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Report For
MINING CLAIMS SSM 321878 321879 321880

covering

A VLF ELECTROMAGNETIC SURVEY

in

McMurray Township

Wawa Area, Ontario

Dated: March 20th, 1975

J. Duncan Crone, Geophysicist

Report for MINING CLAIMS SSM 321878 321879 321880

Covering Ground Electromagnetic Survey in

McMurray Township, Wawa, Ontario

Survey Period: Summer 1974 Winter 1975

Survey Method: VLF Electromagnetic (RADEM)

Maps: 1 Scale 1" = 200'

Field Work: W. Nyman of Discovere Mineral Surveys,
Wawa, Ontario

Report: J. Duncan Crone, Geophysicist.

Date: March 20th, 1975

LOCATION AND ACCESS

The claim group lies approximately $2\frac{1}{2}$ miles south east of the Town of Wawa and $\frac{3}{4}$ of a mile south of Pursides Gold Mines. Access is by vehicle and road to either of the north east corners of the group.

PREVIOUS WORK AND INFORMATION

Maps and Reports O.D.M.

Airborn Magnetic Sheet 2191G Michipicoten Bay

Geological Compilation 2220 Manitouwadge - Wawa Sheet

Map No. 36A Michipicoten Area

Michipicoten Gold Area, District of Algoma

T.L. Gladhill 1927, Vol XXXVI Pt. 4

Goudreau and Michipicoten Gold Areas

E. S. Moore 1931, Vol. XL Pt.4

In 1963 Lake Os~~W~~ Mines Limited carried out magnetic and electromagnetic surveys in an attempt to locate possible drill targets for gold mineralization. The geophysical surveys failed to locate any anomalies, however a two stage drill program based on geology was initiated. Eleven holes with a total footage of approximately 3200 feet were drilled at this time.

INSTRUMENT USED

For the survey a Crone RADEM VLF-EM unit was used measuring the dip angle in degrees of the resultant VLF field as well as the field strength (as a percent of normal field strength) of the horizontal component of the VLF field. The VLF station used was Cutler, Maine broadcasting at 17.8 KHz. Measuring accuracies are plus or minus 1 degree and plus or minus 3%.

LINECUTTING AND SURVEY METHODS

Linecutting and surveying were carried out under the supervision of W. Nyman of 19 Magpie Road, Wawa, Ontario during May 1974 and February 1975.

A baseline was cut in an E-W direction then picket lines were cut at 200' intervals in a N-S grid pattern using 100' stations.

334' stations were read at 100' intervals.

INTERPRETATION

Eight anomalies were detected lettered A to H on the plan map.

Anomalies A, C, D, F, and G are coincident with and are likely caused by conductive lake bottom sediments and marsh filled extensions of the lakes. Anomaly A lies over a tailings filled pond and the conductive tailings account for the stronger response here.

The north west trending portion of anomaly B lies on the mapped extension of a gold bearing mineralized shear zone. The north east trending portion of the same anomaly is underlain by a swamp filled depression probably representing a recent area fault.

Anomalies E and H are coincident with swamp filled portions of another North east trending linear also probably representing a recent area fault.

CONCLUSION AND RECOMMENDATIONS

Of the eight anomalies only one appears to be of interest as it coincides with the projected extension of a mapped, gold bearing, shear zone to the north.

A program of stripping and trenching along the zone preferably on L 6 E at 4N should disclose whether this is caused by a mineralized shear. If this is not feasible due to overburden or swamp conditions then a limited induced polarization survey

would give the same answers.

Any drill program would be dependent upon the outcome of the above recommendations.

Respectfully Submitted,

J. Duncan Crone

J. Duncan Crone B.A., P.Eng.
Geophysicist

*Maps were signed by WE Ryan
in J. D. Crone's absence.*

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS If more than one survey, specify data for each type of survey

Number of Stations 334 Number of Readings 334
Station interval 100 FT. Line spacing 200 FT.
Profile scale 1" = 24"
Contour interval 10 ft

MAGNETIC

Instrument
Accuracy - Scale constant
Diurnal correction method
Base Station check-in interval (hours)
Base Station location and value

ELECTROMAGNETIC

Instrument CRONE RADECI VLF
Coil configuration
Coil separation
Accuracy +/- 1 degree
Method: [] Fixed transmitter [] Shoot back [] In line [] Parallel line
Frequency 17.8 KH2 CUTLER MAINE (specify V.L.F. station)
Parameters measured DIP ANGLE AND FIELD STRENGTH

GRAVITY

Instrument
Scale constant
Corrections made
Base station value and location
Elevation accuracy

INDUCED POLARIZATION RESISTIVITY

Instrument
Method [] Time Domain [] Frequency Domain
Parameters - On time Frequency
- Off time Range
- Delay time
- Integration time
Power
Electrode array
Electrode spacing

CHABANEL TP.
(M.1548)

Township of
McMURRAY

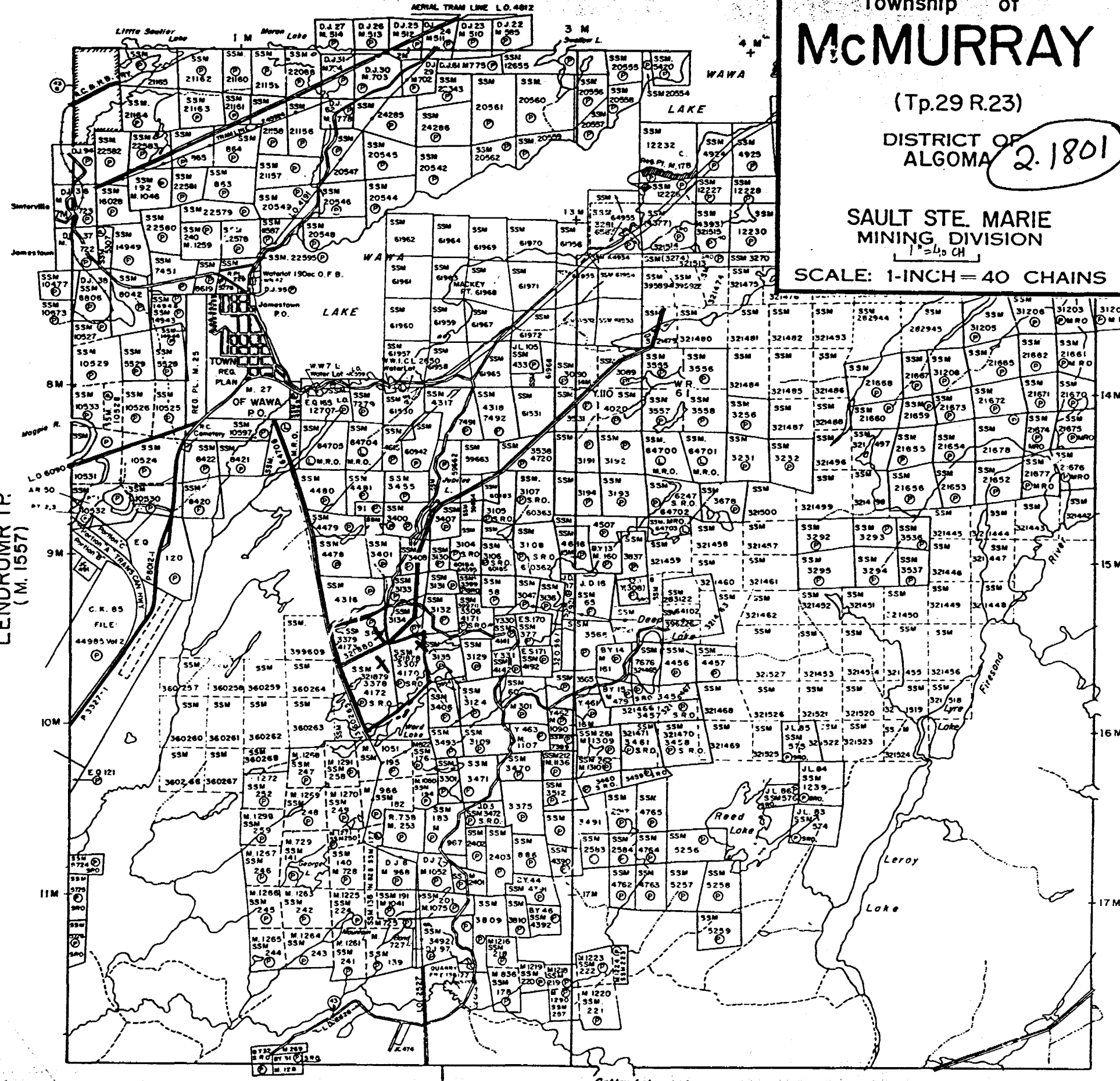
(Tp.29 R.23)

DISTRICT OF
ALGOMA **2.1801**

SAULT STE. MARIE
MINING DIVISION

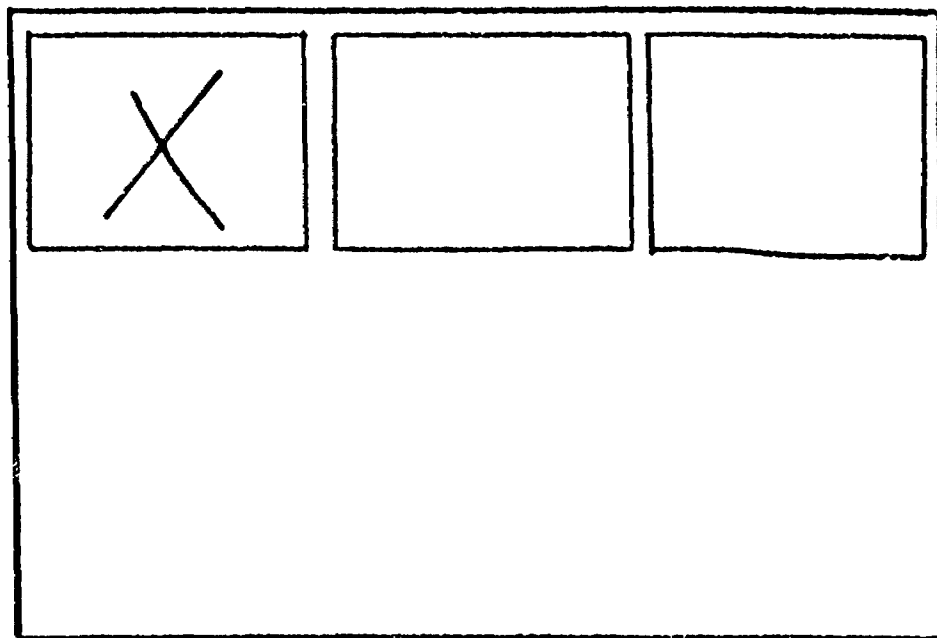
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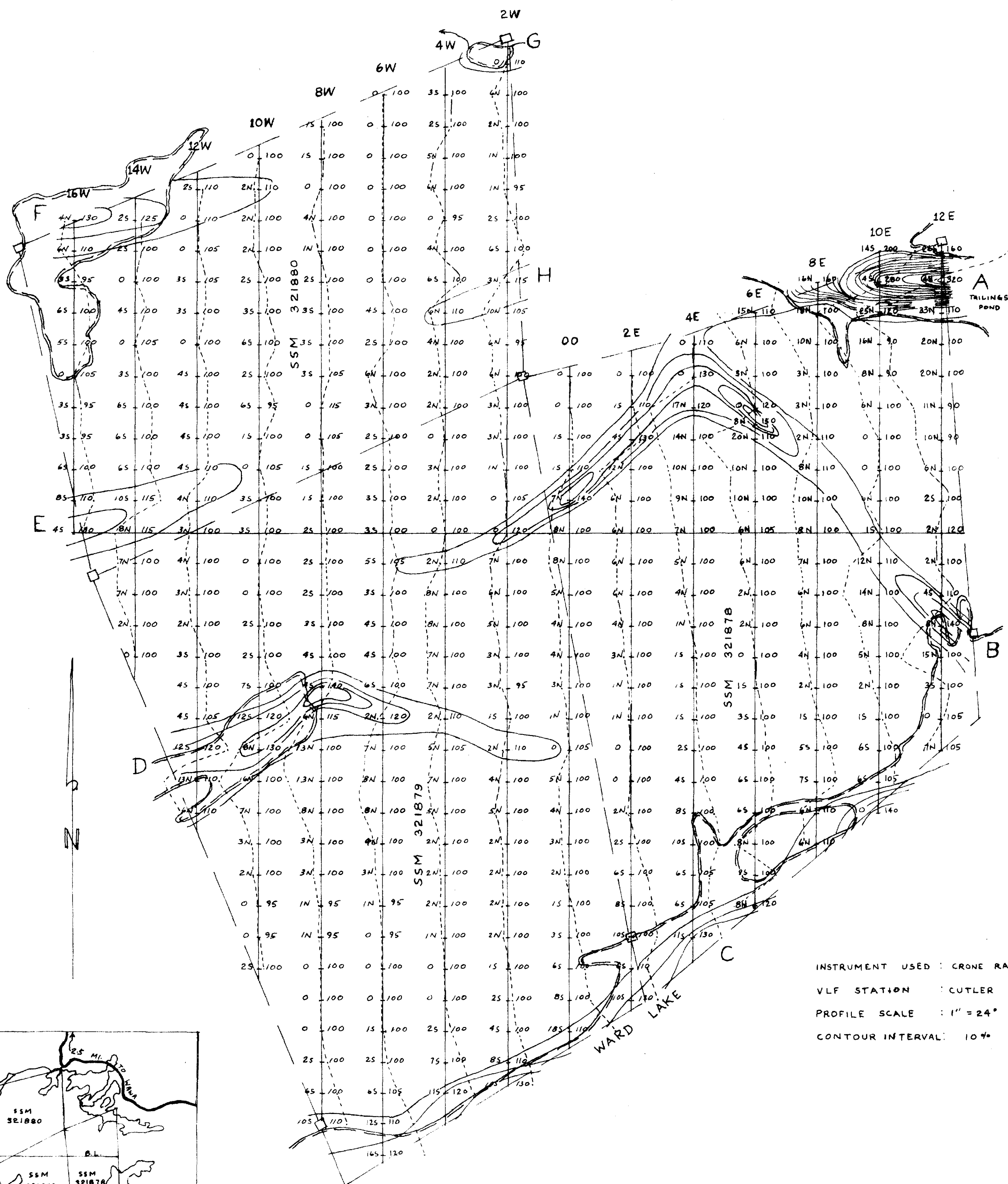
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(M.1557)



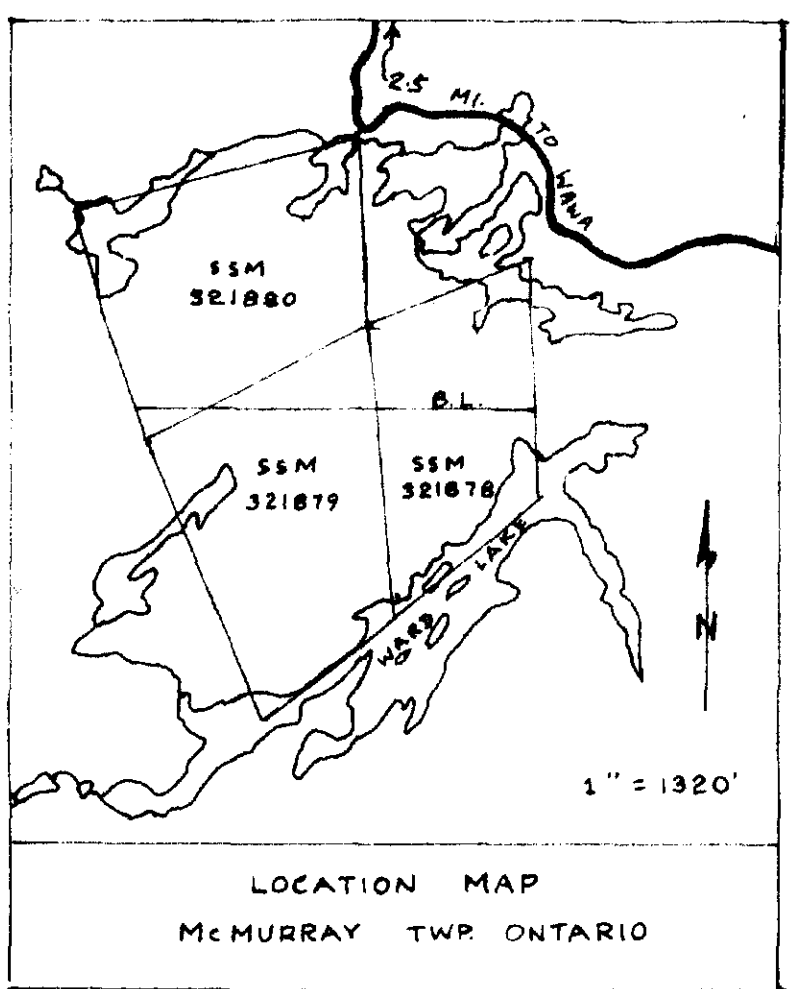
SEE ACCOMPANYING
MAP(S) IDENTIFIED AS
MCMURRAY - 0026A1 #1

LOCATED IN THE MAP
CHANNEL IN THE FOLLOWING
SEQUENCE (X)





INSTRUMENT USED : CRONE RADEM VLF
 VLF STATION : CUTLER MAINE 17.8 KH_s
 PROFILE SCALE : 1" = 24'
 CONTOUR INTERVAL : 10%



VLF ELECTROMAGNETIC SURVEY
 ON MINING CLAIMS SSM 321878 321879 321880
 McMURRAY TOWNSHIP ONTARIO

MARCH 1975

1" = 200'

W.E. Ryan
 McMURRAY-0006-A1 #1

