

LOG NO: 1203	RD.
ACTION:	
FILE NO: 87-830-16497	

10/88

GEOCHEMICAL RESPORT

ON

WMM CLAIMS  
SIXTEEN MILE CR., WHISTLER AREA  
VANCOUVER MINING DIVISION

50° 12' 12" N      122° 58' 42" W  
92J2W

for

Owner: M.P. WARSHAWSKI

by

Operator: J.W. MacLEOD, P.ENG.,

VANCOUVER, BRITISH COLUMBIA

NOVEMBER 20, 1987

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**16,497**

SUB-RECORDER  
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VANCOUVER, B.C.

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REPORT ON

WMM CLAIMS

SUMMARY

The WMM claims are located about 12 km north of Whistler, B.C. and readily accessible by logging roads.

They were staked to cover a known gold occurrence hosted by silicified basalt and northwest trending linears which parallel the strike of the Northair vein system.

33 soil samples were collected but no anomalous results were obtained.

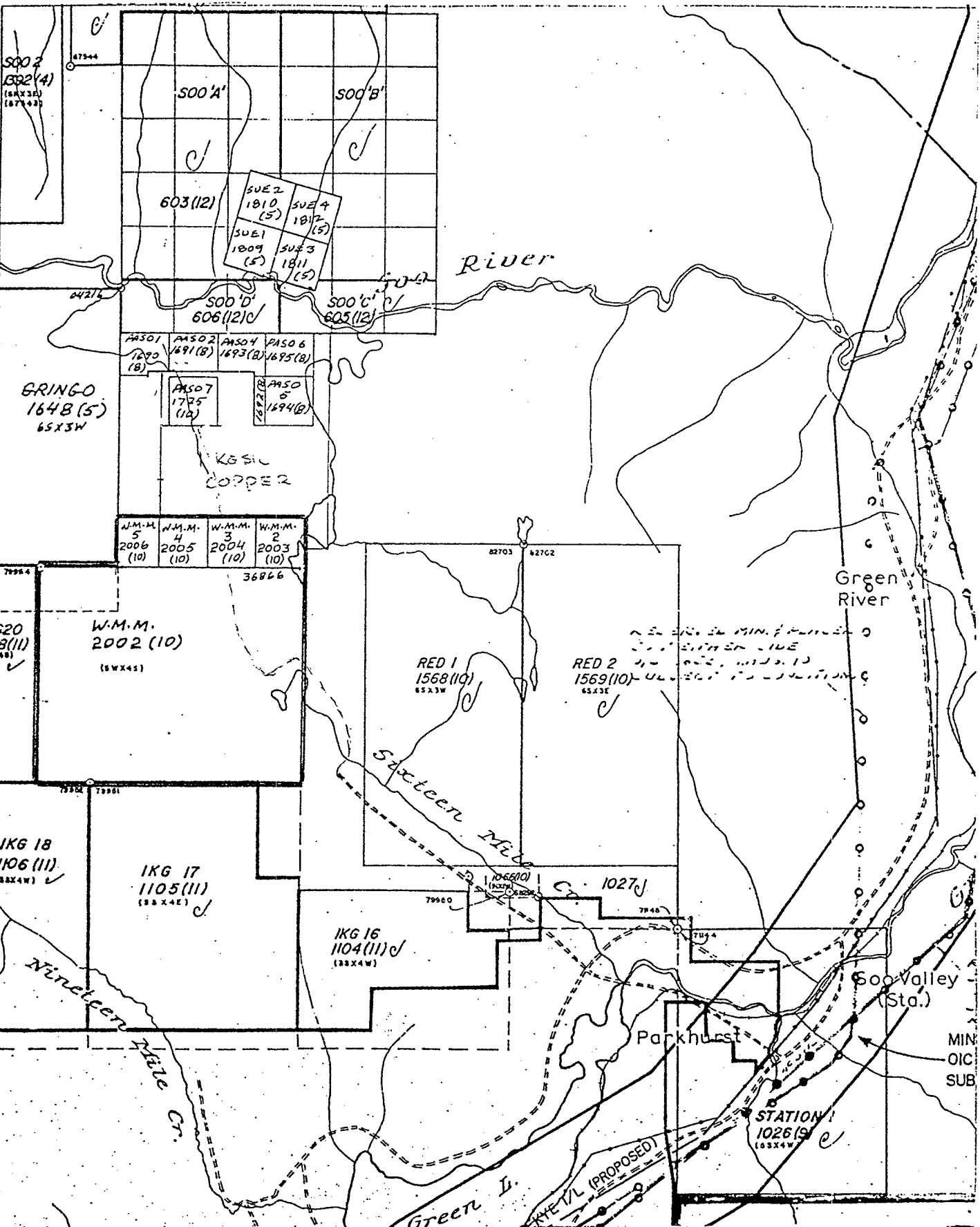
In view of the known mineralization it was concluded that this is not an effective way to prospect this generally covered area.

INTRODUCTION

The following report has been prepared to fulfill the requirements of the Mineral Act with regard to the application of a geochemical survey for assessment credit.

Soil samples were taken by the writer and G.A. Bleiler on September 18, 1987. 33 samples were collected at 25 metre intervals along the boundary of the grid and staked claims and along a northwest trending linear. The total distance sampled was 1200 meters.

M926/2W



<b>MERY ENGINEERING CORP.</b>	
PLAN OF WMM CLAIMS. FROM CLAIM MAP 92JZW.	
DRAWN BY: JWM	SCALE: 1:50,000
DATE: Nov. 20, 1997	N.T.S. :

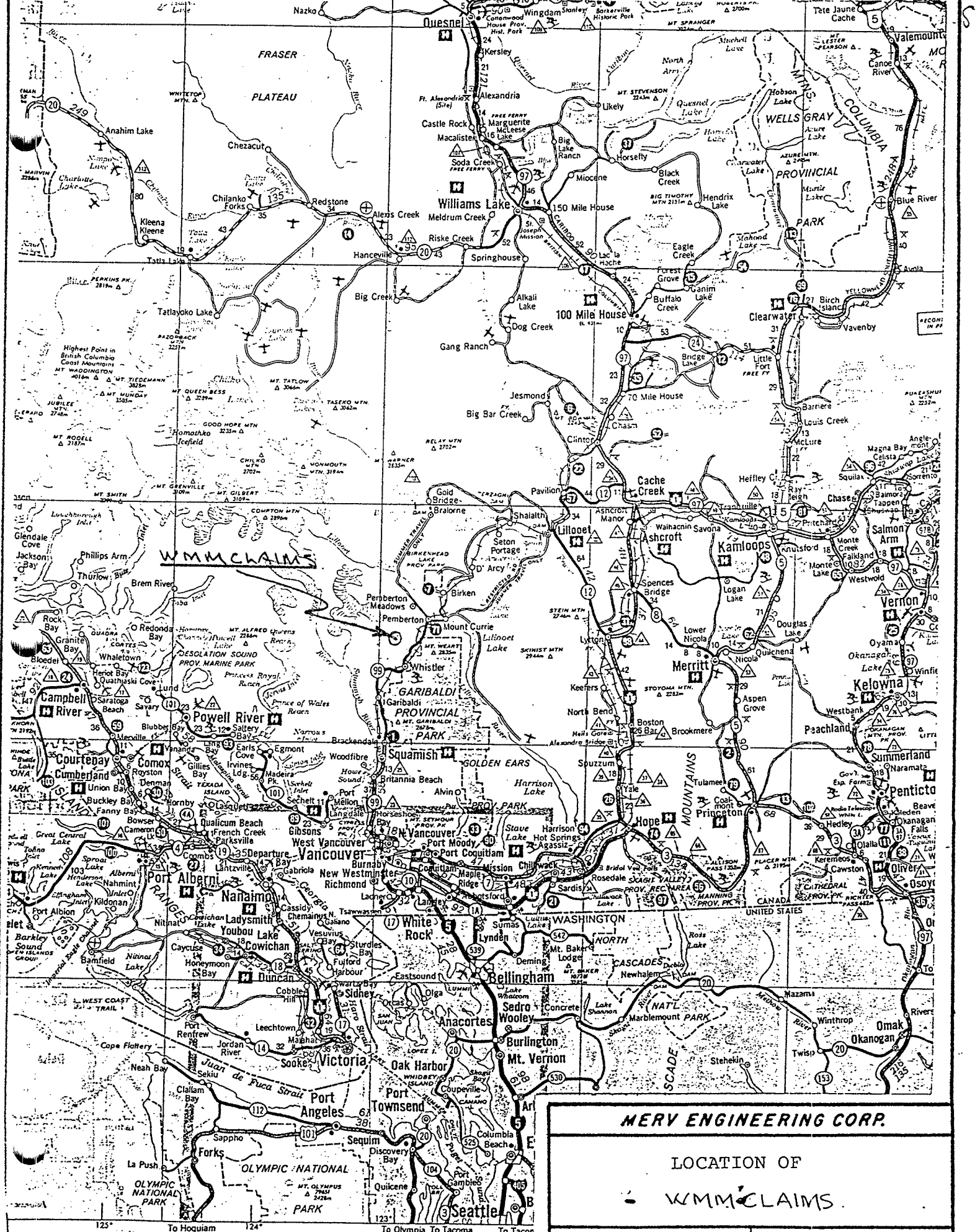
The property consists of one grid claim of 20 units and four two post claims for a total of 24 units as follows:

<u>Claim Name</u>	<u>Record No.</u>	<u>Units</u>	<u>Ann. Date</u>
WMM	2002	20	October 24
WMM2	2003	1	October 24
WMM3	2004	1	October 24
WMM4	2005	1	October 24
WMM5	2006	1	October 24

The claims are registered in the name of M.P. Warshawski, 6326 Montgomery St., Vancouver, B.C. V6M 2X8.

LOCATION & ACCESS

The WMM claims are located at the headwaters of Sixteen Mile Creek which flows into the Green River at the east end of Green Lake. The claims are in the northwest corner of map 92J2W and are accessible by 8 km of gravel logging road from the Whistler - Pemberton highway.



MERV ENGINEERING CORP.

LOCATION OF  
WMM CLAIMS.

DRAWN BY: JWM

SCALE: 1:240,000

DATE: Nov 20, 1997

N.T.S. : 9252 W.

HISTORY

The gold occurrence noted on the accompanying maps was located by Warshawski in 1972. Trenching at that time suggested that the exposure might be float and limited geochemistry did not indicate a source in the immediate vicinity.

In the fall of 1986 a study of aerial photos revealed the presence of northwest trending linears up hill from the showing so the WMM claims were staked to cover these features.

The present program was carried out to test one of these linears and prospect the ground up hill from the gold occurrence.

For the record, subsequent to the work reported herein, bulldozer work established that the gold occurrence was actually "in place" and it is noteworthy that five soil samples taken in the vicinity of the trenching did not return significant gold values.



GENERAL

The claims are located in the rugged Coast Range Mtns. covering a uniform slope of about 20 between 914 and 1371 meters elevation. Precipitation is heavy being mainly snow from November to June. What appear to be excellent stands of fir, hemlock and cedar have been logged in patches but are reported to be overmature.

1761

760

LINEAR

GOLD

WMM 5  
 WMM 2  
 WMM 3  
 WMM 2

WMM CLAIM

3000

1917

4500

Nineteen

MERV ENGINEERING CORP.

WMM CLAIMS  
AREA TOPOGRAPHY

DRAWN BY: JWM	SCALE: 1:25,000
DATE: Nov 22 1981	N.T.S.: 92 JSW

GEOLOGY

The WMM claims are underlain by the same volcanic-sediment assemblage that hosts the vein system at the Northair Mine about 15 km to the southwest.

Although outcrop is sparse overburden is not deep on the steep hillside. Going west up the hill most of claims WMM4 appears to be underlain by a massive black basalt. Talus for the next 150 meters suggests a hornfelsic sedimentary horizon above which is a section of andesitic flow.

MINERAL OCCURRENCE

A small amount of hand trenching at the location marked "gold showing" on claim WMM4 exposed silicified andesite mineralized with pyrite which assayed up to 2 oz. of gold in selected samples. The nature of the rock in the pits and obvious angular mineralized boulders 10 meters to the west suggested that the "showing" was float.

Bulldozer trenching after our soil sampling exposed east west trenching silicified zones which assayed up to 0.18 oz. gold over 1.5 meters.

KOSIC COPPER

GRINGO

WMM 5

WMM 4

WMM 3

3700N

2700N

1700N

0100

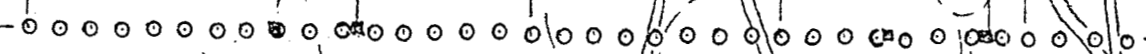
2400

4100

6400

LOGGED AREA

0040



ANDESITE

3WPOST  
SEDIMENT

BASALT

2WPOST

GOLD SHOWING

WMM CLAIM

○ SOIL SAMPLE SITE.

■ CLAIM POST

MERV ENGINEERING CORP.

WMM CLAIMS  
SOIL SAMPLE SITES

DRAWN BY: JWM

SCALE: 1:6000

DATE: Nov 20, 1987

N.T.S. : 9252W

GEOCHEMICAL SURVEY

The object of the survey was to test the northwest trending linear; this is the attitude of the Northair vein system. The linear was found to be occupied by large talus boulders making collection of a sample of B horizon soil very difficult. Only 6 samples were obtained along 400 meters of the linear on claim WMM5.

An east west line of samples was taken to prospect primarily up hill from the "showing". Here again samples are difficult to obtain due to talus on the steep hillside. In general the area is covered with a 3-4 cm layer of volcanic ash just below the A horizon. Most samples were off the reddish "B" horizon soil just below the volcanic ash. No values approaching anomalous conditions were obtained in the assay results of the soil samples collected.

Subsequent to this survey when bulldozer work exposed gold mineral in place 5 soil samples were taken and analysed for gold. Since these returned no significant values it must be concluded that soil sampling is not an effective method to indicate the subsurface presence of gold in this area.

CONCLUSIONS

In view of the lack of positive results over known mineralization, soil sampling cannot be recommended to prospect this area for gold mineralization.

Respectfully submitted,



J. W. MacLeod, P.Eng.

Vancouver, B.C.  
November 20, 1987

APPENDIX I

ASSAY PROCEDURE





## 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

November 24, 1987

TO:

MR. JIM MACLEOD  
860 - 625 Howe Street  
Vancouver, B.C. V6C 2T6

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").

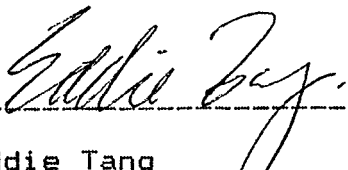
(e) Separatory funnels were used to separate the organic layer.

### 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



# VANGEOCHEM LAB LIMITED

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November 24, 1987

TO:

MR. JIM MACLEOD  
860 - 625 Howe Street  
Vancouver, B.C. V6C 2T6

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:HNO<sub>3</sub>:H<sub>2</sub>O 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.



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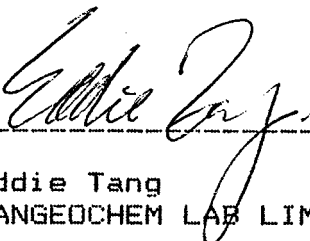
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### 3. Method of Analyses

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. Wade Reeves or Mr. Eddie Tang, and, the laboratory staff.

  
-----  
Eddie Tang  
VANGEOCHEM LAB LIMITED

APPENDIX II

ASSAY RESULTS

VANGEOCHEM LAB LIMITED

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 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 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: JIM MACLEOD  
 ATTENTION:  
 PROJECT:

REPORT#: 871390PA  
 JOB#: 871390  
 INVOICE#: 871390NA

DATE RECEIVED: 87/09/22  
 DATE COMPLETED: 87/10/09  
 COPY SENT TO:

ANALYST *W. 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
0+00	.2	2.68	12	ND	28	5	.05	.1	5	10	28	4.45	.02	.51	184	3	.10	6	.04	23	ND	ND	ND	1	8	ND	ND	44
0+25	.1	4.46	12	ND	28	ND	.07	.1	8	12	54	4.30	.01	.67	290	4	.11	9	.08	17	ND	ND	ND	ND	9	ND	ND	59
0+50	.6	.90	5	ND	8	4	.06	.1	4	3	13	2.44	.04	.07	58	2	.04	5	.03	14	ND	ND	3	3	6	ND	ND	10
0+75	.3	.93	10	ND	11	5	.04	.1	2	3	14	1.80	.03	.07	84	2	.03	1	.03	15	ND	ND	3	1	6	3	ND	14
1+00	.5	1.67	17	ND	24	ND	.07	.1	5	6	25	2.65	.02	.41	195	1	.06	7	.05	17	ND	ND	ND	1	11	ND	ND	48
1+17	.1	4.99	12	ND	33	ND	.06	.1	6	11	46	4.87	.02	.55	255	4	.11	4	.20	18	ND	ND	ND	ND	10	ND	ND	65
1+50	.1	2.42	11	ND	55	ND	.76	.1	3	6	49	2.78	.02	.73	224	3	.07	7	.06	6	ND	ND	ND	1	53	ND	ND	26
1+75	.1	3.76	ND	ND	85	5	.20	.1	17	16	62	5.13	.01	1.75	1461	6	.17	14	.05	11	ND	ND	ND	ND	33	ND	ND	135
2+00	.4	1.58	11	ND	22	4	.10	.1	5	6	33	4.21	.03	.52	258	3	.09	2	.05	16	ND	ND	4	2	13	ND	ND	43
2+50	.4	1.54	14	ND	28	4	.11	.1	4	4	25	2.72	.03	.31	148	1	.06	3	.05	16	ND	ND	ND	2	12	ND	ND	36
2+75	.2	2.46	5	ND	77	ND	.14	.1	5	6	34	3.34	.03	.58	244	2	.07	6	.03	8	ND	ND	ND	ND	39	ND	ND	40
3+00	.3	2.87	12	ND	44	4	.11	.1	7	8	32	4.33	.02	.63	390	2	.11	7	.04	17	ND	ND	ND	2	15	ND	ND	79
3+25	.2	2.30	4	ND	41	ND	.15	.1	5	8	44	3.75	.03	.41	273	2	.09	7	.05	10	ND	ND	ND	ND	13	ND	ND	68
3+50	.7	1.59	14	ND	21	4	.09	.1	5	4	26	2.46	.04	.37	213	2	.05	4	.03	15	ND	ND	4	2	11	3	ND	32
3+75	.1	5.10	ND	ND	101	4	.13	.1	7	7	55	3.56	.02	.50	232	4	.09	4	.07	14	ND	ND	ND	ND	21	ND	ND	73
4+00	.4	3.14	ND	ND	34	ND	.13	.1	12	7	53	4.14	.02	.81	360	5	.12	11	.03	13	ND	ND	ND	ND	14	ND	ND	128
4+25	.5	2.00	5	ND	32	ND	.11	.1	6	6	39	3.43	.03	.49	286	3	.07	5	.04	15	ND	ND	ND	1	12	ND	3	45
4+50	.2	2.60	9	ND	77	ND	.36	.1	17	7	47	3.36	.03	.69	2189	3	.09	5	.07	17	ND	ND	ND	ND	23	ND	ND	81
4+75	.1	3.65	ND	ND	83	ND	.82	.1	19	10	95	3.89	.02	1.36	715	4	.15	15	.05	10	ND	ND	ND	ND	62	ND	ND	160
5+50	.3	1.91	ND	ND	40	ND	.17	.1	9	6	35	3.91	.01	.84	311	2	.09	6	.02	14	ND	ND	4	2	21	ND	ND	54
6+00	.1	3.60	ND	ND	83	5	.62	.1	19	9	152	4.26	.02	1.81	776	2	.16	25	.05	9	ND	ND	ND	ND	50	ND	ND	177
6+60	.4	2.16	10	ND	30	4	.17	.1	8	8	36	3.29	.03	.69	280	2	.08	7	.03	13	ND	ND	3	1	18	ND	ND	62
6+75	.3	3.12	8	ND	50	10	.22	.1	13	8	34	4.94	.03	1.52	389	2	.13	8	.03	11	ND	ND	3	3	27	ND	ND	109
7+38	.8	1.36	7	ND	27	5	.11	.1	6	6	18	2.05	.05	.28	145	1	.03	4	.02	14	ND	ND	4	1	12	8	4	22
8+00	.3	2.26	5	ND	31	8	.14	.1	10	7	26	3.25	.02	1.12	333	ND	.08	9	.13	7	ND	ND	ND	4	27	ND	ND	35
1+00N	.6	1.78	5	ND	29	ND	.09	.1	5	1	12	2.41	.04	.52	195	1	.05	2	.03	13	ND	ND	ND	1	19	3	3	34
1+50N	.9	2.31	16	ND	34	4	.13	.1	7	5	30	3.39	.04	.49	253	2	.09	5	.09	18	ND	ND	6	1	19	ND	ND	83
2+00N(SOIL)	.7	1.50	16	ND	29	ND	.06	.1	2	2	11	1.70	.04	.18	80	1	.02	2	.03	13	ND	ND	ND	ND	13	7	3	15
2+00N(SILT)	.1	.21	5	ND	13	ND	1.97	.9	ND	ND	11	.27	.04	.07	61	1	.01	ND	.04	6	ND	ND	3	1	62	ND	6	18
3+00N	.1	1.50	7	ND	80	ND	.92	2.5	18	3	40	1.60	.05	.58	4916	3	.06	7	.10	14	ND	ND	ND	ND	47	4	ND	106
4+00N	.1	1.73	12	ND	89	ND	.75	1.5	13	3	31	2.10	.04	.86	3713	3	.09	5	.07	8	ND	ND	ND	ND	40	ND	ND	146
0+50N	.1	1.45	10	ND	59	ND	.62	.4	12	3	19	1.78	.04	.86	2495	1	.07	4	.08	6	ND	ND	ND	ND	36	ND	3	103
5+00	.1	.08	11	ND	9	ND	.49	.1	ND	ND	5	.05	.03	.03	39	ND	.01	3	.05	7	ND	ND	4	4	19	6	9	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



# VANGEOCHEM LAB LIMITED

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

REPORT NUMBER: 871390 6A

JOB NUMBER: 871390

MR. JIM MacLEOD

PAGE 1 OF 1

SAMPLE #	Au ppb
0+00	25
0+25	20
0+50	5
0+75	nd
1+00	5
1+17	5
1+50	nd
1+75	20
2+00	15
2+50	nd
2+75	nd
3+00	5
3+25	nd
3+50	5
3+75	5
4+00	5
4+25	5
4+50	nd
4+75	5
5+50	5
6+00	10
6+60	15
6+75	5
7+38	5
8+00	10
1+00N	10
1+50N	10
2+00N (Soil)	5
2+00N (Silt)	nd
3+00N	nd
4+00N	nd
0+50N	nd
5+00N	5

DETECTION LIMIT  
nd = none detected

5  
-- = not analysed

is = insufficient sample

APPENDIX III

STATEMENT OF EXPENDITURE



COST OF SURVEY

Sample Collection

J.W. MacLeod - 1 day @ \$150.00  
G.A. Bleiler - 1 day @ \$150.00

Assaying

Vangeochem - 424.05

Report Preparation

2 days @ \$150.00 - 300.00  
\$1,024.05  
=====



# VANGEOCHEM LAB LIMITED

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

IN ACCOUNT WITH:

INVOICE: 871390 NA

MR. JIM MACLEOD  
860 - 625 Howe St.  
Vancouver, B.C.  
V6C 2T6

DATE: October 9, 1987

PROFESSIONAL SERVICE  
INVOICE IS PAYABLE UPON RECEIPT

PO#:

REPORT: 871390 GA

PROJECT: None Given

CODE	QUAN- TITY	DESCRIPTION	UNIT PRICE	TOTAL PRICE
	33	Soil/Silt samples prepared for analyses	0.85	28.05
	33	Gold analyses by Aqua Regia/Sol. Ext./AAS	5.50	181.50
	33	Multi-element analyses by ICP	6.50	214.50

TOTAL, THIS INVOICE: \$424.05

PLEASE PAY BY INVOICE  
NO STATEMENT WILL BE ISSUED

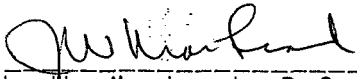
APPENDIX IV

ENGINEER'S CERTIFICATE

CERTIFICATE

I, James W. MacLeod, of 1220 Arbutus Street, in the City of Vancouver, in the Province of British Columbia DO HEREBY CERTIFY:

1. That I am a Consulting Engineer, with a business address at #860 - 625 Howe Street, in the City of Vancouver, in the Province of British Columbia.
2. That I am a graduate of the University of Alberta with a degree of B.Sc. in Mining Engineering.
3. That I have actively practiced my profession in mineral exploration since graduation in 1946.
4. That I am a registered Professional Engineer in the Province of British Columbia.
5. That the soil samples covered by this report were collected by myself and Mr. G.A. Bleiler on September 18, 1987.

  
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J. W. MacLeod, B.Sc., P.Eng.

DATED at the City of Vancouver,  
Province of British Columbia,  
this 20th day of November, 1987.