



41P15NE8344 2.3050 CAIRO

TECHNICAL REPORT ON THE CAIRO COPPER CLAIMS

For: Robert Sheedy

RECEIVED

by

SEP 26 1979

SYLVA EXPLORATIONS LIMITED

MINING LANDS SECTION

1979



Partial to an ongoing program

Contents of Initial geophysics for three claims L503005, L503011 and L503009.

- #1 - Brief description of past work
- #2 - Magnetic Survey
- #3 - VLF EM Survey
- #4 - Primary commentaries and Recommendations.

#1- Past work

The claims in question have been held for many years by Mr. Sunisloe a prospector from the Matachewan area who allowed them to lapsed for some time prior to the restaking by the present owner in the fall of 1978.

The main mineralization of economic interest on the property is copper which occurs in quartz-carbonated veins in the form of chalcopyrite and in its native state in secondarily weathered sheared rocks near the shore of the river.

Some shallow holes were drilled in times past which incorrectly collared past through the steep topography and intersected river sand. The most intensive work to date is the diamond drill program carried out by Rosmar, a Junior company who drilled three holes in the '60's which returned mineralization of various widths but not commercially viable. A Self Potential survey was supposed to have been carried out over the claims at 100 foot intervals. This correlating with a copper showing led to the subsequent drilling.

To date no surface trenching or mapping has been carried out by Sylva and none will be attempted until the property is mapped in detail and a Self-Potential and Horizontal Loop survey completed.

* A Geochemical survey was completed using the Total Heavy Metal Method with completely negative results. Even samples taken directly over the chalcopyrite zones returned negative results. It is worth mentioning that the quartz-carbonated veins which were located in the course of the work were not weathering to any degree. A Geochemical Map is presented along with the report but there are no results to describe. It would appear that any copper values are tied up with silicious zones which do not allow the formation of detectable haloes with the cold extraction method. Large sulphide-copper bodies are unlikely to occur on the claims surveyed to date.

Magnetic Survey

With intermediate lavas, granodiorite, diorite and gabbro intrusives all known to be on the property a considerable variance of magnetic signature can be expected. The strongest response was located on L8W near 11+50S where a 15000 gamma reading was flanked by a -20,000 gamma depression. This zone which lies just north of a known copper vein continues SW to the claim boundary near L14W and proceeds NE at least as far as 10S on L2W. The other highly magnetic area is found near the zone which was drilled in the past with 8300 gammas being the peak at L1W 2N. South east of this lies another small magnetic feature at 50N on Line 2E. These zones may outline ultramafic intrusive rocks which produce the mineralization although until geological mapping can be carried out there can be no degree of certainty. As a rule the weak VLF anomalies trend thorough the areas of least magnetism which may possibly be the signature of the carbonatized horizons which contain most of the minerals which to date have not been found to be of a magnetic nature. The SE sector of the property is generally found to be of a low signature. Probably this suggests homogenous rocktype. There is however a small zone of magnetism at 13S on L4E.

The NW corner of the property which lies to the North side of the river is markedly even and suggests that the conglomerate rocktypes known to exist there are uniform.

VLF-M. Survey (Crone Radem)

In this survey the dip angle component of the instrument was profiled. Out of Phase component is negligible, and the Field Strength is presented as an aid to locating the axis of conductors.

There does not seem to be any conductors of a greatly significant strength on the property. Indeed the main anomaly which can be traced from Line 10E across the property on a SW trend to the drilled area at the vicinity of 2N on L 2W is very scetchy. Nonetheless the anomaly is there and although the parameters measured were small there is reason to beleive that tthe former SP anomaly is bonafide and probably could have been present much further to the East. Until the property is mapped interpretation of all the VLF data will be of a highly speculative nature.

Three more crossover zones were located in the central section of the property at 8S and favouring the Eastern sector. A vein structure at the south end of the property which was traced by cursory prospecting was located at 13+50S on Lines 8 and 6W for more than 300 feet made a weak crossover. It appears that sections of this zone carry economic widths and grades if sufficient stike and consistency were to be proved out.

As previously stated the VLF crossovers seem to lie between the areas of high magnetic intensity and lows. Often the conductors thmselves form a low.

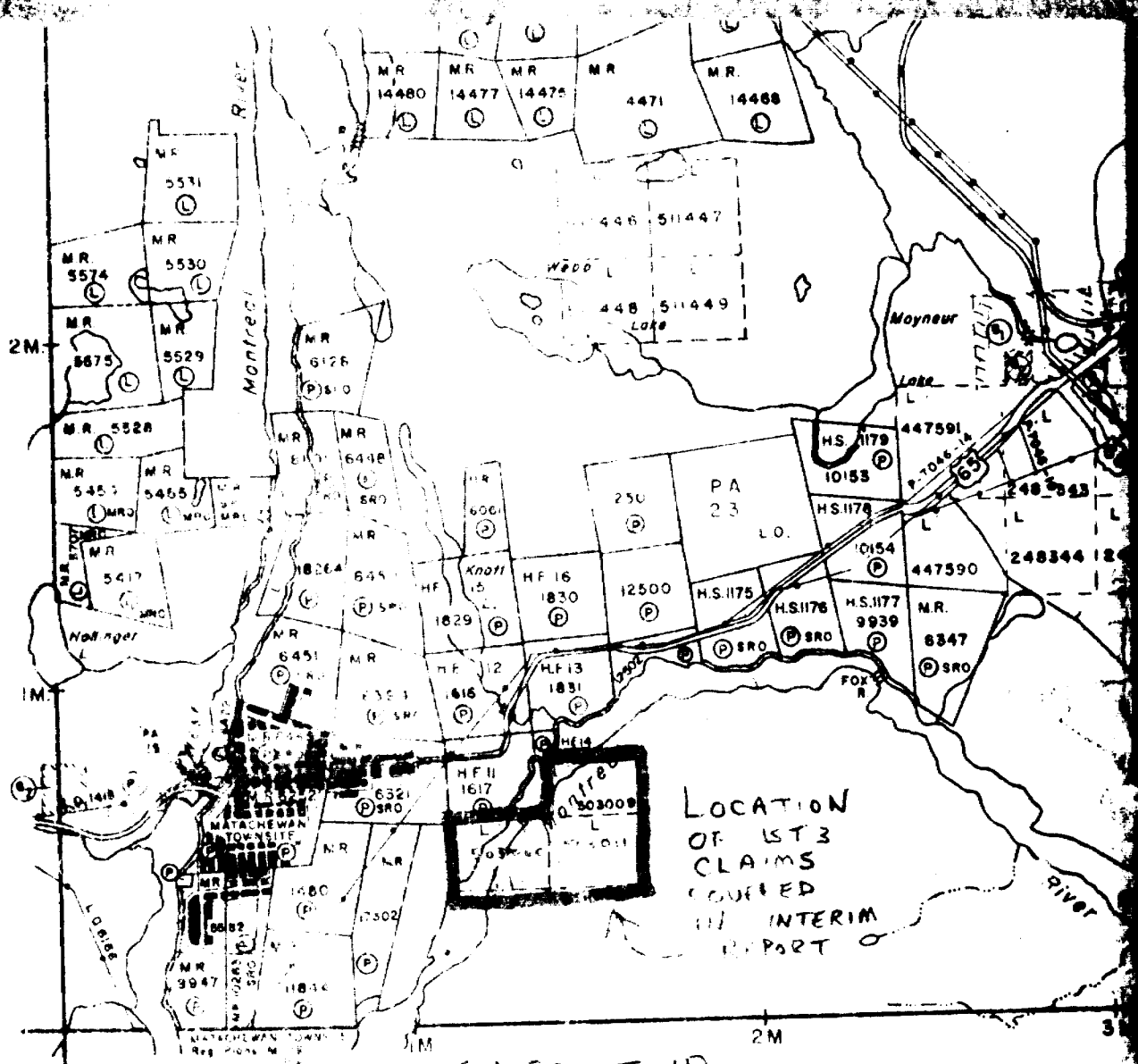
Only at the former drill site vicinity does the VLF and Mag correlate.

Cutler , Maine was selected as a transmitting station because of its strength and general agreement with the strike of the property. The VLF survey should be correlated with a MaxMin survey to evaluate whether the conductors are bonafide or whether due to geological noise. Mapping and the SP survey which may be carried out will be of a great benefit.

Primary Commentary and Recommendations

While line cutting many old pits were discovered which carried copper mineralization. However no apparent work has ever been carried out to see whether any of these correspond with the other. Further only part of the property is exposed by outcrop and evaluation of the showings both old and new will have to be undertaken geophysically before any definitive work programs will be initiated.

R. Sheedy



CAIRO TWP
 LARDEE LK. MINING DIVISION
 TEMISKAMING DIST. Kimberley Twp



TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) GEOCHEM, VLF, MAGNETOMETER

Township or Area CAIRO

Claim Holder(s) R. SHEEDY

Survey Company SYLVA EXPLORATIONS LIMITED

Author of Report R. Sheedy

Address of Author Box 135, Matachewan, Ont.

Covering Dates of Survey May 1979 - Sept 23, 1979
(linecutting to office)

Total Miles of Line Cut 6.708 miles

MINING CLAIMS TRAVERSED

List numerically EM

Prefix	Number	EM
✓ L503005	1/4	1/4
✓ L503009	1/3	1/3
✓ L503011	✓	✓

**SPECIAL PROVISIONS
CREDITS REQUESTED**

DAYS
per claim

- Geophysical
 - Electromagnetic 20
 - Magnetometer 20
 - Radiometric _____
 - Other _____
- Geological _____
- Geochemical 40

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

15 days each
15 days each

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: _____ SIGNATURE: Robert Sheedy
Author of Report or Agent

Res. Geol. L.D. Qualifications 2,2501

Previous Surveys

File No.	Type	Date	Claim Holder

TOTAL CLAIMS 3

If space insufficient, attach list

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 343 Number of Readings 619 - LESS ON GEOCHEM
Station interval 100' - 50' Line spacing 100' - 200'
Profile scale
Contour interval

MAGNETIC

Instrument McPHAR M700
Accuracy - Scale constant +/- 20 gammas
Diurnal correction method check at base station
Base Station check-in interval (hours) every 2 hrs.
Base Station location and value L2W +/- 440 gammas

ELECTROMAGNETIC

Instrument VLF-EM - CRONE RADEM
Coil configuration
Coil separation
Accuracy +/- 10 DA +/- 5% FIELDSTRENGTH
Method: [] Fixed transmitter [] Shoot back [] In line [] Parallel line
Frequency CUTLER, MAINE (specify V.L.F. station)
Parameters measured DIP ANGLE (PRESENTED), 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
Type of electrode

GEOCHEMICAL SURVEY - PROCEDURE RECORD

Numbers of claims from which samples taken 2503005, L 503011
L 503009

Total Number of Samples _____

Type of Sample MARKED (O) for organic (m) for mineral
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

Soil Horizon Sampled B

Horizon Development _____

Sample Depth 12"

Terrain RUGGED, SAND, GRAVEL

Drainage Development THROUGH SWAMPS & OFF OUTCROPS

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis #80

General Samples Dried - equal amounts placed in test tubes using distilled water for both cleaning & mix - shaken & left for equal time -

ANALYTICAL METHODS

Values expressed in: per cent
p. p. m.
p. p. b.

THM
Cu, Pb, Zn, Ni, Co, Ag, Mo, As, (circle)

Others _____

Field Analysis (_____ tests)

Extraction Method COLD-DITHIAZONE

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (310 tests)

Extraction Method COLD

Analytical Method DRY-DITHIAZONE

Reagents Used DITHIAZONE

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General organic, mineral or buterop indicated on maps. Attempts made whenever possible to collect B horizon -

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

Corrections made _____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth -- include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

Additional information (for understanding results) _____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____
(specify for each type of survey)

Accuracy _____
(specify for each type of survey)

Aircraft used _____

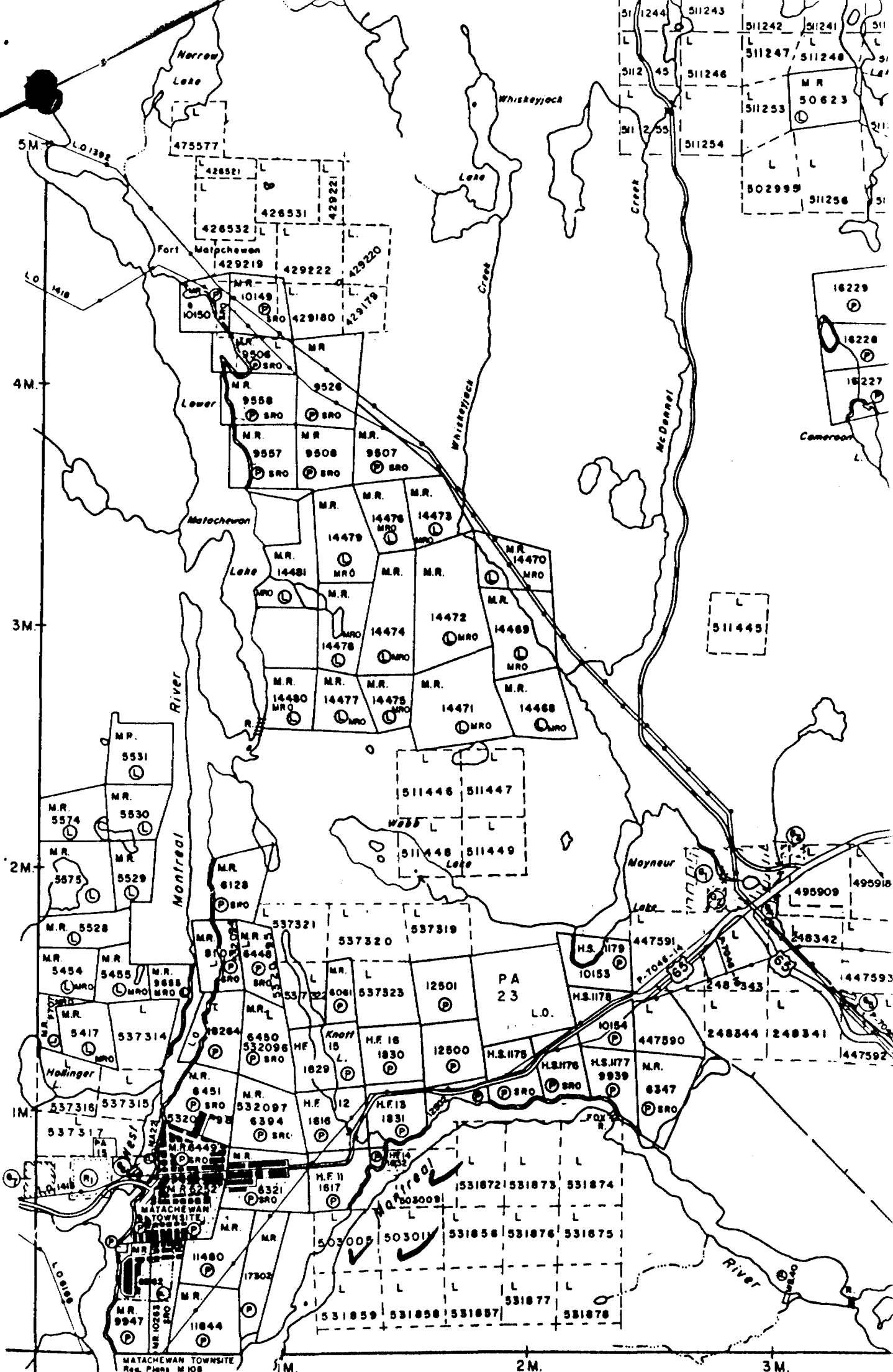
Sensor altitude _____

Navigation and flight path recovery method _____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

Powell Twp. - M.241



Caristwp
M 210

Kimberley Twp. - M.22



Ontario

Ministry of
Natural
Resources

Room 6450
Whitney Block

Sylva Explorations Limited
Box 135
Matachewan, Ontario
POK 1M0



Ontario

Ministry of
Natural
Resources

Room 6450
Whitney Block

Mr. George Koleszar
Acting Mining Recorder
Ministry of Natural Resources
Box 984, 4 Govt. Road E.
Kirkland Lake, Ontario
P2N 1A2



Ontario

Ministry of
Natural
Resources

Room 6450
Whitney Block

Mr. Robert Sheedy
Box 135
Matachewan, Ontario
POK 1M0



Ontario

Ministry of
Natural
Resources

If not called for, please return to
Ministry of Natural Resources
Queen's Park, Toronto, Ontario
M7A 1W3

Room 6450, Whitney Block

To:

Mr. H.L. Lovell
Resident Geologist
Ministry of Natural Resources
4 Govt. Road East
Kirkland Lake, Ontario
P2N 1A2

Alma Twp. - M.202

THE TOWNSHIP
OF
CAIRO

DISTRICT OF
TIMISKAMING

**LARDER LAKE
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 C.

NOTES

400' Surface Rights Reservation along the shores of all lakes and rivers

AREAS WITHDRAWN FROM STAKING

S.R. - SURFACE RIGHTS		M.R. - MINING RIGHTS	
Section	Order No.	Date	Disposition
①	V.H.F. Tower cabin site		S.R.
②	W. 26/78	May 31, 1978	S.R.
			15376 v.2
			188 522

- SAND and GRAVEL
- ① M.T.C. Gravel Pit 206 ② Gravel File 127307
 - ③ M.T.C. Gravel Pit 1313 ④ Gravel Pit 205
 - ⑤ Gravel Pit 204, File 127307 ⑥ Gravel Pit
 - ⑦ M.T.C. Gravel Pit 3F-4, File 127307

DATE OF ISSUE
SEP 27 1979
SURVEYS AND MAPPING
BRANCH

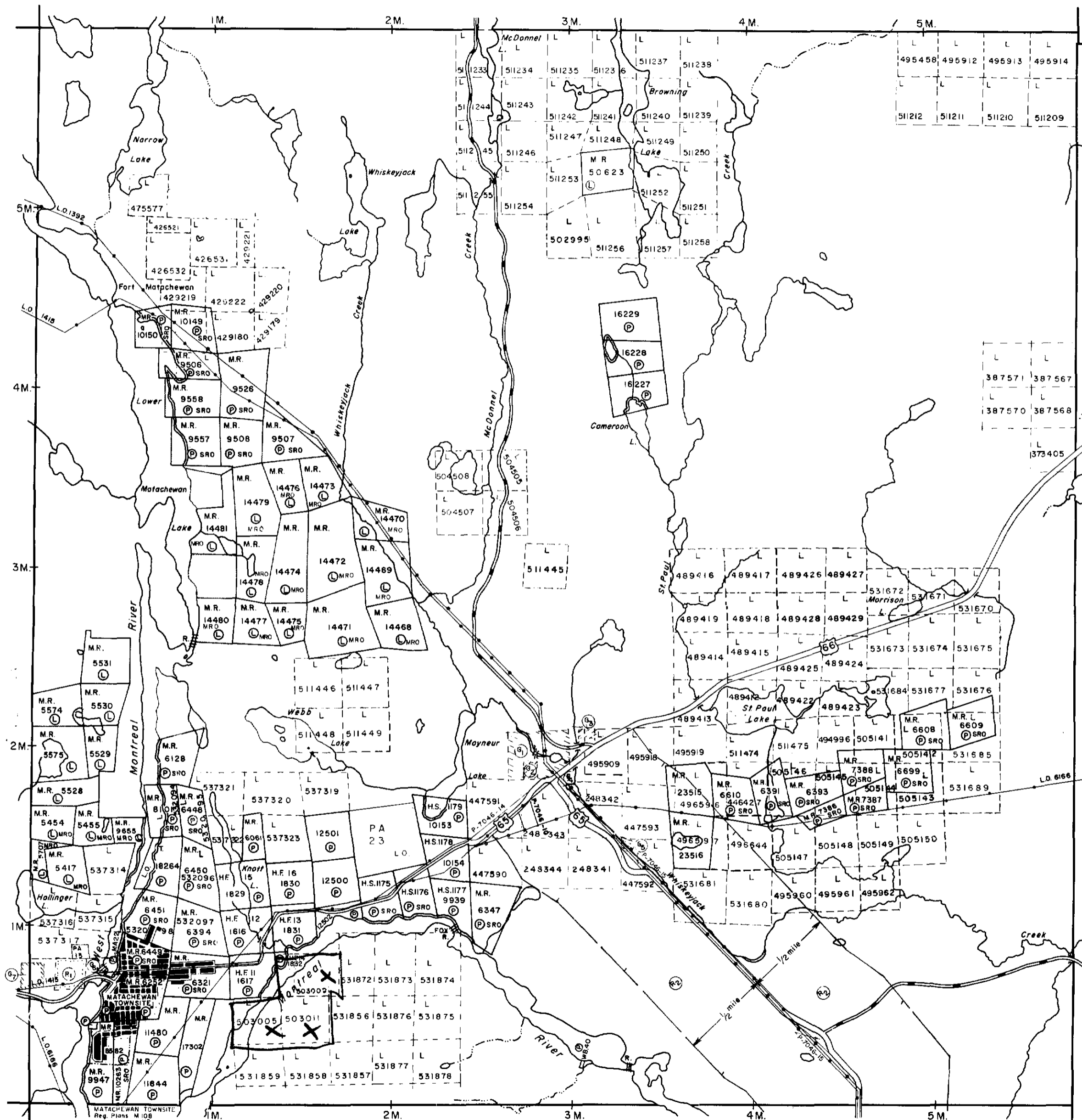
Order plan

PLAN NO. **M.210**

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

Powell Twp. - M.241

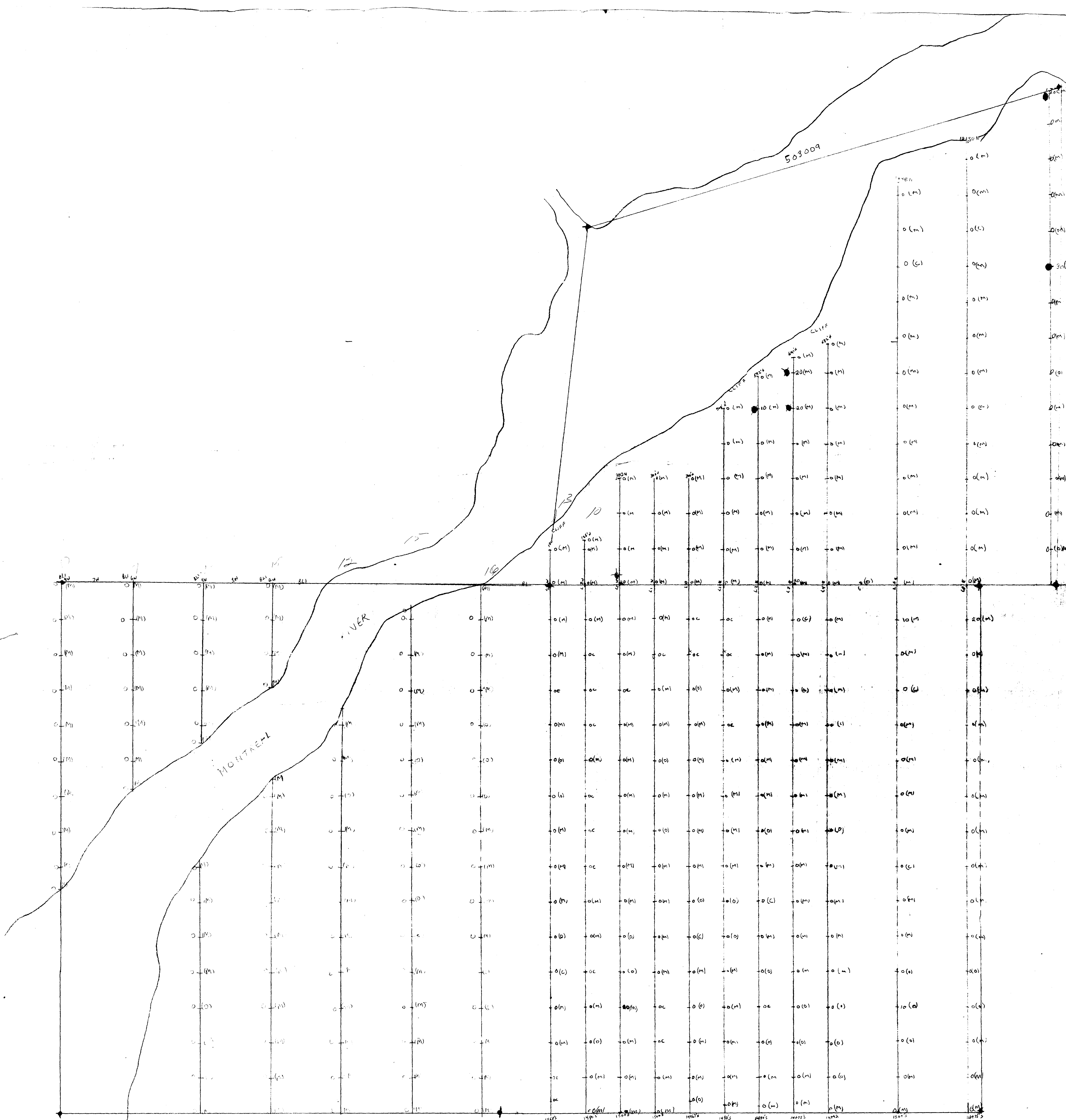
Flavelle Twp. - M.220



Kimberley Twp. - M.226



41P15NE8344 2.3050 CAIRO



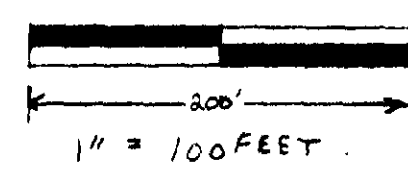
503005

503011

SYLVA EXPLORATIONS
 GEOCHEMICAL SURVEY
 (TOTAL HEAVY METALS)
 "THE CAIRO GROUP"
 FOR
 R. SHEEDY

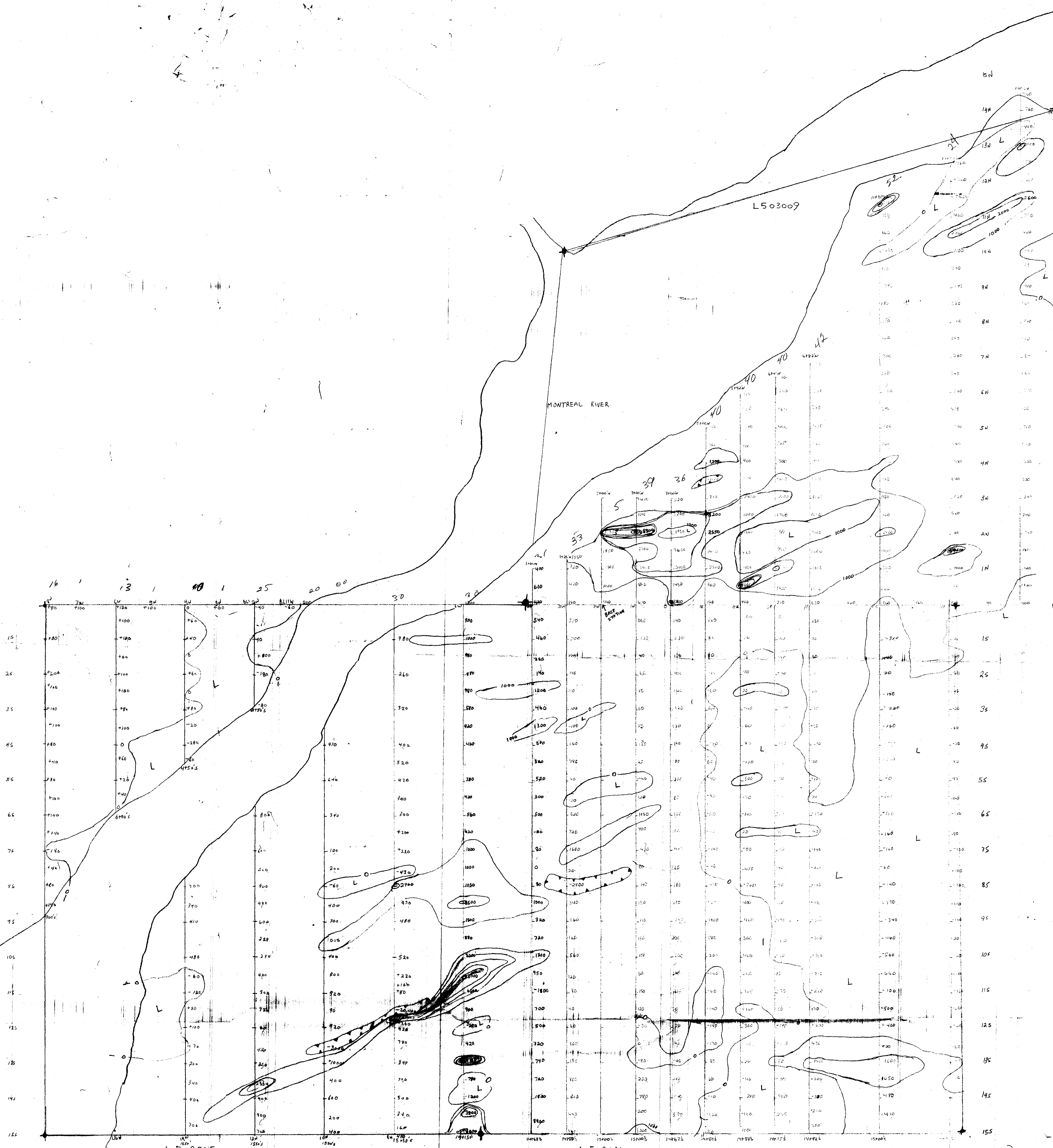
0 PARTS PER MILLION
 10 PARTS PER MILLION
 20 PARTS PER MILLION
 30 PARTS PER MILLION

TRUE
 NORTH



Carl-fied
 R. Sheedy



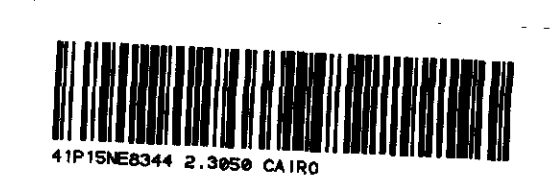


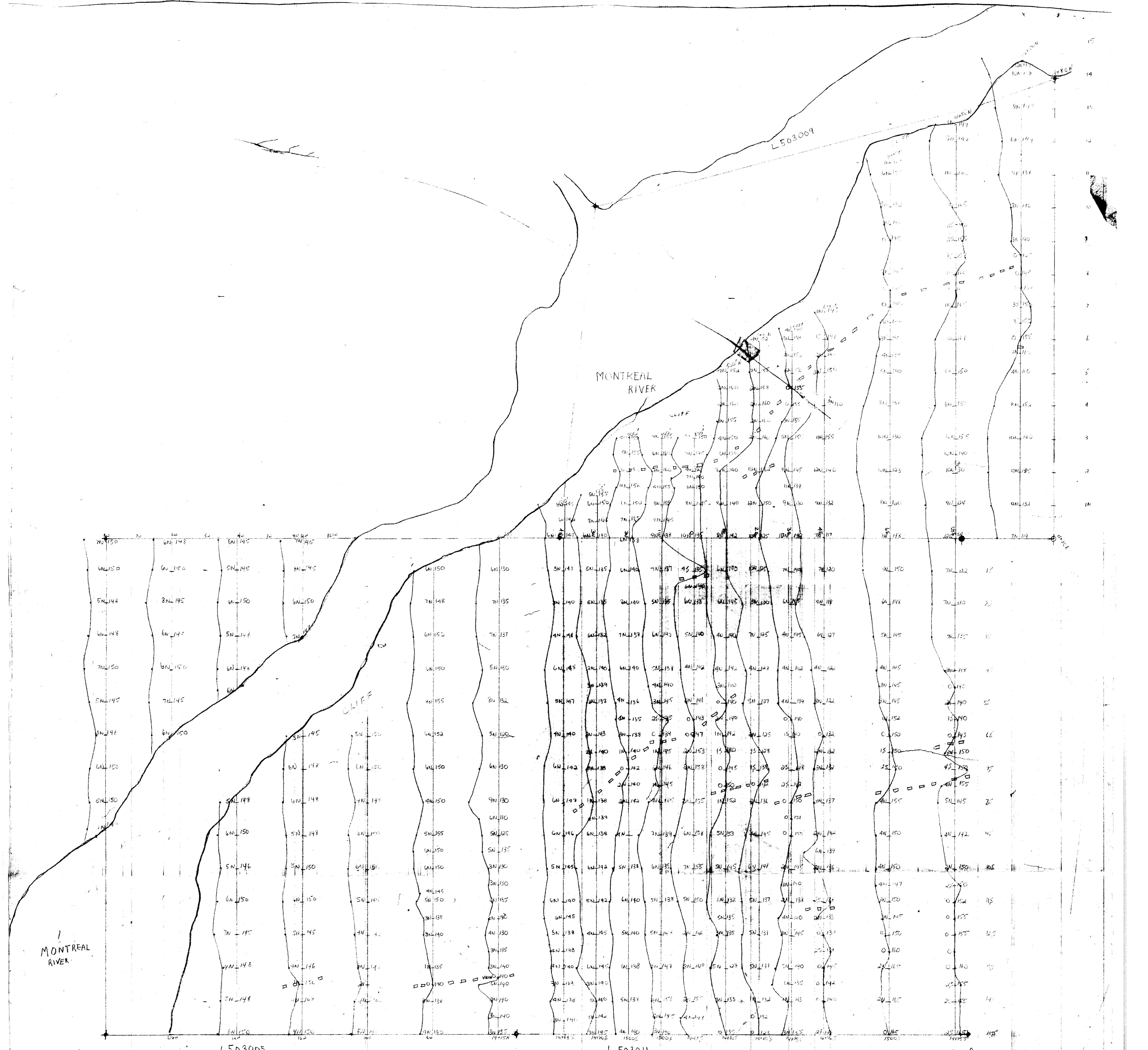
300 FT
 300 FEET
 1 INCH EQUALS 100 FEET
 CONTOUR INTERVAL - 1000 GAMMAS
 ○ SEVERE MAGNETIC DEPRESSION
 L - LOWER READINGS (USUALLY SURROUNDED BY HIGHER)

SYLVA EXPLORATIONS
 MAGNETOMETER SURVEY
 "THE CAIRO GROUP"
 FOR
 RSHEEDY
 OPERATOR: G. TAMAN
 AUTHOR: R. SHEEDY

Mc PHAR M700

Carl Sheedy





MONTREAL RIVER

MONTREAL RIVER

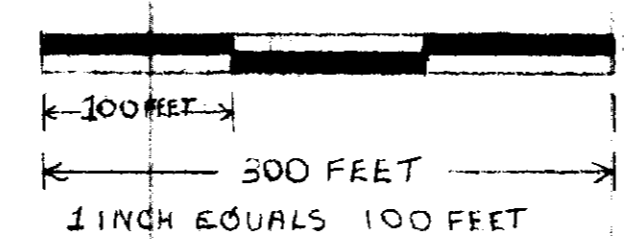
CLIFF

CLIFF

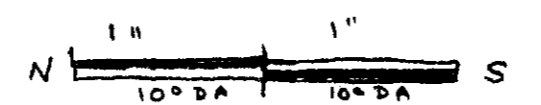
L503005

L503011

□ □ □ CONDUCTOR AXIS



D.A. SCALE.



SYLVA EXPLORATIONS
CRONE RADEM SURVEY
THE CATRO GROUP
FOR
R SHEEDY
TRANSMITTER-CUTLER, MAINE 17892

Certified
R Sheedy

