast quadrant of Deloro Township and northwest quadrant of Shaw Township. Refer to Figures 1 and 2, Location Map.

#### ACCESS

Access to the property is by way of the "Timmins back road", eastward from the City of Timmins to the Town of South Porcupine. The Langmuir Road travels south out of South Porcupine. This road has a series of secondary bush roads which lead to the east and central section of the group. Dome Mines has also constructed a new gravel road running south along the western section of the claim group. This road provides easy access to the claim group year round.









DELORO TWP.



# EXSICS EXPLORATION LTD.

P.O. Bex 1680, PAM-7X1 Suits 13, Hellinger Bldg, Tinnins Ont. Telaphone: 765-267-4151

CLIENT: TYRANEX GOLD INC.

PROPERTY: DELORO & SHAW TOWNSHIPS

SHAW TWP.

TITLE:

CLAIM LOCATION MAP

Flg 3,

 Date:
 Oct /1987
 Scale:
 1:20,000
 NTS:

 Drawn:
 L.R.
 Interp:
 Job No. EE-61

#### LINECUTTING PROGRAM

A 400 foot grid was cut over seven of the 10 claims using an east-west baseline turned off at the number 2 post of claim 946131. This baseline was cut 1200 feet to the east boundary of the group and 1600 feet to the west where the remainder of the block has been flooded by the new Dome tailings system.

Crosslines were turned off of this baseline at 400 foot intervals and cut to the north and south boundaries of the block.

In all, a total of 6.5 miles of grid was established.

#### GEOPHYSICAL PROGRAM

This program consisted of a Magnetic and Gradient survey. The survey was completed using the EDA Omni Plus Magnetometer system. This system records the total field value as well as the vertical gradient value at each station at the same time. The data is stored internally and retained until it is dumped at the end of the day. Because of the small mileage, the baseline was first surveyed and tied in. All of the crosslines were then surveyed and tied into the baseline values.

This corrected data was then plotted on separate base maps, one for the total field values and a second for the gradient data.

Both of these maps can be found in the back pocket of this report.

Specifications for the BDA Omni Magnetometer can be found as Appendix A of this report.

#### SURVEY RESULTS

The most predominant feature of the grid is an east-northeast structure striking across lines 1600W to L300E at 1600N. A second, weaker structure is evident striking east across lines 1600W to 800W at 800 north.

These structures may be significant but require further geophysics such as IP follow-up.

Another area of interest is situated on L400E at 800S. This weak low feature may be of interest as it may relate to an alteration zone.

Further testing possibly with an IP survey should be considered to better define the target area.

### RECOMMENDATIONS AND CONCLUSIONS

The magnetic and gradient surveys were successful in outlining several areas of interest.

At this point an Induced Polarization survey would be the best geophysical follow-up method in the event of disseminated sulphide areas. Horizontal loop such as MaxMin may also be of help in distinguishing legitimate bedrock or anomalous areas.

#### CERTIFICATE OF QUALIFICATIONS

#### I, John Charles Grant do hereby certify:

- that I am a geophysicist and reside at Lot 2 Martineau Avenue, Kamiskotia Lake, Timmins, Ontario.
- 2. that I am a Fellow of the Geological Association of Canada.
- 3. that I am a member of the Certified Engineering Technologist Association.
- 4. that I graduated for Cambrian College of Applied Arts and Technology, Sudbury Campus in 1975 with an Honour's diploma in Geology Technology.
- 5. that I have practised my profession continuously for 12 years.
- 6. that my report on the Deloro/Shaw Townships property, Porcupine Mining Division, is based on work carried out under my supervision.
- 4. I hold no specific or special interest in the described property. I have been retained as a Consulting Geophysicist for "the property".

SOCIADated this 15th day of October 1987

JOHN GRANT

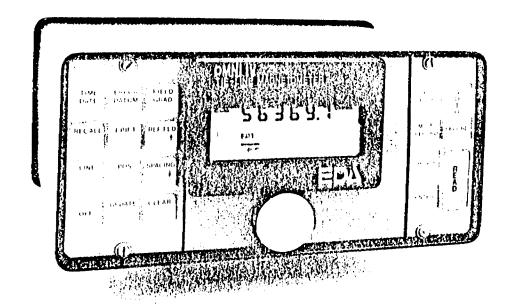
" · )

C. Grant, C.E.T., F.G.A.C.

APPENDIX A

# OMNI IV Tile Line' Magnetometer





# **OMNI IV's Major Benefits**

- Four Magnetometers in One
- Self Correcting for Diurnal Variations
- Reduced Instrumentation Requirements
- 25% Weight Reduction
- User Friendly Keypad Operation
- Universal Computer Interface
- Comprehensive Software Packages



# Specifications

aynamic Range . . .

**Tuning Method** 

itomatic Fine Tuning

ocessing Sensitivity .... ± 0.02 gamma

tistical Error Resolution . . . . . . . . . . . 0.01 gamma

osolute Accuracy

indard Memory Capacity otal Field or Gradient ie-Line Points **Base Station** 

play

232 Serial I/O Interface dient Tolerance

**Test Mode** 

**Gradient Sensors** 

Sensor Cable

Operating Environmental Range Power Supply

Battery Cartridge/Belt Life

Weights and Dimensions

Instrument Console Only

Lead-Acid Battery Cartridge 1.8 kg, 235 x 105 x 90mm

id-Acid Battery Belt 1.8 kg, 540 x 100 x 40mm isor 1.2 kg, 56mm diameter x 200mm

**Gradient Sensor** 

(0.5 m separation-standard) ................................. 2.1 kg, 56mm diameter x 790mm

Idient Sensor

Om separation-optional) 2.2 kg, 56mm dlameter x 1300mm Standard System Complement

e Station Option Gladiometer Option . 18,000 to 110,000 gammas. Roll-over display feature suppresses first significant digit upon exceeding 100,000 gammas.

Tuning value is calculated accurately utilizing a specially developed tuning algorithm

± 15% relative to ambient field strength of last stored value

± 1 gamma at 50,000 gammas at 23°C

± 2 gamma over total temperature range

1,200 data blocks or sets of readings 100 data blocks or sets of readings 5,000 data blocks or sets of readings

Custom-designed, ruggedized liquid crystal display with an operating temperature range from -40°C to +55°C. The display contains six numeric digits, decimal point, battery status monitor, signal decay rate and signal amplitude monitor and function descriptors.

2400 baud, 8 data bits, 2 stop bits, no parity 6,000 gammas per meter (field proven)

A. Diagnostic testing (data and programmable memory) B. Self Test (hardware)

Optimized miniature design. Magnetic cleanliness is consistent with the specified absolute accuracy.

0.5 meter sensor separation (standard), normalized to gammas/meter. Optional 1.0 meter sensor separation available. Horizontal sensors optional.

Remains flexible in temperature range specified, includes strain-relief connector

ing Time (Base Station Mode) Programmable from 5 seconds up to 60 minutes in 1 second increments

-40°C to +55°C; 0-100% relative humidity; weatherproof Non-magnetic rechargeable sealed lead-acid battery cartridge or belt; rechargeable NiCad or Disposable battery cartridge or belt; or 12V DC power source option for base station operation.

2,000 to 5,000 readings, for sealed lead acid power supply, depending upon ambient temperature and rate of readings

-- 2.8 kg, 238 x 150 x 250mm

Instrument console; sensor; 3-meter cable, aluminum sectional sensor staff, power supply, harness assembly, operations manual.

Standard system plus 30 meter cable Standard system plus 0.5 meter sensor E D A Instruments Inc 4 Thorncliffe Park Drive Toronto, Ontario Canada M4H 1H1 Telex: 06 23222 EDA TOR Cable: Instruments Toronto 14161 425 7800

In U.S.A E.D.A. Instruments Inc. 515 I. Ward Road Wheat Ridge, Colorado 13031 422 9112

Printed in Canada

(Geophysical, Geological,





Geochemical and Expenditures) 900 Mining Acc ariver. - Do not use shaded areas below, Township or Area =LORO Total Miles of line Credits Requested per Each Claim in Columns at right Mining Claims Traversed (List in numerical sequence) Mining Claim Mining Claim Expend. Days per Expend Geophysical Number Number For first survey: 946128 - Electromagnetic Enter 40 days, (This includes line cutting) - Magnetometer - Radiometric For each additional survey: using the same grid: - Other Enter 20 days (for each) Geological Geochemical Man Davs Days per Geophysical Complete reverse side - Electromagnetic and enter total(s) here 946136 - Magnetometer Radiometric - Other Geological RECEIVED Geochemical Airborne Credits Days per AUG 3 1 1987 Note: Special provisions Electromagnetic credits do not apply Magnetometer to Airborne Surveys. MINING LANDS SECTION RECORDED Radiometric wiribping) AUG 17198 Calculation of Expenditure Days Credits Total **Total Expenditures Days Credits** \$ 15 Total number of mining claims covered by this report of work. Total Days Credits may be apportioned at the claim holder's For Office Use Only choice. Enter number of days credits per claim selected Total Days Cr. Date Recorded in columns at right. Recorded Branch Director Date Date Approved as Recorded Recorded Holder of 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



OFFICE USE ONLY

837 (85/12)

# Ministry of Northern Development and Mines

# 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.

	<del></del>			
			TIC & GRADIENT.	
Township or	r Area	DETORE	& SHAW TUPS.	MINING CLAIMS TRAVERSED
Claim Holde	er(s)	YRANE	× Goid INC.	List numerically
Survey Com	panye	EXS/C5	EXP. LTD.	P. 91/6/28
Author of R	eport	JOHN	CGRANT.	(prefix) (number) - 946129
Address of A	Author .	130× 1	880 Jimmins, Out	***************************************
				946 130
Covering Da	tes of Surv	/ey	(6) 182 - Aug 15/87 (linecutting to office)	946 131
Total Miles o	of Line Cu	t	6.5 Miles	946132
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SPECIAL			DAYS	946 133
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ENTER 40	• •		-Magnetometer	946 135
survey.	g, for this		-Radiometric	946136
ENTER 20	n days for	each	_Other	
additional	•		Geological	946/37
same grid.	,	8	, and the second	1
L	· <del>······</del>		Geochemical	
AIRBORNE	CREDITS	Special provi	sion credits do not apply to airborne surveys)	
Magnetomete	er		neticRadiometric	.
	11 -	/ (enter t	lays per claim)	
DATE:	1 /5/0	Z SIGNA	TURE: Mant	
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		Qualit	ications	-
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	••••••			TOTAL CLAIMS

### GEOPHYSICAL TECHNICAL DATA

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

N	Number of Stations 34/3 Station interval 100 /	Number of Readings686
S	Station interval 100 /	Line spacing Hov'
F	Profile scale	
(	Contour interval <u>GRADIENT - 10 INTERVA</u>	es MAGNETIC- 100 COMMA
MAGNETIC	Instrument FNA OMNI  Accuracy – Scale constant ± / GAMMA  Diurnal correction method BASE STATION  Base Station check-in interval (hours) //3 /v  Base Station location and value BASE LINE W  USEA TO CORRECT CROSS LINES	10 MAGNETOMETER  at. 50,000 GAMMAS.  LOUPING.  1 HOUR.  (AS READ, TIER IN ANA
ELECTROMAGNETIC	Instrument Coil configuration Coil separation Accuracy	
ROI	•	oot back
ECT	Frequency	L.F. station)
副	Parameters measured	
GRAVITY	Instrument Scale constant Corrections made  Base station value and location	
	Elevation accuracy	
	Instrument	☐ Frequency Domain
	Parameters - On time	Frequency
RESISTIVITY	- Off time  - Delay time  - Integration time	
ESI	Power	
	Electrode array	
	Electrode spacing	
	Type of electrode	

NDUCED POLARIZATIC

SELF POTENTIAL	
	Range
	8
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	
Parameters measured	
Additional information (for understanding result	lts)
-	
AIRBORNE SURVEYS	
Type of survey(s)	
Instrument(s)	
	ify for each type of survey)
Accuracy(spec	
Aircraft used	
Sensor altitude	
Navigation and flight path recovery method	
	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	ANALYTICAL METHODS
Type of Sample(Nature of Material)  Average Sample Weight	p. p. m. □ p. p. b. □
Method of Collection	Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circle)
Soil Horizon Sampled	Others
Horizon Development	Field Analysis (tests)
Sample Depth	Extraction Method
Terrain	Analytical Method
	Reagents Used
Drainage Development.	Field Laboratory Analysis
Estimated Range of Overburden Thickness	No. (tests)
	Extraction Method
	Analytical Method
	Reagents Used
SAMPLE PREPARATION (Includes drying, screening, crushing, ashing)  Mesh size of fraction used for analysis	Extraction Method
	Analytical Method Reagents Used
	General ————
General	



# Technical Assessment Work Credits

2.10457

November 4,1987

Mining Recorder's Report of Work No. 187/87

Recorded Holder							
Tyranex Gold Inc.							
Township or Area  Deloro and Shaw							
Type of survey and number of Assessment days credit per claim	Mining Claims Assessed						
Geophysical							
Electromagnetic days							
Magnetometer days	P 946128 - 134						
Radiometric days							
Induced polarization days							
Other days							
Section 77 (19) See "Mining Claims Assessed" column							
Geological days							
Geochemical days							
Man days Airborne Airborne							
Special provision X Ground X							
Credits have been reduced because of partial coverage of claims.							
Credits have been reduced because of corrections to work dates and figures of applicant.							
pecial credits under section 77 (16) for the following m	nining claims						
10 days Magnetometer	· 1						
<del>-</del>							
P 946135-137							
o credits have been allowed for the following mining cl	aims						
not sufficiently covered by the survey insufficient technical data filed							
Note: Assessment credits are based upon linecutting and magnetometer survey.  There are no additional credits for gradient magnetometer survey.							
, at the contract of the contr							

November 30, 1986

Your File: 187/87 Our File: 2.10457

Mining Recorder
Ministry of Northern Development and Mines
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

RE: Notice of Intent dated November 4, 1987 Geophysical (Magnetometer) Survey on Mining Claims P 946128 et al in the Townships of Deloro and Shaw

The assessment work credits, as listed with the above-mentioned Notice of Intent, have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

W.R. Cowan, Manager Mining Lands Section Hines and Minerals Division

Whitney Block, Room 6610 Queen's Park Toronto, Ontario N7A 1W3

Telephone: (416) 965-4888

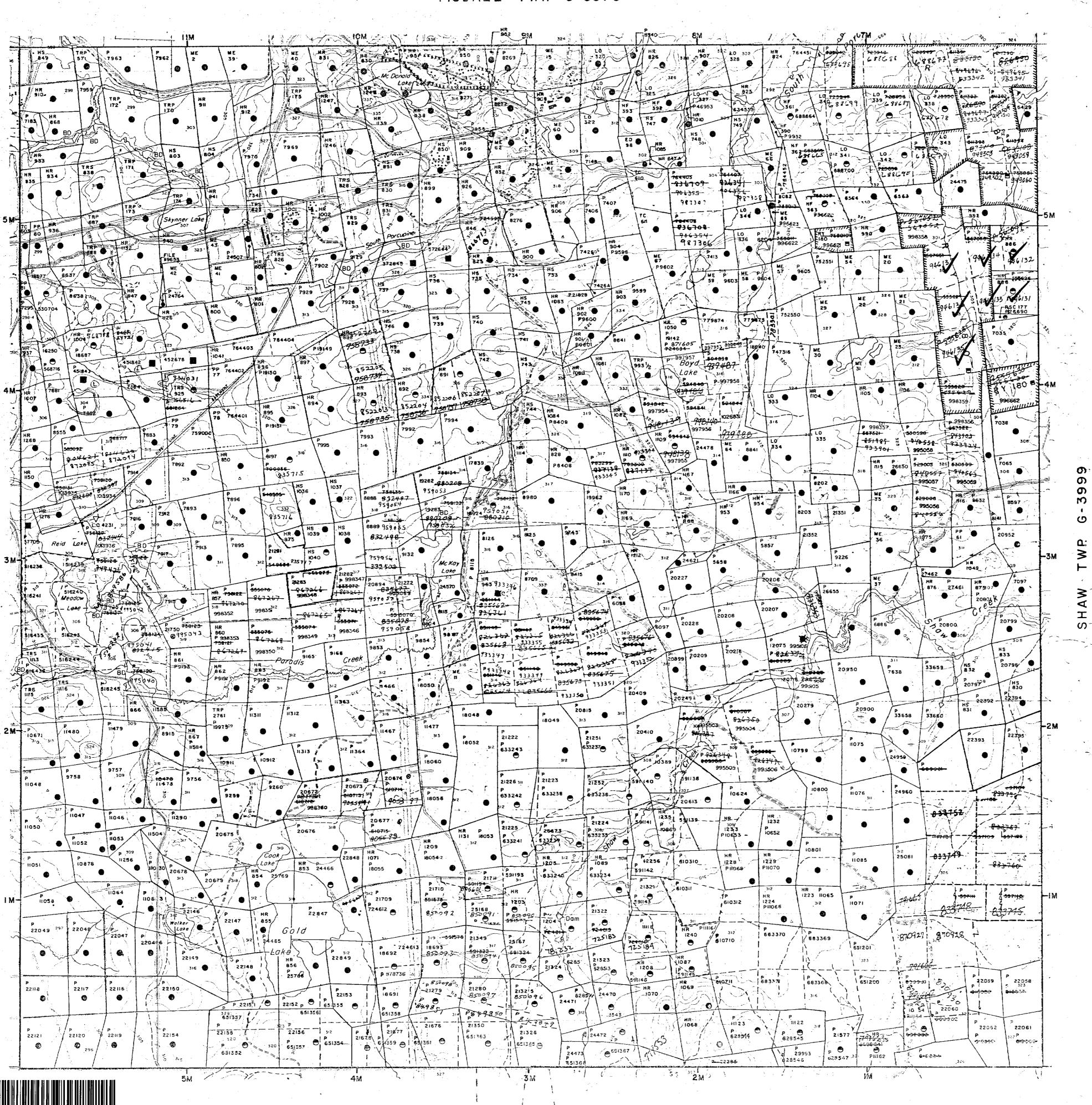
RM:pl

Enclosure: Technical Assessment Work Credits

cc: Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto. Ontario

Resident Geologist Timmins, Ontario

Tyranex Gold Inc. Suite 1710 390 Bay Street Toronto, Ontario M5H 2Y2



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HIGHRAY AND ROUTE NO	
OTHER ROADS	State and the state of the stat
TRAILS	
SURVEYED LINES	
TOWNSHIPS, BASE LINES, ETC.	
LOTS, MINING CLAIMS, PARCELS, E	10
UNSURVEYED LINES.	
LOT LINES	
PARCEL BOUNDARY SHOWING 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	X
, TRAVERSE MONUMENT	•
DISPOSITION OF CRO	WN LANDS
TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	_
" SURFACE RIGHTS ONLY	
" , MINING RIGHTS ONLY	

SCALE 1:20 000

TE: 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.

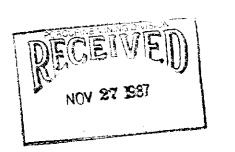
NOTES

REGISTERED PLAN OF SUBDIVISION

MINING CLAIMS SHOWN WITHIN THIS AREA ARE SUBJECT TO THE FIGHTS AND PRIVILEGES GRANTED UNDER AN EASEMENT ORDER DATED MAY 19, 1937 TO DELNITE MINES LTD.

DOME MINES, LIMITED SURFACE RIGHTS LEASE #103926

APPLICATION UNDER P.L.A. FOR SURFACE RIGHTS...DUCKS UNLIMITED CANADA



TOWNSHIP

# DELORO

M.N.R. ADMINISTRATIVE DISTRICT

TIMMINS

MINING DIVISION

PORCUPINE

LAND TITLES / REGISTRY DIVISION COCHRANE



Ministryof Natural

Land Management Resources Branch

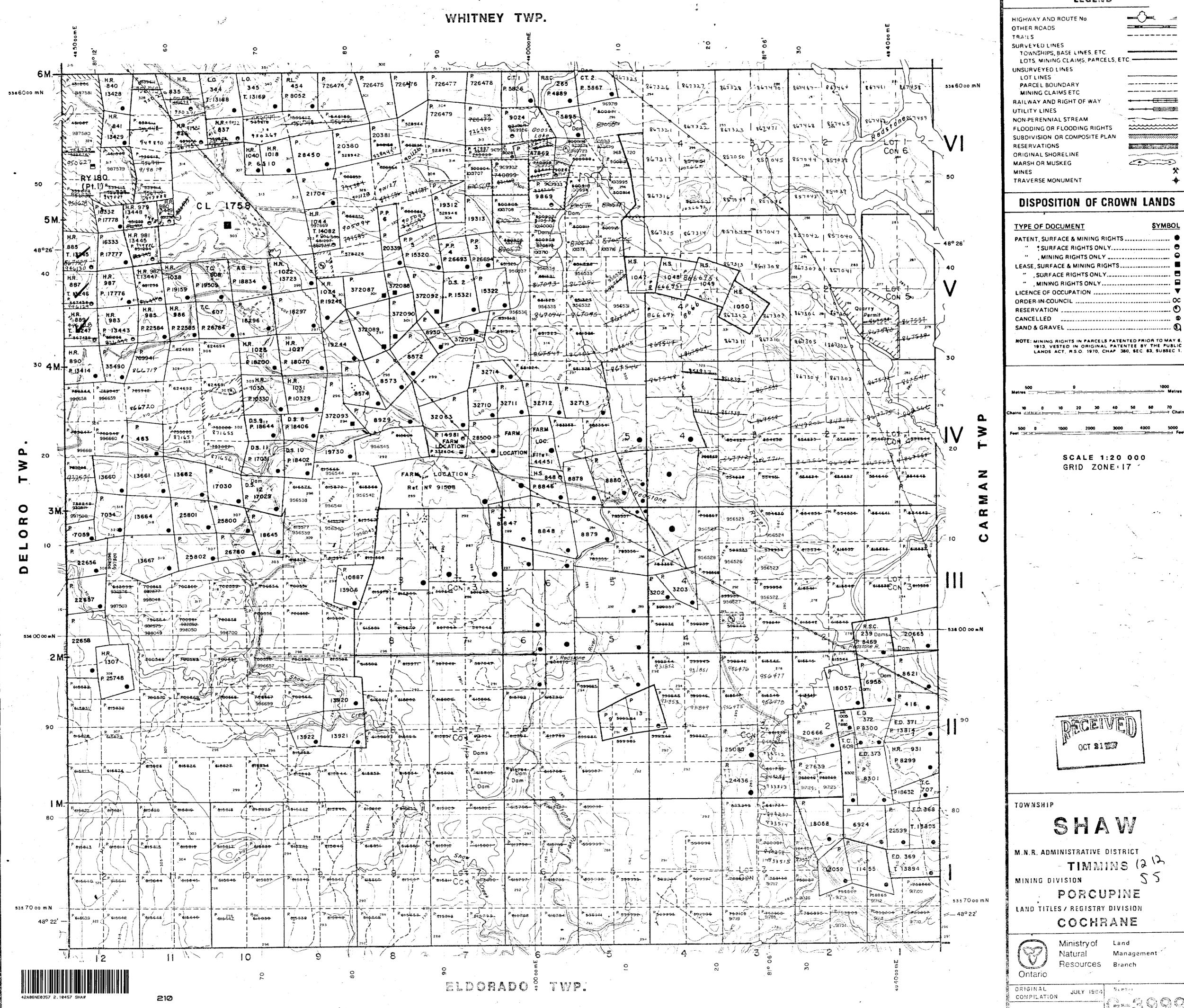
Date FEBRUARY 1984

C-7007 Received of hard school

200

G

ADAMS TWP G-



LEGEND

PATENT, SURFACE & MINING RIGHTS .....

