

IRON MOUNTAIN PROJECT

M491

1979 ASSESSMENT REPORT

GEOCHEMICAL SURVEY COVERING A PORTION
OF MINERAL CLAIM "TWO BY FOUR" (484)

Latitude 120° 45'W
Longitude 50° 12'N

03

NTS 92 I-2 E

Nicola Mining Division

Owner - K.W. Livingstone
4317 West 12th Avenue
Vancouver, B.C.

Operator - Chevron Standard Limited
Minerals Staff
901 - 355 Burrard Street
Vancouver, B.C.

by

W. A. Howell

November 14, 1979

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
7568

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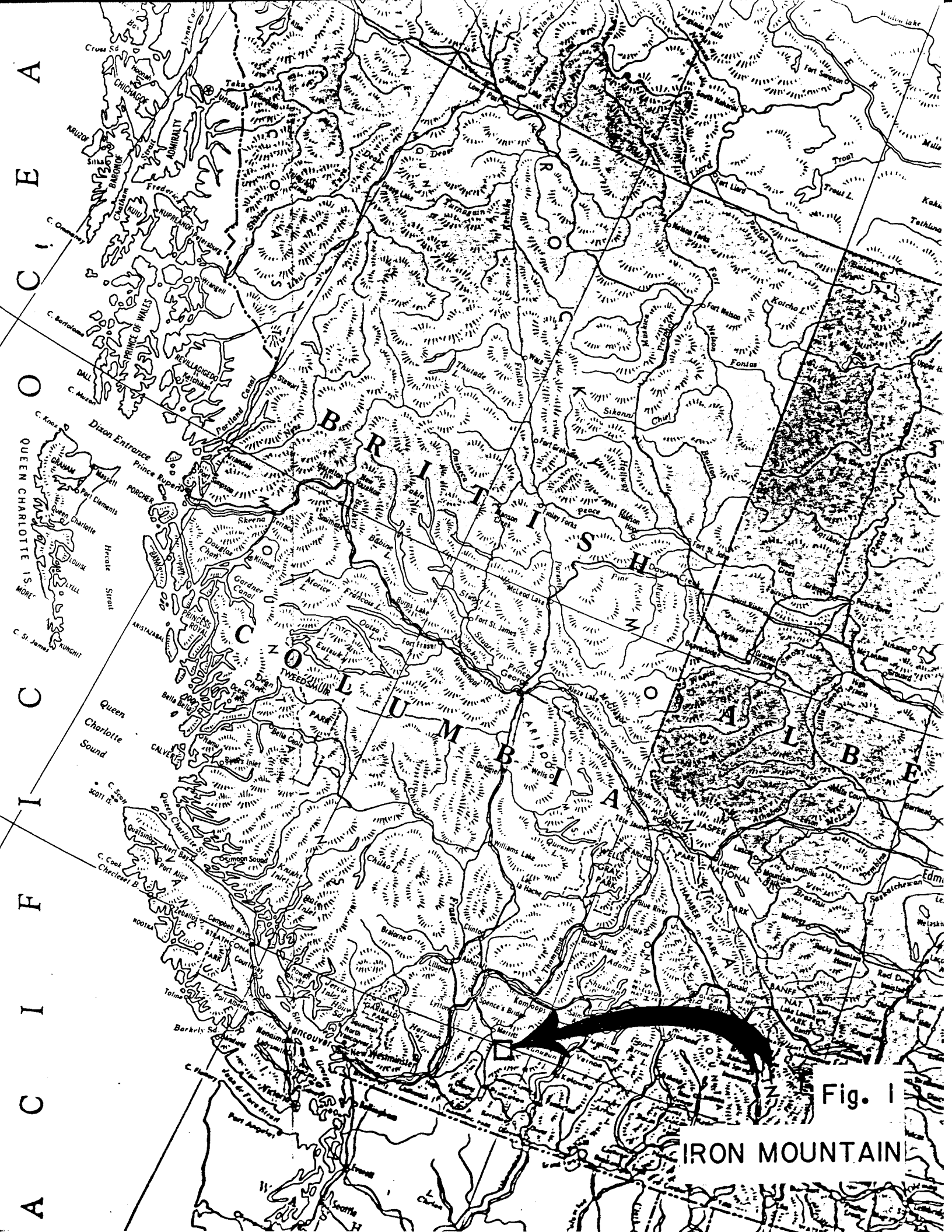


Fig. 1

IRON MOUNTAIN

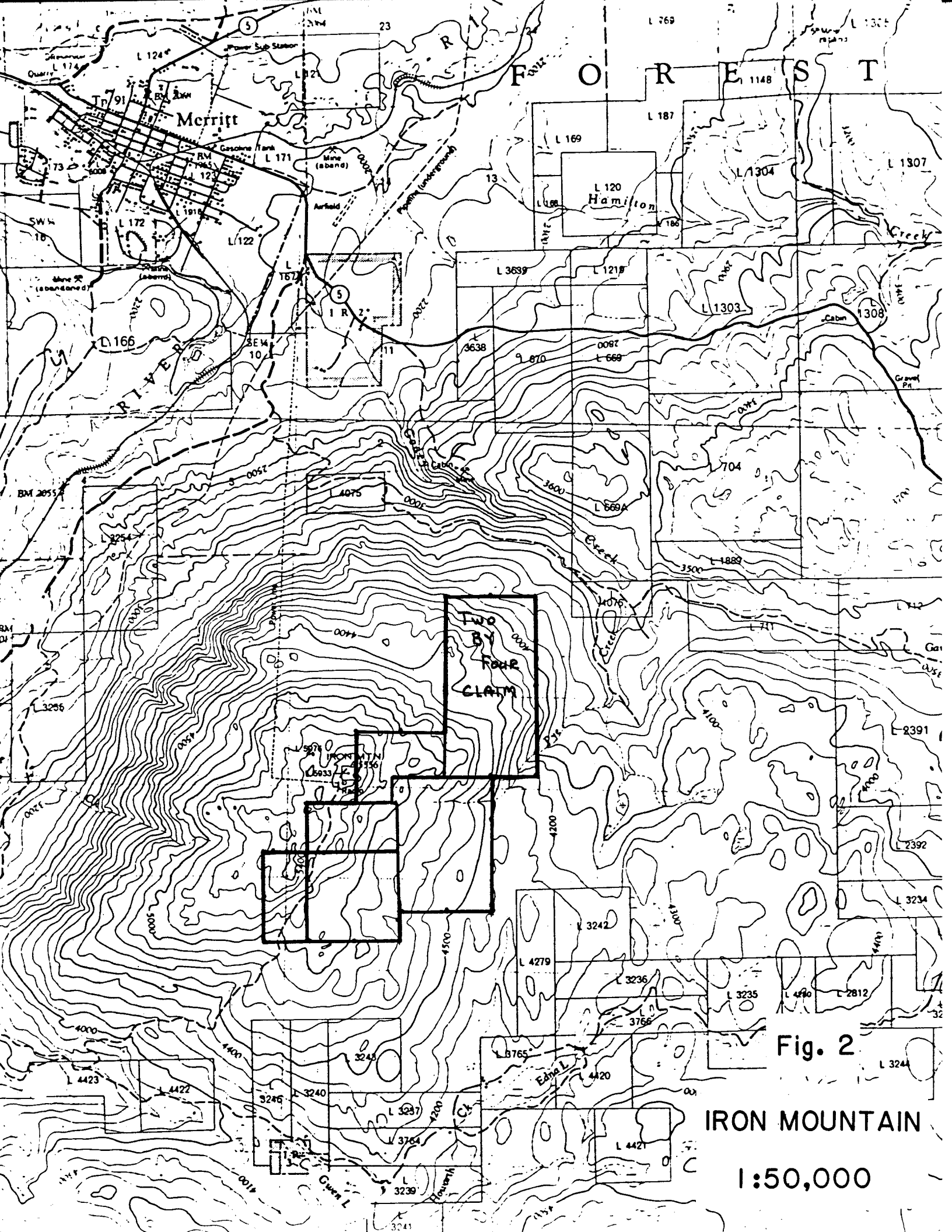


Fig. 2

IRON MOUNTAIN

1:50,000

INTRODUCTION

Location

The Two By Four mineral claim is located on the northeast flank of the summit of Iron Mountain at approximately $121^{\circ}45'W, 50^{\circ}12'N$, 6 kilometers south of the town of Merritt in the southcentral interior of B.C.

Access

Access to the claim is by old logging roads from the end of the Fox Farm Road which joins Highway #5 approximately 2 kilometers south of Merritt. Alternate access to the summit of Iron Mountain, is by good gravel road from the Coldwater Road, about 6 kilometers from its junction with Highway #5.

History

The Iron Mountain area has experienced prospecting and mineral exploration by a variety of operators since the turn of the century. Development work by Comstock of B.C. Ltd. had been done by about 1927 on the "Leadville" shaft near the summit of the mountain, where a galena "vein" had been discovered.

Work on this prospect appears to have been fairly minimal until 1947 when a further attempt was made to reopen the old "Leadville" shaft, then renamed the "Lucky Todd". Thirty-six tons of ore were shipped to Trail with net contents consisting of 67 ounces silver, 11,819 pounds lead and 484 pounds zinc.

Similar lithologies to the Lucky Todd shaft area occur on the Two By Four claim, approximately 2,800 meters N43^oE of the old "Lucky Todd" shaft. Surface stripping by bulldozer has occurred in this area and several pits have been blasted in the exposed bedrock by previous owners.

The recorded owner of the Two By Four claim is Mr. K.W. Livingstone of 4317 West 12th Avenue, Vancouver, B.C. It is held under option agreement by Chevron Standard Limited, 901 - 355 Burrard Street, Vancouver, B.C., as part of the Gyprock group of mineral claims.

Regional Geology

Bedrock lithologies underlying Iron Mountain and the grid area have been recognized by W.J. McMillan, B.C. Ministry of Mines, as a series of intermediate to acidic tuffs, flows and breccias with occasional interbedded sediments of volcanic origin. Detailed geological mapping has not been completed over the Two By Four claim.

GEOCHEMICAL SURVEY

Grid

A sample grid was established using 50 meter sample spacing on lines with a separation of 100 meters.

The grid extends from line 73+00N to line 79+00N, a total of 7 lines, with samples collected between 53+00E and 57+00E on lines 73+00N to 76+00N; 53+00E and 58+00E on line 77+00N; and 53+00E and 57+50E on lines 78+00N and 79+00N.

A total of 67 soil samples and 2 silt samples were collected.

The grid area has been extensively logged with intensive local surface soil disruption due to bulldozing, skidding and slash burning. The area is underlain by gravelly soils. Drainage is across the grid in an easterly to northeasterly direction.

Regrowth of vegetation over the area is largely willow, grasses and a variety of shrubs and brambles, to a height of one to three meters.

Bedrock outcropping within the grid is restricted to a confined area in the vicinity of 78+00N, 56+00E - 57+00E where barite with minor amounts of sphalerite and traces of galena can be found.

The grid was established over a topographically recessive area bounding the mineralized outcrops in an attempt to discover any expression of buried mineralization beneath the overburden within the recessive topographic area and to assess the geochemical response of soils in this area over known mineralization.

Sampling and Analysis

All samples were collected from "B" horizon soils or the best mineral soil development available at each sample site. Samples were collected with a stainless steel spoon from holes excavated with a mattock or grub-hoe. Sample depths usually ranged from 20 - 35 centimeters. The samples were transferred to a standard gusseted kraft paper sample bag, then shipped to Vangeochem Labs Ltd. in North Vancouver for analysis of the -80 mesh fraction. Analysis was by commonly used atomic absorption techniques.

During collection, the granularity, moisture content and any other significant features of the soil were noted.

Discussion of Results

Geochemical trends within the grid area are slightly north of east, roughly the trend of the volcanic rock units, and parallel with drainage depressions. As geochemical expressions are not widely variant, the possibility of hydromorphic expression cannot be discounted. The strongest anomalies tend to coincide

with areas of visible mineralization, as one would expect, showing that soil and chemical conditions are indeed conducive to yielding a geochemical expression of underlying lithologies.

Slight displacement of elemental trends and the expression over and adjacent to visible mineralization tends to refute the possibility of the expression being entirely hydromorphic although a moderating influence may be present.

RECOMMENDATIONS

Filling in and extension of the established grid system to cover favourable lithologies is recommended for future geochemical programs in this area. It is recommended that serious consideration be given to closing the sample spacing on each line to 25 or 30 meters as many of the rock units in the vicinity are narrow in width. The closer spacing of samples should yield better definition of any mineralized horizons which may be present.

STATEMENT OF COSTS

For work done on the TWO, BY, FOUR, TWO BY FOUR, TWO BY THREE #2 situated at Iron Mountain in the Nicola Mining Division. Work was done from the 22 day of May 1979 to the 4 day of July 1979.

A. PHYSICAL WORK:

Line cutting and grid establishment 17.8 km
(costs prorated)

Fuel	\$	96.10	
Meals and groceries		223.88	
Motel		207.62	
Truck		291.67	
Saws		360.00	
Labour, W. A. Howell - 22 May, 29 May - 8 June, 3, 4 July			
G. Miller - 1-10 June			
T. Oliver - 1-10 June		1,804.16*	
Misc. equipment - maps, taxis, first aid supplies, flagging, topofil files, etc.		<u>218.94</u>	
		\$3,202.37	\$3,202.37

B. GEOCHEMICAL

Assays (geochemical)		345.75	
prorated costs		555.29	
Report and map preparation		<u>300.00</u>	
		1,201.04	<u>1,201.04</u>
TOTAL EXPENDITURES			<u>\$4,403.41</u>

* Average labour cost = $\frac{1,804.16}{25} = \$72.16$ per man day

David Arscott

David Arscott, P.Eng.


STATEMENT OF QUALIFICATIONS

- 1) I, William A. Howell, reside at 10611 Ainsworth Crescent, Richmond, B.C.

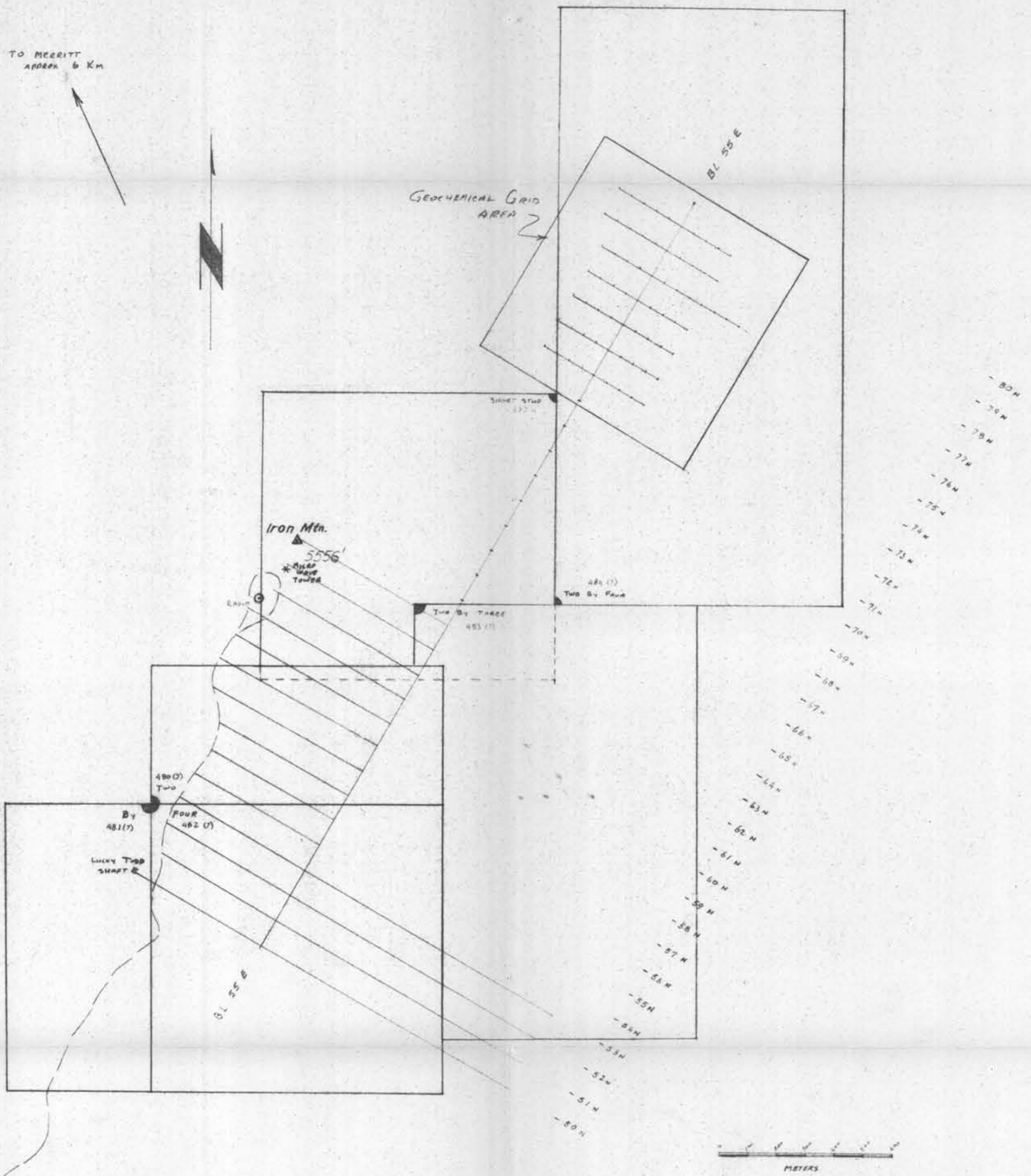
- 2) I am a graduate of the University of British Columbia and have a Bachelor of Science degree in Geology (1971).

- 3) I have been employed in the mineral exploration industry since 1967, continuously since 1971 in a variety of supervisory capacities.

- 4) I have personally supervised the 1979 Geochemical Survey on the Two By Four mineral claim.


W. A. HOWELL

TO MERRITT
APPROX 6 Km



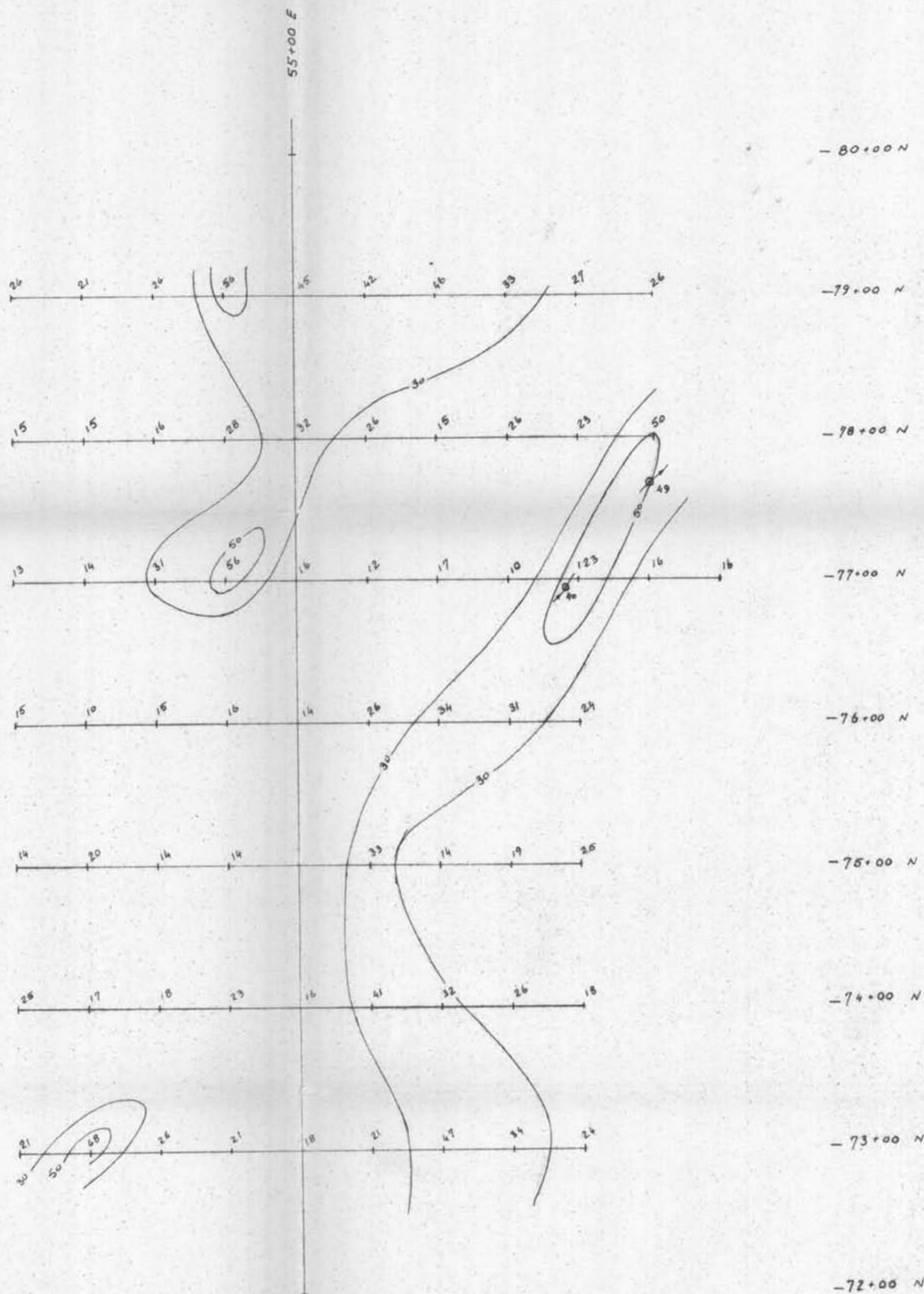
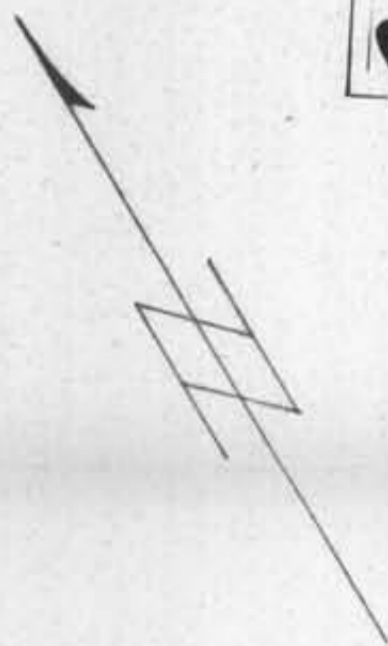
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SKETCH MAP TO ACCOMPANY
STATEMENT OF EXPLORATION
&
DEVELOPMENT
ON THE "GYPROCK" GROUP
NICOLA M.D. NTS 92 I 2

W A Howell July 4 1979

FIG 3

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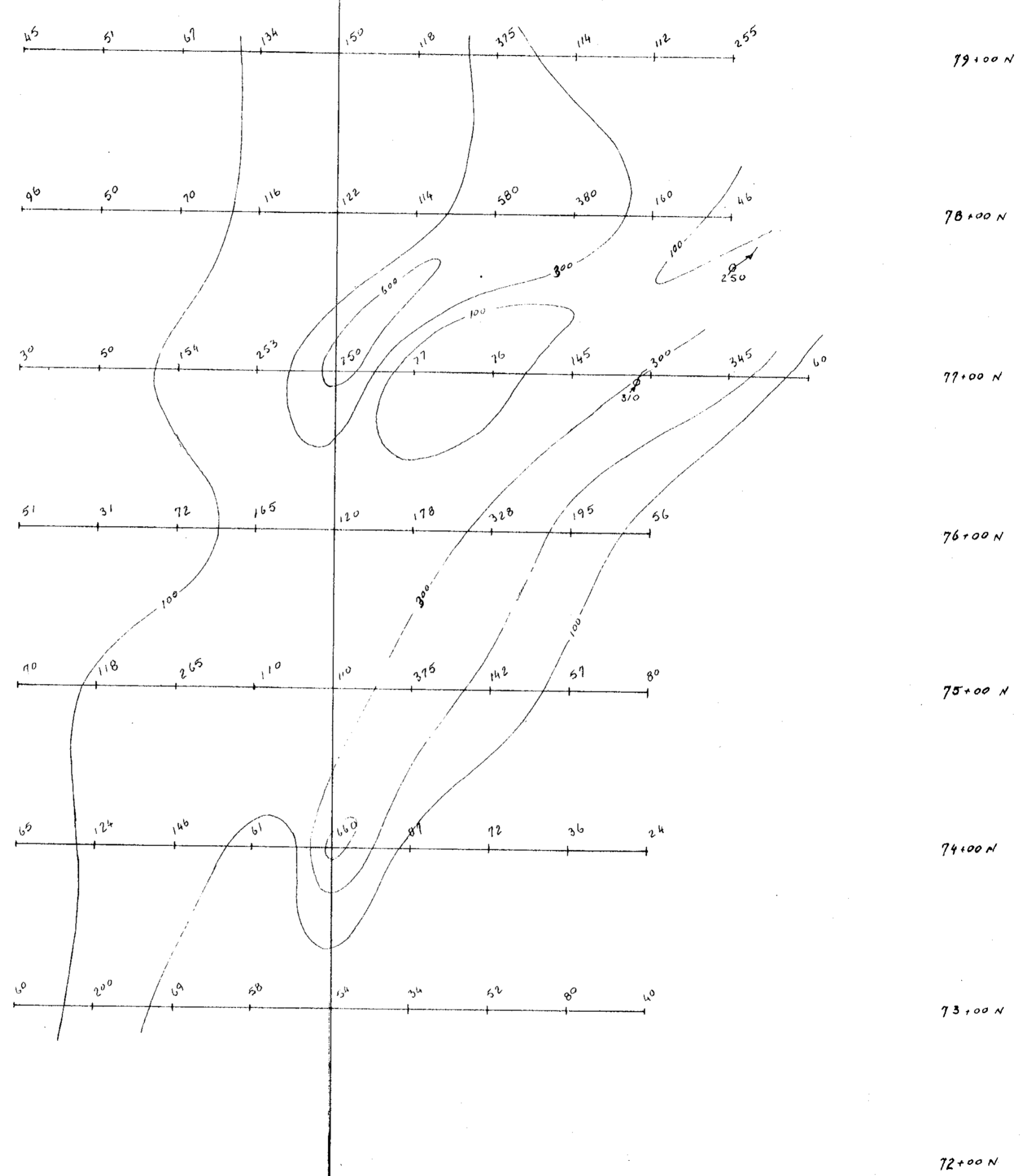
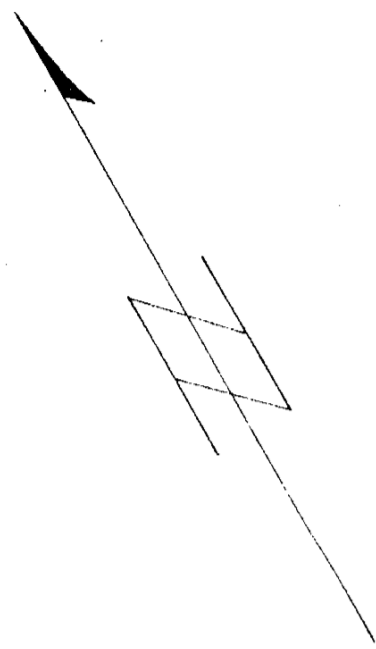


15
 Copper Value in Soil (ppm)

22
 Copper Value in Silt (ppm)

0 50 100 150 200
 METERS

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IRON MOUNTAIN COPPER GEOCHEMICAL VALUES			
FIGURE No. 4	PROJECT No. M 491		
DATE Nov. 14/79	REVISIONS	SCALE 1:25000	
NTS No. 9222		FILE No.	
COMPILED BY W.A.H.			

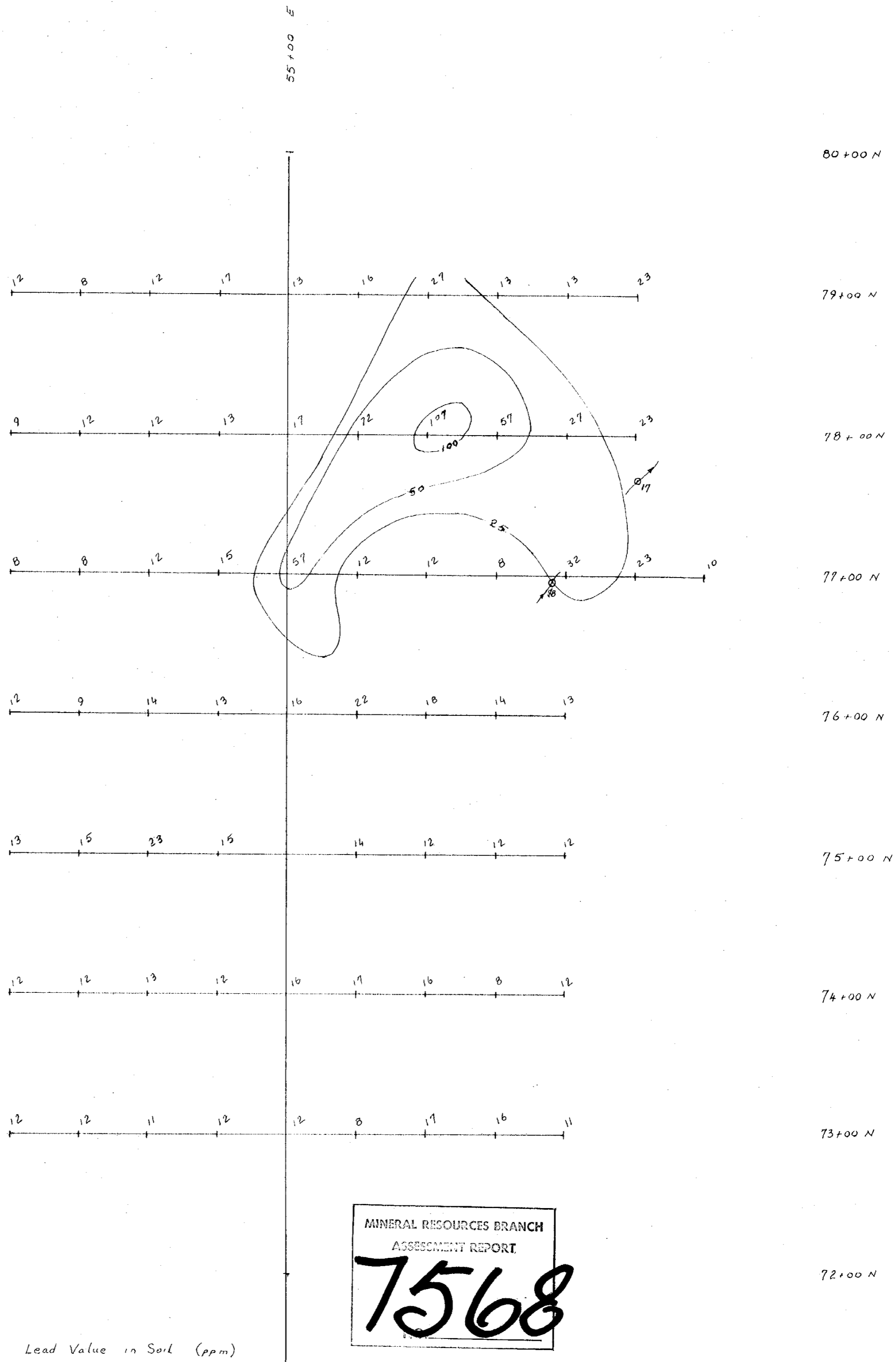
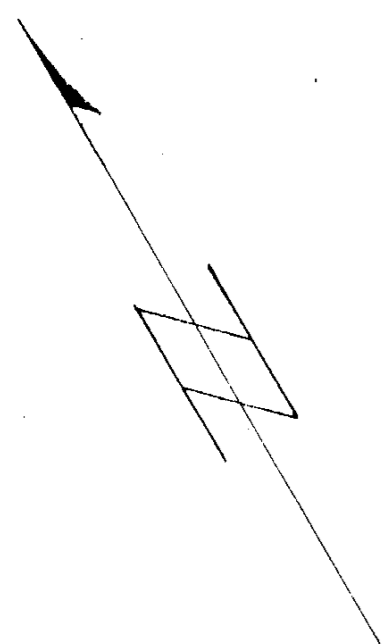


Zinc Value in Soil (ppm)
 Zinc Value in Silt (ppm)

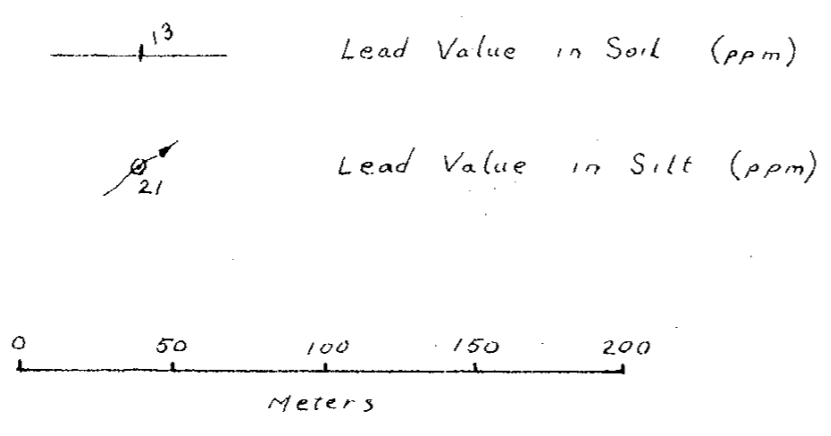


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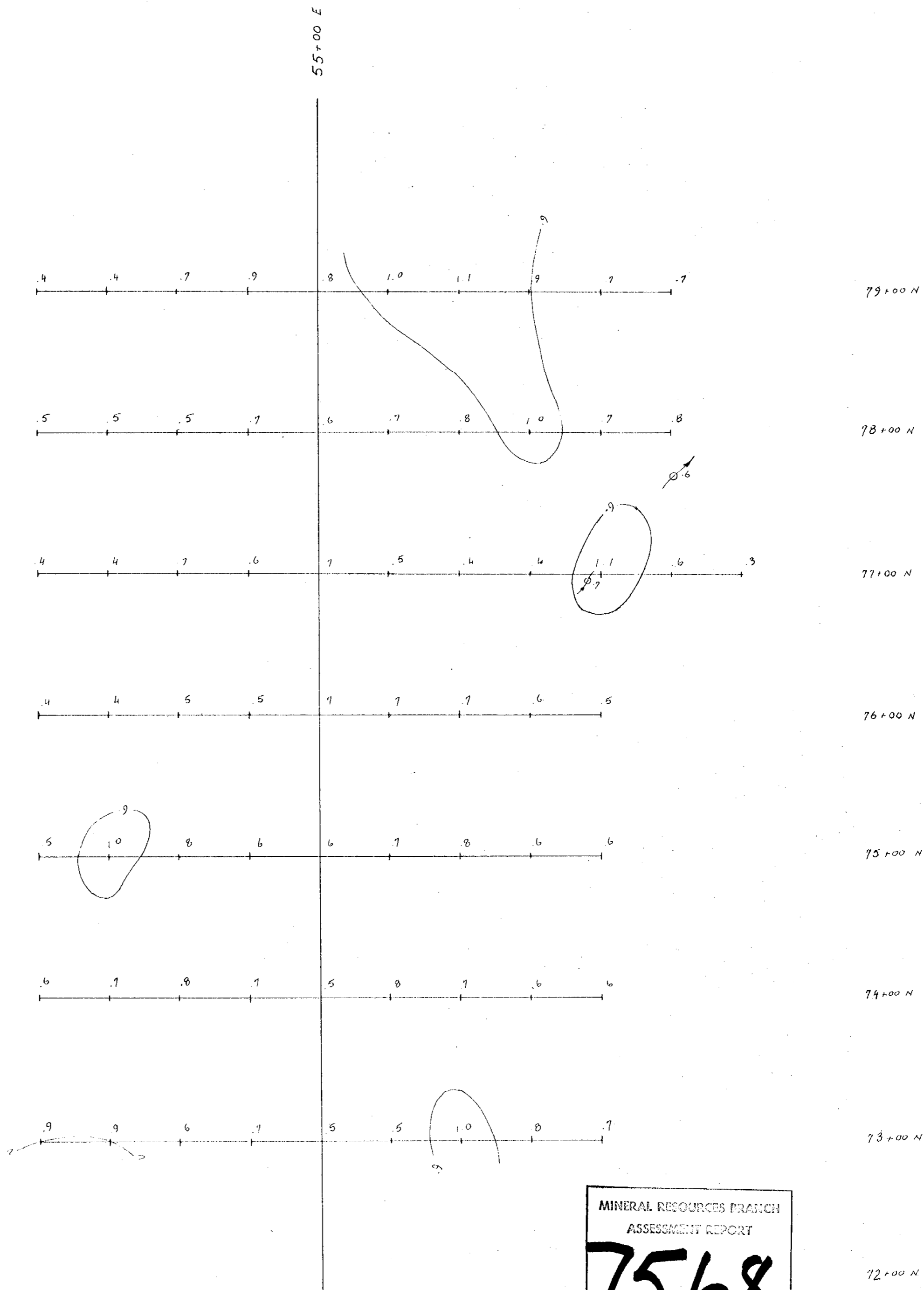
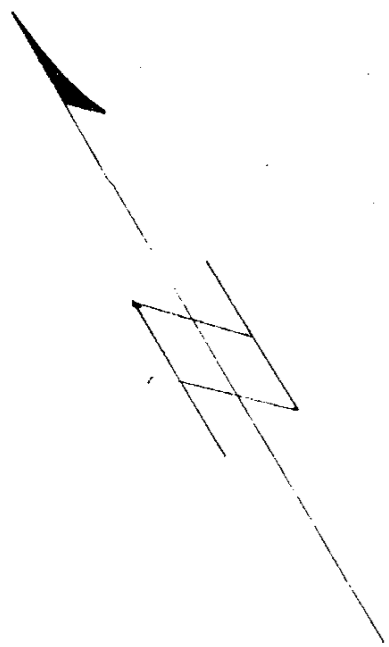
Chevron Standard Limited Minerals Staff			
IRON MOUNTAIN ZINC GEOCHEMICAL VALUES			
FIGURE No. 5	PROJECT No. M 491		
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NTS No. 92 I 2		FILE No.	
COMPILED BY WPH			



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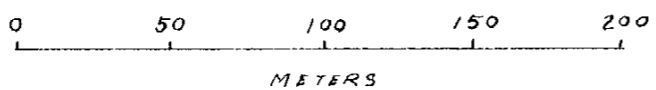
Chevron Standard Limited Minerals Staff			
IRON MOUNTAIN LEAD GEOCHEMICAL VALUES			
FIGURE No. 6		PROJECT No. M 491	
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— .8 — Silver Value in Soil (ppm)

— .7 — Silver Value in Silt (ppm)



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IRON MOUNTAIN SILVER GEOCHEMICAL VALUES			
FIGURE No. 7	PROJECT No. M 491		
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