

11/84

KARGEN DEVELOPMENTS LTD.  
GEOLOGICAL AND GEOCHEMICAL  
REPORT ON THE  
UMITI CREEK PROPERTY  
CARIBOO MINING DIVISION  
LAT.  $53^{\circ}08'N$  LONG.  $122^{\circ}12'W$  NTS 93G/1E  
DATE OF WORK: NOVEMBER 3 - 9, 1985  
DATE OF REPORT: JANUARY, 1986  
AUTHOR: J.C. FREEZE, B.Sc., F.G.A.C.

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GEOLOGICAL BRANCH  
ASSESSMENT REPORT

14,396

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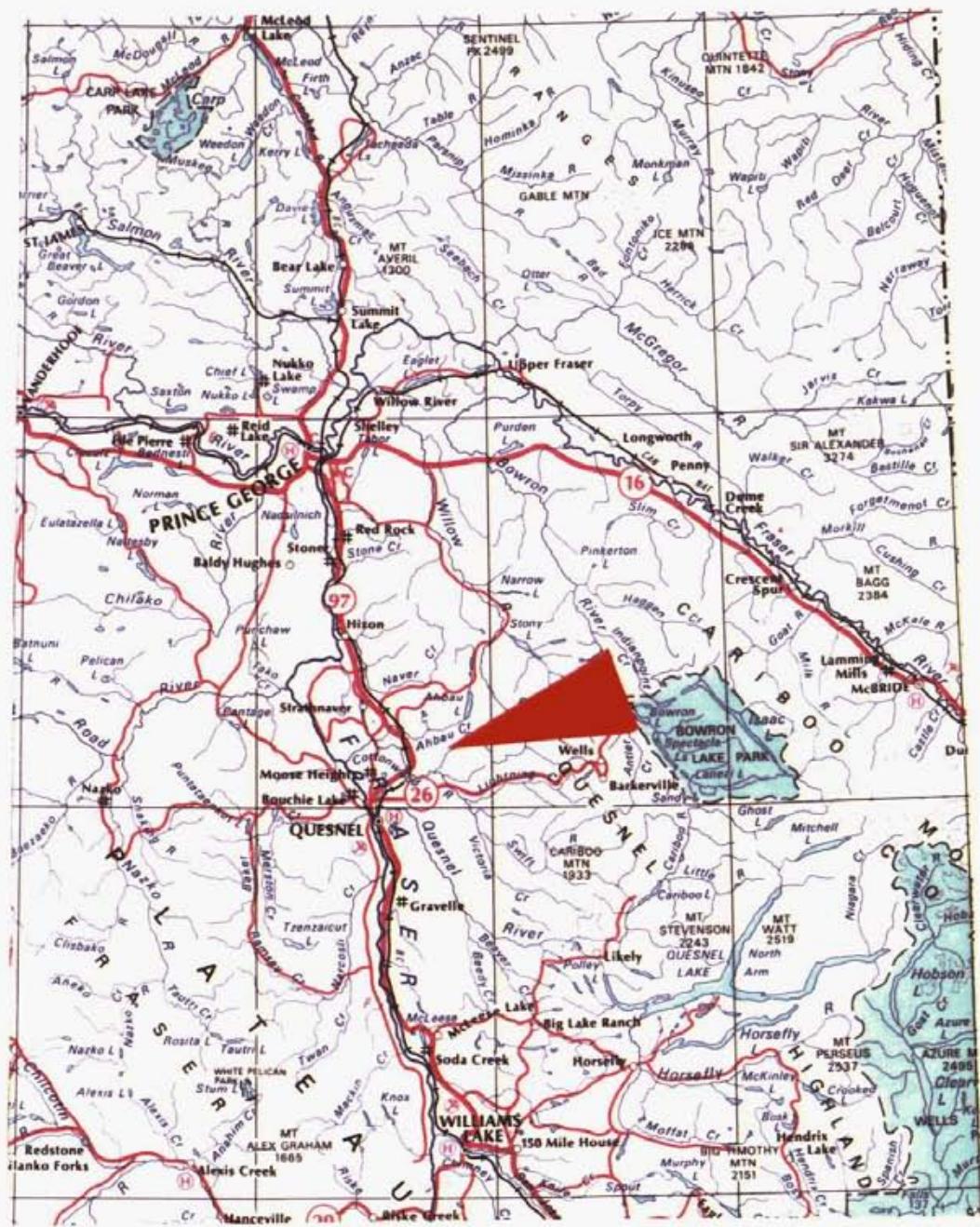
## INTRODUCTION

The Umiti Creek property is a gold prospect located in the Cariboo Mining division near Quesnel, B.C. The property consists of four 20 unit modified grid claims. The claims owned by Mr. J.C. Bot and Mr. S.P. Butler cover a magnetic high outlined by a high level airborne survey.

Kargen Developments optioned the claims and carried out geological and geochemical work between November 3 and 9 in 1985. The program was carried out by contract geologist S.P. Butler and prospector S.E. Montgomery under the direction of consulting geologist, J.C. Freeze, F.G.A.C. of White Geophysical Inc.

### 1.1 Location and Access

The property covers 20 square kilometres located approximately 27 air kilometres northeast of Quesnel, B.C. Access is via a gravel road heading east from Highway 97 at approximately 15 kilometres north of Quesnel. The property is located approximately 20 kilometres east of Highway 97. The B.C. Rail line also runs parallel and adjacent to Highway 97, providing access. At the time of the 1985 work program the gravel road was washed out in places so a helicopter was required for access.



**KARGEN DEVELOPMENT CORP.  
— UMI GROUP —  
LOCATION MAP**

1 : 2,000,000

**WHITE GEOPHYSICAL INC.**

FIG. 1.1

### 1.2 Physiography

The Umiti Creek property lies in a fairly moderate climatic zone. Average annual precipitation is 50 to 75 cm. Mean daily temperature in July is 14° to 16° Celsius and in January is -10° to -15° Celsius.

The topography of the property consists of gently rolling hills cut by the valley of the Umiti Creek.

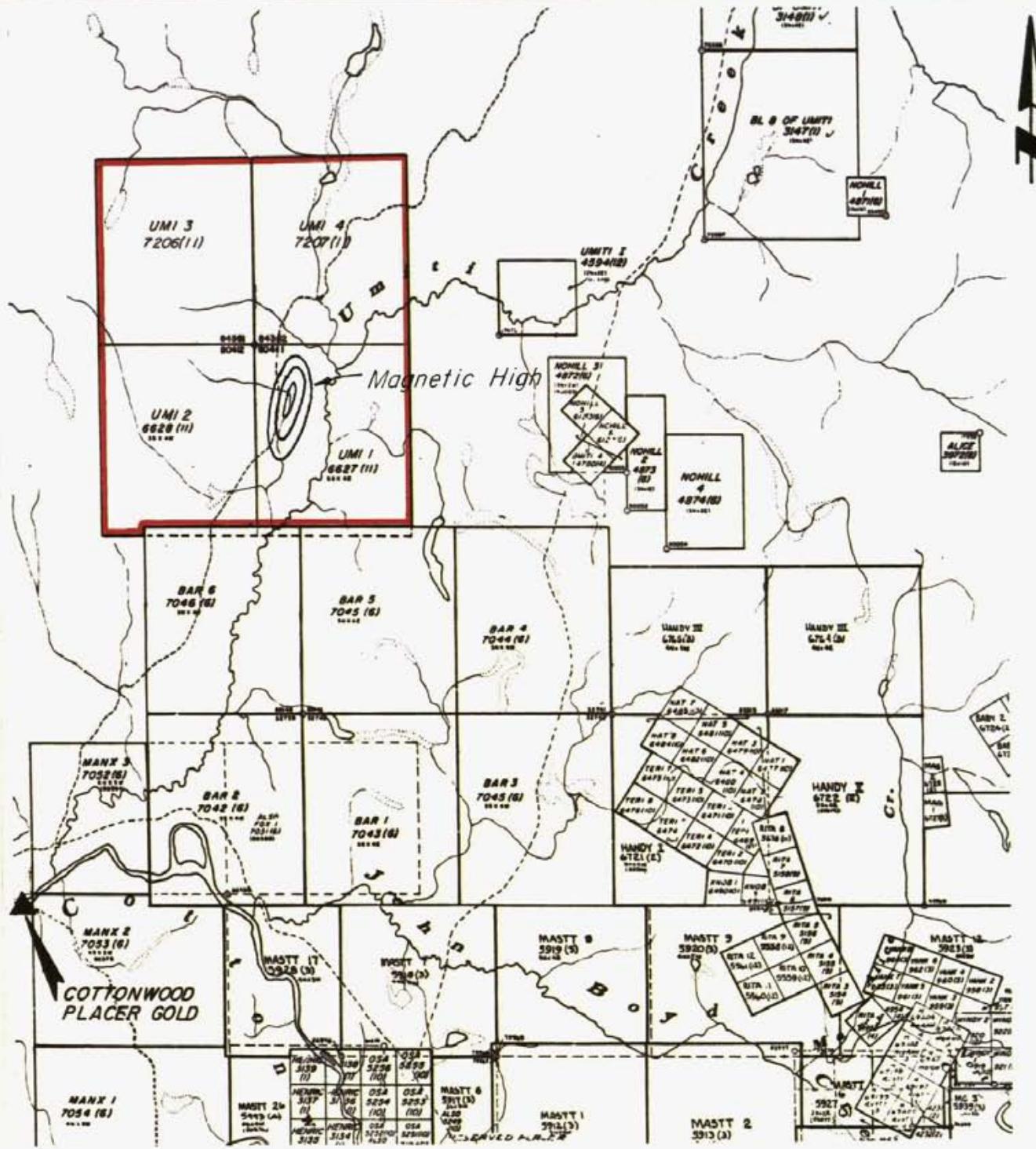
A coniferous forest covers the claims consisting predominantly of lodgepole pine, spruce and fir trees.

The property is drained by Umiti Creek and a few tributaries which flow southwesterly into the Cottonwood River. The Cottonwood flows northwesterly into the southward flowing Fraser River.

### 1.3 Claim Information

The Umiti Creek property is comprised of one group of four modified grid claims of 20 units each. The UMI #1 and #2 claims were staked by Mr. J.C. Bot of Wells, B.C. in 1984. The UMI #3 and #4 claims were staked by Mr. S.P. Butler of Vancouver, B.C. in 1985. In 1985, Kargen Developments Ltd. optioned the property and carried out work on the UMI 1 and 2 claims. Claim data is given below:

Group	Claim	Units	Record No.	Expiry	Owner
Umi	Umi 1	20	6627	Nov. 13, 1986	John C. Bot
	Umi 2	20	6628	Nov. 13, 1986	John C. Bot
	Umi 3	20	7206	Nov. 13, 1987	Sean P. Butler
	Umi 4	20	7207	Nov. 13, 1987	Sean P. Butler



**KARGEN DEVELOPMENT CORP.  
— UMI GROUP —  
CLAIMS MAP**

## **WHITE GEOPHYSICAL INC.**

**FIG. 1.3**

#### **1.4 History**

Placer gold mining has been carried out on the Cottonwood River and the Ahbau Creek since the early 1900's. On Umiti Creek, downstream from the UMI #1 - 4 claims, disrupted creek channels and other workings indicate placer mining.

The Quesnel trough has been explored by several mining companies: for porphyry copper in the 1970's and for gold in the 1980's. Dome Exploration's QR property located on the Quesnel River, is reported to contain approximately 900,000 tons of economic gold mineralization.

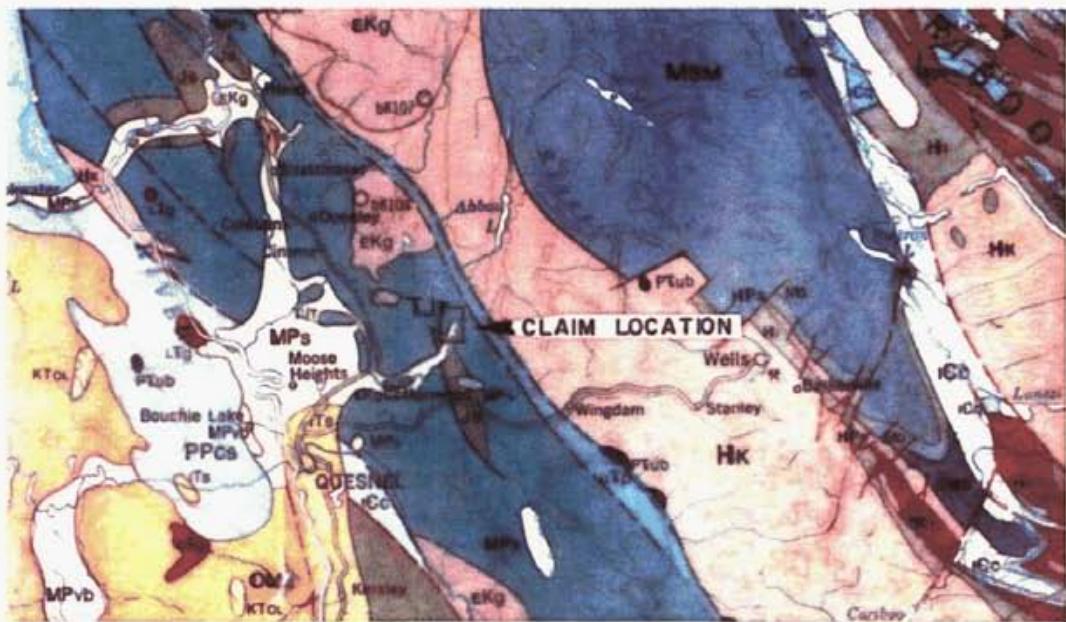
#### **1.5 Work Program Carried Out in 1985**

In 1985, field work by Kargen Developments Ltd. was conducted from November 3 to November 9. During this period a total of 86 humus samples were collected from the 'A' horizon. Samples were collected at 50 metre stations on east-west lines using a 23° declination. Heavy mineral concentrate sampling was carried out on Umiti Creek. Geological mapping was attempted but no outcrop was found.

### **2. GEOLOGY**

#### **2.1 General Geology**

The geology of topographic sheet 93G was mapped by Amos Bowman of the Geological Survey of Canada (G.S.C.) in 1885-86, by H.W. Tipper, also of the G.S.C. in 1961 and was updated in 1974 on Geologic sheet 93: Geology of the Parsnip River area: Figure 2.1.

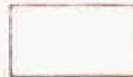


#### TERTIARY

##### MIocene AND PLIOCENE

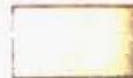


MPvb olivine basalt flows, breccia, tuff



MPs sandstone, shale, conglomerate, diatomite, lignite

#### LOWER AND MIDDLE JURASSIC



Jp slate, argillite, conglomerate

Js shale, greywacke, conglomerate

#### UPPER TRIASSIC AND LOWER JURASSIC



Tjt TAKLA GROUP andesite, basalt, tuff, breccia, conglomerate  
greywacke, shale, limestone

Tjv andesite, basalt, tuff, breccia, minor sediments

#### EARLY CRETACEOUS (in whole or in part)



Ekg NAVER INTRUSIONS quartz monzonite, syenite, monzonite  
granodiorite, diorite

Ekgd granodiorite, quartz diorite, minor granite, syenite, gabbro, pyroxenite

## KARGEN DEVELOPMENT CORP.

— UMI 1-4 CLAIMS —

## REGIONAL GEOLOGY

BY TIPPER, CAMPBELL, TAYLOR, SCOTT, G.S.C. MAP 1424 A

**WHITE GEOPHYSICAL INC.**

FIG. 2.1

The Umiti Creek property is situated in the Quesnel trough which is underlain predominantly by the Upper Triassic - Lower Jurassic aged Takla Group. The Takla Group consists of andesite flows, tuffs, agglomerate, basalt, breccia and argillite. A sliver of Jurassic aged shale, greywacke, and conglomerate lies in fault contact with the Takla Group at the southern end of the property. Miocene and Pliocene (Tertiary) aged sandstone, shale, conglomerate, diatomite and lignite overlies both of the older formations along Umiti Creek. Early Cretaceous intrusives have been mapped both to the north and to the south of the property.

## 2.2 Property Geology and Mineralization

Geological mapping was attempted on the property but most of the ground was covered in snow at the time of the survey. Bedrock was not observed at any soil sample sites, along creeks or road cuts. The thickness of glacial cover on the property is unknown but it is common for it to range from 10 to 200 feet in the Quesnel trough.

Known mineralization on the property consists of visible gold observed in panned concentrates on Umiti Creek.

### 3. GEOCHEMISTRY

#### 3.1 Humus Sampling

##### 3.1.1 Sampling

Humus Sampling was carried out over the Umiti Creek property because of the glacial drift masking the bedrock. Standard 'B' horizon soil samples developed over glacial till would reflect concentrations of metal in the till, not the bedrock below the till. Decaying vegetable matter often becomes enriched in base and precious metals where it lies above mineralized bedrock, even if glacial drift covers the bedrock. Copper and zinc are deposited directly by ground water passing through the humus layer. Gold is taken up by deep root systems and transported into needles which drop annually and become part of the humus layer.

A total of 86 humus samples were collected at 50 metre stations along east-west lines using a 23° declination.

##### 3.1.2 Sample Preparation and Analytical Procedures

Humus samples were collected from the organic horizon above the 'A' soil horizon with the aid of a lightweight mattock or folding shovel. The samples were sent to Chemex Labs in North Vancouver for analysis.

In the laboratory, samples were sieved through a minus 35 mesh screen, ring pulverized to approximately minus 100 mesh, digested in nitric-aqua regia, and were analysed for gold by neutron activation and for 30 elements by Inductively Coupled Plasma (ICP).

### 3.1.3 Results

Anomalous gold values were obtained in several zones on the property. Only a few of these are spot (one station) anomalies, in most cases a series of anomalous gold values occur in succession on a line. Anomalous gold values range from 8 to 1,310 ppb. Silver values range from a detection limit of 0.2 to 1.4 ppm and are considered anomalous above 0.6 ppm. Copper, lead and zinc values are considered anomalous above 33 ppm, 10 ppm and 110 ppm, for this survey.

A zone in the southwestern portion of claim UMI #2 is anomalous in copper, zinc and some gold. This zone is evident on three lines.

The remaining anomalous values are relatively scattered and there is little correlation between the various metals.

## 3.2 Heavy Mineral Concentrate Sampling

### 3.2.1 Sampling

Heavy mineral concentrate samples must be collected at sites where predominantly high density materials are deposited in the stream bed. These sites include: gravel bars, the inside of bends, stretches below the confluence of two streams, mouths of canyons and areas around obstacles or traps in the active channel. A total of six heavy mineral concentrate samples were collected on Umiti Creek.

### 3.2.2 Sample Preparation and Analytical Procedures

In the field a 50 to 100 kg sample of stream gravel was taken at each site. The sample was wet-sieved to minus ten mesh, the coarse fraction discarded and the remaining fine fraction panned down to a rough concentrate of approximately 0.5 kg.

Before bagging, the sample was "tailed out" to 0.25 kg and visually inspected. All obvious minerals of interest such as free gold, scheelite, cassiterite, pyrite and galena were noted. The paned concentrate was placed in a numbered Kraft envelope and sent to Chemex Labs in Vancouver for analysis.

In the laboratory, the remaining light minerals were removed by heavy liquid separation. Then the magnetic minerals were removed by magnetic separation and the remaining non-magnetic fraction was crushed and analysed for gold by atomic absorption and 30 elements by ICP following a nitric aqua-regia digestion.

### 3.2.3 Results

Visible gold was observed in four of the six samples collected. Analytical results showed that all six samples contain anomalous concentrations of gold. Values range from 860 ppb to 12,200 ppb. One sample also contained an anomalous concentration of silver, 8.8 ppm. No other elements appear to occur in anomalous concentrations. (See Appendix for results).

Heavy mineral dispersion trains are generally 1 to 3 km in length. It is strongly suggested that the gold found in Umiti Creek is coming from the UMI #1 to #4 claims.

## CONCLUSIONS AND RECOMMENDATIONS

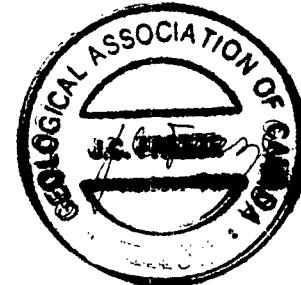
Visible gold was found in panned stream gravels in Umiti Creek and anomalous gold and silver values were found in both samples and heavy mineral concentrate samples.

This evidence suggests that precious metal mineralization may occur in bedrock on the **Umiti Creek** property.

The following program should be carried out to investigate the anomalies:

- 1) Heavy mineral concentrate sampling at 200 metre intervals on all creeks draining the property.
- 2) A detailed search for bedrock on the property.
- 3) Soil sampling over areas near bedrock.
- 4) Humus sampling over the rest of the property and in detail over anomalous areas.
- 5) A ground magnetometer and VLF-EM survey to detect major structures and lithologic contacts on the property.

Respectfully submitted,



J.C. Freeze, B.Sc., F.G.A.C.  
Consulting Geologist

**REFERENCES**

Ridley, J.C., Troop, A.G.  
and Wong, C., 1983

Heavy Mineral Stream  
Concentrate Sampling Paper  
given at C.I. M. Annual  
Meeting, 1983.

Tipper, H.W.  
1961 and 1974

Geology of the Parsnip River  
Area: Map 1424 A.

**COST STATEMENT**

S.P. Butler	Nov. 3 to 9	7 days @ \$250/day ....	\$ 1,750.00
E. Montgomery	Nov. 3 to 9	7 days @ \$180/day ....	1,260.00
Vehicle	(all inclusive)	7 days @ \$100/day ....	700.00
Food and Accommodation	2 x 7 days @ \$60/day ....	840.00	
Helicopter	.....	.....	650.00
Supplies	.....	.....	500.00
Chemex Heavy Mineral Concentrate Analysis			
6 @ \$26.75	.....	.....	160.50
Humus Analysis	86 @ \$14.75	.....	1,268.50
Drafting and Printing	.....	.....	250.00
Administration	at 10% of consumables	.....	283.00
Report Writing and Supervision	.....	.....	<u>1,000.00</u>
Total	.....	\$ 8,662.00	

**STATEMENT OF QUALIFICATIONS**

NAME: Freeze, J.C., (nee Ridley), B.Sc.

PROFESSION: Consulting Geologist

EDUCATION: 1981 B.Sc. Geology -  
University of British Columbia

1978 B.A. Geography -  
University of Western Ontario

PROFESSIONAL ASSOCIATIONS: Fellow of the Geological Association of Canada

EXPERIENCE: 1985 - Present: Project Co-ordinator -  
Geologist with White Geophysical Inc.  
Coordinating mineral exploration  
projects involving geology,  
geochemistry, geophysics and diamond  
drilling in B.C. and Yukon.

1981 - 1985: Project Geologist with  
Mark Management Ltd. Hughes-Lang Group.  
Responsible for precious metals  
exploration programs involving  
geology, geochemistry, geophysics and  
diamond drilling in Western Canada.

1979 - 1981: Summer and part-time  
Geologist involved with coal exploration  
in N.E. B.C. with Utah Mines Ltd.



# Chemex Labs Ltd.

Analytical Chemists

Geochemists

Registered Assayers

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Telex: 043-52597

## Semi quantitative multi element ICP analysis

TO : WHITE GEOPHYSICAL INC.

9251 BECKWITH ROAD  
RICHMOND, B.C.  
V6X 1V7

## CERTIFICATE OF ANALYSIS

## HUMUS SAMPLES

CERT. #: A8518302-001-A  
INVOICE #: I8518302  
DATE : 22-NOV-85  
P.O. #: NONE  
NONE

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :  
ATTN: JOEY FREEZE

Sample description	Au	NAA	Al	Ag	As	Ba	Be	Bi	C <sub>3</sub>	Cd	Co	Cr	Cu	Fe	Ga	K	L <sub>3</sub>	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Tl	Tl	U	V	W	Zn
	ppb	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
U-1	<1	1.01	0.2	<10	150	<0.5	<2	0.44	<0.5	7	75	10	1.77	<10	0.09	10	0.35	622	<1	0.01	23	630	6	<10	31	0.07	<10	<10	34	<10	56	--
U-2	<1	1.06	0.2	<10	120	<0.5	<2	0.21	<0.5	2	64	1	1.37	<10	0.08	20	0.17	286	<1	0.01	8	620	4	<10	21	0.07	<10	<10	39	<10	20	--
U-3	6	0.39	0.2	<10	100	<0.5	<2	0.28	<0.5	3	99	3	1.30	<10	0.05	10	0.11	677	<1	<0.01	10	410	4	<10	19	0.04	<10	<10	24	<10	20	--
U-4	<1	0.36	0.2	<10	70	<0.5	<2	0.16	<0.5	1	100	2	0.38	<10	0.03	<10	0.06	158	<1	<0.01	7	230	6	<10	13	0.04	<10	<10	20	<10	20	--
U-5	1	1.33	0.2	10	150	<0.5	<2	0.49	<0.5	9	142	12	2.43	<10	0.13	10	0.26	927	<1	<0.01	27	910	8	<10	22	0.07	<10	<10	42	<10	60	--
U-6	<1	0.26	0.2	<10	230	<0.5	<2	0.66	0.5	2	72	2	0.45	<10	0.06	10	0.06	3558	<1	<0.01	6	660	6	<10	36	0.01	<10	<10	9	<10	80	--
U-7	<1	0.53	0.2	<10	70	<0.5	<2	0.26	<0.5	3	141	5	1.49	<10	0.06	10	0.10	333	<1	<0.01	10	480	4	<10	14	0.06	<10	<10	34	<10	30	--
U-8	<1	0.38	0.2	<10	70	<0.5	<2	0.13	<0.5	<1	94	<1	0.39	<10	0.03	10	0.03	90	<1	<0.01	2	140	4	<10	10	0.05	<10	<10	12	<10	10	--
U-9	3	1.01	0.2	<10	120	<0.5	<2	0.28	<0.5	7	186	11	2.23	<10	0.07	10	0.30	579	<1	<0.01	24	340	4	<10	17	0.08	<10	<10	43	<10	40	--
U-10	<1	0.58	0.2	<10	140	<0.5	<2	0.88	<0.5	5	141	12	1.92	<10	0.10	10	0.23	706	<1	<0.01	19	410	4	<10	36	0.04	<10	<10	28	<10	30	--
U-11	<1	0.32	0.2	<10	90	<0.5	<2	0.17	<0.5	1	132	4	0.81	<10	0.03	10	0.04	142	<1	<0.01	6	170	2	<10	15	0.03	<10	<10	18	<10	10	--
U-12	8	0.68	0.2	<10	50	<0.5	<2	0.18	<0.5	3	108	7	1.59	<10	0.07	10	0.17	404	<1	<0.01	16	590	2	<10	9	0.05	<10	<10	28	<10	30	--
U-13	37	0.51	0.2	<10	30	<0.5	<2	0.15	<0.5	2	143	<1	1.22	<10	0.03	10	0.05	153	<1	<0.01	6	310	4	<10	9	0.07	<10	<10	31	<10	20	--
U-14	767	0.67	0.2	<10	130	<0.5	<2	0.32	<0.5	3	122	4	1.25	<10	0.07	10	0.11	589	<1	<0.01	9	640	10	<10	23	0.06	<10	<10	31	<10	30	--
U-15	<1	1.81	0.2	<10	70	<0.5	<2	0.23	<0.5	7	99	5	2.93	<10	0.06	10	0.22	482	<1	<0.01	21	1220	2	<10	12	0.09	<10	<10	52	<10	90	--
U-16	<1	0.91	0.2	<10	90	<0.5	<2	0.25	<0.5	4	108	3	1.58	<10	0.08	10	0.16	548	<1	<0.01	11	620	4	<10	18	0.07	<10	<10	36	<10	40	--
U-17	1310	0.62	0.2	<10	210	<0.5	<2	0.33	<0.5	4	135	4	1.07	<10	0.07	10	0.08	4413	<1	<0.01	8	420	8	<10	16	0.06	<10	<10	25	<10	40	--
U-18	<1	0.80	0.2	<10	80	<0.5	<2	0.28	<0.5	4	113	5	1.73	<10	0.05	10	0.17	386	<1	<0.01	13	760	4	<10	15	0.06	<10	<10	31	<10	60	--
U-19	<1	0.39	0.2	<10	50	<0.5	<2	0.14	<0.5	2	122	4	1.08	<10	0.01	10	0.05	120	<1	<0.01	7	230	2	<10	7	0.04	<10	<10	23	<10	10	--
U-20	<1	0.27	0.2	<10	40	<0.5	<2	0.09	<0.5	1	115	1	0.71	<10	0.02	10	0.03	154	<1	<0.01	5	180	4	<10	8	0.04	<10	<10	18	<10	10	--
U-21	<1	0.74	0.2	<10	100	<0.5	<2	0.21	<0.5	4	116	4	1.60	<10	0.07	10	0.15	1608	<1	<0.01	13	440	6	<10	11	0.06	<10	<10	30	<10	50	--
U-22	<1	0.25	0.2	<10	30	<0.5	<2	0.09	<0.5	1	141	1	0.78	<10	0.03	10	0.03	110	<1	<0.01	6	140	4	<10	7	0.03	<10	<10	16	<10	10	--
U-23	<1	0.31	0.2	<10	20	<0.5	<2	0.09	<0.5	3	149	4	1.17	<10	0.03	<10	0.07	169	<1	<0.01	9	160	4	<10	5	0.04	<10	<10	18	<10	10	--
U-24	1	0.71	0.2	<10	50	<0.5	<2	0.18	<0.5	5	131	7	1.73	<10	0.05	10	0.17	622	<1	<0.01	16	400	8	<10	9	0.05	<10	<10	30	<10	50	--
U-25	121	0.44	0.2	<10	130	<0.5	<2	0.29	<0.5	3	139	5	1.07	<10	0.09	10	0.10	1044	<1	<0.01	9	290	6	<10	19	0.05	<10	<10	22	<10	30	--
U-26	<1	0.59	0.2	<10	250	<0.5	<2	0.36	0.5	4	85	3	0.51	<10	0.09	20	0.09	2937	<1	<0.01	6	340	6	<10	26	0.04	<10	<10	16	<10	60	--
U-27	<1	1.47	1.2	<10	130	<0.5	<2	0.39	<0.5	24	54	15	3.72	<10	0.10	10	0.20	1492	<1	<0.01	19	2020	4	<10	33	0.03	<10	<10	69	<10	40	--
U-28	2	1.07	0.2	<10	90	<0.5	<2	0.23	0.5	2	91	17	0.83	<10	0.10	20	0.10	94	<1	<0.01	9	510	22	<10	19	0.04	<10	<10	25	<10	70	--
U-29	<1	2.32	1.0	<10	220	<0.5	<2	0.56	<0.5	11	38	33	2.02	<10	0.14	20	0.23	189	<1	<0.01	28	2600	2	<10	50	0.02	<10	<10	21	<10	40	--
U-30	<1	2.52	0.6	<10	200	<0.5	<2	0.40	<0.5	14	106	19	2.43	<10	0.16	20	0.32	751	<1	<0.01	26	1120	10	<10	32	0.06	<10	<10	42	<10	60	--
U-31	<1	0.92	0.2	<10	70	<0.5	<2	0.25	<0.5	3	104	4	0.95	<10	0.06	10	0.11	177	<1	<0.01	7	320	4	<10	18	0.09	<10	<10	36	<10	20	--
U-32	<1	0.99	0.2	<10	80	<0.5	<2	0.22	<0.5	2	105	3	0.93	<10	0.09	10	0.15	114	<1	<0.01	9	290	8	<10	18	0.08	<10	<10	32	<10	20	--
U-33	<1	1.20	0.2	<10	100	<0.5	<2	0.36	<0.5	5	134	5	1.52	<10	0.10	20	0.28	330	<1	<0.01	14	400	6	<10	23	0.11	<10	<10	40	<10	30	--
U-34	1	1.74	0.2	<10	110	<0.5	<2	0.32	<0.5	5	123	14	2.02	<10	0.10	10	0.35	236	<1	<0.01	20	990	6	<10	19	0.10	<10	<10	43	<10	30	--
U-35	<1	0.84	0.4	<10	70	<0.5	<2	0.28	<0.5	4	86	4	1.04	<10	0.07	10	0.15	397	<1	<0.01	9	480										



# Chemex Labs Ltd.

Analytical Chemists

Geochemists

Registered Assayers

212 Brookbank Ave.  
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Telephone: (604) 984-0221  
Telex: 043-52597

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Ti, W and V can only be considered as semi-quantitative.

TO : WHITE GEOPHYSICAL INC.

9251 BECKWITH ROAD  
RICHMOND, B.C.  
V6X 1V7

CERT. #: A8518302-002-A  
INVOICE #: I8518302  
DATE : 22-NOV-85  
P.O. #: NONE  
NONE

COMMENTS :  
ATTN: JOEY FREEZE

CERTIFICATE OF ANALYSIS

Sample description	Au	NAA	Al	Aq	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Tl	Tl	U	V	W	Zn
	ppb	Z	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	Z	ppm	Z	ppm	ppm	Z	ppm	ppm	ppm	ppm	ppm	I	ppm	ppm	ppm	ppm	ppm	
U-41	30	0.57	0.2	<10	70	<0.5	<2	0.30	<0.5	1	192	3	0.66	<10	0.06	20	0.08	96	<1	0.01	6	300	4	<10	18	0.07	<10	<10	21	<10	20	--
U-42	13	0.87	0.2	<10	240	<0.5	<2	0.55	0.5	2	284	3	1.19	<10	0.08	20	0.14	183	<1	0.01	10	480	6	<10	45	0.10	<10	<10	38	<10	60	--
U-43	2	1.44	0.4	<10	190	<0.5	<2	0.38	<0.5	9	230	11	2.18	<10	0.11	20	0.31	1130	<1	0.02	21	790	8	<10	28	0.11	<10	<10	56	<10	60	--
U-44	2	0.96	0.4	<10	70	<0.5	<2	0.26	<0.5	2	222	2	1.11	<10	0.07	20	0.14	126	<1	0.02	8	230	4	<10	26	0.13	<10	<10	40	<10	20	--
U-45	2	1.63	0.4	<10	140	<0.5	<2	0.29	<0.5	3	237	18	2.02	<10	0.10	20	0.18	153	<1	0.02	18	1700	8	<10	22	0.08	<10	<10	39	<10	20	--
U-46	6	0.74	0.4	<10	70	<0.5	<2	0.27	<0.5	2	225	4	0.75	<10	0.06	10	0.10	91	<1	0.01	7	270	6	<10	20	0.08	<10	<10	25	<10	10	--
U-47	<1	1.22	0.2	<10	110	<0.5	<2	0.50	<0.5	6	190	11	2.13	<10	0.11	20	0.35	280	<1	0.02	22	590	4	<10	26	0.13	<10	<10	48	<10	50	--
U-48	<1	0.77	0.2	<10	180	<0.5	<2	0.51	0.5	5	390	9	1.63	<10	0.07	10	0.17	554	<1	0.01	17	620	4	<10	30	0.08	<10	<10	32	<10	60	--
U-49	<1	0.59	0.2	<10	100	<0.5	<2	0.32	<0.5	2	385	7	1.09	<10	0.05	10	0.08	236	1	0.03	11	320	4	<10	23	0.09	<10	<10	28	<10	30	--
U-50	3	0.74	0.2	<10	180	<0.5	<2	0.60	0.5	8	360	8	1.96	<10	0.10	10	0.31	1053	<1	0.02	25	480	8	<10	43	0.11	<10	<10	47	<10	60	--
U-51	<1	0.97	0.2	<10	130	<0.5	<2	0.41	<0.5	3	335	8	1.14	<10	0.08	10	0.18	210	1	0.02	14	280	10	<10	27	0.08	<10	<10	33	<10	20	--
U-52	3	1.05	0.4	<10	140	<0.5	<2	0.50	0.5	9	187	21	3.34	<10	0.09	10	0.13	721	<1	0.01	13	2040	22	<10	46	0.02	<10	<10	35	<10	80	--
U-53	<1	1.18	0.2	<10	80	<0.5	<2	0.24	<0.5	5	287	6	1.38	<10	0.06	10	0.24	167	<1	0.02	15	440	8	<10	19	0.08	<10	<10	36	<10	40	--
U-54	2	0.88	1.0	<10	200	<0.5	<2	0.36	<0.5	16	245	21	1.87	<10	0.05	10	0.13	1830	1	0.02	18	840	4	<10	27	0.04	<10	<10	37	<10	60	--
U-55	2	0.83	0.8	<10	170	<0.5	<2	0.43	0.5	11	390	16	3.33	<10	0.04	10	0.25	2643	1	0.01	27	930	8	<10	22	0.07	<10	<10	55	<10	60	--
U-56	<1	0.52	0.2	<10	60	<0.5	<2	0.09	<0.5	1	292	3	0.49	<10	0.01	10	0.04	77	1	0.01	7	250	4	<10	15	0.02	<10	<10	9	<10	10	--
U-57	<1	0.38	0.2	<10	70	<0.5	<2	0.14	<0.5	3	490	5	0.91	<10	0.01	10	0.04	106	<1	0.01	11	720	6	<10	14	0.01	<10	<10	8	<10	10	--
U-58	<1	0.64	0.2	<10	110	<0.5	<2	0.19	<0.5	3	259	6	1.14	<10	0.06	10	0.11	309	<1	0.01	12	470	4	<10	16	0.04	<10	<10	20	<10	10	--
U-59	<1	0.42	0.2	<10	120	<0.5	<2	0.31	<0.5	3	359	6	1.10	<10	0.05	10	0.06	478	<1	0.02	11	340	2	<10	19	0.04	<10	<10	21	<10	30	--
U-60	<1	0.51	0.2	<10	120	<0.5	<2	0.14	<0.5	1	227	6	0.60	<10	0.03	10	0.04	74	<1	0.01	8	260	4	<10	14	0.04	<10	<10	16	<10	20	--
U-61	<1	0.88	0.2	<10	160	<0.5	<2	0.64	<0.5	4	144	7	1.27	<10	0.17	20	0.24	309	<1	0.01	12	950	8	<10	54	0.08	<10	<10	33	<10	50	--
U-62	<1	0.94	0.6	<10	130	<0.5	<2	0.33	<0.5	3	161	6	1.11	<10	0.12	20	0.22	216	1	0.02	14	640	4	<10	30	0.05	<10	<10	31	<10	30	--
U-63	<1	1.33	0.2	<10	200	<0.5	<2	0.49	0.5	7	205	10	1.82	<10	0.13	20	0.42	449	1	0.02	26	590	6	<10	40	0.07	<10	<10	42	<10	70	--
U-64	<1	1.53	0.2	<10	150	<0.5	<2	0.43	<0.5	7	141	11	2.13	<10	0.19	20	0.40	508	1	0.02	20	860	6	<10	35	0.09	<10	<10	58	<10	60	--
U-65	<1	2.92	0.6	<10	240	<0.5	<2	0.48	0.5	34	169	27	3.13	<10	0.25	20	0.69	1229	1	0.02	46	1070	6	<10	42	0.06	<10	<10	64	<10	110	--
U-66	<1	1.98	0.4	<10	290	<0.5	<2	0.54	1.0	15	130	22	2.66	<10	0.20	20	0.56	1080	1	0.03	32	840	4	<10	49	0.12	<10	<10	69	<10	110	--
U-67	<1	1.56	0.4	<10	480	<0.5	<2	0.57	1.0	10	205	14	2.18	<10	0.17	20	0.42	3122	2	0.02	27	1150	10	<10	53	0.08	<10	<10	52	<10	170	--
U-68	<1	1.96	1.4	<10	290	<0.5	<2	0.36	<0.5	16	142	23	2.32	<10	0.18	20	0.33	1587	1	0.02	32	840	4	<10	36	0.07	<10	<10	54	<10	90	--
U-69	<1	1.37	0.4	<10	380	<0.5	<2	0.44	0.5	5	136	7	1.52	<10	0.19	20	0.35	731	<1	0.02	17	680	8	<10	39	0.07	<10	<10	41	<10	70	--
U-70	<1	1.34	0.4	<10	250	<0.5	<2	0.33	0.5	10	101	10	1.75	<10	0.15	20	0.34	1179	2	0.02	21	590	6	<10	29	0.07	<10	<10	44	<10	70	--
U-71	<1	1.75	0.6	<10	170	<0.5	<2	0.36	<0.5	10	113	13	2.78	<10	0.16	20	0.59	592	1	0.01	34	1200	6	<10	28	0.08	<10	<10	55	<10	80	--
U-72	<1	4.94	0.8	<10	410	<0.5	<2	0.60	<0.5	30	120	60	4.71	<10	0.28	20	0.80	1283	<1	0.02	79	1870	4	<10	57	0.09	<10	<10	83	<10	160	--
U-73	3	3.87	1.4	<10	390	<0.5	<2	0.38	<0.5	25	127	78	4.15	<10	0.22	20	0.78	757	<1	0.02	74	1040	2	<10	41	0.09	<10	<10	67	<10	120	--
U-74	<1	1.38	0.2	<10	180	<0.5	<2	0.37	<0.5	8	181	11	1.62	<10	0.11	20	0.25	1360	2	0.02	19	570	8	<10	27	0.11	<10	<10	44	<10	50	--
U-75	1	1.13	0.4	10	260	<0.5	<2	0.49	<0.5	16	251	13	1.29	<10	0.11	20	0.18	7739	<1	0.01	18	630	10	<10	34	0.09	<10	<10	33	<10	170	--
U-76	<10	2.67	0.6	10	250	<0.5	<2	0.60	<0.5	15	796	39	3.07	<10	0.19	20																



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Semi quantitative multi element ICP analysis

TO : WHITE GEOPHYSICAL INC.

9251 BECKWITH ROAD  
RICHMOND, B.C.  
V6X 1V7

CERTIFICATE OF ANALYSIS

CERT. #: A8518302-003-A  
INVOICE #: I8518302  
DATE : 22-NOV-85  
P.O. #: NONE  
NONE

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :  
ATTN: JOEY FREEZE

Sample description	Au	NAA	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Tl	Tl	U	V	W	Zn
	ppb	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
U-81	<5	1.40	0.4	<10	170	<0.3	<2	0.24	<0.5	10	131	9	1.88	<10	0.13	20	0.33	473	1	0.01	19	670	8	<10	22	0.07	<10	<10	50	<10	60	--
U-82	<5	1.60	0.2	<10	140	<0.3	<2	0.29	<0.5	15	112	16	2.09	<10	0.14	20	0.51	628	<1	0.02	30	510	4	<10	26	0.07	<10	<10	37	<10	60	--
U-83	2	1.33	0.4	<10	240	<0.5	<2	0.65	0.5	10	118	15	1.98	<10	0.10	20	0.46	1410	1	0.01	33	720	8	<10	49	0.04	<10	<10	37	<10	70	--
U-84	<1	1.06	1.2	<10	150	<0.5	<2	0.33	<0.5	5	96	6	1.83	<10	0.07	20	0.29	327	1	0.01	17	1060	6	<10	30	0.06	<10	<10	42	<10	50	--
U-85	<1	1.17	0.2	<10	90	<0.5	<2	0.18	<0.5	5	108	7	1.79	<10	0.07	10	0.29	406	<1	0.01	20	530	4	<10	17	0.05	<10	<10	38	<10	40	--
U-86	<1	1.44	0.8	<10	150	<0.5	<2	0.31	<0.5	6	125	17	1.49	<10	0.10	10	0.21	585	<1	0.01	17	1040	6	<10	34	0.07	<10	<10	38	<10	40	--

Certified by *Heinz Bischler*...



# Chemex Labs Ltd.

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Geochemists

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Telephone: (604) 984-0221  
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Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Ti, W and V can only be considered as semi-quantitative.

COMMENTS:  
ATIN: JOEY FREEZE

## CERTIFICATE OF ANALYSIS

TO : WHITE GEOPHYSICAL INC.

9251 BECKWITH ROAD  
RICHMOND, B.C.  
V6X 1V7

HEAVY MINERAL  
CONCENTRATES

CERT. #: A8518301-001-A  
INVOICE #: I8518301  
DATE : 22-NOV-85  
P.O. #: NONE  
NOEN

Sample description	Au ppb	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi %	Ca ppm	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg ppm	Mn ppm	Mo %	Na ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Tl %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm		
FA/AA																																	
HU-1	7400	1.57	0.8	10	20	<0.5	<2	1.28	<0.5	14	140	18	4.74	10	0.04	50	0.27	2108	<1	0.01	22	600	8	<10	29	0.33	<10	<10	74	<10	40	--	--
HU-2	2000	1.43	0.4	10	40	<0.5	<2	1.27	<0.5	20	136	20	5.68	10	0.05	60	0.27	2520	<1	0.01	25	580	12	<10	26	0.31	<10	<10	85	<10	40	--	--
HU-3	860	1.29	8.8	10	20	<0.5	<2	1.43	<0.5	17	113	23	5.17	10	0.06	50	0.34	1324	<1	0.01	29	660	6	<10	30	0.30	<10	<10	104	<10	40	--	--
HU-4	6600	0.96	1.2	<10	10	<0.5	<2	0.76	<0.5	19	116	24	5.59	10	0.06	60	0.20	2043	<1	<0.01	28	900	14	<10	15	0.35	10	<10	56	<10	40	--	--
HU-5	3400	1.36	0.8	10	30	<0.5	2	1.24	<0.5	23	176	33	6.41	20	0.07	50	0.35	1841	<1	0.01	40	870	18	<10	26	0.30	<10	<10	79	<10	60	--	--
HU-6	12200	1.24	0.4	<10	20	<0.5	<2	1.11	<0.5	21	176	32	6.77	20	0.06	90	0.24	1893	<1	0.01	33	630	18	<10	28	0.41	20	<10	108	<10	50	--	--

Certified by .....

Hart Bickler

THIS LINE IS NOT EDGE OF CLAIM

