

2.3349

TECHNICAL REPORT



42A02NW0080 2.3349 MCNEIL

010

ON

The Group of Claims known

as

The Lew Weekley Property

McNeil Twp

1980

By Sylva Explorations Limited

Author - Robert Sheedy

SURVEYS

Magnetic

VLF-EM

Self Potential

Introduction

The surveys were conducted over two claims in a large group of claims situated in the middle of McNeil Twp. Claims numbered L512356 and L512355 were covered in their entirety and a portion of 512302 and 512363 on their eastern parts. The entire group is comprised of 39 claims. Access to the property is gained from a fourwheel drive road departing highway 560 to a sawmill at Ezra Lake. Another road is followed along the East Nighthawk river to a distance of approximately two miles past the questionable bridge which crosses the river just north of East Nighthawk Lake. Here a junction is reached with the road which extends North from Argyle Lake near Camp Tru-Nor. The latter is impassable due to a collapsed bridge.

From the junction a north bound road reaches to a point on the Whitefish River where a bridge was blasted out by persons unknown in 1979. After the river is crossed by boat it is necessary to walk or as in the case of the authors visit to utilize an ATV to gain access to the property by a narrow bulldozer road.

Past work on the property consisted of some rock trenching by the late Hugh Kells and Messrs. Hennessey and Laporte. A shaft which was estimated by the author to be between 40 to eighty feet deep was sunk in early days by Mr. Laporte on what appears to be a narrow quartz vein in a mineralized rhyolite flow. This shaft as well as the sinking equipment is located on the NE end of a small lake on Claim L512585. A steam tugger, boiler etc. is still in situ suggesting that operations were suspended with the intent of resuming at a later date.

The Kells showing lies just north of the claim line on claim # L512355 approximately 450°E of the #4 claim post for the aforementioned claim. The rock consists of a very aphanitic syenite dike cutting across a fractured zone in the andesite country rock. Many old pits were dug along strike suggesting that some gold values must have been encountered by Mr. Kells.

Messrs. King and Weekley widened the trench and collared a hole which did not intersect the trench or the syenite dike. More mafic syenite was encountered however in the hole indicating that the dike is not the only one but rather part of a stockwork ranging in width from one foot to about eight. Two more holes were drilled along strike which apparently intersected the dike although the rock was more variable than at the showing. Some very high values were obtained in the initial drilling but later check samples proved them to be contaminated by the assayer by means unknown (certainly not intentionally) The actual values were very low.

At the request of Mr. Weekley a geophysical program was instituted to test the property for anomalous sulphide zones which were not of sufficient strength to register on the ODM InPut survey of 1974. The results are described elsewhere in this report.

During the authors five day visit rhyolite flows were found on the property, as well as dacite and the abundance of andesite confirmed. At least one large diabase dike was located. Much of the property and the claims covered in the survey is covered by a very wet swamp filled with thick tagalders.

MAGNETIC SURVEY

The township of McNeil has not to date been mapped in detail by the ODM and very little geological work of any type has been carried out to date over a wide scale. Interpretations of the magnetic signature of the property is therefore of a necessity difficult and based on rather nebulous information. In general the rocks which have the lowest magnetic response to the North of the property are thought to be acid, likely dacitic or intermediate andesites.

Just North of the baseline the magnetic peaks trend with the bedding planes at the main showing and show a Southeasterly strike however the general stratigraphy seems to be in a Westerly direction. It seems therefore that fracturing and other structures cut across the general stratigraphy. (See VLF Map)

The most prominent feature is the large magnetics to the south of the property. Certainly the rocks underlying are more mafic in nature but with a magnetic relief of 4000 gammas on the property it is unlikely that this is an ultrabasic flow or intrusive. One outcrop examined by the author showed some obscure signs of folding. Also the presence of magnetite enriched andesites cannot be ruled out. The large inflection in the feature may indicate some folding or faulting but since the entire zone lies in a very wet swamp with absolutely no outcrop definite conclusions cannot be drawn at this time.

At 350's on Line 10E a definite acid volcanic gives a low magnetic feature which can be traced westward for some distance. This appears to contact with the more magnetic rocks and form a contact about 100' further south. Quite likely this is part of a volcanic lithology which varies from acid to the more mafic types.

It is worth commenting that approximately one mile to the East rhyolites were found interbedded with basalts. It is quite possible that the same sequence exists on this part of the property.

The syenite dikes seem to be of a very narrow nature and gave low readings. They were not of sufficient width to expedite detection through magnetic means at the parameters measured.

In general the magnetic survey shows a general East and West trend in the former emplacement which may have been altered in later geological times by folding or faulting or both. Insufficient outcrop is available to correlate the tow. It seems that stripping and diamond drilling will be required to acquire information.

VLF-EM SURVEY

Crone Radem - Stations - Cutler Maine - Field strength and Dip angle Presented.

The radem survey was very useful to trace the structure of the property which was definely and consistantly SE. Some of the lineaments detected were of a great length which is apparent from an examination of the accompanying map.

The largest of these passes from the NW quadrant of the grid and continues to the baseline at the Eastern property boundary. It dips sligtly to the North and correlates well with the SP results which show that it is a descrete bedrock conductor with some sulphide association.

The second lies just south of the baseline in the Western sector. This is well is a bedrock conductor and is highest in horizon at iss Eastern extremity (See SP map) Neither of these two aforementioned conductors have magnetic correlation. The latter has its best field strength at 225'S on L00.

Another conductor beginning at L0 and 7S likely denotes a contact but since it coincides with a SP feature and a high steep magnetic gradient it should be given attention.

Another located just SE of the aforementioned zone is likely another contact or structural anomaly. However several SP responses in the general area may indicate the presence of sulphides being associated.

Possibly the most interesting anomaly is located on high ground on Line 10E at 450'S. This zone may be able to be stripped with a bulldozer. Since it lies on a magnetic gradient and has been geologically identified it is of particular interest.

In the extreme NE quadrant of the property a zone which lies at a bad angle for the Cutler station may represent another zone which runs at right angles to the rest of the property. It also has some SP correlation.

Several other scattered zones are on the property but lack magnetic or SP correlation and while of geological interest do not suggest the presence of either disseminated or massive sulphides.

SELF-POTENTIAL SURVEY

This type of survey was chosen over a horizontal loop system for several reasons. Primarily when arriving on the property no geological informaton was available. Since the SP works along strike as well as across it was by far the much better tool for mapping geophysically as well as geologically. Further the SP serves well to differentiate between a descrete conductor and a structural anomaly since it is insensitive to wet shear zones, clay, and all the other plagues which attack an EM system. It is however limited in its penetration in wet swampy overburden and for this reason any negative response at all is worthy of consideration. It can be said that anomalous results which work against topography are impottant. ie: A dry sandy hill causes a negative response and a low wet swamp creates a positive response. While the system is archaic to most, this is largely due to their inexperience.

Since the property was mostly covered by a wet low swamp careful attention was given to the readings taken with the SP. Any reading under -30 millivolts was considered worthy of note and the enclosed map was profiled down to -20 millivolts. Very little high ground was encountered.

It is worth mentioning in passing that Sylva's SP is not subjected to topography like the formerly used CuSO_4 porous pot system which was affected by the water table.

Before beginning the survey the baseline was ran to define a neutral zone to emplace the stationary probe. This was placed at L8E and was not disturbed throughout the survey. Polarity problems were nil since the carbon cathodes do not polarize in the slightest. (eg: a common battery or the induced polarization method to discriminate against graphite - time domain) [For this reason Sylva cannot get a patent] All readings which are taken from a LCD digital display accurate to plus or minus one millivolt were corrected to the base station. The results are presented on the accompanying map.

In considering the results it should be born in mind that profiles were drawn strictly that no readings were crossed which did not fit the absolute patterné. For this reason the map may appear confusing until it is correlated with the Mag and VLF results.

Basically the enclosed maps show the correlation between the bonafide conductors and those which are structural as formerly described in the VLF report.

However there is a major zone which did not respond to VLF on the property which begins at L6W 3N and extends to L650E on the baseline. This zone is well delineated by magnetic signature consisting of a lineament of magnetic peaks correlating well with the SP results. While it is known that a SP will react to oxidizing magnetite it is unlikely that sufficient quantities are present to create such a response judging from the Mag survey. In the authors opinion this is a separate disseminated zone which bears attention.

RECOMMENDATIONS AND CONCLUSIONS

Insufficient geological information is available at this time for any definite conclusions to be drawn. A program of stripping and diamond drilling will be required to test the anomalies which were found during the course of the survey. In the opinion of the author the original showing should be redrilled from North to South as shown on the map. A second priority would be to either strip or drill the zone at L10E - 450S. A trench of sufficient length should be put in to expose the rock for a minimum of two hundred feet if possible from 3 to 5 south. Since almost nothing is known about the remaining zones the setting out of priorities can only be ascertained by the property owners as work progresses. Certainly the mag-SP anomaly at 250N on L0 should be stripped. Also the steep magnetic gradient at L0-750S should be tested by diamond drilling until the magnetic and SP responses are determined. Other targets are printed on the accompanying maps.

In conclusion the best looking rock seen during the authors visit was a pyritized rhyolite. If after assaying it proves to be auriferous then attention should be given to geophysical features in magnetic lows since the rock is devoid of mafic minerals.

Robert Sherry

CLEAVER TWP. M.269

4M

3M

2M

1M

CLAIMS COVERED IN SURVEY

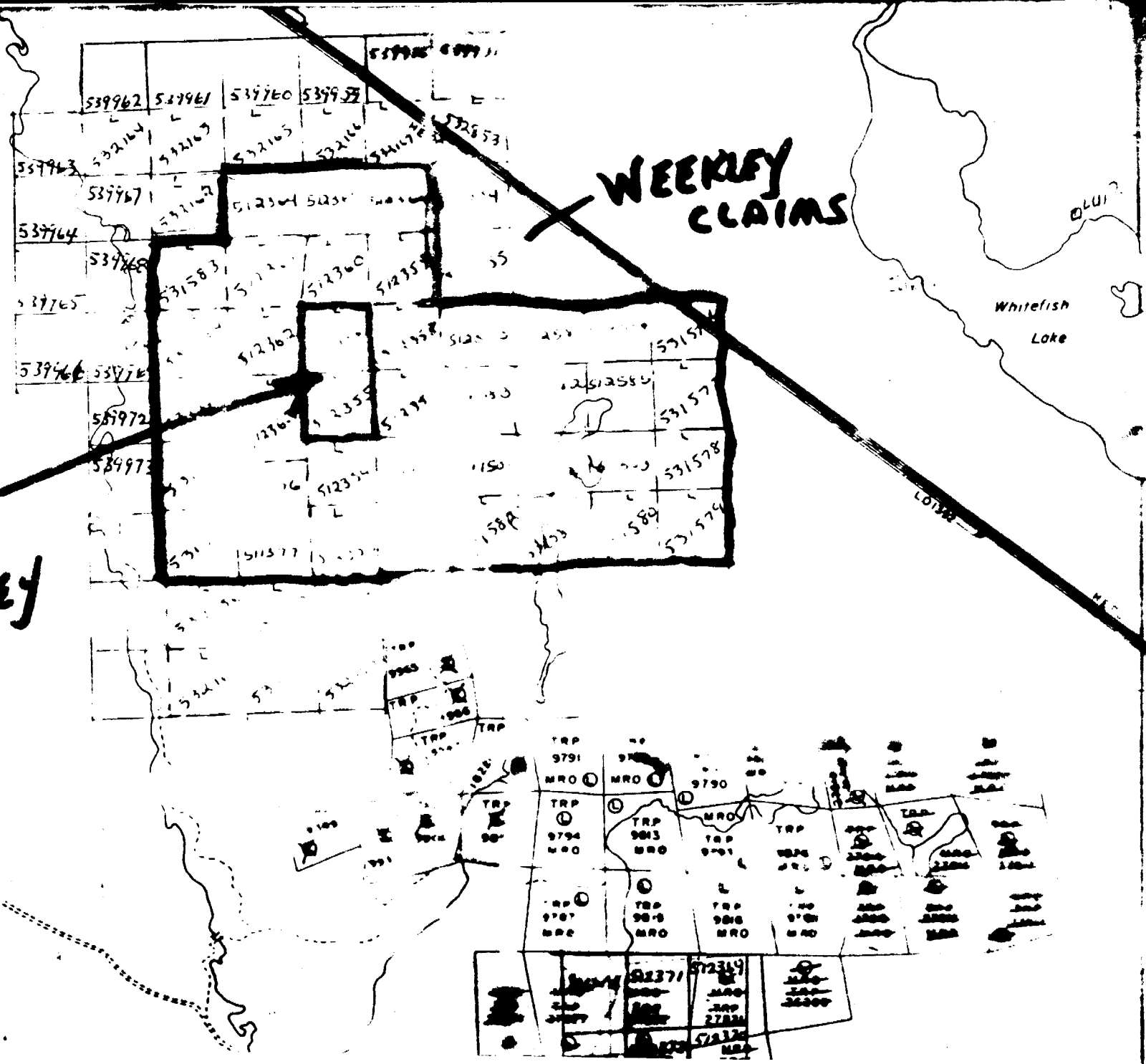
WEEKLY CLAIMS

Whitefish Lake

Nighthawk River

East

East



GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 326 Number of Readings 326-500

Station interval 100 Line spacing 200'

Profile scale 1" = 20' ~ VLF - 25 millivolt on SP

Contour interval 100 gammas mag

MAGNETIC

Instrument McPhar ~~MP-2~~ M700 Fluxgate

Accuracy - Scale constant +/- 20 gammas

Diurnal correction method check in to base

Base Station check-in interval (hours) less than 1 hour

Base Station location and value L00+00 - 59026 gammas as measured by Scintrex MP-2 Total Intensity Proton Precession Magnetometer

ELECTROMAGNETIC

Instrument Crone Radem

Coil configuration _____

Coil separation _____

Accuracy +/- 1°

Method: Fixed transmitter Shoot back In line Parallel line

Frequency Culler, Maine - 17.8 Hz
(specify V.L.F. station)

Parameters measured IP - OP - 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 _____

SELF POTENTIAL

Instrument Syplex Mark III Range 1 mile
Survey Method one base station located line 8W - all readings taken from one station.
Corrections made None required - as presented

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 _____

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

General _____

ANALYTICAL METHODS

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

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

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

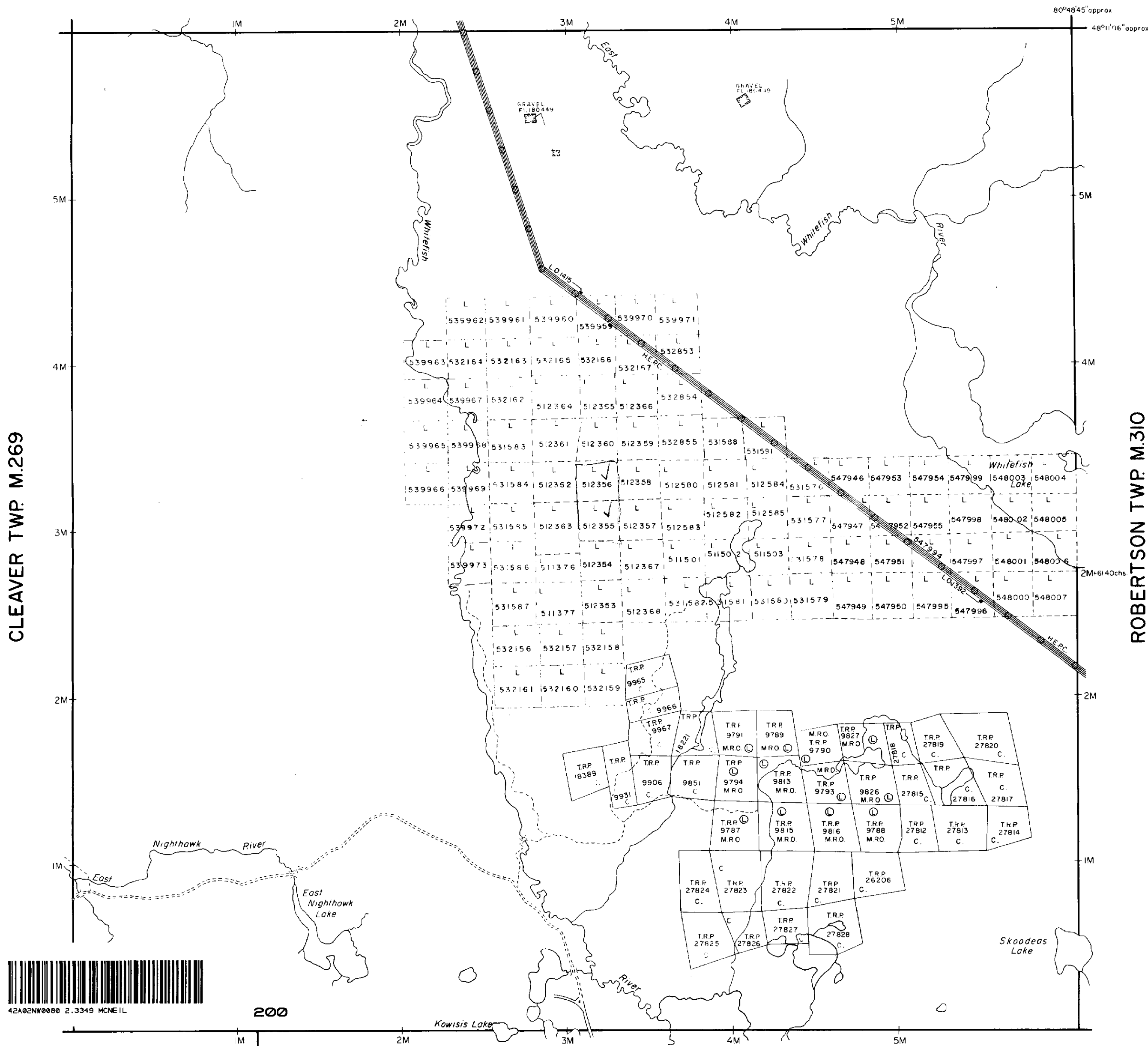
Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____

FASKEN TWP M.280



CLEAVER TWP. M.269

ROBERTSON TWP. M.310



200

HINCKS TWP. M.223

ARGYLE TWP. M.203

NOTES

400' surface rights reservation along the shores of all lakes and rivers

DATE OF ISSUE
JUN 20 1980
SURVEYS AND MAPPING
BRANCH

LEGEND

- PATENTED LAND
- PATENTED FOR SURFACE RIGHTS ONLY
- LEASE
- LICENSE OF OCCUPATION
- CROWN LAND SALES
- LOCATED LAND
- CANCELLED
- MINING RIGHTS ONLY
- SURFACE RIGHTS ONLY
- HIGHWAY & ROUTE NO.
- ROADS
- TRAILS
- RAILWAYS
- POWER LINES
- MARSH OR MUSKEG
- MINES

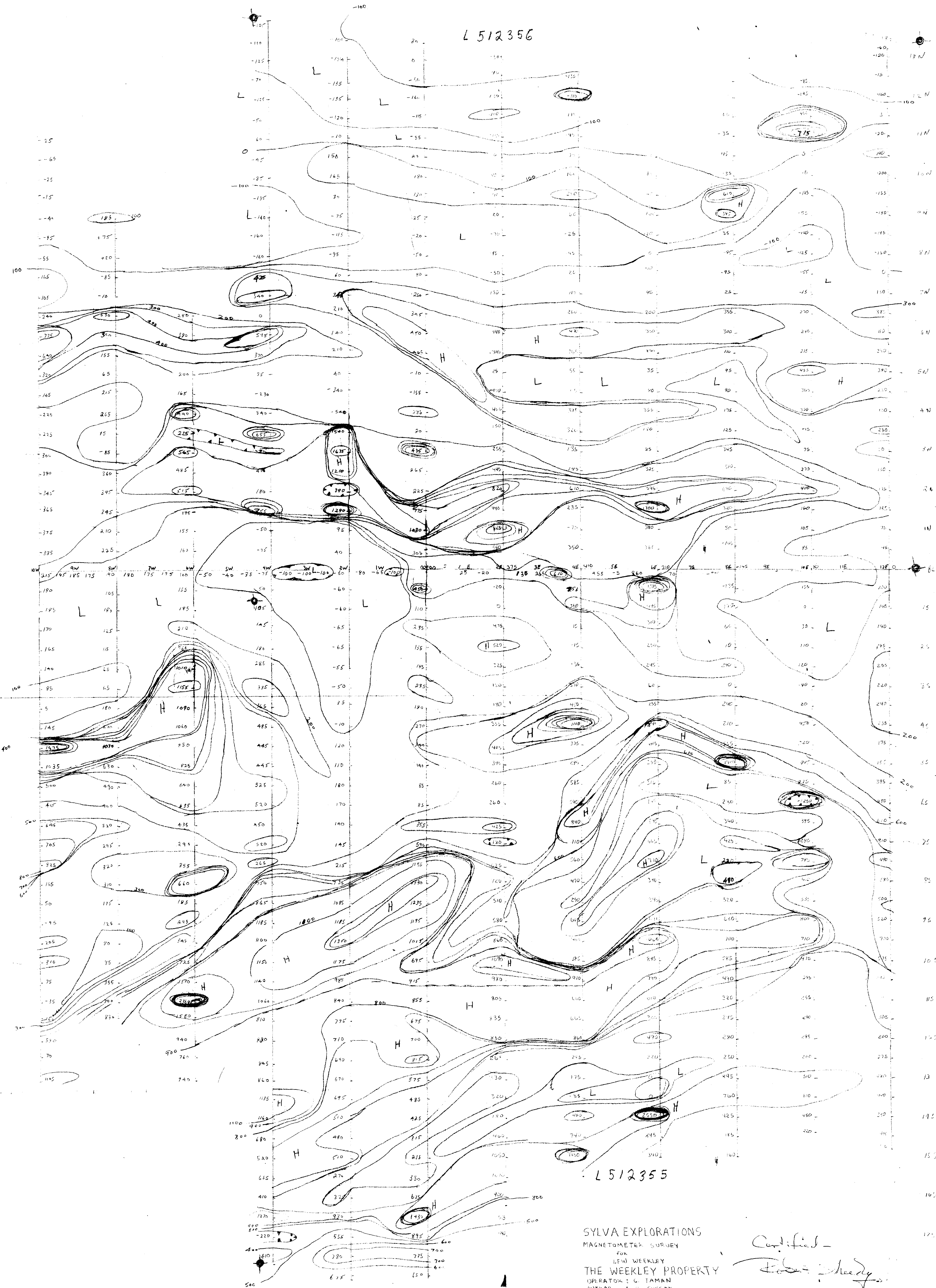
* used only with summer resort locations or when space is limited

2.3349 TOWNSHIP OF
MCNEIL
DISTRICT OF
TIMISKAMING
LARDER LAKE
MINING DIVISION
SCALE: 1 INCH = 40 CHAINS (1/2 MILE)

DR. DK. PLAN NO. **M.300**
DATE 18 271

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

L 512356



275
 175
 1050

1010
 1155
 1246
 1266

L 512355

SYLVA EXPLORATIONS
 MAGNETOMETER SURVEY
 FOR
 LEW WEEKLEY
 THE WEEKLEY PROPERTY
 OPERATOR: G. TAMAN
 AUTHOR: K. SHERDY

Certified -
 K. SHERDY

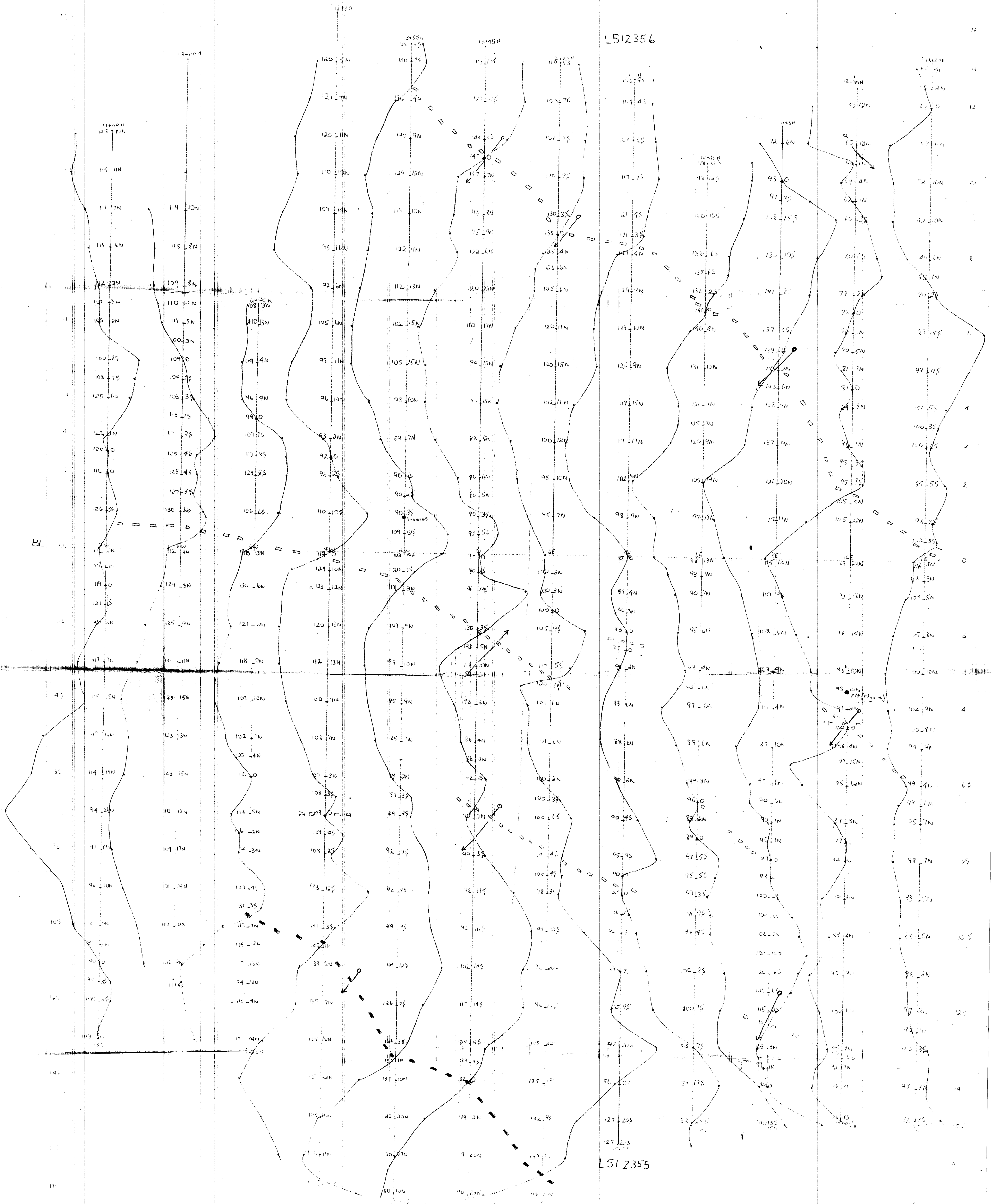
Contour Interval - 100 gammas
 Muller M700 Magnetometer

1 INCH = 100 FEET

NORTH



L512356



L512355

LEW WEEKLY PROPERTY

SYLVA EXPLORATION'S LIMITED
YLF-EM SURVEY - CRONE ROAD

CUTLER MAINE 17.8 KHZ

Operator - E. Ames

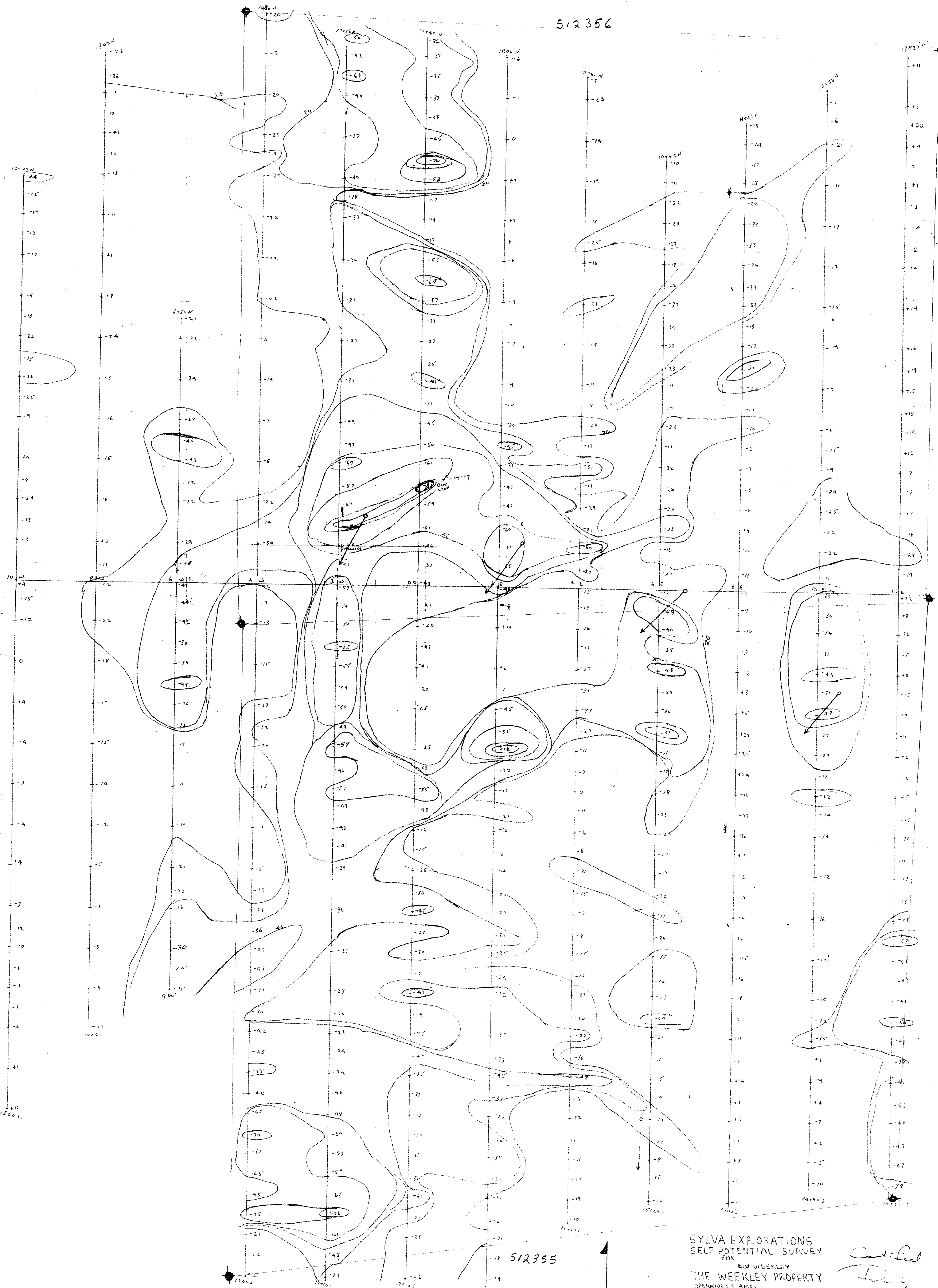
Author - R. Shedy

McNEIL TWP

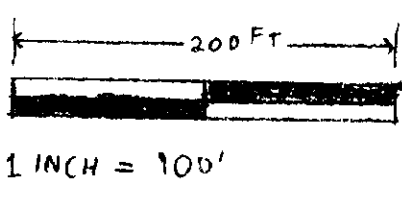
Carl Fred R. Shedy



512356



Instrument - Sylox MK IV
Self Potential



TRUE NORTH

SYLVA EXPLORATIONS
 SELF POTENTIAL SURVEY
 FOR
 LEW WEEKLEY
 THE WEEKLEY PROPERTY
 OPERATOR: B AMES
 AUTHOR: R. SHEEDY

Conf: Lew
Sheedy

- Contour Interval - 10 gemmas
- - HIGHEST RESPONSE IN ZONE
- - RECOMMENDED TRENCH OR B.D. HOLE

