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GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORTS

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Geochemical Report  
on the  
Concha Claim Group

Princeton, B.C. area, (Miner Mtn.)  
Similkameen, Mining Division  
at the coordinates of  
120° - 27' West & 49° - 28' North  
Map 92H/8W

written by

Douglas H. Hopper  
Mining Technologist  
04 October 1995

Amended 24 May 1996

**FILMED**

\* GEOLOGICAL BRANCH  
ASSESSMENT REPORT \*

**24,070**

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### Appendix A

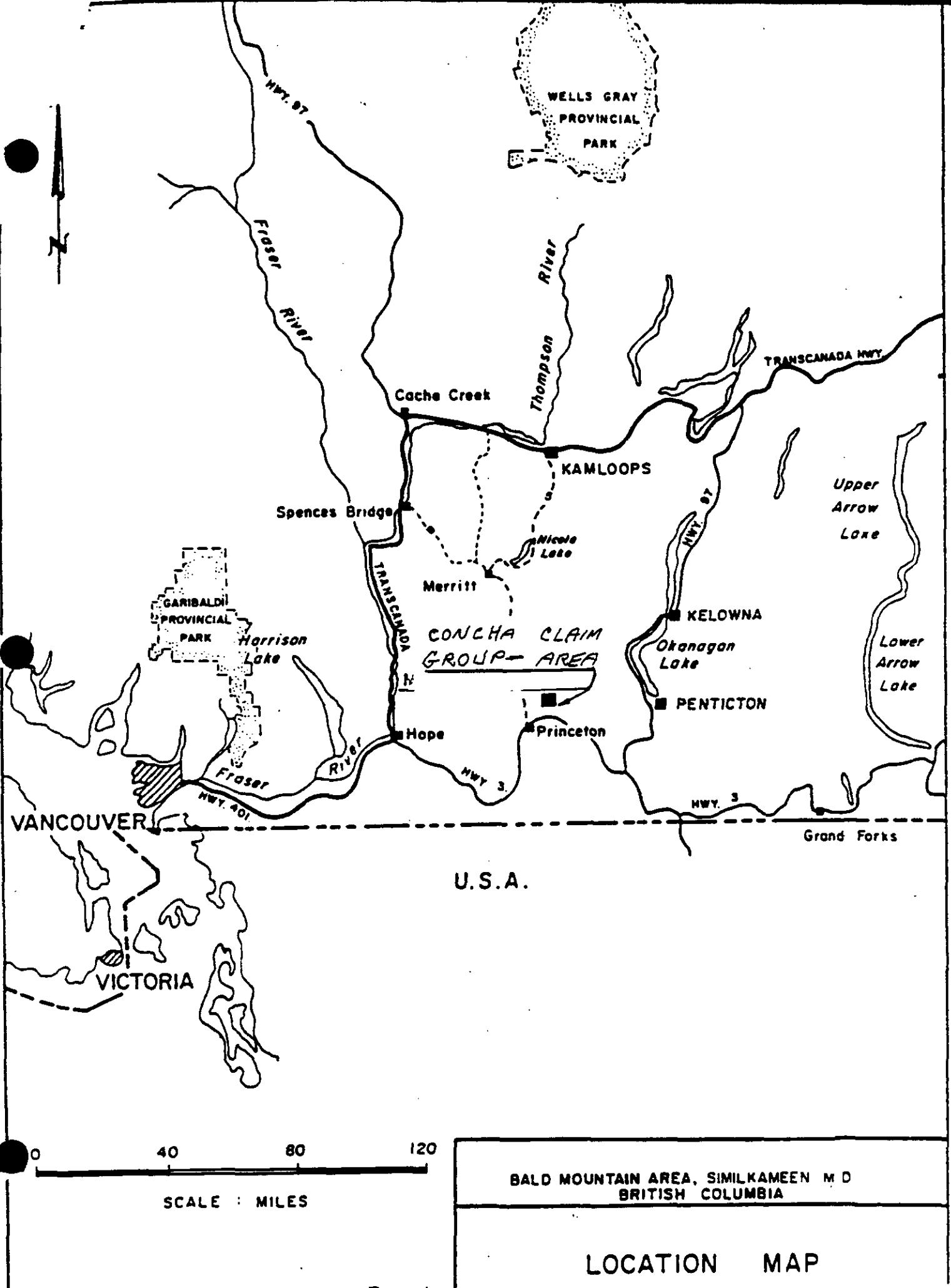
5 pages  
Methods and Specifications for Analytical Package  
Group 1D - 30 Element ICP by Aqua Regia  
File #95-3481R, Apr. 07, 1995

### Appendix B

4 pages  
Method for Wet Geochem Gold Analysis  
File #95-3481R, Feb. 18, 1996

### Appendix C

2 Maps, 1:50 or 1cm = 50 meters scale  
1. Copper-Gold Map (geo-chem)  
2. Lead-Zinc Map (geo-chem)





### Concha Claim Group and Location

The Claim Group is located on Mt. Miner some 3 miles N.E. of Princeton, B.C. An access road to the east, from the Osprey Lake road, immediately north of Allison Brook, turn right or east across the old railroad grade, then up the hill passing the old trenches, on old claims, Concha 9-10, 11-12 Post.

The area is ranch land, with low grass over most of the area, an occasional copse of poplar trees, with the lower areas populated with pine and fir.

The claims are on the N.W. corner of Map 92H/8W, 120°-27'W and 49°-28'N.

<b>Claim Name</b>		<b>Tenure #</b>	<b>Expiry Date</b>
Concha 1	1-2 Post	309823	June 06, 1997
Concha 2	"	309824	June 06, 1997
Concha 3	"	309825	June 06, 1997
Concha 4	"	309826	June 06, 1997
Concha 5	"	309827	June 06, 1996
Concha 6	"	309828	JUNE 06, 1996
Concha 15	"	311201	July 06, 1996
Concha 16	"	311202	July 06, 1997
Concha 19	"	311205	July 06, 1997
Concha 20	"	311206	July 06, 1997
Concha 21	"	311207	July 06, 1997
GNW 88	4 Post	332202 5 units	Oct. 15, 1996
GNW 89	"	332203 5 units	Oct. 15, 1995
Cu Frog	4 Post	335432 20 units	Apr. 20, 1996

### Sampling Methods

The soil samples were taken at the depths of 2-8" deep, dug manually with a Mattock, placed in a Kraft paper bag, designed for this purpose. The grid co-ordinates are marked on the bag. The samples are later air dried, when possible. Later they are packaged and sent to the laboratory.

### Work Done

A total of 89 soil and 1 rock samples were taken from the property grid. Chain and compass, stations, flagged, and marked where possible.

The lines done are as follow:

Line 43+00E	52+00N to 58+00N
Line 44+00E	52+00N to 58+00N
Line 45+00E	53+00N to 58+00N
Line 46+00E	55+00N to 63+00N
Line 47+00E	56+00N to 63+00N
Line 48+00E	58+00N to 63+00N
Line 49+00E	58+00N to 63+00N

The soil work was done on Concha 1-4 claims. The rock, a rusty sediment (Y0#1), N.W. of the old L.C.P. of Concha 11 & 12 along the bank, N. side of the road.

Three soils from 1994 were re-assayed - See Apr. 07, 1995.

### Survey Results

The new geo-chem results for copper extended the known anomaly on Concha 2&4 well up into Concha #1, with a new zone appearing N.E. corner of Concha #1.

The new lead and zinc anomalies lie perfectly within confines of the copper anomaly. Gold for this survey was not done or assayed in the usual manner.

The K% (potassium) ranges from 0.3% - 0.6%, suggesting the presence of K.spar alteration, necessary for copper porphyries. The survey also has silver, lead, zinc and copper. The gold has already been known, another good pointer to indicate a copper porphyry.

### Local Geology Mineralization

The geology here is the Nicoka Group of intermediate volcanics and overlain by the Princeton Group, sandstone and coal.

Some zones of quartz mineralization has been spotted on the road (Concha #2), which will be sampled at a later date. One piece of float, from a trench between the road and Concha 6 of quartz, pyrite with abundant malachite was found. This may be partly responsible for the gold values occurring over the area.

### Property History

The Baldy Mountain Prospect has been known and explored since 1900. The United Empire Company looked at the Regal Zone for coal. Later Granby Consolidated Mines did a geo-chemical and self-potential survey, followed by trenching and limited diamond drilling that established the Granby Zone. In 1960, Silver Standard Mines drilled on the property. In 1965 Meridian Syndicate did a geo-chemical survey and electromagnetic survey. In 1968 Great Slave Mines did an induced potential survey (report #1721), over the same area as a report by Climax Copper Mines (#488) 1963. Some of the results of these two surveys will be included in this report.

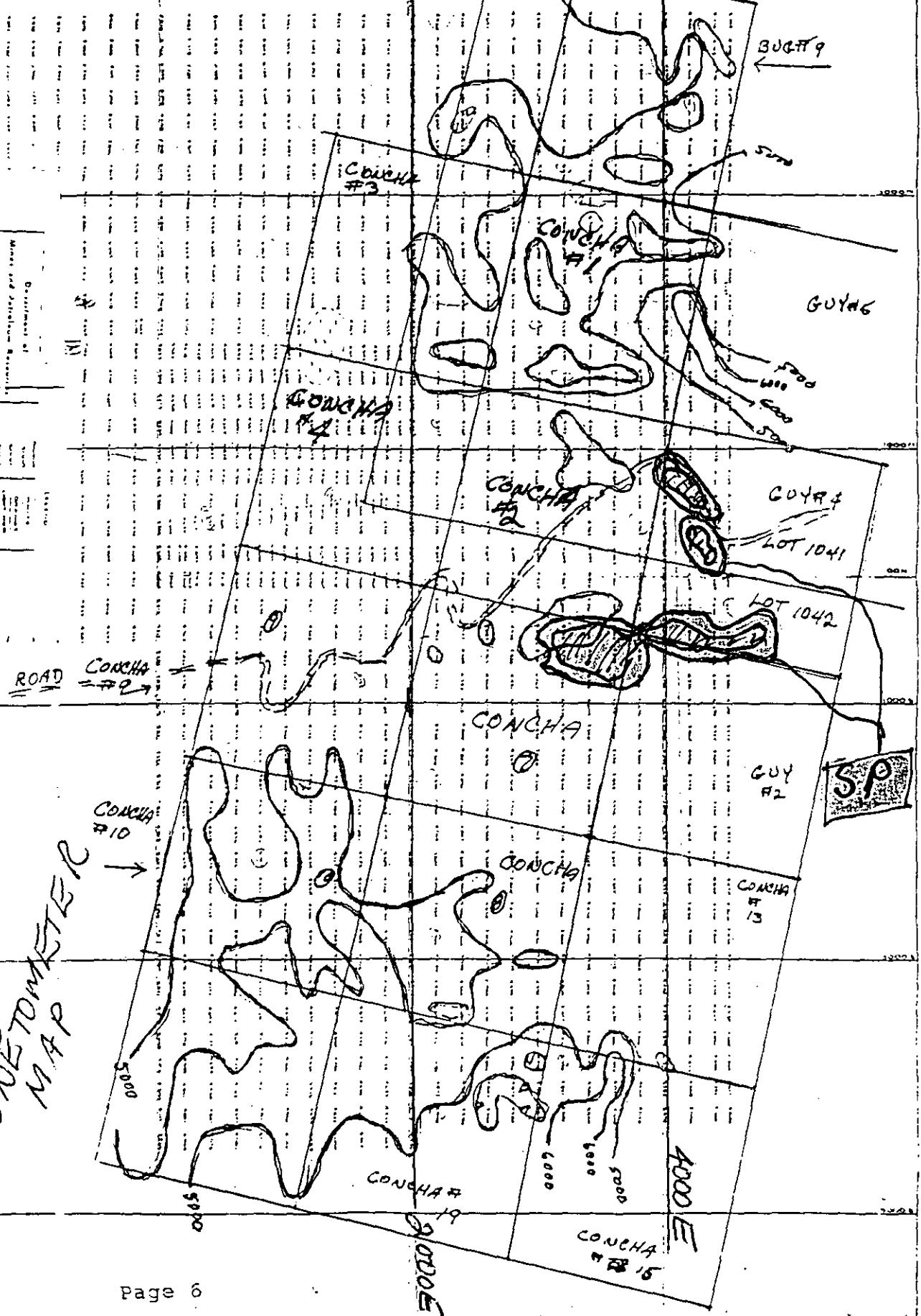
A further survey done in 1977, by Quintana Minerals (#6336) over some of the claim area; a part of this survey will also be in this report.

In 1988, Mingold Resources did some geo-chem work which is included in the Gold-Copper, (by K. J. Taylor and Others) map by D. Hopper.

### Old Surveys - New Recommendations and Results

The old I.P. surveys by Donald Cochrane (#1721), 1968, Magnetometer Map, Report #251, Induced Polarization survey, Climax Copper Mines, 1963 report #488 (reports 488 & 1721 over the same claim area, expanded) all seem to concur and agree, to support the copper-gold anomalies that occur there: that is Lines 39+00E, 41+00E, 38+00N to 48+00N, and Line 41+00E 38+00N to 42+00N. Further geo-chem work is recommended for this area (Concha 20 & 21).

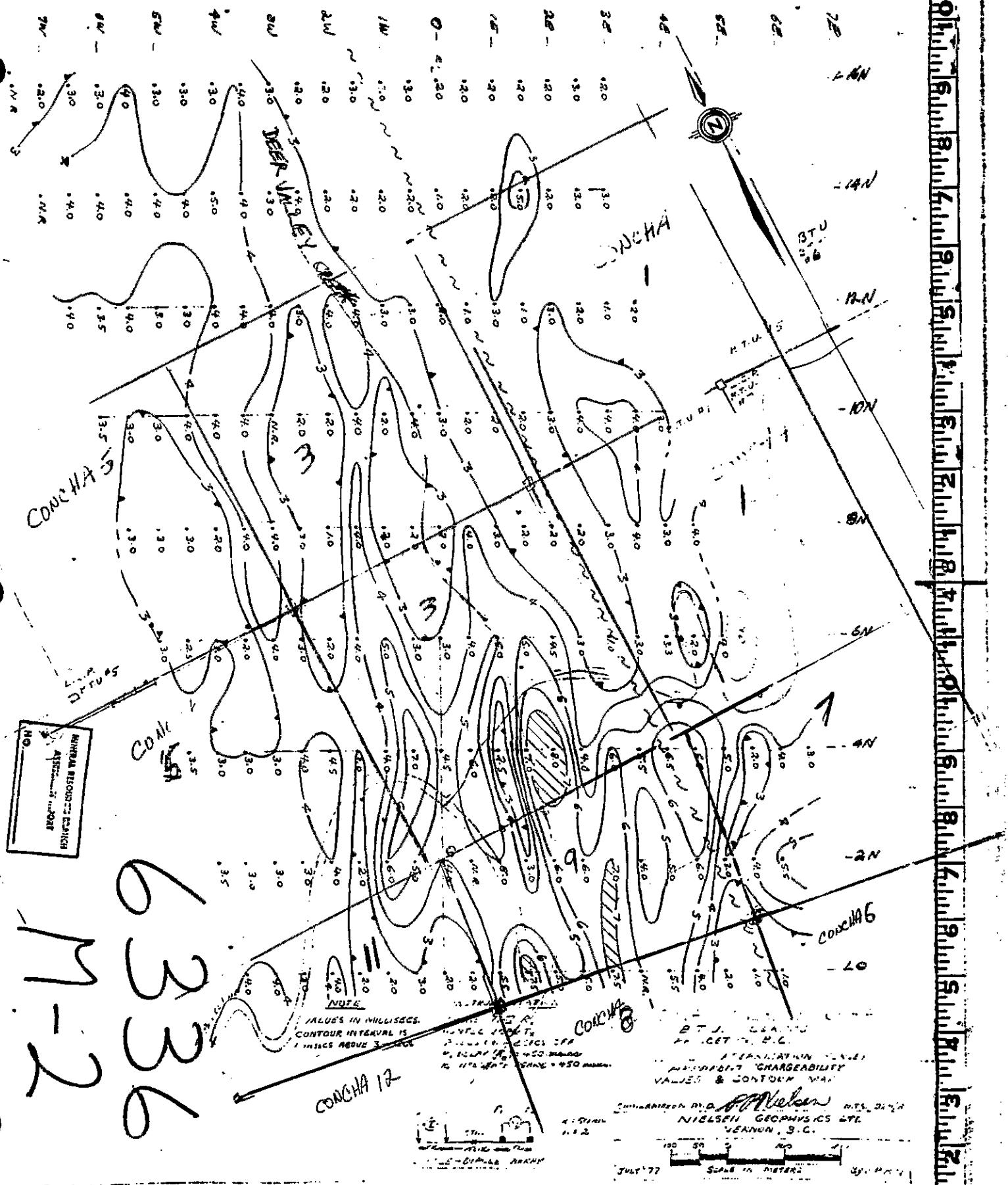
The new copper-zinc-lead anomalies on Concha 1-2-4, claims seem to agree with the occurring magnetometer highs of the area, see Magnetometer Map 251 in this report.

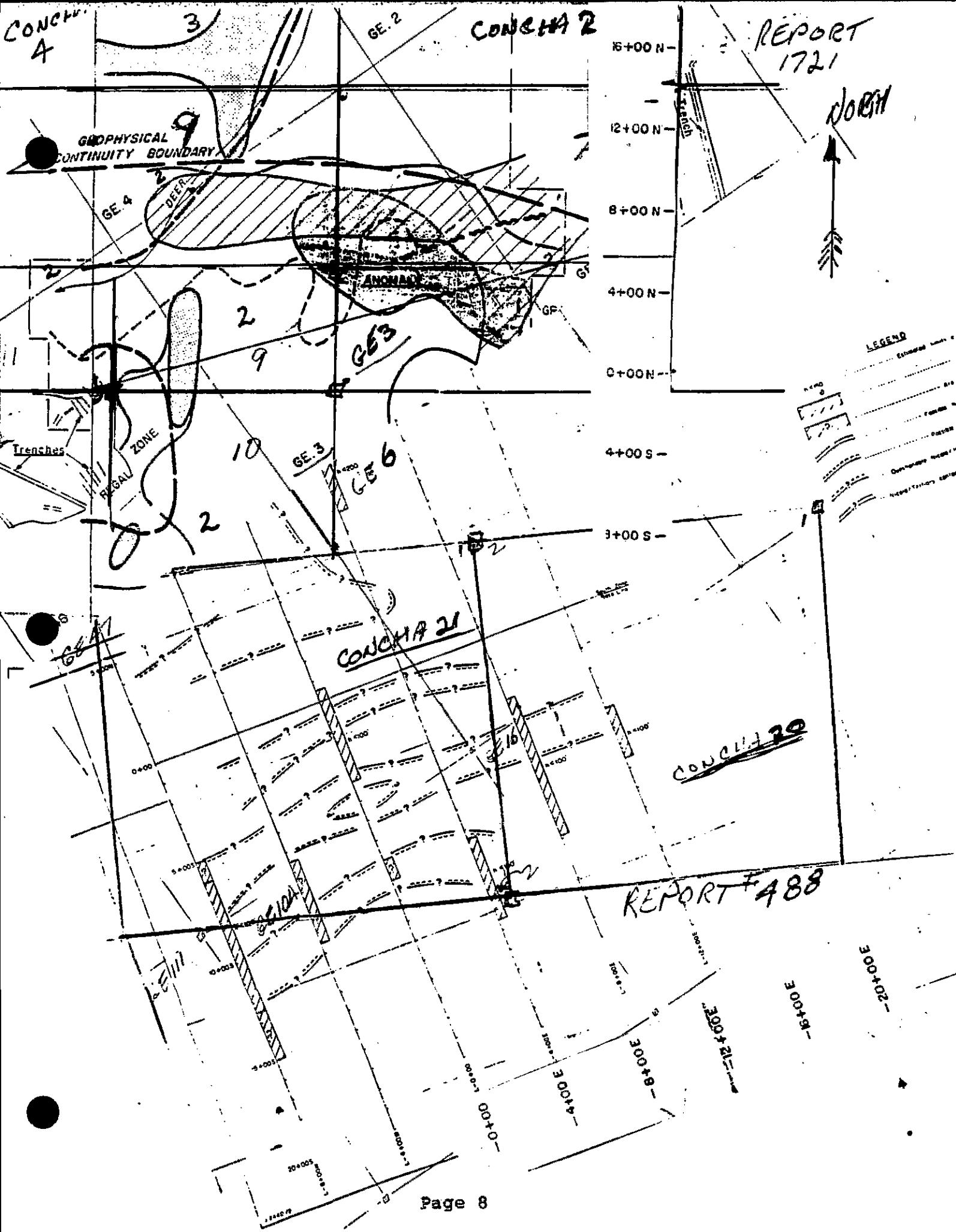
LOT  
3778LOT  
1041

REPORT #

251 #4

2  
22 Street  
22nd Street  
22nd Street  
22nd Street





### Soil Sample Type

The soil samples were taken at depths of 2" - 8", of brown-black loamy top soil, which seems to be abundant over the claim area. The usual sampled area was just below the root line of the above plants which grow very well for cow fodder.

This black soil is very persistent to depths, with some minor sandy gravel and stones throughout. However, good soil profiles were observed in the trenches and along the road sides, that exhibit some good gossanous areas.

### 1996 Work Done

On 19 February 1996, a total of 92 soil samples were done, a re-assay of those previously reported for lead and zinc. The samples were assayed for gold only as the original analysis (File #95-3481), reported Au greater than 2 p.p.m., which is inaccurate, according to the Assayer.

These gold values have been plotted on a map with the same co-ordinates as work done, page 4 of this report.

### Local Geology

In viewing some of the many trenches, andesites-tuffs, and a tan coloured, kaolinized feldspar porphyry rock, trending east and west with the dip observed in Allison Cr. cliff, a vertical distance of 600 feet. All of these rock units carry malachite, pyrite, calcite, hematite, epidote, and magnetite (occassionally).

One trench, line 51+000E - 50+50N, had numerous fault gouges trending east and west 2" - 6" wide, indicating lots of faulting action.

I believe Allison Cr. and Shisler Cr. to be major faults, along with another spotted trending N20<sup>W</sup> S W corner of Concha 2, which is an aquafier.

It is reported that the coal mine located south of Concha 6 and the road, in the sediments, was faulted off, with the face, and the contacts of this coal zone were loaded with copper mineralization.

The gold areas, plotted on the maps, agree with the copper contours, with very few stations outside the contours of 80 p.p.m., having gold assays. It also appears that two things are occurring here, where there is zoning of copper and then copper and gold, suggesting different periods of mineral deposition.

### The Scope of Work Done - Discussion and Forecasted Work

The reason for all this geochemical work was to keep the claims in good standing as to filing the "Statements of Work" and expand the known geochem to see where it goes , see what it does.

Ken Taylors earlier work indicated a good spot to start, with the gold and copper values indicated in the trenches, a past drill hole at 4, west 600' with the o - 300' section assayed 0.25 - 0.30 % copper. No gold reported or assayed this location is at line 49+00E - 50+50N, just east of the long trench, (Ken Taylors report).

Some magnetometer & geophysical work has been done with the geochem done over these areas, the most interesting being Concha 20 and 21 claims and then north to the road, where the Magnetometer and geophysical work are co-insident.

Lately, I have been successful in making a deal with a local company, where the past work has been very supporting to the value of the property. The indications of further work are more geochem work to the south and east of Shisler Cr. and the creek itself, induced potential surveys to accurately locate some of the past work that will be followed up later by drilling (diamond).

Concha Claim Expenses

Aug 18, 95	Maps	\$ 14.26
Apr 28, 95	Map blow-up	2.62
Apr 25, 95	Map	9.34
Apr 06, 95	assaying	26.80
June 30, 95	drafting supplies	21.48
Mar 06, 95	Concha Map	9.07
Apr 28, 95	printing & shipping	5.24
Sept 21, 95	Western Reproducers	21.80
Sept 25, 95	Western Reproducers	9.40
Sept 27, 95	printing	6.84
Sept 25, 95	Acme Labs Assaying	736.98
June 01 - Sept 15, 95	wages for N. Wychopen 3.5 days @ \$160.00/day	560.00
June 01 - Sept 15, 95	truck rental 3 days @ \$50.00/day	150.00
Sept 27, 95	report writing and research to maps	500.00
Sept 27, 95	drafting geo-chem maps	550.00
Oct 02, 95	typing fees	35.00
	-----	
	Sub-total	\$2,658.83
May 06, 96	printing	7.48
Feb 19, 96	assaying	611.51
May 14, 96	drafting and report writing	300.00
May 24, 96	typing	45.00
	-----	
	Total	\$3,622.82

**Statement of Qualifications for Douglas H. Hopper**

1. I attended the Haileybury School of Mining during the years 1962 to 1966 studying Mining Technology.
2. Since the year 1964, I have worked with Hudson Bay Exploration, Kennecot Exploration, Sumitome Exploration, and a number of other exploration companies as a field geologist, underground geologist, Diamond Drill supervisor and other related duties concerning mining.

October 1995

Douglas H. Hopper

Appendix A

**Methods and Specifications for Analytical Package  
Group 1D - 30 Element ICP by Aqua Regia**

**File #95-3481, Apr. 07, 1995**

# ACME ANALYTICAL LABORATORIES LTD.

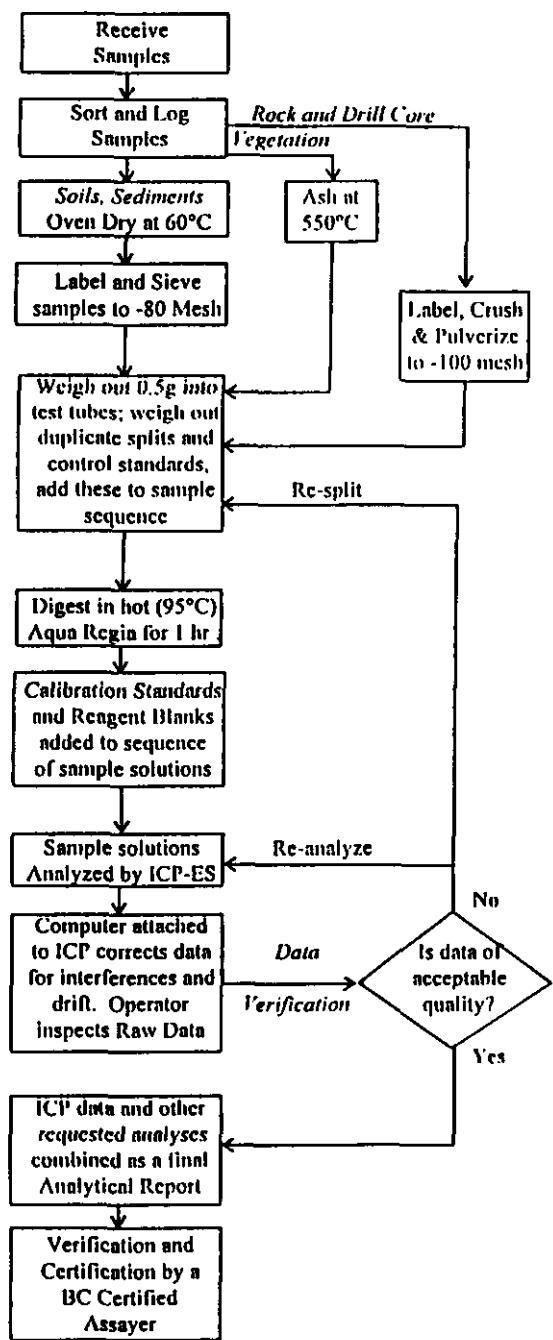
Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B.C., Canada V6A 1R6

Telephone: (604) 253-3158 Fax: (604) 253-1716

## METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 1D - 30 ELEMENT ICP BY AQUA REGIA

### Analytical Process



### Comments

#### Sample Preparation

Soils and sediments are dried (60°C) and sieved to -80 mesh (-177 microns), rocks and drill core are crushed and pulverized to -100 mesh (-150 microns). Plant samples are dried (60°C) and pulverized or dry ashed (550°C). Moss-mat samples are dried (60°C), pounded to loosen trapped sediment then sieved to -80 mesh. At the clients request, moss mats can be ashed at 550°C then sieved to -80 mesh although this can result in the potential loss by volatilization of Hg, As, Sb, Bi and Cr. A 0.5 g split from each sample is placed in a test tube. A duplicate split is taken from 1 sample in each batch of 34 samples for monitoring precision. A sample standard is added to each batch of samples to monitor accuracy.

#### Sample Digestion

Aqua Regia is a 3:1:2 mixture of ACS grade conc. HCl, conc. HNO<sub>3</sub>, and demineralized H<sub>2</sub>O. Aqua Regia is added to each sample and to the empty reagent blank test tube in each batch of samples. Sample solutions are heated for 1 hr in a boiling hot water bath (95°C).

#### Sample Analysis

Sample solutions are aspirated into an ICP emission spectrophotograph (Jarrel Ash AtomComp model 800 or 975) for the determination of 30 elements comprising: Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, Ti, U, V, W, Zn.

#### Data Evaluation

Raw and final data from the ICP-ES undergoes a final verification by a British Columbia Certified Assayer who then signs the Analytical Report before it is released to the client. Chief Assayer is Clarence Leong, other certified assayers are Dean Toye and Jacky Wang.

## GEOCHEMICAL ANALYSIS CERTIFICATE

Doug Hopper File # 95-3481 Page 1

203 - 828 W. Hastings St., Vancouver BC V6C 4C8

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W
	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm																
Y0 #1	1	181	8	59	.4	7	24	632	5.81	3	<5	<2	3	71	<.2	<2	<2	105	2.63	.144	12	7	1.66	29	.01	3	2.06	.02	.05	<2

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: P1 ROCK P2 TO P4 SOIL

DATE RECEIVED: SEP 11 1995 DATE REPORT MAILED: Sept 18/95 SIGNED BY..... D.TOEY, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

## GEOCHEMICAL ANALYSIS CERTIFICATE

Doug Hopper File # 94-1531R

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm										
L39E 48+00N	3	1650	8	135	1.2	22	44	1887	7.43	8	<5	2	5	161	1.1	4	<2	233	5.55	.149	17	15	1.65	210	<.01	12	1.01	.02	.07	<2	<5
L48E 55+00N	4	402	150	756	1.7	14	45	5097	6.93	19	<5	<2	4	57	6.1	4	<2	221	1.10	.150	33	12	1.78	191	.02	7	2.21	.01	.18	<2	<5
ROAD 52+00N	23	787	10	82	1.3	18	39	936	8.74	13	<5	<2	6	52	.5	<2	<2	197	.66	.157	16	29	1.81	118	.02	4	2.54	.01	.16	<2	<5

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 - SAMPLE TYPE: SOIL PULP

DATE RECEIVED: MAR 22 1995 DATE REPORT MAILED: April 17/95 SIGNED BY..... D.TOEY, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS



SAMPLE#	No	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	U
		ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm							
L43+00E 58+00N	1	35	9	45	<.3	6	5	355	2.19	7	<5	<2	3	36	<.2	<2	<2	45	.37	.053	14	15	.18	114	.08	<3	1.13	.02	.13	2
L43+00E 57+50N	<1	29	10	56	<.3	3	5	429	1.84	2	<5	<2	4	49	<.2	2	<2	35	.46	.046	14	13	.18	152	.07	3	1.09	.01	.16	<2
L43+00E 57+00N	3	18	14	71	<.3	11	7	580	1.63	11	<5	<2	11	107	<.2	<2	4	25	.50	.076	49	9	.19	246	.02	3	.83	.01	.21	<2
L43+00E 56+50N	1	17	13	62	<.3	4	4	365	1.37	9	<5	<2	9	88	<.2	<2	<2	22	.64	.064	40	7	.29	187	.03	4	.96	<.01	.26	<2
L43+00E 56+00N	1	74	12	83	<.3	10	10	858	2.34	14	<5	<2	4	81	.5	3	<2	40	.78	.084	22	14	.35	287	.06	5	1.46	.02	.27	<2
L43+00E 55+50N	1	39	15	53	<.3	7	6	431	1.78	4	<5	<2	6	66	.4	<2	<2	34	.56	.062	20	15	.28	142	.05	4	.90	.01	.19	<2
L43+00E 55+00N	2	246	10	88	<.3	10	14	1367	3.39	10	<5	<2	3	92	.4	2	<2	55	1.02	.125	19	15	.84	185	.04	8	1.68	.01	.35	<2
L43+00E 54+50N	1	285	11	95	<.3	11	16	1444	3.79	12	<5	<2	3	84	<.2	<2	5	64	1.10	.142	20	16	1.00	223	.04	5	2.09	.01	.43	<2
L43+00E 54+00N	1	67	14	63	<.3	11	9	615	1.99	8	<5	<2	4	79	.4	2	2	34	1.05	.083	20	16	.38	193	.04	8	1.22	.01	.25	<2
L43+00E 53+50N	3	268	15	73	.3	12	22	870	4.04	10	<5	<2	4	42	.7	<2	<2	78	.79	.107	16	17	.95	219	.04	5	1.94	.01	.36	<2
RE L43+00E 53+50N	2	276	16	75	.3	11	23	896	4.13	13	<5	<2	4	43	.6	2	<2	80	.81	.108	16	19	.98	229	.04	6	1.99	<.01	.38	<2
L43+00E 53+00N	2	69	9	79	<.3	11	17	794	3.68	11	<5	<2	<2	70	.4	2	<2	60	1.16	.130	12	23	.89	245	.03	7	2.18	.02	.38	<2
L43+00E 52+50N	2	485	6	43	<.3	13	32	642	6.54	8	<5	<2	4	54	<.2	<2	<2	126	.83	.194	25	15	1.73	194	.03	5	2.79	.02	.35	<2
L43+00E 52+00N	2	105	11	62	<.3	10	14	597	3.52	7	<5	<2	2	80	.2	2	<2	71	.78	.135	14	20	.73	237	.07	5	2.03	.02	.30	<2
L44+00E 58+00N	3	173	32	159	.4	11	18	1287	4.21	9	<5	<2	5	109	.2	<2	2	67	.73	.116	26	18	.76	465	.04	5	1.97	.02	.42	<2
L44+00E 57+50N	2	26	11	75	<.3	7	5	755	1.57	4	<5	<2	6	100	.4	2	<2	22	.73	.060	37	9	.22	436	.04	6	1.32	.02	.27	<2
L44+00E 57+00N	1	344	8	126	.3	16	21	1361	6.11	<2	<5	<2	3	54	<.2	<2	3	142	1.10	.095	19	29	1.63	123	.03	7	2.43	.01	.29	<2
L44+00E 56+50N	2	272	17	111	<.3	13	22	1286	4.67	3	<5	<2	3	58	.2	<2	<2	73	.75	.104	22	16	.94	169	.05	3	2.60	.02	.39	<2
L44+00E 56+00N	1	150	18	93	<.3	6	15	1137	3.37	3	<5	<2	3	49	.4	2	<2	47	.87	.098	18	11	.68	267	.05	8	2.19	.01	.37	<2
L44+00E 55+50N	1	201	13	89	<.3	11	16	1480	3.47	7	<5	<2	2	71	<.2	2	<2	60	1.12	.103	14	13	.85	297	.06	7	2.31	.02	.37	<2
L44+00E 55+00N	2	232	12	92	.5	12	18	1115	3.93	10	<5	<2	4	50	.9	<2	<2	75	1.27	.096	18	20	.95	172	.04	6	1.79	.01	.19	<2
L44+00E 54+50N	1	470	8	110	<.3	12	18	1597	4.54	13	<5	<2	2	63	<.2	<2	7	100	1.09	.142	20	19	1.08	219	.05	8	2.32	.02	.34	<2
L44+00E 54+00N	3	221	13	138	<.3	13	24	1383	4.33	12	<5	<2	3	55	.9	<2	<2	90	.76	.116	17	22	.78	238	.06	7	2.25	.02	.33	<2
L44+00E 53+50N	3	167	14	152	<.3	16	18	1178	3.52	7	<5	<2	2	62	1.1	2	2	69	.70	.106	15	27	.62	312	.08	<3	2.26	.02	.30	<2
L44+00E 53+00N	2	259	11	77	.3	13	18	716	4.01	6	<5	<2	4	56	<.2	<2	<2	83	.92	.140	23	26	.86	242	.04	4	1.79	.01	.27	<2
L44+00E 52+50N	4	531	19	103	.3	19	28	930	5.60	11	<5	<2	3	61	.7	<2	<2	123	1.26	.242	26	38	1.42	316	.02	7	2.01	.01	.26	<2
L45+00E 58+00N	2	191	45	141	.6	12	21	1565	5.79	11	<5	<2	2	83	.4	<2	5	90	.66	.140	19	17	.94	379	.03	4	1.93	.02	.52	<2
L45+00E 57+50N	2	112	37	150	.3	10	13	993	3.13	2	<5	<2	<2	76	1.4	<2	<2	53	.68	.106	16	12	.42	290	.06	3	1.79	.03	.30	<2
L45+00E 57+00N	1	304	17	102	<.3	9	17	1509	4.41	<2	<5	<2	2	44	.3	<2	3	56	.79	.089	17	12	.86	197	.04	5	2.22	.02	.38	<2
L45+00E 56+50N	2	460	42	233	.3	13	25	2126	5.82	<2	<5	<2	3	57	1.5	<2	3	79	.95	.174	21	21	1.41	282	.02	7	2.55	.01	.57	<2
L45+00E 56+00N	1	246	37	232	<.3	17	22	1290	6.42	12	<5	<2	3	123	1.6	<2	<2	132	.73	.110	14	41	1.64	312	.06	4	2.87	.03	.41	<2
L45+00E 55+50N	1	236	73	545	<.3	21	30	1656	6.34	14	<5	<2	2	104	2.4	<2	<2	126	.71	.106	15	47	1.49	302	.07	3	3.00	.02	.41	<2
L45+00E 55+00N	3	612	17	331	.5	18	46	3140	6.72	20	<5	<2	2	43	4.5	<2	8	157	1.22	.211	22	29	2.09	344	.02	6	3.30	.01	.28	<2
L45+00E 54+50N	3	292	21	229	<.3	15	24	1914	5.73	4	<5	<2	2	52	1.3	<2	<2	132	.74	.105	21	21	1.16	278	.05	5	2.86	.02	.52	<2
L45+00E 54+00N	1	712	15	575	<.3	17	26	3932	6.75	12	<5	<2	2	89	3.1	<2	6	164	1.32	.127	16	15	1.98	316	.03	9	3.11	.01	.38	<2
STANDARD C	20	63	37	127	6.5	66	34	970	4.06	44	17	6	39	54	18.9	15	17	64	.49	.095	40	62	.91	190	.08	26	1.81	.06	.15	10

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	No ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	S ppm	Al %	Na %	K %	W ppm
L45+00E 53+00N	1 280	16	174	<.3	11	20	2687	4.51	3	<5	<2	3	93	<.2	<2	3	111	1.26	.113	15	15	1.02	428	.07	10	2.85	.02	.54	2	
L45+00E 53+00N	3 433	10	94	<.3	18	25	1094	5.52	<2	<5	<2	2	57	<.2	<2	7	165	.94	.166	19	46	1.38	415	.02	7	2.17	.02	.40	3	
L46+00E 63+00N	1 34	9	78	<.3	4	6	636	1.58	<2	<5	<2	<2	72	.2	<2	3	35	.78	.078	13	10	.19	247	.06	4	1.44	.02	.20	<2	
L46+00E 62+50N	<1 20	14	62	<.3	14	7	557	1.57	<2	<5	<2	7	192	.4	<2	3	31	.80	.058	42	22	.39	336	.05	6	1.77	.02	.35	<2	
L46+00E 62+00N	1 23	11	55	<.3	10	6	525	1.62	<2	<5	<2	3	212	<.2	<2	<2	30	.85	.057	26	19	.29	369	.06	7	1.76	.02	.41	<2	
L46+00E 61+50N	1 22	13	59	<.3	12	6	484	1.53	<2	<5	<2	3	160	.3	<2	<2	28	.76	.062	23	21	.24	391	.06	5	1.63	.02	.36	<2	
L46+00E 61+00N	18 41	38	129	<.3	31	16	159	6.48	23	<5	<2	11	202	<.2	<2	5	22	.62	.085	44	8	.18	87	.01	3	1.21	.01	.62	<2	
L46+00E 60+50N	1 38	8	47	<.3	8	6	401	1.97	<2	<5	<2	3	50	.2	<2	<2	48	.57	.069	16	14	.23	144	.07	<3	.97	.01	.18	<2	
L46+00E 60+00N	1 36	12	74	<.3	7	7	556	1.78	2	<5	<2	2	64	.7	<2	4	41	.75	.089	14	14	.22	214	.06	3	1.27	.01	.24	<2	
L46+00E 59+50N	3 122	28	130	.4	17	15	1825	2.77	3	<5	<2	<2	87	.8	<2	5	81	1.19	.165	17	42	.79	252	.04	6	1.64	.01	.28	2	
L46+00E 59+00N	3 217	62	204	.6	15	25	1951	4.87	14	<5	<2	<2	122	1.1	<2	<2	70	1.25	.207	16	31	.87	303	.03	11	1.90	.02	.50	<2	
L46+00E 58+50N	2 239	41	138	.6	14	25	1792	6.61	13	<5	<2	2	66	.4	<2	2	119	.62	.114	23	47	1.36	165	.01	6	2.30	.02	.48	2	
L46+00E 58+00N	2 226	65	144	1.1	9	20	1300	7.24	16	<5	<2	2	116	<.2	<2	3	121	.60	.152	26	18	.96	239	.04	8	2.60	.03	.68	2	
L46+00E 57+50N	2 234	27	148	.5	7	23	1426	6.05	8	<5	<2	3	138	.5	<2	<2	101	.59	.114	28	19	.72	335	.04	8	2.27	.04	.59	<2	
L46+00E 57+00N	4 219	64	269	.7	11	32	1669	4.50	10	<5	<2	<2	107	1.8	<2	5	88	.90	.158	23	13	.51	322	.05	5	2.22	.03	.38	<2	
L46+00E 56+50N	3 206	25	154	.8	11	20	1077	4.99	5	<5	<2	2	121	.5	<2	5	99	.71	.153	23	15	.70	274	.03	5	2.05	.03	.47	<2	
L46+00E 56+00N	3 214	28	126	.6	10	19	1421	4.56	2	<5	<2	3	60	.8	2	5	125	.63	.092	24	17	.70	324	.08	7	2.52	.02	.39	2	
L46+00E 55+50N	3 216	44	282	.5	10	20	1908	4.24	6	<5	<2	2	56	2.6	<2	6	120	.78	.128	20	16	.86	323	.06	5	2.45	.02	.44	<2	
RE L46+00E 55+50N	3 218	43	281	.5	10	20	1904	4.17	11	<5	<2	2	56	3.0	<2	3	119	.78	.128	20	15	.85	325	.06	7	2.46	.02	.44	2	
L46+00E 55+00N	2 287	52	371	.4	7	20	3136	5.36	5	<5	<2	2	48	2.4	<2	2	154	.93	.146	21	10	1.31	274	.04	9	2.85	.02	.48	3	
L47+00E 63+00N	3 40	9	137	<.3	8	7	878	1.76	3	<5	<2	<2	57	.6	<2	<2	36	.57	.134	14	11	.28	264	.07	8	1.60	.01	.44	<2	
L47+00E 62+50N	1 23	8	88	<.3	6	5	741	1.49	<2	<5	<2	<2	65	.4	<2	<2	32	.70	.092	11	9	.18	292	.06	4	1.32	.02	.14	<2	
L47+00E 62+00N	<1 20	9	59	<.3	7	5	580	1.56	<2	<5	<2	<2	55	.4	<2	2	34	.55	.045	12	11	.16	206	.07	3	1.31	.02	.09	<2	
L47+00E 61+50N	1 24	11	70	<.3	5	5	562	1.31	4	<5	<2	<2	92	.4	<2	<2	28	.92	.093	11	8	.17	256	.04	3	1.13	.02	.14	<2	
L47+00E 61+00N	1 31	5	80	<.3	5	5	512	1.41	<2	<5	<2	<2	86	.6	<2	<2	31	.81	.104	13	10	.18	249	.05	3	1.13	.02	.21	<2	
L47+00E 60+50N	1 54	11	69	<.3	7	7	681	1.92	3	<5	<2	<2	61	<.2	<2	<2	47	.87	.098	14	17	.36	281	.05	5	1.41	.02	.25	<2	
L47+00E 60+00N	1 88	16	85	.3	8	9	1063	2.57	<2	<5	<2	<2	66	.4	<2	<2	68	1.19	.115	13	21	.60	225	.04	9	1.42	.02	.33	<2	
L47+00E 59+50N	1 133	11	65	<.3	7	8	712	2.04	<2	<5	<2	2	60	<.2	<2	<2	47	.82	.083	14	17	.33	208	.05	6	1.17	.02	.25	<2	
L47+00E 59+00N	1 38	12	48	<.3	6	6	406	1.89	<2	<5	<2	4	44	.3	<2	<2	48	.52	.055	16	14	.25	126	.06	<3	.91	.01	.16	<2	
L47+00E 58+50N	1 103	41	284	.4	8	11	1175	3.44	6	<5	<2	3	80	2.5	<2	<2	60	.65	.098	16	17	.53	429	.06	5	1.56	.02	.33	2	
L47+00E 58+00N	3 167	13	177	1.0	15	21	2178	3.53	4	<5	<2	2	62	1.5	2	<2	91	.82	.115	24	33	.64	380	.07	4	2.26	.02	.24	<2	
L47+00E 57+50N	2 113	9	226	.4	7	14	1449	2.77	2	<5	<2	3	73	1.8	<2	<2	60	.92	.129	14	16	.50	257	.05	4	1.68	.02	.24	3	
L47+00E 57+00N	3 264	12	114	.4	9	23	1502	4.65	6	<5	<2	2	61	.4	<2	<2	113	.95	.164	24	13	1.02	225	.03	4	2.22	.01	.31	3	
L47+00E 56+50N	2 166	10	131	.3	8	16	1212	3.84	8	<5	<2	<2	50	.7	<2	4	103	1.05	.137	18	16	.72	239	.05	6	2.11	.02	.27	2	
L47+00E 56+00N	3 200	23	264	.3	11	20	1533	4.67	7	<5	<2	3	47	1.8	<2	<2	111	.83	.118	19	16	.85	172	.04	4	1.92	.02	.29	2	
STANDARD C	20	59	37	120	6.3	65	31	958	3.81	42	18	8	36	50	16.4	18	21	66	.47	.088	38	57	.85	175	.08	27	1.74	.05	.14	11

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



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## Doug Hopper FILE # 95-3481

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SAMPLE#	No	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm							
L48+50E 63+00N	1	273	10	87	.3	15	24	896	4.53	14	<5	<2	3	177	<.2	3	<2	120	1.29	.092	9	11	1.76	109	.24	9	2.20	.01	.51	<2
L48+50E 62+50N	41	225	8	78	<.3	12	21	1075	4.49	8	<5	<2	3	139	<.5	3	<3	120	1.16	.058	10	12	1.49	129	.25	4	2.51	.01	.45	<2
L48+50E 62+00N	1	122	6	56	<.3	9	12	681	2.90	7	<5	<2	5	72	<.3	<2	2	65	.67	.049	15	14	.56	133	.13	5	1.64	.02	.36	<2
L48+50E 61+50N	1	39	9	88	<.3	9	7	750	1.85	7	<5	<2	2	67	<.3	2	<2	34	.78	.087	15	11	.22	271	.08	4	1.57	.02	.25	<2
RE L48+50E 61+50N	1	38	8	88	<.3	10	7	748	1.84	8	<5	<2	2	67	<.8	3	<2	34	.79	.088	15	11	.22	271	.08	4	1.57	.02	.25	<2
L48+50E 61+00N	41	30	8	70	.3	8	6	476	2.01	4	<5	<2	3	57	.3	3	<2	39	.64	.087	15	13	.20	190	.08	4	1.36	.01	.19	<2
L48+50E 60+50N	1	34	10	73	<.3	8	7	531	2.02	9	<5	<2	2	59	<.5	<2	<2	40	.74	.099	12	13	.25	185	.08	6	1.35	.02	.19	<2
L48+50E 60+00N	1	31	7	69	<.3	7	5	518	1.73	7	<5	<2	<2	68	<.3	<2	<2	34	.80	.102	14	11	.20	202	.06	4	1.23	.02	.17	<2
L48+50E 59+50N	1	33	8	89	<.3	4	5	525	1.70	<2	<5	<2	2	71	<.3	<2	<2	33	.85	.124	13	11	.21	222	.06	5	1.18	.02	.20	<2
L48+50E 59+00N	1	29	9	72	<.3	7	4	477	1.82	<2	<5	<2	<2	64	<.7	2	<2	37	.76	.103	13	12	.19	208	.06	4	1.17	.01	.18	<2
L48+50E 58+50N	1	32	4	74	<.3	6	5	475	1.73	5	<5	<2	<2	63	<.7	2	2	34	.73	.111	11	11	.20	198	.06	5	1.10	.01	.18	<2
L48+50E 58+00N	1	32	5	55	<.3	7	5	422	1.90	3	<5	<2	2	50	<.3	<2	2	39	.58	.084	13	13	.19	154	.07	5	1.09	.02	.15	<2
L49+00E 63+00N	1	163	<3	64	<.3	11	17	670	3.96	6	<5	<2	3	120	<.2	<2	2	104	.94	.061	11	16	1.36	95	.21	3	1.75	.01	.45	<2
L49+00E 62+50N	1	133	<3	90	.3	9	15	692	3.94	6	<5	<2	6	138	<.2	<2	<2	86	1.06	.110	9	17	1.19	183	.16	6	1.85	.02	.39	<2
L49+00E 62+00N	1	151	104	87	.7	10	13	1004	3.79	8	<5	<2	4	51	<.2	<2	4	76	.68	.072	24	18	.79	121	.08	4	2.06	.02	.32	<2
L49+00E 61+50N	1	60	16	89	<.3	8	9	1281	2.55	7	<5	<2	3	56	.3	<2	<2	38	.81	.036	21	11	.40	195	.07	3	1.64	.01	.36	<2
L49+00E 61+00N	1	63	6	74	<.3	8	9	637	2.37	4	<5	<2	2	64	<.3	2	<2	52	.76	.107	13	13	.38	187	.08	3	1.46	.02	.23	<2
L49+00E 60+50N	1	244	5	83	<.3	7	17	1019	3.50	7	<5	<2	2	106	<.3	<2	2	98	1.12	.138	11	13	1.10	157	.14	6	2.12	.02	.33	<2
L49+00E 60+00N	1	37	5	69	<.3	7	6	528	2.02	<2	<5	<2	<2	57	<.2	<2	<2	41	.64	.086	14	12	.24	181	.08	3	1.33	.01	.19	<2
L49+00E 59+50N	1	40	8	66	<.3	8	6	559	1.99	2	<5	<2	<2	76	<.2	<2	3	40	.86	.099	13	12	.25	193	.07	5	1.27	.01	.18	<2
L49+00E 59+00N	1	39	6	68	<.3	7	6	573	1.96	3	<5	<2	<2	80	<.5	<2	<2	39	.89	.105	13	13	.25	179	.07	4	1.28	.02	.16	<2
L49+00E 58+50N	1	35	7	76	<.3	9	6	578	1.95	<2	<5	<2	<2	59	<.2	2	3	39	.75	.115	13	12	.21	187	.07	3	1.30	.02	.15	<2
STANDARD C	20	59	35	125	6.4	68	32	957	3.91	38	18	7	36	52	17.3	16	18	57	.48	.089	39	58	.88	179	.08	26	1.78	.06	.15	11

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Appendix B

Method for Wet Geochem Gold Analysis

File #95-3481R, Feb. 19, 1996



**ACME ANALYTICAL LABORATORIES LTD.**

*852 E. Hastings St. Vancouver, B.C. Canada V6A 1R6*

*Phone: (604) 253-3158 Fax: (604) 253-1716*

*Toll Free: 1-800-990-ACME E-Mail: acme\_labs@minklink.bc.ca*

## **METHOD FOR WET GEOCHEM GOLD ANALYSIS**

### **Sample Preparation**

Soils and sediments are dried(60 deg. C) and sieve to -80 mesh.

Rocks and cores are crushed and pulverized to -100 mesh.

### **Sample digestion**

10g samples, ignite at 600 deg. C for four hours, digest with 3:1:2 mixture HCL:HNO<sub>3</sub>:H<sub>2</sub>O in hot water bath for one hour. 50ml digested solution is extracted into 10 ml MIBK (methyl-isobutyl ketone). The organic fraction is then analyzed for gold using Varian graphite furnace AA ( Spectr 10 plus). Detection for gold is 1 ppb.



Doug Hopper FILE # 95-3481R

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SAMPLE#	Au* ppb
L48+50E 63+00N	3
L48+50E 62+50N	6
L48+50E 62+00N	2
L48+50E 61+50N	<1
RE L48+50E 61+50N	1
L48+50E 61+00N	4
L48+50E 60+50N	1
L48+50E 60+00N	3
L48+50E 59+50N	3
L48+50E 59+00N	1
L48+50E 58+50N	1
L48+50E 58+00N	1
L49+00E 63+00N	2
L49+00E 62+50N	3
L49+00E 62+00N	4
L49+00E 61+50N	2
L49+00E 61+00N	5
L49+00E 60+50N	3
L49+00E 60+00N	8
L49+00E 59+50N	1
L49+00E 59+00N	1
L49+00E 58+50N	2
STANDARD AU-S	50

Sample type: SOIL PULP. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER BC V6A 1R6

PHONE(604)253-3158 FAX(604)253-1716



## GEOCHEMICAL ANALYSIS CERTIFICATE

Doug Hopper File # 95-3481R Page 1  
 203 - 828 W. Hastings St., Vancouver BC V6C 4C8



SAMPLE#	Au* ppb
YO #1	39

- SAMPLE TYPE: ROCK PULP      AU\* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.

DATE RECEIVED: FEB 14 1996 DATE REPORT MAILED:

Feb 19/96

SIGNED BY... C. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



SAMPLE#	Au* ppb
L43+00E 58+00N	5
L43+00E 57+50N	79
L43+00E 57+00N	9
L43+00E 56+50N	4
L43+00E 56+00N	5
L43+00E 55+50N	17
L43+00E 55+00N	21
L43+00E 54+50N	21
L43+00E 54+00N	4
L43+00E 53+50N	9
RE L43+00E 53+00N	3
L43+00E 53+00N	1
L43+00E 52+50N	11
L43+00E 52+00N	1
L44+00E 58+00N	8
L44+00E 57+50N	<1
L44+00E 57+00N	17
L44+00E 56+50N	9
L44+00E 56+00N	7
L44+00E 55+50N	6
L44+00E 55+00N	21
L44+00E 54+50N	108
L44+00E 54+00N	6
L44+00E 53+50N	5
L44+00E 53+00N	16
L44+00E 52+50N	48
L45+00E 58+00N	8
L45+00E 57+50N	3
L45+00E 57+00N	7
L45+00E 56+50N	50
L45+00E 56+00N	8
L45+00E 55+50N	20
L45+00E 55+00N	36
L45+00E 54+50N	10
L45+00E 54+00N	12
STANDARD AU-S	47

Sample type: SOIL PULP. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Au* ppb
L45+00E 53+50N	9
L45+00E 53+00N	20
L46+00E 63+00N	1
L46+00E 62+50N	1
L46+00E 62+00N	<1
L46+00E 61+50N	<1
L46+00E 61+00N	<1
L46+00E 60+50N	2
L46+00E 60+00N	<1
L46+00E 59+50N	1
L46+00E 59+00N	4
L46+00E 58+50N	19
L46+00E 58+00N	13
L46+00E 57+50N	4
L46+00E 57+00N	9
L46+00E 56+50N	12
L46+00E 56+00N	10
L46+00E 55+50N	3
RE L46+00E 55+50N	3
L46+00E 55+00N	5
L47+00E 63+00N	<1
L47+00E 62+50N	<1
L47+00E 62+00N	1
L47+00E 61+50N	<1
L47+00E 61+00N	1
L47+00E 60+50N	1
L47+00E 60+00N	1
L47+00E 59+50N	2
L47+00E 59+00N	15
L47+00E 58+50N	8
L47+00E 58+00N	17
L47+00E 57+50N	5
L47+00E 57+00N	9
L47+00E 56+50N	14
L47+00E 56+00N	42
STANDARD AU-S	46

Sample type: SOIL PULP. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Appendix C

- 2 Maps, 1:50 or 1cm = 50 meters scale  
1. Copper-Gold Map (geo-chem)  
2. Lead-Zinc Map (geo-chem)

