



42A13SW0091 63.2096 REID

010

63.2096

## INTRODUCTION

During the period from July 1, 1966 to September 19, 1966, a gravimetric and magnetic survey were carried out on a block of 28 claims in northwest Reid Township, Porcupine Mining Division.

## LOCATION AND ACCESS

The property is located approximately eighteen miles northwest of Timmins, Ontario. A semi-permanent camp was established on Thorburn Creek in the central part of the claim group. The camp was serviced by rotary aircraft from Timmins, Ontario.

## PREVIOUS WORK

The complete claim group has been covered by two combined magnetic-electromagnetic airborne surveys.

Canadian Aero Mineral Surveys flew the area in 1963 for B.W. Lang of Toronto, Ontario. The area was re flown in May 1964 by Hunting Survey Corporation for Mespi Mines Limited.

Both surveys indicated the presence of electromagnetic conductors paralleling a strong magnetic feature with a north-easterly strike.

Subsequently Mespi Mines Limited conducted two ground electromagnetic surveys using a Ronka Mark IV E.M. unit and Crone Jr. K.M. unit. Several strong conductive zones were indicated and further detailed using vertical loop E.M. equipment and the fixed transmitter method.

The Third E.M. survey indicated the presence of several more conductors previously undetected.

Several drill holes were drilled to test the conductive zones. All holes encountered carbonaceous schists carrying pyrite and pyrrhotite and minor chalcopyrite.

The ground E.M. surveys and the early diamond drilling have been filed previously with the Department of Mines.

#### INSTRUMENTS USED AND SURVEY METHODS

A Sharpe MF-1 Fluxgate magnetometer was used for the magnetic survey.

For all except the extreme northwest claims lines were two hundred feet apart and stations were read at one hundred foot intervals.

All readings were tied into a base on the grid and drift corrections were made. A total of 843 stations were established on claims P. 83383-89 inclusive, P. 85159-60, P. 85168-73 inclusive, P. 86084. The other claims shown on the map were previously surveyed and reported on (Sept 22, 1965, Report by W.K. Nyman).

A World-Wide Worden gravimeter (# 16) with a sensitivity of .09833 milligals per scale division was used for the gravity survey. Stations were read at 100 foot intervals along lines four hundred feet apart. A total of 1077 stations were established and tied into a base station. Drift, elevation and latitude corrections were made and the final total gravity values were plotted and contoured.

Regional and residual maps were also drawn but are not included with this report.

## GEOLOGY

There are no outcrops within the map area however the entire area is believed to be underlain by rocks of Precambrian age. The few drill holes that have been put down within the area have indicated that the geology is very complex.

Much of the area is underlain by rhyolitic and andesitic rocks with carbonaceous interbeds. The volcanic rocks have been intruded by relatively narrow lenticular peridotite bands which appear to be roughly conformable to the attitude of the volcanic rocks. All rocks in the area are cut by a series of north to northwest striking diabase dikes.

## SURVEY RESULTS

Three major faults are indicated on both surveys. The fault zones are indicated as pronounced gravity lows. Strong northeasterly bearing magnetic anomalies are abruptly terminated against two of the faults in the west and west central portions of the map area.

The strong northeasterly bearing magnetic anomalies are also strong gravity lows. The magnetic and gravimetric anomalies are interpreted as being highly carbonitized and serpentinized peridotites.

A strong gravity anomaly on claim P. 55196 and another on P. 83385 are interpreted as being caused by a slight increase in rock density because of the presence of diabase dikes and an abrupt decrease in overburden thickness. Depth determinations over these anomalies indicate that the overburden depth is probably less than fifty feet while much of the map area is covered

by one hundred and fifty feet of overburden.

CONCLUSIONS AND RECOMMENDATIONS

All of the electromagnetic conductors outlined to date are associated with gravity lows and all the gravity highs indicated are adequately explained by local changes in overburden depth and/or the presence of diabase dikes.

No further work is recommended on this ground at this time.

Respectfully submitted

MESPI MINES LIMITED



J.E. Steers  
Exploration Manager

JKS/jf

*Reid Township  
Bradshaw Option*

MAHAFFY TWP

P	P
58552	58553
P	P
58554	58585
P	P
58555	58587
P	P
58556	58589
P	P
58558	58590
P	P
58572	58578
P	P
58577	58576
P	P
58575	58571
P	P
58573	58572
P	P
58571	58570
P	P
58569	58568
P	P
58567	58566

P	P	P	P
63613	63600	63599	63560
P	P	P	P
63598	63597	63596	63595
P	P	P	P
63594	63594	63581	63581
P	P	P	P
63593	63592	63591	63590
P	P	P	P
63589	63589	63582	63582
P	P	P	P
63588	63587	63586	63585
P	P	P	P
63584	63584	63583	63583
P	P	P	P
63582	63582	63582	63582
P	P	P	P
63581	63581	63581	63581
P	P	P	P
63580	63580	63580	63580
P	P	P	P
63579	63579	63579	63579
P	P	P	P
63578	63578	63578	63578
P	P	P	P
63577	63577	63577	63577
P	P	P	P
63576	63576	63576	63576
P	P	P	P
63575	63575	63575	63575
P	P	P	P
63574	63574	63574	63574
P	P	P	P
63573	63573	63573	63573
P	P	P	P
63572	63572	63572	63572
P	P	P	P
63571	63571	63571	63571
P	P	P	P
63570	63570	63570	63570
P	P	P	P
63569	63569	63569	63569
P	P	P	P
63568	63568	63568	63568
P	P	P	P
63567	63567	63567	63567

BRADSHAW OPTION

WEST GROUP

STREET 2

SHEET 1

P	P
86787	86788
P	P
86786	86782
P	P
86785	86781
P	P
86784	86780
P	P
86783	86779
P	P
86778	86777
P	P
86776	86776
P	P
86775	86775

EAST GROUP

REID TWP

*43 days/c*

63  
CL  
CONVES  
COMP  
REID on  
PORCUP  
So

Mahaffy Twp.

THE TOWNSHIP OF  
OF

**REID**

DISTRICT OF  
COCHRANE

PORCUPINE  
MINING DIVISION

SCALE 1-INCH=40 CHAINS

LEGEND

- PATENTED LAND (P)
- GRANT AND SALE C.S.
- LEASES (L)
- LOCATED LAND Loc.
- LICENSES OF OCCUPATION L.O.
- ROADS (R)
- IMPROVED ROADS (IR)
- KING'S HIGHWAY (KH)
- RAILWAYS (R.W.)
- POWER LINES (P.L.)
- MARSH OR MUSKEG (M)
- MINES (M)
- MINING RIGHTS ONLY M.R.O.
- SURFACE RIGHTS ONLY S.R.O.
- CANCELLED (C)

NOTES

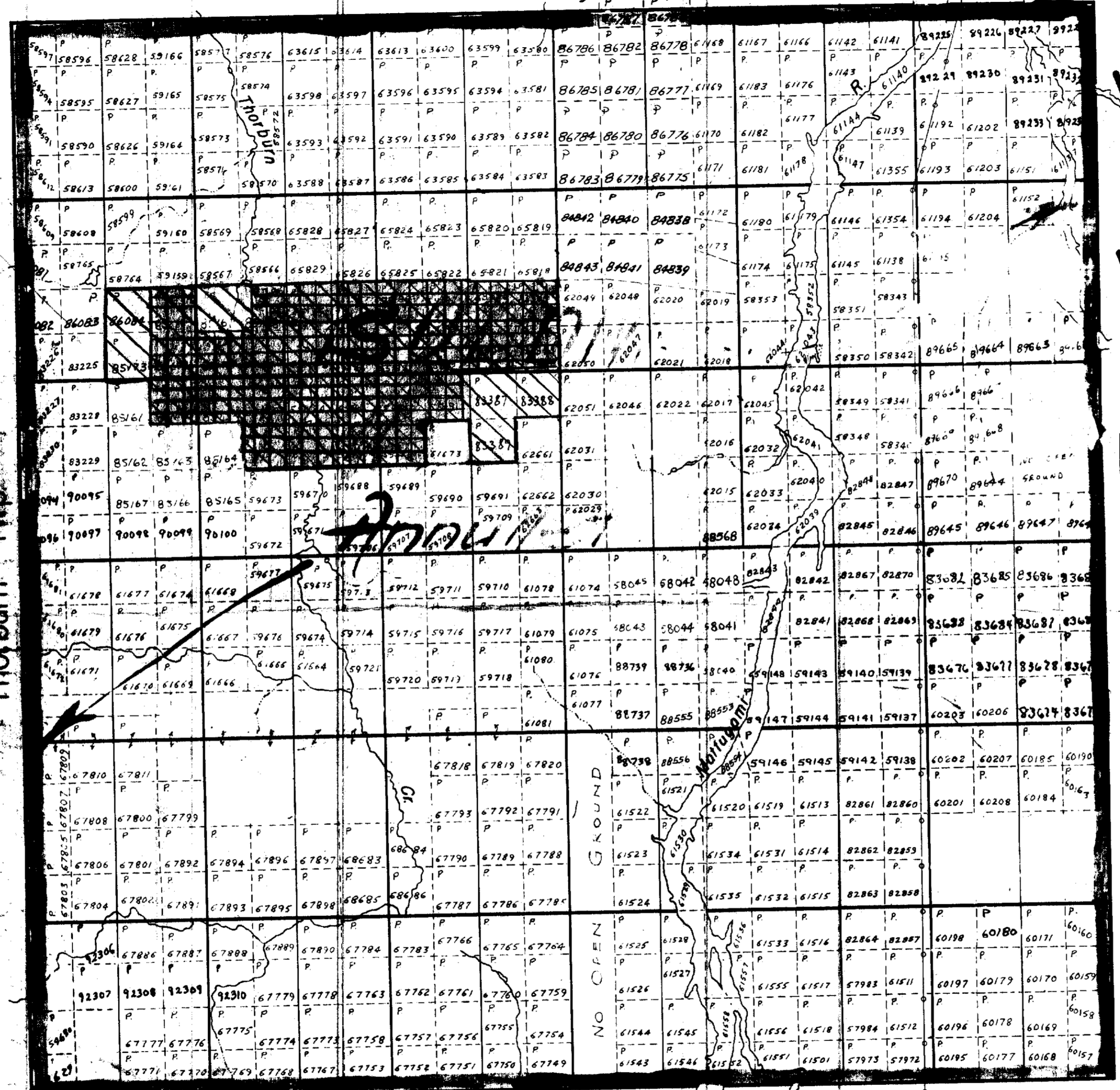
- L.O. 1344 to H.E.P.C. of Ont. covers flooding along shores of Mattagami River.
- To be staked as in unsurveyed territory Subsection (I) of Section 52a
- 400' Surface Rights Reservation around all Lakes and Rivers.

ONT. DEPT. OF MINES  
MINING LANDS BR.  
THIS MAP FOR CHECKING  
PURPOSES ONLY - MUST  
NOT BE SOLD.

63.2096

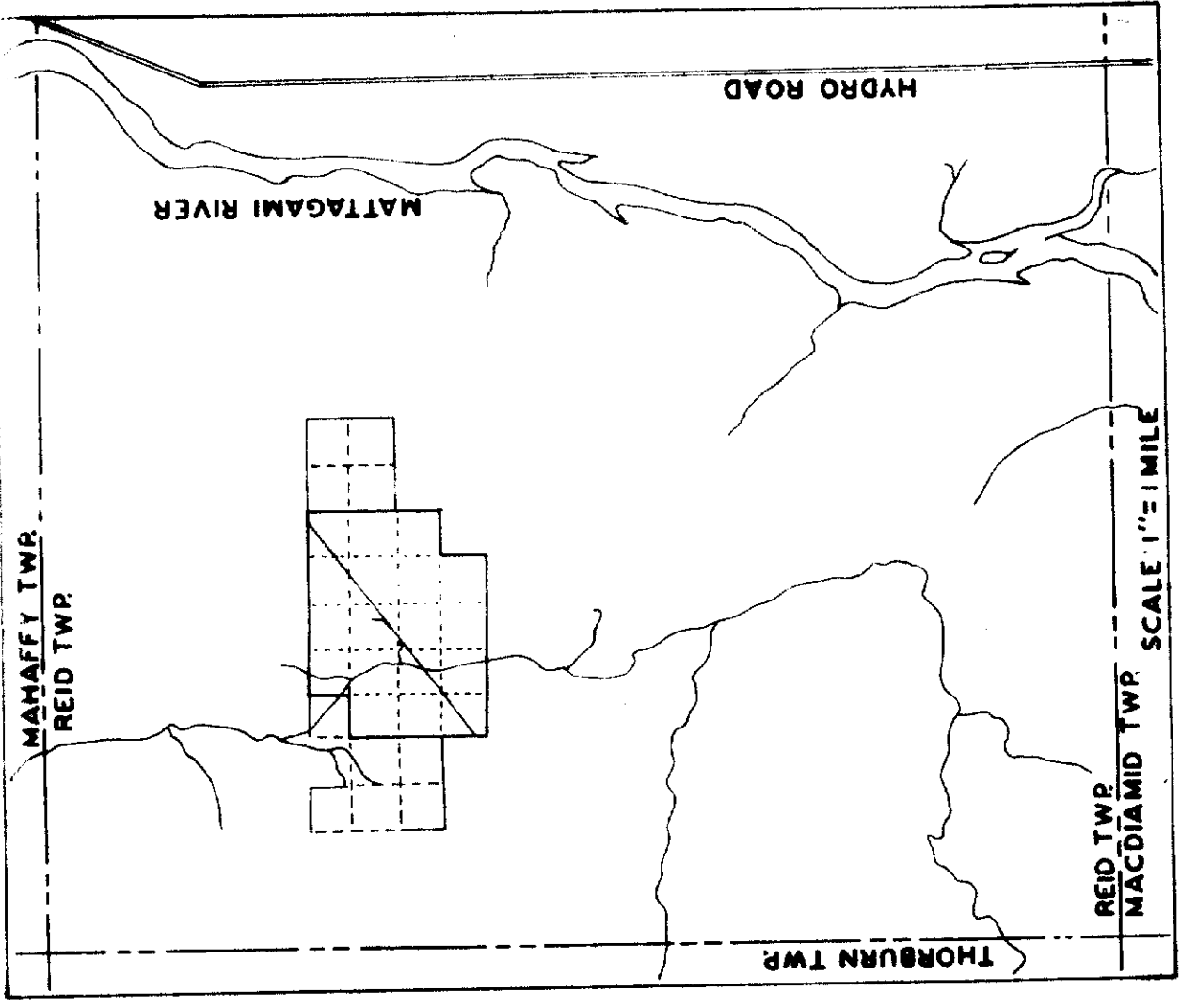
PLAN NO. - M-575

DEPARTMENT OF MINES  
-ONTARIO-



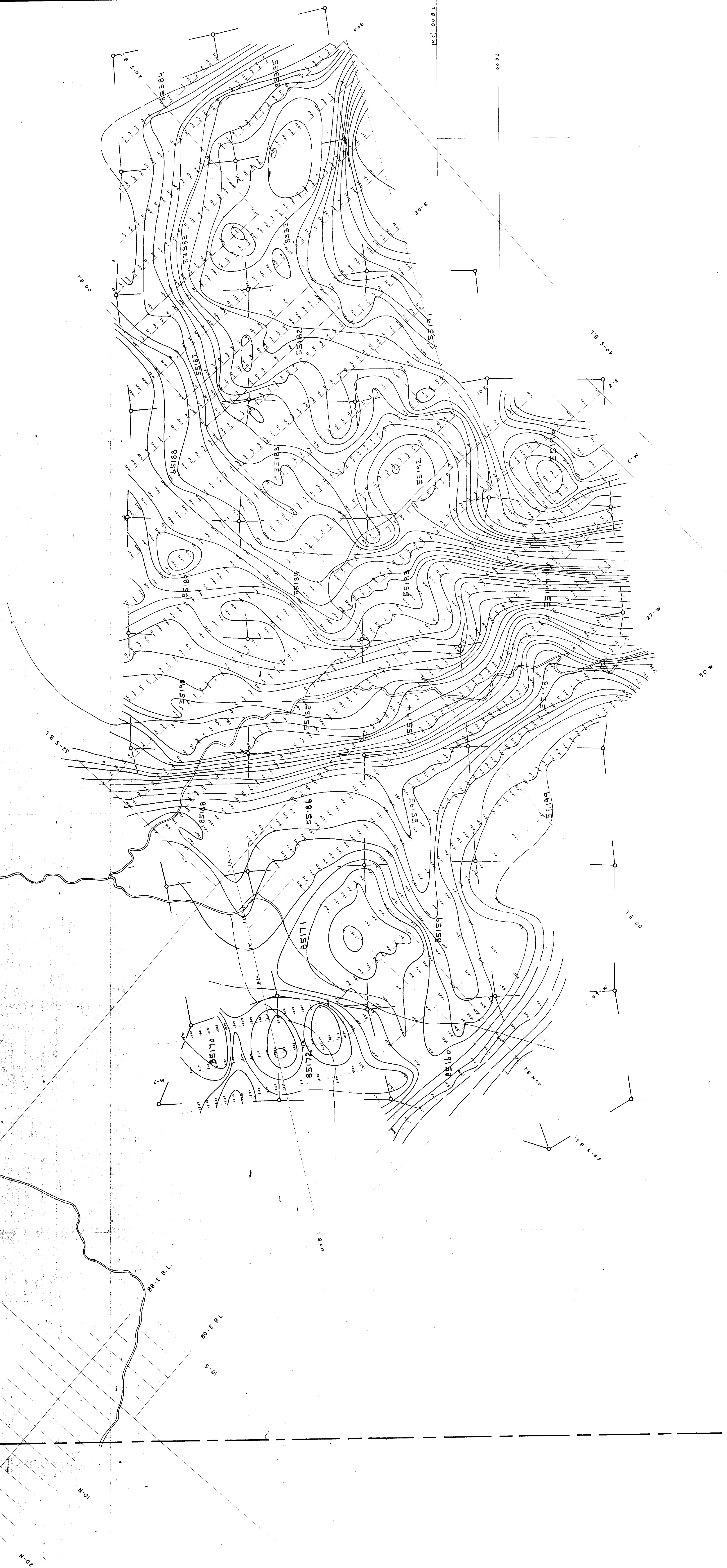
42A1330691 63.2096 REID

200  
GEM.



MESPI MINES LTD.  
 REID TWP.  
 TOTAL GRAVITY MAP  
 REID #1 GRID

SCALE: 1" = 700'  
 CONTOUR INTERVAL: 51 METERS  
*J. Brown*  
 68-3096



200  
100 GAMMAS  
FROM 1000 TO 3000 GAMMAS  
CONTOURS

MAP SCALE: 1"=400'  
INSTRUMENT FLUXGATE MF-1  
REID GRID  
MAGNETOMETER SURVEY  
MESPI MINES LTD.

