

S. W. Evans,  
MINING C



42A10SW0335 2.7830 CODY

010

TELEPHONE (416) 444-4133

DON MILLS, ONTARIO

29 SOUTHWELL DR.

**RECEIVED**

SEP - 1 1982

**MINING LANDS SECTION**

*W.D. Evans*  
↑

REPORT ON GEOPHYSICAL SURVEYS

ON W. D. EVANS - 43 MINING CLAIMS

Nos. P 552605 - 552621 inc., P 555236 - 555242 inc.,

and P 555818 - 555836 inc.

CODY TOWNSHIP - PORCUPINE MINING DIVISION

PROVINCE OF ONTARIO

dated at Toronto, Ontario.  
June 15, 1982.

S. W. Evans, P. Eng.,  
Mining Geologist.

**RECEIVED**

FEB 21 1985

**MINING LANDS SECTION**



42A10SW0335 2.7830 CODY

010C

I N D E X

Page

SUMMARY	1
PROPERTY AND LOCATION	2
PROPERTY LOCATION MAP	4
GENERAL GEOLOGY	5
PORCUPINE GEOLOGY (after Dunbar; C.I.M. 1948)	7
HISTORY & SUMMARY OF DEVELOPMENT	8
SURVEY METHODS AND INSTRUMENT DATA	11
a) Magnetometer Survey	
b) Electromagnetic (V. L. F.) Survey	
GEOPHYSICAL RESULTS	15
CONCLUSIONS	18
RECOMMENDATIONS	19
BIBLIOGRAPHY	20
CERTIFICATE	21
ENCLOSURES	
1: LOCATION MAP	
2: LINE GRID PLAN	
3: MAGNETOMETER SURVEY	
4: ELECTROMAGNETIC SURVEY	

SUMMARY

The property, highly folded, faulted and excellent underlying rock units, all of which could host gold deposits, has responded with valid and important geophysical results. The Geonics E.M. - 16, a V. L. F. unit performed exceedingly well and numerous conductors are recorded. However prolific the geophysical response we are not ready to recommend drilling at this stage.

The V. L. F. unit in the water covered and overburden areas of the property was at the limit of its capabilities and did not pick up important V. E. M. conductors that are recorded on the compilation map.

It is hard to believe, that after 70 years these 43 mining claims, around the corner from Manson & Benella's Gold Island discovery of 1907, the first in the Porcupine, that no excellence of exploration techniques have been applied either on the land or on Northeast Bay.

I have recommended further geophysics, at closer line intervals, a proton magnetometer survey and further electromagnetic surveys with Crone's vertical loop unit (V. E. M.).

PROPERTY AND LOCATION

The property consists of 43 contiguous unpatented mining claims in the north central sector of Cody Township. They extend from the Cody north boundary with Matheson Township southwards and extend east and west from the Isthmus to the North Peninsula of Night Hawk Lake. Only 11 1/2 of these claims are on the land, 5 1/2 are water covered to the west and the rest are under the Northeast Bay of Night Hawk Lake.

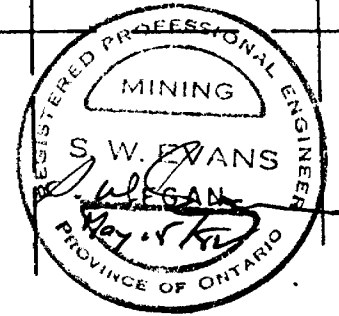
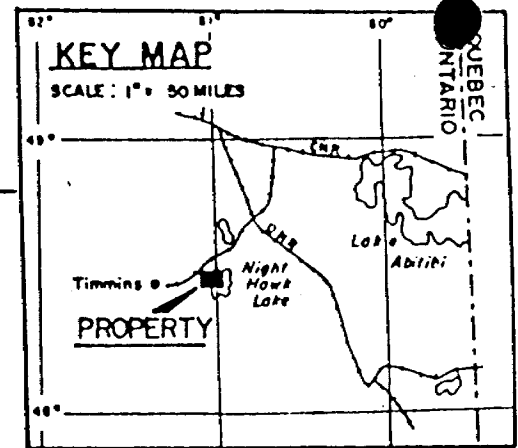
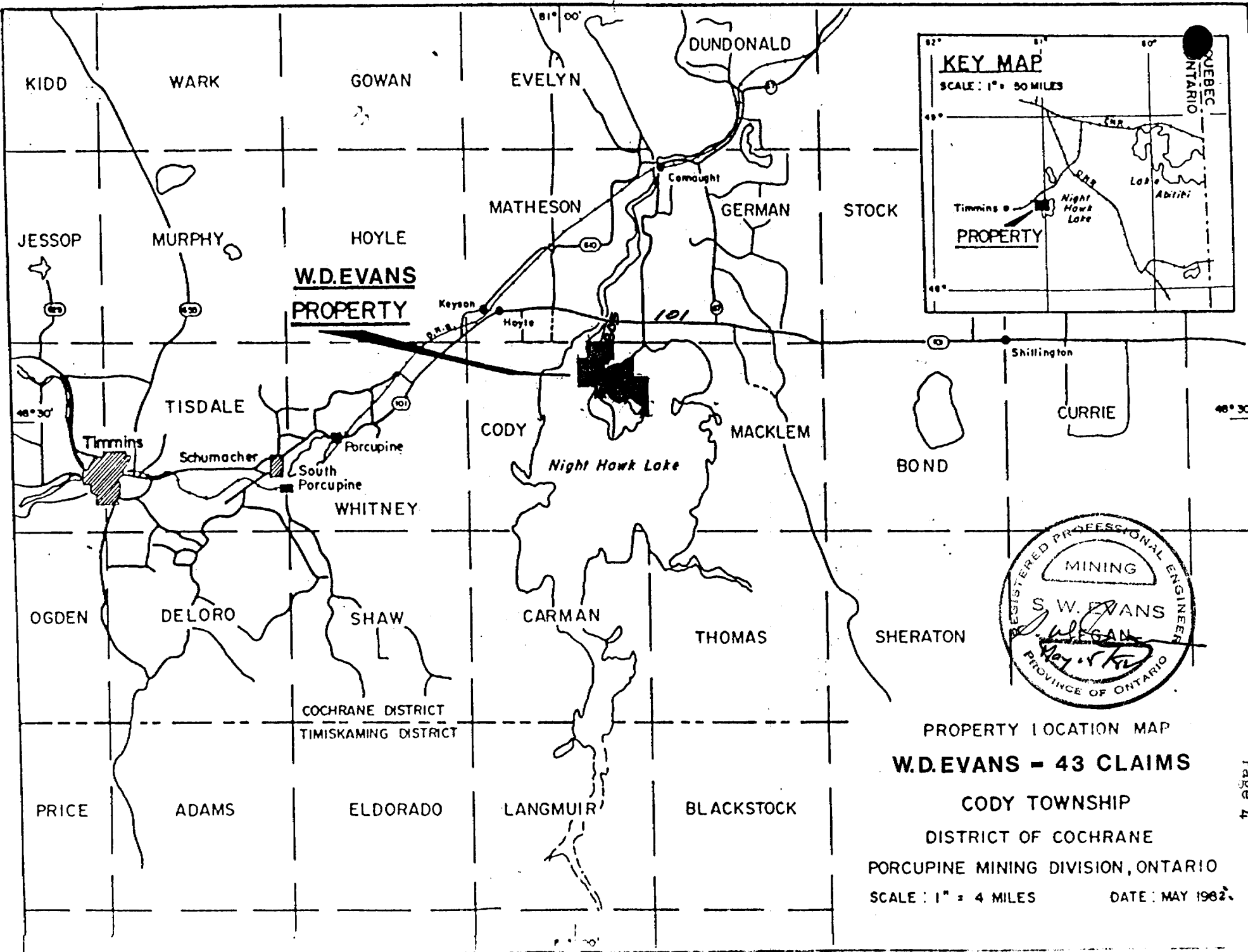
They are numbered as follows:

P 552605	P 552616	P 555241	P 555827
P 552606	P 552617	P 555242	P 555828
P 552607	P 552618	P 555243	P 555829
P 552608	P 552619	P 555819	P 555830
P 552609	P 552620	P 555820	P 555831
P 552610	P 552621	P 555821	P 555832
P 552611	P 555236	P 555822	P 555833
P 552612	P 555237	P 555823	P 555834
P 552613	P 555238	P 555824	P 555835
P 552614	P 555239	P 555825	P 555836
P 552615	P 555240	P 555826	

PROPERTY AND LOCATION (continued)

The property is readily reached via Highway No. 101, east from the Town of South Porcupine, Ontario, for 16 miles. Cross the Frederickhouse River bridge and proceed immediately south on paved road No. 803. You enter the property  $3/4$  of a mile south of the No. 101 intersection, where the Cody Township north boundary crosses this road. Highway No. 803 for the next  $1\ 1/2$  miles to the south traverses the property.

Located in an area of low relief and sparse outcrop, the land is marked by thick stratified clays and tills. The water areas are the same with thick overburden layers to penetrate the bedrock. One old drill hole in the centre of the Northeast Bay of Night Hawk Lake went through 153 feet of overburden to bedrock. This shallow bay often has only 5 or 10 feet of water depth. We do have sparse outcrop along the shore of the Northeast Bay which in this case would be outside the property boundary.



PROPERTY LOCATION MAP  
**W.D. EVANS - 43 CLAIMS**  
 CODY TOWNSHIP  
 DISTRICT OF COCHRANE  
 PORCUPINE MINING DIVISION, ONTARIO  
 SCALE: 1" = 4 MILES      DATE: MAY 1982

GENERAL GEOLOGY

The property is underlain by folded and faulted Precambrian volcanics and sediments. This 'belt' originates west of Timmins and extends 90 miles east to and beyond the Quebec boundary. The series is intruded by stocks and sills of varied composition; ultrabasics, gabbro, granite and quartz porphyry. With the land area of the property almost devoid of outcrop, 1 trench to bedrock and 2 drill holes, our geology must be interpolated from our neighbours sparse outcrop and history with great reliance on E. J. Leahy's report and maps. Two thirds of our land acreage lies to the north of the Destor-Porcupine Fault. The major structural feature conform and follows with the series of volcanics and sediments to and beyond the Quebec boundary. Striking N 70° E through Cody Township, the Destor-Porcupine dips steeply south. It is marked by a shear zone several hundred feet wide. Talcose chloritic schists with carbonatization and the accessory fuchsite are common.

In addition Leahy identifies four additional fault systems in the eastern part of the Porcupine area: a N 55° W striking system; a N 35° W striking system; a third set of faults with strikes varying from N 25° W to N 25° E; and a fourth system, the youngest, striking N 70° E, the same as the Destor - Porcupine system but dipping north.

Rock Types and Mineralization

Leahy reports the property underlain by three major important rock units. We have borrowed freely from F. E. Towsley's report

GENERAL GEOLOGY (continued)Rock Types and Mineralization

to Pardee Amalgamated Group of Nov. 11, 1940. The discussion follows:

- 1: Younger Sediments, Timiskaming: located north of the Destor-Porcupine Fault, Towsley describes this series of greywacks, conglomerate, argillite in this fashion: "This siliceous Timiskaming greywacke and conglomerate lie in a synclinal fold which can be traced east from Timmins and along which are found many of the large gold producers of the Porcupine". Bedding is steeply south. Pyrite, chalcopyrite and some pyrrhotite are common to the sediments. Fracture systems and margins of conglomerate pebbles are mineralized. Gold values are usually low.
- 2: Mafic and Ultramafic Rocks: South of the Destor-Porcupine we have masses large and small of Mafic and Ultramafic Rocks. Leahy has differentiated into serpentized peridotite and dunite, diorite, and carbonatized ultramafic rocks. Towsley remarks that this unit is only slightly mineralized and gold values are rare.
- 3: Extremely Altered Rocks: Leahy has designated this property major rock unit consisting of chlorite-carbonate schists, talc-chlorite carbonate-schists, chlorite-sericite quartz schists, serpentine schists.  
Towsley breaks the carbonates into three distinct types, the green dolomitic carbonates, the ferro rusty carbonates and the grey carbonates. The carbonates can be split by small lenticular masses of serpentine.
- 4: Felsic Intrusive Rocks: The carbonates have been injected with felsic intrusive rocks such as feldspar porphyry, quartz feldspar porphyry, aphanitic and felsitic dikes. Towsley says that the quartz and aplite are widespread in the carbonates and with such impregnation are reasonably well mineralized (5% of the rock). These are pyrite, chalcopyrite, sphalerite, pyrrhotite, galena, and occasional visible gold. The gold, according to Towsley, is associated with disseminated sulphides and the sulphide veinlets.



HISTORY & SUMMARY OF DEVELOPMENT

E. M. Burwash, 1896, W. A. Parks, 1899, and others reported on the Porcupine to the Ontario Bureau of Mines. It is of note that Burwash's statement "The district would be a promising one from a prospector's point of view were it not for the presence of the drift" is still pertinent and applicable to the property under discussion to-day. The first gold discovery in the Porcupine was made in 1907 by two Finnish prospectors, Victor Manson and Harry Benella on Gold Island in Night Hawk Lake. It is noteworthy that Gold Island is only 1 claim southeast of the southeast corner of this 43 claim group. The serious aspect of prospecting in those days of long difficult travel and material logistics is that Manson and Benella started a 50 ft. shaft on Gold Island in 1908. In any event, the Porcupine discoveries of Hollinger and Dome in 1909 and production from both of these properties in 1910 heralded events that made the Porcupine Mining Region one of the leading gold producers in the world. By the end of 1978, thirty-six mines had produced over 55 million ounces of gold and almost 12 million ounces of silver. The total value of this production was \$1,999,169,913.

From the Gold Island discovery, surface and underground exploration spread from the North Peninsula and East Peninsula locations. Sporadic impetus was given by the increase in gold prices in the 1930's to \$35.00 (U.S.) an ounce. Work in many cases was

HISTORY & SUMMARY OF DEVELOPMENT (continued)

sponsored by some of the well known Porcupine production successes to the west. eg: Hollinger, Broulan Reef, Preston East Dome, Pamour Porcupine.

Gold prices at \$35.00 (U.S.) per ounce for many years did not assure stability of exploration and successes in this locale. Creative projects like the Preston East Dome sponsored Pardee were allowed to fold. At the time of writing the Aquarius shaft and extensive surrounding lands are now controlled by American Smelting & Refining. Asarco adjoins the W. D. Evans property to the east and are presently underground and erecting a 400 ton per day PILOT MILL. The old Gold Hawk and Porcupine Peninsula are under option to Pamour Porcupine.

Only two drill holes and one trench to outcrop are reported on the land area of the property. One drill hole not shown on Leahy's map had 54 feet of overburden and intersected ultramafics and felsic volcanics. This intersection will move the Destor-Porcupine Fault north at this location. The western water covered 5 1/2 claims have no reported drilling.

International Nickel completed magnetometer and ground electromagnetic surveys in 1966 over part of the Northeast Bay water covered 26 claims. Broulan Reef did a magnetometer survey only, over part of the property. Of the four holes drilled by Inco in 1969, the Northeast Bay, only two concern this property. Overburden was 125 and 153 feet respectively and both intersected ultramafics. They

HISTORY & SUMMARY OF DEVELOPMENT (continued)

were checked for copper and nickel and no gold assays are reported. The other minor addition to property assessment is a section line of eight drill holes bearing N 25° W that started beside Goldhawk's Hollinger shaft on the North Peninsula. The northern 1500 feet in plan would be on the Evans' property. It is reported privately that this sectional drilling was carried out under Broulan Reef's direction.

SURVEY METHODS AND INSTRUMENT DATA

The baseline was established across the narrow part of the North Peninsula Isthmus of Night Hawk Lake and extended due East and West to the property boundaries. Line 0 + 00 was located on the baseline beside Highway No. 803 right-of-way and for its entire length stayed within this road allowance. The baseline to the East over the ice of Northeast Bay was also located to coincide with the two claims north boundary in this locale. Of the 43 mining claims only 11 1/2 are on the land.

Picket lines (cut and chained on the land portion) were turned off every 400 feet and extended the property boundaries. All lines were chained and picketed at 50 foot intervals. All pickets were marked giving the station location and the upper section with fluorescent marker spray ready quick recognition in the winter sun glare over the ice. A snowmobile was equally effective on the lake traverses.

A total of 37 1/4 miles of picket line included 2 1/4 miles of baseline and tielines. Geophysical readings were taken at 3,639 recording stations plus an additional 180 magnetometer readings along the baseline. Mr. J. Chevalier of Timmins, Ont., was the magnetometer operator. Mr. W. D. Evans, Don Mills, Ont.

SURVEY METHODS AND INSTRUMENT DATA (continued)

was the Geonics E.M.-16 operator. The grid system was directed by Mr. W. D. Evans and overall supervision by the author.

The field work started towards the end of January, 1982, and was completed April 6th, 1982. When the field work was completed, three days were spent recovering pickets from the lake. Ice and weather prevented the success of this recovery.

a: Magnetometer Survey

A Scintrex Fluxgate Magnetometer with a sensitivity of  $\pm 5$  gammas per scale division on the 1000 gamma range reads the vertical component of the earth's magnetic field. A central station was established on the baseline at L 0 + 00. Control readings were taken along the baseline and diurnal corrections applied. The instrument was set at 425 gammas and this base was carried into the survey area.

An arbitrary background of 725 gammas was assigned and 300 added to all readings. The survey field period was remarkably clear from atmospheric magnetic disturbances.

SURVEY METHODS AND INSTRUMENT DATAb: Electromagnetic Survey (V.L.F. Geonics 16)

The VLF-transmitting stations operating for communications with submarines have a vertical antenna. The antenna current is thus vertical, creating a concentric horizontal magnetic field around them. When these magnetic fields meet conductive bodies in the ground, there will be secondary fields radiating from these bodies. This equipment measures the vertical components of these secondary fields.

The EM 16 is simply a sensitive receiver covering the frequency band of the new VLF transmitting stations, with means of measuring the vertical field components. The receiver has two inputs, with two receiving coils built into the instrument. One coil has normally vertical axis and the other is horizontal.

The signal from one of the coils (vertical axis) is first minimized by tilting the instrument. The tilt-angle is calibrated in percentages. The remaining signal in this coil is finally balanced out by a measured percentage of a signal from the other coil, after being shifted by  $90^\circ$ . This coil is normally parallel to the primary field.

Thus, if the secondary signals are small compared to the primary horizontal field, the mechanical tilt-angle is an accurate measure of the vertical real-component, and the compensation  $\Pi/2$ -signal from the horizontal coil is a measure of the quadrature vertical signal.

SURVEY METHODS AND INSTRUMENT DATA (continued)b: Electromagnetic Survey (V.L.F. Geonics 16) (continued)

The north south line direction was at the optimum right angle across the geological structure with the Cutler/Seattle combined unit inserted. Cutler, Maine, U. S. A., with the stronger signal was used completely. The Cutler frequency is 17.8 kHz. The dials inside the inclinometer are calibrated in positive and negative percentages and in degrees. Either ones can be used. If the instrument is facing  $180^{\circ}$  from the original direction of travel, the polarities of the readings will be reversed. When plotting the readings, care should be taken to correct the polarities. The important thing is to know the actual tilt angle of the instrument.

Quadrature results are plotted on the left side and In-Phase results on the right side of the line with the resultant polarity. Both quadrature and the in-phase readings are profiled with the dip angle in percentages at a scale 1 inch = 20 percent.

With overburden thicknesses to 153 feet in the Northeast Bay of the lake composed of varved clays, sand and gravel, the effectiveness of the Geonic - 16 is reduced. Our swamps and lakes set up secondary currents which result in quadrature deviation with little or no response in the in-phase component.

GEOPHYSICAL RESULTS

Complex geology has created a complex geophysical picture that at this stage, we can only obtain a preliminary assessment of the property. In any event, we are dividing the property (mapwise) into four main sections - A, B, C, & D, with a further numbered subdivision.

A general statement on structural lineaments follows: Three major structural lineaments are mapped. Two that strike N 30° W parallel to the Engleheart River system. The eastern structure is shown on Leahy's original Preliminary Map but not on his final. I have to accept my own field interpretations. The Destor-Porcupine Fault strikes N 50° E in Area A. I have moved it north since an old drill hole intersected ultramafics and felsic volcanics. There are other complex patterns that eventually will be understood. This is just a preliminary look at the structural aspect of the property.

AREA A: The claims north of the Destor-Porcupine Fault are underlain by Timiskaming sediments. The magnetometer and electromagnetic responses are relatively low. If anything, there is a gradual increase from 450 gammas to 600 gammas in the northwest. The Destor-Porcupine Fault is marked by 600 gammas to 800 gammas and in the A 2 region, ultramafics (intersected in an old drill hole) result in localized magnetometer highs on three lines from 800 gammas to 1400 gammas.

A-1: Good electrical conductor on two lines. The West V. L. F. is within a magnetic low near the intersection of the Destor-Porcupine Fault and western major lineament. The conductor on the next line to the east falls within the 600 gamma isomagnetic.

A-2: Strong electrical conductors over four lines from the road east to boundary. These conductors are just south of the ultramafic magnetic anomaly and approach the 500 gamma isomagnetic line. The strongest electrical conductor is located on the road (L 0 + 00).



GEOPHYSICAL RESULTS

A-3: This weak conductor in the Timiskaming sediments on the edge of a magnetic low becomes of interest when searching for gold in these sediments.

AREA B: As we approach the north shore of the bay, a series of V. L. F. typical 'sulphide' conductors are recorded on every line. The younger diabase with 600 gammas and core to 1000 gammas abuts against the eastern lineament.

B-1: Excellent V. L. F. conductor also picked up by INCO'S vertical loop and no drill test record. Inco's vertical loop picked up on 5 lines for a strike length of 2000 feet. This conductor lies just north of an interesting magnetic structure to 1200 gammas. This is a first class target.

B-2: Not unlike B-1 but lacks any direct magnetic association. No record of testing by drilling.

B-3: This series of conductors with on-shore build up. Wilwood to the north did much drilling over the years and there are sulphide associations to the north. The answer to these conductors may be available in the assessment files but not in all instances since they did not direct much drilling under the bay.

AREA C: As we approach the south shore of the bay and Goldhawk west boundary, we pick up further excellent strong sulphide conductors and a complicated magnetic anomaly. On two lines we have the highest magnetic readings taken on the property (highest: 2725 gammas). These results complicated by folding and faulting are related to the gold ore making quartz feldspar porphyry with widths to 50 feet. The strike length of our V. L. F. conductors is approximately 3500 feet.

C-1: Two excellent V. L. F. conductors. Results to the west indecisive as we approach western lineament.

C-2: Excellent strong V. L. F. conductors on both lines. Our strongest magnetic highs recorded on the property. The small hill above shore is rusty. Extensive 2000 gamma isomagnetic continues south. We have isolated these two lines with two minor structural lineaments temporarily.

GEOPHYSICAL RESULTS (continued)

C-3: Excellent strong V. L. F. conductors. Double conductors extend to our property boundary and be extended east to the quartz feldspar porphyry ore that cuts across the point of land on the Goldhawk western claim.

AREA D: Our area D can be considered the remaining water covered portion of the property. Electrical conductors are weak and the serpentinized ultramafics greater in extent than previously mapped. Faulting also complex.

D-1: Definite but weak electrical conductor within serpentinized ultramafics near eastern major structural lineament.

D-2: Definite but weak electrical conductor on two lines. Isomagnetic 1800 to 1400 gammas.

D-3: Weak electrical conductor off the end of the V. L. F. buildup approaching the north boundary of Goldhawk. Low magnetics.

D-4: Extensive ultramafic region with broad 1400 gamma isomagnetic.

CONCLUSIONS

The property is completely underlain by rock types that are host to nearby important gold deposits. This includes the neighbouring Goldhawk and American Smelting and Refining Company properties to the east. The north end of the property is underlain by Timiskaming sediments from which the Pamour and the Hoyle are mining gold from closely spaced auriferous quartz veins which cross the younger sediment conglomerates.

The 43 claims almost devoid of outcrop are located in an area of complex faulting, folding, and geological alteration. The geophysical response to the work just completed has been definite and valuable. The magnetic survey in particular responded to our varied and complex geology. The Geonics EM-16 also delivered positive electrical conductors within its depth and overburden capabilities. However, the V. L. F. did not pick up the preponderance of the INCO V.E.M. anomalies that are recorded on the compilation sheet. Only two drill holes on the land area and two Inco holes on Northeast Bay to test ultramafics with no gold assays taken.

With this gap in the geophysical assessment, I am not prepared to drill test any of the prolific geophysical picture that is developing. It is also important to know the boundaries and extent of the Inco coverage since I believe that most of their field work was not carried to the shore. Forty-three claims and four diamond drill holes over 70 years of hit and miss exploration leaves the property virtually untested.

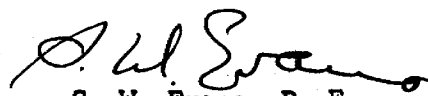
RECOMMENDATIONS

The following recommendations are listed:

- 1: Continue with the geological data compilation.
- 2: Close the line grid interval to 200 feet and be prepared to close to 100 feet in specific areas depending on results.
- 3: Proton Magnetometer Survey with sensitivity of 1 gamma with recording stations every 50 feet.
- 4: Deep overburden exists on the property. Therefore, a standard transmitter vertical loop survey method should be employed. The Crone Vertical Loop (VEM) with frequencies 480 and 1800 was successfully employed in laying out a gold - bearing structure on the Nickel Offsets Limited, Tulley Township property with similar conditions. The Crone VEM is recommended.
- 5: Such a program should allow for detailed Induced Potential and provision for detailed Seismic to determine bedrock profiles before drilling.
- 6: Such a program should also be prepared to close the line grid to 100 feet if considered necessary.

This program could start on the land areas immediately and proceed to the ice when weather permits. This would allow a preliminary assessment of the effectiveness of this program.

dated at Toronto, Ontario.  
June 15, 1982.

  
S. W. Evans, P. Eng.,  
Mining Geologist.

## B I B L I O G R A P H Y

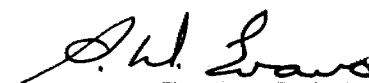
- Twenty-First Annual Report Bureau of Mines,  
Ontario - Vol. XXI Part 1.....1912  
Page 205: The Porcupine Gold Area by  
A. G. Burrows - second report
- Structural Geology of Canadian Ore Deposits  
C. I. M. Symposium.....1948
- Geology of Ore Deposits of Tisdale Township  
O.D.M. Geological Report No. 58 by  
S. A. Ferguson.....1968
- Geology of the Night Hawk Lake Area, District  
of Cochrane, O.D.M. Geological Report by  
E. J. Leahy.....1971
- Maps:
- Cody Township; O.D.M. Preliminary Geological  
Map No. P 545 by E. J. Leahy & assistants  
.....1964 - 1968
- Timmins - Kirkland Compilation Sheet  
O.D.M. Map No. 2205  
O.D.M. Cartographic update.....1972
- Cody Township Compilation Sheet  
O.D.M. No. P 2090.....1980
- Ontario Dep't. of Mines - Assessment files  
Ontario Resident Geologist, Timmins, Ontario

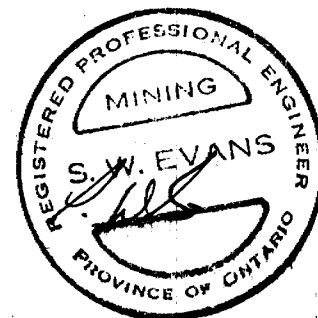
C E R T I F I C A T E

I, S. W. Evans, of the Municipality of Metropolitan Toronto, in the Province of Ontario, do hereby certify that:

- 1: I am a Mining Geologist residing at 29 Southwell Drive, Don Mills, Ontario.
- 2: I am a graduate of the University of Toronto in Mining Geology, 1951, with a degree of Bachelor of Applied Science and that I am a member of the Association of Professional Engineers of the Province of Ontario.
- 3: I have been practising my profession since graduation.
- 4: As a native of the Porcupine, I have been involved professionally on innumerable projects over the years in this Mining Division. I am familiar with the mining geology and the development history of the region.

dated at Toronto, Ontario.  
June 15, 1982.

  
S. W. Evans, B.A.Sc., P.Eng.,  
Mining Geologist.



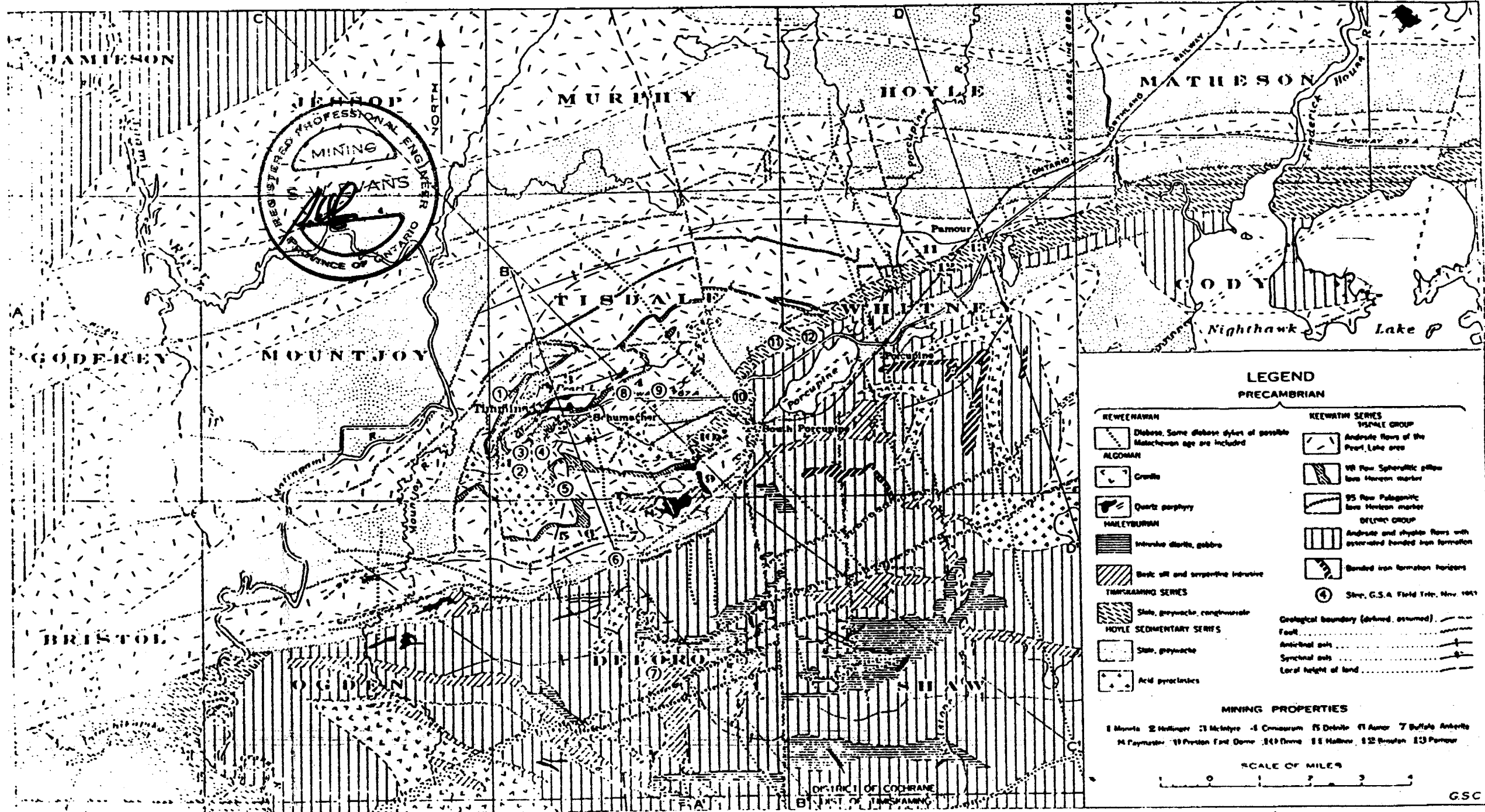


Fig. 1 Geological Map of Porcupine Area.



Ministry of  
Natural  
Resources  
Ontario

Report of Work # 142/our  
(Geophysical, Geological,  
Geochemical and Expenditures) #16



42A10SW0335 2.7830 CODY

900

*Cody sup*

The Mini

Type of Survey(s) <b>MAGNETOMETER AND V.L.F. ELECTROMAGNETIC</b>		Township or Area <b>CODY TOWNSHIP</b>
Claim Holder(s) <b>WILLIAM D. EVANS</b>		Prospector's Licence No. <b>A 43011</b>
Address <b>29 SOUTHWELL DRIVE, DON MILLS, ONTARIO, M3B 2N8</b>		
Survey Company <b>S. W. EVANS, MINING GEOLOGIST</b>	Date of Survey (from & to) 8 2 1982 6 4 1982 Day   Mo.   Yr.   Day   Mo.   Yr.	Total Miles of line Cut <b>35.5</b>
Name and Address of Author (of Geo-Technical report)		

Credits Requested per Each Claim in Columns at right

Special Provisions For first survey: Enter 40 days. (This includes line cutting)  For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical V - Electromagnetic	Days per Claim 40
	V - Magnetometer	20
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Man Days	Geophysical	Days per Claim
 RECEIVED APR 26 1982 AM 7:30 PM 4:56	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		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
P	552605	<del>15</del>	P	555242	<del>15</del>
	552606			555818	
	552607			555819	
	552608			555820	
	552609			555821	
	552610			555822	
	552611			555823	
	552612			555824	
	552613			555825	
	552614			555826	
	552615			555827	
	552616			555828	
	552617			555829	
	552618			555830	
	552619			555831	
	552620			555832	
	552621			555833	
	555236			555834	
	555237			555835	
	555238			555836	
	555239				
	555240				
	555241				

Expenditures (excludes power stripping)

Type of Work Performed <b>LINECUTTING &amp; 2 GEOPHYSICAL SURVEYS</b>	 RECORDED APR 26 1982
Performed on Claim(s) 43 claims	
Calculation of Expenditures Total Expenditures \$ 38,700.00 + 15 = 2580	Receipt No. _____

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 April 24, 1982	Recorded Holder or Agent (Signature) W.D. Evans
------------------------	--

For Office Use Only		
Total Days Cr. Recorded 2580	Date Recorded Apr. 30/82	Mining Recorder <i>[Signature]</i>
Date Approved as Recorded <i>[Signature]</i>	Branch Director Regional Mining Recorder <i>[Signature]</i>	

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 S. W. Evans, Mining Geologist, 29 Southwell Dr., DON MILLS, Ont. M3B 2N8	Date Certified April 24, 1982	Certified by (Signature) S. W. Evans
---	----------------------------------	---



## Assessment Work Breakdown

Man Days are based on eight (8) hour Technical or Line-cutting days. Technical days include work performed by consultants, draftsmen, etc..

Type of Survey <b>MAGNETOMETER SCINTREX FLUXGATE ( INCLUDING LINECUTTING )</b>						
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days
<input style="width: 50px;" type="text" value="235"/>				<input style="width: 50px;" type="text" value="1645"/>		<input style="width: 50px;" type="text" value="75"/>
				=	Total Credits	+
					<input style="width: 50px;" type="text" value="1720"/>	+
					No. of Claims	=
					<input style="width: 50px;" type="text" value="43"/>	=
					Days per Claim	<input style="width: 50px;" type="text" value="40"/>

Type of Survey <b>V.L.F. ELECTROMAGNETIC GEONICS EM - 16</b>						
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days
<input style="width: 50px;" type="text" value="122.9"/>				<input style="width: 50px;" type="text" value="860"/>		<input style="width: 50px;" type="text"/>
				=	Total Credits	+
					<input style="width: 50px;" type="text" value="860"/>	+
					No. of Claims	=
					<input style="width: 50px;" type="text" value="43"/>	=
					Days per Claim	<input style="width: 50px;" type="text" value="40"/>

Type of Survey						
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days
<input style="width: 50px;" type="text"/>				<input style="width: 50px;" type="text"/>		<input style="width: 50px;" type="text"/>
				=	Total Credits	+
					<input style="width: 50px;" type="text"/>	+
					No. of Claims	=
					<input style="width: 50px;" type="text"/>	=
					Days per Claim	<input style="width: 50px;" type="text"/>

Type of Survey						
Technical Days	X	7	=	Technical Days Credits	+	Line-cutting Days
<input style="width: 50px;" type="text"/>				<input style="width: 50px;" type="text"/>		<input style="width: 50px;" type="text"/>
				=	Total Credits	+
					<input style="width: 50px;" type="text"/>	+
					No. of Claims	=
					<input style="width: 50px;" type="text"/>	=
					Days per Claim	<input style="width: 50px;" type="text"/>

RECEIVED  
 [Signature Area]  
 [Date Area]

1985 03 06

Our File: 2.7830

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

Dear Sir:

We received reports and maps on February 21, 1985 for a Geophysical (Electromagnetic & Magnetometer) Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims P 552605, et. al., in the Township of Cody.

This material will be examined and assessed and a statement of assessment work credits will be issued.

We do not have a copy of the report of work which is normally filed with you prior to the submission of this technical data. Please forward a copy as soon as possible.

Yours sincerely,

S.E. Yundt  
Director  
Land Management Branch

Whitney Block, Room 6643  
Queen's Park  
Toronto, Ontario  
M7A 1M3  
Phone:(416)965-4888

A. Barr:mc

cc: M.D. Evans  
29 Southwell Drive  
Don Mills, Ontario  
M3B 2N8

cc: S.M. Evans  
29 Southwell Drive  
Don Mills, Ontario  
M3B 2N8



1985 06 04

Your File: 142  
Our File: 27830

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

Dear Sir:

RE: Notice of Intent dated May 7, 1985  
Geophysical (Electromagnetic & Magnetometer)  
Survey on Mining Claims P 552605, et al.  
in the Township of Cody

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,

S.E. Yundt  
Director  
Land Management Branch

Whitney Block, Room 6643  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: (416) 965-4888

D. Isherwood:mc

cc: W.D. Evans  
Don Mills, Ontario  
cc: S.W. Evans  
Don Mills, Ontario

Encl.

*to whom who  
assesses.*

*only reduce  
credits for claims*

*P 552607*

*552610*

*552614*

*Ray 5-4888*

cc: Mr. G.H. Ferguson  
Mining Lands Commissioner  
Toronto, Ontario  
cc: Resident Geologist  
Timmins, Ontario

**Technical Assessment  
Work Credits**

File  
2.7830

Date  
1985 05 07

Mining Recorder's Report of  
Work No. 142

Recorded Holder  
**WILLIAM D. EVANS**

Township or Area  
**CODY TOWNSHIP**

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<b>Geophysical</b> Electromagnetic _____ <u>40</u> days Magnetometer _____ <u>20</u> days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological _____ days Geochemical _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	P 552605-606 552608-609 552611 to 613 inclusive 552615 to 621 inclusive 555236 to 242 inclusive 555818 to 836 inclusive

**Special credits under section 77 (16) for the following mining claims**

<u>20 DAYS ELECTROMAGNETIC</u> <u>10 DAYS MAGNETOMETER</u> P 552614	<u>10DAYS ELECTROMAGNETIC</u> <u>5 DAYS MAGNETOMETER</u> P 552610
---	---

**No credits have been allowed for the following mining claims**

not sufficiently covered by the survey       Insufficient technical data filed

P 552607

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical — 80; Geological — 40; Geochemical — 40; Section 77 (19)—60:



*May 22/85*

1985 05 07

Your File: 142  
Our File: 2.7830

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

Dear Sir:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact Mr. R.J. Pichette at 416/965-4888.

Yours sincerely,

S.E. Yundt  
Director  
Land Management Branch

Whitney Block, Room 6643  
Queen's Park  
Toronto, Ontario  
M7A 1W3

*to* D. Isherwood:mc

Encls.

cc: W.D. Evans  
29 Southwell Drive  
Don Mills, Ontario  
M3B 2N8

cc: S.W. Evans  
29 Southwell Drive  
Don Mills, Ontario  
M3B 2N8

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



Ministry of  
Natural  
Resources

Ontario

## Notice of Intent for Technical Reports

1985 05 07

2.7830/142

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on his record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted direct to the Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

2.7830

	EM	Mag		EM	Mag		
552605		✓	555736		✓		
606		✓	237		✓		
607		∅	238		✓		
608		✓	239		✓		
609		✓	240		✓		
610		3/4	241		✓		
611		✓	242		✓		
612		✓	555818		✓		
613		✓	819		✓		
614		2/4	820		✓		
615		✓	821		✓		
616		✓	822		✓		
617		✓	823		✓		
618		✓	824		✓		
619		✓	825		✓		
620		✓	826		1/4	2	
552621		✓	827		1/4	2	
			828		1/4	2	
			829		1/4	2	
			830		2/4	2	
			831		✓		
			832		✓		
			833		✓		
			834		3/4	2	
			835		1/4	2	
			836		✓		

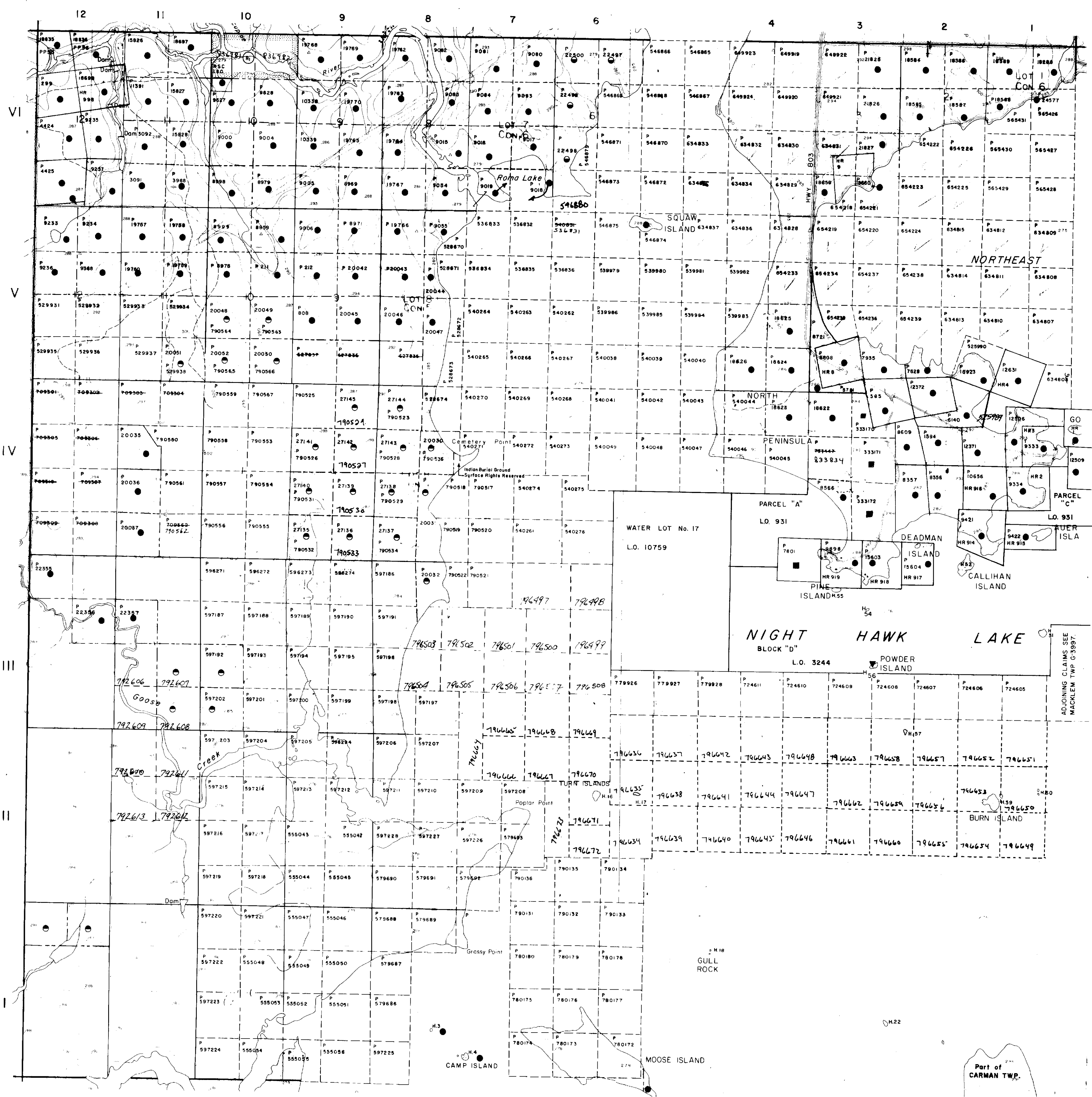


G-3984

RWT Y000

G-3984

### MATHESON TWP. G-3982



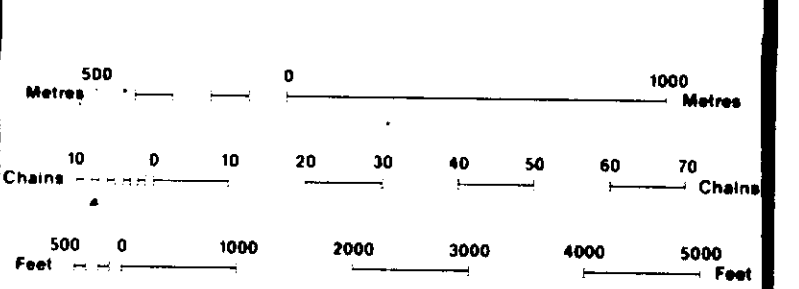
### LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
  - TOWNSHIP, RANGE 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	
RESERVATION	
CANCELLED	
SAND & GRAVEL	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1912, VESTED IN ORIGINAL PATENTEES BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1



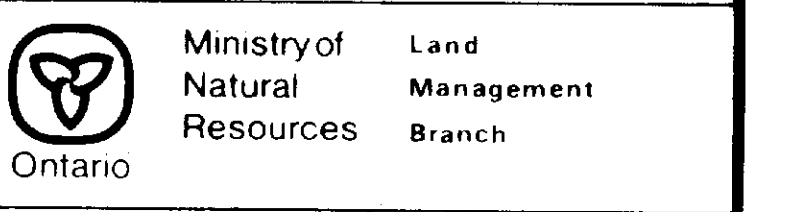
SCALE 1:20 000

### NOTES

THE WHOLE OF MOOSE ISLAND IS ATTACHED TO THE TOWNSHIP OF CODY (FILE 25642)

FLOODING RIGHTS RESERVED TO ELEVATION 903.5' (T&N RAILWAY DATUM) ON NIGHT HAWK LAKE AND THAT PORTION OF THE FREDERICK HOUSE RIVER BETWEEN NIGHT HAWK LAKE AND FREDERICK HOUSE LAKE TO ONTARIO HYDRO

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



Date: FEBRUARY, 1984  
Number: **G-3994**  
Received March 15/84

2.7830

### MAP SYMBOLOLOGY

- Aerial Cableway
- Boundary
- International
- District, Township
- Lot, Concession
- Approximate
- Part Boundary
- Bridge
- Road, Railroad
- Building
- Chimney
- Cliff, Pit, Pile
- Contours
- Intersected
- Approximate
- Approximate
- Control Points
- Surveyed
- Culvert
- Falls
- Spot Elevation
- Transmission Line
- Flooded Land
- Lock
- Marsh or Swamp
- Moat
- Mine Head Frame
- Outcrop
- Pipeline (above ground)
- Railroad
- Single Track
- Abandoned
- Turbine
- Road
- Highway, County
- Part Boundary
- Access (road of doubtful existence or unimproved driveway)
- Trail, Back Road (rough, steep)
- Rapids
- Double line river with multiple rapids
- Double line river with multiple rapids
- River, Stream, Canal
- Approximate
- Approximate
- MOCK
- MOCK
- Spot Elevation (less than 100.0)
- Tower
- Transmission Line
- Pole
- Tunnel
- Utility Poles
- Wharf, Dock, Pier
- Wooded Area

### AREAS WITHDRAWN FROM DISPOSITION

Description	Order No.	Date	Disposition	File
M.R.O. - MINING RIGHTS ONLY				
S.R.O. - SURFACE RIGHTS ONLY				
M.+S. - MINING AND SURFACE RIGHTS				
	W. 31/76	10/9/76	S.R.O.	16539

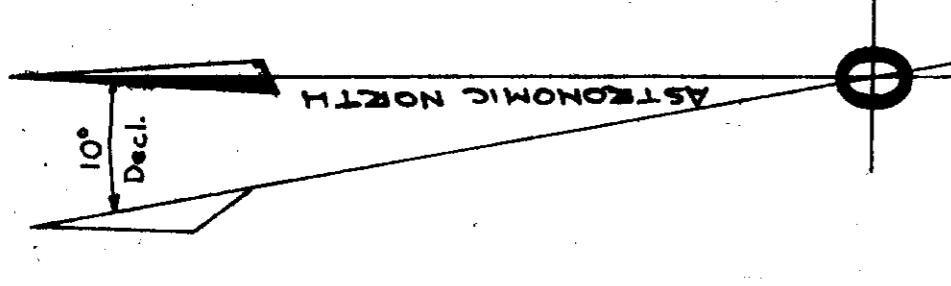
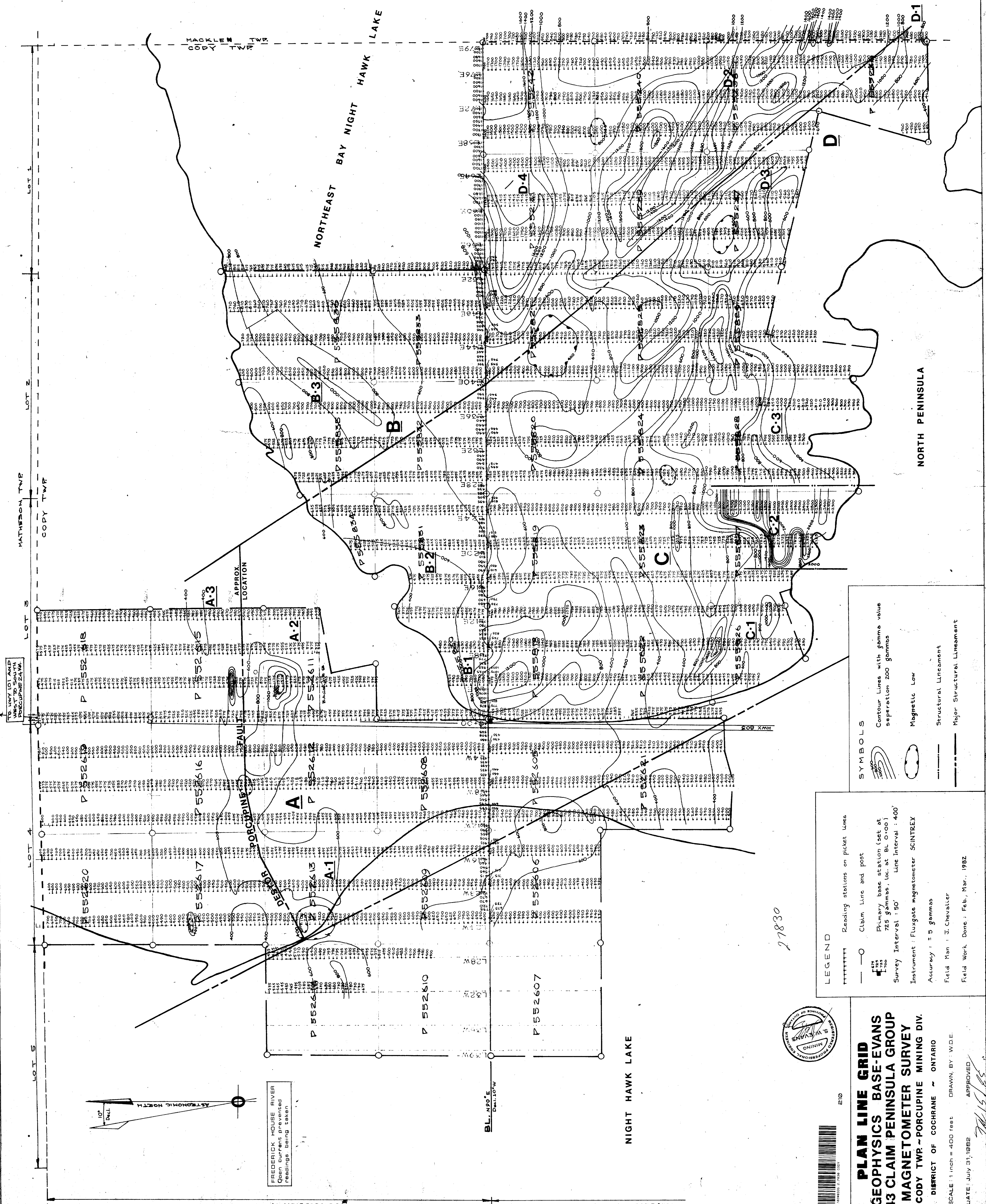
CODY TWP

WHITNEY TWP. G-3975

MACKLEM TWP. G-3997

CARMAN TWP. G-4000





FREDERICK HOUSE RIVER  
Open current prevented  
Readings being taken

**LEGEND**

- Reading stations on picket lines
- Claim Line and post
- ▲ Primary base station (set at 725 gammas, loc. at Bl. 0+00)
- Survey Interval: 50' Line Interval: 400'
- Instrument: Fluygate magnetometer SCINTREX
- Accuracy: ± 5 gammas
- Field Man: J. Chevalier
- Field Work Done: Feb., Mar., 1982

**SYMBOLS**

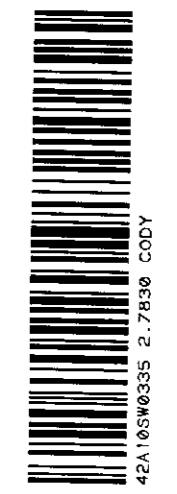
- Contour Lines with gamma value separation 200 gammas
- Magnetic Low
- Structural Lineament
- Major Structural Lineament

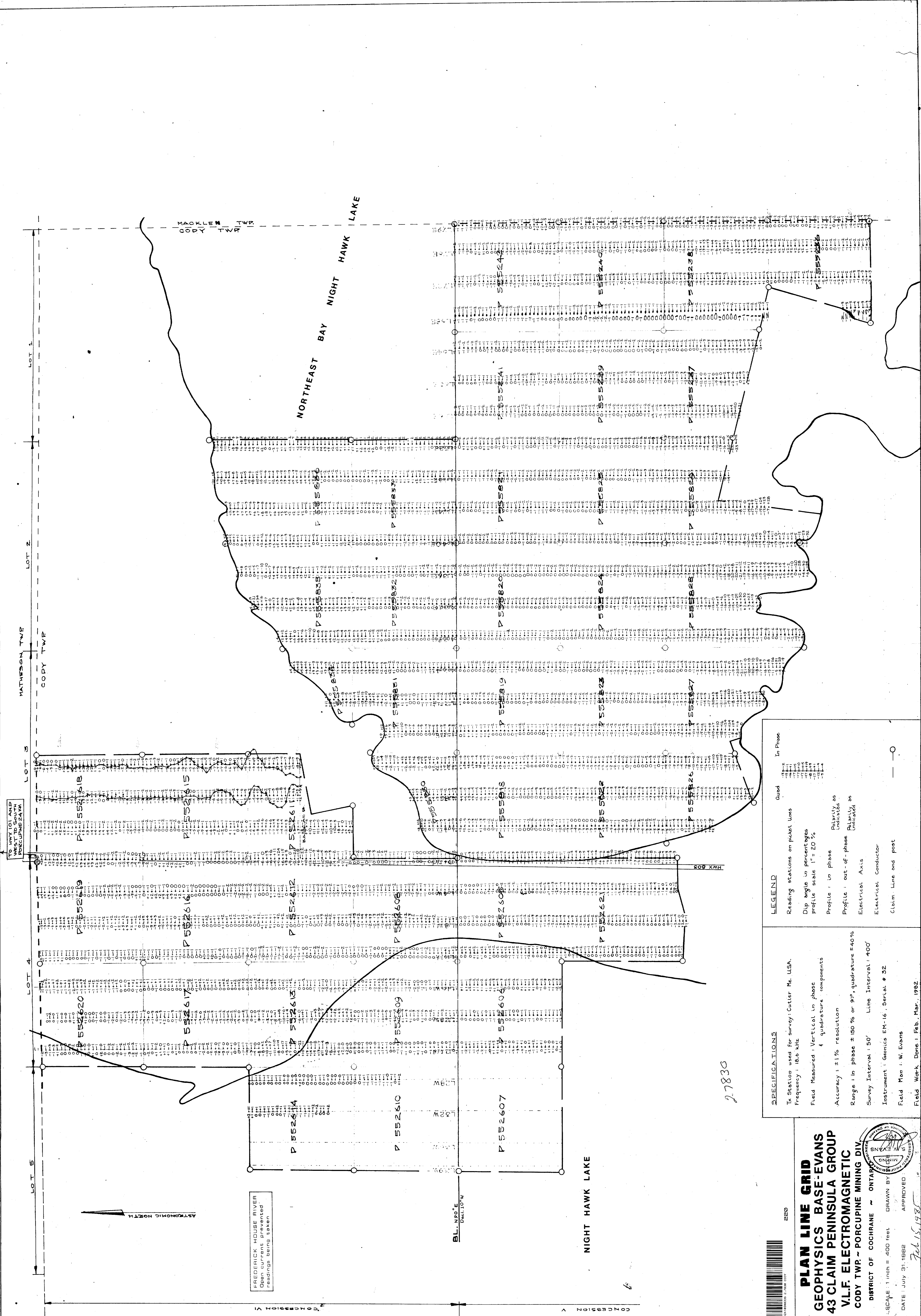
27830



**PLAN LINE GRID**  
**GEOPHYSICS BASE-EVANS**  
**43 CLAIM PENINSULA GROUP**  
**MAGNETOMETER SURVEY**  
**CODY TWP - PORCUPINE MINING DIV.**  
 DISTRICT OF COCHRANE - ONTARIO

SCALE: 1 inch = 400 feet DRAWN BY: W.D.E.  
 DATE: July 31, 1982 APPROVED: [Signature]





**SPECIFICATIONS**

To Station used for survey: Cutler, Me. USA.  
 Frequency: 18.6 kHz

Field Measured: Vertical in phase  
 & quadrature components

Accuracy: ± 1% resolution

Range: In phase ± 100% or 90°, quadrature ± 40%

Survey Interval: 50' Line Interval: 400'

Instrument: Geonics EM-16, Serial # 32

Field Man: W. Evans

Field Work Done: Feb., Mar., 1992

**LEGEND**

Reading stations on pocket lines

Dip angle in percentages  
 Profile scale 1" = 20%

Profile: In phase Polarity as indicated

Profile: out-of-phase Polarity as indicated

Electrical Axis

Electrical Conductor

Claim Line and post

PLAN LINE GRID  
 GEOPHYSICS BASE-EVANS  
 43 CLAIM PENINSULA GROUP  
 V.L.F. ELECTROMAGNETIC  
 CODY TWP. - PORCUPINE MINING DIV.  
 DISTRICT OF COCHRANE - ONTARIO

SCALE 1 inch = 400 feet. DRAWN BY DATE: July 31, 1992 APPROVED Feb 15, 1993

