

2505

REPORT

ON A GEOCHEMICAL, GEOLOGICAL AND  
MAGNETOMETER SURVEY  
OVER PART OF

THE

SCHKAM LAKE SHOWING  
ON CLAIMS BEA 3 AND SAM 5

NEW WESTMINSTER MINING DIVISION  
HOPE, BRITISH COLUMBIA

FOR

KELSO EXPLORATIONS LTD (N.P.L.)  
470 GRANVILLE STREET  
VANCOUVER, B.C.

BY

Donald W. Tully, P. Eng.

June 12, 1970

West Vancouver, B.C.

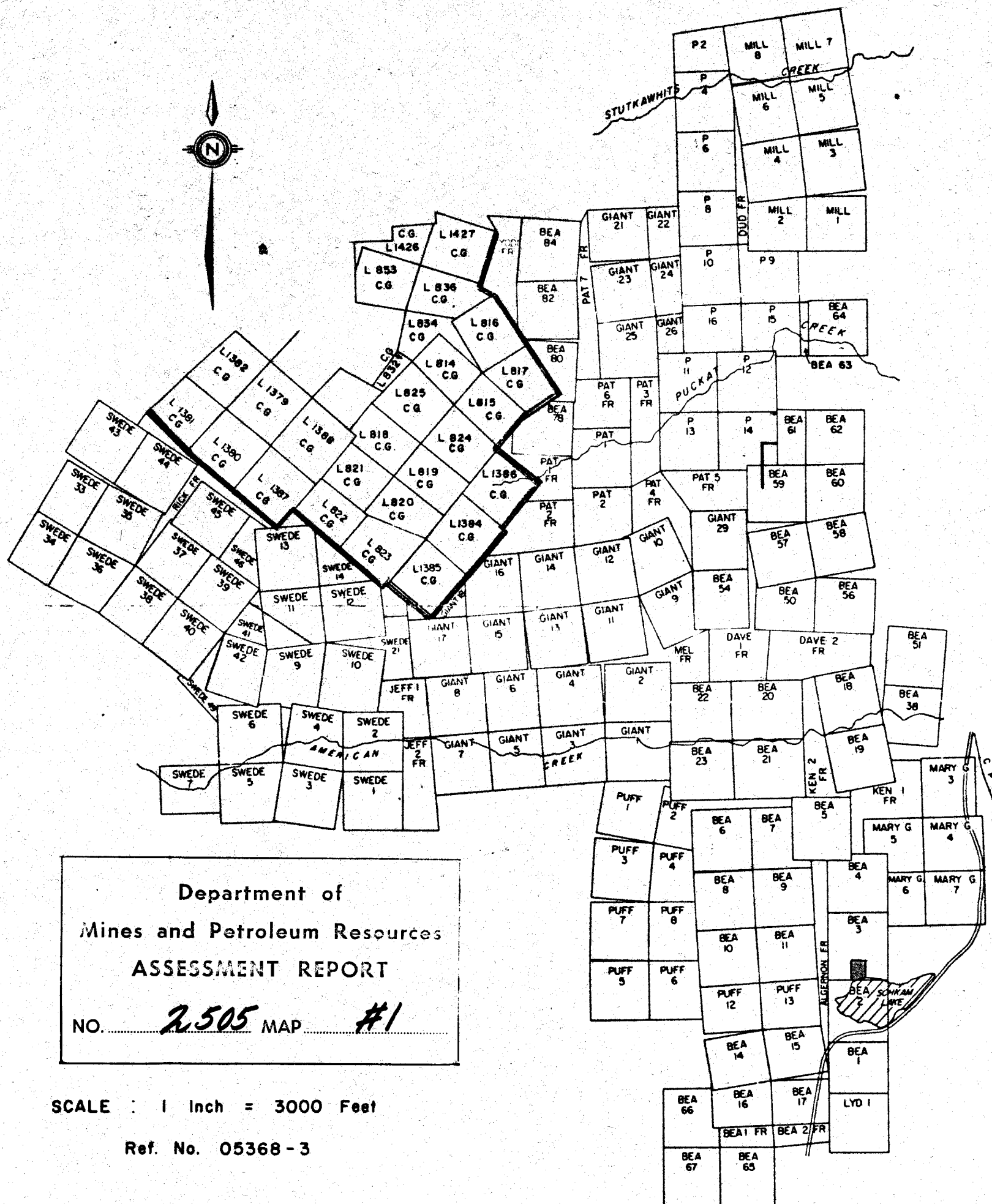
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MAPS

- #1 PROPERTY CLAIM MAP ..... *1" = 3000'* (opposite page 1)
- #2 GEOLOGICAL MAP 1" = 100' ..... (in pocket)
- #3 GEOCHEMICAL MAP 1" = 100' ..... (in pocket)
- #4 MAGNETOMETER MAP 1" = 100' ..... (in pocket)

<p>Department of Mines and Petroleum Resources ASSESSMENT REPORT</p> <p>NO. <i>2505</i> MAP .....</p>
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SUMMARY AND CONCLUSIONS

A relatively rare type of nickel occurrence has been located on the Kelso property. According to Dr. J. A. Gower at the University of British Columbia, this type of nickel occurrence has been reported recently in the American Mineralogist in samples from Africa. The writer has seen similar looking rocks from the Boston Bar area and near Medland, Oregon. None are economic but according to Dr. Gower, if the grade were in excess of 0.5% nickel content, a leaching process could be considered.

1700 lineal feet of bulldozer trenching and 1500 feet of line control were performed over a small zone of indicated nickel results obtained in a reconnaissance survey last autumn on the north side of Schkam Lake (Lake of the Woods) about three miles north of Hope, British Columbia.

Geological mapping, geochemical soil sampling and a magnetometer survey over this zone showed an altered zone of serpentized and carbonatized intrusives and sediments.

Geochemical results showed anomalous results over an elliptical area of roughly 600 x 200 feet in dimension averaging over 1000 parts per million in nickel. The zone may extend to the northeast. Recent tests by Kennecott (Kenenco Explorations (Western) Ltd) showed the nickel mineralization as not present in economic quantities.

A magnetometer survey showed a local magnetic relief of 600 - 800 gammas over the zone of nickel mineralization and continuing northward.

It is concluded that further geochemical and magnetometer work would in all likelihood extend this zone to the north. However, in view of the low grade of mineralization, no further expenditure is recommended on this particular showing.

A search for higher grade, larger zones in this area is recommended.

## INTRODUCTION

This report is supplementary to a report dated December 30, 1969, on a reconnaissance geological and geochemical survey over the Kelso property at Hope, British Columbia, in the fall of 1969. Exploration work in the spring of 1970 is reported.

## LOCATION, ACCESS AND TOPOGRAPHY

The nickel showing is located on a small facing slope at the northwest end of Schkam Lake about 1000 feet north of the Trans - Canada highway, some three miles north of Hope, British Columbia and about one mile west of the Fraser River. A car road provides access from cottages at Schkam Lake to the showing.

The elevation is 800 feet above sea - level.

## WORK PERFORMED

### Trenching

Bulldozer work was performed by Catermole-Trethewey Limited. Assistance in geological mapping, geochemical sampling and magnetometer work was performed by messrs Pat Connell and Jeff Sluggett during March, April and May, 1970.

### Geology and Mineralization

North trending and east dipping beds of altered conglomerate, graphite shale, schist and serpentized rocks underlie the zone of interest. A small band of carbonate rock (magnesite - siderite) carries the nickel mineralization which is tentatively identified as maufite, an oxide of nickel, magnesium, iron and silica. The carbonate is fresh and may be intrusive. An introduction of magnesia is evident in the altered rocks.

A strong zone of faulting strikes northward through the zone. This faulting is probably related to a major regional fault zone trending north-south through the claim group about 1000 feet east of Schkam Lake and probably extends northward through the Mill Creek zone.

A geology map sketch on scale 1" = 100' accompanies this report.

### Geochemical

152 soil samples were taken at approximately 100 foot intervals generally in the "B" soil horizon over the zone. The grid lines were laid out and marked by P. Connell and J. Sluggett.

Assays were done by Crest Laboratories (B.C.) Limited, 1068 Homer Street, Vancouver, using the  $\text{HClO}_4$  -  $\text{HNO}_3$  digestion method and atomic absorption analysis on samples prepared to minus 80 mesh size.

The results varied up to 4400 parts per million nickel with insignificant amounts of copper. The average nickel content of the samples taken over the zone is about 1100 ppm.

Assay certificates of Lot No. 180G and 203G and a plan of scale 1" = 100' accompanies this report.

### Geophysical

Magnetometer readings were taken by P. Connell of Kelso Explorations with a Geotronics portable fluxgate instrument model G-100 at the same stations as the geochemical sample locations. Base station readings were taken approximately every two hours during the period of the survey on parts of April 30, May 1 - 4, 1970.

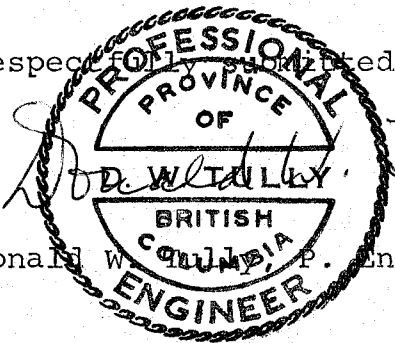
The results show a north trending anomalous zone of 600 - 800 gammas over the geochemical anomaly. The magnetic influence appears to increase towards the north. Tracing the zone of geochemical values northward with a magnetometer is a possibility.

A plan of scale 1" = 100' accompanies this report.

RECOMMENDATIONS

The unusual nature of the nickel mineralization, the size and low grade postulate recommends that no further work be done on this showing.

Additional geochemical reconnaissance traverses at 500, 1000 and 1500-foot intervals in an east-west direction are recommended in the area north of this showing for any new zones of longer size and higher grade. The cost would be about \$350.00.

Respectfully submitted,  
*Donald W. Tully*  
Donald W. Tully, P. Eng.  
A circular professional seal for Donald W. Tully, P. Eng. The seal features a rope-like border and contains the text: "PROFESSIONAL ENGINEER" at the top and bottom, "PROVINCE OF BRITISH COLUMBIA" in the center, and "DONALD W. TULLY" in the middle. A signature is written across the seal.

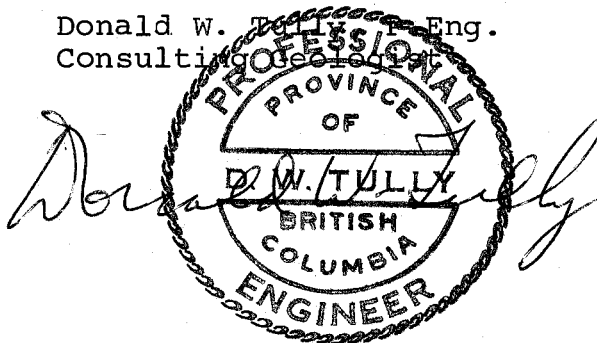
CERTIFICATE

I, Donald William Tully, do hereby certify, that,

1. I am a Consulting Geologist and Professional Engineer with offices at Suite 102, 2222 Bellevue Avenue, West Vancouver, B. C.
2. I am a graduate of McGill University, 1943, with a Bachelor of Science Degree.
3. I am a registered Professional Engineer in the Provinces of Ontario and British Columbia.
4. I have practiced my profession for twenty-five years.
5. I have no direct, indirect or contingent interest in the claims held by Kelso Explorations Ltd. (N.P.L.) or the securities of Kelso Explorations Ltd. (N.P.L.) nor do I intend to receive any interest.
6. This report dated June 12, 1970, is based on an examination on the ground made on April 13 and June 2, 1970. The work was performed under my direct supervision in the field during March, April, May and June, 1970.

DATED at West Vancouver, British Columbia, this  
12th day of June, 1970

Donald W. Tully, Eng.  
Consulting Geologist





# CREST LABORATORIES (B.C.) LTD.

B.C. REGISTERED ASSAYERS  
INDUSTRIAL and RESEARCH CHEMISTS

1068 HOMER STREET  
VANCOUVER 3, B.C.  
May 25, 1970

Kelso Explorations Ltd.  
411 - 470 Granville Street  
VANCOUVER, B.C.

Lot No. 203 G: Geochemical Analysis for copper and nickel:

Mesh Size: -80  
Analytical Method: Atomic Absorption  
Digestion Method:  $\text{HClO}_4 - \text{HNO}_3$

Sample No.	Copper PPM	Nickel PPM	Sample No.	Copper PPM	Nickel PPM
5-1	42	360	DB - 1 ✓	64	260
5 A ✓	84	520	DB - 2	32	110
5 B ✓	48	180	DB - 3	52	110
6 A ✓	12	30	DB - 4	22	90
6 B ✓	60	190	DB - 5	24	180
7 A ✓	32	150	DB - 6	180	140
7 B ✓	12	45	DB - 7	30	1300
8 A ✓	30	150	DB - 8	38	1120
8 B ✓	52	140	DB - 9	36	590
DB - A ✓	30	140	DB - 10	54	670
DB - B ✓	30	210	DB - 11	42	970

Yours truly,

CREST LABORATORIES (B.C.) LTD.

Alfred A. Burgoyne  
Geologist-Geochemist

AAB/seb

**CREST LABORATORIES (B.C.) LTD.**B.C. REGISTERED ASSAYERS  
INDUSTRIAL and RESEARCH CHEMISTS1068 HOMER STREET  
VANCOUVER 3, B.C.

May 8, 1970

Kelso Explorations Ltd.  
411 • 470 Granville Street  
VANCOUVER, B.C.Lot No. 180 G:Geochemical Analysis for Copper and Nickel:

Sample Number:	Copper ppm	Nickel ppm	Sample Number:	Copper ppm	Nickel ppm
T1 1	36	4200	1 - 1	32	160
1a	44	200	2	28	100
2	28	3200	3	50	120
3	84	2400	4	70	120
4	32	120	5	32	80
T1 5	20	320	6	112	70
T2 1	42	1540	7	116	90
2	30	980	8	28	80
T2 3	26	120	1 - 9	20	90
T3 1	66	260	2 - 1	14	120
2	108	4400	2	18	90
3	20	3700	3	52	110
4	72	3300	4	26	50
5	116	200	5	84	70
T3 6	120	80	6	45	70
T4 1	104	460	6A	100	80
2	40	180	7	98	70
3	42	1400	8	116	90
4	44	1680	2 - 9	142	150
5	68	540	3 - 1	144	130
T4 6	86	100	2	24	60

Kelso Explorations Ltd.  
 Lot No. 130 G  
 May 8, 1970  
 Page 2...

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Sample Number:	Copper ppm	Nickel ppm	Sample Number:	Copper ppm	Nickel ppm
3 - 3	68	50	6 - 8	46	1500
4	92	80	9	72	280
5	66	70	6 - 10	120	160
6	56	70	7 - 1	32	150
7	88	100	2	18	70
8	180	110	3	24	1000
3 - 9	164	160	4	16	460
4 - 1	34	110	5	18	1280
2	26	70	6	62	340
3	8	40	7	44	1480
4	94	90	8	90	2600
5	24	70	7 - 9	98	280
6	70	70	8 - 1	24	100
7	74	90	2	26	140
8	40	90	3	12	80
4 - 9	148	100	4	24	1200
5 - 1	42	680	5	56	2300
2	14	650	6	48	160
3	84	140	7	70	440
4	32	340	8	64	400
5	32	80	8 - 9	114	80
6	30	108	9 - 1	34	170
7	26	680	2	24	140
8	40	280	3	28	120
5 - 9	44	880	4	10	80
6 - 1	28	220	5	24	120
2	30	140	6	34	130
3	24	360	6A	24	120
4	68	1380	7	14	100
5	60	2700	8	50	170
6	42	1300	9 - 9	22	120
7	86	340	10 - 1	40	180

Kelso Explorations Ltd.  
Lot No. 180 G  
May 8, 1970  
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Sample Number:	Copper ppm	Nickel ppm	Sample Number:	Copper ppm	Nickel ppm
10 - 2	32	120	11 - 5	22	90
3	20	80	6	22	60
4	26	100	7	24	80
5	28	90	8	26	130
6	30	120	11 - 9	40	130
7	32	110	12 - 1	22	80
8	10	40	3	16	50
10 - 9	30	110	4	16	50
11 - 1	42	150	5	36	80
2	32	120	6	54	140
3	26	90	7	18	80
4	23	120	8	28	100
			12 - 9	20	100

Yours truly,

CREST LABORATORIES (B.C.) LTD.

*Bruce Graham*

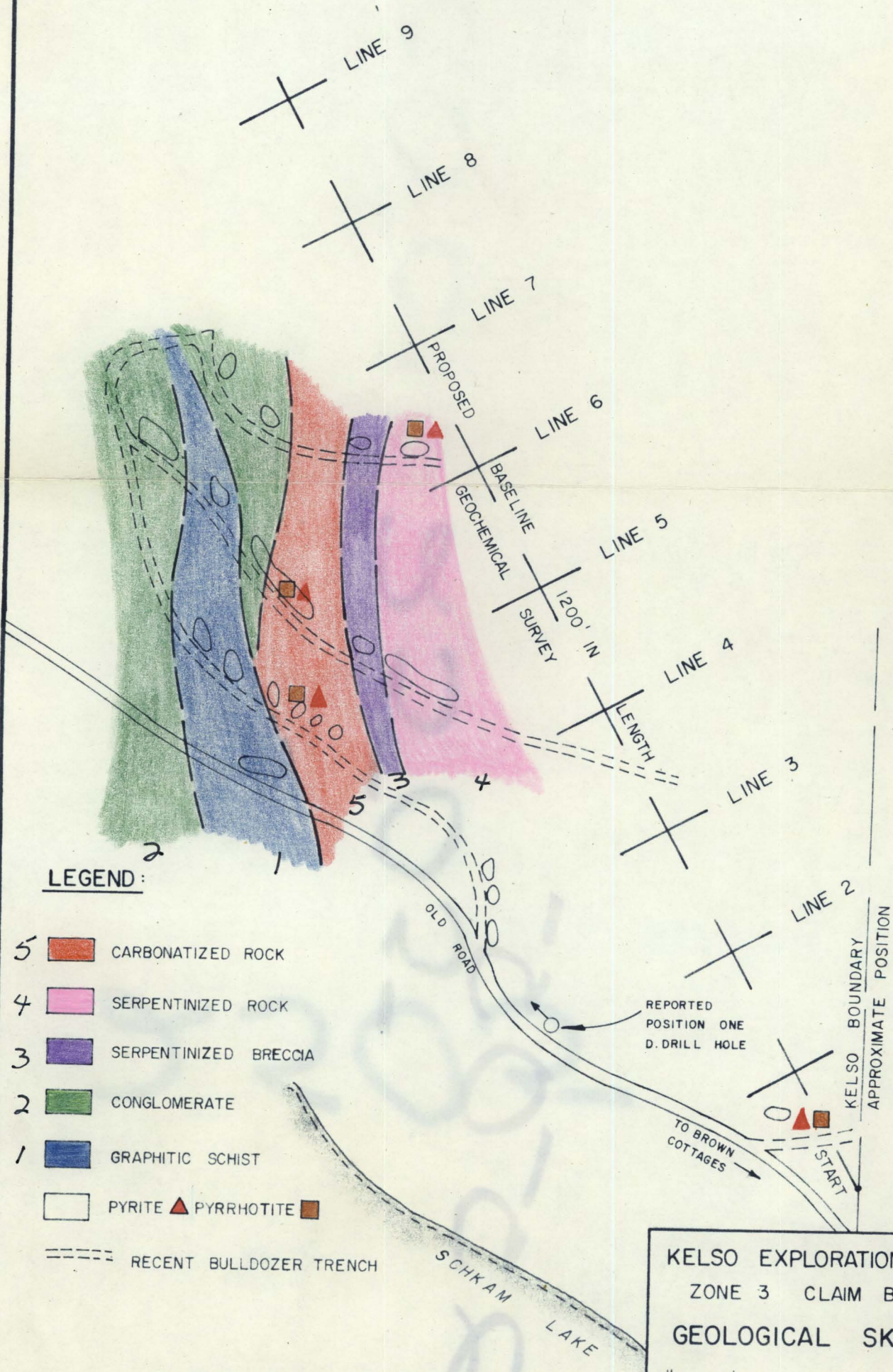
Bruce Graham  
Chemist

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT

NO. 2505 MAP #2



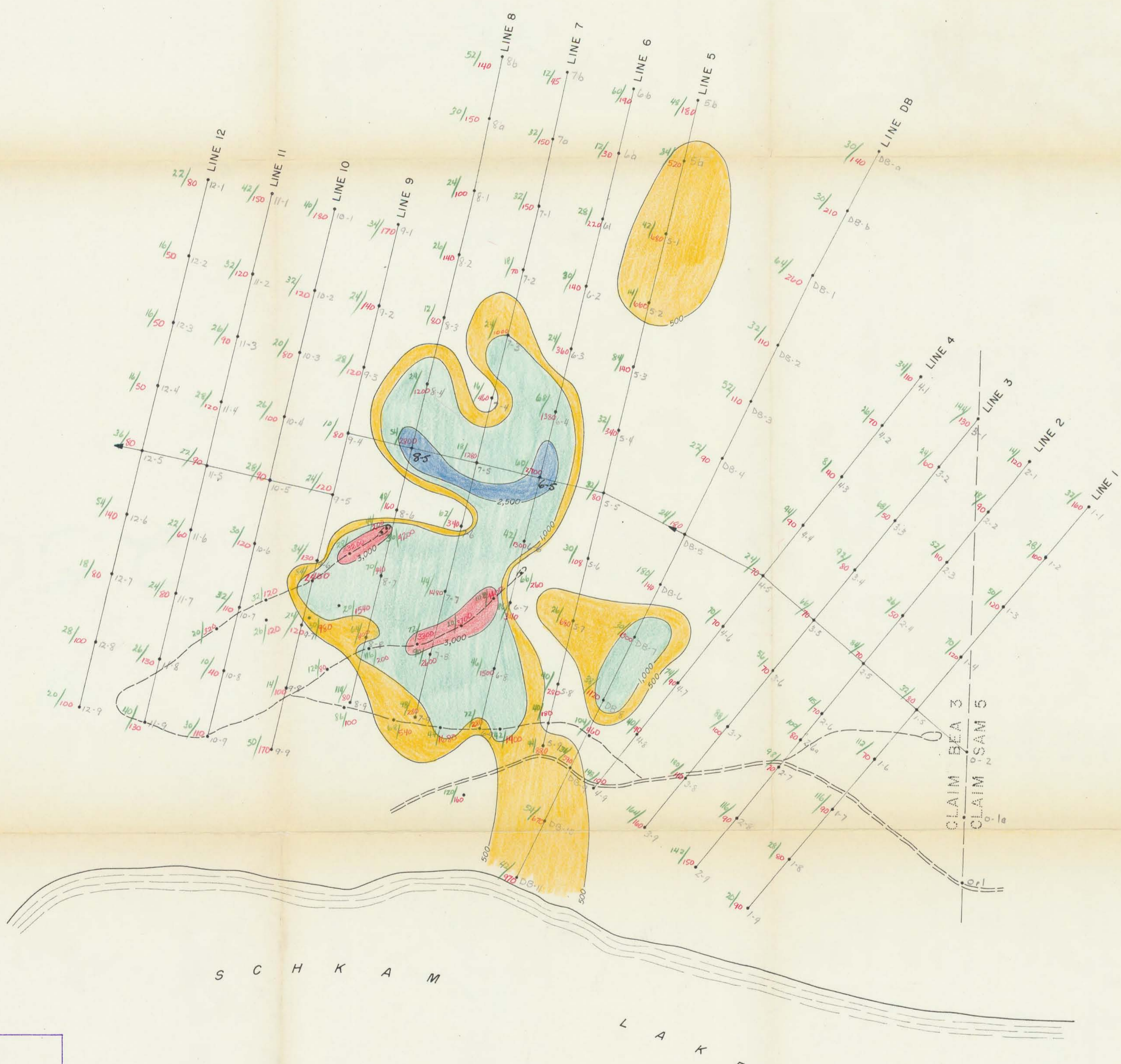
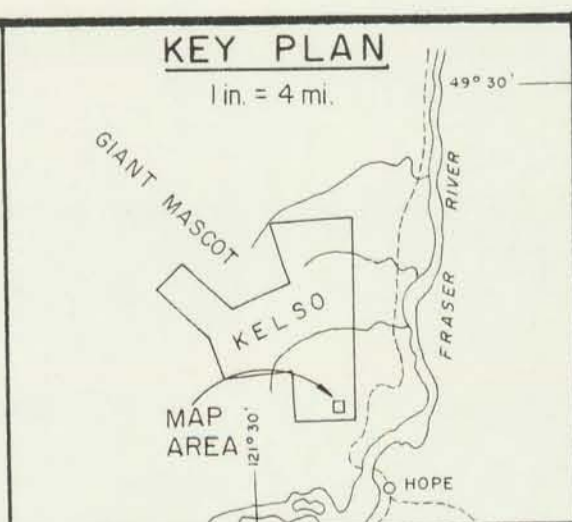
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**LEGEND:**

- 5  CARBONATIZED ROCK
- 4  SERPENTINIZED ROCK
- 3  SERPENTINIZED BRECCIA
- 2  CONGLOMERATE
- 1  GRAPHITIC SCHIST
- PYRITE  PYRRHOTITE
- RECENT BULLDOZER TRENCH

KELSO EXPLORATIONS LTD.  
ZONE 3 CLAIM BEA 2  
GEOLOGICAL SKETCH



5202



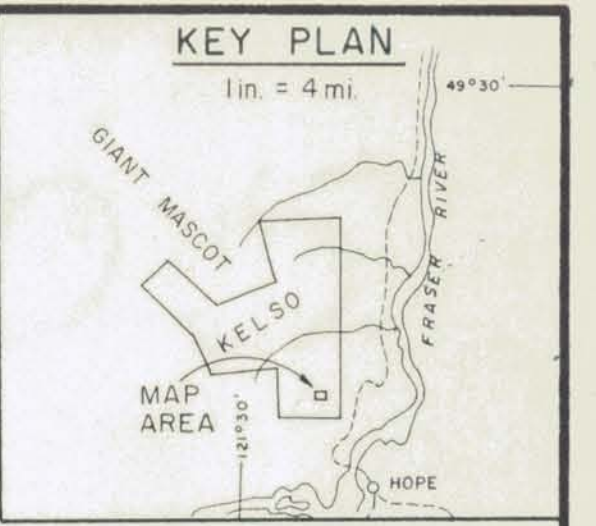
Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 2505 MAP #3

- LEGEND
- 5-3 — CONTROL LINE AND STATION
  - — BULLDOZER TRENCH
  - ==== TRUCK ROAD
  - 744 +3000 p.p.m. NICKEL
  - 740 +2500 p.p.m. NICKEL
  - 739 +1000 p.p.m. NICKEL
  - 736 +500 p.p.m. NICKEL
- CU/Ni Copper/Nickel Values in p.p.m.

2505



HOPE, B.C.
KELSO EXPLORATIONS LTD. N.P.L.
GEOCHEMICAL SURVEY
MINING CLAIM No. BEA 3, SAM 5
1"=100' DONALD W. TULLY P. Eng MAY, 1970



2502

2505

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 2505 MAP # 4

- LEGEND
- CONTROL LINE AND STATION
  - MAGNETIC INTENSITY COUNTOUR
  - BULLDOZER TRENCH
  - 745 MAGNETIC DEPRESSION AREA
  - 752 MAGNETIC "HIGH" AREA (+55,000  $\gamma$ )



HOPE, B.C.
KELSO EXPLORATIONS LTD. N.P.L.
MAGNETOMETER SURVEY
MINING CLAIM Nos. BEA 3, SAM 5
1"=100' DONALD W. TULLY P.Eng. MAY, 1970