GEOLOGICAL & GEOCHEMICAL & RADIOMETRIC REPORT

on the

D & D NO. 4,5,6,7,8 CLAIMS

ATLIN MINING DIVISION

LAT. 59°45' LONG. 133°15' 104N/14E & W.

for

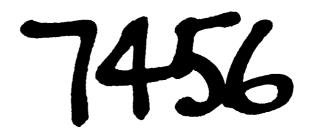
R.H. SERAPHIM P. ENG.

WORK COMPLETED JULY 29, 1979

bу

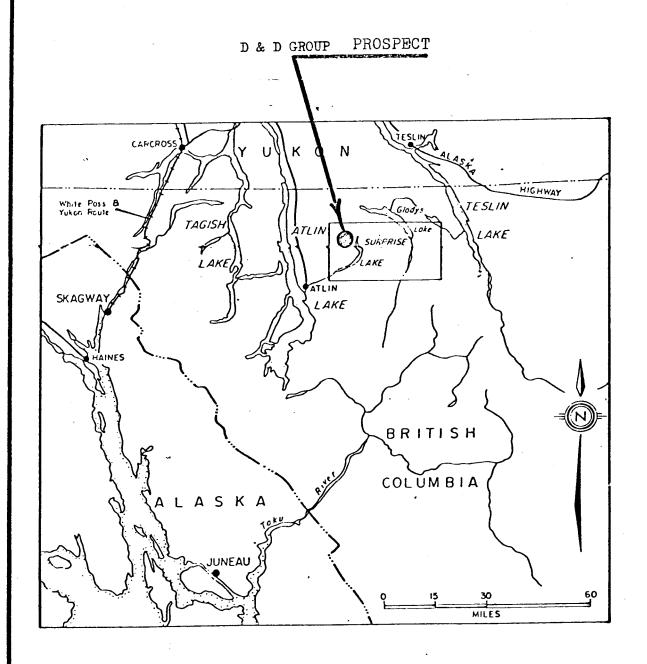
T.E. LISLE, P. ENG.

SEPTEMBER 9, 1979



CONTENTS

-	SUMMARY & CONCLUSIONS	Pag	e l	
	INTRODUCTION	Pag	re 2	
	CLAIMS	Pag	e 2	
	LOCATION, ACCESS & TOPO	GRAPHY Pag	re 3	
	HISTORY	Pag	re 4	
	WORK PROGRAM	Pag	e 5	
	GEOLOGY	Pag	e 6 &	7
	DISCUSSION	Pag	e 8	
	ILLUSTRATIONS	1		
	LOCATION MAP	1		
	CLAIM MAP	2		
	D & D # 4	GRID-GEOCHEMISTRY	MAP	3 A
	и .	GRID - GEOLOGY	11	3B
	11	1:500 GRID - U & T	n. "	4 A
	11	1:500 " - Th.	***	4B
	11	1:500 GEOCHEMISTRY	**	4C
	DAVE SHOWING		11	5
	APPENDIX 1	GEOCHEMISTRY		
	APPENDIX 2	EXPENDITURES		
	APPENDIX 3	CERTIFICATION		



R.H. SERAPHIM ENGINEERING LTD.

LOCATION MAP, D & D GROUP

ATLIN MINING DIVISION, NTS 104N

MAP 1 SEPT.. 1979

SUMMARY & CONCLUSIONS

The D & D 4 to 8 mineral claims are located west of Surprise Lake, and south of Mt. Edmond in the Atlin Mining Division.

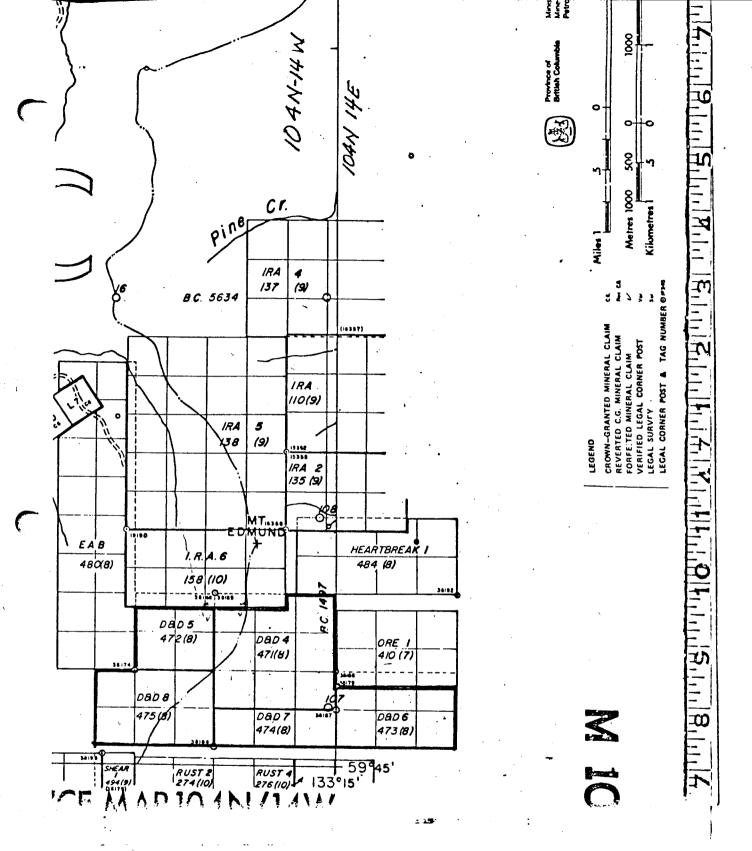
The claims are underlain by Alaskite of the Surprise Lake batholith, and locally by remnants of Palezoic cover rocks.

Porspecting in 1978 disclosed a narrow quartz vein with Kasolite and other secondary minerals.

Follow-up work in 1979 has shown that this quartz vein is part of a larger zone of veining and fracturing in the Alaskite which is marked by a pale limonitic gossan.

Geological, radiometric and geochemical work as well as trenching in 1979 failed to indicate mineralized extensions to the quartz vein, or other mineralized areas.

Because this work was limited in extent, further prospecting should be undertaken along the zone of interest.



R.H. SERAPHIM ENGINEERING, LTD D & D GROUP. ATLIN MINING DIVISION Scale 1:50:000 July /79

· 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 D & D 4 to 8 mineral claims were staked after the U.R.P. data release and prospected during 1978 and 1979. The results of the 1979 work are described herein and shown on the enclosed maps.

CLAIMS

The D & D group of mineral claims is comprised of 28 units in 5 claims as follows:

Name	Record No.	<u>Units</u>	<u>Anniversary</u>
D&D 4	471(8)	9	August 1/79
D&D 5	472(8 ⁾	4	August 1/79
D&D 6	473(8)	6	August 1/79
D&D 7	474(8)	3	August 1/79
D&D 8	475(8)	6	August 1/79

LOCATION, ACCESS, TOPOGRAPHY.

The Surprise Lake batholith is located between Latitudes $59^{\circ}34^{\circ}$ and $59^{\circ}_{\upsilon}50^{\circ}$, and Longitudes $132^{\circ}20^{\circ}$ and $133^{\circ}30^{\circ}$ 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 4 to 8 mineral claims are located south of Mt. Edmund and west of the northern part of Surprise Lake, 104N - 14E and 14W.

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 intrusions.

In 1976 and 1977, Placer Developments Ltd. investigated uraniferous 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 aquired by other companies and by individuals on the release in June, 1978, of geochemical data from the government sponsored uranium reconnaissance program.

The area has been investigated for placer gold, but other than this, no extensive exploration is known to have taken place for Uranium on the .D & D 4 to 8 claims.

WORK PROGRAM

The claim area was prospected by R.H. Seraphim Engineering field personnel on the dates listed in Appendix 1.

The program consisted of soil sampling with a grub hoe from the stations marked, and the taking of radiometric readings with a G1S4 spectrometer (serial No. 702107). The geology of the claims was partly mapped.

Control for grid lines was by belt chain and compass.



-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 exerpts 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 D & D 4 to 8 claims are mainly underlain by a medium to coarse grained Alaskite, which is commonly porphyritic. A finer grained phase of unknown size is present near the north claim line of D&D 4. The rocks are variably weathered.

A limonitic zone, trending northeast is present south of the fine grained Alaskite. This zone contains numerous quartz veinlets, and is perhaps part of a more extensive fracture zone.

One of the veins found in place (Map 5) contains Kasolite over a few inches, and occurs within a strong gougy fault zone trending N20°E.

No uranium mineralization has been detected on other veins to date.

DISCUSSION

The radiometric data, as indicated on maps 4% and 4B show narrow ranges for Thorium, and for Uranium and Thorium. No strong anomalous trend is indicated.

The geochemical data from the same grid (Map 4C) shows a range of assays from 2.5 to 15.5 ppm. Uranium. No important trend northeast from the Dave showing is indicated. Samples on lines 4E and 6E ranged from 2.5 to 35 ppm Uranium with a number of the higher assays between the north perimeter line of the Dave 4 claim and the Dave showing. Radiometrics, (U +Th), in this same general area shows a higher than background response partially coincident with the finer grained Alaskite. Mapping and radiometric prospecting in this general area should be continued.

T.E. LISLE P. ENG.

	DATE		JECT			o of
	- 19 <u>.</u>	•••••		•		
		00 200	F 400.5	I		
		00 200 1	E 4∞E	600E 70 Y -	-	,
	·	1				\$
	۷.	C.P. 010 No.4.15		17/7	R. 196.	`[]
		<u> </u>	28	312	Course Porphyry	_
	IRA-25-28		- /6	7.5		
		. } `	· 10 · 7	• . 12·5		111
		. ,	. 26	•	•	2005
		. 3	. 10	. 29		
			. • 2,1	· 7·5		
		Ĭ.	· 35	. 19.5		4005
		· · · · ·	- 30	· 8·5 · 10·5		
		: ' <u>'</u> \'.	· 8 · 24	-10	•	1
		}}/	· 13·5	- 14.5	•	l
	0:01.5		. 14.5	· 7.5	MOD	1 A A iB 6005
	0.000		.,	3.5		•
		\.	٠، ١	1 • 4	•	·
- ,		·	. 6	8		8005
	·	1/1	. 10.5	•		
			8.	•		
			3.5	•		10005
		· .	· 2.5			· ·
		·	5,4-	—. <u> </u>		`
	Coche Ck.	Rocks.	21.5			
			•	•		12005
		./.	•			
	,			. 	•	
			•	•	•	14005
			•	•		Λ
		•	•	•	1	1) 0.
					• 0	
		·				h ^y
					1 (°)	
					. 0	
•		l			R.N. SERAPHIM ENC	SINEERING LTD.
1					D:D No. 4.	1
					Geochemistry	1
					ATLIN MINING	j.
				ي	SCALE 1:10.000	AUG057/79

					JOE NO	
			1			<u>-</u>
,	0o 2∞E	400 E	600E			
2.6.7	p. 0,0 No.4.15		Inmont	i.e.		
IRA-25-28	1 2	- •	列分次	Coorse Porphyr	/	
	. (,	•		E 7.		
)	•	(la)	E 0 116		200
	. ↓	•	1. 1.			
	ic.			والوبه		
1	Ţ,	. /				400
	٠ الم		ور رود ولاد	1356 3		
	· {[} ·	·	0. 4	為		
	\mathcal{V} .	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	/\ri !:	₹2.7°	MOP AR	'R 60
0:0 No 5				V *	MOD 4 II	
			1	60.		,
pole vellow-	*	1,000	•	•		Ec
-t 3:	A)	Sales				
Porphyn	- £50.					
-		· · · · · · · · · · · · · · · · · · ·	•			100
		. 1	<u> </u>			
Coche Ck. X	ocks Virgin					1200
	The state of the s	. •	•	• •		, 200
· /			<i>y</i> -	•		·
Coarse Pa	Float.	" . F'				140
		local	F.C.A		/	•
	•	• '	•		. 2 4 6	-le
				/	Co fin	\sim
				A #	6 11	
				Θ		
A . 7 Medium	7 - Coarse Grained	Aloskite.		B.N. SERAPA	IM ENGINEE	RING
Jois Spors	· Porphyry- (Fine			0:0	No. 4. CLAIN	<u> </u>
168 Promi	reat Fractures				01064	
Q Quari	's Keining.			ATLIN 1 SCALE 1:10.	MINING DIVI	

CD. BY C		SUEJECT		•	JOB NO.	O OF
	co	200 E	400 E	600€		
	4			27		1
	L.C.P. DiD No	4.15		3//	L' Ridge.	7
	11		38	36 12 1 A		
120 25.27			- 3/	-40	- Course Porphyry	1/1
IRR-25-28 .	· · · · · ·	,	- 30	. 67	•	
) () ()		-38	· A1	<i>*</i>	
	. 1	•	. 47	- 34	•	2005
	. ,	3	· 48	· 55		
	• (6		· 37 · 37	25 · 32		
	•	<u>.</u> 	. 39	· 39		400 5
		, " ,_	· 46	. 27		
	•	$\langle i \rangle$ ·	. 57	. 20		•
		{}	· 43	· 23		
0:0005	•	Ĭ .	. 3/	· 28 · 27	· MOL	A RiB 600
	•	١.	28.	•		
		(Al.	•		•
	•	<i>:\\\</i>	. 34	•		800 1
			. 19		,	
1	i	1111	25	•		
	!	. 111	. 29			10005
·	7		.35			
		. • •	29 .	—.	.3	
Coche	Ck. Rocks.		.31			
		.•	•	•		12005
		•	•			
	?	•	•	·-	•	
	•	•	•	•		1400
					•	
	•	•	•	•		1
					10	Lule
						hum
			,			/
					igcup	
	1				R.H. SERAPHIM EN	GINEERING LT
					D!D M. 4.	
					,	
					Oranium & Th	
					3CALE 1:10.000	

	410E .	4506	46 0E	470£	4 80E	4 90E	3005		
• 27	• 2/	• 28	-23	.39	- 2/	- 22	• 20		650 S _
•31	.40	· z3	•27	' 27	•27	•28	• 2 Z	7.3	
•23	.2/	•22	.53	.25	.27	:22	,28		670s -
, 27	. 30	. 24	, 26	,3 0	.27	, 27	, 20		. 6805 -
. 27	• 3 2	• 34	. 26	· 32	•33	•2/	• 27		690 5 4
. 27	. •21	• 23	•27	- 26 TR. /	-29	•30	• 26	.27	700S x
. 27	• 20	•29	'27	• 27	• <i>3</i> 0	• 29			So Suele
									PHIM ENGINEERING. LTD

34 4A.

	410 €	4506	4606	4 70£	4 80E	4306	3005	
• 9	٠6	•//	• 9	. 8	÷ 10	•10	.7	
. 10	· 12.	•11	.9	• /3	و.	و٠	•7	G60 S
″1ō	."	10	.13	· 10	•#	٠9	•9	67 05
• 10	·/3	. 10	• <i>15</i>	.14	.11	•//	•#	<i>630</i> 5
• 11	. /2	•11	.10	. /3	•#	. 9	. /0	690 5
• //	. 14	•/0	•//	· 10	• //	• 10	.7 ·	7 700 S
. 7	•10	• //	•/2	• 7	· <i>13</i>	٠8		J6 Juli
						-		R.H. SERAPHIM ENGINEERING. LT

430E	4106 -	450E -	- 30 7	4 10£	. 308 4	4306	-3005	
. 9	· 13·5	•	•	•	- 7	5.5	.5.5	250 S _
.45	175	. 9	. 15:5		• /2	•6	. 6	6605
.5	٠.5	• 7:5	. 75	. 9	. 8	ı 9	. 8	6705 -
.১ও	· <i>5</i> ·5	•7	• 6	. 8	. /2	• 7	• 7	G805 -
8	• //-5	•11-5	٠4	35	.4	· 3.5	•3	6905 -
•5.5	. 2.5	• 3.5	• 4.5	· 3·5 Rench 1.	• 3.5	•	.25	7005 1
f	· 4·5	• 2.5	. 6.5	• 4	٠.۵	• ঃ-ড		16 Jule
				,	÷	•		R.H. SERAPHIM ENGINEERING, LTD

DATE SUBJECT	JOB NO.
14	56
	× 75°
	9 - 5.5 ppm-U. 1 met
R-2:-	Hemotite. 3 . 5 " " " " " " " " " " " " " " " " " "
7-1	10.5 19 Trench 1
V - 11-	Hemolitic gouge
Kosolite Province Coarse grouned Rosolite Province Plant Float	
Course grained for al askite. 12ppm-U- Imch	1159 1
	19 ppm-0. 1 meter
	sel-te
,	16 har
	R.H. Seraphim Engineering
meters	Di'D No. 4- Dave Showing Geology & Geochemistry
	Scale 1:500 Sept/



Appenoix /

212 BROOKSBANK AVE. NORTH VANCOUVER, B.C. CANADA V7J 2C1

TELEPHONE: AREA CODE: 984-0221 604

TELEX:

043-52597

CHEMEX LABS LTD.

• GEOCHEMISTS WREGISTERED ASSAYERS

CERTIFICATE NO. 49223

INVOICE NO.

31843

RECEIVED

August 1, 1979



Appendix

CHEMEX LABS

• ANALYTICAL CHEMISTS

GEOCHEMISTS

REGISTEREI

CERTIFICATE OF ANALYSIS

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

PROJECT: DD #4

CC: T. Lisle

			cc. I. PISTE
	SAMPLE NO. :	PPM	
	SAMPLE NO. :	U	
	0 + 00s 4 + 00yr	28	
	0 + 50	16.0.	
	1 + 00	10.0	
	1 + 50	7.0,	
	2 + 00	26 -	•
	2 + 50	10.0	
	3 + 00	21.0	
	3 + 50	35 /	
ı	4 + 00 4 + 00	30 ,	
I	4 + 50 4 + 00	8.0 -	
	$5 + 00 + 00$ \checkmark	24.0/	
ı	5 + 50	13.5	
l	6 + 00	14.5	
I	6 + 50 + 4 + 00x	9.0/	
I	7 + 00 + 4 + 00E	6.5 ′	
ſ	7 + 50 4 + 00 W	5.0	
l	8 + 00	6.0 ′	
l	8 + 50	10.5′	
l	9 + 00 + 00	8.0 ′	
l	9 + 50 + 4 + 00E	3.5	
ŀ	10 + 00 4 + 00E	2.5′	
	10 + 50s 4 + 00w	8.5	
	T-1	10.5	
	79 R2	2.0	(rock)
	400E 1110S SILT	21.5	(TOCK)
├~			

CERTIFICATE OF ANALYSIS

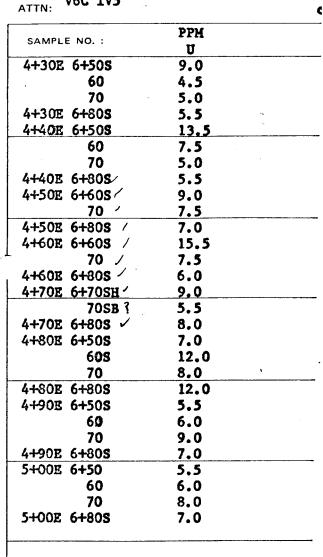
TO:

R.H. Seraphim Engineering Ltd., 316 - 470 Granville St.,

Vancouver, B.C.

V6C 1V5

. ANALYTICAL CHEMISTS



MEMBER CANADIAN TESTING ASSOCIATION



CHENEX LABS LTD.

CC: Lisle

CAMADA TELEPHONE: AREA CODE: TELEX: V7J 2C1 ESS - 3 S54-0221 604

: 604 043-52597

· 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. 49322

INVOICE NO. 32009

RECEIVED Aug. 3/79

ANALYSED Aug. 20/79

SAMPLE NO. :	TPM U	
0+00S 6+00I		•
0+50	7.5	•
1+50	12.5	
2+50	29	
3+00	7.5	
3+50	19.5	
4+00	8.5	
4+50	10.5	-
5+00 .	10.0	
5+50	14.5	
6+00	7.5	
6+50S 6+00E		
6+90S 4+30E	8.0 /	'
4+40	11.5	
4+50	11.5	
4+60	4.0	•
4+70	. 3.5	
4+80	4.0	
4+90	3.5	
6+90S 5+00E		
7+00s 4+30W		
4+40E		
4+50	3.5	
4+60	4.5	
4+70	3.5	
4+80	3.5	
5+02	2.5	
5+20	4.5	
5+30	2.5	
5+40	6.5	
5+50	4.0	
5+60	6.0	
5+70	3.5 ✓	
7+00S 6+20E		
7+50S 6+40E 8+00S 6+40E		
8+005 6+40E	· ·	

	FRUITUL: UD #4		
SAMPLE NO. :	PPM II		
TR 1 A	5.5	,	M
В	6.5		
TR 1 C	3.5		
TR 2 A	32		
TR 3 A	12.0		
TR 3 (b)	19.0		
SAMPLE NO. :	PPM		
	U		
TR-1 79-R-3	2.0		
1			

APPENDIX 2

EXPENDITURES D & D # 4

LABOUR			
T. LISLE - July 22,23,24,27,28/79 - $\frac{1}{2}$ day 29/79			
5•	5 days @ 150.00	\$	825.00
B. BOBEL - July 19/78 - Geologist	1 @ 125.00		125.00
J. TAYLOR - July 23,27,28,29	4 @ 55.00		220.00
D. FENNINGS - July 27,28	2 @ 60.00		120.00
B. MCKEE - July 27,28	2 @ 75.00		150.00
TRANSPORTATION			
Helicopter - Hughes 500 July 21/79			154.00
July 24/79			154.00
July 27/7	$9 - \frac{1}{2} \times 247.00$		123.00
July 29/7	9		154.00
TRUCK RENTAL 6 x 35.00			210.00
CAMP COSTS			
Man days - 15 @ 15.00 per man			225.00
GEOCHEMICAL ANALYSIS 96 x 3.	00		288.00
REPORT - 1 @ 150.00			150.00
MISCELLANEOUS OFFICE OVERHEAD			
Reproduction - typing - etc.	,		50.00

JE Findle

CERTIFICATE OF QUALIFICATION

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

- 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.