

4528

R E P O R T

on

GEOCHEMICAL SURVEY OF

PIK, BEN, BX, & DEC Mineral Claims

SIMILKAMEEN M. D.

PRINCETON, B.C.

by

FRED KERN, JR.,
Geologist

210 - 535 Howe
Vancouver, B.C.

29 May, 1973

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 4528 MAP.....

C O N T E N T S

INTRODUCTION	P.1.
PROCEDURES	P.1.
SUMMARY	p.2
RECOMMENDATIONS	P.2.
CERTIFICATE	P.4.
ASSAYS	Appendix I
#1 MAPS (GEOCHEMISTRY)	" II
#2 MAPS BENTONITE SHOWING	" III
#3 Geology	

A crew consisting of geologist and four assistants conducted a gridding and soil sampling program on mineral claims PIK 1-22; BEN 4, 6, 8, 10, 20, 21, 22, 24, 26, 28 29, 30, 35; BX 1-8; DEC 54, 55, in mid-May, 1973. Grid lines were established by locating Claim Post, Initial PIK #15 and using the compass bearing of the claim line as the control. All subsequent lines were laid out by paralleling or turning 90° corners to that bearing. Said bearings are Az 12° and Az 102°. After establishing (and practicing over measured distances) the pace distances of the assistants an acceptable degree of accuracy was established. Pace and compass was used throughout this survey, and a total of 625 samples were taken.

The area covered in the survey is generally of moderate to high relief - some of the lines (to a maximum length of 9,000') went through 1,000' of change of elevation. In such localities soil evolution cannot keep pace with erosion. Consequently, soil analysis may be diagnostic of only a limited area at best. Therefore 200' soil sample stations on a 400' grid spacing may not give complete evaluation of the zone covered.

In addition, soil profiles in this area contain much evidence of forest fires and attendant charcoal and ash contaminates.

Statistically, 8 ppm of copper is the background from this group of samples. Consequently, a factor of 5 times background, or 40 ppm copper, is considered to constitute an anomalous concentration of that element.

One well-shaped anomaly was discovered by this survey, extending across parts of BEN 29, PIK 11 and PIK 9.

RECOMMENDATION

The discovery of an anomalous zone where copper values up to 30 times background were found localizes an area of interest for further evaluation. This zone is in a preferred geological locality, viz., near a contact zone between the Nicola Group, producing formations in the Copper Mountain mine 4 miles to the south. The locality of the highest values is in a valley where the copper has been retained in the soil. Nearby steep slopes of Nicola rocks (with the Princeton (Tertiary) rocks capping the highlands, according to C. E. G. Brown, P. Eng., in his report of 31 May, 1972, are deemed to be the source of this copper. These conditions would account for the low values from the soils derived from the Princeton formations but high values in the valley where the Nicola can give up contained copper for concentration in

the normal processes of erosion and deposition.

It is recommended that geophysics be used to further delineate and to probe for the source of the geochemical anomaly discovered in the work carried out to date on these claims. an IP would perhaps be most dependable for this type of exploratory probing,; however, with the terrain, as well as expected thickness of the Princeton beds, to be encountered here, I recommend a preliminary EM survey with a portable instrument, such as the RONKA, be carried out in the next stage of the development. The anomaly discovered on the PIK claims is certainly worthy of further investigation and the use of geophysical methods to further understand its size and shape is recommended.

Work in progress from May 8th to 29th, 1973.

16 man days at \$30.00	\$480.00
22 man days at \$50.00	\$ 1,100.00
	<u>\$ 1,580.00</u>

C E R T I F I C A T E

This is to certify:

1. That I am a consulting geologist, with offices at 210 - 535 Howe Street, Vancouver, B. C.
2. That I am a graduate of the University of Illinois with the degree of B. Sc. (Geology)
3. That I have practiced my profession for more than 20 years, working for major and minor petroleum and mining companies on three continents.
4. That the work covered in this report was carried out by me or under my direct supervision by competent workers.
5. That I have no interest, direct or indirect, in the subject property, nor in the securities of Benpel Industries, Ltd.


.....
Fred Kern, Jr.

210 - 5335 Howe Street
Vancouver 1, B. C.
29 May, 1973



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SAMPLE(S) FROM: **BENPEL INDUSTRIES LTD.**
200 - 535 Howe St.
Vancouver 1, B.C.

SAMPLE NO.	Cu ppm	Sample No.	Cu ppm
ON OW	12	60	6
2	9	62	3
4	13	64	6
6	8	66	8
8	10	68	6
10	7	70	6
12	8	72	8
14	8	74 W	10
16	15	4N OW	15
18	18	2	26
20	5	4	24
22	19	6	5
24	7	8	9
26	24	10	6
28	11	12	16
30	6	14	12
32	11	16	29
34	13	18	16
36	5	20	7
38	8	22	7
40	11	24	18
42	11	26	16
44	24	28	14
46	14	30	23
48	8	32	19
50	4	34	18
52	8	36	9
54	3	38	6
56	11	40	6
58	3	42	3

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SAMPLE NO.	Cu ppm	Sample No.	Cu ppm
44	3	18	5
46	9	20	13
48	4	22	5
50	9	24	25
52	8	26	38
54	9	28	20
56	3	30	21
58	1	32	15
60	3	34	6
62	4	36	10
64	5	38	19
66	23	40	8
68	13	42	7
70	7	44	11
72	12	46	7
74	9	48	13
76	6	50	10
78	13	52	9
80	9	54	8
82	15	56W (A)	4
84	15	56W (B)	2
8N OW	8	60	8
2	12	62	9
4	15	64	7
6	6	66	7
8	6	68W (A)	7
10	9	68	3
12	6	72	4
14	6	74	7
16	4	76	8

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SAMPLE NO.	Cu ppm	Sample No.	Cu ppm
8N 78W	6	6	6
80	7	8	11
82	10	10	14
84	30	12	8
12N OW	6	14	4
2	1	16	8
4	2	18	26
6	3	20	6
8	2	22	14
10	5	24	6
12	4	26	10
14	3	28	6
16	2	30	13
18	4	32	23
20	4	34	14
22	2	36	5
24	7	38	7
26	4	40	6
28	1	42	5
30	12	44	4
32	16	46	8
34	20	48	4
36	14	50	5
38	4	52	4
40	7	54	6
42	3	56	12
44	2	58	4
15N OW	3	60	8
2	6	62	10
4	6	64	5

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SAMPLE(S) FROM: **BENPEL INDUSTRIES LTD. (PAGE FOUR)**

SAMPLE NO.	Cu ppm	Sample No.	Cu ppm
15N 66W	4	17	9
68	4	18	40
70	9	19	8
72	7	20*	12
74	19	21	18
76	10	22	13
78	14	23	9
80	21	24	9
82	20	25	17
84	16	26	15
86	12	XN 26	12
88	12	27	7
90	54	28	13
XN OW	7	29	30
1	4	30	11
2	4	31	26
3	5	32	25
4	16	33	9
5	4	34	8
6	3	35	10
7	6	36	10
8	7	37	8
9	6	38	14
10	9	39	28
11	7	40	46
12	9	YN OW	5
13	8	2	7
14	8	3	7
15	24	4	11
16	8	5	4

*X line of M. Oliver

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SAMPLE(S) FROM: **BENPEL INDUSTRIES LTD. (PAGE FIVE)**

SAMPLE NO.	Cu ppm	Sample No.	Cu ppm
YN 6W	6	36	8
7	4	37	13
8	4	38	8
9	6	39	12
10	35	40	12
11	13	41	8
12	15	42	6
13	9	43 OW	6
14	9	2	6
15	9	4	6
16	12	6	33
17	8	8	8
18	7	10	33
19	8	12	21
20	9	14	12
21	6	16	8
22	5	18	6
23	15	20	12
24	20	22	15
25	5	24	5
26	10	26	12
27	5	28	7
28	7	30	8
29	4	32	22
30	12	34	30
31	9	36	13
32	10	38	5
33	7	40	13
34	17	42 A	10
35	6	42 B	10

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SAMPLE(S) FROM: BENPEL INDUSTRIES LTD. (PAGE SIX)

SAMPLE NO.	Cu ppm	Sample No.	Cu ppm
45 44W A	5	24	10
44 B	5	26	10
46 A	9	28	6
46 B	9	30	18
48 A	20	32	17
48 B	5	34	22
50 A	10	36	22
50 B	3	38	28
52	7	40	9
54	5	52	8
56	8	54	8
58	10	56	5
60	7	58	8
62	4	60	8
64	5	62	9
66	7	64	10
68	8	66	10
70	4	68	6
72	11	70	13
74	11	72	10
85 4W	10	74	13
6	13	B X 1	56
8	10	2	34
10	18	3	50
12	150	4	48
14	40	5	47
16	16	6	54
18	16	7	48
20	18	8	35
22	24	9	30

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SAMPLE(S) FROM: **BENPEL INDUSTRIES LTD. (PAGE SEVEN)**

SAMPLE NO.	Cu ppm	Sample No.	Cu ppm
B X 10	40	9-2	43
11	27	4W 16N	10
12	58	18	13
13	70	20	no sample
14	18	22	29
15	15	24	33
16	15	26	14
17	65	28	85
18	27	30	200
19	>500	32 meadow	165
20	42	34 meadow	20
21	205	36 meadow	185
22	42	38 meadow	255
23	50	40	234
24	30	42	207
25	86	44 meadow	33
26	30	46 meadow	26
27	41	48	24
28	50	50	19
29	48	52	15
30	32	54	18
Dec.55 L-1-S-3	23	56	10
S-4	20	58	49
5	35	60	26
6	20	62	12
7	21	64	11
8	12	66	10
9	30	68	9
10	18	70	9
Dec.55 L-11-S-1	53	72	8

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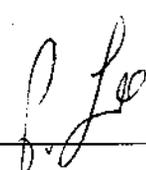
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SAMPLE(S) FROM: BENPEL INDUSTRIES LTD. (PAGE EIGHT)

SAMPLE NO.	Cu ppm	Sample No.	Cu ppm
4W 74N	10	18	7
76	14	20	9
78	8	22	16
80	28	24	19
82	17	26	32
84	22	28	9
86	23	30	16
88	24	32	12
8W 40N	14	34	10
42	12	36	38
44	8	38	42
46	20	40	56
48	15	42	55
50	27	44	59
52	18	46	57
54	10	48	33
56	10	50	30
58	14	52	28
60	22	54	31
62	25	56	23
64	13	58	22
66	8	60	22
68	8	62	18
70	8	64	9
72	8	66	4
74	7	68	8
76	8	70	6
78	14	74	4
80	10	76	6
12W 16N	10	78	10

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SAMPLE(S) FROM: **BENPEL INDUSTRIES LTD. (PAGE NINE)**

SAMPLE NO.	Cu ppm	Sample No.	Cu ppm
12W 80N	6	52	14
82	5	54	30
84	5	56	16
86	7	58	18
88	6	60	16
90	7	62	14
92	4	64	5
94	8	66	8
96	7	68	5
98	10	70	7
100	9	72	4
72	8	74	4
16W 16N	10	76	6
18	12	78	7
20	12	80	4
22	16	20W 16N rock	no sample
24	9	18 rock	no sample
26	32	20 rock	no sample
28	46	22	20
30	9	24	78
32	50	26	45
34	12	28 rock	no sample
36	no sample	30 rock	no sample
38	no sample	36	5
40	no sample	38	8
42	8	40	16
44	13	42	9
46	10	44	14
48	21	46	10
50	6	48	10

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SAMPLE(S) FROM: **BENPEL INDUSTRIES LTD. (PAGE TEN)**

SAMPLE NO.	Cu ppm	Sample No.	Cu ppm
20W 50N	8	40	8
52	8	42	6
54	12	44	4
56	12	46 rocks	no sample
58	6	48 rocks	no sample
60	5	50 rocks	no sample
62	4	52 rocks	no sample
64	7	54	12
66	3	56 rocks	no sample
68	5	58	20
70	7	60	4
72	8	62	4
74	2	64	5
76	6	66	4
78	5	68	5
80	6	70	3
22 W 34 N	16	72	4
23 W 32 N	7	74	2
24 W 16 N	36	76	4
18 rocks	no sample	78	4
20	46	80	4
22	30	28W 18N	28
24	20	20	23
26	1	22	7
28	1	24	10
30	26	26	18
32	15	28	16
34	8	30	16
36	8	32	8
38	10	34	8

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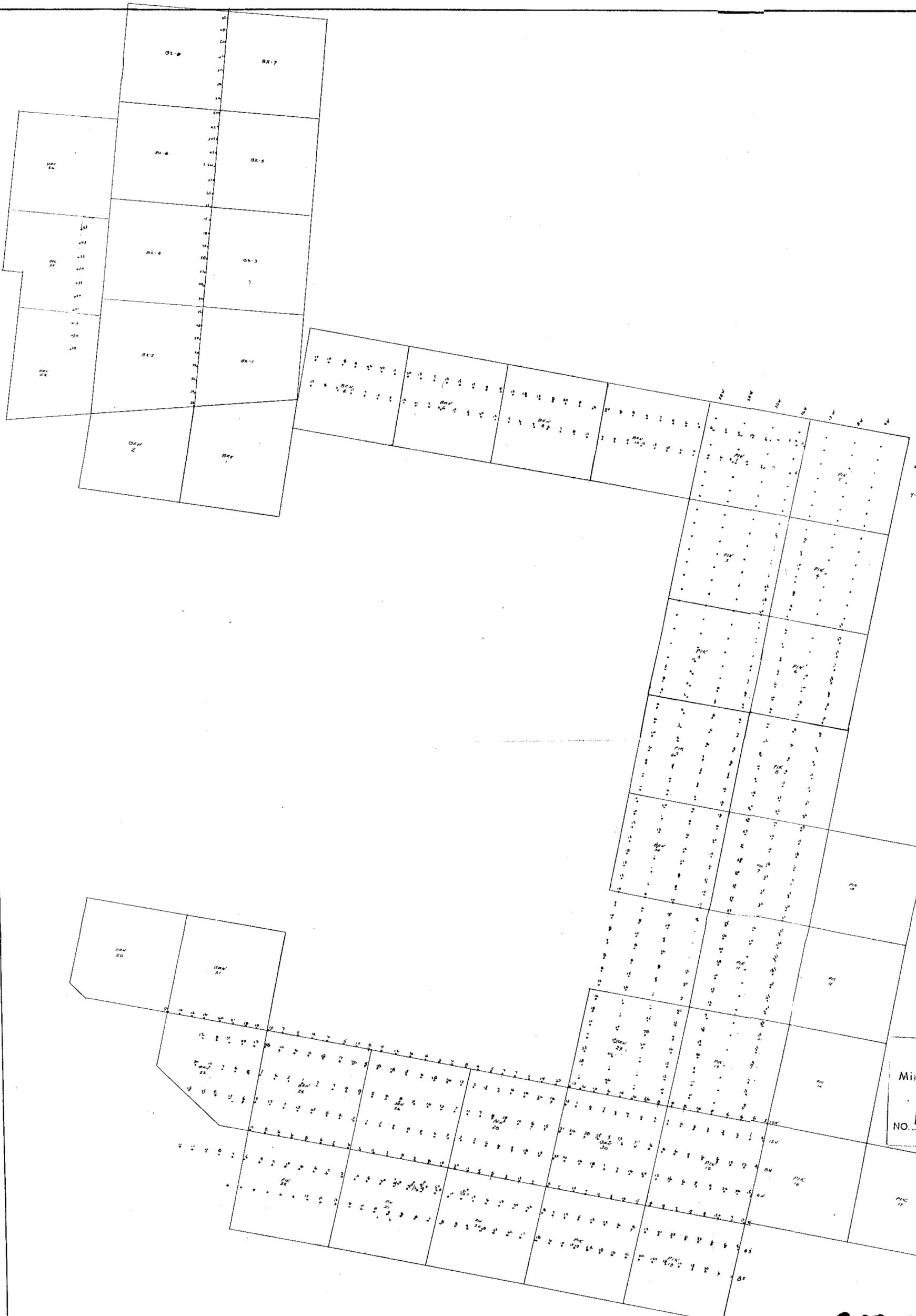
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SAMPLE(S) FROM: **BENPEL INDUSTRIES LTD. (PAGE ELEVEN)**

SAMPLE NO.	Cu ppm	Sample No.	Cu ppm
28N 36N	9	60	5
38	8	62	13
40	10	64	7
42	9	66	10
44	10	68	4
46	12	70	3
48	13	72	7
50	18	74	18
52	12	76	31
54	13	78	26
56	10	80	13
58 rocks	no sample	82	8
60 rocks	no sample	84	12
62 rocks	no sample		
64	5		
66	6		
68	10		
70	6		
72	4		
74	9		
76	8		
78	5		
80	6		
12N 46W	12		
48	17		
50	20		
52	5		
54	13		
56	8		
58	12		

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Department of
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 NO. 4528 MAP #1

BENPEL INDUSTRIES, LTD.
 BY PIK, BEN, DEC, CLAIMS
 SIMLIKAMEEN M.D.
 BRITISH COLUMBIA
 scale: 400'
 2" Cu 11"

4528-M1 J. K. ... 8/20/73

4258-W2

To PRINCETON
6 miles

ABANDONED

RAILROAD

LAKE

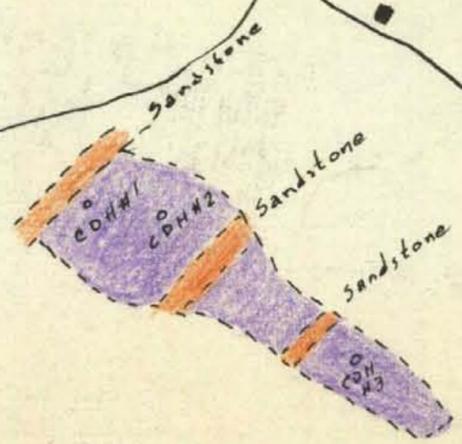
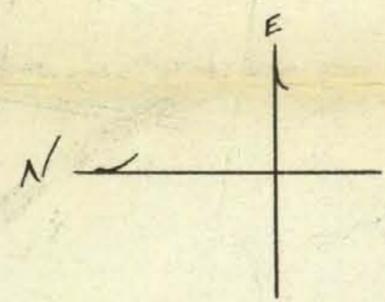
Surrey Post

DEC 56

DEC 55

DEC 54

LOT 3959



BENPEL INDUSTRIES LTD.
BENTONITE SHOWINGS

SIMILKAMEEN M.D.
PRINCETON B.C.
Scale 1" : 200'

Department of Mines and Petroleum Resources	
ASSESSMENT REPORT	
NO. 4528	MAP #2

FRED KERN JR.
Geologist

May, 1973

4.
5/30/73

SIMILKAMEEN R.

511-8527

4528-M2



-  PRINCETON-LAVA, SS.
-  LOST HORSE- SYENITE
-  NICOLA- IGNEOUS - META-SEDS.

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ASSESSMENT REPORT
NO. 4528 MAP #3

BENPEL INDUSTRIES, LTD.
BX, PIK, BEN, DEC. CLAIMS
SIMILIKAMEEN M.D.
BRITISH COLUMBIA
scale: 400'
C. C. P. R.

SMELTER LAKE EM-8524 4528-M3