

RADIOMETRIC AND GEOCHEMICAL REPORT

on the

D & D and D & D & D CLAIMS

ATLIN MINING DIVISION

104 N / 11 E

for

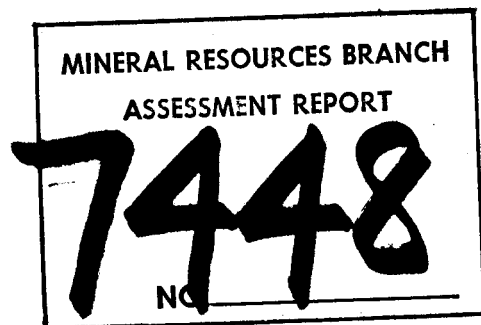
R.H. SERAPHIM, P. ENG.  
# 316, 470 Granville Street  
Vancouver, B.C.

WORK COMPLETED - JULY 6, 1979

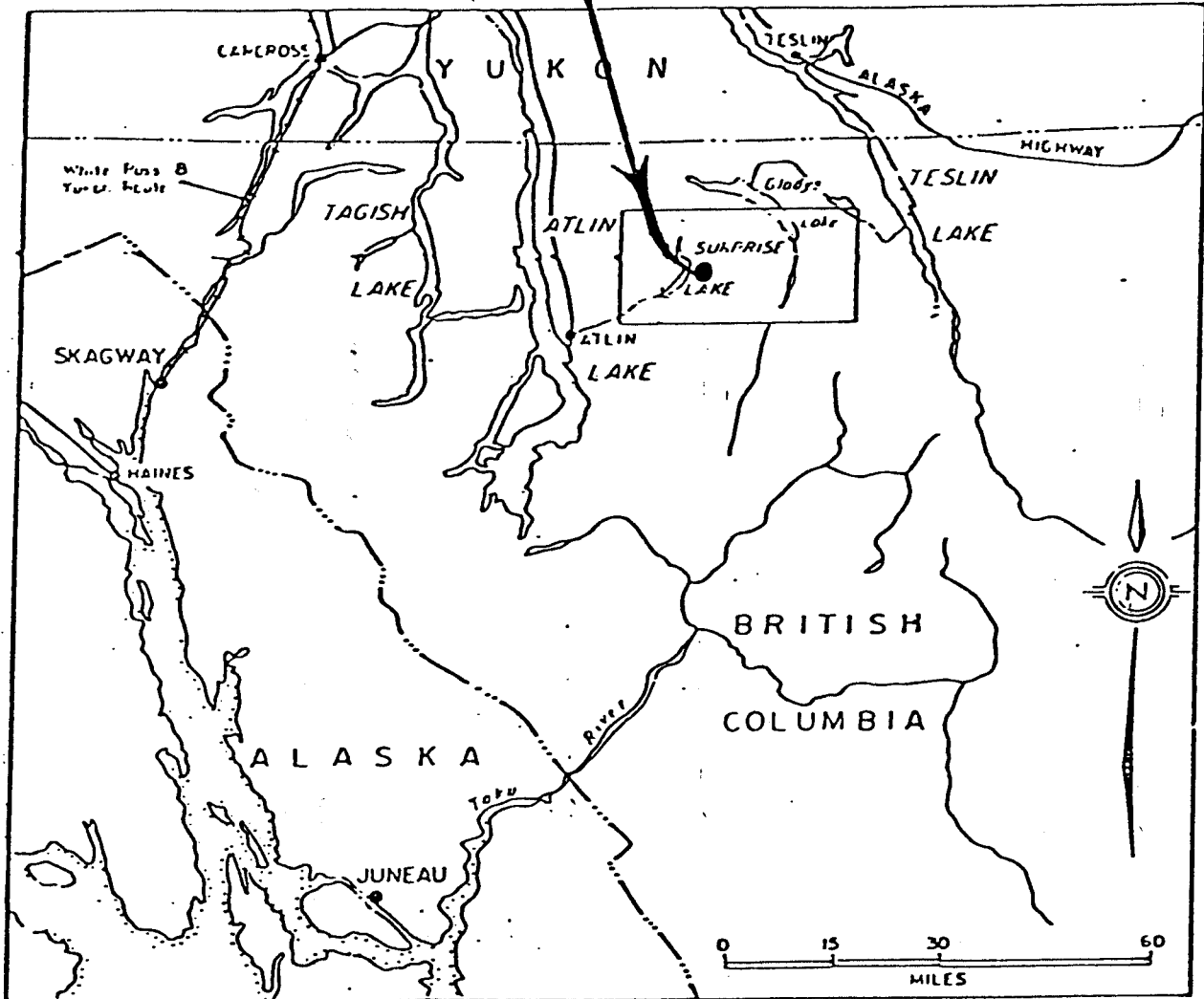
by

T.E. LISLE, P. ENG.

August 9, 1979



D&D - D & D & D MINERAL CLAIM



R.H. SERAPHIM ENGINEERING LTD.  
LOCATION MAP ,D&D - D&D&D M.C.  
ATLIN MINING DIVISION

104 N/11WE

Fig. 1.

SUMMARY & CONCLUSIONS

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MAPS: LOCATION	
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PROSPECTING MAP with	GEOCHEMICAL RESULTS
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## INTRODUCTION

The D & D and D & D & D mineral claims were acquired by staking after the release of the Uranium Reconnaissance Program geochemical data.

Preliminary prospecting was carried out on the D & D claim in 1978. Further work was undertaken in 1979.

This later work did not generate much exploration data due to the exceptional heavy winter snowfall, and the unseasonable weather throughout June and July, 1979. Because of this, further work should be undertaken to better evaluate the mineral potential of the claims.

The results of the work completed to date on the claims are shown on the enclosed maps 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 D & D and D & D & D claims are approximately 5.5 Km. southeast of Surprise Lake. Lat.  $59^{\circ} 39'$ , Long.  $133^{\circ} 08'$ , N.T.S. 104N/11E. Access is by helicopter from Atlin, B.C.

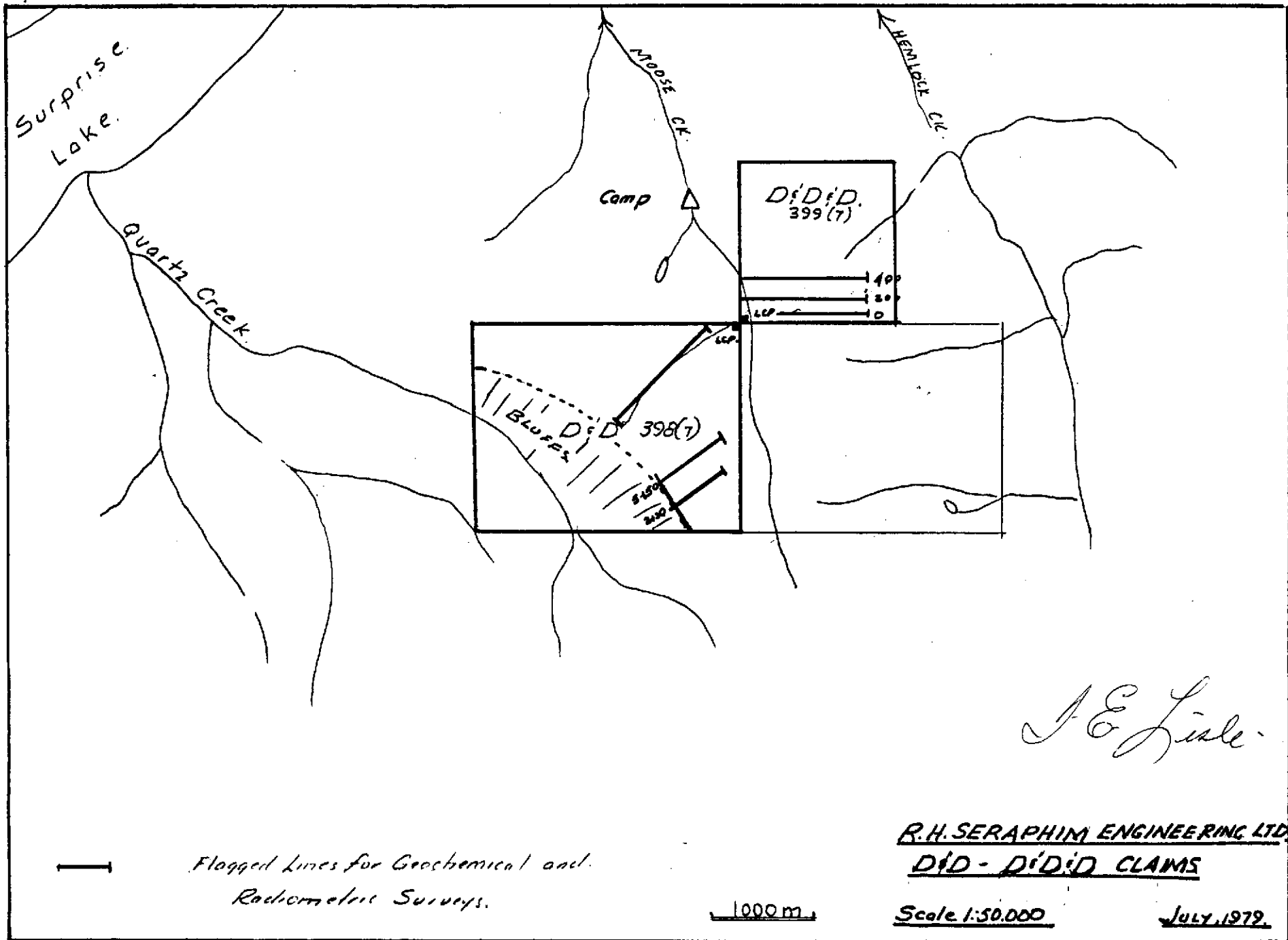
### WORK PROGRAM

Preliminary prospecting traverses were made in the claim area in 1978.

Between June 26 and July 6, 1979 a two man camp was established near the claims on upper Moose Creek.

Three lines were run ( compass & belt chain) East from the west boundary of the D & D & D claim. Stations were marked at 50 meter intervals. on lines 200 meters apart. Radiometric readings were taken at the stations with a G1S4 Spectrometer.

Soil samples were collected at 100 meter intervals at the stations shown.



-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.

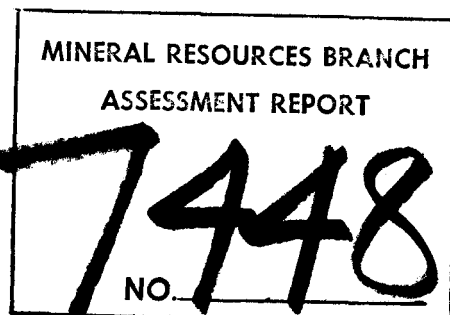


GEOLOGY cont'd

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 a 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. Finer-grained varieties generally cut coarser-grained ones, but there are many exceptions. ... The simplest textures occur in the coarse-grained and nearly equigranular rocks, in which quartz forms large grains of simple outline."

The Alaskite in the claim area is commonly the coarse grained weathered variety with lesser amounts of fine grained or alaskite porphyry (large feldspar in fine grained matrix). These latter rocks are usually fresher and more massive but on the Quartz Creek bluffs are locally limonitic, manganiferous and in places exhibit a pale green alteration.

Traces of Fluorite are present in the bluffs along Quartz Creek and minor amounts of chalcopyrite, galena, sphalerite and wolframite are also present.



## GEOCHEMISTRY

Geochemical soil samples were collected from the stations marked on Map 3. Samples were dug with a grub-hoe, packaged in standard Kraft soil envelopes and shipped to Chemex Laboratory in North Vancouver. At Chemex the samples were analyzed fluorometrically for uranium.

The claim area has been glaciated and is characterized by broad valleys, felsenmeer slopes and locally, precipitous bluffs, ridges and cirques. The soil horizons are not well developed and typical samples contain fine to coarse alaskitic sand, with variable amounts of surface organic debris.

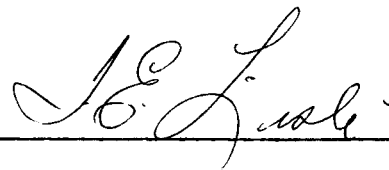
The geochemical samples yielded from 0.5 to 91 ppm U. The sample data has not been examined in detail, however, field notes indicate that (a) some of the samples yielding higher values contain organic debris, and (b) some of the higher assays are from samples in the vicinity of Creeks.

## RADIOMETRICS

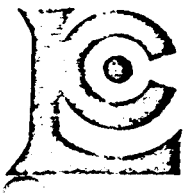
Radiometric readings were taken at the grid stations with a G1S4 spectrometer. Three sets of readings were taken for total count, Uranium & Thorium, and Thorium, and the values shown are the average.

RADIOMETRICS cont'd

The radiometric survey did not indicate areas of strong radioactivity. The data does show low to locally moderate variations within all three factors which may have significance when correlated with geology and geochemistry. In view of this, and as the work covered only a small area of the claims, prospecting should be continued.

A handwritten signature in cursive script, reading "T.E. Lisle", positioned above a horizontal line.

T.E. LISLE, P. ENG.



APPENDIX I.

# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: 526-5299 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

CERTIFICATE NO. 48535  
INVOICE NO. 31396  
RECEIVED July 13/79  
ANALYSED Aug. 1/79

ATTN: CC: Lisle

SAMPLE NO. :	PPM U	DEPTH	HORIZ.	REMARKS
D+D 0+00 BL 1+00 NE	5.0			
2+00	11.5	10"	C	light clayey soil.
2+00	6.5	8"	A+C	Medium " "
3+00	8.5	8"	C	" " "
4+00	13.5	10"	A+C	" sandy "
5+00	13.5	9"	C	" " "
6+15	25	8"	C	Light " "
7+00	28	9"	C	Coarse " "
9+00	58	9"	Silt	" Silt "
10+00	22.5	8"	Silt.	" " <u>Silt.</u>
10+90	32	6"	Silt.	Medium "
12+20	10.5	8"	A+C	" muddy soil.
D+D 0+00 BL 13+00	8.5	9"	A+C	" sandy soil.
2+50 BL 0+50 NE	9.5	6"	C	Coarse weathered rock.
1+00	6.0	8"	A+C	Medium - Muddy soil.
3+00	15.5	10"	C	Coarse sandy soil.
4+00	10.0	11"	C	" weathered rock's soil.
5+00 NE	40	8"	A+C	" sandy soil.
2+50 BL 0+50 SW	18.5			
5+50 BL 1+00 NE	11.0	6"	C	" weathered rock.
3+00	9.5			
4+00	13.5	10"	A+C	mud-soil.
6+00	8.0	11"	A+C	" "
D+D 5+50 BL 8+00	9.0	10"	C	silty " "

SAMPLE NO. :	PPM U	DEPTH	HORIZ.	REMARKS
D+D 0+00 BL 1+00	9.5	8"	C	Coarse rock - soil
2+00	4.0	8"	C	" weathered rock-soil-
3+00	5.5	7"	C	Weathered rock-soil-
4+00	4.0	9"	A+C	" " - "
4+00	4.0	10"	A+C	" " - "
5+00	7.5	7"	A+C	" " - "
5+50	22.0	8"	C	" " - "
6+00 BL	4.0	6"	A+C	" " - "
3. 0+00 BL 8+00 NE 1. m d	4.0			
2+50 BL 2+00 NE	22.0	8"	C	Coarse weathered rock's soil.
6+50 NE	3.0	9"	A+C	" sandy soil.
2+50 BL 7+00 NE	9.0	6"	C	" soil (muddy).
5+50 BL 2+00 NE	7.5	8"	C	weathered rock.
5+00 NE	5.5	10"	A+C	Mud's soil.
D+D 5+50 BL 7+00 NE	4.5	10"	A+C	Coarse sandy soil.



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *[Signature]*



APPENDIX 1

CHEMEX LABS LTD.

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

ANALYTICAL CHEMISTS GEOCHEMISTS REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 48309

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

INVOICE NO. 31076

RECEIVED July 9/79

ATTN: CC: T. Lisle

ANALYSED July 16/79

Table with columns: SAMPLE NO., PPM U, Depth, Hum., and description. Contains multiple rows of soil analysis data with handwritten notes and soil descriptions like 'Fine silty sand', 'Coarse sandy soil', etc.



MEMBER CANADIAN TESTING ASSOCIATION

CERTIFIED BY: [Signature]

APPENDIX 2

D & D GROUP

EXPENDITURES

D & D - D & D & D - 29 units

LABOUR

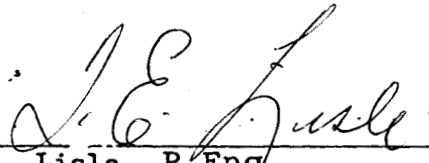
T. Lisle - July 2, 1979	\$ 150.00
D. Fennings Prospector - June 26 - July 6	
11 @ \$60.00	660.00
J. Taylor Prospector - June 26 - July 6	
11 @ \$55.00	605.00
CAMP COSTS 23 @ \$15.00	345.00
HELICOPTER COSTS:	
June 26/79 Hughes 500	338.50
July 2/79	308.00
July 6/79	247.00
TRUCK RENTAL 6 days @ \$35.00	210.00
GEOCHEMICAL SAMPLES 39 @ \$3.00	117.00
38 @ \$3.00	114.00
REPORT PREPARATION	150.00
OVERHEAD	50.00
	<hr/>
	\$ 3,294.50

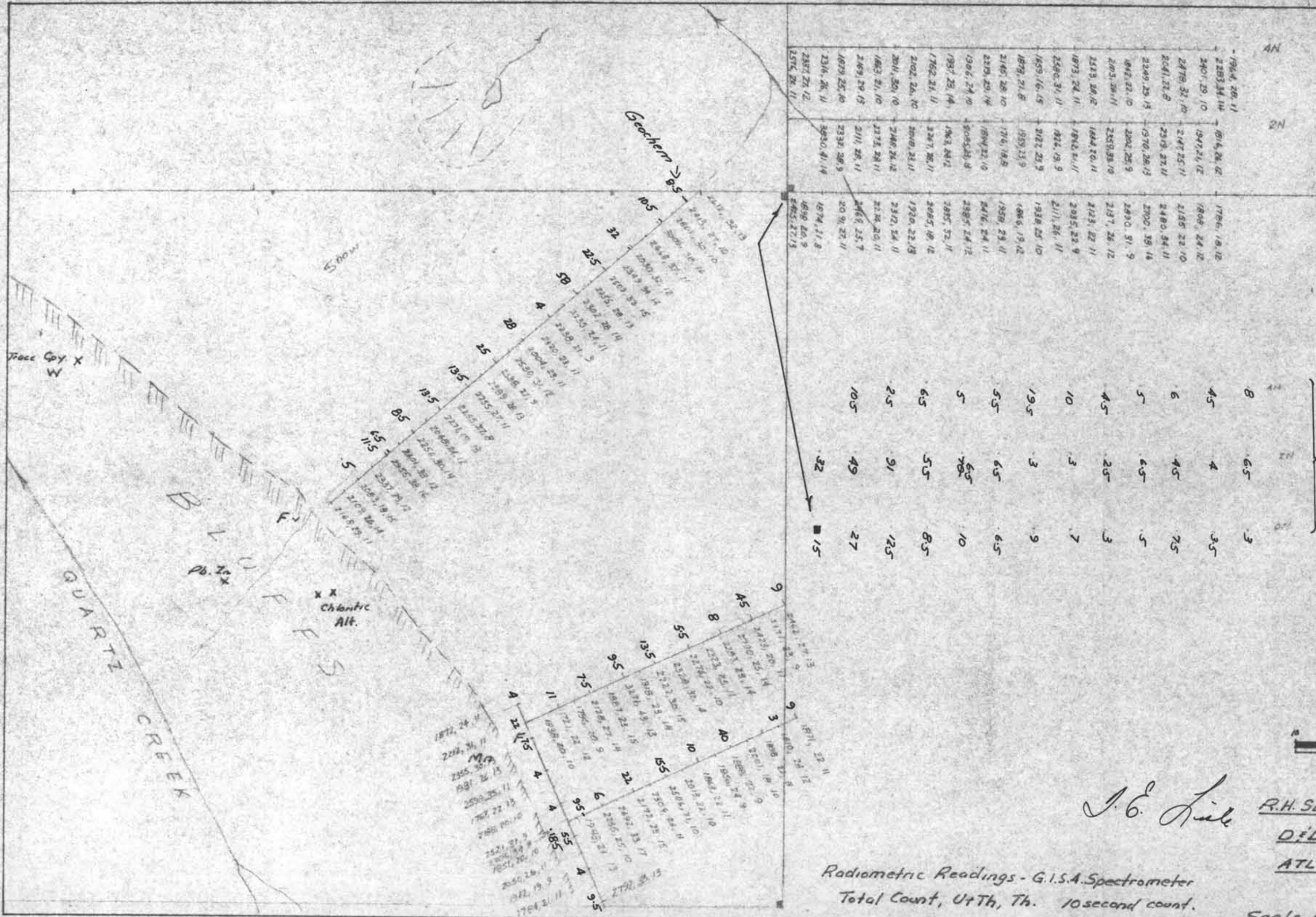
*J. E. Lisle*

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 2 under my supervision.
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.

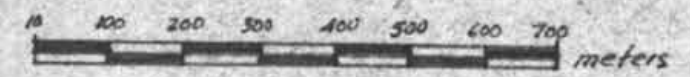
  
\_\_\_\_\_  
T.E. Lisle, P.Eng.



1964, 26, 11	1786, 18, 12	8	6.5	3
2283, 34, 14	1806, 24, 12	4.5	4	3.5
2401, 29, 10	1941, 21, 12	6	4.5	7.5
2478, 32, 10	2147, 25, 11	5	6.5	5
2481, 28, 8	2319, 37, 11	4.5	4.5	7.5
2249, 29, 13	1910, 28, 13	5	6.5	5
1842, 32, 10	2202, 28, 9	4.5	2.5	3
2003, 28, 11	2359, 33, 10	10	3	7
2483, 28, 12	1884, 20, 11	19.5	3	9
1873, 24, 11	1842, 31, 11	5.5	6.5	6.5
2580, 31, 11	1824, 19, 9	5	7.5	10
1859, 16, 15	2127, 25, 9	5.5	6.5	6.5
1879, 21, 8	1859, 23, 9	5	6.5	6.5
2145, 28, 10	1716, 18, 8	5	6.5	6.5
2278, 29, 14	1894, 22, 10	5	6.5	6.5
1906, 24, 10	2085, 24, 12	5	6.5	6.5
1937, 23, 14	1963, 24, 12	5	6.5	6.5
1762, 21, 11	2387, 32, 11	5	6.5	6.5
2102, 26, 10	2387, 32, 11	5	6.5	6.5
2041, 30, 10	2049, 21, 11	5	6.5	6.5
1863, 21, 10	2148, 24, 12	5	6.5	6.5
2169, 29, 13	2375, 24, 11	5	6.5	6.5
1879, 25, 10	2111, 28, 11	5	6.5	6.5
2314, 28, 11	2332, 28, 9	5	6.5	6.5
2387, 27, 12	1874, 21, 8	5	6.5	6.5
2576, 28, 11	1898, 20, 9	5	6.5	6.5
	2482, 27, 13	5	6.5	6.5

Geochemical Assays - ppm U.

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**7448**  
NO



*J. G. Lyle*

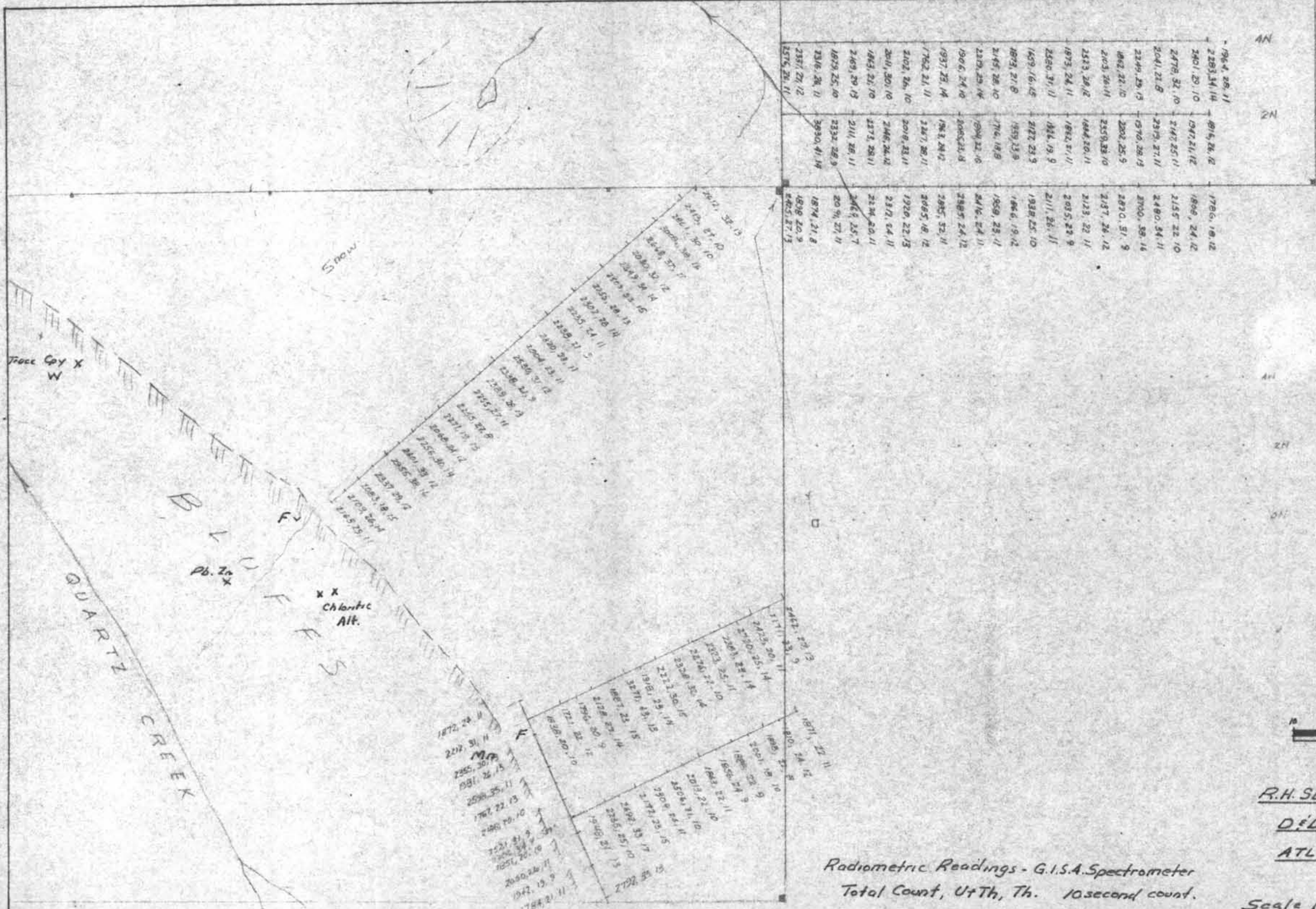
R.H. SERAPHIM ENGINEERING LTD  
D/D - D/D/D CLAIMS  
ATLIN MINING DIVISION

Radiometric Readings - G.I.S.A. Spectrometer  
Total Count, U<sup>238</sup>, Th. 10 second count.

Scale 1:10,000

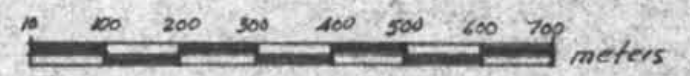
July, 1979





1964, 28, 11	1916, 28, 12	1786, 18, 12
2283, 34, 14	1947, 21, 12	1808, 24, 12
2401, 29, 10	2147, 25, 11	2157, 22, 10
2478, 32, 10	2391, 27, 11	2480, 34, 11
2641, 22, 8	2593, 33, 10	2700, 38, 14
2249, 29, 13	2976, 38, 13	2820, 51, 9
1862, 22, 10	2882, 25, 9	2930, 51, 9
2403, 28, 11	2359, 33, 10	2137, 26, 12
2323, 24, 12	1844, 20, 11	2123, 22, 11
1873, 24, 11	1812, 21, 11	2035, 23, 9
2380, 31, 11	184, 19, 9	2111, 26, 11
1459, 16, 15	2122, 23, 9	1938, 22, 10
1873, 21, 8	1959, 23, 9	1866, 19, 12
2145, 28, 10	1716, 18, 8	1958, 23, 11
2379, 29, 14	1944, 22, 10	2416, 24, 11
1906, 24, 10	2005, 21, 8	2887, 24, 12
1937, 23, 14	1942, 24, 12	2835, 32, 11
1762, 21, 11	2427, 28, 11	2085, 18, 12
2102, 24, 10	2018, 23, 11	1920, 22, 13
2811, 30, 10	2146, 24, 12	2372, 34, 11
1463, 21, 10	2373, 28, 11	2124, 20, 11
2169, 29, 13	2114, 28, 11	2469, 25, 7
1879, 25, 10	2332, 28, 9	2074, 27, 11
2316, 28, 11	2890, 41, 14	1874, 21, 8
2351, 27, 12	1874, 21, 8	1874, 21, 8
2575, 28, 11	1874, 21, 8	1874, 21, 8

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**7448**  
NO



R.H. SERAPHIM ENGINEERING LTD  
D:D - D:D!D CLAIMS  
ATLIN MINING DIVISION

Radiometric Readings - G.I.S.A. Spectrometer  
Total Count, UTh, Th. 10 second count.

Scale 1:10,000 July, 1979

*J.E. Hill*