

PROSPECTING REPORT

for

B & T MINERAL CLAIM

ATLIN MINING DIVISION

for

R.H. SERAPHIM, P. ENG.  
#316, 470 Granville Street  
Vancouver, B.C.

WORK COMPLETED JUNE 24, 1979

Location 104N/11E

Lat.  $59^{\circ} 38'$  Long.  $133^{\circ} 11'$

by

T.E. LISLE, P. ENG.

July 12, 1979

7352

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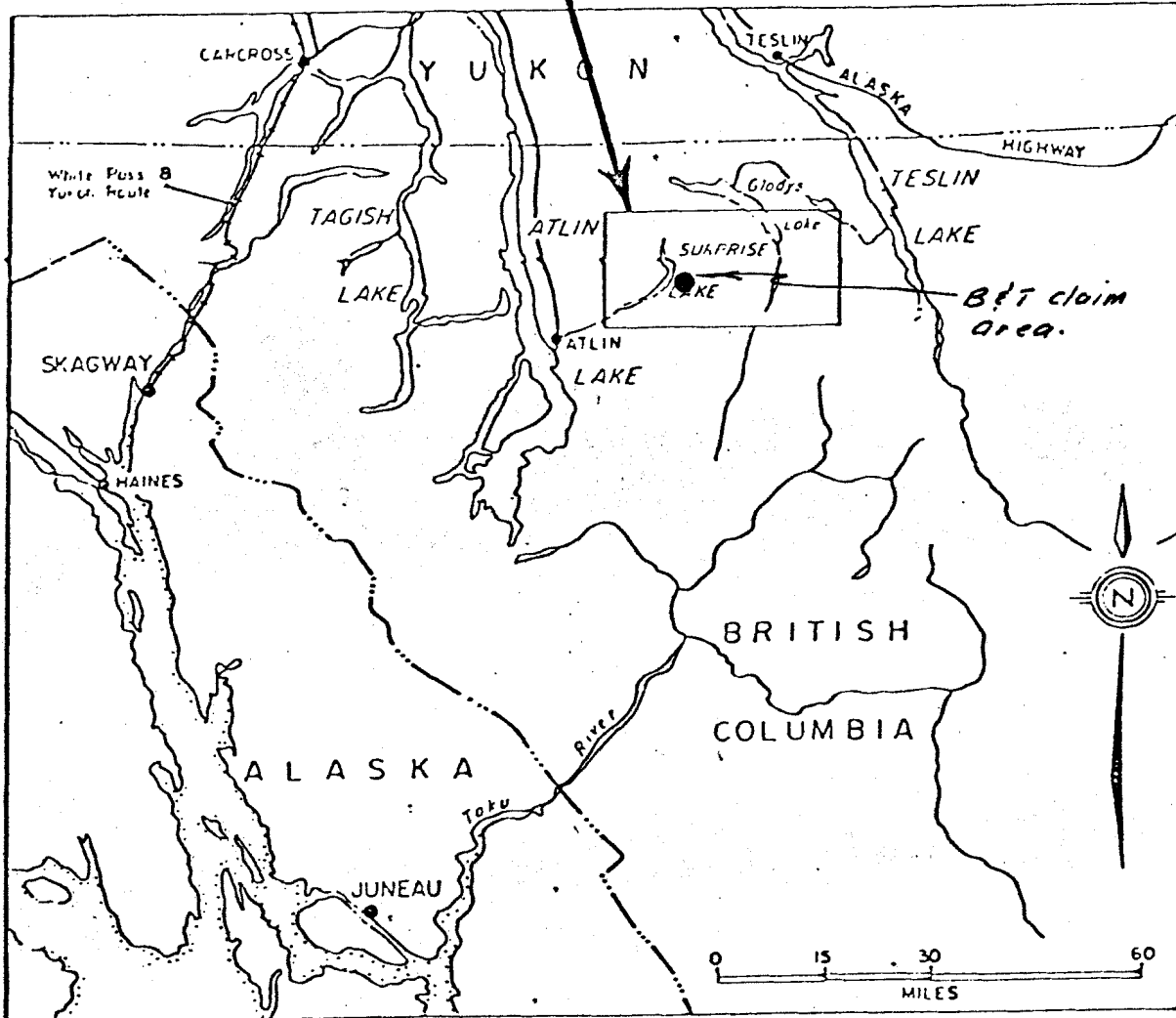
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ATLIN URANIUM PROJECT AREA



R.H.SERAPHIM ENGINEERING LIMITED.

B & T CLAIM

LOCATION MAP.

ATLIN MINING DIVISION, N.T.S. 104N.

June 1979

MAP 1.

Fig. 1.

### Summary and Conclusions

The B & T Claim, comprised of 12 units is South of Quartz Creek about three kilometers South-east of Surprise Lake in the Atlin Mining Division.

The Claim is underlain by coarse grained alaskite of the Surprise Lake Alaskite batholith. The Alaskite is locally cut by narrow, fine grained alaskite dikes which are locally porphyritic. These dikes are slightly more radioactive than the coarse grained alaskite.

No target areas of importance were encountered during the preliminary exploration of the claim which included geochemical, geological and radiometric surveys.

### Introduction

R.H. Seraphim Engineering Limited, on behalf of Wyoming Mineral Corporation, initiated a reconnaissance uranium exploration program in the Atlin area in 1978. The program included prospecting with geiger counters and G1S4 spectrometers, and limited geological and geochemical surveys around the Surprise Lake Alaskite batholith.

The program was partly in response to the uranium reconnaissance geochemical survey carried out by the Provincial and Federal governments in 1977.

The B & T mineral claim was staked during the 1978 season and prospected at various times as shown in appendix 1.

The results of this preliminary work are shown on the enclosed map and described in this report.

Location, Access, Topography

The Surprise Lake batholith is located between Latitudes  $59^{\circ}34'$  and  $59^{\circ}50'$ , and Longitudes  $132^{\circ}20'$  and  $133^{\circ}30'$  in northwestern British Columbia.

The southwest corner of the batholith is about 19 kilometers (12 miles) northeast of Atlin, B.C. Access to the western sections of the batholith is by a system of dirt and gravel roads leading from Atlin. Access to the central and eastern sections of the batholith is by helicopter or fixed wing aircraft.

Elevations in the area range from about 900 to 2100 meters above sea level.

The area has been subjected to repeated glaciation. The terrain is characterized by broad valleys, subdued upland surfaces and moderate to steep valley slopes. Some of the creeks headwater in precipitous cirques.

The Claim covers flat to gently rolling terrain south of Quartz Creek about three kilometers southeast of Surprise Lake.

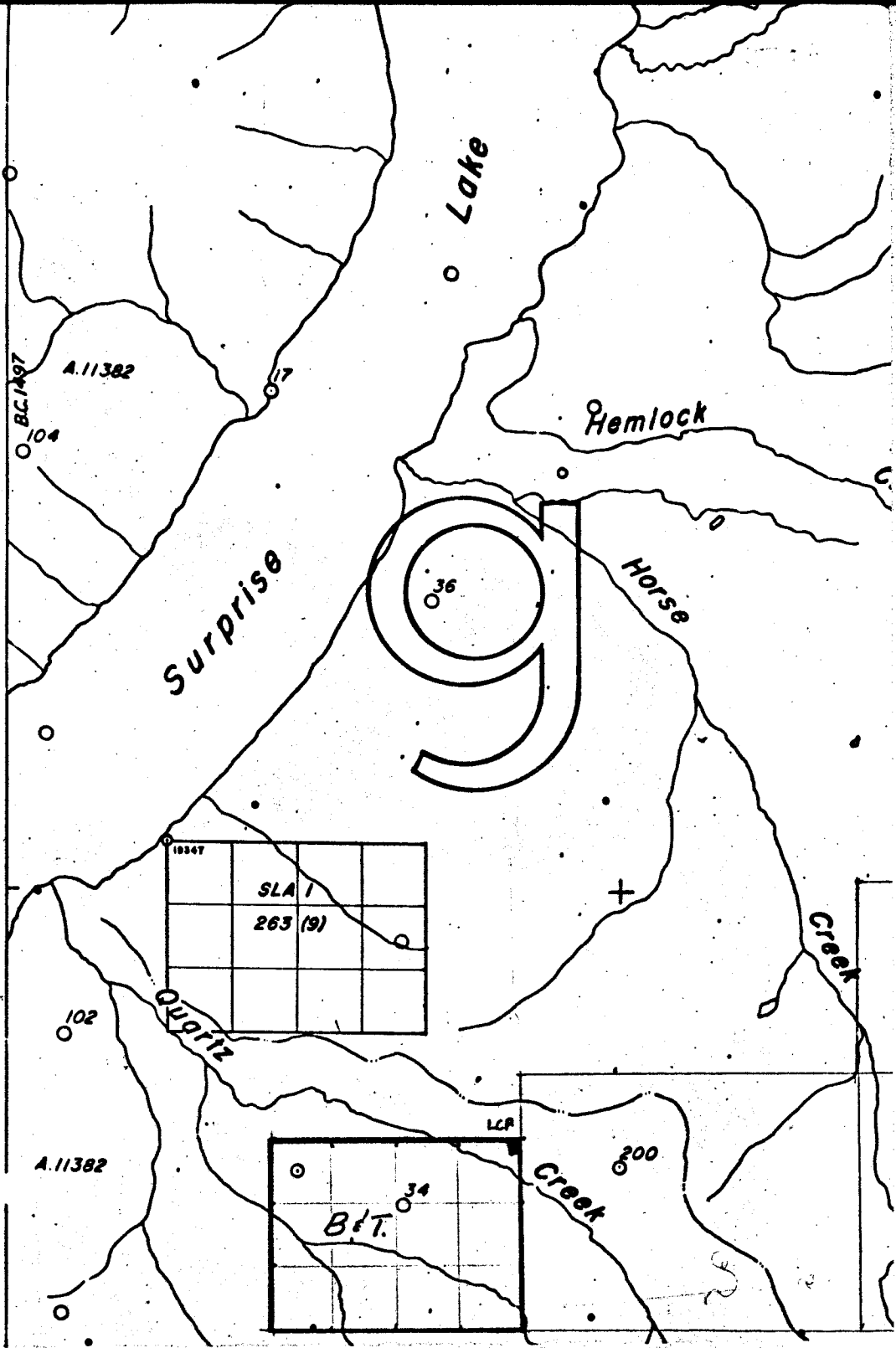
CLAIMS

The B & T claim, record number 370(6) is staked 4 west and 3 south of a legal corner post.

Sufficient assessment work was not completed, consequently, the three westerly units are to be dropped, leaving a claim 3 units west and three south from the Legal Corner Post.

104N 11E

M 10



I-W

*J. E. Gust*

R.H.SERAPHIM ENGINEERING

LOCATION

B&T. MINERAL CLAIM.

ATLIN MINING DIVISION

104N 11E

Scale 1:50,000

July / 79.

## HISTORY

The Surprise Lake alaskite intrusion has been known for many years to contain anomalous amounts of uranium.

In 1954 and 1955, Barymin Company investigated radioactive occurrences in the Cracker, Ruby and Boulder Creek areas. The main showing found in this investigation was the Purple Rose at the head of Cracker Creek. This prospect contains zeunerite and metazeunerite in an area of quartz veining and kaolinized fracture zones near the western margins of the intrusion.

In 1976 and 1977, Placer Developments Ltd. investigated uraniumiferous surficial deposits, containing in the order of 1.0 lb. uranium per ton, in the Trout Lake area. In the same period, a consortium of companies including Malabar Mines, Getty Mines Ltd. and Union Oil Company of Canada Ltd. investigated a number of uranium occurrences, including the Purple Rose, and drilled one of them in the area to the west of Trout Lake in 1978.

Mattagami Lake Mines have been exploring claims in the central section of the batholith during the past two years. A large number of claims were acquired by other companies and by individuals on the release in June, 1978, of geochemical data from the government sponsored uranium reconnaissance program.

The B & T claim was acquired on the release of geochemical data from the U.R.P program. No exploration work of consequence is known to have preceded this.



## WORK PROGRAM

Preliminary prospecting traverses were made in the Quartz Creek area in the summer of 1978. A number of geochemical samples were collected at that time.

On June 24, 1979, a three man party spent the day carrying out preliminary geologic, geochemical and radiometric surveys. Survey control was by hip-chain and compass.

Thirty soil and silt samples were collected and shipped to Chemex Lab. in North Vancouver. The samples were analyzed by Fluorometric methods for Uranium. A G1S4 spectrometer Serial No. 702107 and a geiger counter were used for the radiometric survey. Readings were taken with instruments on the ground beside the station.

## -GEOLOGY

The Surprise Lake Alaskite batholith intrudes an assemblage of volcanic, sedimentary and ultramafic rocks of paleozoic age, and granitic rocks of Mesozoic age. J.D. Aitken mapped the area from 1951 to 1955 and incorporated the results of his investigations in Memoir # 307. The following excerpts from that publication provide some insight into the geology of the batholith.

"..... The contacts of the Surprise Lake batholith also dip steeply outward everywhere except in the vicinity of Ruby Creek, where parts of the roof remain, and in detail the contact relations are exactly like those at Dawson Peaks .... Dykes of alaskite reach up to a quarter-mile from steep contacts, but are few .... Schistose rocks are found at several points along the contacts of the Surprise Lake batholith and the Dawson Peaks stock, but normally the contact-metamorphosed rocks are hornfels..... The alaskite (13a) forms light brown crumbly outcrops from which fresh specimens are not easily gained. It is recognized in the field by its inequigranular, highly variable texture (from fine to very coarse grained, and in places, porphyritic), abundant smoky quartz, low mafic-mineral content, and lack of colour-contrast between the two feldspars. Streaks and clots of simple pegmatite, a few inches long at most, are widespread and some outcrops contain small drusy cavities.

GEOLOGY cont'd

The only mafic mineral, brown biotite fringed with green, comprises 1 to 5 per cent of the rock. .. Traces of muscovite are present in most specimens. Fluorite and apatite are widespread in traces. Topaz and allanite are very rare. Arsenopyrite appears in the habit of normal accessory mineral in one specimen. ... The alaskite displays a confusing variety of textural types, here in sharp contact with one another, there in gradational contact.

... The simplest textures occur in the coarse-grained and nearly equigranular rocks, in which quartz forms large grains of simple outline."

GEOLOGY cont'd

The area to the north of the claim is underlain by a coarse grained alaskite characterized by 3 to 5% black scaly biotite.

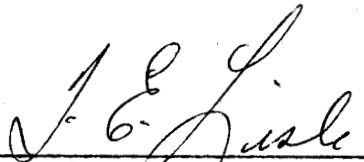
The alaskite is cut by narrow grey fine grained alaskite dikes, generally less than one meter wide. The dikes grade locally to smoky quartz or quartz-feldspar porphyry with +10% prominent quartz crystals, 2 to 4 mm in diameter and occasional large feldspars to 1 cm.

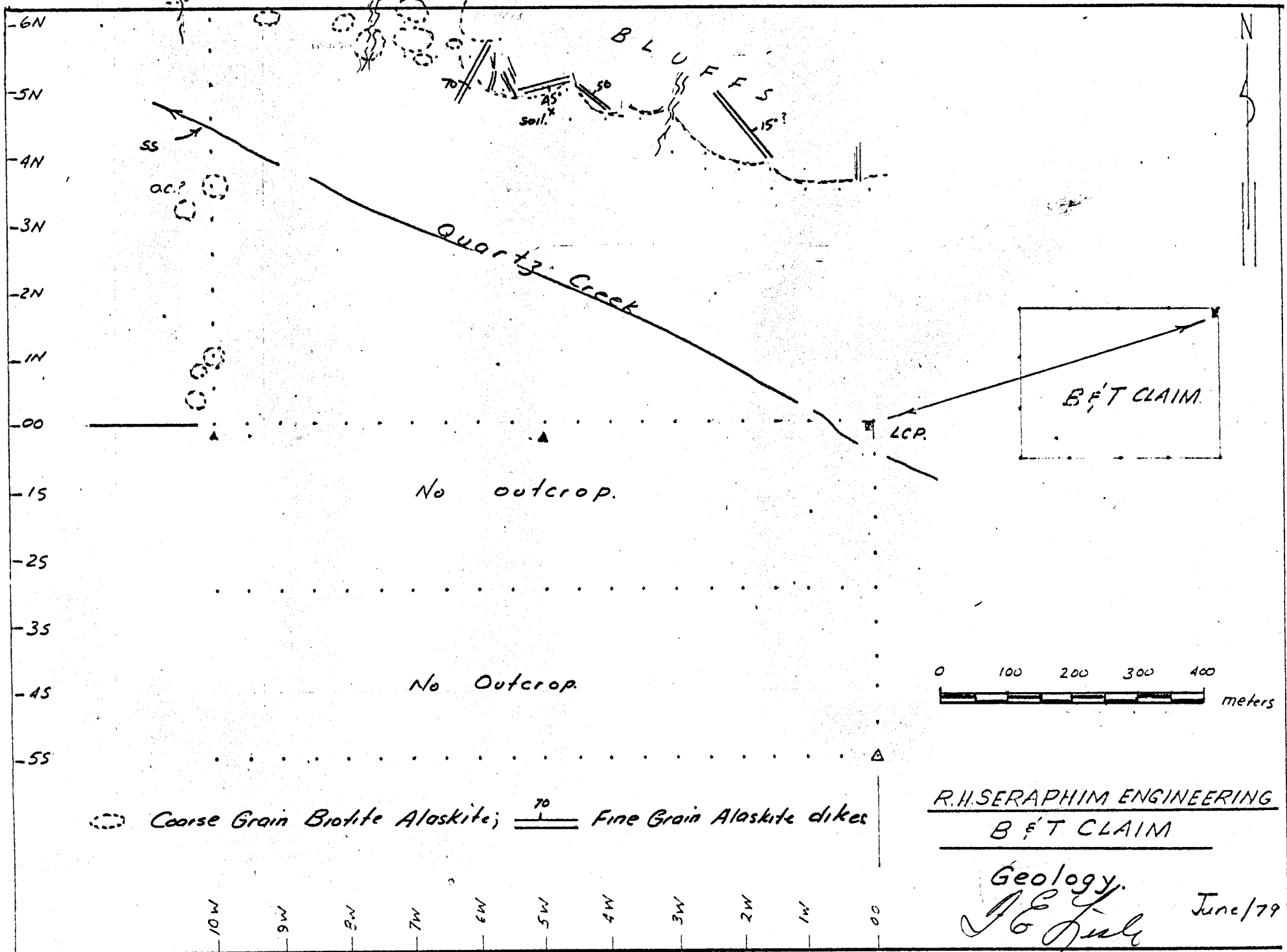
The coarse alaskite in many areas is highly weathered and breaks down into large areas of crumbly coarse gravel sized fragments.

DISCUSSION

The radiometric survey did not reveal any strong target areas on which to base further work. Readings taken on outcrops were generally higher than those taken in areas of overburden. Readings taken on the narrow dikes, were significantly higher than those taken on the coarse grained alaskite.

The geochemical survey did not reveal areas with substantial uranium in the soils. The silt sample to the north and west of the claim is coincident with an area which showed slightly higher than background on the uranium and thorium setting. The organic debris on the creek bank is weakly radioactive.

  
T.E. LISLE, P. ENG.

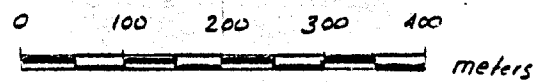
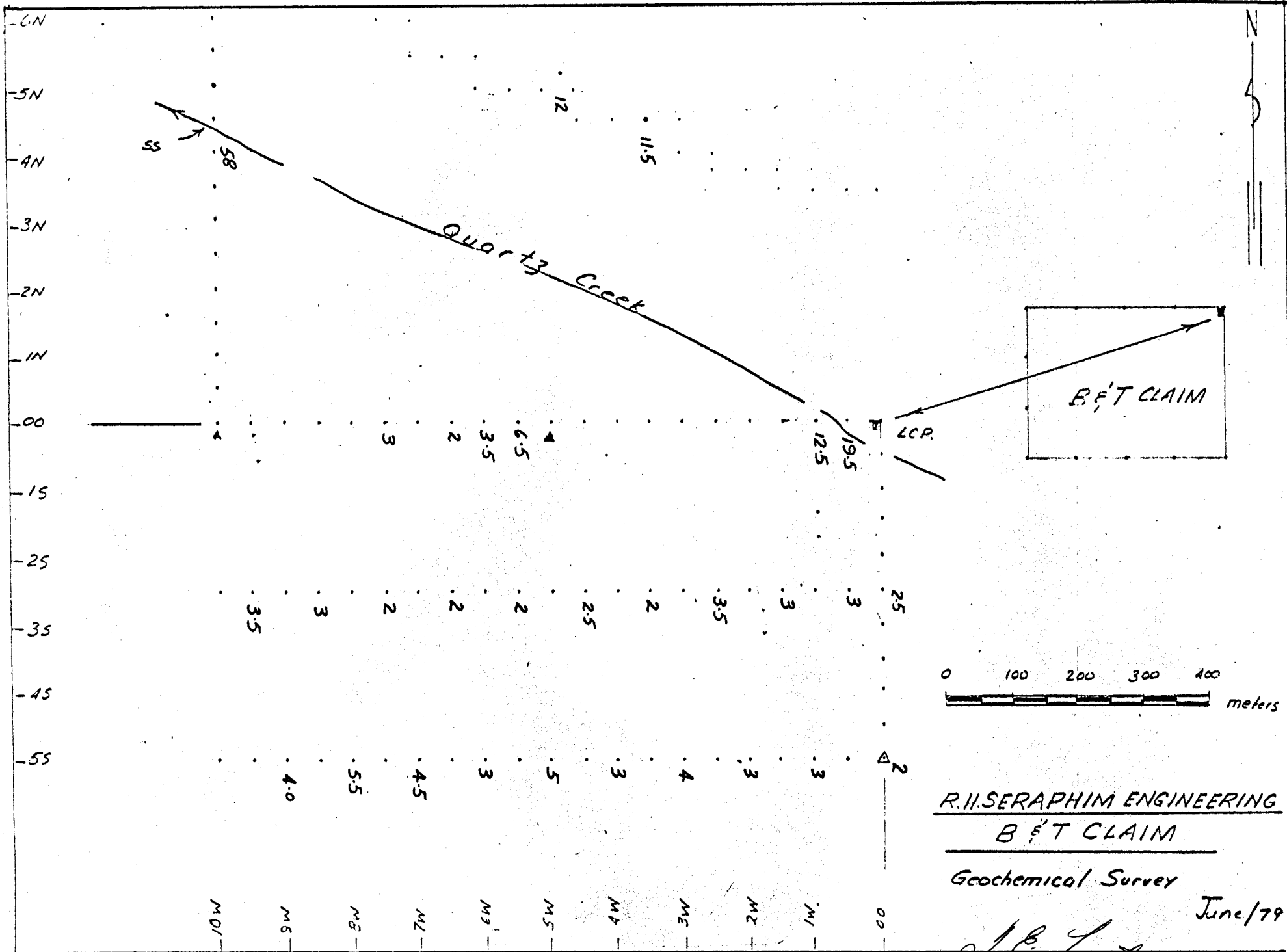


⊙ Coarse Grain Biotite Alaskite; 70 Fine Grain Alaskite dikes

R.H. SERAPHIM ENGINEERING  
BET CLAIM

Geology.  
J. G. July  
June/79





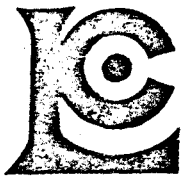
R. H. SERAPHIM ENGINEERING  
 B & T CLAIM

Geochemical Survey

June/79

*J. B. Smith*





Appendix 1

# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
 NORTH VANCOUVER, B.C.  
 CANADA V7J 2C1  
 TELEPHONE: ~~984-5259~~ 984-0221  
 AREA CODE: 604  
 TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO: R.H. Seraphim Engineering Ltd.,  
 316 - 470 Granville St.,  
 Vancouver, B.C.  
 V6C 1V5

ATTN: PROJECT: B&T

CC: T. Lisle

CERTIFICATE NO. 47958  
 INVOICE NO. 30895  
 RECEIVED June 27/79  
 ANALYSED July 5/79

SAMPLE NO. :	PPM U	DEPTH - HORIZ.		
BL 0+50W ✓	19.5			silt?
1+00W ✓	12.5			
5+50W	6.5			
6+00W	3.5			
6+50W	2.0			
BL 7+50W	3.0			
2+25S 0+00W	2.5	12" B+C		Coarse sandy soil - limonitic.
0+50W	3.0	10" C		" " " Lt. brown.
1+50W	3.0	10" C		Light brown sand.
2+50W	3.5	10" A+C		Coarse - light sandy soil.
3+50W	2.0	12" B+C		Coarse sandy soil - limonitic.
4+50W	2.5	12" A+C		" brown soil - moddy.
5+50W	2.0	10" B+C		Sandy soil - limonitic
6+50W	2.0	8" C		Coarse sandy soil - light.
7+50W	2.0	8" C		Light brown sandy soil.
2+25S 8+50W	3.0	?	C	" " " " (Muddy)
2+75S 9+50W	3.5	?	C	" " " " & clay.
5+00S 0+00W	2.0	10" C		Sandy soil - medium brown
1+00W	3.0	12" A+C		Sandy soil - medium brown.
2+00W	3.0	10" A+C		Medium brown sandy soil.
3+00W	4.0	10" A+B+C		Coarse muddy soil - Lt. Brown.
4+00W	3.0	8" A+C		Coarse sandy soil - Light brown
5+00W	5.0	10" C		Medium - muddy soil.
6+00W	3.0	12" A+B+C		Fine limonitic sandy soil.
7+00W	4.5	6" A+C		Medium sandy soil. limonitic.
8+00W	5.5	7" C		Weathered Rock.
5+00S 9+00W	4.0	7" A+C		Coarse sandy soil.
BT450N 350W	11.5			
BT450N 1000W	58			
BT525N 475W	12.0			



MEMBER  
 CANADIAN TESTING  
 ASSOCIATION

CERTIFIED BY: .....

APPENDIX 2

B & T Claim -- Expenditures - June 24, 1979

LABOUR

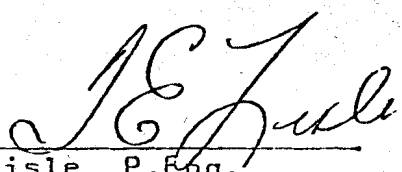
T. Lisle	1 day @ 150.00	\$ 150.00
D. Fennings	1 day @ 60.00	60.00
D. Taylor	1 day @ 55.00	55.00
CAMP COSTS	3 @ \$15.00	45.00
INSTRUMENT RENTAL		10.00
TRUCK RENTAL		35.00
HELICOPTER CHARTER		308.00
GEOCHEMICAL SAMPLES	25 @ \$2.75	68.75
REPORT PREPARATION		150.00
OFFICE OVERHEAD - Typing, etc.		50.00
		<hr/>
	Total	<u>\$ 931.75</u>

*J. E. Lisle*

CERTIFICATE OF QUALIFICATION

I, T.E. Lisle of 145 West Rockland Road,  
North Vancouver, B.C. declare that:

1. The work described in this report was carried out by me and by the personnel listed in Appendix 3 under my supervision, on June 24, 1979.
2. I am a graduate of the University of British Columbia with a B.Sc. 1964.
3. I have worked intermittently in exploration geology for several years prior to 1964, and have worked continuously in the same field since that date.
4. I am a member of the following organizations:
  - [a] Canadian Institute of mining & Metallurgy
  - [b] Geological Association of Canada
  - [c] Association of Professional Engineers of B.C.

  
\_\_\_\_\_  
T.E. Lisle, P.Eng.  
October 2, 1978