



42A11SW0102 63.2413 JAMIESON

Report for Mespi M
Covering a Magnetometer Survey
Jamieson Township, Porcupine Mining District

LOCATION & ACCESS:

The claim group covered in this report consists of 21 continuous claims as follows: P-95675 to P-95678 inclusive, P-96665 to P-96667 inclusive, P-96665, P-96668 and P-97470 to P-97471 inclusive. They are situated immediately east of the Mattagami River in the northeast portion of Jamieson Township. Access is via the Mattagami River on the Power Line road (winter road) which cuts across the claim group.

GEOLOGY:

The area has a moderate to heavy (50' to 200') glacial lay over. Drilling in the vicinity of the claims indicates that they are underlain by east-west striking rhyolites and andesites. The Mattagami River is suspected of occupying a major fault zone. Numerous north-south striking diabase dikes are known to occur in the area.

INSTRUMENTS USED IN THE SURVEY:

A Sharpe Instruments Limited MF-1 Fluxgate magnetometer was used throughout the survey. This instrument reads directly in gammas, and if operated with care is capable of an accuracy of ± 5 gammas. The reading component of the earth's magnetic field is measured. All normal drift corrections were applied to the readings.

LOCATING AND SPACING:

Lines were set on a 400' grid by B. Todd, Contractor, P.O. Box 207, Timmins, Ontario. A total of 12.5 miles were completed during the period July 15th to 30th, 1968. The Sharpe Fluxgate

instrument was operated by Mr. A. F. Bessette of Mespi Mines Limited during the period August 7th to 10th, 1968. Total number of stations read was 202.

INTERPRETATION:

These strong north-south anomalies are most likely diabase dikes. A noticeable offset in the dikes occurs between lines 13+00E at 13+00N and line 12+00W at 7+00N. A fault striking in a direction approximately perpendicular to the power line is thus suspected. Throw on this suspected fault would be in the order of 100'. This structural information would perhaps assist in the interpretation of other surveys. Depth of overburden calculations indicate the thickness of the clay covering the diabase dikes to be in the order of 200'.

Respectfully submitted,

Toronto, Ontario,

December 20th, 1968.

Consulting Geophysicist.



Report for Mespi Mines Limited
Covering an Electromagnetic Survey
Jamieson Township, Porcupine Mining District

LOCATION & ACCESS OF CLAIMS:

The claim group covered in this report consists of a contiguous group of 18 claims as follows: P-95675 to P-95678 inclusive, P-95689 to P-95692 inclusive and P-96664 to P-96669 inclusive. They are located between the Mattagami River and the power line road in the north-east portion of Jamieson Township. Access from Timmins is via the Mattagami River or along the power line road (winter road).

GEOLOGY:

The area has a moderate to heavy (100' to 200') of glacial clay cover. Regional geology would indicate bedrocks of greenstone.

INSTRUMENT USED IN SURVEY:

A Crone Dual-Frequency E.M. machine was used. This equipment is described in the enclosed brochure. Serial number of the unit was 51-67, 1,800 - 480 cps. type. The standard Crone In-Line method was used with a separation between the operators of 300'. Stations are recorded at the mid point between the two men. Accuracy of reading is $\pm 2\%$.

LINECUTTING AND OPERATORS:

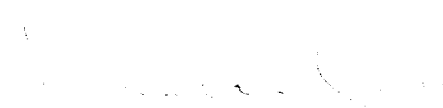
A 400' line interval grid was cut by Charles McAllister, P.O. Box 561, Schumacher, Ontario, Contractor. In all 13.6 miles of line were cut between February 2nd to 21st, 1968. The E.M. work was under the direction, in the field, of Mr. H. Z. Tittley of 224 Ross Avenue East, Timmins, Ontario. A total of 583 stations were read during the period April 1st to 16th, 1968.

INTERPRETATION:

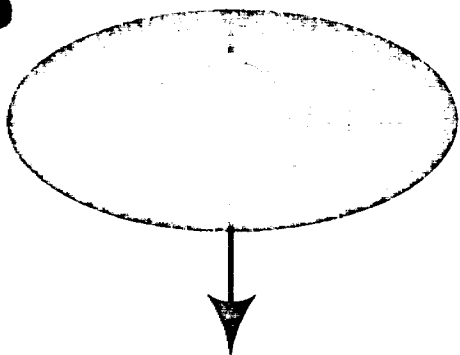
The depth of the clay overburden increases as the Mattagami River is approached. This causes a background of negative readings at the high frequency, increasing from -2° on line 4+00W to -10° on line 24+00W. This would indicate a depth of clay in the order of 150' on line 24+00W. The reading frequency was switched to 60 cps. at line 28+00W in order to penetrate the heavy clay and eliminate the background effect. All readings between 12+00W and the river were thus taken at the low frequency. Three weak anomalous conditions were detected on lines 20W, 24W and 36W as marked on the map. The anomalies are weak as can be expected with this depth of overburden and must be detailed with a vertical loop (no-power) machine for further evaluation.

Respectfully submitted,

Toronto, Ontario,
December 20th, 1968.


Consulting Geophysicist.

CRONE GEOPHYSICS LIMITED

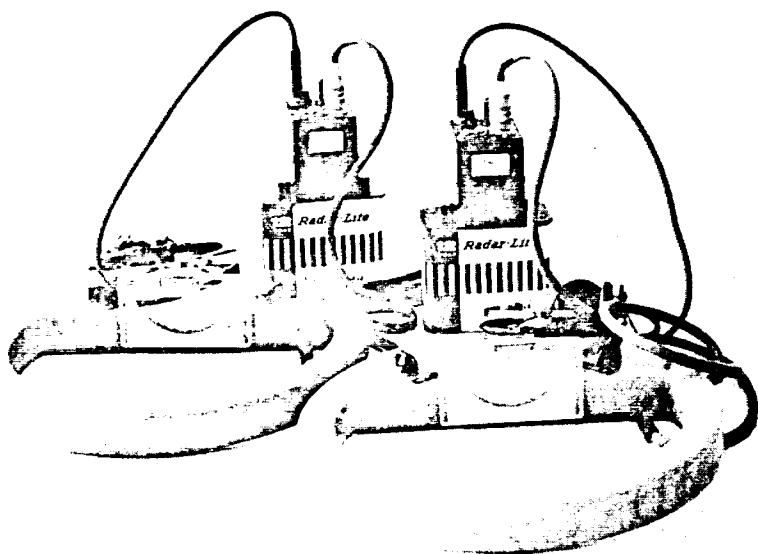


979 LAKESHORE ROAD E.
PORT CREDIT, ONTARIO
CANADA

Phone: 274-3704

A patented * EM method that permits accurate surveys without line cutting even in areas of very rugged terrain.

Since this method was developed 10 years ago by Duncan Crone it has become one of the most extensively used ground EM methods in Canada and the United States. In this period the JEM has been the basic ground EM equipment that in conjunction with other exploration methods has discovered over 110,000,000 tons of ore.

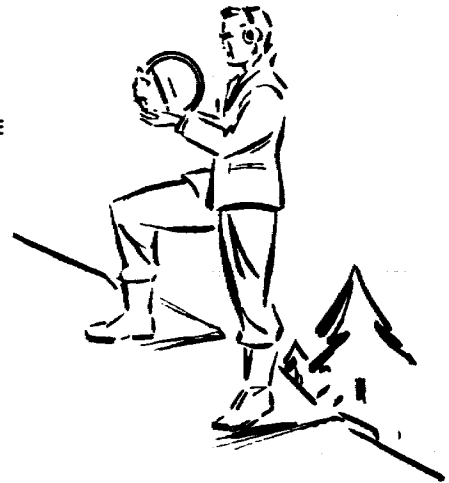
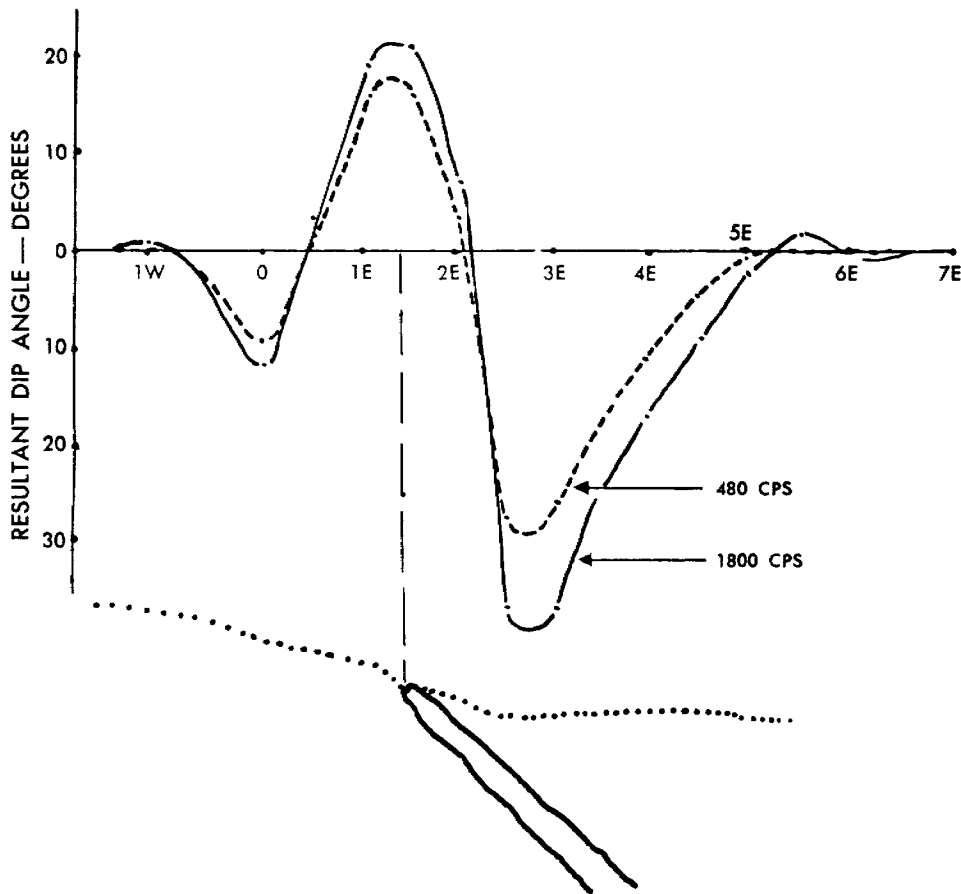


- accurate dip and conductivity analysis
- depth penetration in the order of 150'
- simple, reliable instrumentation and operation
- can be used with the Crone method or as a vertical loop unit

This is a two man operation each carrying a unit capable of transmitting and receiving. They are spaced 200' or 300' apart and travel along the same line. Both transmit and receive, the two dip angles thus obtained are then added together. If the resultant is "O" no conductors are present, otherwise a pattern is obtained dependant on the depth, dip and strike of the conductor.

* Canadian Patent # 631,506 and U.S. # 309,911

Example of a JEM traverse over a dipping conductor located in Denbigh, Ontario.



SPECIFICATIONS

- | | | |
|------------------------|-------------------------------------|---------------|
| 1) Standard Unit | — Massive Sulphide Exploration | 480/1800 CPS |
| 2) High Frequency Unit | — Disseminated Sulphide Exploration | 1800/3600 CPS |

READOUT — Dip angle from inclinometer $\pm \frac{1}{2}^\circ$

NULL INDICATOR — Audio through crystal earphones

WEIGHT — Per man each transceiver unit — 15 lb.
Shipping weight including 2 spare batteries — 55 lb.

RANGE — non-conductive overburden 1° wide null at 300'
non-conductive overburden 15° wide null at 500'

BATTERY POWER — Normal 12 volt — TW-2 Burgess; 732 Eveready, M-919 Mallory
Hi Power 18 volt — 3 of 6 volt F4BP Burgess and Adaptor
BATTERY LIFE — 2 weeks to 1 month
RECEIVER — 1.4 volt mercury RM1R — life 1 year

PRICE \$2,000.00 including method rights

RENTAL \$110.00 per month

Macdiarmid Twp.- M. 294

THE TOWNSHIP OF
OF

JAMIESON

DISTRICT OF
COCHRANE

PORCUPINE
MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

- PATENTED LAND Ⓟ
- CROWN LAND SALE C.S.
- LEASES Ⓛ
- LOCATED LAND Loc.
- LICENSE OF OCCUPATION L.O.
- MINING RIGHTS ONLY M.R.O.
- SURFACE RIGHTS ONLY S.R.O.
- ROADS — — — — —
- IMPROVED ROADS — — — — —
- KING'S HIGHWAYS — — — — —
- RAILWAYS — — — — —
- POWER LINES — — — — —
- MARSH OR MUSKEG — — — — —
- MINES Ⓜ
- CANCELLED Ⓧ

NOTES

400' Surface Rights Reservation around
all lakes and rivers.

Flooding rights to areas along Mattagami
River to H.E.P.C. - L.O. 7085.

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

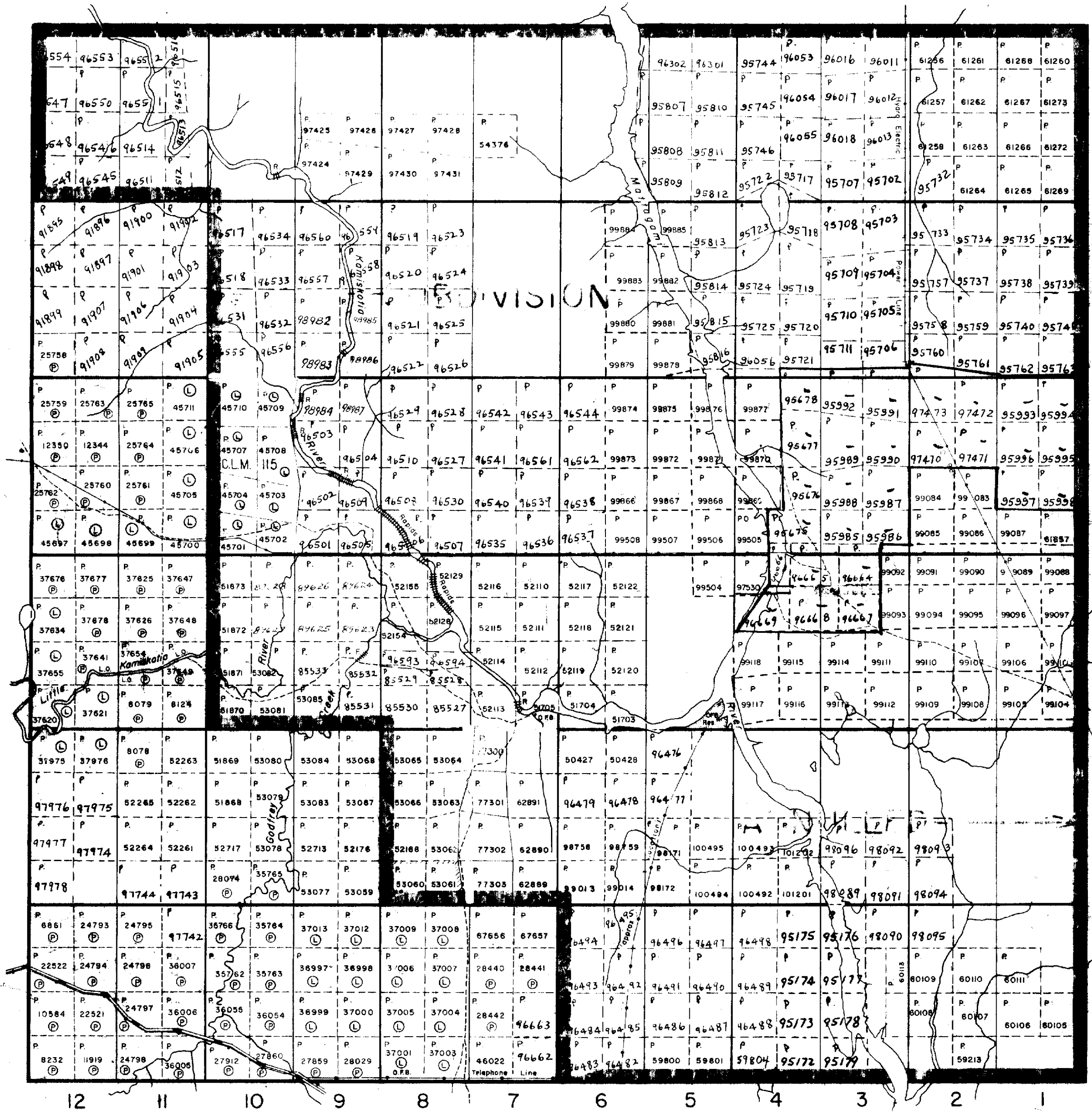
PLAN NO.- M.288

DEPARTMENT OF MINES

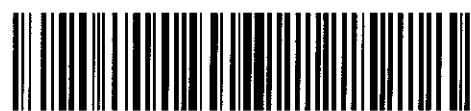
— ONTARIO —

Robb Twp.- M.309

Jessop Twp.- M.289



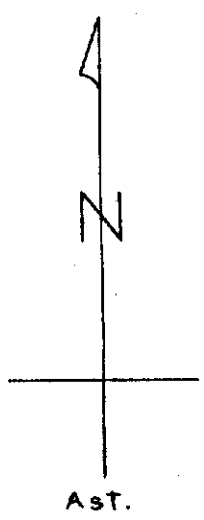
Godfrey Twp.- M. 284



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Marta Juma

River

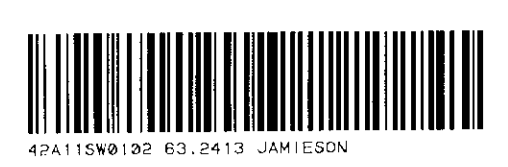


Mespi Mines Ltd.
 North East Jamieson M&P
 Magnetometer Survey
 Fluxgate MF-1
 Scale 1" = 400'
 Readings in Gamma

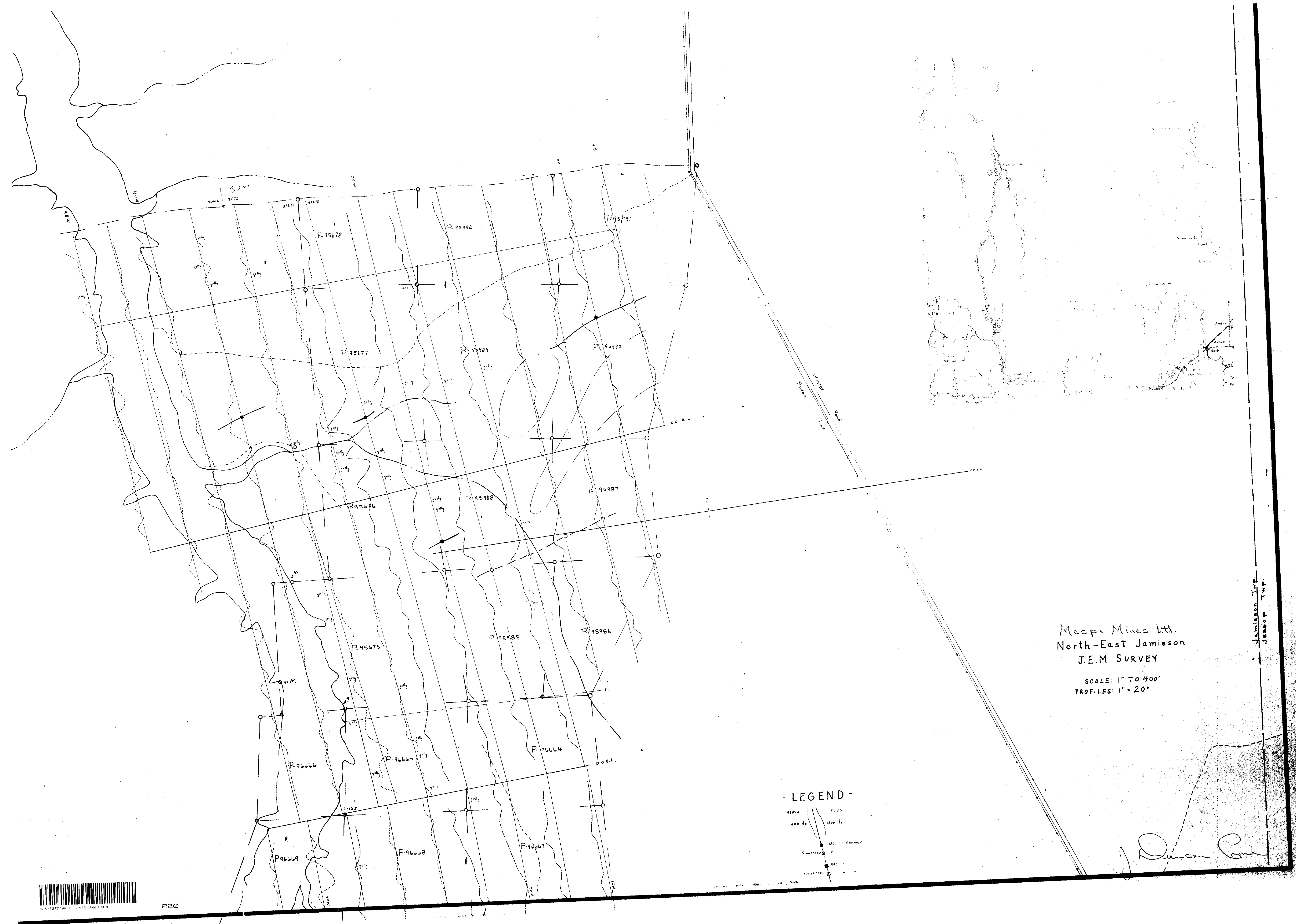
J. Duncan

Approved By:
 Drawn By: R.C. [unclear]

Survey Date August 7-10, 1968



Jamieson Twp.
 Jessop Twp.



Mespi Mines Ltd.
 North-East Jamieson
 J.E.M SURVEY

SCALE: 1" TO 400'
 PROFILES: 1" = 20'

- LEGEND -

- MINUS 400 Hz
- PLUS 1000 Hz
- 1800 Hz ANOMALY
- SUBSTRATE
- 150
- 100

Jamieson Twp
 JESSOP TWP

J. Duncan

