



52G16NW0170 52G15SW0034 BELL LAKE

2.109

010

MATTAGAMI LAKE MINES LIMITED

#23 CLAIM GROUP (LYON LAKE)

STURGEON LAKE AREA, PATRICIA MINING DIVISION, ONTARIO

September 1970

CLAIMS: - 58

SURVEYS:	- Magnetic	- McPhar Fluxgate Magnetometer
	- Electromagnetic	- Crone Shootback JEM

Maps 6

LOCATION AND ACCESS:

This group of 58 contiguous claims numbered 212610, 212617, 212735, 212741, 212742, 225511 - 21, 225523 - 28, 225591 - 07, 225661 - 72, 225747 - 51, 225773 - 4, is located between Lyon Lake and Swamp Lake, Sturgeon Lake Area. Access is via winter road east from the Matabi Mine site on Abitibi block #7, a distance of approximately 5 miles.

PREVIOUS WORK AND REPORTS:

Maps

Ontario Department of Mines	Bell Lake Sheet 1117-G
Ontario Department of Mines	Geological Compilation - 2169

The claim group is primarily underlain by felsic volcanic rocks. The area was flown by Questor for Mattagami Lake Mines Limited with the claim group being staked to cover a string of airborne conductors.

AUTOPOSITIVES FILED SEPERATELY

EQUIPMENT USED AND OPERATORS:

Magnetic - A McPhar fluxgate magnetometer was used measuring the vertical component of the earth's magnetic field directly in gammas. Base stations were established and normal drift correction procedures carried out. Instrument accuracy is ± 10 gammas. Number of stations read was 2405 on 44 miles of line. Field supervisor was Robert Major, Mattagami Lake Mines staff, Box 190, Ignace, Ontario. Survey dates were between November 15, 1969 to January 31, 1970.

Electromagnetic - A Crone JEM "shootback" unit was used with operating frequencies of 480 and 1800 Hz and a coil separation of 200'. The "resultant dip angle" is measured with an accuracy of $\pm 1^\circ$. Number of stations read was 2370 on 44 miles of line. Field supervisor and period of survey were the same as the magnetic survey.

LINECUTTING:

A total of 44 miles of line were cut under contract to Fred Corcoran, 116 Villeneuve Street, Val D'Or, P.Q. during the period November 1 to December 20, 1969. The grid has a 400' line interval.

INTERPRETATION:

Four conductors were detected by the EM survey, numbered 23-2, 23-3, 23-4 and 23-5. Except for the east end of conductor 23-4 the JEM profiles are broad with low to moderate negative readings. This would indicate zones of moderate to poor conductivity probably representing fracture filling type sulphides with widths in the order of 100'. On most profiles multiple banded zones are evident. The conductors are magnetic in the order of 1000 to 5000 gammas above background. The following test drill holes are proposed.

Conductor 23-2 Collar at L32E, 1+50 south of BL #2, drilling grid south at -45° for 500'. Expected depth of overburden 60'.

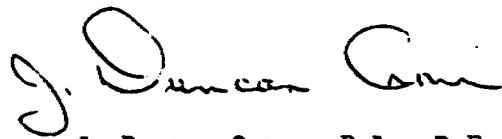
Conductor 23-3 Collar at L36E, 9+50N of base line 2, drilling grid south at -45° for 600'. Expected depth of overburden 40'.

Conductor 23-3 Collared at 7+00S (BL-2), 74+00E drilling in a direction of 245° at -45° for a depth of 700'. Depth of overburden could be 75 to 100'.

Conductor 23-4 Collared at 14+00N (BL-2) line 76E, drilling grid south at -45° for a depth of 600'. Overburden estimate 75' to 100'.

Conductor 23-5 Collared at 25+00N (BL-2) line 96E,
drilling grid south at -45° for a depth of 500'. Overburden estimate
75'.

Respectfully submitted,

A handwritten signature in cursive script that reads "J. Duncan Crone". The signature is written in dark ink and is positioned above the typed name.

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

STURGEON

LAKE

See
M-2877

Color Pool
in blue map
at 084 4726

POND

1/2 M. Run on J.J. Dutton S. = 1 M 1938.

BELL LAKE

M-1884

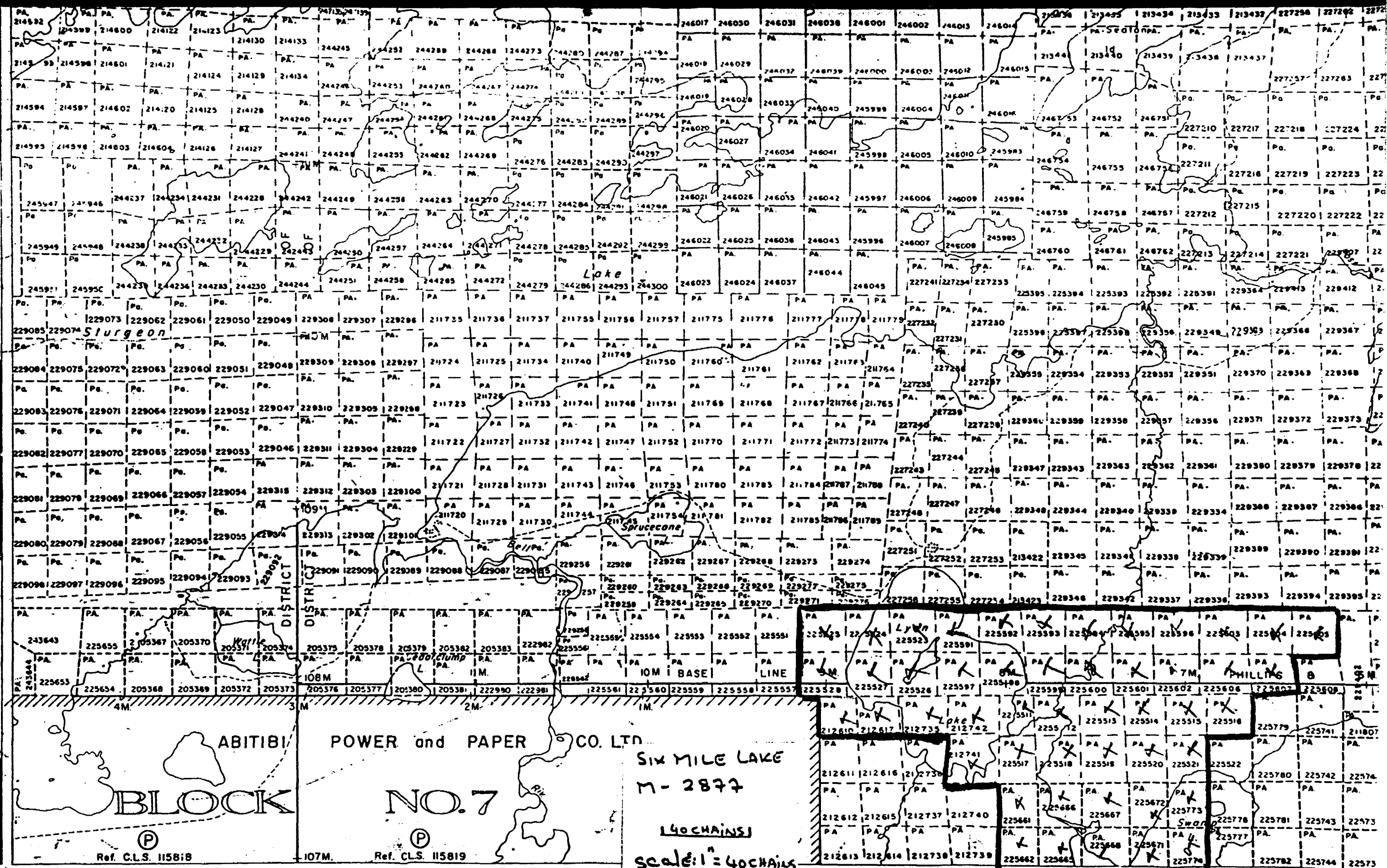
40 chains

Scale 1" = 40 chains

DATE OF ISSUE
FEB 3 1971
ONT. DEPT. OF MINES
AND NORTHERN AFFAIRS

NORTH and run by
J.J. DALTON 1938
UNDER BAY

225787	225788	225789	225790	225791	225792	225793	225794	225795	225796	225797	225798	225799	225800	225801	225802	225803	225804	225805	225806	225807	225808	225809	225810	225811	225812	225813	225814	225815	225816	225817	225818	225819	225820	225821	225822	225823	225824	225825	225826	225827	225828	225829	225830	225831	225832	225833	225834	225835	225836	225837	225838	225839	225840	225841	225842	225843	225844	225845	225846	225847	225848	225849	225850	225851	225852	225853	225854	225855	225856	225857	225858	225859	225860	225861	225862	225863	225864	225865	225866	225867	225868	225869	225870	225871	225872	225873	225874	225875	225876	225877	225878	225879	225880	225881	225882	225883	225884	225885	225886	225887	225888	225889	225890	225891	225892	225893	225894	225895	225896	225897	225898	225899	225900	225901	225902	225903	225904	225905	225906	225907	225908	225909	225910	225911	225912	225913	225914	225915	225916	225917	225918	225919	225920	225921	225922	225923	225924	225925	225926	225927	225928	225929	225930	225931	225932	225933	225934	225935	225936	225937	225938	225939	225940	225941	225942	225943	225944	225945	225946	225947	225948	225949	225950	225951	225952	225953	225954	225955	225956	225957	225958	225959	225960	225961	225962	225963	225964	225965	225966	225967	225968	225969	225970	225971	225972	225973	225974	225975	225976	225977	225978	225979	225980	225981	225982	225983	225984	225985	225986	225987	225988	225989	225990	225991	225992	225993	225994	225995	225996	225997	225998	225999	226000
--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------



ABITIBI
BLOCK

POWER and PAPER CO. LTD.

NO. 7

SIX MILE LAKE

M-2877

40 CHAINS

scale: 1" = 40 CHAINS

Ref. C.L.S. 115818

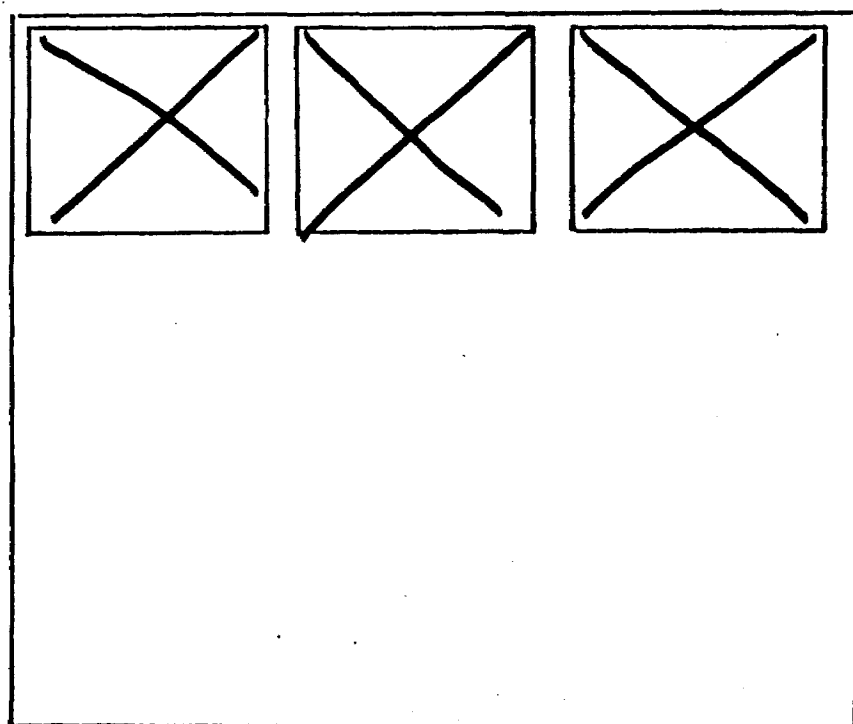
Ref. C.L.S. 115819

49°52'30" 91°00' 59' 58' 57' 56' 55' 54' 53' 52' 51' 50'

SEE ACCOMPANYING
MAP(S) IDENTIFIED AS

52G/15 SW-0034 #1-2

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

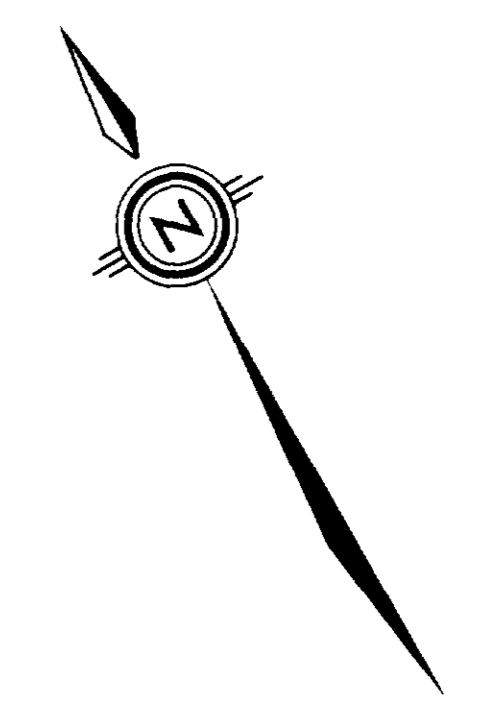
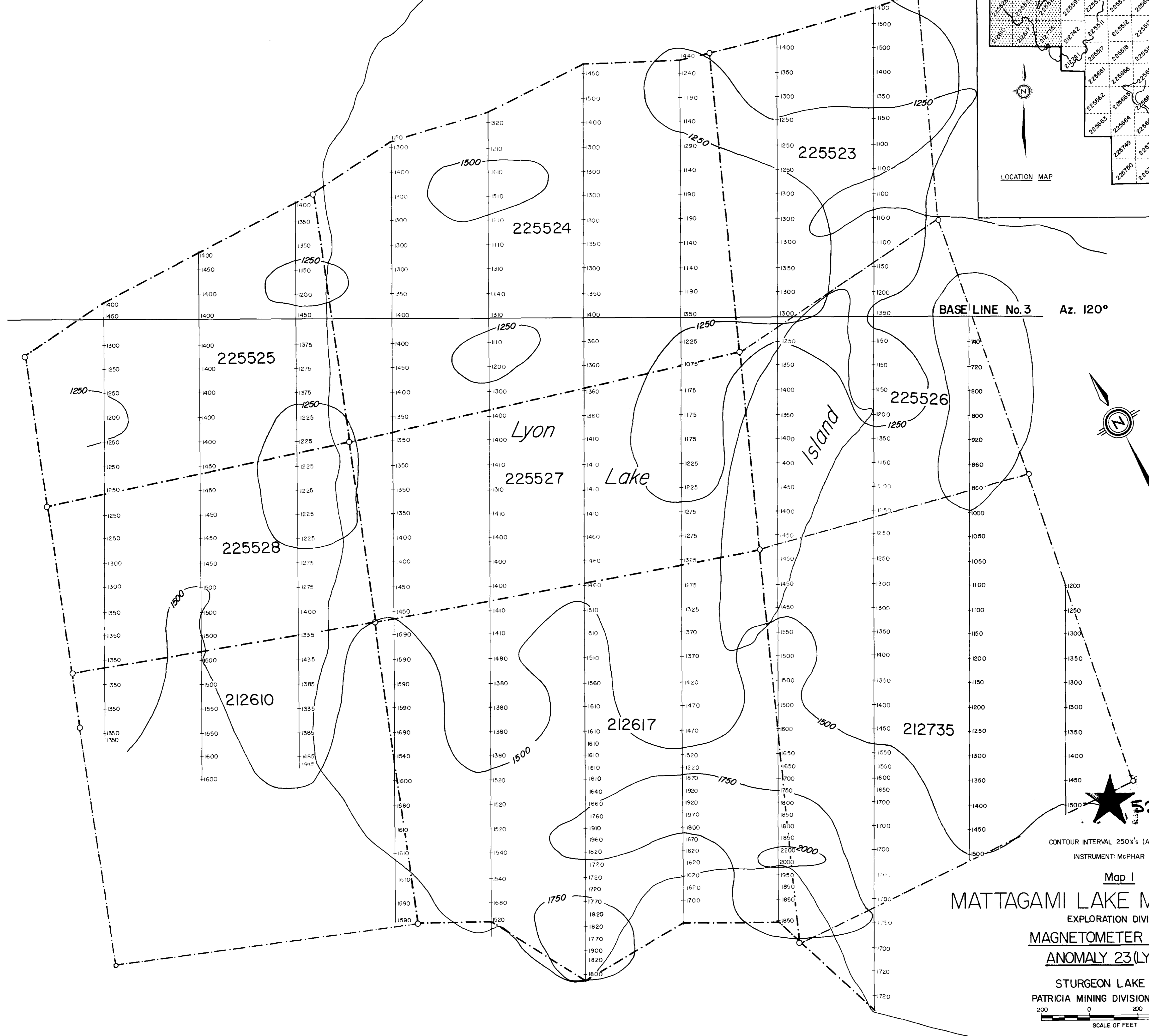
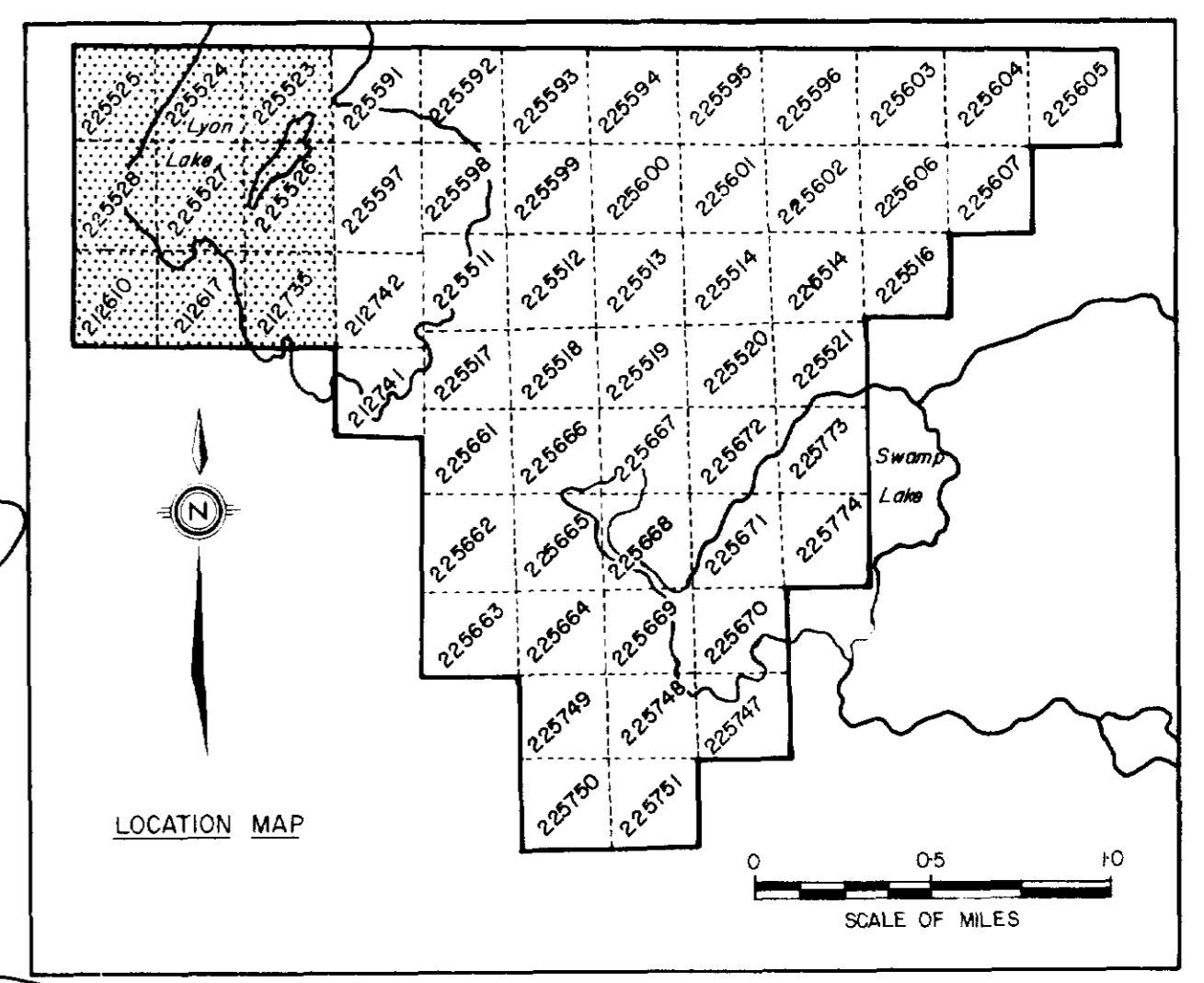


FOR ADDITIONAL
INFORMATION

SEE MAPS:

52G/15 SW-0034 # 3 - 6

24+00W 20+00W 16+00W 12+00W 8+00W 4+00W 0+00 4+00E 8+00E

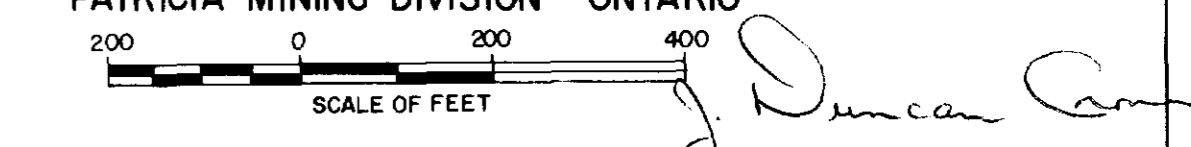


★ 52G/15 SW-0034#1

CONTOUR INTERVAL 250's (AFTER 1000's)
INSTRUMENT: MCPHAR M-700

Map 1
MATTAGAMI LAKE MINES LIMITED
EXPLORATION DIVISION
MAGNETOMETER SURVEY
ANOMALY 23 (LYON LAKE)

STURGEON LAKE AREA
PATRICIA MINING DIVISION - ONTARIO



FEBRUARY 1970

2.109





52 G / 155W-0034 #2

CONTOUR INTERVAL: 500'S (AFTER 1000'S)
INSTRUMENT: MAPHAR M-700

Map 2

MATTAGAMI LAKE MINES LIMITED

EXPLORATION DIVISION

MAGNETOMETER SURVEY

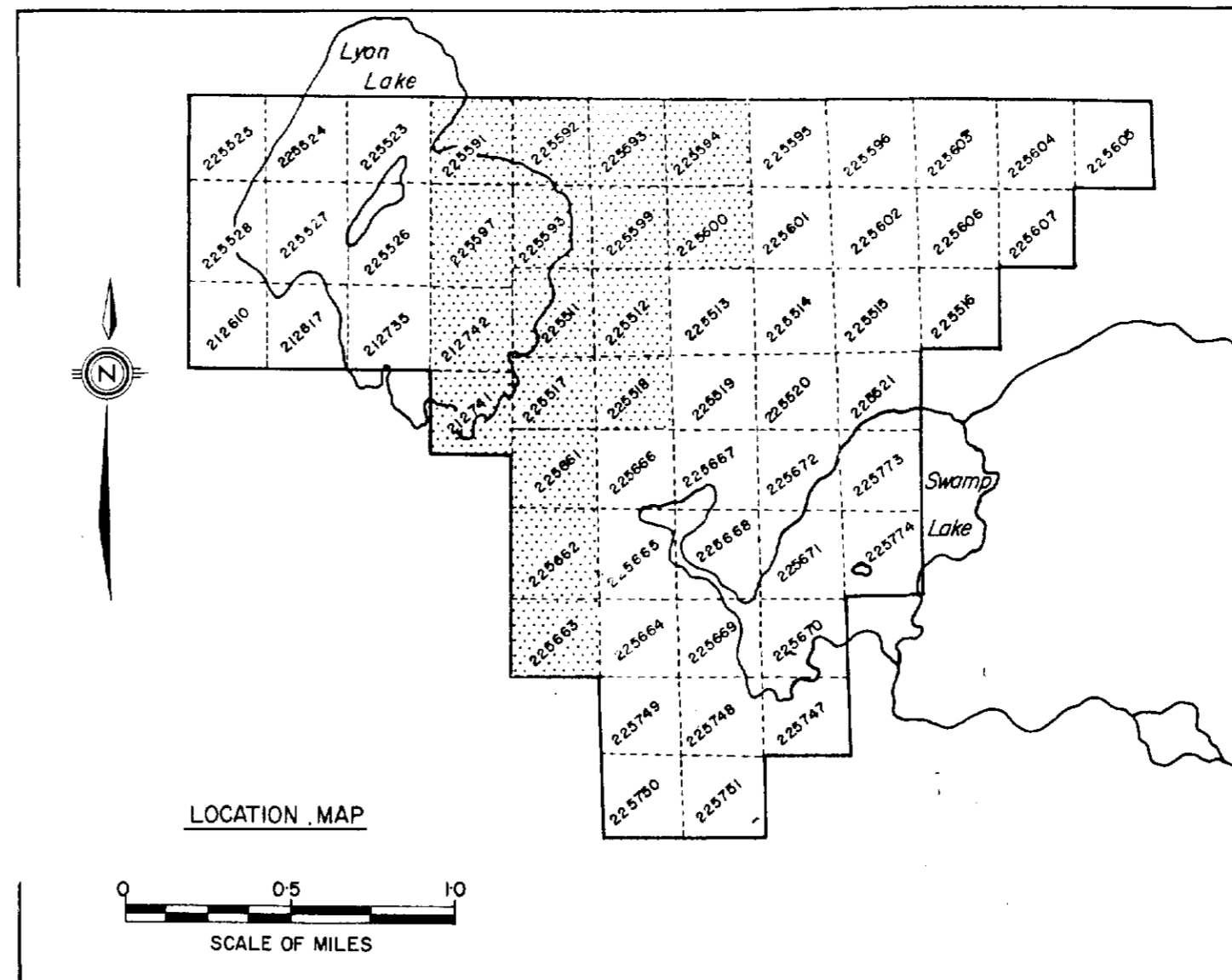
ANOMALY 23

STURGEON LAKE AREA

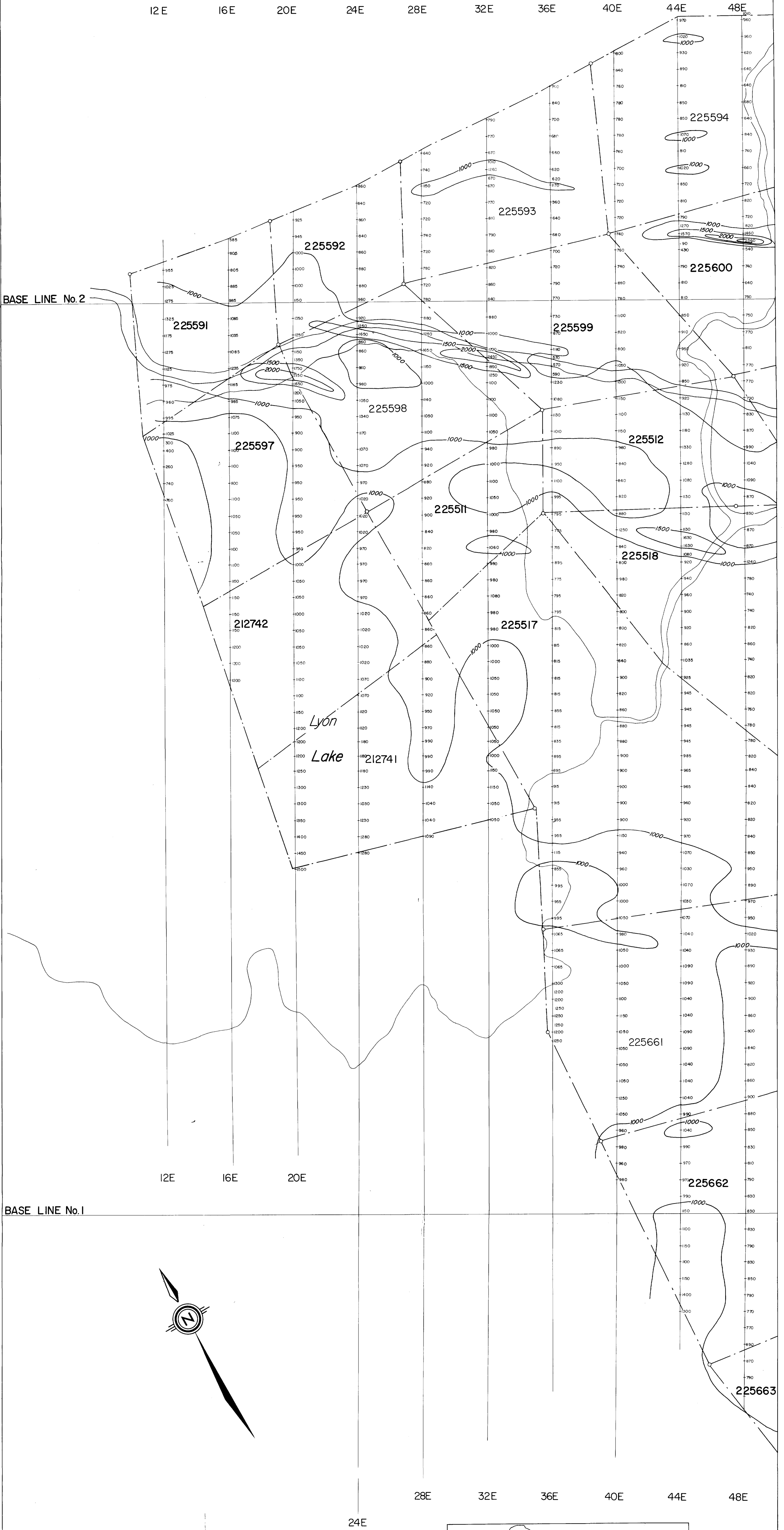
PATRICIA MINING DIVISION-ONTARIO

J. Duncan Coe

SCALE OF FEET
0 200 400



12E 16E 20E 24E 28E 32E 36E 40E 44E 48E



24E 28E 32E 36E 40E 44E 48E



52 G / 155W-0034 #2

CONTOUR INTERVAL: 500'S (AFTER 1000'S)
INSTRUMENT: MAPHAR M-700

Map 2

MATTAGAMI LAKE MINES LIMITED

EXPLORATION DIVISION

MAGNETOMETER SURVEY

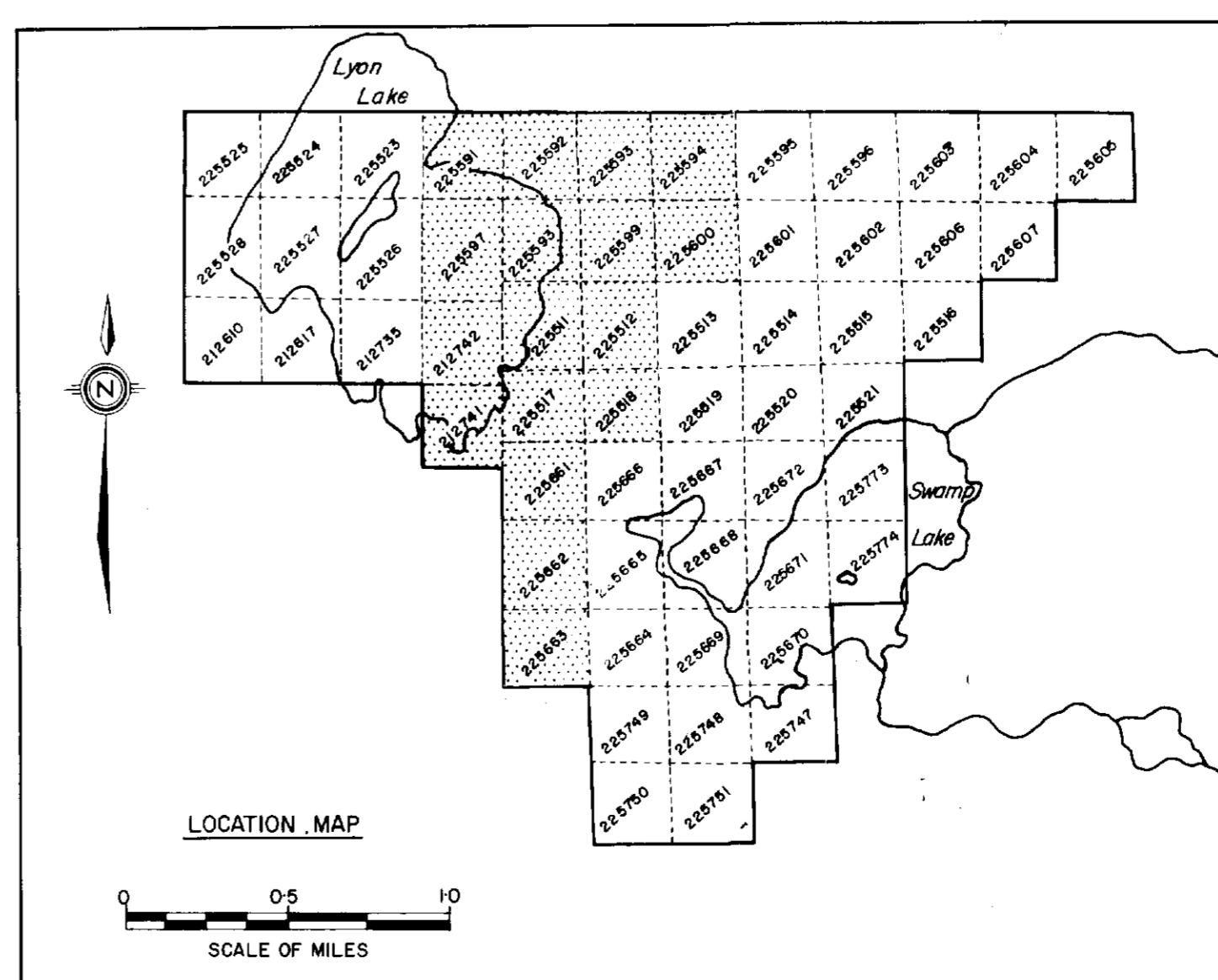
ANOMALY 23

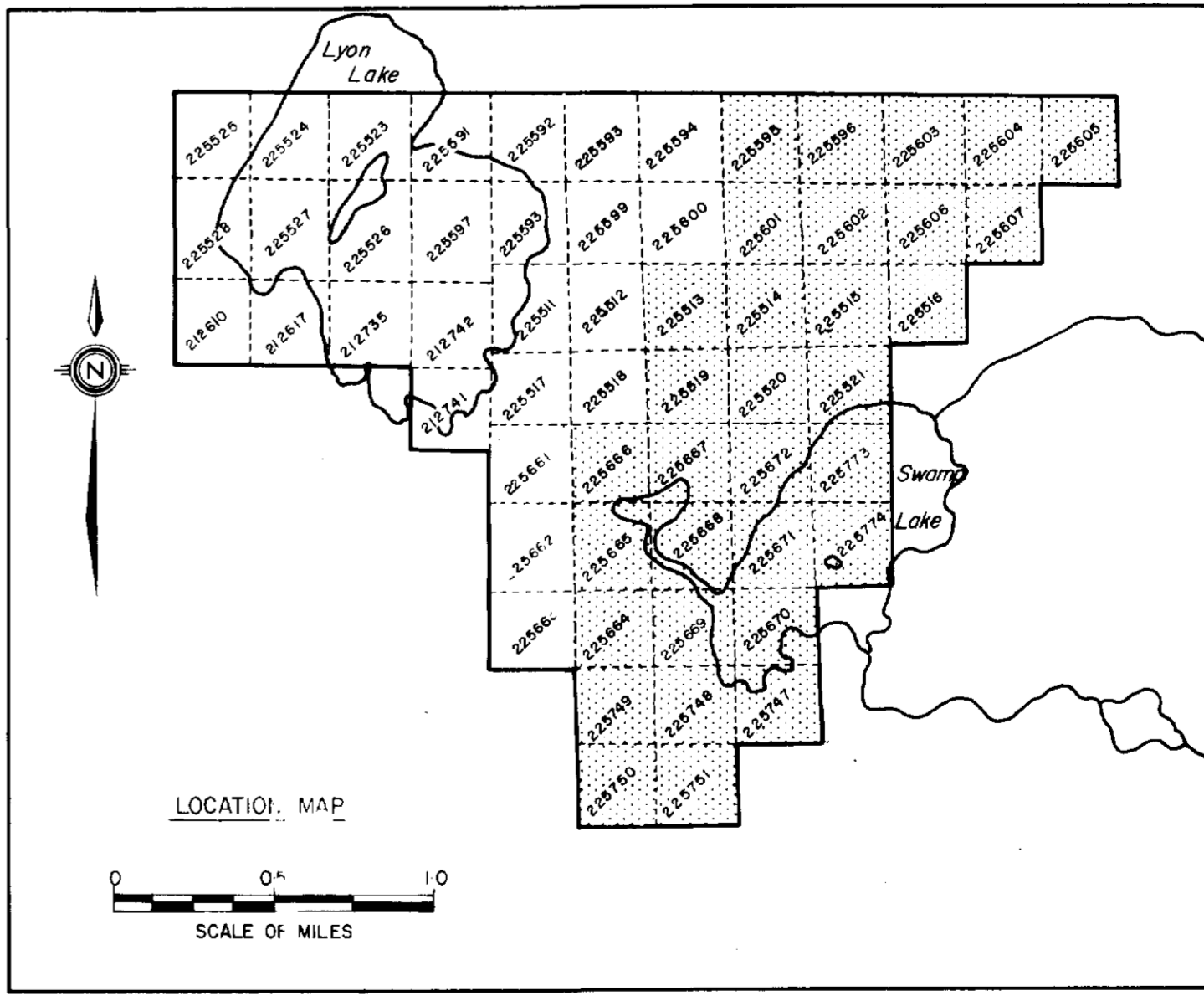
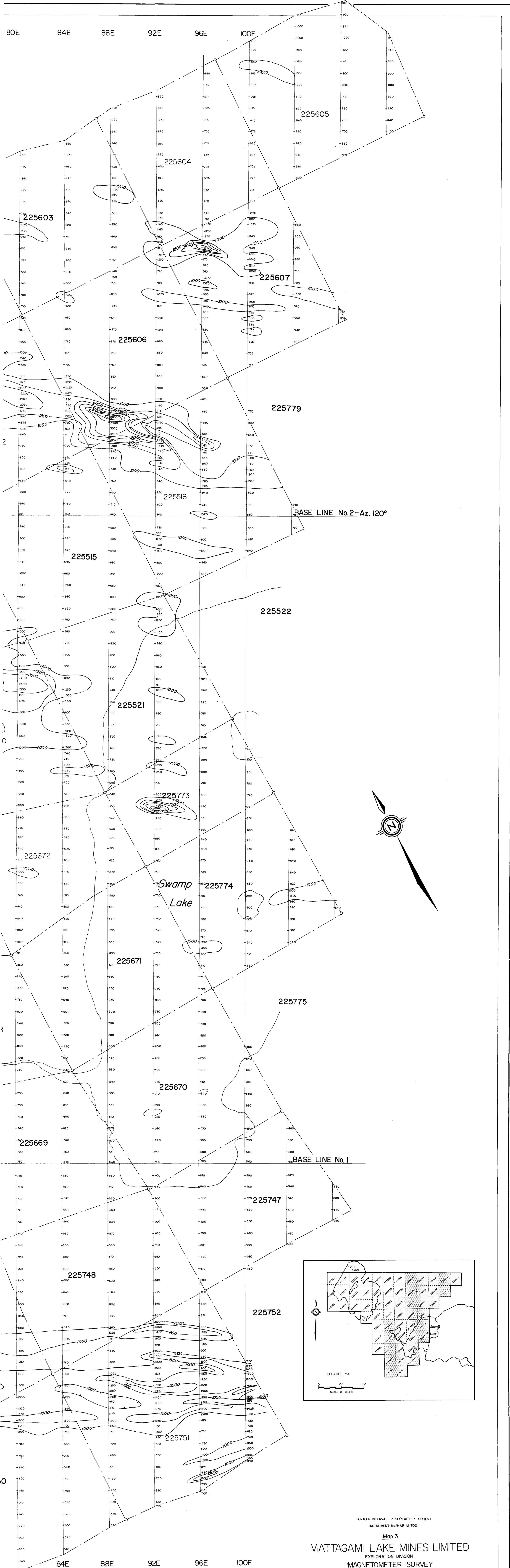
STURGEON LAKE AREA

PATRICIA MINING DIVISION-ONTARIO

J. Duncan Coe

SCALE OF FEET
0 200 400

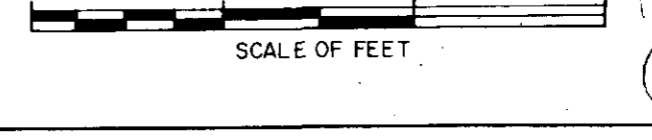




CONTOUR INTERVAL 500 Gs (AFTER 1000 Gs)
 INSTRUMENT McPHAR M-700

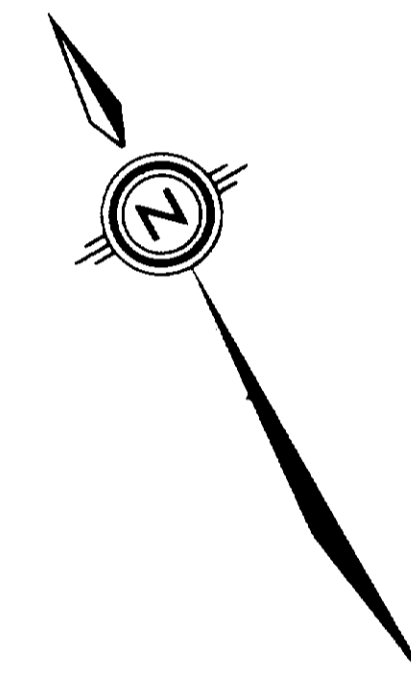
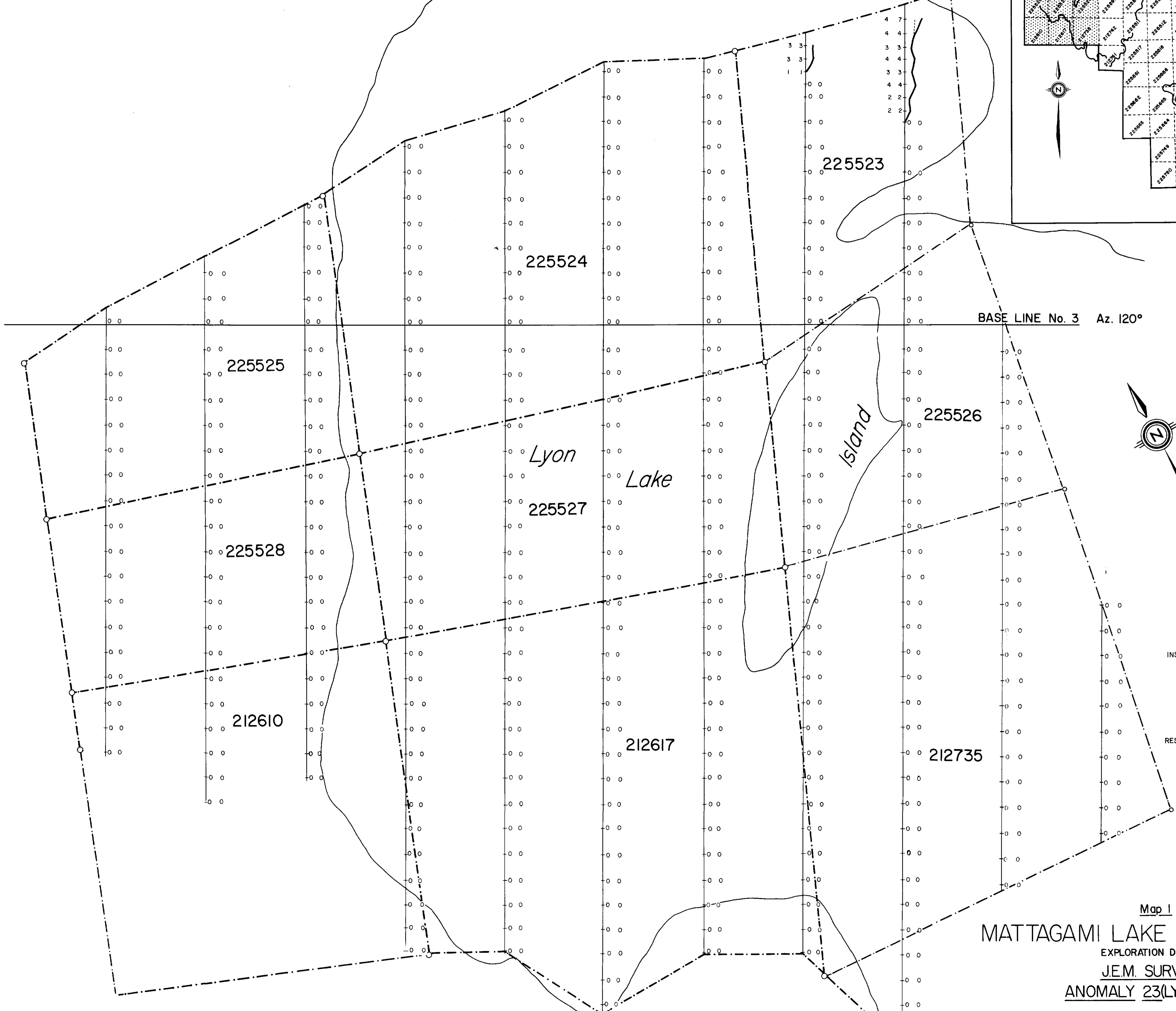
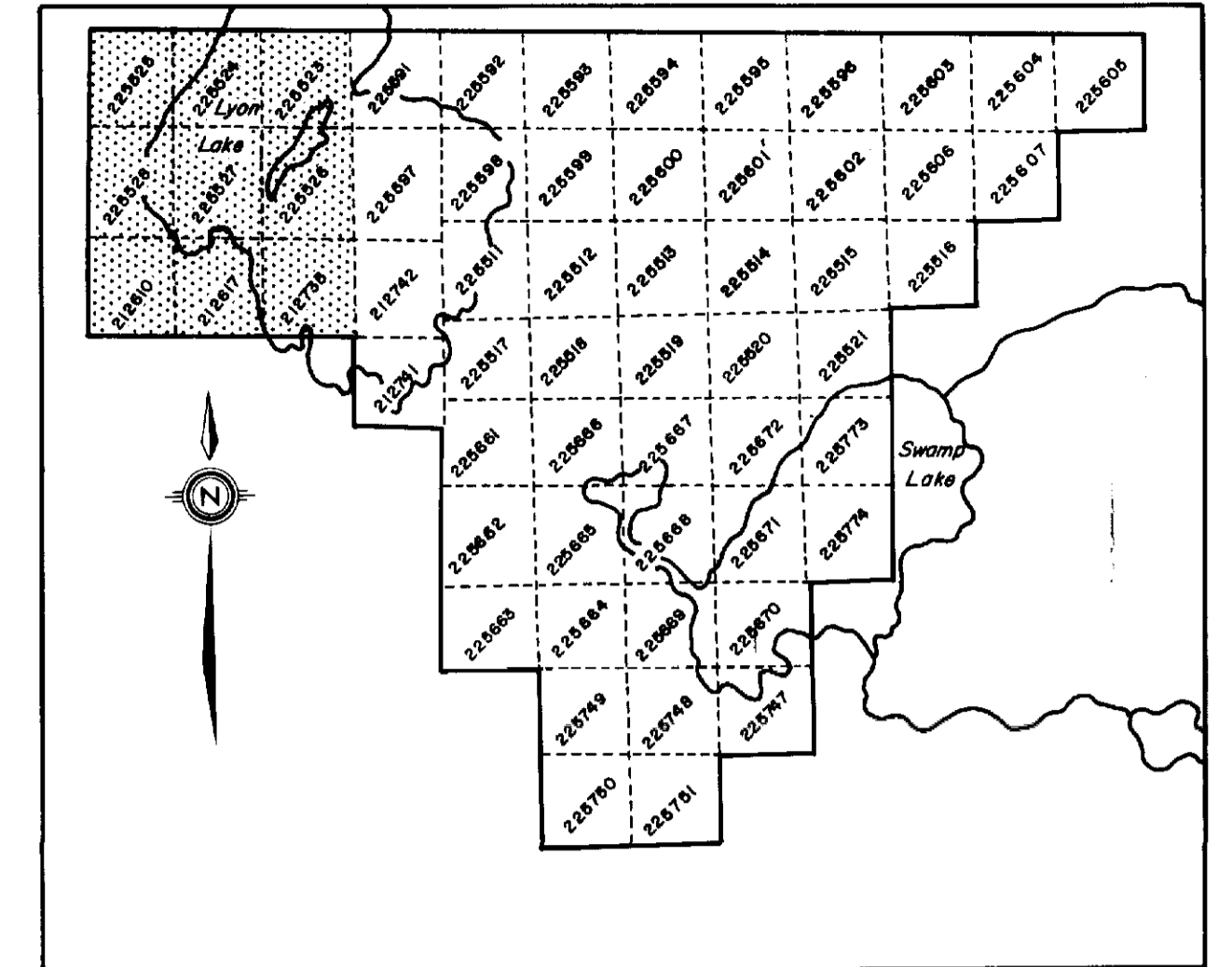
Map 3
 MATTAGAMI LAKE MINES LIMITED
 EXPLORATION DIVISION
 MAGNETOMETER SURVEY
 ANOMALY 23

STURGEON LAKE AREA
 PATRICIA MINING DIVISION-ONTARIO



★ 52G/15SW-0034#3

24+00W 20+00W 16+00W 12+00W 8+00W 4+00W 0+00 4+00E 8+00E



INSTRUMENT: CRONE J.E.M.
200' SEPARATION
1800Hz
480Hz
RESULTANT DIP ANGLE IN DEGREES
1" = 20°

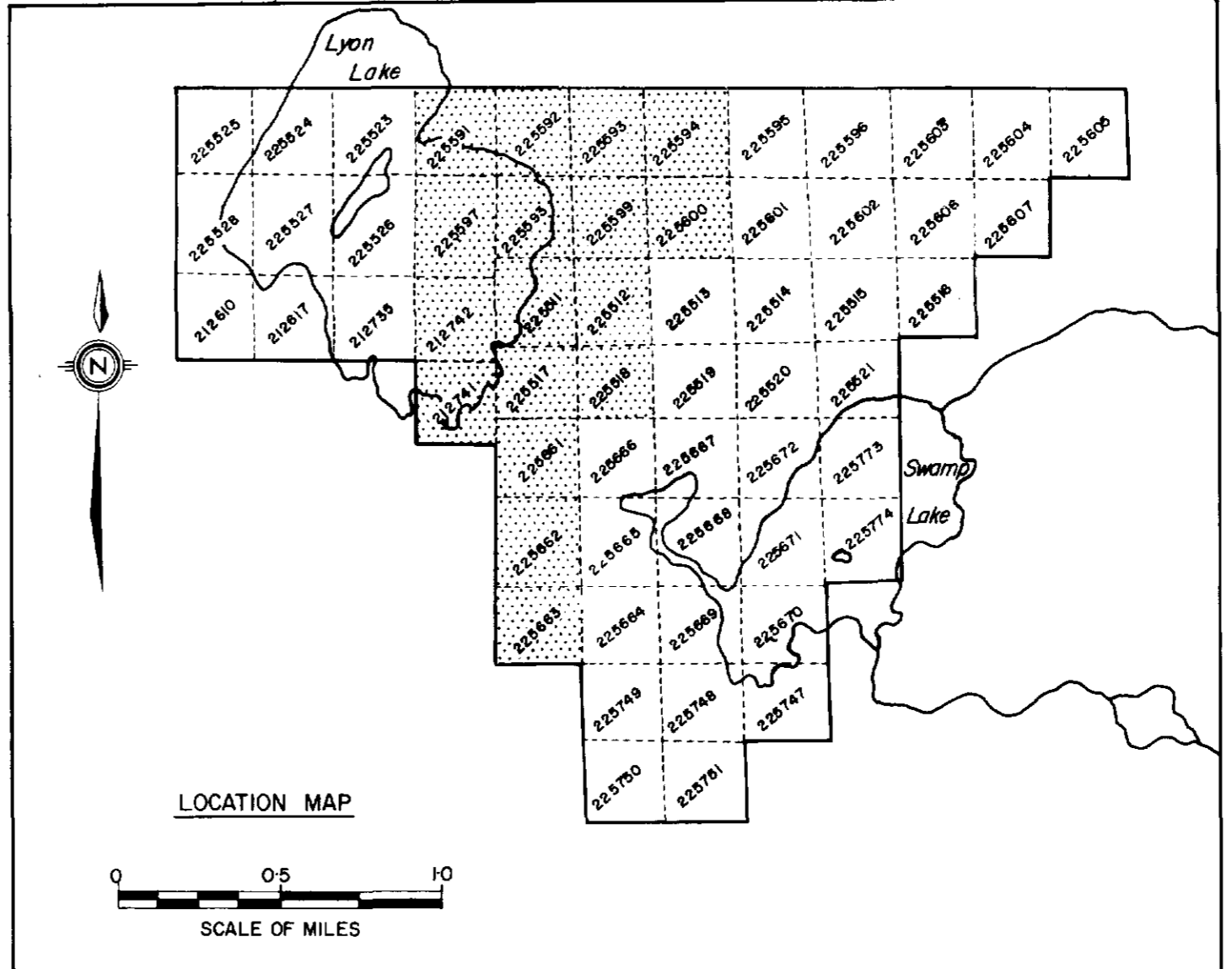
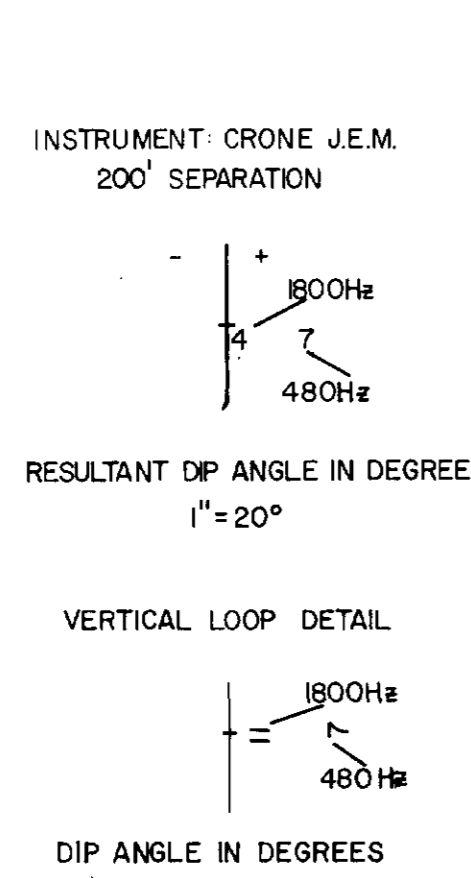
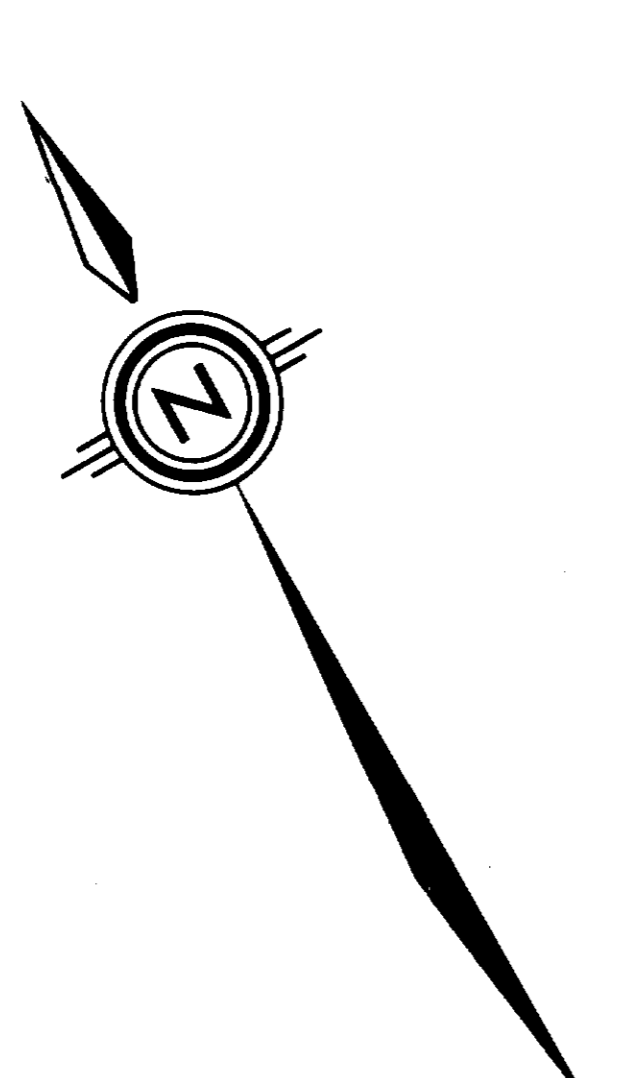
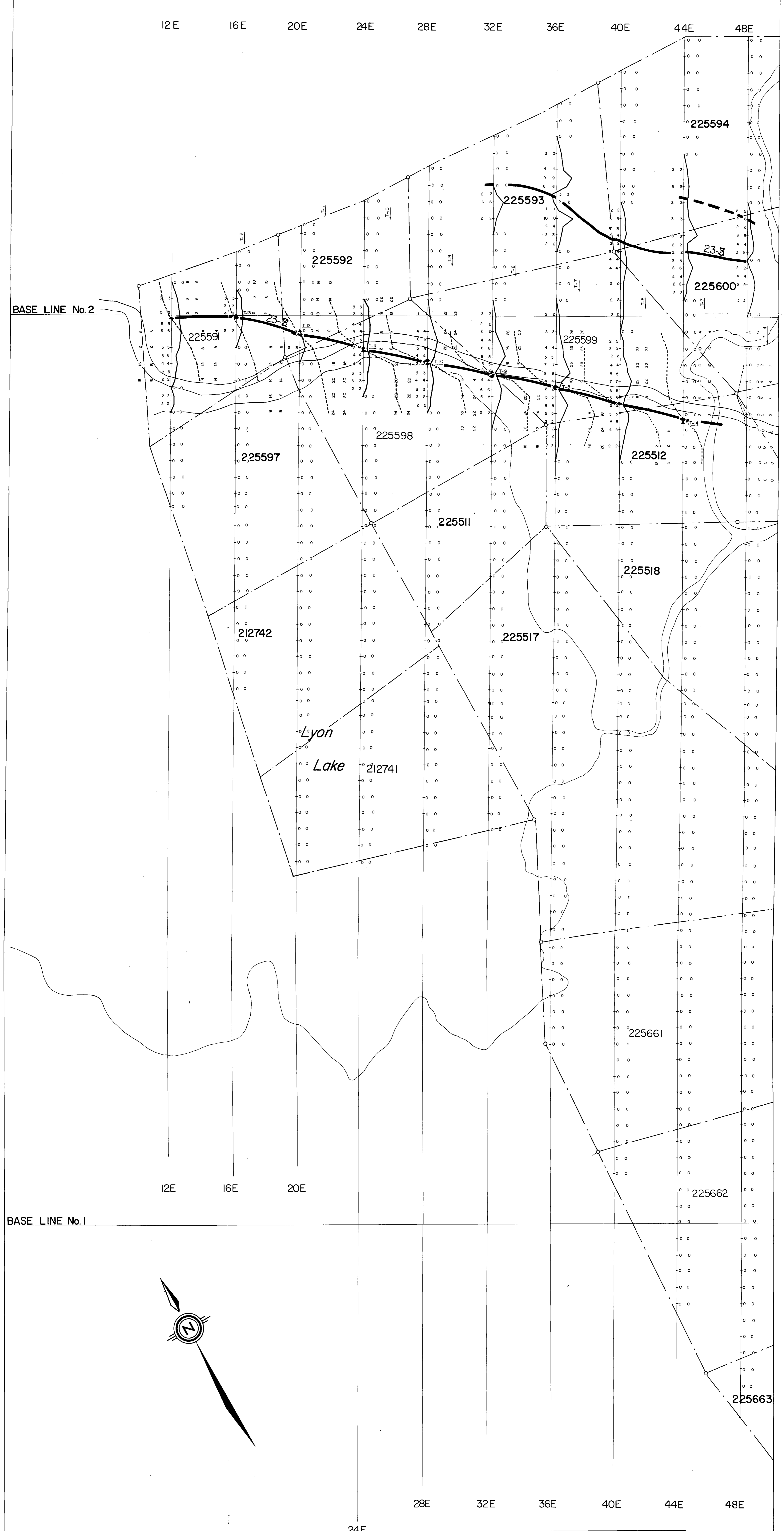
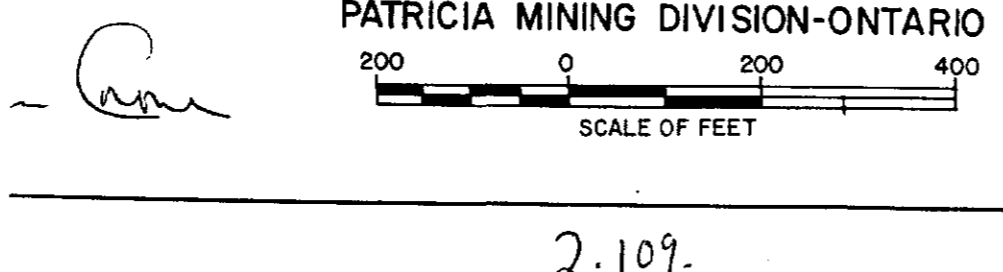
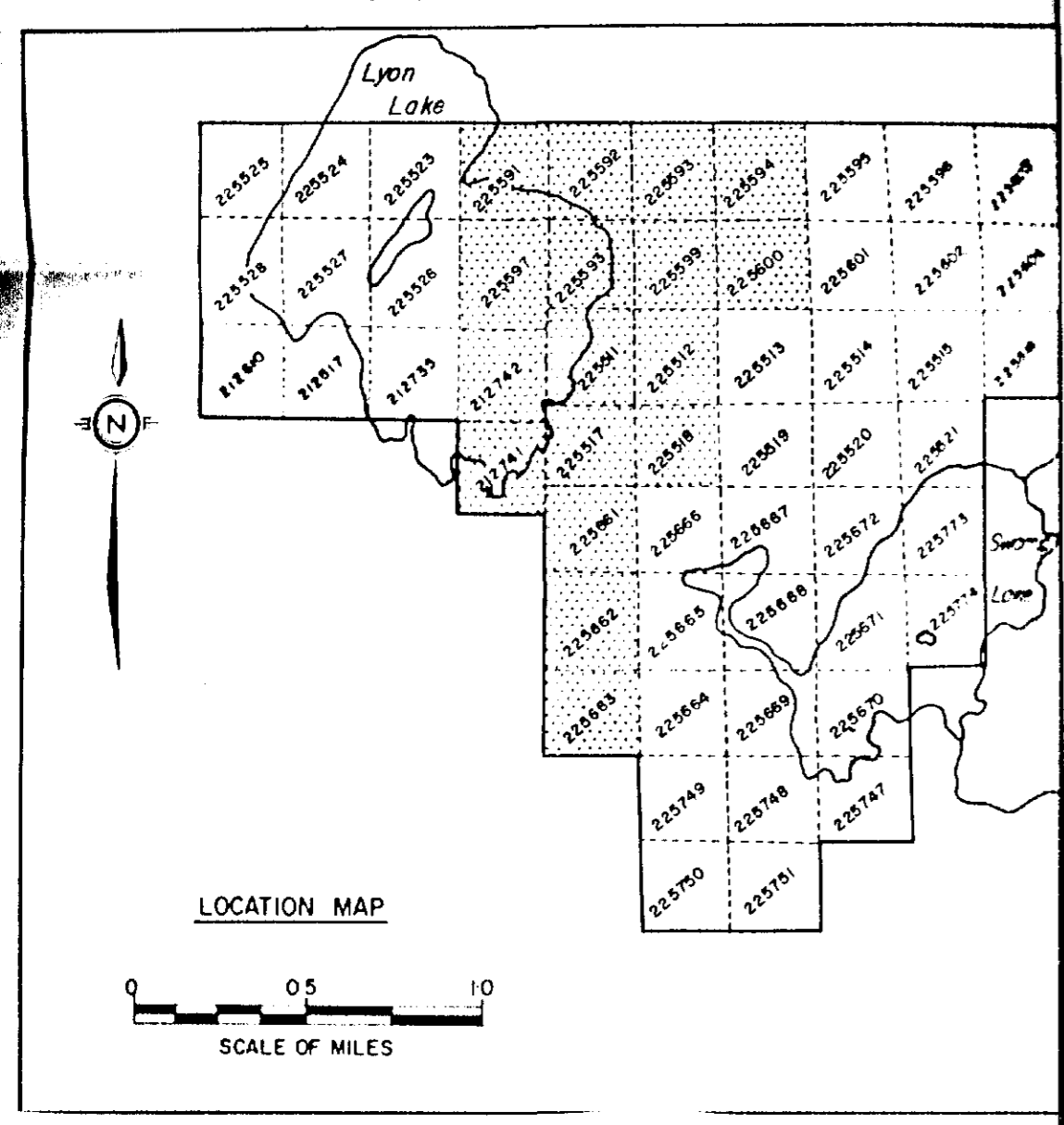
Map 1
MATTAGAMI LAKE MINES LIMITED
EXPLORATION DIVISION
J.E.M. SURVEY
ANOMALY 23(LYON LAKE)
STURGEON LAKE AREA
PATRICIA MINING DIVISION - ONTARIO
SCALE OF FEET
FEBRUARY 1970

★ 52G/15SW-0034, #4



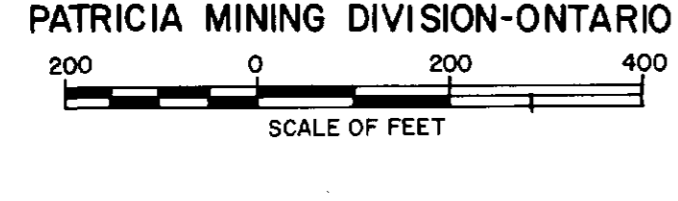
Map 2
MATTAGAMI LAKE MINES LIMITED
 EXPLORATION DIVISION
J.E.M. SURVEY
ANOMALY 23
 STURGEON LAKE AREA
 PATRICIA MINING DIVISION-ONTARIO

★ 52G/15SW-0034, #5

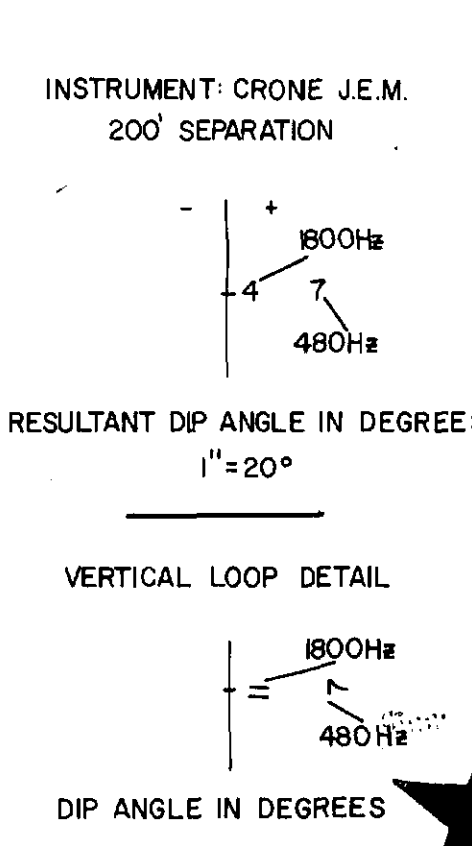
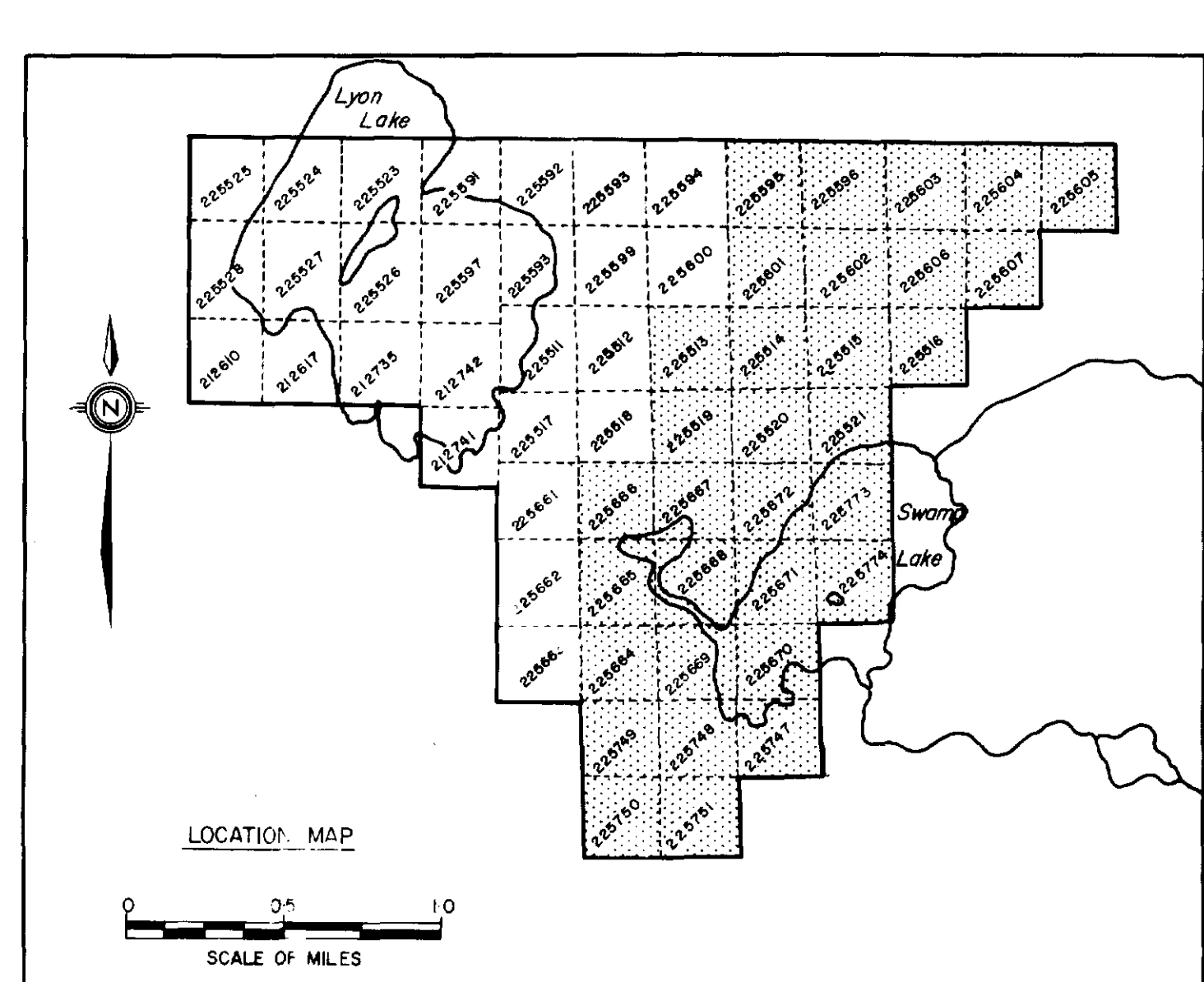
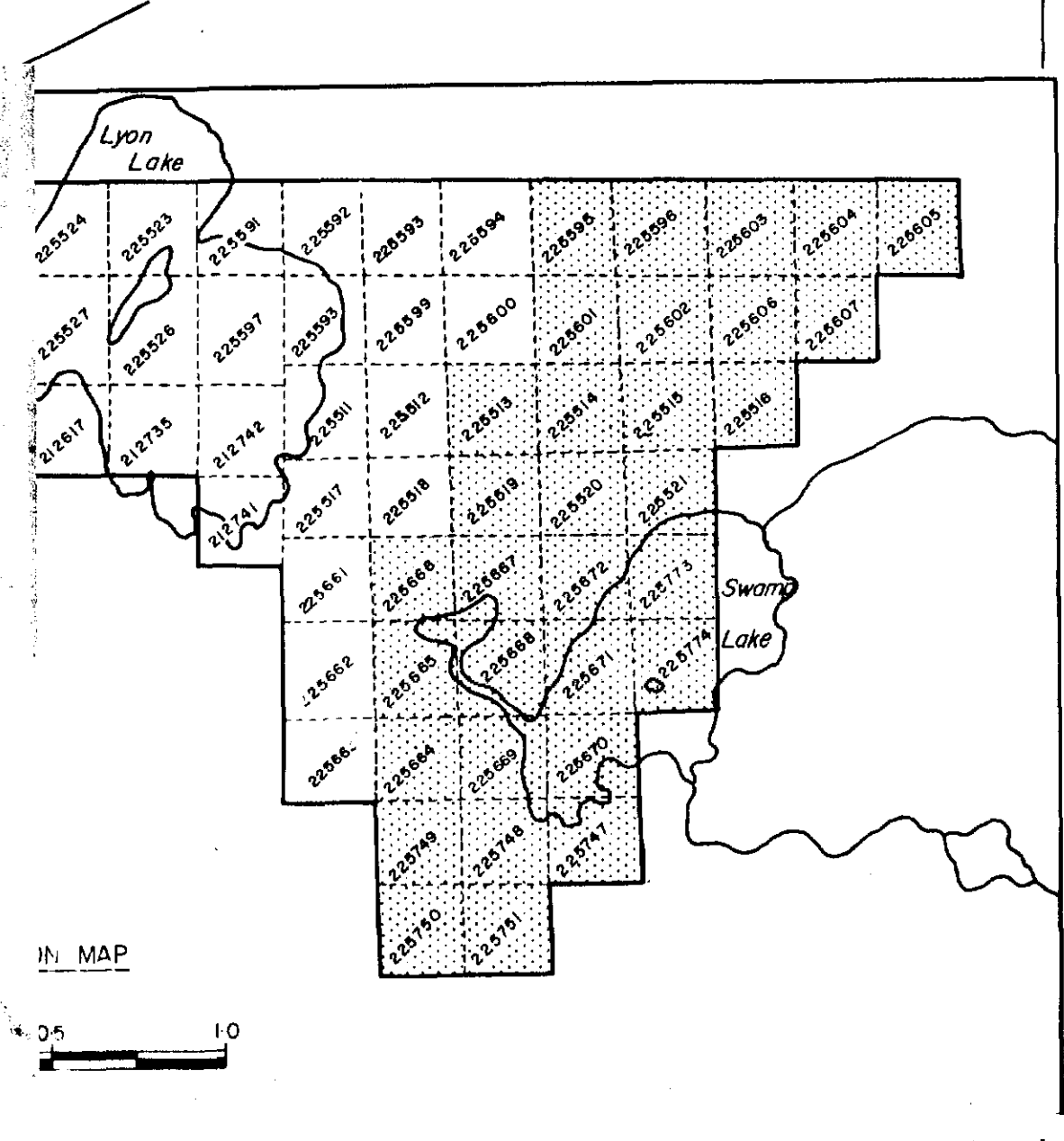
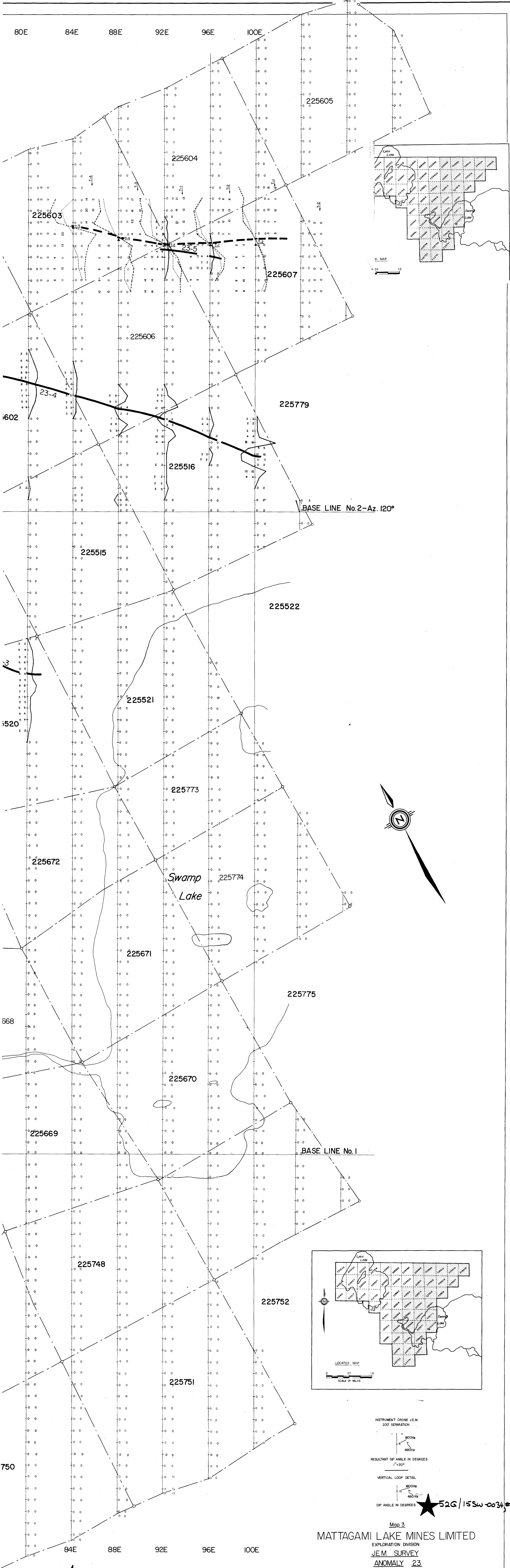


Map 2
MATTAGAMI LAKE MINES LIMITED
 EXPLORATION DIVISION
J.E.M. SURVEY
ANOMALY 23
 STURGEON LAKE AREA
 PATRICIA MINING DIVISION-ONTARIO

★ 52G/15SW-0034 #5

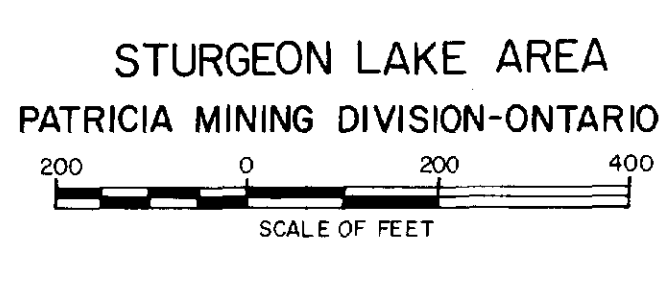


J. Duncan



★ 52G/15Sw-0034 #6

Mattagami Lake Mines Limited
 EXPLORATION DIVISION
 J.E.M. SURVEY
 ANOMALY 23



Patricia Mining Division-Ontario
 J. Duncan
 DECEMBER 1969

★ 52G/15Sw-0034, #6

CONTOUR INTERVAL 500' (AFTER 1000')

INSTRUMENT: MCPHAR M-700

Map 3

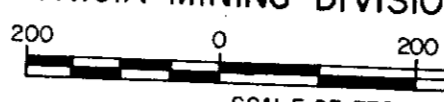
MATTAGAMI LAKE MINES LIMITED

EXPLORATION DIVISION
MAGNETOMETER SURVEY

ANOMALY 23

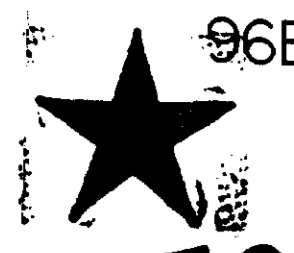
STURGEON LAKE AREA

PATRICIA MINING DIVISION-ONTARIO



J. Duncan
DECEMBER 1969

52G/15SW-0034#3



96E

100E

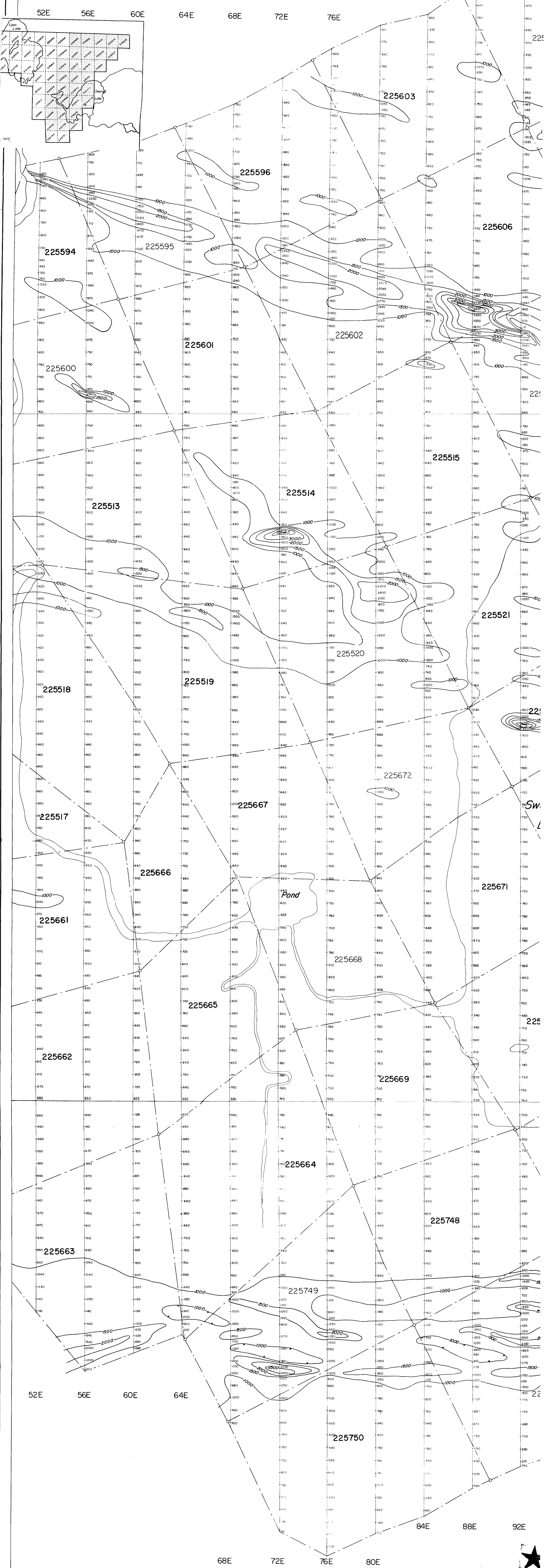
80E

84E

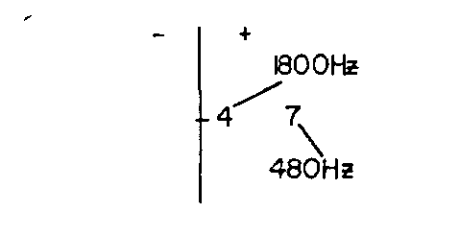
88E

92E

2-109

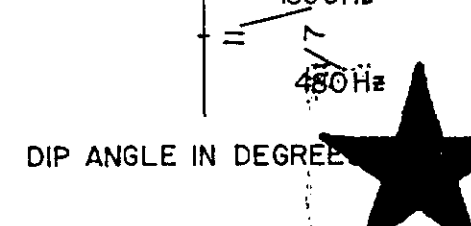


INSTRUMENT: CRONE J.E.M.
200 SEPARATION



RESULTANT DIP ANGLE IN DEGREES
1°20'

VERTICAL LOOP DETAIL



DIP ANGLE IN DEGREES

52G/15SW-0034#6

Map 3

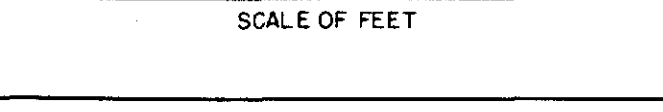
MATTAGAMI LAKE MINES LIMITED

EXPLORATION DIVISION

J.E.M. SURVEY

ANOMALY 23

STURGEON LAKE AREA
PATRICIA MINING DIVISION-ONTARIO



2.109

DECEMBER 1969

80E 84E 88E 92E

72E 76E

2

2

2

2

2

2

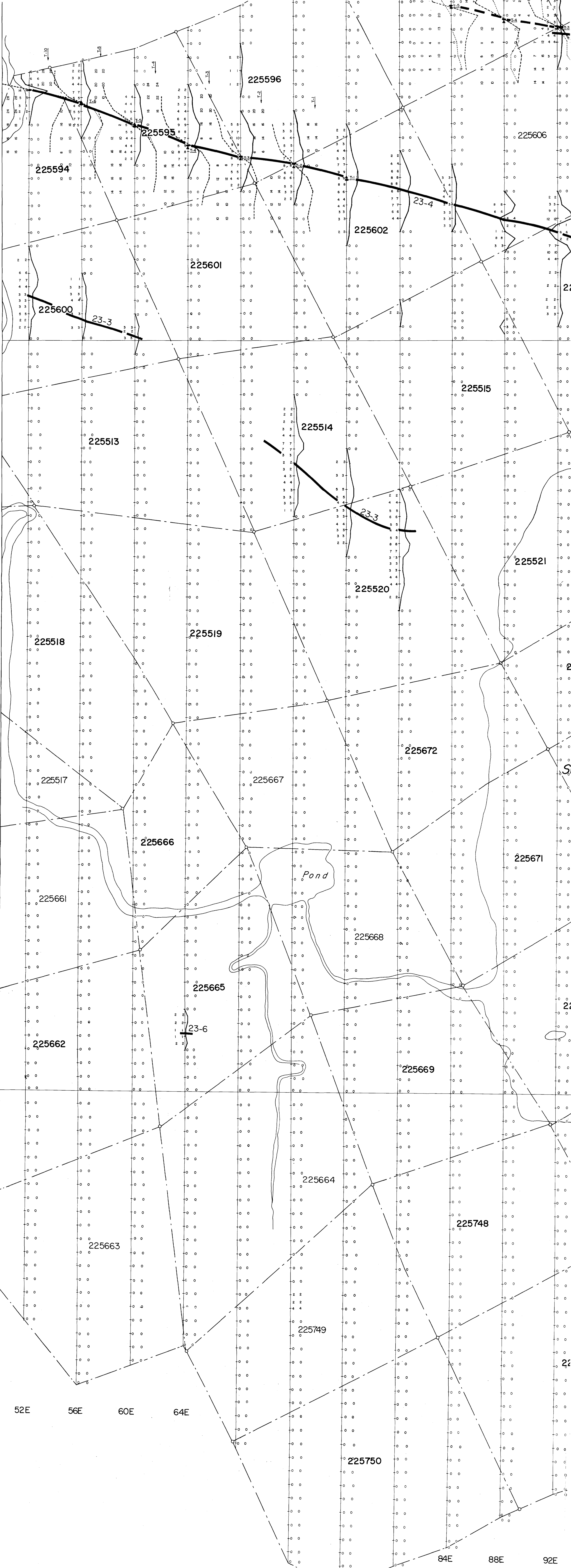
2

2

2

2

2



52E 56E 60E 64E

68E 72E 76E 80E 84E 88E 92E

52G/15SW-00

