



41N15NW0050 0014A1 LENDRUM

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2.3710

THE ALGOMA STEEL CORPORATION, LIMITED  
EXPLORATION DEPARTMENT

RECEIVED

FEB - 4 1981

MINING LANDS SECTION

GEOPHYSICAL REPORT  
(VLF - EM-16)

ANOMALIES 6 & 6A (TREMBLEY AREA)  
MICHIPICOTEN AREA  
LENDRUM TOWNSHIP  
SAULT STE. MARIE MINING DIVISION

J. E. GRAY  
GEOLOGICAL TECHNICIAN  
EXPLORATION

FEBRUARY 2, 1981

GEOPHYSICAL REPORT  
(VLF - EM-16)

ANOMALIES 6 & 6A (TREMBLEY AREA)  
MICHIPICOTEN AREA  
LENDRUM TOWNSHIP  
SAULT STE. MARIE MINING DIVISION

Location and Access

The claims are situated in the centre of Lendrum Township at the southeast corner of the Gros Cap Indian Reserve. The western boundary of the claim group coincides with the eastern limit of the surveyed Reserve line.

Access to the claim group is gained via the Trans-Canada Highway to a secondary gravel road about 3 km north of the entrance to the town of Wawa. The gravel road leads to Trembley Station on the A.C.R. railway, about 1 km from the highway. A blazed trail leads from here to the claim group, about 1 km distant.

Claim Status

The claims are held by The Algoma Steel Corporation, Limited. Staking was carried out in April, 1980. The group consists of 8 claims, SSM 542608 to SSM542615 inclusive.

Reason For Survey

The survey was carried out to investigate an airborne anomalous area outlined in February, 1980.

Previous Work Done

No evidence of previous trenching, diamond drilling or line cutting was recorded when the survey was carried out.

Topography

The claims are located in rough, hilly terrain. Streams and swamps are very much in evidence throughout this surveyed area. Steep rock faces, high falls and cliffs are predominate throughout the claim group.

Results of Survey

Several parallel anomalies having a strike length of approximately 4,000 feet are located south of the base line. Additional anomalous zones are located north of the base line.

Results of Survey (Contd.)

(i) Southern Anomalies

Zone 1

Located approximately 2+50S of the base line and having a strike length of 4000 feet.

Zone 2

Located approximately 300 feet south of the base line and having a strike length of 4,000 feet.

Zone 3

Located approximately 800 feet south of the base line and having a strike length of 2,800 feet.

Smaller anomalous areas are located approximately 1,800 feet south of the base line on cross sections 8+00E - 20+00E. Overall strike length of these zones is approximately 1,200 feet.

(ii) Northern Anomalies

One major occurrence is located approximately 1,500 feet north of the base line on cross sections 16+00E - 36+00E. Overall strike length is 2,000 feet.

A second anomalous zone is located approximately 21+50S on cross sections 12+00E - 32+00E. Overall strike length is 2,000 feet.

This zone is believed to be caused by hydro line interference as a high power line is located in this vicinity on all cross sections mentioned.

Method of Survey

A line grid was laid out (see accompanying plans). The grid totalled approximately 11.34 line miles of cross sectional tie lines and base lines. Cross sectional lines were turned off a base line at 90°. Line spacings were at 100 foot intervals. Chainage pickets were established at 100 foot intervals. VLF readings were taken at 100 foot intervals along the cross lines.

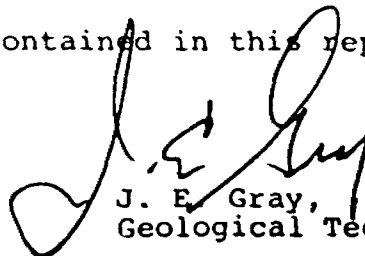
Type of Instrument Used

VLF EM16 electromagnetic unit.

Survey Dates

August 9, 10 17 and 31, 1980.

I certify the information contained in this report is true and correct.



J. E. Gray,  
Geological Technician.

February 2, 1981



GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 511 Number of Readings 511
Station interval 100 feet Line spacing 400 feet
Profile scale 1" = 20'
Contour interval

MAGNETIC

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

ELECTROMAGNETIC

Instrument Geonics E.M.16
Coil configuration
Coil separation
Accuracy + 1%
Method: [ ] Fixed transmitter [ ] Shoot back [x] In line [ ] Parallel line
Frequency Cutler Maine 15 - 25 K Hz
(specify V.L.F. station)

Parameters measured (1) The vertical in phase component
(tangent of the tilt angle of the polarization ellipsoid)

Instrument (2) The vertical out of phase (quadrature) component
Scale constant (the short axis of the polarization ellipsoid compared
to the long axis)
Corrections made

GRAVITY

Base station value and location
Elevation accuracy

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

INDUCED POLARIZATION RESISTIVITY

FIELD WORK

<u>Type of Work</u>	<u>Name &amp; Address</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>

CONSULTANTS

<u>Name &amp; Address</u>	<u>Dates Worked (specify in field or office)</u>	<u>Number of 8 hour days</u>

DRAFTSMAN, TYPING, OTHERS (specify)

<u>Name &amp; Address</u>	<u>Type of Work</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>

TOTAL 8 HOUR TECHNICAL DAYS \_\_\_\_\_

LINE-CUTTING

<u>Name</u>	<u>Address</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>
N. Tarasuk	Box 403, Little Current, Ontario.	June 12, 13, 15, 16, 19 & 21, 1980	6
S. Trudeau	Box 147, Hilton Beach, St. Joseph's Island, Ontario.	June 12, 13, 15, 16, 19 & 21, 1980	6
M. Andre	Michipicoten Harbour, Ontario.	June 9, 15, 16, 19 & 21, 1980	6

TOTAL 8 HOUR LINE-CUTTING DAYS \_\_\_\_\_

**1. FIELD WORK**

<u>Type of Work</u>	<u>Name &amp; Address</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>

**2. CONSULTANTS**

<u>Name &amp; Address</u>	<u>Dates Worked (specify in field or office)</u>	<u>Number of 8 hour days</u>

**3. DRAUGHTSMAN, TYPING, OTHERS (specify)**

<u>Name &amp; Address</u>	<u>Type of Work</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>

TOTAL 8 HOUR TECHNICAL DAYS \_\_\_\_\_

**4. LINE-CUTTING**

<u>Name</u>	<u>Address</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>
A. E. Fournier	8 Herrick Street Sault Ste. Marie, Ontario	June 9, 10, 11, 12, 13, 14, and 15, 1980	7
R. Oja	326 Albart St. W., Sault Ste. Marie, Ontario	June 12, 13, 15, 19 & 21	5

TOTAL 8 HOUR LINE-CUTTING DAYS 12



Ministry of  
Natural  
Resources

Your file:

.1982 07 26

Our file: 2.3710

Mining Recorder  
Ministry of Natural Resources  
75 Elgin Street  
Box 669  
Sault Ste. Marie, Ontario  
P6A 5N2

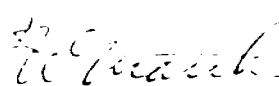
Dear Sir:

RE: Geophysical (Electromagnetic) Survey on Mining  
Claims SSM 542608 et al in the Township of Lendrum

The Geophysical (Electromagnetic) Survey assessment work credits as listed with my Notice of Intent dated May 5, 1982 have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours very truly,

  
E.F. Anderson  
Director  
Land Management Branch

Whitney Block, Room 6450  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: 416/965-1316

A. Barr/sc

cc: Algoma Steel Corporation  
Sault Ste. Marie, Ontario  
Attn: Mr. John E. Gray

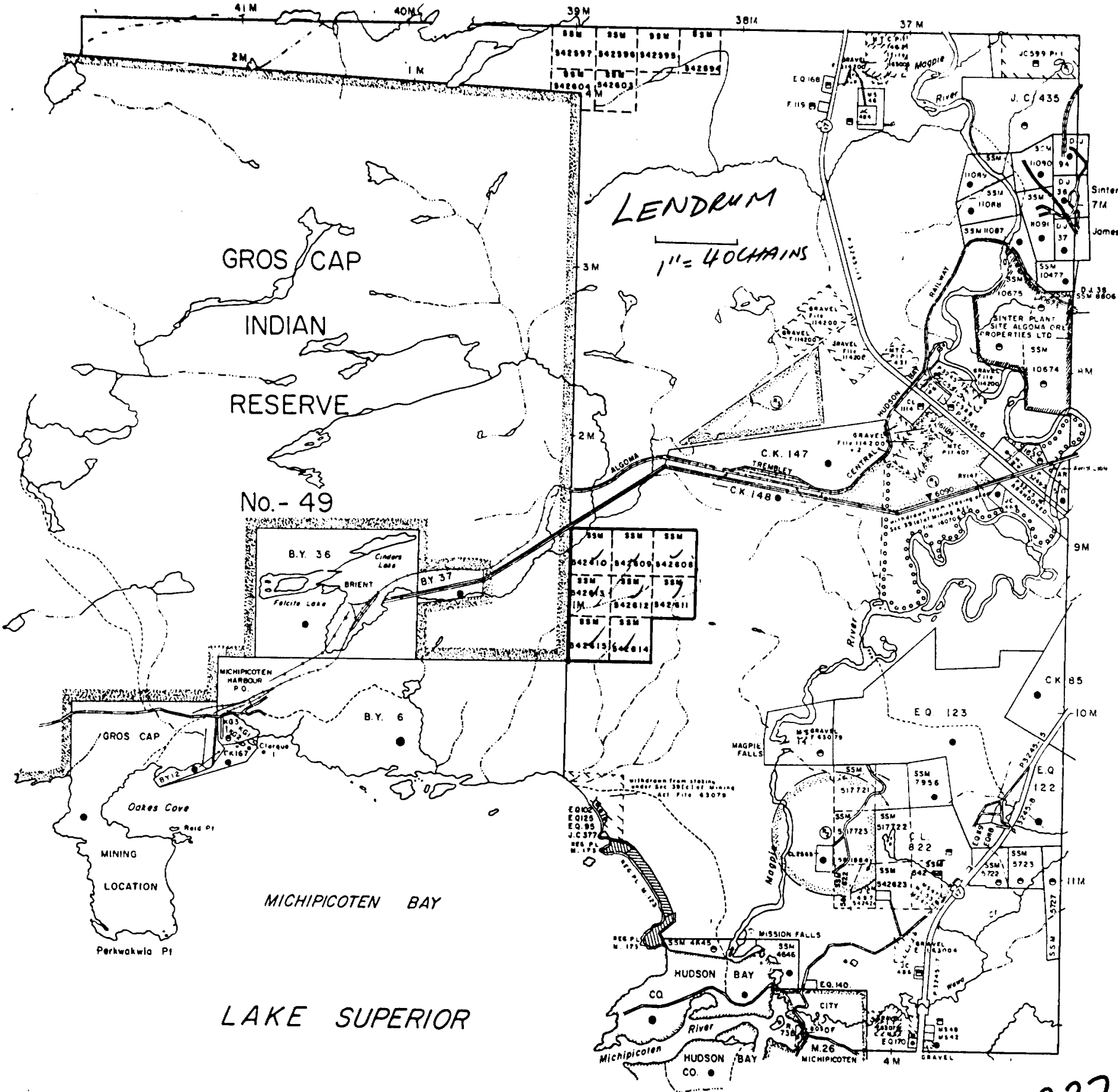
cc: ✓ Resident Geologist  
Sault Ste. Marie, Ontario



BAILLOQUET Tp. M.1558

BOSTWICK Tp. M.1565

McMURRAY Tp. M.1547



RABAZO Tp. M.1556

2.3710

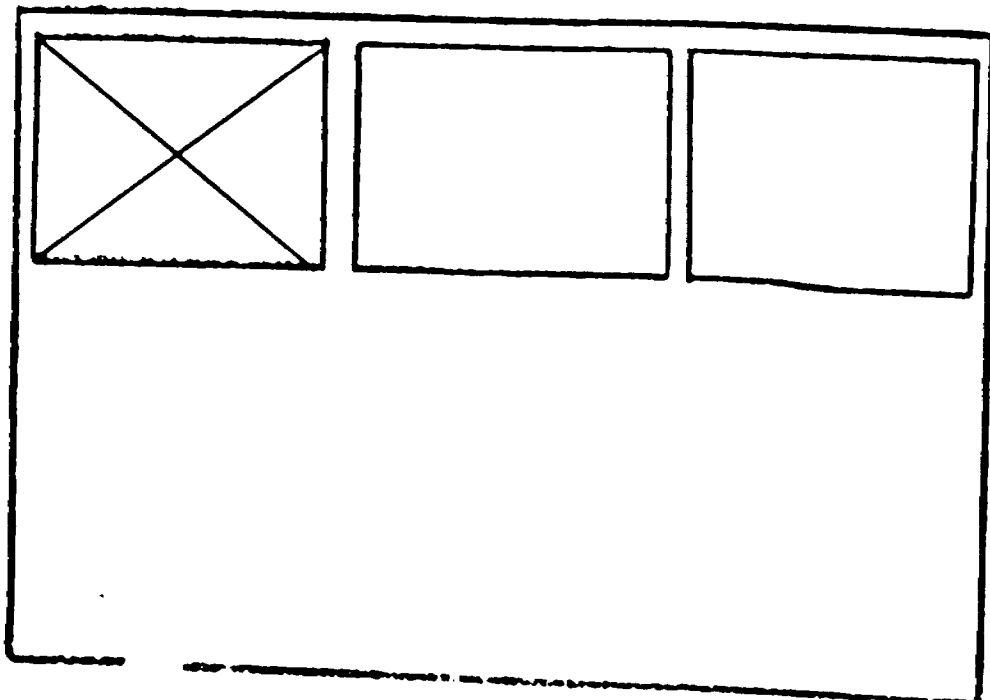
SEE ACCOMPANYING  
MAP(S) IDENTIFIED AS

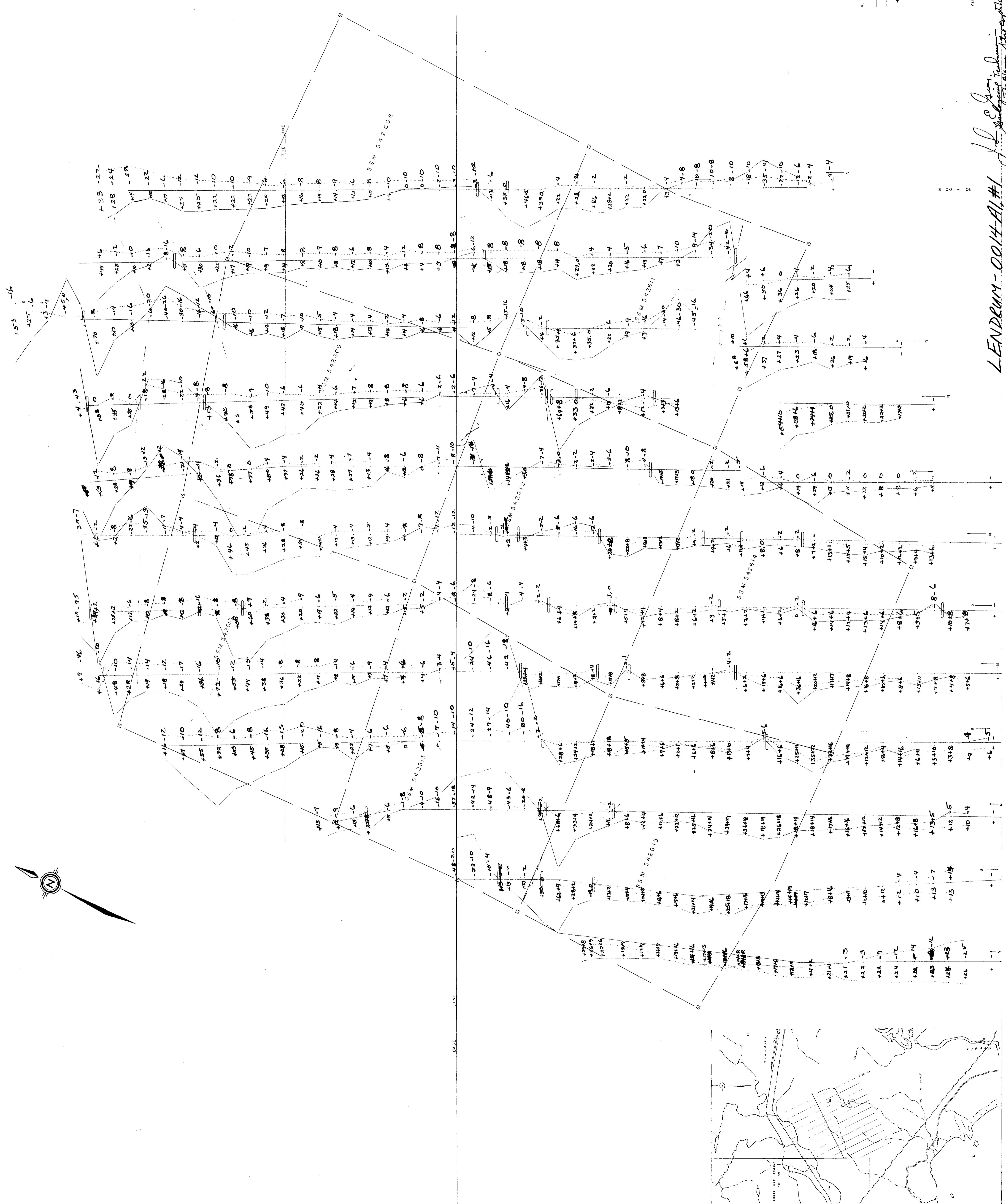
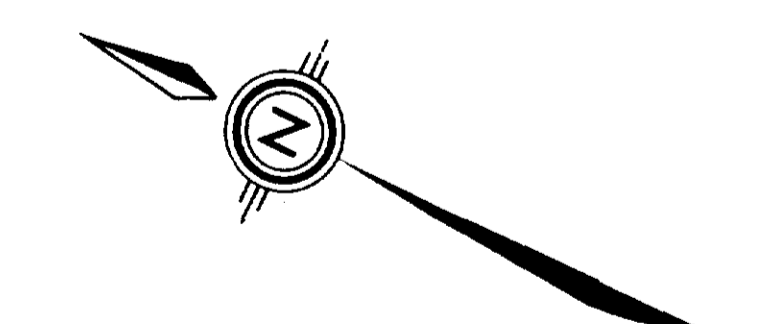
LENDRUM-0014-A1, #1

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





V. L. F. SURVEY LEGEND  
 IN PHASE READINGS  
 QUADRATURE READINGS  
 READING LOCATIONS  
 READING DIRECTIONS  
 CONDUCTOR AXES  
 SCALE 1" = 40'  
 CUTLER MAIN STATION USED AS SIGNAL SOURCE  
 AUGUST 9, 10, 16, 31, 1980  
 2370

LENDRUM - 0014-AI-#1  
 J. E. S. Engineering & Surveying  
 1001 N. 1st St., Suite 100  
 Phoenix, AZ 85004

DATE OCTOBER 31/80	SCALE 1" = 200'
OWNING COMPANY	THE ALGOMA STEEL CORPORATION, LIMITED
PROJECT	LENDRUM TOWNSHIP
ANOMALY NO.	6 B 6A
SURVEYOR	V. L. F. E. M. SURVEY
DRAWN BY	J. E. S.
TRACED BY	D. J. TAGLIARACCI
CHECKED BY	
APPROVED	

