32D04SE0307 2.1119 HEARST

THE McELROY-HEARST TOWNSHIP PROPERTY OF CANTECH RESOURCES LIMITED COVERING AN ELECTROMAGNETIC SURVEY

JAN 12 1973
PROJECTS SECTION

PROPERTY, LOCATION & ACCESS

The property comprises 10 contiguous, unpatented mining claims in McElroy and Hearst Townships, Larder Lake Mining Division, Ontario.

The claims are numbered as follows:

319192 - 319196 inclusive
319463 - 319467 "

Located 1 mile west of the Town of Larder Lake, the claims lie in the northeast corner of McElroy Township and the northwest corner of Hearst Township. Highway 66 lies 1/2 mile north of the claim group and from this paved road, a new secondary gravel road, under construction by the Ontario Department of Lands & Forests, strikes southerly across the property. Two additional roads, suitable for four-wheel drive vehicles only, give access to the northwest and easterly portions of the property respectively.

HISTORY

Most of the claims of the group were staked prior to 1930, brought to patent and held until 1968 when they came open for taxes.

During the various periods of intensive exploration in the Larder Lake Area (that is, prior to 1950), the claims were prospected, trenched and diamond drilled in a search for gold. No ore bodies were found.

In 1968 on reverting to the crown, the claims were staked by Canadian Nickel Corporation following an aerial geophysical survey. Reconnaissance ground geophysical work was carried out and the claims were allowed to lapse. In November-December 1971, the claims were restaked by Cantech Resources Limited.

The best sources of geological information are the following:

Abraham, E.M. Geology of McElroy Twp., O.D.M. Vol. LIX Part VI, 1950
Thomson, J.E. Geology of Hearst & McFadden Twps. O.D.M. Vol. LVI, Part VIII 1947
Dumesnil, J.C. Geological Assessment Report-Amax Group 3, McElroy Twp. 1 Nov.'68

FIELD PROCEDURE

A base line and a tie line were established in an E-W direction as shown. Utilizing an old grid system of lines running North-South on 400 foot

centre, the property was traversed in a series of loops from the base line. Initially base stations had been established every 400 feet on the base line with station 0 on line 0 being arbitrarily set at a field strength of 200. Readings were taken every 100 feet. 530 stations were read representing 10 miles of line. The survey was conducted by the writer during the early part of December 1972.

INTERPRETATION

To the west of line 4E terrain is rough, outcrop is plentiful and overburden generally light.

Clay and swamp with no outcrop cover the central part of the property which extends east from line 4E to the edge of a prominent sand esker which covers the three northeasterly claims numbered 319464, 319466 and 319467.

Conductive zones B C D E and F and the crossovers lying in the vicinity of D E and F are all considered to be the result of conductive overburden.

Conductor A is considered to be a possible graphitic zone with or without accompanying sulphides. The conductor occurs in an area of light overburden and is obviously not the result of conductive overburden. Similar conductors have been drilled on the adjoining property by Amax to yield graphitic argillite yielding values of 1% - 3% Zinc, 0.25% - 1% copper with low silver and lead values over widths varying from 2 to 14 feet.

It is recommended that conductor A be tested by a magnetometer survey and possibly one or two short drill holes.

Signed,

L. J. Cunningham, B.Sc., P.Eng.,
Mining Engineer

Dated at
Kirkland Lake, Ontario
30th December, 1972

FORM NO. [illegible] REPORT PAPER GRAND & TOY LIMITED

APPENDIX

The Radem equipment simply utilizes a radio receiver covering the frequency band of VLF transmitter stations scattered over this continent and other parts of the world. These transmitter bases are especially constructed towers which transmit on the VLF frequency (very low frequency) expressly for communication with submarines which they do effectively through depths of salt water. Therefore it is understandable that penetration into rock is substantial should there be no conductive overburden acting as an inhibitor.

These transmitter stations transmit in the 17 Kcs. to 26 Kcs. range. A station is chosen so that the electromagnetic lines of force of the horizontally concentric field are perpendicular to the strike of the formations or conductors which are being sought in the region of interest. The numerous VLF stations available make it a simple matter to select the appropriate primary field direction required which was the Cutler, Maine station in the present case. The transmitter station may almost be considered as located at infinity, therefore the primary field is uniform and parallel in a given area.

Coupling due to a secondary induced field is measured by a tilt angle. This is accomplished by turning the receiver around a vertical axis to a position of minimum signal and then tilting around a horizontal axis to a position of no signal or "null". This angle is measured in degrees and the direction of dip is noted. The receiver is marked so that when tilted an arrow on the instrument point toward the axis of the conductor. As the conductive axis is "crossed over" the arrow points vertically down and the dip angle is zero. The degree of tilt or amplitude is generally a measure of the intensity of the conductor. The width between the peaks of the amplitude is generally an indication of the depth of the conductor. The narrower spread of the peak indicating a conductor nearer surface.

The Radem instrument must be used with a great deal of discretion and experience; the frequencies used similarly attenuate buried metallic conductors and strong surficial ionic conductors. The resultant conductive zones may be graphite, sulphides, faults, wet shears or surficial conductive clay.

FORM NO. 1 ... P REPORT PAPER GRAND & TOY LIMITED

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900

GEOPHYSICAL – GEOLOGICAL TECHNICAL DATA STATEMENT

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.

RECEIVED
JAN 12 1973
PROJECTS SECTION

Type of Survey VLF EM

Township or Area McElroy-Hearst Townships

Claim holder(s) G. G. Plaskett
5 King Georges Road, Toronto, Ontario

Author of Report L. J. Cunningham

Address 1 McPhee Avenue, Kirkland Lake, Ontario

Covering Dates of Survey 3 - 15th December, 1972
(linecutting to office)

Total Miles of Line cut

SPECIAL PROVISIONS CREDITS REQUESTED

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

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
--Electromagnetic	20
--Magnetometer	
--Radiometric	
--Other	
Geological	
Geochemical	

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

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

DATE: 30 December 1972 SIGNATURE: _____
Author of Report or Agent

PROJECTS SECTION

Res. Geol. _____ Qualifications 63.1603

Previous Surveys _____

Checked by _____ date _____

GEOLOGICAL BRANCH

Approved by _____ date _____

GEOLOGICAL BRANCH

Approved by _____ date _____

OFFICE USE ONLY

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
L	319192
	193
	194
	195
	196
	463
	464
	465
	466
	467

If space insufficient, attach list

TOTAL CLAIMS 10

Show instrument technical data in each space for type of survey submitted or indicate "not applicable"

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations 530 Number of Readings 1060

Station interval 100 FT.

Line spacing 400 FT

Profile scale or Contour intervals Profile Scale 1" = 20' FIELD STRENGTH
(specify for each type of survey) Contoured EVERY 20 units

MAGNETIC

Instrument

Accuracy - Scale constant

Diurnal correction method

Base station location

ELECTROMAGNETIC

Instrument Crone Radem

Coil configuration

Coil separation

Accuracy ± 1%

Method: ☒ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency Cutler, Maine
(specify V.L.F. station)

Parameters measured

GRAVITY

Instrument

Scale constant

Corrections made

Base station value and location

Elevation accuracy

INDUCED POLARIZATION – RESISTIVITY

Instrument

Time domain Frequency domain

Frequency Range

Power

Electrode array

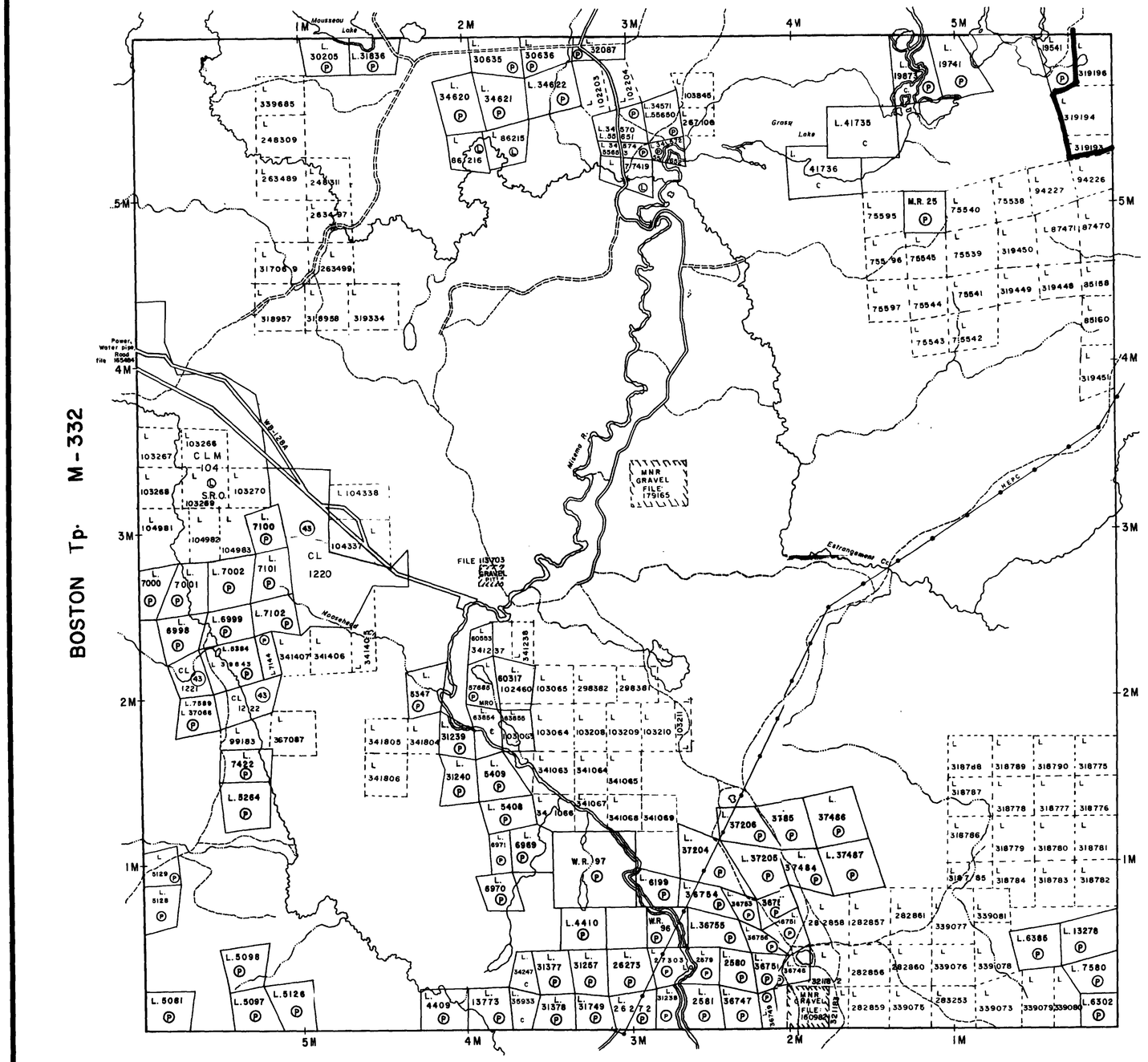
Electrode spacing

Type of electrode

TRIM LINE

M-366

GAUTHIER Tp. M-350



THE TOWNSHIP OF

Mc ELROY

DISTRICT OF TIMISKAMING

LARDER LAKE MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

PATENTED LAND	● or Ⓟ
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.
PATENTED FOR SURFACE RIGHTS ONLY	◓

NOTES

400' Surface rights reservation along the shores of all lakes & rivers

Areas withdrawn from staking under Section 43 of the Mining Act. R S O 70

	File	Date	Disposition
(43)	186016	22 Mar '72	S R & M R.

PLAN NO. M-366

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

TRIM LINE

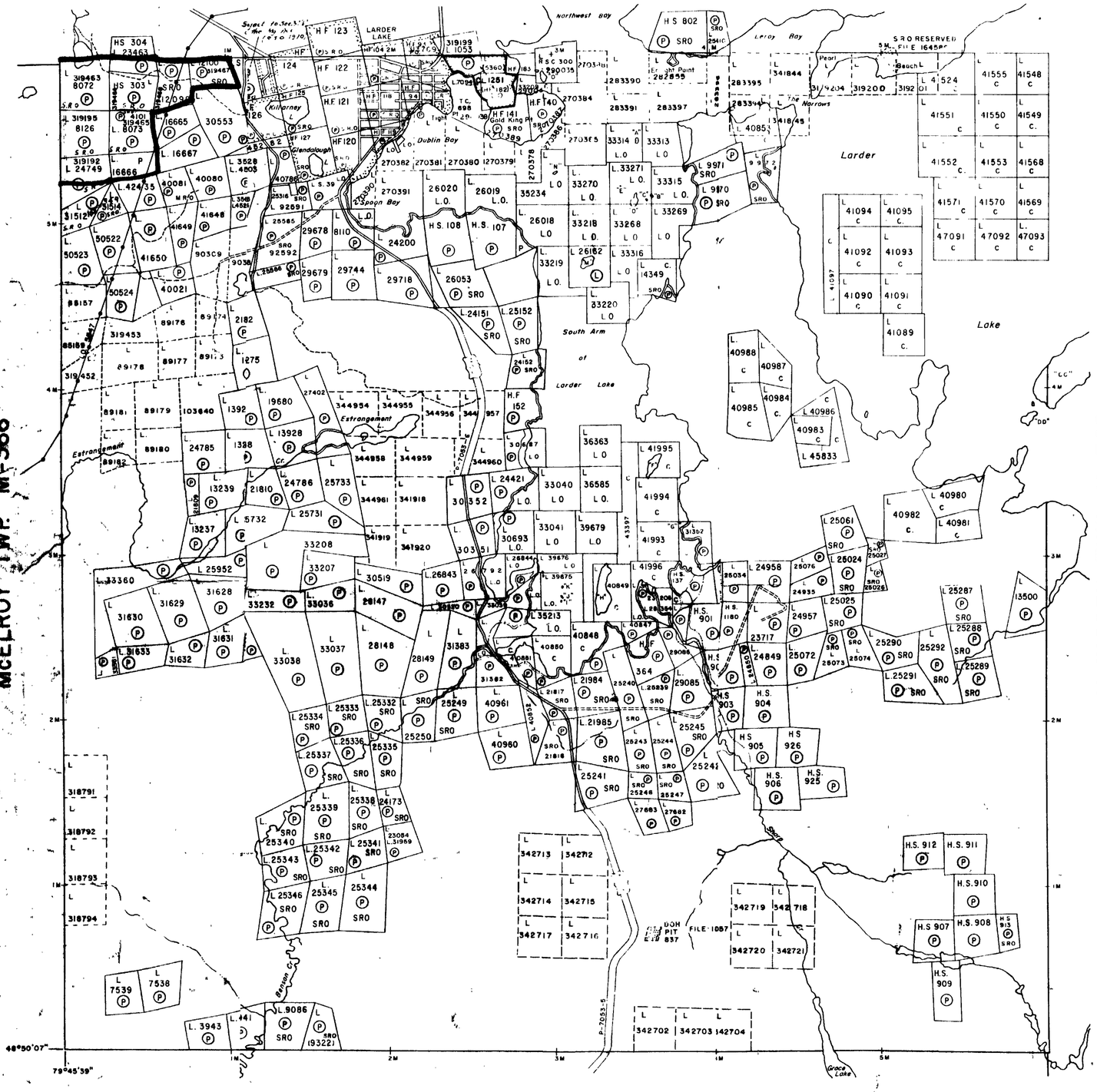
32D845E8307 2.1119 HEARST 200

McVITTIE TWP. M-370

McELROY TWP. M-366

McFADDEN TWP. M-368

SKEAD TWP. M-387



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OF

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KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C
PATENTED S.R.O.	

NOTES

400' Surface Rights reservation around all lakes and rivers.

Township of HEARST lies entirely within THE CORPORATION OF THE TOWNSHIP OF LARDER LAKE created on 31st DECEMBER 1945 Municipal Board Order PF B-4045-6 FILE 29282

Staking of mining claims within the area shown thus ▨▨▨ – Town of Larder Lake – subject to Sec. 37(b) of the Mining Act (R.S.O. 1970).

- MINING LANDS -
DATE OF ISSUE
JAN 16 1973
MINISTRY
OF NATURAL RESOURCES

PLAN NO. M-354

ONTARIO
DEPARTMENT OF MINES
AND NORTHERN AFFAIRS

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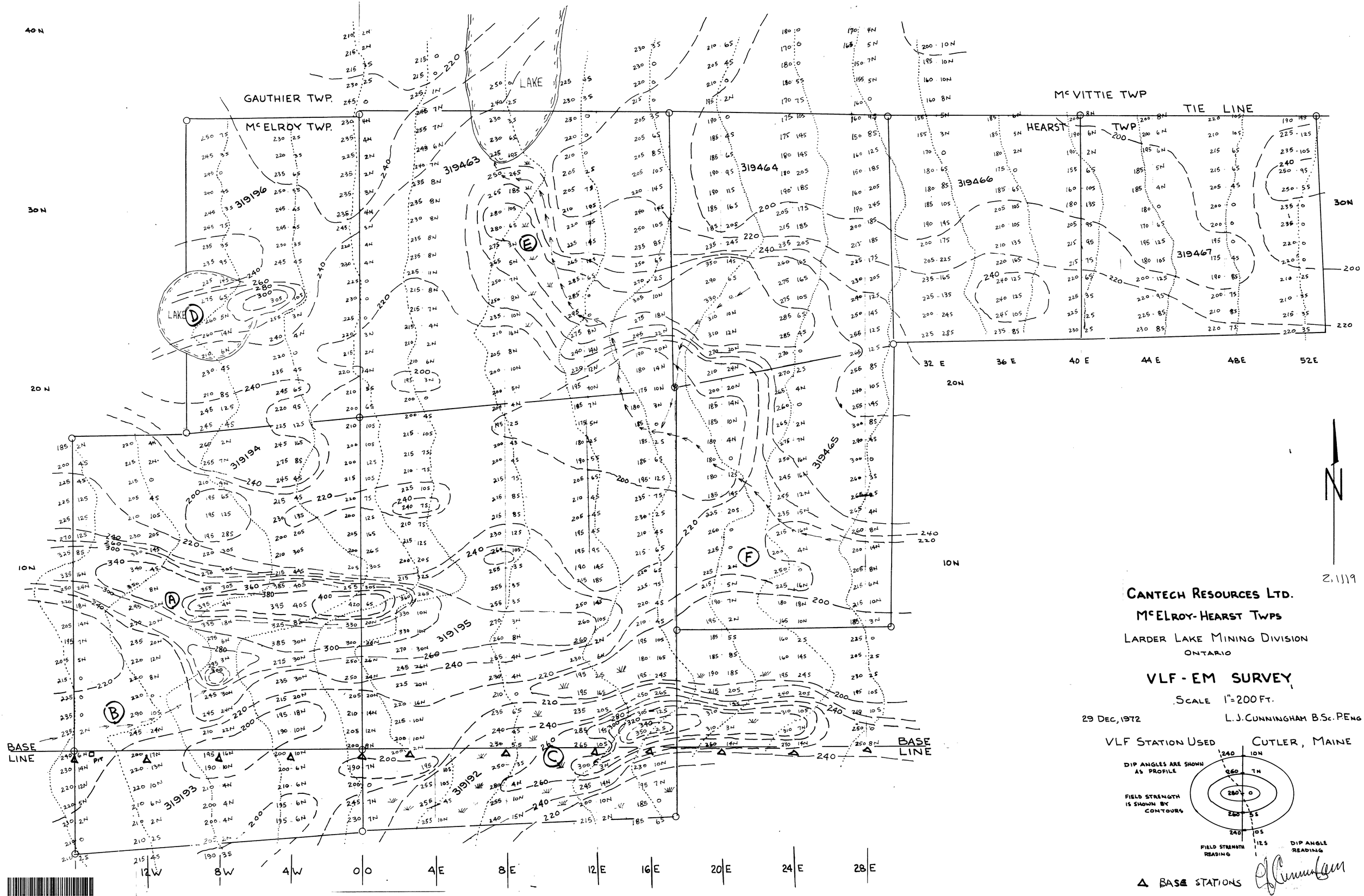
2.1119



2.1119

CANTECH RESOURCES LTD.

McELROY-HEARST TWPS

LARDER LAKE MINING DIVISION

ONTARIO

VLF-EM SURVEY

SCALE 1"=200 FT.

29 DEC, 1972

L. J. CUNNINGHAM B.Sc. P.ENG.

VLF STATION USED CUTLER, MAINE

△ BASE STATIONS

320845E0367 2.1119 HEARST