


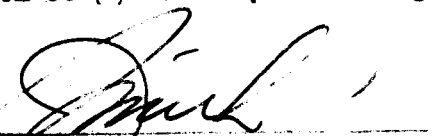
REPORT OF EXPLORATION  
COMPLETED ON THE  
LIZ 33-42 and 49-58 CLAIMS  
COMMAND RESOURCES LTD.

This report has been examined by the Geological Evaluation Unit and is recommended to the Commission to be considered as representation work in the amount of

\$4000.00

  
Resident Geologist or  
Resident Mining Engineer

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

  
Commissioner of Yukon Territory

Vancouver, B.C.  
August 21, 1974.

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REPORT ON EXPLORATION COMPLETED ON THE  
LIZ 33-42 and 49-58 CLAIMS  
FOR  
COMMAND RESOURCES LTD.

INTRODUCTION

The Liz 33-42 and 49-58 mineral claims are located approx. 5.5 miles east of a major zinc discovery made by Barrier Reef Resources Ltd. during the summer of 1973 in the Bonnet Plume River area, Northwest Yukon.

This report is based on field work conducted by Agilis Engineering Ltd., on behalf of Command Resources Ltd.,

Work consisted of claim survey, geological mapping, gridding, 800 foot lines and 200 foot stations, and soil sampling.

The geological mapping was completed by J. Deighton, Geologist. The program was supervised by the writer.

GEORGRAPHY

Location and Access

The Liz mineral claims are located approximately 125 miles northeast of Mayo, Y.T. on Duo Creek, a tributary of the Bonnet Plume River.

Coordinates of the property are 64° 24' North latitude and 132° 26' West Longitude.

The property lies within map sheet 106C of the National Topographic series.

Access to the property from Vancouver is either by motor vehicle to Mayo, Y.T. and from there by helicopter to the property, or by Canadian Pacific Airlines to Whitehorse, via North Air to Mayo and hence via helicopter to the property.

A small lake, Porters Puddle, on Duo Creek is accessible by fixed wing planes. Barrier Reef Resources Ltd. is constructing a winter airstrip on Goz Creek and a winter tote road is planned from Mayo.

#### TOPOGRAPHY

The Liz mineral claims lie along the valley of Duo. Only small isolated outcrops have been found on the property. Just north of the claim boundary topography steepens and outcrops become plentiful. Numerous cliffs traverse this area.

#### PROPERTY

The Liz mineral claims were acquired by Command Resources Ltd. from Mr. Andy Harman, prospector and consists of the following contiguous mineral claims:

| <u>Name</u> | <u>Record Number</u> | <u>Record date</u> |
|-------------|----------------------|--------------------|
| Liz 33-42   | Y69718 - 27          | Aug. 21, 1973      |
| Liz 49-58   | Y69734 -42           | Aug. 21, 1973.     |

#### HISTORY

The area was mapped by Dr. J.O. Wheeler, Geological Survey of Canada, in 1952 and the information was published as Preliminary Map 53-7, at a scale of 1" = 4 miles. The area was remapped in more details by S.L. Blusson, Geological Survey of Canada.

The first lead-zinc discoveries associated with brecciated dolomites were made in the early 1950's by the K.J. Springer interests. These showings were followed up in recent years by Gordon Dickson, prospector.

Further exploration along the belt of Palaeozoic sedimentary units lead to the discovery of the Tom deposit of Hudson Bay Mining and Smelting at McMillan Pass, the stratiform lead-zinc deposits of the Vangorda Area, of which the Anvil Mines with 60 million tons grading 10% lead-zinc combined is producing at a rate of 7,500 tons per day.

From 1965 to 1972 exploration in the area, because of low metal prices and high exploration costs, was discontinued.

In 1972, the discovery of the Summit Lake deposit by Canex Placer Ltd. along a 25 mile long belt of Ordovician graptolitic shales resulted in renewed exploration.

During 1972 important base metal discoveries were made in the Godlin Lake area in the Northwest Territories, 100 miles north of Summit Lake. The mineralization occurs within a belt of open-folded and faulted Lower Palaeozoic carbonate rocks, the Mackenzie fold belt.

Exploration concentrated along this fold belt resulted in the discovery of the Bonnet Plume discoveries of Barrier Reef Resources Ltd. and the discoveries by Cypress Resources Ltd., 10 miles to the west of the first.

The Liz mineral claims lie approximately 5 miles east of the main Barrier Reef discovery and approximately 2 miles east of a zinc discovery along the eastern boundary of Barrier Reef Resources Ltd. property.

### GEOLOGY

The Liz 33-42 and 49-58 claims owned by Command Resources Ltd. are underlain by Lower Cambrian Strata of the Backbone Range Formation. This unit is composed of the varied colored shales, argillites, quartzites, grits and minor limestone and dolomites. The western portion of the claim group may be underlain by a sub division of the Backbone Range Formation, - buff grey weathering poorly bedded and in part pistolitic dolomite. This sub-division is the unit in which lead-zinc mineralization occurs on the adjacent ground of Barrier Reef.

No outcrop occurs on the claims owned by Command Resources and the above information is taken from the Geological Survey of Canada open file #205 map of the area, and was supplemented by geological mapping just north of the claim group.

### MINERALIZATION

Mineralization in the Bonnet Plume area is comprised of light to buff-colored to reddish-brown sphalerite associated with porous, brecciated and in places silicified dolomites. Galena has been reported from the higher grade ores.

The best mineralization is usually associated with breccia but has also been found parallel to bedding. The latter type has usually little associated quartz.

Surface outcrops of mineralized rocks are strongly weathered, and zinc carbonates (Smithsonite) is abundant. This feature makes recognition of economic mineralization difficult without the use of geochemical aids.

## GEOCHEMISTRY

### Field Method

The Liz mineral claims were soil sampled on a grid system. The grid consisted of North-South compass lines, 800 feet apart with sample stations every 200 feet along the lines marked by flagging. East-West tie lines were established for control.

Samples were collected by auger from the "B" horizon where ever possible. Soils were packed in kraft paper envelopes and shipped to Chemex labs Ltd., 212 Brooksbank Ave., North Vancouver, B.C. for preparation and analysis for total lead and zinc.

### Lab Technique

All samples were analysed by Chemex labs Ltd.

A minus 80 mesh fraction was taken from each sample, digested for 2 1/2 hours in hot nitric acid. A second minus 80 mesh fraction was digested for 4 hours in hot perchloric-nitric acid.

Quantitative analysis for lead and zinc content was performed by atomic absorption methods.

## RESULTS

Results were obtained for a total of 321 samples.

Statistical analysis is based on a total of 984 samples collected on the Liz claims owned by Command Resources and from the surrounding properties.

The results were grouped percent frequency and accumulated percent were calculated and plotted on arithmetic probability paper.

|      | <u>Range ppm</u> | <u># of sample</u> | <u>Background ppm</u> | <u>%</u> | <u>Anomalous ppm</u> | <u>%</u> |
|------|------------------|--------------------|-----------------------|----------|----------------------|----------|
| Zinc | 10 to <4000      | 984                | 140                   | 73.99    | 280                  | 9.23     |
| Lead | 10 to <700       | 984                | 40                    | 70.81    | 140                  | 3.56     |

### Interpretation

The geochemical survey outlined two general areas being anomolous in lead and zinc.

#### Area 1

A weak zinc anomaly, following the course of Duo Creek is located between line 68E, 36S and 36E and 32S.

The close correlation between outline of anomaly and topographic low features along the creek suggest a drainage anomaly. Peak value is located at 48E, 40S of 1048 ppm zinc.

The lead values follow the same pattern but are not as continuous and displaced to the west. Peak value is located at 44 E, 44S of 110 ppm.

#### Area 2

Area 2 is located along the eastern margin of the property along line 80E from 6S to 24S. The outline of the anomaly is irregular. Topographically it lies along a gentle south slope. Amplitude of the anomalie is from 300 to 1000 ppm with two distinctive peaks. The first at 80E,6S -1000 ppm, the second at 80E,20S - 620 ppm.

The lead contour maps shows a coinciding lead anomaly with two peaks, the first at 80E 6S - 120 ppm, the second at 80E, 20S - 140 ppm.

#### DISCUSSION AND CONCLUSIONS

Since no detailed geological information is available, it is difficult to evaluate the significance of the two anomalous areas. This is compounded by extensive, possibly deep overburden.

Area 1 appears to be a drainage anomaly. The presence of high lead values just to the west can not be explained but could be caused by erratics. No further work is recommended in area 1.

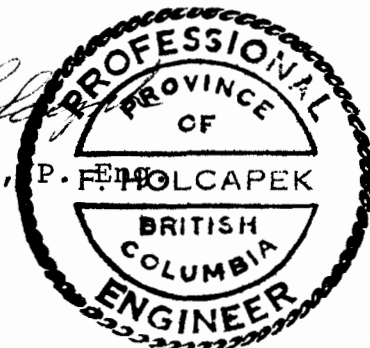
Area 2 lies along the western and northern boundary of the property. The favorable dolomitic-limestone horizon has been found outcropping to the north and hence could underlay the property in this area.

The anomaly is well defined but too close to the boundary to be of major significance.

Respectfully submitted,



F. Holcapek, P. Eng.



August 21, 1974.  
Vancouver, B.C.

LEAD - ppm

| <u>Interval</u> | <u>No. of samples</u> | <u>%</u> | <u>Accumulative %</u> |
|-----------------|-----------------------|----------|-----------------------|
| 0-10            | 21                    | 2.13     | 2.13                  |
| 11-20           | 131                   | 13.31    | 15.44                 |
| 21-30           | 330                   | 33.54    | 48.97                 |
| 31-40           | 215                   | 21.84    | 70.81                 |
| 41-50           | 80                    | 8.13     | 78.94                 |
| 51-60           | 85                    | 8.63     | 86.57                 |
| 61-70           | 35                    | 3.55     | 90.12                 |
| 71-80           | 29                    | 2.94     | 93.06                 |
| 81-90           | 9                     | .91      | 93.97                 |
| 91-100          | 10                    | 1.01     | 94.98                 |
| 101-110         | 6                     | .6       | 95.59                 |
| 111-120         | 5                     | .5       | 95.64                 |
| 121-130         | 2                     | .2       | 95.84                 |
| 131-140         | 6                     | .6       | 96.44                 |
| 141-150         | 4                     | .4       | 96.84                 |
| 151-160         | 0                     |          |                       |
| 161-170         | 1                     | .1       | 96.94                 |
| 171-180         | 4                     | .4       | 97.34                 |
| 181-190         | 0                     |          |                       |
| 191-200         | 2                     | .2       | 97.54                 |
| 200+            | 9                     | .9       | 98.44                 |

ZINC - ppm

| <u>Interval</u> | <u>No. of<br/>samples</u> | <u>%</u> | <u>Accumulative %</u> |
|-----------------|---------------------------|----------|-----------------------|
| 0-20            | 51                        | 5.18     | 5.18                  |
| 21-40           | 49                        | 4.98     | 10.16                 |
| 41-60           | 68                        | 6.91     | 17.07                 |
| 61-80           | 134                       | 13.62    | 30.69                 |
| 81-100          | 134                       | 13.62    | 44.31                 |
| 101-120         | 176                       | 17.89    | 62.20                 |
| 121-140         | 116                       | 11.79    | 73.99                 |
| 160             | 69                        | 6.01     | 80.00                 |
| 180             | 31                        | 3.15     | 83.15                 |
| 200             | 24                        | 2.44     | 85.59                 |
| 220             | 13                        | 1.32     | 86.91                 |
| 240             | 12                        | 1.22     | 88.13                 |
| 260             | 12                        | 1.22     | 89.35                 |
| 280             | 14                        | 1.42     | 90.77                 |
| 300             | 20                        | 2.03     | 92.80                 |
| 320             | 22                        | 2.23     | 95.03                 |
| 340             | 6                         | .60      | 95.63                 |
| 360             | 15                        | 1.59     | 96.92                 |
| 380             | 3                         | .30      | 97.22                 |
| 400             | 9                         | .91      | 98.13                 |
| 420             | 3                         | .30      | 98.43                 |
| 440             | 0                         |          |                       |
| 460             | 1                         | .11      | 98.54                 |
| 480             | 1                         | .11      | 98.55                 |
| 500+            | 11                        | 1.12     | 99.67                 |

CERTIFICATION

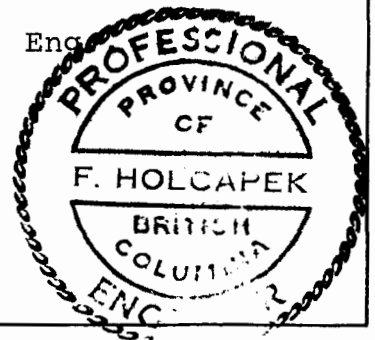
I, Ferdinand Holcapek of 92 - 10842 152nd Street, Surrey, British Columbia, do hereby certify that:

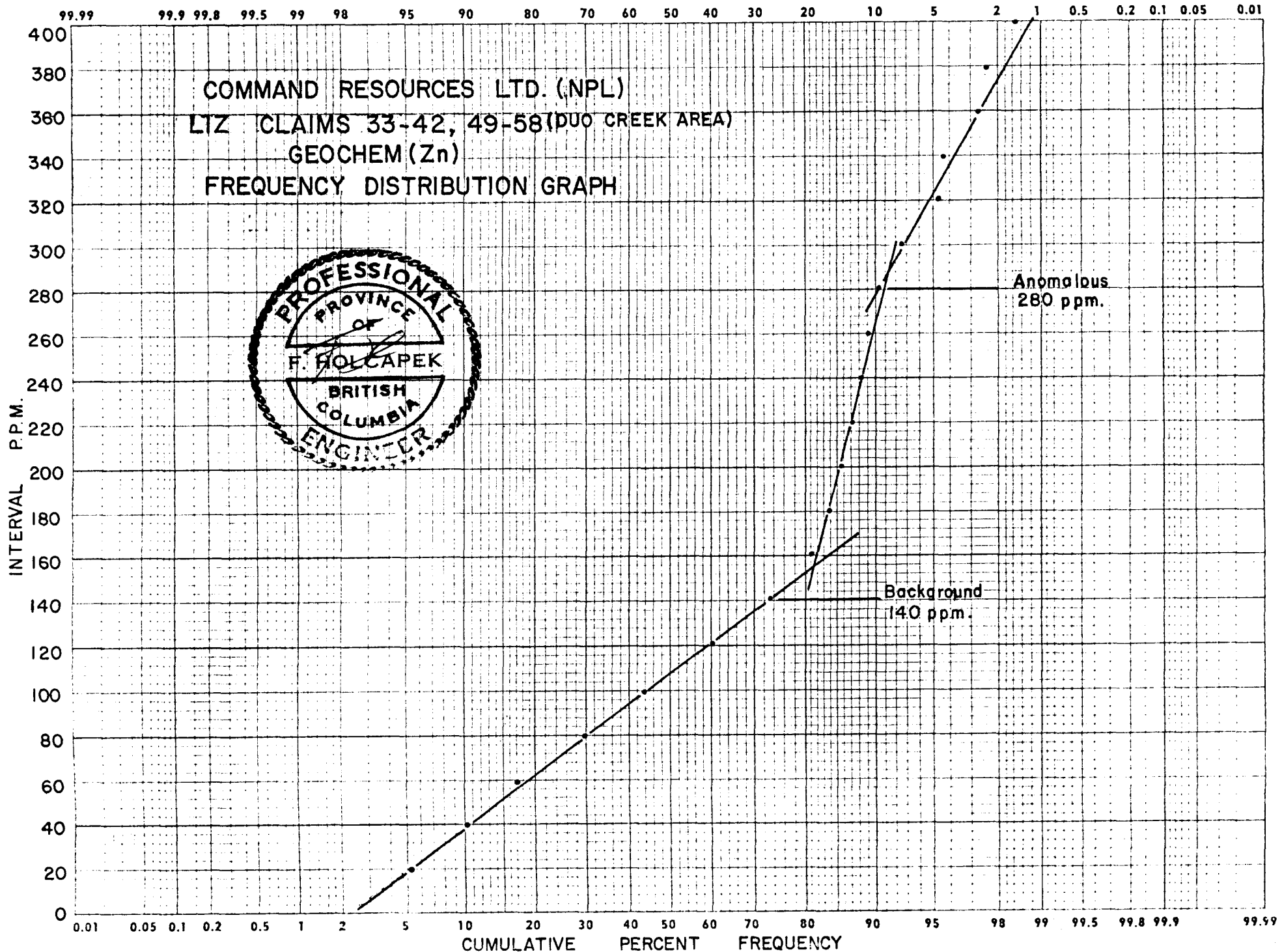
1. I am a graduate of the University of British Columbia, with a Bachelor of Science Degree in Geology, 1969.
2. Since graduation I have been engaged in mining exploration in: British Columbia, Yukon Territory, Northwest Territories, Quebec, Nevada, Arizona, Mexico and Australia.
3. I am a registered member, in good standing, of the Association of Professional Engineers of British Columbia, the Geological Association of Canada and the Society of Exploration Geophysists.
4. I am a consulting geologist.
5. This report is based on field work conducted under my supervision, during the period of June 15 to July 31, 1974.
6. That the cost statement attached outlines expenditures incurred to complete the work program.

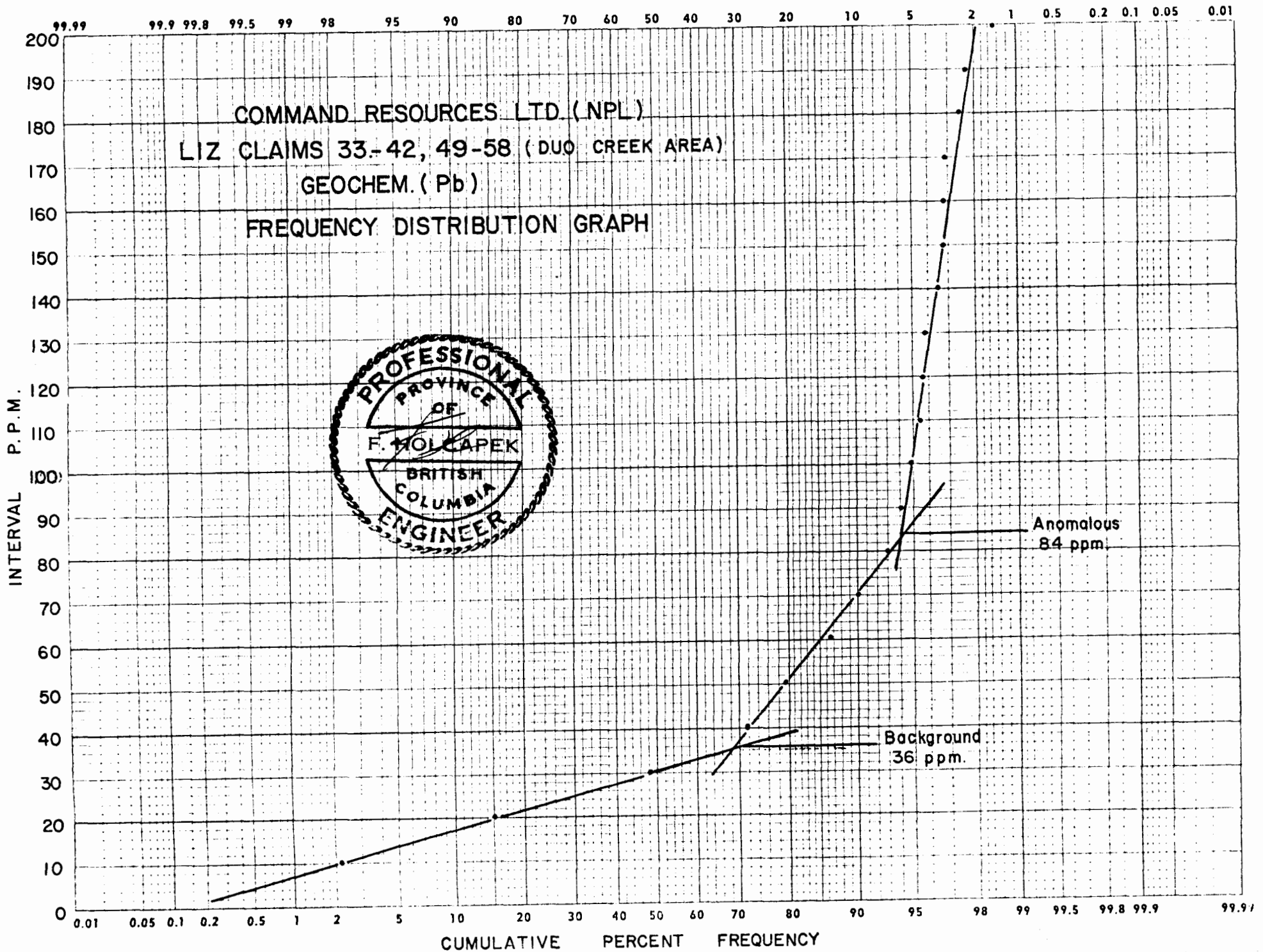


F. Holcapek, P. Eng.

Vancouver, B.C.  
August 21, 1974.







# YUKON TERRITORY

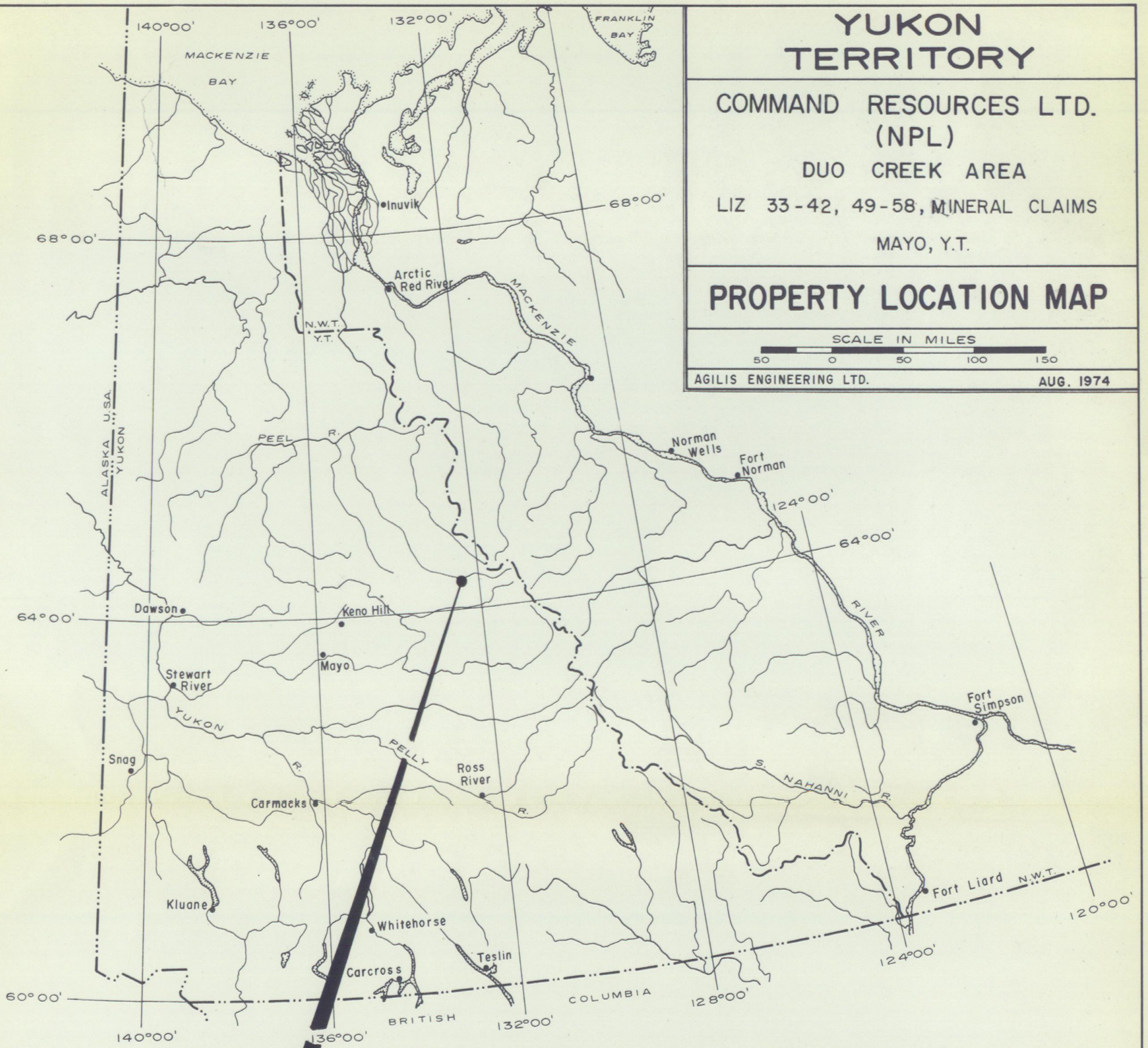
COMMAND RESOURCES LTD.  
(NPL)  
DUO CREEK AREA  
LIZ 33-42, 49-58, MINERAL CLAIMS  
MAYO, Y.T.

## PROPERTY LOCATION MAP

SCALE IN MILES  
50 0 50 100 150

AGILIS ENGINEERING LTD.

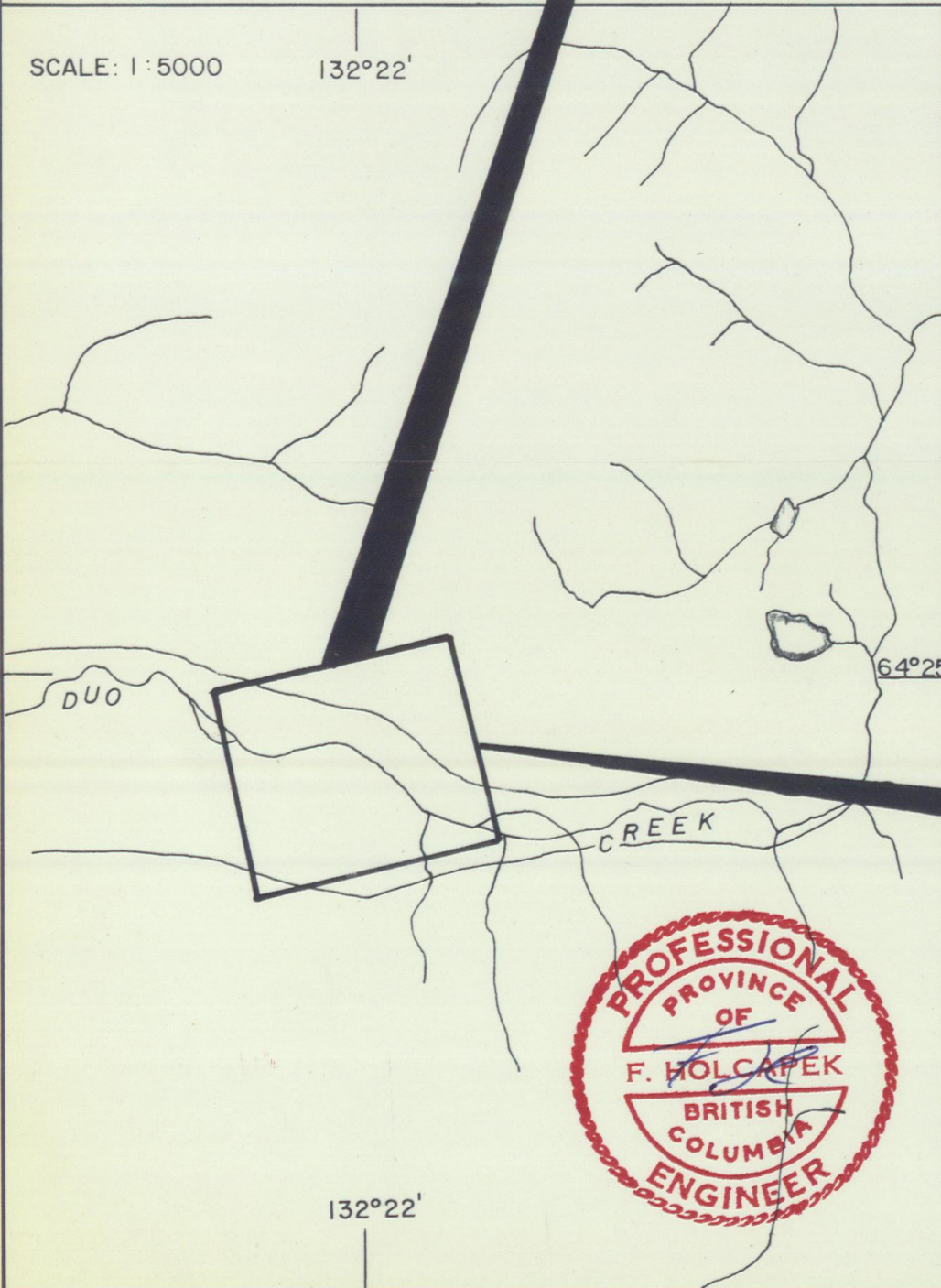
AUG. 1974



SCALE: 1:5000

132°22'

SCALE: 1" = 2640'

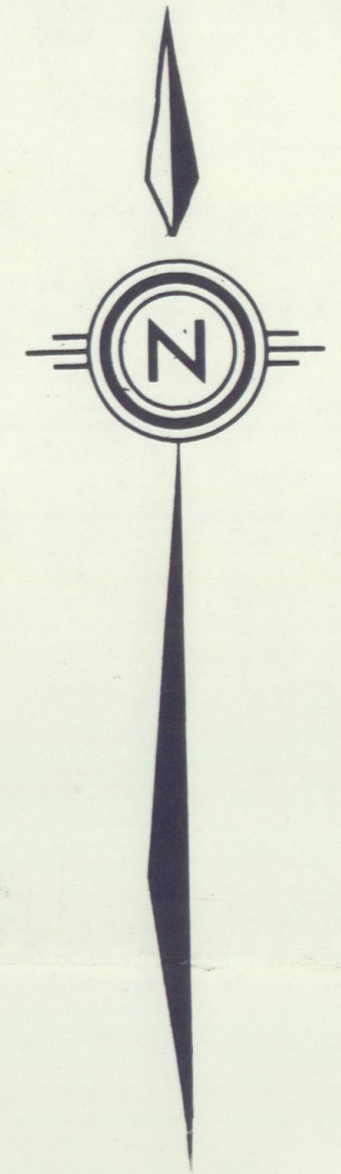


|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Liz 33 | Liz 35 | Liz 37 | Liz 39 | Liz 41 |
| Liz 34 | Liz 36 | Liz 38 | Liz 40 | Liz 42 |
| Liz 49 | Liz 51 | Liz 53 | Liz 55 | Liz 57 |
| Liz 50 | Liz 52 | Liz 54 | Liz 56 | Liz 58 |



132°22'

64°25'



**LEGEND**

- Geological contact
- ~ ~ ~ Fault
- Rock outcrop
- ↘ 20 Overturned plunging fold
- ↘ 20 Plunging fold
- ⊥ 70 Strike and dip

**LOWER CAMBRIAN**

**Backbone Ranges Formation**

- 945 Varied coloured quartzites (minor), sandstone, & shale
- 905 Grey massive limestone, 20' - 60' thick
- Geochemical survey station
- Claim post and line
- × Helicopter pad
- △ Camp
- Creeks

position approximate due to numerous side channels



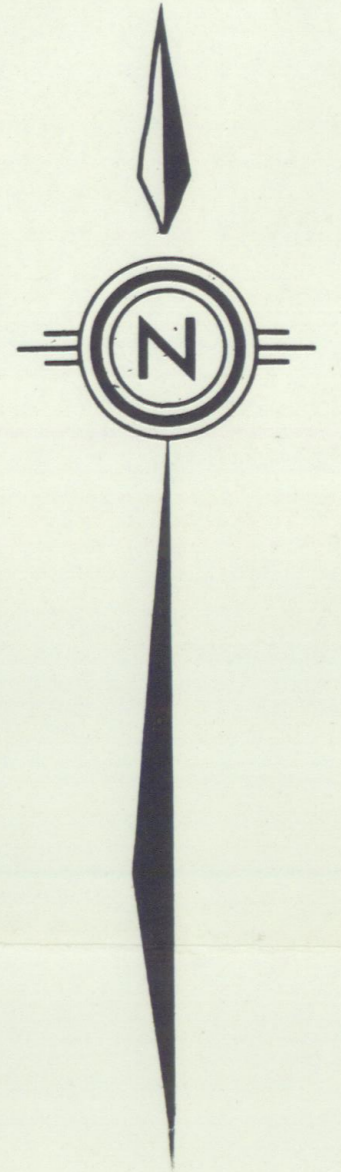
COMMAND RESOURCES LTD. (NPL)

DUO CREEK AREA  
LIZ 33-42, 49-58 MINERAL CLAIMS  
Mayo, Y.T.

GEOLOGY &  
CLAIM MAP

SCALE IN FEET  
400 0 400 800 1200

AGILIS ENGINEERING LTD. AUG 1974



- LEGEND**
- Geochemical survey station
  - 600 — Geochemical contour for zinc  
CONTOUR INTERVAL - 100 p.p.m.
  - Claim post
  - X Helicopter pad
  - △ Camp
  - Creeks



|  |           |
|--|-----------|
| COMMAND RESOURCES LTD. (NPL)   |           |
| DUO CREEK AREA<br>LIZ 33-42, 49-58 MINERAL CLAIMS<br><small>Mayo, Y.T.</small> |           |
| GEOCHEMICAL CONTOUR MAP FOR<br><b>ZINC</b><br>(P.P.M.)                         |           |
| SCALE IN FEET<br>400 0 400 800 1200  |           |
| AGILIS ENGINEERING LTD.  | AUG. 1974 |



0E 4E 8E 12E 16E 20E 24E 28E 32E 36E 40E 44E 48E 52E 56E 60E 64E 68E 72E 76E 80E 84E 88E 92E

4S 8S 12S 16S 20S 24S 28S 32S 36S 40S 44S 48S 52S 56S

BASELINE

TIE LINE

DUO CREEK

Puddle

CAMP

HELICOPTER PAD

- LEGEND**
- Geochemical survey station
  - 60 — Geochemical contour for lead  
CONTOUR INTERVAL - 10 p.p.m.
  - Claim post
  - x Helicopter pad
  - △ Camp
  - Creeks

position approximate due to numerous side channels



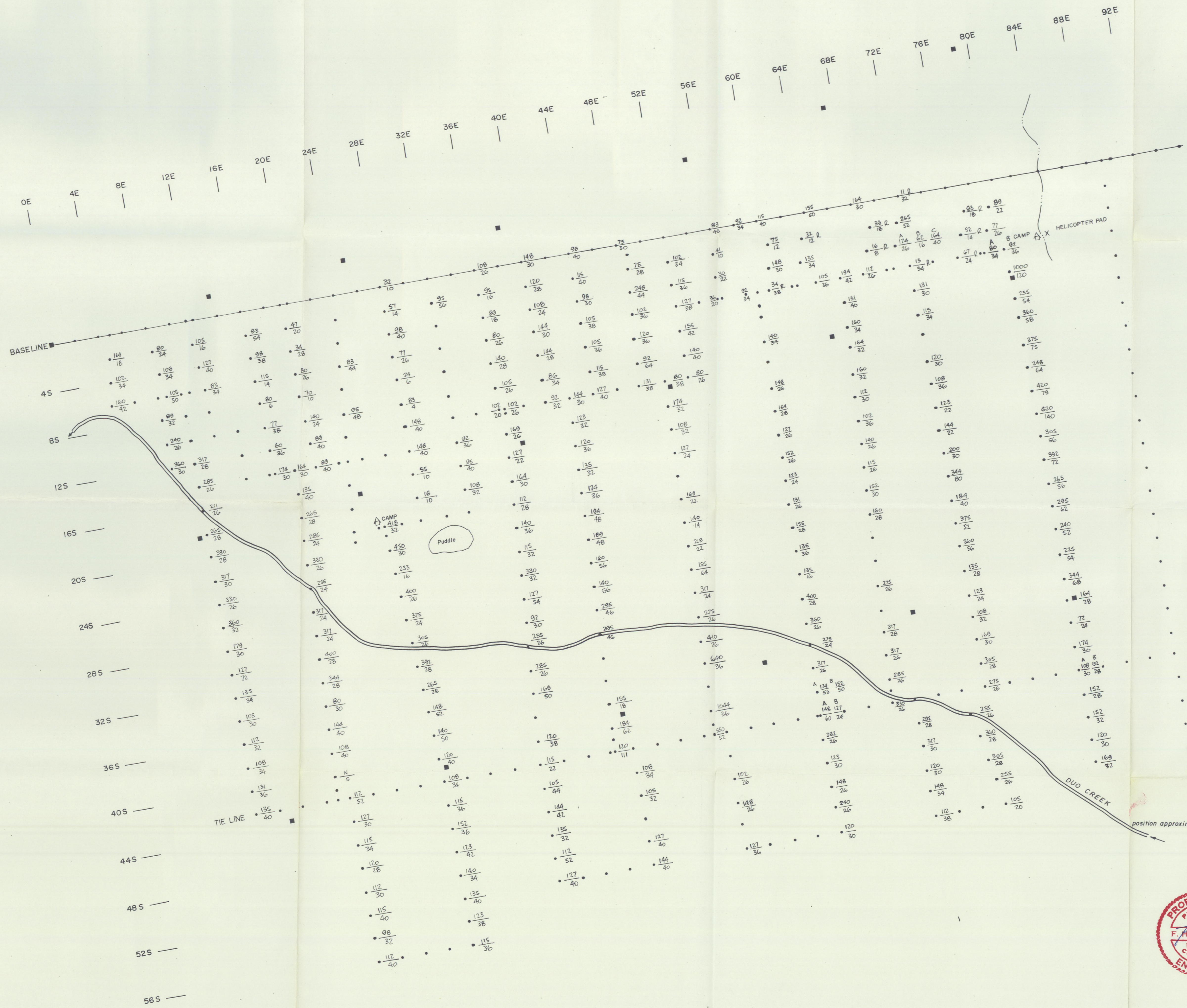
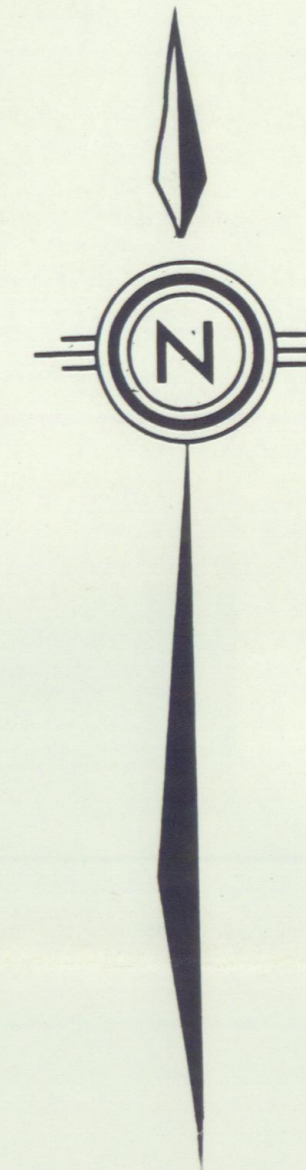
COMMAND RESOURCES LTD. (NPL)

DUO CREEK AREA  
LIZ 33-42, 49-58 MINERAL CLAIMS  
Mayo, Y.T.

GEOCHEMICAL CONTOUR MAP FOR  
**LEAD**  
(P.P.M.)

SCALE IN FEET  
400 0 400 800 1200

AGILIS ENGINEERING LTD. AUG. 1974



**LEGEND:**

- $\frac{160}{38}$  Value in p.p.m. for zinc
- $\frac{225}{54}$  Value in p.p.m. for lead
- Claim post
- X Helicopter pad
- △ Camp
- Creeks



COMMAND RESOURCES LTD. (NPL)

DUO CREEK AREA  
LIZ 33-42, 49-58 MINERAL CLAIMS  
Moyo, Y.T.

GEOCHEMICAL SURVEY FOR  
LEAD AND ZINC

SCALE IN FEET  
400 0 400 800 1200

AGILIS ENGINEERING LTD. AUG. 1974