

✓ 2.3048  
Deleg to Dept of mines



41P12SW0019 2.3048 BENNEWELIS

010

REPORT ON  
Wm. SIMS INDUSTRIES LIMITED  
CHESTER AND BENNEWELISSE TOWNSHIP  
GROUP OF CLAIMS  
AIRBORNE MAGNETOMETER SURVEY  
SURFACE PROSPECTING CLAIMS #473102, 473093, 473089  
BY  
EDWARD J. BLANCHARD

**RECEIVED**

SEP 25 1979

MINING LANDS SECTION

## INTRODUCTION

An airborne magnetometer survey was flown over the properties of Wm. Sims Industries Limited on July 16, 1979.

The present report covers the data and results of this survey. Additional prospecting and sampling of gold occurrences has been completed with results indicated herein.

#### PROPERTY

The property is located on the north east side of Chester Township and the north west corner of Benneweisse Township, or approximately twelve miles south of the town of Gogama. The property consists of 27 unsurveyed mining claims.

#### GEOLOGY

The structural strike of the rocks in the area trend east west. The northern section of the claims is covered by sediments of Schistose conglomerate and Arkose.

Granitic quartz-porphyry bodies are reported to be conformable and locally appear to play a structural role in the localization of the Gold bearing quartz sulphide veins. The veins have a basic east west strike but several cross fracture veins, longitudinal veins and diagonal shear structures make up the host environment for the sulphide bearing gold values.

### MAGNETOMETER SURVEY

An airborne magnetometer survey was completed to check the responses over the small sulphide shear zones and to see if any large sulphide shear zones may exist on the rest of the claims.

### INSTRUMENTS USED

Airborne magnetometer M-123 Barringer Sensor Toroidal 104 Series, none directional and noise cancelling. Hewitt-Packard Model 7155, continuous strip recorder. A Cessna 180 was used to fly the survey.

### THE SURVEY

The survey consisted of lines north to south, south to north to cross the structure. Flight lines were spaced at 660 feet intervals and an altitude of 250 feet was maintained.

## THE SURVEY - Continued

A total of 34 miles were flown over the properties. Control of direction was by Auto pilot - Gyro compass and excellent geographical control points. Readings were recorded every 12 seconds with an accuracy of  $\pm 10\%$  of ambient field. Fiducial points indicated on map.

## GENERAL PROSPECTING

Detailed prospecting was carried out on Claims #473102, 473093 and 473089. Several porphyry shear zones containing gold values were found. In some instances the discoveries were relocating old showings, and cleaning up the trenches and re-sampling.

The best of the zones sampled via chip samples across the veins, were location #1, Claim #473093, vein stripped, rock trenches and sampled. The vein was sampled at intervals along a strike length of 100 ft. with the following results:

AU - Sample #9994, #9995 and #9996

9994 across 8.5 feet = Au .06

9996 across 4ft. 8 in. mostly pyrite = Au .48

9995 Wall rock - Fractured = Au .005

See old reference Page 75

GENERAL PROSPECTING - Continued

#2. 35 ft. SHAFT

Shaft dewatered and vein sampled across 3ft 6 in.  
Au .59 Sample #9997. The wall rock was also sampled both sides of the vein #9998. Visible gold was also observed several places both down dip in the shaft and for 50 ft. along surface.

See old reference Page 76

Several other areas were sampled via the occasional grab sample method. Assays ranged from .05 to .17 Au. Insufficient work was done on sampling because of heavy overburden conditions.

CONCLUSIONS AND FUTURE RECOMMENDATIONS:

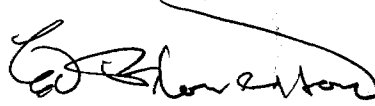
The higher magnetices on lines 1-N and 13-N and 5-N line up with the known mineralized zones and should be checked on the ground as this may be additional sulphide shear zones.

The current trenches should be bulldozed to clear away the overburden that prohibits additional sampling.

CONCLUSIONS AND FUTURE RECOMMENDATIONS - Continued

As both zones worked on are open on both ends, this trenching may increase the strike length considerably. It may also uncover areas of intensive cross fracturing over large widths, that may contain appreciable gold values. This type of work has been carried out extensively by the Texas Gulf Sulphur Co. on claims  $\frac{1}{2}$  mile to the west.

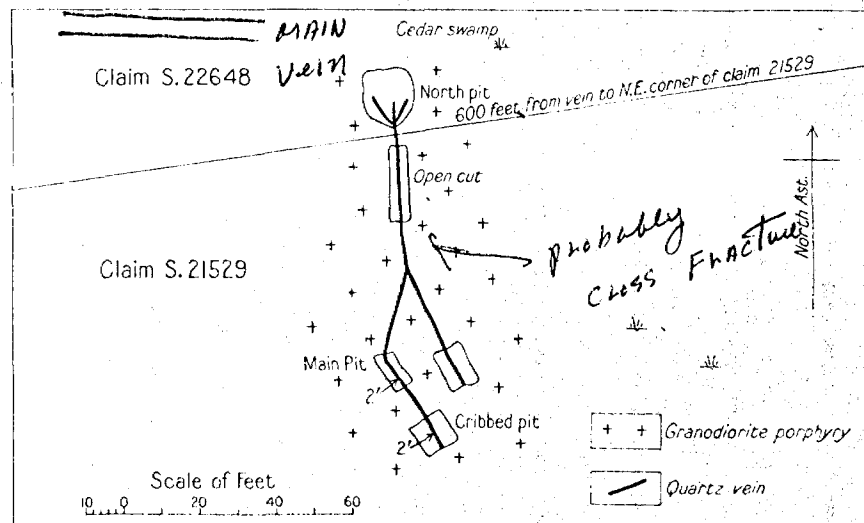
Further to the west, the same sulphides bearing shears have been stripped by Canadian Crest Gold Mines Limited and found to cover considerable length. Some of their ore being mined and milled on a 100 TPD basis. Due to the widespread activity in the immediate area by several major and smaller groups, we recommend this program, to be followed by diamond drilling if warranted.

  
EDWARD J. BLANCHARD.

more, strikes N. 73° E., and dips 30° S. A shaft has been sunk to a depth of 35 feet. Massive pyrite is common, and native gold is occasionally observed. A grab sample yielded 0.10 ounces gold per ton, but higher values are reported by officials. To date, 9 men have been engaged in stripping, trenching, and deep test-pitting, with the result that 4 mineralized quartz veins have been discovered. Further surface exploration may be expected to disclose other gold-bearing quartz veins.

J. F. Eccles-Holmes

The Eccles-Holmes group consists of 13 claims, S. 21,362, 21,528, 21,529, 21,567, 21,568, 21,778-79, 22,648, 23,000, 25,501, 25,502, 25,602, 25,661, located on the east side of Mesomikenda lake just south of the road bridge. A narrow quartz vein, known as No. 1, has been uncovered at the north boundary of S. 21,529 in a coarse phase of the granodiorite porphyry. It strikes north-south,



Surface plan of No. 1 showing, Eccles-Holmes property, Chester township.

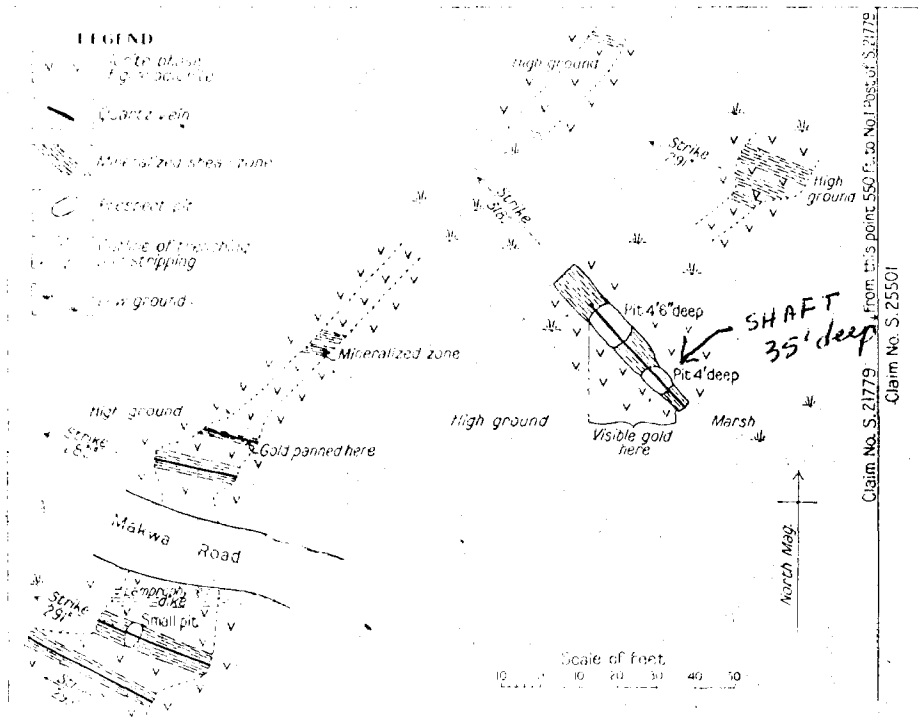
has an average width of 1 foot, and has been traced for 100 feet. The wall rock is silicified and fairly well mineralized with pyrite for several inches on either side of the vein. The common minerals are pyrite, chalcopryite, and molybdenite in minute quantities. Midway toward the south of the exposure, the vein splits into two parts. Two test pits have been sunk, disclosing heavy mineralization over a width of 3 feet. From the bottom of the main pit, which is cribbed and has a depth of 14 feet, a channel sample taken by J. F. Eccles-Holmes over a width of 3 feet 3 inches is reported to have yielded 0.50 ounces of gold per ton, and a grab sample of the quartz yielded 1.00 ounces of gold per ton. A grab sample of only moderately mineralized quartz taken by the writer from the same pit yielded 0.70 ounces gold per ton and 1.70 ounces silver. Another grab sample of fresh or silicified vein matter taken by the writer from an open cut at the north end of the vein yielded 0.31 ounces gold per ton.

About 200 feet southwest of No. 1 vein there is a strongly fractured zone, which in places shows 6 inches of quartz carrying an abundance of pyrite and chalcopryite. The total width of the "break" is about 3 feet. The wall rock immediately adjacent is silicified and epidotized and is essentially the granodiorite



type. A grab sample of the mineralized vein matter from the bottom of a shallow test pit yielded negligible gold values.

Another vein, known as No. 4, has been uncovered on claim S. 21,779, a few feet northeast of the Makwa road. It occurs in a sheared zone in a rather basic or dioritic phase of the granodiorite. The zone itself varies from 3 to 5 feet in width, strikes northwest, and apparently widens in the same direction. The main quartz leader is 6 inches wide and is accompanied by narrow quartz stringers on either side. The mineralization consists of pyrite, chalcopyrite, and a little visible gold; actinolite is abundantly developed at one point. The quartz is characterized by the presence of minute quantities of a silvery-grey metallic



Surface plan of No. 4 showing, Eccles-Holmes property, Chester township.

mineral occurring in nest-like forms. Microchemical tests on this material indicate that there are probably two minerals, bismuthinite (bismuth sulphide,  $\text{Bi}_2\text{S}_3$ ) and tetradyte (bismuth telluride,  $\text{Bi}_2\text{Te}_3$ ). Two 4-foot test pits have been sunk on the vein. A 27-inch channel sample taken by Captain Eccles-Holmes from the south pit yielded 1.39 ounces gold per ton. A grab sample taken by the writer from the same pit yielded 2.58 ounces gold per ton. Thirty feet north of the road, stripping has disclosed another quartz vein, one foot in width, from which gold may be panned freely.

A. Labbé

In 1931, a well-mineralized break was uncovered in the northwest corner of S. 19,991, Chester township. Further surface exploration during the past season has resulted in the tracing of this break several hundred feet to the east, as well as the picking up of a parallel break 40 feet to the north of it. The new showings,

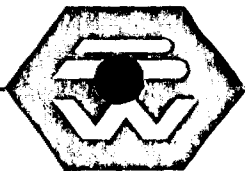
which occur in 9 feet wide, in width, occur pyrite, chalco

A new sh was being stri trend N. 80° 1 coloured qua phry and qua as well as coa suggested that three represen

It is rep Porcupine Cro of men have l

Late in 1 on the point being put dov deepest hole the results are

In 1933, exploration w M. S. Beal of Clam lake, so much inte strongly shea dipping 54°



BELL - WHITE ANALYTICAL LABORATORIES LTD.

P.O. BOX 187,

HAILEYBURY, ONTARIO

TEL: 672-3107

## Certificate of Analysis

NO. 8694

DATE: June 5, 1979.

SAMPLE(S) OF: Rock(5)

RECEIVED: June 4/79.

SAMPLE(S) FROM: Mr. E. J. Blanchard, Erana Mines Ltd., Sudbury, Ontario.

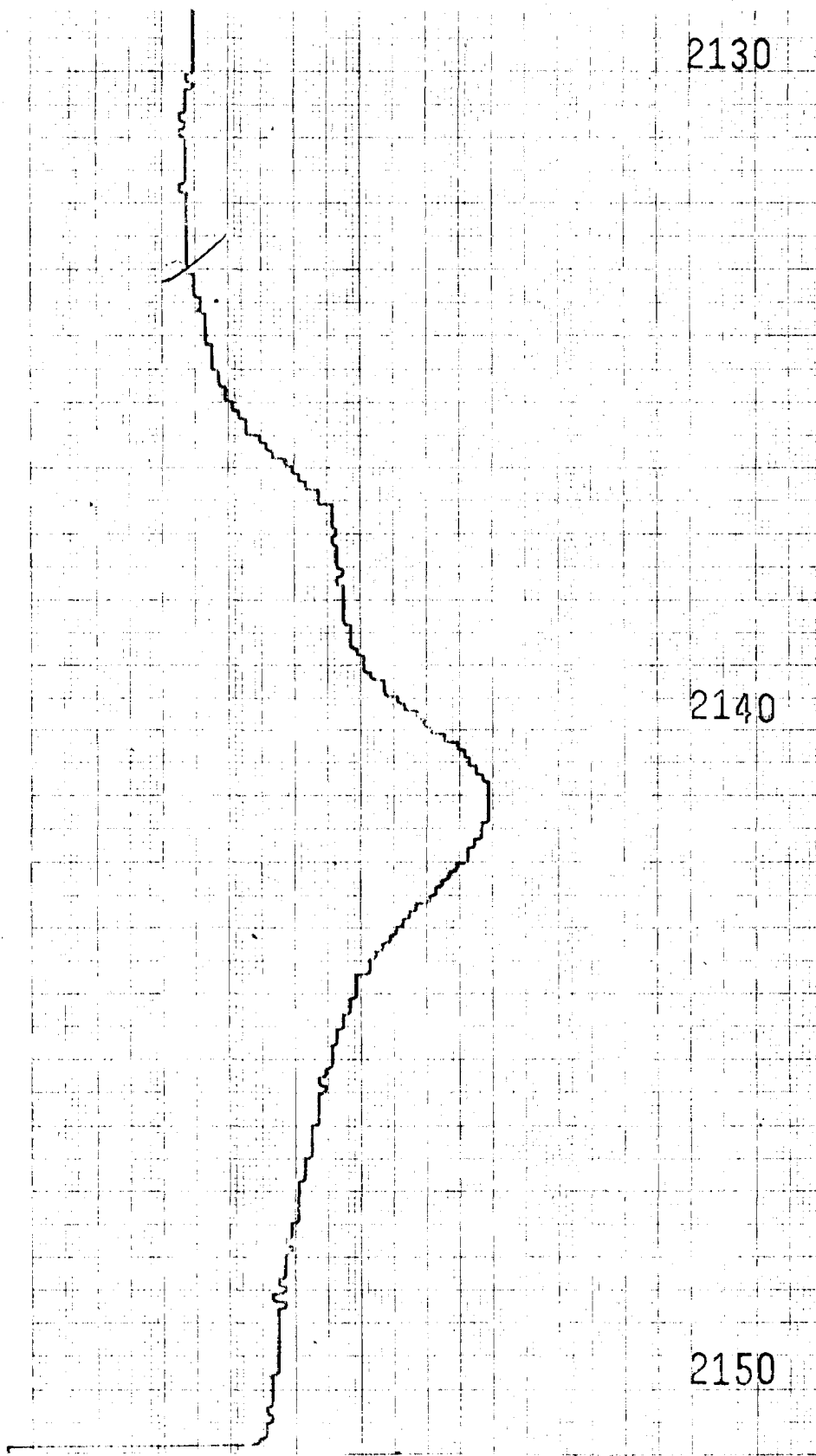
<u>Sample No.</u>	<u>Oz. Gold</u>	<u>Oz. Silver</u>	<u>% Copper</u>
9994	0.06	1.36	7.6
5	0.005		
6	0.48	0.08	2.68
7	0.59	0.13	7.6
8	0.005		

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

BELL-WHITE ANALYTICAL LABORATORIES LTD.

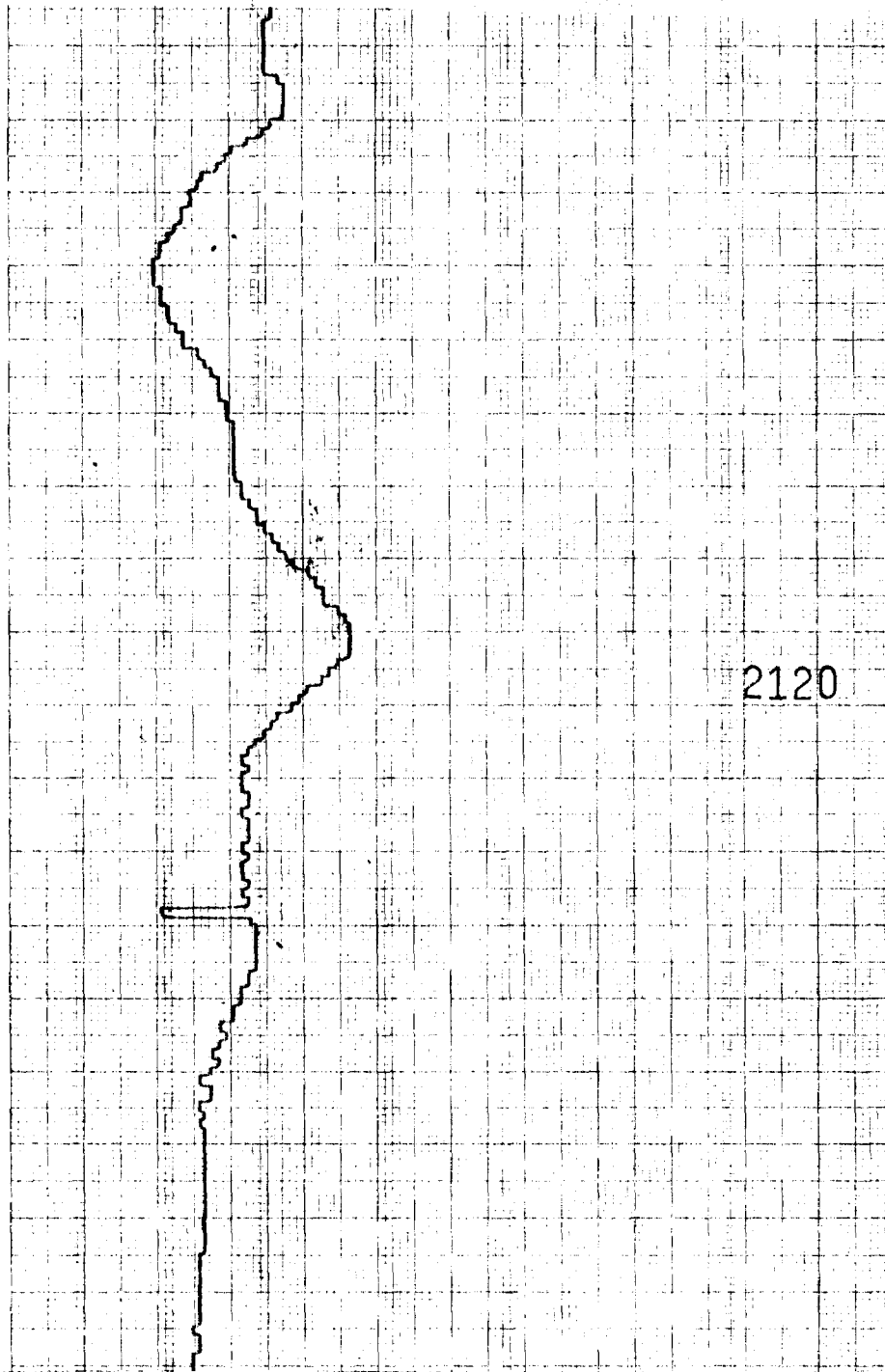
PER 

↑  
IN



HEWLETT-PACKARD 9280-0273

↑  
25  
A

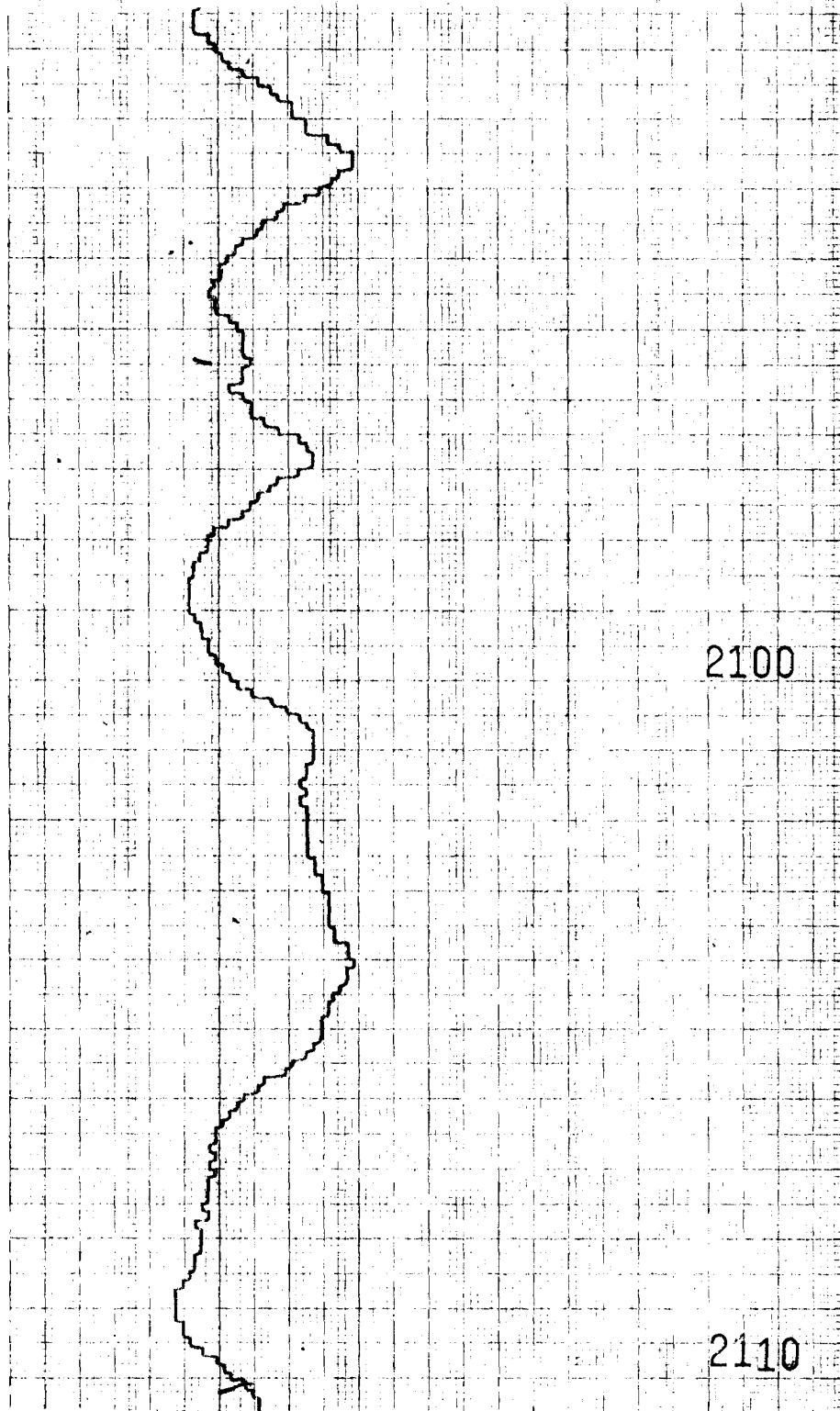


2120

HEWL

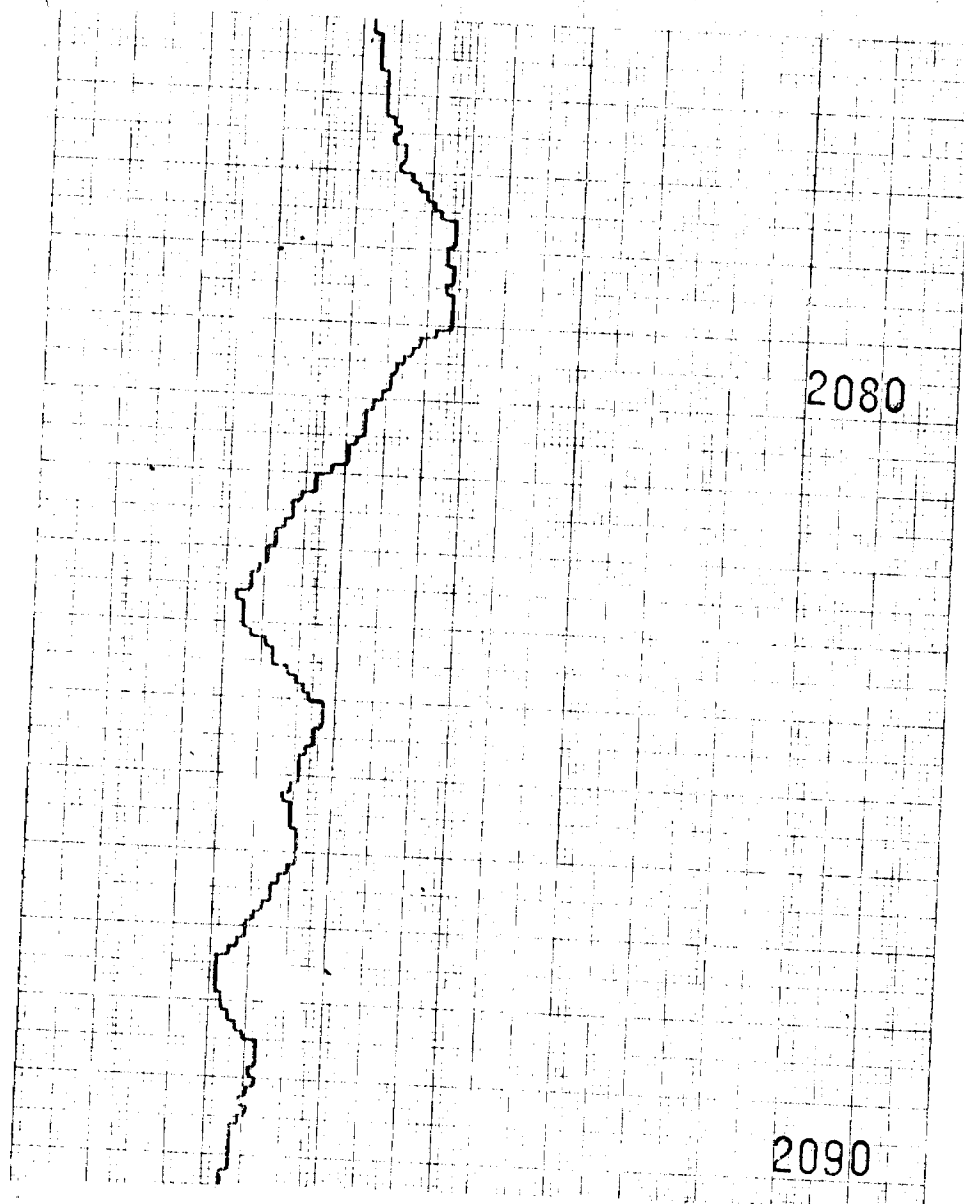
511

3N  
↑



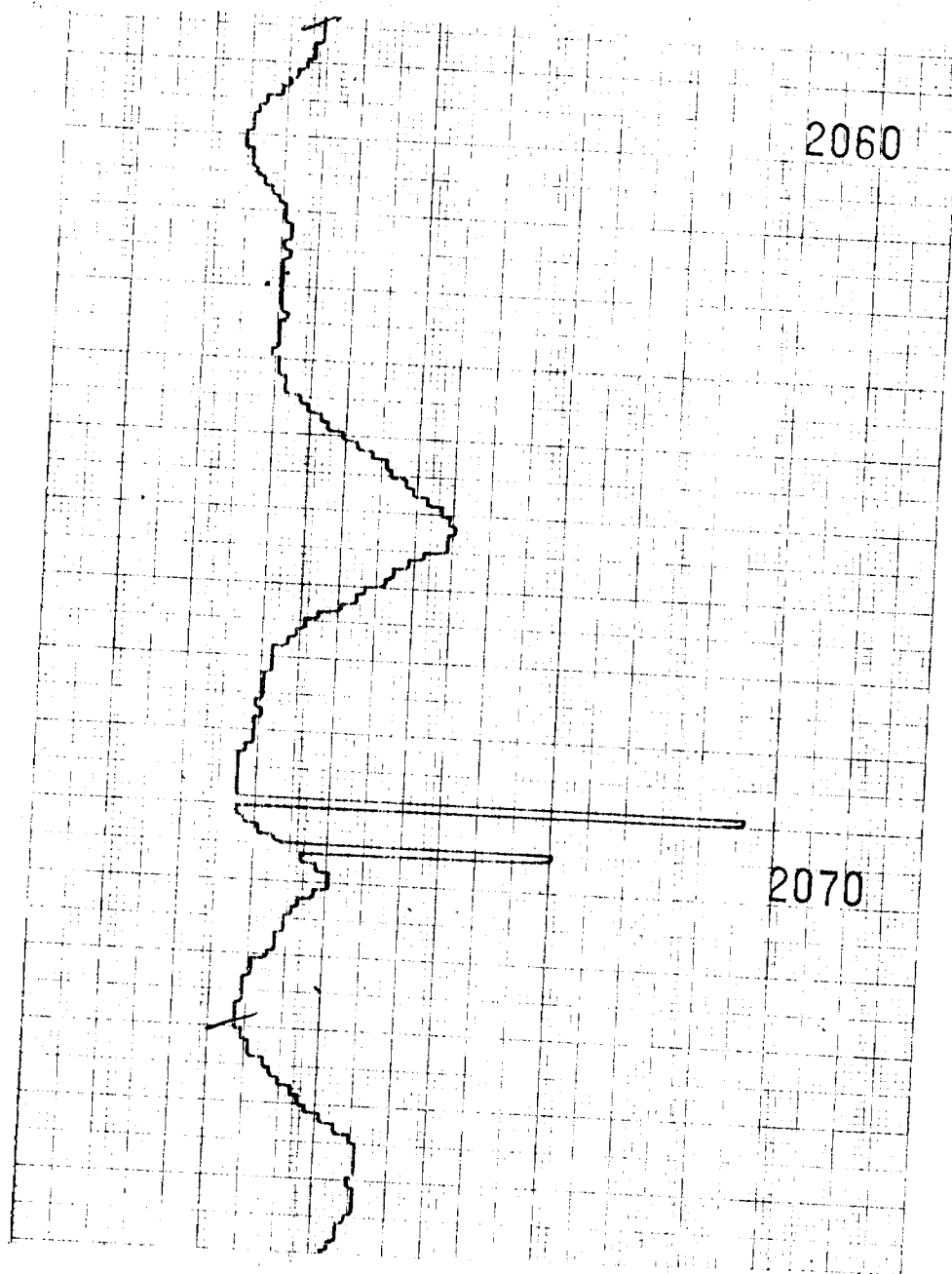
ETT-PACKARD 9280-0278

45  
↑



HEWLETT-PACKARD 9280-0278

↑  
5N



A black and white photograph of a piece of graph paper. A jagged, hand-drawn line runs vertically down the left side of the page. In the upper right quadrant, the number '2050' is handwritten in a dark ink. The graph paper has a grid of small squares.

2050

HEWLETT-PACKARD  
9280-0278



↑  
7N

2040

2020

↑  
85

2030

2010

↑  
9N

7  
10.5

11N

2000

1990

1970

↑  
123

1980

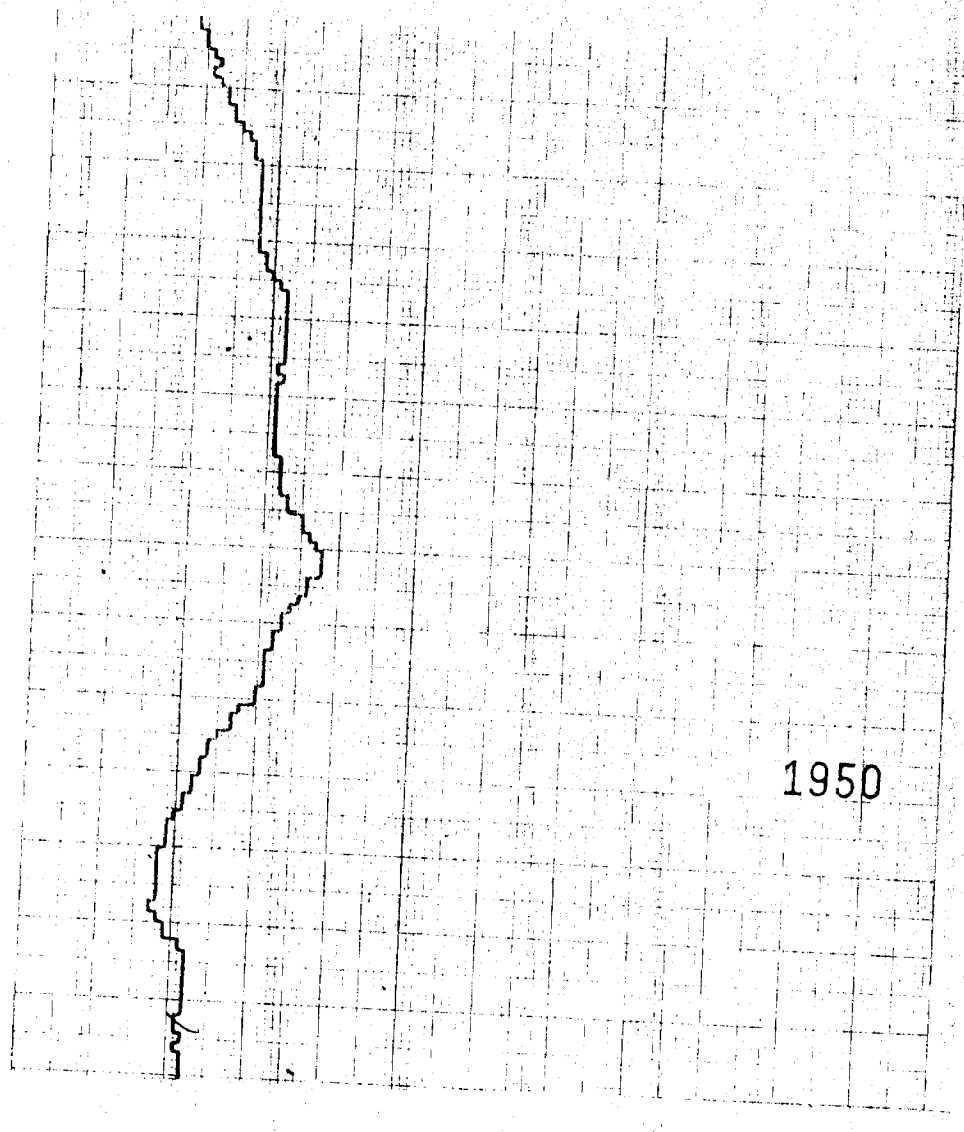
1960

↑ 13N

HEWLETT-PACKARD 9280-0278

311

↑  
145



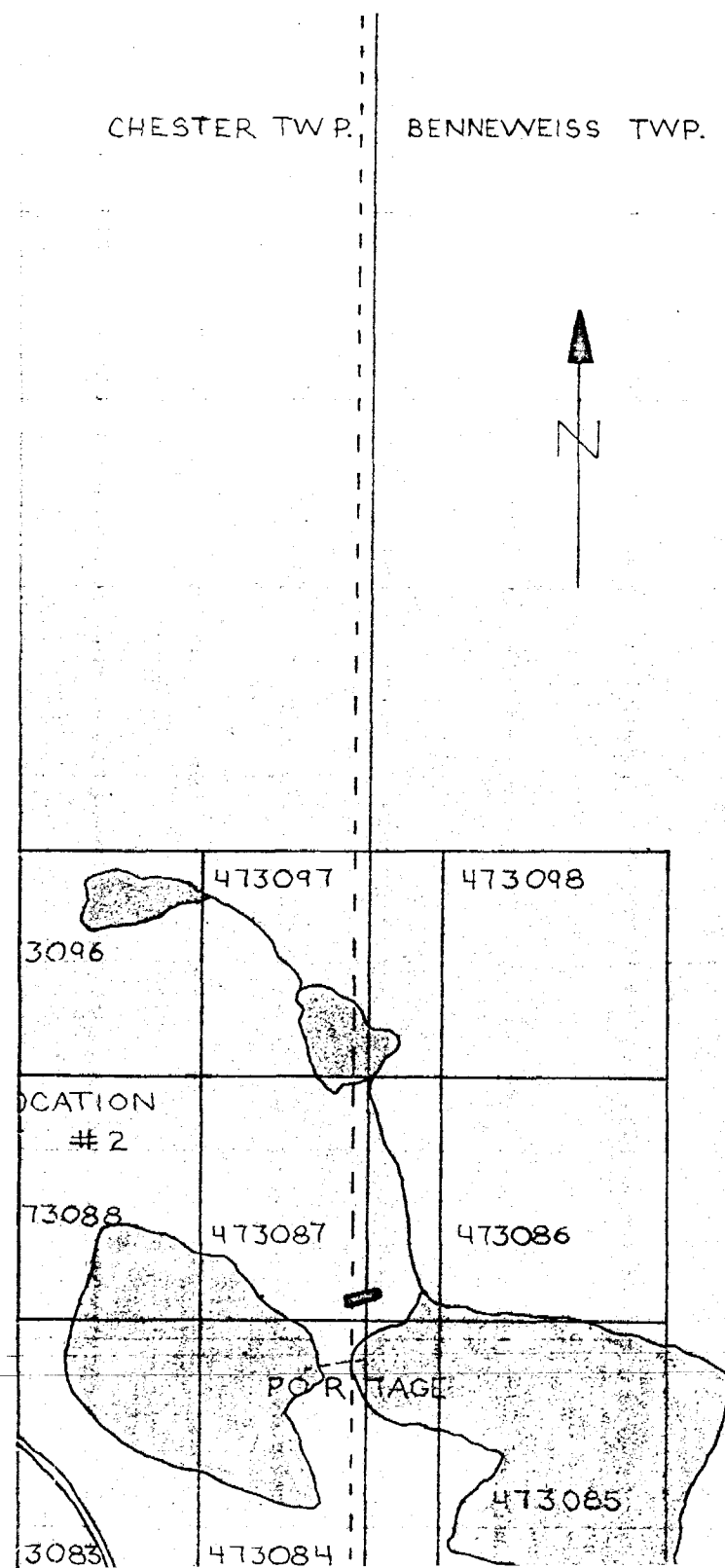
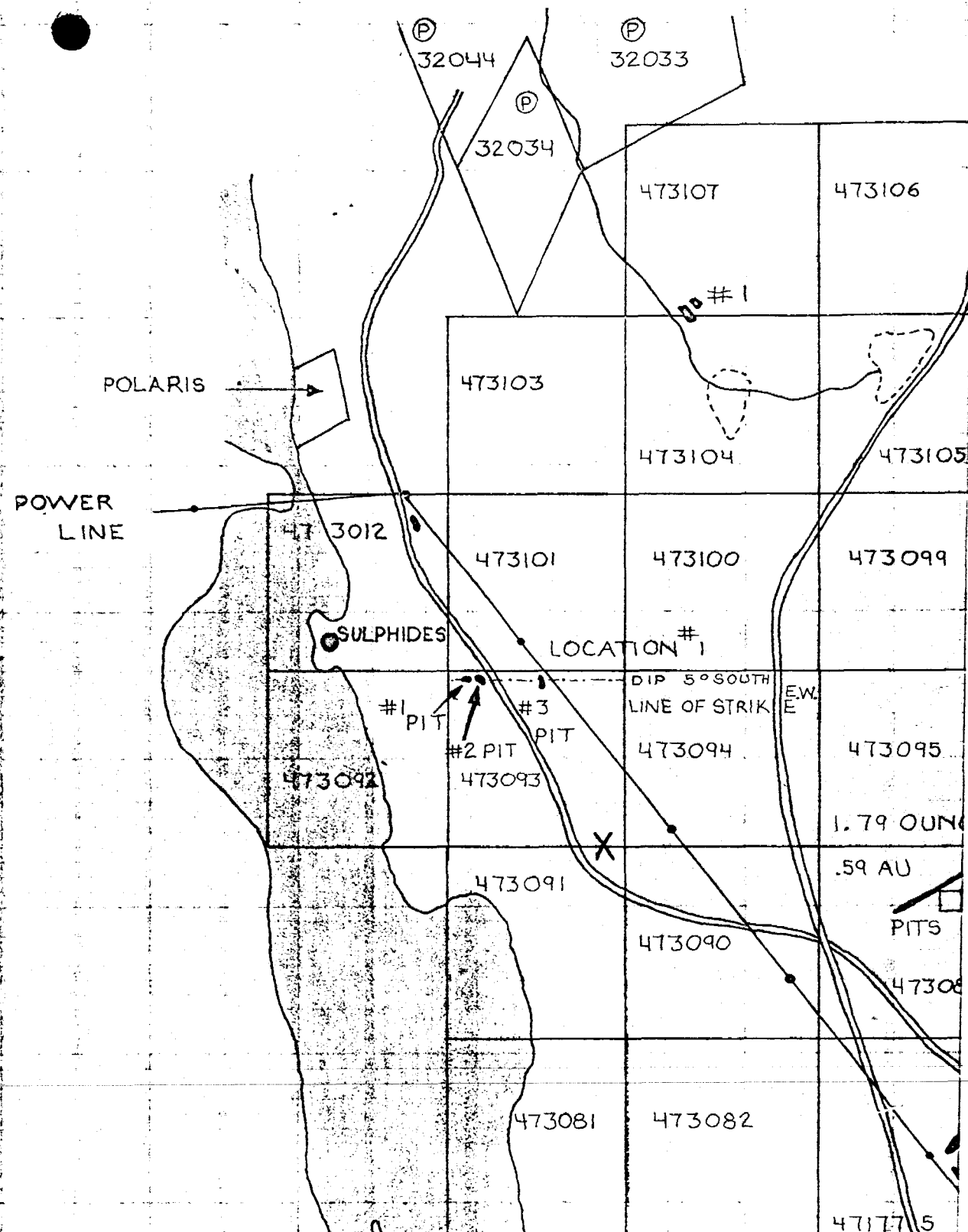
1950

15N

1940

16S

1930







# GEOPHYSICAL TECHNICAL DATA

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

Number of Stations \_\_\_\_\_ Number of Readings \_\_\_\_\_

Station interval \_\_\_\_\_ Line spacing \_\_\_\_\_

Profile scale \_\_\_\_\_

Contour interval \_\_\_\_\_

## MAGNETIC

Instrument \_\_\_\_\_

Accuracy — Scale constant \_\_\_\_\_

Diurnal correction method \_\_\_\_\_

Base Station check-in interval (hours) \_\_\_\_\_

Base Station location and value \_\_\_\_\_

## ELECTROMAGNETIC

Instrument \_\_\_\_\_

Coil configuration \_\_\_\_\_

Coil separation \_\_\_\_\_

Accuracy \_\_\_\_\_

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

Frequency \_\_\_\_\_  
(specify V.L.F. station)

Parameters measured \_\_\_\_\_

## 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 \_\_\_\_\_ 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) Airborne Magnetometer Sensor is Toroidal 104 Series non-directional

Instrument(s) MO 123 Airborne Magnetometer Barringer Research with Sensor and Noise Cancelling Hewitt-Packard Model 7155 Continuous Strip Recorder

Accuracy  $\pm 10\%$  of Ambient Field 1 Gamma - 12 Seconds

(specify for each type of survey)

Aircraft used Cessna 180 CF-PKL

Sensor altitude 250 ft.

Navigation and flight path recovery method Gyroscope Topography Control Auto Pilot

Aircraft altitude 330 ft.

Line Spacing 600 ft.

Miles flown over total area 34 miles

Over claims only 16.5 miles

$$16.5 \times 40 = 660 \div 27 = 24.4$$

# 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 \_\_\_\_\_



ST. LOUIS TWP. (M.1127)

400' Surface Rights Reservation  
Around Minisnakwa Lake To The  
Dept. Of Lands & Forests  
File-160708

# BENNEWEIS

DISTRICT OF  
SUDBURY

PERCUPINE  
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 MUSKOGEE	—
MINES	✕
CANCELLED	—

## NOTES

400' Surface rights Reservation around all Lakes and Rivers

Areas withdrawn from staking under Section  
42 of the Mining Act. R.S.O. 1970  
Order No. File Date Disposition

(R) 10 W 27/76 13345, 74943 1970/7/8 S.R.O.

DATE OF ISSUE

SEP 25 1979

SURVEYS AND MAPPING

BRITISH

PLAN NO. M.658

ONTARIO  
MINISTRY OF NATURAL RESOURCES  
SURVEYS AND MAPPING BRANCH

CHESTER TWP. (M.717)

CHAMPAGNE TWP. (M.712)

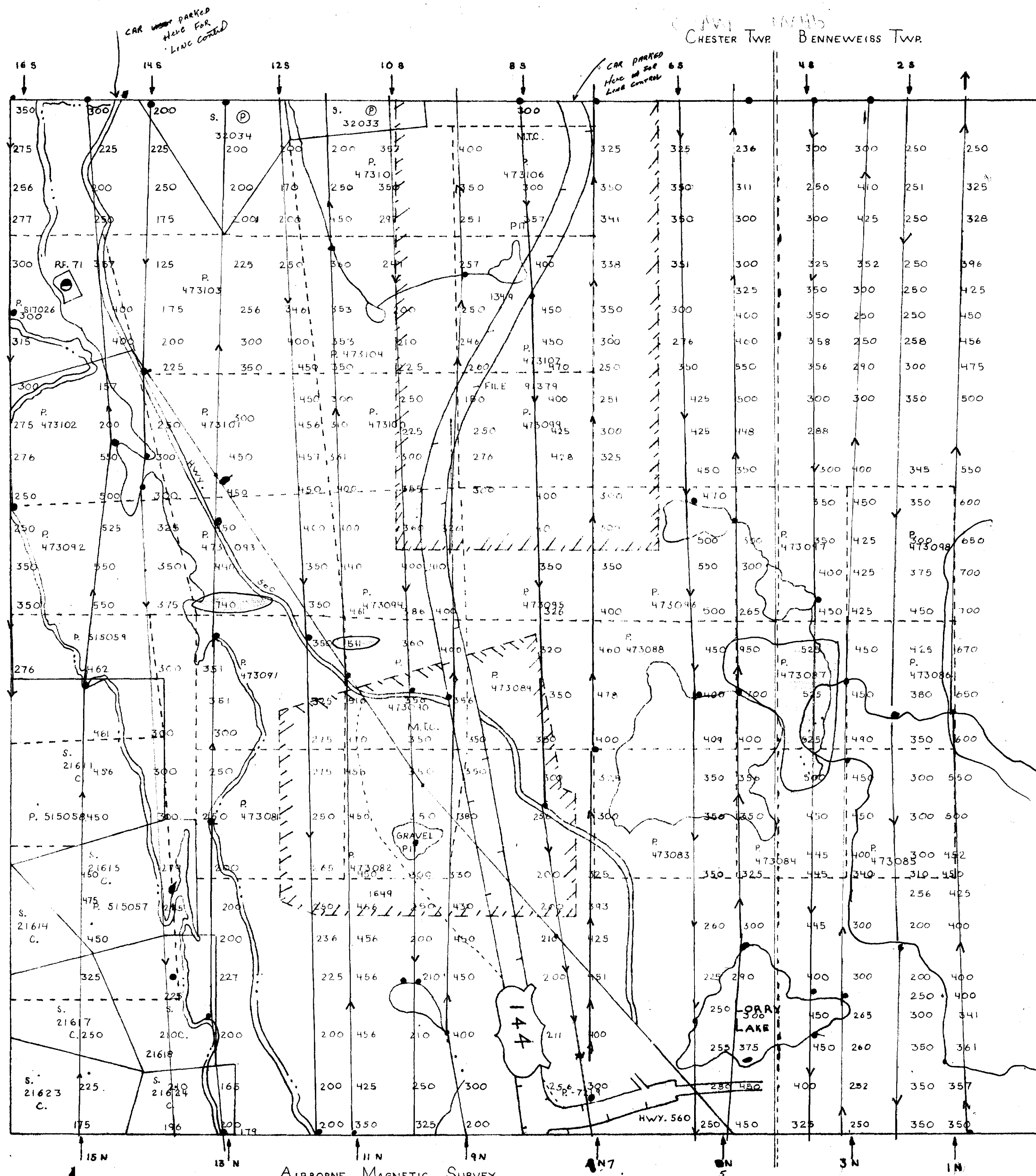
VROOMAN TWP. (M.1173)



41P125W0019 2.3048 BENNEWEIS



CHESTER TWP. CHESTER TWP. CHESTER TWP.



AIRBORNE MAGNETIC SURVEY  
CHESTER TWP.  
SCALE 1" = 660'

LEGEND  
- - - • FLIGHT LINES (DIRECTION AND FIDUCIAL POINTS)  
MAGNETIC CONTOURS  
ALTITUDE 250 FEET

