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**GEOLOGICAL REPORT  
ON THE  
ROB 19, 20, 21 MINERAL CLAIMS**

FILED

**Located in the Iskut River Area**

**Liard Mining Division**

**NTS 104B/10W**

**56°41' North Latitude**

**130°11' West Longitude**

**- Prepared for -**

**NEW ALSTER ENERGY LTD.**

**- Prepared by -**

**S.L. TODORUK, Geologist**

**C.K. IKONA, P.Eng.**

**March, 1988**

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**17,219**

# GEOLOGICAL REPORT on the ROB 19, 20, 21 MINERAL CLAIMS

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## 1.0 INTRODUCTION

The Rob 19, 20 & 21 mineral claims (22 units) are situated in the Iskut River area of northwest British Columbia where Skyline Explorations Ltd. is nearing the completion of milling facilities in preparation for its Stonehouse Gold deposit. The Cominco/Delaware Resource Corp. joint venture has recently announced plans to carry out an underground program designed to confirm the continuity and grade of their Twin Zone gold deposit. Also during 1987, Inel Resources Ltd. completed approximately 150 metres of underground development on the Discovery Zone polymetallic deposit. Several other companies also carried out extensive exploration and drilling programs in 1987 with considerable success (Western Canadian Mining Corp., Winslow Gold Corp., Gulf International Minerals, Tungco Resources Corp., Hector Resources Inc., Kestrel Resources Ltd., Consolidated Sea-Gold Corp.).

A total of 16 man days were spent prospecting, mapping, rock chip, silt and soil sampling on the New Alster Energy Ltd. property.

## 2.0 LIST OF CLAIMS

Records of the British Columbia Ministry of Energy, Mines and Petroleum Resources indicate that the following claims (Figure 2) are owned by I. Hagemoen.

<u>Claim Name</u>	<u>Units</u>	<u>Record No.</u>	<u>Record Date</u>	<u>Expiry Date</u>
Rob 19	15	3793	December 22, 1986	December 22, 1989
Rob 20	2	3794	December 22, 1986	December 22, 1989
Rob 21	5	3795	December 22, 1986	December 22, 1989



NEW ALSTER ENERGY LTD.

ROB 19, 20 & 21 CLAIM GROUP  
PROPERTY LOCATION MAP

LIARD MINING DIVISION, B.C.

PAMICON DEVELOPMENTS LTD.

Drawn

J.W.

N.T.S.

104B IIE

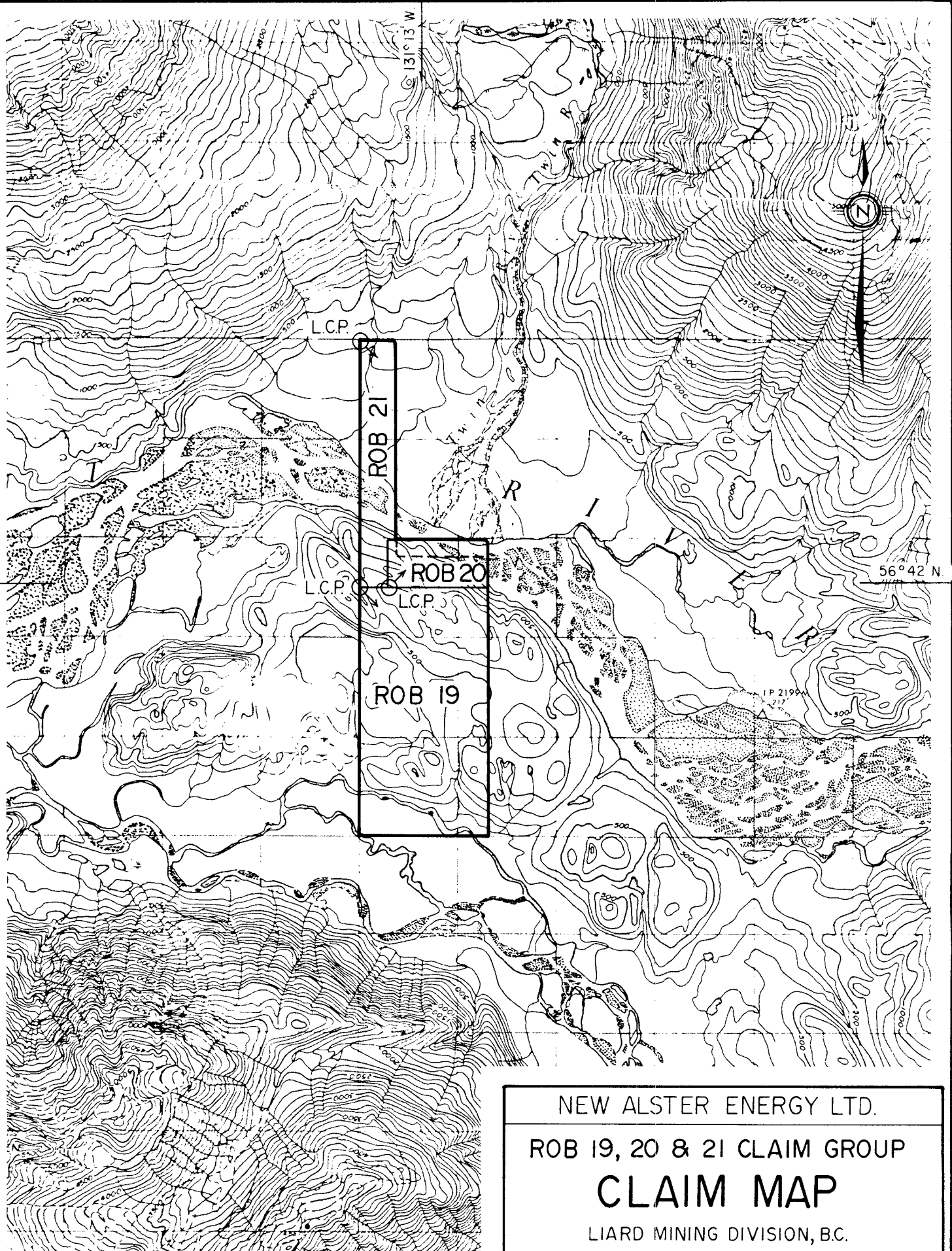
Date

March 1988

Figure

1.

0 100 200 MILES  
0 100 200 300 KILOMETRES



Km 0 5 1 2 3 Km

1:50,000

NEW ALSTER ENERGY LTD.

ROB 19, 20 & 21 CLAIM GROUP

**CLAIM MAP**

LIARD MINING DIVISION, B.C.

PAMICON DEVELOPMENTS LTD.

Drawn  
J.W.

N.T.S.  
104 B IIE

Date.  
March-1988

Fig. No. **2**

### 3.0 LOCATION, ACCESS AND GEOGRAPHY

The Rob 19, 20 & 21 mineral claims are located approximately 80 kilometres east of Wrangell, Alaska, and 100 kilometres northwest of Stewart, British Columbia, on the eastern edge of the Coast Range Mountains (Figure 1). The Iskut River flows along the southern claim boundary of the Rob 19. Coordinates of the claims area are 56° 41' north latitude and 130° 11' west longitude, and the property falls under the jurisdiction of the Liard Mining Division.

Access to the property is via helicopter from the Bronson Creek gravel air strip, located approximately six kilometres to the east. Daily scheduled flights to the strip from Smithers, Terrace and Wrangell, Alaska have been available during the field season using a variety of fixed wing aircraft.

The construction of a road 65 kilometres long has been proposed by C.K. Ikona of Pamicon Developments Limited on behalf of Skyline Explorations Ltd. The road would be situated on the south side of the Iskut Valley to connect the Stewart-Cassiar Highway with a proposed BC Hydro dam site on the Iskut River and Skyline's Stonehouse Gold deposit on Bronson Creek.

Geographically, the area is typical of mountainous and glaciated terrain with the elevations ranging from a few hundred metres above sea level in the river valley bottoms to in excess of 1500 metres at the ridge tops. Major drainages are U-shaped, whereas smaller side creeks tend to be steeply cut due to the intense erosional environment. Active glaciation is prevalent above the 1200 metre contour, with the tree line existing at 1000 metres. The upper reaches of the area are covered with alpine vegetation. The lower slopes are predominantly timbered with a variety of conifers with an undergrowth of devil's club. More open areas and steeper slopes contain dense slide alder growth. Both summer and winter temperatures would be considered generally moderate and in excess of 200 centimetres of precipitation may be expected during any given year.

#### 4.0 AREA HISTORY

The first recorded work done in the Iskut Region occurred in 1907 when a prospecting party from Wrangell, Alaska staked nine claims north of Johnny Mountain. Iskut Mining Company subsequently worked crown granted claims along Bronson Creek and on the north slope of Johnny Mountain. Up to 1920, a 9 metre adit revealed a number of veins and stringers hosting galena and gold-silver mineralization.

In 1954, Hudsons Bay Mining & Smelting located the Pick Axe showing and high grade gold-silver-lead-zinc float on the open upper slopes of Johnny Mountain, which today is part of Skyline Explorations Ltd.'s Reg deposit. The claims were worked and subsequently allowed to lapse.

During the 1960s, several major mining companies conducted helicopter borne reconnaissance exploration programs in a search for porphyry-copper-molybdenum deposits. Several claims were staked on Johnny Mountain and on Sulphurets Creek.

Between 1965 and 1971, Silver Standard Mines, and later Sumitomo, worked the E + L prospect on Nickel Mountain at the headwaters of Sulphurets Creek. Work included trenching, drilling and 460 metres of underground development work. Reserves include 3.2 million tons of 0.80% nickel and 0.60% copper.

In 1969 Skyline staked the Inel property after discovering massive sulphide float originating from the head of the Bronson Creek glacier.

During 1972, Newmont Mining Corporation of Canada Limited carried out a field program west of Newmont Lake on the Dirk claim group. Skarn-type mineralization was the target of exploration. Work consisted of airborne and ground magnetic surveys, geological mapping and diamond drilling. One and one-half metres grading 0.220 ounces gold per ton and 15.2 metres of 1.5% copper was intersected on the Ken showing.

In 1980 Dupont Canada Explorations Ltd. staked the Warrior claims south of Newmont Lake on the basis of a regional stream sediment survey. In 1983, Skyline Explorations Ltd. and Placer Development Ltd. optioned the Warrior claims from Dupont. Efforts were directed at sampling and extending several narrow quartz-pyrite-chalcopyrite veins with values ranging from 0.1 to 3.0 oz/ton gold. Geophysics and coincident geochemical values indicated a significant strike length to the mineralized structure. The Warrior claims were allowed to lapse in 1986, at which time, Gulf International Minerals Ltd. acquired the McLymont claims covering much the same area.

Assays of interest from recent Gulf drilling are listed below (Gulf International Minerals Ltd., Annual Report, 1987):

<u>Drill Hole</u>	<u>Interval (feet)</u>	<u>Length (feet)</u>	<u>Copper (%)</u>	<u>Silver (oz/ton)</u>	<u>Gold (oz/ton)</u>
87-25	343.0 - 373.0	30.0	0.23	0.11	0.404
	409.3 - 412.0	2.7	0.55	0.35	0.250
	470.2 - 473.8	3.6	0.42	0.19	1.520
87-29	167.0 - 170.0	3.0	0.001	0.01	0.140
	205.0 - 241.5	36.5	0.97	39.73	1.605

After restaking the Reg property in 1980, Skyline carried out trenching and drilling for veined high-grade gold and polymetallic massive sulphide mineralization on the Reg and Inel deposits between 1981 and 1985.

In 1986, drilling and 460 metres of underground cross-cutting and drifting on the Stonehouse Gold Zone confirmed the presence of high grade gold mineralization with additional values in silver and copper over mineable widths with good lateral and depth continuity. As of January 1988, reserves on the Stonehouse Gold Zone were reported as:

	<u>Au</u> (oz/ton)	<u>Tons</u>
Total Measured	1.246	121,000
Total Drill-Indicated	0.556	236,875
Total Inferred	<u>0.570</u>	<u>700,000</u>
Subtotal	0.644	1,057,875
McFadden	<u>2.800</u>	<u>30,000</u>
Ore Reserve Total	0.704	1,087,875

On the Delaware Resources Ltd. - Cominco Snip claims immediately north of the Stonehouse Gold deposit, approximately 10,000 metres of diamond drilling was carried out, mainly delineating the Twin Zone. Drill hole S-71 intersected 10.2 metres of 2.59 oz/ton gold. An underground program is expected to begin in early 1988. As of December, 1987, reserves on the Twin Zone were reported as:

	<u>Au</u> (oz)	<u>Tons</u>
Total Inferred	0.700	1,100,000

Also, during 1987 Inel Resources Ltd. commenced an underground drifting and diamond drilling program along the main cross-cut intent on intersecting the Discovery Zone which hosts gold-bearing polymetallic massive sulphide mineralization.

Western Canadian Mining Corp. carried out an extensive diamond drilling program on their Gosson claims, concentrating on the Khyber Pass Gold Zone which is 45 metres thick. The best drill hole intersection in this zone to date is as follows:

<u>Hole</u>	<u>From</u> (m)	<u>To</u> (m)	<u>Length</u>		<u>Gold</u> (oz/t)	<u>Silver</u> (oz/t)	<u>Copper</u> (%)
85-3	11.2	16.8	5.6	18.4	0.12	6.48	1.74
	30.2	44.2	5.2	17.1	0.17	2.66	0.90
	54.5	60.1	5.6	18.4	0.15	1.77	--
	66.0	69.0	3.0	9.8	0.28	1.54	--

Tungco Resources Corporation drill tested three main gold/copper quartz vein targets; the Bluff, No. 7 and Swamp Zones. The Bluff Zone has been delineated 70 metres along strike and 60 metres downdip with better intersections grading up to 0.243 oz/ton gold across 2.45 metres. The No. 7 Vein returned 1.12 metres of 0.651 oz/ton gold.

## 5.0 REGIONAL GEOLOGY

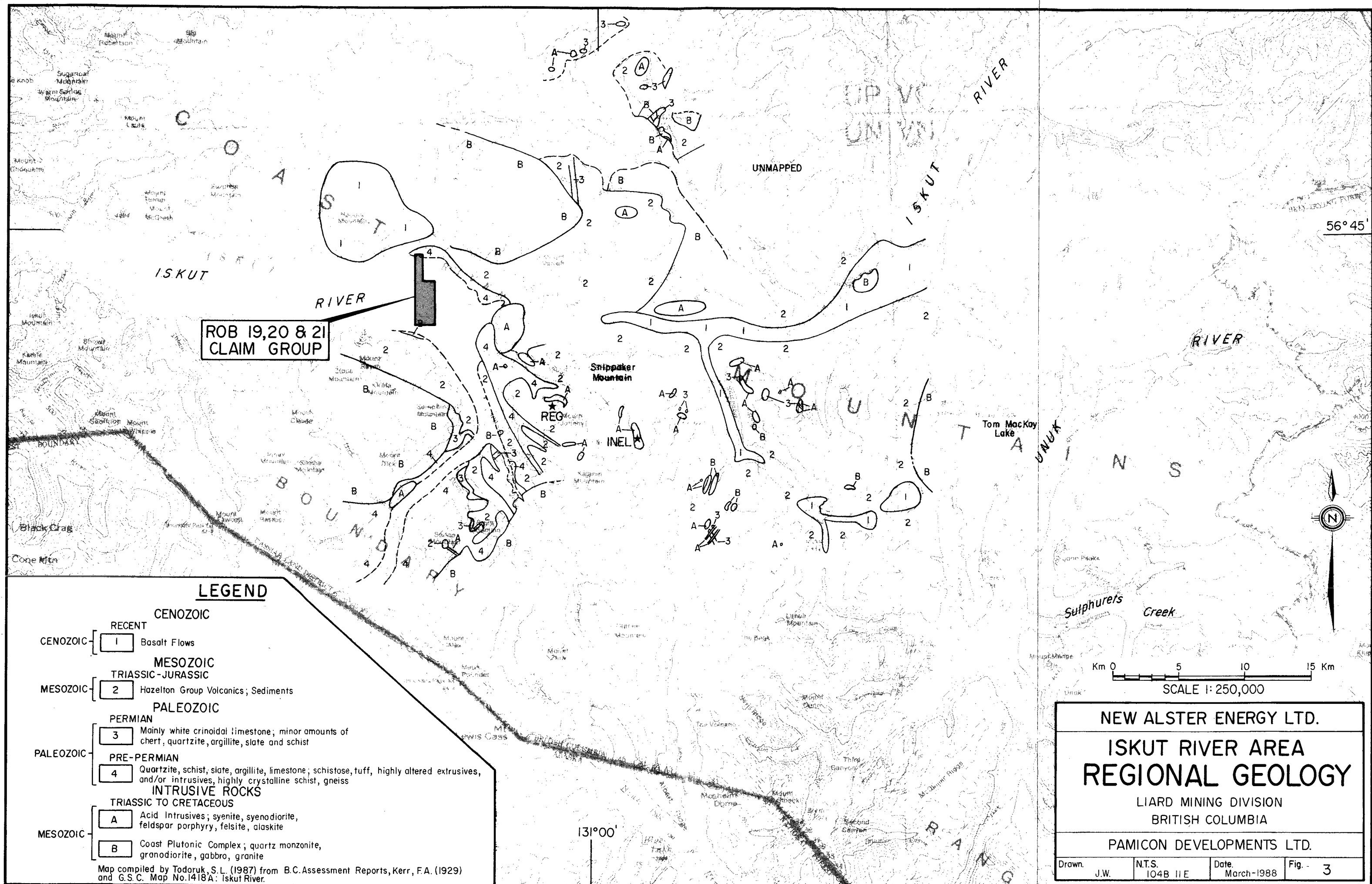
Government mapping of the general geology in the Iskut River area (Kerr, 1929, GSC Maps 9-1957 and 1418-1979) has proved to be incomplete and unreliable. Subsequent mineral exploration studies have greatly enhanced the lithological and stratigraphic knowledge of this geo-entity known as the Stewart Complex (Grove, 1986).

Grove (1986) defines the Stewart Complex in the following manner:

"The Stewart Complex lies along the contact between the Coast Plutonic Complex on the west, the Bowser Basin on the east, Alice Arm on the south and the Iskut River on the north."

Within the Stewart Complex the oldest rock unit consists of Paleozoic crinoidal limestone overlying metamorphosed sedimentary and volcanic members. This oceanic assemblage has been correlated with the Cache Creek Group.

Unconformably overlying the Paleozoic limestone unit are Upper Triassic Hazelton Group island arc volcanics and sediments. These rocks have informally



been referred to as the "Snippaker Volcanics." Grove (1981) correlates this assemblage to the Unuk River Formation of the Stewart Complex whereas other writers match this group with the time equivalent Stuhini Volcanics. Monotis fossils have been recognized on the north slope of Snippaker Peak and west of Newmont Lake, 20 km to the north, giving an age Late Triassic. It is within these rocks that Skyline's Stonehouse Gold and Inel deposits occur (Figure 3).

Grove reports an unconformable contact between Carboniferous and Middle Jurassic strata on both sides of Snippaker Ridge, north of Snippaker Peak. The same unconformable relationship between these major rock units appears to extend from Forrest Kerr Creek west, along the Iskut River, to the Stikine River junction. Present interpretation suggests an east-west trending thrust along the axis of the Iskut River which, like the King Salmon Thrust Fault, pushed up and over to the south.

Following the Iskut River thrust faulting, the entire region was overlain by Middle Jurassic Hazelton Group volcanic-sedimentary rocks named the Betty Creek Formation by Grove (1986).

The batholithic Coast Plutonic Complex intrusions in the Iskut region are of Cretaceous and Tertiary age. Composition varies from quartz monzonite and granodiorite to granite. Satellitic subvolcanic acidic porphyries may be important in the localization of mineralization.

Quaternary and Tertiary volcanics occur to the east along the Iskut River near Forrest Kerr Creek and north at Hoodoo Mountain.

## 6.0 PROPERTY GEOLOGY AND MINERALIZATION

Geological mapping of lithologic units was only carried out on a general nature while prospecting was being carried out.

It appears the Rob 19, 20 & 21 claims are predominantly underlain by sedimentary rocks consisting of siltstones and greywackes. Minor chlorite and carbonate alteration were noted while sulphide content was generally less than 1% pyrite.

Near the northern claim boundary, small plugs of feldspar porphyry were also sampled but returned low gold values (Figure 4).

## 7.0 GEOCHEMISTRY

*Soil samples were taken from the "B" horizon at 10-25 cm depths*

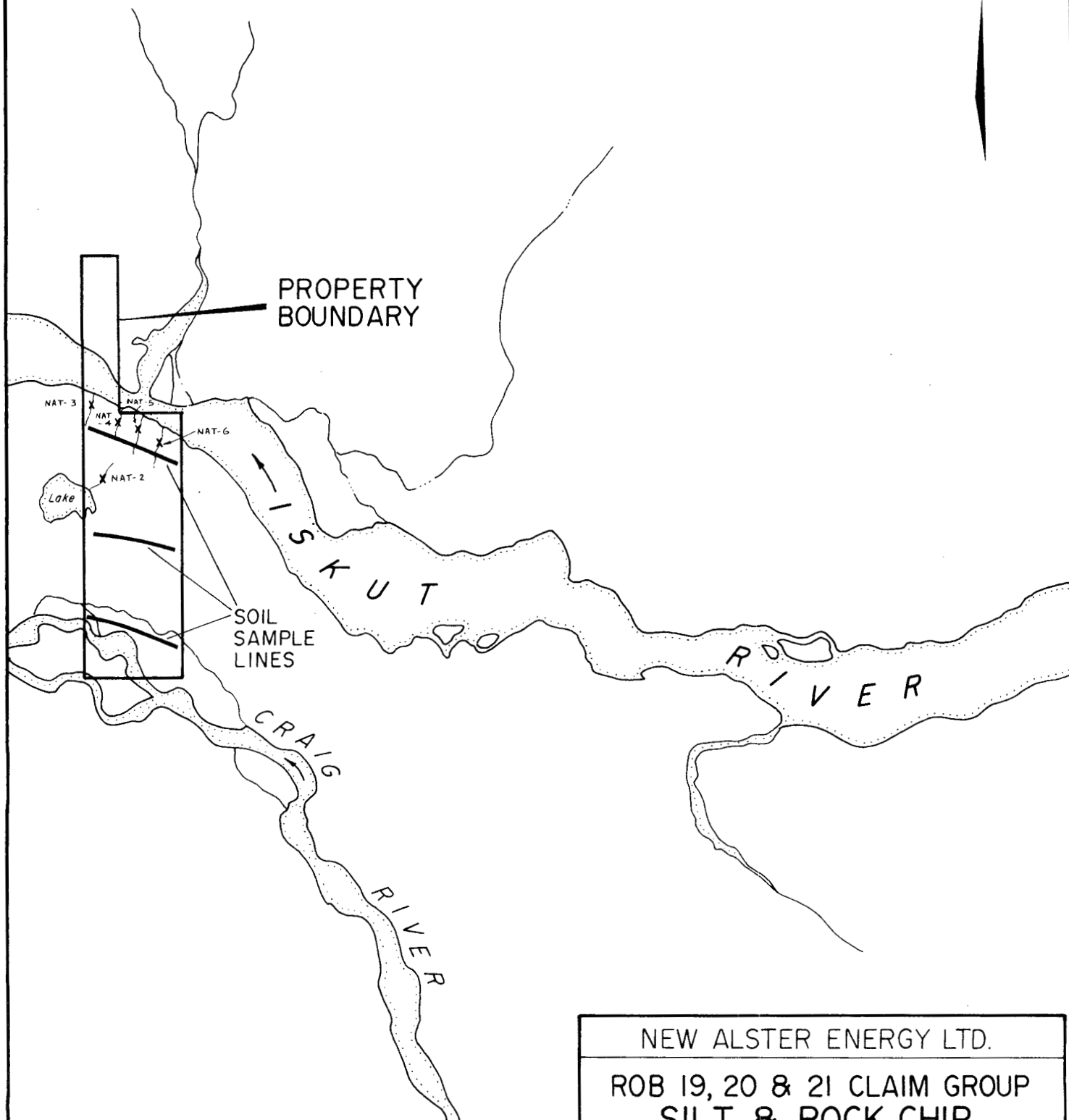
A total of 150 soil and 6 silt samples were collected from the Rob 19, 20 & 21 mineral claims (Figure 5).

Three traverse soil lines were hip-chained and compassed across the Rob 19 claim block. Three samples returned values greater than 30 ppb gold. Sample numbers are listed below:

<u>Sample Number</u>	<u>Gold (ppb)</u>
NA60	40
NA61	45
NA132	40
NA142	35

## 8.0 DISCUSSION AND CONCLUSIONS

The Rob 19, 20 & 21 mineral claims appear to be predominantly underlain by Unuk River Formation siltstone and greywacke sediments. Near the northern claim boundary of the claims, feldspar porphyritic plugs have intruded these sediments. In the Iskut River Gold Camp several varying styles of gold mineralization have been discovered associated with feldspar porphyry intrusives such as Skyline Explorations Ltd.'s Stonehouse Gold deposit which contains reported reserves of 1.1 million tons grading 0.704 oz/ton gold.



Km 0 1 2 3 Km

NEW ALSTER ENERGY LTD.

ROB 19, 20 & 21 CLAIM GROUP  
SILT & ROCK CHIP  
LOCATION MAP

LIARD MINING DIVISION, B.C.

PAMICON DEVELOPMENTS LTD.

Drawn  
J.W.

N.T.S.  
104B IIE

Date.  
March-1988

Fig. No. 4

On the Rob 19, 20 & 21 mineral claims four soil samples have returned anomalous values of greater than 30 ppb gold.

#### 9.0 RECOMMENDATIONS

For the 1988 field season, the balance of funds made available for 1987 (\$25,000) should be used to continue prospecting, mapping and soil sampling the Rob 19, 20 & 21 claims. Contingent upon the success of this program, \$75,000 should be made available for continued exploration work and possibly a short diamond drilling program to test any new mineralized targets.

Respectfully submitted,

---

Steve L. Todoruk, Geologist

---

Charles K. Ikona, P.Eng.



**APPENDIX I**

**BIBLIOGRAPHY**

## BIBLIOGRAPHY

Poloni, J.R.: Report on the Rob #17, #19, #20, #21 Mineral Claims, May 13, 1987.

Skyline Explorations Ltd.: News Release dated January 10, 1988.

Tungco Resources Corporation: News Release dated December 1, 1987.

Western Canadian Mining Corp.: News Release dated November 12, 1987.

**APPENDIX II**

**COST STATEMENT**

## COST STATEMENT

### WAGES

N. Debock - 3 days @ \$275	\$ 825.00
R. Gibson - 3 days @ \$200	600.00
R. Riedel - 3 days @ \$200	600.00
J. Lopez - 3 days @ \$200	600.00
B. McAdam - 1 day @ \$200	200.00
C. Ikona - 1 day @ \$450	450.00
Management - 2 days @ \$250	<u>500.00</u>

### TOTAL WAGES

\$ 3,775.00

### EXPENSES

#### Man Day Support

Management - 3 days	
Crew - 13 days	
NMH - 3 days	
19 days @ \$125/day	\$ 2,375.00

#### Equipment and Expendible Field Supplies

13 days @ \$30	390.00
----------------	--------

#### Aviation

Helicopter	\$ 1,858.38
Fixed Wing	1,089.38
Airstrip User Fee	<u>500.00</u>
	3,447.76

#### Equipment Rental

Truck	\$ 250.00
ATV	<u>250.00</u>
	500.00

Air Fare	500.00
----------	--------

Communication	100.00
---------------	--------

Freight	100.00
---------	--------

Assays	<u>2,049.65</u>
--------	-----------------

### TOTAL EXPENSES

9,462.41

Management Fee on Expenses @ 15%

1,419.36

### TOTAL THIS PROGRAM

14,656.77

**APPENDIX III**

**ASSAY CERTIFICATES**



## VANGEOCHEM LAB LIMITED

MAIN OFFICE  
1521 PEMBERTON AVE.  
NORTH VANCOUVER, B.C. V7P 2S3  
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE  
1630 PANDORA ST.  
VANCOUVER, B.C. V5L 1L6  
(604) 251-5656

December 23, 1987

TO: Steve Todoruk  
PAMICON DEVELOPMENTS  
711 - 675 W. Hastings St.  
Vancouver, B.C. V6B 1N4

FROM: Vangeochem Lab Limited  
1521 Pemberton Avenue  
North Vancouver, British Columbia  
V7P 2S3

SUBJECT: Analytical procedure used to determine Aqua Regia soluble gold in geochemical samples.

### 1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received at the laboratory in high wet-strength, 4" x 6", Kraft paper bags. Rock samples would be received in poly ore bags.
- (b) Dried soil and silt samples were sifted by hand using an 8" diameter, 80-mesh, stainless steel sieve. The plus 80-mesh fraction was rejected. The minus 80-mesh fraction was transferred into a new bag for subsequent analyses.
- (c) Dried rock samples were crushed using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for subsequent analyses.

### 2. Method of Digestion

- (a) 5.00 to 10.00 grams of the minus 80-mesh portion of the samples were used. Samples were weighed out using an electronic micro-balance and deposited into beakers.
- (b) Using a 20 ml solution of Aqua Regia (3:1 solution of HCl to HNO<sub>3</sub>), each sample was vigorously digested over a hot plate.
- (c) The digested samples were filtered and the washed pulps were discarded. The filtrate was then reduced in volume to about 5 ml.



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(d) Au complex ions were then extracted into a di-isobutyl ketone and thiourea medium (Anion exchange liquids "Aliquot 336").

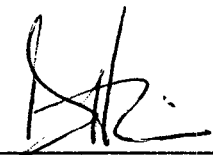
(e) Separatory funnels were used to separate the organic layer.

### 3. Method of Detection

The detection of Au was performed with a Techtron model AA5 Atomic Absorption Spectrophotometer with a gold hollow cathode lamp. The results were read out onto a strip chart recorder. A hydrogen lamp was used to correct any background interferences. The gold values, in parts per billion, were calculated by comparing them with a set of gold standards.

### 4. Analysts

The analyses were supervised or determined by Mr. Conway Chun or Mr. Eddie Tang and his laboratory staff.

  
\_\_\_\_\_  
Eddie Tang  
VANGEOCHEM LAB LIMITED

for



## VANGEOCHEM LAB LIMITED

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December 23, 1987

TO: Steve Todoruk  
PAMICON DEVELOPMENTS  
711 - 675 W. Hastings St.  
Vancouver, B.C. V6B 1N4

FROM: Vangeochem Lab Limited  
1521 Pemberton Avenue  
North Vancouver, British Columbia  
V7P 2S3

SUBJECT: Analytical procedure used to determine gold by fire assay method and detect by atomic absorption spectrophotometry in geological samples.

### 1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received at the laboratory in high wet-strength, 4" x 6", Kraft paper bags. Rock samples would be received in poly ore bags.
- (b) Dried soil and silt samples were sifted by hand using an 8" diameter, 80-mesh, stainless steel sieve. The plus 80-mesh fraction was rejected. The minus 80-mesh fraction was transferred into a new bag for subsequent analyses.
- (c) Dried rock samples were crushed using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for subsequent analyses.

### 2. Method of Extraction

- (a) 20.0 to 30.0 grams of the pulp samples were used. Samples were weighed out using a top-loading balance and deposited into individual fusion pots.
- (b) A flux of litharge, soda ash, silica, borax, and, either flour or potassium nitrite is added. The samples are then fused at 1900 degrees Fahrenheit to form a lead "button".
- (c) The gold is extracted by cupellation and parted with diluted nitric acid.



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(d) The gold bead is retained for subsequent measurement.

### 3. Method of Detection

- (a) The gold bead is dissolved by boiling with aqua regia solution, then diluted with deionized water to 10 ml volume.
- (b) The detection of gold was performed with a Techtron model AA5 Atomic Absorption Spectrophotometer with a gold hollow cathode lamp. The results were read out on a strip chart recorder. The gold values, in parts per billion, were calculated by comparing them with a set of known gold standards.

### 4. Analysts

The analyses were supervised or determined by Mr. Conway Chun or Mr. David Chiu and his laboratory staff.

---

David Chiu  
VANGEOCHEM LAB LIMITED



## VANGEOCHEM LAB LIMITED

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TO: Steve Todoruk  
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711 - 675 W. Hastings St.  
Vancouver, B.C. V6B 1N4

FROM: Vangeochem Lab Limited  
1521 Pemberton Avenue  
North Vancouver, British Columbia  
V7P 2S3

SUBJECT: Analytical procedure used to determine hot acid soluble  
for 28 element scan by Inductively Coupled Plasma  
Spectrophotometry in geochemical silt and soil samples.

### 1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received at the laboratory in high wet-strength, 4" x 6", Kraft paper bags. Rock samples would be received in poly ore bags.
- (b) Dried soil and silt samples were sifted by hand using an 8" diameter, 80-mesh, stainless steel sieve. The plus 80-mesh fraction was rejected. The minus 80-mesh fraction was transferred into a new bag for subsequent analyses.
- (c) Dried rock samples were crushed using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for subsequent analyses.

### 2. Method of Digestion

- (a) 0.50 gram portions of the minus 80-mesh samples were used. Samples were weighed out using an electronic balance.
- (b) Samples were digested with a 5 ml solution of HCL:HN03:H2O in the ratio of 3:1:2 in a 95 degree Celsius water bath for 90 minutes.
- (c) The digested samples are then removed from the bath and bulked up to 10 ml total volume with dimineralized water and thoroughly mixed.



## VANGEOCHEM LAB LIMITED

### MAIN OFFICE

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---

### 3. Method of Analyses

The ICP analyses elements were determined by using a Jarrel-Ash ICAP model 9000 directly reading the spectrophotometric emissions. All major matrix and trace elements are interelement corrected. All data are subsequently stored onto disk.

### 4. Analysts

The analyses were supervised or determined by either Mr. Eddie Tang, and, the laboratory staff.

A handwritten signature in black ink, appearing to be 'Eddie Tang', is written over a horizontal line. To the right of the signature, there is a small, stylized mark that looks like 'for'.

Eddie Tang  
VANGEOCHEM LAB LIMITED



# VANGEOCHEM LAB LIMITED

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REPORT NUMBER: 871464 GA

JOB NUMBER: 871464

PAMICON DEVELOPMENT LTD.

PAGE 1 OF 4

SAMPLE #	Au ppb
NA 1	5
NA 2	nd
NA 3	15
NA 4	5
NA 5	5
NA 6	10
NA 7	30
NA 8	20
NA 9	30
NA 10	5
NA 11	10
NA 12	10
NA 13	20
NA 14	5
NA 15	5
NA 16	5
NA 17	10
NA 18	5
NA 19	15
NA 20	20
NA 21	10
NA 22	20
NA 23	20
NA 24	5
NA 25	nd
NA 26	5
NA 27	10
NA 28	30
NA 29	5
NA 30	5
NA 31	10
NA 32	10
NA 33	20
NA 34	10
NA 35	10
NA 36	15
NA 37	15
NA 38	5
NA 39	25

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample



# VANGEOCHEM LAB LIMITED

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VANCOUVER, B.C. V5L 1L6  
(604) 251-5656

REPORT NUMBER: 871464 6A

JOB NUMBER: 871464

PANICON DEVELOPMENT LTD.

PAGE 2 OF 4

SAMPLE #	Au ppb
NA 40	10
NA 41	10
NA 42	5
NA 43	25
NA 44	20
NA 45	30
NA 46	20
NA 47	25
NA 48	20
NA 49	10
NA 50	30
NA 51	10
NA 52	15
NA 53	10
NA 54	15
NA 55	15
NA 56	25
NA 57	10
NA 58	20
NA 59	25
NA 60	40
NA 61	45
NA 62	25
NA 63	30
NA 64	10
NA 65	15
NA 66	25
NA 67	25
NA 68	25
NA 69	25
NA 70	10
NA 71	20
NA 72	20
NA 73	20
NA 74	15
NA 75	5
NA 76	15
NA 77	15
NA 78	20

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample



# VANGEOCHEM LAB LIMITED

MAIN OFFICE  
1521 PEMBERTON AVE.  
NORTH VANCOUVER, B.C. V7P 2S3  
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE  
1630 PANDORA ST.  
VANCOUVER, B.C. V5L 1L6  
(604) 251-5656

REPORT NUMBER: 871464 6A

JOB NUMBER: 871464

PAMICON DEVELOPMENT LTD.

PAGE 3 OF 4

SAMPLE #	Au ppb
NA 79	10
NA 80	10
NA 81	15
NA 82	10
NA 83	20
NA 84	5
NA 85	15
NA 86	15
NA 87	15
NA 88	15
NA 89	30
NA 90	15
NA 91	30
NA 92	25
NA 93	20
NA 94	15
NA 95	20
NA 96	10
NA 97	20
NA 98	10
NA 99	5
NA 100	nd
NA 101	10
NA 102	nd
NA 103	10
NA 104	30
NA 105	5
NA 106	30
NA 107	25
NA 108	20
NA 109	10
NA 110	15
NA 111	10
NA 112	10
NA 113	15
NA 114	5
NA 115	20
NA 116	15
NA 117	30

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample



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1630 PANDORA ST.  
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(604) 251-5656

REPORT NUMBER: 871464 GA

JOB NUMBER: 871464

PAMICON DEVELOPMENT LTD.

PAGE 4 OF 4

SAMPLE #	Au ppb
NA 118	20
NA 119	15
NA 120	20
NA 121	5
NA 122	15
NA 123	20
NA 124	25
NA 125	30
NA 126	20
NA 127	30
NA 128	25
NA 129	20
NA 130	25
NA 131	10
NA 132	40
NA 133	20
NA 134	20
NA 135	20
NA 136	15
NA 137	30
NA 138	20
NA 139	30
NA 140	20
NA 141	30
NA 142	35
NA 143	25
NA 144	25
NA 145	15
NA 146	25
NA 147	25
NA 148	30
NA 149	20
NA 150	20
NA S1	20
NA S2	20

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample

# ICAP GEOCHEMICAL ANALYSIS

A .5 GRAM SAMPLE IS DIGESTED WITH 5 ML OF 3:1:2 HCL TO HNO3 TO H2O AT 95 DEG. C FOR 90 MINUTES AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR SN, MN, FE, CA, P, CR, MG, BA, PD, AL, NA, K, W, PT AND SR. AU AND PD DETECTION IS 3 PPM.  
IS= INSUFFICIENT SAMPLE, ND= NOT DETECTED, -- NOT ANALYZED

COMPANY: STEVE TODORUK (PAMICON)  
ATTENTION:  
PROJECT: NEW ALLSTER

REPORT#: 871464PA  
JOB#: 871464  
INVOICE#: 871464NA

DATE RECEIVED: 87/10/05  
DATE COMPLETED: 87/10/14  
COPY SENT TO:

ANALYST *A. J. Jones*

PAGE 1 OF 4

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
NA 1	.5	1.86	8	ND	48	ND	.02	.1	3	7	10	3.35	.05	.10	45	1	.05	5	.02	26	ND	ND	4	ND	2	4	ND	24
NA 2	.3	1.33	18	ND	52	ND	.04	.1	7	8	17	4.58	.05	.18	761	3	.10	7	.04	47	ND	ND	9	1	4	4	ND	71
NA 3	.1	3.67	35	ND	125	ND	.24	.1	17	39	28	7.75	.04	2.02	773	1	.21	30	.09	40	ND	ND	ND	ND	8	ND	ND	104
NA 4	.1	2.07	9	ND	64	ND	.41	.1	6	8	14	2.23	.04	1.87	1398	1	.07	10	.03	16	ND	ND	ND	1	11	ND	ND	59
NA 5	.5	2.01	5	ND	54	ND	.05	.1	3	14	14	2.90	.05	.37	64	2	.05	3	.03	19	ND	ND	ND	1	5	ND	ND	29
NA 6	.1	2.95	407	ND	88	ND	.13	.1	19	23	91	9.97	.05	.67	674	1	.28	37	.10	18	ND	ND	9	ND	7	ND	ND	225
NA 7	.5	2.08	138	ND	38	ND	.05	.1	15	11	134	8.60	.04	.26	675	2	.17	4	.08	28	ND	ND	5	2	7	ND	ND	31
NA 8	6.2	2.90	32	ND	49	ND	.08	.1	6	41	49	6.24	.04	.48	182	1	.13	18	.07	35	ND	ND	5	1	8	ND	ND	50
NA 9	1.6	2.87	14	ND	38	ND	.22	.1	19	21	1291	5.17	.03	2.23	985	ND	.17	18	.06	19	ND	ND	ND	2	6	ND	ND	138
NA 10	1.2	1.45	9	ND	23	ND	.13	.1	15	10	96	3.73	.05	.71	2133	ND	.08	5	.07	19	ND	ND	ND	7	10	ND	5	50
NA 11	.4	3.65	15	ND	32	ND	.10	.1	20	16	134	6.12	.02	2.01	815	ND	.21	8	.05	12	ND	ND	ND	1	5	ND	ND	184
NA 12	.8	3.91	21	ND	38	ND	.19	.1	50	17	915	9.09	.02	2.17	686	1	.33	13	.06	20	ND	ND	ND	3	6	ND	ND	323
NA 13	.8	2.95	5	ND	75	ND	.14	.1	9	63	41	6.90	.04	.53	208	1	.15	33	.06	20	ND	ND	5	ND	11	4	ND	59
NA 14	1.1	1.83	12	ND	30	ND	.20	.1	11	58	31	3.54	.04	1.05	293	1	.08	40	.04	25	ND	ND	ND	7	10	ND	ND	42
NA 15	.7	3.13	26	ND	27	ND	.27	.1	21	115	11	4.03	.02	1.57	784	ND	.11	72	.08	14	ND	ND	ND	4	12	ND	ND	55
NA 16	1.2	.71	ND	ND	26	ND	.12	.1	5	9	17	1.50	.05	.18	100	ND	.01	3	.04	21	ND	ND	ND	5	8	4	4	15
NA 17	1.6	.74	3	ND	23	4	.21	.1	9	61	14	1.17	.04	.50	98	1	.01	32	.02	24	ND	ND	4	10	38	4	6	14
NA 18	1.3	.49	ND	ND	18	ND	.10	.1	3	19	13	.85	.06	.15	46	ND	.01	10	.05	14	ND	ND	4	3	10	6	6	12
NA 19	3.2	5.22	ND	ND	24	ND	.04	.1	2	14	25	3.32	.06	.04	61	1	.04	3	.07	38	ND	ND	ND	2	3	3	ND	32
NA 20	3.3	8.23	6	ND	31	ND	.04	.1	4	16	22	5.72	.06	.07	264	4	.10	4	.06	39	6	ND	ND	2	3	ND	ND	93
NA 21	2.0	4.96	11	ND	86	ND	.14	.1	10	35	43	5.43	.09	.83	580	4	.12	38	.06	38	ND	ND	3	ND	8	ND	ND	196
NA 22	1.2	5.00	89	ND	35	ND	.94	.1	8	21	103	4.42	.13	.14	387	2	.05	16	.06	41	ND	ND	ND	1	17	4	ND	156
NA 23	1.7	4.98	ND	ND	55	ND	.18	.1	7	12	79	3.10	.08	.11	688	1	.04	4	.14	24	ND	ND	ND	ND	6	4	ND	110
NA 24	.9	6.27	8	ND	41	ND	.03	.1	3	14	26	4.03	.07	.16	346	1	.08	8	.08	34	ND	ND	ND	ND	2	3	ND	121
NA 25	.3	3.98	9	ND	24	ND	.07	.1	7	20	21	2.87	.03	2.36	213	ND	.10	14	.04	21	ND	ND	ND	ND	3	ND	ND	96
NA 26	.3	4.06	9	ND	55	ND	.32	.1	12	11	298	3.42	.04	2.89	458	ND	.13	10	.07	20	ND	ND	ND	1	10	ND	ND	164
NA 27	.7	3.52	11	ND	78	ND	.21	.1	8	12	43	4.46	.04	.14	330	2	.09	6	.06	31	ND	ND	ND	4	12	ND	ND	74
NA 28	1.5	1.16	8	ND	25	ND	.09	.1	5	7	17	2.16	.04	.10	74	2	.02	3	.02	24	ND	ND	ND	6	8	ND	3	17
NA 29	1.2	.47	ND	ND	34	ND	.15	.1	1	5	8	.77	.05	.06	92	ND	.01	3	.03	15	ND	ND	ND	1	9	4	5	12
NA 30	.7	3.58	3	ND	45	ND	.12	.1	21	17	365	6.97	.04	.78	491	2	.16	7	.07	14	ND	ND	ND	1	6	ND	ND	53
NA 31	.5	3.15	12	ND	33	ND	.09	.1	16	13	197	7.96	.07	.30	1299	4	.16	8	.04	28	ND	ND	5	ND	6	ND	ND	69
NA 32	1.5	2.62	9	ND	25	3	.04	.1	3	13	16	6.14	.07	.06	127	4	.10	2	.02	44	ND	ND	9	7	4	4	ND	44
NA 33	1.4	3.90	9	ND	34	ND	.17	.1	4	14	20	5.57	.06	.06	187	6	.10	3	.03	46	ND	ND	7	8	7	4	ND	86
NA 34	2.0	3.58	6	ND	25	ND	.04	.1	4	12	22	5.22	.06	.17	155	4	.09	3	.02	45	ND	ND	7	6	4	4	ND	77
NA 35	3.6	7.63	11	ND	42	ND	.05	.1	5	14	37	6.29	.14	.19	317	4	.14	12	.04	40	8	ND	ND	ND	3	6	ND	286
NA 36	.9	1.72	11	ND	29	ND	.04	.1	4	12	12	4.26	.06	.20	90	3	.09	1	.01	29	ND	ND	6	5	3	3	4	94
NA 37	.1	3.27	ND	ND	81	ND	.70	.1	15	122	65	4.45	.04	2.07	1113	1	.13	104	.11	18	ND	ND	ND	ND	22	ND	ND	97
NA 38	.2	1.41	8	ND	70	ND	.79	.1	7	22	31	3.57	.06	.18	605	ND	.08	33	.11	20	ND	ND	ND	ND	29	ND	3	86
NA 39	1.0	3.34	11	ND	51	ND	.03	.1	3	17	26	6.82	.06	.03	130	5	.11	ND	.05	52	ND	ND	7	8	4	3	ND	31
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
NA 40	1.1	6.02	11	ND	27	ND	.04	.1	3	19	18	6.92	.05	.05	121	1	.12	5	.05	48	ND	ND	5	3	3	ND	ND	48
NA 41	.5	4.23	ND	ND	39	ND	.03	.1	2	17	15	5.38	.04	.02	52	1	.09	5	.05	37	ND	ND	ND	1	6	ND	ND	17
NA 42	1.3	7.77	ND	ND	50	ND	.04	.1	4	22	17	4.40	.07	.11	198	ND	.13	13	.04	34	ND	ND	ND	ND	4	ND	ND	230
NA 43	.1	4.10	7	ND	301	ND	.11	.1	11	43	44	5.31	.10	.73	583	3	.14	58	.05	37	ND	ND	ND	ND	39	ND	ND	274
NA 44	.6	3.50	7	ND	40	ND	.10	.1	3	13	16	4.93	.06	.05	140	3	.08	7	.05	39	ND	ND	5	3	11	ND	ND	47
NA 45	.5	1.78	10	ND	46	ND	.03	.1	2	11	15	4.58	.06	.03	34	4	.07	6	.05	42	ND	ND	7	6	4	ND	ND	29
NA 46	1.9	4.78	25	ND	46	ND	.04	.1	10	11	34	6.23	.20	.12	684	5	.01	11	.06	48	ND	ND	ND	2	3	6	ND	155
NA 47	.7	3.80	7	ND	38	ND	.06	.1	2	13	17	4.95	.05	.03	90	1	.07	4	.04	42	ND	ND	3	5	6	ND	ND	26
NA 48	1.5	5.54	4	ND	32	ND	.01	.1	2	16	17	5.23	.06	.03	70	ND	.08	4	.04	45	ND	ND	ND	ND	2	ND	ND	31
NA 49	.1	3.42	14	3	49	ND	.07	.1	4	25	23	11.07	.06	.06	97	5	.21	6	.03	53	ND	ND	11	9	6	ND	ND	40
NA 50	.3	.86	5	ND	36	ND	.04	.1	3	9	10	2.57	.07	.04	52	1	.03	6	.01	25	ND	ND	6	4	5	ND	ND	15
NA 51	3.5	5.99	10	ND	75	ND	.08	.1	8	11	26	5.48	.28	.13	711	3	.01	16	.04	47	ND	ND	ND	ND	10	10	ND	292
NA 52	.1	4.08	7	ND	50	ND	.06	.1	2	21	24	4.91	.06	.04	114	2	.07	6	.04	39	ND	ND	ND	2	6	ND	ND	31
NA 53	.6	1.59	7	ND	68	ND	.08	.1	3	15	17	3.86	.06	.05	91	3	.05	8	.03	51	ND	ND	8	10	8	ND	ND	31
NA 54	.5	3.76	ND	ND	43	ND	.06	.1	4	15	22	3.46	.07	.07	274	1	.05	9	.05	34	ND	ND	ND	ND	7	ND	ND	48
NA 55	.1	2.91	8	ND	114	ND	.18	.1	5	14	24	4.52	.09	.21	2849	2	.11	20	.10	31	ND	ND	ND	ND	11	ND	ND	214
NA 56	.1	6.47	4	ND	71	ND	.07	.1	2	21	27	6.39	.05	.03	212	ND	.10	10	.06	41	ND	ND	ND	ND	7	ND	ND	39
NA 57	.3	1.30	4	ND	46	ND	.04	.1	2	10	14	2.15	.06	.03	50	1	.01	7	.04	31	ND	ND	3	4	7	ND	ND	17
NA 58	.3	4.38	5	ND	73	ND	.03	.1	2	15	21	3.98	.05	.02	80	1	.06	11	.03	35	ND	ND	ND	1	4	ND	ND	32
NA 59	.6	5.39	4	ND	42	ND	.04	.1	2	19	21	4.09	.04	.02	62	ND	.06	6	.03	31	ND	ND	ND	ND	5	ND	ND	25
NA 60	.6	1.16	7	ND	49	ND	.06	.1	3	11	17	3.37	.06	.04	59	3	.04	11	.02	38	ND	ND	6	9	6	ND	ND	20
NA 61	.6	3.45	8	ND	43	ND	.03	.1	3	16	21	4.59	.06	.04	75	2	.07	8	.03	40	ND	ND	4	6	4	ND	ND	39
NA 62	1.3	4.02	16	ND	105	ND	.05	.1	5	11	17	5.29	.14	.14	822	3	.09	10	.03	47	ND	ND	ND	3	14	3	ND	246
NA 63	1.5	6.25	ND	ND	108	ND	.06	.1	4	17	19	5.31	.13	.07	280	1	.08	13	.05	41	ND	ND	ND	ND	17	ND	ND	127
NA 64	1.1	4.03	4	ND	61	ND	.06	.1	3	19	24	5.32	.06	.04	92	2	.08	6	.03	45	ND	ND	3	3	7	ND	ND	40
NA 65	.3	3.94	8	ND	90	ND	.05	.1	7	27	32	4.59	.08	.43	262	2	.10	30	.04	33	ND	ND	ND	ND	7	ND	ND	135
NA 66	.1	2.67	7	ND	156	ND	.28	.1	14	31	39	4.44	.08	.81	1578	1	.12	52	.08	31	ND	ND	ND	ND	52	ND	ND	194
NA 67	.1	2.31	14	ND	68	ND	.12	.1	5	24	82	5.16	.06	.15	243	18	.09	18	.06	33	ND	ND	3	1	8	ND	ND	42
NA 68	.8	3.40	8	ND	47	5	.05	.1	3	16	27	5.16	.06	.04	88	2	.08	10	.03	45	ND	ND	4	6	8	ND	ND	32
NA 69	.5	2.47	11	ND	67	ND	.02	.1	4	16	19	6.56	.06	.04	109	4	.11	8	.02	50	ND	ND	9	9	5	ND	ND	33
NA 70	.7	1.39	7	ND	38	ND	.03	.1	3	12	13	3.40	.07	.04	64	2	.04	4	.03	34	ND	ND	6	6	5	ND	ND	18
NA 71	.7	4.47	10	ND	43	ND	.05	.1	4	18	24	4.70	.07	.06	176	2	.09	13	.05	42	ND	ND	ND	4	5	ND	ND	83
NA 72	.3	3.92	5	ND	46	ND	.12	.1	4	19	21	4.29	.07	.12	722	2	.08	8	.06	37	ND	ND	ND	3	8	ND	ND	116
NA 73	.3	5.85	5	ND	36	ND	.04	.1	2	25	26	6.97	.06	.02	89	3	.10	7	.08	39	ND	ND	ND	ND	3	ND	ND	32
NA 74	.6	.91	ND	ND	49	ND	.06	.1	3	10	14	1.78	.06	.08	82	1	.01	7	.04	20	ND	ND	3	2	8	5	ND	24
NA 75	.5	5.65	ND	ND	53	ND	.05	.1	2	18	20	4.18	.06	.03	112	ND	.06	5	.04	34	ND	ND	ND	ND	7	ND	ND	30
NA 76	.6	2.04	ND	ND	33	ND	.11	.1	3	10	13	2.63	.07	.05	120	2	.03	8	.02	34	ND	ND	3	5	7	5	ND	44
NA 77	1.2	4.12	11	ND	75	ND	.05	.1	4	15	18	4.36	.09	.10	318	3	.08	13	.04	44	ND	ND	ND	2	5	ND	ND	124
NA 78	.1	1.56	8	ND	35	ND	.04	.1	3	12	15	3.51	.05	.04	80	4	.05	6	.02	41	ND	ND	7	5	5	ND	ND	24
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
NA 79	.1	2.09	7	ND	51	ND	.15	.1	3	13	15	4.31	.05	.06	79	4	.06	5	.04	38	ND	ND	ND	3	9	ND	ND	51
NA 80	.3	3.89	4	ND	30	ND	.11	.1	3	15	17	4.51	.08	.13	498	4	.05	9	.05	35	ND	ND	ND	ND	7	ND	ND	188
NA 81	.7	4.27	ND	ND	33	ND	.06	.1	3	15	20	4.12	.12	.06	253	1	.01	3	.05	44	ND	ND	ND	ND	4	ND	ND	68
NA 82	.1	2.18	8	ND	37	ND	.05	.1	2	19	28	7.99	.05	.04	168	2	.15	1	.05	46	ND	ND	ND	2	4	ND	ND	45
NA 83	.5	1.58	10	ND	36	ND	.14	.1	5	13	20	6.69	.07	.05	229	5	.11	11	.02	50	ND	ND	3	9	7	ND	ND	50
NA 84	.5	3.14	16	ND	46	ND	.08	.1	3	16	19	4.42	.04	.04	128	2	.07	4	.03	48	ND	ND	ND	2	6	ND	ND	35
NA 85	.3	3.09	5	ND	22	ND	.03	.1	3	19	19	5.30	.05	.13	154	1	.09	7	.02	44	ND	ND	ND	1	3	ND	ND	49
NA 86	.1	1.32	ND	ND	34	ND	.06	.1	1	12	13	2.82	.05	.06	82	2	.04	6	.03	33	ND	ND	ND	ND	6	ND	ND	30
NA 87	.1	6.55	ND	ND	47	ND	.06	.1	2	26	22	6.53	.02	.03	177	ND	.12	6	.07	34	ND	ND	ND	ND	6	ND	ND	40
NA 88	.1	2.89	8	ND	45	ND	.11	.1	4	18	16	3.49	.04	.10	748	1	.06	5	.06	33	ND	ND	ND	ND	7	ND	ND	38
NA 89	.1	2.79	13	ND	37	ND	.03	.1	3	19	20	4.49	.05	.04	691	2	.07	3	.08	44	ND	ND	ND	1	4	ND	ND	29
NA 90	.1	4.26	7	ND	51	ND	.06	.1	4	20	24	3.90	.04	.05	944	ND	.07	7	.07	32	ND	ND	ND	ND	5	ND	ND	63
NA 91	.3	4.78	ND	ND	34	ND	.07	.1	5	17	27	3.66	.05	.04	366	ND	.05	6	.06	39	ND	ND	ND	ND	5	ND	ND	52
NA 92	1.1	4.67	8	ND	36	ND	.07	.1	4	12	20	3.51	.08	.07	573	ND	.05	4	.04	38	ND	ND	ND	ND	6	ND	ND	112
NA 93	.6	2.03	8	ND	37	ND	.05	.1	3	13	18	3.67	.05	.05	164	2	.05	2	.03	41	ND	ND	ND	2	6	ND	ND	35
NA 94	.3	3.15	7	ND	43	ND	.04	.1	3	14	20	4.58	.04	.03	83	1	.07	4	.04	38	ND	ND	ND	1	6	ND	ND	43
NA 95	1.1	2.16	ND	ND	31	ND	.15	.1	8	43	29	4.69	.03	.35	172	ND	.08	14	.04	33	ND	ND	ND	4	14	ND	ND	34
NA 96	.6	1.24	ND	ND	60	ND	.21	.1	3	12	16	2.52	.04	.16	103	ND	.03	8	.04	24	ND	ND	ND	ND	13	ND	ND	34
NA 97	.1	2.58	11	ND	93	ND	.59	.1	6	31	61	2.59	.09	.63	320	1	.01	41	.12	16	ND	ND	ND	ND	26	ND	ND	77
NA 98	.1	.72	ND	ND	60	ND	.93	.1	2	7	23	.51	.05	.10	261	ND	.01	8	.07	14	ND	ND	ND	ND	35	ND	4	18
NA 99	.3	.85	ND	ND	18	ND	.04	.1	1	6	11	.36	.05	.03	18	ND	.01	12	.02	20	ND	ND	3	ND	4	ND	4	5
NA 100	.5	.32	ND	ND	17	ND	.04	.1	ND	2	4	.19	.05	.03	19	ND	.01	ND	.02	19	ND	ND	ND	ND	4	ND	5	4
NA 101	.1	3.30	ND	ND	53	ND	.12	.1	2	13	20	2.43	.04	.06	255	ND	.03	6	.05	27	ND	ND	ND	ND	8	ND	ND	43
NA 102	.3	2.30	ND	ND	34	ND	.06	.1	3	12	17	2.89	.07	.10	462	1	.03	5	.04	26	ND	ND	ND	ND	5	ND	ND	54
NA 103	.1	4.23	ND	ND	49	ND	.05	.1	1	23	22	4.82	.04	.03	205	ND	.06	3	.05	31	ND	ND	ND	ND	7	ND	ND	16
NA 104	.7	7.07	ND	ND	55	ND	.03	.1	2	18	22	4.19	.05	.06	243	ND	.07	5	.05	32	ND	ND	ND	ND	5	ND	ND	81
NA 105	.3	2.67	16	ND	48	ND	.10	.1	3	14	24	3.43	.05	.07	180	1	.05	6	.05	35	ND	ND	ND	ND	8	ND	ND	52
NA 106	.3	2.51	20	ND	53	ND	.05	.1	3	15	33	4.25	.06	.11	144	1	.06	6	.05	34	ND	ND	ND	ND	7	ND	ND	33
NA 107	1.1	3.95	ND	ND	53	ND	.09	.1	2	13	14	3.11	.06	.06	129	ND	.04	5	.03	32	ND	ND	ND	ND	6	ND	ND	51
NA 108	.1	2.61	11	ND	30	ND	.05	.1	2	19	25	7.63	.03	.04	77	3	.14	2	.03	40	ND	ND	4	2	4	ND	ND	30
NA 109	.7	4.41	7	ND	38	3	.02	.1	4	24	26	7.24	.05	.06	146	2	.14	8	.03	45	ND	ND	ND	ND	3	ND	ND	78
NA 110	1.5	4.60	4	ND	40	ND	.06	.1	3	15	23	4.57	.08	.07	222	1	.07	7	.03	41	ND	ND	ND	1	5	ND	ND	79
NA 111	.7	4.62	ND	ND	59	ND	.05	.1	5	12	20	4.19	.10	.08	470	1	.05	8	.05	38	ND	ND	ND	ND	4	ND	ND	112
NA 112	.3	4.61	ND	ND	51	ND	.03	.1	2	15	20	3.84	.07	.04	142	ND	.05	6	.04	35	ND	ND	ND	ND	3	ND	ND	41
NA 113	1.7	6.82	ND	ND	49	ND	.03	.1	5	15	20	4.71	.10	.08	394	ND	.08	7	.04	37	ND	ND	ND	ND	4	ND	ND	110
NA 114	.3	2.30	4	ND	45	ND	.04	.1	2	11	13	2.84	.05	.05	107	ND	.02	4	.02	32	ND	ND	ND	1	4	ND	ND	24
NA 115	.7	3.97	ND	ND	44	ND	.02	.1	2	17	15	4.31	.05	.04	83	ND	.06	6	.02	38	ND	ND	ND	ND	4	ND	ND	40
NA 116	1.7	6.03	ND	ND	49	ND	.02	.1	1	19	23	5.00	.07	.06	178	ND	.07	4	.04	40	ND	ND	ND	ND	3	ND	ND	75
NA 117	1.7	5.26	4	ND	90	ND	.02	.1	4	11	29	4.85	.15	.09	365	ND	.08	11	.04	45	ND	ND	3	ND	3	ND	ND	180
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
NA 118	1.5	5.16	5	ND	57	6	.06	.1	3	15	18	4.18	.06	.06	120	1	.07	7	.03	37	ND	ND	ND	1	5	ND	ND	78
NA 119	1.1	5.33	10	ND	53	ND	.03	.1	4	24	24	5.09	.06	.11	166	1	.11	10	.03	39	ND	ND	ND	ND	3	ND	ND	105
NA 120	1.1	8.16	5	ND	35	ND	.03	.1	3	28	24	5.87	.07	.07	125	ND	.11	6	.03	39	ND	ND	ND	ND	4	ND	ND	106
NA 121	.8	5.49	5	ND	90	ND	.02	.1	3	19	21	5.30	.07	.04	156	ND	.08	9	.03	41	ND	ND	4	ND	2	ND	ND	73
NA 122	1.1	5.47	7	ND	49	ND	.04	.1	2	16	20	4.19	.08	.04	118	1	.06	5	.04	37	ND	ND	ND	ND	4	ND	ND	55
NA 123	.8	6.03	10	ND	59	ND	.08	.1	4	18	24	4.96	.07	.07	166	ND	.07	11	.04	45	ND	ND	ND	1	6	ND	ND	82
NA 124	.2	5.15	8	ND	55	ND	.04	.1	2	22	24	6.05	.04	.04	68	ND	.10	6	.04	44	ND	ND	ND	ND	8	ND	ND	28
NA 125	.4	3.30	8	ND	50	ND	.03	.1	3	15	18	3.70	.07	.07	148	1	.05	4	.03	37	ND	ND	5	ND	4	ND	ND	46
NA 126	.1	3.96	7	ND	70	ND	.06	.1	7	18	22	3.73	.04	.08	636	1	.06	5	.05	32	ND	ND	3	1	7	ND	ND	47
NA 127	.4	3.30	ND	ND	55	ND	.07	.1	2	14	16	2.90	.04	.04	107	ND	.04	5	.03	28	ND	ND	4	ND	6	ND	ND	29
NA 128	.1	3.92	4	ND	77	ND	.08	.1	2	19	18	4.35	.06	.04	94	1	.07	5	.03	32	ND	ND	3	ND	11	ND	ND	31
NA 129	.4	4.50	4	ND	47	ND	.10	.1	2	21	23	4.81	.04	.05	78	ND	.07	5	.02	33	ND	ND	ND	ND	7	ND	ND	34
NA 130	.4	4.04	10	ND	39	ND	.03	.1	2	16	17	4.12	.05	.04	63	1	.07	4	.03	38	ND	ND	ND	ND	4	ND	ND	46
NA 131	.1	2.34	16	ND	48	ND	.05	.1	3	17	23	5.87	.05	.03	71	3	.09	5	.02	46	ND	ND	12	9	5	ND	ND	20
NA 132	.2	1.34	11	ND	46	ND	.05	.1	3	15	15	5.19	.05	.04	161	4	.08	7	.03	40	ND	ND	12	5	6	ND	ND	25
NA 133	.1	3.95	10	ND	70	ND	.07	.1	2	25	29	5.62	.04	.04	78	1	.08	6	.04	38	ND	ND	4	ND	12	ND	ND	28
NA 134	3.1	5.28	10	ND	74	ND	.12	.1	6	10	20	3.99	.18	.09	482	2	.05	9	.03	46	ND	ND	4	2	11	8	ND	197
NA 135	.2	4.57	10	ND	73	ND	.05	.1	4	13	24	3.94	.05	.07	341	1	.06	7	.05	54	ND	ND	ND	1	6	ND	ND	50
NA 136	.1	3.49	8	ND	61	ND	.16	.1	3	18	24	3.32	.04	.19	632	1	.06	10	.07	27	ND	ND	ND	ND	12	ND	ND	87
NA 137	.1	3.39	10	ND	71	ND	.04	.1	2	19	24	4.23	.04	.03	124	ND	.06	5	.04	31	ND	ND	5	ND	8	ND	ND	28
NA 138	.6	1.48	11	ND	46	ND	.06	.1	2	15	16	3.27	.05	.04	52	2	.04	13	.04	35	ND	ND	8	6	7	ND	ND	14
NA 139	.2	2.47	5	ND	50	ND	.05	.1	3	20	22	5.65	.06	.04	90	4	.09	7	.03	48	ND	ND	12	4	5	ND	ND	23
NA 140	.1	2.32	10	ND	94	ND	.37	.1	6	17	17	3.38	.08	.21	1207	2	.06	5	.02	31	ND	ND	3	1	21	ND	ND	111
NA 141	.2	2.40	10	ND	37	ND	.04	.1	2	16	14	3.40	.07	.05	94	1	.04	5	.03	35	ND	ND	7	2	5	4	ND	28
NA 142	1.5	8.74	16	ND	74	ND	.07	.1	3	26	28	6.09	.08	.07	223	ND	.10	9	.05	38	ND	ND	ND	ND	5	ND	ND	95
NA 143	.8	2.85	10	ND	67	ND	.06	.1	3	11	18	2.97	.11	.07	280	2	.03	10	.03	35	ND	ND	5	1	8	4	ND	73
NA 144	.4	1.68	16	ND	53	5	.02	.1	4	13	18	5.48	.07	.03	110	5	.08	ND	.02	44	ND	ND	13	12	3	ND	ND	31
NA 145	.2	7.09	14	ND	41	ND	.02	.1	2	34	27	8.57	.06	.04	46	2	.13	2	.06	41	ND	ND	ND	ND	1	ND	ND	20
NA 146	.1	2.54	17	ND	61	ND	.02	.1	2	19	20	5.62	.05	.03	68	3	.08	2	.02	40	ND	ND	9	5	3	ND	ND	21
NA 147	.4	4.27	8	ND	58	ND	.08	.1	5	18	22	3.80	.09	.18	525	2	.07	14	.07	31	ND	ND	ND	ND	7	ND	ND	88
NA 148	.1	3.56	14	ND	51	3	.05	.1	3	23	20	5.05	.06	.05	156	1	.08	4	.05	37	ND	ND	6	1	6	ND	ND	30
NA 149	.2	2.44	8	ND	49	ND	.03	.1	2	18	16	3.78	.07	.05	80	2	.04	4	.03	34	ND	ND	10	3	4	4	ND	26
NA 150	.2	5.51	10	ND	74	ND	.07	.1	7	22	31	3.60	.06	.10	517	1	.07	10	.05	26	ND	ND	ND	ND	9	ND	ND	97
NA S 1	.1	2.79	10	ND	282	ND	.55	.1	15	29	45	4.60	.11	.82	1695	2	.09	54	.08	32	ND	ND	3	ND	61	ND	ND	184
NA S 2	.1	2.99	14	ND	363	ND	.58	.1	10	26	40	4.43	.14	.67	1988	1	.08	39	.08	34	ND	ND	3	ND	77	ND	ND	222
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1



## VANGEOCHEM LAB LIMITED

MAIN OFFICE  
1521 PEMBERTON AVE.  
NORTH VANCOUVER, B.C. V7P 2S3  
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE  
1630 PANDORA ST.  
VANCOUVER, B.C. V5L 1L6  
(604) 251-5656

REPORT NUMBER: 871485 GA

JOB NUMBER: 871485

PAMICON DEVELOPMENT LTD.

PAGE 1 OF 1

SAMPLE #

Au

ppb

NA - 100

20

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample

MAIN OFFICE: 1521 PEMBERTON AVE. N. VANCOUVER B.C. V7P 2S3 PH: (604) 986-5211 TELEX: 04-352578  
 BRANCH OFFICE: 1630 PANDORA ST. VANCOUVER B.C. V5L 1L6 PH: (604) 251-5656

## ICAP GEOCHEMICAL ANALYSIS

A .5 GRAM SAMPLE IS DIGESTED WITH 5 ML OF 3:1:2 HCL TO HNO<sub>3</sub> TO H<sub>2</sub>O AT 95 DEG. C FOR 90 MINUTES AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR SN, MN, FE, CA, P, CR, MG, BA, PD, AL, NA, K, W, PT AND SR. AU AND PD DETECTION IS 3 PPM.  
 IS= INSUFFICIENT SAMPLE, ND= NOT DETECTED, --= NOT ANALYZED

COMPANY: STEVE TODORUK  
 ATTENTION:  
 PROJECT: NEW ALLESTER

REPORT#: 871485PA  
 JOB#: 8714185  
 INVOICE#: 871485

DATE RECEIVED: 87/10/07  
 DATE COMPLETED: 87/10/16  
 COPY SENT TO:

ANALYST W. P. Jones

PAGE 1 OF 1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM	
NA-100	.8	4.36	15	7	54	ND	.04	.1	6	26	18	4.88	.07	.10	649	6	.10	5	.04	20	ND	ND	ND	ND	3	4	ND	ND	98
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1	



# VANGEOCHEM LAB LIMITED

MAIN OFFICE  
1521 PEMBERTON AVE.  
NORTH VANCOUVER, B.C. V7P 2S3  
(604) 966-5211 TELEX: 04-352578

BRANCH OFFICE  
1630 PANDORA ST.  
VANCOUVER, B.C. V5L 1L6  
(604) 251-5656

REPORT NUMBER: 871461 6A

JOB NUMBER: 871461

PANICOM DEVELOPMENT LTD.

PAGE 1 OF 1

SAMPLE #	Au ppb
03063	5
03064	nd
03065	nd
NAT - 1	nd
NAT - 2	nd
NAT - 3	nd
NAT - 4	nd
NAT - 5	10
NAT - 6	nd

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample

**APPENDIX IV**

**STATEMENT OF QUALIFICATIONS**

### STATEMENT OF QUALIFICATIONS

I, STEVE L. TODORUK, of Suite 129, 7451 Minoru Boulevard, Richmond, in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a Geologist in the employment of Pamicon Developments Limited, with offices at Suite 711, 675 West Hastings Street, Vancouver, British Columbia.
2. THAT I am a graduate of the University of British Columbia with a Bachelor of Science Degree in Geology.
3. THAT my primary employment since 1979 has been in the field of mineral exploration.
4. THAT my experience has encompassed a wide range of geologic environments and has allowed considerable familiarization with prospecting, geophysical, geochemical and exploration drilling techniques.
5. THAT this report is based on data generated by myself, under the direction of Charles K. Ikona, Professional Engineer.
6. THAT I have no interest in the property described herein, nor in securities of any company associated with the property, nor do I expect to receive any such interest.
7. THAT I hereby grant permission to New Alster Energy Ltd. for the use of this report in any prospectus or other documentation required by any regulatory authority.

DATED at Vancouver, B.C., this \_\_\_\_\_ day of \_\_\_\_\_, 1988.

---

Steve L. Todoruk, Geologist

**APPENDIX V**


**ENGINEER'S CERTIFICATE**

# ENGINEER'S CERTIFICATE

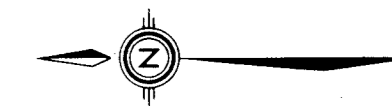
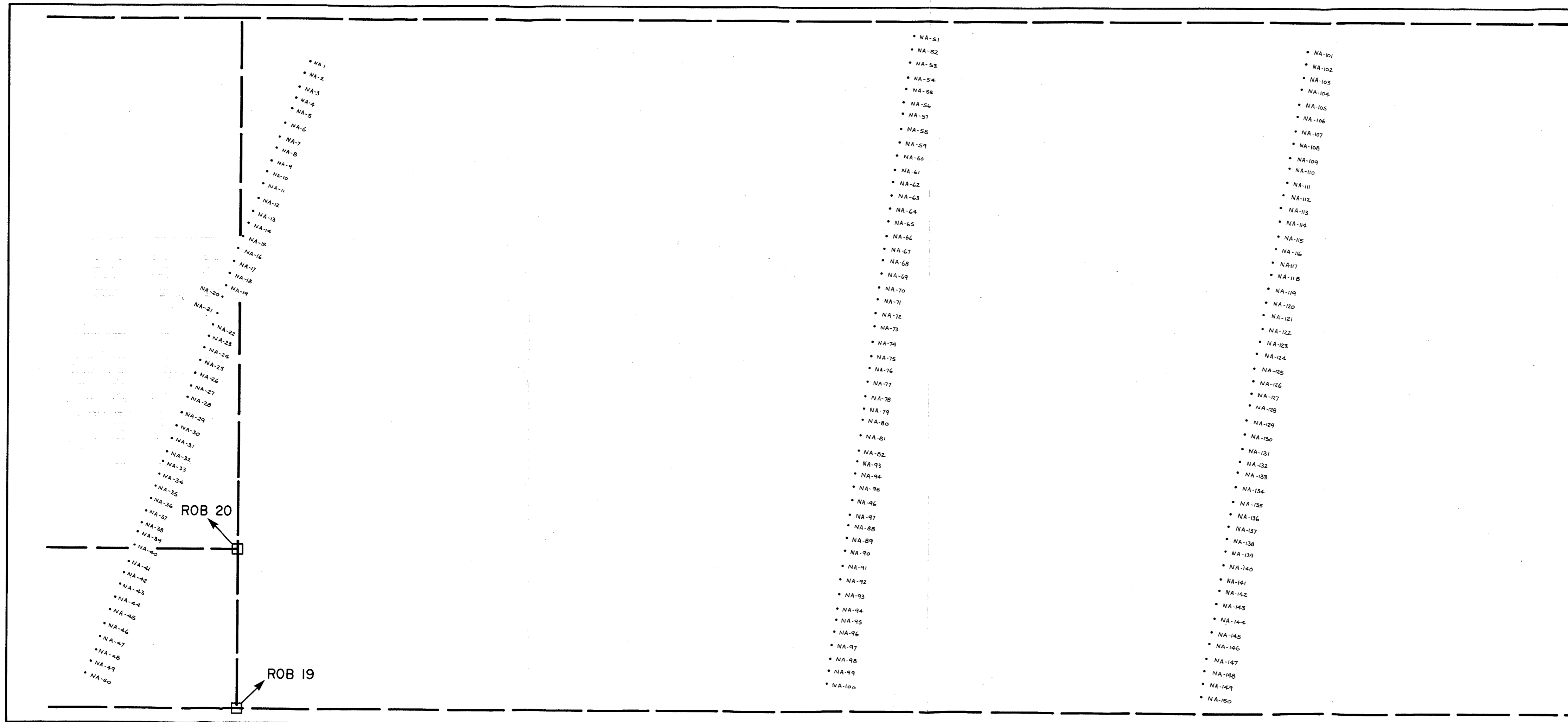
I, CHARLES K. IKONA, of 5 Cowley Court, Port Moody, in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a Consulting Mining Engineer with offices at Suite 711, 675 West Hastings Street, Vancouver, British Columbia.
2. THAT I am a graduate of the University of British Columbia with a degree in Mining Engineering.
3. THAT I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.
4. THAT this report is based on work conducted on the property under my direction.
5. THAT I have no interest in the property described herein, nor in securities of any company associated with the property, nor do I expect to acquire any such interest.
6. THAT I consent to the use by New Alster Energy Ltd. of this report in a Prospectus or Statement of Material Facts or any other such document as may be required by the Vancouver Stock Exchange or the Office of the Superintendent of Brokers.

DATED at Vancouver, B.C., this 17<sup>th</sup> day of MAR, 1988.



Charles K. Ikona, P.Eng.

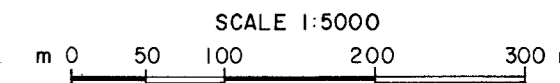


PROPERTY  
BOUNDARY

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

17,219

NA-101 • SOIL SAMPLE LOCATION



NEW ALSTER ENERGY LTD.			
ROB 19, 20 & 21 CLAIM GROUP			
SOIL GEOCHEMISTRY			
LOCATION MAP			
LIARD MINING DIVISION, B.C.			
PAMICON DEVELOPMENTS LTD.			
Drawn J.W.	N.T.S. 104 B 11E	Date March-1988	Fig. No. 5