

84-1048-13050

11/95

GEOCHEMICAL REPORT ON THE

SA CLAIMS

FOR

TENORE OIL AND GAS LTD.

SIMILKAMEEN MINING DIVISION

NTS 92 H/8 E

(Lat. 49° 19' North, Long. 120° 10' West)

Vancouver, B.C.

Robert Helgason, Project Geologist

August 22, 1984

OreQuest Consultants Ltd.

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**13,050**

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Appendix A - VanGeochem Analytical Procedures and Results

## 1.0 INTRODUCTION

### 1.1 LOCATION and ACCESS

The SA claims are situated in the Similkameen Mining Division approximately 7.5 kilometers south-west of Hedley. Latitude is 49° 19' North and longitude is 120° 10' West, NTS map sheet 92 H/8.

Access is gained by a good gravel logging road which follows Whistle Creek. This road heads south from Highway #3 approximately 7 kilometers west of Hedley.

### 1.2 PHYSIOGRAPHY

The terrain is generally moderate to steep. Most of the property slopes down into Pettigrew creek which bisects the claims. Elevations range from 900 metres to 1,490 metres.

Forest cover is predominately pine and fir with occasional spruce. In the creek bed cedar and devils club are common. Vegetation ranges from mature open forest to dense immature stands to open grassy slopes.

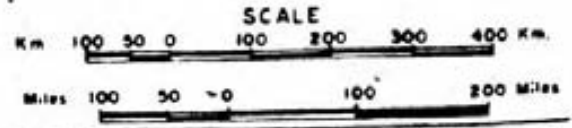
### 1.3 CLAIM STATUS

The SA claim is a block of 20 units, staked in November 1982. The expiry date is November 20, 1984. The owner is Tenore Oil and Gas Ltd. of Vancouver, B.C.



TENORE OIL AND GAS LTD  
SA CLAIM

PROPERTY LOCATION MAP



The claim is as follows:

Claim Name	# Units	Record #	Expiry Date
SA	20	1294 (11)	November 20, 1984

#### 1.4 HISTORY

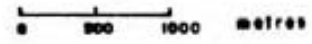
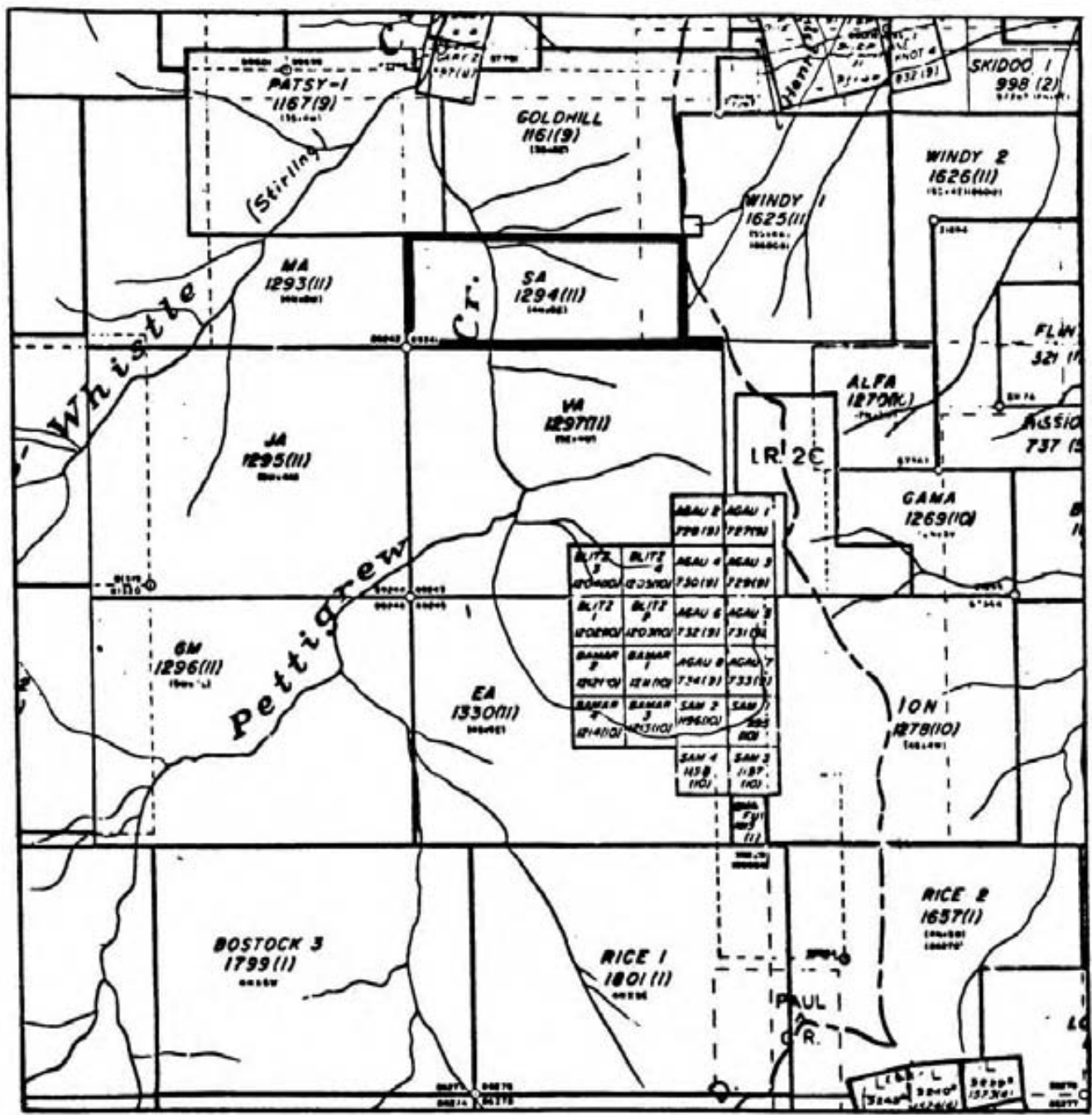
There is no known history of the claims, however Hedley area has been a gold producing area intermittently since the late 1800's. Recent revised interest in the area is the result of positive ore values announced by Banbury Gold mines located approximately 4 kilometers to the north.


#### 1.5 GEOCHEMICAL SURVEY

Soil sampling was carried out over an anomalous area delineated by the 1983 field work. A detailed grid was measured and flagged based on the grid from the 1983 geochemical sampling. The previous grid was located using the Legal Corner Post as the 0 north and 0 east point. All sample sites are labelled as coordinates north and east of this origin.

A total of 52 samples were taken from three lines totaling 1.35 kilometers in length. Lines were spaced 75 metres apart with samples taken every 25 metres. Samples were collected using a mattock to collect the B horizon wherever possible.

Samples were analyzed by VanGeochem Lab Ltd. of North Vancouver for molybdenum, copper, lead, zinc, silver, gold and arsenic (Appendix A).



 OREQUEST CONSULTANTS LTD.

**SA CLAIM**

92 H/8

1:50,000

2

## 2.0 EXPLORATION RESULTS

Field work was carried out under direct supervision of Robert Helgason, Geologist. Overall direction was provided by George Cavey, Consulting Geologist, OreQuest Consultants Ltd., Vancouver.

### 2.1 GEOLOGY

The SA claims as mapped by Rice are Upper Triassic Nicola Group. This group consists of varied volcanics, sediments and minor schists.

Argillite is the predominate rock type underlying the claims. Outcrops were seen on both sides of Pettigrew creek. Near the eastern edge of the claims some calcite veining with disseminated pyrite (<1%) was seen in the argillite. No sign of intrusive rock was seen.

### 2.2 GEOCHEMICAL SURVEY

Results are generally low and below threshold.

Anomalous values for all elements were statistically selected as follows:

Element	Threshold	Anomalous
Molybdenum (ppm)	15	>20
Copper (ppm)	52	>66
Lead (ppm)	21	>25
Zinc (ppm)	184	>228
Silver (ppm)	1.0	>1.2
Arsenic (ppm)	12	>15
Gold (ppb)	15	>20

Two samples returned anomalous values in molybdenum, copper, lead and



silver. Only one other sample was anomalous, with high copper and arsenic values. There were no samples anomalous in gold.

The two multi element anomalous samples are located at 8+25 N and 15+00 E and 15+25 E which is in the extreme northwest corner of the grid. Expansion of anomalies from the previous year was not achieved.

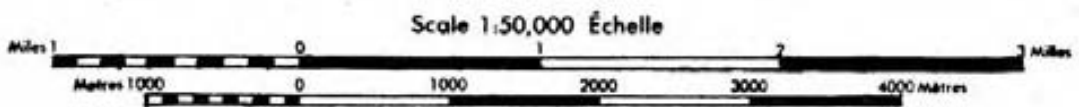
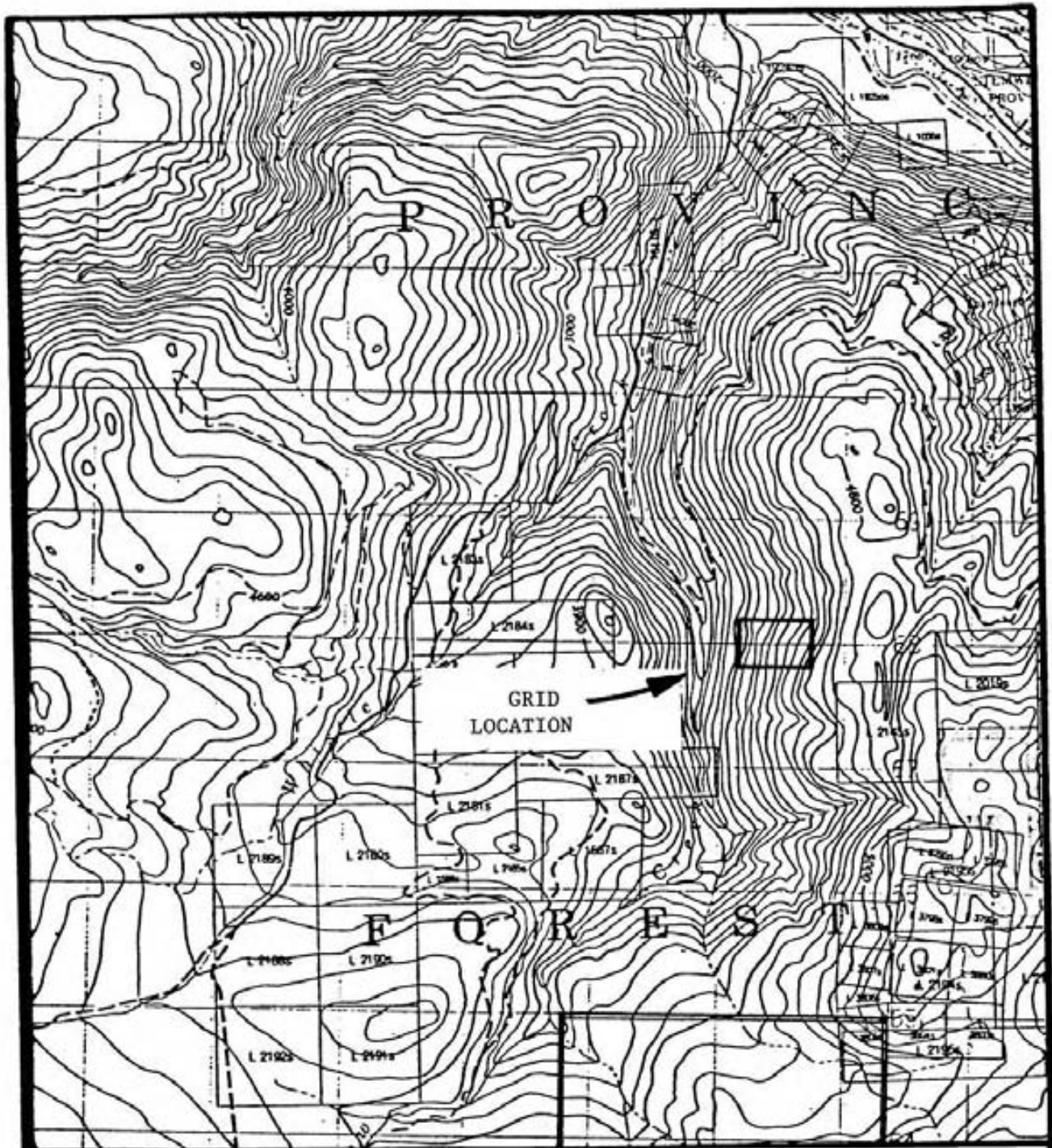
### 3.0 CONCLUSIONS and RECOMMENDATIONS


The geochemical survey carried out did not indicate any potentially mineralized areas on the property. Two anomalous samples were found at the corner of the grid. To properly test these anomalies the sampling should be expanded at this location.

The property is located 4 kilometers from a producing gold mine, Banbury Gold. The geologic environment of the SA claims is similar except no intrusive rocks were seen on the SA to provide a source for skarn or vein type mineralization as there is at Banbury Gold.

Any further work should be aimed at expanding the anomalies found in the northwest corner of the detailed grid. Geological mapping of the claims could also be helpful in delineating areas of interest.

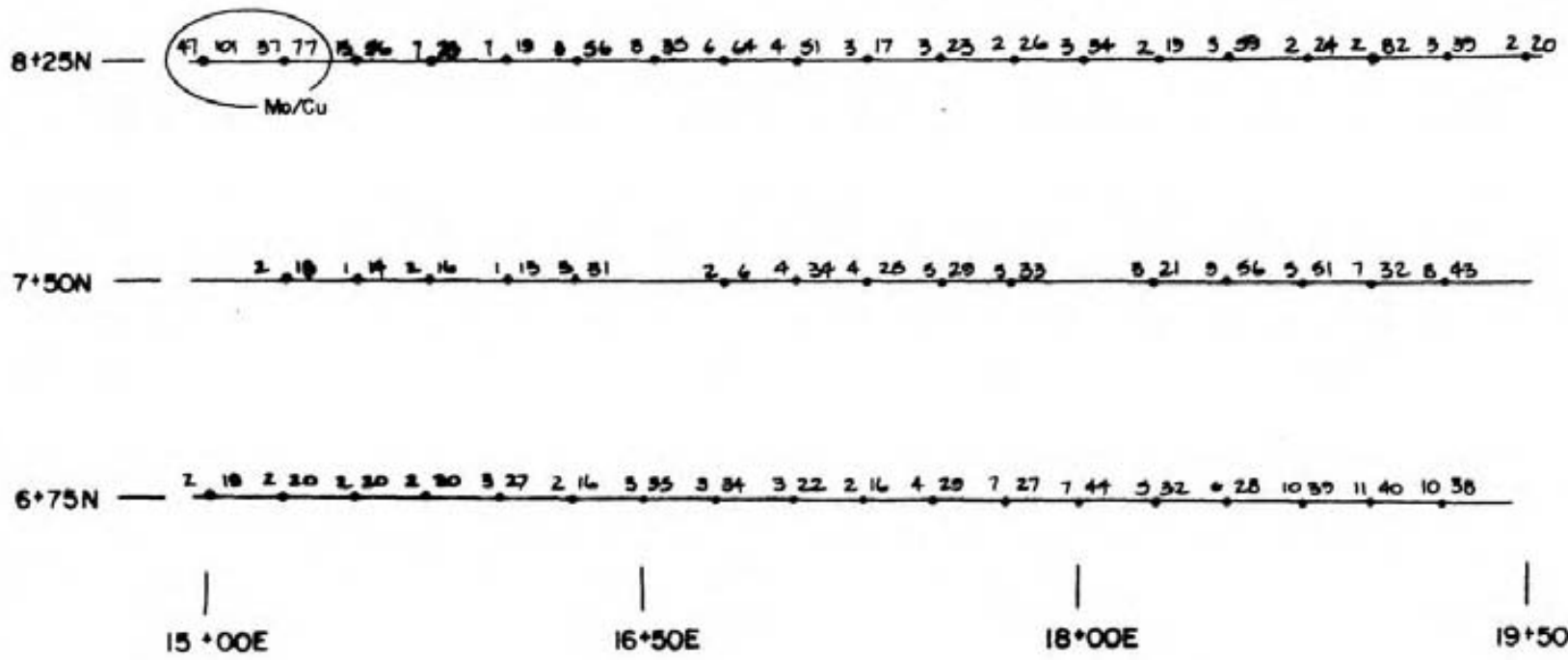
Pending approval of this report the SA claims will be in good standing until November 20, 1985.



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CLAIM PHYSIOGRAPHY

TENORE OIL & GAS LTD

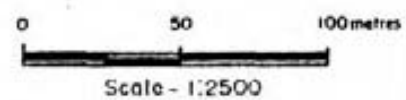


**LEGEND**

All samples from B horizon

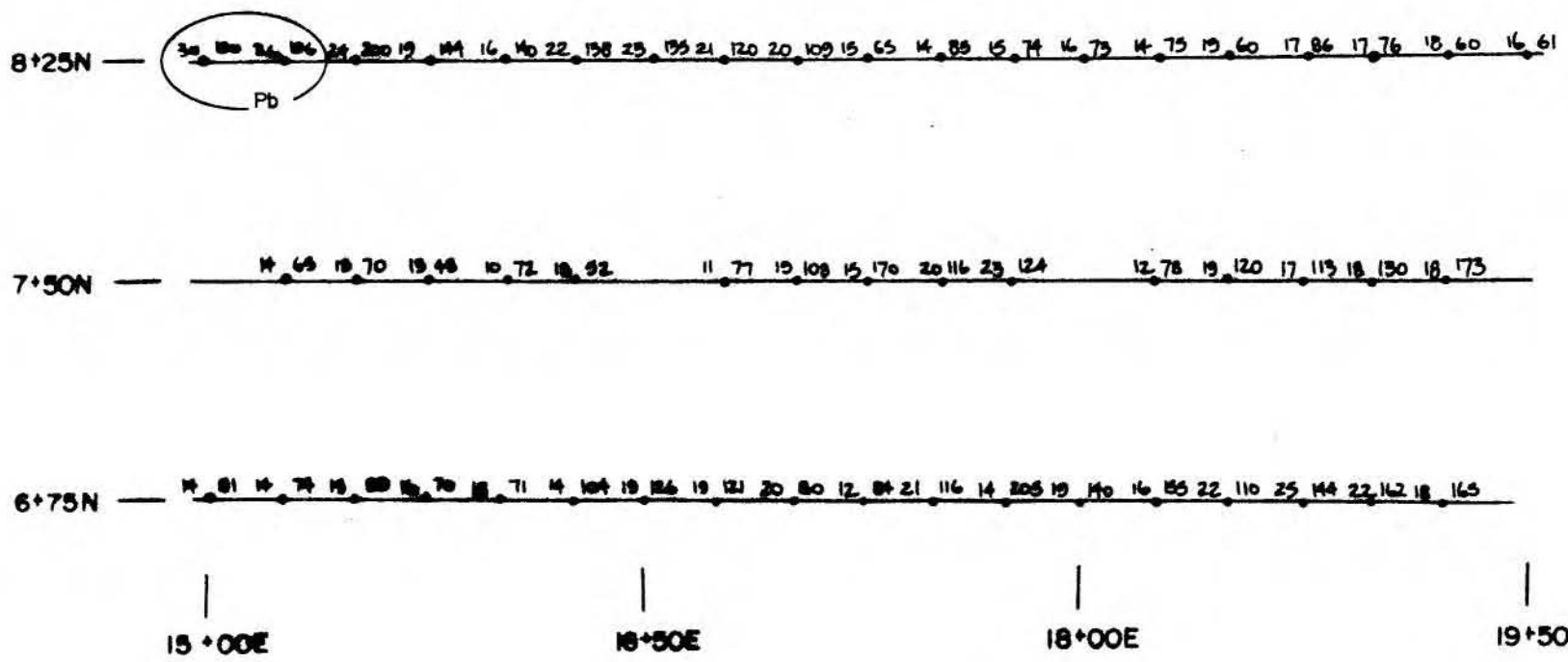
All sample results in ppm

Anomalous zone



NTS 92H/8

	OREQUEST CONSULTANTS LTD
GEOCHEMISTRY	
Mo/Cu	
TENORE OIL & GAS LTD.	
AUG 1984 KJW	1:2500
	3

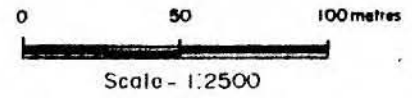


**LEGEND**

All samples from B horizon

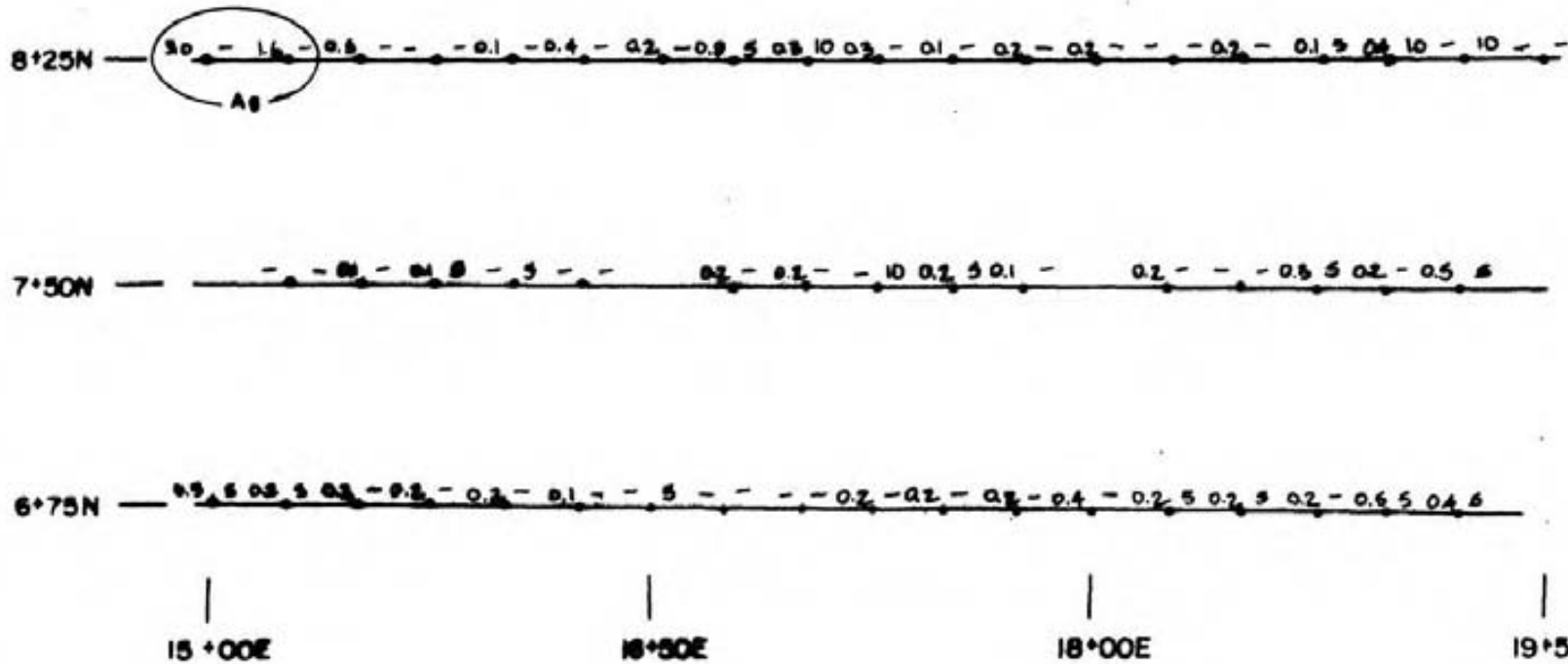
All sample results in ppm

Anomalous zone



NTS 92H/8

OREQUEST CONSULTANTS LTD.	
GEOCHEMISTRY Pb/Zn	
TENORE OIL & GAS LTD.	
AUG 1984 KJW	1:2500
<b>4</b>	



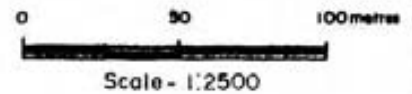
**LEGEND**

All samples from B horizon

All Ag results in ppm

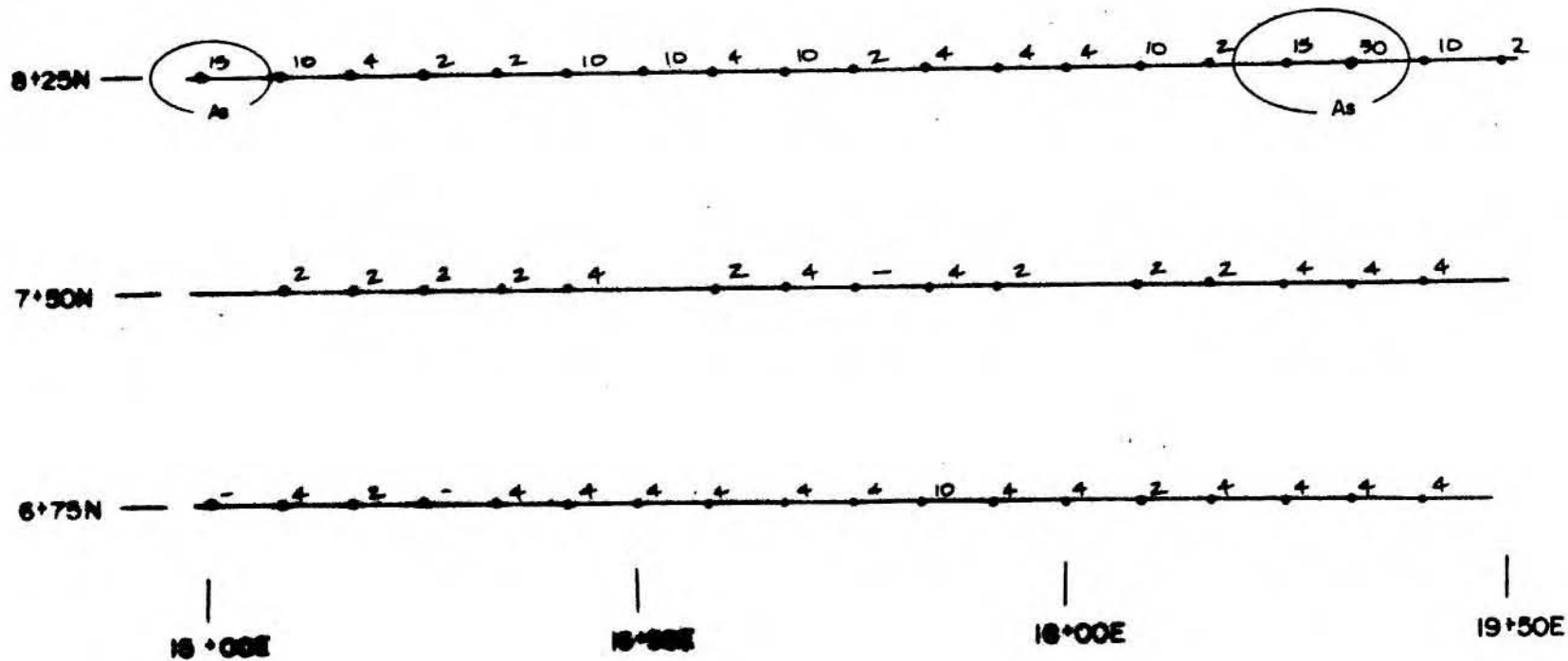
All Au results in ppb

Anomalous zone



NTS 92H/8

OREQUEST CONSULTANTS LTD.	
GEOCHEMISTRY	
Ag/Au	
TENORE OIL & GAS LTD.	Sheet No. 5
DATE: AUG 1984 BY: R.J.W.	SCALE: 1:2500

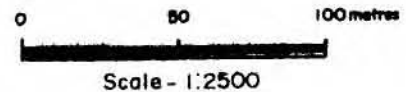


**LEGEND**

All samples from B horizon

All sample results in ppb

As Anomalous zone



NTS 92H/B

<p>GEOCHEMISTRY As</p>	
<p>TENORE OIL &amp; GAS LTD.</p>	<p>76</p>
<p>AUG 1984 KJW</p>	<p>1:2500</p>



4.0 ITEMIZED COST STATEMENT

June 11 and 12, 1984

Wages

Geologist - 1.5 days @ \$200/day	\$ 300.00
Geologist - 1.5 days @ \$200/day	300.00
Assistant - 1.5 days @ \$150/day	225.00
Food and Accommodation	180.00
Truck Rental - 2 days @ \$75/day	150.00
Geochemical analysis - 52 samples @ \$15.64 sample	813.28
Equipment and Supplies	35.00
Drafting - 8 hrs. @ \$20/hr.	160.00
Report - 3 days @ \$200/day	600.00
Supervision - .75 days @ \$400/day	300.00
Typing - 4 hrs. @ \$20/hr.	<u>80.00</u>
TOTAL	<u><b>\$3,143.28</b></u>



## QUALIFICATIONS

I, Robert Helgason, of #4-1306 Bidwell Street, Vancouver, British Columbia hereby certify:

1. I am a graduate of the University of British Columbia (1980) and hold a BSc. degree in geology.
2. I am presently employed as a project geologist with OreQuest Consultants Ltd. of 404-595 Howe Street, Vancouver, British Columbia.
3. I have been employed in my profession by various mining companies for the past five years.
4. The information contained in this report was obtained during the completion of the field work program conducted by OreQuest Consultants Ltd. in 1984.
5. Neither OreQuest Consultants Ltd. nor myself have direct or indirect interest in the property described nor in Tenore Oil and Gas Ltd.
6. This report may be used by Tenore Oil and Gas Ltd. for all corporate purposes and including any public financing.



Robert Helgason  
Project Geologist

DATED at Vancouver, British Columbia, this 22nd day of August, 1984.

## BIBLIOGRAPHY

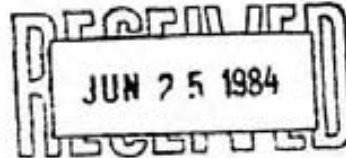
CAVEY, G.

Geochemical Report on the SA claims for Tenore Oil and Gas Ltd.,  
January 4, 1984.

RICE, H.M.A.

G.S.C. Memoir 243, Geology and Mineral Deposits of the Princeton  
Area, 1947.

APPENDIX A



**VANGEOCHEM LAB LIMITED**

-----  
1521 Pemberton Ave.  
North Vancouver B.C. V7P 2S3  
(604)986-5211 Telex: 04-352578

**GEOCHEMICAL ANALYTICAL REPORT**

CLIENT: OREQUEST CONSULTANTS LTD.  
ADDRESS: 404 - 595 Howe Street  
: Vancouver, B.C.  
: V6C 2T5

DATE: June 22 1984

REPORT#: 84-66-026

PROJECT#: TENORE  
COPY SENT TO: OREQUEST CONSULTANTS LTD.  
SAMPLES ARRIVED: June 13 1984  
REPORT COMPLETED: June 22 1984  
ANALYSED FOR: Mo Cu Pb Zn Ag Au As

JOB#: 84155  
INVOICE#: 7928  
TOTAL SAMPLES: 52  
SAMPLE TYPE: 52 Soil  
REJECTS: DISCARDED

PREPARED FOR: OREQUEST CONSULTANTS LTD.

ANALYSED BY: VGC Staff

SIGNED: 

GENERAL REMARK: None

WAGBEDIEN LAB LIMITED  
 1521 Pemberton Avenue  
 North Vancouver B.C. V7P 2S3  
 (604) 986-5211 Telex: 04-352578

PREPARED FOR: DREQQUEST CONSULTANTS LTD.

NOTES: nd = none detected  
 : — = not analysed  
 : is = insufficient sample

REPORT NUMBER: 84-66-026

JOB NUMBER: 84155

PAGE 1 OF 2

SAMPLE #	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	As ppm
S984-1	2	19	14	81	.3	5	nd
S984-2	2	20	14	74	.2	5	4
S984-3	2	20	15	89	.2	nd	2
S984-4	2	20	16	70	.2	nd	nd
S984-5	3	27	18	71	.2	nd	4
S984-6	2	16	14	104	.1	nd	4
S984-7	3	35	19	126	nd	5	4
S984-8	3	34	19	121	nd	nd	4
S984-9	3	22	20	80	nd	nd	4
S984-10	2	16	12	84	.2	nd	4
S984-11	4	29	21	116	.2	nd	10
S984-12	7	27	14	205	.2	nd	4
S984-13	7	44	19	140	.4	nd	4
S984-14	5	32	16	155	.2	5	2
S984-15	6	28	22	110	.2	5	4
S984-16	10	39	25	144	.2	nd	4
S984-17	11	40	22	162	.5	5	4
S984-18	10	38	18	165	.4	5	4
S984-21	47	101	30	190	3.0	nd	15
S984-22	37	77	26	196	1.6	nd	10
S984-23	15	56	24	200	.5	nd	4
S984-24	7	25	19	144	nd	nd	2
S984-25	7	19	16	140	.1	nd	2
S984-26	8	56	22	138	.4	nd	10
S984-27	8	35	23	135	.2	nd	4
S984-28	6	64	21	120	.9	5	10
S984-29	4	51	20	109	.3	10	2
S984-30	3	17	15	65	.3	nd	4
S984-31	3	23	14	85	.1	nd	4
S984-32	2	26	15	74	.2	nd	4
S984-33	3	34	16	73	.2	nd	10
S984-34	2	19	14	75	nd	nd	2
S984-35	3	59	19	60	.2	nd	15
S984-36	2	24	17	86	.1	5	2
S984-37	2	82	17	76	.4	10	30
S984-38	2	39	18	60	nd	10	10
S984-39	2	20	16	61	nd	nd	2
S984-41	2	18	14	65	nd	nd	2
S984-42	1	14	13	70	.1	nd	2
DETECTION LIMIT	1	1	2	1	0.1	5	2

WASSERBACH LAB LIMITED  
1521 Pemberton Avenue  
North Vancouver B.C. V7P 2S3  
(604) 986-5211 Telex: 04-352578

PREPARED FOR: DREGLIST CONSULTANTS LTD.

NOTES: nd = none detected  
: — = not analysed  
: is = insufficient sample

REPORT NUMBER: 84-66-026

JOB NUMBER: 84155

PAGE 2 OF 2

SAMPLE #	No ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	As ppm
SR84-43	2	16	13	48	.1	5	2
SR84-44	1	13	10	72	nd	5	2
SR84-45	3	31	18	52	nd	nd	4
SR84-46	2	6	11	77	.2	nd	2
SR84-47	4	34	19	100	.2	nd	4
SR84-48	4	25	15	170	nd	10	nd
SR84-49	5	29	20	116	.2	5	4
SR84-50	5	33	23	124	.1	nd	2
SR84-51	3	21	12	78	.2	nd	2
SR84-52	9	56	19	120	nd	nd	2
SR84-53	5	51	17	113	.3	5	4
SR84-54	7	32	18	130	.2	nd	4
SR84-55	8	43	18	173	.5	5	4
DETECTION LIMIT	1	1	2	1	0.1	5	2

V7P 2S3

Nov. 8, 1983

To: Orequest Consultants  
#404 - 595 Howe St.  
Vancouver, B C V6C 2T5

From: Vangeochem Lab Ltd.  
1521 Pemberton Avunue  
North Vancouver, B.C. V7P 2S3

Subject: Analytical procedure used to determine hot acid soluble  
Mo, Cu, Pb, Zn, Ag in geochemical silt, soil and rock samples.

1983 samples

1. Sample Preparation

- (a) Geochemical soil, silt or rock samples were received in the laboratory in wet-strength  $3\frac{1}{2}$  x  $6\frac{1}{2}$  Kraft paper bags and rock samples in 4" x 6" Kraft paper bags.
- (b) The wet samples were dried in a ventilated oven.
- (c) The dried soil and silt samples were sifted by hands using a 8" diameter 80-mesh stainless steel sieves. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.
- (d) The dried rock samples were crushed by 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 later analysis.

2. Methods of Digestion

- (a) 0.50 gram of the minus 80-mesh samples was used. Samples were weighed out by using a top-loading balance.
- (b) Samples were heated in a sand bath with nitric and perchloric acids (15% to 85% by volume of the concentrated acids respectively).

(C) The digested samples were diluted with demineralized water to a fixed volume and shaken.

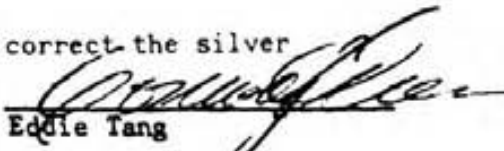
3. Method of Analysis

Mo, Cu, Pb, Zn, Ag analyses were determined by using a Techtron Atomic Absorption Spectrophotometer Model AA4 or Model AA5 with their respective hollow cathode lamps. The digested samples were aspirated directly into an air and acetylene flame, but Mo digestion were aspirated into an acetylene and nitrous flame. The results, in parts per million, were calculated by comparing a set of standards to calibrate the atomic absorption unit and displayed in a strip chart recorder.

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

5. Back Ground Correction

A Hydrogen continuum lamp is used to correct the silver ground interferences.

  
Eddie Tang

VANGEOCHEM LAB LTD.

ET:j1





VANGEOCHEM LAB LTD. 1521 PEMBERTON AVE., NORTH VANCOUVER, B.C. CANADA 604-966-2122

986-5211

V7P 2S3

Nov. 8, 1983

To: Orequest Consultants  
#404 - 595 Howe St.  
Vancouver, B C V6C 2T5

From: Vangeochem Lab Ltd.  
1521 Pemberton Ave.  
North Vancouver, B.C. V7P 2S3

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

For soil and humus samples

#### 1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received in the laboratory in wet-strength 4 x 6 Kraft paper bags or rock samples sometimes in 8" x 12" plastic bags.
- (b) The dried soil and silt samples were sifted by hands using a 8" diameter 80-mesh stainless steel sieve, The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.
- (c) The dried rock samples were crushed by 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 later analysis.

#### 2. Method of Digestion

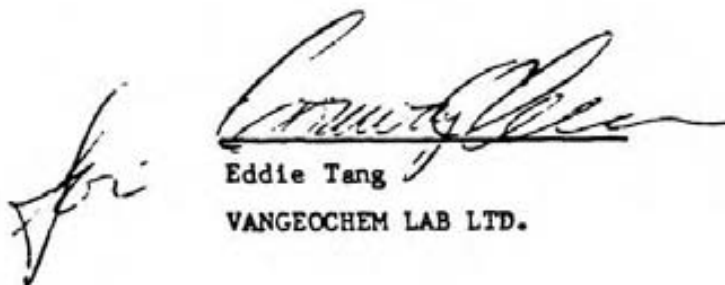
- (a) 5.00 - 10.00 grams of the minus 80-mesh samples were used. Samples were weighed out by using a top-loading balance into beakers.
- (b) 20 ml of Aqua Regia (3:1 HCl:HNO<sub>3</sub>) were used to digest the samples over a hot plate vigorously.
- (c) The digested samples were filtered and the washed pulps were discarded and the filtrate was reduced to about 5 ml.
- (d) The Au complex ions were extracted into diisobutyl ketone and thiourea medium. (Anion exchange liquids "Aliquot 336").

(e) Separate Funnels were used to separate the organic layer.

3. Method of Detection

The gold analyses were detected by using a Techtron model AAS Atomic Absorption Spectrophotometer with a gold hollow cathode Lamp. The results were read out on 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. The analyses were supervised or determined by Mr. Conway Chun or Mr. Eddie Tang and his laboratory staff.

  
Eddie Tang  
VANGEOCHEM LAB LTD.

ET: jl



VANGEOCHEM LAB LTD. 1521 PEMBERTON AVE., NORTH VANCOUVER, B.C., CANADA 604-885X2X7

V7P 2S3

986-521

Nov. 8 1983

TO: Orequest Consultants  
#404 - 595 Howe St.  
Vancouver, B.C. V6C 2T5

FROM: Vangeochem Lab Ltd.  
1521 Pemberton Ave.  
North Vancouver, B.C. V7P 2S3

SUBJECT: Analytical procedure used to determine hot acid soluble arsenic  
in geochemical silt, soil, lake sediments and rock samples.

for geochem soil humus, rock samples

1. Sample Preparation

- (a) Geochemical soil, silt, lake sediments or rock samples were received in the laboratory in wet-strength  $3\frac{1}{2}$  x  $6\frac{1}{2}$  Kraft paper bags and rock samples in 4" x 6" Kraft paper bags.
- (b) The wet samples were dried in a ventilated oven.
- (c) The dried soil and silt samples were sifted by hands using a 8" diameter 80-mesh stainless steel sieves. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a nwq bag for analysis later.
- (d) The dried rock samples were crushed by 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 later analysis.

2. Method of Digestion

- (a) 0.25 gram of the minus 80-mesh sample was used. Samples were weighed out by using a top-loading balance.
- (b) Samples were heated in a sand bath with concentrated perchloric acid (70 - 72% HClO<sub>4</sub> by weight) at a medium heat for four hours.
- (c) The digested samples were diluted with demineralized water.

3. Method of Analysis

- (a) Potassium iodide and stannous chloride in HCL were added to the digested samples.
- (b) Zinc metal was introduced and the arsenic in solution was gassed off as arsene through a glass wool scrubber plug saturated with lead acetate and into a solution of silver diethyldithiocarbamate in chloroform with l-ephedrine, forming a red complex with the silver diethyldithiocarbamate.
- (c) The concentration of the arsenic was determined colorimetrically by comparing the intensity of the color of the red complex with a set of known standards prepared in a similar fashion as the samples.

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



Eddie Tang

VANGEOCHEM LAB LTD.



VANGEOCHEM LAB LTD.

1521 PEMBERTON AVE., NORTH VANCOUVER, B.C., CANADA V7P 2S3 (604) 966-5211

Nov. 8 1983

To: Orequest Consultants  
#404 - 595 Howe St.  
Vancouver, B C V6C 2T5

From: Vangeochem Lab Ltd.  
1521 Pemberton Avenue  
North Vancouver, B.C. V7P 2S3

Subject: Analytical procedure used to determine gold by fire-assay method and detected by atomic absorption spec. in geological samples.

For samples requested for Fireassays- AAS finished

1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received in the laboratory in wet-strength 4" x 6" Kraft paper bags or rock samples sometimes in 8" x 12" plastic bags.
- (b) The dried soil and silt samples were sifted by hands using a 8" diameter 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.
- (c) The dried rock samples were crushed by 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 later analysis.

2. Method of Extraction

- (a) 20.0 - 30.0 grams of the pulp samples were used. Samples were weighed out by using a top-loading balance into a fusion pot.
- (b) A Flux of litharge, soda ash, silica, borax, flour, or potassium nitrite is added, then fused at 1900°F and a lead button is formed.
- (c) The gold is extract by cupellation and part with diluted nitric acid.
- (d) The gold bead is saved or measurement later.



VANGEOCHEM LAB LTD.

1521 PEMBERTON AVE., NORTH VANCOUVER, B.C., CANADA V7P 2S3

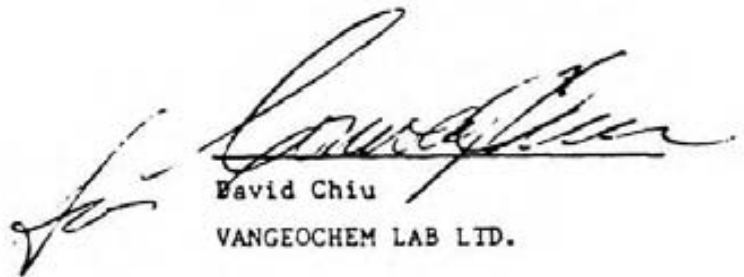
(604) 986-5211

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3. Method of Detection

- (a) The gold bead is dissolved by boiling with sodium cyanide, hydrogen peroxide and ammonium hydroxide.
- (b) The gold analyses were detected by using 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 gold standards.

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



David Chiu  
VANGEOCHEM LAB LTD.

DC:jl