



42A05NE0146 2.11418 TURNBULL

010

Rep

1987 LINE CUTTING AND GEOPHYSICAL SURVEYS

Turnbull Twp. Ont.

For

DELBRIDGE MINES LTD.



42A05NE0146 2.11418 TURNBULL

010C

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DRAWINGS (IN POCKETS)

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- VLF-E.M. SURVEY (Profiles).....Dwg. S 87-15
- VLF-E.M. SURVEY (Fraser Filter)....Dwg. S 87-17

N. W. Sheet

- MAGNETOMETER SURVEY.....Dwg. S 88-1
- VLF-E.M. SURVEY (Profiles).....Dwg. S 88-3
- VLF-E.M. SURVEY (Fraser Filter)....Dwg. S 88-2

Ralph V. Stewart, B.Sc., P.Geol., F.G.A.C.
March 25, 1988

2.8622.

RECEIVED

JUL 22 1988

MINING LANDS SECTION



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Turnbull Twp. Ont.

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MINING LANDS SECTION

Ralph V. Stewart, B.Sc., P.Geol., F.G.A.C.
March 25, 1988

28622.

SUMMARY

The line cutting and geophysical surveys for 1987 were completed by Mike McIssac, with the plotting and interpretation of results completed by the writer. The following tabulation summarizes the periods of work:

Area	Project	Approximate Dates
N. E. Sheet	Line Cutting (13.5 Miles); Magnetometer & VLF-EM Surveys.	Jan. 15-Feb. 15/87; & May 15 -Aug. 15/87.
N. W. Sheet	Line Cutting (12.5 Miles); Magnetometer & VLF-EM Surveys.	Aug. 15-Oct.1, 1987.
N. E. Sheet Data	Plotting And Interpretation Of Field Results(R. Stewart)	Sept. 15 -30, 1987.
N. W. Sheet Data	Plotting And Interpretation Of Field Results(R. Stewart)	Feb. 1-March 1 1988.

In summary, the following two VLF anomalies may represent 'structural breaks', close to and possibly associated with auriferous quartz veins. These two conductors are designated as Anomaly C (N. E. Sheet), and Anomaly H (N. W. Sheet). They are described in somewhat more detail in the 'Analysis And Interpretation Section' below.

DESCRIPTION OF 1987 SURVEYS

The control baseline used for these surveys was an extension of the one used for the 'South Sheet', extended to L 104 North. Lines were cut every four hundred feet, both east and west to cover the N.E. and N.W. Blocks. Pickets were placed along the lines at 100' intervals, and 'tie lines' were also used as control.

The magnetic survey was completed using a Proton Precession Instrument, and distances between readings were generally 100', except in areas of higher gamma intensity where the readings

were anomalous, and then the 'spacing' was reduced to 50'. A base station for survey control was established at base line picket 36+00 North. The VLF survey was completed using a Geonics E M 16 Instrument, and readings were taken at 100' spacings along each line. Plans showing the Profiles and Fraser Filter data are contained at the back of this report.

ANALYSIS AND INTERPRETATION OF DATA

The following comments relate to the anomalies shown on the accompanying geophysical plans:

N. E. Sheet

Anomaly

Comments

- A This anomaly has a moderate response, and is located topographically along a north-south trending creek, with associated 'swampy' ground. There is no associated magnetic response and it does not appear to reflect geological contacts or structures. The anomaly is probably caused by 'swampy' conductive overburden conditions, below and in the immediate vicinity of the creek.
- B This anomaly has a weak response, and may reflect the geological contact between intrusive (granodiorite), and gabbroic rocks. A north-south trending dyke, (interpreted from previous government surveys) may also contribute to the anomaly. Pending detailed mapping, the area adjacent this anomaly appears to be a favorable for additional prospecting.
- C This may represent a faulted extension of anomaly B, and appears to reflect the geological contact between felsic intrusives north of line 80N, and an interpreted diabase dyke south of this line.

N. E. Sheet

Anomaly

Comments

- C Geological mapping between Line 76N and 78N, has defined a system of mineralized quartz veins, probably related to this structural break. Additional prospecting and exploration should be completed north of Line 76N, immediately west of the anomaly.
- D This is a moderate to weak anomaly, which follows a discreet 'magnetic low'. There are no rock exposures and it appears to be caused by 'deeper' conductive overburden.
- E,F,G These three anomalies appear to be associated with topographic features (swampy ground) and do not have any economic significance.

N. W. Sheet

Anomaly

Comments

- H This appears to be the most significant anomaly on this sheet. It is interpreted to be a structural 'fault zone' in bedrock. It is interesting to note that the prominent quartz vein system on Line 96N, strikes to the southeast toward a mineralized vein on Line 88N-20W. The area between these two veins is 'overburden covered', but it is possible that a line joining these two veins may represent a 'tangential off-shoot' from VLF anomaly H-H1, and therefore have economic implications.
- I This one appears to correspond to an area of slightly elevated magnetic readings, and may represent a contact fault. The area has not been geologically mapped to date.
- J This anomaly has a moderate response and in general occupies an area of low magnetic readings, indicating possible conductive overburden.

Anomaly

Comments

- K This one has weak response and does not appear to have any economic significance.
- L This occurs in an area of low magnetic readings, and over low 'swampy' ground. It is probably caused by conductive overburden.
- M Topographically, this anomaly lies within, and parallel to a low swampy area, and close to slightly 'higher ground' with outcrop exposures. It is attributed to conductive overburden.
- N Similiar to comments for Anomaly M.
- O Weak response and does not appear to have any economic significance.

RECOMMENDATIONS

Note on the sketch of the Turnbull Twp. property (next page), those areas covered to date by geophysical surveys. It should be pointed out that lines 32N to 60N on the N. W. Sheet were cut, but were not run geophysically. In addition to this area, the so called 'northern tip' (6 claims), and 'southern tip' (Carscallen Twp.) have not been covered to date. The South Sheet, run geophysically in 1985, did not cover the area completely to Massey Township.

Prospecting, trenching and diamond drilling in 1987, turned up an interesting gold prospect in the Line 24 South Area. The gold here may be associated with a coarse grained, disseminated pyrite, within a north-south trending zone of quartz veining. It is recommended that this area be covered by an IP Survey, in an attempt to define concentrations of sulphides.

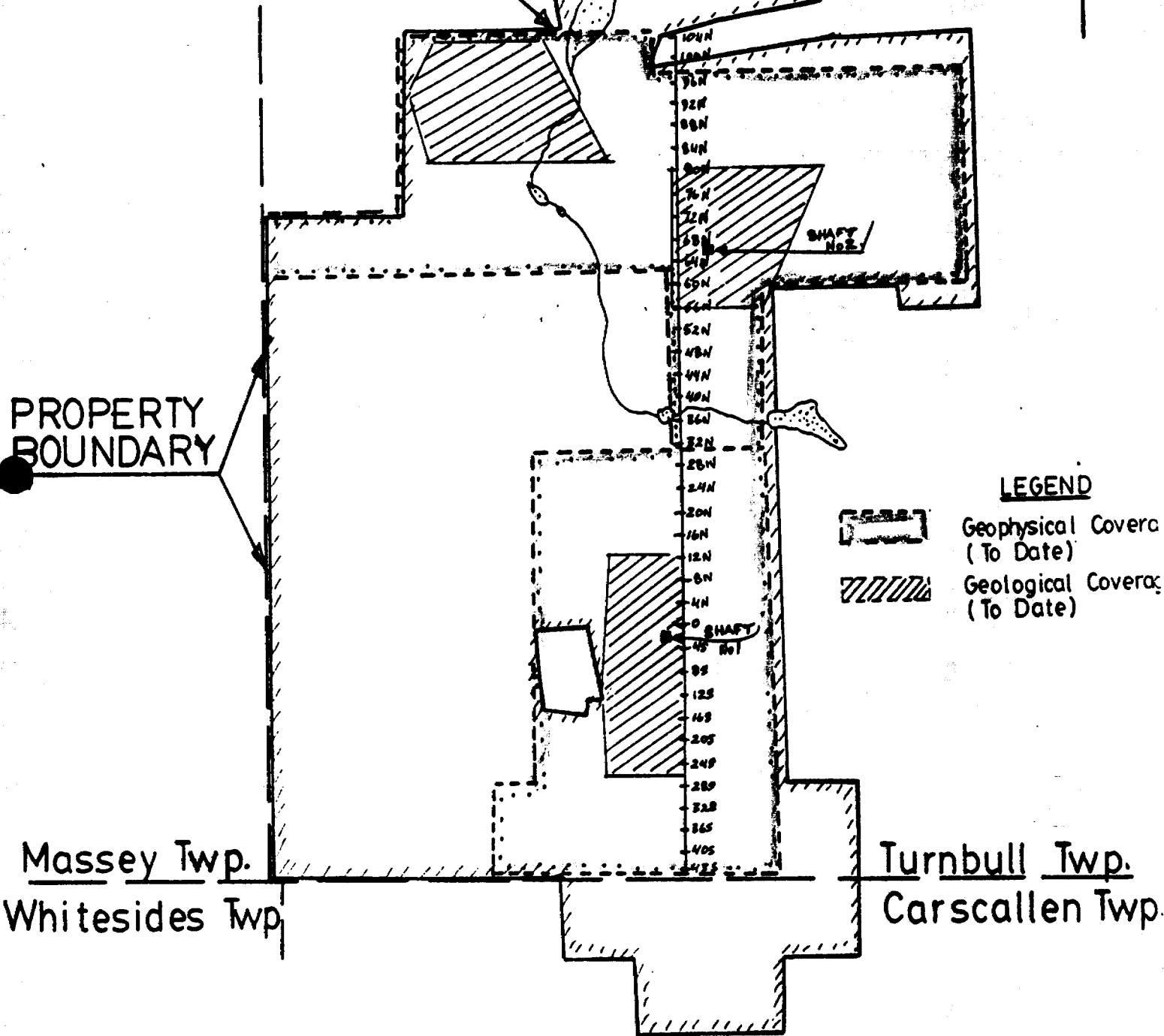
The following line cutting and 'geophysical expenditures' are proposed:

V.L.F. And Magnetometer Surveys-----	\$ 11,280
I.P. Survey-Line 24 S. Area-----	<u>\$ 2,000</u>
Total	<u>\$ 13,280</u>

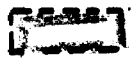
COMMENTS ON 1987 COSTS

A more complete listing and detailing of the costs of these surveys has been prepared under a separate document, and will be submitted for assesement and other purposes.

PROPERTY PLAN
Delbridge Mines Ltd
Scale 1" = 1/2 Mile



LEGEND



Geophysical Covera
(To Date)



Geological Covera
(To Date)

SKETCH SHOWING —
DELBRIDGE MINES LTD.
PROPERTY — Turnbull Twp.

(SCALE 1" = 1/2 Mile)
DRAWN: R.V.S./MARCH, 1988.



W P 6-150

2.11418 The Minin

Type of Survey(s): Ground Geophysical MAG - VLF (line Cutting) Township or Area: Turnbull Twp
 Claim Holder(s): DELBRIDGE MINES LIMITED Prospector's Licence No.: T 4623
 Address: Suite 2106 - 20 Queen St. West - Toronto, Ontario M5H-3R3
 Survey Company: Michael McIssac Date of Survey (from & to): 15 1 87 to 10 87 Total Miles of line Cut: 26
 Name and Address of Author (of Geo-Technical report): Ralph Stewart - 15 Deerbrook Trail - Agincourt, Ontario M1W-1V3

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	40
	- Magnetometer	20
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Airborne Credits	Geophysical	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	952470	60	P	880200	60
	952471	60		880201	60
	952472	60		880202	60
	952473	60			
	952474	60		996333	60
	952475	60		996334	60
	952476	60		996335	60
				996336	60
	995046	60		996337	60
	995047	60			
	995048	60		996339	60
				996340	60
	995050	60		996341	60
	995051	60		996342	60
	995052	60			
	995053	60			
	995054	60			
	995055	60			
	880196	60			
	880197	60			
	880198	60			
	880199	60			

RECORDED
MAY 17 1988

RECEIVED
MAY 12 1988
JUN 24 1988

Expenditures (excludes power stripping)
 Type of Work Performed: Geophysical Survey
 Performed on Claim(s) P996337-342 Incl. P 952470-476 Incl. P708918 - 921 Incl. P806295-299 Incl. P796746-747-755 Incl. P805430-438 Incl.
 Calculation of Expenditure Days Credits
 Total Expenditures \$ + 15 = Total Days Credits

MINING LANDS SECTION
 claims covered by this report of work. 33

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: May 10, 1988
 Recorded Holder or Agent (Signature): Robert M. Onotsky

For Office Use Only
 Total Days Cr. Recorded: 1980
 Date Recorded: May 12, 1988
 Mining Recorder: [Signature]
 Date Approved as Recorded: [Signature]
 Branch 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: Robert M. Onotsky - 1205 - 181 Collier ST - P.O. BOX 1250
 Barrie, Ontario L4M-5R4
 Date Certified: May 10/88
 Certified by (Signature): [Signature]



AMENDED

Recorded Holder	Delbridge Mines Limited
Township of Area ^{XXXX}	Turnbull

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical Electromagnetic _____ 40 _____ days Magnetometer _____ 20 _____ 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 checked="" 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 952470 to 476 inclusive

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

20 days Electromagnetic
10 days Magnetometer

P 996339 - 40

No credits have been allowed for the following mining claims

- not sufficiently covered by the survey insufficient technical data filed

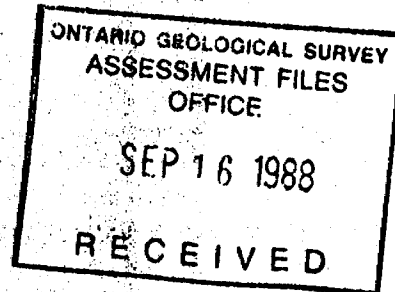
P 995046 to 048 inclusive
 995050 to 055 inclusive
 880196 to 202 inclusive
 996333 to 338 inclusive
 996341-42

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.

September 8, 1988

Your File: W8806-150
Our File : 2.11418

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



Dear Sir:

RE: Notice of Intent dated August, 1988.
Geophysical (Electromagnetic & Magnetometer) Survey
on Mining Claims P 952470 et al in the Township
of Turnbull.

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

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

Yours sincerely,

W.R. Cowan, Manager
Mining Lands Section
Mines & Minerals Division

Whitney Block, Room 6610
Queen's Park
Toronto, Ontario
M7A 1W3
Telephone: (416) 965-4888

SH:sc

cc: Delbridge Mines Ltd
Suite 2106
20 Queen Street West
Toronto, Ontario
M5H 3R3

cc: Mr. Ralph Stewart
15 Deerbrook Trail
Agincourt, Ontario
M1W 1V3

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

cc: Mr. Robert M. Onotsky
Suite 1205
181 Collier Street
P.O. Box 1254
Barrie, Ontario
L4N 5R4

cc: Resident Geologist
Timmins, Ontario

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

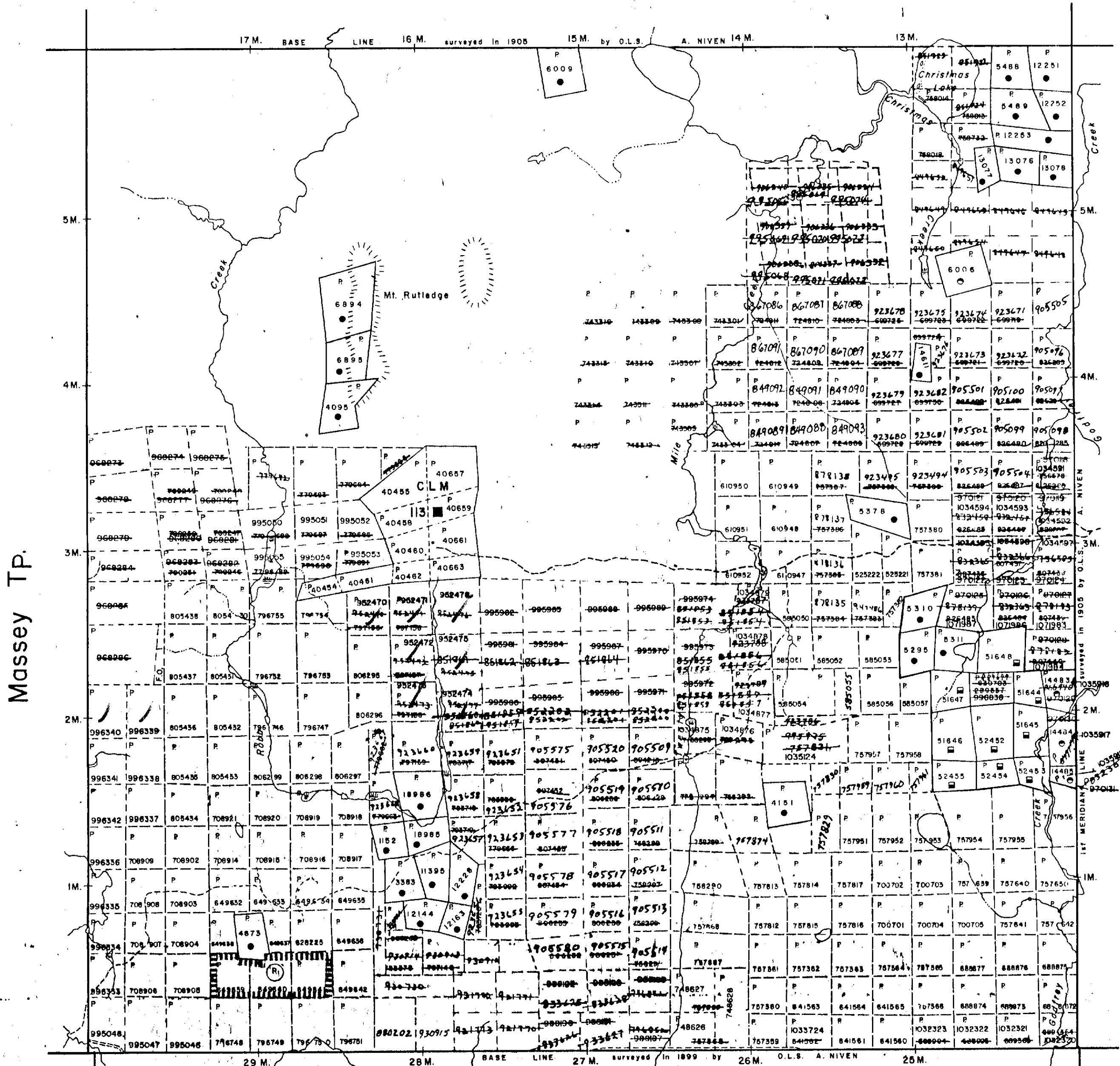
- M.R.O. - MINING RIGHTS ONLY
- S.R.O. - SURFACE RIGHTS ONLY
- M.+S. - MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
(R1)	W-26188 NR	88-03-30	S.R. + M.P.	

NOTES

THIS TOWNSHIP LIES WITHIN THE MUNICIPALITY OF THE CITY OF TIMMINS.

Robb TP



Massey TP.

Godfrey TP.

Carscallen Tp.

LEGEND

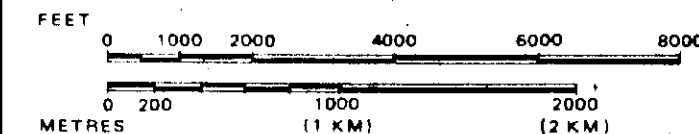
- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
 - TOWNSHIPS, BASE LINES, ETC.
 - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
 - LOT LINES
 - PARCEL BOUNDARY
 - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM*
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" SURFACE RIGHTS ONLY	○
" MINING RIGHTS ONLY	◐
LEASE, SURFACE & MINING RIGHTS	■
" SURFACE RIGHTS ONLY	◼
" MINING RIGHTS ONLY	◻
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	OC
RESERVATION	Ⓡ
CANCELLED	⊗
SAND & GRAVEL	Ⓢ

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1.

SCALE: 1 INCH = 40 CHAINS



TOWNSHIP

TURNBULL

M.N.R. ADMINISTRATIVE DISTRICT

TIMMINS

MINING DIVISION

PORCUPINE

LAND TITLES / REGISTRY DIVISION

COCHRANE



Date MARCH, 1985

Number

G-3250

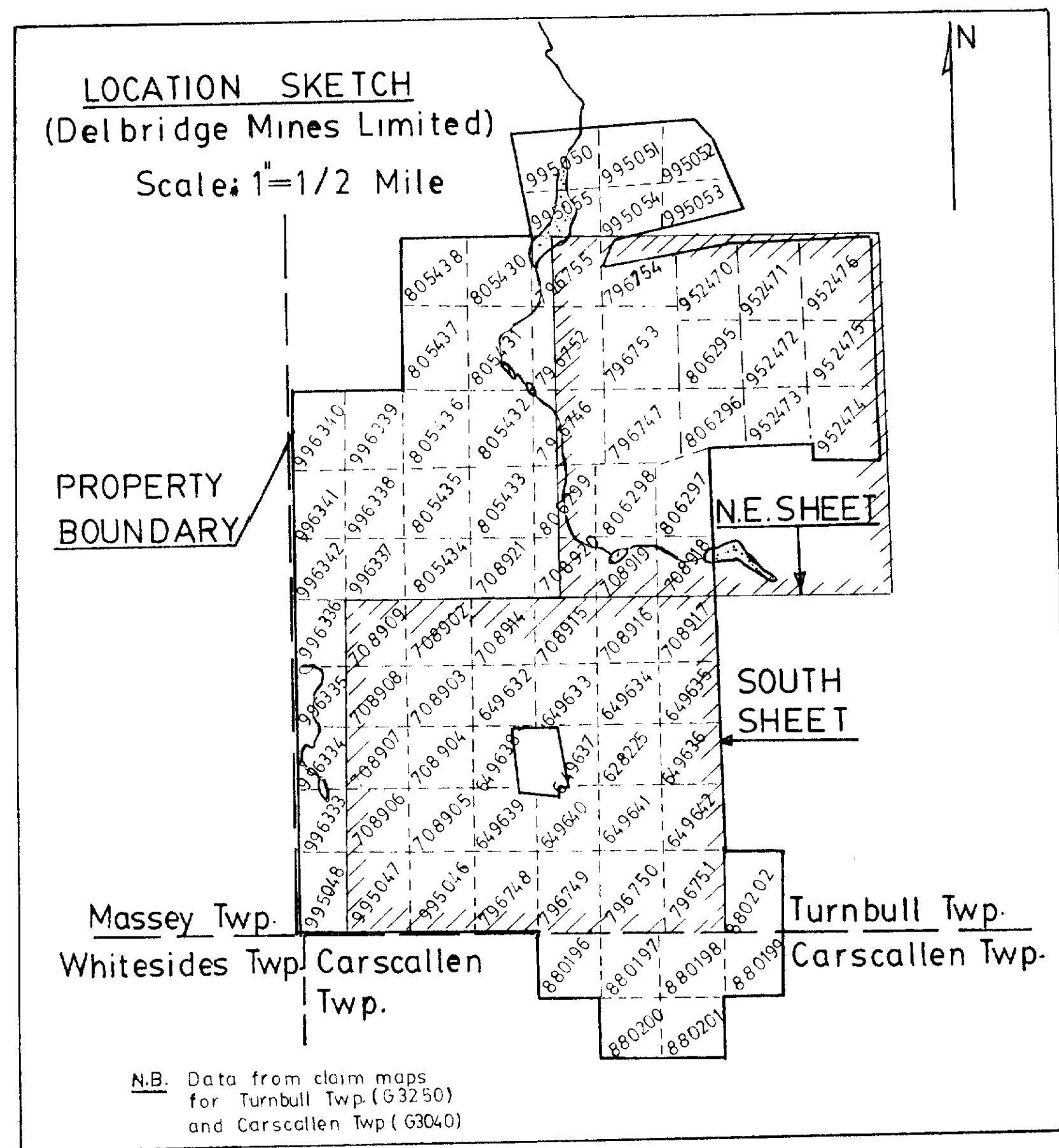
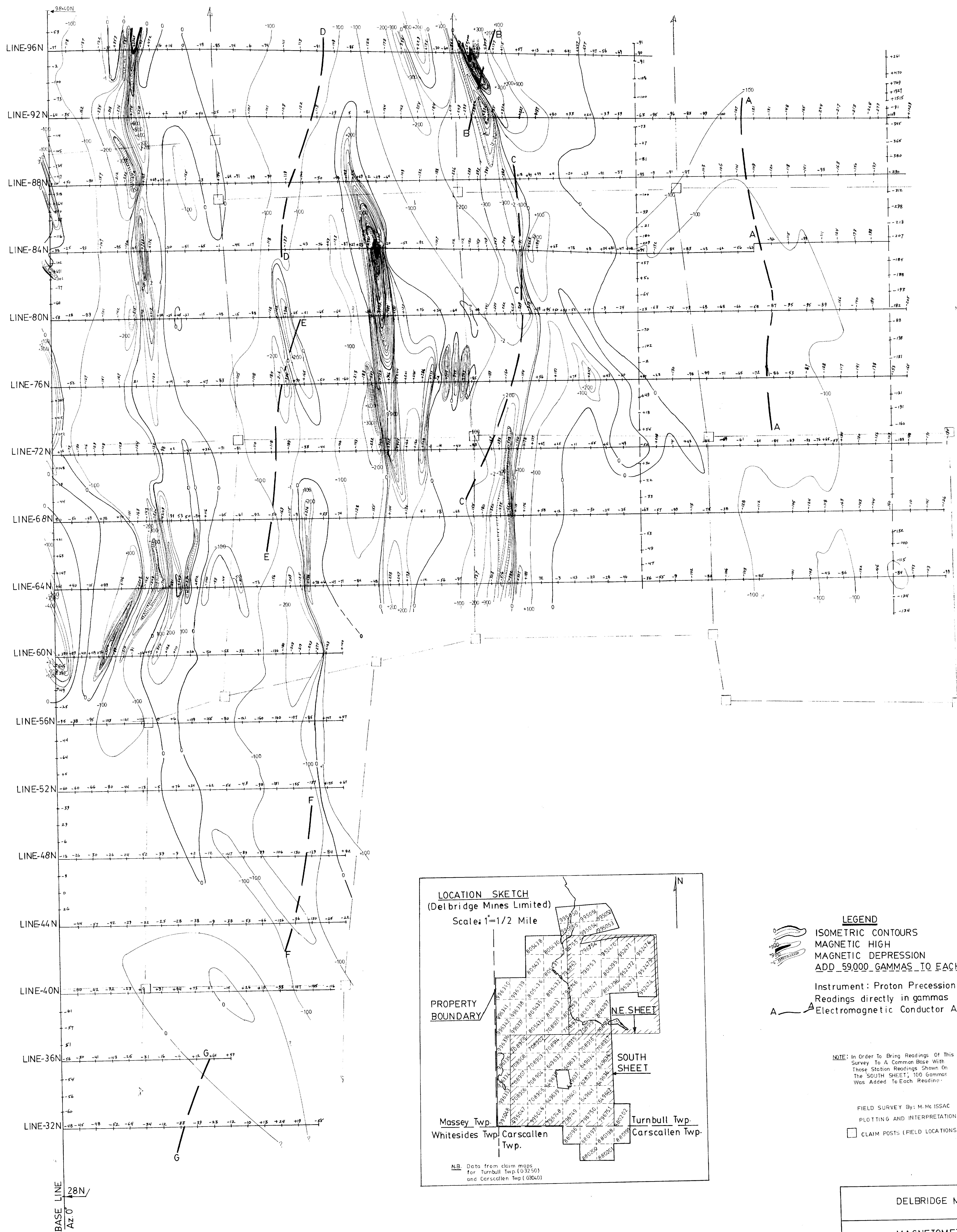
MW Robt 15, 1985



42A05NE0146 2-11418 TURNBULL

200

K. Kolenov



LEGEND

- ISOMETRIC CONTOURS
- MAGNETIC HIGH
- MAGNETIC DEPRESSION
- ADD 59,000 GAMMAS TO EACH READING

Instrument: Proton Precession
Readings directly in gammas

A — A Electromagnetic Conductor Axis

NOTE: In Order To Bring Readings Of This Survey To A Common Base With These Station Readings Shown On The SOUTH SHEET, 100 Gammas Was Added To Each Reading.

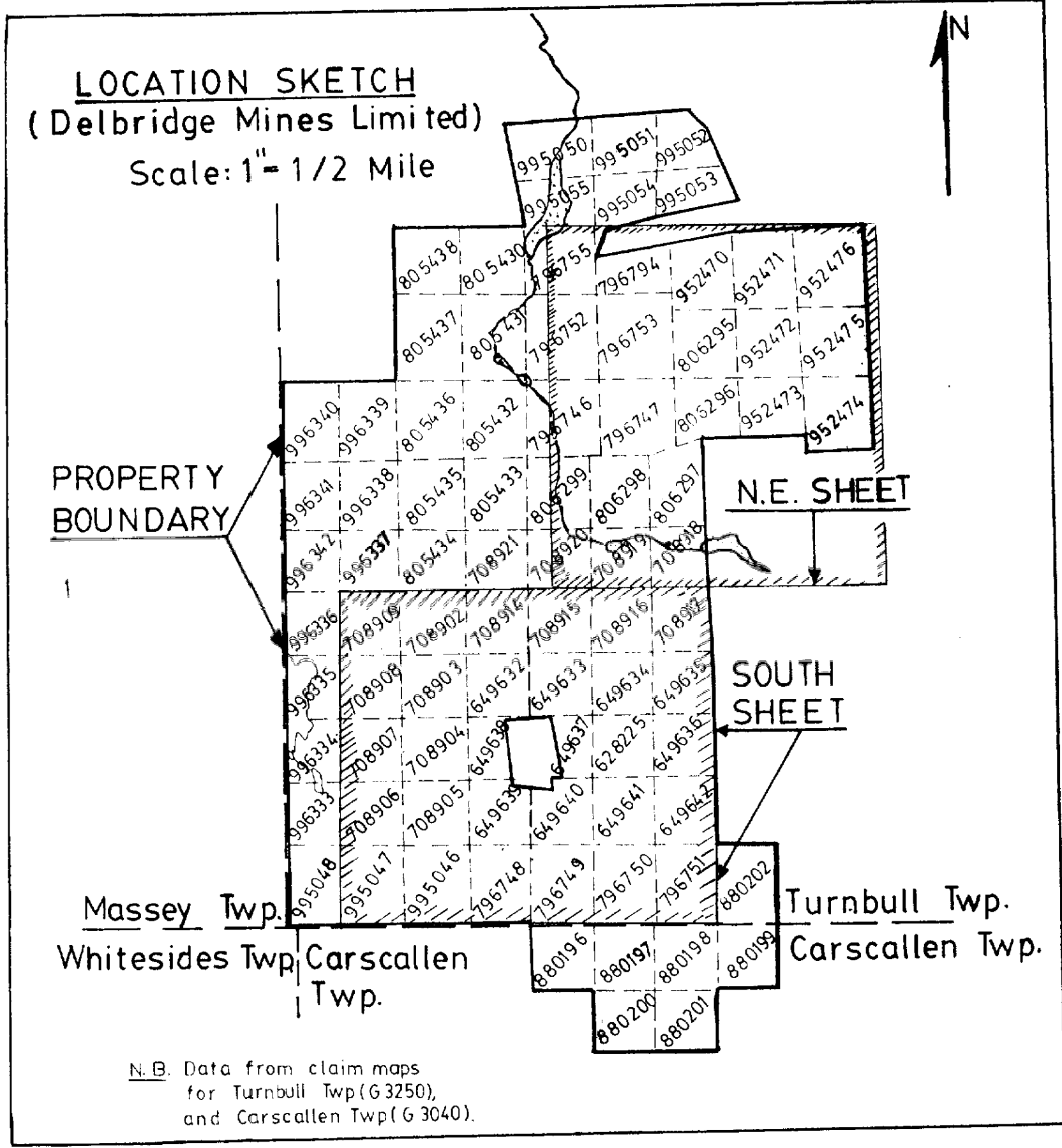
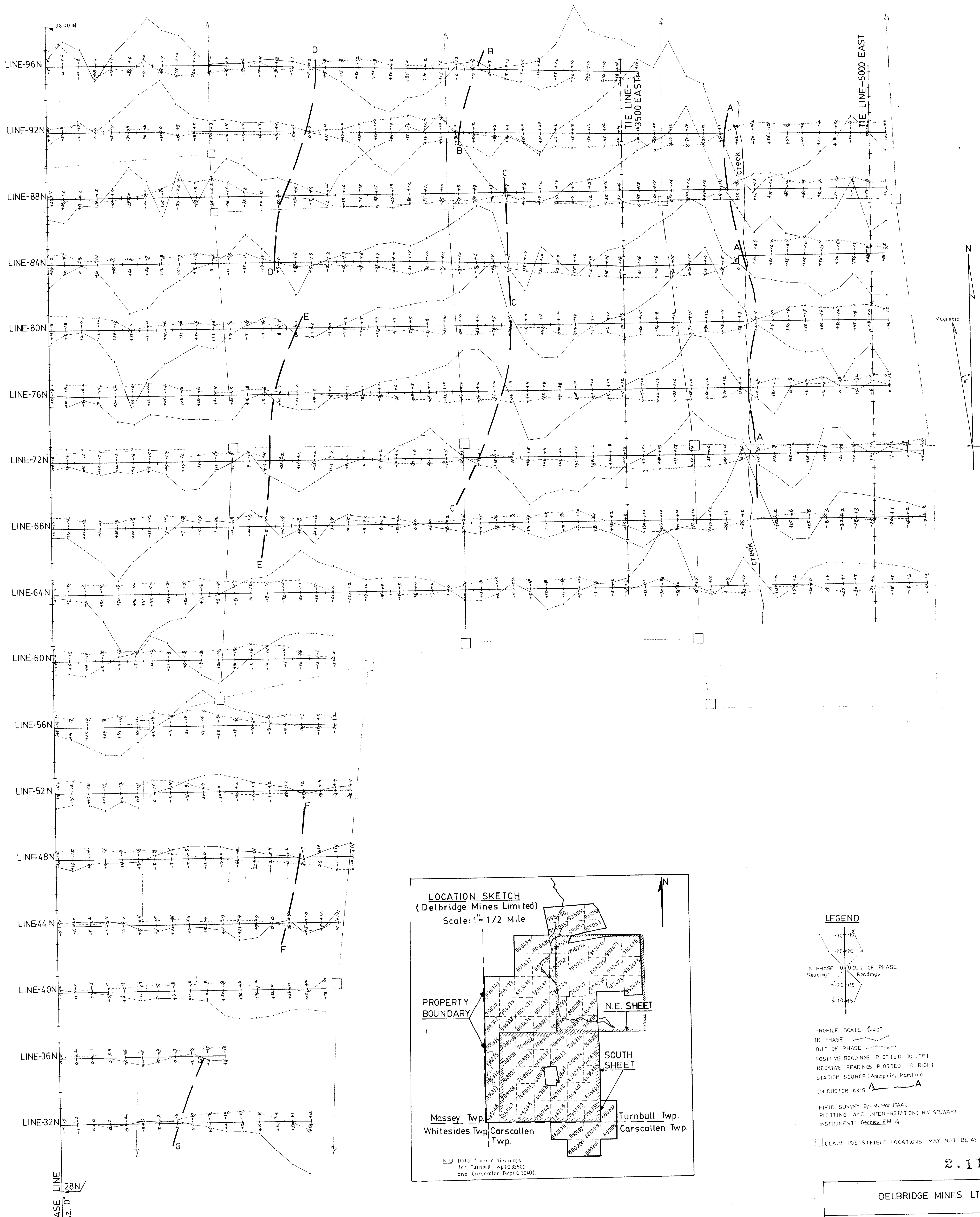
FIELD SURVEY BY: M. Mc ISSAC
PLOTING AND INTERPRETATION: R.V. STEWART

□ CLAIM POSTS (FIELD LOCATIONS MAY NOT BE AS SHOWN)

2.11418

DELBRIDGE MINES LTD.	
MAGNETOMETER SURVEY - N.E. Sheet - De SANTIS PROPERTY TURNBULL TWP., ONT.	
AUGUST, 1987 SURVEY	DWG. S 87-16
DRAWN: R.V.S. Sept. 18, 1987	SCALE: 1" = 200'





LEGEND

IN PHASE Readings: \times (with values -30, -20, -10, 0, 10, 20, 30)

OUT OF PHASE Readings: \circ (with values -30, -20, -10, 0, 10, 20, 30)

PROFILE SCALE: 1" = 40'

IN PHASE: \times

OUT OF PHASE: \circ

POSITIVE READINGS PLOTTED TO LEFT

NEGATIVE READINGS PLOTTED TO RIGHT

STATION SOURCE: Annapolis, Maryland.

CONDUCTOR AXIS: A — A

FIELD SURVEY BY: M. Mac ISAAC

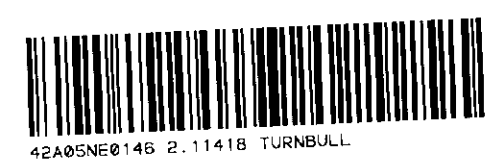
PLOTTING AND INTERPRETATION: R.V. STEWART

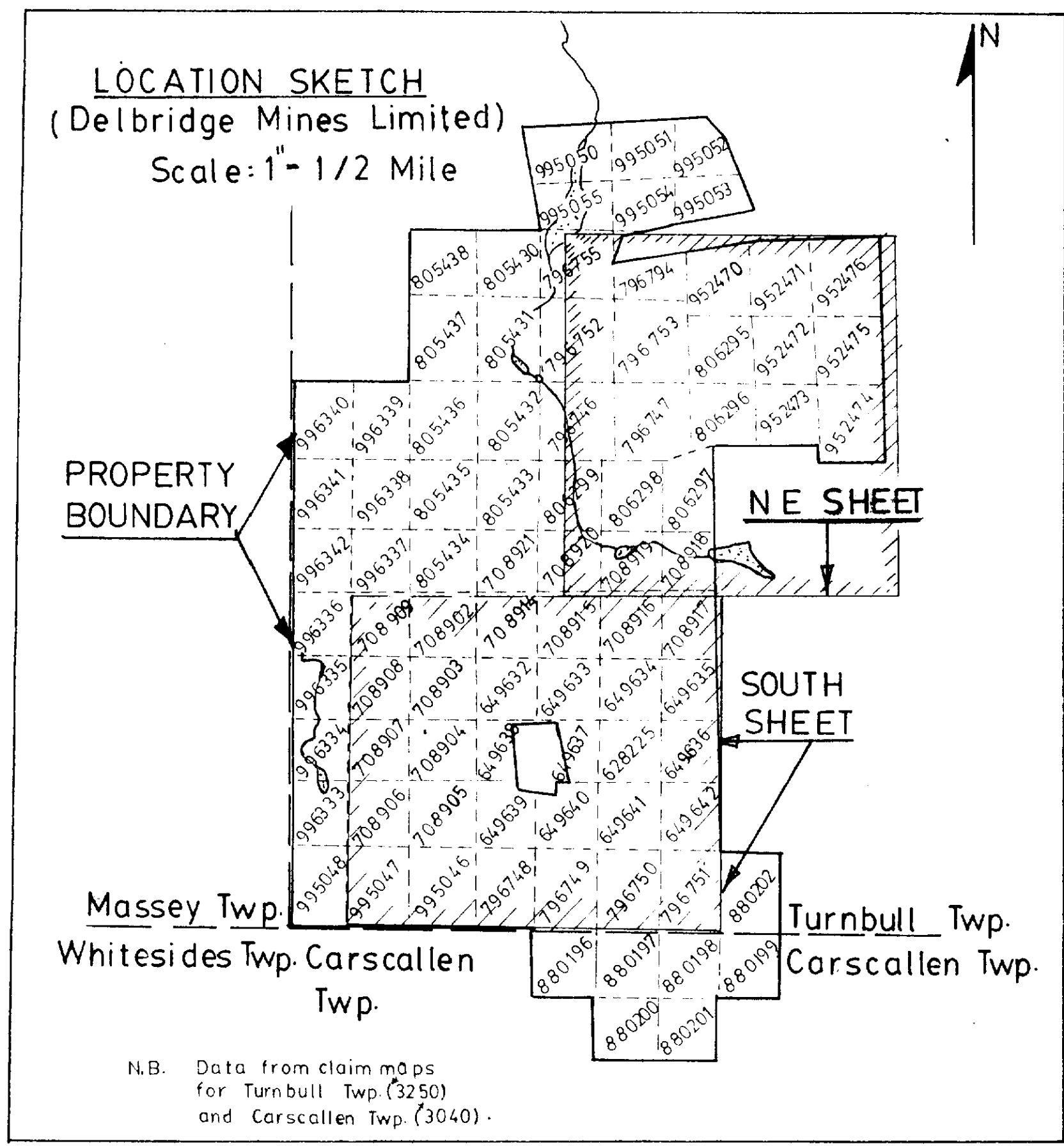
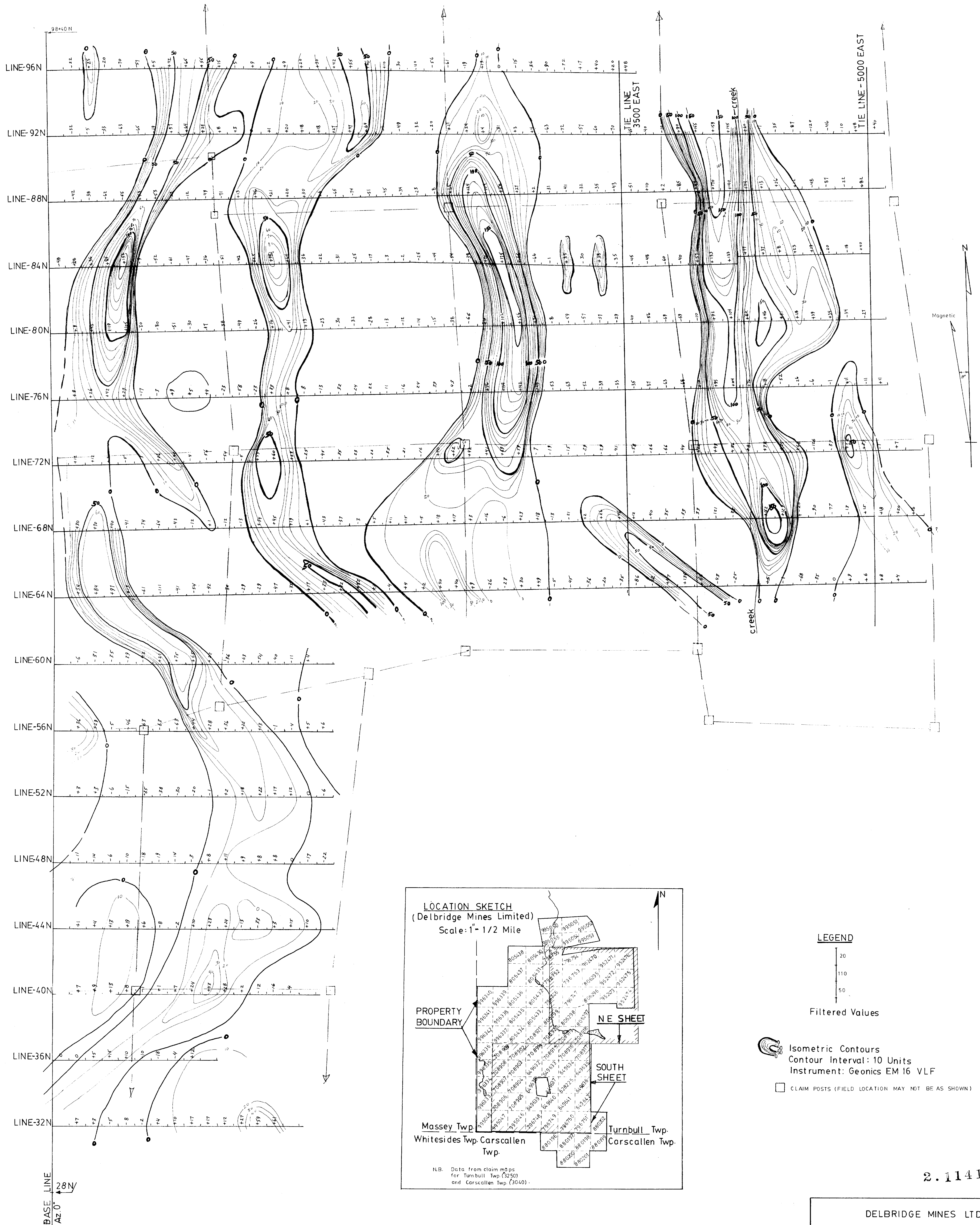
INSTRUMENT: Geonics EM 16

□ CLAIM POSTS (FIELD LOCATIONS MAY NOT BE AS SHOWN)

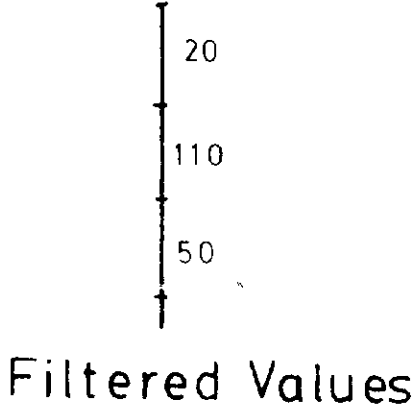
2.11418

DELBRIDGE MINES LTD.	
VLF EM SURVEY - N.E. Sheet - De SANTIS PROPERTY TURNBULL TWP., ONT.	
AUGUST, 1987 SURVEY	DWG. S. 87-15
DRAWN: R.V.S. Sept 18 1987	SCALE 1"=200'





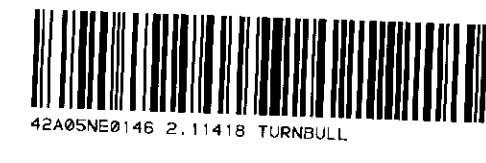
LEGEND

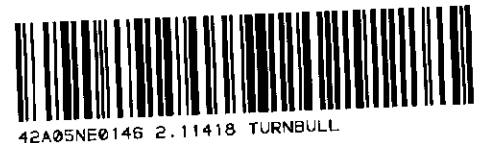
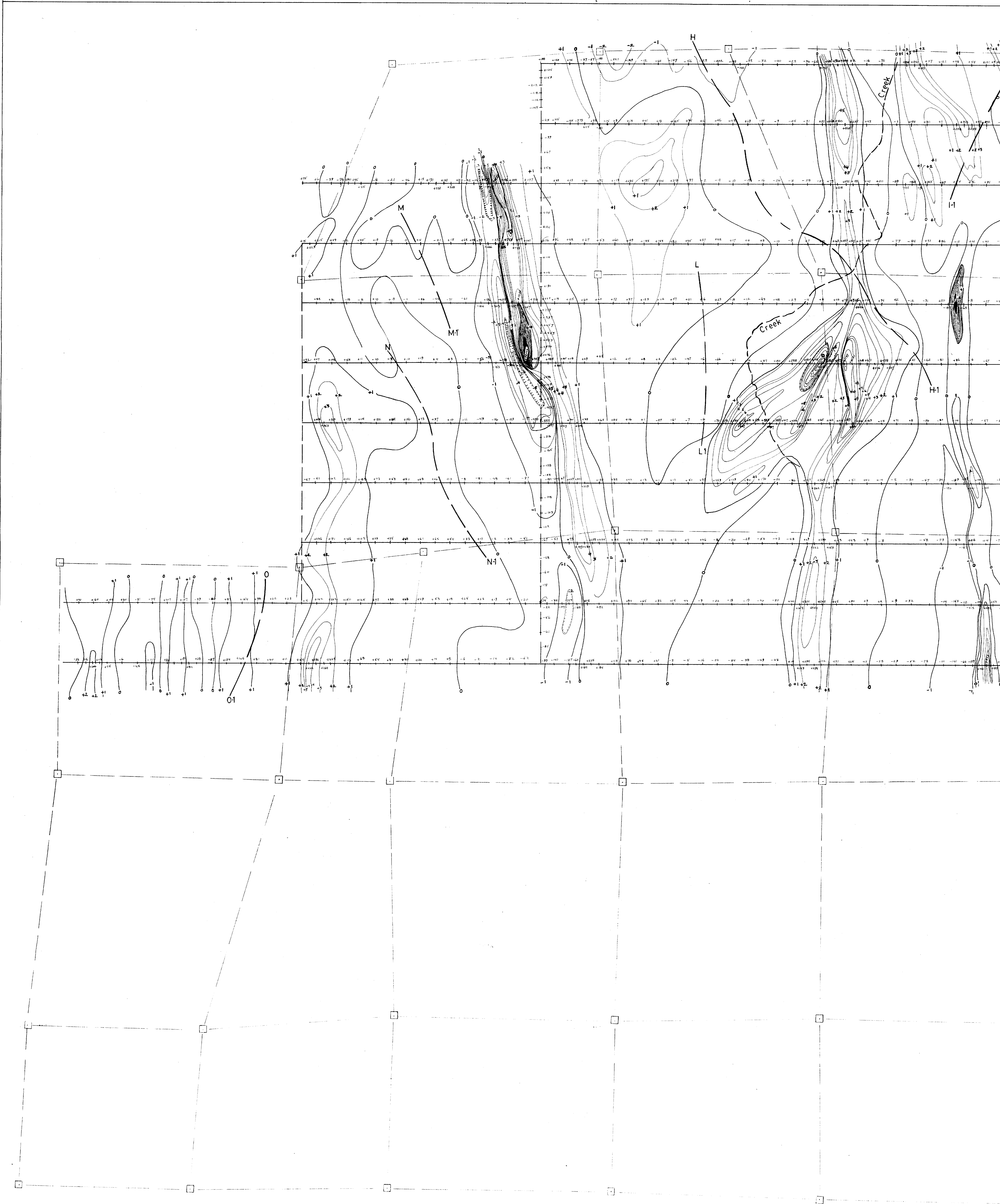


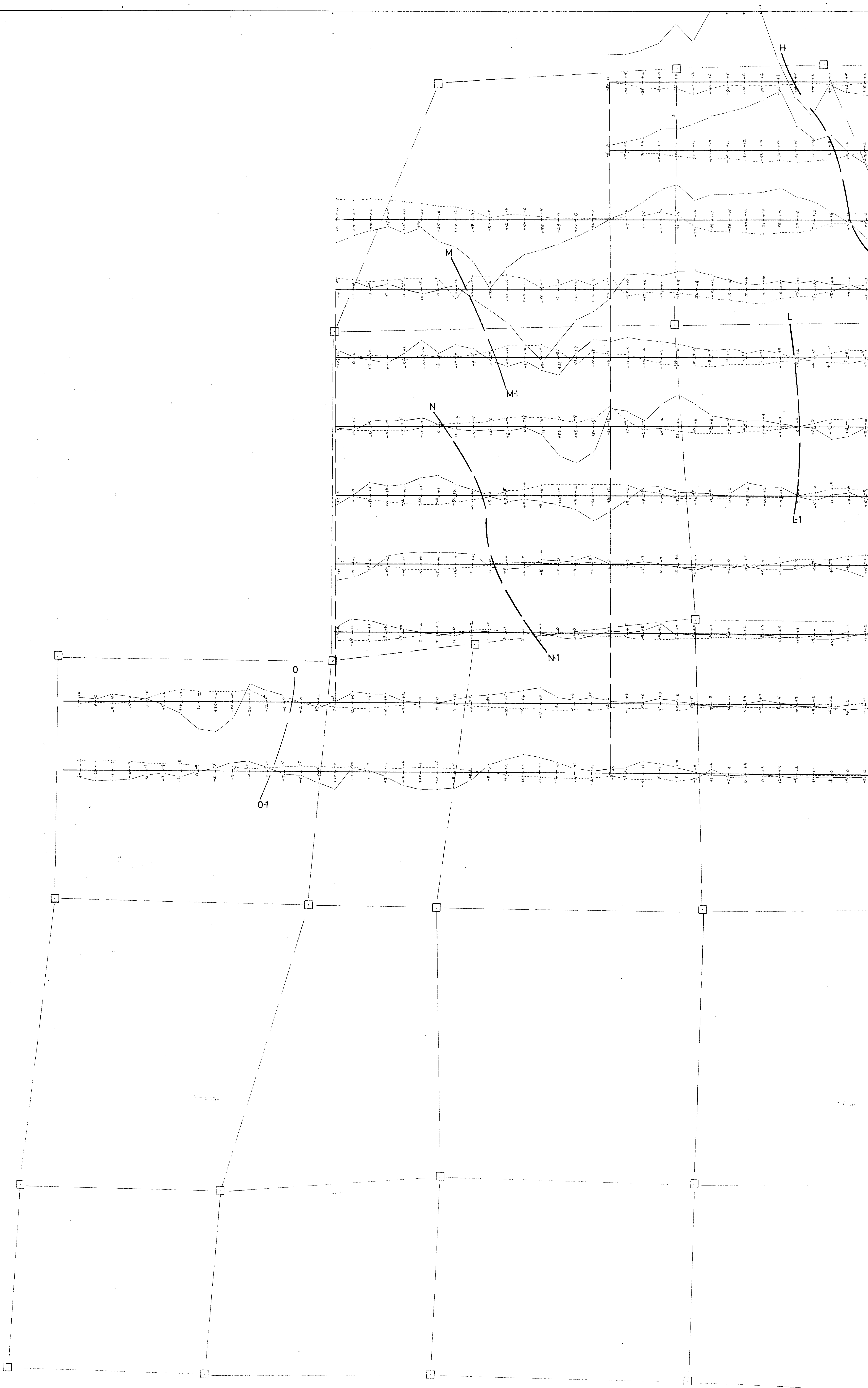
- Isothetic Contours
Contour Interval: 10 Units
Instrument: Geonics EM 16 VLF
- CLAIM POSTS (FIELD LOCATION MAY NOT BE AS SHOWN)

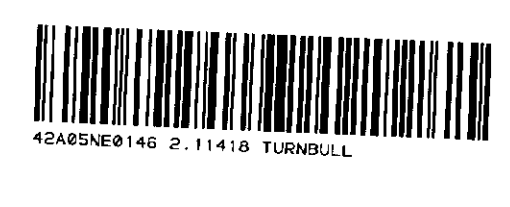
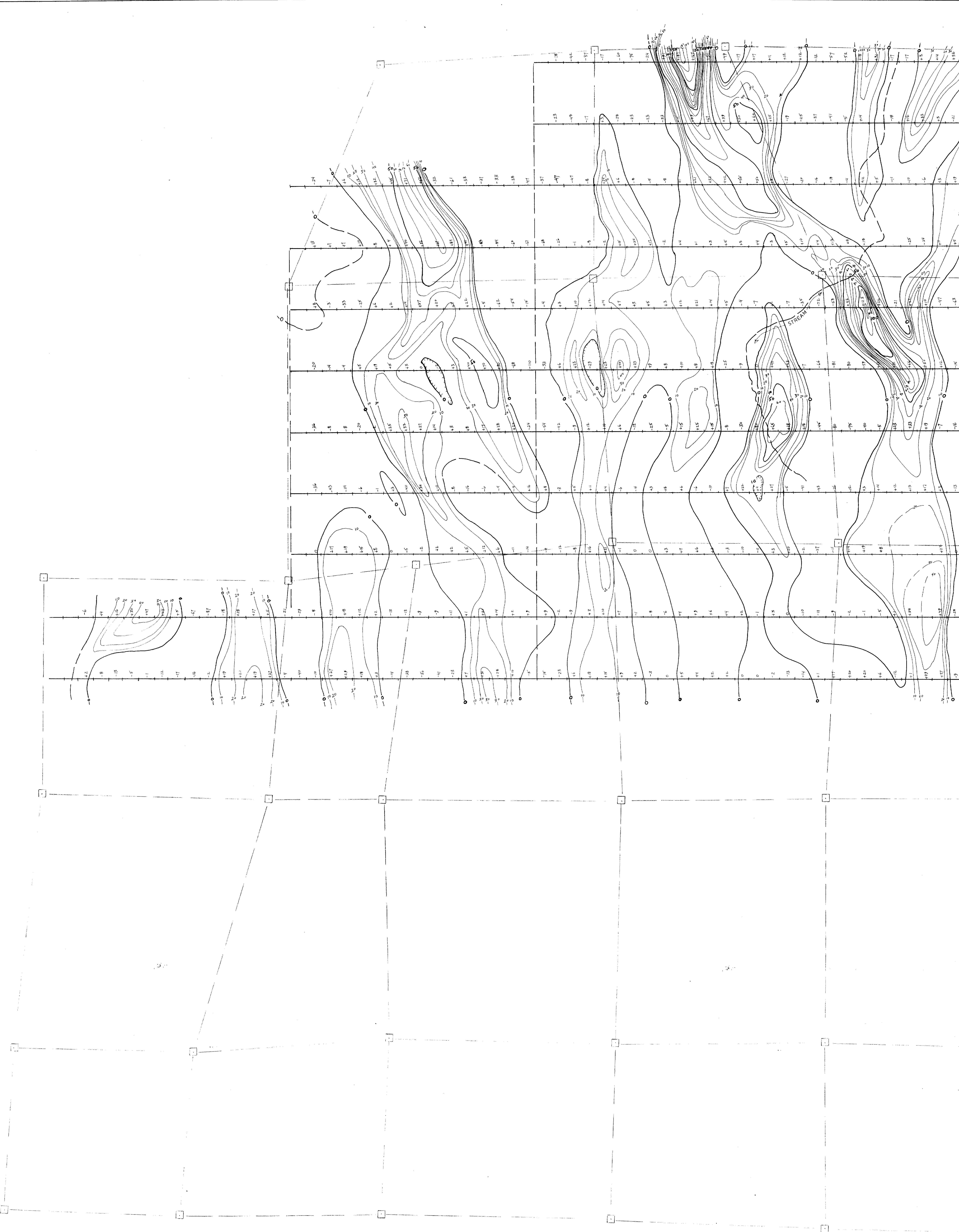
2.11418

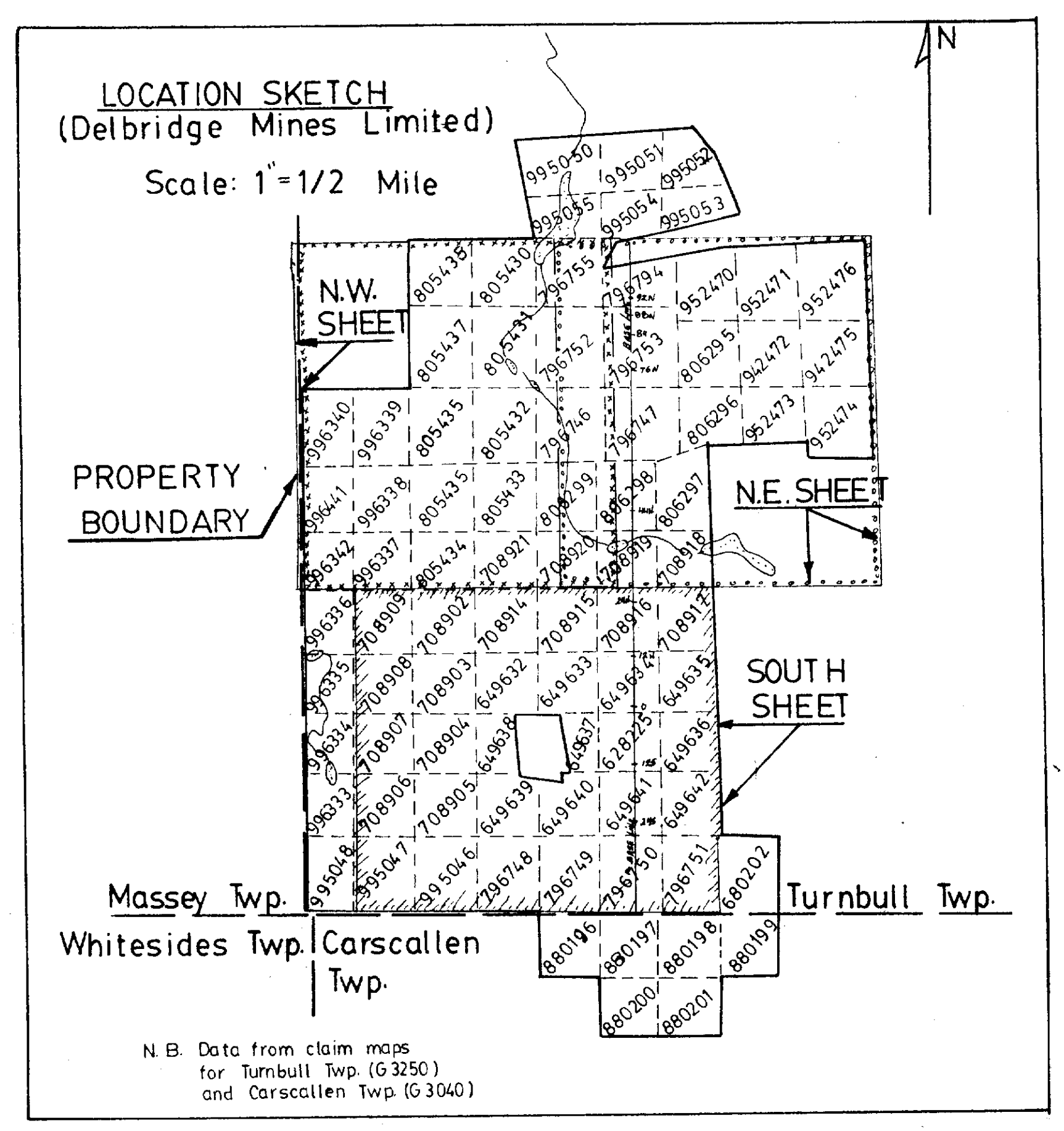
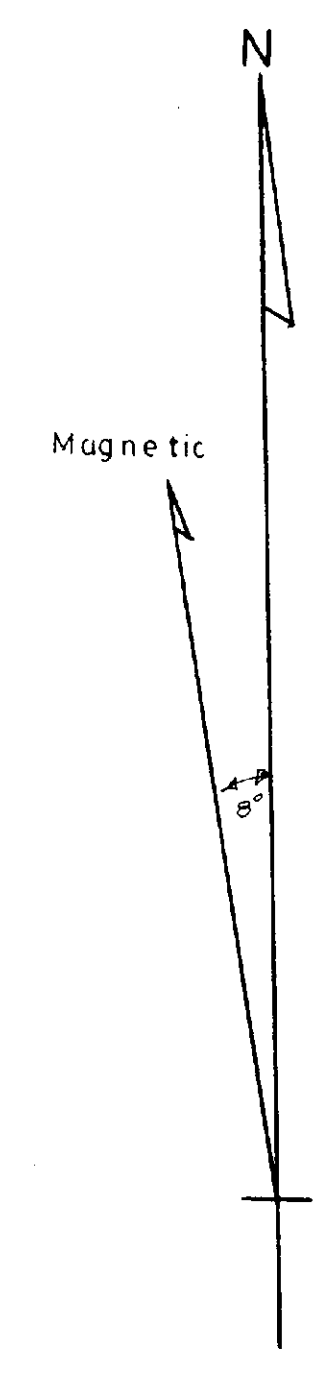
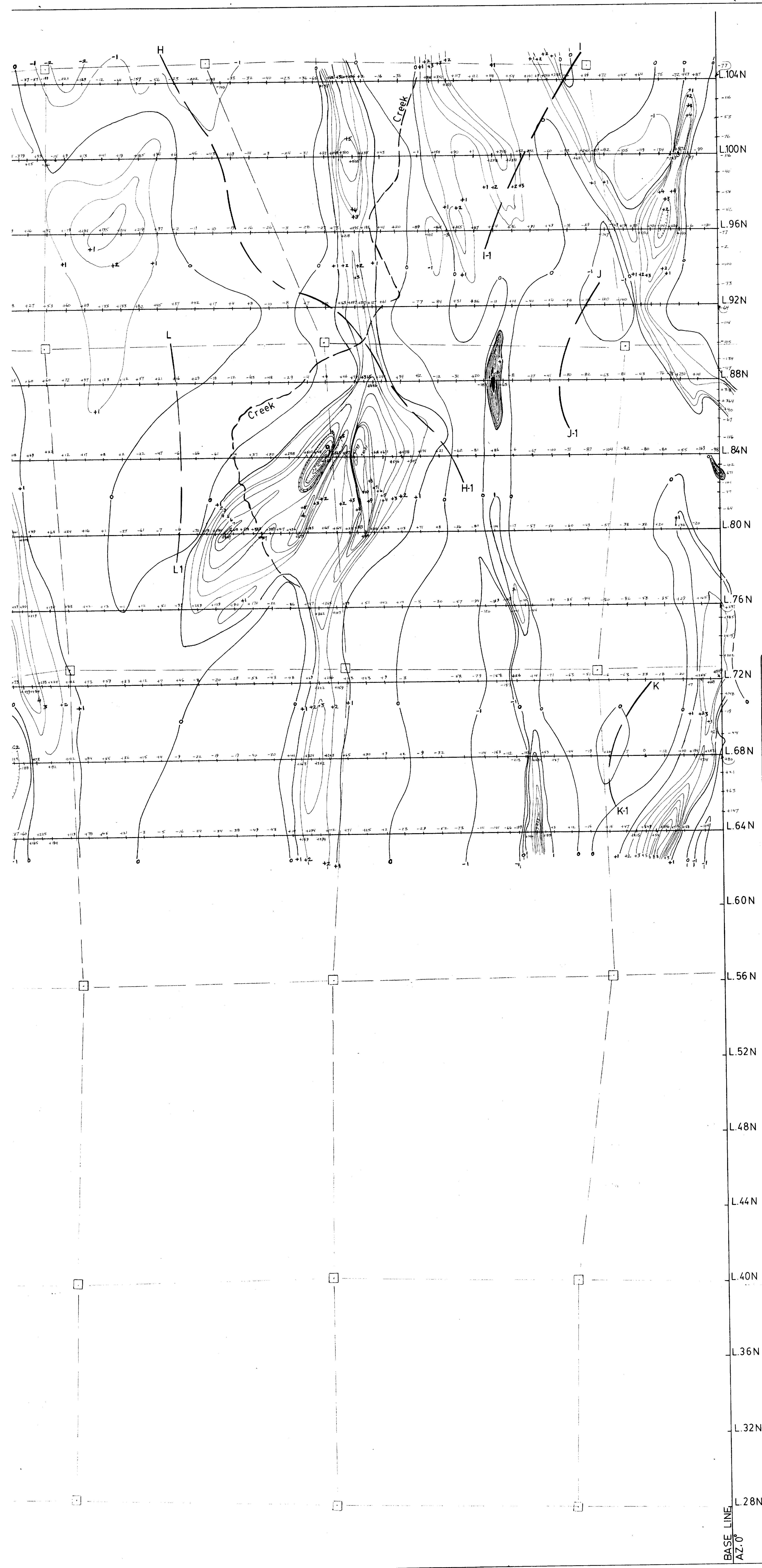
DELBRIDGE MINES LTD.	
FRASER FILTERED VLF EM RESULTS - N.E. Sheet - De SANTIS PROPERTY TURNBULL TWP., ONT.	
AUGUST, 1987 SURVEY	DWG. S-87-17
DRAWN: RVS., Sept. 18, 1987	SCALE: 1"=200'











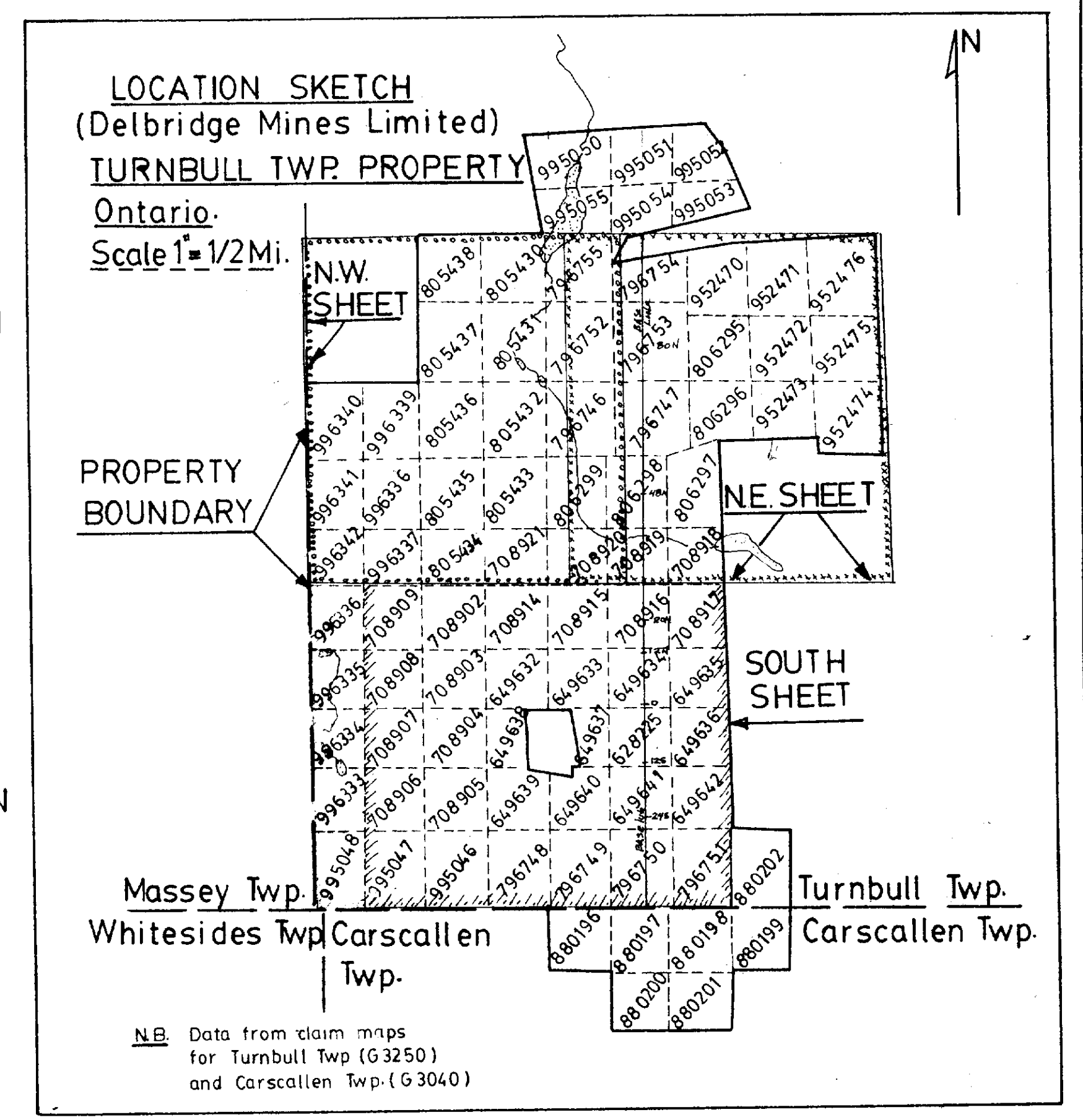
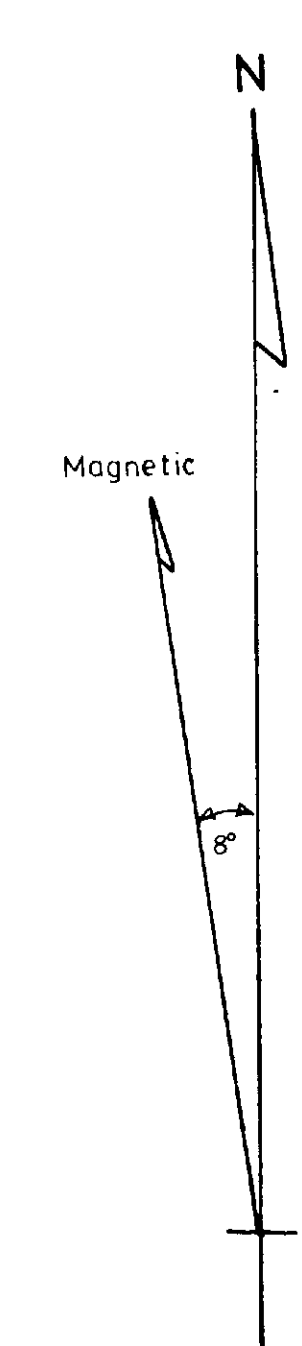
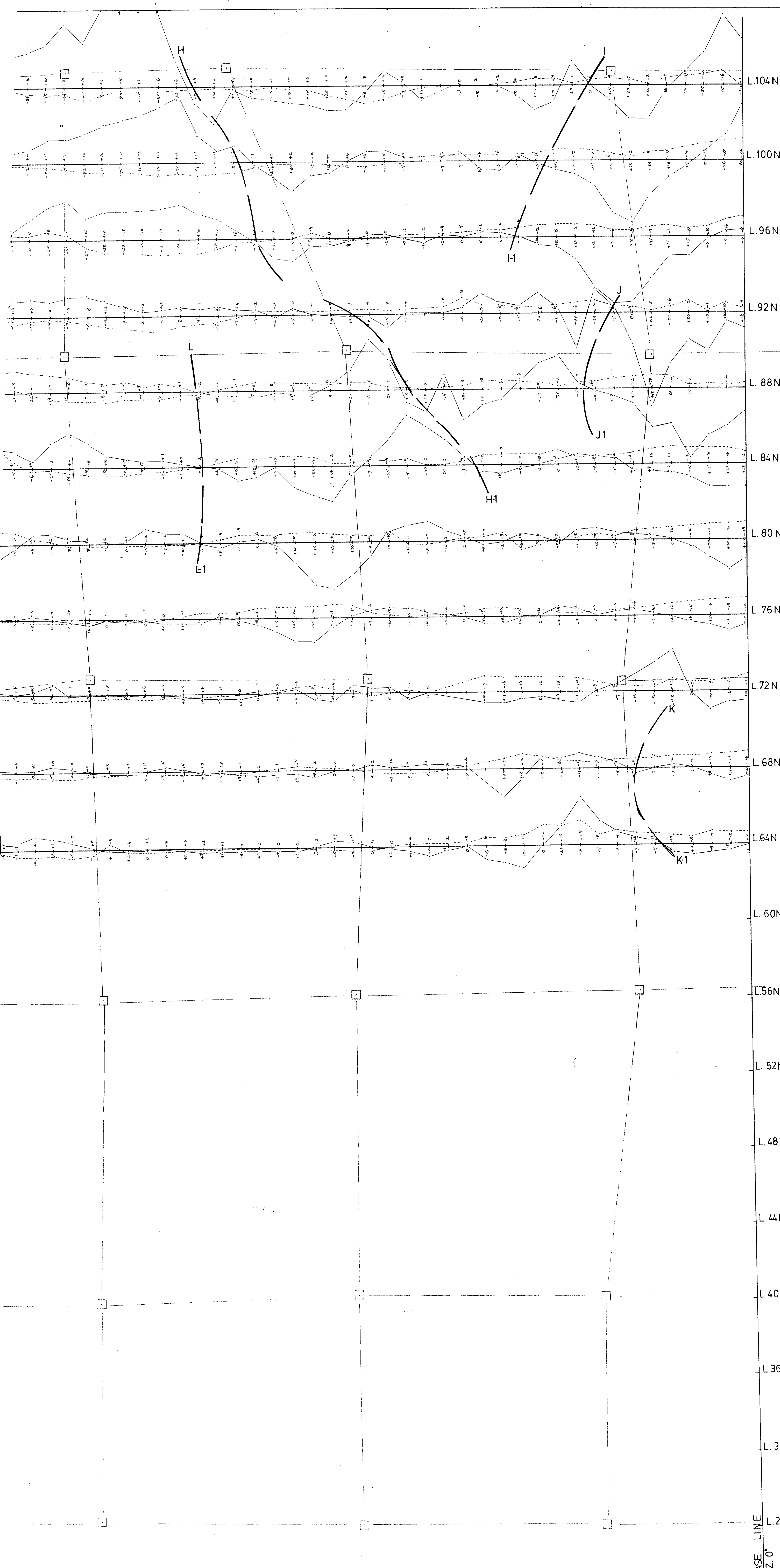
- LEGEND**
- ISOMETRIC CONTOURS
 - MAGNETIC HIGH
 - MAGNETIC DEPRESSION
 - N.B. Add 50,000 Gammas to each reading
 - Instrument: Proton Precession
 - Readings directly in gammas
 - Electromagnetic Conductor Axis
 - Claim Posts (Field locations may not be as shown)

NOTE: In order to bring Readings of this survey to a common base with those Station Readings shown on the "SOUTH SHEET" 100 Gammas was added to each reading.

FIELD SURVEY By: M. McIssac
PLOTING & INTERPRETATION: R.V. Stewart

2.11418

DELBRIDGE MINES LTD.	
MAGNETOMETER SURVEY -N.W. Sheet- De SANTIS PROPERTY TURNBULL TWP., ONT.	
SEPT. 1987 SURVEY	DWG. S 88-1
DRAWN: RVS, February 1988	SCALE 1"=200'



LEGEND

PROFILE SCALE 1" = 40'
 IN PHASE ———
 OUT OF PHASE - - -
 POSITIVE READINGS PLOTTED TO LEFT
 NEGATIVE READINGS PLOTTED TO RIGHT
 STATION SOURCE: Annapolis Maryland

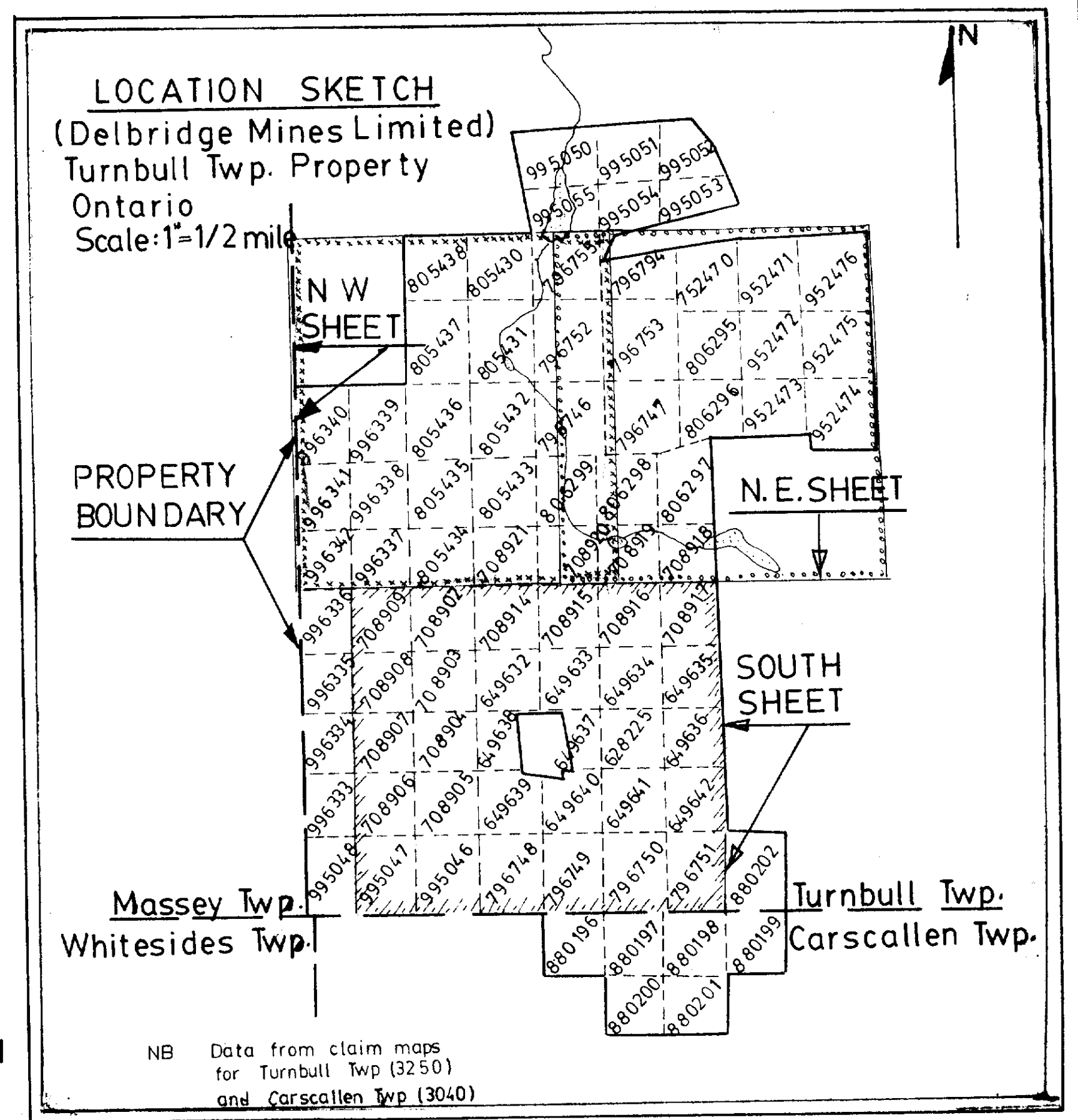
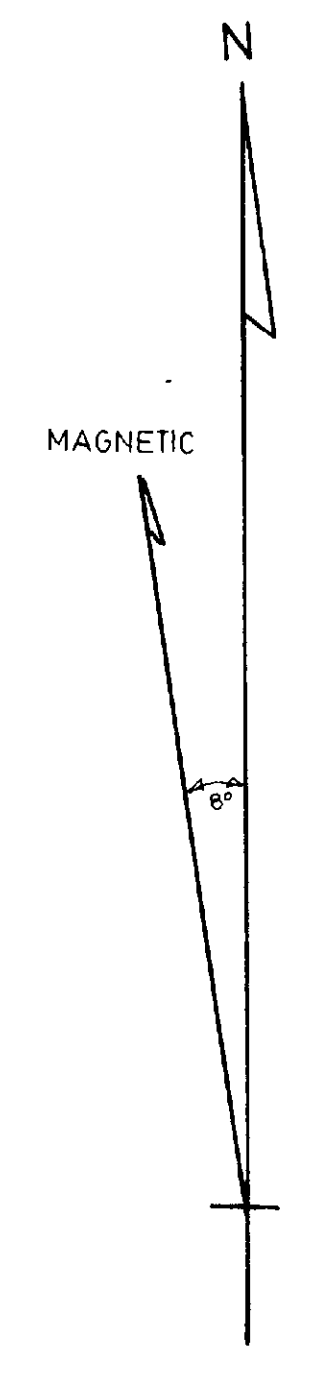
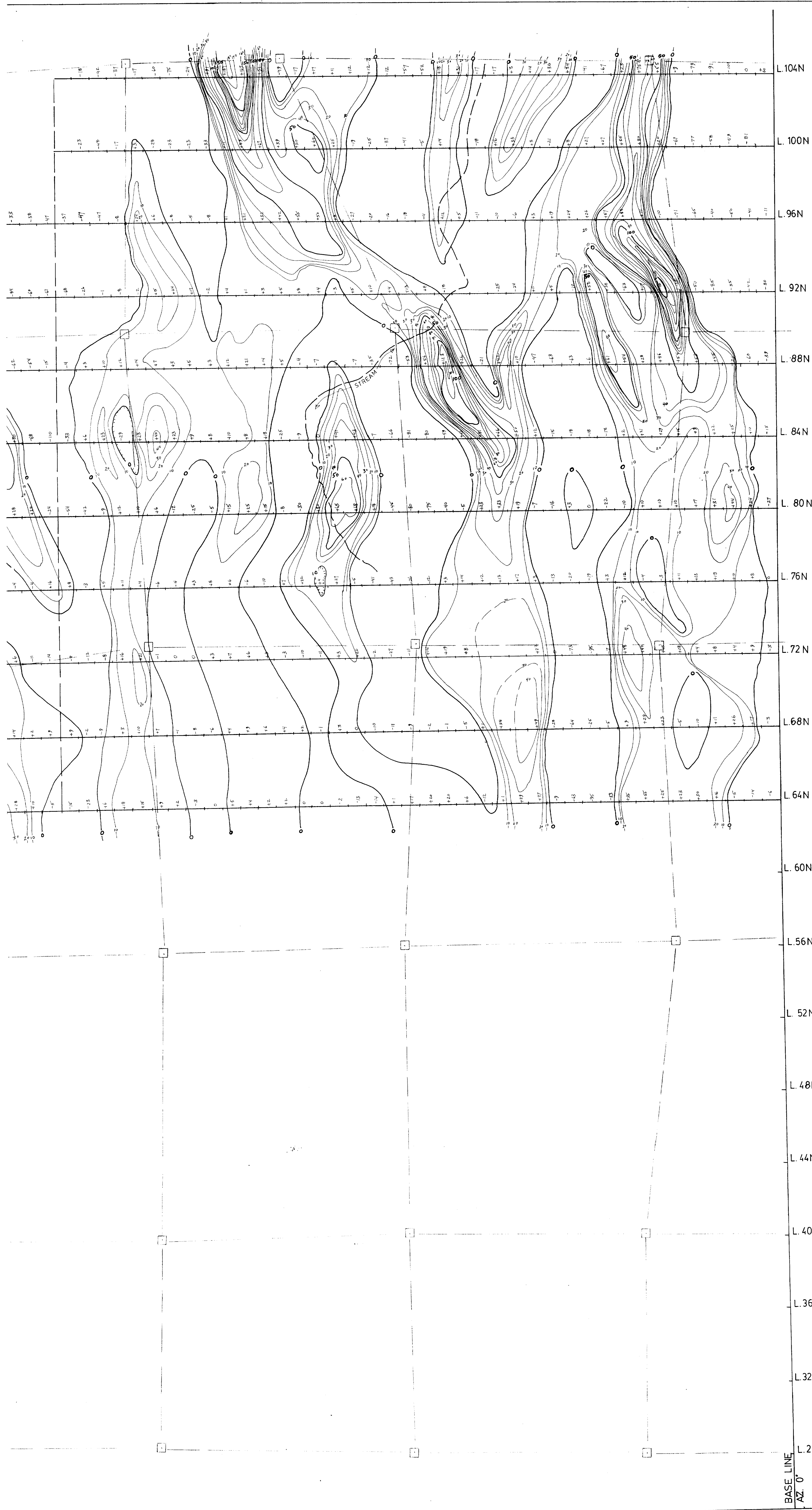
A — CONDUCTOR AXIS

FIELD SURVEY BY: M. Mac Issac
 PLOTTING AND INTERPRETATION: R.V. STEWART
 INSTRUMENT Geonics: EM 16

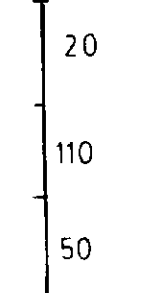
□ CLAIM POSTS (Field locations may not be as shown)

2.11418

DELBRIDGE MINES LTD.	
V.L.F. - EM SURVEY - N.W. Sheet - De SANTIS PROPERTY TURNBULL TWP., Ont.	
SEPTEMBER, 1987 SURVEY	DWG. S. 88-3
DRAWN: R.V.S., FEB 1988	SCALE: 1" = 200'



LEGEND



Filtered Values

Isometric Contours
 Contour Interval: 10 Units
 Instrument: Geonics E.M.16-VLF

CLAIM POSTS (Field locations may not be as shown)

2.11418

DELBRIDGE MINES LTD.	
FRASER FILTERED VLF-EM RESULTS -N.W. Sheet- De SANTS PROPERTY TURNBULL TWP., ONT.	
SEPTEMBER, 1987 SURVEY	DWG S 80-2
DRAWN RVS, FEBRUARY, 1988	SCALE 1"=200'

BASE LINE
AZ. 0°