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DETAILED GEOPHYSICAL REPORT

FOR

DIPLOMAT RESOURCES INC.  
DELORO PROJECT  
DISTRICT OF COCHRANE  
PORCUPINE MINING DISTRICT  
TIMMINS, ONTARIO

RECEIVED

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MINING LANDS SECTION

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John. C. Grant

EXSICS EXPLORATION LIMITED

Timmins, 1985

## TABLE OF CONTENTS

	Page
TITLE PAGE	ii
TABLE OF CONTENTS	iii
LIST OF FIGURES	1,4
INTRODUCTION	4,7
LOCATION AND ACCESS	7,8
GEOLOGY	10,11
STRUCTURAL GEOLOGY	11,12,13
ECONOMIC GEOLOGY	14
LINECUTTING	14,15,16
GEOPHYSICAL SURVEYS	16
MAGNETIC SURVEY PROCEDURE	17
VLF-EM SURVEY PROCEDURES	17
INTERPRETATION	18
SURVEY RESULTS	18, to 24
CONDUCTIVE ZONES	25
CONCLUSIONS	26,27
RECOMMENDATIONS	28
REFERENCES	29
CERTIFICATE	
TECHNICAL DATA STATEMENT	
APPENDIX A	
APPENDIX B	

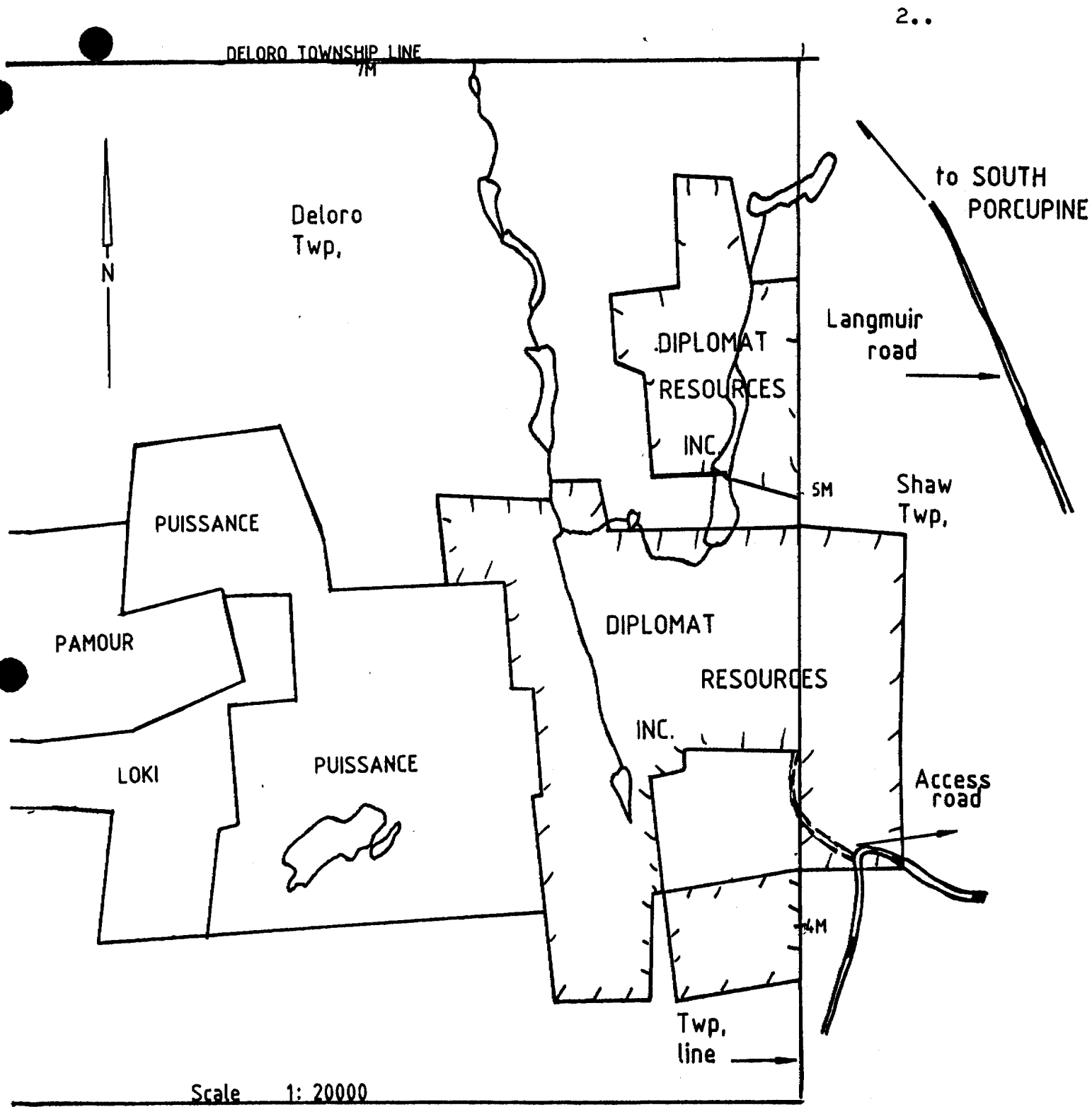
## LIST OF FIGURES

	Page
Figure 1a: Claim map of the Diplomat Resources Deloro Project	2,3
Figure A: Locatio Map	5
Figure Aa: Location Map	6
Figure B: General Geology	9
Figure 2: Linecutting Grid	15

INTRODUCTION

The block of claims under discussion forms two discontinuous groups made up of 17 unpatented mining claims situated on the boundary line of Shaw and Deloro Townships, Porcupine Mining Division, District of Cochrane, Timmins, Ontario. The more northerly of the two blocks consist of 5 mining claims numbered, P. 833107, P. 833108, P. 833110, P. 758990 and P. 758991, all entirely within Deloro Township. The other block is made up of the remaining 12 claims, 9 of which are in Deloro and 3 of which are in Shaw Townships. The 17 claims are as follows: ( see Claim Group, Fig. 1a,1b)

<u>Location</u>	<u>Claim Number</u>
Deloro Township	P 758990
" "	P 758991
" "	P 833107
" "	P 833108
" "	P 833110
" "	P 555626
" "	P 555627
" "	P 555628
" "	P 555629
" "	P 555630
" "	P 567049
" "	P 567050
" "	P 567051
" "	P 567052
Shaw Township	P 567427
" "	P 567428
" "	P 567429

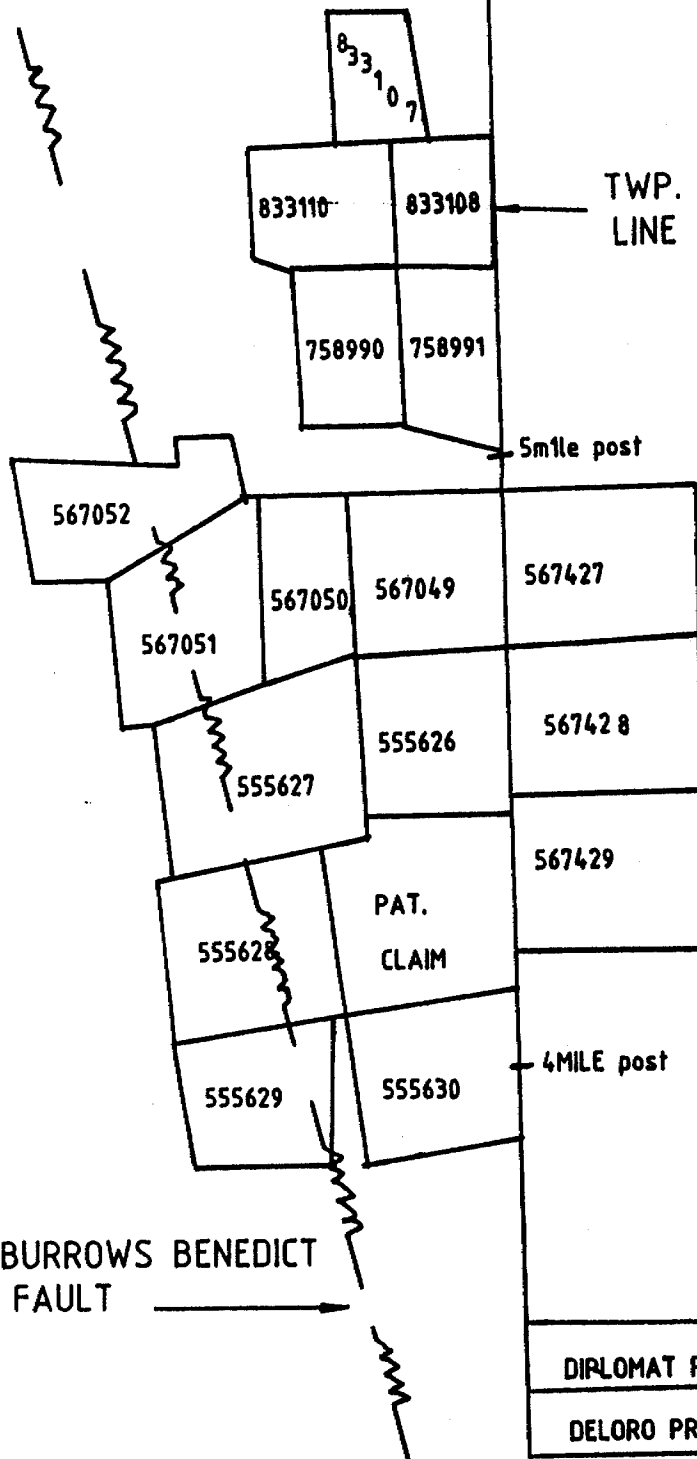
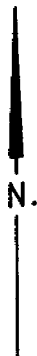


Claim map of the DIPLOMAT RESOURCES INC. Deloro Project, Deloro Township, Porcupine Mining District, District of Cochrane, Ontario.

Fig. 1a

DELORO TOWNSHIP

SHAW TOWNSHIP



BURROWS BENEDICT  
FAULT

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DELORO PROJECT, TIMMINS, ONTARIO

CLAIM GROUP

Jan, 1985      Fig. 1b  
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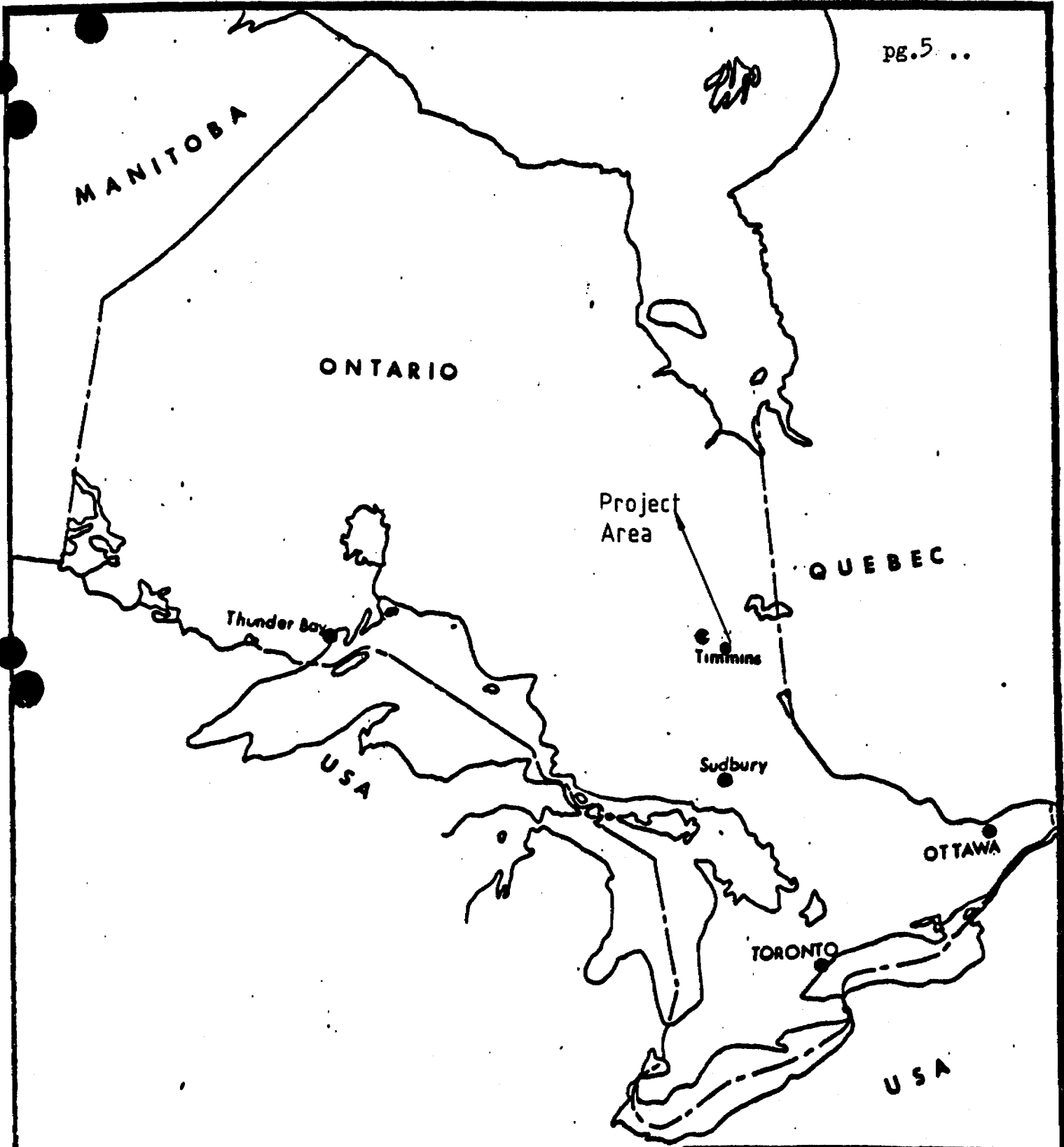
A total field magnetic survey and a VLF-EM survey were conducted on the entire 17 claim block which is known as the Deloro Project, Diplomat Resources Inc., Deloro and Shaw Townships, Timmins, Ontario.

The purpose of these surveys was to locate structural features and to identify areas which may be favourable for gold mineralization.

The field work was conducted by Exsics Exploration Limited during the fall of 1984 and winter of 1985. This phase of the exploration program involved the upgrading of the access road to the old shaft area, now covered by mining claims P 567428 and P 555626. A slashing program was then done to clear approximately 20 acres of timber and brush on and around the main shaft area, pits and trenches and a small incline, located to the northwest of the main shaft. (see fig. 2 , Linecutting Grid, for slash boundary). A linecutting grid, with 100 foot(detail)line spacing and 200 foot line spacing was cut over the whole 17 claim block. An east - west baseline was established across the block for control. Data collection on the survey lines was at 100 foot intervals, with 50 foot intervals read in anomalous areas.

#### Location and Access

The Deloro Project is located about 8 miles(12 km) southeast of the City centre of Timmins and about 2.5 miles (4km) south of the Town Of South Porcupine, in the northeast quadrant of Deloro Township, Porcupine Mining District, Timmins, Ontario. (see fig. A, Aa).

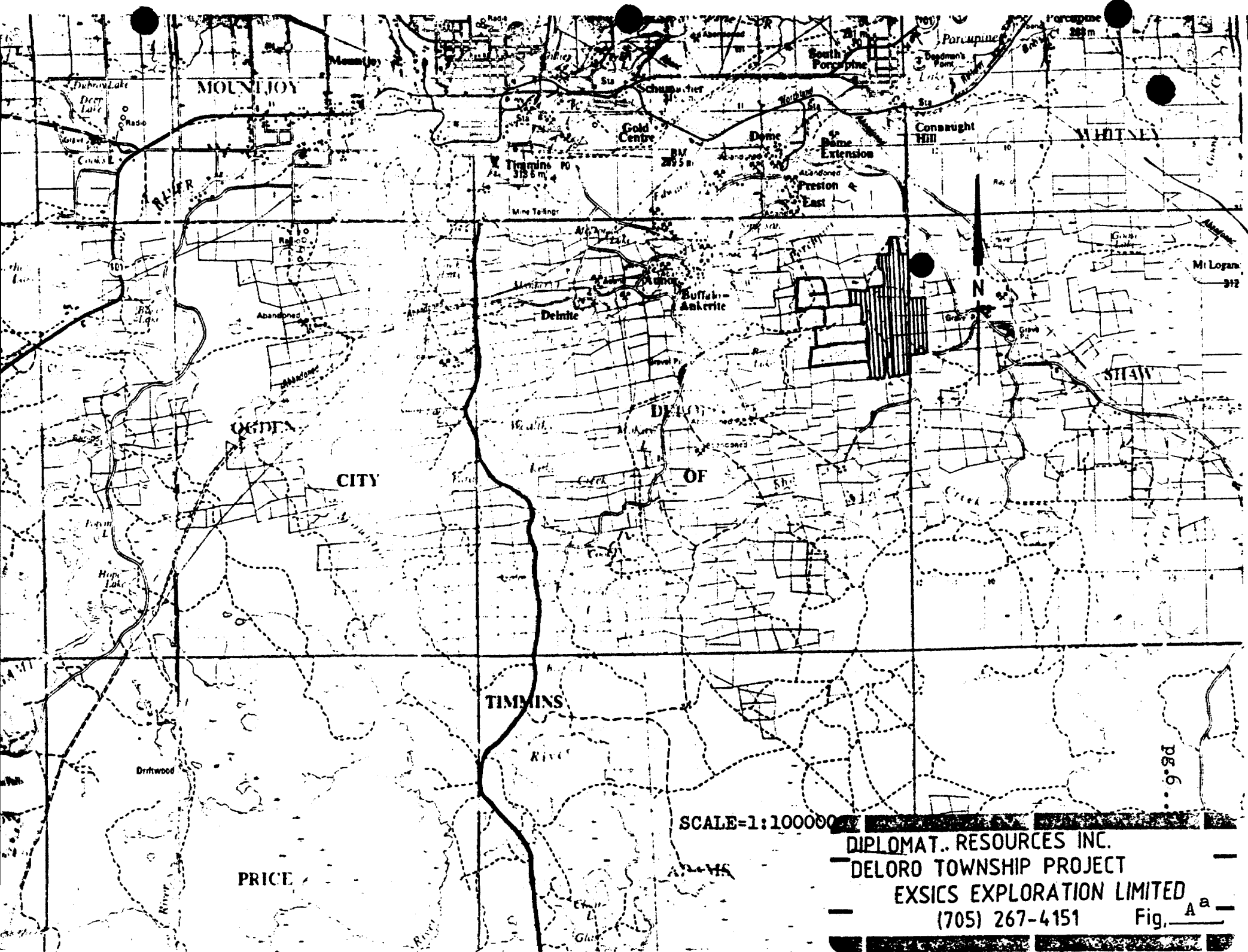


DIPLOMAT RESOURCES INC. 1985

FIGURE A  
**LOCATION MAP**







SCALE=1:100000

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Fig. A a

pg. 6

Access to the property is via the "Timmins Backroad", eastward from the City of Timmins to the town of South Porcupine. The central and eastern portion of the Project may be reached by a series of bush roads leading about 1 mile (1.5km) westward off of an all weather road, "Langmuir Road", which leads southward from the Town of South Porcupine.

### GEOLOGY

Deloro Township was mapped in detail by A.G. Burrows of the O.D.M. in 1915 and 1924; S.A. Ferguson in 1959 (North half); and in 1964 and 1965 by H.D. Carlson (1967). D.R. Pyke (1982) studied the geology of the Timmins area which included Deloro Township.

With the exception of a few diabase dikes and minor Middle Precambrian sedimentary rocks, all the bedrock in the Timmins area is of Early Precambrian (Archean) age. Early Precambrian metavolcanics in the area are divided into two groups, the Deloro and Tisdale Groups.

The Deloro Group is largely a calc-alkaline sequence, approximately 4,500 to 5,000 meters thick, and is composed mainly of flows of andesite and basalt in the lower part, and dacitic flows and dacitic and rhyolitic pyroclastic rocks towards the top. Iron formation is common at or near the top of the group.

A major change in volcanism marks the beginning of the Tisdale Group. The basalt formation consists largely of ultramafic volcanic rocks and basaltic komatiites. This in turn is overlain by a thick sequence of tholeiitic basalts. The uppermost formation is largely volcanoclastic and has a calc-alkaline dacite composition. The total thickness of the Tisdale Group is about 5,000 meters.

Metasediments of the Porcupine Group, consisting mainly of interlayered greywacke and siltstone with lesser conglomerate, form part of what is for the most part a turbidite sequence. Maximum thickness of the group is approximately 3,000 meters.

Large, generally sill-like bodies of dunite and herzolite were emplaced almost entirely within the Deloro Group of Volcanic rocks.

Minor subvolcanic quartz feldspar porphyry intrusions occur within a restrictive stratigraphic interval, suggesting that they in part may represent extrusive rhyolitic domes.

Figure B illustrates the general geology of the Timmins area.

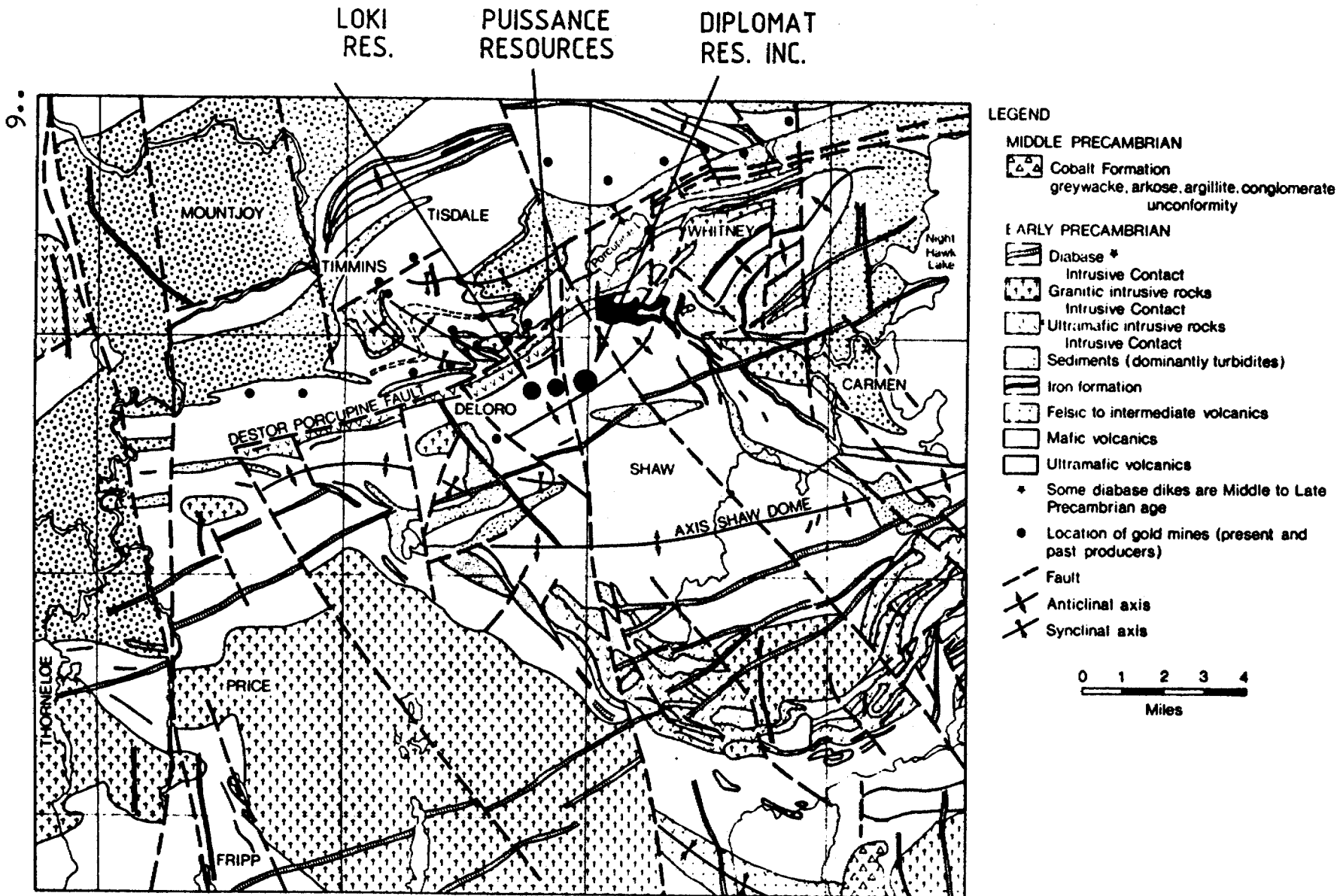


Figure B: General Geology of the Timmins Area

## STRUCTURAL GEOLOGY

A major structural break, the Destor-Porcupine Fault, separates the Timmins area into two main structural domains. North of the fault, two periods of folding have been discerned; an original north-trending series of overturned folds were subsequently refolded about an east-northeast axis. South of the fault, the Shaw Dome forms the main structural feature; the axis trending approximately east-west.

Other younger, yet regionally important faults also traverse the area; the Montreal River Fault, and the Burrows-Benedict Fault. The Montreal River Fault is parallel to and associated with the western boundary faults of the Colbalt Graben. This fault is trending in a northwest direction and bisects Shaw Township which is just east of Deloro Township.

The Burrows-Benedict Fault trends north-northwest across the Timmins area and merges with the Montreal River Fault near the west-central boundary of Tisdale Township. This fault displaces the Destor-Porcupine Fault approximately 1.0 miles (1.5 km) in a left lateral sense. This fault is located near the eastern Deloro Township boundary line.

As illustrated on Pyke's (1982) map (O.G.S. Map 2455), several parallel to sub-parallel faults exist in Deloro Township

which may be related to either the Montreal River Fault or the Burrows-Benedict Fault or in fact the Destor-Porcupine Fault. It has been geologically indicated that several of the diabase dikes have filled previous fault zones.

### ECONOMIC GEOLOGY

#### 1. The Powell Property (Puissance Gold Zone)

This property abuts against the western margin of the present ground. On it, one or more zones of carbonated rock containing green fuchsitic alteration, occurs. Within this zone or zones, gold-bearing quartz veins occur in which assays in excess of 1 ounce per ton have been reported (Ontario Geological Survey File T-67). The zone or zones trend east west and continue onto the present ground. A specimen taken from within 200 feet of this ground is reported to have assayed .41 ounces to the ton (File T-67). It is probable that on the ground this gold-bearing material terminates on the Burrows-Benedict Fault. However, an area about half a claim wide exists between where the zone or zones enter the ground and the edge of the fault. The displacement of the fault has not been accurately determined, but it is thought to have displaced the sequence  $3/4$  to 1 mile north. Therefore the eastward continuation of the Puissance gold-bearing zone(s) might be expected to continue through the southern part of claims P.758990 and P.758991. It is thought, therefore, that these two claims represent areas that strongly merit further exploration for gold.

On claims P.758991 a group called the Philadelphia Mining Syndicate (date unknown) drove an adit into gently north-dipping quartz, reporting on the map legend "Work done to 11th July Drift in solid quartz, hanging wall not reached, average assay value over \$20.00 per ton." The section indicated appears to be about 8 feet. Gold would be either at

a price of \$20 or \$35 an ounce, indicating a grade in excess of 1 ounce or at least .6 of an ounce per ton. (Ontario Geological Survey, Assessment File T-271).

## 2. Excello Mine

The ground occupied by this property in the 1930's is now represented by claims P.555626, P.567049, and claims P.567427, P.567428, and P.567429 of the present property. Information for these claims is here reproduced from the Ontario Geological Survey Assessment File T-4. For ease in understanding, the assay values quoted in this file have been converted from dollars to ounces per ton, as all values are quoted at \$20 gold.

In 1934, mine workings from a single shaft, at a depth of 125 feet, are reported to include some 900 feet of drifting into one or more west northwest-trending quartz veins in which channel samples gave values between .23 and .4 ounces of gold to the ton. In a letter dated October 15th, 1934, the engineer, James Crookston stated:

"We have uncovered another vein, carrying free gold, proving to me that this vein system is our main orebody which is a mineralized zone of about several hundred feet in width, running in a northwest by southeast direction, and about 300 feet north of our main No. 1 shaft, which is down to a depth of 155 feet with the first level at 125 feet, where a large station has been cut and approximately 1200 feet of underground work. I also recommend that we carry the underground work 300 feet north where we expect to pick up the main orebody. With respect to our surface work, we have about 45,000 tons of commercial ore which, assays reported, value from .1 to 800 ounces to the ton, proving this property one of outstanding merit. I have been checking up the means of recovery as our highest values are locked in tellurides, sylvanite, and calaverite, with sky high values. With the work

which has already been done it has proved that we have one of the most outstanding properties in the Porcupine district".

A series of assays by Hollinger Consolidated Mines, the Provincial Government, and others, appended to the above report, gives gold values from a low of .8 ounces to a high of nearly 80 ounces of gold to the ton. A second list gives assays from various veins which are numbered up to 20, with values from "trace" to 25 ounces, most being grab samples. This later list is dated May 13, 1935.

Field mapping of the ground by Erie Canadian, in 1938, shows 18 veins on the 5 claims, most trending west northwest, but with several trending a little east or west of due north.

Assuming the dependability of these reports in the assessment files, the writer considers this ground to be of exceptional importance as a potential area for the development of a gold mine within the Porcupine mining camp.



## LINECUTTING

An east-west baseline was established at the junction of claim posts #3 and #2 of P 567428 and P. 555626 respectfully. The Township line of Deloro and Shaw was re-established as 10+00 of the survey grid. Grid lines were turned off of this baseline and cut to the north and south boundaries of the block. All of the cross lines were chained at 100 foot intervals. (see fig. 2, Linecutting Grid.).

The linecutting was layed out as follows:

Baseline:	1400E to 3200W
Tie line 4100N	0+00 to 2100W
Tie line 1700S	0+00 to 3200W

Cross lines were cut and chained at 100 foot intervals from L1400E to L2200W and from the baseline to the north boundary of the block. In effect, claims P. 833107, 833108, 833110, 758990, 758991, 567050, 567049, 567427, 567428, 555626 and the east half of P.555627 were covered by this detail grid. The remainder of the block was covered by 200 foot line spacing. In all, a total of 48.5 miles, (78.05km) of grid and baselines were done.

## GEOPHYSICAL SURVEYS

### a) Magnetometer Survey:

The magnetic survey was completed on 46.5 miles, (74.83km) of grid, using the Scintrex MP-2 Portable Proton Magnetometer. A total of 2395 readings were taken on the grid at 100 foot intervals with 50 foot readings in anomalous areas. The instrument's specifications are found, as Appendix A of this report. The survey was completed during the month of January, 1985.

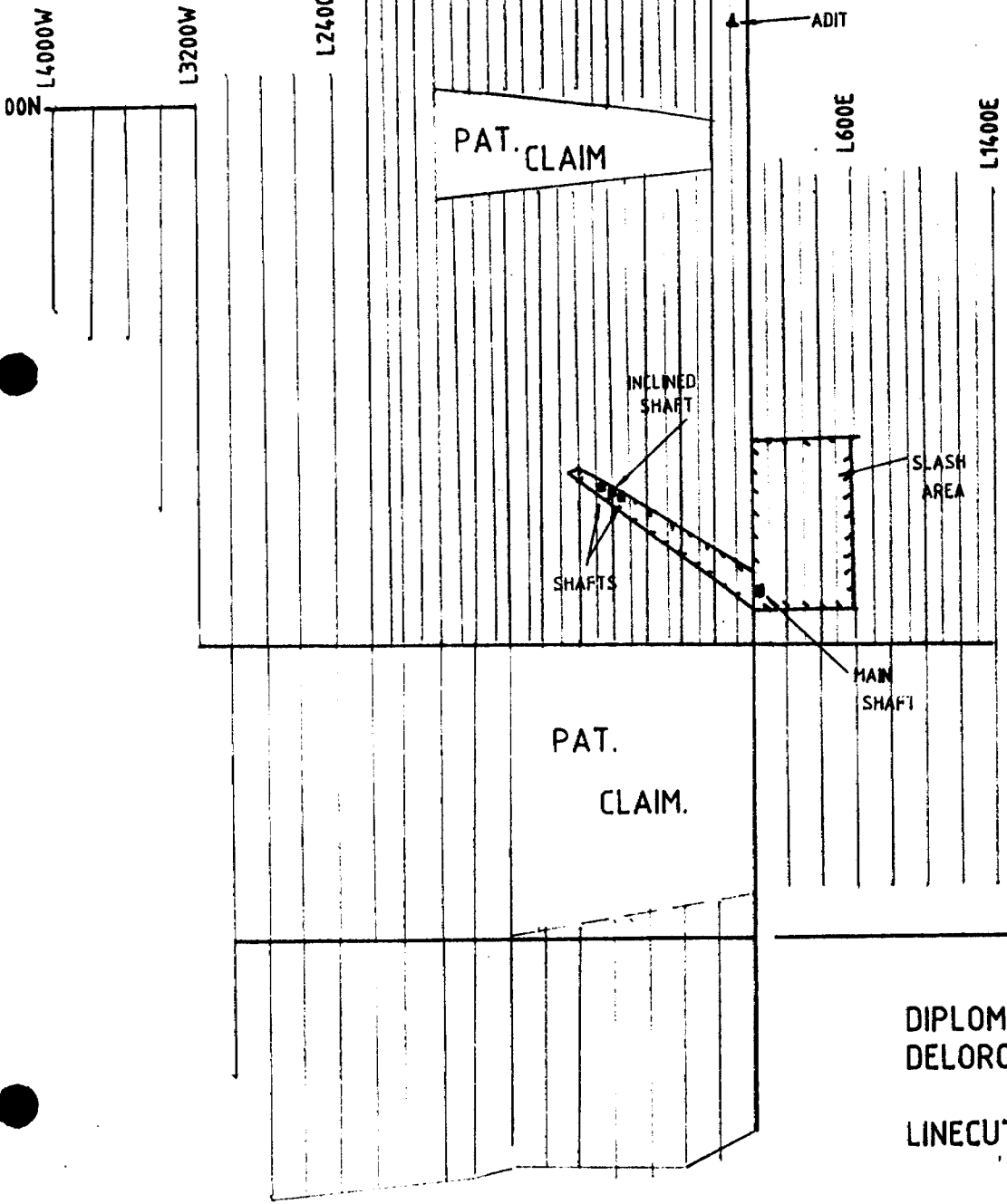
### b) VLF (Radem)-EM Survey

The VLF survey was completed in conjunction with that of the magnetic survey. A Crone, Radem receiver unit, utilizing a Transmitting station operating at 24.0 khz, (Cutler, Maine), was used throughout the survey. The readings were taken at 100



DELORO TWP.

SHAW TWP.



DIPLOMAT RESOURCES INC.  
DELORO TWP. PROJECT

LINECUTTING GRID

FIG. 2

foot intervals with 50 foot readings done in anomalous areas. At each station, the dip angle and Horizontal Field Strength, (H.F.S.) were recorded. A total of 2387 dip readings and 2387 H.F.S. readings were done.

The instrument's specifications are found as Appendix B of this report. The survey was done during the month of January, 1985.

### MAGNETIC SURVEY PROCEDURE

Before surveying the grid, a series of base, magnetic, stations were established at fixed points on the grid to assist in the calculations of the diurnal variations in the total magnetic field.

These fixed locations are as follows:

Location	Mean value, in gammas
Baseline(BL), 1100E	59200
BL, 0+00	59200
BL, 1400W	59450
BL, 2000W	59350
BL, 2400W	59450
BL, 3000W	59300

All the north-south grid lines were surveyed with several "Tie-ins" to these base stations, each day, and the diurnal variation was not found to exceed plus or minus 25 gammas in 5 hours.

The magnetic data is plotted on a base map with a scale of 1:1200, (1" to 100'). A base level of 59000 gammas has been removed from each reading. The data was then contoured at 50 and 100 gamma intervals where possible. These contoured base maps are included in the back pocket of this report.

VLF-EM (Radem) Survey

Before surveying the north-south grid lines, the EM unit had to be calibrated at a base station located on L 0+00 at the baseline. The transmitting station used throughout this survey was Cutler, Maine, at a frequency of 24.0 khz. The unit is rotated, face-up, until it is at right angles to the station. When this is completed, the H.F.S. is adjusted to a required percentage and locked. In this survey, the H.F.S. was set at 200 percent.

Readings were taken at 100 foot intervals with 50 foot intervals read in anomalous areas, with the unit facing in the direction of the transmitting station. Both the H.F.S. and dip angles were recorded at each station. The data was corrected and plotted on a base map using a scale of 1" to 100'. The dip angle values are plotted separately from the H.F.S., and on a scale of 1" to 200' to 20 degrees. The H.F.S. readings were contoured at 10 percent where possible.

Both sets of maps are presented with this report in the back pocket.

INTERPRETATION

To aid in the interpretation of the VLF-EM data, a low pass filter, known as Fraser Filtering, was used on the dip angle readings. The filtering procedure results in the positive peak to be positioned over the conductor. This filtering will result in high positive values over shallow conductors and low positive values over deeper conductors.

It should be stated here, that numerous, natural occurring substances will cause anomalous values; these being, the composition and thickness of the overburden, wet areas, ie, swamps and bogs, shorelines, bedrock exposures in those wet areas and certainly the presence of electrical conductive material such as graphite and sulphide horizons.

SURVEY RESULTS

The magnetic results does provide information as to the geological stratigraphy of the claim group. The magnetic background over the entire block appears to be in the range of 59150 to 59250 gammas.

Generally, the most predominant magnetic feature strikes in a northeast to southwesterly direction, from L600E/2700N to L2200W/350N. The trend is most likely representative of a known diabase dike striking in the same direction and in the same vicinity.

Also, the north-south trending magnetic feature, centered along L200W between 1800N and 400N which shifts to a southeasterly direction from L0+00/400N to L500E/1400S, may in fact be associated with an assumed quartz diabase dike which runs in a similar pattern in the area.

EM. Conductive Zones North Half.

## Zone A. (L1200E/400N to L700W/1050N)

This EM response represents one of the most predominant zones of the property. There is a south flanking magnetic correlation on the zone's central and northwestern section, with direct mag correlation in excess of 450 gammas above background on the eastern extension. Due to the presence of the high magnetics and the amplitudes of the response, the zone is probably the north edge of an iron rich vein system. It is in this type of environment that we will be concentrating our efforts in the search of gold horizons.

The presence of iron formation with quartz is known along the strike of this zone because of the heavy trenching done in the early 1930's and 1940's on the northwestern and southeastern portions of the conductor.

Zone A'. (L1200E/200N to L1400E/BL)

This EM response is most likely the southeast extension of A which has been displaced by an assumed northeast to southwest trending fault. This is evident if you study the Fraser filter data for the same area which shows the displacement in the contouring. The amplitudes of the filtered data is similar in both zones, along L1300E between 100N and 400N.

Zone B. (L600E/1650N to L200W/1650N)

This zone is the second most predominant EM feature on the grid. There is little to no magnetic correlation with the response which may down play the importance of the zone. The western extension of B stops abruptly up against the assumed location of the quartz diabase dike.

The zone may in fact be representative of a legitimate bedrock source, but at this time it will require further investigation to better define it. There is abundant outcrop on or around the zone for a possible geological explanation.

Zone B'. (L600W/1650N to L800W/1550N)

This zone may be the western extension of B which has been displaced by the presence of the dike which strikes north along L200W. The zone has magnetic correlation paralleling it which may suggest that the source is the southeast flank of a mapped dike in the same area.

Zone B''. (L1000W/1600N to L1600W/1500N)

Again, this zone may be indicative of the northwestern flank of the same dike mentioned in zone B', as the EM conductor axis closely follows the contoured magnetic in the area.

These three zones, B, B' and B'' may be representative of a quartz vein system which has been faulted and displaced by several dikes. Further investigation would be required for a better definition of each of the responses.

Zone C. (L600E/2500N to L0+00/2500N)

This EM response is probably the contacts, both easterly and westerly edges, of the diabase dike which is also found in the same area. The magnetic correlation of the zone would support this.

Zone D. (L1600W/2200N to L1800W/2200N)

This zone is probably representative of conductive overburden and or topography. The western end has been faulted off by a fault zone, striking northeast-southwest into the Burrows Benedict fault. The western extension is noted again on L2100W at 2150N where it continues for 300 feet, where it again appears to be faulted by the presence of the Burrows Benedict fault. There is no magnetic correlation with the zone which may suggest the conductive overburden theory, however, the area should be mapped before any final conclusions are made.

Zone E. (L1400W/2400N to L2300W/2400N)

This EM response is most likely related to the creek which parallels the zone. The entire length of the response is confined between to suspected faults. The lack of magnetic correlation would support the creek interpretation, but it should be noted that there has been heavy trenching to the north of this zone which would require remapping and sampling and may provide an answer for the source.

Zone F. (L1800W/2975N to L2600W/2600N)

This zone is related to a swamp to outcrop contact and again the extension has been faulted off by the presence of the Burrows Benedict fault. There is no magnetic correlation with the zone but the axis is within 100 feet of old trenching. Remapping and sampling of these trenches may explain the source of F.

In concluding, it should be stated that zones D, E and F are all parallel to each other and are all contained within the two faults.

Zone G. (L3200W/2050N to L3800W/3050N)

Zone J. (L2600W/2600N to L3100W/3300N)

Both of these zones strike at 325 degrees for 600 feet which closely relates to the strike of the Burrows Benedict Fault. In fact, the zones are probably the southwest and northeast contacts of this fault. There is no magnetic correlation with either of the zones.

Zone K. (L2000W/4050N to L2200W/4050N)

This zone continues off of the grid to the west and it has no magnetic correlation. There is evidence of old trenching several hundred feet north of the response which may aid in determining the source.

Zone H. and I. (L3600W to L3800W at 2250N)  
(L3600W/1850N to L3800W/1900N)

These two zones parallel each other with zone I being a probable contact between outcrop and swamp and H being a swamp conductor. The area is completely covered by water and neither zone has any magnetic correlation. At this time, no further work is recommended on either zone.

Zone L. (L100W/3600N to L2200W/5200N)

This EM response is another one of the most predominant zones of the survey. That part of the zone on L100W and 200W at 3600N has been explained. Old work in the area, by Philadelphia Mining Syndicate, consisted of driving an adit into what is now the eastern edge of this zone. The zone consist of quartz rich iron formation with known gold values. The magnetics show strong correlation in excess of 900 gammas above background which would varify the iron formation. The associated mag low, on strike with the high is probably representative of the fault contact. The zone is extremely distorted and folded as can be seen in the magnetic contouring.



## Zone L. Con't

As you progress west across the fault the zone has been displaced 400 feet north from where it continues for 1300 feet at 320 degrees and off of the grid to the northwest. The existence of the iron formation with this extension of the zone can be seen in the magnetic which closely relates to the strike of the zone for over 600 feet.

Resampling of the adit as well as trenching on the extension of this zone is highly recommended as it appears that this type of vein structure is the ideal environment for gold mineralization.

## Zone M. (L1400W/5000N to L1700W/5150N)

This EM response strikes at 320 degrees and parallels zone L. There is no magnetic correlation with the conductor but it may in fact be associated with the iron formation to the south. It should be noted, that the zone is associated with a gully.

## Zone N. (L1000W/6150N to L1400W/6050N)

This EM response is probably associated with a swamp to outcrop contact as the area is rolling outcrop to swamp. There is no magnetic correlation with the zone. Another possibility is that the zone is fault associated.

## Zone P. (L800W/6550N to L1200W/6900N)

This response strikes at 315 degrees which closely relates to the strike of the outcrop to swamp contact in the area. There is no direct mag correlation with the zone but there is a moderate magnetic feature 200 feet south of the eastern extension of the conductor which may in fact be fault associated.

Zone R. (L0+00/5800N)

This single line response is probably related to either a fault or diabase dike. The magnetic correlation with the zone is in excess of 500 gammas above background which would suggest either the fault or dike presence.

Zone S. L100W/4450N to L600W/4450N)

This zone strikes into the fault on the western extension. That portion of the zone between L600W and 400W is related to a creek which is also present in the area. There is no magnetic association with this section.

The eastern portion of the zone would be the contact between the volcanic agglomerate and basalts. The direct associated mag highs and lows with this section of the zone is probably representative of a contact zone. This zone should be mapped in detail and sampled where possible because it closely parallels the vein structure of zone L.

EM CONDUCTORS, SOUTH HALF:

Zone T. (L0+00/1000S to L200E/1250S)

This zone strikes at 140 degrees and continues off of the grid to the southeast. It closely relates to a moderate north flanking mag feature. There is abundant outcrop in the area which should be investigated. The EM response may be a legitimate bedrock response.

There are two single line parallel responses to the northeast and southwest of this zone that could be upgraded depending on the results of Zone T.

Zone U. (L2400W/700S to L2800W/700S)

This conductor is a probable bedrock response at depth, striking west from the Burrows Benedict Fault. There is no direct mag correlation with the zone. There is evidence that a down hole IP survey was done 200 to 300 feet north of the conductor. The western extension of the zone strikes into a north south outcrop

ridge making it possible to trench the zone if it can be traced to this ridge.

The elongated northeast southwest trending mag zone 300 feet north of U is probably indicative of a mapped fault in the area which strikes off of the grid and on to the adjoining Puissance ground.

Zone V. (L0+00/2050S to L400W/2350S)

This zone is probably related to a known iron formation which has been trenched in the past. There is direct mag correlation with the western portion of the zone.

Zone W. (L200W/2600S to L1000W/2700S)

This zone is the probable contact of a diabase dike mapped in the area. The western portion of the conductor stops abruptly against the Burrows Benedict fault. The magnetic correlation suggests the same.

This zone is displaced 100 feet north and 700 feet west by this fault and the zone continues southwest from L1800W to L2800W and off of the grid. The magnetic contours also show this displacement.

The weak VLF response on L1600W and L1800W at 2600S and 2400S is the probable southwestern contact of the fault.

CONCLUSIONS

Both the detailed VLF-EM and magnetometer surveys proved to be successful as the predominant structural features and lithological units have been located. The EM survey located 5 predominant anomalies which may in fact be related to sulphide mineralization. The survey also located several other "possible" sulphide zones.

In the analysis of the mag and EM data of the Puissance Corporation Property immediately to the west of the Diplomat ground, it was found that the presently known mineralization is associated with magnetic lows.

In the Diplomat surveys, the predominant zones also have associated mag lows either directly or flanking these anomalies. Therefore, it is the opinion of the author that the information obtained from the surveys would warrant further, detailed examination of the more predominant zones and based on these detailed results, the other "possible" zones may also have to be explored.

## RECOMMENDATIONS

Based on a summer program, the following work is recommended as a follow-up program:

1. The whole claim block should be mapped in detail, paying particular interest to those areas where the anomalies are.
2. In the vicinity of Zone A, stripping of the area in and around the main shaft, the removal of the waste dump, cleaning out of the old trenches and resampling them for updated assays, the dewatering of the main shaft for resampling. The removal of the waste dump is a definite priority because it is expected that the dump covers a small outcrop of quartz said to contain much free gold. (see report, R.P. Kinkel, Novell Porcupine Mines, John Novac, July 10, 1940).
3. Zone B should have power stripping, trenching and sampling done at various points along it's strike.
4. Zone L, dewatering of the adit for resampling and updated assays. Power stripping and detailed mapping along the strike and at the same time, detailed mapping of zones M,K and S because of their close association to Zone L.
5. The cleaning out and resampling of any and all trenches on or around zones D,E and F.
6. A detailed mapping program is suggested on claims P. 555628, 555629, 555630 and 567429 again paying particular attention to the areas of the anomalies. Upon completion of this mapping, trenching and stripping may be required in areas of shallow overburden and diamond drilling in areas of deep overburden.
7. Detailed mapping at a scale of either 1' to 20 feet or 1" to 10 feet will be required in the stripped areas. When this is completed, it is recommended that either chip or channel sampling be done across the zones for their entire length.

RECOMMENDATIONS, CON'T

8. Based upon the results of the above recommendations and the success of locating the mineralization zones, bulk sampling may be required.

## REFERENCES

Carlson, H.D.

1967: Geology of Ogden, Deloro and Shaw Townships; Ontario Department of Mines, Open File Report 5012, 117p. Accompanied by Maps P.341, P.342 and P.343, scale 1 inch to 1/4 mile.

Ferguson, S.A.

1959d: Deloro Township, Northeast Quarter, District of Cochrane, Ontario Department of Mines, Map P.12, scale 1 inch to 500 feet

Fraser, D.C.

1969: Contouring of VLF-EM Data; Geophysics, Volume 34, Number 6 (December, 1969), p. 958-967.

Geological Survey of Canada

1970: Timmins Sheet, Cochrane, Timiskaming and Sudbury Districts, Ontario; Geological Survey of Canada, Aeromagnetic Series Map 7085G, scale 1 inch to 4 miles.

Hurst, M.E.

1939: Porcupine Area, District of Cochrane, Ontario, Ontario Department of Mines, Map 47a, scale 1 inch to 2000 feet.

Jensen, K.A.

1985: Report on Deloro Project, Joint Venture, Pamour Porcupine Mines, and Loki Resources, District Of Cochrane, Timmins Ontario.

Kinkel, R.P.

1940: Report on Novell Porcupine Mines, John Novac.

Kirwan, J.L.

1984: Diplomat Resources Inc., Deloro and Shaw Claims, Porcupine Mining Division, Ontario, Preliminary Report.

Pyke, D.R.

1982: Geology of the Timmins, Area, District of Cochrane; Ontario Geological Survey Report 219, 141p. Accompanied by Map 2455 scale 1:50,000

CERTIFICATE

I, John C. Grant, hereby certify that:

- 1) I am a 1975, graduate geophysist. of the three year program in Geological Technology at Cambrian College of Applied Arts and Technology and I have worked subsequently as Exploration Geophysist for Teck Exploration Limited, (5 years), North Bay Office and presently for Exsics Exploration Limited, Timmins Office, as Exploration Manager, Geophysist, since 1980.
- 2) I am a member of the Certified Engineering Technologist Association.
- 3) I am an associate member of the Geological Association Of Canada
- 4) I have been actively engaged in my profession for the past ten(10) years, including all aspects of Exploration studies, surveys and interpretations
- 5) I have no specific or special interest in the described property and the field work described in the attached report was carried out under my supervision. The interpretations and conclusions contained therein are based on my training and professional experience.



John Charles Grant (C.E.T.)

Exsics Exploration Limited





Ministry of Natural Resources

File \_\_\_\_\_

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) E.M. and Mag.  
Township or Area Deloro and Shaw  
Claim Holder(s) Diplomat Resources Inc.  
#205,1155 West Pender St, Vancouver BC  
Survey Company Exsics Exploration Limited  
Author of Report J.C. Grant  
Address of Author Box 1880, Timmins, Ontario  
Covering Dates of Survey Oct. 16, 1984 to Feb. 10, 1985  
(linecutting to office)  
Total Miles of Line Cut 48.5

MINING CLAIMS TRAVERSED  
- List numerically

- P. 758990 (prefix) (number)
- P. 758991
- P. 833107
- P. 833108
- P. 833110
- P. 555626
- P. 555627
- P. 555628
- P. 555629
- P. 555630
- P. 567049
- P. 567 050
- P. 567051
- P. 567052
- P. 567427
- P. 567428
- P. 567429

If space insufficient, attach list

**SPECIAL PROVISIONS CREDITS REQUESTED**

ENTER 40 days (includes line cutting) for first survey.  ENTER 20 days for each additional survey using same grid.	Geophysical	DAYS per claim
	-Electromagnetic	<u>40</u>
	-Magnetometer	<u>40</u>
	-Radiometric	_____
	-Other	_____
	Geological	_____
	Geochemical	_____

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

Magnetometer \_\_\_\_\_ Electromagnetic \_\_\_\_\_ Radiometric \_\_\_\_\_  
(enter days per claim)

DATE: May 21, 1985 SIGNATURE: J.C. Grant  
Author of Report or Agent

Res. Geol. \_\_\_\_\_ Qualifications 2.5347

Previous Surveys

File No.	Type	Date	Claim Holder

TOTAL CLAIMS 17

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS If more than one survey, specify data for each type of survey Mag=2395  
Dip=2387  
F.S.=2387

Number of Stations Mag=2395, Dip=2387, FS=2387 Number of Readings \_\_\_\_\_  
Station interval 100 feet Line spacing 100 and 200 feet  
Profile scale 1 inch=20%  
Contour interval 50, 100 gammas

MAGNETIC

Instrument Scintrex MP-2 Proton Magnetometer  
Accuracy - Scale constant + 1 gamma over 20,000 to 100,000 Range  
Diurnal correction method Fixed Base Station on Grid  
Base Station check-in interval (hours) 3 hours  
Base Station location and value BL/1100E(59200), BL/0+00(59200), BL/1400W(59450)  
BL/2000W(59350), BL/2400W(59450), BL/3000W(59300).

ELECTROMAGNETIC

Instrument Crone VLF-EM (Radem) Receiver  
Coil configuration \_\_\_\_\_  
Coil separation \_\_\_\_\_  
Accuracy Range of + 90 degrees with an accuracy of + 1/2 degree  
Method:  Fixed transmitter  Shoot back  In line  Parallel line  
Frequency Cutler, Maine @ 24.0 KHz.  
(specify V.L.F. station)  
Parameters measured Dip Angle measurement in degrees of the magnetic field  
component, from the horizontal.

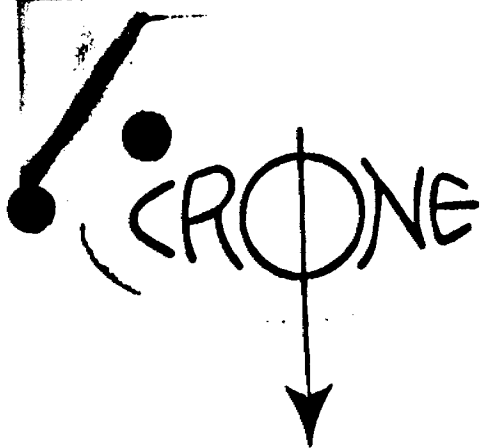
GRAVITY

Instrument \_\_\_\_\_  
Scale constant \_\_\_\_\_  
Corrections made \_\_\_\_\_  
Base station value and location \_\_\_\_\_  
Elevation accuracy \_\_\_\_\_

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 \_\_\_\_\_

APPENDIX A



## CRONE GEOPHYSICS LIMITED

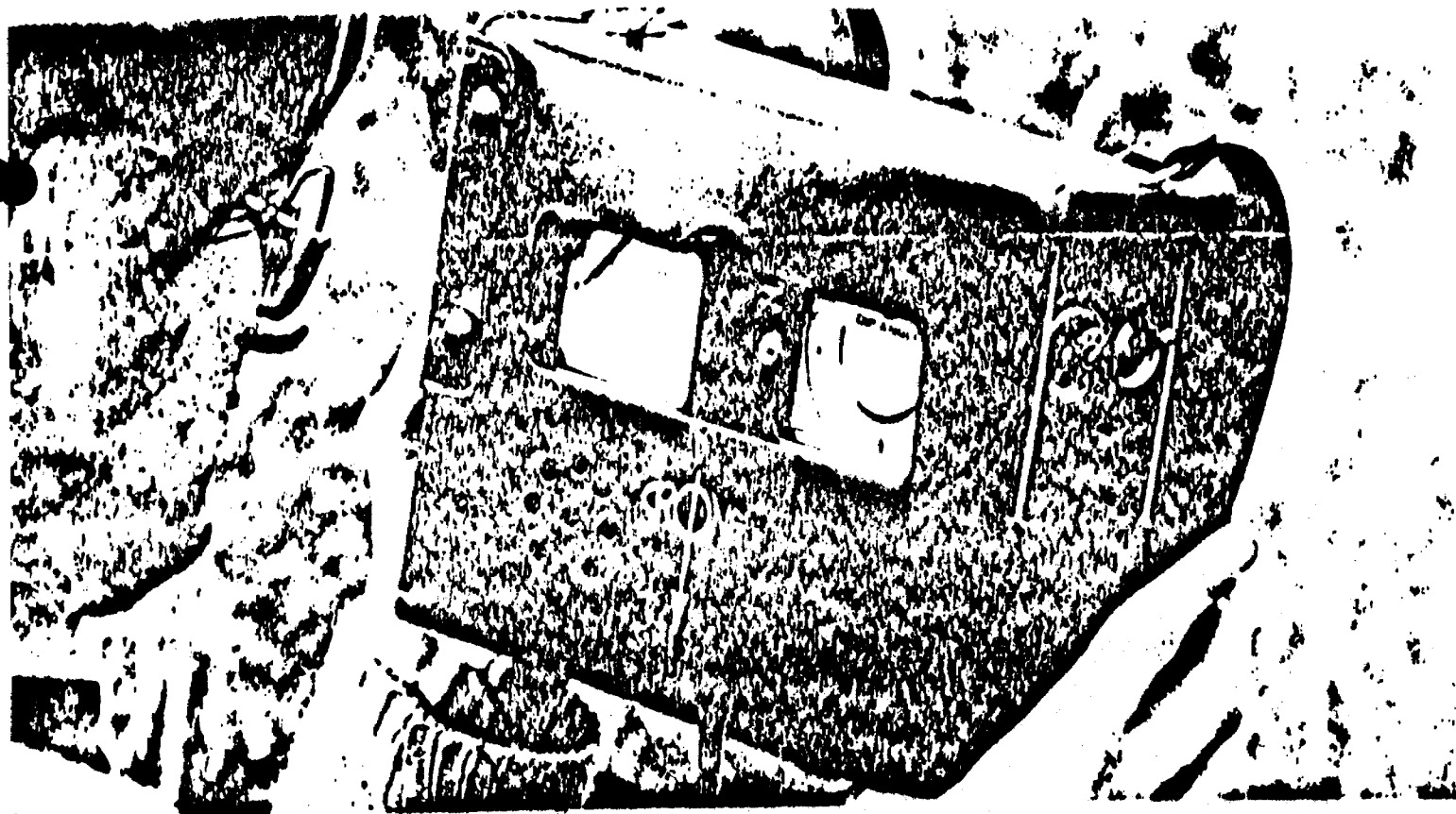
3607 WOLFEDALE ROAD,  
MISSISSAUGA, ONTARIO,  
CANADA,  
L5C 1V8

Phone: (416) 270-0096

Cable: CRONGEO, TORONTO

# RADEM

AN EM RECEIVER MEASURING THE FIELD  
STRENGTH, DIP ANGLE AND QUADRATURE  
COMPONENTS OF THE VLF COMMUNICATION  
STATIONS



This is a rugged, simple to operate, ONE MAN EM unit. It can be used without line cutting and is thus ideally suited for GROUND LOCATION OF AIRBORNE CONDUCTORS and the CHECKING OUT OF MINERAL SHOWINGS. This instrument utilizes higher than normal EM frequencies and is capable of detecting DISSEMINATED SULPHIDE DEPOSITS and SMALL SULPHIDE BODIES. It accurately isolates BANDED CONDUCTORS and operates through areas of HIGH HYDRO NOISE. The method is capable of deep penetration but due to the high frequency used its penetration is limited in areas of clay and conductive overburden.

The DIP ANGLE measurement detects a conductor from a considerable distance and is used primarily for locating conductors. The FIELD STRENGTH measurement is used to define the shape and

# SPECIFICATIONS

**SOURCE OF PRIMARY FIELD:** VLF Communication Stations 12 to 24K hz  
**NUMBER OF STATIONS:** 7 switch selectable  
**STATIONS AVAILABLE:** The seven stations may be selected from:

Code	Station & Location	Frequency
CM	Cutler, Maine .....	24.0 KHz
SW	Seattle, Washington .....	24.5 KHz
AM.	Annapolis, Maryland .....	21.4 KHz
H	Lanai, Hawaii .....	23.4 KHz
BOF	Bordeaux, France .....	15.1 KHz
E	Rugby, England .....	16.0 KHz
MS	Gorki, Russia .....	17.1 KHz
OD	Odessa (Black Sea) .....	15.6 KHz
NC	Australia, N.W.C. ....	22.3 KHz
YJ	Yosamal, Japan .....	17.4 KHz
HN	Hegaland, Norway .....	17.6 KHz
TJ	Tokyo, Japan .....	20.0 KHz
BA	Buenos Aires .....	23.6 KHz

**CHECK THAT STATION IS TRANSMITTING:** Audible signal from speaker.

## PARAMETERS MEASURED:

- (1) **DIP ANGLE** in degrees of the magnetic field component, from the horizontal, of the major axis of the polarization ellipse. Detected by a minimum on the field strength meter and read from an inclinometer with a range of  $\pm 90^\circ$  and an accuracy of  $\pm \frac{1}{2}^\circ$ .
- (2) **FIELD STRENGTH** (total or horizontal) of the magnetic component of the VLF field, (amplitude of the major axis of the polarization ellipse). Measured as a percent of normal field strength established at a base station. Accuracy  $\pm 2\%$  dependent on signal. Meter has two ranges: 0 — 300% and 0 — 600%.
- (3) **OUT-OF-PHASE** component of the magnetic field, perpendicular in direction to the resultant field, as a percent of normal field strength, (amplitude of the minor axis of the polarization ellipse). This is the minimum reading of the Field Strength meter obtained when measuring the dip angle. Accuracy  $\pm 2\%$ .

**OPERATING TEMPERATURE RANGE:**  $-30^\circ\text{C}$  ( $-20^\circ\text{F}$ ) to  $+50^\circ\text{C}$  ( $120^\circ\text{F}$ )

**DIMENSIONS AND WEIGHT:** 9 x 19 x 27cm — 2.7Kg (6 lb)

**SHIPPING:** Instrument with foam lined wooden case,  
shipping wt. — 6.0Kg (13 lb)

**BATTERIES:** 2 of 9 volt — Eveready 216  
Average life expectancy — 20 hours for continuous operation

UNITS AVAILABLE ON A RENTAL OR PURCHASE BASIS.  
CONTRACT SERVICES AVAILABLE FOR FIELD SURVEYS.

APPENDIX B

# SCINTREX MP-2 Portable Proton Precession Magnetometer

## Function

The MP-2 is a portable one gamma proton precession magnetometer for field survey or base station use. The optimized design of sensor and circuitry using the latest COS/MOS components has resulted in a very light weight, low power consumption, rugged and reliable magnetometer.

Light emitting diodes coupled with an ingenious optically polarized reflector combine solid state reliability with easy reading even in bright sunlight.

Coupled with a module into which the MP-2 is easily inserted, the magnetometer can be used as a base station unit for analogue or digital recording. Full details of the MBS-2 Magnetic Base Station are available on another Scintrex specification sheet.

The noise-cancelling dual-coil sensor and electronics have been so designed as to effectively eliminate reading problems due to virtually all magnetic gradients which may be encountered in field survey conditions.

## Features

1 gamma sensitivity and accuracy over range of 20,000 to 100,000 gammas.

Operates in very high gradients, to 5000 gammas per meter.

Ultra small size and weight.

Up to 25,000 readings from only 8 D cells.

Battery pack isolated from electronics for corrosion protection.

Battery pack easily extended for winter use.

Light emitting diode digital display, with complete test feature.

Unique no-glare polarized reflector permits easy reading in bright sunlight.

Indicator light warning of excessive gradient, ambient noise or electronic failure.

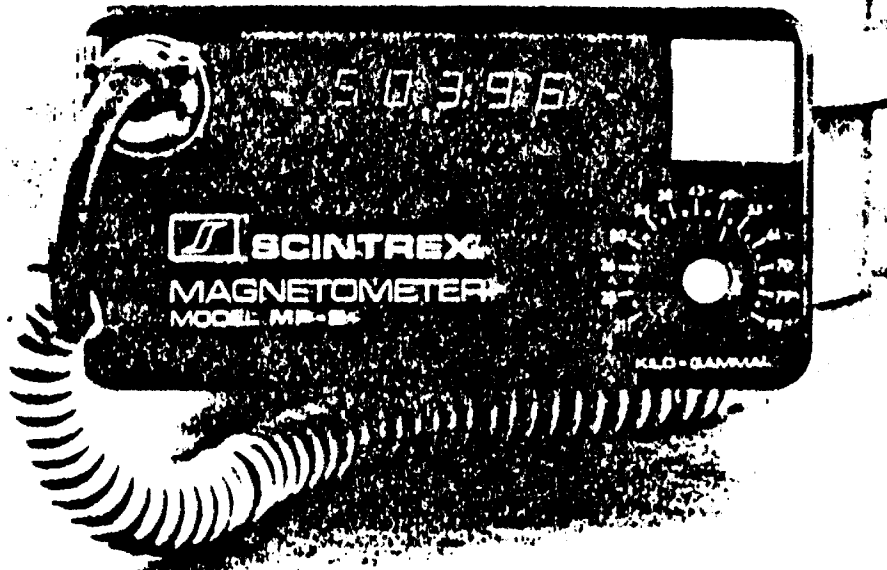
Digital readout of battery voltage.

Rugged all metal housing for rough field use at all temperatures.

Automatic recycling or external trigger features permit ready conversion to base station use.

Short reading time.

Broad operating temperature range.



MP-2 Console

MP-2 in Operation with Staff Sensor



# Technical Description of MP-2 Portable Proton Precession Magnetometer



MBS-2 Magnetic Base Station



MP-2 in Operation with Back Pack Sensor

Resolution	1 Gamma
Total Field Accuracy	$\pm 1$ Gamma over full operating range
Range	20,000 to 100,000 gammas in 25 overlapping steps
Internal Measuring Program	Single reading — 3.7 seconds. Recycling feature permits automatic repetitive readings at 3.7 second intervals
External Trigger	External trigger input permits use of sampling intervals longer than 3.7 seconds
Readout	5 digit LED (Light Emitting Diode) readout displaying total magnetic field in gammas or normalized battery voltage
Digital Output	Multiplied precession frequency and gate times
Base Station Mode	MP-2 console slips into a base station module which provides external triggering as well as digital and analogue outputs. The complete unit is called the MBS-2 Magnetic Base Station
Gradient Tolerance	Up to 5000 gammas/meter
Power Source	8 alkaline "D" cells provide up to 25,000 readings at 25°C under reasonable signal/noise conditions (less at lower temperatures). Premium carbon-zinc cells provide about 40% of this number
Sensor	Omnidirectional, shielded, noise-cancelling dual coil, optimized for high gradient tolerance
Harness	Complete for operation with staff or back pack sensor
Operating Temperature Range	-35°C to +60°C
Size	Console, with batteries: 80 x 160 x 250mm Sensor: 80 x 150mm Staff: 30 x 1550mm (extended) 30 x 600 mm. (collapsed)
Weights	Console, with batteries: 1.8 kg Sensor: 1.3 kg Staff: 0.6 kg
Standard Accessories	Sensor, Staff, Cable, Harness, Carrying Case, Manual
Shipping Weight	Approximately 9.5 kg

Scintrex Limited  
222 Snidercroft Road  
Concord (Toronto) Ontario  
Canada L4K 1B5  
Tel: (416) 669-2280  
Telex: 06-964570  
Cable: Scintrex Toronto

Complete Geophysical  
Instrumentation  
and Services





42A06NE0451 2.8154 DELORO

900

#331/85

Mir

Type of Survey(s): *Proton Mag & VLF-EM Dip & Field Strength* Township or Area: *DELORO TWP.*  
 Claim Holder(s): *DIPLOMAT RESOURCES INC.* Prospector's Licence No.: *T-1874*  
 Address: *205-1155 WEST PENDER ST. VANCOUVER B.C.*  
 Survey Company: *EXSICS EXPLORATION LTD.* Date of Survey (from & to): *16 10 84 10 2 85* Total Miles of line Cut: *5.0*  
 Name and Address of Author (of Geo-Technical report): *JOHN C. GRANT, P.O. Box 1880, Timmins, Ont.*

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	<i>20</i>
	- Magnetometer	<i>40</i>
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
Man Days Complete reverse side and enter total(s) here	Geological	
	Geochemical	
Airborne Credits 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	
<i>P.</i>	<i>833107</i>				
	<i>833108</i>				
	<i>833110</i>				

RECEIVED  
SEP 26 1985  
HIGHLANDS SECTION  
RECEIVED  
SEP 26 1985  
RECORDED  
SEP 26 1985

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures \$  +  =

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. *3*

Date: *Sept 26/85* Recorded Holder or Agent (Signature): *J. C. Grant*

For Office Use Only

Total Days Cr. Recorded: *180* Date Recorded: *Sept 26/85* Mining Record: *[Signature]*

Date Approved as Recorded: *85.10.10* Director: *[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: *J. C. Grant Box 1880, Timmins, Ont.*

Date Certified: *Sept 26/85* Certified by (Signature): *[Signature]*



**Report of Work**  
(Geophysical, Geological,  
Geochemical and Expenditures)

# 105/85  
28154  
Mining Act

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.

may 18/85

Type of Survey(s) *VLF VLF* **PROTON MAGNETOMETER, DIP ANGLE & FIELD STRENGTH** Township or Area **DELORO TWP. & SHAW**

Claim Holder(s) **DIPLOMAT RESOURCES INC.** Prospector's Licence No. **T-1874**

Address **#205, 1155 West PENDER Street, Vancouver B.C.**

Survey Company **EXSIS EXPLORATION LTD.** Date of Survey (from & to) **16 10 84 10 2 85** Total Miles of line Cut **40.5**

Name and Address of Author (of Geo-Technical report) **JOHN C. GRANT, Box 1880, Timmins Ont.**

Credits Requested per Each Claim in Columns at right Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	40
	- Magnetometer	40
	- Radiometric	
	- Other	
For each additional survey: using the same grid: Enter 20 days (for each)	Geological	
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	Days per Claim
	Magnetometer	
	Radiometric	

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
P.	758990				
	758991				
	567052				
	567051				
	567050				
	567049				
	555627				
	555628				
	555629				
	555630				
	555626				
	567429				
	567428				
	567427				

**RECEIVED**  
APR 09 1985

**MINING LANDS SECTION**

**RECORDED**  
MAR 29 1985  
Receipt No. *[Signature]*

*See revised work statement*

Expenditures (excludes power-stripping)

Type of Work Performed **RECEIVED**

Performed on Claim(s) **1**

Date **MAR 29 1985**

Calculation of Expenditure Days Credits

Total Expenditures \$  ÷ 15 =  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. **14**

For Office Use Only

Total Days Cr. Recorded **1120** Date Recorded **March 29/85** Mining Agent **[Signature]**

Date Approved as Recorded **[Signature]** Branch Director

Date **March 29 1985** Recorder/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 **JOHN C. GRANT, Box 1880, Timmins, Ont.**

Date Certified **March 29/85** Certified by (Signature) **[Signature]**

Mining Lands Section

File No 28154

Control Sheet

TYPE OF SURVEY

GEOPHYSICAL

GEOLOGICAL

GEOCHEMICAL

EXPENDITURE

MINING LANDS COMMENTS:

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*L. Q.*  
*l. q.*  
*l. q.*

*Dennis R.*

Signature of Assessor

*May 29 / 85*

Date

1985 07 09

Your File: 105/85  
Our File: 2.8154

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

Dear Sir:

RE: Notice of Intent dated June 13, 1985  
Geophysical (Electromagnetic & Magnetometer)  
Survey on Mining Claims P 555626 et al,  
in Deloro and Shaw Townships

---

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. Kinvig:mc

cc: Diplomat Resources Inc  
Suite 205  
1155 West Pender Street  
Vancouver, B.C.  
V6C 2P6  
cc: Mr. G.H. Ferguson  
Mining & Lands Commissioner  
Toronto, Ontario

cc: John C. Grant  
Box 1880  
Timmins, Ontario  
P4N 7X1

cc: Resident Geologist  
Timmins, Ontario

Encl.

**Technical Assessment  
Work Credits**

File  
2.8154

Date  
1985 06 13

Mining Recorder's Report of  
Work No. 105/85

Recorded Holder	DIPLOMAT RESOURCES INC
Township or Area	DELORO AND SHAW TOWNSHIPS

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<b>Geophysical</b> Electromagnetic _____ 20 _____ days Magnetometer _____ 40 _____ 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 758990-91 567049 to 52 inclusive 555626 to 30 inclusive 567427 to 29 inclusive

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

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

not sufficiently covered by the survey                       Insufficient technical data filed

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:



Ministry of  
Natural  
Resources

*June 28/85*

1985 06 13

Your File: 2.8154  
Our File: 105/85

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

*R.D.K.* D. Kinvig:mc

Encls.

cc: Diplomat Resources Inc  
Suite 205  
1155 West Pender Street  
Vancouver, B.C.  
V6C 2P6

cc: John G. Grant  
Box 1880  
Timmins, Ontario  
P4N 7X1

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



Ministry of  
Natural  
Resources

Ontario

Notice of Intent  
for Technical Reports

1985 06 13

2.8154/105/85

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.

**REGISTERED**

May 17, 1985

Report of Work #105/85

Diplomat Resources Inc  
Suite 205  
1155 West Pender Street  
Vancouver, B.C.  
V6C 2P6

Dear Sirs:

RE: Mining Claims P 758990, et al, in Deloro Township *+ Shaw*

---

I have not received the reports and maps (in duplicate) for the Geophysical (Magnetometer & Electromagnetic) Survey on the abovementioned claims.

As the assessment "Report of Work" was recorded by the Mining Recorder on March 29, 1985, the 60 day period allowed by Section 77 of the Mining Act for the submission of the technical reports and maps to this office will expire on May 28, 1985.

If the material is not submitted to this office by May 28, 1985, I will have no alternative but to instruct the Mining Recorder to delete the work credits from the claim record sheets.

For further information, please contact Mr. Arthur Barr at (416)965-4888.

Yours sincerely,

S.E. Yundt  
Director  
Land Management Branch

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

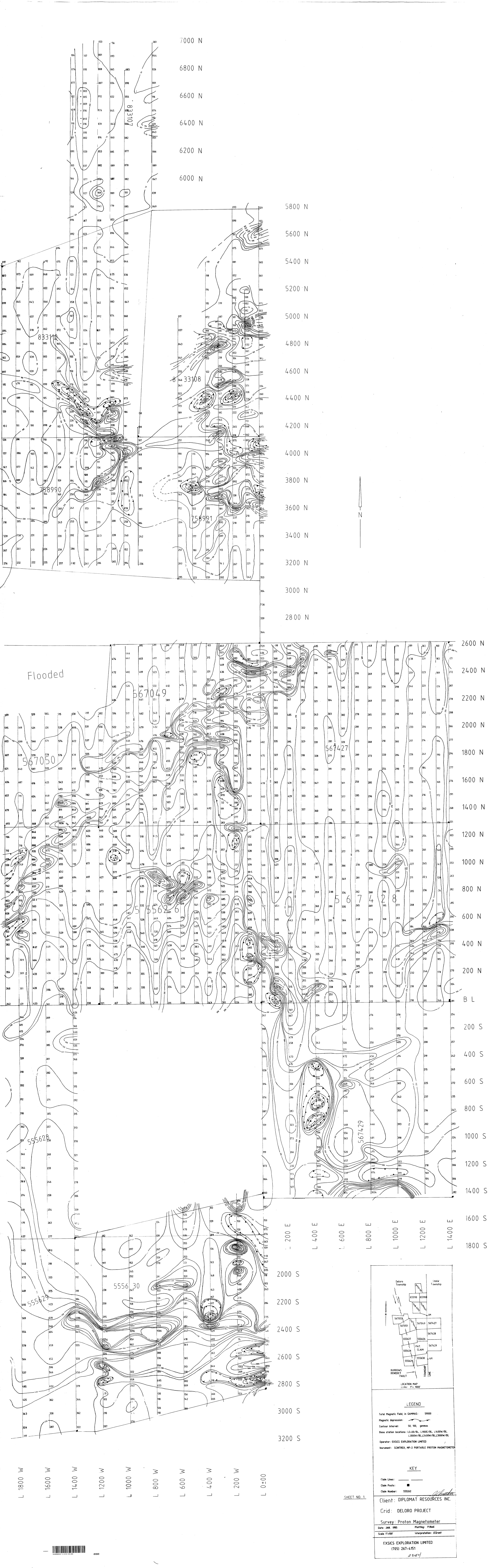
A. Barr:mc

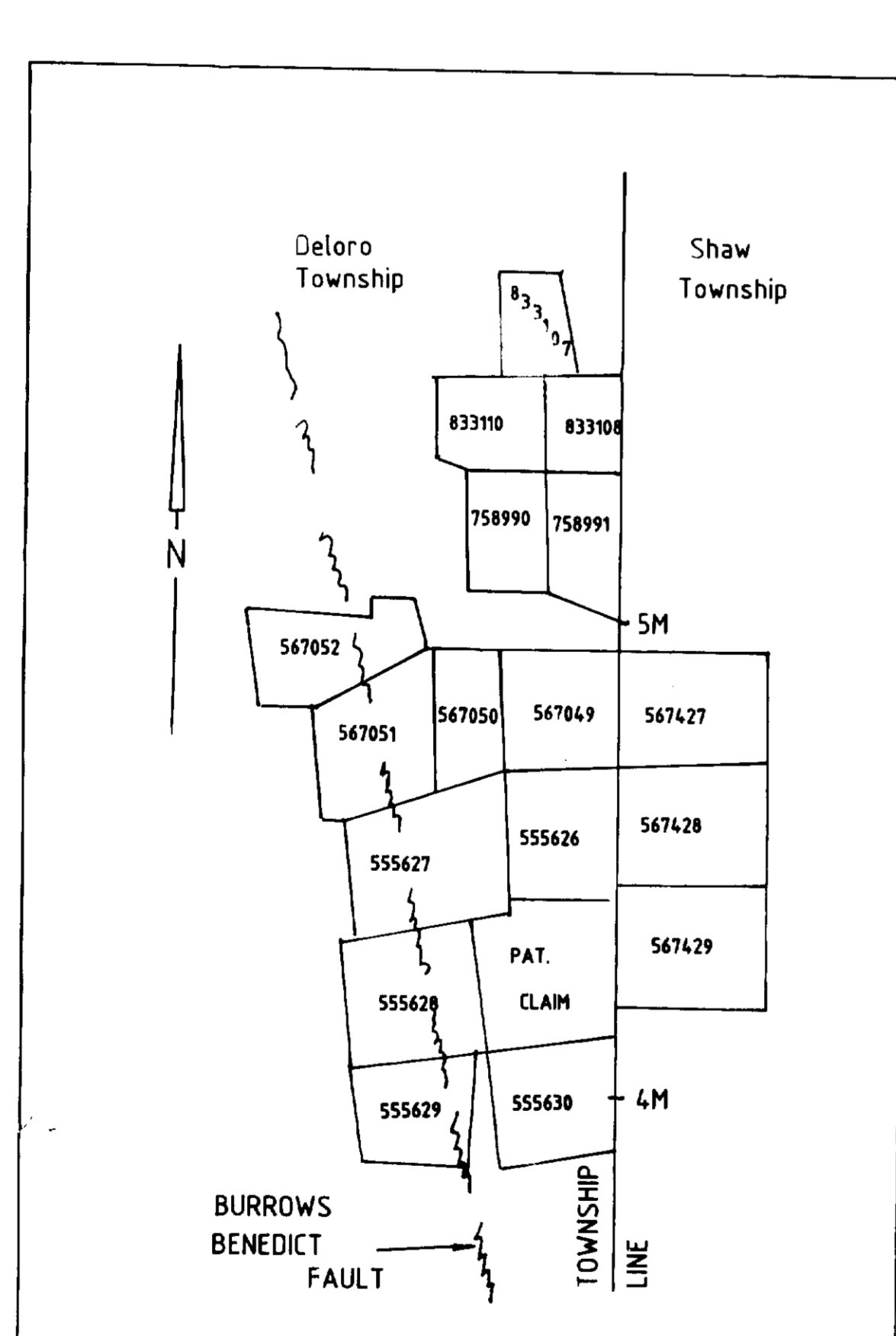
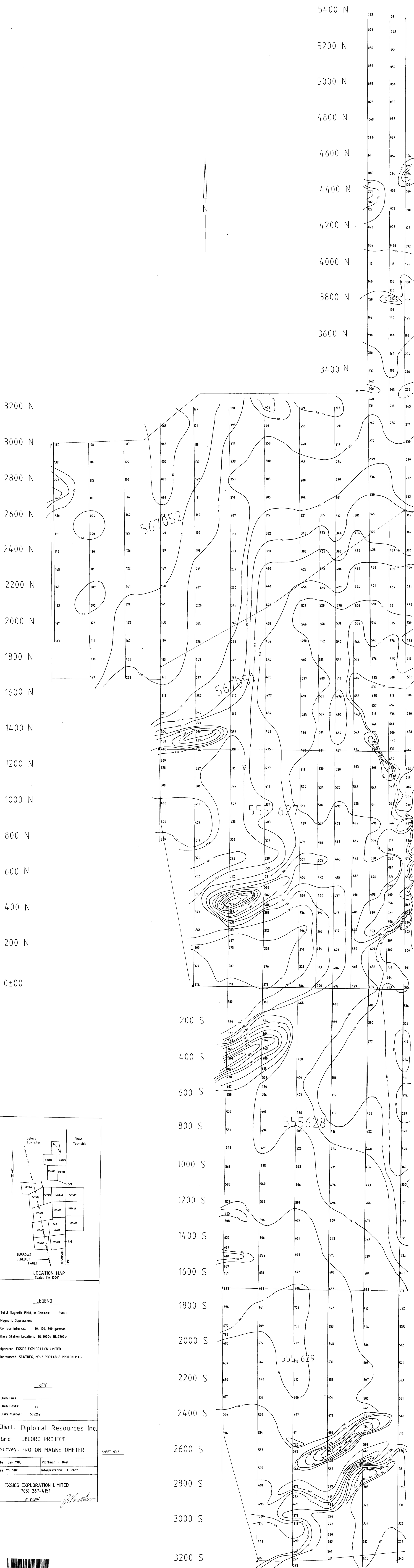
cc: Mining Recorder  
Timmins, Ontario

cc: John G. Grant  
Box 1880  
Timmins, Ontario  
P4N 7X1









**LEGEND**

Total Magnetic Field, in Gammas: 59000  
 Magnetic Depression:  
 Contour Interval: 50, 100, 500 gammas  
 Base Station Locations: BL3000w BL2200w

Operator: EXSICS EXPLORATION LIMITED  
 Instrument: SCINTREX, MP-2 PORTABLE PROTON MAG.

**KEY**

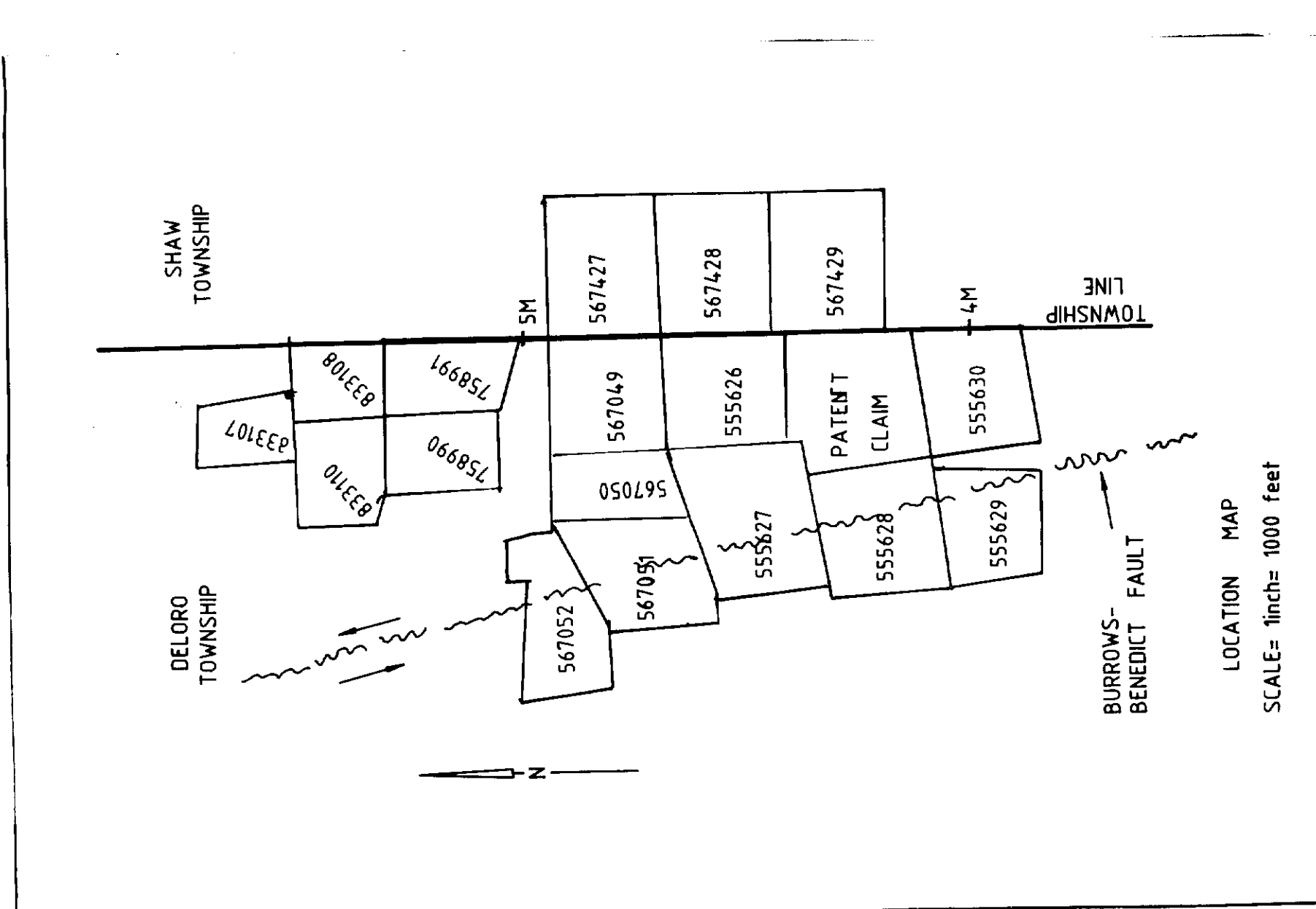
Claim lines: \_\_\_\_\_  
 Claim Posts: □  
 Claim Number: 555262

Client: Diplomat Resources Inc.  
 Grid: DELORO PROJECT  
 Survey: PROTON MAGNETOMETER

Date: Jan, 1985      Plotting: P. Noel  
 Scale: 1" = 100'      Interpretation: J.C. Grant

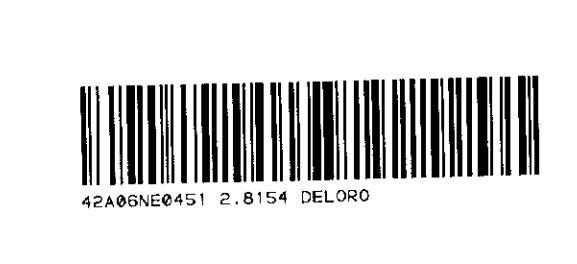
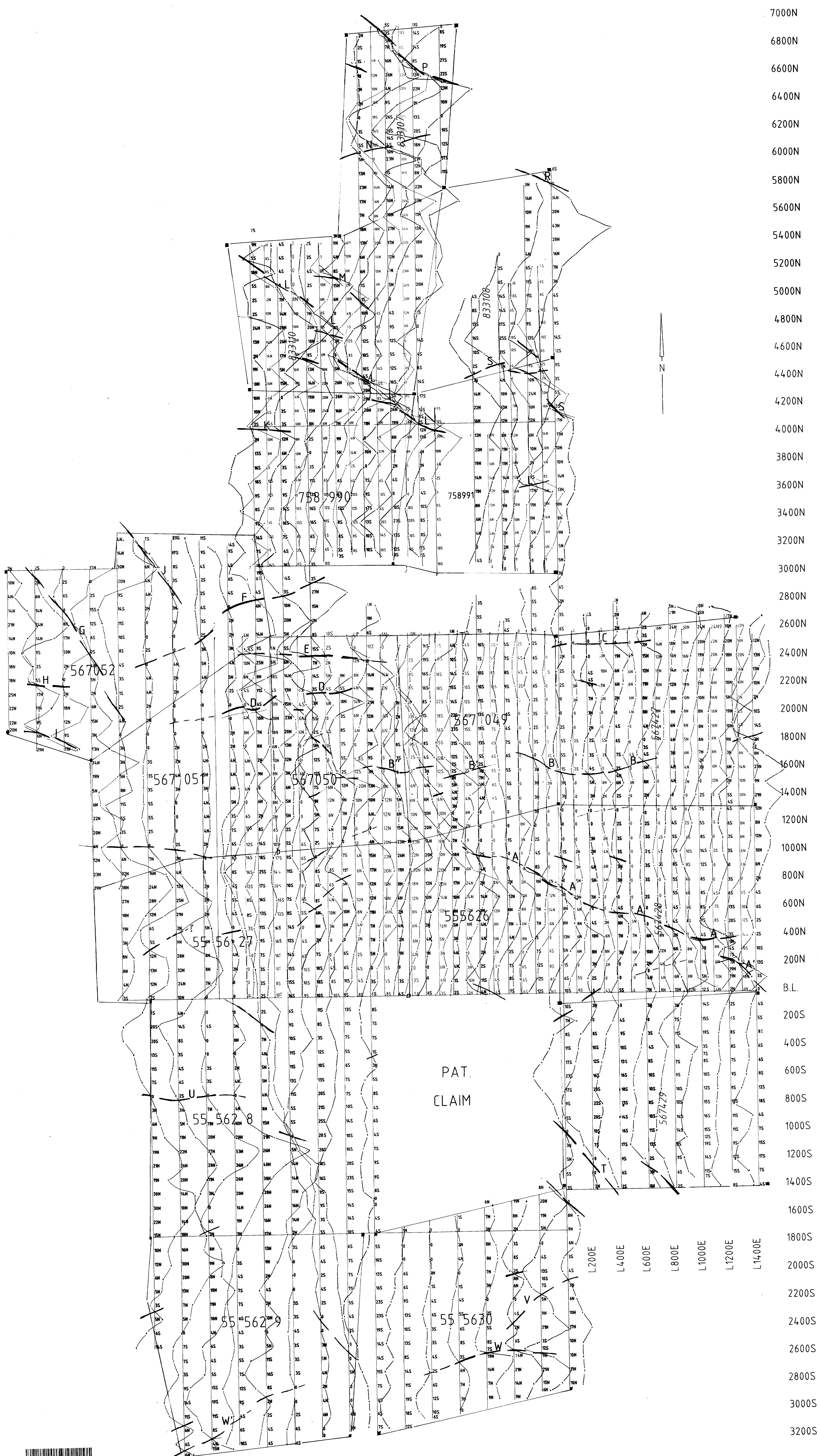
EXSICS EXPLORATION LIMITED  
 (705) 267-4151





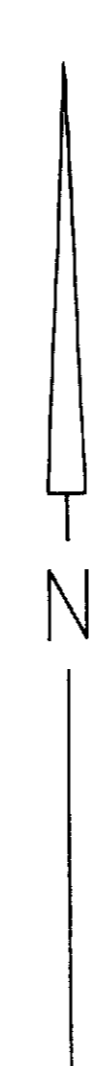
Client: Diplomat Resources Inc.  
Grid: Deloro/Shaw Townships  
Survey: V.L.F.  
Date: Nov./Dec. 1984  
Scale: 1 inch=200 Feet  
1 inch=20'

EXSICS EXPLORATION LTD.  
(705) 267-4151  
8/8/84





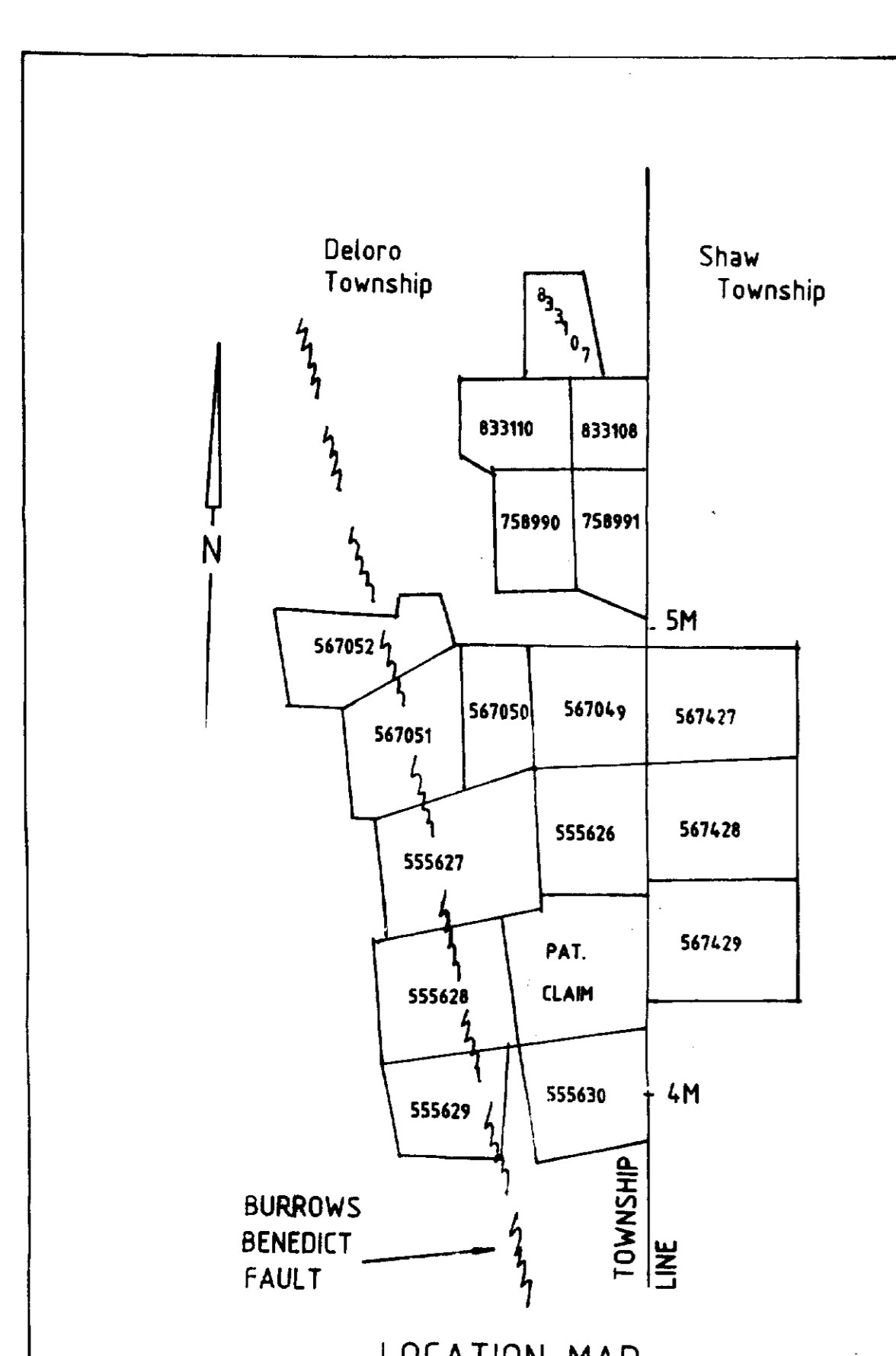
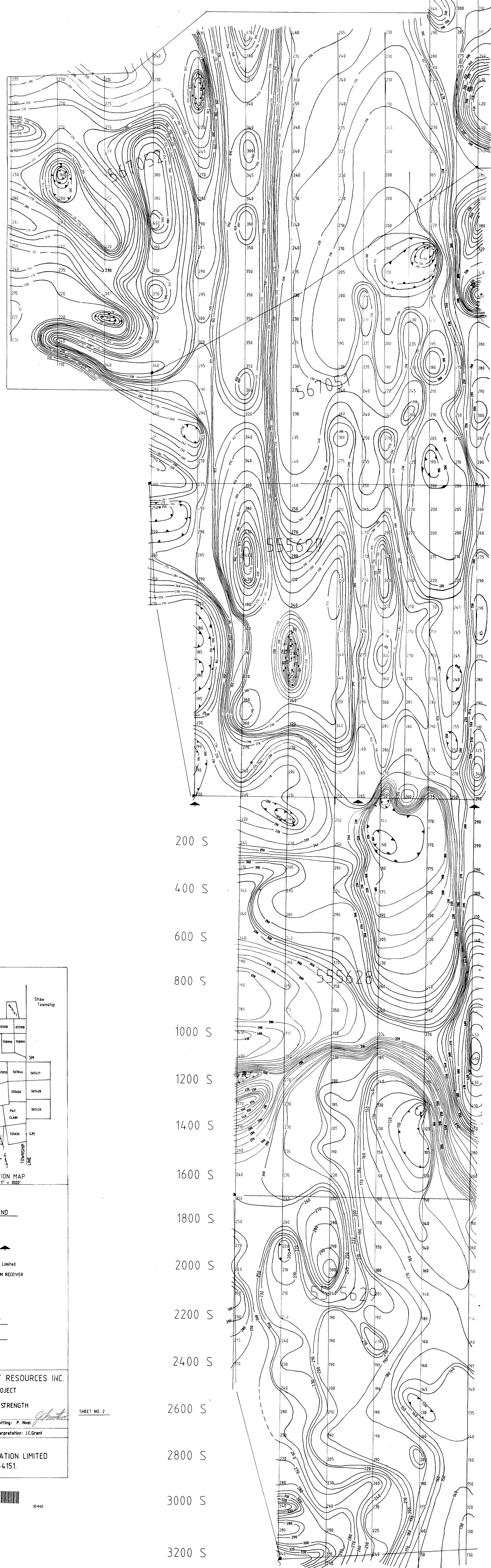
5400 N  
5200 N  
5000 N  
4800 N  
4600 N  
4400 N  
4200 N  
4000 N  
3800 N  
3600 N  
3400 N



3200 N  
3000 N  
2800 N  
2600 N  
2400 N  
2200 N  
2000 N  
1800 N  
1600 N  
1400 N  
1200 N  
1000 N  
800 N  
600 N  
400 N  
200 N  
0±00

200 S  
400 S  
600 S  
800 S  
1000 S  
1200 S  
1400 S  
1600 S  
1800 S  
2000 S  
2200 S  
2400 S  
2600 S  
2800 S  
3000 S  
3200 S

L 3000 W  
L 2800 W  
L 2600 W  
L 2400 W  
L 2200 W  
L 2000 W



**LEGEND**

Contour Interval: 10 percent  
Base station Locations: ▲  
Operators: P.Noel, J.C.Grant  
Excics Exploration Limited  
Instrument: CRONE, VLF RADEM RECEIVER  
Station: CUTLER, MAINE  
Frequency: 24.0 khz.

**KEY**

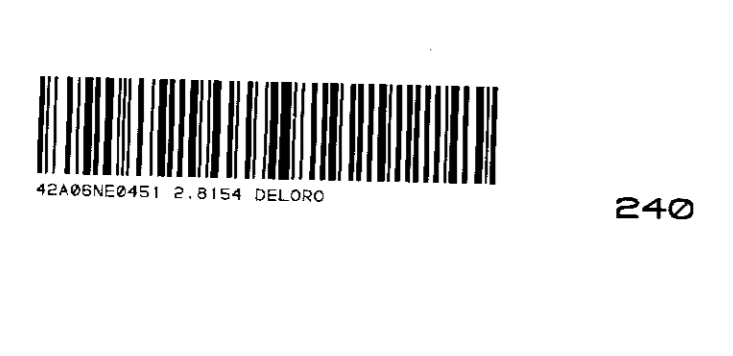
Claim lines: ———  
Claim posts: ■  
Claim number: 555629

Client: DIPLOMAT RESOURCES INC.  
Grid: DELOMOR PROJECT  
Survey: VLF. FIELD STRENGTH

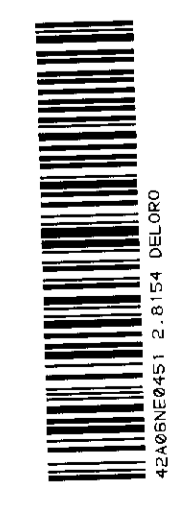
Date: Jan, 1985 Plotting: P. Noel  
Scale 1" = 100' Interpretation: J.C.Grant

EXSICS EXPLORATION LIMITED  
(705) 267-4151  
2.8184

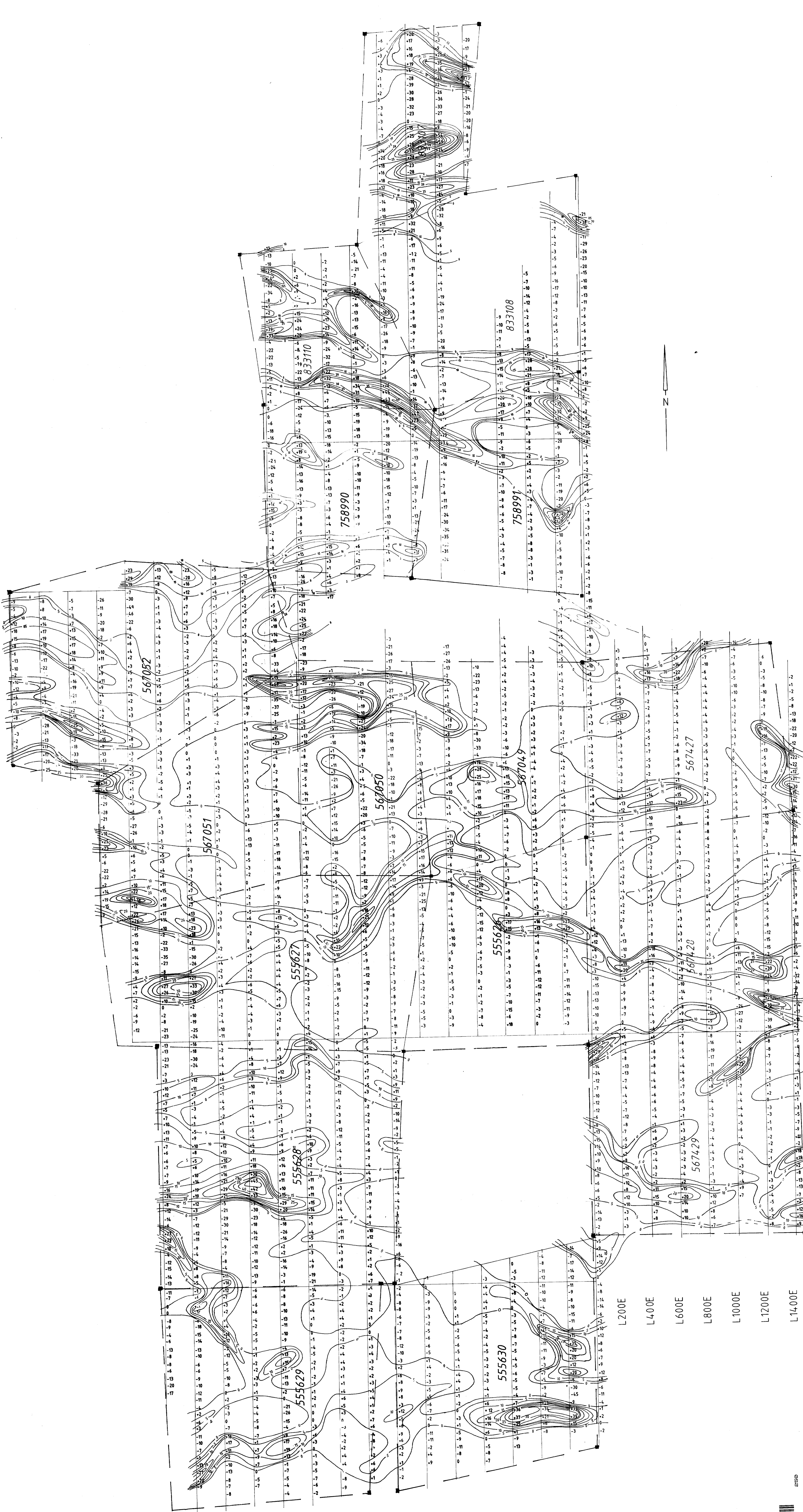
SHEET NO. 2



L4000W  
L3800W  
L3600W  
L3400W  
L3200W  
L3000W  
L2800W  
L2600W  
L2400W  
L2200W  
L2000W  
L1800W  
L1600W  
L1400W  
L1200W  
L1000W  
L800W  
L600W  
L400W  
L200W  
L0+00



7000N  
6800N  
6600N  
6400N  
6200N  
6000N  
5800N  
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1600S  
1800S  
2000S  
2200S  
2400S  
2600S  
2800S  
3000S  
3200S



<p>LOCATION MAP SCALE: 1 inch = 100 feet</p>	
<p>LEGEND</p>	
<p>Contour Intervals: 5</p>	
<p>Operator: Exsics Exploration Ltd</p>	
<p>Instrument: Engine VLF Radem</p>	
Claim Line:	_____
Claim Post:	■
Claim Number:	833708
<p>Client: Diplomat Resources Inc.</p>	
<p>Grid: Daloro/Shaw Townships</p>	
<p>Survey: VLF FRASER FILTERING</p>	
Date: Dec./1984	Plotting: P. Neill
Scale: 1 inch = 200 feet	Interpretation: J. Grant
<p>EXSICS EXPLORATION LIMITED</p>	
<p>(705) 267 4151</p>	
<p><i>A. East</i></p>	