

BOSWELL RIVER MINES LTD.

DAN GROUP

Watson Lake M.D., 105-B-3
60° 10' North, 131° 6' West

SUMMARY of 1968 WORK PROGRAM

by

J.W. McLeod

&

P.H. Sevensma, Ph.D., P. Eng.

July 7, 1969.

TABLE OF CONTENTS

	<u>Page No.</u>
1. INTRODUCTION	1
2. PROGRAM SUMMARY	1
3. PROPERTY	2
4. LOCATION and ACCESS	2
5. OUTLINE	2
A. Geochemical Report	3
B. Geophysical Report	8
C. Physical Work Report	13
D. Summary of Recommendation	27

CERTIFICATE

BIBLIOGRAPHY

ILLUSTRATIONS & TABLES

List of Figures

Appendix "A"

Table 1

Table 2

Figures 1 - 36

BOSWELL RIVER MINES LTD.

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SUMMARY of 1968 WORK PROGRAM

1. INTRODUCTION

An extensive program of road building, trenching and geochemical and geophysical work was carried out by Boswell River Mines Ltd. on the Dan Group between May 15 and November 1, 1968, including drilling on several target areas.

These programs were conducted by personnel of Boswell River Mines Ltd., the writer's firm acting as consulting geologist.

Recently, the data have been assembled by P.H. Sevensma Consultants Ltd. in separate geochemical, geophysical and drilling reports.

2. PROGRAM SUMMARY

The purpose of the program was to provide an initial assessment of a number of targets indicated by a previous airborne survey, as well as of the showings known in the area.

None of the programs was designed to test any one area exhaustively.

The claim area was subdivided into nine individual sub-areas, and the statistical detail of the work performed on each area is summarized in Figure 1.

3. PROPERTY

The property herein known as the Dan Group, consists of 295 mineral claims bearing the names Bud, Daren, Rex and Dan. The complete list of claims, with names, claim numbers, and anniversary dates is included in the appendix.

The claims have been staked in accordance with the Yukon Quartz Mining Act.

4. LOCATION and ACCESS

The claim group is accessible by a truck road running from Mile 722 on the Alaska Highway, 15 miles north and west.

Accessibility to the various areas within the group has been provided by the construction of access roads on the property (figure 2).

5. OUTLINE

The following part of the report is separated into three sections:

- A. Geochemical Report
 - 1. General
 - 2. Description by area.
- B. Geophysical Report
 - 1. General
 - 2. Description by area
- C. Physical Work Report
 - 1. General
 - 2. Description by area.

A. Geochemical Report

1. General

In the summer and fall of 1968, the following geochemical work was performed on the Dan Group. The geochemical work consisted of silt and soil sampling surveys. The silt samples were taken at regular intervals on the various creeks which are numbered (figure 3). The silts were taken by hand from the creeks and placed in paper bags, these were partially air dried and sent into the laboratory without further preparation. The soil samples were taken from cut and flagged grid lines (figure 2) at regular intervals. These samples were bagged and sent into the laboratory without further preparation.

Both the silt and soil samples were dried, screened and tested in 0.50 gram portions. The test for Pb., Zn. and sometimes Cu. were performed by hot HCl, HNO₃ extraction and subsequent analyses with a Techtron AA4 flame spectrometer. The analysed results are given on all figures in the text in p.p.m.

The laboratory tests were conducted by Vancouver Geochemical Laboratory (Coranex Project), 1521 Pemberton Avenue, North Vancouver, B.C.

The following report outlines the work performed, gives interpretation of acquired results and makes recommendations where possible with regard to further work.

2. Description by Area

(a) Burnt Hill Area (Figure 2)

The geochemical work performed on this area consisted of 77 silt samples taken on creeks 4 and 6 (see figure 3). Several moderately anomalous areas were indicated by the silt samples (see figures 7 and 8). There are no anomalous Pb. values.

While a longer dispersion train of values might be expected, this is not the case; the higher values seem to be isolated or at best to possess a relatively short dispersion. The higher values may exhibit a pattern which extends or seems to traverse all three creeks and a soil sampling survey should be conducted over this area to encompass the three interesting zones on one sample grid. For example, a baseline could be run N 310° (approximate) with E-W grid survey lines running off at right angles for 2,000 feet.

An isolated Zn.-Cu. response at the end sample station on creek 5 warrants some further work, which could be in the form of a soil survey as previously outlined, only of a more limited extent.

(b) Dan Area (Figure 1)

The geochemical work performed on this area consisted of 11 silt samples (see figure 3) and 142 soil samples.

The silt survey conducted over the Dan Group on creek 3 shows only one isolated, anomalous copper response (see figure 9). The soil sample survey conducted over the survey grid on the Dan area shows a definitely higher than background (Pb.-Zn.-Cu.) zone approximately 500 - 750 feet south of baseline "0" on survey line 6+00 W, and a slightly less anomalous zone from baseline "0" north 750 feet on survey line 4+00 W through 4+00 E. Also, a Pb.-Zn.-Cu. response is indicated on the south end (1,000 - 1,500 feet) at baseline "0" on lines 32+00 W to 36+00 W. (see figures 10, 11, and 12). To conclude and recommend further work would be redundant since on the basis of the encouraging soil survey results this was done in the form of an I.P. survey and trenching over the grid, which will be reviewed in the following geophysical and physical work reports.

(c) Central Valley Area (Figure 2)

A total of 13 silts were taken over creek 1 (figure 3). There were no particularly interesting responses indicated by the silt survey (figure 13), therefore no immediate follow-up work is thought to be advisable in the area drained by creek 1.

A soil survey program was performed over the Central Valley area (see figure 2) and 17 soil samples were taken, but neither the location map nor the results can be found. Since the results cannot be evaluated it can only be recommended that these samples be taken again.

(d) Drumlin Valley Area (Figure 2)

A total of 35 silt samples were taken on creek 2 (see figure 3) and one fairly large anomalous train of values was encountered (see figures 14 and 15).

A 15,600 foot grid survey line (baseline "6") approximately 1,000 feet east of creek 2 was put in and 143 soil samples were taken at 100 foot intervals between lines 43+00 N and 100+00 S. No soil values comparable to the silt samples were encountered on the baseline, but this may be because the baseline does not cut the zone, which may be responsible for the high values in the creek (figures 16 and 17). It can thus be recommended that a grid survey line be put in, that traverses the creek at right angles (see suggested grid on figure 14).

A Zn. response was encountered on baseline "6" in the vicinity of 11+00 N to 16+00N and geophysical follow-up work was performed (see geophysical report).

(e) Crescent Valley Area (Figure 2)

The geochemical program on this area consisted of 35 soil samples taken along baseline "2" and on the survey grid lines 124+00 W, 52+00 W and 40+00 W.

An anomalous Zn.-Cu. zone was encountered at 1,600 to 1,800 feet north of baseline "2" on the grid survey line 40+00 W (figures 20, 21 and 22).

It is recommended that all grid survey lines be soil sampled and that I.P. be run over the anomalous areas as they appear.

(f) Mod Area (Figure 2)

No geochemical work was performed on the area (see geophysical report).

(g) Rusty Valley Area (Figure 2)

The soil survey performed over this area consisted of 89 soil samples which were analyzed for Pb.-Zn.

The numerous high Pb.-Zn. values coincide well (figures 26 and 27), suggesting that an area of lead-zinc mineralization was encountered.

A recommendation for further or extended soil sampling must be made. The extension could be on the existing grid lines both to the north and south of baseline "4" to a total distance of 2,000 feet each way and by filling-in grid survey lines 20+00 E, 4+00W and 8+00 N, to complete a rectangular grid from 8+00 W to 40+00 E with lines every 400 feet and extending 2,000 feet north and south of baseline "4". Soil samples could then be taken at 200 foot sample intervals.

Follow-up geophysical work has been performed and more may be required if geochemical results warrant it.

(h) Rex Area (Figure 2)

A soil sampling program was conducted over the grid from and including baseline "3". Many significant Pb. values were encountered, some of which showed correspondence with Zn. responses, particularly between 2+00 W and 2+00 E on baseline "3" (figures 30 and 31).

A recommended induced polarization follow-up revealed a coincident anomalous zone (see geophysical report) and therefore further geochemical work at this time is not recommended in this immediate area. The option on these claims has been terminated as a result of unfavorable drill results.

B. Geophysical Report

1. General

The following report summarizes the work performed on the Dan Group during the summer and fall of 1968. The report also includes interpretation of results, conclusions reached from the results and recommendations regarding further work on the various areas (see figure 2) within the claim group.

The geophysical methods employed in the survey are reviewed (Walcott, 1969). The induced polarization method will be referred to as I.P. and electro-magnetic (16) as E.M.-16.

2. Description by Area

(a) Burnt Hill Area (Figure 2)

While no geophysical work was performed on the area, it is suggested that if the soil survey program gives any encouraging results (see geochemical report), an I.P. or E.M.-16 survey could be conducted over the interesting areas.

(b) Dan Area (Figure 2)

2,600 feet of I.P. survey was conducted over the area. The survey was confined to line 0+00 and consisted of two runs using first 200 foot, then 400 foot electrode separation in an area where known mineralization occurs. High chargeability and low resistivity readings were obtained over a good portion of the line and especially over the north end.

The coincidence of geochemical and geophysical results in this area enhance the possibility that a mineralized zone was encountered rather than graphitic schist. It should be kept in mind that while the geochemical results for Pb. are not high and that Cu. samples don't extend far enough to the north, the Zn. values are anomalous, and further work should be performed.

The grid lines 8+00 W to 4+00 E should be extended to the north another 1,000 feet and soil samples and induced polarization should be completed on these lines (see dotted line area on figure 10).

(c) Central Valley Area (Figure 2)

No geophysical work was performed on this area and none can be recommended until the soil sampling program is completed (see geochemical report).

(d) Drumlin Valley Area (Figure 2)

Geophysical surveys were conducted along base-line "6" for a total distance of 15,600 feet. This survey employed I.P. and E.M.-16 methods. In the vicinity of the geochemical silt and soil response (figures 14 and 16) from 11+00 N to 16+00 N the I.P. shows a zone of fairly high resistivity. This may be of interest if sphalerite is the predominant mineral, which it should be noted, is not usually the case in this area, but it is felt that additional work in the form of a more comprehensive soil and I.P. survey (as outlined in figure 14) is warranted to test for a concentration of zinc.

At 87+00 S the I.P. shows a high chargeability zone and the Crone E.M. shows a coincident conductive zone. The area lacks a geochemical response, but a more detailed examination is warranted in the form of more I.P. and soil sampling as proposed diagrammatically (figure 18).

(e) Crescent Valley Area (Figure 2)

No geophysical work was carried out on this area. Considering the incomplete nature of the surveys conducted to date (see geochemical report) it appears as if I.P. follow-up work will be needed if further geochemical work provides additional positive information.

(f) Mod Area (Figure 2)

The grid lines on baseline "5" were tested by I.P., E.M.-16 and Crone E.M. The Crone E.M. was used as follow-up on the E.M.-16 anomalies (figure 24). The induced polarization results (figure 23) show one area of coincident high chargeability and low resistivity. There is a marked lack of continuity between the response on line 2+00 W and 2+00 E. It has been recommended by the geophysicist that additional I.P. work be done at various spacings to provide an explanation of this lack of continuity. (Walcott, 1969).

Due to I.P. results and subsequent diamond drilling, further work is not recommended and the option on the group of claims has been terminated.

(g) Rusty Valley Area (Figure 2)

An I.P. survey was conducted over baseline "4" and the accompanying grid lines. The survey was run at three different electrode spacings: 400 feet, 200 feet, 100 feet. The results at the various spacings are consistent and on lines 12+00 E and 28+00 E (figure 28) a corresponding resistivity and chargeability response is evident (figure 28). It is recommended that further I.P. work be carried out to conform with the proposed extended geochemical soil sampling program (see geochemical report).

(h) Rex Area (Figure 2)

An I.P. survey over the grid lines was conducted as follow-up work to the soil sampling program. Also an E.M.-16 instrument was operated over the same grid and one coincident conductive response is noted (Figures 32-33) marked "B". This response is believed to be due to disseminated pyrite and/or pyrrhotite in the underlying rock as this area contains visible rusty stained out crops. Diamond drilling was recommended (Walcott, 1969) and will be reviewed in the accompanying physical work report.

The anomalous I.P. results at zone "A" (Figure 33) is thought to indicate a pinching out of the zone on the west and a trend to greater depth on the east as indicated by the decrease in the E.M. - 16 response. Diamond drilling was recommended (Walcott, 1969) and will be reviewed in the physical work report. It should be noted here that either the I.P. or the E.M.-16 responses could be due to a mineralized zone or a section of graphitic schist.

The zone "C" (Figure 33) response may be due to a deep seated source (Walcott, 1969) has stated that further work should depend upon geological considerations. (see Physical Work Report).

C. Physical Work Report

1. General

This report describes in detail the linecutting, and diamond drilling. In all areas where bulldozer and hand (blasting) trenching was done it is included, as well as, in Figure 1, but since the work has not been surveyed it is not possible to accurately locate the trenches on a reference map sheet.

All work included in this report was carried out during the summer and fall of 1968. Like the geochemical and geophysical reports the physical work review is described on an area by area basis.

2. Description by Area

Burnt Hill Area: (Figure 2)

A total of 3000 feet of road was constructed in this area.

All existing claim lines were cut-out, chained and flagged every 200 feet. The linecut totals 42,000 feet (Figure 2).

There was no diamond drilling or trenching performed on this area.

Dan Area (Figure 2)

Road construction totalling 4000 feet was completed on this area.

A total of 48,700 feet of line was cut. (Figure 2).

There was no diamond drilling done on this area.

Six bulldozer trenches were excavated. These trenches ranged from 500 to 200 feet in length and all reached bedrock where they encountered- zinc mineralization.

Also three trenches were blasted - out of bedrock. These trenches averaged one foot width for a total length of 100 feet.

Total trenching approximately 1900 feet.

Central Valley Area (Figure 2)

A total of 4000 feet of road was constructed.

Linecutting for a total distance of 21,800 feet was completed (Figure 2).

Neither diamond drilling nor trenching was performed on this area.

Drumlin Valley Area (Figure 2)

A total of 3000 feet of access road was completed.

Linecutting on baseline "6" for 15,600 feet was completed. This included cutting line, flagging and marking the line every 100 feet (Figure 2).

No diamond drilling was performed on this area.

Two trenches were attempted but abandoned because bedrock could not be reached.

Crescent Lake Valley Area (Figure 2)

Access road construction in this area totalled 21,000 feet.

Linecutting totalling 12,400 feet was completed. This included a baseline and survey lines every 400 feet. (Figure 2).

Five trenches were excavated, but only two reached bedrock where they encountered zinc mineralization.

No diamond drilling was carried out on this area, although the mineralized zones uncovered by trenching may warrant some work.

Mod Area (Figure 2)

A total of 4000 feet of access road was completed in this area. Linecutting totalling 24,000 feet was completed in the area (Figure 2). Eleven diamond drill holes were completed. This included five holes completed with a Winkie drill and six holes with AQ wireline equipment (Figure 4). All AQ drilling was performed by Arctic Drilling Company.

The following is a summary of the six AQ wireline holes (Figure 25).

M #1 - Total length 238' feet
Bearing S 23° W.
Dip 45°
Core Size: AQ

<u>Ft.</u>	<u>Remarks</u>
0 - 20.0	Overburden.
20.0 - 96.0	Phyllite and interbedded quartzite
96.0 - 100.3	Syenite sill
100.3 - 110.0	Alternating Phyllite and Quartzite
110.0 - 115.3	Chlorite, epidote alteration with disseminated pyrrhotite
115.3 - 118.0	Limestone with some replacement by pyrrhotite

118.0 - 123.6 Altered, phyllite and quartzite
 123.6 - 238.0 Phyllite, quartzite and various
 interbedded mixtures of both.

M #2 Total length - 239 feet
 Bearing - S 23° W
 Dip - 70°
 Core Size - AQ.

<u>Ft.</u>	<u>Remarks</u>
0 - 11.0	Overburden
11.0 - 118.5	Interbedded phyllites and quartzites some minor pyrrhotite and slight alteration in the lower part of this section.
118.5 - 124.8	Mineralized zone of banded, massive to disseminated pyrrhotite, manganese, arsenopyrite and some chalcopyrite. The host being phyllites, quartzites and some calcite filled fractures.
124.8 - 127.0	Phyllite followed by quartzite.
127.0 - 142.5	Quartzites and interbedded phyllites containing banded, disseminated pyrrhotite, chalcopyrite, arseno- pyrite throughout.
142.5 - 144.0	Rhyolitic, grey, none foliated host with a few mineralized stringers of pyrrhotite, chalcopyrite, arsenopyrite.

144.0 - 239.0

Phyllite and interbedded quartzite.

M #3 Total length - 150 feet
 Bearing - S 13° W.
 Dip - 60°
 Core Size : AQ

<u>Ft.</u>	<u>Remarks</u>
0 - 17.0	Overburden
17.0 - 95.0	Phyllite and interbedded quartzite.
95.0 - 100.0	Syenite with disseminated pyrite.
100.0 - 123.0	Phyllite and interbedded quartzite.
123.0 - 125.5	Greenish, altered granitic rock.
125.5 - 127.3	Crystalline limestone with discernable sphalerite, pyrrhotite, some magnetite, and small particles of galena.
127.3 - 129.5	Greenish-pink-granitic rock and altered granitic rock.
129.5 - 149.6	Phyllite with some interbedded quartzite.

M # 4 Total length - 266 feet
 Bearing - N
 Dip - 90°
 Core Size - AQ

<u>Ft.</u>	<u>Remarks</u>
0 - 9.0	Overburden
9.0 - 136.0	Phyllite with interbedded quartzite.
136.0 - 142.0	Syenite - reddish brown color.

142.0 - 169.0	Phyllite with interbedded quartzite.
169.0 - 180.8	Mineralized limestone and quartzite containing massive, banded pyrrhotite sphalerite, with some magnetite and galena. Some small particles of chalcopyrite are present.
180.8 - 266.0	Altered quartzite (1.0 ft.), phyllite plus interbedded quartzite.

M #5 Total length - 276 feet
 Bearing - N
 Dip - 45°
 Core Size - AQ

<u>Ft.</u>	<u>Remarks</u>
0 - 31.0	Overburden
31.0 - 41.0	Phyllite, quartzite.
41.0 - 215.0	Phyllite plus interbedded quartzite.
215.0 - 217.0	Altered syenite
217.0 - 249.0	Phyllite, minor interbedded quartzite
249.0 - 251.0	Mineralization, massive pyrrhotite, some magnetite, sphalerite.
251.0 - 253.5	Altered crystalline limestone with some pyrrhotite, magnetite.
253.5 - 256.0	Epidotized alteration zone.
256.0 - 262.0	Phyllite and interbedded quartzite with banded pyrrhotite throughout.

<u>Ft.</u>	<u>Remarks</u>
262.0 - 276.0	Quartzite, phyllite.

M #6 Total depth - 316 feet
 Bearing - N
 Dip - 75°
 Core Size - AQ

<u>Ft.</u>	<u>Remarks</u>
0 - 11.0	Overburden
11.0 - 219.0	Phyllite with interbedded quartzite
219.0 - 230.0	Alterations zone, with Calcite stringers.
230.0 - 316.0	Phyllite with interbedded quartzite .

WM #1 Total length - 25 feet
 Dip - 45°
 Core Size - Winkie Ex.

<u>Ft.</u>	<u>Remarks</u>
0 - 5.0	Phyllite
5.0 - 16.0	Altered zone with some pyrrhotite mineralization.
16.0 - 25.0	Phyllite.

WM #2 Total length - 21 feet
 Dip - 80°
 Core Size - Winkie Ex

<u>Ft.</u>	<u>Remarks</u>
0 - 8.5	Phyllite
8.5 - 19.0	Alteration with pyrrhotite

- from 12 ft. - 16 ft.

19.0 - 21.0

Phyllite.

WM #3 Total length - 70 feet
 Dip - 30°
 Core Size - Winkie Ex.

<u>Ft.</u>	<u>Remarks</u>
0 - 70.0	Phyllite with interbedded quartzite

WM #4 Total length - 24 feet
 Dip - 60°
 Core Size - Winkie Ex.

0 - 0.5	Phyllite
0.5 - 5.0	Alteration zone with magnetite.
5.0 - 10.5	Crystalline limestone.
10.5 - 12.0	Mineralization as pyrrhotite, sphalerite, galena.
12.0 - 12.5	Alteration.
12.5 - 13.0	Mineralization, pyrrhotite, sphalerite, galena.
13.0 - 24.0	Phyllite with slight sphalerite mineralization at 13.4 feet. Small amount of quartzite at 22 feet.

WM #5 Total length - 27 feet
 Dip - 60°
 Core Size - Winkie Ex.

<u>Ft.</u>	<u>Remarks</u>
0 - 1.0	Phyllite
1.0 - 2.5	Chlorite, epidote alteration.

2.5 - 10.2	Crystalline limestone.
10.2 - 10.5	Chlorite, epidote alteration.
10.5 - 14.0	Pyrrhotite, sphalerite, galena in irregular bands of variable thickness.
14.0 - 27.0	Phyllite with interbedded quartzite.

Extensive trenching was done on the Mod area. The trench length was 600 feet which uncovered - lead - zinc mineralization over the entire length, but due to diamond drill results the option on this group has been terminated.

Rusty Valley Area (Figure 2)

A total of 6000 feet of access road was constructed. 20,400 feet of linecutting was completed. Two AQ diamond drill holes were completed by Arctic Diamond Drilling. (Figures 5, 29)

Summary

RV #1 Total length-712 feet
 Bearing - N 195°
 Dip - 50°
 Core Size - AQ

<u>Ft.</u>	<u>Remarks</u>
0 - 30.0	Overburden
30.0 - 67.0	Quartzites with interbedded phyllites.
67.0 - 78.0	Alteration zone, at 77.8 feet mineralization in the form of sphalerite, minor galena also possibly some

	wolframite? Some light brown garnets were found in places.
78.0 - 82.5	Crystalline limestone.
82.5 - 90.5	Alteration zone with - mineralization, as bands of disseminated sphalerite, possibly some wolframite? and galena at both top and bottom contact.
90.5 - 94.6	Crystalline limestone.
94.6 - 104.0	Alteration zone. Mineralization occurs as sphalerite, wolframite? galena at 94.6 feet and 101.6 to 102.2 feet. Pyrrhotite, sphalerite and magnetite occur from 103.3 to 104.0 feet
104.0 - 115.0	Alteration zone with pyrrhotite, sphalerite, magnetite (banded) from 107.0 to 108.5 feet. Just pyrrhotite at 109.5 feet.
115.0 - 214.0	Interbedded phyllites and quartzites. 1"pyrrhotite at 139.0 and small amounts of disseminated pyrrhotite throughout this section.
214.0 - 215.0	Pyrrhotite with small amount of sphalerite.
215.0 - 229.0	Phyllites and interbedded quartzite.

229.0 - 311.0	1" sphalerite at 229 feet, with some pyrrhotite. Rest of section is phyllites and interbedded quartzites with disseminated pyrrhotite.
311.0 - 342.5	Quartzite and interbedded phyllites at 318.6 to 319.6 there is a zone of disseminated pyrrhotite, sphalerite and galena. Alteration is noted at 334.0 to 336.0 feet.
342.5 - 479.0	Interbedded phyllites and quartzites. Small amounts of pyrrhotite present as is a small zone of sphalerite at 417.0 feet.
479.0 - 486.0	Siliceous volcanics, with some fracture fillings of pyrite and pyrrhotite.
486.0 - 712.0	Interbedded phyllites and quartzites at 537.5 to 538.3 there is found fairly massive pyrite and pyrrhotite.

RV #2 Total length - 118 feet
 Dip - 75°
 Core Size - AQ

<u>Ft.</u>	<u>Remarks</u>
0 - 27.0	Overburden
27.0 - 83.5	Interbedded phyllites and quartzites.
83.5 - 92.0	Massive magnetite replacement of limestones.
92.0 - 92.5	Alteration zone.

92.5 - 118.0

Phyllites and interbedded quartzites.

There were seven trenches excavated and six of these reached bedrock. No mineralization was encountered at bedrock, but some galena and sphalerite float were uncovered in the trenches. The diamond drill results are fairly encouraging and further work on the area is recommended (see summary)

Rex Area (Figure 2)

A total of 4000 feet of access road was constructed.

Lines were cut to the total of 26,000 feet (Figure 2).

A total of 1667 feet of AQ wireline drilling was done. This consisted of four holes, also two Winkie X-ray holes were drilled for a total footage of 118 feet. (Figures 6, 34, 35).

Summary

<u>Hole No.</u>	<u>Footage Interval</u>	<u>Remarks</u>
R1		Total length - 894 feet
		Bearing - N 17° E
		Dip - 50°
		Core Size - AQ
	0 - 22.5	Overburden
	22.5 - 374.6	Interbedded phyllites and quartzites with disseminated pyrrhotite.
	374.6 - 430.0	Contact metamorphic section without visible mineralization.
	430.0 - 691.0	Phyllite and some interbedded quartzites.

<u>Hole No.</u>	<u>Footage Interval</u>	<u>Remarks</u>
	691.0 - 894.0	log missing.
R2		Total length - 126 feet
		Bearing - N 0°
		Core Size - AQ
		log missing.
R3		Total length - 551 feet
		Bearing - N 17°E
		Dip - 50°
		Core Size - AQ
	0 - 26.0	Overburden
	26.0 - 251.0	Phyllites and interbedded quartzites.
	251.0 - 255.5	Contact metamorphic zone, with chlorite, talc, serpentine, diopside.
	255.5 - 259.5	Impure quartzite.
	259.5 - 269.0	Contact metamorphic zone.
	269.0 - 273.0	Phyllite
	273.0 - 282.6	Marble
	282.6 - 551.0	Phyllite and at 282.0 to 283.0 pyrrhotite mineralization.
R4		Total depth - 96 feet
		Bearing - N 0°
		Dip - 70°
		Core Size - AQ
	0 - 17.0	Overburden
	17.0 - 96.0	Phyllite

<u>Hole No.</u>	<u>Footage Interval</u>	<u>Remarks</u>
WR 1		Total length - 97 feet Bearing - N17 ^o E Core Size - Winkie Ex. No log.
WR 2		Total length - 21 feet Bearing - N 17 ^o E Core Size - Winkie Ex. No log.

Trenching totalling 280 feet was completed on the area. This consisted of four trenches none of which reached bedrock. Due to the discouraging drill results further work is not recommendable and the option on these claims has been terminated.

Munson Lake Area (Figure 2)

This area was only prospected and no visible mineralization was encountered.

Summary of Drill Results.

Drilling was not successful on the Mod and Rex Groups in finding extensions to the known significant high grade showings. Our interpretation is that this mineralization is related to local dragfolds around folded "boudins" of limestone. Folds of this type were observed on a small scale in the drill-core. (see figure 3 & 4).

Both the Rex and the Mod appear to lie in the same stratigraphic sequence, affected by this type of folding.

More encouragement was obtained in Rusty Valley, where Hole RV -1 intersected 37' of 6% Zn with low lead and silver. (see Figure 36).

As high lead is present in the soils nearby, further drilling is recommended in this area.

D. SUMMARY OF RECOMMENDATIONS.

Burnt Hill Area:

Follow-up soil survey should be conducted to test the silt anomalies. Following this survey an E.M. or I.P. should be run over the same zones.

Dan Area:

The stage has been reached on this area, where the next logical form of follow-up work would involve diamond drilling targets as outlined.

Before drilling however, the extensions of the known target area should be covered by soil-sampling and I.P. to outline the full length of the zone and the probable zones of maximum pyrrhotite sphalerite(chalcopyrite-galena) mineralization.

Note: (geophy. report) Recommendation for extension of soil and I.P. work to the north (as outlined on Figure 10).

Central Valley Area:

Re-sampling of the Central Valley grid in the form of a soil survey and possibly E.M. at the same time or as follow-up to soil responses.

Drumlin Valley Area:

It has been noted in the physical work report that trenching encountered deep overburden. This feature could encourage a closer, more detailed look at the slightly anomalous zones, as set forth diagrammatically in Figures 14, 18 and in the geophysical report.

Crescent Valley Area:

Extensive additional geochemical work is recommended, as well as, simultaneous E.M. Where anomalies are indicated, I.P. follow-up should be performed. The trenching uncovered zinc mineralization and therefore these particular spots may have reached the drilling stage.

Mod Area:

Due to the unfavourable drill results on various targets in this area no further work is recommended and the option agreement has been terminated at the writer's recommendation.

Rusty Valley Area:

Further geochemical and geophysical work is recommended in this area with the objective of outlining diamond drill targets.

Rex Area:

No further work is recommended on this area because of unfavourable diamond drill results. The option agreement on the claims in this area has been terminated at the writer's recommendation.

Future Program.

The area as a whole presents a high background of 150 - 300 ppm zinc in the soils.

Extensive zinc mineralization in place has been encountered along the northern belt, from Crescent Lake to the Dan, with indications of continuing mineralization in to the Burnt Hill area, but much of the area has upward of 20' of overburden.

The Central Rex-Mod zone exhibits excellent silver-lead mineralization in folded "boudins" of limestone, but the structure has been proven to be unfavorable for continuity at depth.

In the Southern belt, a fair intersection of zinc in place has been cut in Rusty Valley.

In the Drumlin Valley, where a strong conductor was found by airborne methods, too little work has been done to formulate a decisive opinion. This Valley has a fairly deep clay overburden. Further geochemical surveys and I.P. over selected areas are required to pinpoint the possible sources of metal.

Further work on the Northern and the Southern belt is recommended, to consist of soil sampling, occasional E.M. and selected I.P.

Several drill-targets have been located, which disappear under overburden. Their full extent should be traced before drilling is begun.

In all the specified areas, geological mapping should be undertaken to gain a better understanding of the stratigraphy, the structure and the possible extent of the mineralization.

Economics

The best targets in the area are those that carry galena, as the $\text{oz}/\text{t.}$ silver to % lead ratio in the area always lies in the 1 to 2 range.

The Rusty Valley Target is the most promising in this respect and good float assaying 9.2% Pb.+ Zn. and 6.5 $\text{oz}/\text{t.}$ Ag. has been encountered below a large significant lead soil-anomaly at least partly coincident with a good I.P. anomaly and over 2,000' long.

In the Drumlin Valley, the lead values are mostly much higher than elsewhere in the silts, and some fair values are present in the soils. Masking by clay is significant in this valley.

The anomalous stream-silts in the Burnt Hill area suggest a significant NW trending zone about 9,000' long with zinc and minor copper, but no lead.

The Dan and Crescent Valley zones appear to lie on strike, directly South of graphitic beds with intraformational conglomerates; the main mineral is sphalerite.

As numerous base-metal showings and indications are present over a large area, the probability of finding one or more bodies of several million tons of a grade of 10% - 12% Pb. + Zn. + 6 - 8 $\text{oz}/\text{t.}$ Ag., or conversely, of 10% - 15% Zn. with little lead-silver, is considered very good. The former grade would be economic, but a deposit of straight zinc would require a special marketing contract to be of economic interest at this time.

The pace and emphasis of the proposed future program should be

geared to the above considerations. Areas where lead-silver are indicated should have precedence, i.e. Rusty Valley and Drumlin Valley, and in future soil-sampling, all assaying should be done for Cu., Pb. and Zn., and emphasis shifted according to the results.

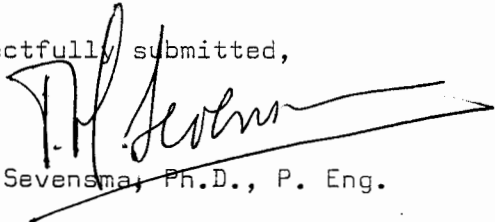
Cost Estimate

A cost estimate for continuing work is presented in a summarized form, based on an estimate of the total amount of work required to locate an economical target in this belt.

1. Geological Mapping, 16 man months @ \$1,500.00	\$24,000.00
2. Linecutting, 30 line miles @ \$100.00	3,000.00
3. Soil sampling, 2,000 samples @ \$5.00	10,000.00
4. EM, 30 line-miles @ \$100.00	3,000.00
5. IP, detailed, 50 line-miles @ \$300.00	15,000.00
6. Truck, 4 wheel drive	6,000.00
7. Camp construction	4,000.00
8. Camp operation, 1,000 man days @ \$7.50	7,500.00
9. Engineering and supervision, 15%	10,000.00
10. Diamond drilling, 6,000' @ \$16.00, all inclusive	<u>100,000.00</u>
Sub Total	\$182,500.00
11. Contingencies, 15%	27,000.00
12. Administration, 10%	<u>21,000.00</u>
Total	<u><u>\$230,500.00</u></u>

The details of this program require further study and scheduling.

Respectfully submitted,


P.H. Sevensma, Ph.D., P. Eng.

July 7, 1969.

CERTIFICATE

I, PIETER H. SEVENSMA, of 908, 1280 Haro Street, in the City of Vancouver, in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a Consulting Geologist, with a business address at 715-850 West Hastings Street, in the City of Vancouver, in the Province of British Columbia.
2. THAT I am a graduate of the University of Geneva, Switzerland (Physics and Chemistry, 1937; Geology and Mineralogy, 1937) where I obtained my Ph.D. in Geological and Mineralogical Sciences in 1941.
3. THAT I am a Registered Professional Engineer in the Geological Section of the Association of Professional Engineers of the Province of British Columbia and of the Association of Professional Engineers of Yukon Territory.
4. THAT I have practiced my profession as a geologist for the past 30 years.
5. THAT the information contained in my report of July, 1969 on the 1968 Program on the Dan Group is based on a number of personal examinations of the work in progress and of samples taken by me personally.
6. THAT I have no direct or indirect interest in any of the securities or claims of Boswell River Mines Ltd., no do I expect to receive or acquire any.

Dated this 7th day of July, 1969.

A handwritten signature in black ink, appearing to read 'P.H. Sevensma', written over a horizontal line.

P.H. Sevensma, Ph.D., P. Eng.

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LIST OF FIGURES

<u>Area</u>	<u>Type and Scale</u>	<u>Figure Number</u>
All areas	Statistical Summary	1
Dan Group (All areas)	50" x 25" Topographic Scale 1" = 1000 feet shows roads construction, line- cutting, soil sample locations, geophysical traverse lines.	2
General Reference	Scale 1" = 4000 feet	3
Index Map	Shows area layout and silt sample locations.	
Mod	Scale 1" = 100 feet Plan of drill holes	4
Rusty	Scale 1" = 1000 feet Plan of drill holes	5
Rex	Scale 1" = 1000 feet Plan of drill holes	6
Burnt Hill	Scale 1" = 1000 feet Silt sample values	7
Burnt Hill	Scale 1" = 1000 feet Silt sample values	8
Dan	Scale 1" = 1000 feet Silt sample values	9
Dan	Scale 1" = 1000 feet Pb plot	10
Dan	Scale 1" = 1000 feet Zn plot	11
Dan	Scale 1" = 1000 feet Cu plot	12
Central Valley	Scale 1" = 1000 feet Silt sample values	13

LIST OF FIGURES

<u>Area</u>	<u>Type and Scale</u>	<u>Figure Number</u>
Drumlin Valley	Scale 1" = 1000 feet Silt sample values	14
Drumlin Valley	Scale 1" = 1000 feet Silt sample values	15
Drumlin Valley	Scale 1" = 1000 feet Zn plot (ppm)	16
Drumlin Valley	Scale 1" = 1000 feet Pb plot	17
Drumlin Valley	Scale 1" = 1000 feet Crone E.M.	18
Drumlin Valley	Scale 1" = 1000 feet I.P. Survey	19
Crescent Lake	Scale 1" = 1000 feet Zn plot	20
Crescent Lake	Scale 1" = 1000 feet Pb plot	21
Crescent Lake	Scale 1" = 1000 feet Cu plot	22
Mod	Scale 1" = 1000 feet I.P. Survey	23
Mod	Scale 1" = 1000 feet Crone and E.M. - 16	24
Mod	Scale 1" = 100 feet D.D.H. Cross Section	25
Rusty Valley	Scale 1" = 1000 feet Pb plot	26
Rusty Valley	Scale 1" = 1000 feet Zn plot	27
Rusty Valley	Scale 1" = 1000 feet I.P. Survey	28
Rusty Valley	Scale 1" = 100 feet D.D.H. Cross Section	29

LIST OF FIGURES

<u>Area</u>	<u>Type and Scale</u>	<u>Figure Number</u>
Rex	Scale 1" = 1000 feet Pb plot	30
Rex	Scale 1" = 1000 feet Zn plot	31
Rex	Scale 1" = 1000 feet E.M. - 16 Survey	32
Rex	Scale 1" = 1000 feet I.P. Survey	33
Rex	Scale 1" = 100 feet D.D.H. Cross Section	34
Rex	Scale 1" = 100 feet D.D.H. Cross Section	35
Rusty Valley	Assay-Log - Hole No. RV 1	36

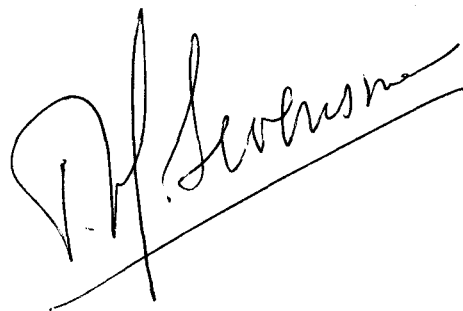
APPENDIX "A"

List of Mineral Claims Held by Boswell River
Mines Ltd. in the Watson Lake Mining Division

	<u>Claim Name</u>	<u>Claim Number</u>	<u>Anniverary Date</u>
Owned Claims	Bud 1 - 18	Y22939 - 56	May 8, 1969
	Dan 1 - 10	Y13401 - 10	July 27, 1971.
	Dan 11 - 16	Y22800 - 05	March 7, 1972
	Dan 17 - 66	Y22806 - 55	March 7, 1969
	Dan 67 - 82	Y22862 - 77	April 22, 1969
	Dan 83 - 120	Y22901 - 38	May 8, 1969
	Dan 121 - 128	Y27617 - 24	June 17, 1969
	Dan 129 - 136	Y27670 - 77	June 24, 1969
	Dan 137 - 172	Y28179 - 214	June 28, 1969
	Dan 173 - 188	Y28219 - 34	July 4, 1969
	Dan 189 - 192	Y28215 - 18	June 28, 1969
	Dan 193 - 200	Y28235 - 42	July 4, 1969
	Dan 217 - 218	Y28294 - 95	Oct. 3, 1969
	Dan 225 - 227	Y28243 - 45	July 4, 1969
	Dan 228 - 250	Y28247 - 69	July 4, 1969
	Dan 251 - 272	Y28270 - 91	July 4, 1969
	Dan 271 - 273	Y28309 - 11	Oct. 3, 1969
	Dan 274 - 286	Y28296 - 308	Oct. 3, 1969
	Dan 289 - 290	Y28312 - 13	Oct. 3, 1969
Optioned Claims	Daren 1 - 4	Y28092 - 95	July 22, 1969
	Rex 1 - 8	Y17908 - 15	July 24, 1969

The within claims all stand in the name of Boswell River Mines Limited (N.P.L.). There are no liens or charges filed against any of the within claims.

Representation work has been filed but certificates of work have not yet been received as of July 4, 1969.



W. J. Stevenson

TABLE 1

List of representative 1968 samples of typical
occurrences on the Dan Group taken by P.H. Sevensma.

<u>Area</u>	<u>Sample No.</u>	<u>True Width</u>	<u>Cu. %</u>	<u>Pb. %</u>	<u>Zn. %</u>	<u>Ag. oz/t.</u>
Mod, West tr.	22	8'	.12	3.1	7.9	4.9
" East tr.	23	6'	.08	8.7	2.1	13.1
Rusty Valley	25	Float	.13	4.6	4.6	6.5
Rex, Main showing	29	4'	.27	12.8	10.2	16.8
Crescent Valley	42	Float	.22	.10	2.3	tr.
C.V. Baseline 2, 9800W	44	40'	.01	.3	6.1	.08
* Dan, Trench 2E	19	15'	.07	tr.	3.9	.06
* " West trench	78	8' ?	.10	.1	17.1	.4

* The Dan samples were taken in recent trenches.

Gold and tungsten are present in trace amounts.

Cadmium assays are of the order of 0.1% per 10% Zn.

On the Mod, Manganese assays as high as 13% and arsenic as high as 1% have been obtained by the writer.

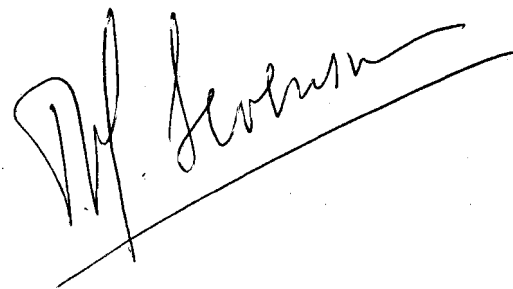


TABLE 2

1968 Winkie Drill Results in the Dan Area

A. Rex Area (J.R. Williams, report 305806/817, August 6th, 1968)

	<u>Sample No.</u>	<u>Footage</u>	<u>Length</u>	<u>Ag.</u>	<u>Pb.</u>	<u>Zn.</u>
W1	2129	7'-10'	3'	8.05	4.33	3.05
	2130	10'-15'	5'	9.70	6.05	7.20
	2131	15'-20'	5'	4.40	1.70	10.70
	2132	20'-23'	3'	6.90	4.05	3.95
<u>Calc. Average</u>		<u>7'-23'</u>	<u>16'</u>	<u>7.21</u>	<u>3.99</u>	<u>6.91</u>
W2	2126	1'-5'	4'	8.10	5.20	16.15
	2127	5'-10'	5'	9.35	4.70	5.10
	2128	10'-15'	5'	8.60	4.10	6.50
<u>Calc. Average</u>		<u>1'-15'</u>	<u>14'</u>	<u>8.80</u>	<u>4.63</u>	<u>8.76</u>

The average grade of both intersections, weighted by footage is: 7.9 4.3 7.8

True width of these intersections is estimated at 9'.

B. Mod Area (Coast Eldridge, report 2683, October 25th, 1968)

WM-4	301-460	10.5'-13'	2.5'	22.0	13.33	6.01
WM-5	302-461	10.5'-14'	3.5'	18.1	11.32	16.70

This is near a showing said to be 20' wide and to assay:
 (G.S.C., L. Green): 6.34 5.0 5.0
 or to be 6' wide and to assay (P.H.S.): 13.1 8.7 2.1

M. Johnson

BOSWELL RIVER MINES LTD.
Dan Group
1968 Program - Statistical Summary
Figure 1

Area	Roads Feet	Linecutting Feet	Trenching (1) Number	Geochemical		Geophysics		Drilling				
				Silts	Soils	I.P.	E.M.-16	Winkie Hole	Feet	AQ Hole	Feet	
1. Burnt Hill	3,000	42,000	-	77	-	-	-	-	-	-	-	-
2. Dan	4,000	48,700	9	11	142	2,600	-	-	-	-	-	-
3. Central Valley	4,000	21,800	-	13	17	-	-	-	-	-	-	-
4. Drumlin Valley	3,000	15,600	2	35	143	15,600	15,600	-	-	-	-	-
5. Crescent Lake	21,000	112,000	5	-	35	-	-	-	-	-	-	-
6. Mod	4,000	24,000	1	-	-	25,300	25,300*	5	165	6	1486	
7. Rusty Valley	6,000	20,400	7	-	89	12,800	-	-	-	2	830	
8. Rex	4,000	26,000	4	-	130	21,000	6,750	2	118	4	1667	
9. Munson Lake	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS	49,000	310,500	28	136	556	77,300	47,650	7	283	12	3983	

* Distance covered by E.M. - 16 Crone E.M.

(1) Since the trenches listed have not been mapped the calculations as to volumes of material moved have not been included. This is expected to be done as soon as work resumes on the areas.

A preliminary average is: total length, 1,900'; width: 14'; average depth: 10'.
 Total yardage: $10' \times 14' \times 1,900' / 27 = \pm 10,000$ c.y.

T.H. Stevens



General Reference Index Map

DAN GROUP — 1968 PROGRAM

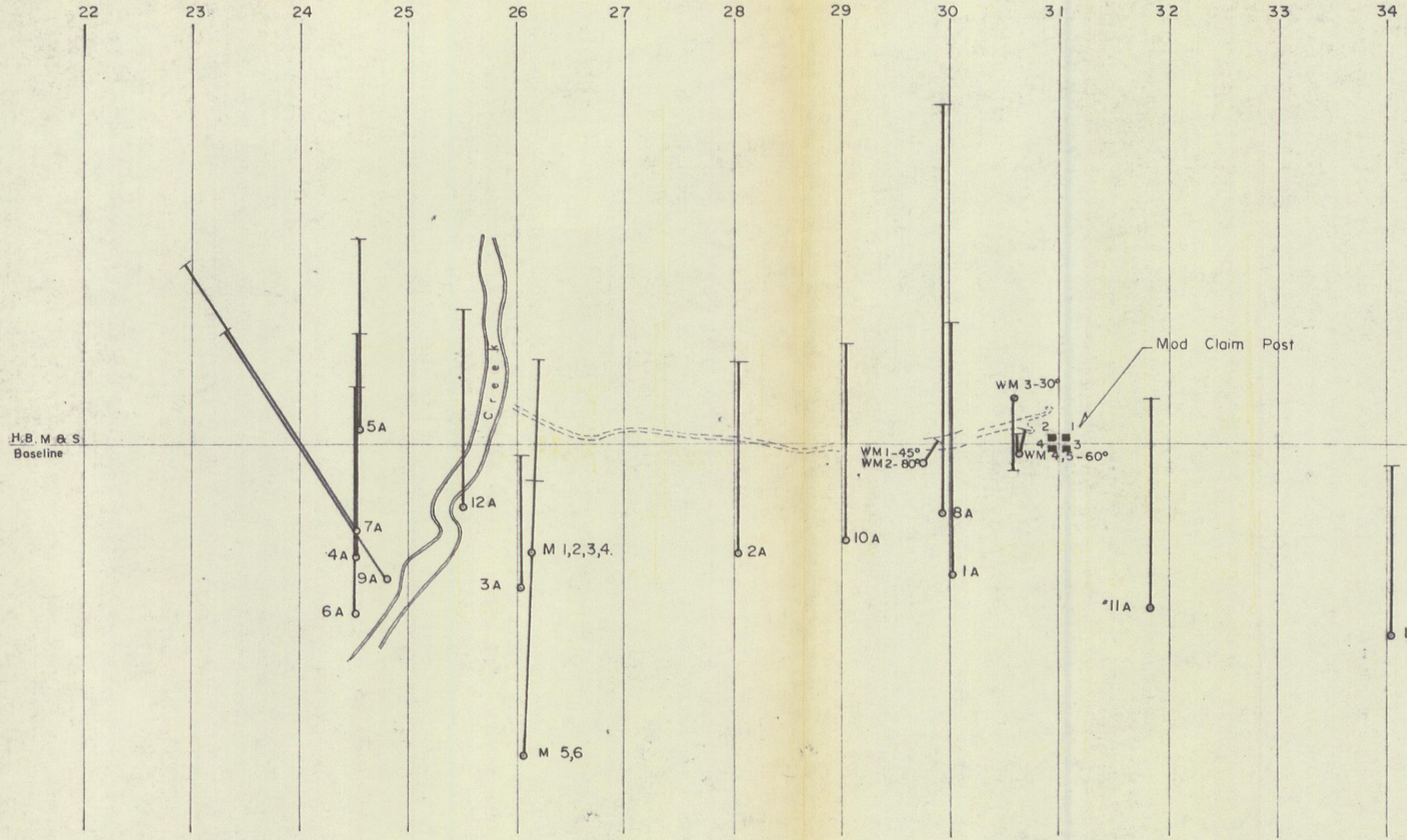
- — — Claim Boundaries
- Stream Silt Surveys
- — — Approx. Boundaries of Areas
- — — Grid Baseline

FIG. 3

[Handwritten Signature]

BOSWELL RIVER MINES LTD.
DAN GROUP

Watson Lake M.D.-Y.T. 105-B-3
 P. H. Sevensma Consultants Ltd.-Vancouver B.C.
 July 1968, Scale: 0 1/2 1 Mile



H.B. M & S
Baseline

Creek

Mod Claim Post

WM 3-30°

WM 1-45°
WM 2-80°

OWM 4,5-60°

--- Outline of Ore zone.

D.D.H.-A 1,2etc. Hudson Bay Mining & Smelting
D.D.H. M 1,2etc. Boswell River Mines

P. H. Sevensma

DAN GROUP
MOD AREA

BOSWELL RIVER MINES LTD.

D. D. H. PLAN

Whitehorse M.D.-Y.T.

*105- B-3

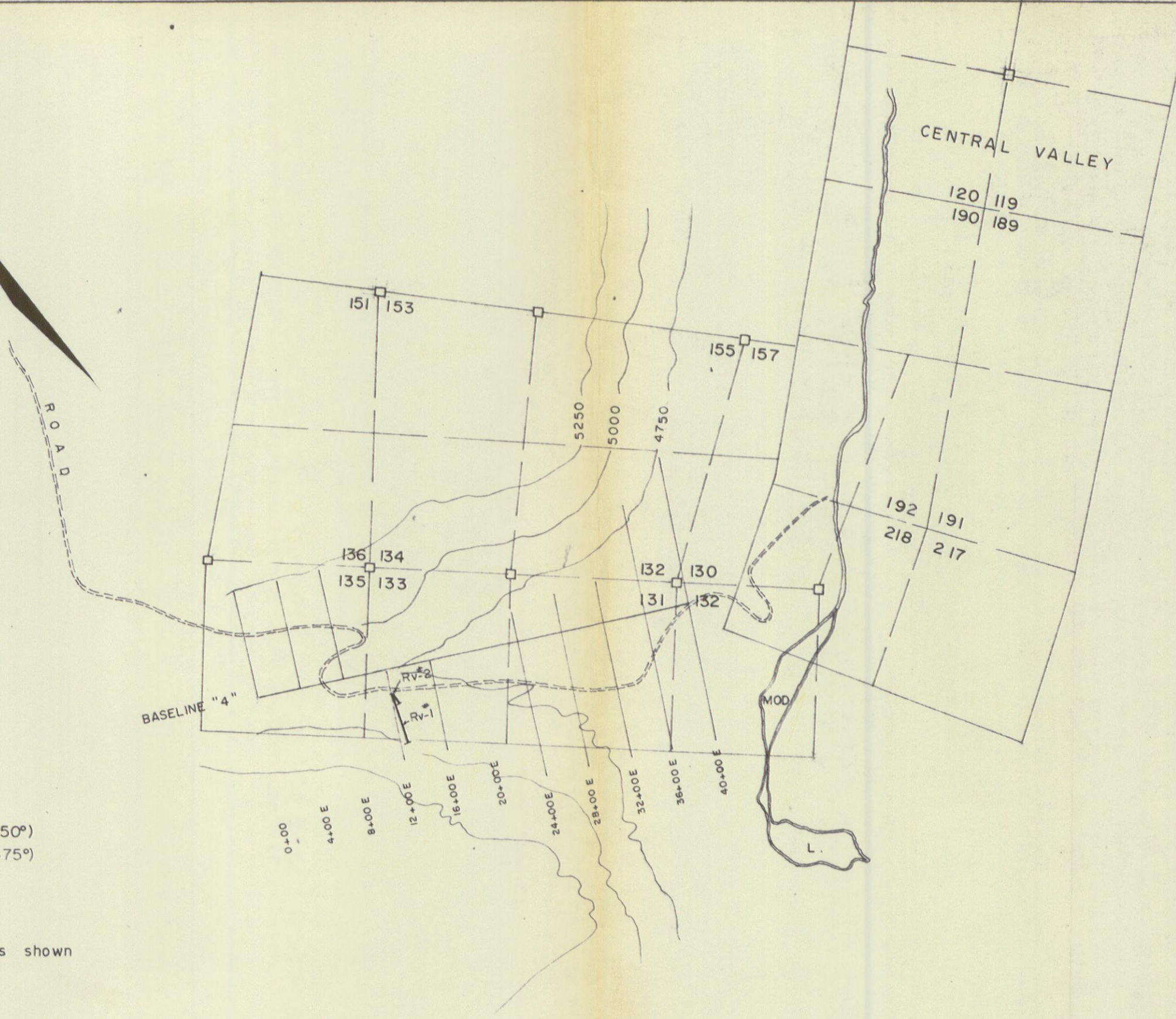
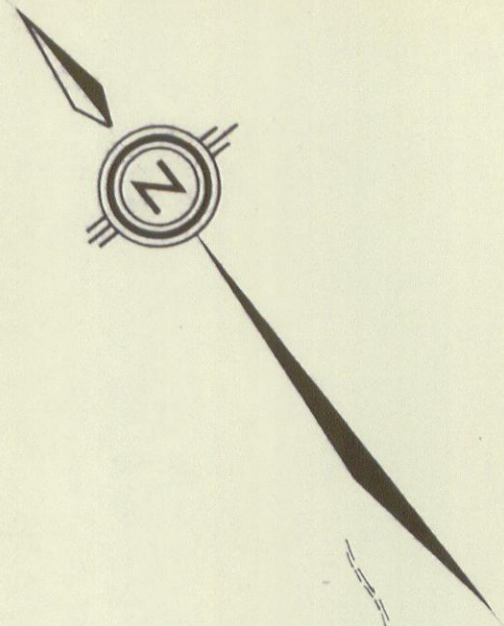
P. H. Sevensma Consultants Ltd. Vancouver, B.C.

Dwg. No.:

Fig. 4

May 1969

Scale: 0 100'



D.D.H. Rv.#1 712' (-50°)
 D.D.H. Rv.#2 118' (-75°)

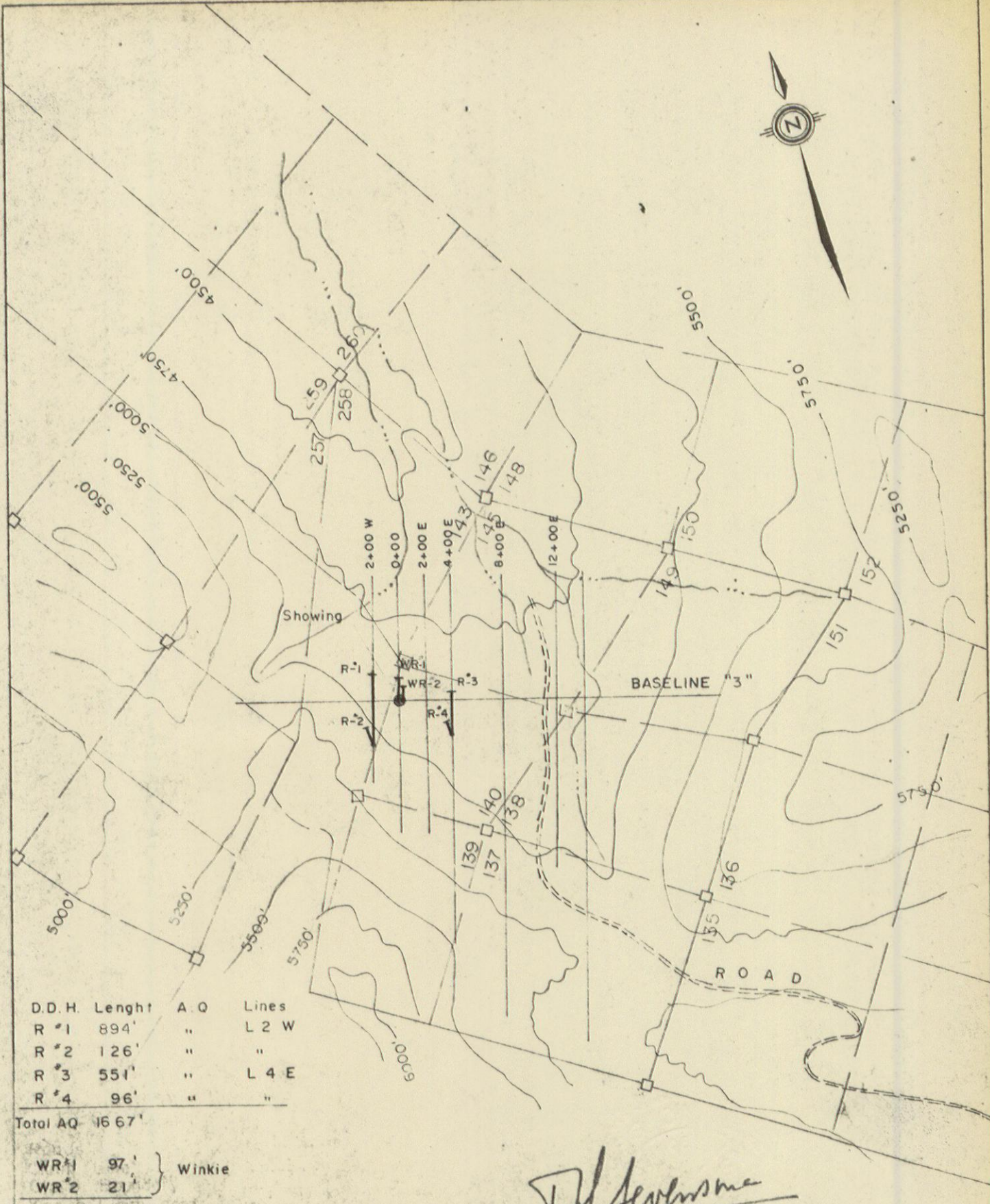
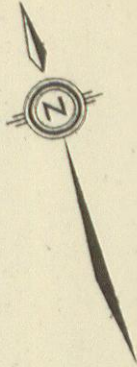
NOTE: All D.D.H. collars shown are approximate position.

P. H. Sevensma

DAN GROUP
 RUSTY VALLEY AREA

BOSWELL RIVER MINES LTD.	
D. D. Holes Rv.#1 and Rv.#2	
Watson Lake M.D.—Y.T.	105 - B - 3
P. H. Sevensma Consultants Ltd. Vancouver, B.C.	
April 1969	Scale: 0 1000'

Dwg. No. Fig. 5



D.D.H.	Length	A Q	Lines
R #1	894'	"	L 2 W
R #2	126'	"	"
R #3	551'	"	L 4 E
R #4	96'	"	"

Total A Q 1667'

WR #1	97'	} Winkie
WR #2	21'	

Total Winkie 118'

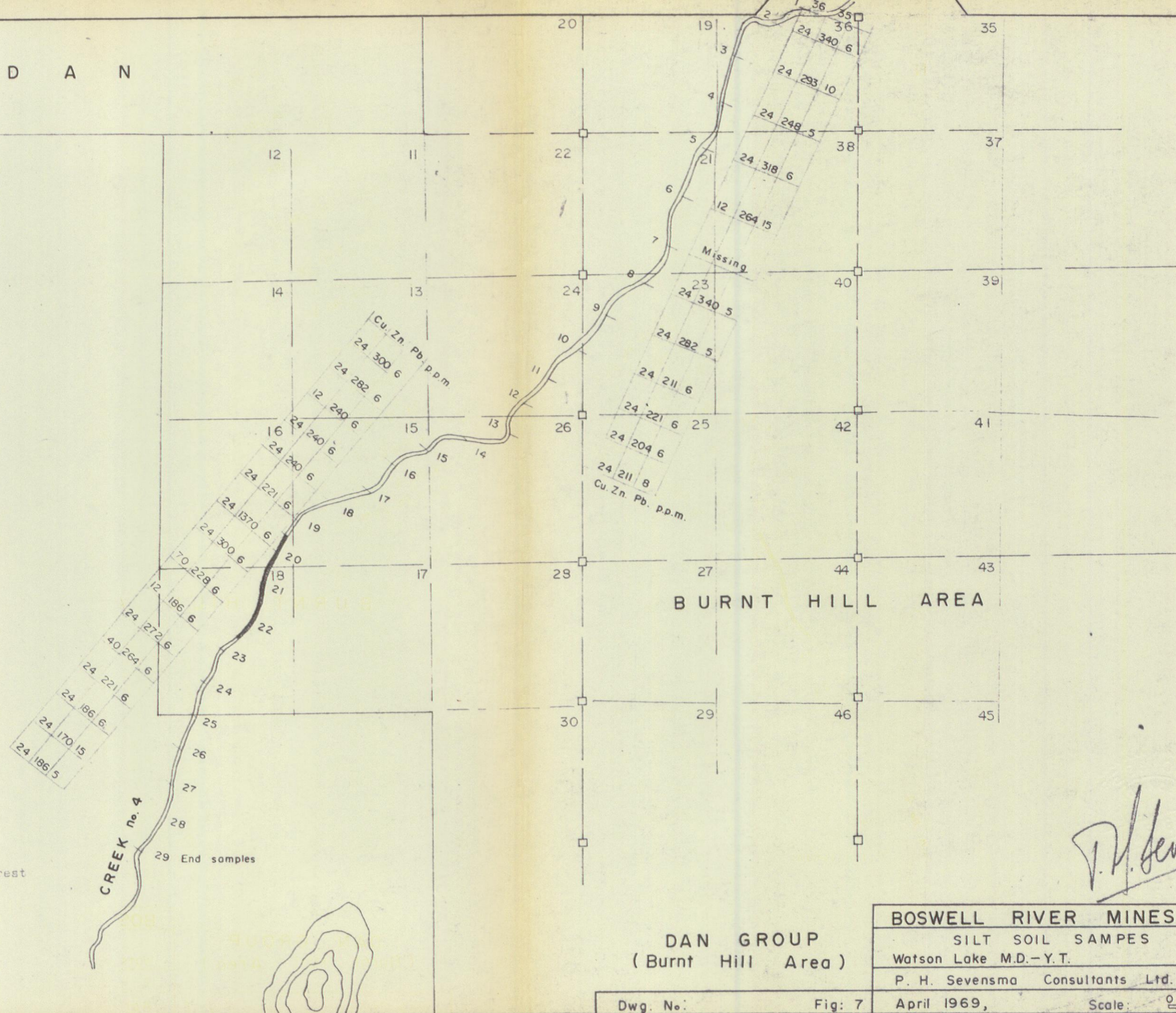
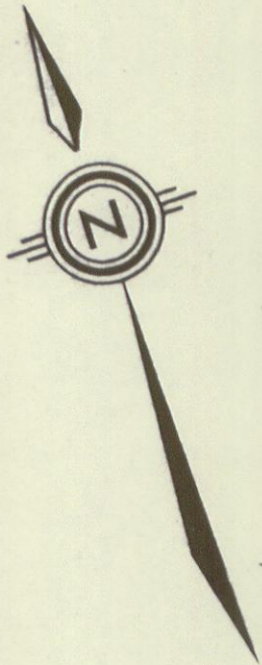
Note All D.D.H collars shown are only approximate positions.

DAN GROUP
REX AREA

T.H. Sevensma

BOSWELL RIVER MINES LTD.	
D.D. Holes R #1, #2, #3, #4 and Winkie Land #2	
Watson Lake M.D.-Y.T.	105-B-3
P. H. Sevensma Consultants Ltd.	Vancouver, B.C.
Dwg. No.:	Fig: 6
May 1969,	Scale: 0 1000'

D A N



DAN GROUP
(Burnt Hill Area)

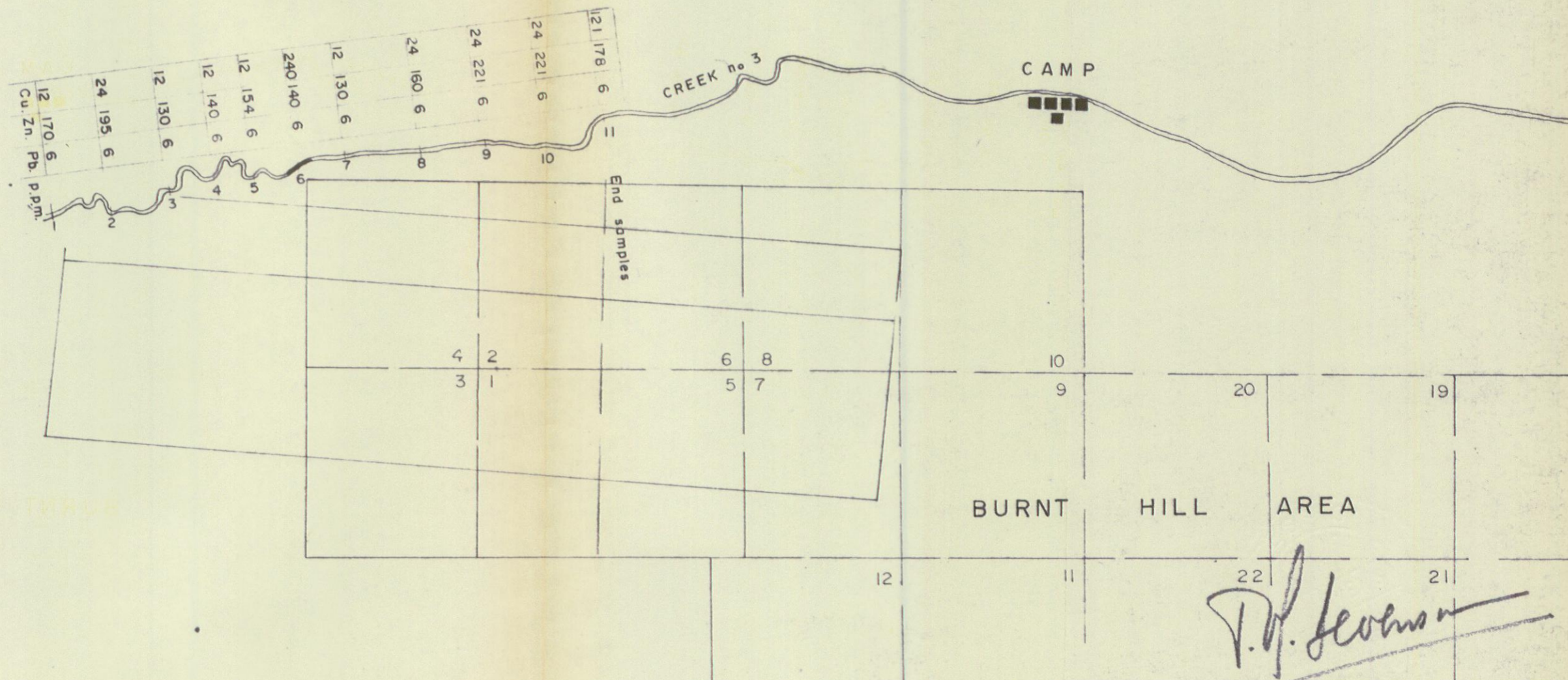
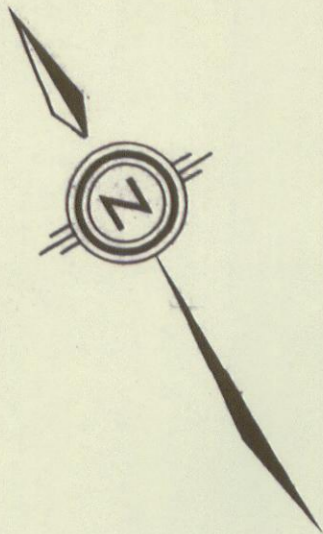
BOSWELL RIVER MINES LIMITED.	
SILT SOIL SAMPLES	
Watson Lake M.D.-Y.T.	105- -3
P. H. Sevensma Consultants Ltd. Vancouver, B.C.	
Dwg. No.:	Fig: 7
April 1969,	Scale: 0 1000'



DAN GROUP
(Burnt Hill Area)

BOSWELL RIVER MINES LTD.	
SILT SOIL SAMPLES	
Watson Lake M.D.-Y.T.	105-B-3
P. H. Sevensma Consultants Ltd. Vancouver, B.C.	
Dwg. No.:	Fig: 8
April 1969,	Scale: 0 1000'

P. H. Sevensma



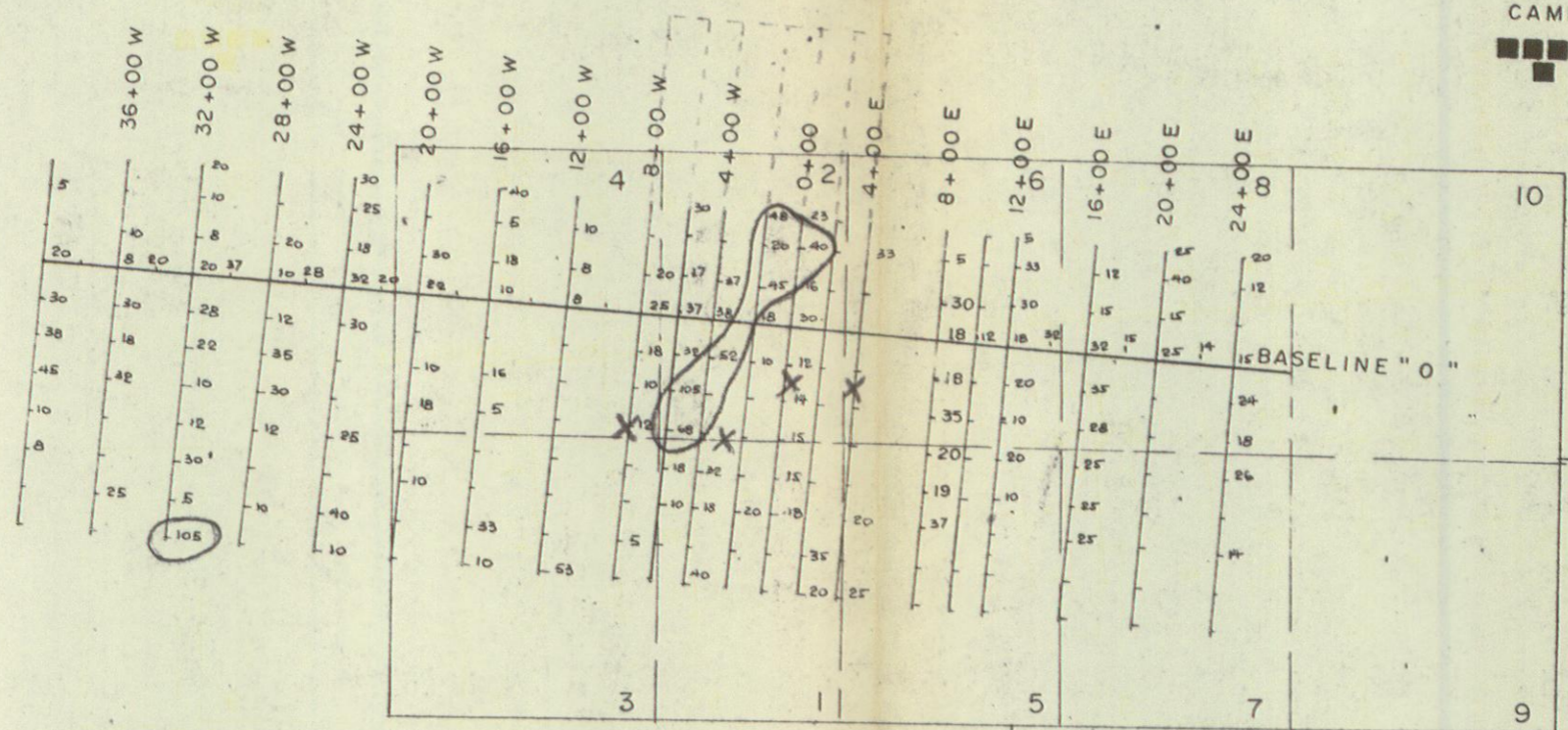
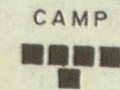
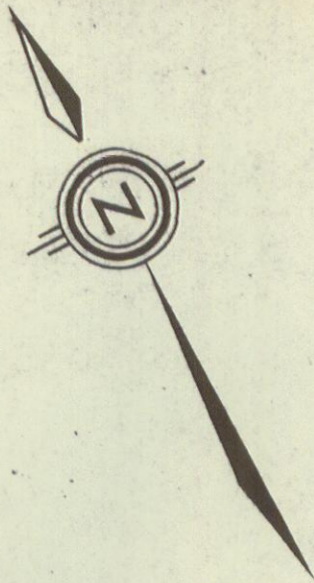
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24	221	6	10
24	221	6	9
24	160	6	8
12	130	6	7
240	140	6	6
12	154	6	5
12	140	6	4
12	130	6	3
24	195	6	2
12	170	6	1

T. H. Sevensma

DAN GROUP

BOSWELL RIVER MINES LTD.	
SILT SOIL SAMPLES	
Watson Lake M.D.-Y.T.	105-B-3
P. H. Sevensma Consultants Ltd.	Vancouver, B.C.
April 1969	Scale: 0 1000'

Dwg. No. Fig: 9





20 19 36

12 11 22 21 38

BURNT HILL AREA

14 13 24 23 40

-  Area of interest
-  Trenched showings

P. H. Sevensma

DAN GROUP

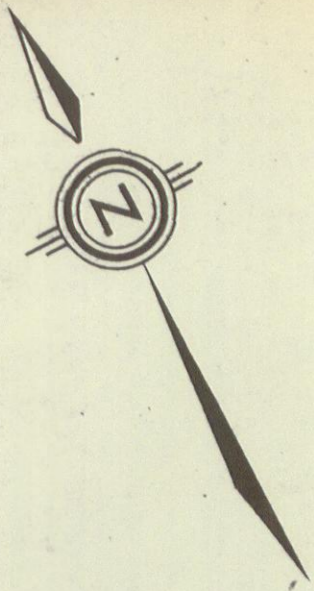
Pb. Plot

BOSWELL RIVER MINES LTD.

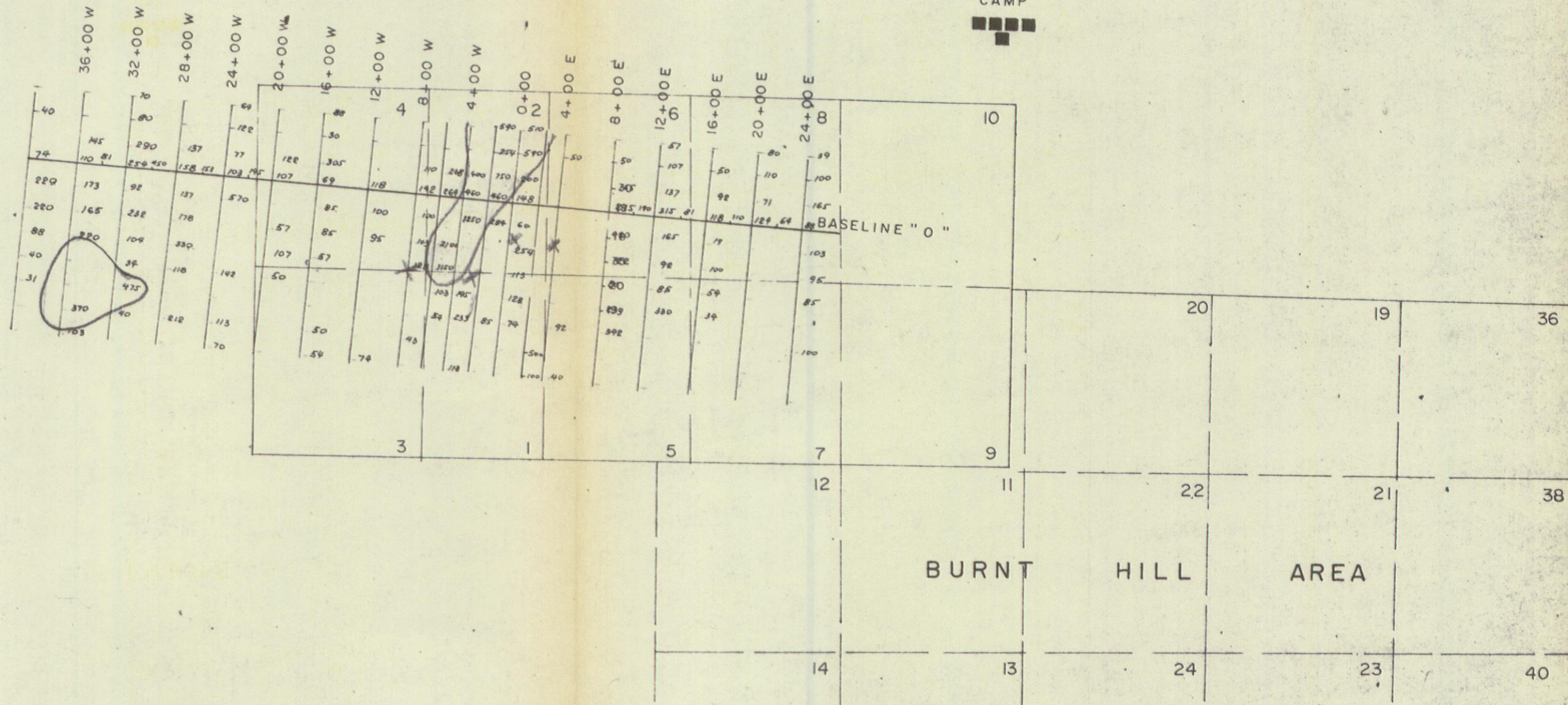
GEOCHEMICAL SURVEY — BASELINE "O"
Watson Lake M.D.-Y.T. 105-B-3

P. H. Sevensma Consultants Ltd. Vancouver, B.C.

Dwg. No. Fig. 10 May 1969, Scale: 0 1000'



CAMP
■ ■ ■ ■ ■



○ Area of interest
 X Trenched showings

P. H. Sevnsma

DAN GROUP

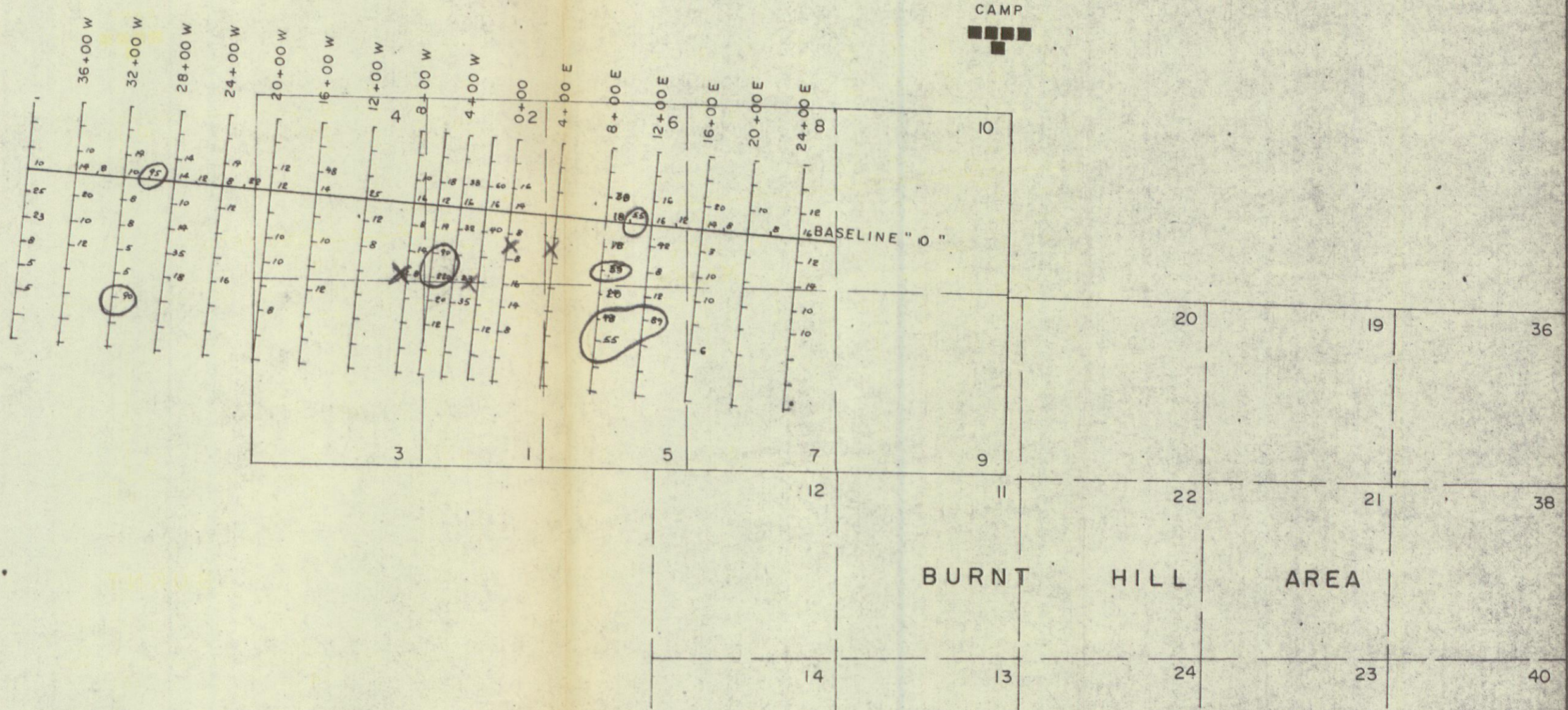
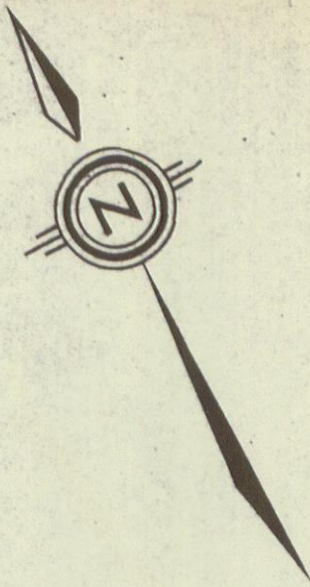
Zn Plot

BOSWELL RIVER MINES LTD.

GEOCHEMICAL SURVEY — BASELINE "0"
 Watson Lake M.D.-Y.T. 105-B-3

P. H. Sevnsma Consultants Ltd. Vancouver, B.C.

Dwg. No. Fig. 1E May 1969, Scale: 0 1000'





CAMP



BASELINE "O"

BURNT HILL AREA

Cu. Plot

-  Area of interest
-  Trenched showings'

D.H. Swenson

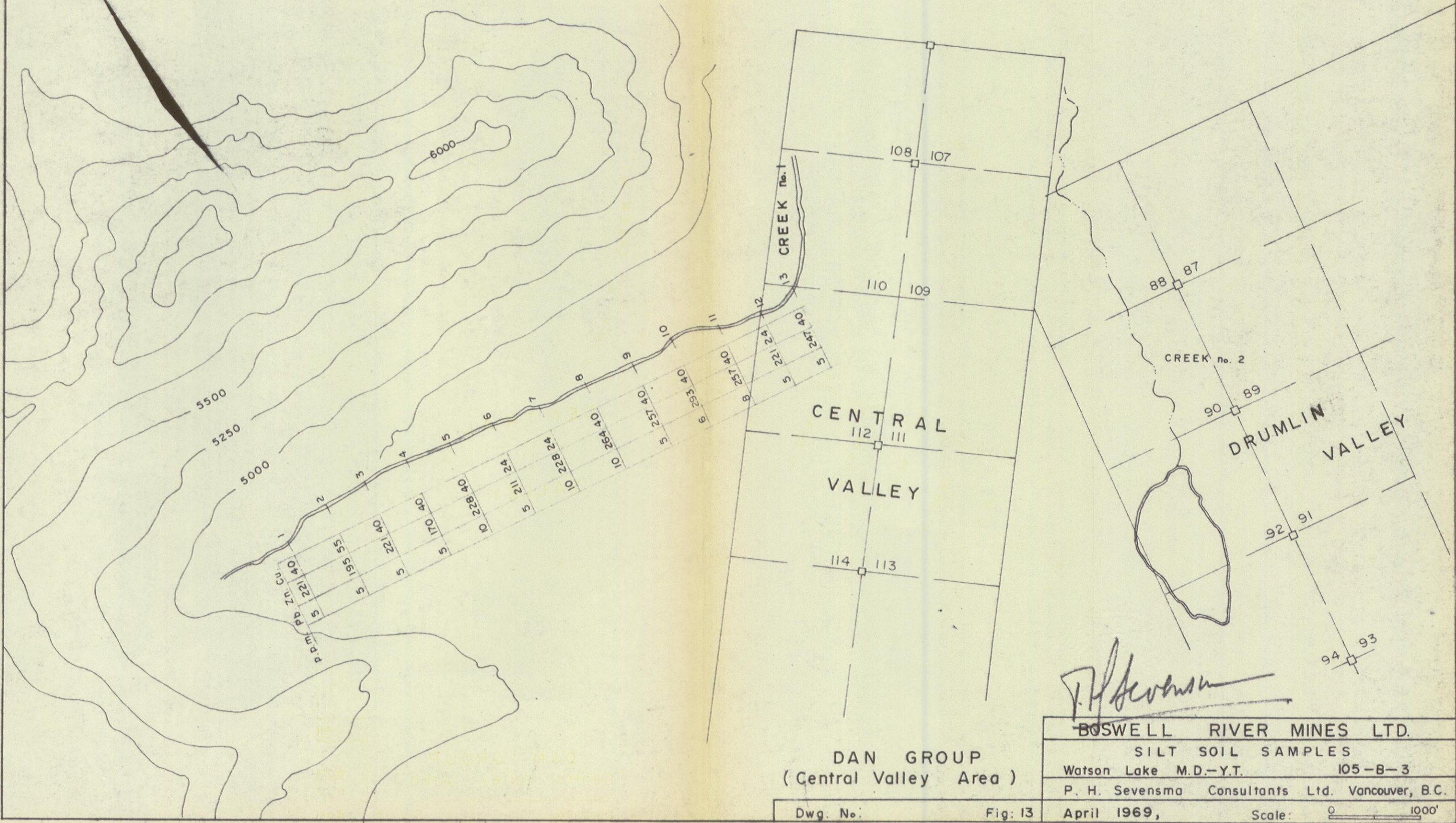
DAN GROUP

BOSWELL RIVER MINES LTD.

GEOCHEMICAL SURVEY — BASELINE "O"
Watson Lake M.D.-Y.T. 105-B-3

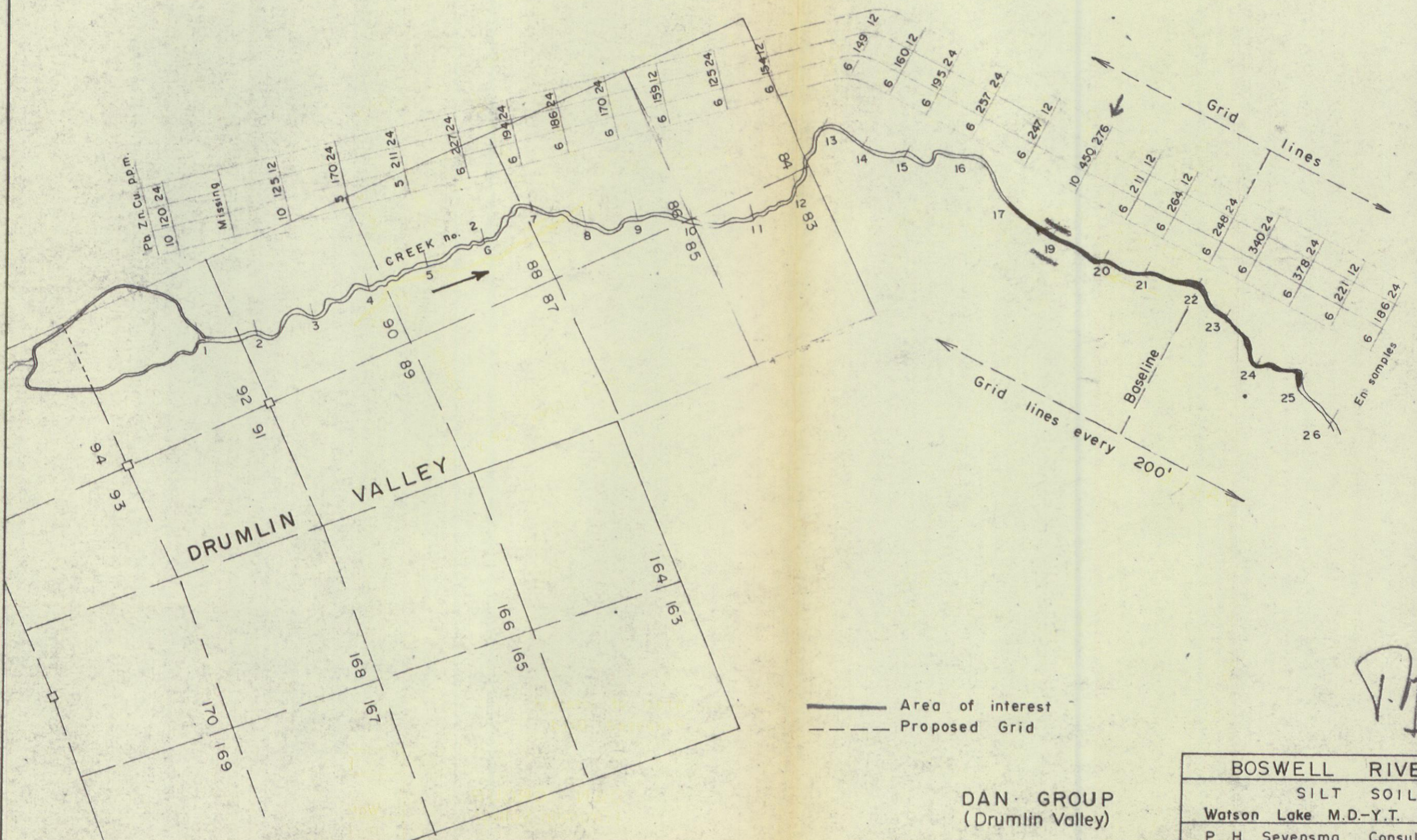
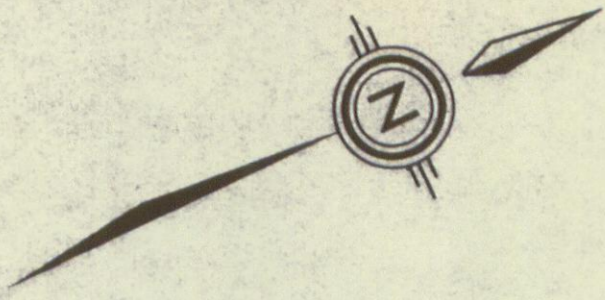
P. H. Sevensma Consultants Ltd. Vancouver, B.C.

Dwg. No. Fig: 12 May 1969, Scale: 0 1000'



DAN GROUP
(Central Valley Area)

BOSWELL RIVER MINES LTD.	
SILT SOIL SAMPLES	
Watson Lake M.D.-Y.T.	105-B-3
P. H. Sevensma Consultants Ltd. Vancouver, B.C.	
Dwg. No.:	Fig: 13
April 1969,	Scale: 0 1000'



P. H. Sevensma

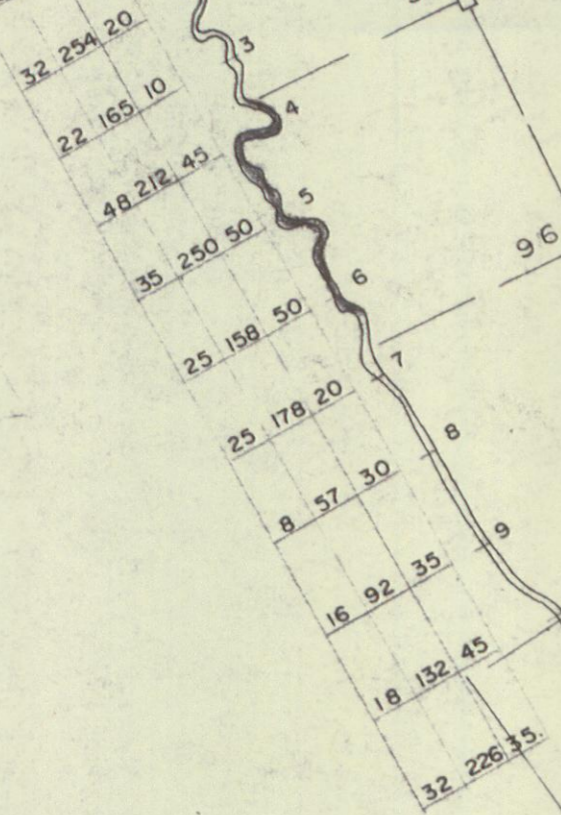
— Area of interest
 - - - Proposed Grid

DAN GROUP
 (Drumlin Valley)

BOSWELL RIVER MINES LTD.	
SILT SOIL SAMPLES	
Watson Lake M.D.-Y.T.	105-B-3
P. H. Sevensma Consultants Ltd. Vancouver, B.C.	
Dwg. No.	Fig:14
April 1969,	Scale: 0 1000'



P.P.m.	Cu.	Zn.	Pb.
30	218	12	



DRUMLIN
VALLEY

170 169

94 93

172 171

96 95

174 175

98 97

176 175
178 171

100 99

102 101

104 103

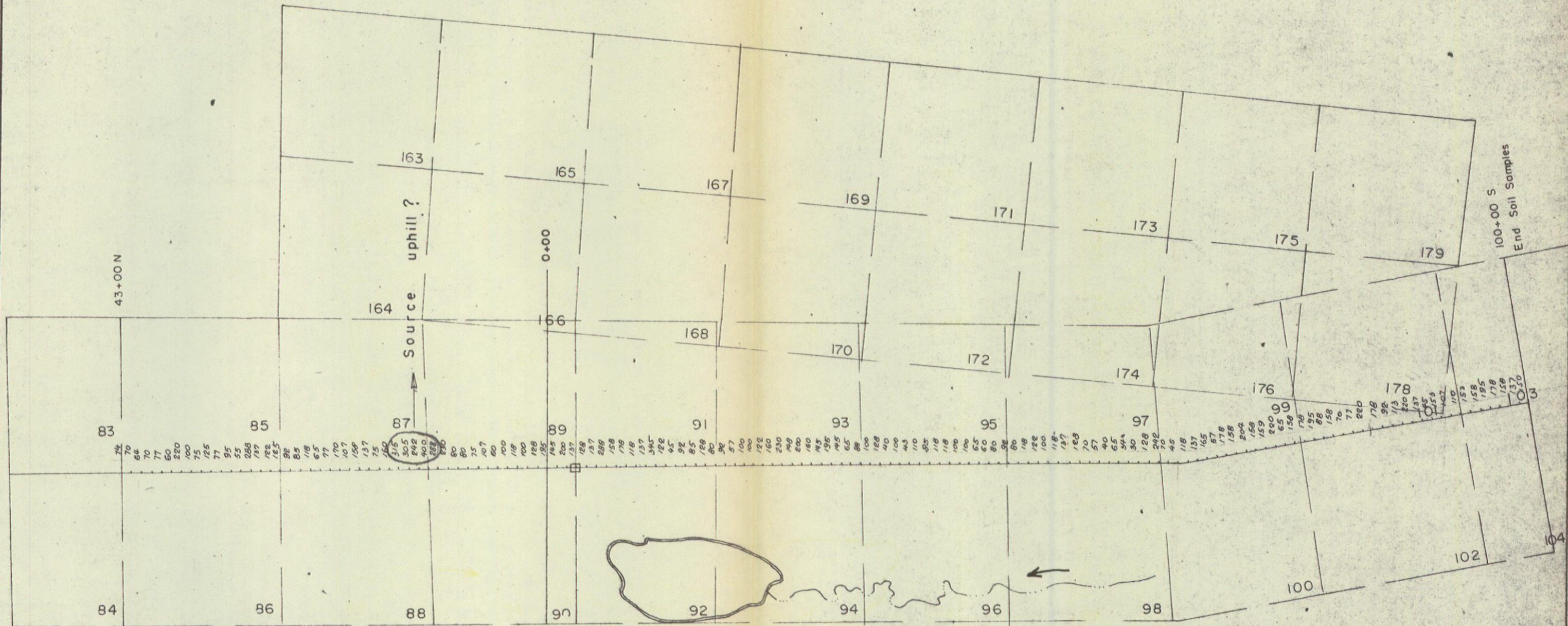
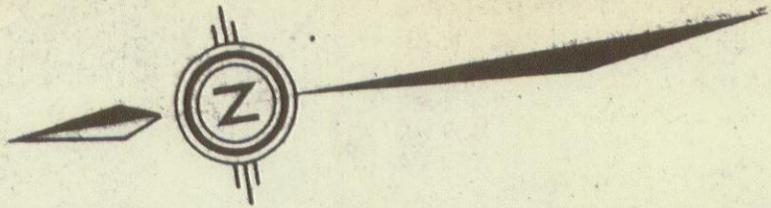
105

DAN GROUP
(DRUMLIN VALLEY AREA)

Area of interest
Pb. significantly higher than the
5-12 pp.m. regional background.

P. H. Sevensma

BOSWELL RIVER MINES LTD.	
SILT SOIL SAMPLES	
Watson Lake M.D.-Y.T.	105-B-3
P. H. Sevensma Consultants Ltd. Vancouver, B.C.	
Dwg. No:	Fig: 15
April 1969,	Scale: 0 1000'

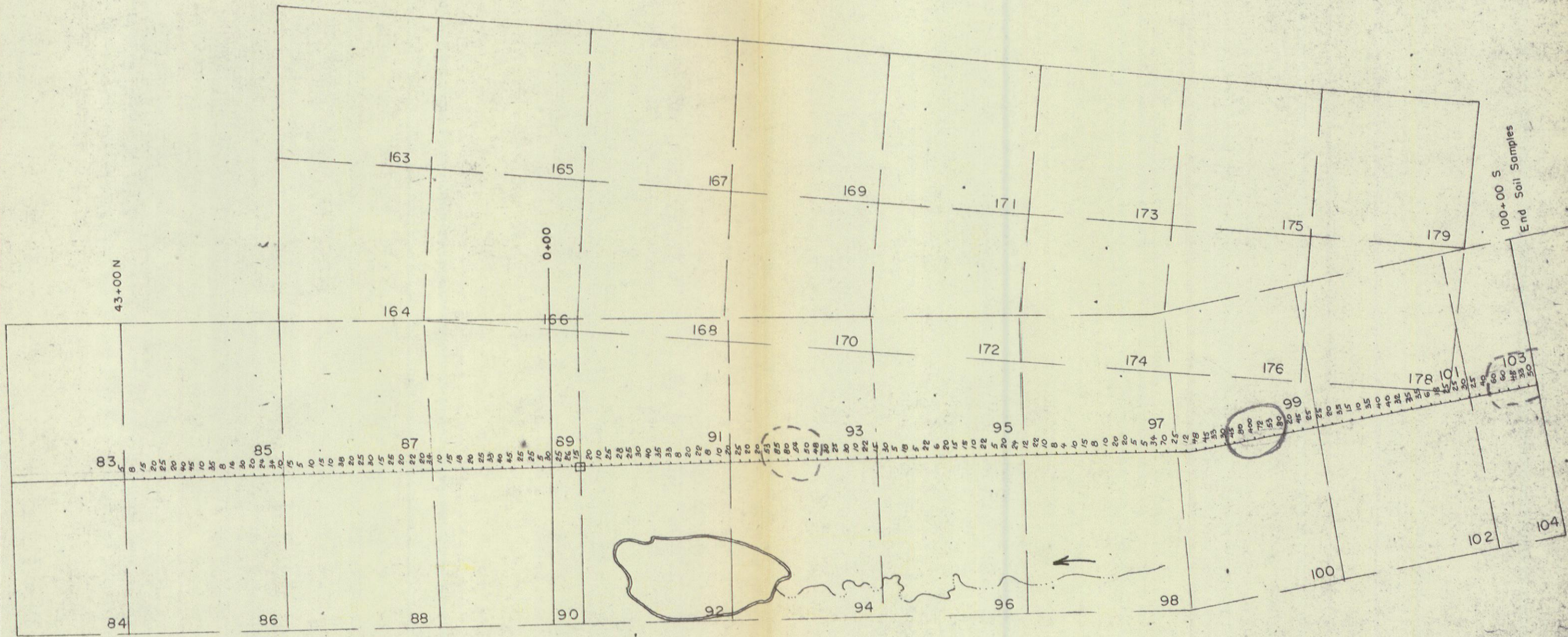
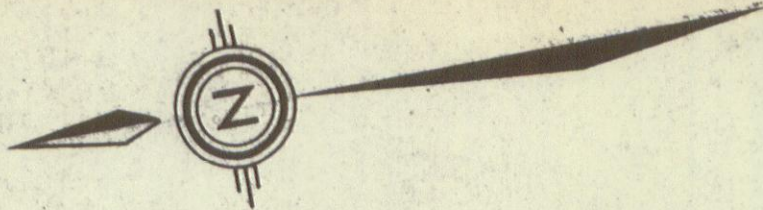



P. H. Sevensma

DAN GROUP
(DRUMLIN VALLEY AREA)

Zn Plot (p.p.m.)

BOSWELL RIVER MINES LTD.	
GEOCHEMICAL SURVEY—Drumlin Valley Baseline "6"	
Watson Lake M.D.—Y.T.	105-B-3
P. H. Sevensma Consultants Ltd. Vancouver, B.C.	
Dwg. No.	Fig. 16
April 1969;	Scale: 0 1000'



 Area of interest

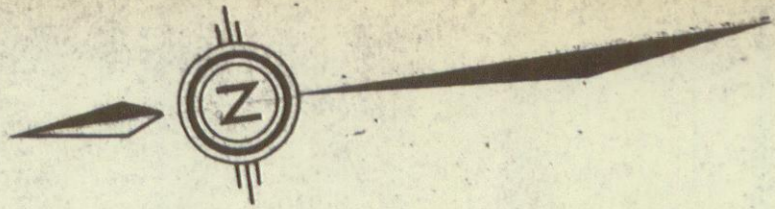
P. H. Sevensma

DAN GROUP
(DRUMLIN VALLEY AREA)

Pb. Plot (ppm.)

BOSWELL RIVER MINES LTD.
GEOCHEMICAL SURVEY—Drumlin Valley Baseline
Watson Lake M.D.—Y.T. 105-B-3
P. H. Sevensma Consultants Ltd. Vancouver, B.C.

Dwg. No. Fig: 17 April 1969, Scale: 0 1000'



LEGEND
 Interpreted zone of interest.....
 Anomalous Response.....

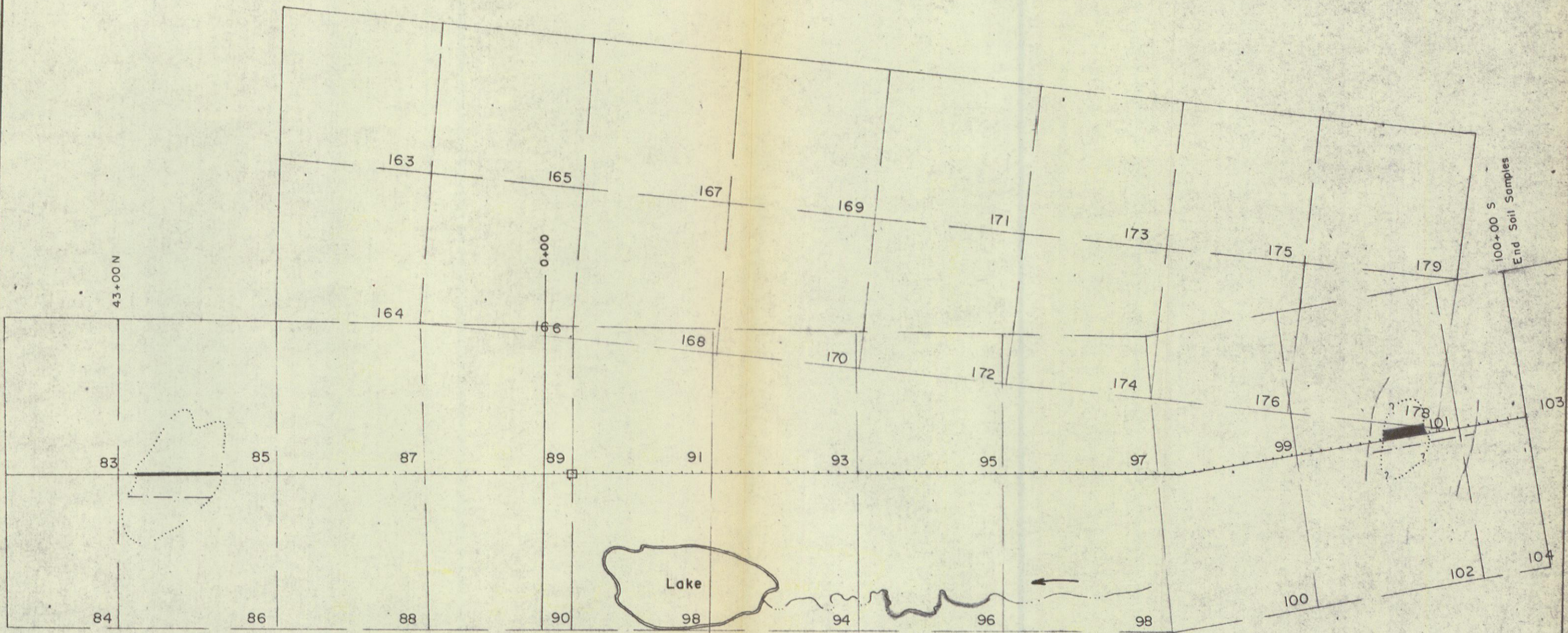
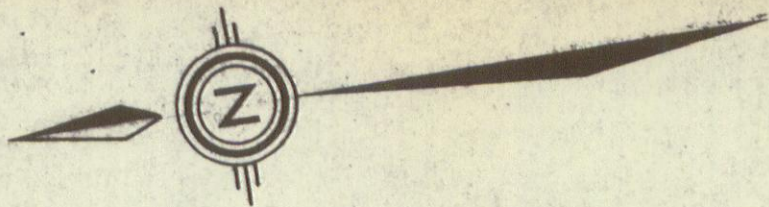
J.H. Johnson

DAN GROUP
 (DRUMLIN VALLEY AREA)

E M CRONE SURVEY

BOSWELL RIVER MINES LTD.	
GEOCHEMICAL SURVEY - Drumlín Valley Baseline	
Watson Lake M.D.-Y.T.	105-B-3
P. H. Sevensma Consultants Ltd. Vancouver, B.C.	
April 1969,	Scale: 0 1000'

Dwg. No. Fig: 1B



LEGEND

- Interpreted zone of interest.....
- Apparent chargeability.....
- Apparent resistivity.....

J. H. Sevensma

DAN GROUP
(DRUMLIN VALLEY AREA)

I. P. SURVEY

BOSWELL RIVER MINES LTD.

GEOCHEMICAL SURVEY—Drumlin Valley Baseline

Watson Lake M.D.—Y.T. 105-B-3

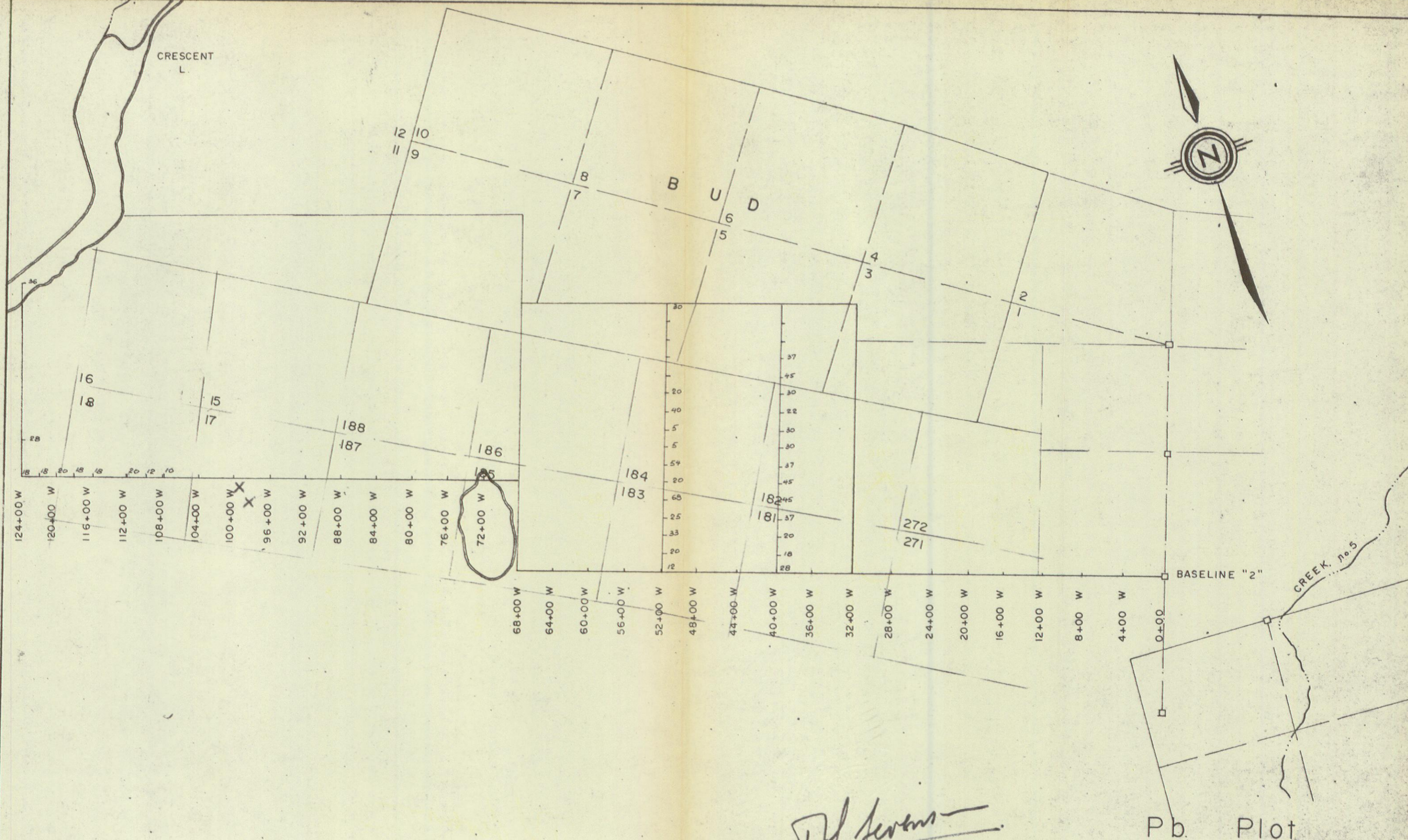
P. H. Sevensma Consultants Ltd. Vancouver, B.C.

Dwg. No.

Fig: 19

April 1969,

Scale:



X Trenched showings

P. H. Sevensma

DAN GROUP
(Crescent Valley Lake Area)

BOSWELL RIVER MINES LTD.	
GEOCHEMICAL SURVEY	BASELINE "2"
Watson Lake, M.D.-Y.T.	105-B-3
P. H. Sevensma Consultants Ltd. Vancouver, B.C.	
Dwg. No.	Fig. 2i
May 1969,	Scale: 0 1000'

Pb Plot

BASELINE "2"

CREEK, No. 5

CRESCENT L.



BU D

12 10
11 9

8
7

6
5

4
3

2
1

16
18

15
17

188
187

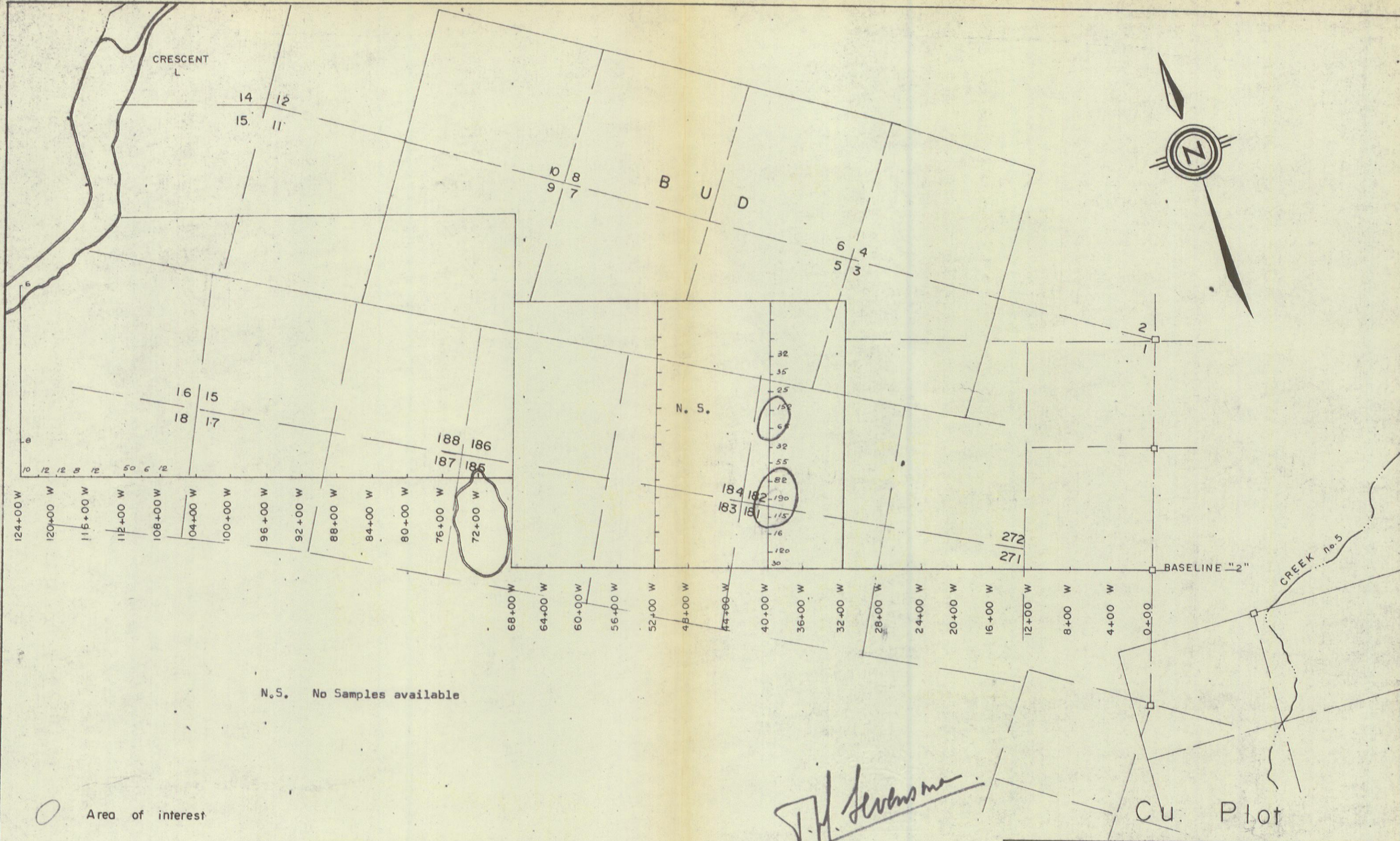
186
185

184
183

182
181

272
271

124+00 W
120+00 W
116+00 W
112+00 W
108+00 W
104+00 W
100+00 W
96+00 W
92+00 W
88+00 W
84+00 W
80+00 W
76+00 W
72+00 W
68+00 W
64+00 W
60+00 W
56+00 W
52+00 W
48+00 W
44+00 W
40+00 W
36+00 W
32+00 W
28+00 W
24+00 W
20+00 W
16+00 W
12+00 W
8+00 W
4+00 W
0+00 W



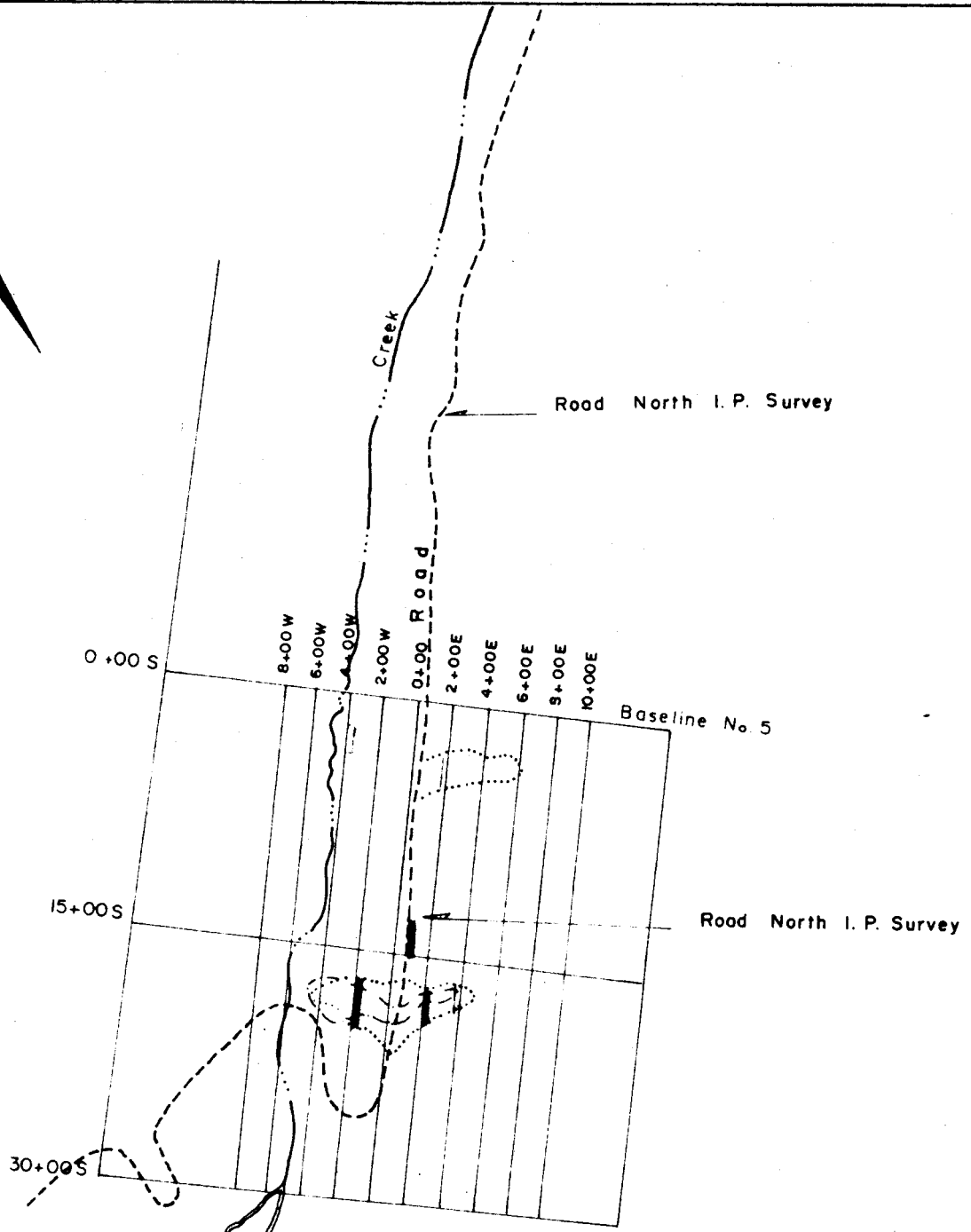
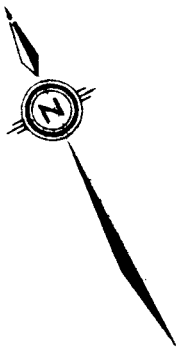
N.S. No Samples available

○ Area of interest

P.H. Sevensma

DAN. GROUP
(Crescent Valley Lake Area)

BOSWELL RIVER MINES LTD.	
GEOCHEMICAL SURVEY	BASELINE "2"
Watson Lake, M.D.-Y.T.	105-B-3
P. H. Sevensma Consultants Ltd. Vancouver, B.C.	
Dwg. No.	Fig. 22
May 1969,	Scale: 0 1000'



LEGEND

- Interpreted zone of interest. (hatched area)
- Apparent chargeability..... (dashed line)
- Apparent resistivity..... (dotted line)
- Area of Interest (solid line)
- Area of possible interest (thick black line)

T.M. Sevensma

DAN GROUP
MOD AREA

BOSWELL RIVER MINES LTD.

I. P. SURVEY BASELINE "5"

Whitehorse M.D.-Y.T.

105-C-13

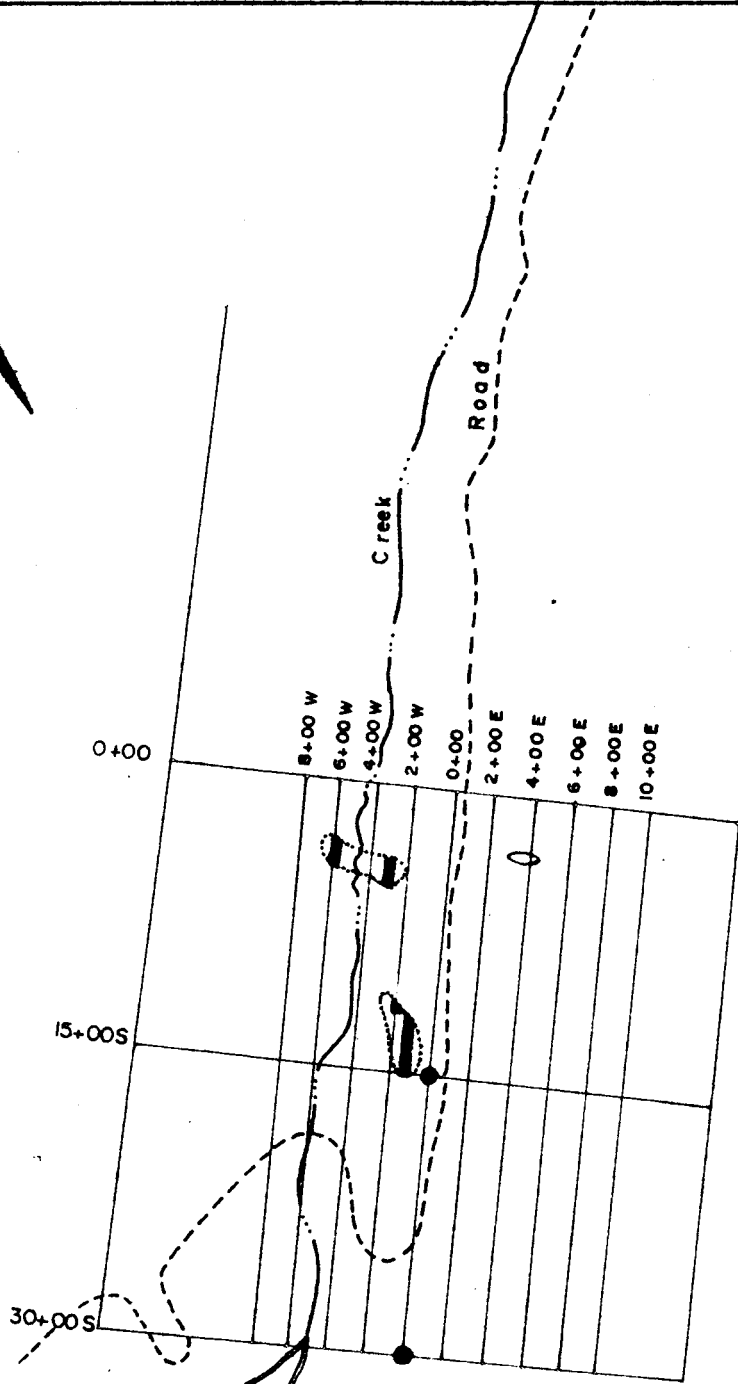
P. H. Sevensma Consultants Ltd. Vancouver, B.C.

Dwg. No.

Fig. 23

Juin 1969,

Scale: 0 1000'



LEGEND

- Area of interest..... |
- Poor to moderate conductor..... ○
- Showing..... ●

T. H. Sevensma

DAN GROUP
MOD AREA

BOSWELL RIVER MINES LTD.

CRONE ELECTROMAG. and RONKA EM-16
Whitehorse M.D. - Y.T. 105-C-13

P. H. Sevensma Consultants Ltd. Vancouver, B.C.

Dwg. No.:

Fig: 24

June 1969

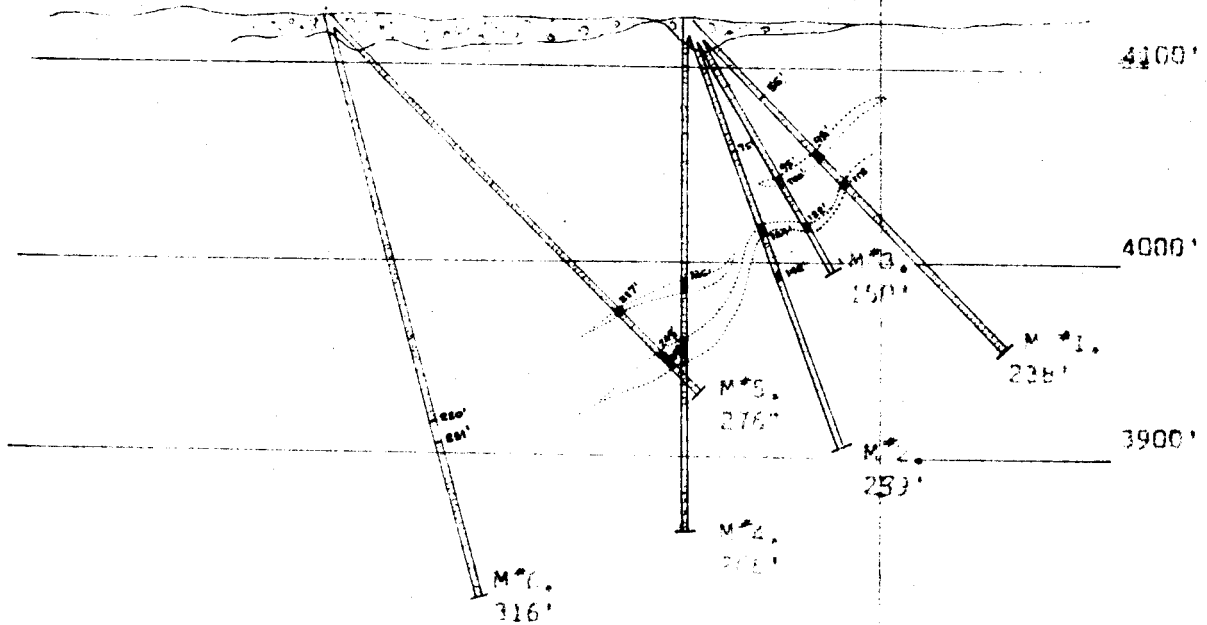
Scale:



SOUTH

NORTH

S.1. M.S. - M.5



LEGEND



Dip
 Quartzites & Phylites

P. H. Sevensma

DAN GROUP
 MOD AREA

BOSWELL RIVER MINES LTD.

Section looking West D.D.H. M*1, 2, 3, 4, 5 & 6
 Watson Lake M.D. 105-B-3

P. H. Sevensma Consultants Ltd. Vancouver, B.C.

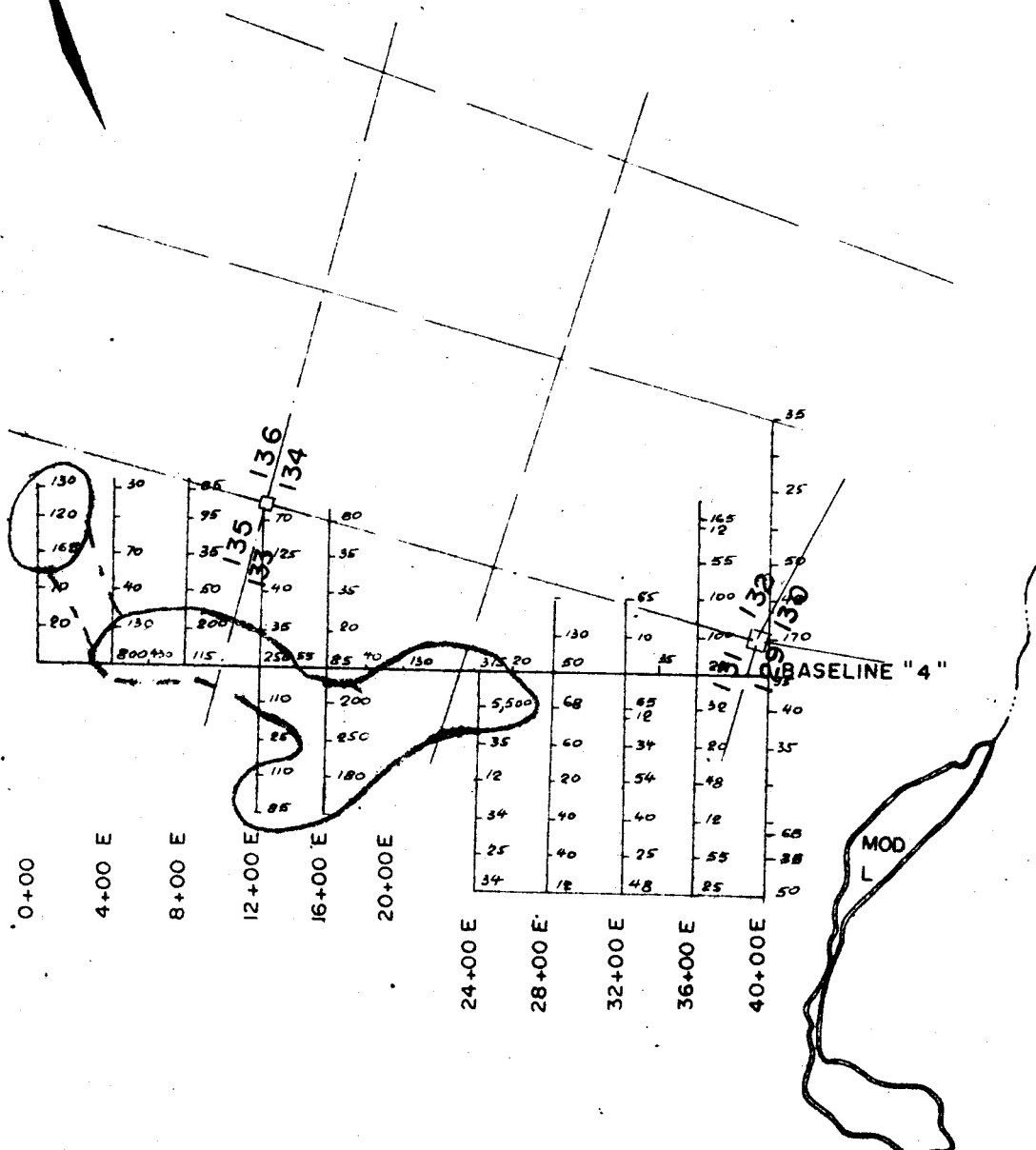
Dwg. No.

Fig:25

May 1969,

Scale:





P.H. Sevensma

○ Area of interest

Pb. Plot

DAN GROUP
(RUSTY VALLEY AREA)

BOSWELL RIVER MINES LTD.

GEOCHEMICAL SURVEY - BASELINE "4"
Watson Lake M.D - Y.T. 105-B-3

P. H. Sevensma Consultants Ltd. Vancouver, B.C.

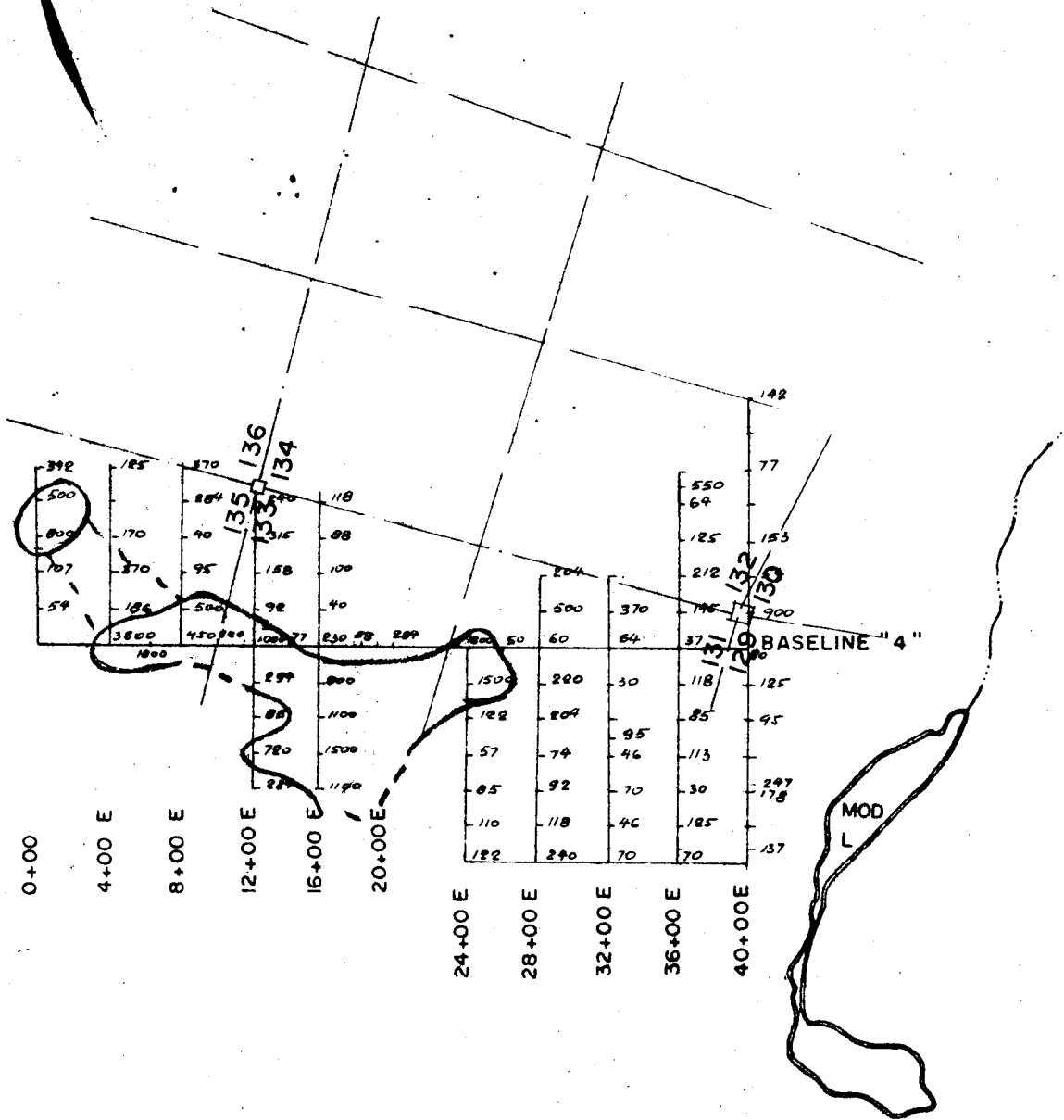
Dwg. No.

Fig:26

May 1969

Scale:

0 1000'



○ Area of interest

Zn. Plot

DAN GROUP
(RUSTY VALLEY AREA)

BOSWELL RIVER MINES LTD.

GEOCHEMICAL SURVEY — BASELINE "4"
Watson Lake M.D.—Y.T. 105-B-3

P. H. Sevensma Consultants Ltd. Vancouver, B.C.

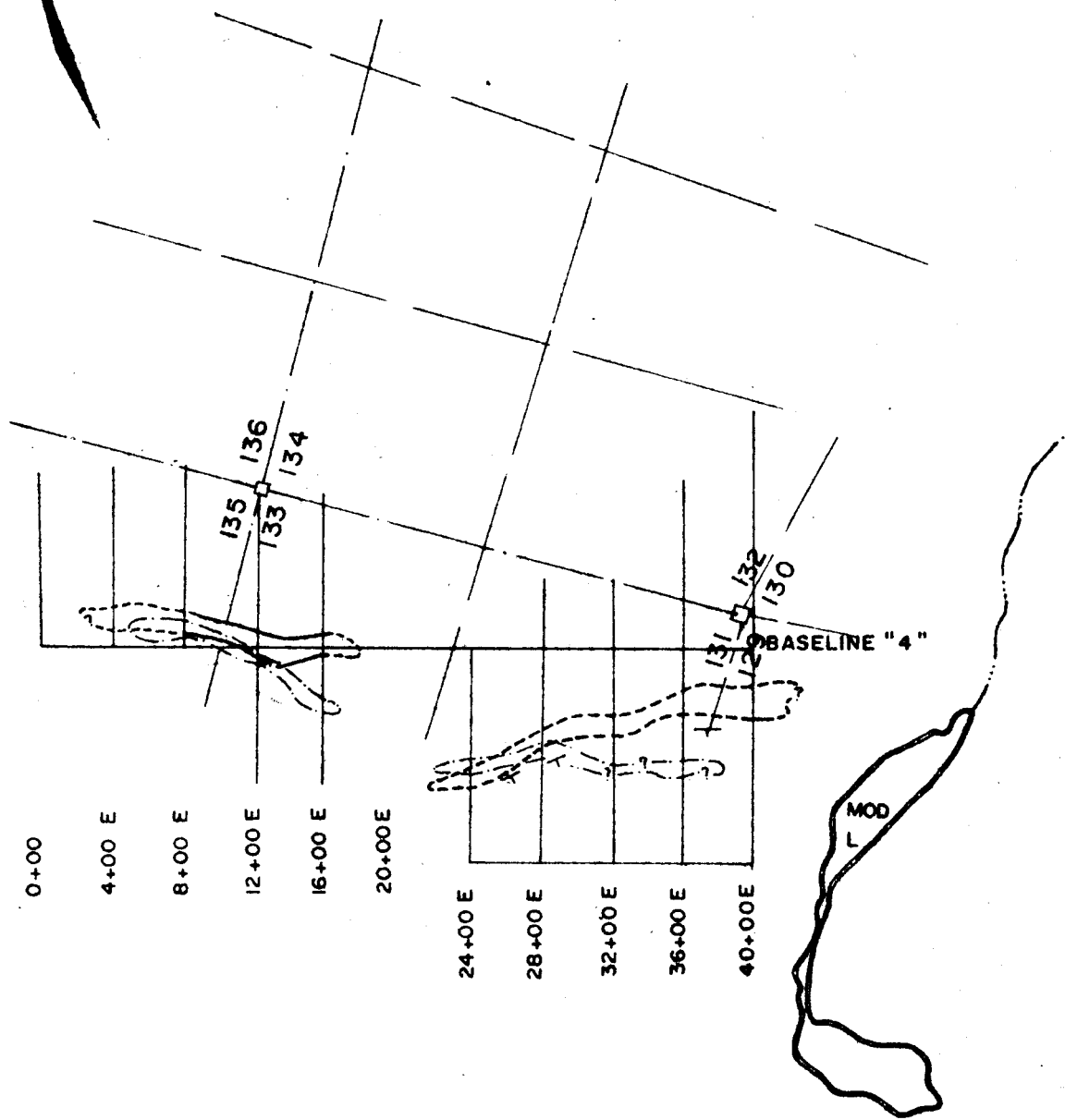
Dwg. No.

Fig: 27

May 1969

Scale:





LEGEND

- Interpreted zone of interest
- Significant outline of apparent chargeability....
- Significant outline of apparent resistivity.....

P.H. Sevensma

I. P. SURVEY

DAN GROUP
(RUSTY VALLEY AREA)

BOSWELL RIVER MINES LTD.	
GEOCHEMICAL SURVEY - BASELINE "4"	
Watson Lake M.D - Y.T.	105-B-3
P. H. Sevensma Consultants Ltd. Vancouver, B.C.	

Dwg. No.:

Fig:28

May 1969

Scale:



N.N.East

S.S.West

B.L. "4" 400' S

Approx. Collar position

4800'

68

205

118

Rv-#2 (-75°)

LEGEND



Overburden

Quartzites & Phyllites

The average applies from 68.2 to 105.5, but no samples were taken from 77.0 to 82.5 and from 90.5 to 94.5.

712'

Rv-# 1 (-50°)

AVERAGE

DAN GROUP
(RUSTY VALLEY AREA)

	Ag.	Pb.	Zn.
37.3'	.15	.14	5.97

BOSWELL RIVER MINES LTD.

Section looking East D.D.H. Rv #1 and Rv #2
Watson Lake M.D.—Y.T. 105-B-3

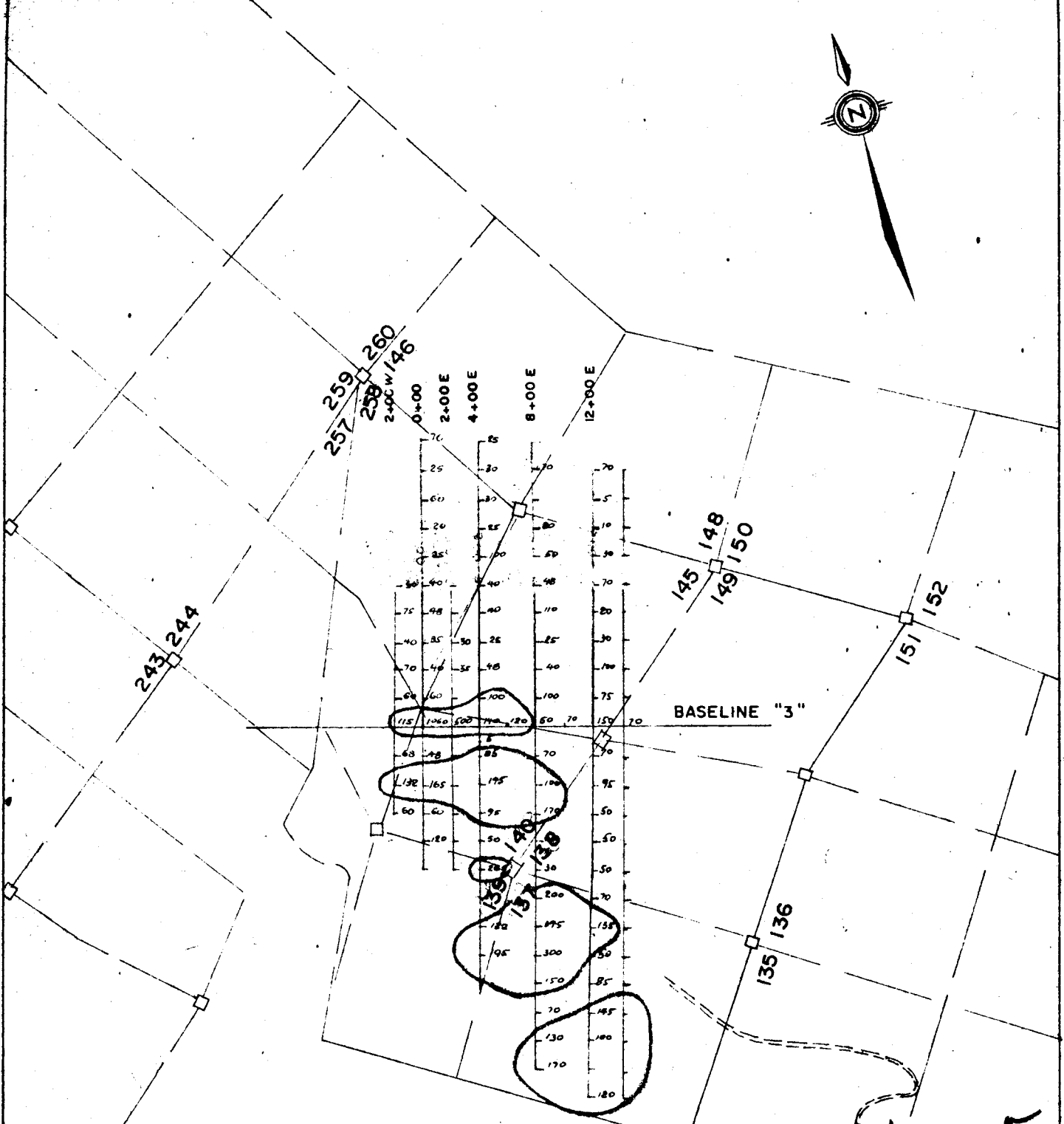
P. H. Sevensma Consultants Ltd Vancouver, B.C.

Dwg. No:

Fig: 29

May 1969

Scale: 0 100'



LEGEND

- Roads
- Claim Line
- Claim Boundary
- Known Claim post
- Assumed Claim post
- Area of interest

DAN GROUP
REX AREA

Pb Plot

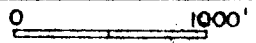
BOSWELL RIVER MINES LTD.	
GEOCHEMICAL SURVEY — BASELINE "3"	
Watson Lake M.D.—Y.T.	105-B-3
P. H. Stevensma Consultants Ltd. Vancouver, B.C.	

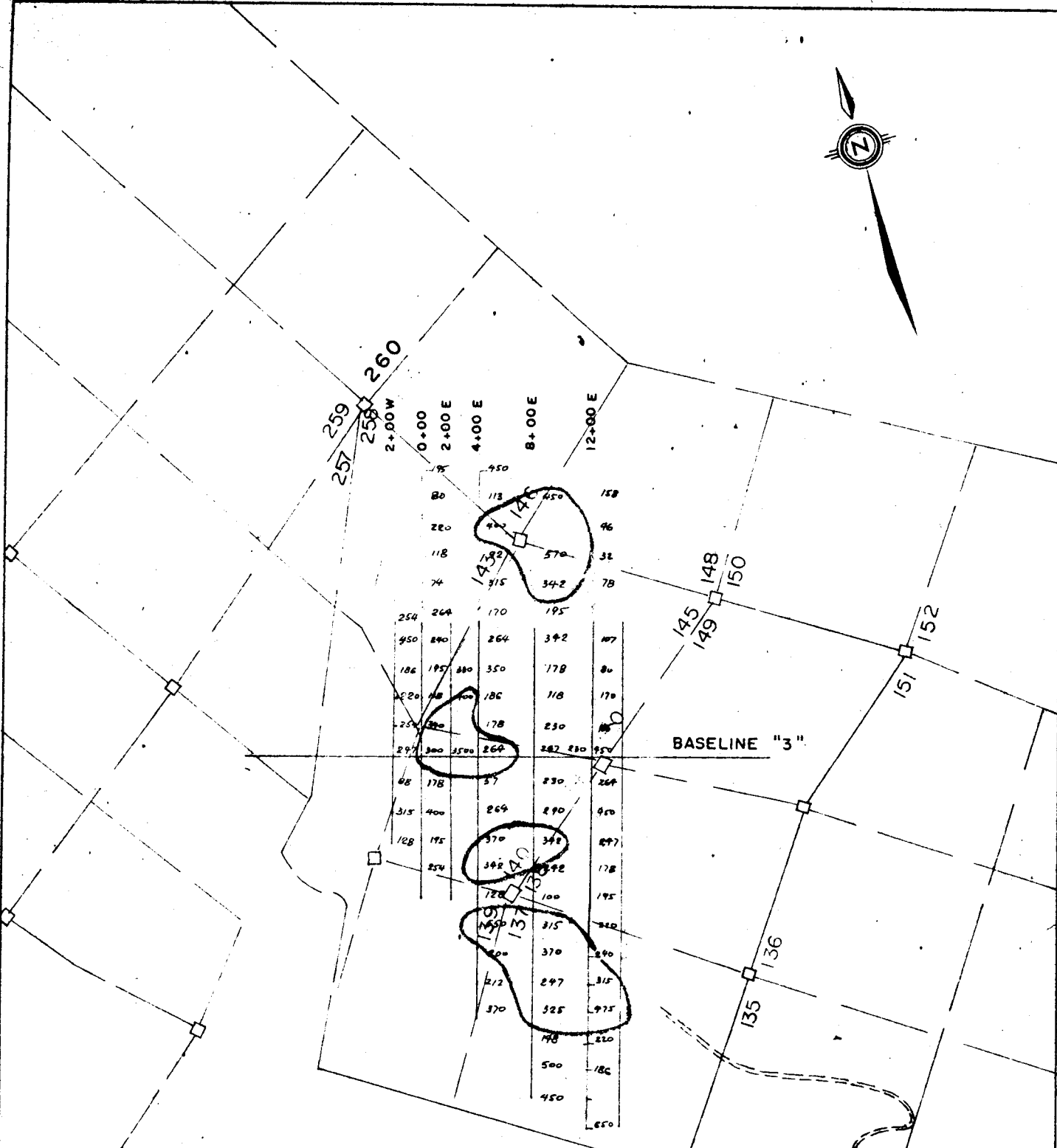
Dwg. No.:

Fig: 30

May 1969,

Scale:





LEGEND

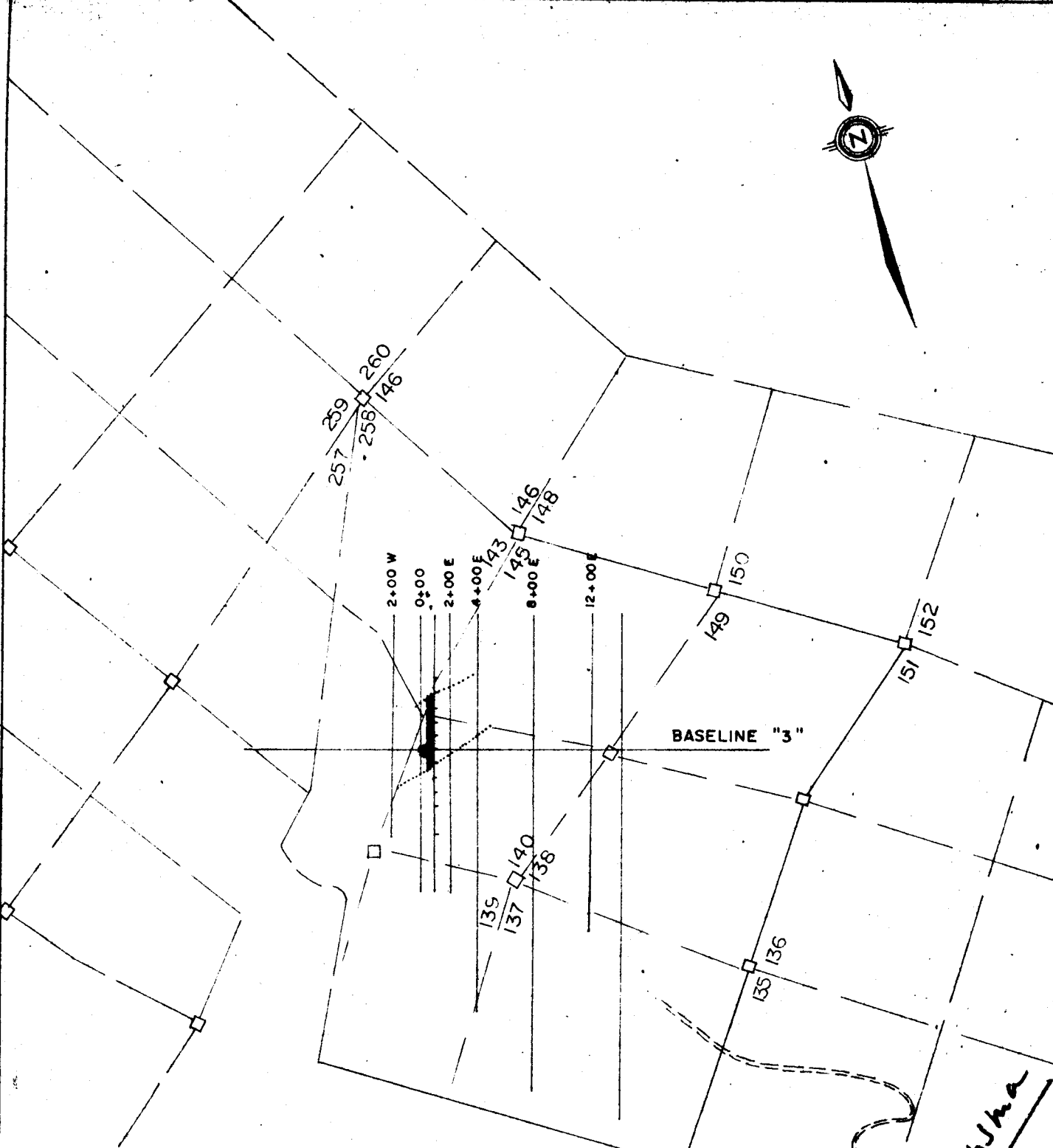
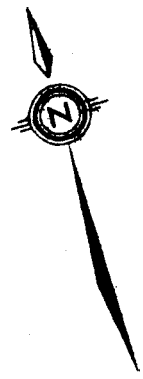
- Roads
- Claim Line
- Claim Boundary
- Known Claim post
- Assumed Claim post
- Area of interest

DAN GROUP
REX AREA

Zn Plot

A.H. Sevensma

BOSWELL RIVER MINES LTD.	
GEOCHEMICAL SURVEY — BASELINE "3"	
Watson Lake M.D.—Y.T.	105-B-3
P. H. Sevensma Consultants Ltd. Vancouver, B.C.	
Dwg. No:	Fig: 31
May 1969,	Scale:



LEGEND

- Roads (dashed line)
- Claim Line (solid line)
- Claim Boundary (dashed line)
- Known Claim post (square symbol)
- Assumed Claim post... (square symbol)

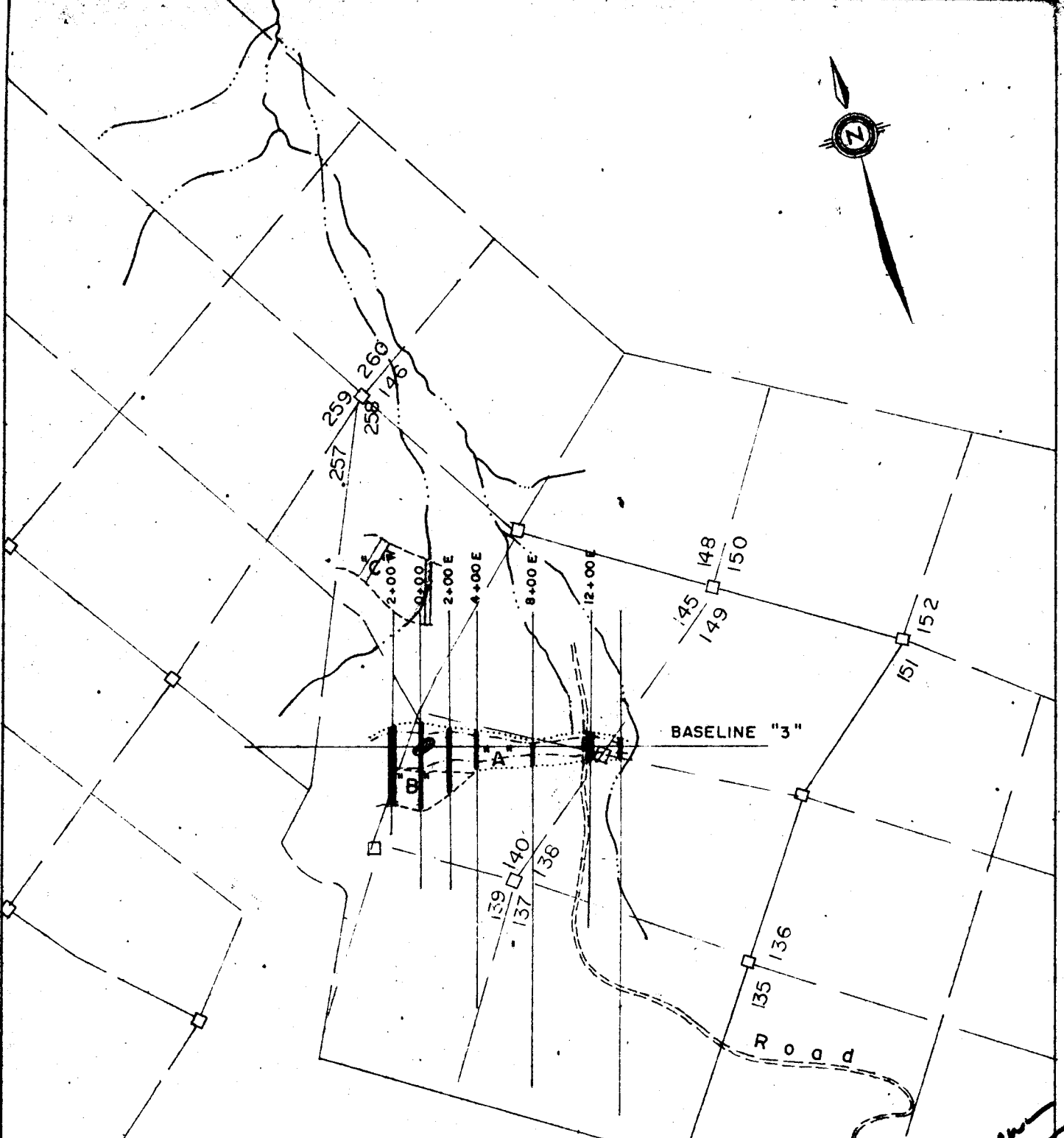
- ◀ Interpreted zone of interest..... (thick black line)
- Apparent chargeability..... (dotted line)
- Showing..... (dashed line)

P. H. Sevensma

EM - 16 SURVEY

DAN GROUP
REX AREA

BOSWELL RIVER MINES LTD.	
GEOCHEMICAL SURVEY — BASELINE "3"	
Watson Lake M.D.-Y.T.	105-B-3
P. H. Sevensma Consultants Ltd. Vancouver, B.C.	
Dwg. No.	Fig: 32
May 1969,	Scale: 0 1000'



L E G E N D

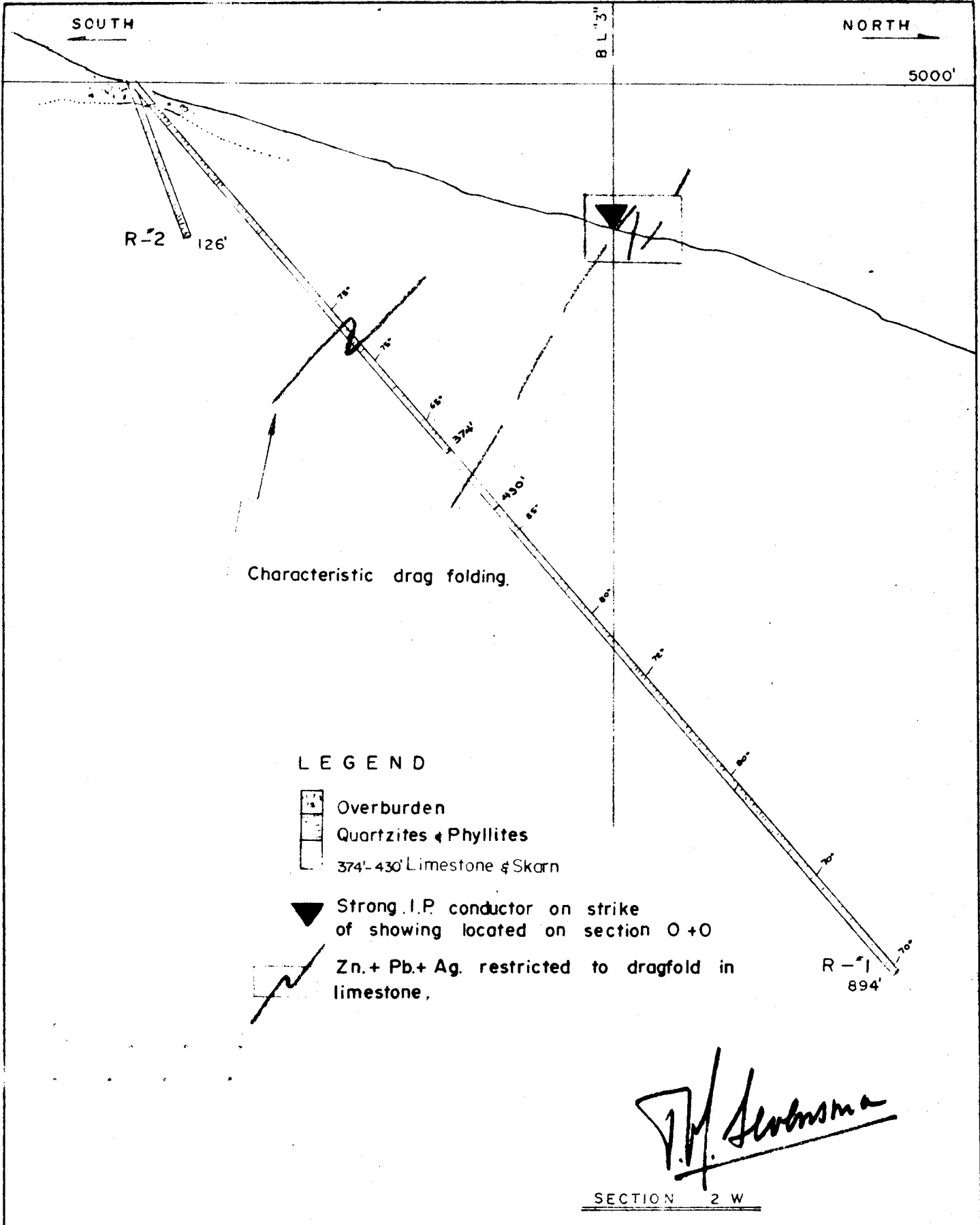
- Roads
- Claim Line
- Claim Boundary
- Known Claim post
- Assumed Claim post
- Showing...

- Interpreted zone of interest
- Apparent chargeability
- Apparent resistivity
- Area of possible interest
- "A" — "B" — "C" Zone

P. H. Sevensma

DAN GROUP
REX AREA

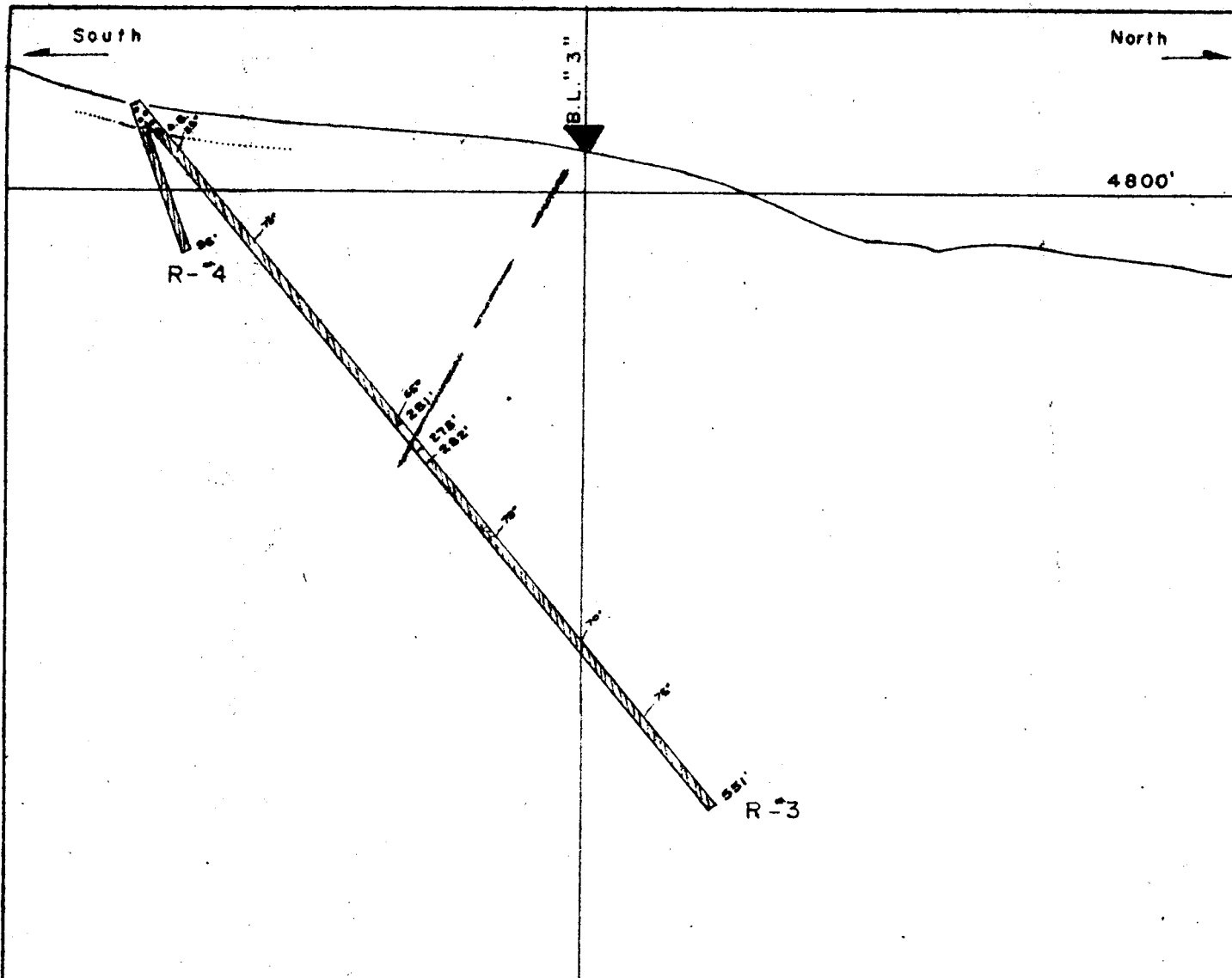
BOSWELL RIVER MINES LTD.	
I. P. SURVEY — BASELINE "3"	
Watson Lake M.D.—Y.T.	105-B-3
P. H. Sevensma Consultants Ltd. Vancouver, B.C.	
Dwg. No.	Fig: 33
May 1969,	Scale:







P. H. Sevensma

DAN GROUP
(Rex Area)

BOSWELL RIVER MINES LTD.	
Section looking West D.D.H. R#1 and #2	
Watson Lake M.D.-Y.T.	105-B-3
P. H. Sevensma Consultants Ltd. Vancouver, B.C.	



LEGEND

-  Overburden
-  Phyllite
-  Limestone & Skarn 251' - 282'
-  Strong I.P. conductor on strike of showing located on section 0+0.

P. H. Sevensma

SECTION 4 E

DAN GROUP
(Rex Area)

BOSWELL RIVER MINES LTD.

Section looking West D.D.H R#3 and #4
Watson Lake M.D.-Y.T. 105-B-3

P. H. Sevensma Consultants Ltd. Vancouver, B.C.

Dwg. No.:

Fig:35

May 1969,

Scale:

0 100'



BOSWELL RIVER MINES LTD
DAN GROUP — WORK PROGRAM
 Watson Lake M.D.-Y.T.
 105-B-3
 P. H. Sevensma Consultants Ltd
 Vancouver, B.C.
 August 1968 to July 1969
 Scale: 0 500 1000 2000
 FIG. 2

- Grid line used for I.P., E.M.-16, crane E.M. and Soil Surveys.
- Soil sample points (See figure 3 for soil samples).
- Access roads, up graded during current program.
- Access roads, constructed during current program.
- Area boundaries, separated for convenience only.
- Claim posts
- Claim boundaries
- Area of interest

P.H. Sevensma July 7, 1969

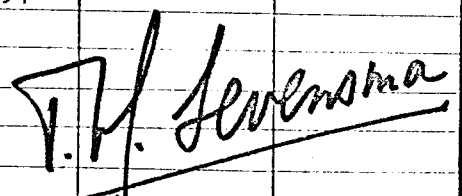


ASSAY — LOG

P.H. Sevensma Consultants Ltd.
715 - 850 West Hastings St., Vancouver 1, B.C.

COMPANY Boswell River Mines Ltd.

Property:
Dan Group- Rusty Valley area.

Sample No.	From	To	Feet	oz/t. Au.	oz/t. Ag.	% Pb.	% Zn.	% Cu.	
303 - 463	68.2'	71.0'	2.8'		.14	tr.	3.24	-	
304 - 464	71.0'	77.0'	6.0'		.24	.42	8.83	-	
	77.0'	82.5'	5.5'	Not sampled	-	-	-	-	
305 - 465	82.5'	87.5'	5.0'		.19	.09	13.43	.02	
306 - 466	87.5'	90.5'	3.0'		.21	.27	8.83	-	
	90.5'	94.5'	4.0'	Not sampled	-	-	-	-	
307 - 467	94.5'	99.0'	4.5'		.12	.12	4.43	-	
308 - 468	99.0'	104.0'	5.0'		.31	.17	7.60	-	
309 - 469	104.0'	105.5'	1.5'		.18	.20	5.99	.12	
<u>Averages:</u>									
	68.2'	77.0'	8.8'		.21	.29	7.05	-	
	82.5'	90.5'	8.0'		.20	.16	11.71	.01	
	94.5'	105.5'	11.0'		.21	.15	6.08	.02	
	68.2'	105.5'	37.3'		.15	.14	5.97		
									
P.H. SEVENSMA CONSULTANTS LTD.									

ROSWELL RIVER MINES LTD.
RAN 1-10 GROUP OF CLAIMS
103-2-3, 60°10'N, 131° 6'W.

GEOPHYSICAL REPORT
JULY 8-20th, 1967

by

F. H. SEVERINA, Ph.D., P. Eng.

GEOLOGICAL SURVEY
SEP 04 1967
Resident Geologist
Whitehorse, Y. T.

This report has been examined by
the Geological Evaluation Unit.
Approved as to technical worth by:

D. C. Finlay
RESIDENT GEOLOGIST

Approved as to cost in the amount
of \$ 1000.00

R. E. Redden
RESIDENT MINING ENGINEER

Accepted as representation work
under Section 53(4) Yukon Quartz
Mining Act.

[Signature]
COMMISSIONER OF YUKON

TABLE OF CONTENTS

	<u>Page</u>
1. INTRODUCTION	1
2. PROPERTY	1
3. ACCESS AND CLIMATE	1
4. HISTORY	2
5. GEOLOGY	3
6. POTENTIAL	4
7. GEOPHYSICAL SURVEY	5
8. SUMMARY AND RECOMMENDATIONS	7
9. COST OF PROGRAM	8
AFFIDAVIT AND APPENDIX A	

ILLUSTRATIONS

- Figure 1 Location map, 1" = 20 miles
Figure 2 Location and Geology, 1" = 4 miles
Figure 3 Claim Map, 1" = 1/2 mile
Figure 4 Trenching, 1" = 20'
Figure 5 EM-16, Readings, 1" = 400'
Figure 6 EM-16, Profiles, 1" = 400'

BOWELL RIVER MINES LTD.

DAN 1-10 GROUP OF CLAIMS

GEOPHYSICAL REPORT

July 8-20th, 1967

1. INTRODUCTION

The Dan Group of 10 claims was staked in July 1966 and recorded on July 27, 1966, to cover showings and float of zinc-silver-lead discovered in 1946 by Hudson Bay Mining & Smelting Company prospectors.

A Ronka DI-16 electromagnetic survey was conducted over the bulk of the group between July 8th and 20th, 1967 to assess the possible extent of the showings and the possible source of the float.

2. PROPERTY

The property consists of the following claims (Figure 4):

Dan 1 to 10 Grant nos. Y13401 - Y13410

The claims have been staked in accordance with the requirements of the Yukon Quartz Mining Act, as checked personally by the writer in the field.

The claims lie along the South bank of the Swift River, at Latitude N 60°10' and Longitude W. 131° 6' 30", elevation 4000', claim sheet 105-B-3.

3. ACCESS AND CLIMATE

The claim group is accessible by a good truck road running for 15 miles North and West from Mile 722 on the Alaska Highway. As the old bridge located 1½ miles West of the property

has been washed away, the river has at present, to be forded in this location with a 4-wheel drive vehicle.

A 30' timber bridge can easily be rebuilt across the Swift River at this point.

There is good timber in the area up to an elevation of about 4800'. Snowfall is medium, with about 4' of packed snow in spring.

There is abundant water year-round.

4. BLUESKY

- 1946 Discovered by prospectors working for Hudson Bay Mining & Smelting Company.
- 1952 Holicon type EM survey by Hudson Bay Mining & Smelting Company followed by drilling of strong anomalies in the valley, which were found to be related to graphite schists.
The sheering was not drilled.
- 1962 Examined by the writer on behalf of Cominco Ltd.
- 1964 Trenching by W. McKinnon with a bulldozer.
- 1966 Restaked by Roswell River Mines Ltd. in association with one of the original discoverers, Mr. W. McKinnon of Teslin, Y.T. and re-examined by the writer.
- 1967 Reake EM-16 survey conducted by T. Martin, Box 398, Whitehorse, geophysical operator and J. Sheldon of Teslin, assistant under supervision of P.H. Sevenema Consultants Ltd.
- 1951-1959 Areal mapping by W.H. Fools, J.H. Reddick and L.H. Green for the Geological Survey of Canada, Wolf Lake sheet, map 10-1960.
- 1961-1963 Airborne magnetic survey, June - September 1961, by Aero Surveys for the Department of Mines and Technical Surveys, published in 1963 (Map 1306G, 1" = 1 mile; Map 7001G, 1" = 4 miles).

5. GEOLOGY

(a) Areal

The claims overlie an area of Mississippian-Devonian sediments consisting of slates, quartzites, some limestone and chert overlying (?) typical Mississippian-Devonian volcanics. The presence of graphitic schists is typical for the formations of this age, which are part of the productive schist formations in the Yukon, containing the Klondike Gold fields and the Vancouver Creek massive base-metal bearing sulphide bodies (Figures 1 and 2).

In the area under consideration, the pronounced Swift River fault lies immediately North of the mineralized area. This major fault separates the schists from a dome of Precambrian intruded by a part of the Cassiar batholith (Figure 1).

The schists are characterized by the intrusion of the Sea Gull batholith and a highly muscovitized quartz-monzonite, the Ram Stock, both extremities of which (on the NW and the SE) terminate in diorite intrusives of apparent older age.

To the Southwest, similar diorite intrusives are associated with the Logjam stock and near and in these diorites there are cross-cutting veins with good silver-gold-lead-zinc values. A typical assay in this area is: 2' width carrying 0.3 oz/t Au, 30 oz/t Ag, 3% Pb, 7% Zn.

(b) Local

The showings and float on the Dan Group lie in a band of schists between the major fault and one of the small diorite intrusives generally associated with the mineralization in the area.

The main showing is a NW striking strata-bound pyrrhotite-sphalerite zone, dipping about 70° SW into the hill. The wall-rock is a slightly stannous (actinolite) and silicified thin-bedded argillite.

The exposure averages 8.0% Zn over a width of 3.7' and an exposed length of 40', as determined by the writer's sampling in June 1962 and in July 1966 (Figure 4).

Float 700' to the ESE consists of 4' blocks of massive pyrrhotite; an average assay of the samples taken by the writer gave 0.75 Ag, 0.25% Pb and 3.2% Zn.

In places there is minor visible chalcopyrite, but none of this showed up in any of the writer's samples, which were assayed by Whitehorse Assay Office.

The area around and between the showings and the float is covered by overburden estimated to be from 5 - 50' thick.

6. POTENTIAL

The area is structurally favorable with a major fault near a 15 mile long dome of Precambrian.

The associated dioritic intrusives are known to be associated with zinc-silver-lead mineralization with usually high silver-lead ratios, even if zinc predominates.

The Logan occurrences are responding to development by Pure Silver Mines Ltd.

Stratigraphically, the Dan showings are interbedded in formations of the same age and lithological characteristics as the Vangorda Creek base-metal bodies; the massive pyrrhotite is fine-grained, as is typical of strata-bound occurrences.

It should be remembered that many, if not most, of the large sulphide bodies being mined on either the Precambrian Shield or in the Western Cordillera were discovered as a result of work on properties on which hindsight has revealed a relationship to geologically favorable environmental conditions such as are found here now, but did not have a surface expression of sufficient commercial value to encourage the larger mining organizations to participate in the original exploration.

The presence of strata-bound base-metal deposits in the Yukon has recently been established and much attention has been directed toward the location of these deposits by indirect techniques in areas adjacent to the major discoveries. A more fruitful approach

might be the detailed exploration of showings where a combination of favorable geological conditions and a sulphide-mineralized outcrop provide direct evidence of mineral deposition. The Dan Group is of this latter type and hence a situation having an above average chance of success.

Sphalerite-carrying float found on line 32E, 1150' N of the base line (Figures 5 and 6) confirms that the potential of this area may be much larger than hitherto assumed.

7. GEOPHYSICAL SURVEY

(a) Ronka M-16 Method

This instrument is an electromagnetic receiver capable of detecting the signal of remote stations operating in the 15 to 25 kcs. range.

For each station, a specific crystal is inserted, the operating frequencies of which correspond to those of transmitters located at various points in the Northern hemisphere, which transmitters are used in the detection of submarine vessels.

The instrument has been found to be sensitive and to detect conducting zones lying at several hundred feet depth.

Where isolated conductive zones occur in a non-conductive medium, very sharp and localized deflections of the primary field can be detected and their cause pinpointed very accurately.

When the rock environment is variously conductive, complex deflections are generally found which will provide an overall strike of the formations, but which require further interpretation by trenching or other means of examining the formations giving rise to these complex patterns.

Deep clay-bearing overburden diminishes the sensitivity of the instrument and where steep topographical slopes occur an additional tilt of the field is usually present.

A Ronka M-16 survey gives the best results when a conductor points towards the transmitting station, so as to lie at right angles to the field.

On the Dan Group, the angle between the strike and the direction to the showing is about 30° , which provides a quite satisfactory coupling.

(b) Dan Group Survey

This survey was carried out after cutting open and rechainning old existing lines and cutting and chaining new lines where required.

The survey revealed a complex pattern of conductive formations, suggesting the presence of both moderately and strongly conductive rocks. In the first category are chloritic and sericitic schists and hornfelses; in the second are graphitic schists, schistose rocks carrying various amounts of disseminated pyrrhotite and massive pyrrhotite zones.

In general, the pattern suggests a moderate tilt to the field of perhaps some 10%.

Overburden effects are noticeable on a significant area South of the base line, where the in-phase and quadrature are generally of opposite signs. Conductivity in this area suggests broad zones of medium conductivity.

Along the North quarter of the surveyed area, i.e. down-slope, more highly conductive formations occur with both in-phase and quadrature having generally the same sign, with low quadrature values.

The transition zone between these two areas is marked by strong in-phase deflections, which can be followed throughout the profiles.

One limited zone, on 24+00E and 28+00E, between 7+00N and 8+00N, is a limited near-surface conductor, still reflected weakly on lines 20 and 12. This area warrants investigation, as this type of conductor is suggestive of sulphides.

The trench showing is located at the edge of a broad profile, suggesting a deeper source of conductivity.

This zone can be quite clearly traced to the SE, although it is weaker on lines 28+00 and 12+00.

In summary, the area is believed to be underlain by variously conductive formations, with significant indications that some of these are associated with sulphides. The zone associated with the trenched showing lies along the edge of a conductive zone with a current concentration about 300'-400' deep, which could reflect the presence of a deeper lying pyrrhotite body.

(c) Summary

A complex zone of this type, associated with a showing and with float of a highly conductive type, i.e. massive pyrrhotite, requires trenching along selected lines, in conjunction with geological mapping and soil sampling for lead and zinc with particular attention being paid to the formations underlying each type of conductor.

8. SUMMARY AND RECOMMENDATIONS

Structurally and lithologically, the Dan showing lies in a favorable environment, where, whenever lead is encountered, silver ratios are high, and where large strata-bound deposits may be present.

The electromagnetic survey indicates the presence of variously conductive formations, some of which may be sulphide-masses or -bodies.

It is strongly recommended to trench a line every 800', i.e. one half the lines, or about 4 line miles, in conjunction with soil sampling and geological mapping on all lines to assess the extent of the mineralization along the indicated NW-SE conductor directions.

This work will undoubtedly lead to pinpointing other drill targets besides the existing showing. The survey suggests that the latter may well increase in size and conductivity at a depth of several hundred feet.

9. COST OF PROGRAM

The cost of the proposed program is summarized as follows:

Road improvement	\$ 2,500
Stripping and trenching	2,500
Geological mapping	2,000
Soil sampling, 200 samples @ \$5.00	1,000
Prospecting, 3 man-months	2,500
Supervision, Engineering	2,500
Drilling, 1500' @ \$10.00	15,000
Camp Costs	<u>2,000</u>
	\$30,000
Contingencies, 20%	<u>6,000</u>
Total	<u>\$36,000</u>

In case of success, considerable more drilling may be justified.

Respectfully submitted,



P.H. Sevenema, Ph.D., P. Eng.

FHS/lx

July 26, 1967

APPENDIX A

LIST OF INDIVIDUALS ENGAGED IN GEOPHYSICAL WORK ON THE
DAN 1-10 MINERAL CLAIMS FOR BOSWELL RIVER MINES LTD.
JULY, 1967

Supervision

P.H. Sevensma Consultants Ltd.,
P.O. Box 738,
Whitehorse, Y.T.

Geophysical Operator

T. Martin,
P.O. Box 398,
Whitehorse, Y.T.

Assistant

J. Sheldon,
Teslin, Y.T.

Date of field work:

July 8th - 20th, 1967

Cost of survey:

8.33 line miles @ \$140 \$1,166.20

AFFIDAVIT

I, PETER H. SEVEN SMA, of 715-850 West Hastings Street,
Vancouver, Province of British Columbia, HEREBY MAKE OATH AND SAY
AS FOLLOWS:

That attached hereto to this my Affidavit, marked
Appendix A, is a list of individuals engaged in work on the Dan 1-10
claims for Boswell River Mines, as well as a statement of expenditure
which I certify to be accurate.

SWORN BEFORE ME at the City)
of Vancouver, Province of)
British Columbia, this 2)
day of August, A.D. 1967)

M. H. A. [Signature])
A Notary Public in and for the)
Province of British Columbia

P. H. Sevensma
Peter Sevensma

BOSWELL RIVER MINES LTD. STAR-FOX-DAN

BIG SALMON LAKE SCHIST BELT
WHITEHORSE M.D. Y.T., 105-SW

P. H. SEVENSMA

CONSULTANT

VANCOUVER, B.C.

June 1967

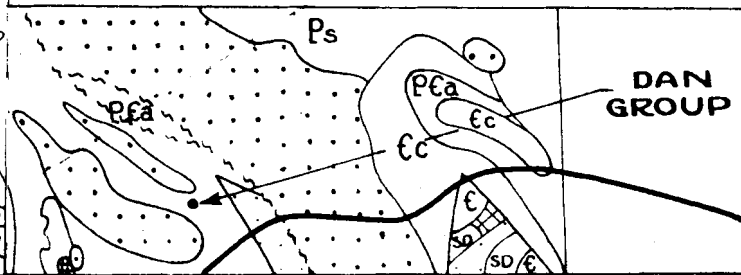
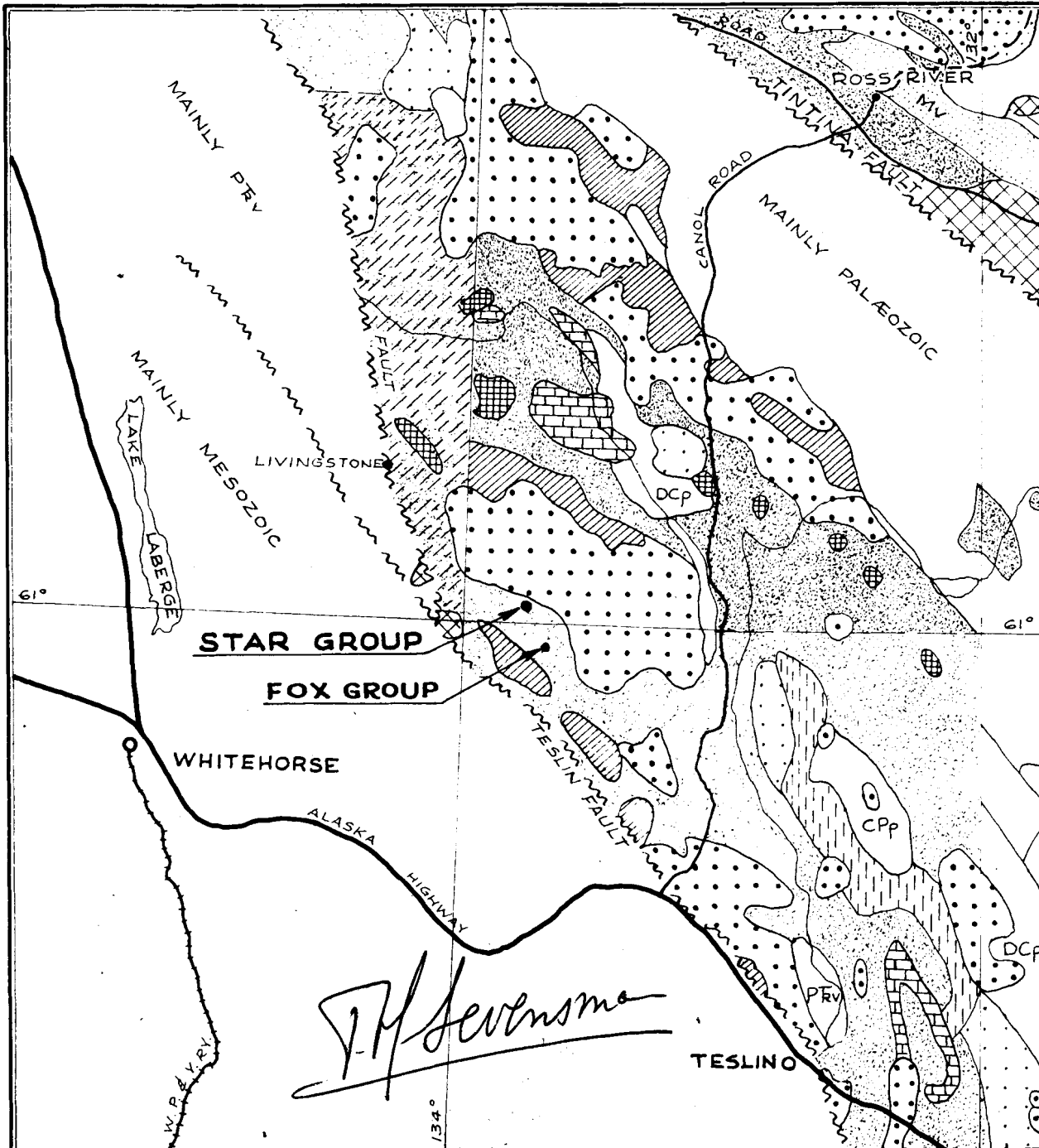
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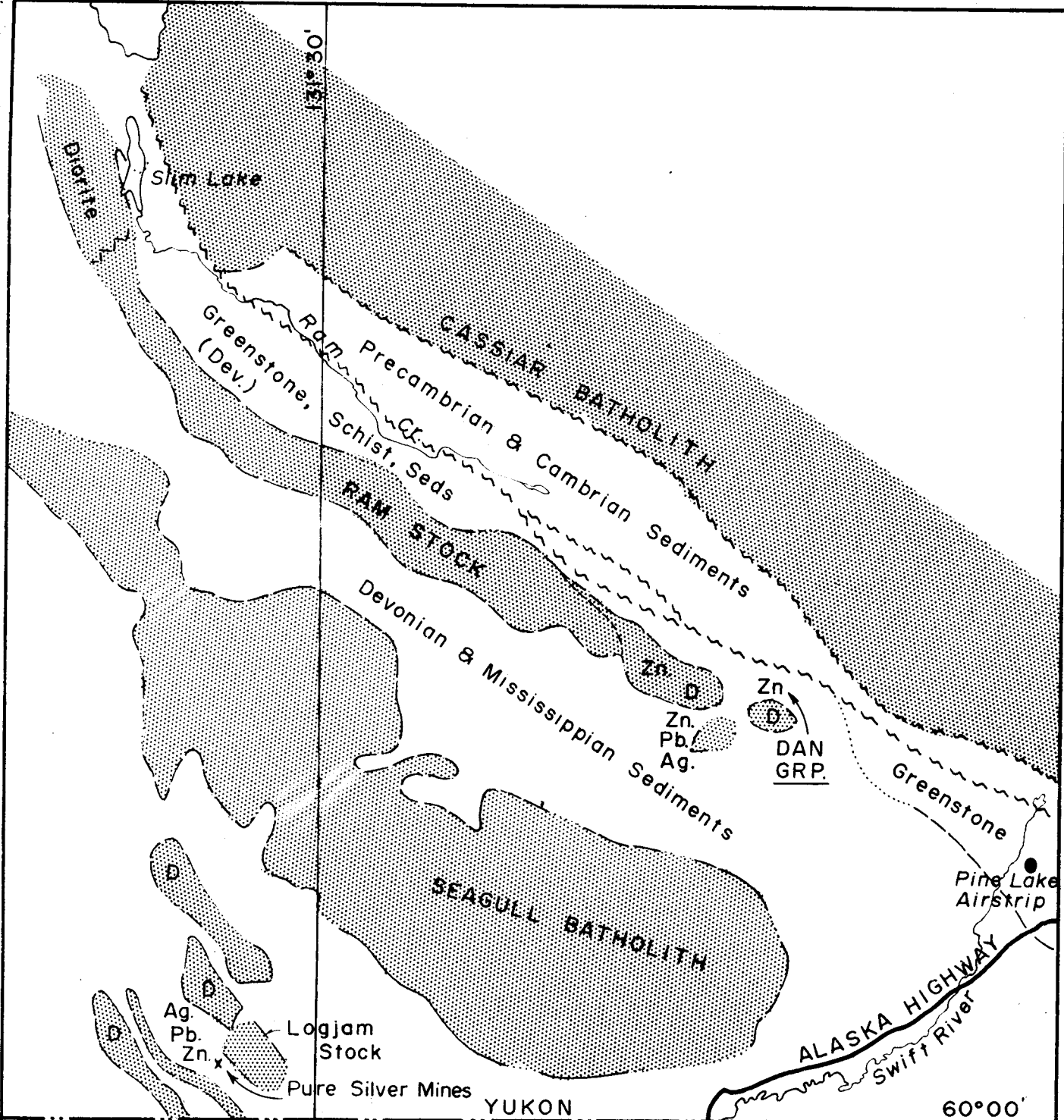
FIG. 1

LEGEND

Map 30 - 1963

	Tv	Basalts etc, Tertiary
	4	Granitic porphyry
	3	Granodiorite, Cretaceous
	PRv	Perm. - Trias volcanics
	CPp	Carb. - Perm. clastics
	Cm	Mississ. limestone, chert
	DCv	Dev. - Carb. volcanics
	DCp	Dev. - Carb. clastics
	DCs	Dev. - Carb. schists
	Ml	Limestone, marble
	1	Ultrabasics
	Ms	Quartz - mica - schists
	Mg	Granitic gneiss
	My	Yukon Grp., schist, gneiss, not differentiated





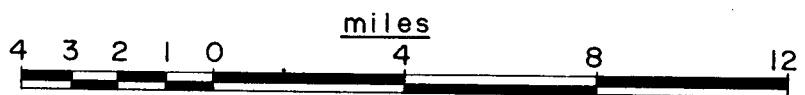
Ref: G.S.C. Map 10-1960

B. C.

D = Diorite

INTRUSIVE ROCKS

P. H. Sevensma



BOSWELL RIVER MINES LTD.	
DAN GROUP	
Watson Lake M.D.	105 B-3
P. H. SEVENSMA CONSULTANTS LTD.	
VANCOUVER, B.C.	July 26, 1967

FIG 2

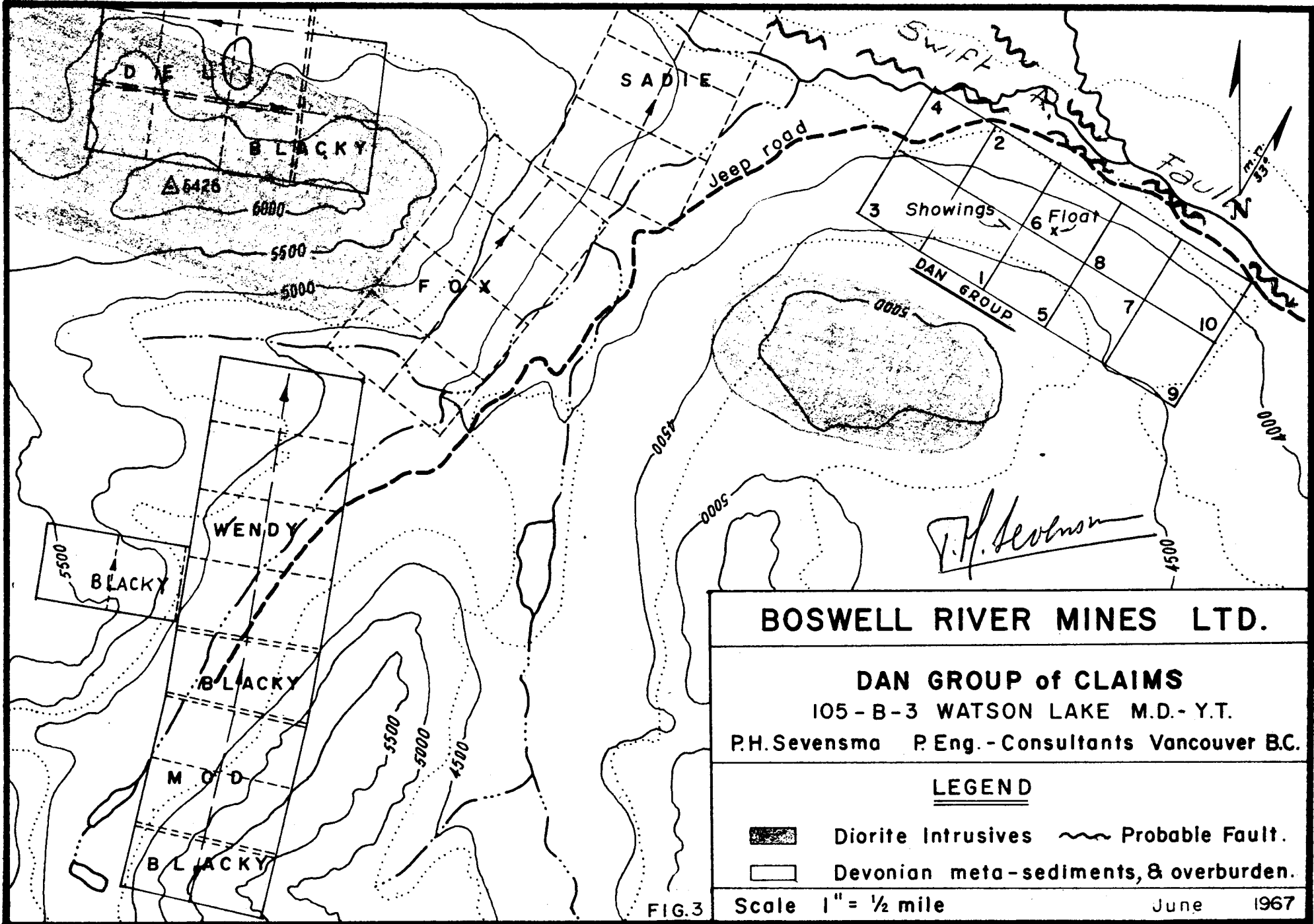


FIG.3

BOSWELL RIVER MINES LTD.

DAN GROUP of CLAIMS

105 - B - 3 WATSON LAKE M.D. - Y.T.

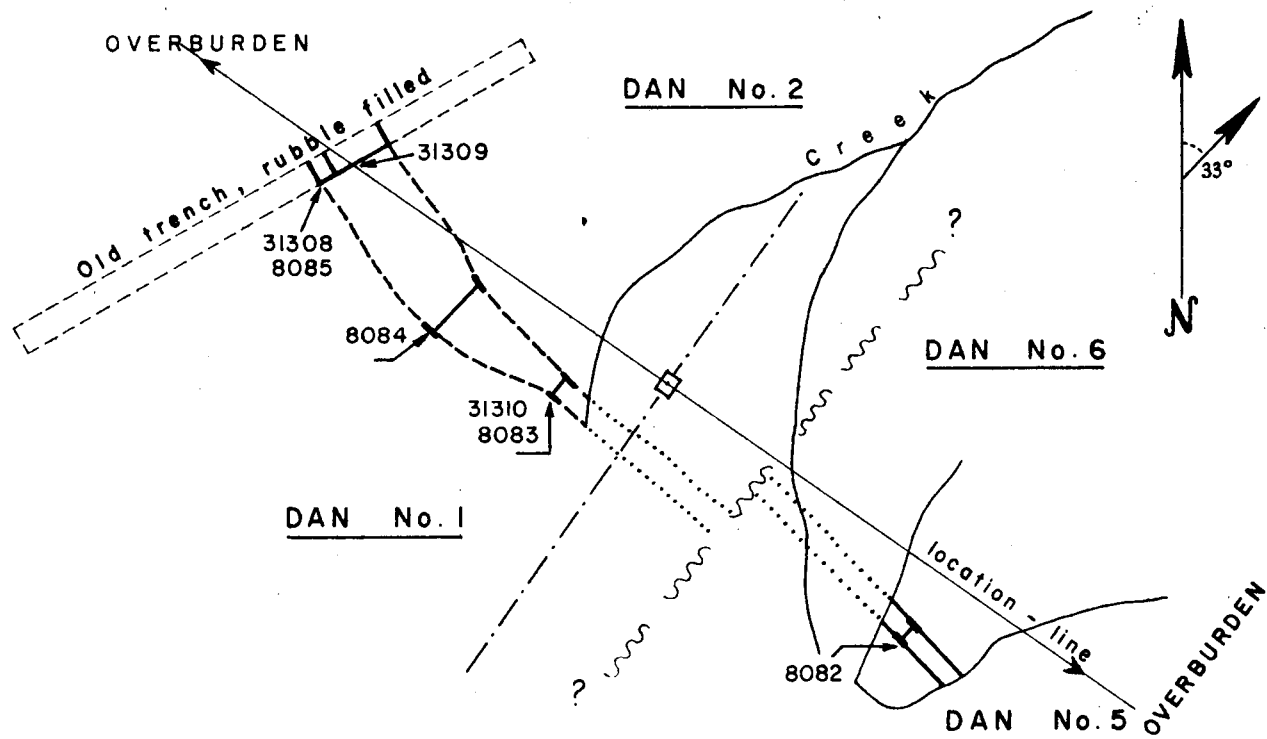
P.H. Sevensma P. Eng. - Consultants Vancouver B.C.

LEGEND

-  Diorite Intrusives
-  Probable Fault.
-  Devonian meta-sediments, & overburden.

Scale 1" = 1/2 mile

June 1967



		Width	Ag	Pb	Zn	Cu	
8082	Main showing	2'	Tr.	Tr.	Tr.	Tr.	
8083		2'	Tr.	Tr.	8.8	Tr.	
31310		20"	.12	nil	3.0	nil	
8084		7'	.20	Tr.	10.0	Tr.	
8085		2'	Tr.	Tr.	6.1	Tr.	
31308		2'	.08	nil	1.6	nil	
31309		6'	.54	nil	6.1	nil	
8086	Trench 4	Float?	Tr.	Tr.	3.6	Tr.	
31311		Float?	1.50	0.5	2.8	nil	

* Trench 4 is about 700' due East from the Main showing.

31308 - 311 Samples taken JUNE 24, 1962
 8082 - 8086 " " JULY 22, 1966

BOSWELL RIVER MINES LTD.

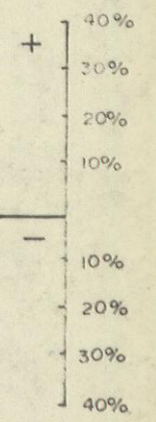
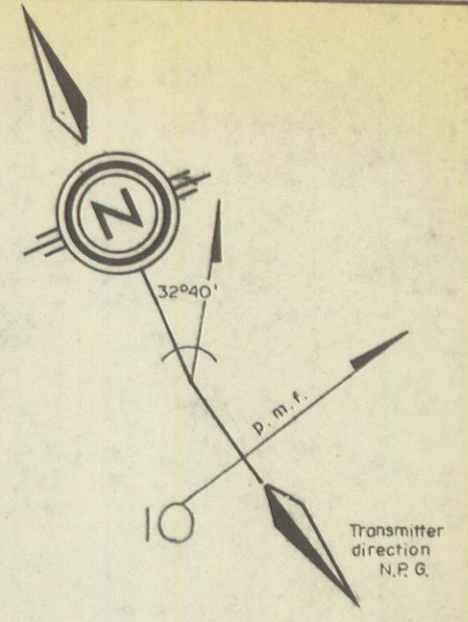
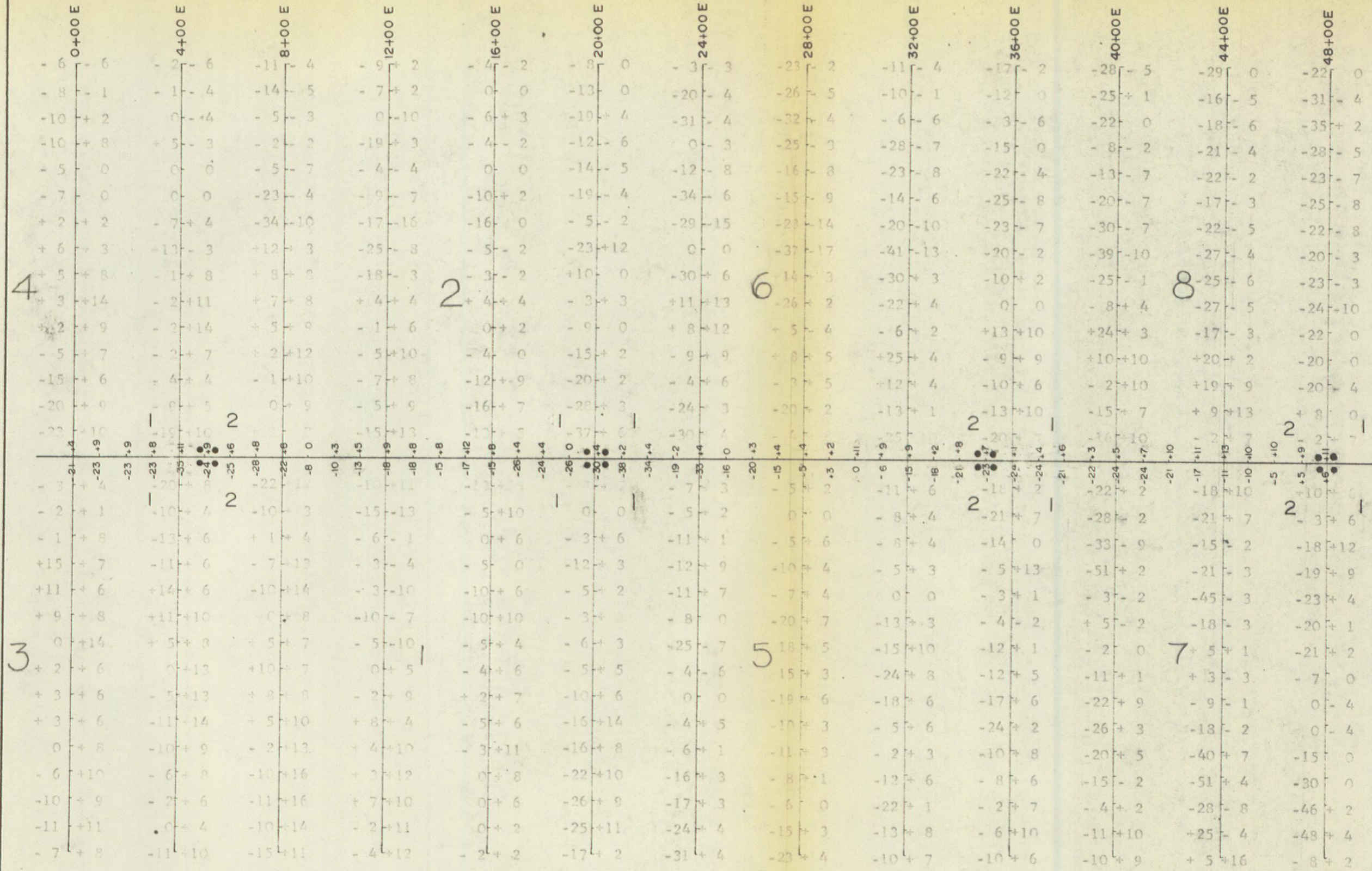
DAN GROUP of CLAIMS

105-B-3 WATSON LAKE M.D. Y.T.

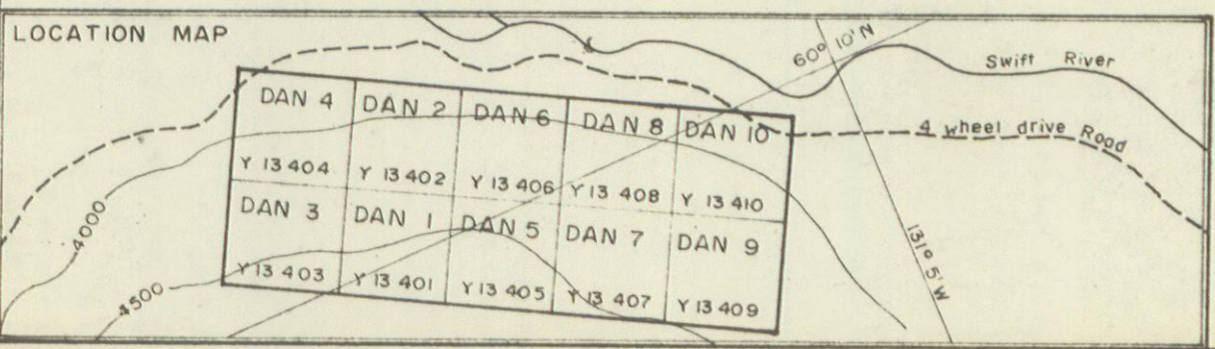
LOCATION OF SAMPLES TAKEN BY P.H. SEVENSMA
 JUNE 24, 1962 and JULY 22, 1966

1" = 20' June 1967

P.H. SEVENSMA ——— CONSULTANTS LTD. ——— VANCOUVER, B.C.



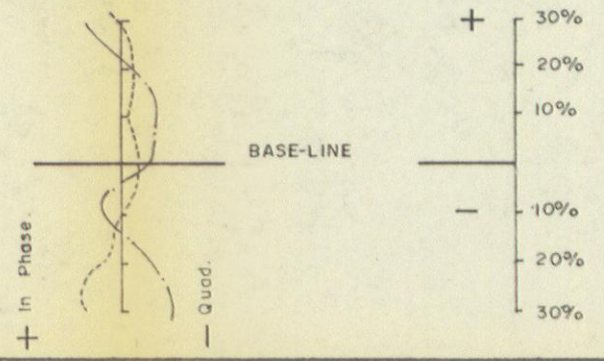
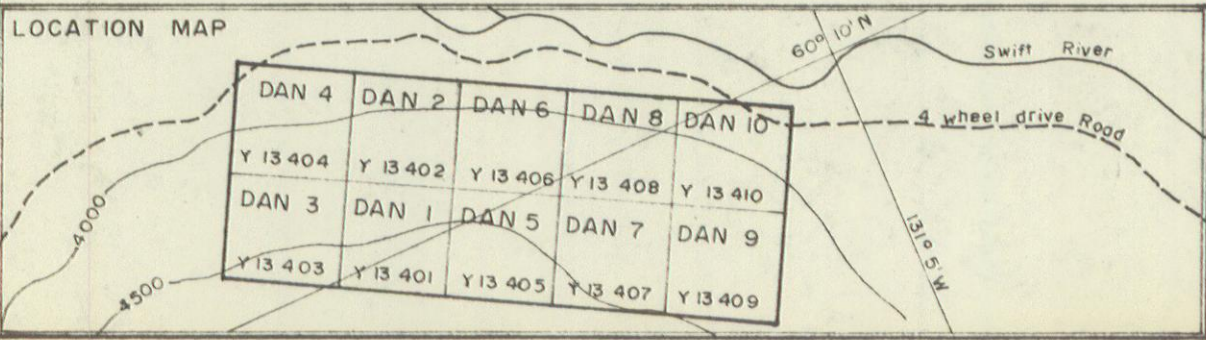
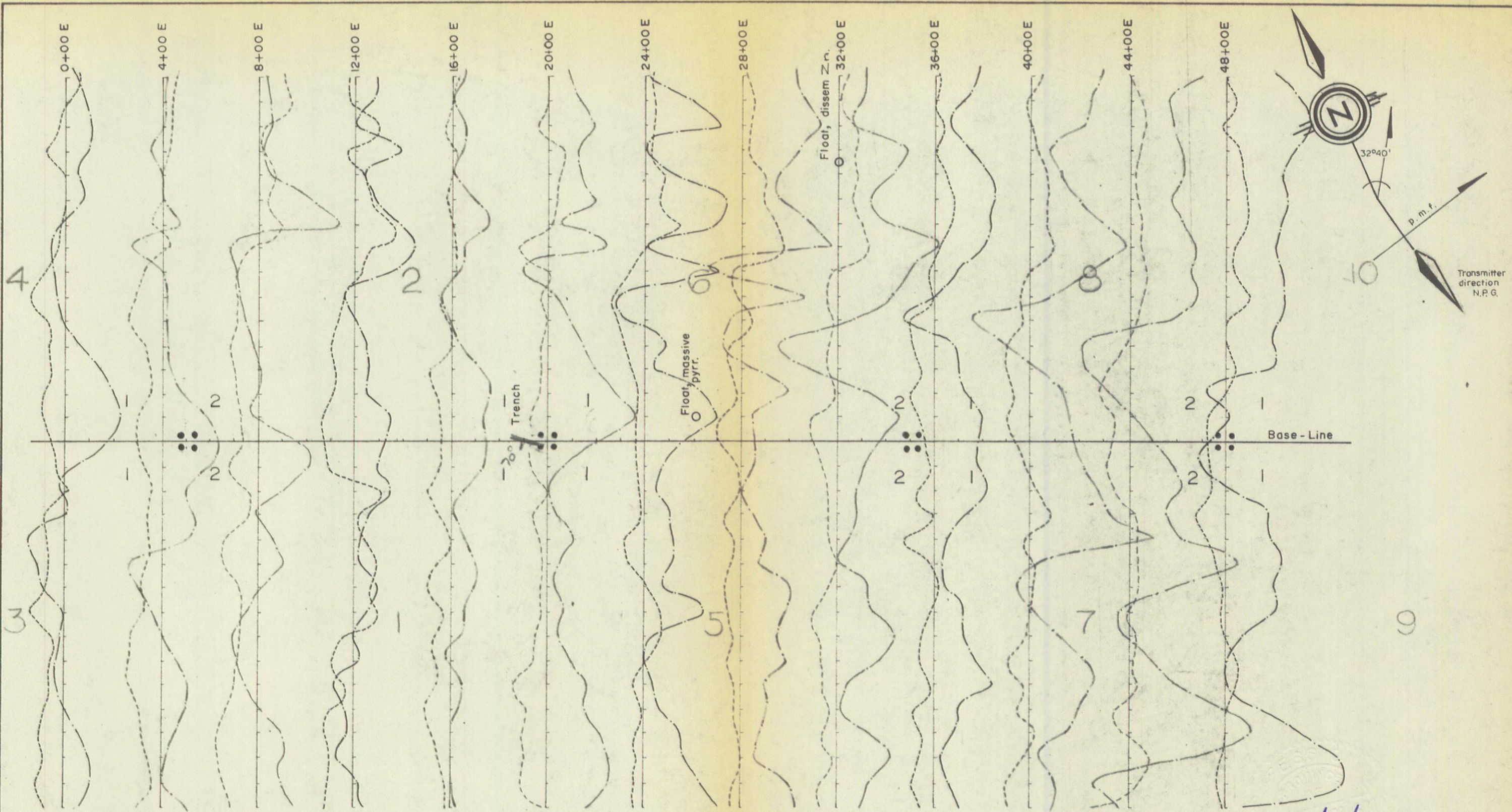
P. H. Sevensma



BOSWELL RIVER MINES LTD.
RONKA EM-16 SURVEY
 Watson Lake M.D. **DAN GROUP**
 P. H. Sevensma Consultants Ltd - Vancouver B.C.
 July 24, 1967 105-B-3

SCALE 400'

FIG. 5



T. H. Sevensma

BOSWELL RIVER MINES LTD.	
RONKA EM 16 SURVEY	
Watson Lake M.D.	DAN GROUP
P. H. Sevensma Consultants Ltd - Vancouver B.C.	
July 24, 1967	105-B-3
SCALE 400'	

FIG. 6