



42A11NE0554 2.4754 WARK

010

PHONE 235-496

**H. D. CARLSON,**  
PH. D., P. ENG.  
CONSULTING GEOLOGIST  
110 MARTIN STREET  
PORCUPINE, ONTARIO. P0N 1C0

GEOPHYSICAL REPORT

ON

A VERTICAL LOOP ELECTROMAGNETIC SURVEY

OF

HUNKIN CLAIMS

IN

WORK TOWNSHIP

PORCUPINE MINING DIVISION

DISTRICT OF COCHRANE

By: H.D. Carlson Ph. E., P. Eng.  
Consulting Geologist.

**RECEIVED**

MAY 10 1982

MINING LANDS S.

**H. D. CARLSON,**

PH. D., P. ENG.  
CONSULTING GEOLOGIST  
110 MARTIN STREET

H. D. CARLSON  
PORCUPINE, ONTARIO. P0N 1C0

INTRODUCTION

This report describes a geophysical survey (V.L.E.M.) which was conducted over three (3), unpatented mining claims located in Lot 3, Concession V1, Work Township, Ontario. These claims are described as follows:

P.554176-N.W.  $\frac{1}{4}$ , N $\frac{1}{2}$ , Lot 3, Conc. V1, Work Township.

P.554185-S.W.  $\frac{1}{4}$ , S $\frac{1}{2}$ , Lot 3, Conc. V1, Work Township.

P.554186-N.E.  $\frac{1}{4}$ , S $\frac{1}{2}$ , Lot 3, Conc. V1, Work Township.



In 1980 and 1981 these claims were surveyed by certain geophysical techniques (magnetometer and horizontal loop electromagnetic methods) and the results of this work are described in a report by K.H. Darke, P. Eng., dated March 20, 1981, which was submitted to the Ontario Ministry of Natural Resources for assessment work credit, and is on file in the Ministry offices. In his report Darke deals with such aspects and attributes of the subject claims (in considerable detail) as Location and Access, Previous Work, and Geology, and it would appear to

VERTICAL LOOP ELECTROMAGNETIC SURVEY

A grid of north-south-trending picket lines had been established previously on the property with a line spacing of 100 metres and survey stations set up at 25 metre intervals.



A grid of north-south-trending picket lines had been established. The instrument operators were Guy Thibeault and assistants of Timmins, Ontario. The instrument used was a Crone (CEM) vertical loop with an operating frequency of 1830 Hz.

A number of weak to very weak cross-overs were indicated by the survey, and the locations of these are noted below:

L24W	Sta. 38S	L21W - Sta. 1262S
L23W	Sta. 62S	L22W - Sta. 1275S
L22W	Sta. 288S	L22W - Sta. 1462S
L21W	Sta. 300S	L23W - Sta. 1362S
L20W	Sta. 313S	L23W - Sta. 1487S
L19W	Sta. 862S	L24W - Sta. 1350S

The great majority of these are very weak with broad shoulders of very low amplitude, and it is doubtful that they represent genuine, sub-surface, bedrock conductors. Only one of the above cross-overs might be considered a possible candidate for further investigation, i.e., that at Sta. 62S on L 23W; here the responses are somewhat stronger, and this possible bedrock conductor lies on the northwest flank of a regional northeast-trending magnetic feature, which is roughly parallel to known stratigraphic strike-lines in the area. Consideration might be given to testing this cross-over, and its environs, by means of a deep-penetrating, high-resolution technique, such as with the Crone P.E.M. instrument.

Respectfully submitted

Porcupine, Ontario  
April, 1982

H.D. Carlson, Ph.D., P. Eng.,  
Consulting Geologist.



42A11NE0554 2.4754 WARK

900

2.4754

1983 02 25

2.4754

Mining Recorder  
Ministry of Natural Resources  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2B7

Dear Sir:

Re: <sup>115367</sup> Geophysical (Electromagnetic) Survey on  
Mining Claims P 554176 et al in the  
Township of Wark. 42A/11NE

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The Geophysical (Electromagnetic) Survey  
assessment work credits as shown on the attached  
statement 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: 416/965-1380

A. Barr:jh  
Encls.

cc: Peter G. Hunkin  
Timmins, Ontario

H.D. Carlson  
Porcupine, Ontario

Resident Geologist  
Timmins, Ontario

1983 02 25

Recorded Holder <b>Peter G. Hunkin</b>
Township or Area <b>Wark Twp.</b>

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<b>Geophysical</b> Electromagnetic <u>20</u> days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Section 86 (18) _____ days Geological _____ days Geochemical _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input type="checkbox"/> Ground <input type="checkbox"/> <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	P 554176 554185-86

**Special credits under section 86 (15a) for the following mining claims**

--

**No credits have been allowed for the following mining claims**

<input type="checkbox"/> not sufficiently covered by the survey <input type="checkbox"/> Insufficient technical data filed
--

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical — 80; Geological — 40; Geochemical — 40; Section 86(18)-60:



Mining Lands Comments


To: Geophysics *Mr. Barber.*

Comments

*- Key map needed*

Approved   
 Wish to see again with corrections   
 Date *Jan 3/83*   
 Signature *Ryan*

To: Geology - Expenditures

Comments

Approved   
 Wish to see again with corrections   
 Date   
 Signature

To: Geochemistry

Comments

*LD*

Approved   
 Wish to see again with corrections   
 Date   
 Signature

To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

1982 05 19

2.4754

Mining Recorder's Office  
Ministry of Natural Resources  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2S7

Dear Sir:

We have received reports and maps for a Geophysical (Electromagnetic) Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims P 554176 et al in the Township of Wark.

This material will be examined and assessed and a statement of assessment work credits will be issued.

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

J. Skura/amc

cc: Mr. Peter G. Hunkin  
Timmins, Ontario

cc: Mr. H.D. Carlson  
Porcupine, Ontario

In the matter of mining claims:

P 554176

P 554185

P 554186

in Wark Township

On consideration of an application from the recorded holder, Peter G. Hunkin  
under Section 77 Subsection 22 of The Mining Act, I hereby order that the time for filing reports and plans in support of  
Electromagnetic assessment work recorded on January 26 19 82  
be extended until and including May 10 1982.

May 10, 1982  
Date

  
Signature of Director, Land Management Branch

Copies: P. Hunkin  
Timmins, Ontario

Mining Recorder  
Timmins, Ontario





Ontario

*Waiting for extension  
from road*

*P. 554176*

Ministry of  
Natural  
Resources

Notification of recording  
of assessment work credits

**RECEIVED**

**FEB 2 1982**

**MINING LANDS SECTION**

Lands Administration Branch  
Mining Lands Section  
Ministry of Natural Resources  
Room 1617, Whitney Block  
Queen's Park, Toronto  
M7A 1W3

Date of recording of work: January 26, 1982

Recorded holder: Peter G. Hunkin

Address: P. O. Box: 2201  
Timmins, Ontario

Township or Area: WARK TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining claims
Geophysical	
Electromagnetic <u>20</u> days	P-554176 ✓
Magnetometer _____ days	P-554185 ✓
Radiometric _____ days	P-554186 ✓
Induced polarization _____ days	
Section <u>77 19</u> ( <del>19</del> ) days	
Geological _____ days	
Geochemical _____ days	
Man days <input type="checkbox"/>	Airborne <input type="checkbox"/>
Special provision <input checked="" type="checkbox"/>	Ground <input checked="" type="checkbox"/>

Notice to recorded holder:

Survey reports and maps in duplicate be submitted to the Lands Administration Branch, Toronto within 60 days from the date of recording of this work.

Reports and maps are being forwarded to the Lands Administration Branch with this letter.

*[Signature]*  
Regional Mining Recorder  
c.c. Peter G. Hunkin

*April 20/82*



Ministry of Natural Resources

Ontario

Work  
Twp #16

P-554176

A separate form is required for each type of work to be recorded.

THE MINING ACT REPORT OF WORK

To the Recorder of PORCUPINE Mining Division

I, PETER G. HENKIN name of Recorded Holder Prospector's Licence

do hereby report the performance of 60 days of Geophysical (E.M) ELECTRO-MAGNETIC type of work

not before reported to be applied on the following contiguous claims

Claim No.	Days	Claim No.	Days	Claim No.	Days
<u>P554176</u>	<u>20</u>	.....	.....	.....	.....
<u>P554185</u>	<u>20</u>	.....	.....	.....	.....
<u>P554186</u>	<u>20</u>	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....

All the work was performed on Mining Claim (s) P554176 P554185 P554186  
(In the case of geological and/or geophysical survey (s) where more than 18 claims are involved attach a schedule)

READ CAREFULLY: THE FOLLOWING INFORMATION IS REQUIRED BY THE MINING RECORDER.

- For Manual Work, Stripping or Opening up of Mines, Sinking Shafts or Other Actual Mining Operations - Names and addresses of the men who performed the work and the dates and hours of their employment.
- For Diamond and other Core Drilling - Footage, No. and angle of holes and diameter of core. Name and address of owner or operator of drill. Dates when drilling was done. Signed core log and sketch in duplicate.
- For Compressed Air or Other Power Driven or Mechanical Equipment  
Type of drill or equipment. Names and addresses of men engaged in operating equipment and the dates and hours of their employment.
- For Power Stripping - Type of equipment. Name and address of owner or operator. Amount expended. Dates on which work was done. Proof of actual cost must be submitted within 30 days of recording.
- With each of the above types of work sketches are required to show the location and extent of the work in relation to the nearest claim post. In the case of diamond or other core drilling the sketch must be submitted in duplicate.
- For Geophysical, Geological, Geochemical Surveys and Expenditure Credits - the name of author of report. Covering dates of survey (linecutting & office). Type of instrument used. Total amount of expenditure. Technical reports, maps, expenditure breakdown, receipts must be filed in duplicate with the Minister within 60 days of recording.
- For Land Survey - the name and address of Ontario Land surveyor.

The Required Information is as Follows: (Attach a list if this space is insufficient)

RECEIVED

JAN 28 1982

MINING LANDS SECTION

RECORDED  
JAN 26 1982  
Receipt No. ....

PORCUPINE MINING DIVISION  
RECEIVED  
JAN 25 1982  
AM 7 8 9 10 11 12 1 2 3 4 5 6 P 11

Date JAN 22 1982

Peter G. Henkin  
Signature of Recorded Holder or Agent

The Mining Act Certificate Verifying Report of Work

I, ORVILLE HICKS  
Box 401 SCHUMACHER ONTARIO P0N 1E0  
(Post Office Address)

hereby certify:

- That I have a personal and intimate knowledge of the facts set forth in the report of work annexed hereto, having performed the work or witnessed same during and/or after its completion.
- That the annexed report is true.

Dated JAN 22, 19 82. Orville Hicks  
Signature

THE PENALTY FOR MAKING A FALSE STATEMENT IN THIS REPORT AND/OR CERTIFICATE IS \$500. OR SIX MONTHS IMPRISONMENT OR BOTH

May 5/82

Lands Administration Branch  
Mining Lands Section  
Ministry of Natural Resources  
Room 1617, Whitney Block  
Queens Park, Toronto Ont.  
M7A 1W3

Dear Mr. Mathews:

Re: Prosser Wark Tsp. claim numbers  
P554176, P554185, P554186. N/O P.G. Hunkin.

Due to a delay in the engineers report, I now request  
an extension on the subject claims from March 25/82 to May 10/82.

The report is now in my possession and I enclose a  
copy for your files, accompanied by your FM. 837.

I trust this is satisfactory.

Yours Truly,

  
P.G. Hunkin

**RECEIVED**

MAY 4 1982

MINING LANDS SECTION



GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 247 Number of Readings 247
Station interval 25 meters Line spacing 100 meters
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 V.E.M. Crone
Coil configuration
Coil separation
Accuracy
Method: [X] Fixed transmitter [ ] Shoot back [ ] In line [ ] Parallel line
Frequency 1830 Hz (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) \_\_\_\_\_

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 \_\_\_\_\_

Prosser Twp.

THE TOWNSHIP OF  
OF

**WARK**

DISTRICT OF  
COCHRANE

PORCUPINE  
MINING DIVISION

SCALE: 1-INCH= 40 CHAINS

LEGEND

- |                       |             |
|-----------------------|-------------|
| PATENTED LAND         | (P)         |
| CROWN LAND SALE       | (S) or C.S. |
| LEASES                | (L)         |
| 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                 | —           |

NOTES

400' Surface rights reservation around all lakes & rivers

Ont Northland Rwy spur line R/W for S.R.O. see file 177607

This township lies within the Municipality of CITY of TIMMINS.

DATE OF ISSUE

JAN 12 1983

Ministry of Natural Resources  
TORONTO

PLAN NO.- M-317

ONTARIO

MINISTRY OF NATURAL RESOURCES

SURVEYS AND MAPPING BRANCH

Kidd Twp.

Gowan Twp.

VI

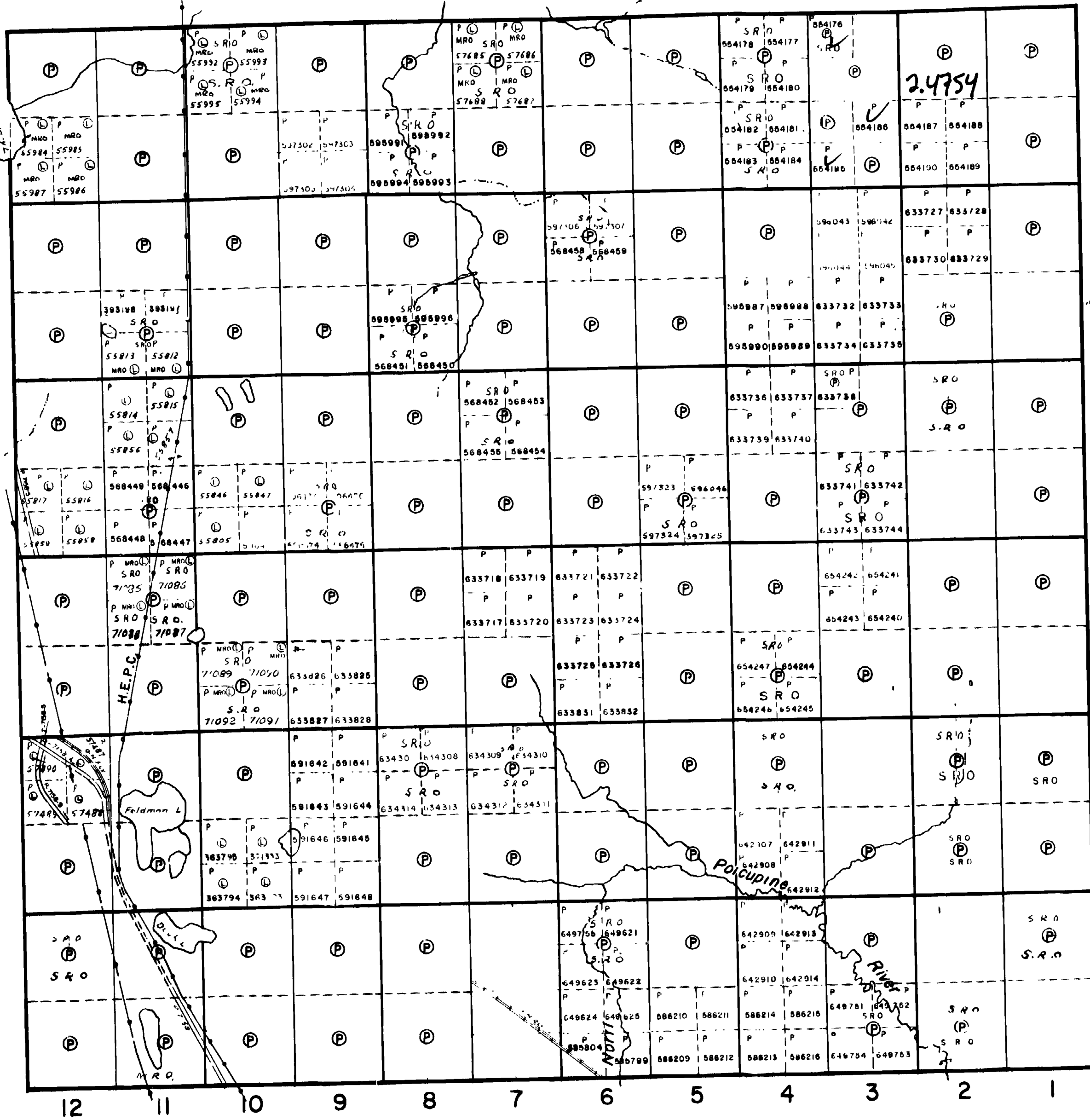
V

IV

III

II

I



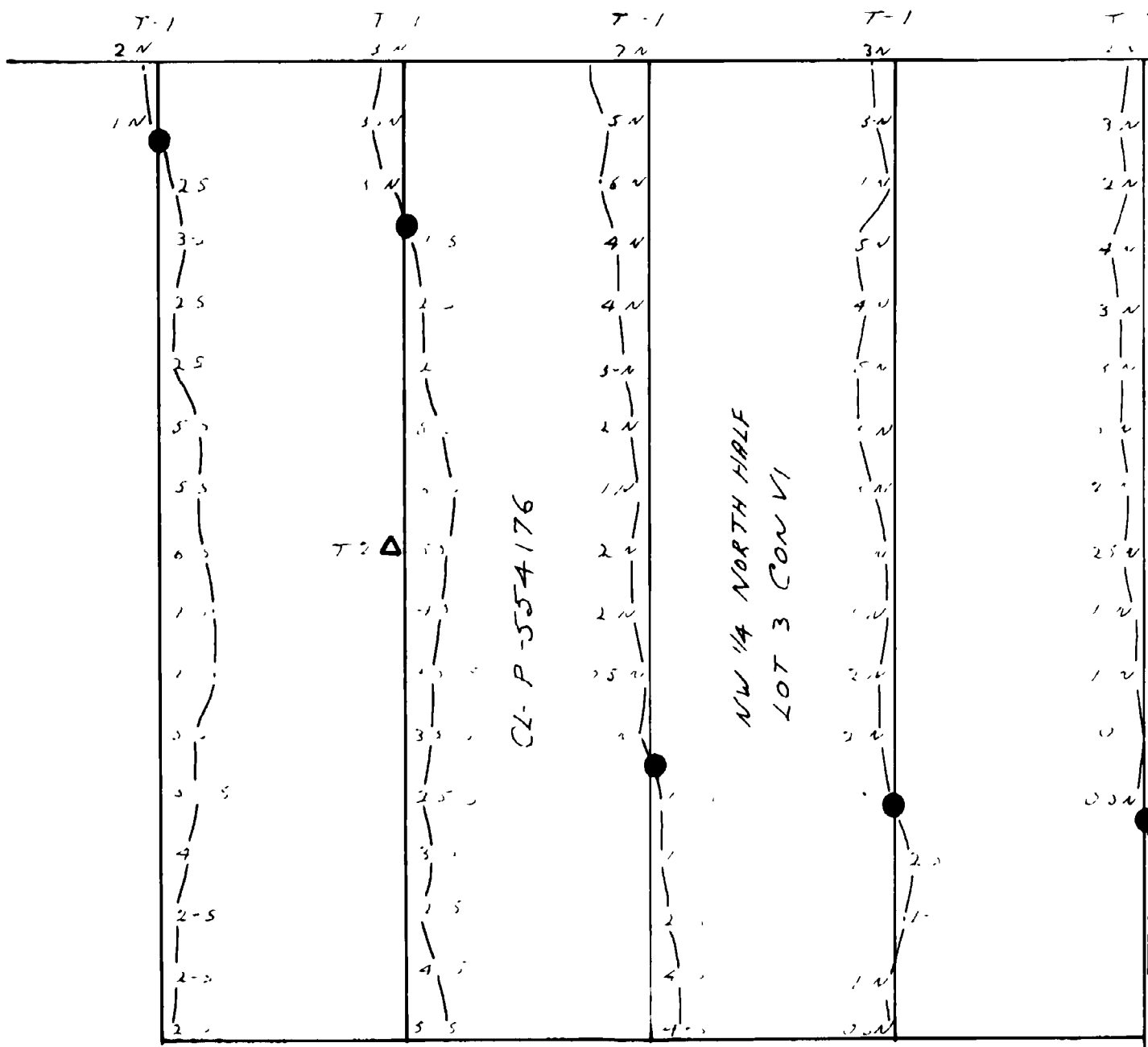
Murphy Twp.





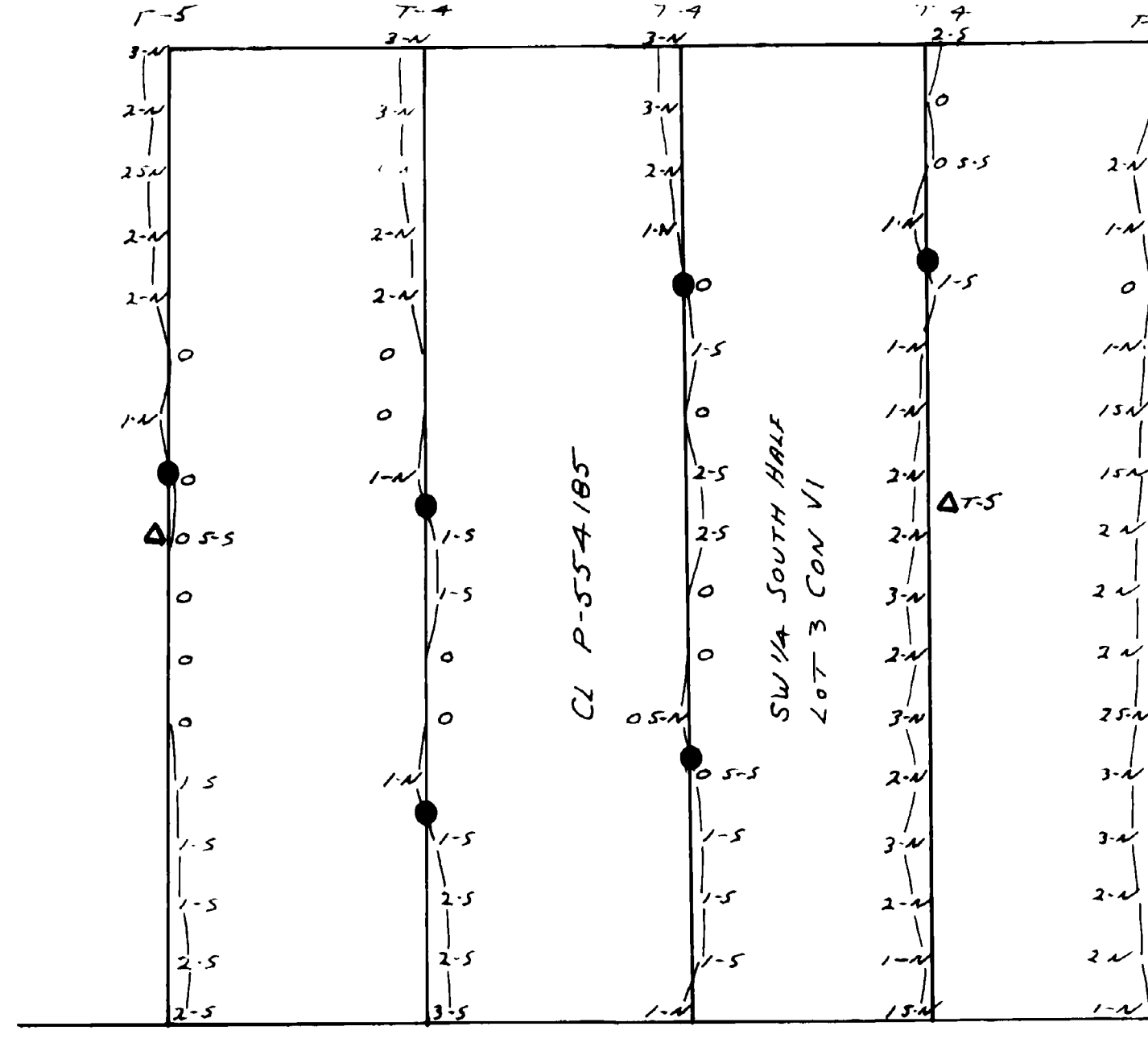
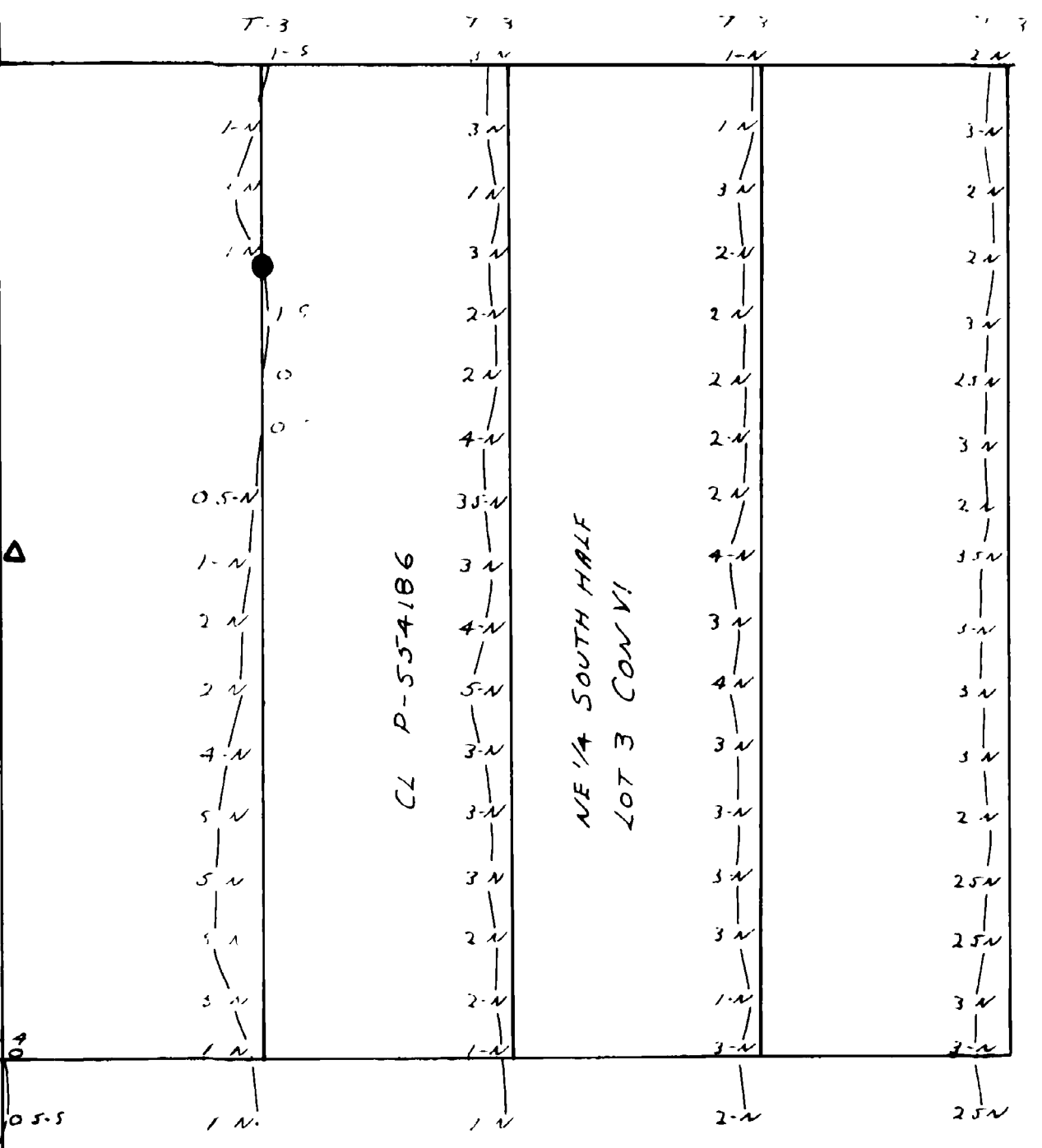
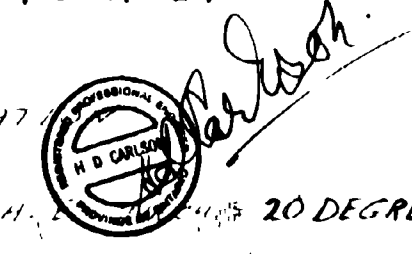
L-24-W L-23-W L-22-W L-21-W L-20-W L-19-W L-18-W L-17-W L-16-W

PROSSER TWP.  
WARR TWP.



VERTICAL LOOP EM SURVEY

A TRANSMITTER LOCATED  
 35-S R.H.V. H. 20 DEGREES  
 P554176 CLAIM NUMBER  
 U CLAIM CORNER 4754  
 INSTRUMENT CRONE FREQUENCY 315 Hz  
 SCALE 25 METERS BETWEEN READINGS  
 ● CROSS OVER



LOT 3 CON VI WARR TWP.  
 LOT 3 CON V WARR TWP.

