

63.5934



42A15NE0001 63.5934 MORTIMER

010

MAGNETOMETER SURVEY
CLAIM L531045
MORTIMER TOWNSHIP

MINISTRY OF ECONOMIC
DEVELOPMENT AND TRADE

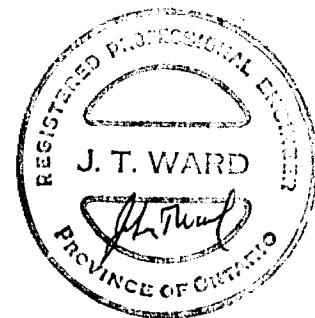
JAN 5 1 1991

FOR REGENT ST. DENIS

INCENTIVES OFFICE

JAN. 20, 1991

BY JOHN T WARD , P. ENG.



DP90-393

ABSTRACT

A magnetic survey was completed on leased claim L 531045 in Mortimer Township . It is concluded that the magnetic survey indicates that the mafic complex with interesting PGE ratios being worked by St. Denis extends southward across the south boundary. It is also concluded the magnetic survey indicates a parallel zone with similar magnetic signature traversing the east half of the claim. It is recommended that the eastern anomaly be tested by a diamond drill.



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010C

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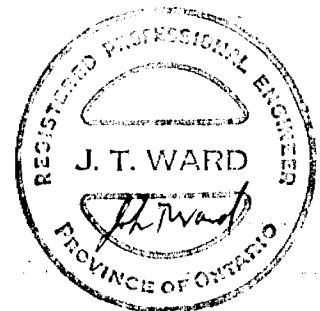
Fig 3 TOTAL FIELD MAGNETIC SURVEY scale 1:2500

Fig 4 PROFILE
DETAIL TRAVERSE LINE 10 METRES NORTH OF LINE #1

Scale 1 cm = 6 METRES 1 cm = 40 gammas

Fig 5 PROFILE
DETAIL TRAVERSE LINE "A"

Scale 1 cm = 6 METRES 1 cm = 50 gammas.



MAGNETOMETER SURVEY CLAIM L531045 MORTIMER TWP

PROPERTY DESCRIPTION AND ACCESS: Claim L531045 is a 47.25 acre leased claim wholly owned by Regent St Denis of Iroquois Falls Ontario. The claim is reached by traveling 17 kilometers north of the community of Iroquois Falls to mileage 16.2 k on the Abitibi pulp and paper all season access road.

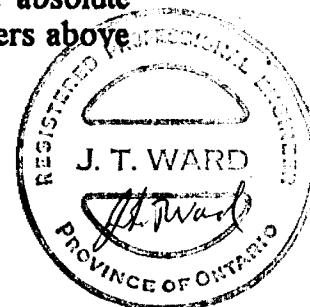
GEOLOGY: The claim is underlain by mafic volcanics inclusive of very thin pyroclastic horizons. Diabase dykes striking north to north 20 degrees west traverse the claim. Trace PGE assays obtained by Regent St. Denis in and close by porphyritic and serpentinized mafic rocks show favorable platinum to palladium ratios. 95% of the claim is overlain by commercial gravels and sand. Abitibi pulp and paper have excavated several gravel pits immediately to the west and south of St. Denis' claim. These pits in general are about 20 meters deep and approximately 1 to 2 hectares in size. One such pit is currently being excavated by Abitibi Pulp and Paper within claim L531045, approximately 100 meters to 175 meters south of the outcropping area which St. Denis has been working. Within this gravel pit a serpentinized and sheared gabbro was exposed this summer.

PREVIOUS WORK: Regent St. Denis has carried out extensive trenching and blasting in the outcropping area in the north west corner of the claim over the period 1979 to the present. In 1990 as part of an OPAP program, Regent St. Denis stripped bedrock by backhoe and drilled one 100 ft. diamond drill hole in the north west corner of his property.

The Burntbush River OGS airborne INPUT and magnetic survey traversed the area in 1989 without indicating the presence of conductors on claim L531045. John Ward and David Ward with the assistance of Regent St Denis traversed the main showings on the claim with multi frequency Max-Min EM in May 1990 without detecting a significant level of EM conductive response.

MAGNETOMETER SURVEY: The purpose of the magnetometer survey was to locate and identify mafic, or ultramafic dykes which might underlie the drift covered portions of the claim.

The magnetometer survey was performed on Aug. 21, 1990 by John T. Ward, P. Eng., assisted by Regent St. Denis and Fred Ellgring. Survey lines were prepared by St. Denis and chaining was carried out by St. Denis and an assistant S. Ismaily. Six traverse lines were read with 200 stations at 12.5 meter intervals. On December 8th, 250 more stations were read in detail at 1.5 meter intervals in order to improve interpretability of depth to bedrock in magnetically anomalous areas. Data was drift corrected to a uniform datum of 58000 gammas total field. Magnetometer used was a Geonics proton mag readable to the nearest absolute gamma. Sensor head was 2 meters above ground August 21st and 3 meters above ground December 8th.



Results are plotted on a map at a scale 1:2500 and contoured at 100 gamma intervals.

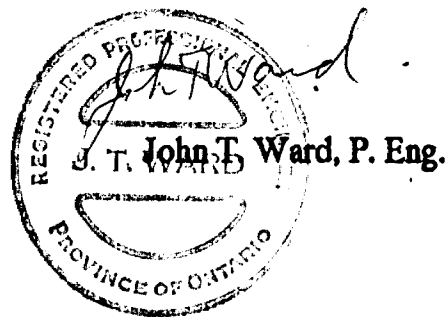
INTERPRETATION:

The mafic complex worked by St. Denis is shown to extend south 10 degrees east 400 meters southward and across the south boundary. A parallel complex of similar magnetic signature traverses the east half of the claim. The serpentinized and sheared mafic rock exposed in Abitibi Pulp and Paper's gravel pit and the sheared, mineralized mafic in St. Denis' 1990 backhoe pit, were demonstrated to be magnetically weak by detail magnetometer traverses. Attention was therefore given to the magnetic low bisecting the claim and lying between the two magnetic highs. One and a half meter station interval detail traversing of this magnetic low on December 8th demonstrated that this low is merely the south pole of the eastern magnetic dyke. Similar detail traverses of the eastern magnetic dyke indicated a depth of 12 meters below surface for the eastern dyke 125 meters south of the north boundary of the claim and 9 meters below surface 75 meters south of the north boundary.

CONCLUSIONS AND RECOMMENDATIONS:

It is concluded by the writer that the outcropping mafic complex worked to date by Regent St. Denis with interesting trace PGE mineralization extends the full extent of the claim from north to south. It is also concluded that a parallel mafic zone of similar magnetic signature lies in the eastern half of the claim covered by 10 to 15 meters of gravel and sand. It is recommended that the eastern magnetic mafic complex be tested by diamond drilling with collar located 76 meters south of the claim's north boundary and 190 meters west of the claim's east boundary. Azimuth 80 degrees and dip minus 60 degrees, length 50 metres.

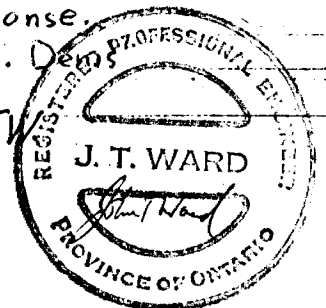
Submitted respectfully,



Added Note:

Producing PGE reefs worldwide are a few centimetres to a few metres in width and contain no more than 1/2% to 2 1/2% disseminated sulphides, i.e they contain insufficient sulfides to produce a significant E.M. response. Therefore the lack of significant E.M. responses on St. Denis P.G.E. prospect is a positive, not negative, factor.

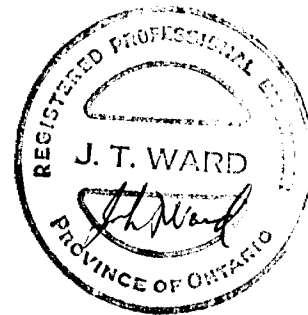
JAN 20 / 91



CERTIFICATION

I hereby certify that all the work covered by this report was carried out by myself and under my direct supervision. I further certify that I have been engaged in geophysical mineral exploration in Canada for most of the last 40 years as a geophysicist, contractor and consulting engineer. I certify that I hold no financial interest in the property described in this report.

Former employment includes the position of Senior Geophysicist - Barringer Research, Rexdale; Geophysicist - Derry Michener & Booth, Consulting Geologists; Geophysicist - Patino Mining Ltd; and Staff Geophysicist, Urangesellschaft Canada Ltd. and that of Self-Employed Consulting Engineer in the periods 1970 to 1972 and 1974 to the present.



John T. Ward

JAN 20, 1991

FIGURE #1
KEY MAP
CLAIM L531045

Stimson Twp.

THE TOWNSHIP
OF
MORTIMER

DISTRICT OF
COCHRANE

LARDER LAKE
MINING DIVISION

SCALE: 1-INCH=40 CHAINS

VI

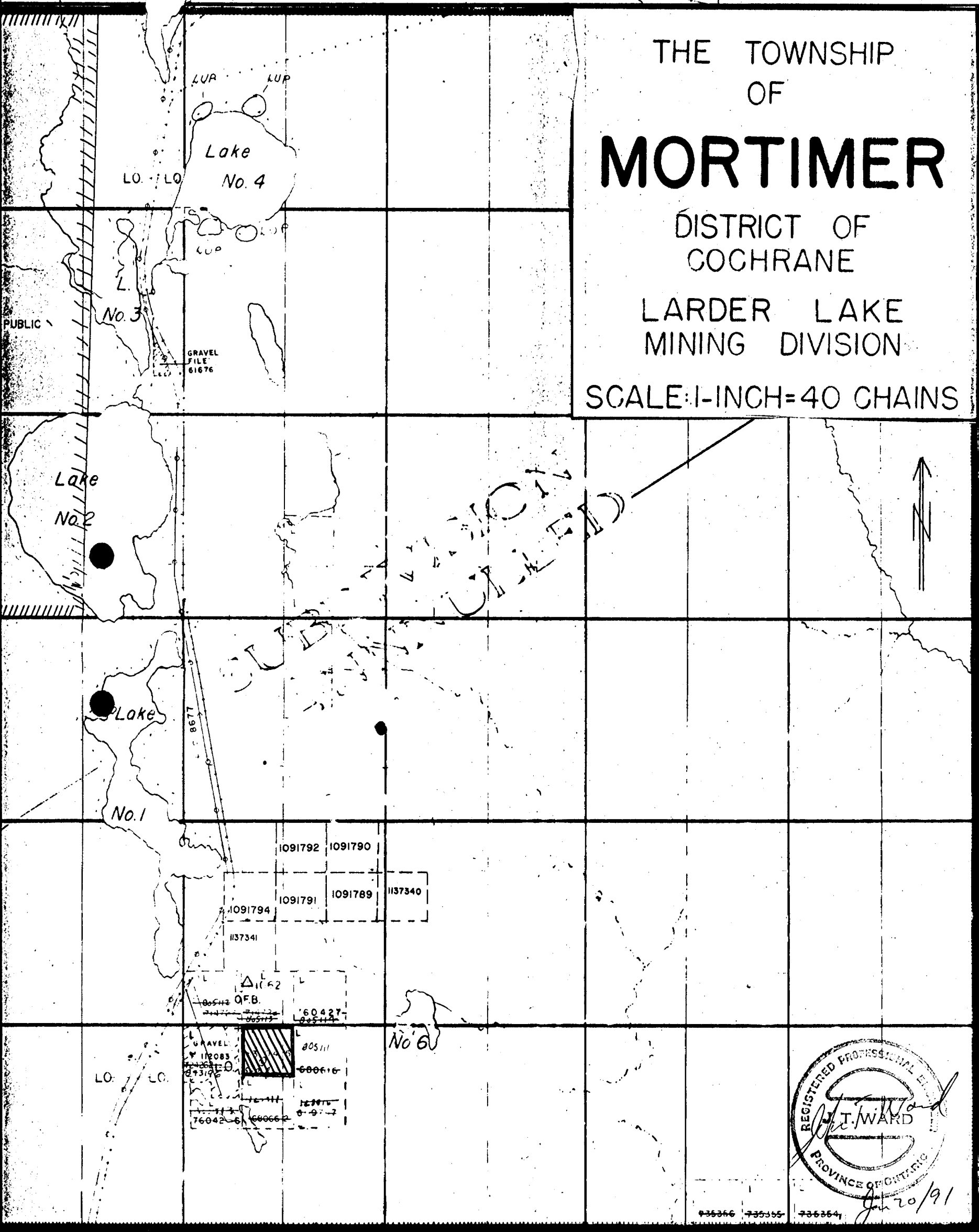
V

IV

III

II

I



10 9 8 7 6 5 4 3 2 1

Edwards Twp.

DATE OF

TOTAL FIELD STRENGTH
 MAGNETIC DETAIL
 CLAIM L531045
 READ ON TRAVERSE DETAIL LINE "A"
 STATION INTERVAL 1.5 METRES

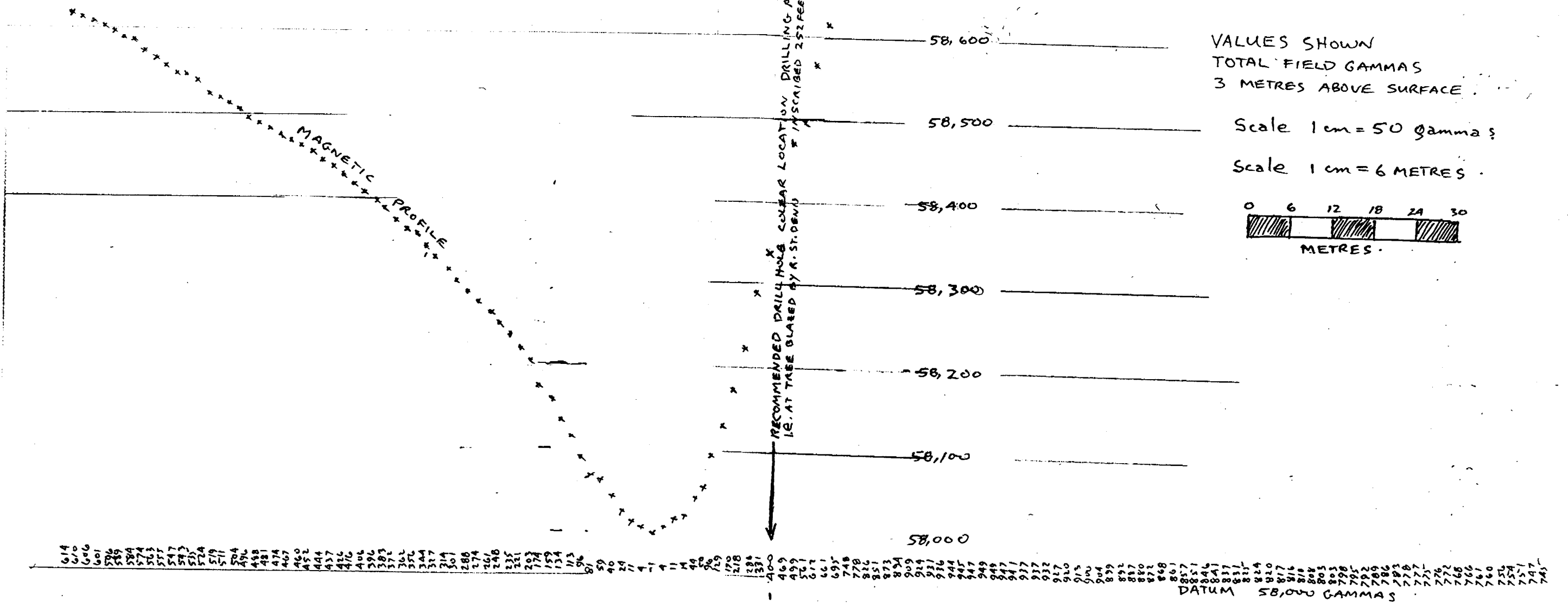
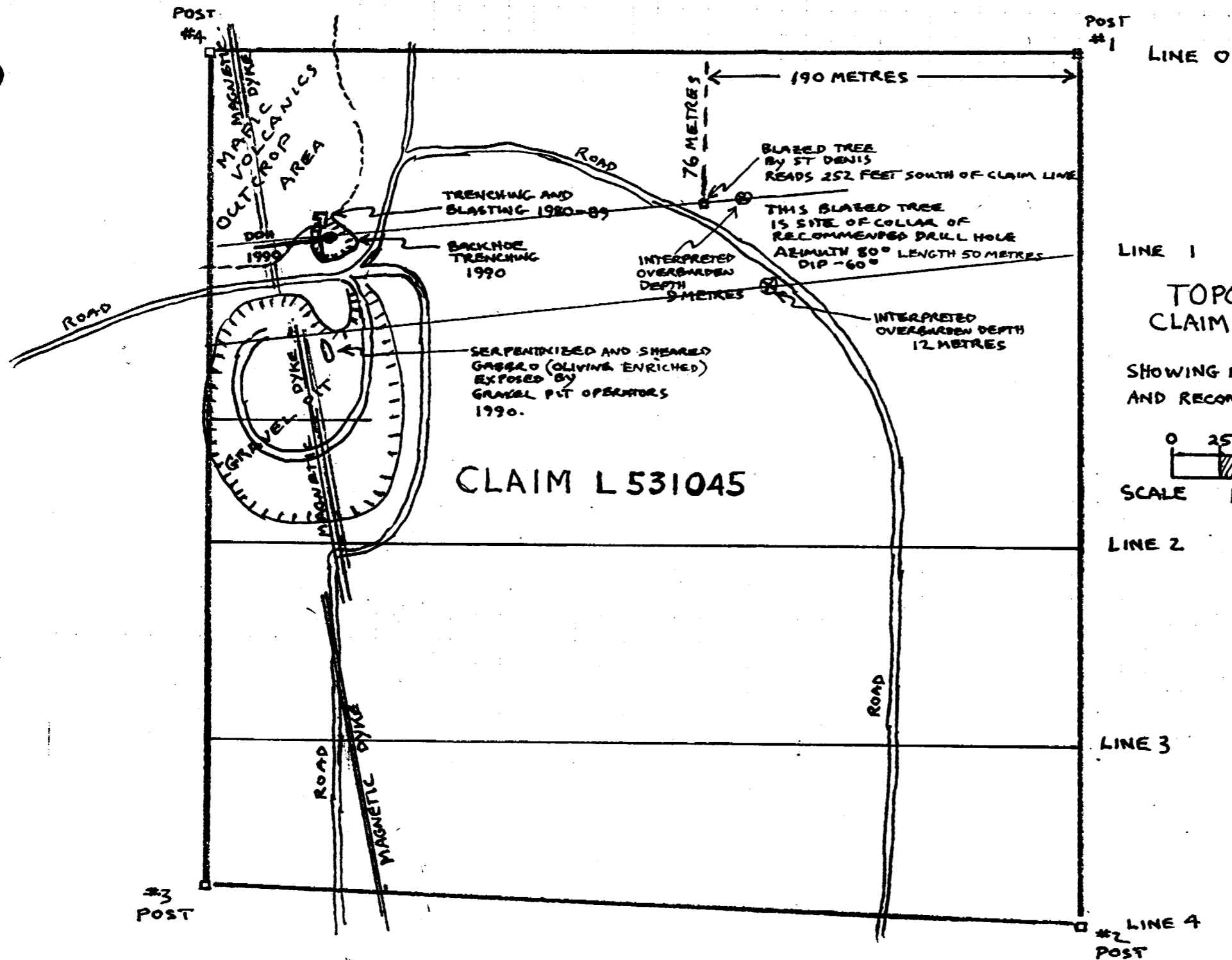


Figure #2



↑
N
TOPOGRAPHY
CLAIM L 531045

SHOWING MAGNETOMETER SURVEY LINES
AND RECOMMENDED DRILL HOLE COLLAR LOCATION



SCALE 1:2500

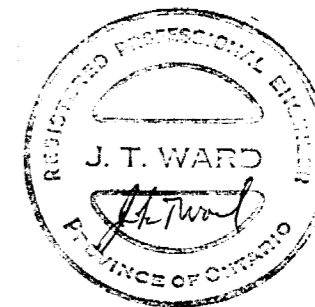


Figure #3



DETAIL LINE "A"

LINE 1
TOTAL FIELD
MAGNETIC SURVEY
CLAIM L531045

Magnetic Datum 58,000 gammas
Values shown in total field gammas

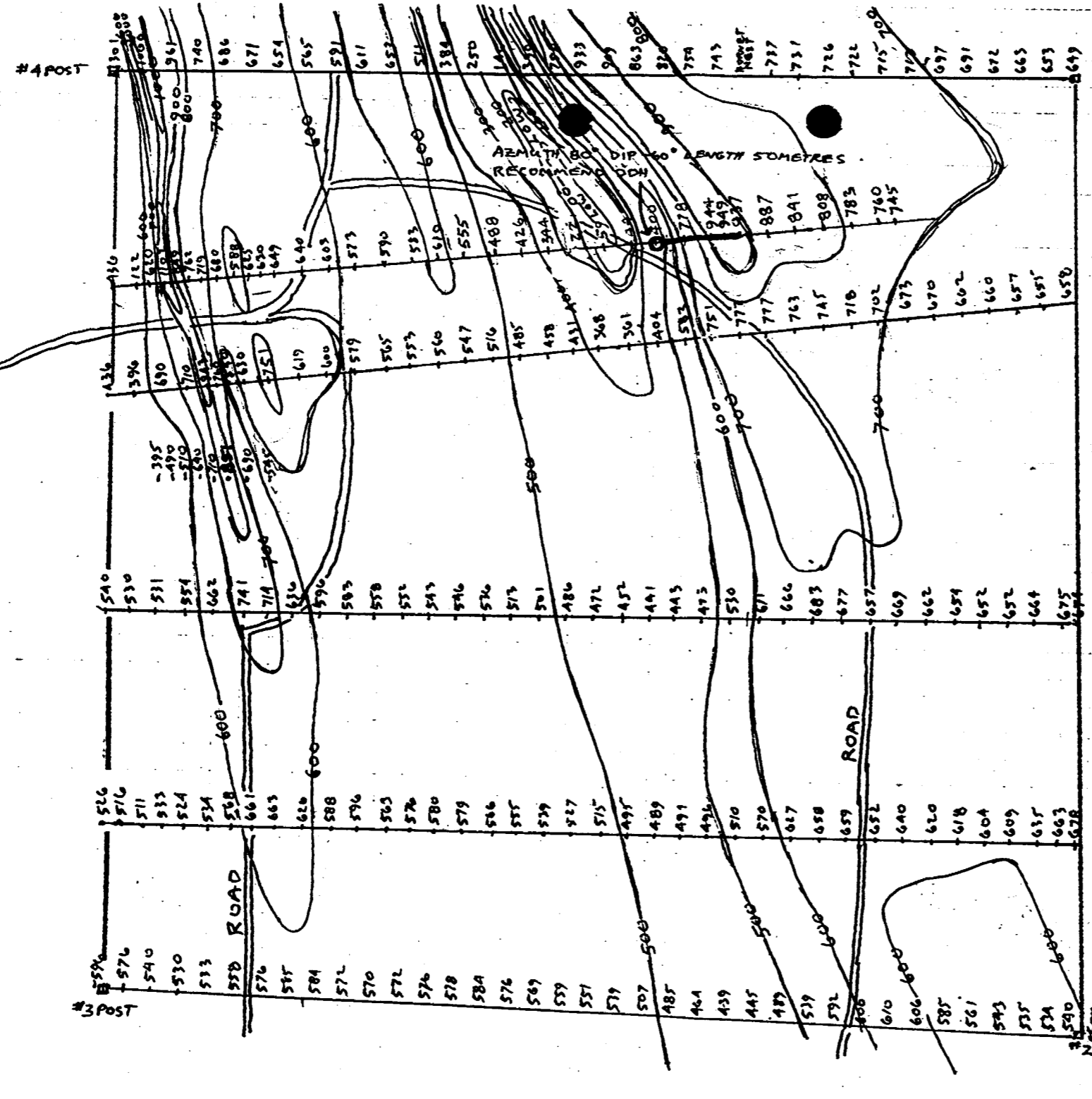
LINE 2 Contour intervals 100 gammas

Scale 1:2500



LINE 3

LINE 4



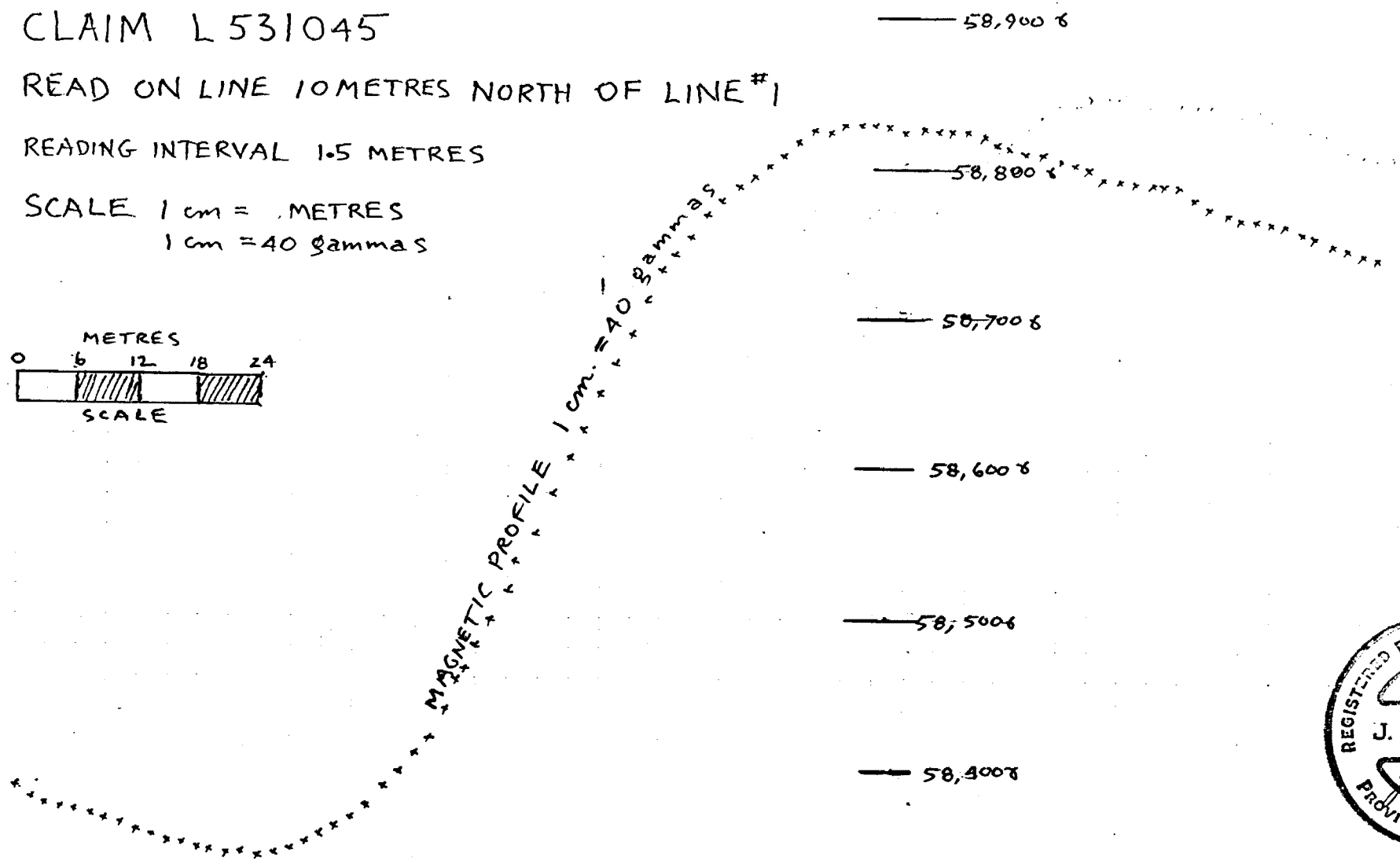
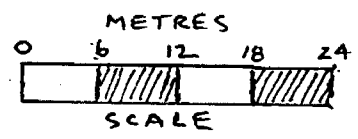
TOTAL FIELD STRENGTH MAGNETIC DETAIL

CLAIM L531045

READ ON LINE 10 METRES NORTH OF LINE #1

READING INTERVAL 1.5 METRES

SCALE 1 cm = . METRES
1 cm = 40 gammas



385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500
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READINGS IN GAMMAS
DATUM 58,000 γ



OVER BORDER REMOVED

END OF DRILL

SHEAR ZONE
NEAR WEST WALL

WEST

OF

MORTIMER

PLAN 62-4714 6

MINING CLAIM L531045

REGENT ST. DENIS

BOX 104

ARROUOIS FALLS, ONT. POK 110.

Pl. 232-6545

SUBDIVISION ANNULLED

GEODETIC SURVEY OF CANADA
 STATION No. 28302 (MORTIMER)
 MAY76 CO-ORDINATES:
 LATITUDE: 48°54'06"30417 N
 LONGITUDE: 80°37'45"84704 W

L 805113
(UNSURVEYED)

L 805114
(UNSURVEYED)

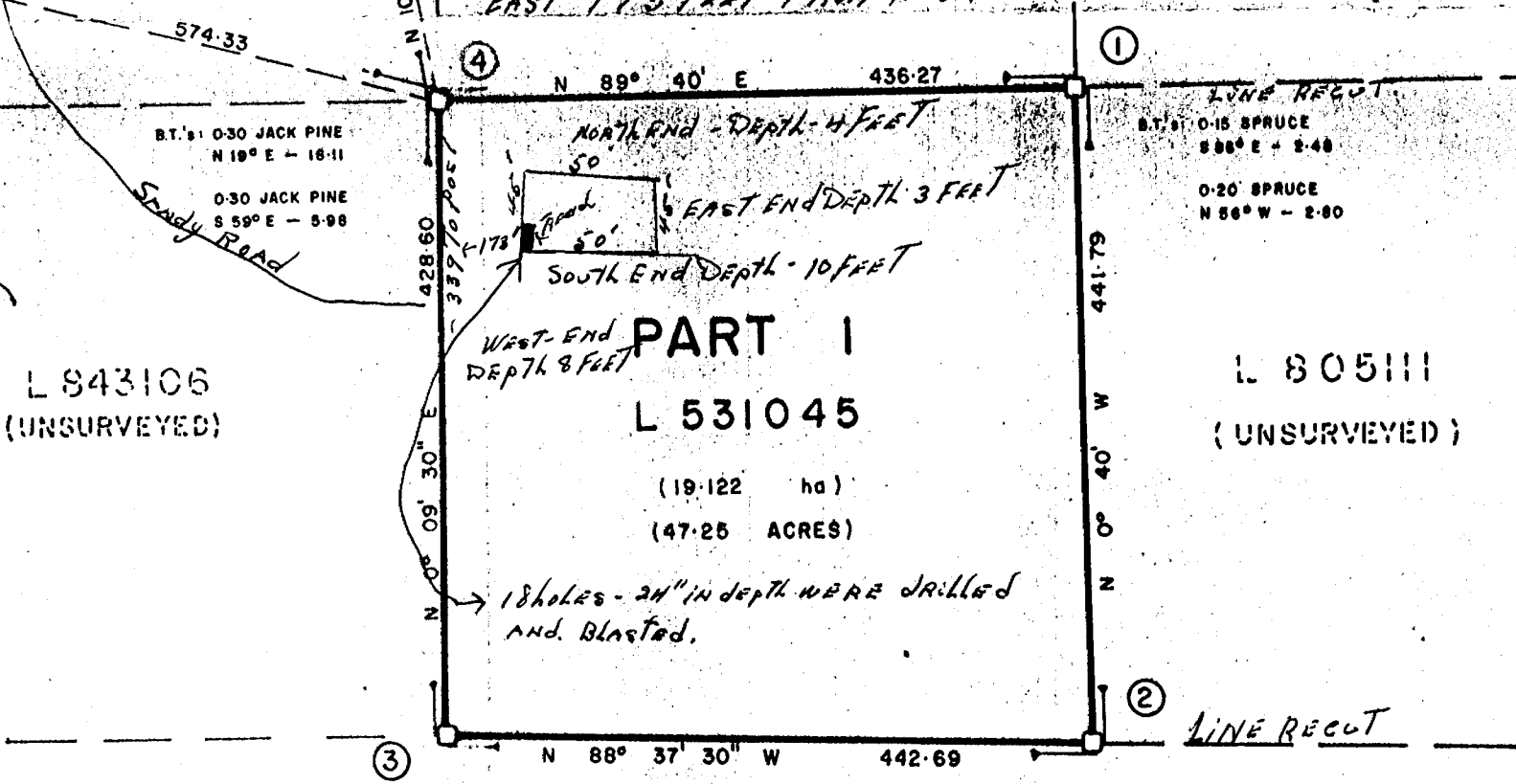
L 805112
(UNSURVEYED)

LOCATION OF STRIPPING AND TRENCHING

SOUTH 339 FEET FROM #4 POST L531045
EAST 173 FEET FROM #3 POST AND #4 POST L531045

ENTRY MEASUREMENT TO ALL ABOVE LOTS ROAD

Sandy Road



L 843106
(UNSURVEYED)

L 805111
(UNSURVEYED)

PART I
L 531045

(19.122 ha)
(47.25 ACRES)

18 HOLES - 2 1/2" IN DEPTH WERE DRILLED AND BLASTED.

SIB & W P
NO B.T.'s

B.T.'s: 0-15 SPRUCE
N 69°30' E - 5-25
0-20 SPRUCE
N 54° W - 3-42

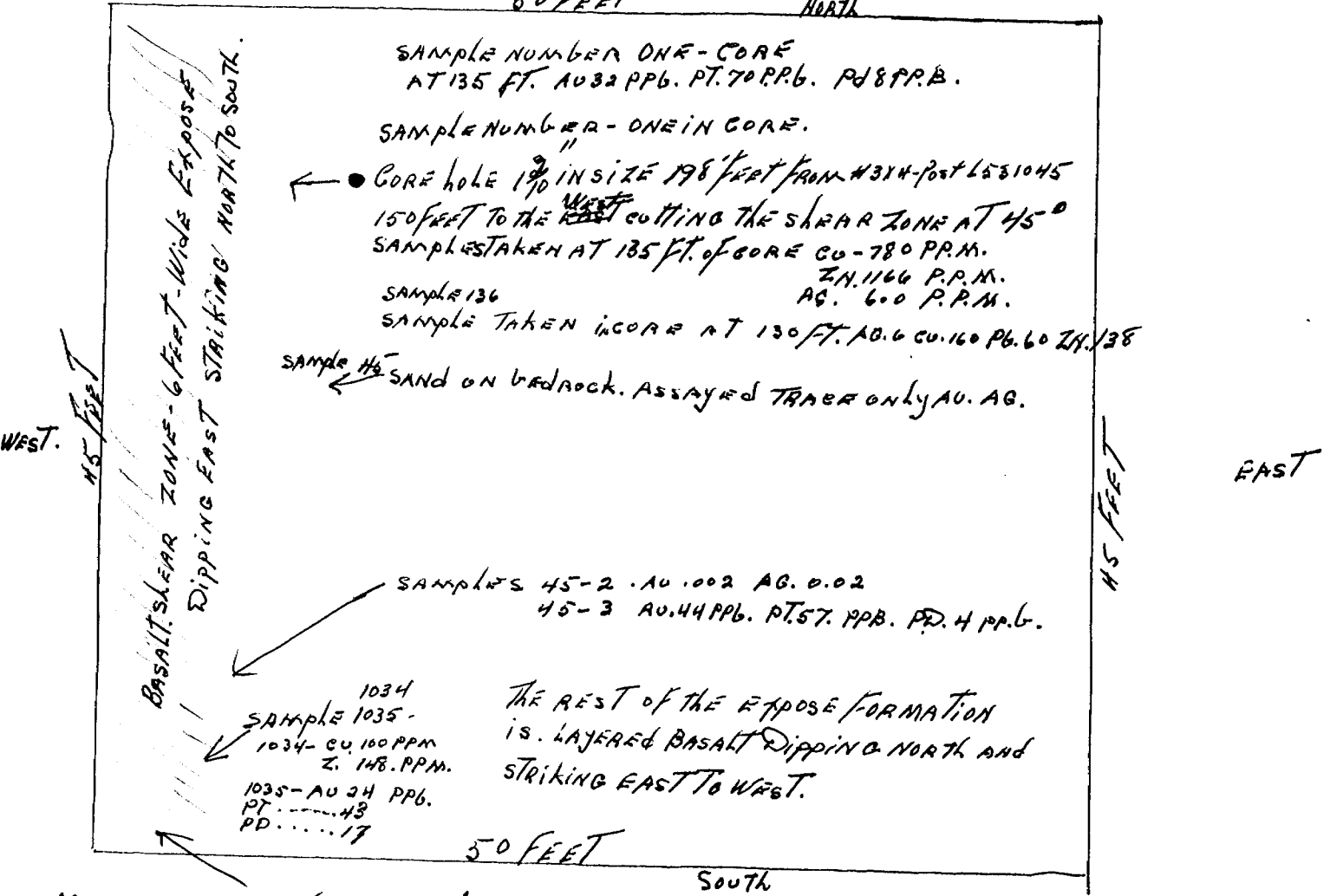
L 823016
(UNSURVEYED)

L 823017
(UNSURVEYED)

L 823016
(UNSURVEYED)

DETAILED LOCATION OF MAP OF PROSPECTING SHOWING SAMPLES LOCATION AND ASSAYS.

AREA STRIPPED.
60 FEET NORTH



Grab. sample SAMPLE 530 34 ZN-530
34 ZN - P.P.M.

THE SULPHIDES ARE IRON PYRITE AND "MARGASITE" IN THE
SHEAR ZONE AND IN THE LAYERED BASALT.



BELL - WHITE ANALYTICAL LABORATORIES LTD.

P.O. BOX 187,
POJ 1KO

HAILEYBURY, ONTARIO

TEL: 672-3107
FAX: (705) 672-5843

Certificate of Analysis

NO. 0799

DATE: October 2, 1990

SAMPLE(S) OF: Core (1)

RECEIVED: October 1990

SAMPLE(S) FROM: R. St. Denis

<u>Sample #</u>	<u>Cu ppm</u>	<u>Zn ppm</u>	<u>Ag ppm</u>
1	780	1166	6.0

*SAMPLE TAKEN AT 135 FEET OF CORE
IN SHEAR ZONE.*

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

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HAILEYBURY, ONTARIO

TEL: 672-3107
FAX: (705) 672-5843

Certificate of Analysis

NO. 0781

DATE: October 1, 1990

SAMPLE(S) OF: Core (1)

RECEIVED: September 1990

SAMPLE(S) FROM:

Mr. R. St. Denis

Sample #	Au ppb	Pt ppb	Pd ppb
1	32	70	8

Base Metals to follow.

~~ANAL SAMPLE AT BENE SOUTH - WEST END~~
~~OF STARR ZONE~~
CORE SAMPLE AT 135 ft. DOWN HOLE.

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

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FAX: (705) 672-5843

Certificate of Analysis

NO. 1-36 *CORE DOWN HOLE

DATE: November 28, 1990

SAMPLE(S) OF: Rock (1)

RECEIVED: November 1990

SAMPLE(S) FROM: Mr. R. St. Denis

Sample #	Ag ppm	Cu ppm	Pb ppm	Zn ppm
136	6	160	60	138

CORE DOWN HOLE AT 130 FT.

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

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HAILEYBURY, ONTARIO

TEL: 672-3107
FAX: (705) 672-5843

Certificate of Analysis

NO. 0994

DATE: November 16, 1990

SAMPLE(S) OF: Pulp (2)

RECEIVED: November 1990

SAMPLE(S) FROM: Mr. R. St. Denis

Sample #	Au ppb	Pt ppb	Pd ppb	Cu ppm	Zn ppm
1034				100	148
1035	24	43	17		

*pulp, drilled with pluggers 24 inches
in depth
LOCATION - IN SHEAR ZONE SOUTH WEST side
OF EXCAVATED AREA.*

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

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POJ 1K0

HAILEYBURY, ONTARIO

TEL: 672-3107
FAX: (705) 672-5843

Certificate of Analysis

NO. 0538

DATE: August 2, 1990 *Received August 10-1990*

SAMPLE(S) OF: Fines (1)

RECEIVED: August 1990

SAMPLE(S) FROM: Mr. R. St. Denis

Sample #	Oz. Gold	Oz. Silver
45-1	Trace	Trace

SAND ON BEDROCK.

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

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HAILEYBURY, ONTARIO

TEL: 672-3107
FAX: (705) 672-5843

Certificate of Analysis

NO. 0585

DATE: August 15, 1990

SAMPLE(S) OF: Rock (2)

RECEIVED: August 1990

SAMPLE(S) FROM:
Regent St. Denis

Sample #	Oz. Gold	Oz. Silver	Au ppb	Pt ppb	Pd ppb
45-2	0.002	0.02			
45-3			44	57	4

Hand. samples. south-west end of shear zone.

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

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POJ 1K0

HAILEYBURY, ONTARIO

TEL: 672-3107
FAX: (705) 672-5843

Certificate of Analysis

NO. 1099

DATE: December 18, 1990

SAMPLE(S) OF: Rock (1)

RECEIVED: December 1990

SAMPLE(S) FROM: Mr. Regent St. Denis

<u>Sample #</u>	<u>Zn ppm</u>
530	34

*GRAB. SAMPLE. BROWN. ROCK TAKEN IN SOUTH
WEST END OF SHEAR ZONE*

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

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