



## INTRODUCTION

During the period from October 7, 1964 to February 27, 1965 a Crone method electromagnetic survey was conducted by Mespi Mines Limited of 1705 - 80 Richmond Street, West, Toronto on a large group of claims in Loveland township.

## LOCATION OF CLAIMS AND ACCESS

Seventy-eight claims located in south west Loveland and north west Robb townships, Porcupine Mining Division Ontario are numbered as follows:

P. 53690,91,92,93,94,95,96,97,98,99, P. 53700,01, P. 53717,18,19,20,  
P. 53721,22,23,24,25,26,27,28,29,30, P. P. 53928,29,30,31,32,33,34,  
P. 53935,36,37,38,39, P. 54543,44,45, P. 54548,49,50, P. 54826,27,  
P. 54828,29,30,31,32, P. 55510,11,12,13,14,15,16,17,18, P. 55801,  
P. 55802,03,04, P. 57784,85,86,87,88,89,90,91,92,93,94,95,96,97,98.

The property lies 25 miles north west of Timmins, Ontario and 5 miles north west of the Kam Kotia Mine.

A semi permanent camp was established along the Kamiscotia River at its junction with Loveland creek to work this group. Access to the claim group was by means of helicopter from Timmins or by swamp buggy and boat in summer and skidoo in winter.

## PREVIOUS WORK

The complete area has been covered by three combined

magnetic-electromagnetic airborne surveys.

Hunting Survey Corporation flew the ground twice in 1957 with  $\frac{1}{4}$  mile spaced N-S flight lines for B.W. Lang of Toronto and in 1964 with  $\frac{1}{8}$  mile spaced flight lines in a NE - SW direction for Mespi Mines Limited.

Canadian Aero flew the area in 1961 for Con West Exploration with E - W,  $\frac{1}{8}$  mile spaced flight lines.

All surveys indicated conductors with fair to poor conductivity and moderate amplitude.

#### INSTRUMENT USED AND METHOD OF SURVEY

A Crone dual frequency (1800 cps - 480 cps) transceiver unit was used for the complete survey. The survey was carried out using an in-line method, a coil separation of 300' and readings were taken at 100' intervals, closing to 50' in anomalous areas. The dip angles shown on the plan are the resultant angles and are plotted at the mid point between the two coils.

There were 73 miles of line cut and 3557 stations read with the Crone E.M.

#### SURVEY RESULTS

The survey shows a conductive zone extending from approximately 32N to 68N striking N 20 degrees E with a length of 36000'. Within this zone the 800' section from 42N to 50N shows up as a good conductor, the remainder on either end shows only fair to

poor conductivity.

The width varies considerably, a 2400' zone from 42 N to 56 N indicates widths up to 100'. This tapers at either end to more normal widths.

There is some indication of multiple conductors but generally the profiles are relatively symmetrical indicating a single conductor, possibly zoned across width.

The depth of overburden from the profiles would appear to be from 40' to 50' and quite uniform.

The dip of the conductor is steeply to the east (75 deg.).

#### RECOMMENDATIONS

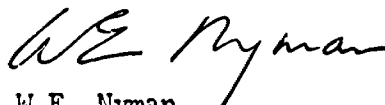
A minimum of three drill holes are recommended to test the conductor. These are located as follows:

R.L. # 1	L. 44N	47 00 W	- 45 deg. W.
R.L. # 2	L. 50N	46 00 W	- 45 deg. W.
R.L. # 3	1. 56N	44 00 W	- 45 deg. W.

Further drilling if necessary would be planned from the results obtained from these.

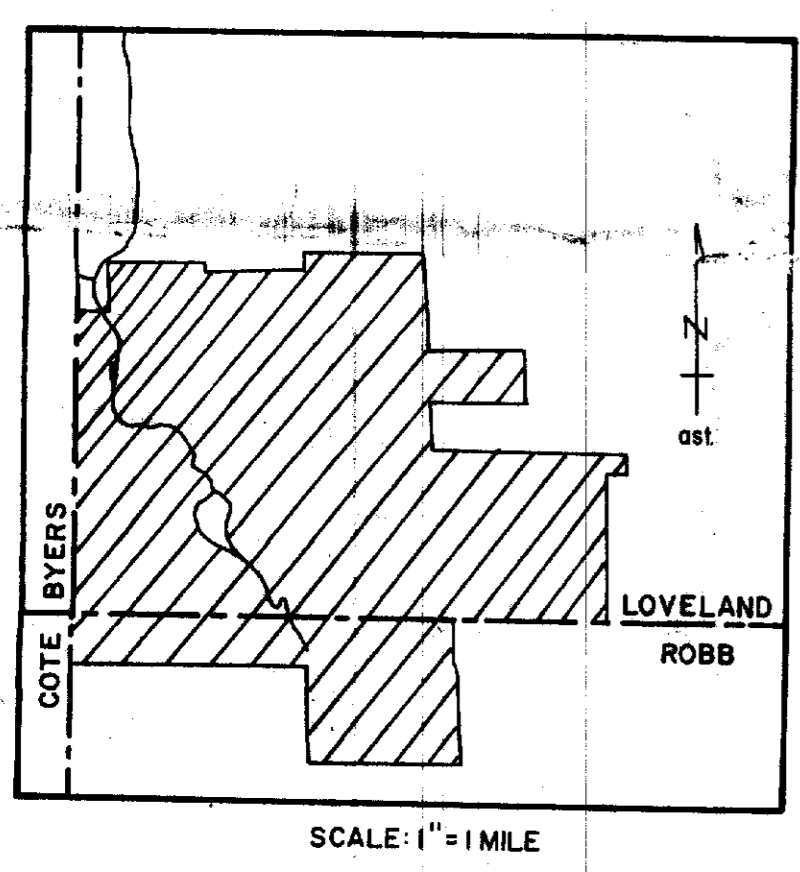
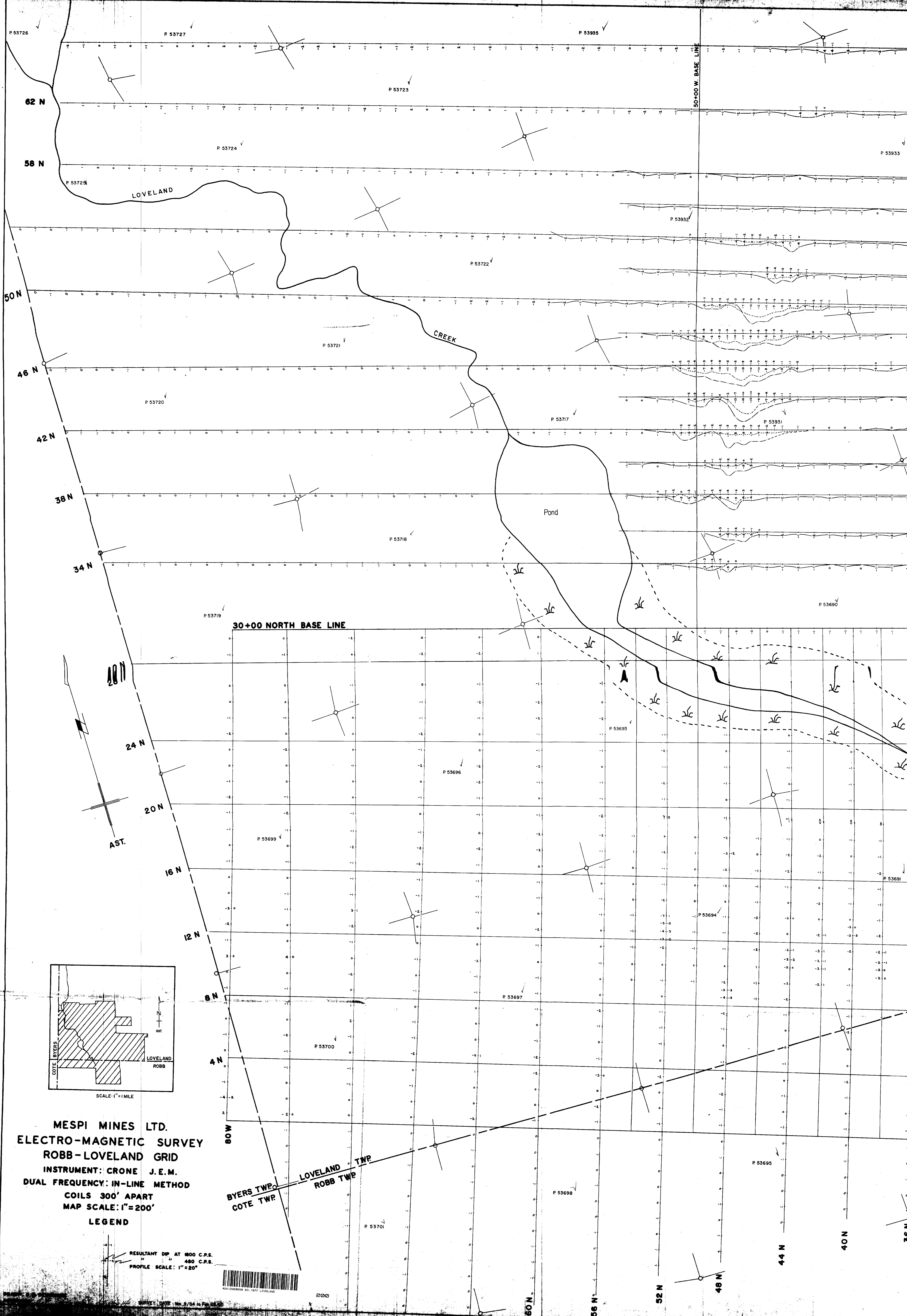
Respectfully submitted

MESPI MINES LIMITED



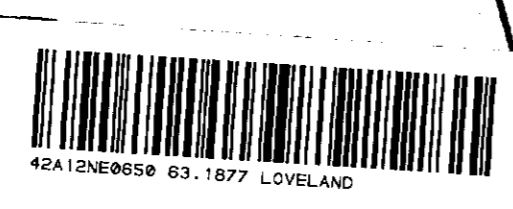
W.E. Nyman  
Exploration Manager

WEN/jf



**MESPI MINES LTD.**  
**ELECTRO-MAGNETIC SURVEY**  
**ROBB-LOVELAND GRID**  
 INSTRUMENT: CRONE J.E.M.  
 DUAL FREQUENCY: IN-LINE METHOD  
 COILS 300' APART  
 MAP SCALE: 1"=200'  
**LEGEND**

RESULTANT DIP AT 1000 C.P.S.  
 480 C.P.S.  
 PROFILE SCALE: 1"=20'



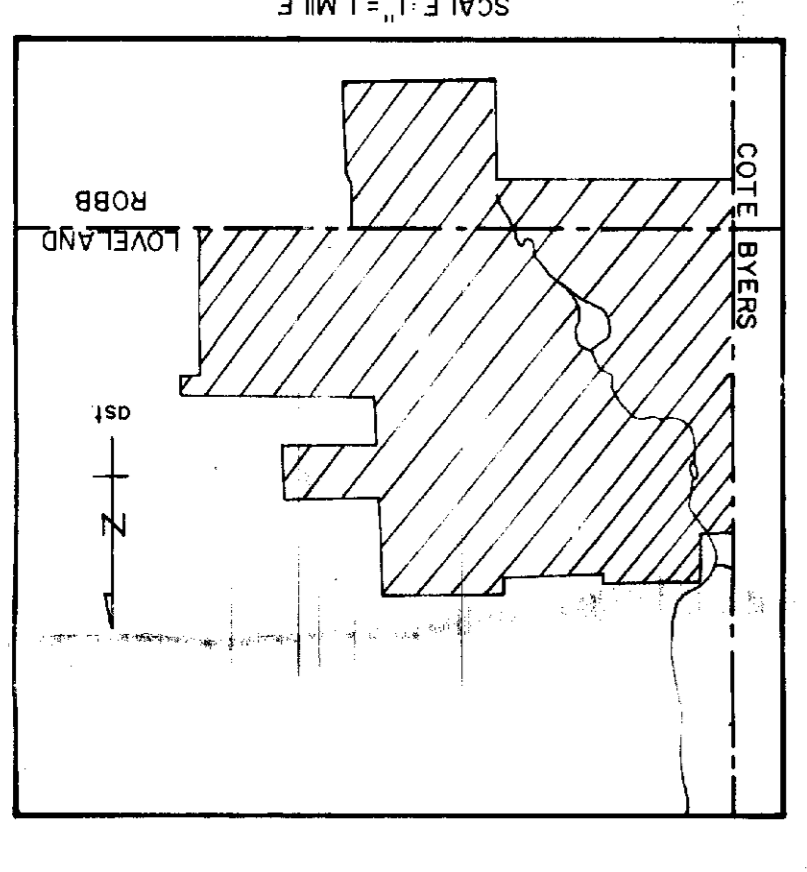
03.1877

SURVEY DATE: MAY 2014 TO FEB 2015  
DRAWN: R.C. BENGUMEE  
APPROVED: [Signature]

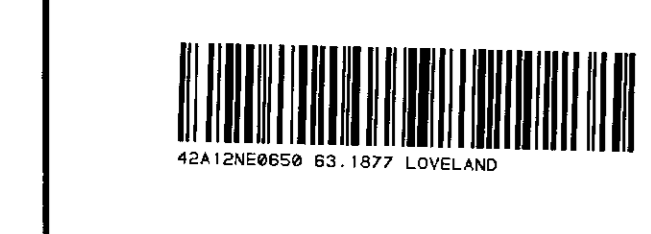
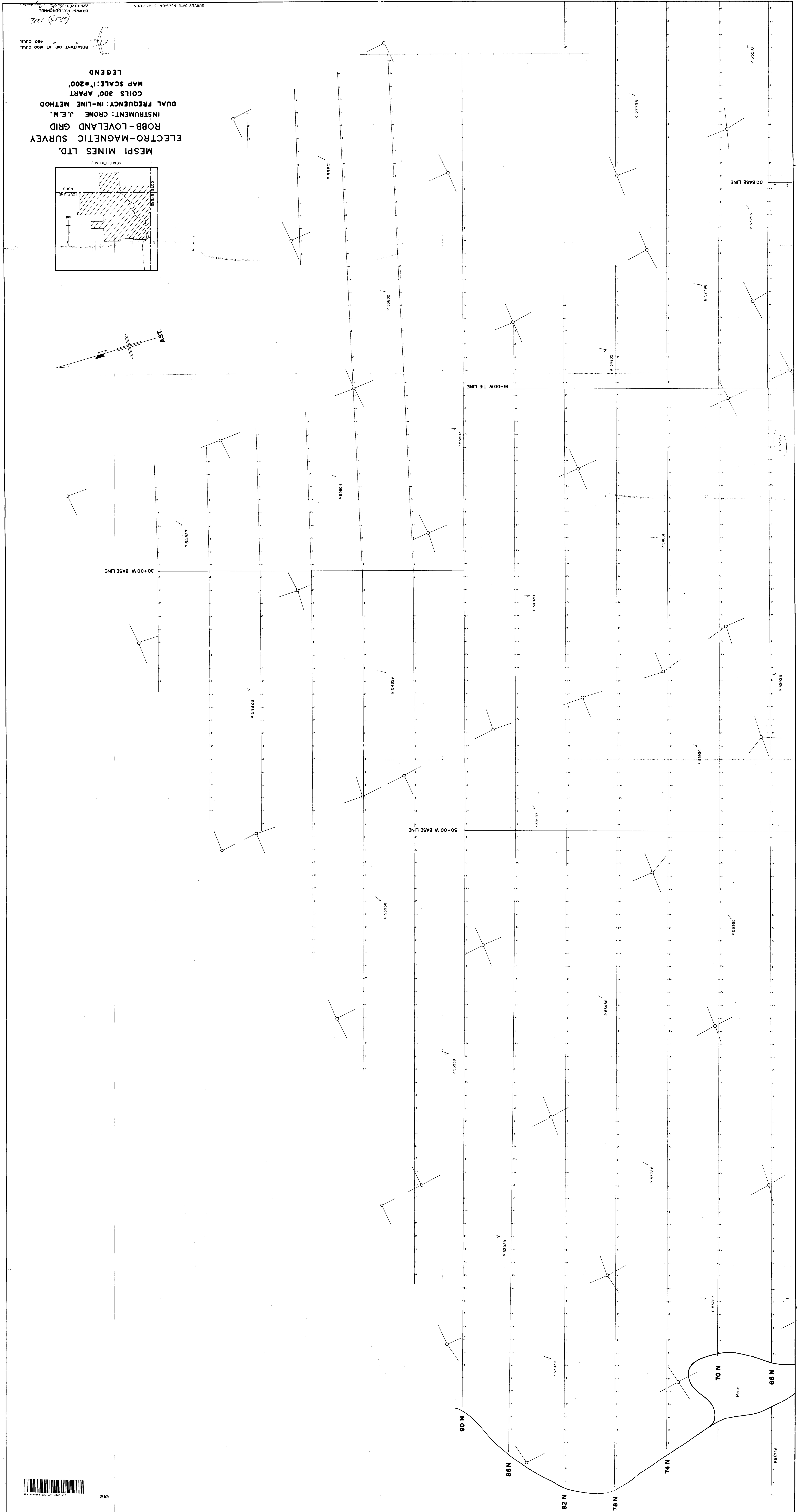
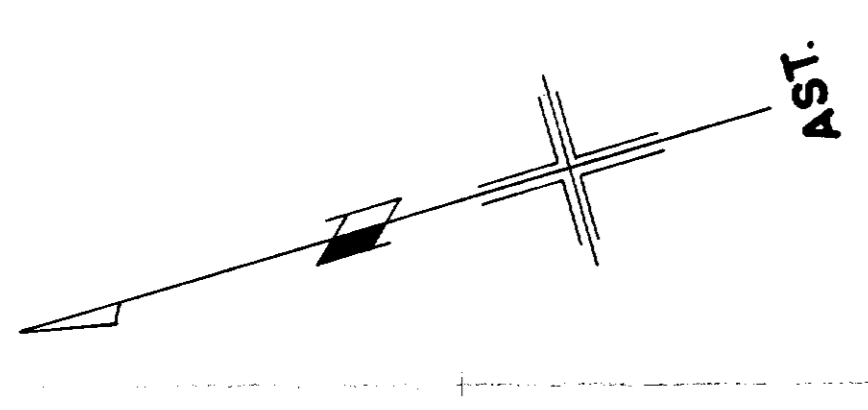
RESULTANT DIP AT 1800 C.R.S. 480 C.R.S.  
MAGNETIC DECLINATION 12.2

LEGEND

MESPI MINES LTD.  
ELECTRO-MAGNETIC SURVEY  
ROBB-LOVELAND GRID  
INSTRUMENT: CRONE J.E.M.  
DUAL FREQUENCY IN-LINE METHOD  
COILS 300' APART  
MAP SCALE: 1"=200'



SCALE: 1"=1 MILE



00 BASE LINE

14 E TIE LINE

555

P 57795

P 55510

P 55513

P 55514

P 57792

P 57791

P 55517

P 55516

P 57787

P 57788

P 57789

P 57786

P 57785

P 57784

P 54545

P 54544

P 54543

0+00

P 54548

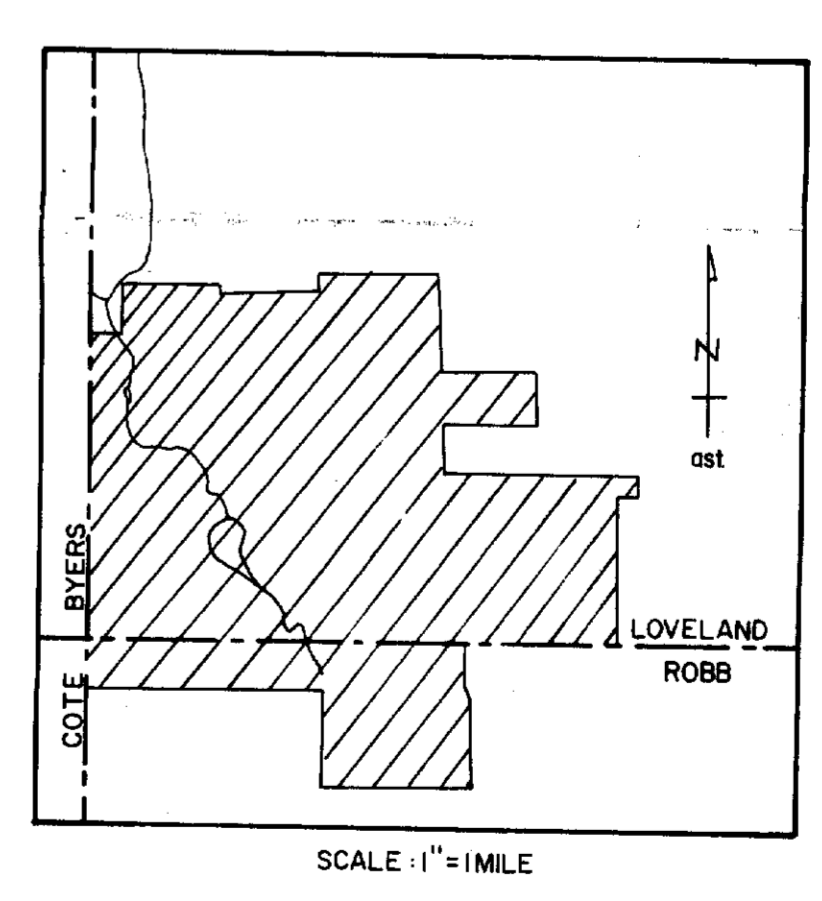
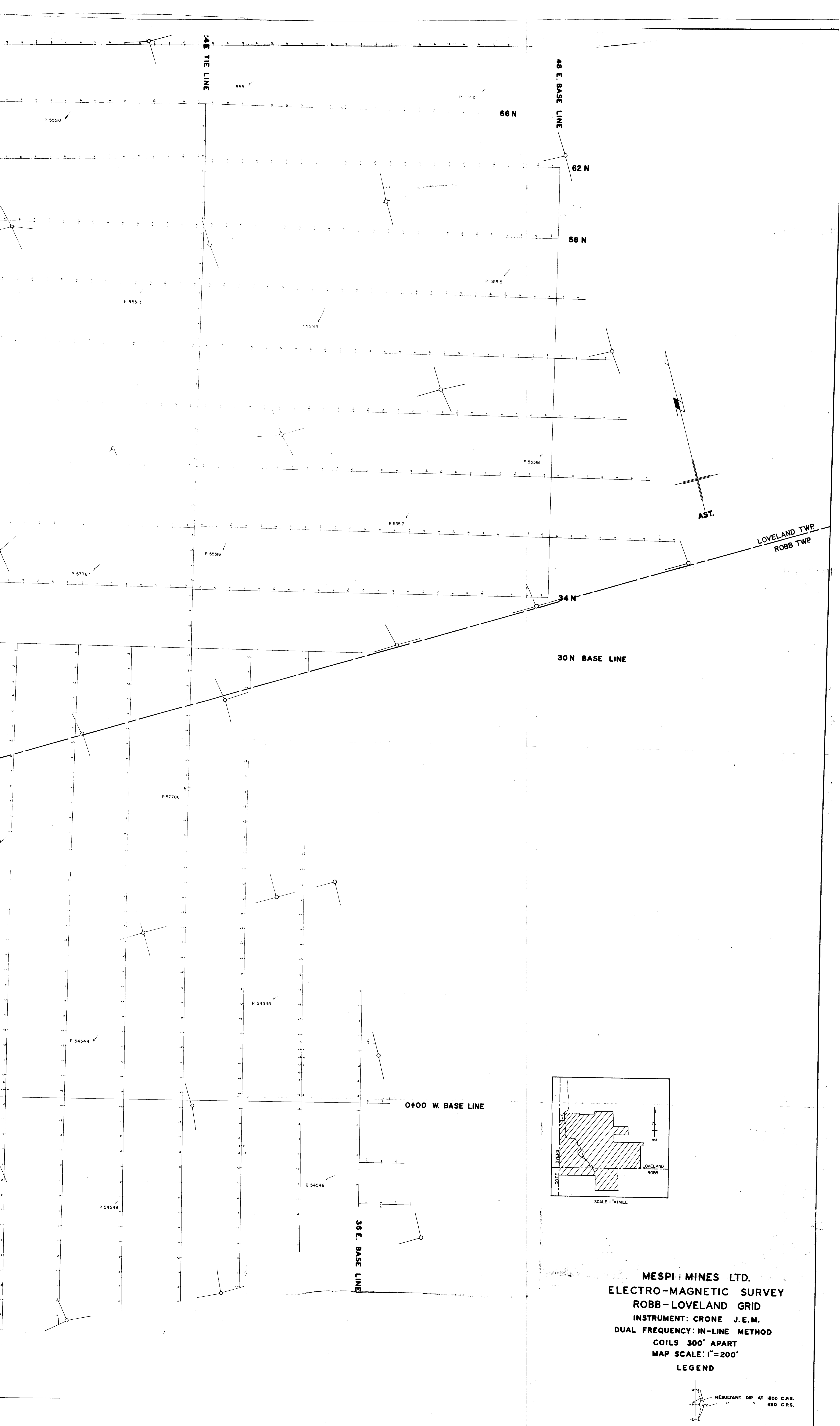
P 54549

P 54550

36 E. BASE LINE







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 ROBB-LOVELAND GRID  
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 COILS 300' APART  
 MAP SCALE: 1"=200'

LEGEND

