

4421-

PART 2  
(OF 2)

GEOCHEMICAL REPORT

ON

HI GROUP MINERAL CLAIMS

HEDLEY AREA

OSOYOOS MINING DIVISION

BY

A.W. Dean, P.Eng.

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT

NO. 4421 MAP \_\_\_\_\_  
Part B

CLAIMS: HI 1 to 40 inclusive

LOCATION: 8 miles northwest of Hedley, B.C.  
49° 128° S.E.  
N.T.S.: 92-H-8E

OWNER: John M. McAndrew

WORK BY: Ducanex Resources Limited

DATES: June 2 to June 5, 1973  
June 12 and 13, 1973  
June 26 to June 28, 1973

Vancouver, B.C.

June 28, 1973.

T A B L E   O F   C O N T E N T S

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MAPS

#1B FIG. 1	HI GROUP LOCATION MAP	following Page 1
#2B FIG. 2	HI CLAIM GROUP 1" = 800'	Pocket
#3B FIG. 3	Cu VALUES IN P.P.M. 1" = 200'	Pocket
#4B FIG. 4	Mo VALUES IN P.P.M. 1" = 200'	Pocket

GRAPHS

FIG. 3a - following Page 3

FIG. 4a - following Page 3

## INTRODUCTION

A soil geochemical survey was completed in two stages on a portion of the H1 Group claims from June 2 to June 5, and June 12 and 13, 1973. The survey was undertaken in an overburden covered area to test for possible copper and molybdenum anomalous conditions overlying two high IP chargeability anomalies previously outlined by Anaconda American Brass Limited in 1968. (Assessment Report No. 1617) The sampling and field survey was conducted by D. Johnson, geologist and K. Allen, assistant, under the general supervision of A.W. Dean, P.Eng. The data gathered and the results of the survey are discussed in the body of this report.

## LOCATION AND ACCESS (Fig. 1)

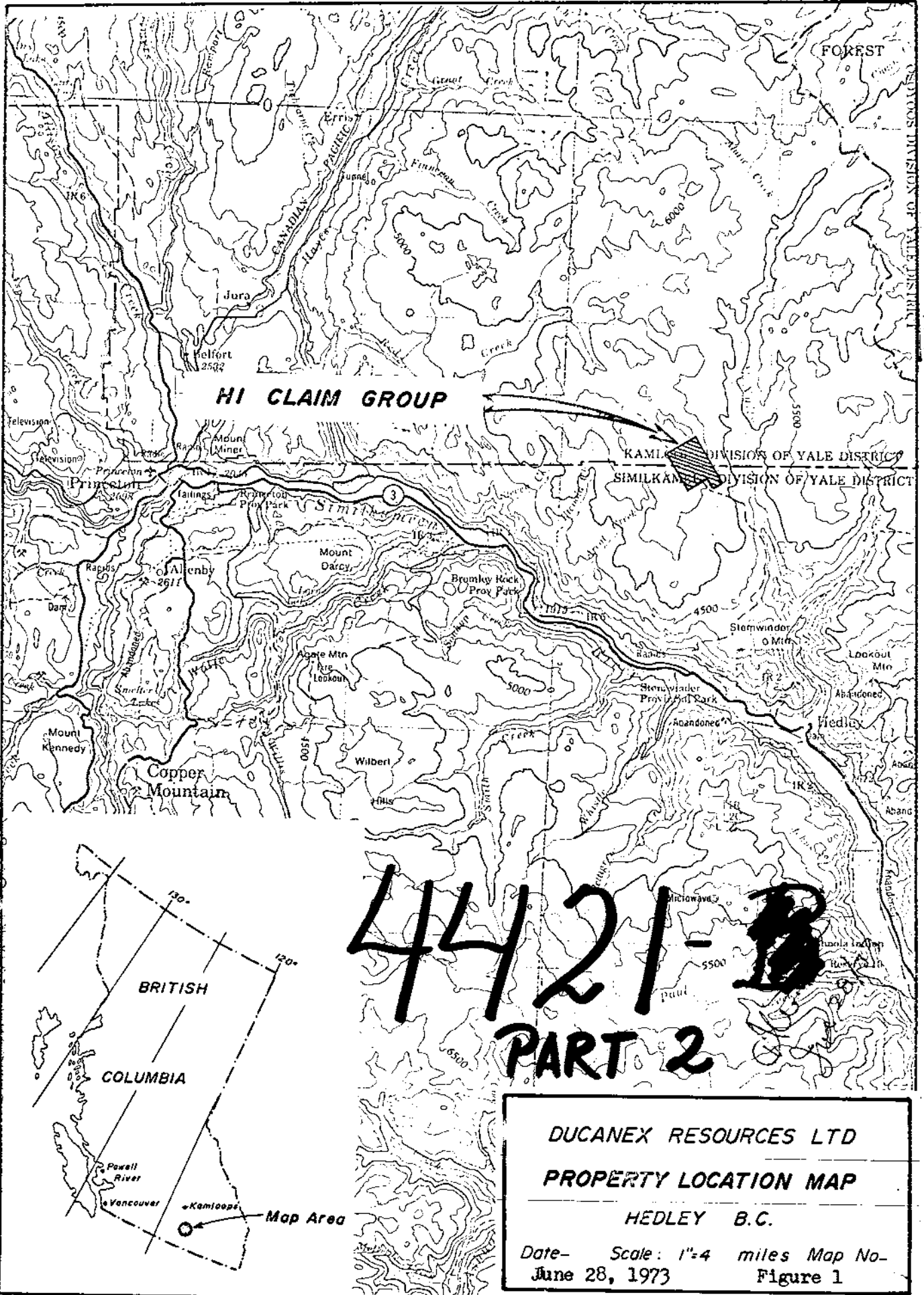
The centre of the H1 claims is located three miles west of McNulty Creek, some eight miles northwest of Hedley, B.C. The south end of the group can be easily reached by a forestry fire access road that leaves Highway No. 3 two miles west of Hedley.

## CLAIMS

The H1 Group consists of a total of forty full-size, contiguous claims that were staked by the present owner, J.M. McAndrew in 1972. These claims cover the north-east portion of the J.M. claim group once held by Anaconda American Brass Limited until March 9, 1971.

Claim names, record numbers and recorded dates are listed below:

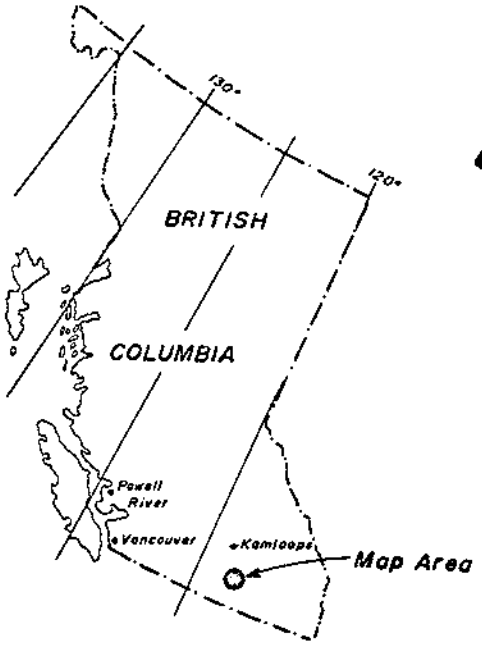
<u>Claim Name</u>	<u>Record Number</u>	<u>Record Date</u>
H1 No. 1 to H1 No. 40 inclusive	29323 - 29362 inclusive	July 7, 1972



**HI CLAIM GROUP**

KAMLOOPE DIVISION OF YALE DISTRICT  
SIMILKANEN DIVISION OF YALE DISTRICT

**4421-18**  
**PART 2**



**DUCANEX RESOURCES LTD**  
**PROPERTY LOCATION MAP**  
**HEDLEY B.C.**  
Date- June 28, 1973      Scale: 1"=4 miles      Map No- Figure 1

Full interest in the above claims is held by J.M. McAndrew of Surrey, British Columbia.

#### GEOLOGY

Government geological map No. 888A by H.M.A. Rice shows the Hi Group overlies a roof pendant of Triassic volcanic rocks (Nicola Group) within the Similkameen batholith (Coast Intrusions).

Outcrop within the survey area is scarce. Small outcrops of fine-grained andesite containing minor amounts of disseminated and fine line stringers of pyrite and magnetite were observed at stations 118 E - 184 N and 129 E - 200 N. Also feldspar porphyry although not observed in outcrop is known to exist in the vicinity of station 130 E - 196 N where it was encountered in a packsack drill hole completed in 1970.

#### GEOCHEMICAL SURVEY

Picket lines spaced eight hundred feet apart previously established by Anaconda in 1968 (lines 200 N, 192 N and 184N) were re-used for the survey. Additional chain and compass lines were made to establish an overall grid with lines spaced four hundred feet apart. The layout of grid lines relative to claim boundaries is shown in Fig. 2.

Soil samples were collected along grid lines at one hundred foot intervals from the B horizon at depths varying from six to twelve inches. A total of 268 samples were collected, placed in standard size heavy duty paper envelopes and shipped to Bondar-Clegg and Company Limited, North Vancouver, British Columbia, for analysis.

#### LABORATORY PROCEDURE

Samples received by Bondar-Clegg were dried in infra-red

dryers and sieved to -80 mesh. A .5 gram sample of the -80 mesh fraction was digested in LeFort aqua regia for three hours, bulked to 20% acid concentration and homogenized. After allowing one hour settling time, the samples were then analyzed by atomic absorption for copper and molybdenum in constant comparison with both synthetic and matrix standards. A permanent printout chart is retained for cross check purposes.

#### DISCUSSION OF RESULTS

- 1) Copper geochem results have been plotted and contoured as shown in Fig. 3. The values range from 4 to 175 p.p.m. and have been divided into three categories, derived from a cumulative frequency curve (3a) as follows:

4 - 45 p.p.m. Cu - background

45 - 60 p.p.m. Cu - threshold

60+ p.p.m. Cu - anomalous

An anomaly approximately two hundred feet wide and seven hundred feet long centred at 117 E.- 196 N. lies on the east fringe of an IP anomaly outlined by Anaconda in 1968.

Threshold and weakly anomalous values centred at 107 E. - 198 N. and 130 E. - 196 N. lie coincident with portions of the IP anomalies outlined by Anaconda.

- 2) Molybdenum geochem results have been plotted as shown in Fig. 4. Values range from non-detected to 29 p.p.m. The values, based on a cumulative frequency curve (Fig. 4a) have been divided into three categories as follows:

N.C. - 4 p.p.m. Mo - background

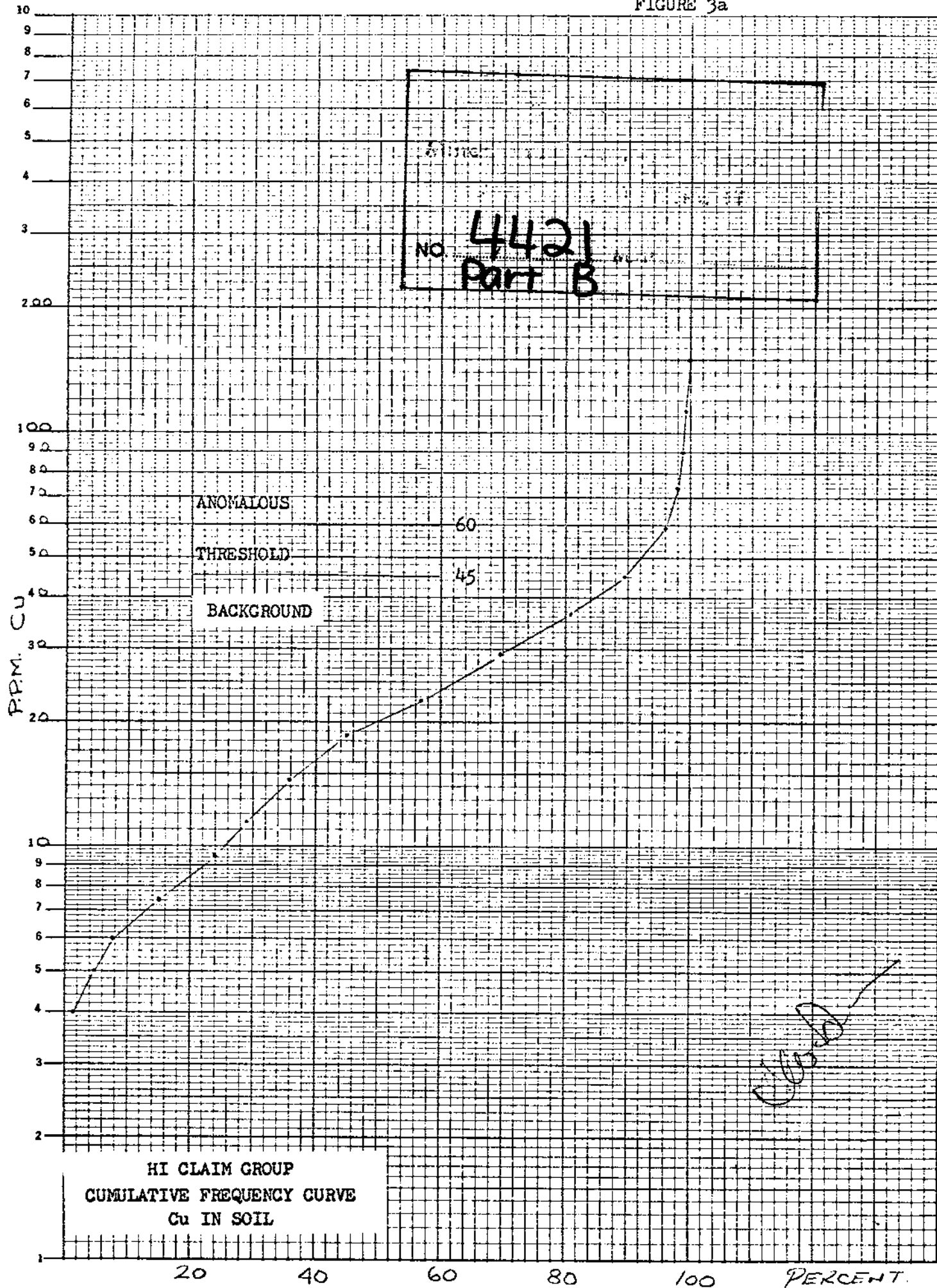
4 - 6 p.p.m. Mo - threshold

6+ p.p.m. Mo - anomalous

FIGURE 3a

GRAPHIC CONTROLS CANADA LTD.  
MADE IN CANADA

71 SEMI-LOGARITHMIC, 3 CYCLES X 10 TO THE INCH



CUSA

GRAPHIC CONTROLS CANADA LTD.  
MADE IN CANADA

61 SEMI-LOGARITHMIC, 2 CYCLES X 70 TO THE INCH  
SPECIFY TRACING OR DRAWING PAPER

PPM MO

10  
9  
8  
7  
6  
5  
4  
3.0  
2.0  
1.0  
9  
8  
7  
6  
5  
4  
3  
2  
1

Mines and Metallurgical Services  
ASSESSMENT REPORT  
NO. 4421 M.A.P.  
Part B

ANOMALOUS

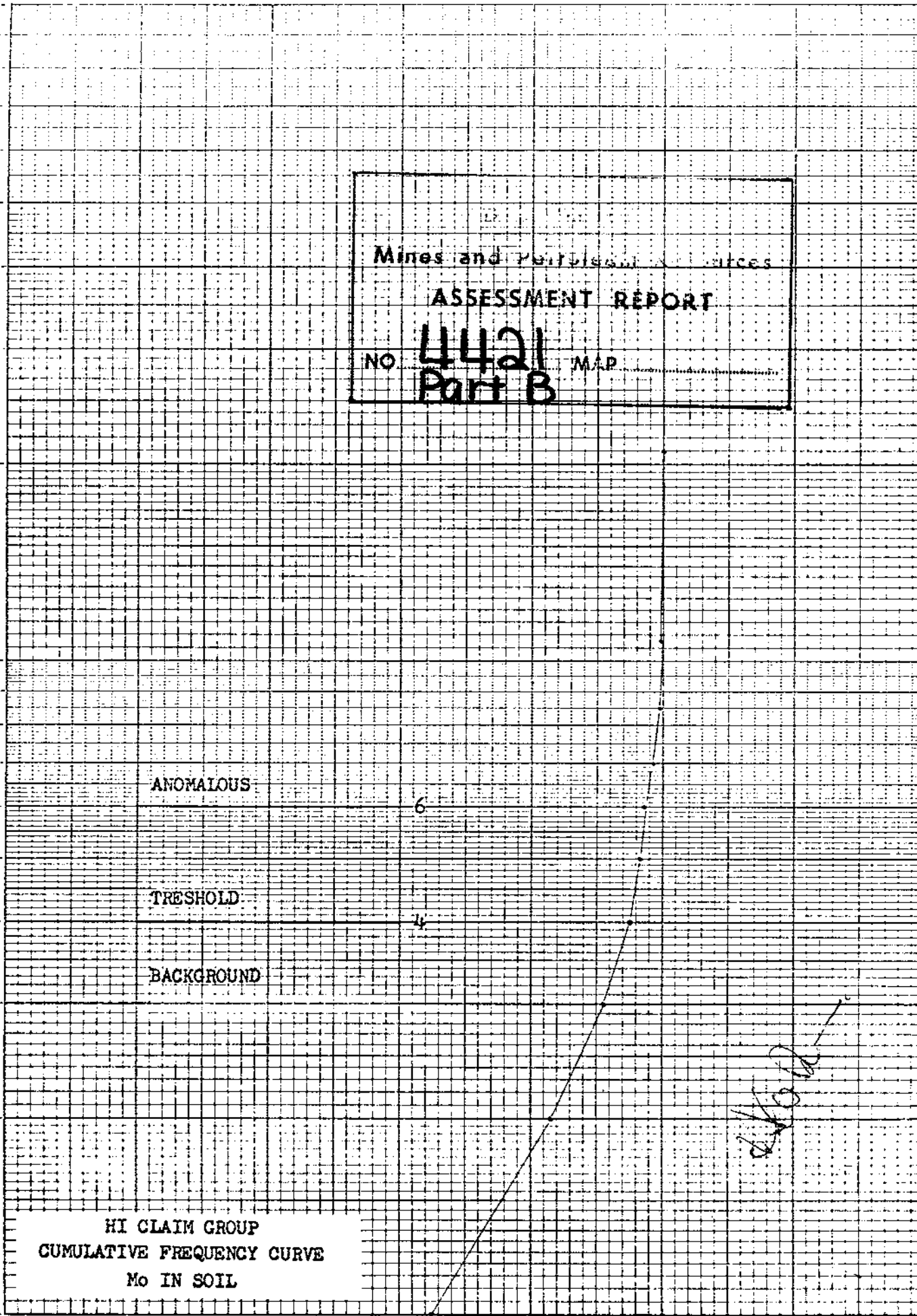
TRESHOLD

BACKGROUND

HI CLAIM GROUP  
CUMULATIVE FREQUENCY CURVE  
Mo IN SOIL

20 40 60 80 100 PERCENT

*Handwritten signature*





Only a few sporadic molybdenum anomalous values were detected in the survey area. Of a total of nine values considered anomalous, six are coincident with the more western IP anomaly outlined by Anaconda in 1968.

A handwritten signature in cursive script, appearing to read "A.W. Dean", written over a horizontal line.

A.W. Dean

Vancouver, B.C.

June 28, 1973

APPENDIX A

STATEMENT OF COSTS

The following cost statement is for work carried out by three Ducanex Resources Limited personnel on the Hi Group property belonging to J.M. McAndrew between June 2 and June 27, 1973.

The work consisted of the re-establishing and layout of compass and chain lines and a geochemical survey during which 268 samples were collected. Additional time was spent in Vancouver with report preparation by A.W. Dean and drafting by Global Drafting Services.

COSTS

Geological Engineer 1 day @ \$50.00/day	= \$	50.00	
Geologist 6 days @ \$34.60/day	=	208.00	
Assistant 6 days @ \$18.30/day	=	110.00	
Room and board, \$8/man day, 13 man days	=	104.00	
Geochem analysis by Bondar-Clegg (268 samples @ \$1.70 each)	=	455.60	
Transportation (Jeep rental 6 days @ \$17.20/ day, plus fuel \$20.00)	=	123.00	
Report and map preparation: 1 geological engineer 2 days @ \$50.00/day	=	100.00	
Drafting: Global Drafting Services	=	70.00	
			<u>\$1220.60</u>

Declared before me at the City of Vancouver, in the Province of British Columbia, this 29th day of June 1973, A.D.

*H. Phillips*  
A Commissioner, Notary Public, within British Columbia  
A Notary Public in and for the Province of British Columbia

SUB-MINING CORPORATION

C E R T I F I C A T E

I, A.W. Dean, of the City of Burnaby, in the Province of British Columbia, hereby certify as follows:

1. That I am a Registered Professional Engineer of the Province of British Columbia and reside at 5 North Springer Avenue, Burnaby 2, British Columbia.
2. That I am a graduate of Michigan Technological University with a Bachelor of Science in Geological Engineering, having practised my profession since 1958.
3. That I have no interest either directly or indirectly in the claims known as the Hi Group nor do I expect to receive any.



A.W. Dean, P.Eng.

Vancouver, B.C.  
June 28, 1973



**BONDAR-CLEGG & COMPANY LTD.**

1500 PEMBERTON AVENUE, NORTH VANCOUVER, B.C.  
PHONE 988-5315

**GEOCHEMICAL LAB REPORT**

No. 23 - 222

Extraction Hot Aqua Regia

From Ducanex Resources Ltd.

Method Atomic Absorption

Date June 22, 1973

Fraction Used

Analyst K. B.

SAMPLE NO.	Cu ppm	Mo ppm						REMARKS
HI 184N 119E	38	4						
120	80	3						
121	26	2						
HI 184N 122E	16	1						ND denotes 'not detected'
HI 184N 124E	20	5						cc Mr. D. Johnson
125	14	1						
126	12	1						
127	18	1						
128	16	1						
129	18	ND						
130	42	1						
131	20	ND						
132	26	1						
133	34	1						
134	24	1						
135	35	1						
136	38	1						
137	46	1						
138	31	2						
139	28	2						
HI 184N 140E	52	2						
HI 188N 119E	26	4						
120	45	5						
122	24	2						
125	12	1						
126	14	ND						
127	12	1						
128	12	ND						
129	12	1						
130	14	ND						

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PART 2

RECEIVED  
JUN 27 1973  
A.W.D.

# BONDAR-CLEGG & COMPANY LTD.

## Geochemical Lab Report

Report No. 23 - 222

Page No. 2

SAMPLE NO.	Cu ppm	Mo ppm			SAMPLE NO.	Cu ppm	Mo ppm		
HI 188N 131E	21	ND			HI 196N 119E	37	2		
132	25	ND			120	25	1		
133	36	1			121	26	2		
134	60	2			122	26	1		
135	50	2			123	30	2		
136	34	1			HI 196N 124E	32	2		
137	28	1			HI 200N 115E	48	2		
138	37	1			116	38	2		
139	24	1			117	128	3		
HI 188N 140E	32	1			118	56	2		
HI 192N 130E	25	1			119	52	2		
131	44	1			120	33	1		
132	46	3			121	21	1		
133	50	2			122	24	2		
134	60	2			123	24	2		
135	33	2			HI 200N 124E	35	1		
136	34	3			HI 204N 116E	24	1		
137	22	2			117	23	1		
138	22	1			118	16	ND		
139	18	2			119	19	1		
117E	50	9			120	25	1		
118	30	1			121	25	ND		
119	29	ND			122	27	2		
120	17	3			123	34	1		
121	29	3			HI 204N 124E	26	1		
122E	20	3							
124E	30	1							
125	12	2							
126	18	1							
127	28	1							
HI 192N 128E	20	1							
HI 196N 115E	175	13							
116	98	4							
117	98	4							
118	60	3							

RECEIVED

MAR 27 1973

A.W.D.

## BONDAR-CLEGG &amp; COMPANY LTD.

1500 PEMBERTON AVENUE, NORTH VANCOUVER, B.C.  
PHONE 988-5315

## GEOCHEMICAL LAB REPORT

No. 23 - 177

Extraction Hot Aqua Regia

From Ducanex Resources Ltd.

Method Atomic Absorption

Date June 13, 1973

Fraction Used -80 mesh

Analyst K. B.

SAMPLE NO.	Cu ppm	Mo ppm					REMARKS
HI 180N - 105E	19	2					
106E	9	1					
107E	12	ND					
108E	6	ND					
109E	17	ND					
110E	8	ND					
111E	8	ND					
112E	5	ND					
113E	7	ND					
114E	8	ND					
115E	6	ND					
116E	7	ND					
117E	6	ND					
118E	10	1					
119E	14	1					
HI 180N - 120E	22	2					
HI 184N - 101E	5	ND					
102E	6	ND					
103E	13	1					
104E	16	ND					
105E	5	ND					
106E	4	ND					
107E	8	ND					
108E	8	ND					
109E	11	ND					
110E	9	ND					
111E	13	ND					
112E	9	1					
113E	10	1					
HI 184N - 114E	10	1					

4421-~~3~~  
PART 2

# BONDAR-CLEGG & COMPANY LTD.

## Geochemical Lab Report

Report No. 23 - 177

Page No. 2

SAMPLE NO.	Cu ppm	Mo ppm			SAMPLE NO.	Cu ppm	Mo ppm		
HI 184N - 115E	18	2			HI 192N - 108E	5	ND		
116E	9	4			109E	8	9		
117E	20	2			110E	10	3		
118E	29	1			111E	38	6		
119E	30	3			112E	31	ND		
HI 184N - 120E	69 -	3			113E	58 -	1		
HI 188N - 101E	7	ND			114E	43 -	1		
102E	8	ND			115E	58 -	1		
103E	7	ND			HI 192N - 116E	53 -	2		✓
104E	8	ND			HI 196N - 97E	6	ND		
105E	10	ND			98E	6	ND		
106E	14	1			99E	6	ND		
107E	9	ND			100E	5	ND		
108E	9	ND			102E	6	29		
109E	10	ND			104E	8	ND		
110E	12	1			105E	9	ND		
111E	21	1			106E	20	2		
112E	20	ND			107E	63 -	4		
113E	11	1			108E	61 -	7		
114E	17	2			109E	42 -	4		
115E	18	6			110E	47 -	4		
116E	22	5			111E	40 -	1		
117E	34	1			112E	41 -	3		
HI 188N - 118E	40 -	2			113E	38	2		
HI 192N - 97E	7	ND			114E	37	3		
98E	9	ND			125E	30	3		
99E	8	ND			126E	37	3		
100E	7	ND			127E	27	ND		
101E	5	ND			128E	28	1		
102E	7	ND			129E	44 -	1		
103E	7	ND			130E	67 -	2		
104E	6	ND			131E	40 -	1		
105E	10	ND			132E	53 -	3		
106E	9	1			133E	39	ND		
HI 192N - 107E	9	2			HI 196N - 134E	36	1		

# BONDAR-CLEGG & COMPANY LTD.

## Geochemical Lab Report

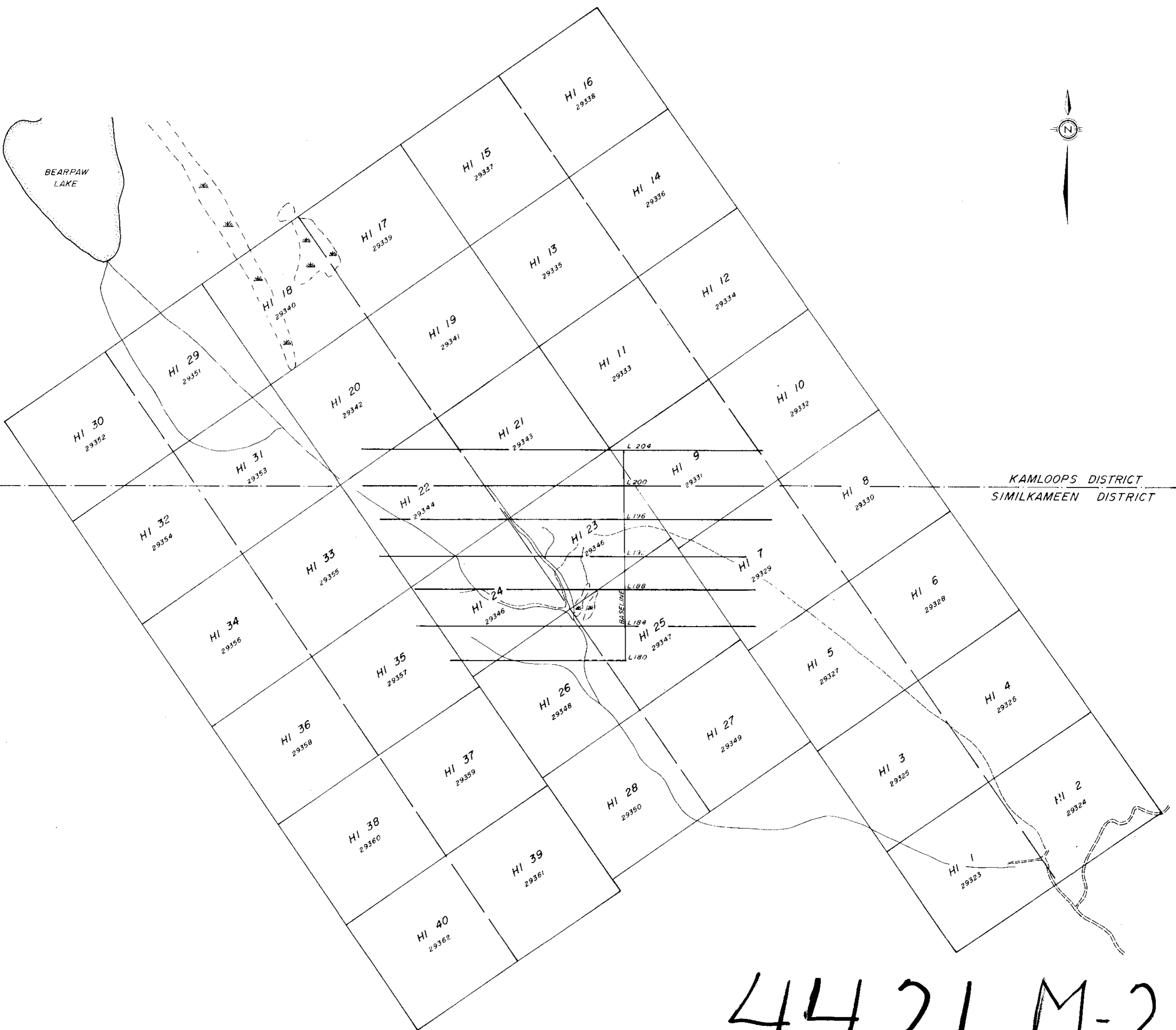
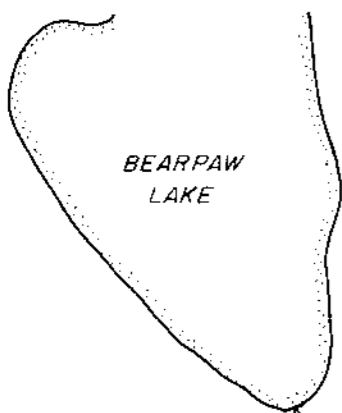
Report No. 23 - 177

Page No. 3

SAMPLE NO.	Cu ppm	Mo ppm			SAMPLE NO.	Cu ppm	Mo ppm		
HI 196N - 135E	21	1			HI 200N - 135E	26	1		
136E	20	1			136E	30	1		
137E	18	2			137E	66 -	4		
138E	12	1			138E	33	2		
140E	26	2			139E	15	1		
141E	24	2			140E	21	1		
HI 196N - 142E	17	2		✓	HI 200N - 141E	27	1		
HI 200N - 95E	4	ND			HI 204N - 95E	4	ND		
96E	4	1			99E	36	ND		
97E	5	ND			100E	64 -	2		
98E	7	3			101E	20	3		
99E	6	ND			102E	57 -	3		
100E	14	ND			103E	48 -	4		
103E	74 -	4			104E	10	ND		
104E	46 -	3			105E	25	5		
105E	23	2			106E	24	1		
106E	42	2			107E	42	2		
107E	60 -	7			108E	9	ND		
108E	39	2			109E	10	ND		
109E	13	ND			110E	28	7		
110E	15	1			111E	25	2		
111E	43 -	ND			112E	11	1		
112E	101 -	3			113E	10	1		
113E	17	ND			114E	22	2		
114E	46 -	2			115E	13	ND		
125E	53 -	3			125E	38	ND		
126E	29	1			126E	33	ND		
127E	53 -	2			127E	18	ND		
128E	29	ND			128E	25	ND		
129E	38	1			129E	20	1		
130E	37	1			130E	38	ND		
131E	22	ND			131E	59 -	ND		
132E	39	ND			132E	39	ND		
133E	32	1			133E	32	ND		
HI 200N - 134E	30	1			HI 204N - 134E	31	ND		





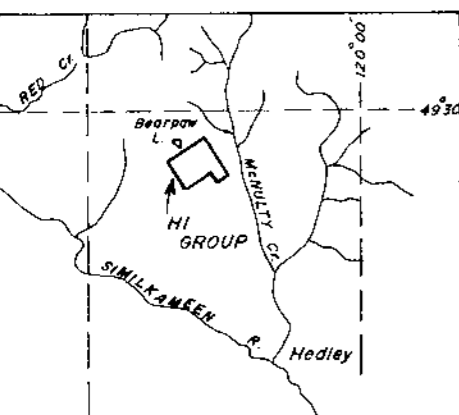


KAMLOOPS DISTRICT  
SIMILKAMEEN DISTRICT

4421 M-2B  
PART 2

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
No. 4421 MAP #2B

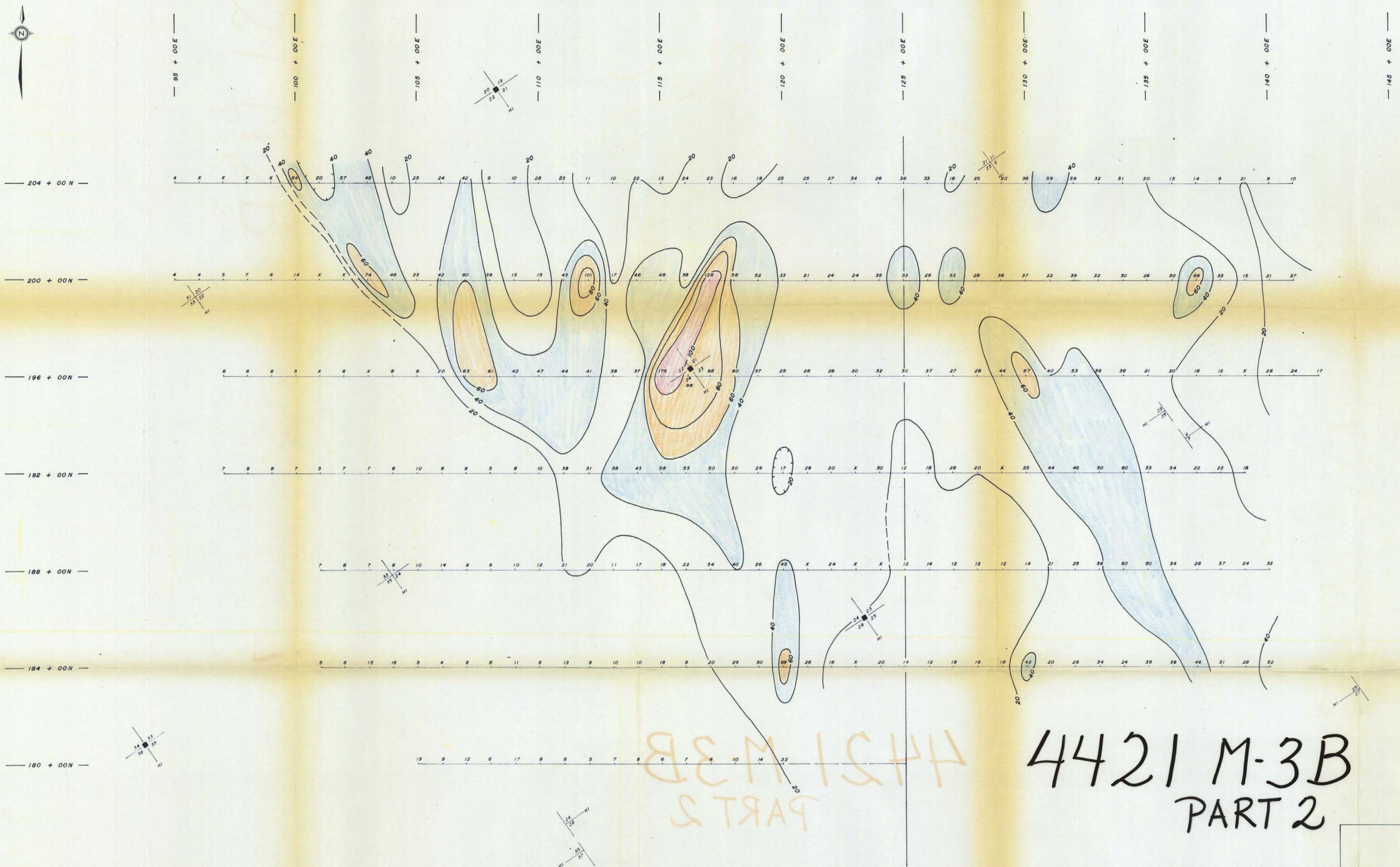
July 28/13  
AWD



HI GROUP  
Location Insert  
Scale 1" = 8 miles

**LEGEND**  
Mineral Claim Name And Record Number Shown  
Swamp  
Stream  
Trail  
Road

**HI CLAIM GROUP**  
No 1 GROUP  
OSOYOOS M.D. HEDLEY B.C.  
TO ACCOMPANY GEOCHEMICAL REPORT  
BY AW DEAN  
800 400 0 800 1600 ft  
SCALE  
Data - June 28 1973 Plate - Fig - 2



4421 M-3B  
PART 2

**LEGEND**

- Soil Sample Location
- Claim post
- X No Sample - Swamp

**CONTOURS - ppm.**

- 20 to 40
- 40 to 60
- 60 to 100
- + 100

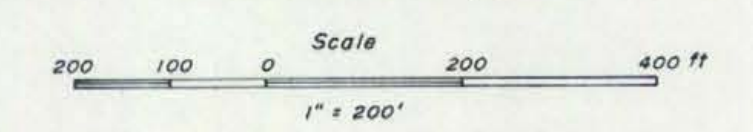
Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 4421 MAP #3B

*Handwritten signature and date: 28-28-73*

**DUCANEX RESOURCES LTD.**

HI CLAIM GROUP  
OSYOOS MINING DIVISION  
HEDLEY B.C.

**GEOCHEMICAL SURVEY**  
CU VALUES IN ppm



Map No - Fig - 3  
To Accompany A Report By - A.W. Dean  
A.W. Dean P.Eng. Dated - June 28 1973

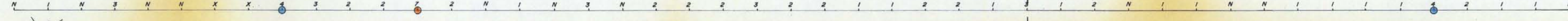


95 + 00 E  
100 + 00 E  
105 + 00 E  
110 + 00 E  
115 + 00 E  
120 + 00 E  
125 + 00 E  
130 + 00 E  
135 + 00 E  
140 + 00 E  
145 + 00 E

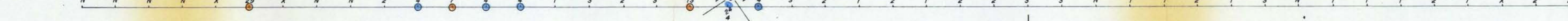
204 + 00 N



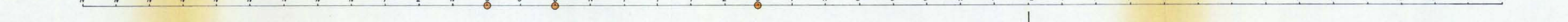
200 + 00 N



196 + 00 N



192 + 00 N



188 + 00 N



184 + 00 N



180 + 00 N



- LEGEND**
- Soil Sample Location
  - ⊕ Claim post
  - X No Sample - Swamp
  - N Not Detected
  - 4 to 6 ppm - Threshold
  - 6+ ppm - Anomalous

I.H.M. ISHH  
S TRAP

4421 M-4B  
PART 2

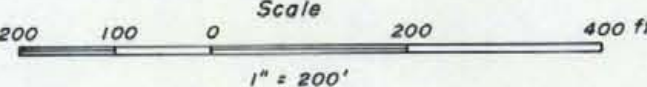
Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 4421 MAP #4B

*dkc*  
*Dec 28 1973*

DUCANEX RESOURCES LTD.

HI CLAIM GROUP  
OSYOOS MINING DIVISION  
HEDLEY B.C.

GEOCHEMICAL SURVEY  
MO VALUES IN ppm.



Map No - Fig-4  
To Accompany A Report By - AK Dean  
A W Dean P.Eng Dated - June 28 1973