TECHNICAL REPORT

On work performed by

Gordon G Richards
&
Dave Bennett

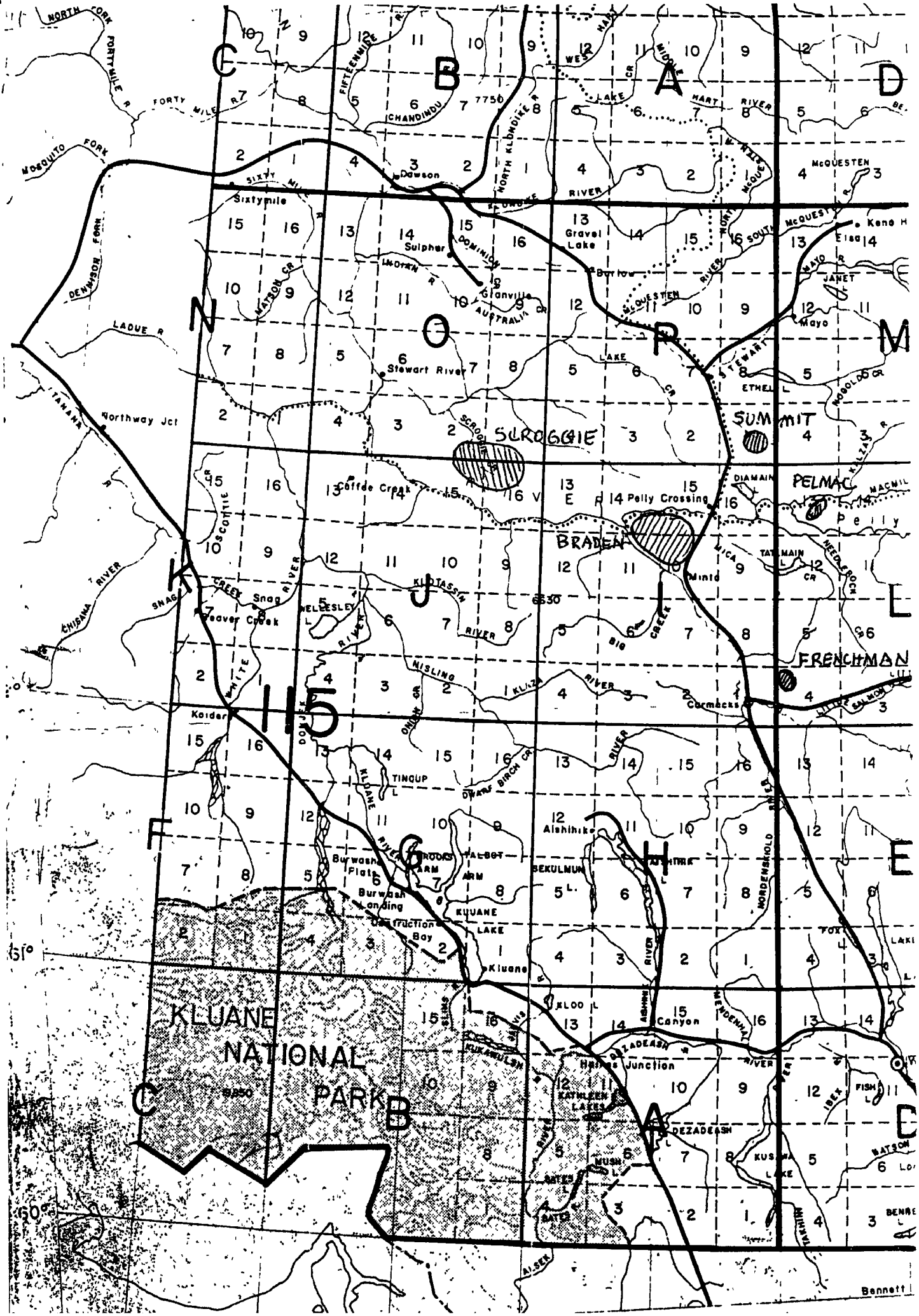
As partial fulfillment of their
2001 GRASSROOTS PROSPECTING PROGRAM
under the
YUKON MINING INCENTIVES PROGRAM

In AREAS

Frenchman 105L/04
Braden 115I/10,11,14 &15
Pelmac 115I/16
Summit 115P/01
Scroggie 115J/15 & 16, 115O/01 & 02

Dated
October 15, 2001

By
Dave Bennett
&
Gord Richards


NORTH FORK
FORTYMILE R
FORTY MILE R
MOSQUITO FORK
SIXTY MILE R
Sixtymile
DENNISON FORK
LADUE R
TANANA R
Northway Jct
SCOTTIE CR
CHISANA RIVER
SNAG CREEK
Snag
Beaver Creek
WHITE RIVER
KELLEY RIVER
KELLESLEY L
KLUTASSIN RIVER
NISLING RIVER
Kaider
DONJEK RIVER
ONION CR
TINQUP L
KLUANE RIVER
Burwash Plain
Burwash Landing
Destruction Bay
KLUANE LAKE
Kluane
KLUANE NATIONAL PARK
SILVER
DAVIS
KLUKSHU LK
Haines Junction
KATHLEEN LAKES
DEZADEASH
DEZADEASH R
RUSH L
BATES L
BATES
ASHIHNIK R
Canyon
KLOO L
SEKULMUN L
KLUANE L
RODGERS ARM
TALBOT ARM
DWARF BIRCH CR
Alshihike
FIFTEENMILE R
CHANDINDU
7750
Dawson
NORTH KLONDIKE R
KLONDIKE RIVER
WEST HART R
MIDDLE HART R
HART RIVER
McQUESTEN R
McQUESTEN
Keno H
Elsa
SOUTH McQUESTEN RIVER
FORT McQUESTEN
Gravel Lake
Sulphur
LAKEMEN R
DOMINION
Glenville
AUSTRALIA CR
Burrow
MAYO R
JANET
Mayo
STEWART RIVER
LAKE
ETHEL L
NODOLOO CR
SUMMIT
KLAZAS R
SCROGGIE
SCROGGIE CR
Coffee Creek
Selly Crossing
DIAMAIN
PELMAC
MACMILLAN R
Selly
BRADEN
MICA
TATAMAIN L
NEEDLEROCK CR
Minto
BIG CREEK
FRENCHMAN
WILLOW SALMON R
Carmacks
KLAZAS RIVER
HOMESTAKE
NORDENSKIOLD R
FOX
LAKE
ASHIHNIK RIVER
NENDENHAL
IBEX
FISH L
KUSKULANA LAKE
BATSON
BENNETT L
Bennett
A
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O
P
115
61°
60°

The following is a summary of our prospecting activity for 2001.

Day	Date	Activity
1	May 31	Buy supplies Whs, mob to Pelly Crossing.
2	June 1	Sample Braden Area.
3	2	Sample Braden Area.
4	3	Sample Braden Area.
5	4	Sample Braden Area
6	5	Sorted gear & packed camp into Summit L & set-up camp.
7	6	Sampled drainage east of camp.
8	7	Sampled drainage east of camp.
9	8	Sampled drainage north of camp.
10	9	Packed samples and camp out. Drove Pelly.
11	10	Sampled old drill camp area on old Pelly rd Braden area.
12	11	ATV packed in camp and sampled Braden area.
13	12	ATV sampled Braden area.
14	13	ATV sampled Braden area.
15	14	ATV sampled Braden area & packed out camp. Pelly.
16	15	drove Dawson, bought supplies flew Scroggie.
17	16	Sampled upper Scroggie.
18	17	Sampled upper Scroggie.
19	18	Sampled upper Scroggie.
20	19	Sampled upper Scroggie.
21	20	Sampled upper Scroggie.
22	21	Sampled upper Scroggie.
23	22	Sampled Stevens Ck.
24	23	Sampled Stevens Ck.
25	24	flew Dawson, sorted gear, drove Pelly Crossing.
26	25	Sampled Pelmac Ridge south.
27	26	Sampled Pelmac Ridge south.
28	27	Sampled Pelmac Ridge north.
29	28	Sampled Frenchman
30	29	Sampled Braden Canyon Area.
31	30	Drove Whs. Shipped samples. Looked at core Bostock Lib.

Dave Bennett

Gord Richards

The five areas prospected were all evaluated with an emphasis on geochemical surveys. Silt, rock, till and soil samples were collected throughout the areas as itemized in the following table.

AREA	SILTS		ROCKS		TILLS		SOILS	
	gr	db	gr	db	gr	db	gr	db
Frenchman	0	2	0	1	13	22		
Braden	0	8	0	2	73	89		2
Pelmac	2	6	4	1	19	21		
Summit	2	2	0	0	29	31		
Scroggie	18	10	3	0			39	56
TOTALS	22	28	7	4			39	58

TOTAL = 455

Silt samples were collected from running streams by either collecting fine sediment with a scoop directly from the stream or by screening through a –25 mesh sieve into a plastic basin in order to obtain a sample containing about 100 gm of –80 mesh material for analyses. Attached field notes describe when screening process was used. Samples were collected in appropriately numbered gusseted kraft sample bags.

Rock samples were made of three to seven rock chips from float or outcrop as described in field notes and small enough to fit into a gusseted kraft sample bag.

Till samples were collected by use of an auger from depths as much as one and one-half meters. This was necessary because of abundant loess throughout all areas except Scroggie Ck, which was unglaciated, and therefore lacking till. As samples were ultimately to be screened to –150 mesh in the lab, one to three kg of till material was collected depending on coarseness of the sample and placed into numbered kraft bags. Coarser sandy samples required bigger field samples in order to achieve this goal.

Soil samples were collected with a scoop from pits dug by mattock or shovel or by auger from C-horizon wherever possible, although some B-horizon material was sometimes included in the sample. Samples were placed in numbered gusseted kraft bags for ultimate analysis of the –80 mesh fraction.

Control of sample locations was by hip chain and compass tied in with GPS locations and the use of 1:50,000 topo maps.

All samples were analyzed at Acme Analytical laboratories, 852 East Hastings St., Vancouver, B.C. Rock samples were crushed and pulverized, all other samples were dried and sieved (silts & soils –80 mesh, tills –150 mesh). Samples from Frenchman, Pelmac and Summit Areas were analyzed by Acme's 1DX Analysis, a 35-element ICP procedure on a one gm sample digested in hot Aqua Regia. Samples from Braden and Scroggie Areas were analyzed by Acme's Ultratrace ICP-MS Analysis, a 40 element (with Os, Pt, Pd added) ICP – MS (mass spectrometry) procedure on a 30 gm sample digested in Aqua Regia. Results are included below.

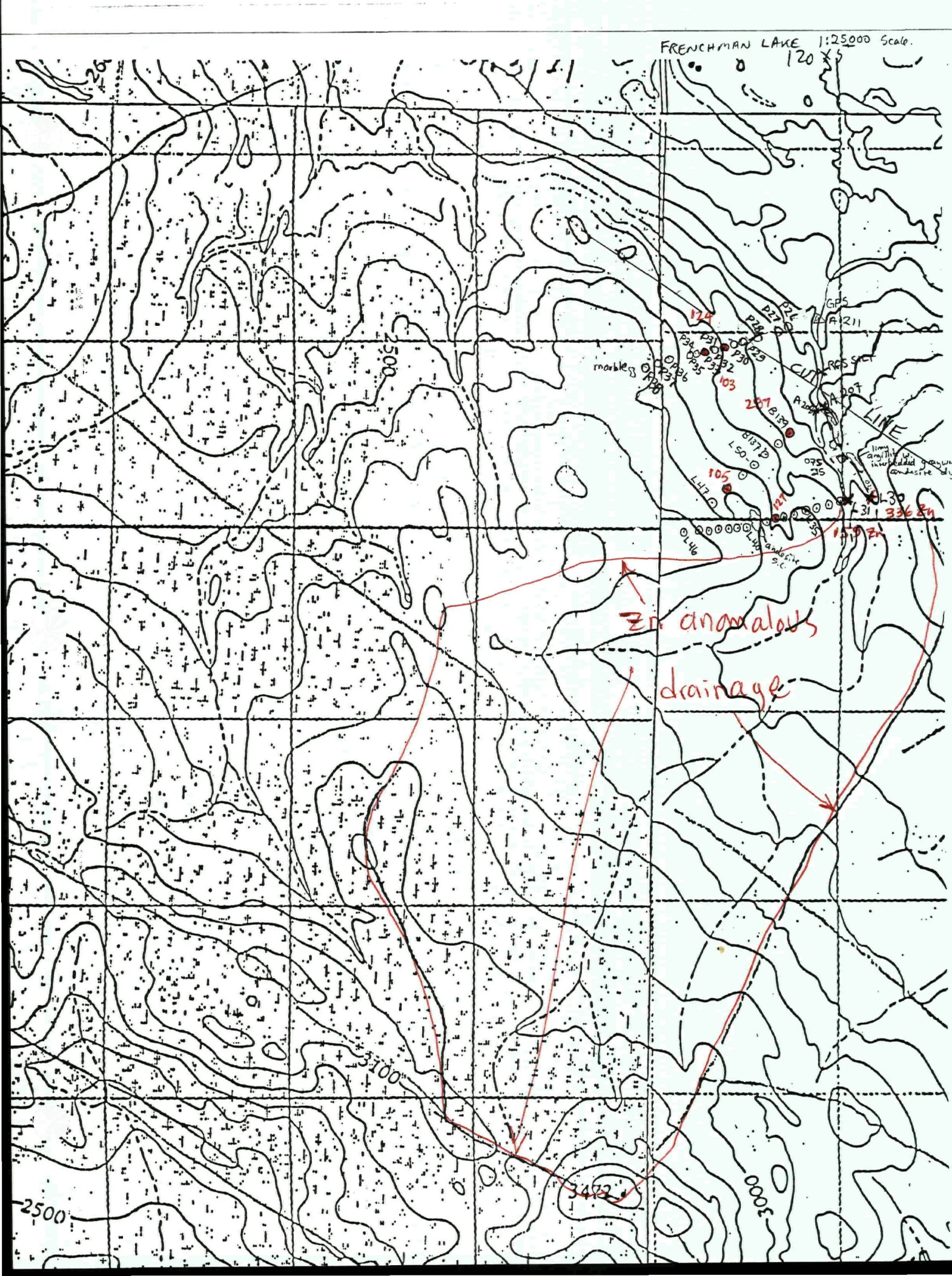
Following is a discussion of the results for each of the five areas studied. On the accompanying maps, only results interpreted to be significantly anomalous are shown.

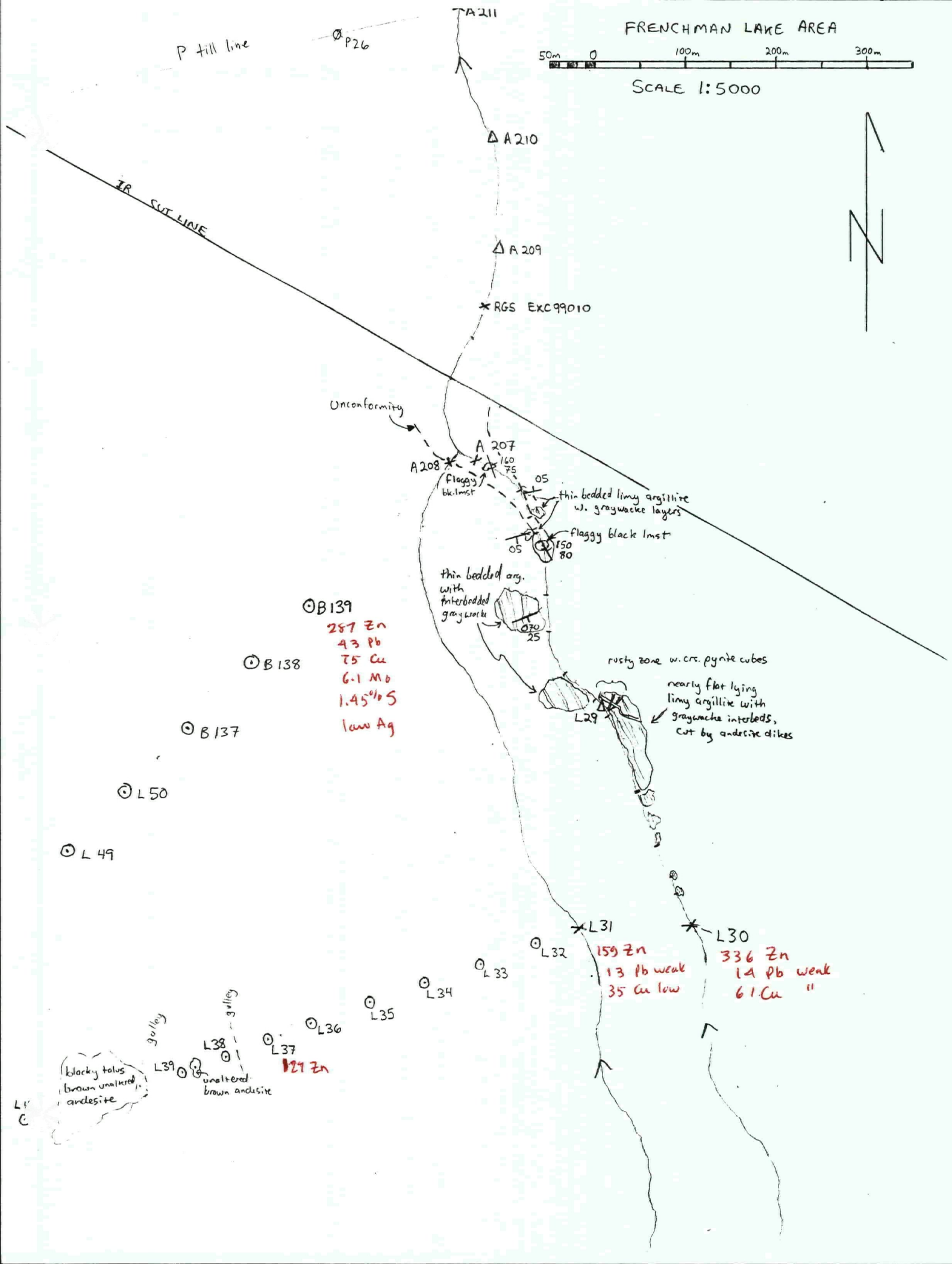
FRENCHMAN

Access was made by foot from the road at the north end of Frenchman Lake for the traverses as shown on the map below.

Anomalous Zn, Pb and Cu in RGS sample no 99010 and our previous stream sediment sampling remains unexplained. Till sample lines placed across ice failed to show an anomalous pattern for these elements. Stream sediment samples L30 and L31 were anomalous for Zn and weakly for Pb and Cu and may indicate the source lies further upstream to the south.

Outcrops of limy argillite with interbeds of grewacke and locally cut by andesite dykes were mapped as shown.


FRENCHMAN LAKE 1:25000 Scale.
120
GPS
A-211
P24
P27
P26
P29
P30
P31
P32
P33
P34
P35
P36
P37
P38
marble
124
103
287
B-139
B-137
L50
LH7
105
127
L30
L31
336 Zn
L46
Lapp
andesite
S.C.
CUT
RGS SECT
A-207
LINE
075
25
Zn anomalous
drainage
2500
3100
3472
3000
2500


FRENCHMAN LAKE AREA
50m 0 100m 200m 300m
SCALE 1:5000
P till line
P26
A211
A210
A209
IR SUT LINE
RGS EXC99010
Unconformity
A208
A207
160
75
Flaggy blk.lmst
05
thin bedded limy argillite w. graywacke layers
flaggy black lmst
05
150
80
thin bedded arg. with interbedded graywacke
070
25
rusty zone w. crs. pyrite cubes
nearly flat lying limy argillite with graywacke interbeds, cut by andesite dikes
L29
B139
287 Zn
43 Pb
75 Cu
6.1 Mo
1.45% S
low Ag
B138
B137
L50
L49
L31
L30
336 Zn
14 Pb weak
61 Cu "
L32
159 Zn
13 Pb weak
35 Cu low
L33
L34
L35
L36
L37
129 Zn
L38
L39
gulley
gulley
blocky talus brown unaltered andesite
unaltered brown andesite

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GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon PROJECT FRENCHMAN File # A102159 Page 1

6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Mo 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 %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm
B-137	2.2	43	9	70	.1	25	10	393	2.49	11	2	<2	3	63	.3	1.3	1.1	55	1.35	.078	17	27	.49	169	.033	5	1.18	.023	.08	1	<1	6.6	<1	<.02	4
B-138	1.4	38	9	57	<.1	20	9	457	1.95	10	2	<2	4	88	.3	<.5	<.5	39	2.86	.091	36	23	.54	174	.041	6	.91	.026	.08	<1	<1	4.8	<1	<.02	4
B-139	6.1	75	43	287	.2	27	18	871	4.48	11	4	<2	8	158	2.8	<.5	<.5	30	3.38	.132	44	10	.79	82	.009	7	1.15	.025	.14	1	<1	5.7	1	1.45	6
L-32	.8	40	7	41	.2	24	8	255	1.97	7	2	<2	3	68	<.2	<.5	<.5	45	1.26	.097	12	25	.63	132	.045	6	1.02	.024	.07	<1	<1	4.5	<1	.03	3
L-33	1.3	33	9	52	<.1	24	10	364	2.58	11	3	<2	6	44	<.2	1.2	<.5	61	.62	.060	20	34	.55	188	.057	4	1.50	.020	.07	1	<1	7.2	<1	<.02	5
L-34	2.5	61	11	89	.1	34	12	541	2.89	18	2	<2	4	88	.6	.6	<.5	56	2.29	.092	28	32	.59	188	.035	4	1.26	.023	.09	2	<1	7.2	<1	.03	5
L-35	2.5	65	10	61	<.1	33	12	402	3.88	31	2	<2	7	33	.3	1.2	<.5	68	.42	.055	21	39	.43	157	.039	4	1.38	.018	.07	1	<1	8.9	1	<.02	4
L-36	2.3	51	8	55	<.1	26	10	701	2.46	20	1	<2	4	140	.3	<.5	<.5	55	6.61	.089	77	26	.47	177	.042	5	.88	.027	.07	<1	<1	7.4	<1	<.02	3
L-37	2.3	50	14	127	.1	29	14	555	3.56	11	2	<2	5	47	.3	1.4	<.5	42	.78	.068	24	21	.39	154	.015	2	1.14	.015	.12	1	<1	5.6	<1	.04	4
L-38	2.0	43	18	76	.1	13	9	542	2.42	8	1	<2	7	97	.2	<.5	<.5	27	6.04	.089	85	9	.20	122	.003	3	.53	.012	.08	<1	<1	4.9	<1	.03	2
L-39	2.2	57	7	69	.1	26	10	464	2.69	16	1	<2	3	115	.5	<.5	1.4	57	3.86	.078	47	27	.45	158	.031	3	1.07	.019	.07	<1	<1	7.4	<1	<.02	4
L-40	1.7	56	6	99	.1	21	8	415	2.18	17	<1	<2	2	166	.5	1.1	<.5	47	6.63	.079	71	21	.50	154	.028	5	.91	.018	.07	<1	<1	6.1	<1	<.02	3
RE L-40	1.6	55	6	95	.1	22	8	410	2.16	15	<1	<2	2	164	.5	<.5	<.5	46	6.48	.079	69	21	.49	153	.028	3	.89	.018	.06	<1	<1	6.1	<1	<.02	3
L-41	1.7	52	5	57	<.1	22	9	465	2.18	16	<1	<2	2	172	.2	<.5	<.5	47	7.20	.079	76	21	.50	135	.027	2	.91	.019	.06	<1	<1	6.2	<1	<.02	3
L-42	.7	35	7	38	<.1	21	8	352	2.07	6	2	<2	5	44	<.2	.6	<.5	52	.67	.050	17	26	.53	186	.070	3	1.17	.027	.06	1	<1	5.4	1	<.02	4
L-43	2.0	52	8	59	<.1	30	11	485	2.77	16	2	<2	4	64	<.2	1.3	<.5	62	1.19	.082	18	30	.47	161	.041	3	1.23	.021	.07	<1	<1	8.5	<1	<.02	4
L-44	2.0	45	8	48	<.1	25	9	418	2.55	17	1	<2	3	119	.2	<.5	<.5	57	4.18	.084	48	27	.49	136	.044	2	1.00	.019	.07	1	<1	6.7	<1	<.02	3
L-45	1.6	33	3	37	<.1	21	6	305	1.61	15	<1	<2	2	234	.3	<.5	<.5	33	13.94	.059	128	15	.40	232	.021	3	.58	.021	.04	<1	<1	4.5	<1	<.02	2
L-46	2.1	46	6	47	<.1	21	8	390	2.24	16	<1	<2	2	175	.2	<.5	.8	46	7.07	.071	73	21	.51	130	.032	3	.85	.028	.06	<1	<1	5.8	<1	<.02	3
L-47	1.4	46	8	53	<.1	24	9	344	2.71	14	2	<2	3	60	<.2	<.5	<.5	61	.94	.054	20	30	.55	204	.042	3	1.34	.021	.07	1	<1	7.9	<1	<.02	4
L-48	2.3	58	13	105	.2	28	12	618	2.85	13	2	<2	4	75	.2	1.0	<.5	48	1.79	.089	25	23	.49	178	.020	<1	1.22	.018	.09	2	<1	7.6	1	.03	4
L-49	1.4	35	9	53	<.1	24	9	433	2.82	12	3	<2	5	42	.2	<.5	<.5	58	.56	.060	27	29	.43	165	.042	2	1.19	.021	.07	1	<1	9.1	<1	<.02	3
L-50	1.5	52	9	59	<.1	23	9	509	2.34	12	2	<2	3	84	<.2	.5	<.5	52	1.78	.087	21	25	.52	159	.034	3	1.05	.021	.07	1	<1	7.7	<1	<.02	3
P-26	2.9	73	22	113	.4	27	10	468	2.79	11	2	<2	3	155	.4	<.5	<.5	30	4.22	.104	59	12	.50	185	.005	3	.87	.011	.09	1	<1	4.5	<1	.09	4
P-27	3.7	47	21	105	<.1	19	9	460	3.70	10	2	<2	5	59	.4	1.4	.6	40	.66	.058	45	16	.40	144	.008	<1	.95	.012	.10	1	<1	6.4	3	.04	4
P-28	2.3	80	11	75	.3	38	12	418	2.82	18	2	<2	2	109	.4	<.5	.8	51	4.01	.094	46	27	.72	189	.031	4	1.08	.021	.11	1	<1	6.2	<1	.05	4
P-29	1.7	40	13	60	<.1	24	9	663	2.67	10	3	<2	5	51	<.2	1.3	<.5	57	.72	.090	25	26	.60	151	.044	4	1.17	.027	.09	1	<1	6.7	<1	.02	4
P-30	1.7	58	8	47	<.1	27	8	325	2.40	17	1	<2	3	125	<.2	<.5	<.5	50	4.32	.086	49	26	.58	207	.039	3	.95	.025	.07	<1	<1	6.4	<1	.02	3
P-31	3.5	56	17	124	.1	29	12	574	3.14	10	3	<2	4	94	.7	.7	<.5	52	2.21	.079	32	23	.58	235	.013	1	1.42	.020	.12	1	<1	6.5	1	.03	5
P-32	2.0	73	9	67	.3	30	9	365	2.51	15	1	<2	1	146	<.2	<.5	<.5	46	4.28	.105	51	23	.49	149	.020	3	1.00	.018	.09	<1	<1	6.2	<1	.04	4
P-33	3.9	91	15	103	.3	51	10	368	3.08	12	<1	<2	1	190	.9	.8	<.5	42	5.66	.106	67	22	.87	185	.009	3	1.39	.014	.11	1	<1	6.1	<1	.10	6
P-34	1.5	56	6	68	<.1	20	10	553	2.67	10	<1	<2	2	158	.4	.5	.5	61	7.72	.086	79	24	.70	207	.066	2	1.02	.028	.09	<1	<1	6.4	<1	<.02	4
P-35	1.6	69	9	55	<.1	28	10	450	2.57	21	<1	<2	3	153	<.2	.9	<.5	53	5.54	.087	59	27	.69	193	.037	3	1.03	.023	.09	<1	<1	7.0	<1	.02	4
P-36	3.8	65	11	68	.1	29	11	467	2.52	19	1	<2	2	195	.4	.6	1.0	53	4.90	.106	56	26	.67	128	.029	3	1.11	.024	.07	<1	<1	7.2	<1	.03	4
STANDARD C3	26.3	68	34	172	6.0	33	11	767	3.12	56	24	3	21	28	24.6	14.1	23.6	80	.56	.088	20	169	.62	140	.086	20	1.85	.037	.16	15	1	4.1	<1	.02	7
STANDARD G-2	1.8	3	3	44	<.1	6	4	558	1.96	<1	4	<2	5	71	<.2	<.5	<.5	44	.67	.097	9	80	.66	211	.145	6	1.05	.076	.52	3	<1	2.6	<1	<.02	5

GROUP 1DX - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY OPTIMA ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: TILL S150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 10 2001 DATE REPORT MAILED: July 23/01 SIGNED BY. C. T. D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

SAMPLE#	Mo 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 %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm
P-37	1.5	53	8	58	<.1	26	9	433	2.62	23	<1	<2	4	135	.2	<.5	<.5	43	5.17	.084	61	20	.50	130	.026	6	.81	.011	.03	<1	<1	6.2	<1	.03	3
P-38	1.6	56	7	51	<.1	27	9	386	2.67	18	<1	<2	3	119	<.2	<.5	.8	48	4.02	.082	52	24	.47	138	.033	4	.79	.020	.07	<1	<1	6.5	<1	<.02	3
RE P-38	1.6	57	8	53	<.1	27	8	370	2.53	18	<1	<2	3	115	.4	<.5	.5	46	3.85	.082	49	24	.45	135	.031	6	.75	.019	.06	<1	<1	6.1	2	<.02	2
STANDARD C3	26.2	66	34	160	5.8	33	11	736	3.19	55	24	3	21	27	23.5	14.7	23.9	79	.57	.085	18	167	.63	142	.090	21	1.76	.037	.15	15	1	4.2	2	.02	7
STANDARD G-2	1.9	3	2	41	<.1	6	4	518	2.03	<1	5	<2	4	70	<.2	<.5	1.1	42	.67	.098	8	80	.65	216	.141	4	.95	.071	.48	2	<1	2.5	2	<.02	5

Sample type: TILL S150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data K FA ___

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GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon PROJECT FRENCHMAN File # A102160

6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Mo 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 %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm
L-29	3.7	43	2	63	.2	3	1	267	4.61	<1	<1	<2	5	69	<.2	.7	2.4	93	.26	.011	8	12	1.23	25	.010	10	1.56	.062	.12	<1	<1	3.7	4	.09	<1

GROUP 1DX - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY OPTIMA ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK R150

DATE RECEIVED: JUL 10 2001 DATE REPORT MAILED: July 23/01 SIGNED BY. C. Toye .....D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)-1716
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GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon PROJECT FRENCHMAN File # A102161

6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Mo 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 %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm
L-30	4.5	61	14	336	<.5	74	25	1713	4.11	13	1	<2	4	118	3.7	<.5	<.5	57	1.24	.089	11	35	1.16	228	.011	10	1.65	.016	.15	<1	<1	6.8	3	.16	9
L-31	2.4	35	13	159	<.5	26	11	982	2.81	10	1	<2	3	73	1.4	<.5	<.5	38	.79	.094	15	16	.57	425	.014	9	.99	.017	.10	<1	1	3.6	2	.09	6
RE L-31	2.4	34	13	156	<.5	25	11	944	2.76	8	1	<2	2	71	1.4	<.5	<.5	37	.77	.095	14	15	.56	431	.015	6	.98	.017	.10	<1	<1	3.4	<1	.10	6
STANDARD C3	28.4	67	33	175	6.3	37	12	785	3.21	63	24	3	23	28	24.5	15.4	24.6	85	.54	.092	19	180	.61	155	.089	20	1.83	.045	.18	15	1	4.3	1	.01	7

GROUP 1DX - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY OPTIMA ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SILT SS80 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 10 2001 DATE REPORT MAILED: July 24/01 SIGNED BY: C. Leong D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data d FA

BRADEN

Access to the area was made by truck along roads leading west from the Klondyke Highway, by ATV beyond the driveable portions of these roads and by boat down the Pelly River from Pelly Crossing.

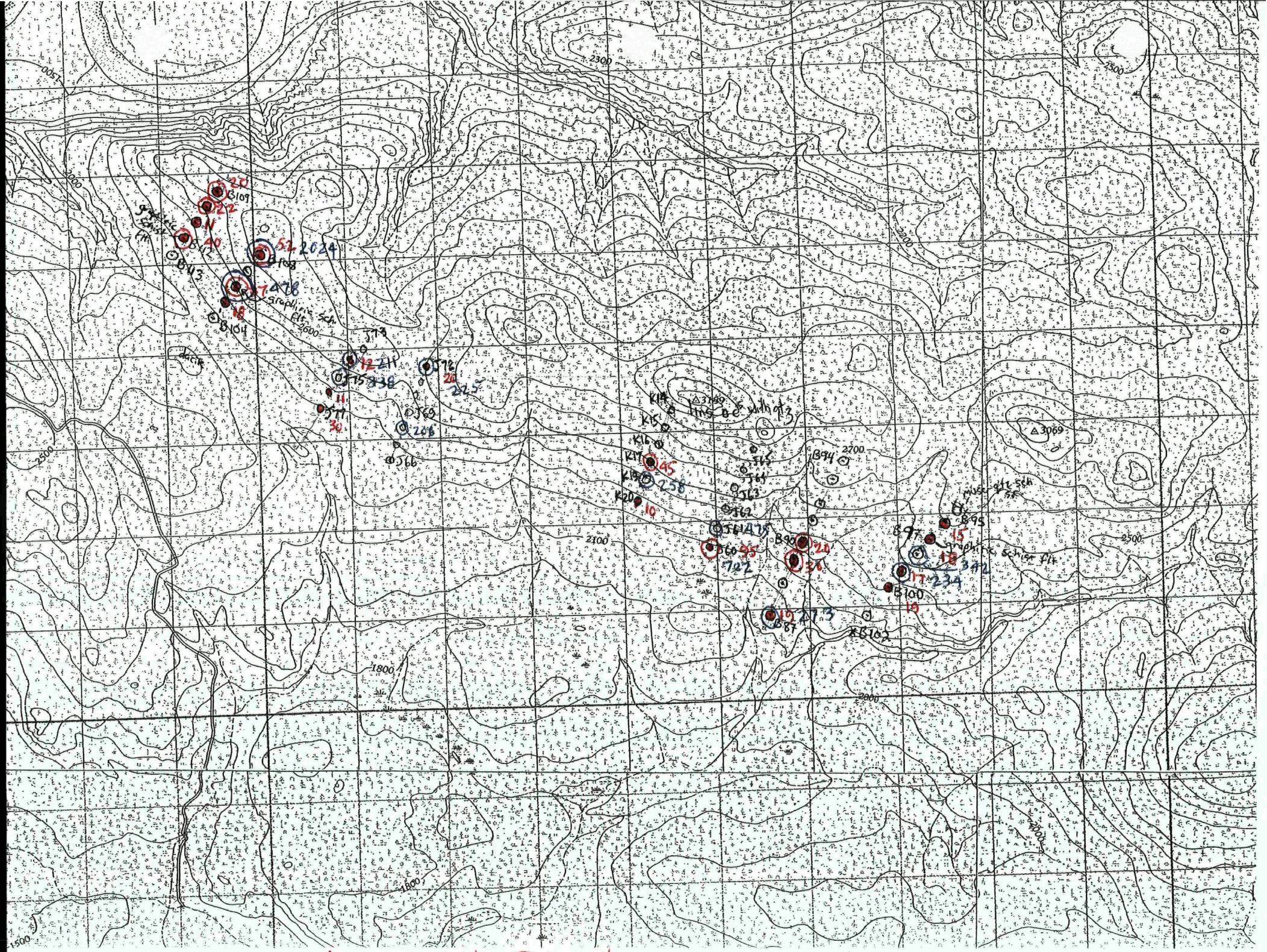
The area was prospected for carbonate associated Zn-Pb-Cu-Ag mineralization as well as shale hosted Ni-Zn-Mo-PGE which were indicated from our previous work. RGS data also indicated anomalous Zn-Pb-Cu values in stream sediments. No strong positive results were indicated for these deposit types. Graphitic shale was encountered in basal tills and a few outcrops as well as drill core examined from Minfile occurrence 026. The tills were variably anomalous for Ni, Zn, Mo and occasionally a few other elements but PGE values were all low. Distribution of graphitic shale is in our notes.

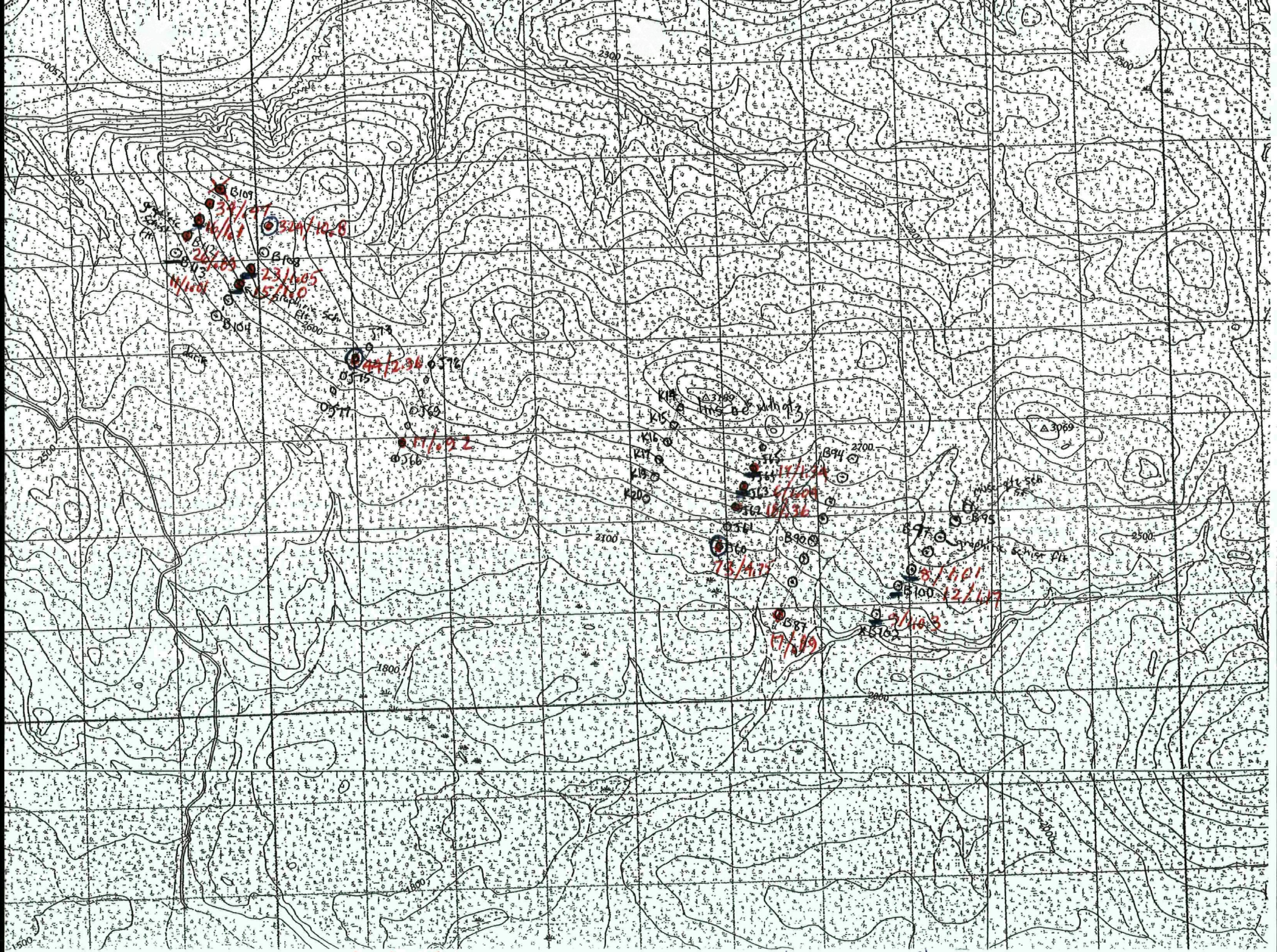
A single sample J-21 was anomalous for Cu-89ppm, Pb-158ppm, Zn-351ppm, Ag-1812ppb, Au-29.8ppb and Hg-375ppb from material described as muscovite rich brown till. 200-m north, the next sample encountered black graphitic shale and 200 m south, the previous sample encountered frozen grey and black till. The sample was collected 500 m north of the Klondyke Highway and could easily be checked for mineralization by trenching.

The most interesting pattern of anomalous geochemistry was defined from samples collected along the southwest side of a northwest trending ridgeline underlain at the higher elevations by massive limestone. Between J65 and K14 the limestone contained several white quartz veins up to one-half metres wide as well as abundant silica breccia and irregular quartz veins. These exposures and abundant angular rubble were not examined in any detail, relying instead on the till samples to provide a preliminary evaluation of gold potential. Samples were anomalous for Au-As-Sb-Ag suggestive of an epithermal mineralized occurrence with some anomalous Ni, Mo, Pb, and Zn. Spotty high Ca, Mg and fairly persistent Ba are probably related to underlying carbonate rich geology. It is important to realize the anomalous patterns are defined from tills, which are diluted with much foreign material derived from distant rocks. However, many of the tills seemed to be monolithic, believed to be derived from local underlying bedrock. Two types of till were seen in the Braden area. Along the Klondyke highway, exposures basal till with a variety of foreign rock types are exposed in many road cuts. This till is

probably McConnell Age. The more common till is one with more uniform rock type with fragments related to local outcrops. Fragments are often decomposed partially or completely which causes further complication with geochemical interpretation as these fragments are easily friable and have undoubtedly contributed, sometimes significantly, to the minus 150 mesh screened portion of samples thereby diluting anomalous values. Therefore, the anomalous patterns for Au, Ag, As, Sb and others should only be used as a general guideline for determining the area of interest. In this regard the area is clearly open in all directions from the eight northeast trending sample lines. Carmacks Group volcanics do provide a limit for geochemical exploration southwest of the pronounced northwest trending linear immediately southwest of the till lines.


PELLY
RIVER
YUKON
RIVER
Fort Selkirk
Minto
LE ME


Au • 10 – 19 ppb ⊙ ≥ 20 ppb
○ Ag ≥ 200 ppb



● As ≥ 15 ppm

– 1 ~ 1.99 ppm Sb 0 > 2 ppm Sb

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GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon PROJECT BRADEN File # A102151 Page 1
6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Os ppb	Pd ppb	Pt ppb	Sample gm
B-1	3.55	88.11	11.08	69.8	94	90.8	22.1	740	3.27	10.5	.6	8.1	4.7	47.9	.22	.95	.18	48	1.21	.085	14.1	48.5	.68	236.2	.040	1	.90	.014	.11	<.2	4.5	.12	.03	34	.6	.05	2.8	<5	<10	<2	30
B-2	2.01	58.32	7.33	52.9	78	90.9	17.1	524	2.87	5.9	.5	6.2	3.9	40.6	.09	.49	.13	50	1.05	.094	12.9	66.8	.90	181.4	.038	2	1.08	.012	.09	<.2	4.3	.10	.02	26	.3	.04	3.2	<5	<10	<2	30
B-3	2.42	55.28	9.39	50.2	65	73.7	17.0	457	3.01	7.6	.7	11.1	4.9	33.1	.07	.61	.17	54	.48	.065	16.2	51.5	.73	226.3	.040	2	1.16	.009	.09	<.2	4.4	.08	.03	22	.4	.02	3.6	<5	<10	<2	30
B-4	1.60	54.03	6.58	52.9	36	48.4	13.8	425	3.09	8.7	.7	12.6	4.7	28.6	.05	.65	.11	69	.42	.067	16.3	44.5	.74	231.4	.059	1	1.32	.016	.08	<.2	5.3	.08	.01	34	.3	.02	4.1	<5	<10	<2	30
B-6	2.34	66.61	18.69	74.6	87	52.6	13.5	727	2.62	7.0	.6	9.2	6.5	30.8	.15	.44	.26	38	.74	.058	16.6	29.9	.77	201.3	.043	1	1.11	.005	.24	<.2	3.7	.25	.02	31	.4	.04	3.9	<5	<10	<2	30
B-7	2.86	59.32	9.04	52.8	41	46.7	13.3	454	3.13	8.2	.9	7.4	7.2	29.0	.06	.70	.17	61	.34	.048	26.4	49.5	.75	319.6	.083	1	1.46	.009	.13	<.2	5.9	.12	.01	43	.4	.02	4.5	<5	<10	<2	30
B-8	2.36	44.38	10.35	56.9	61	79.0	14.3	404	3.19	8.0	.6	15.1	6.4	37.5	.05	.48	.18	63	.54	.036	17.7	77.3	.92	373.6	.068	1	1.63	.015	.08	<.2	5.4	.13	.02	43	.4	.03	4.9	<5	<10	<2	30
B-10	2.87	33.04	10.13	50.5	57	32.5	10.0	322	2.89	10.2	.5	11.4	4.2	21.3	.06	.78	.13	67	.30	.041	10.6	40.7	.52	200.6	.069	2	1.41	.005	.09	<.2	3.0	.09	.02	20	.4	.03	4.0	<5	<10	<2	30
B-11	.91	33.35	5.96	65.3	49	26.0	19.0	333	4.03	7.4	.4	9.9	3.0	30.3	.05	.49	.10	133	.48	.103	8.2	33.9	1.25	193.1	.159	2	1.93	.007	.60	<.2	4.2	.20	.02	14	.3	.02	7.5	<5	<10	<2	30
B-12	4.59	64.08	8.71	68.6	137	90.8	17.8	364	3.50	9.1	.9	5.9	7.0	22.4	.10	.70	.19	80	.35	.040	14.3	81.0	.90	190.5	.074	3	1.74	.007	.16	<.2	5.7	.13	.02	19	.9	<.02	5.5	<5	<10	<2	30
B-14	1.97	66.36	5.67	54.5	93	138.5	16.9	299	2.93	5.8	.7	10.0	4.7	18.6	.04	.61	.12	73	.41	.026	17.9	136.9	1.14	215.7	.099	1	1.60	.013	.24	<.2	5.8	.16	.03	37	.4	.03	5.0	<5	<10	<2	30
B-16	6.63	90.18	14.64	87.1	231	162.0	22.2	708	3.33	16.2	1.4	4.8	5.8	184.2	.30	1.24	.25	33	6.75	.058	20.4	66.2	1.01	281.0	.031	3	.89	.015	.11	<.2	3.4	.22	.10	18	.9	.06	3.0	<5	10	2	30
B-17	2.86	58.69	8.64	58.8	129	82.0	14.7	536	2.43	7.4	1.2	4.3	4.5	240.2	.30	.89	.22	35	10.86	.068	13.9	45.5	.95	475.1	.039	2	.87	.013	.12	<.2	3.3	.14	.05	38	.6	.03	3.4	<5	<10	<2	30
B-18	1.51	237.35	1.93	133.2	19	109.4	62.6	1017	10.48	1.4	.4	4.2	2.2	44.2	.07	.09	.06	348	.76	.194	17.3	66.5	3.96	271.7	.141	<1	4.94	.003	.43	<.2	13.5	.54	.01	15	.4	.02	22.3	<5	<10	<2	30
B-19	13.62	89.08	16.69	77.6	40	107.2	15.2	307	3.20	.6	1.0	4.7	8.2	27.2	.10	.26	.32	29	.22	.070	22.6	40.9	.84	109.8	.065	1	1.04	.001	.08	<.2	6.1	.11	.03	14	1.6	.08	3.2	<5	<10	<2	30
B-20	4.88	151.68	4.38	104.2	74	131.3	28.7	1039	7.32	4.7	1.8	9.4	8.3	38.3	.07	.55	.16	42	.27	.078	41.8	34.3	.26	345.2	.005	6	.96	.003	.12	<.2	13.0	.27	.02	50	2.0	.06	2.4	<5	<10	3	30
RE B-25	.39	33.46	3.31	121.9	57	18.5	36.0	876	6.00	1.1	.3	6.0	.7	76.8	.04	.13	.03	211	3.98	.202	5.3	15.8	2.72	136.7	.102	<1	2.60	.007	.25	<.2	11.1	.09	.04	7	.2	<.02	10.9	<5	<10	<2	30
B-22	.75	13.06	3.59	39.0	37	981.8	69.8	891	3.86	56.5	.3	21.7	1.6	17.5	.09	.63	.10	44	.20	.031	5.3	893.5	5.74	112.0	.029	7	.89	.004	.04	<.2	4.6	.05	.01	10	<.1	.05	2.8	<5	<10	2	30
B-23	.22	24.35	2.80	229.3	31	55.5	38.3	1215	5.83	1.1	.1	8.8	1.2	39.1	.13	.05	.05	207	2.22	.104	5.5	149.8	2.42	27.4	.001	<1	2.95	.004	.01	<.2	13.0	<.02	.02	<5	<.1	<.02	12.1	<5	<10	3	30
B-24	.67	196.26	3.02	100.8	29	25.6	32.6	710	4.43	1.7	.3	21.0	1.7	27.9	.01	.17	.04	86	.37	.090	9.0	27.6	1.84	73.3	.065	<1	2.02	.002	.05	<.2	6.2	.02	<.01	<5	.1	.02	7.0	<5	<10	<2	30
B-25	.39	34.01	3.36	120.9	50	18.2	33.4	891	5.99	1.4	.3	6.6	.6	78.0	.02	.12	.03	208	3.98	.218	5.5	14.4	2.70	135.0	.101	1	2.58	.005	.24	<.2	10.9	.09	.02	5	.2	<.02	11.2	<5	<10	<2	30
B-26	1.49	67.97	11.15	93.9	37	23.0	23.5	1059	5.44	1.8	.4	16.5	2.2	27.3	.06	.15	.03	165	.65	.248	12.6	24.7	1.88	67.3	.063	1	2.02	.009	.31	<.2	11.1	.07	<.01	9	.3	.04	9.1	<5	<10	<2	30
B-27	1.21	150.73	5.44	79.0	196	203.4	40.2	1248	5.24	5.7	.4	36.2	2.9	53.3	.07	.27	.13	148	1.10	.181	12.2	351.5	3.20	126.0	.097	1	2.77	.008	.07	<.2	6.0	.11	<.01	27	.1	.05	10.3	<5	<10	<2	30
B-28	1.37	47.80	4.80	44.8	130	40.3	11.0	441	1.99	5.8	.4	4.2	2.3	57.9	.16	.50	.09	34	2.89	.085	8.5	29.9	.53	184.2	.036	2	.68	.010	.05	<.2	3.4	.05	.01	18	.2	.03	1.9	<5	<10	<2	30
B-29	2.39	74.00	11.23	101.6	211	56.2	16.5	500	2.61	10.3	.9	4.2	3.1	145.5	.60	1.55	.12	54	5.75	.069	11.4	32.5	1.15	373.9	.025	3	.99	.015	.09	<.2	4.0	.09	.03	66	.7	.04	2.8	<5	<10	2	30
B-30	2.24	74.52	7.14	65.3	93	78.6	18.3	578	3.20	13.4	.6	6.2	3.2	104.9	.19	.80	.12	59	4.12	.061	12.0	49.4	.98	260.5	.045	2	1.16	.015	.08	<.2	5.2	.10	.03	34	.5	.04	3.5	<5	<10	<2	30
B-31	2.63	103.26	13.11	90.3	135	73.2	17.4	620	3.06	10.7	.7	4.3	3.6	101.5	.28	.89	.19	53	3.29	.070	11.9	47.4	1.07	245.4	.048	2	1.16	.009	.10	<.2	4.3	.12	.09	34	.4	.05	3.4	<5	<10	2	30
B-32	.25	41.73	.33	43.1	14	47.8	18.6	375	2.96	1.2	.3	6.9	.4	16.0	.01	.11	<.02	58	.67	.164	3.9	83.3	1.29	45.2	.044	1	1.51	.028	.03	<.2	5.1	<.02	<.01	9	.1	<.02	4.7	<5	<10	<2	30
B-33	2.56	68.73	9.04	69.4	34	61.0	13.8	385	3.29	10.3	1.0	8.6	7.2	25.0	.06	1.03	.18	65	.30	.024	18.6	43.4	.64	264.2	.074	2	1.59	.012	.17	<.2	6.8	.14	<.01	48	.6	.04	4.7	<5	<10	<2	30
B-34	2.04	56.65	7.03	55.0	253	66.4	15.1	565	2.65	7.0	.8	8.8	3.0	139.9	.20	1.35	.12	44	5.79	.074	11.9	40.7	.79	324.5	.038	2	.98	.011	.09	<.2	3.6	.30	.03	47	.6	.04	3.2	<5	<10	2	30
B-35	2.35	58.71	6.75	43.4	351	63.4	12.6	446	2.56	7.4	1.0	10.4	3.2	170.7	.19	.98	.12	45	5.91	.069	16.6	46.1	.88	403.2	.036	2	.90	.017	.08	<.2	3.1	.08	.04	78	.6	.05	2.9	<5	<10	<2	30
B-36	1.16	36.95	7.61	47.1	39	38.0	10.9	434	2.64	10.2	.6	9.2	4.3	35.9	.05	.66	.14	63	.52	.090	16.0	36.1	.54	203.5	.057	2	1.06	.021	.09	<.2	4.5	.08	<.01	41	.3	.02	3.7	<5	<10	<2	30
B-37	1.69	38.85	7.19	51.5	80	50.4	14.1	540	2.60	7.0	.6	22.4	4.3	29.4	.19	.70	.12	52	.45	.102	14.4	40.5	.62	209.4	.046	2	.94	.021	.10	<.2	3.9	.10	<.01	60	.3	.02	3.3	<5	<10	<2	30
STANDARD DS3	9.57	129.79	35.60	160.5	297	38.0	13.8	868	3.31	32.7	5.8	19.6	4.1	30.6	5.93	5.51	5.83	81	.57	.099	17.8	188.8	.63	151.6	.095	2	1.80	.026	.18	3.9	3.0	1.07	.02	226	1.1	1.16	6.3	<5	<10	<2	30

B21 see P6

Ag 200
Au-10
Mo 3
Cu 100
Pb 15
Zn 100
Ni 900
As 15
Sb 1
Bi .5
S .04
Te .1
Mg 2
Ca 4
K 4
Ba 300
Sr 300

GROUP 1F30 - 30.00 GM SAMPLE, 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML, ANALYSIS BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: TILL S150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 10 2001 DATE REPORT MAILED: July 24/01 SIGNED BY: C. Leong D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ✓ FA ___

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Os ppb	Pd ppb	Pt ppb	Sample gm
B-39	2.02	57.43	7.37	65.4	83	58.1	14.2	490	2.84	6.2	.5	104.8	4.2	29.0	.21	.71	.12	47	.48	.099	14.0	40.5	.77	135.2	.049	1	1.04	.011	.11	<.2	4.2	.11	.02	51	.4	.02	3.2	<5	<10	<2	30
B-40	1.42	47.33	7.41	54.0	55	44.1	13.7	408	2.69	6.9	.5	11.0	4.1	41.2	.12	.63	.13	52	1.42	.075	15.0	41.6	.71	188.9	.048	<1	1.16	.008	.12	<.2	4.0	.10	.01	45	.3	.03	3.7	<5	<10	<2	30
B-41	2.52	54.61	8.41	68.1	52	56.2	16.5	675	3.01	7.8	.6	7.5	4.9	28.9	.15	.80	.14	61	.60	.067	16.2	45.5	.71	228.7	.063	1	1.12	.007	.11	<.2	4.2	.14	.01	49	.4	.03	3.6	<5	<10	<2	30
B-42	1.95	57.61	8.77	62.9	45	55.9	15.3	557	3.08	9.1	.6	5.9	5.0	25.8	.07	.74	.14	60	.41	.055	19.7	45.2	.73	294.0	.064	2	1.27	.013	.11	<.2	5.3	.10	<.01	57	.4	.04	4.1	<5	<10	<2	30
B-43	1.86	53.24	8.52	70.0	113	53.0	16.4	602	3.23	8.5	.6	4.7	4.4	33.8	.23	.94	.14	64	.75	.088	15.1	44.1	.79	222.1	.048	2	1.25	.005	.11	<.2	4.6	.10	.01	54	.4	.04	3.9	<5	<10	<2	30
B-44	1.42	49.68	8.66	60.8	122	45.4	13.7	571	3.10	9.2	.6	9.9	3.9	36.0	.14	.83	.13	65	.63	.084	15.4	39.4	.74	245.2	.047	2	1.25	.018	.08	<.2	4.6	.09	.01	72	.4	.03	3.9	<5	<10	<2	30
B-45	.90	22.89	8.06	39.8	110	24.7	10.2	357	2.50	8.5	1.3	4.0	2.6	40.5	.08	.46	.13	63	.73	.077	13.5	31.4	.55	285.8	.052	2	1.27	.013	.05	<.2	3.3	.06	.01	57	.8	<.02	4.0	<5	<10	<2	30
B-46	2.27	53.36	7.71	63.8	89	48.2	18.1	666	3.09	6.5	.6	11.8	3.8	51.6	.23	.62	.11	61	1.64	.087	13.1	42.5	.95	153.0	.053	2	1.31	.012	.15	<.2	4.8	.11	.02	34	.4	.03	4.1	<5	<10	<2	30
B-47	1.31	38.62	6.77	54.0	105	35.8	12.5	450	2.63	7.8	.5	3.2	3.9	51.1	.19	.70	.12	59	1.47	.088	13.8	33.8	.73	221.9	.055	2	1.07	.016	.10	<.2	3.7	.08	.02	40	.3	<.02	3.5	<5	<10	<2	30
B-48	2.33	61.27	8.14	73.2	105	58.5	21.0	816	3.18	7.0	.5	7.0	3.9	36.8	.39	.84	.17	57	1.24	.110	13.5	42.2	.79	182.7	.035	1	1.11	.005	.13	<.2	4.7	.12	.01	29	.4	.06	3.5	<5	<10	<2	30
RE B-48	2.40	63.97	8.18	75.3	111	61.1	21.8	850	3.30	7.1	.5	8.4	4.0	39.2	.44	.86	.18	57	1.30	.115	14.5	44.3	.83	193.5	.047	1	1.19	.006	.14	<.2	5.3	.13	.02	47	.5	.04	3.8	<5	<10	<2	30
B-49	1.79	52.61	9.46	67.4	86	52.8	16.6	859	2.84	7.8	.6	19.0	4.8	28.4	.25	.85	.14	51	.51	.091	16.6	35.7	.66	243.0	.055	1	1.24	.012	.12	<.2	4.7	.12	<.01	58	.3	.05	3.6	<5	<10	<2	30
B-50	2.23	55.94	10.69	61.6	78	51.3	14.7	678	2.90	7.2	.5	16.1	5.2	24.6	.10	.77	.15	47	.45	.077	17.4	36.4	.58	277.0	.038	1	1.15	.010	.10	<.2	4.6	.15	.01	57	.5	.03	3.5	<5	<10	<2	30
B-51	1.86	48.70	7.22	83.4	65	37.3	9.9	350	2.84	9.3	1.1	67.9	4.8	13.1	.06	.72	.17	51	.14	.024	13.3	31.5	.32	189.3	.029	1	1.14	.003	.06	<.2	2.9	.08	.01	24	.4	.02	3.8	<5	<10	<2	30
B-52	1.70	46.69	7.99	56.8	85	39.8	13.1	600	2.80	7.9	.5	25.0	4.2	31.3	.17	.69	.13	56	.68	.085	15.5	34.6	.62	171.4	.058	1	1.15	.013	.11	<.2	4.3	.11	01	49	.2	.03	3.6	<5	<10	<2	30
B-53	1.53	52.19	7.89	59.6	106	44.6	14.3	591	2.84	7.4	.5	18.9	3.6	26.9	.24	.75	.11	52	.59	.097	14.2	35.1	.67	207.1	.049	1	1.05	.008	.10	<.2	4.2	.10	<.01	54	.4	.04	3.3	<5	<10	<2	30
B-54	1.60	64.31	9.03	61.9	69	52.0	14.7	632	2.98	7.4	.5	5.6	4.7	22.4	.10	.72	.13	53	.38	.053	15.7	41.2	.74	261.5	.057	<1	1.25	.009	.09	<.2	4.6	.10	.01	61	.3	.03	3.8	<5	<10	<2	30
B-82	2.46	56.41	5.96	72.7	90	27.4	16.4	486	3.14	9.4	.5	6.2	2.4	51.8	.21	.59	.11	75	.72	.105	9.4	24.3	.66	275.6	.089	2	1.56	.010	.13	.2	3.0	.06	.02	9	.5	.04	4.8	<5	<10	<2	30
B-83	2.51	56.15	6.76	61.5	152	25.3	12.1	427	2.31	8.7	.9	20.6	3.2	92.8	.32	.98	.10	54	3.00	.110	11.5	21.9	.83	296.9	.050	2	.98	.018	.10	.4	2.4	.07	.14	34	.5	.03	3.2	<5	<10	<2	30
B-84	1.79	42.17	7.61	57.4	62	27.1	10.7	324	2.27	8.7	2.7	10.9	3.8	34.1	.08	.81	.13	62	.57	.072	13.8	33.4	.64	260.1	.068	1	1.21	.014	.08	<.2	3.7	.07	.01	41	.5	.02	3.8	<5	<10	<2	30
B-85	3.73	35.99	5.82	78.7	166	27.5	9.8	369	2.62	10.1	.5	14.4	3.5	43.3	.37	.79	.11	62	.97	.101	12.2	31.0	.65	256.9	.072	1	1.01	.015	.10	<.2	3.4	.09	.03	46	1.0	.04	3.4	<5	<10	<2	30
B-86	.96	42.22	7.17	58.6	131	30.7	11.8	459	2.60	12.5	.4	27.5	2.6	49.5	.15	.93	.12	51	1.13	.048	13.3	28.0	.55	241.4	.035	2	.98	.012	.09	.3	4.3	.07	.03	30	.5	.03	3.1	<5	<10	<2	30
B-87	1.80	40.92	9.71	51.5	50	53.5	15.8	375	3.31	16.8	.6	19.1	6.2	26.1	.05	.89	.17	73	.36	.039	11.4	60.1	.64	379.5	.063	1	2.06	.008	.10	<.2	5.5	.10	.02	20	.2	<.02	5.8	<5	<10	<2	30
B-88	2.08	53.49	7.07	66.6	43	59.8	16.7	619	2.79	8.3	.5	5.9	4.3	41.4	.19	.74	.11	50	1.13	.110	14.4	48.5	.84	225.2	.072	1	1.19	.016	.17	<.2	3.6	.16	.02	43	.2	.02	3.8	<5	<10	<2	30
B-89	2.88	54.42	7.35	73.7	273	73.4	17.3	705	3.22	12.5	.6	30.2	4.5	46.3	.21	.86	.13	61	1.78	.115	15.3	75.1	1.08	278.1	.070	1	1.39	.017	.16	<.2	4.7	.15	.03	62	.3	.02	5.0	<5	<10	<2	30
B-90	1.45	43.61	8.31	52.6	57	45.8	13.2	491	2.66	8.6	.6	19.9	4.5	22.2	.08	.90	.16	50	.34	.072	15.8	42.8	.62	223.3	.069	<1	1.19	.012	.16	<.2	4.2	.13	<.01	52	.2	.04	3.6	<5	<10	<2	30
B-91	2.50	65.54	6.08	76.9	95	115.2	24.3	610	3.18	7.1	.6	6.5	3.9	82.9	.32	.62	.16	70	4.22	.111	15.6	122.4	1.37	472.9	.097	1	1.56	.012	.15	<.2	4.9	.18	.03	35	.2	.02	5.9	<5	<10	<2	30
B-92	3.83	82.00	7.00	80.7	91	111.5	24.6	630	3.38	8.2	.6	4.1	4.1	37.7	.28	.67	.14	63	2.20	.135	15.0	96.7	1.09	315.3	.075	1	1.27	.010	.19	<.2	4.7	.18	.01	34	.4	.04	4.9	<5	<10	<2	30
B-93	2.81	69.01	6.18	83.9	111	100.3	27.2	799	4.28	7.8	.5	6.1	4.2	32.9	.07	.57	.11	83	.97	.139	24.0	85.7	1.34	433.0	.114	1	1.77	.008	.23	<.2	5.5	.18	.02	38	.4	<.02	6.5	<5	<10	<2	30
B-94	4.51	72.81	8.24	91.1	65	111.1	23.1	756	3.84	10.8	.6	3.1	4.6	29.8	.16	.85	.17	60	.46	.134	18.4	84.5	.84	260.0	.061	1	1.16	.007	.13	<.2	5.1	.14	.01	43	.8	.05	4.4	<5	<10	<2	30
B-95	1.44	17.13	7.61	40.8	120	20.8	7.5	401	2.05	7.5	.3	1.4	2.1	25.7	.16	.47	.13	52	.30	.038	9.2	25.9	.36	211.3	.043	1	1.23	.010	.06	<.2	1.7	.07	<.01	17	.1	.02	4.1	<5	<10	<2	30
B-96	4.05	83.12	7.73	74.7	41	126.9	21.5	412	3.24	11.6	.7	14.5	4.6	24.5	.10	.70	.21	64	.38	.077	14.4	100.6	.98	308.2	.076	<1	1.40	.005	.14	<.2	4.8	.15	.02	22	.8	.07	4.9	<5	<10	<2	30
B-97	4.43	131.67	19.21	54.8	140	62.3	8.5	86	4.55	2.8	1.7	12.9	12.9	24.3	.01	.56	.32	48	.32	.071	36.6	21.7	.26	236.4	<.001	<1	1.57	.003	.10	<.2	5.3	.11	.02	55	.9	.07	3.0	<5	<10	<2	30
STANDARD DS3	9.58	127.68	33.38	160.7	273	35.5	12.2	848	3.31	30.6	5.7	19.7	3.7	28.2	5.32	5.21	5.12	82	.53	.098	16.7	188.0	.63	151.4	.086	1	1.81	.028	.18	3.9	2.9	1.01	.03	221	1.1	1.09	6.3	<5	<10	<2	30

Cab Hill East

Sample type: TILL S150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ✓ FA ___

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Os ppb	Pd ppb	Pt ppb	Sample gm
B-98	1.62	42.20	5.99	49.8	342	44.4	10.9	402	2.04	4.8	.6	4.2	3.2	167.2	.23	.93	.10	38	8.47	.051	13.2	34.4	.86	534.7	.034	<1	.89	.014	.07	<.2	2.9	.10	.04	53	.2	.04	3.5	<5	<10	2	30
B-99	1.42	57.70	7.35	48.7	234	40.7	13.2	459	2.28	7.7	.6	17.4	3.5	104.3	.16	1.01	.13	41	6.04	.054	13.6	34.6	.62	425.8	.050	<1	.97	.014	.08	<.2	3.3	.11	.03	87	.3	<.02	3.7	<5	<10	2	30
B-100	3.42	62.66	8.94	64.5	57	72.6	16.9	690	3.42	11.6	.9	19.0	5.9	22.9	.09	1.17	.16	66	.34	.080	15.3	92.5	.92	225.1	.058	<1	1.64	.010	.24	<.2	6.1	.13	.02	30	.5	.02	6.0	<5	<10	<2	30
B-101	2.64	51.95	8.10	60.4	54	56.3	13.4	640	2.88	9.1	.7	8.3	4.7	29.4	.10	1.03	.15	53	.39	.066	17.1	46.1	.69	253.2	.079	1	1.28	.011	.15	<.2	4.2	.13	<.01	53	.4	.03	4.5	<5	<10	<2	30
B-103	13.50	82.75	13.87	145.9	206	203.3	26.1	1381	3.99	14.3	1.3	<.2	9.0	44.3	.72	2.36	.25	40	1.19	.060	25.3	61.0	.72	157.5	.005	2	.56	.091	.10	<.2	5.1	.29	.09	24	1.9	.05	2.9	<5	<10	<2	30
B-104	1.12	29.59	6.91	46.4	119	30.3	9.9	418	2.27	9.0	.5	9.1	3.2	115.5	.15	.84	.13	58	4.12	.045	11.7	33.7	.64	361.4	.075	<1	1.29	.018	.07	.3	2.8	.07	.03	52	.1	.02	4.6	<5	<10	<2	30
B-105	2.36	49.30	8.62	64.4	77	101.5	16.9	603	3.06	15.2	.5	16.2	4.8	47.0	.16	1.00	.17	66	1.07	.068	15.1	81.9	.88	347.8	.078	1	1.42	.011	.09	.2	5.0	.08	.01	47	.3	.02	5.1	<5	<10	<2	30
B-106	6.97	91.62	7.59	85.5	479	290.5	24.7	424	3.43	22.9	.8	37.0	4.4	136.4	.18	1.05	.14	60	6.86	.061	18.3	209.1	2.42	326.4	.018	<1	2.00	.009	.07	<.2	4.9	.08	.03	45	1.3	.02	6.8	<5	<10	2	30
B-107	2.82	79.58	6.48	76.7	92	68.1	10.2	161	2.92	7.1	.7	6.9	3.9	36.3	.01	.67	.20	54	.26	.035	10.3	104.9	1.22	235.7	.058	<1	1.25	.003	.17	<.2	6.2	.12	.03	28	.8	.05	7.6	<5	<10	<2	30
B-108	6.89	116.71	17.35	168.1	2024	461.9	34.7	1335	5.41	324.1	.8	52.6	5.0	46.8	.53	10.80	.35	58	.52	.044	21.1	135.2	.57	350.5	.033	1	.85	.010	.10	.2	11.7	.08	<.01	78	1.0	.05	3.5	<5	<10	<2	30
B-109	3.79	131.16	9.54	158.3	95	93.9	39.1	3048	7.60	5.6	1.4	20.2	5.7	19.5	.11	.68	.18	325	.51	.116	25.3	61.7	2.09	819.7	.086	<1	2.48	.005	.19	<.2	23.3	.33	<.01	42	.8	.07	12.3	<5	14	<2	30
B-110	2.10	51.46	3.25	52.0	164	482.6	38.4	596	2.90	34.0	.3	22.7	1.8	23.8	.14	.47	.08	65	.68	.035	6.5	815.1	2.15	237.8	.055	<1	1.48	.004	.07	<.2	7.6	.13	<.01	41	.7	.05	5.3	5	<10	2	30
B-111	3.03	76.90	9.24	66.0	118	107.8	19.9	501	3.23	15.9	.7	11.2	3.6	90.4	.18	1.10	.19	57	3.80	.044	11.6	75.4	.59	472.7	.038	1	1.27	.012	.09	<.2	5.5	.11	.03	43	.5	.04	4.4	<5	<10	<2	30
B-112	4.75	59.31	12.09	62.9	142	75.2	12.6	316	2.86	25.6	1.1	39.6	5.9	26.2	.08	.89	.26	41	.27	.048	19.0	46.3	.45	267.5	.037	<1	.99	.007	.10	<.2	4.3	.08	.01	47	.8	.04	3.4	<5	<10	<2	30
B-113	1.65	48.13	8.10	51.3	53	170.3	21.2	505	2.91	10.9	.5	7.9	5.1	64.7	.07	1.01	.16	65	1.96	.047	16.9	144.9	1.05	342.1	.083	1	1.53	.027	.09	<.2	4.9	.09	.01	61	.3	<.02	5.3	<5	<10	<2	30
B-140	2.71	44.60	9.09	69.6	121	62.2	13.6	468	2.48	9.8	.7	9.2	4.9	45.4	.12	1.28	.18	63	1.51	.056	16.4	65.2	.88	633.9	.079	1	1.38	.017	.13	<.2	3.6	.14	.04	49	.6	.03	5.1	<5	<10	<2	30
B-142	3.28	58.77	4.89	49.4	179	86.8	12.7	296	2.01	4.1	.9	7.3	3.5	75.8	.16	.56	.15	53	3.09	.073	11.8	80.0	1.05	732.7	.088	<1	1.09	.021	.22	<.2	2.9	.24	.05	32	.6	.04	4.4	<5	<10	<2	30
B-143	5.70	88.70	7.41	77.3	144	147.6	21.0	413	3.35	5.8	1.8	6.8	6.1	40.0	.10	.48	.22	96	.40	.065	25.0	172.0	1.78	643.5	.144	<1	2.16	.019	.62	<.2	5.9	.45	.10	55	1.0	.07	8.8	<5	<10	<2	30
B-144	2.44	41.57	7.97	67.8	261	49.2	11.0	365	2.07	7.6	1.3	10.1	4.4	122.2	.52	1.34	.15	45	4.01	.088	14.2	46.6	.91	613.2	.055	1	.97	.023	.16	<.2	3.1	.18	.06	84	.5	.03	3.7	<5	<10	<2	30
B-145	4.93	81.31	8.13	75.9	139	144.1	18.9	404	3.25	8.4	1.3	15.7	6.5	33.2	.11	.73	.21	85	.24	.028	25.1	159.9	1.56	659.9	.130	1	2.13	.032	.63	<.2	6.2	.38	.10	48	1.1	.05	7.7	<5	<10	<2	30
B-146	3.10	64.02	4.49	58.2	187	123.9	14.7	328	2.14	4.0	.6	21.9	3.4	59.3	.19	.43	.12	60	1.24	.055	12.4	123.1	1.25	575.9	.093	<1	1.36	.027	.43	<.2	3.6	.26	.06	32	.6	.04	5.4	<5	<10	<2	30
RE B-146	3.11	66.77	4.64	60.0	206	127.3	14.5	340	2.20	3.7	.7	21.9	3.6	60.4	.19	.45	.13	59	1.28	.054	12.7	127.0	1.29	593.0	.099	1	1.42	.027	.44	<.2	3.6	.28	.05	36	.6	.06	5.5	<5	<10	2	30
D-232	9.54	166.39	7.11	186.4	129	226.8	23.3	907	6.46	3.1	2.8	19.5	11.6	45.7	.09	.39	.26	217	.69	.070	38.9	243.0	3.41	2145.2	.304	<1	4.19	.034	1.72	<.2	15.5	.85	.21	31	1.4	.10	21.4	<5	<10	2	30
D-233	4.30	79.93	8.13	104.8	223	119.5	16.4	449	3.12	8.3	1.2	8.7	5.2	43.3	.32	.97	.18	84	.62	.076	14.8	132.7	1.60	696.0	124	2	1.87	.033	.56	<.2	5.3	.35	.05	80	1.0	.05	7.7	<5	<10	<2	30
D-234	.98	34.74	4.83	48.0	26	19.9	12.0	184	2.69	7.4	.3	14.4	1.9	12.5	.04	.43	.09	86	.43	.085	7.0	23.6	.65	264.7	.092	<1	1.44	.025	.12	<.2	3.2	.07	.01	12	.2	.02	5.9	<5	<10	<2	30
D-236	13.35	96.03	6.57	128.5	359	205.1	33.3	446	5.63	5.2	2.3	33.4	7.7	55.1	.20	.26	.21	148	.41	.070	19.5	177.5	2.08	834.2	.211	<1	3.38	.019	1.21	<.2	9.6	.57	.03	13	1.4	.07	14.3	<5	<10	<2	30
D-237	5.15	94.81	4.89	72.5	114	240.5	25.7	324	3.47	4.1	1.8	17.7	6.0	33.4	.05	.36	.16	102	.38	.062	21.2	288.2	2.26	792.1	.159	1	2.35	.028	.76	<.2	6.0	.42	.10	50	1.0	.06	9.6	<5	<10	<2	30
D-238	2.86	84.61	8.33	69.6	424	139.5	17.2	404	2.63	6.5	1.0	26.1	4.9	29.2	.15	.70	.15	67	.54	.055	17.8	132.3	1.42	1189.3	.107	1	1.54	.016	.40	<.2	4.7	.31	.06	71	.7	.03	6.5	<5	<10	<2	30
J-1	3.30	75.74	10.94	57.5	27	73.3	17.1	651	3.67	10.1	1.1	12.5	7.1	29.8	.08	1.17	.19	61	.39	.042	19.9	51.3	.73	235.0	.103	1	1.40	.008	.22	<.2	6.5	.15	.03	64	.7	.05	5.1	<5	<10	<2	30
J-2	1.40	95.37	9.79	58.5	127	71.3	21.1	681	4.05	5.0	.5	8.3	3.9	47.4	.08	.63	.13	75	1.16	.077	19.0	60.1	.90	264.3	.038	2	1.41	.008	.13	<.2	6.8	.12	.02	58	.2	.02	5.1	<5	<10	<2	30
J-3	1.87	109.61	9.25	66.4	114	88.2	26.3	847	5.04	6.4	.7	8.9	5.8	29.9	.05	.82	.13	117	.51	.036	18.4	65.6	1.47	281.3	.070	1	2.20	.008	.10	<.2	10.2	.11	.01	63	.3	.04	8.2	<5	<10	<2	30
J-4	17.26	103.83	10.55	151.9	442	103.7	17.3	253	4.16	4.3	2.8	3.5	4.8	36.8	.46	.71	.13	61	.25	.093	20.8	48.5	.37	193.9	.027	<1	.77	.014	.05	<.2	4.9	.13	.05	58	3.9	.10	2.8	<5	<10	3	30
J-5	.70	81.19	2.56	50.9	77	37.4	28.6	693	4.36	2.9	.2	2.9	1.3	42.4	.05	.24	.04	95	1.44	.079	5.8	79.2	2.11	126.5	.105	<1	2.22	.001	.03	<.2	7.6	.02	.02	19	.1	<.02	7.9	<5	<10	<2	30
STANDARD DS3	9.24	123.60	32.15	147.5	280	33.0	11.6	788	3.06	28.9	5.9	19.8	3.9	27.2	5.58	4.97	5.53	75	.51	.093	17.5	190.1	.58	152.6	.085	1	1.67	.030	.16	3.5	2.7	1.06	.03	228	1.1	1.03	6.3	<5	<10	<2	30

Sample type: TILL S150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ✓ FA ___

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Os ppb	Pd ppb	Pt ppb	Sample gm
J-6	1.99	73.78	9.48	71.2	63	60.0	18.8	731	3.75	7.4	.6	4.6	6.4	28.9	.09	.81	.74	68	.50	.064	17.9	47.5	.99	250.4	.079	1	1.68	.007	.14	<.2	5.7	.17	.01	52	.4	.04	5.4	<5	<10	<2	30
J-7	6.25	79.19	14.91	94.6	202	64.4	20.9	705	3.75	10.0	.9	12.8	3.7	106.4	.44	.68	.13	60	4.92	.079	15.6	45.0	.79	245.1	.024	1	1.17	.008	.06	<.2	5.0	.08	.05	56	1.3	.08	4.0	<5	<10	2	30
J-8	1.99	72.69	9.50	59.2	158	64.1	19.7	658	3.55	8.8	.7	5.0	5.6	28.5	.08	1.10	.15	63	.41	.034	20.1	50.7	.87	273.4	.052	<1	1.54	.007	.08	<.2	6.2	.09	.01	74	.5	.04	5.1	<5	<10	<2	30
J-9	1.66	70.20	8.01	75.1	97	59.3	20.6	686	3.78	6.0	.6	3.1	3.9	45.4	.25	.62	.12	67	1.69	.092	14.4	46.2	1.02	220.8	.053	1	1.48	.007	.12	<.2	5.3	.12	.01	39	.4	.03	5.0	<5	<10	<2	30
J-10	1.64	72.75	8.00	76.9	92	81.5	25.1	780	3.69	7.3	.4	2.9	3.4	41.0	.30	.80	.10	68	1.36	.109	12.7	55.0	1.03	168.3	.048	1	1.33	.007	.13	<.2	5.6	.11	.01	33	.4	.03	4.6	<5	<10	<2	30
J-11	2.42	66.03	8.76	60.3	132	79.7	16.8	461	3.02	10.4	.5	23.3	4.1	62.9	.25	.86	.15	53	2.10	.079	14.6	48.4	.66	161.4	.054	1	.92	.009	.09	<.2	4.9	.12	.01	55	.4	.04	3.2	<5	<10	<2	30
J-12	6.16	93.58	12.84	103.2	185	110.1	19.8	677	3.63	15.9	1.2	2.7	6.1	44.0	.50	3.00	.25	45	1.29	.076	18.6	43.4	.76	139.2	.028	2	.99	.005	.14	<.2	4.5	.17	.02	47	1.3	.06	3.3	<5	<10	<2	30
J-13	4.12	73.51	10.83	76.4	170	68.3	14.5	483	3.18	18.2	.8	8.3	5.7	53.1	.16	2.36	.24	45	.97	.045	17.9	32.9	.66	232.1	.056	2	1.21	.012	.10	<.2	4.1	.11	.01	43	.6	.05	3.7	<5	<10	<2	30
J-14	5.76	97.02	10.41	95.2	138	90.5	13.8	731	3.39	24.8	1.0	3.0	6.4	128.8	.19	3.74	.31	21	4.67	.034	17.6	25.4	.56	271.3	.003	2	.69	.005	.08	<.2	3.0	.10	.03	51	.7	.06	2.1	<5	<10	<2	30
J-15	6.40	91.35	10.27	88.5	113	68.7	16.1	752	3.59	7.9	1.1	4.9	4.9	25.8	.10	1.32	.18	52	.42	.035	22.2	48.2	.80	386.6	.049	1	1.55	.006	.10	<.2	6.8	.09	<.01	57	1.2	.05	4.3	<5	<10	<2	30
J-16	4.22	102.54	9.51	80.0	85	91.0	23.9	847	3.52	5.9	1.1	2.9	3.9	54.1	.34	.71	.14	53	1.51	.102	13.0	49.1	1.33	162.3	.051	1	1.18	.009	.18	<.2	5.3	.13	.01	18	.7	.04	3.8	<5	<10	<2	30
J-17	6.38	95.32	11.09	71.6	158	116.1	27.2	825	3.69	6.8	1.2	1.3	5.0	73.5	.23	1.05	.19	47	1.85	.087	14.9	102.6	1.48	179.1	.083	3	1.26	.033	.24	<.2	4.1	.21	.02	25	.7	.06	3.8	<5	<10	3	30
J-18	1.78	28.44	6.85	51.4	117	34.7	9.7	465	2.05	8.4	1.2	5.9	3.0	98.3	.42	.66	.12	45	2.90	.089	12.0	29.0	.77	276.5	.057	1	.88	.015	.13	<.2	2.5	.08	.04	26	.5	.03	3.1	<5	<10	<2	30
J-19	7.86	83.35	13.68	87.9	207	134.5	23.8	713	3.54	8.5	1.0	4.4	5.5	79.8	.49	.83	.24	39	2.68	.079	17.0	52.1	1.01	133.6	.030	1	.74	.006	.11	<.2	4.6	.23	.02	31	1.2	.06	2.6	<5	<10	<2	30
J-20	2.64	71.62	6.04	49.6	96	71.4	18.9	474	2.67	7.4	.9	4.5	2.9	276.0	.19	1.04	.10	44	7.56	.083	10.0	51.9	1.51	390.8	.019	1	.92	.026	.09	<.2	3.8	.09	.06	31	.7	.05	3.4	<5	<10	2	30
RE J-18	1.75	30.37	7.33	53.6	114	35.0	9.5	464	2.04	9.2	1.2	2.8	3.2	95.3	.39	.66	.12	44	2.80	.089	12.2	28.9	.76	277.3	.052	2	.90	.013	.13	<.2	2.6	.08	.04	28	.5	.02	3.3	<5	<10	<2	30
J-21	1.71	89.22	158.34	351.7	1812	39.8	17.0	878	4.31	7.1	.7	29.8	7.3	21.4	.36	.75	.19	79	.37	.062	30.8	40.8	1.22	213.7	.138	1	1.80	.007	.79	<.2	9.4	.29	.03	375	.9	.05	6.8	<5	<10	<2	30
J-22	14.39	81.52	17.67	91.5	428	220.8	23.3	900	4.19	5.1	.7	1.6	10.3	16.2	.01	.34	.35	54	.31	.036	45.6	109.2	.59	85.0	.013	2	.85	.001	.13	<.2	5.8	.27	.02	40	1.4	.08	3.2	<5	<10	<2	30
J-23	5.27	90.15	6.23	75.3	50	99.9	16.1	355	3.57	7.2	1.1	3.7	10.7	23.4	.08	1.09	.21	29	.22	.041	39.5	21.2	.20	209.9	.014	2	.74	.003	.12	<.2	4.0	.07	.01	20	1.3	.05	2.2	<5	<10	<2	30
J-24	11.72	88.60	8.91	100.2	196	207.4	26.7	669	4.19	2.9	.9	1.2	9.6	18.3	.02	.27	.28	62	.22	.031	19.3	120.6	.24	119.2	.013	1	.83	.004	.12	<.2	6.7	.61	.01	26	.9	.06	4.8	<5	<10	<2	30
J-25	3.50	80.15	7.48	60.3	77	82.7	17.1	670	2.86	10.9	1.3	3.2	4.0	168.5	.30	1.39	.15	41	5.55	.070	11.7	54.9	1.23	233.6	.040	1	.90	.016	.11	<.2	4.1	.14	.05	30	.6	.04	3.1	<5	<10	<2	30
J-26	2.08	51.36	5.47	41.6	71	62.0	14.4	443	2.14	4.7	.5	2.8	3.1	77.4	.12	.62	.10	37	2.12	.081	9.2	65.5	.82	165.6	.055	1	.78	.008	.08	<.2	3.2	.08	.04	24	.4	.04	2.4	<5	<10	<2	30
J-27	3.41	96.50	7.10	59.2	178	94.4	21.5	519	2.96	13.1	.6	3.9	4.4	121.3	.19	1.13	.13	54	4.11	.060	12.3	62.9	.98	354.0	.073	1	1.00	.007	.11	<.2	4.1	.14	.05	56	.6	.04	3.4	<5	<10	<2	30
J-28	2.63	56.38	6.99	59.8	111	58.2	14.4	537	2.73	15.7	.7	5.4	5.1	80.6	.22	1.02	.11	48	2.58	.079	13.5	50.8	1.03	149.0	.056	1	1.01	.011	.12	<.2	4.4	.13	.04	36	.5	.03	3.5	<5	<10	<2	30
J-29	2.99	85.07	7.58	59.3	134	79.1	19.1	548	3.00	7.6	.7	7.7	3.2	80.8	.18	.90	.14	49	3.00	.066	12.0	44.6	.80	188.5	.026	2	.90	.008	.07	<.2	4.6	.10	.04	64	.7	.05	2.8	<5	<10	<2	30
J-30	1.92	59.82	7.35	54.7	134	62.1	13.7	487	2.75	8.7	.6	5.4	4.4	52.2	.13	1.07	.13	55	1.69	.058	17.4	44.6	.69	218.2	.045	1	1.09	.009	.08	<.2	4.3	.10	.01	77	.5	.03	3.7	<5	<10	<2	30
J-31	2.02	53.20	8.13	55.4	140	63.0	15.6	961	3.03	12.7	.5	33.2	4.7	35.1	.09	1.04	.14	63	.64	.056	16.7	45.0	.73	226.3	.060	1	1.22	.012	.09	<.2	4.6	.12	.02	64	.6	.03	4.2	<5	<10	<2	30
J-32	2.53	58.40	8.30	65.5	77	73.1	15.6	472	3.14	9.4	.6	3.5	5.7	40.2	.14	.95	.15	59	1.17	.073	18.7	56.3	.76	230.9	.070	1	1.24	.011	.14	<.2	4.7	.15	<.01	50	.7	.04	4.3	<5	<10	<2	30
J-33	2.37	58.34	8.19	62.0	88	68.0	17.9	696	2.95	8.8	.6	8.9	4.5	39.0	.23	.98	.13	54	.93	.090	14.9	45.3	.73	241.8	.055	1	1.13	.008	.12	<.2	4.7	.15	.01	54	.4	.03	3.8	<5	<10	<2	30
J-34	2.67	60.97	7.29	61.7	44	92.7	16.1	542	3.02	12.7	.8	3.5	4.5	20.5	.07	3.23	.13	52	.23	.039	19.4	58.8	.55	158.3	.049	1	.96	.006	.09	<.2	5.1	.18	<.01	64	.7	.03	3.2	<5	<10	<2	30
J-35	2.17	60.01	8.19	65.6	92	69.5	14.2	642	2.97	9.0	.6	3.4	4.7	27.8	.16	.89	.15	55	.47	.091	15.5	51.9	.74	207.4	.051	1	1.15	.010	.11	<.2	4.3	.11	<.01	64	.5	.03	3.8	<5	<10	2	30
J-36	2.85	53.85	8.50	65.2	63	77.7	16.5	699	2.90	10.6	.5	2.1	4.9	25.6	.26	.97	.15	54	.48	.096	15.8	53.1	.66	202.0	.054	1	1.12	.010	.10	<.2	4.3	.15	.01	40	.6	.03	3.6	<5	<10	<2	30
J-37	1.49	55.42	6.72	53.1	37	60.0	14.7	507	2.67	6.7	.5	3.6	4.5	23.3	.05	.84	.12	47	.33	.056	15.7	40.9	.62	224.6	.041	1	1.09	.008	.08	<.2	4.2	.09	<.01	70	.4	.03	3.6	<5	<10	<2	30
STANDARD DS3	9.42	122.49	34.76	153.6	288	37.5	12.9	817	3.13	31.3	5.7	22.4	4.1	30.4	5.62	5.58	5.54	78	.52	.092	17.6	184.3	.59	143.3	.093	2	1.70	.026	.17	3.9	2.9	1.01	.03	238	1.3	1.08	6.3	<5	<10	<2	30

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Sample type: TILL S150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ✓ FA ___

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Os ppb	Pd ppb	Pt ppb	Sample gm
J-38	.76	40.38	7.03	44.7	65	50.0	10.0	403	2.18	6.8	.4	8.8	4.1	21.6	.11	.58	.11	47	.32	.056	12.3	36.4	.57	164.8	.050	1	.83	.007	.08	<.2	3.3	.06	<.01	60	.1	.02	2.6	<5	<10	<2	30
J-39	1.13	55.88	9.40	47.8	21	45.1	13.1	437	3.41	11.9	.6	39.4	6.8	28.0	.08	.82	.19	84	.37	.050	17.2	49.0	.63	219.7	.059	1	1.37	.010	.10	.3	5.0	.08	<.01	95	.3	.04	4.3	<5	<10	<2	30
J-40	1.20	48.44	9.68	54.1	190	40.0	13.0	421	2.97	9.5	.5	3.6	5.0	23.9	.09	.79	.16	71	.36	.049	13.1	48.9	.59	258.1	.080	<1	1.44	.012	.08	<.2	3.9	.08	<.01	75	.3	.04	4.2	<5	<10	<2	30
J-41	1.40	55.40	58.22	69.7	230	47.7	12.5	767	2.72	8.5	.4	5.5	4.8	23.0	.12	.82	.33	48	.37	.075	13.8	36.3	.61	234.9	.044	1	1.02	.009	.08	<.2	3.9	.09	<.01	71	.4	.04	3.1	<5	<10	<2	30
J-60	5.89	36.81	14.27	27.9	722	44.4	8.2	130	1.54	73.1	.6	94.5	1.8	358.2	.18	4.75	.24	16	10.35	.047	5.2	13.4	.79	369.5	.006	2	.40	.029	.08	<.2	1.6	.04	.12	42	1.2	.09	1.2	<5	<10	2	30
J-61	1.98	45.16	7.86	45.6	475	39.0	9.8	340	1.76	7.4	.4	3.9	2.0	125.6	.26	.69	.14	30	7.27	.065	7.8	22.4	.55	386.7	.019	1	.81	.010	.06	<.2	1.8	.05	.07	36	.4	.03	2.4	<5	<10	<2	30
J-62	3.06	90.72	6.83	80.8	130	123.7	22.7	680	4.24	18.3	.5	4.2	5.4	27.5	.05	.36	.16	91	.41	.047	17.6	122.1	1.91	121.1	.051	<1	2.19	.004	.11	<.2	7.5	.07	.03	37	.5	.05	6.6	<5	<10	<2	30
J-63	14.91	235.38	18.61	93.9	72	277.2	41.0	702	4.66	6.5	1.0	2.4	9.3	30.2	.42	1.04	.42	61	.44	.125	19.8	121.4	1.29	225.1	.073	<1	1.38	.006	.14	<.2	4.9	.16	.03	33	1.3	.12	4.7	<5	<10	<2	30
J-64	2.81	62.82	7.48	77.8	86	115.1	23.4	1083	3.60	17.4	.5	5.4	3.3	112.1	.28	1.34	.11	56	7.84	.077	10.8	70.0	1.95	183.7	.001	1	.54	.007	.06	.2	6.5	.25	.05	31	.8	.03	2.5	<5	<10	2	30
J-65	2.03	51.52	6.93	62.8	64	69.7	17.7	479	2.74	9.0	.5	4.1	3.2	114.8	.25	.78	.13	54	5.77	.082	13.3	55.3	1.25	267.5	.063	<1	1.33	.013	.08	<.2	3.5	.09	.05	24	.6	.03	4.7	<5	<10	<2	30
J-66	2.15	58.94	6.41	54.9	122	80.5	17.2	561	2.73	10.1	.7	3.9	4.0	119.2	.17	.92	.12	57	7.22	.042	15.9	71.8	1.01	339.2	.069	<1	1.23	.011	.08	<.2	4.3	.09	.06	57	.6	.04	4.3	<5	<10	<2	30
J-67	2.36	77.23	10.09	71.7	48	109.9	22.3	577	3.54	17.4	.8	5.0	6.5	23.3	.07	.92	.18	77	.34	.050	22.0	91.6	.94	186.1	.091	1	1.62	.007	.21	<.2	6.2	.16	.02	72	.6	.03	5.6	<5	<10	<2	30
J-68	1.96	61.11	6.13	58.4	206	87.5	18.4	493	2.70	10.1	.6	3.4	3.6	152.0	.19	.93	.11	56	6.43	.075	14.0	74.0	1.10	441.9	.075	<1	1.20	.017	.08	<.2	3.9	.09	.06	56	.6	.03	4.4	<5	<10	<2	30
J-69	3.33	90.76	7.87	91.7	62	156.0	24.2	807	3.82	13.9	.5	2.3	5.3	27.7	.16	.75	.16	82	.62	.100	16.9	142.2	1.51	338.1	.128	<1	1.78	.010	.31	<.2	5.8	.22	.01	70	.5	.03	6.4	<5	<10	<2	30
J-70	2.84	75.16	7.88	67.6	43	97.3	17.4	447	3.00	10.9	.6	3.4	4.7	17.3	.09	.98	.13	62	.32	.064	17.0	80.4	.83	159.9	.081	<1	1.18	.005	.14	<.2	4.9	.13	.02	54	.8	.03	4.0	<5	<10	<2	30
J-71	4.41	73.23	11.49	113.4	59	196.7	21.0	445	3.97	14.4	1.5	2.2	8.6	31.7	.02	.29	.26	59	.45	.041	22.2	289.4	1.79	171.7	.114	<1	2.38	.006	.05	<.2	5.8	.06	.02	35	.5	.05	6.6	<5	<10	<2	30
J-72	1.57	64.28	8.02	68.0	225	82.9	15.5	508	3.29	12.8	.6	20.2	4.8	35.4	.11	.71	.14	78	.57	.068	18.4	82.6	1.06	358.4	.080	1	1.62	.010	.10	.2	5.2	.10	.02	81	.4	.03	5.4	<5	<10	<2	30
J-73	5.97	105.47	12.71	104.7	160	221.1	24.1	802	4.61	14.5	.9	4.9	6.5	62.2	.13	1.40	.31	31	2.21	.071	32.6	54.9	.54	441.0	.008	1	.86	.007	.06	<.2	8.8	.04	<.01	53	.8	.10	2.3	<5	<10	<2	30
J-74	7.75	113.27	16.26	94.3	211	147.6	25.9	1458	4.20	43.8	.8	12.4	6.3	30.7	.20	2.36	.38	49	.41	.076	26.0	62.4	.83	479.2	.011	1	1.22	.008	.07	<.2	7.7	.06	.01	127	1.3	.08	3.9	<5	<10	<2	30
J-75	4.52	81.87	6.70	82.2	338	267.8	23.0	382	2.96	17.3	.4	2.7	3.0	89.7	.21	.62	.19	48	4.25	.030	6.3	316.4	1.79	295.9	.007	<1	1.34	.003	.06	<.2	4.0	.06	.05	47	.8	.08	4.8	<5	<10	<2	30
J-76	2.47	58.15	6.68	63.5	157	89.2	20.4	496	2.85	10.5	.6	11.5	4.2	169.3	.15	.99	.13	58	6.27	.078	15.3	80.2	1.09	462.1	.063	1	1.38	.010	.09	<.2	4.8	.10	.04	45	.6	.05	4.8	<5	<10	<2	30
J-77	1.62	54.18	8.02	55.1	35	71.8	17.2	570	2.91	13.5	.4	29.6	5.0	30.4	.11	.85	.15	69	.53	.063	16.4	61.3	.79	229.3	.084	1	1.41	.009	.09	<.2	4.5	.08	<.01	65	.3	.03	4.8	<5	<10	<2	30
RE K-18	3.02	68.11	7.17	72.9	158	115.5	22.5	626	3.12	10.0	.4	2.2	4.5	32.3	.12	.81	.14	50	.97	.122	17.9	85.3	.93	194.0	.054	1	1.11	.007	.16	<.2	4.3	.13	.01	48	.6	.05	4.2	<5	<10	<2	30
K-14	.47	28.55	8.66	48.6	149	30.6	9.3	516	2.06	9.5	.3	3.5	1.6	47.7	.43	.63	.14	50	4.91	.058	13.2	27.8	1.19	231.1	.036	3	1.41	.011	.13	.2	2.4	.06	.08	41	.4	.03	3.9	<5	<10	2	30
K-15	.69	34.06	8.58	52.6	110	31.7	9.8	364	2.00	9.8	.4	6.4	2.7	44.9	.26	.80	.13	44	4.94	.049	14.4	29.3	1.90	153.1	.047	1	1.22	.010	.08	.7	2.9	.07	.04	63	.3	.04	3.5	<5	<10	<2	30
K-16	1.60	52.98	7.10	67.1	29	84.8	17.5	549	3.00	11.1	.4	2.4	4.9	66.3	.20	.90	.14	68	3.38	.086	16.3	79.1	1.21	244.3	.092	1	1.55	.011	.09	<.2	4.3	.10	.03	31	.2	.03	5.4	<5	<10	<2	30
K-17	3.91	64.55	12.16	67.7	58	88.9	17.4	357	3.36	13.4	.8	45.4	7.0	22.6	.06	.83	.27	59	.27	.053	17.5	73.5	.73	185.4	.061	1	1.39	.007	.21	<.2	6.0	.13	.01	28	.6	.05	4.3	<5	<10	<2	30
K-18	2.95	68.10	6.73	74.6	154	113.6	23.2	620	3.10	9.8	.4	2.1	4.4	31.2	.10	.80	.14	49	.97	.124	17.2	84.3	.92	193.6	.056	1	1.10	.007	.15	<.2	4.2	.13	<.01	50	.6	.04	4.0	<5	<10	<2	30
K-19	2.27	52.90	9.73	52.8	258	56.0	14.6	559	3.37	11.9	.7	6.3	6.1	26.0	.10	1.01	.19	58	.47	.045	24.0	53.5	.76	258.7	.051	<1	1.51	.009	.13	<.2	5.6	.10	<.01	47	.7	.04	4.7	<5	<10	<2	30
K-20	.93	32.76	5.53	40.3	94	27.3	9.8	390	1.87	7.7	.5	10.3	2.7	192.6	.21	.66	.09	40	7.94	.087	12.2	28.4	.66	344.1	.055	1	.82	.016	.07	<.2	2.5	.07	.06	32	.3	.04	3.0	<5	<10	<2	30
P-39	14.00	90.49	12.31	114.7	164	66.0	12.1	289	3.29	7.4	1.2	2.9	10.3	39.2	.09	.79	.46	50	.52	.041	32.8	26.6	.59	432.9	.029	1	1.58	.012	.17	.4	3.1	.16	.09	89	1.9	.05	4.7	<5	<10	<2	30
P-40	1.73	42.57	9.51	52.0	26	28.3	7.8	290	1.88	8.5	1.0	4.4	6.8	17.9	.05	1.05	.18	34	.19	.033	18.0	20.5	.38	335.1	.055	<1	1.09	.008	.19	<.2	3.6	.15	.01	125	.4	.03	3.5	<5	<10	<2	30
P-41	2.17	54.17	10.14	65.3	84	51.0	11.8	419	3.02	13.9	1.0	4.7	8.4	19.9	.06	1.41	.20	57	.29	.032	24.2	45.6	.81	391.9	.087	1	1.59	.012	.20	<.2	4.7	.19	.01	111	.6	.03	4.9	<5	<10	<2	30
STANDARD DS3	9.21	127.94	34.81	151.6	290	36.3	11.9	821	3.12	30.7	5.2	19.6	4.0	29.3	5.50	5.05	5.64	78	.52	.092	17.8	183.3	.59	145.4	.094	2	1.71	.031	.16	4.0	2.5	1.01	.01	225	1.1	1.12	6.1	<5	<10	<2	30

Sample type: TILL S150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ___ FA ___

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Os ppb	Pd ppb	Pt ppb	Sample gm
P-42	3.37	95.48	16.03	118.3	22	354.7	53.4	1227	3.07	11.9	1.4	8.7	8.1	28.9	.49	1.31	.19	52	.45	.073	27.9	74.9	1.11	963.2	.082	1	1.91	.014	.13	<.2	4.9	.28	<.01	26	.6	.04	5.7	<5	<10	<2	30
P-43	8.32	192.06	4.37	55.7	290	782.5	52.9	1504	4.07	.8	.9	5.6	1.8	60.5	.31	.20	.24	81	1.08	.019	16.2	417.9	2.23	1045.1	.187	1	1.86	.010	.53	<.2	1.9	.62	<.01	34	1.1	.21	7.0	<5	<10	.2	30
P-44	6.16	96.84	16.51	65.6	104	25.4	5.0	406	3.22	2.1	1.3	5.4	12.9	65.5	.04	.32	.51	60	.28	.071	21.0	41.3	1.46	895.2	.112	<1	2.37	.013	.85	<.2	3.2	.49	.40	<5	1.4	.13	9.2	<5	<10	2	30
P-45	5.35	55.26	7.92	68.6	103	148.4	16.4	364	2.70	7.5	1.3	3.3	5.5	29.5	.06	.65	.17	69	.39	.052	18.8	113.4	1.15	701.3	.100	1	1.57	.014	.31	<.2	4.0	.22	.03	22	.8	.04	6.4	<5	<10	<2	30
P-46	4.21	69.36	6.04	68.9	113	138.6	18.0	396	3.16	5.3	1.3	14.1	5.0	47.7	.12	.44	.17	87	.53	.084	20.0	162.9	1.53	732.1	.133	1	1.85	.025	.67	<.2	3.7	.29	.15	30	.5	.04	7.7	<5	<10	<2	30
P-47	2.35	43.62	7.42	52.1	82	24.3	6.1	168	2.00	3.4	.9	3.0	4.4	39.1	.07	.34	.16	43	.56	.058	12.3	32.7	.53	335.0	.094	1	1.36	.029	.14	<.2	3.3	.20	.02	26	.6	.03	5.2	<5	<10	<2	30
RE P-47	2.24	44.42	7.07	52.3	71	26.7	6.6	169	2.01	3.4	.9	2.8	4.3	35.4	.08	.31	.15	44	.57	.050	11.5	37.0	.53	337.1	.097	1	1.41	.028	.13	<.2	3.2	.19	.04	29	.6	.04	4.7	<5	<10	<2	30
STANDARD DS3	9.26	125.93	34.08	152.6	272	34.0	11.1	784	3.06	28.3	5.8	22.7	3.9	28.6	5.51	5.14	5.39	74	.52	.096	17.8	178.4	.57	142.3	.081	1	1.61	.026	.16	3.6	2.5	1.03	<.01	233	1.1	1.05	5.9	<5	<10	<2	30

Sample type: TILL S150 60C. 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
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon PROJECT BRADEN File # A102152

6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Os ppb	Pd ppb	Pt ppb	Sample gm
B-15	7.16	16.21	17.50	9.5	169	14.7	1.7	72	.71	.8	1.0	<.2	3.6	13.8	<.01	.16	.33	14	.06	.012	5.1	98.3	.15	183.8	.033	1	.25	.018	.16	.8	.6	.07	.06	26	.4	.05	1.1	<5	<10	<2	30
B-21	.09	13.04	.41	17.6	12	2037.0	84.2	679	3.51	11.2	<.1	.2	.1	4.6	.02	.10	<.02	18	.12	.001	<.5	1310.4	14.04	13.9	.001	8	.11	.003	<.01	<.2	3.0	.03	.05	8	.3	<.02	.4	<5	<10	3	30
PEL-1	61.48	157.62	40.11	1470.9	860	101.5	10.5	866	3.98	154.8	1.9	.7	1.3	169.1	26.91	3.15	.21	225	5.68	.029	9.6	186.4	1.36	93.0	.002	4	.72	.023	.31	1.7	3.8	.36	2.78	195	49.9	.13	2.5	6	<10	4	15
PEL-2	39.48	68.92	4.61	114.1	320	77.6	10.4	963	2.88	25.0	1.3	<.2	1.0	75.7	1.25	1.07	.08	200	6.60	.042	4.3	90.2	.73	36.2	.108	1	1.09	.028	.08	.9	3.7	.10	1.54	33	6.2	.09	5.2	<5	<10	<2	30
PEL-3	122.27	146.85	5.44	884.2	579	132.1	17.9	818	4.06	19.4	3.4	<.2	1.8	90.4	15.56	1.39	.08	222	4.10	.041	8.6	173.6	.64	87.3	.002	2	.69	.034	.29	1.8	4.1	.57	2.79	140	36.4	.06	2.2	9	<10	<2	30
PEL-4	98.54	101.44	5.20	732.6	538	161.9	17.3	319	3.04	3.2	5.3	<.2	1.8	55.4	11.82	.90	.11	756	.76	.066	7.7	149.9	.83	110.9	.220	2	1.27	.084	.19	2.3	7.1	.59	1.63	150	16.3	.08	5.3	9	<10	<2	30
RE B-21	.06	13.52	.40	18.7	12	2045.8	87.2	682	3.48	11.3	<.1	<.2	<.1	4.7	.03	.11	<.02	9	.11	.002	<.5	1283.4	14.04	13.7	.001	8	.10	.004	<.01	<.2	3.0	.06	.04	5	.3	<.02	.4	7	<10	2	30
STANDARD DS3	9.11	127.87	34.51	156.0	279	36.1	12.2	794	3.09	28.8	6.0	21.0	3.9	29.3	5.51	5.11	5.48	74	.52	.091	17.1	184.2	.57	143.9	.082	1	1.63	.028	.16	3.9	2.5	1.03	.02	229	1.1	1.01	6.2	<5	<10	<2	30

GROUP 1F30 - 30.00 GM SAMPLE, 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML, ANALYSIS BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: ROCK R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 10 2001 DATE REPORT MAILED: July 27/01 SIGNED BY. C. Leong D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon PROJECT BRADEN File # A102153

6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Os ppb	Pd ppb	Pt ppb	Sample gm
B-5	1.10	34.15	5.31	48.0	66	28.5	10.4	433	2.76	6.0	1.2	25.3	3.4	45.1	.10	.32	.09	61	.72	.075	12.2	34.6	.55	106.8	.064	1	.81	.009	.14	.5	2.8	.13	.03	25	.3	.04	3.5	<5	<10	<2	30
B-9	.58	9.86	4.06	37.5	29	16.6	6.7	292	2.54	2.9	.6	2.4	4.1	32.4	.06	.32	.05	80	.59	.097	14.5	38.4	.34	139.0	.061	1	.58	.010	.05	.7	1.8	.03	.01	43	.2	.02	3.0	<5	<10	<2	30
B-13	.32	10.59	3.36	39.4	38	20.9	6.9	262	1.84	3.1	.5	15.0	3.1	33.6	.07	.24	.05	54	.71	.090	11.6	37.9	.42	179.3	.054	1	.68	.011	.06	.6	2.0	.04	.01	58	.2	.02	3.0	<5	<10	<2	30
B-38	.19	8.86	2.89	34.4	24	15.5	6.5	254	1.78	2.7	.5	1.5	2.9	70.4	.08	.17	.05	46	2.13	.091	11.0	28.4	.54	110.8	.063	1	.70	.016	.06	.2	1.9	.03	.03	8	.4	.03	2.8	<5	<10	<2	30
B-81	3.86	59.74	4.76	77.3	100	22.4	15.7	637	3.24	7.8	1.2	38.8	2.3	56.1	.43	.65	.06	88	.90	.144	9.6	18.2	.74	193.2	.094	1	1.22	.018	.18	.6	2.5	.07	.04	38	1.3	.08	4.3	<5	<10	<2	30
B-102	2.63	29.17	6.18	58.8	69	66.4	13.1	3090	2.72	8.8	.6	2.9	2.9	54.9	.90	.74	.11	51	1.25	.105	12.1	43.4	.64	368.4	.043	1	.75	.015	.08	.3	2.5	.10	.03	28	.7	.04	3.1	<5	<10	<2	30
B-141	.49	12.94	4.23	41.5	46	18.4	6.6	389	1.57	4.5	.6	2.6	2.5	35.3	.11	.31	.06	41	.72	.084	10.0	23.7	.40	168.1	.049	1	.65	.011	.06	<.2	2.0	.04	.01	23	.2	.02	2.9	<5	<10	<2	30
B-235	.82	12.15	3.97	38.5	35	18.2	8.5	887	1.99	6.3	.5	18.1	2.8	29.6	.08	.31	.06	46	.56	.089	9.6	31.1	.47	309.9	.051	1	.69	.013	.06	.8	1.9	.03	.01	28	.2	<.02	2.9	<5	<10	<2	30
RE B-38	.18	8.30	2.67	32.3	24	15.1	6.1	253	1.70	2.5	.4	3.0	2.6	67.3	.07	.15	.04	43	2.07	.083	9.9	23.8	.52	108.8	.063	1	.67	.013	.05	.2	1.8	.03	.03	13	.5	.03	2.7	<5	<10	<2	30
STANDARD DS3	9.11	128.35	32.95	158.2	289	37.0	12.5	805	3.14	29.3	5.7	22.0	3.7	29.3	5.21	4.85	5.16	77	.53	.090	16.9	186.8	.58	147.2	.086	2	1.66	.027	.17	3.8	2.6	.96	.01	227	1.1	1.01	6.3	<5	<10	<2	30

GROUP 1F30 - 30.00 GM SAMPLE, 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML, ANALYSIS BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SILT SS80 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

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PELMAC

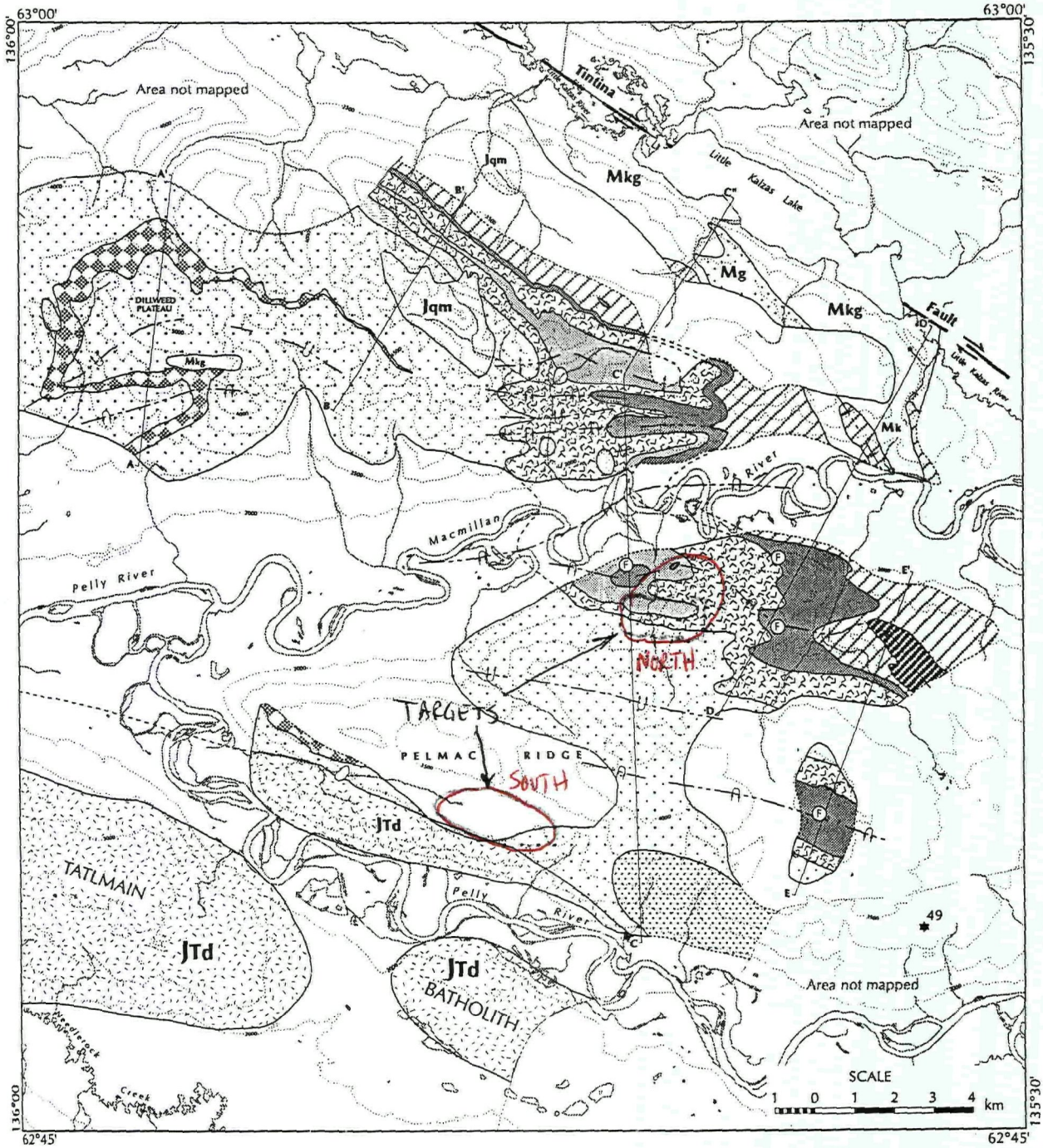
Access into the area was made by boat along the Pelly and MacMillan Rivers and then by foot to the areas described

The area was prospected for massive sulphide mineralization in two separate areas. Multi element geochemical anomalies had been indicated in RGS data and follow-up prospecting completed the previous year.

In the north area the only positive results were obtained in two rock samples at the upstream end of a 30-m long outcrop in a stream. Samples P20 and P21 of limy phyllite ran 411 and 641 ppm Zn, 110 and 94 ppm Pb, and 108 and 11 ppm Cu. This is a direct lead as it could be distal to higher-grade mineralization. It also explains the anomalous silt samples collected previously downstream. 200 m upstream P22 was not anomalous for any metals. Also, rock chips P18 and P19 immediately adjacent to P20 and P21 were also not anomalous. Limy argillaceous tuff along strike could be above or below the mineralized horizon.

In the south area follow-up on two previously collected samples anomalous for Cu-Pb-Zn-As-Sb expanded and partly defined the extent and intensity of anomalous geochemistry in tills but failed to find any anomalous precious metal values.

Both targets are of minimal interest at this time mainly because of the lack of anomalous precious metals.



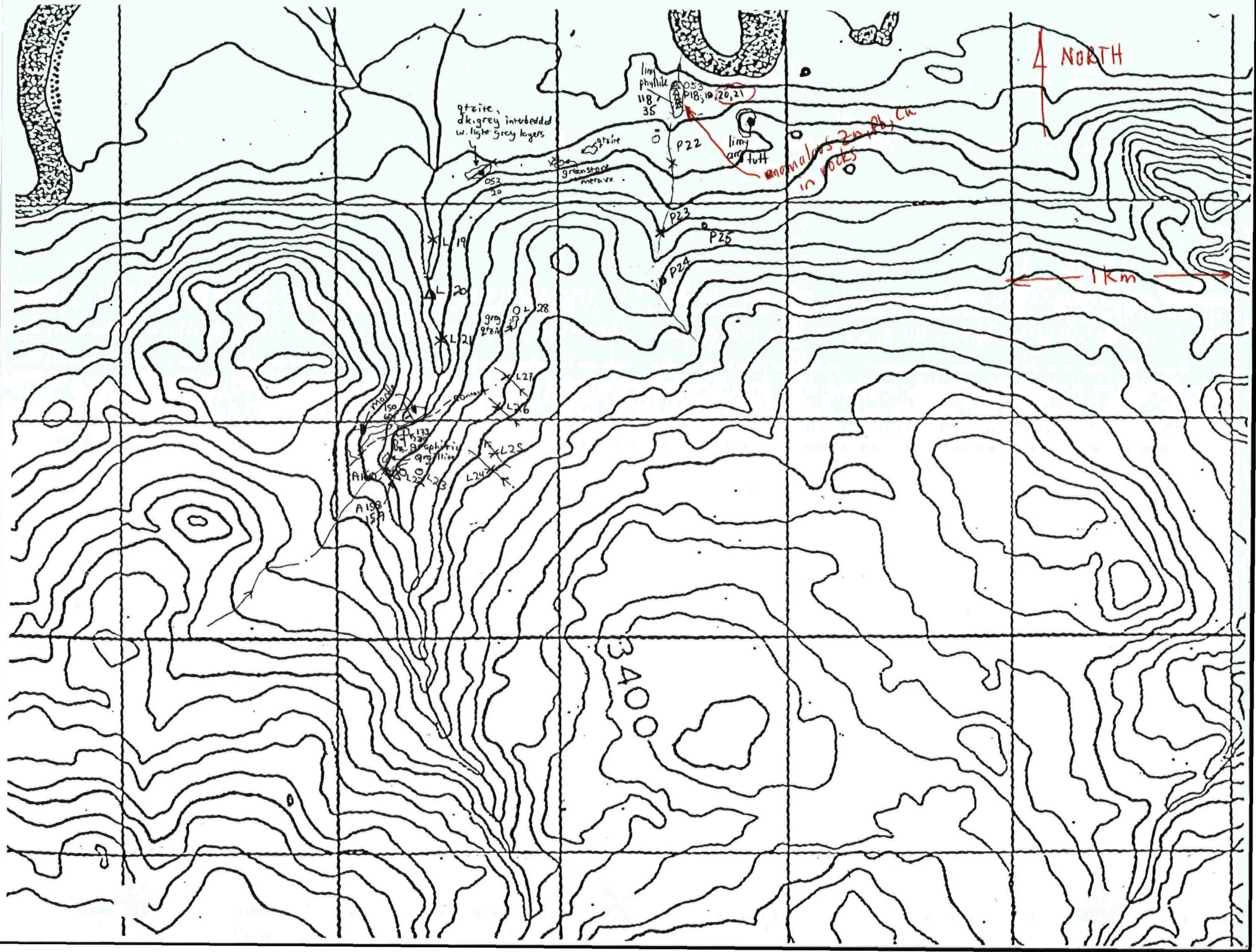
LAYERED METAMORPHIC ROCKS

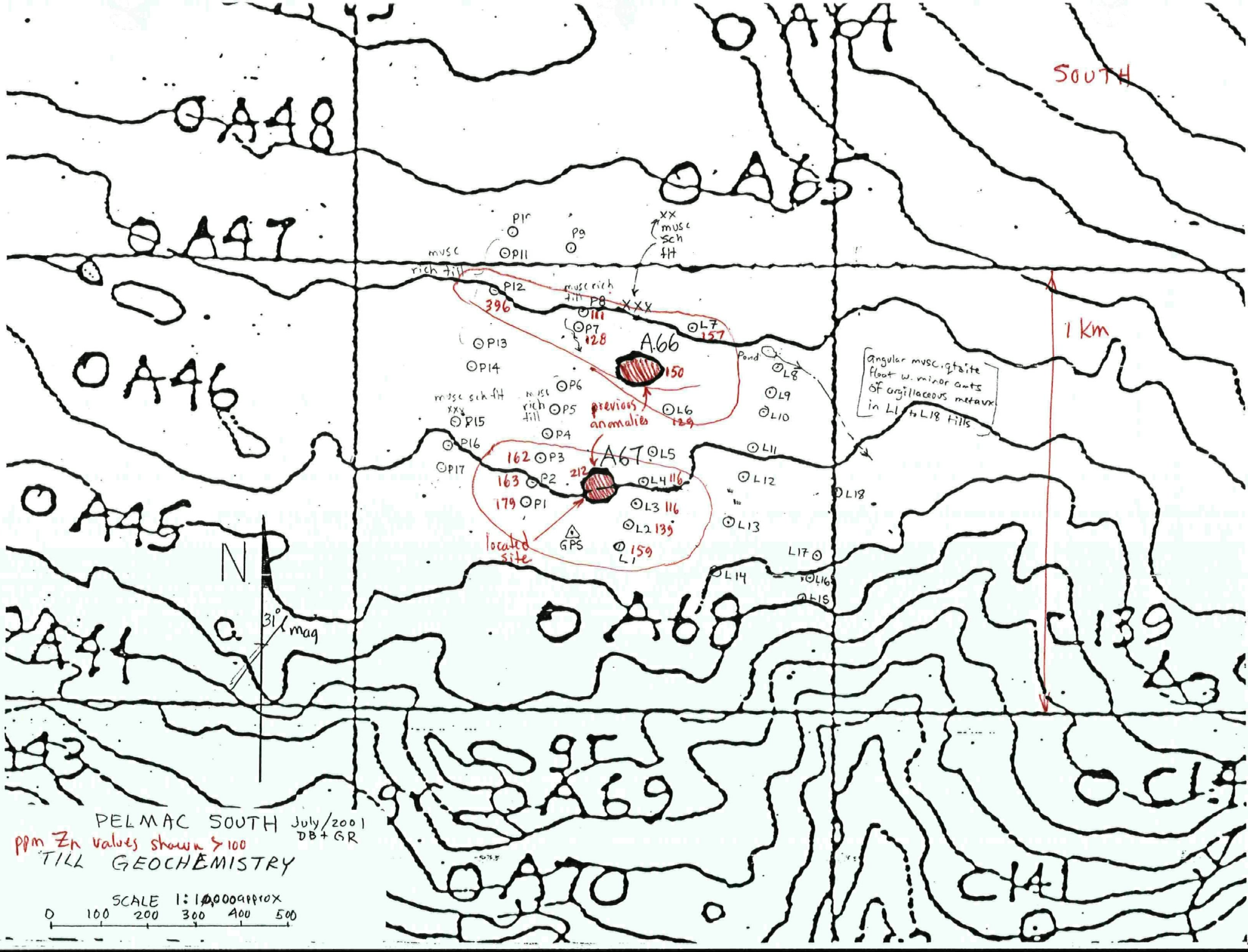
- Unit 1 - quartzite
- Unit 1v - metavolcaniclastic rocks
- Unit 1gr - quartz grit
- Unit 2 - intermediate to mafic metavolcanic rocks
- Unit 2fv - felsic metavolcanic rocks
- Unit 2q - quartzite
- Unit 3 - marble
- Unit 4 - felsic to intermediate metavolcanic rocks
- Unit 4q - quartzite

INTRUSIVE ROCKS

- Tp - Tertiary porphyries
- JTd - Jurassic (?) quartz diorite (Tatlmain batholith)
- Jqm - Jurassic (?) quartz monzonite (Cornolio pluton)
- Mgd - Mississippian (?) granodiorite gneiss
- Mg - Mississippian (?) granite gneiss

Figure 4. Geological map of the Little Kalzas Lake area (105L/13). F = occurrences of crinoidal marble in Unit 3. Number 49 indicates location of mineral occurrence 105L 049 (Hugh, Gal; Yukon Minfile). Straight lines between letters are location of cross sections shown in Figure 5.


NORTH
1km
limy phyllite
053
P18, 19, 20, 21
118, 35
P22
limy arg. tuff
anomalous Zn, Pb, Cu in rocks
qtzite, dk. grey interbedded w. light grey layers
qtzite
greenstone metavx
053
20
P23
P25
P24
L19
L20
L21
L28
grey qtzite
L27
L26
L25
L24
L23
L22
A198
A199
3400


SOUTH
1 km
A48
A47
A46
A45
A44
A43
A66
A67
A68
A69
A70
C139
C14
P11
P12
396
P8
111
P7
128
P13
P14
P15
P16
P17
P6
P5
P4
P3
162
P2
163
P1
179
A.66
150
A67
212
L7
157
L8
L9
L10
L11
L12
L13
L14
L15
L16
L17
L18
L5
L4
116
L3
116
L2
139
L1
159
Pond
GPS
located site
previous anomalies
129
musc rich till
musc sch fH
XXX
XX
N
31° mag
angular musc. qtzite float w. minor amts of argillaceous metaux in L1 to L18 hills
PELMAC SOUTH July/2001
DB + GR
ppm Zn values shown > 100
TILL GEOCHEMISTRY
SCALE 1: 10,000 approx
0 100 200 300 400 500

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Richards, Gordon PROJECT PELMAC File # A102156 Page 1

6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

Pb 15
Zn 100
Sb 3
As 25
Cu 50
S .4

SAMPLE#	Mo 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 %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm
L-1	2.6	57	24	159	.3	117	28	839	4.41	19	<1	<2	10	87	1.2	2.0	1.0	45	1.74	.088	31	59	1.20	319	.003	4	.77	.012	.08	1	<1	8.5	<1	.06	3
L-2	2.3	90	16	139	.2	142	24	530	4.57	66	<1	<2	5	36	.7	9.4	<.5	50	.41	.063	22	34	.37	444	.005	<1	.76	.009	.11	1	<1	9.4	1	.03	3
L-3	1.4	79	16	116	.2	142	28	701	4.43	77	<1	<2	10	50	.2	10.9	<.5	31	.73	.073	29	38	.54	292	.004	<1	.58	.009	.07	1	<1	6.5	2	.05	2
L-4	2.4	61	14	116	<.1	77	12	475	2.99	21	<1	<2	7	29	.2	3.2	<.5	68	.30	.038	25	26	.36	609	.007	<1	1.13	.009	.09	1	1	7.8	2	<.02	4
L-5	.9	14	9	50	<.1	18	12	321	2.50	19	1	<2	8	34	<.2	3.5	.5	33	.43	.075	26	22	.35	223	.019	<1	.88	.010	.06	1	<1	3.1	<1	<.02	2
L-6	2.4	46	22	129	.2	64	20	1205	4.19	32	<1	<2	6	58	.9	2.4	.6	53	.79	.096	23	37	.54	325	.008	3	.96	.012	.09	1	<1	7.8	1	.06	3
L-7	2.1	29	17	157	<.1	34	17	893	3.98	27	<1	<2	6	40	.6	2.2	.7	57	.51	.055	17	33	.53	228	.012	<1	1.16	.009	.08	1	<1	4.7	3	<.02	4
L-8	1.1	11	10	46	<.1	17	7	166	2.38	18	<1	<2	5	31	<.2	1.0	.5	50	.35	.049	16	27	.50	219	.030	1	1.24	.011	.05	1	<1	2.7	2	<.02	4
L-9	1.3	31	12	81	.2	49	15	487	2.97	10	<1	<2	5	36	.4	1.4	1.2	60	.43	.075	22	48	.68	493	.034	<1	1.31	.019	.07	1	<1	7.2	1	<.02	4
L-10	1.3	24	28	63	<.1	31	11	540	2.77	19	<1	<2	6	26	<.2	1.9	<.5	46	.29	.046	21	32	.47	344	.029	<1	1.30	.012	.07	1	<1	4.2	3	<.02	4
L-11	1.5	44	15	92	.2	57	17	509	3.19	32	<1	<2	8	60	.7	2.2	1.1	35	1.05	.100	24	35	.75	327	.029	<1	.88	.011	.11	<1	<1	4.6	<1	.03	3
L-12	1.1	22	9	79	.1	36	11	256	2.73	34	<1	<2	8	39	<.2	2.0	.5	33	.45	.098	26	25	.44	234	.015	1	.75	.009	.07	1	<1	3.2	<1	<.02	2
L-13	1.8	52	11	95	.3	46	15	579	3.58	15	<1	<2	6	38	.4	1.9	.7	52	1.17	.083	21	35	1.06	385	.017	<1	1.32	.011	.07	1	<1	8.4	<1	.02	4
L-14	1.0	19	9	82	.1	36	13	417	3.12	42	<1	<2	5	40	<.2	2.7	<.5	35	.48	.064	23	29	.40	193	.013	<1	.87	.008	.06	<1	<1	4.1	1	.02	3
L-15	1.0	25	8	68	.2	30	10	346	2.27	11	1	<2	5	47	<.2	1.5	.7	35	.78	.089	20	24	.49	315	.026	1	.94	.013	.08	1	<1	5.2	<1	.02	3
L-16	1.6	44	15	83	<.1	43	11	390	3.45	24	<1	<2	8	32	<.2	2.2	<.5	44	.51	.027	30	31	.48	398	.010	<1	1.25	.010	.09	1	<1	8.1	<1	<.02	4
L-17	.7	18	12	45	<.1	32	10	500	2.67	34	<1	<2	5	41	<.2	2.6	<.5	33	.59	.045	18	27	.41	180	.019	<1	.94	.012	.05	1	<1	5.0	<1	.02	3
L-18	1.1	24	10	60	.2	31	10	388	2.57	25	1	<2	5	43	.3	2.2	<.5	40	.59	.057	20	30	.45	243	.020	<1	.98	.009	.06	<1	<1	4.6	<1	.03	2
L-22	1.5	41	12	99	.2	29	10	562	2.32	17	<1	<2	5	71	.6	1.4	.6	38	1.66	.099	19	25	.69	497	.032	<1	.91	.012	.13	<1	<1	4.3	<1	.07	3
L-23	1.5	44	12	87	.1	27	12	570	2.53	16	<1	<2	4	62	.3	<.5	<.5	34	2.82	.104	35	25	.61	375	.040	<1	.86	.010	.11	<1	<1	4.8	<1	<.02	2
L-28	1.0	45	14	68	.2	30	12	786	2.47	14	1	<2	4	42	<.2	1.3	<.5	37	.77	.064	18	23	.63	382	.041	<1	1.13	.018	.08	1	<1	5.2	2	<.02	3
RE L-28	1.1	46	14	67	.2	30	12	811	2.55	15	<1	<2	5	44	<.2	.8	<.5	40	.80	.064	18	24	.66	387	.042	1	1.16	.020	.08	1	<1	5.5	2	<.02	3
P-1	1.6	90	25	179	.3	195	24	370	4.17	36	<1	<2	10	62	.8	7.0	1.2	43	.92	.098	27	35	.68	401	.013	<1	.94	.011	.11	2	<1	5.7	<1	.05	3
P-2	1.0	54	16	163	.1	108	28	1033	4.46	33	<1	<2	8	27	.3	7.8	<.5	42	.35	.044	28	47	.80	274	.050	<1	1.22	.008	.06	1	<1	6.5	2	.03	4
P-3	1.3	64	14	162	.2	155	22	649	3.58	33	<1	<2	13	65	.6	6.0	<.5	29	.72	.089	36	36	.59	155	.011	<1	.75	.007	.11	1	<1	4.6	1	.03	2
P-4	.2	31	7	67	.1	44	15	526	2.17	23	1	<2	13	36	<.2	3.4	<.5	17	.28	.062	36	19	.25	158	.008	<1	.56	.007	.08	1	<1	2.6	<1	<.02	2
P-5	1.4	18	10	37	<.1	35	29	585	3.23	20	<1	<2	13	14	.3	2.4	.7	38	.11	.014	30	32	.31	149	.025	<1	1.39	.007	.07	1	1	3.0	3	.02	3
P-6	.8	21	17	97	<.1	40	13	337	2.97	17	1	<2	12	31	<.2	4.3	<.5	29	.49	.081	32	36	.39	247	.006	<1	.89	.006	.06	1	<1	3.8	<1	.02	3
P-7	1.4	54	25	128	.2	92	25	1144	3.77	42	<1	<2	9	41	.8	12.5	<.5	40	.53	.059	26	35	.49	270	.012	<1	1.01	.010	.08	<1	<1	5.7	<1	.03	3
P-8	.9	39	13	111	.1	54	17	488	2.77	30	<1	<2	11	75	<.2	69.1	<.5	29	2.60	.087	45	25	.65	250	.017	<1	.79	.017	.08	1	<1	4.6	<1	.02	3
P-9	.8	31	15	78	.1	36	10	258	2.91	17	<1	<2	9	32	<.2	3.9	<.5	33	.47	.073	31	38	.45	144	.013	<1	.87	.007	.06	1	<1	4.6	<1	<.02	3
P-10	1.3	41	12	80	.2	52	11	389	2.88	21	<1	<2	9	36	.7	5.2	.5	44	.53	.071	28	32	.45	293	.010	<1	.88	.011	.07	<1	<1	5.2	<1	.02	2
P-11	1.1	45	15	67	.1	46	19	476	3.18	15	<1	<2	14	39	.4	4.9	.6	31	.81	.076	40	22	.60	328	.024	<1	.76	.012	.06	<1	<1	4.4	2	.03	2
P-12	1.6	64	17	396	.1	118	24	807	4.74	52	<1	<2	8	25	1.0	9.0	<.5	45	.26	.050	28	71	.58	329	.005	<1	1.03	.008	.07	1	<1	8.8	4	.05	3
STANDARD C3	26.7	66	33	174	6.2	37	12	751	3.05	57	22	2	23	27	25.8	15.4	24.1	79	.52	.095	19	183	.60	147	.085	22	1.79	.038	.16	15	2	4.4	1	.03	8
STANDARD G-2	1.6	3	3	45	<.1	8	4	556	1.99	<1	2	<2	4	75	<.2	<.5	<.5	44	.64	.105	9	89	.65	227	.138	3	1.02	.080	.52	3	<1	2.8	<1	<.02	5

GROUP 1DX - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY OPTIMA ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: TILL S150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 10 2001 DATE REPORT MAILED: July 23/01 SIGNED BY. C. Toye D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data d FA ___

SAMPLE#	Mo 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 %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm
P-13	.5	43	23	71	.1	54	21	406	3.24	29	3	<2	15	18	<.2	3.4	<.5	15	.21	.036	52	14	.26	149	.002	4	.55	<.001	.01	1	<1	4.0	3	.04	2
P-14	.9	33	12	54	.1	44	14	442	2.91	13	3	<2	6	31	.2	2.6	.8	44	.48	.041	22	28	.52	326	.028	5	1.13	.011	.04	1	<1	4.3	1	<.02	4
P-15	.7	44	15	80	<.1	84	18	647	3.30	32	2	<2	14	52	.3	5.5	<.5	18	2.85	.064	51	29	.41	117	.008	5	.59	.007	.11	<1	<1	4.2	1	.02	2
P-16	1.0	47	21	73	.1	44	15	414	3.10	20	1	<2	12	66	.5	2.0	<.5	20	3.49	.074	56	18	.51	190	.004	3	.51	.010	.07	<1	<1	4.1	1	.04	2
P-17	1.2	47	19	91	.2	55	15	452	3.17	20	3	<2	12	53	.2	3.5	<.5	26	1.39	.067	31	22	.39	300	.004	3	.64	.010	.07	<1	<1	4.6	<1	<.02	2
P-24	1.2	62	13	79	.3	31	12	731	2.42	18	2	<2	3	53	.5	1.5	<.5	29	1.76	.084	18	20	.59	308	.026	2	.78	.015	.12	1	<1	4.0	<1	.03	2
P-25	2.4	53	17	123	.3	43	12	489	3.16	21	3	<2	5	29	.7	2.5	<.5	53	.50	.119	19	28	.44	536	.017	3	1.43	.011	.08	1	<1	4.6	1	.02	3
RE P-25	2.4	52	17	123	.3	40	11	479	3.10	19	3	<2	5	28	.9	2.6	.6	53	.49	.109	18	26	.43	504	.016	4	1.41	.007	.08	1	<1	4.5	1	<.02	2
STANDARD C3	26.2	66	34	160	5.8	33	11	736	3.19	55	24	3	21	27	23.5	14.7	23.9	79	.57	.085	18	167	.63	142	.090	21	1.76	.037	.15	15	1	4.2	2	.02	7
STANDARD G-2	1.9	3	2	41	<.1	6	4	518	2.03	<1	5	<2	4	70	<.2	<.5	1.1	42	.67	.098	8	80	.65	216	.141	4	.95	.071	.48	2	<1	2.5	2	<.02	5

Sample type: TILL S150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ___ FA ___

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(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon PROJECT PELMAC File # A102158
6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Mo 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 %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm
L-19	1.0	28	15	64	<.1	21	9	685	2.07	16	2	<2	4	66	.4	1.4	<.5	31	2.29	.104	25	21	.75	323	.048	3	.59	.004	.03	<1	<1	3.2	<1	.04	2
L-21	1.3	32	9	67	<.1	22	9	681	1.98	14	2	<2	4	63	.2	<.5	<.5	31	2.02	.096	20	20	.72	317	.044	4	.67	.009	.07	<1	<1	3.4	<1	.04	2
L-24	.5	19	7	55	.1	14	6	245	1.58	7	3	<2	3	39	.2	.6	<.5	28	.64	.075	12	15	.40	154	.032	3	.64	.007	.04	<1	<1	2.0	<1	<.02	2
L-25	1.6	40	10	88	.1	22	8	485	2.12	18	3	<2	3	74	<.2	.9	<.5	27	1.44	.092	12	15	.54	243	.023	2	.64	.007	.06	<1	1	3.0	<1	.03	2
L-26	.8	32	9	67	.1	23	8	331	2.03	13	3	<2	4	50	<.2	.8	<.5	31	1.28	.093	10	20	.56	172	.031	<1	.72	.014	.05	<1	<1	3.0	<1	.02	3
L-27	.4	17	6	54	<.1	14	6	371	1.51	6	3	<2	2	39	.2	.7	.7	26	.72	.081	10	15	.38	161	.033	<1	.65	.009	.06	<1	<1	2.3	1	.03	1
P-22	1.0	27	8	58	<.1	16	7	506	2.03	20	<1	<2	2	80	.4	<.5	<.5	23	5.52	.084	61	14	.69	373	.028	1	.52	.009	.07	<1	<1	3.2	<1	<.02	2
P-23	1.5	31	10	68	<.1	19	9	690	2.42	28	<1	<2	3	74	<.2	.6	<.5	25	4.67	.071	51	14	.68	391	.024	2	.56	.005	.08	<1	1	3.2	<1	<.02	2
RE P-23	1.4	32	10	70	<.1	19	9	707	2.50	23	<1	<2	3	76	.3	.5	<.5	25	4.77	.075	53	15	.70	404	.024	1	.58	.005	.09	<1	<1	3.3	<1	<.02	2
STANDARD C3	26.2	66	34	160	5.8	33	11	736	3.19	55	24	3	21	27	23.5	14.7	23.9	79	.57	.085	18	167	.63	142	.090	21	1.76	.037	.15	15	1	4.2	2	.02	7
STANDARD G-2	1.9	3	2	41	<.1	6	4	518	2.03	<1	5	<2	4	70	<.2	<.5	1.1	42	.67	.098	8	80	.65	216	.141	4	.95	.071	.48	2	<1	2.5	2	<.02	5

GROUP 1DX - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY OPTIMA ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SILT SS80 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 10 2001 DATE REPORT MAILED: July 23/01 SIGNED BY. ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

ACME Al ...TICAL LABORATORIES LTD. 852 E. HASTINGS ST. ...NCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60... 53-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon PROJECT PELMAC File # A102157
6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Mo 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 %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm
L-20	3.5	42	7	107	<.1	33	18	243	5.32	1	4	<2	11	21	<.2	1.3	<.5	89	.59	.104	14	74	1.88	161	.298	10	3.16	.110	.96	<1	<1	5.2	<1	.83	9
P-18	4.0	66	21	125	<.1	2	7	4088	9.16	4	6	<2	2	130	.9	<.5	<.5	60	7.35	.069	89	22	2.53	415	.074	16	.17	.020	.11	1	<1	8.0	<1	<.02	5
P-19	1.4	13	18	46	<.1	2	2	1532	2.57	23	2	<2	1	41	<.2	<.5	<.5	17	2.54	.120	23	21	.90	156	.007	10	.36	.020	.24	<1	22	6.5	<1	.95	1
P-20	3.6	108	110	411	.1	2	3	5669	5.86	1	1	<2	<1	163	3.8	.7	1.6	30	12.00	.057	150	36	5.28	1285	.036	12	.15	.010	.09	1	1	7.6	1	<.02	4
P-21	3.0	11	94	641	<.1	6	5	8990	4.59	4	<1	<2	<1	309	2.3	<.5	<.5	17	17.54	.031	213	11	8.12	103	.004	10	.05	.020	.02	<1	20	8.1	3	<.02	3
RE P-21	3.0	11	89	633	.1	7	5	8713	4.48	1	<1	2	<1	299	2.3	<.5	1.2	15	17.10	.033	207	11	7.92	106	.004	10	.05	.020	.02	<1	18	7.8	2	.02	3
STANDARD C3	27.0	70	31	170	5.9	32	11	774	3.42	55	26	3	20	30	25.8	14.7	23.0	83	.59	.091	21	168	.64	147	.095	25	1.86	.040	.12	14	2	4.4	<1	.03	8
STANDARD G-2	2.4	3	2	41	<.1	6	4	510	1.99	<1	5	<2	4	71	<.2	<.5	<.5	41	.64	.096	9	75	.61	204	.130	9	.95	.070	.35	2	<1	2.4	1	<.02	4

GROUP 1DX - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY OPTIMA ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 10 2001 DATE REPORT MAILED: July 24/01 SIGNED BY. ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

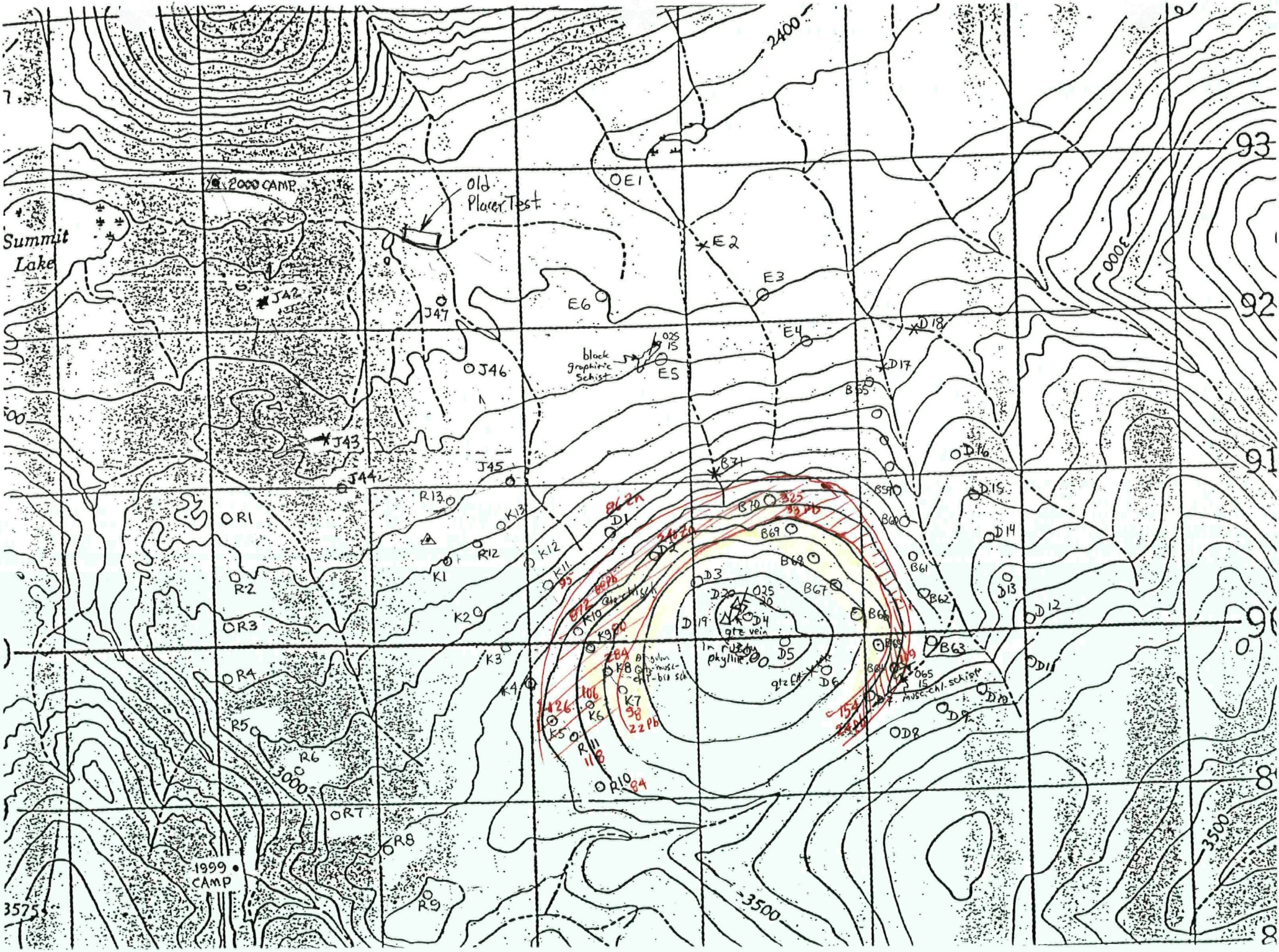
SUMMIT

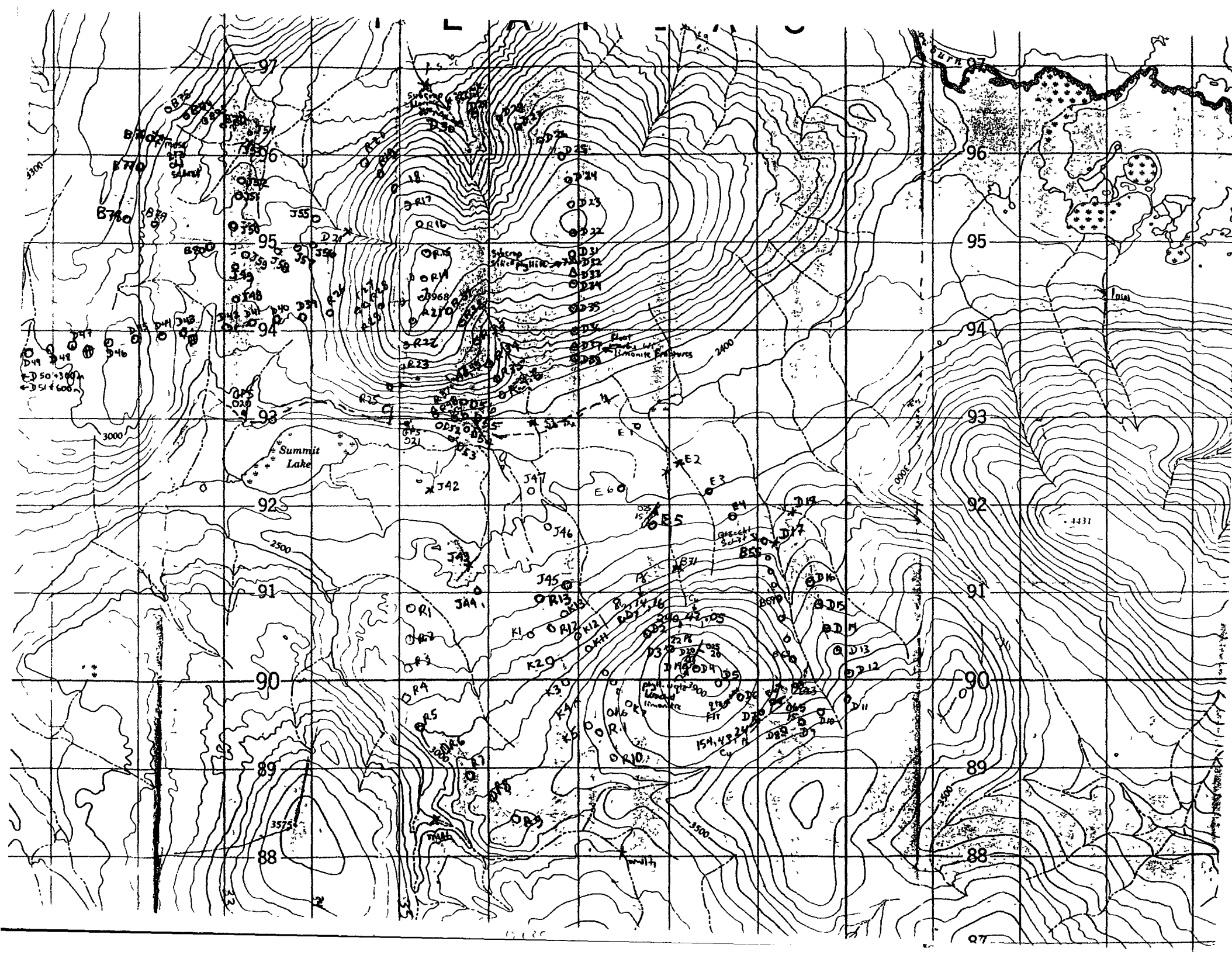
Access into the area was made by backpacking a camp along a trail into a site north of Summit Lake near a small south-flowing creek from where traverses were made into the areas of interest.

The Au-north and Au-east areas were prospected for epithermal gold mineralization with no success. Anomalous As and Sb were common throughout these areas but Au geochemical response was everywhere negative. Old placer mining tests were located near previous year's highest gold values in tills and silts as shown on the map.

The ms target was a massive sulphide target on a pronounced hill south of the Au-east area. Anomalous Zn, shown on the accompanying map, has some support of anomalous Pb and Cu but low Au and Ag. The pattern of anomalous metals mimics the nearly flat lying attitudes measured in outcrop suggesting a massive sulphide target horizon may extend beneath the hill in question. Anomalous base metals in several RGS samples collected in the creek to the west could be explained by either more extensive distribution of this horizon to the west or by glacial transport west from the described zone. The zone could also extend beneath the hill to the south. Sample density is very coarse but does outline the zone. Sample media were tills with abundant foreign pebbles indicating the geochemical response could be very much subdued from pronounced dilution of anomalous bedrock-derived soil.

SUMMIT-SOUTH Scale approx. 1:23,000




Summit Lake
3000
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ACME AN TICAL LABORATORIES LTD. 852 E. HASTINGS ST. COUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60 3-1716
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GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon PROJECT SUMMIT File # A102154 Page 1

6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Mo 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 %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm
B-55	.6	5	3	15	<.1	4	2	56	.81	11	<1	<2	1	8	<.2	2.5	.5	27	.04	.020	18	8	.06	40	.014	1	.44	.005	.04	<1	<1	.7	<1	<.02	4
B-56	.5	20	8	54	<.1	19	8	290	2.08	16	<1	<2	10	19	<.2	5.8	.9	25	.24	.059	37	20	.42	177	.015	1	1.18	.007	.05	<1	<1	2.6	<1	<.02	4
B-57	.5	21	8	58	<.1	19	7	202	2.07	7	<1	<2	11	13	<.2	3.0	1.3	31	.15	.051	39	21	.57	132	.023	<1	1.28	.006	.04	<1	<1	2.5	<1	<.02	5
B-58	.2	25	13	76	<.1	19	7	145	1.82	3	<1	<2	8	23	.2	1.5	.7	28	.30	.073	32	22	.51	209	.032	1	1.21	.008	.06	<1	<1	3.0	<1	<.02	5
B-59	.5	15	8	74	.1	15	7	241	1.74	6	<1	<2	6	24	<.2	3.8	.6	33	.31	.063	21	21	.43	194	.042	<1	1.15	.010	.05	<1	<1	2.7	<1	<.02	4
B-60	<.2	17	2	53	<.1	<1	<1	220	1.88	<1	<1	<2	6	16	<.2	<.5	<.5	38	.17	.002	24	2	.44	15	.039	1	1.24	.008	.05	<1	<1	3.0	<1	<.02	<1
B-61	.4	18	4	65	<.1	1	1	307	1.93	2	<1	<2	6	25	<.2	<.5	<.5	32	.33	.008	23	2	.41	26	.035	1	1.14	.011	.07	<1	<1	3.0	<1	<.02	<1
B-62	<.2	16	<2	57	<.1	1	<1	331	1.92	<1	<1	<2	7	29	<.2	<.5	<.5	26	.50	.005	25	2	.48	17	.036	1	1.14	.010	.06	<1	<1	2.6	<1	<.02	<1
B-63	.6	24	10	71	.1	22	8	245	2.10	5	<1	<2	10	21	<.2	1.0	1.0	29	.32	.085	34	23	.55	216	.042	2	1.16	.010	.09	<1	<1	3.0	<1	<.02	5
B-64	.9	19	12	55	<.1	23	8	241	2.83	8	<1	<2	9	17	<.2	1.4	1.5	51	.17	.023	23	32	.54	117	.024	1	1.74	.010	.06	<1	<1	3.0	<1	<.02	6
B-65 Pb 20 Zn 100 Cu 50	.5	59	14	109	<.1	35	12	364	3.33	4	<1	<2	17	14	.2	<.5	1.6	27	.13	.025	64	29	.74	233	.009	<1	1.77	.005	.05	<1	<1	2.8	<1	<.02	6
B-66	.4	43	16	76	<.1	35	12	488	3.42	<1	<1	<2	21	22	<.2	<.5	1.3	24	.29	.078	84	25	.85	135	.008	<1	1.73	.006	.04	<1	<1	5.3	<1	<.02	5
B-67	.6	16	7	44	<.1	16	6	153	1.93	2	<1	<2	2	12	<.2	<.5	1.0	31	.11	.048	30	21	.50	112	.018	1	1.32	.006	.04	<1	<1	1.9	<1	<.02	5
B-68	.4	22	7	68	.1	26	9	258	2.45	<1	<1	<2	11	19	<.2	<.5	1.5	29	.29	.073	41	29	.74	150	.015	<1	1.50	.006	.03	<1	<1	2.9	<1	<.02	6
B-69	.8	11	21	77	.1	13	6	193	2.41	9	4	<2	6	37	.2	<.5	<.5	34	.71	.086	19	19	.48	157	.014	<1	1.14	.008	.04	1	<1	3.0	<1	.04	4
B-70	.8	25	33	325	.2	15	8	255	2.31	10	4	<2	7	27	.5	<.5	<.5	33	.49	.075	21	19	.47	134	.022	2	1.10	.009	.04	<1	<1	2.8	<1	.02	4
B-72	.9	27	8	54	.1	22	9	456	2.35	24	4	<2	5	38	.3	2.3	<.5	53	.49	.098	18	26	.36	377	.038	4	.90	.017	.05	1	1	3.4	<1	<.02	3
B-73	1.0	29	11	65	<.1	23	9	400	2.27	36	4	<2	9	22	.2	7.3	<.5	34	.22	.051	29	21	.35	337	.031	<1	1.06	.011	.08	<1	<1	4.0	<1	<.02	4
B-74	.9	21	9	51	<.1	18	7	277	1.95	31	3	<2	6	19	.2	3.2	<.5	34	.19	.054	23	21	.35	314	.027	<1	1.06	.008	.07	1	<1	3.0	<1	<.02	3
B-75 Sb 2	.9	27	8	48	<.1	22	7	255	2.22	38	3	<2	6	17	.2	2.4	<.5	44	.14	.029	21	28	.37	296	.032	<1	1.21	.009	.06	1	<1	3.9	<1	<.02	4
RE B-75 Bi .5 As 20	.9	27	8	49	<.1	22	7	257	2.26	38	3	<2	7	17	.2	2.7	<.5	45	.14	.029	22	28	.37	300	.032	<1	1.22	.009	.06	1	<1	3.9	<1	<.02	4
B-76	1.1	40	15	69	.1	24	10	500	2.48	155	3	<2	10	18	.6	10.2	<.5	24	.15	.077	31	16	.28	238	.019	1	.89	.005	.12	<1	<1	4.0	1	<.02	3
B-77	.9	35	15	78	.1	30	10	417	2.55	65	3	<2	11	24	.2	5.8	<.5	30	.29	.085	36	21	.34	433	.014	2	1.03	.008	.09	1	<1	4.9	<1	<.02	3
B-78	1.0	47	11	76	.2	30	11	580	2.52	20	4	<2	7	45	.4	1.0	<.5	39	.81	.089	23	22	.50	436	.032	1	1.22	.013	.11	1	<1	4.0	<1	.02	4
B-79	.7	20	8	44	.1	19	8	212	1.79	22	5	<2	4	53	.3	<.5	<.5	33	.55	.070	17	19	.37	328	.024	2	.94	.011	.05	1	<1	2.8	<1	.04	3
B-80	1.1	39	12	103	.2	27	10	456	2.51	19	2	<2	8	34	.6	<.5	<.5	39	.39	.096	23	23	.54	627	.044	1	1.19	.014	.11	1	<1	3.7	<1	<.02	4
E-1	.6	19	6	41	<.1	20	7	222	1.79	10	2	<2	5	24	<.2	<.5	<.5	37	.28	.062	16	26	.51	201	.050	1	1.15	.012	.05	1	<1	3.0	<1	<.02	4
E-3	1.2	24	11	84	<.1	34	12	531	3.10	17	2	<2	9	25	.2	.8	<.5	58	.25	.035	18	41	.80	243	.068	<1	1.74	.013	.17	1	<1	3.8	<1	<.02	6
E-4	.4	18	7	55	<.1	14	6	158	1.71	7	2	<2	6	30	<.2	<.5	<.5	35	.37	.086	23	23	.46	174	.050	<1	1.04	.014	.07	1	<1	3.2	<1	<.02	4
E-5	.8	22	9	51	<.1	22	9	269	2.38	14	2	<2	6	25	<.2	.5	<.5	49	.24	.049	20	30	.49	320	.048	<1	1.32	.014	.05	1	<1	4.6	<1	<.02	5
E-6	.5	11	8	60	<.1	14	7	339	1.94	13	1	<2	5	27	.3	.5	<.5	40	.34	.060	18	21	.42	212	.038	<1	1.08	.010	.06	<1	<1	2.6	<1	<.02	4
E-7	1.3	55	12	98	.1	57	17	531	4.02	19	1	<2	11	31	<.2	<.5	<.5	89	.37	.020	33	59	.96	558	.175	<1	2.38	.026	.24	<1	<1	11.2	1	<.02	8
J-42	1.7	72	15	90	<.1	84	15	381	4.26	29	2	<2	10	29	<.2	<.5	.5	84	.22	.038	24	60	.98	628	.068	1	3.30	.021	.10	<1	<1	9.6	<1	<.02	9
J-44	2.1	64	12	73	<.1	50	18	1511	3.74	20	2	<2	13	26	<.2	1.1	1.0	66	.16	.029	50	48	.67	634	.054	1	2.48	.010	.12	<1	<1	11.0	<1	<.02	7
STANDARD C3	27.1	67	32	170	6.4	35	12	776	3.07	59	26	3	22	29	24.6	14.6	24.6	82	.50	.091	18	173	.61	146	.082	18	1.85	.042	.17	15	1	4.4	2	.03	8
STANDARD G-2	1.6	3	2	47	<.1	7	4	555	2.00	<1	<1	<2	5	74	<.2	<.5	.8	45	.63	.098	8	79	.64	212	.127	<1	1.02	.084	.51	3	<1	2.6	3	<.02	5

GROUP 1DX - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY OPTIMA ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: TILL S150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 10 2001 DATE REPORT MAILED: July 23/01 SIGNED BY: D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data FA

SAMPLE#	Mo 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 %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm
J-45	1.1	32	10	73	.1	25	8	314	2.67	12	<1	<2	7	28	<.2	.7	<.5	52	.32	.049	21	34	.54	327	.076	2	1.50	.018	.10	<1	<1	5.2	2<.02		5
J-46	1.2	42	10	66	<.1	49	13	489	2.91	16	<1	<2	8	22	<.2	.5	<.5	56	.19	.027	18	41	.64	397	.070	3	1.77	.012	.08	<1	<1	5.4	1<.02		6
J-47	1.7	55	14	79	<.1	44	14	597	3.67	25	1	<2	10	26	<.2	.9	<.5	65	.23	.026	29	43	.79	534	.086	4	2.10	.014	.08	<1	<1	8.5	2<.02		7
J-48	.7	28	10	49	.1	21	8	334	2.18	18	1	<2	5	34	<.2	<.5	<.5	41	.46	.053	18	24	.40	404	.038	1	1.22	.013	.06	<1	<1	3.6	2<.02		4
J-49	1.2	45	34	83	<.1	30	10	687	3.05	157	<1	<2	11	18	.4	5.9	.9	27	.12	.046	33	23	.44	344	.025	1	1.09	.006	.13	<1	<1	6.8	2	.03	3
J-50	.7	29	9	73	.1	21	7	257	2.19	17	<1	<2	7	26	<.2	<.5	<.5	26	.30	.084	23	18	.38	304	.042	3	.92	.010	.08	<1	<1	2.9	1<.02		3
J-51	1.0	32	13	82	.2	21	9	412	2.18	18	<1	<2	7	30	.4	<.5	<.5	30	.45	.086	19	19	.45	416	.047	1	.92	.012	.11	<1	1	3.0	2<.02		3
J-52	1.0	43	26	92	.1	28	12	820	2.92	43	<1	<2	10	23	.3	1.7	.5	31	.27	.071	28	23	.52	421	.036	2	1.10	.009	.11	<1	<1	4.8	1<.02		3
J-54	.8	21	20	69	<.1	18	9	413	3.01	15	<1	<2	8	28	<.2	<.5	<.5	51	.37	.093	27	22	.62	428	.105	1	1.23	.012	.26	<1	<1	5.5	3<.02		4
J-55	.7	44	25	79	.2	21	7	346	2.34	47	<1	<2	10	28	.2	1.0	<.5	25	.33	.088	23	18	.43	190	.042	3	.98	.014	.10	<1	<1	3.5	1<.02		3
J-56	.8	43	24	72	.3	19	6	419	2.21	55	<1	<2	8	24	.2	2.3	<.5	25	.27	.077	22	16	.36	289	.034	2	.88	.011	.08	<1	<1	3.1	1<.02		3
J-57	.7	32	14	64	<.1	18	6	237	2.15	41	<1	<2	7	21	<.2	1.1	<.5	30	.21	.040	24	20	.41	375	.048	<1	1.00	.012	.08	<1	<1	3.7	1<.02		3
J-58	1.0	36	15	77	.2	21	8	375	2.28	37	<1	<2	8	28	.2	1.2	<.5	30	.35	.076	23	20	.44	427	.042	4	1.02	.012	.09	<1	<1	3.3	2<.02		4
J-59	.8	33	11	77	.2	20	7	291	2.11	19	<1	<2	7	29	.2	<.5	<.5	30	.46	.086	20	19	.41	371	.045	1	.94	.013	.08	1	<1	3.2	<1<.02		3
RE J-59	.8	34	11	79	.2	21	7	295	2.14	20	<1	<2	7	30	.2	<.5	<.5	31	.47	.089	20	19	.42	375	.045	1	.95	.012	.08	<1	<1	3.2	1<.02		3
K-1	1.0	24	13	75	<.1	26	11	442	3.02	27	<1	<2	10	20	<.2	8.1	<.5	38	.21	.045	25	30	.55	242	.040	<1	1.37	.009	.08	<1	<1	3.6	<1<.02		5
K-2	1.1	23	14	75	<.1	24	12	417	2.99	14	<1	<2	8	12	<.2	2.3	<.5	39	.11	.043	21	28	.53	108	.049	<1	1.30	.006	.08	<1	<1	2.8	3<.02		5
K-3	.6	16	9	61	<.1	18	8	305	2.09	10	<1	<2	6	26	<.2	<.5	<.5	39	.35	.056	20	25	.44	218	.047	<1	1.09	.012	.06	<1	<1	2.9	2<.02		4
K-4	.7	16	12	71	<.1	17	9	329	2.28	9	<1	<2	9	24	<.2	3.2	<.5	32	.36	.083	26	23	.48	158	.047	<1	1.05	.010	.07	<1	<1	2.6	2<.02		3
K-5	.6	40	7	126	<.1	15	6	165	2.24	5	<1	<2	9	13	.2	<.5	<.5	30	.17	.044	33	23	.49	184	.025	<1	1.25	.007	.05	<1	<1	2.2	<1<.02		4
K-6	.5	31	13	104	<.1	26	9	384	2.71	20	1	<2	11	22	<.2	1.9	<.5	23	.30	.055	34	18	.24	292	.007	1	.94	.009	.06	<1	<1	4.2	<1<.02		2
K-7	.8	28	22	98	.2	21	10	421	2.62	9	1	<2	7	28	<.2	<.5	<.5	31	.44	.073	31	20	.38	339	.016	<1	1.19	.009	.05	<1	<1	3.6	<1<.02		4
K-8	.7	11	10	284	<.1	14	6	169	2.04	7	<1	<2	8	12	.5	<.5	<.5	33	.13	.031	31	21	.40	153	.019	<1	1.15	.006	.04	<1	<1	2.3	1<.02		5
K-9	.9	28	11	80	<.1	27	9	274	2.73	32	<1	<2	16	22	<.2	8.3	<.5	17	.25	.071	49	14	.16	113	.004	<1	.60	.007	.06	<1	<1	3.7	1<.02		2
K-10	.6	64	88	872	.1	43	18	369	3.43	11	2	<2	17	43	3.6	2.9	<.5	25	1.06	.077	48	34	.64	164	.005	1	1.36	.008	.07	1	1	6.4	<1	.04	4
K-11	.5	18	10	95	<.1	18	10	435	2.58	19	1	<2	6	36	.3	16.7	<.5	34	.71	.074	23	20	.39	172	.021	<1	.96	.010	.05	<1	<1	3.2	<1	.02	3
K-12	.6	19	11	78	<.1	20	13	765	2.52	11	1	<2	8	29	<.2	1.2	<.5	35	.45	.075	36	22	.51	169	.027	2	1.14	.009	.06	1	<1	3.3	2<.02		4
K-13	.6	15	10	70	<.1	17	9	560	2.26	15	<1	<2	6	28	<.2	3.6	<.5	31	.43	.075	20	19	.39	151	.025	2	.87	.008	.05	<1	<1	2.5	2<.02		3
STANDARD C3	26.7	66	34	170	6.2	34	12	749	3.25	60	23	3	21	28	23.8	13.8	24.3	81	.50	.089	18	175	.58	152	.092	18	1.76	.041	.18	15	1	4.2	<1	.02	8
STANDARD G-2	1.6	2	2	46	<.1	7	4	531	2.04	2	2	<2	6	72	<.2	<.5	<.5	43	.60	.098	8	80	.59	219	.144	2	.97	.081	.54	2	<1	2.4	2<.02		5

Sample type: TILL S150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

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GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon PROJECT SUMMIT File # A102155

6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Mo 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 %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm
B-71	.7	10	17	144	<.1	10	8	516	1.93	4	3	<2	4	21	.3	1.7	<.5	29	.42	.069	19	17	.37	116	.021	<1	.79	.010	.02	1	<1	2.2	<1	<.02	2
E-2	.9	21	11	103	<.1	19	10	491	2.67	10	4	<2	5	32	<.2	2.5	<.5	36	.57	.097	20	22	.46	251	.036	3	1.00	.013	.04	1	<1	3.2	<1	.03	3
J-43	.3	8	4	36	<.1	9	4	146	1.22	1	3	<2	4	27	<.2	<.5	<.5	26	.46	.082	15	14	.30	143	.039	3	.64	.012	.04	1	<1	2.0	1	.02	2
J-53	.5	10	6	52	<.1	12	6	802	2.34	33	3	<2	4	43	<.2	1.2	.5	29	.65	.092	13	15	.32	241	.026	<1	.65	.016	.05	1	<1	2.1	1	.04	2
RE J-53	.3	9	6	46	<.1	11	5	731	2.19	30	3	<2	3	41	<.2	2.0	<.5	27	.61	.086	14	14	.31	222	.026	3	.61	.009	.05	1	<1	1.9	2	.03	2
STANDARD C3	26.2	66	34	160	5.8	33	11	736	3.19	55	24	3	21	27	23.5	14.7	23.9	79	.57	.085	18	167	.63	142	.090	21	1.76	.037	.15	15	1	4.2	2	.02	7
STANDARD G-2	1.9	3	2	41	<.1	6	4	518	2.03	<1	5	<2	4	70	<.2	<.5	1.1	42	.67	.098	8	80	.65	216	.141	4	.95	.071	.48	2	<1	2.5	2	<.02	5

GROUP 1DX - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY OPTIMA ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SILT SS80 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 10 2001 DATE REPORT MAILED: July 23/01 SIGNED BY: C. Leong .D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ✓ FA ___

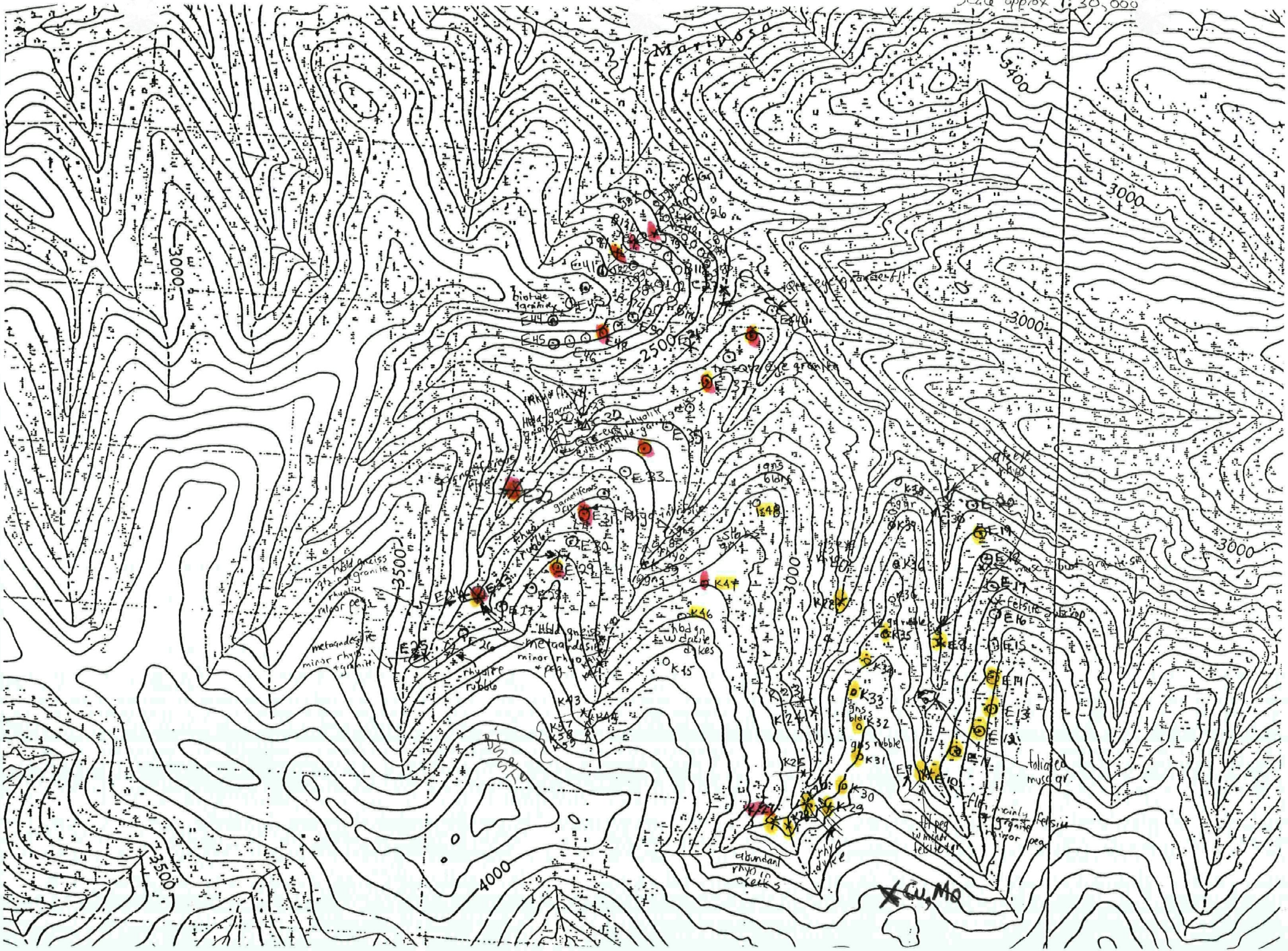
SCROGGIE

Access was made by flying by fixed wing to the airstrip on Scroggie Creek, ATV to the mouth of Mariposa Creek and Stevens Creek and from there by foot to the area of the traverses shown on the accompanying maps.

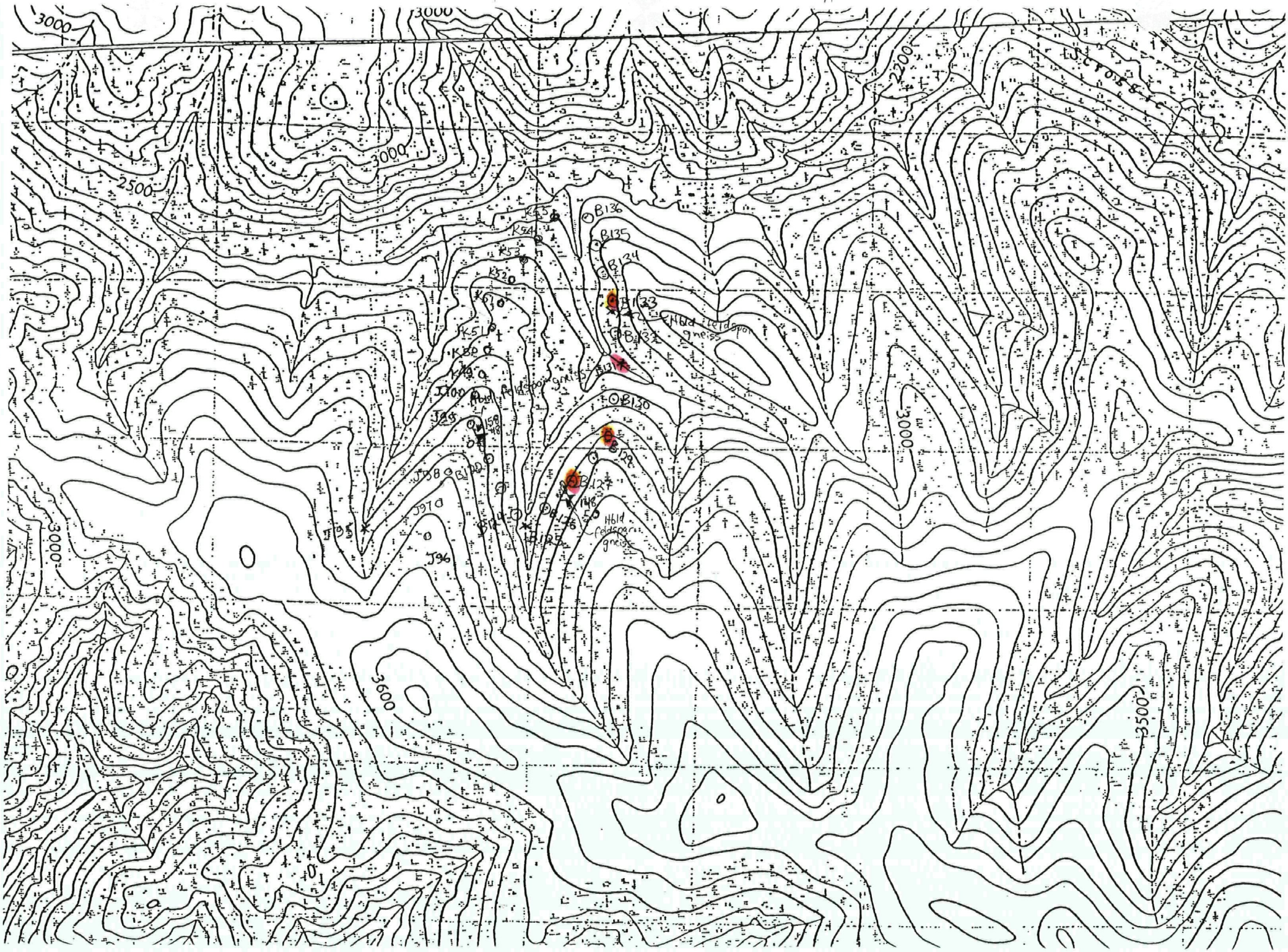
Targets in upper Stevens and Scroggie Creeks were based on stream sediments collected in previous years that were geochemically anomalous for several elements.

The Stevens Creek target was anomalous for Au and W. Follow-up work in 2001 found spotty anomalous gold values with no backup by other metals and has been written off as a target for further work.

The Scroggie Creek target covered several leads, one of which is related to a porphyry Cu-Mo occurrence discovered in1970 and worked on in 1971 and again in 1980. (Minfile 115J 072). Silts and soils collected in the upper drainages of the two most easterly north-flowing creeks returned anomalous values for W-Mo-Bi-Ag-Pb with S-Te and some Cu. Au was everywhere low. Felsic intrusive float, with a few similar outcrops, was particularly abundant in the upper reaches of these creeks. The association of these metals with felsic intrusions is diagnostic of porphyry W deposits. Elements common with this deposit type and not assayed for, include F, Li and Sn. "W, Mo and Sn are anomalously in hostrocks close to mineralized zones; anomalously high contents of F, Zn, Pb and Cu occur in wallrocks up to several kilometres from mineralized zones. W, Sn, Mo, F, Cu, Pb and Zn may be anomalously high in stream sediments..." (Sinclair W.D. in BC Mineral Deposit Profiles – Volume II, OF 1995-20). Further, "main ore mineral is generally either scheelite or wolframite... Subordinate ore minerals include molybdenite, bismuth, bismuthinite and cassiterite... Not currently an important source of world W production. ." Logtung (Yukon) has published resources of 162 Mt @ 0.10% W, 0 03% Mo. In the past several decades the low grades required high production volumes which have not been justified by the demand and price for tungsten. Prices are currently high, roughly $4/lb, such that higher-grade porphyry W deposits might be viable.


UPPER SCROGGIE
Scale approx 1:30,000
Mardoch
3400
3000
2500
3500
4000
Cu, Mo

STEVENS CREEK Approx. Scale 1:30,000



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GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon PROJECT SCROGGIE File # A102162 Page 1

6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Os ppb	Pd ppb	Pt ppb	Sample gm
B-114	.88	12.05	7.49	72.5	44	11.2	13.9	742	3.29	5.5	.4	.7	4.7	37.8	.07	.23	.09	66	.33	.037	12.5	19.9	.95	269.2	.169	1	2.07	.009	.66	<.2	1.6	.19	<.01	13	.1	.02	7.0	<5	<10	<2	30
B-115	.82	9.45	8.18	104.4	24	8.9	17.2	854	4.48	4.5	.5	1.1	7.7	35.3	.08	.20	.06	84	.42	.070	13.8	15.6	1.41	206.2	.258	<1	2.54	.006	.89	<.2	1.2	.30	.03	15	.2	<.02	8.1	<5	<10	<2	30
B-116	.57	31.76	3.90	46.9	37	25.0	13.2	296	2.49	4.3	.3	.6	3.1	27.2	.03	.16	.05	62	.28	.024	5.0	64.6	1.19	149.9	.123	1	1.73	.007	.21	<.2	2.2	.09	.01	8	<.1	.02	4.4	<5	<10	<2	30
B-117	.69	12.68	8.49	75.9	25	17.3	13.1	594	3.49	5.4	.6	.7	8.4	35.8	.05	.22	.07	66	.33	.023	13.7	26.5	1.21	184.4	.140	1	2.44	.004	.24	<.2	2.1	.13	.04	15	.1	<.02	7.2	<5	<10	<2	30
B-118	.94	12.02	8.94	78.7	31	20.0	16.5	668	3.59	7.8	.5	1.4	7.6	19.5	.09	.37	.12	71	.20	.057	12.9	28.7	.89	211.1	.150	1	2.45	.005	.40	<.2	2.1	.20	.02	26	.3	<.02	7.2	<5	<10	<2	30
B-119	.94	9.53	8.59	72.4	30	19.8	15.0	950	3.25	6.7	.6	1.5	8.6	21.1	.07	.23	.13	70	.24	.049	15.4	37.8	.79	140.4	.127	1	2.04	.007	.19	<.2	2.2	.14	.04	15	.3	.02	7.2	<5	<10	<2	30
B-120	.35	6.37	3.20	74.7	11	5.5	11.4	674	2.80	1.8	.5	.4	16.0	18.5	.03	.06	.03	48	.25	.089	23.4	10.8	.85	113.3	.166	1	1.70	.005	.81	<.2	.9	.27	.02	6	.2	<.02	5.5	<5	<10	<2	30
B-121	.65	8.73	6.81	83.5	22	10.4	11.8	581	3.48	5.1	.7	4.1	11.0	26.7	.07	.19	.08	70	.33	.078	27.4	20.0	.89	204.5	.182	1	2.14	.010	.52	<.2	2.0	.19	.04	9	.2	.02	7.8	<5	<10	<2	30
B-122	1.03	30.32	8.57	74.0	40	25.6	15.9	674	3.58	8.6	1.0	4.8	5.9	34.0	.05	.35	.13	73	.53	.043	21.8	48.1	.99	446.9	.121	1	2.46	.015	.11	<.2	4.9	.10	.04	28	.5	.03	6.8	<5	<10	<2	30
B-123	.67	20.96	6.78	51.5	43	19.7	11.9	356	2.64	6.3	.6	6.7	4.2	26.4	.05	.32	.11	62	.34	.043	13.4	34.7	.74	242.1	.106	1	1.75	.014	.08	<.2	2.8	.06	.02	56	.4	.02	5.6	<5	<10	<2	30
B-124	.49	15.84	5.08	52.3	38	18.3	12.1	388	2.66	4.1	.4	3.1	2.8	25.6	.06	.22	.08	55	.42	.059	10.7	31.2	.82	198.9	.091	<1	1.74	.012	.09	<.2	2.5	.05	.04	15	.3	.02	5.2	<5	<10	<2	30
B-126	.64	13.16	7.21	66.3	41	17.2	12.6	484	2.91	5.4	.6	5.3	4.6	28.7	.08	.25	.12	61	.48	.072	13.4	33.3	.83	201.5	.116	1	1.86	.012	.15	<.2	2.5	.10	.02	23	.3	<.02	5.8	<5	<10	<2	30
B-127	1.28	59.62	12.64	96.7	78	21.4	17.5	713	3.77	7.0	.4	35.0	2.9	29.4	.25	.35	.41	93	.42	.062	11.0	40.6	.90	246.4	.126	1	2.22	.018	.16	<.2	3.0	.11	.04	28	.4	.12	8.2	<5	<10	<2	30
B-128	.73	21.08	9.09	79.2	38	18.9	13.6	561	3.51	4.7	.6	7.4	6.3	29.1	.07	.27	.13	69	.36	.094	18.8	37.7	1.09	248.4	.165	<1	2.23	.011	.40	<.2	2.1	.18	.04	12	.2	.02	8.3	<5	<10	<2	30
B-129	.80	27.80	21.79	82.7	40	24.5	14.0	448	3.36	4.8	1.4	24.0	17.4	23.6	.17	.26	.22	64	.28	.060	25.8	55.8	.98	164.1	.127	1	2.31	.007	.24	<.2	2.3	.19	.02	13	.3	.02	7.2	<5	<10	<2	30
B-130	.86	23.77	10.44	58.7	91	19.5	10.8	364	2.59	7.9	1.2	5.7	6.6	29.1	.16	.41	.22	61	.37	.063	22.1	30.3	.57	222.4	.084	1	1.58	.012	.07	<.2	2.7	.08	.03	26	.5	.03	5.8	<5	<10	<2	30
B-132	.70	22.28	9.31	80.2	30	25.6	16.2	704	3.82	5.0	.8	6.4	9.5	39.8	.07	.30	.13	68	.48	.048	18.9	42.6	1.15	431.7	.074	1	2.39	.012	.18	<.2	4.1	.06	.04	22	.4	.04	7.7	<5	<10	<2	30
B-133	.93	18.96	6.09	84.9	27	12.8	17.2	706	4.81	5.2	.6	10.6	4.8	43.8	.05	.25	.09	119	.64	.134	17.3	22.8	1.42	341.0	.170	<1	2.59	.013	.28	<.2	3.5	.11	.04	13	.2	.02	9.2	<5	<10	<2	30
B-134	.87	25.28	6.13	79.2	12	20.5	17.3	642	4.50	7.6	.6	9.6	7.9	29.6	.05	.29	.09	114	.27	.025	13.7	35.9	1.32	182.2	.188	<1	2.81	.015	.20	<.2	4.2	.09	.02	15	.2	.02	9.1	<5	<10	<2	30
B-135	.93	22.95	7.29	79.5	15	16.3	18.0	860	4.42	5.1	.9	7.4	12.1	24.8	.04	.23	.09	91	.33	.045	17.9	25.3	1.30	322.7	.130	1	2.67	.009	.48	<.2	3.2	.15	.03	14	.1	.02	8.5	<5	<10	<2	30
B-136	.64	28.16	6.57	60.5	52	18.5	11.1	386	2.79	5.9	1.0	4.1	6.2	29.9	.04	.38	.13	70	.44	.068	22.8	30.8	.78	291.6	.124	1	1.75	.017	.15	<.2	4.0	.08	.01	18	.4	<.02	5.9	<5	<10	<2	30
RE B-136	.66	28.84	6.40	61.1	46	20.0	11.1	388	2.81	5.9	1.0	4.4	5.9	29.2	.05	.41	.12	70	.44	.065	22.7	32.0	.79	296.1	.124	<1	1.75	.012	.15	<.2	4.4	.08	.04	25	.4	.03	5.7	<5	<10	<2	30
E-11	4.46	14.07	23.87	83.1	347	10.1	8.9	324	2.79	4.4	.6	5.4	1.8	29.0	.22	.22	3.61	75	.30	.040	6.5	20.7	.74	113.5	.095	1	1.99	.009	.08	19.8	2.3	.16	.04	26	.2	.14	6.1	<5	<10	<2	30
E-12	10.53	23.61	37.98	130.8	520	15.1	9.8	419	3.20	6.9	.6	6.3	2.7	20.5	.52	.52	6.49	89	.28	.054	9.2	31.1	.83	132.3	.119	<1	2.00	.005	.12	26.1	2.5	.23	.04	20	.3	.21	7.8	<5	<10	<2	30
E-13	3.12	42.64	56.25	98.8	633	20.9	13.2	452	3.12	6.4	1.1	7.8	4.1	28.2	.62	.43	4.26	68	.32	.064	16.4	36.6	.85	211.0	.092	<1	1.98	.012	.13	28.6	3.2	.23	.06	26	.6	.19	6.8	<5	<10	<2	30
E-14	2.23	29.55	38.95	95.5	259	23.4	16.3	607	3.39	8.9	1.1	3.6	5.7	26.4	.25	.65	.81	75	.32	.054	17.0	37.6	.99	235.4	.110	<1	2.17	.009	.14	2.6	3.4	.21	.04	22	.4	.14	6.9	<5	<10	<2	30
E-15	.75	32.51	9.57	79.2	24	22.4	19.2	588	4.16	7.8	.6	7.3	3.8	36.5	.10	.40	.14	85	.33	.047	11.6	43.3	1.01	328.8	.110	<1	2.85	.010	.21	.3	5.2	.14	.03	22	.4	.05	8.6	<5	<10	<2	30
E-16	1.62	29.14	35.19	92.0	435	19.5	14.2	416	3.30	6.1	.6	10.8	3.7	27.3	.22	.28	.44	75	.27	.055	12.8	28.7	.68	231.2	.090	<1	1.91	.014	.12	.4	2.7	.13	.06	22	.2	.28	7.2	<5	<10	<2	30
E-17	1.22	60.71	14.95	140.6	123	16.9	13.2	485	3.89	6.3	.6	9.1	3.2	22.4	.19	.30	.22	78	.29	.074	10.8	25.7	1.01	259.6	.160	<1	2.79	.010	.35	.3	2.0	.22	.04	24	.2	.18	8.0	<5	<10	<2	30
E-18	1.71	20.85	14.44	61.1	102	17.5	8.0	246	3.33	10.4	.7	11.1	3.2	16.9	.11	.41	.22	79	.15	.056	12.5	36.1	.44	115.4	.098	1	2.20	.006	.07	<.2	2.4	.10	.04	27	.2	.06	8.5	<5	<10	<2	30
E-19	1.08	56.23	12.38	75.0	57	23.4	14.8	470	3.29	6.9	.7	25.4	6.0	25.5	.14	.36	.18	70	.29	.063	16.5	38.4	.81	271.3	.121	<1	2.15	.014	.13	.3	2.8	.09	.03	9	.1	.05	7.4	<5	<10	<2	30
E-20	1.07	20.04	10.62	66.8	52	18.1	9.9	396	2.53	6.7	.7	8.0	2.2	22.8	.16	.40	.21	64	.30	.067	13.8	32.6	.60	189.0	.094	1	1.58	.015	.09	.5	2.1	.08	.04	30	.2	.04	6.0	<5	<10	<2	30
E-26	.46	22.19	6.48	62.1	100	8.5	9.9	309	2.76	3.3	.3	9.6	1.2	28.7	.08	.15	.09	86	.47	.053	5.3	15.8	.76	129.2	.171	<1	1.95	.012	.16	.2	2.3	.11	.05	25	<.1	.03	5.9	<5	<10	<2	30
STANDARD DS3	9.20	127.49	34.98	156.0	280	34.9	11.3	779	3.07	28.4	6.4	21.9	3.8	26.1	5.36	4.99	5.19	84	.53	.090	17.5	182.0	.57	144.0	.093	1	1.85	.026	.17	3.7	2.3	.96	.05	235	1.2	1.05	5.9	<5	<10	<2	30

Mo 3
Cu 10
Pb 10
Zn 100
Ag 200
Au 10
Sb 1
Bi .5
W 2
S .05
Te .1
Se .5

GROUP 1F30 - 30.00 GM SAMPLE, 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML, ANALYSIS BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SOIL SS80 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 10 2001 DATE REPORT MAILED: July 24/01 SIGNED BY. C. L. D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ✓ FA ___

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Os ppb	Pd ppb	Pt ppb	Sample gm
E-27	1.03	41.16	7.46	72.8	178	8.0	11.9	280	4.60	4.0	.3	9.0	.9	90.0	.07	.17	.11	78	.45	.105	4.6	13.2	.81	355.2	.084	<1	2.75	.095	.29	<.2	3.4	.14	.48	16	.5	.34	8.5	<5	<10	<2	30
E-28	.85	20.32	9.20	73.3	89	16.4	15.7	400	2.95	5.9	.5	6.2	2.5	15.7	.12	.31	.18	70	.26	.069	10.0	24.2	.65	185.6	.081	1	1.55	.011	.10	.2	3.3	.11	<.01	21	.1	.03	6.3	<5	<10	2	30
E-29	.73	33.14	8.54	89.2	130	18.5	18.3	402	3.47	6.2	.7	13.6	2.9	20.0	.08	.33	.19	73	.33	.096	13.0	28.5	1.20	294.6	.105	2	2.31	.008	.14	.2	6.0	.13	<.01	37	.3	.03	9.9	<5	<10	<2	30
E-30	.77	29.44	13.49	57.6	151	14.6	8.5	207	3.29	4.9	.7	7.7	2.0	33.7	.07	.29	.18	77	.22	.055	8.1	24.6	.65	269.3	.084	1	2.19	.050	.10	<.2	4.4	.08	.19	29	.1	.03	8.0	<5	<10	<2	30
E-31	1.15	13.88	9.27	61.0	78	14.4	10.4	227	3.35	7.2	.3	32.1	1.8	15.8	.11	.33	.16	95	.13	.038	6.4	26.5	.55	120.4	.084	<1	2.31	.011	.05	<.2	2.5	.08	<.01	24	.1	.02	8.7	<5	<10	<2	30
E-32	1.11	17.79	14.70	44.9	71	12.7	8.4	229	2.83	6.5	.4	4.0	2.0	18.5	.09	.34	.26	83	.18	.030	7.1	25.0	.54	147.9	.074	<1	1.75	.008	.06	<.2	2.7	.09	.02	18	.1	.03	7.7	<5	<10	<2	30
E-33	.78	24.44	16.04	50.8	76	13.1	9.6	247	2.31	4.4	1.1	6.7	4.9	18.1	.06	.26	.42	50	.24	.032	15.0	25.7	.53	199.2	.046	<1	1.52	.010	.04	<.2	3.0	.11	<.01	21	.4	.05	5.0	<5	<10	<2	30
E-34	.69	24.18	7.67	74.8	63	16.3	15.0	465	3.50	5.1	.4	14.2	2.7	32.3	.12	.27	.11	81	.35	.083	8.0	28.0	.99	223.6	.083	1	2.44	.007	.05	<.2	2.7	.09	.01	14	.3	.03	7.8	<5	<10	<2	30
E-35	2.99	42.79	29.01	133.0	79	16.0	19.0	798	4.79	12.3	1.3	8.4	4.0	25.8	.19	.29	.18	101	.45	.119	14.8	23.8	.84	463.0	.067	<1	2.02	.004	.11	<.2	6.6	.10	.03	19	.4	.08	9.1	<5	<10	<2	30
E-36	.36	12.89	6.53	92.1	8	10.3	16.5	814	3.74	4.4	.6	6.2	4.4	34.7	.05	.21	.06	76	.41	.081	29.0	14.6	1.21	333.2	.154	<1	2.15	.008	.73	<.2	3.0	.28	.05	12	.3	.02	6.7	<5	<10	<2	30
E-37	1.09	17.74	9.52	57.8	20	19.7	10.1	344	2.90	9.4	.9	14.7	5.4	21.9	.08	.50	.17	64	.19	.040	21.6	33.1	.56	213.2	.077	1	2.01	.014	.07	<.2	3.7	.10	.01	27	.3	.02	6.3	<5	<10	<2	30
E-38	.64	15.01	7.78	67.4	15	17.0	13.5	449	3.09	7.0	.5	5.2	5.4	24.5	.10	.33	.11	59	.20	.040	9.2	23.4	.75	224.5	.130	1	2.22	.007	.20	<.2	2.0	.13	.01	12	.1	<.02	6.7	<5	<10	<2	30
E-39	.82	17.84	8.77	74.5	27	20.2	13.0	610	3.05	7.1	.7	28.1	6.4	19.2	.08	.37	.13	61	.21	.063	15.1	25.2	.69	179.7	.078	1	1.99	.003	.15	<.2	2.3	.12	.01	27	.2	.04	6.2	<5	<10	<2	30
E-40	.70	13.75	7.62	63.2	23	22.2	11.7	455	2.94	5.6	.8	3.9	11.1	30.7	.07	.26	.12	70	.28	.059	21.5	37.3	.88	179.9	.105	<1	1.82	.007	.09	<.2	2.9	.09	.01	16	.2	.02	7.1	<5	<10	<2	30
RE E-40	.74	13.89	7.50	66.5	23	22.2	12.6	465	2.97	5.3	.8	4.6	11.0	31.0	.08	.27	.13	71	.28	.059	21.4	36.2	.90	186.1	.107	<1	1.85	.010	.10	<.2	2.9	.09	.01	16	.2	.02	6.9	<5	<10	<2	30
E-41	.28	9.02	4.35	90.1	15	6.8	16.2	869	3.71	1.7	.4	1.0	9.7	28.1	.05	.08	.03	68	.46	.129	21.4	12.3	1.21	215.4	.208	<1	2.31	.006	.80	<.2	1.5	.37	.01	8	<.1	<.02	7.5	<5	<10	<2	30
E-42	1.35	13.01	10.25	69.0	25	15.3	13.0	592	3.50	8.7	.4	1.5	6.0	22.1	.07	.48	.17	76	.15	.042	9.7	30.6	.78	207.3	.112	<1	2.41	.005	.28	<.2	1.9	.17	.02	12	.1	.03	7.5	<5	<10	<2	30
E-43	.56	13.06	10.19	63.2	18	13.5	10.9	356	3.05	6.2	.4	7.0	4.7	29.9	.06	.36	.10	65	.23	.036	14.6	27.0	.76	195.3	.103	<1	2.03	.008	.16	<.2	2.1	.10	.01	18	.2	.02	5.9	<5	<10	<2	30
E-44	.70	10.19	7.01	78.8	21	12.6	14.9	749	3.79	4.8	.4	3.2	10.4	30.0	.04	.31	.09	72	.28	.045	12.9	21.3	1.04	277.9	.181	<1	2.28	.005	.62	<.2	1.7	.18	.02	12	.2	.02	7.3	<5	<10	<2	30
E-45	1.11	15.90	8.24	63.2	51	18.1	13.2	522	3.68	5.9	.7	3.5	9.3	23.2	.07	.47	.10	75	.39	.033	11.6	26.8	.93	268.9	.105	1	2.07	.009	.39	<.2	4.2	.15	.02	18	.3	.02	7.0	<5	<10	<2	30
E-46	.83	12.94	7.89	55.1	56	16.8	11.2	425	2.98	5.7	.4	1.4	5.0	27.5	.07	.37	.12	69	.32	.020	11.6	28.9	.71	291.2	.110	<1	1.80	.007	.25	<.2	2.6	.09	.02	12	.2	.02	6.3	<5	<10	<2	30
E-47	.69	15.99	8.33	70.0	30	20.7	13.2	488	3.45	9.7	.5	1.0	7.6	20.5	.05	.45	.12	73	.20	.037	14.0	32.3	.89	221.1	.168	<1	2.02	.007	.63	<.2	4.0	.20	<.01	14	.3	.02	6.5	<5	<10	<2	30
E-48	.53	16.96	7.95	66.6	37	13.4	13.4	720	3.44	5.4	.6	14.4	6.3	25.2	.05	.33	.08	65	.33	.046	13.4	22.1	.95	306.1	.125	1	1.97	.008	.56	<.2	2.9	.20	.01	12	.3	.03	6.1	<5	<10	<2	30
E-49	.74	23.87	8.78	50.5	23	28.6	10.7	299	3.03	10.3	.9	3.6	9.0	25.9	.02	.56	.15	70	.26	.025	30.1	40.0	.64	215.8	.101	<1	1.78	.009	.14	<.2	5.3	.07	.01	19	.3	.02	5.7	<5	<10	<2	30
E-50	.80	12.89	7.73	62.4	32	17.1	13.4	508	3.43	7.2	.5	1.9	8.2	20.2	.04	.41	.13	73	.18	.021	18.0	29.3	.86	169.8	.167	1	1.98	.004	.56	<.2	3.2	.17	.02	13	.1	<.02	6.8	<5	<10	<2	30
J-81	.29	5.99	4.22	70.7	22	5.1	10.8	548	2.72	1.4	.7	10.6	16.7	32.3	.05	.09	.03	47	.49	.122	31.7	8.0	.70	159.1	.109	<1	1.41	.006	.50	<.2	1.5	.13	.02	19	.1	<.02	5.3	<5	<10	<2	30
J-82	.62	8.83	7.44	68.0	15	10.2	11.2	625	2.83	4.6	.6	3.0	7.7	14.1	.07	.24	.10	55	.18	.058	12.7	17.3	.66	114.6	.077	1	1.58	.006	.19	<.2	1.9	.12	.01	11	.2	.02	6.0	<5	<10	<2	30
J-83	.91	11.23	8.30	67.5	21	16.5	10.0	386	3.33	8.1	.5	2.5	6.4	19.2	.07	.37	.13	71	.18	.051	13.5	27.7	.66	154.6	.108	1	1.98	.006	.15	<.2	2.0	.13	.01	20	.1	.02	6.4	<5	<10	<2	30
J-84	.96	12.20	9.01	71.6	24	16.5	12.3	523	3.71	10.8	.5	1.9	11.1	25.9	.06	.45	.13	80	.21	.035	13.4	30.0	.85	186.5	.150	1	2.33	.007	.19	<.2	2.2	.12	<.01	13	.2	.03	7.2	<5	<10	<2	30
J-85	.74	13.79	10.94	73.6	30	16.7	13.0	504	3.50	7.2	.8	9.8	11.1	26.8	.05	.40	.10	60	.26	.035	18.2	24.9	.86	194.5	.107	<1	2.08	.008	.19	<.2	2.3	.10	.02	18	.3	.05	6.7	<5	<10	<2	30
J-86	.97	16.50	8.17	64.7	64	20.5	14.5	549	3.29	7.8	.7	1.7	14.7	24.9	.06	.40	.13	68	.28	.042	19.0	32.7	.80	247.9	.122	<1	1.99	.007	.23	<.2	2.4	.14	.01	17	.2	.02	6.0	<5	<10	<2	30
J-87	.43	6.47	5.76	74.9	10	9.5	10.7	590	3.13	3.1	.6	3.7	8.7	20.1	.04	.14	.06	58	.31	.063	17.9	18.7	.88	153.8	.138	<1	1.82	.009	.44	<.2	2.0	.19	<.01	10	.2	<.02	5.8	<5	<10	<2	30
J-88	.55	9.69	6.54	61.6	28	13.9	9.7	442	2.64	3.6	.6	4.3	9.1	18.8	.06	.17	.09	55	.28	.057	22.9	26.3	.70	147.7	.108	1	1.51	.008	.29	<.2	2.2	.12	.02	16	.1	.03	6.4	<5	<10	<2	30
STANDARD DS3	9.11	125.95	33.20	155.8	269	31.6	11.3	785	3.08	27.5	5.4	21.6	3.8	27.7	5.31	4.80	5.20	75	.52	.093	16.2	181.9	.57	147.2	.082	1	1.65	.022	.15	3.6	2.8	.94	.05	222	1.2	1.01	6.2	<5	<10	<2	30

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ✓ FA ___

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Os ppb	Pd ppb	Pt ppb	Sample gm
J-89	.53	8.16	7.46	88.2	12	12.0	13.7	650	3.20	3.3	.6	14.4	12.7	27.1	.09	.23	.14	60	.33	.088	17.1	20.3	.84	118.9	.175	1	1.98	.012	.49	<.2	1.5	.20	.01	9	.1	<.02	6.7	<5	<10	<2	30
J-90	.73	14.35	8.17	66.7	26	15.9	12.4	499	3.14	5.7	1.1	6.7	15.1	22.7	.04	.32	.11	65	.25	.039	42.5	28.3	.79	161.0	.141	1	1.92	.011	.28	<.2	3.1	.16	.02	19	.2	.02	6.7	<5	<10	<2	30
J-91	.79	9.12	9.54	53.2	17	11.2	7.5	317	2.87	6.5	.5	4.1	6.9	18.3	.07	.27	.14	69	.19	.048	15.3	21.9	.58	81.6	.125	<1	1.65	.006	.20	<.2	2.0	.13	.02	16	.1	.03	7.5	<5	<10	<2	30
J-92	1.06	10.64	7.38	74.1	31	13.3	12.6	637	3.47	5.2	.6	2.8	8.7	23.7	.05	.22	.10	69	.32	.060	19.1	24.7	.87	138.8	.145	<1	2.13	.012	.31	<.2	1.9	.17	.03	14	.2	.02	7.6	<5	<10	<2	30
J-93	.97	12.26	9.52	89.2	82	12.3	13.2	641	3.28	3.4	.8	7.9	12.5	32.6	.07	.20	.10	62	.46	.080	28.4	21.3	.98	137.2	.166	1	2.15	.009	.46	<.2	2.3	.22	.04	43	.2	.04	7.6	<5	<10	<2	30
J-94	1.30	12.10	7.85	80.7	37	15.1	14.7	656	3.41	6.0	.6	5.8	12.0	24.1	.09	.27	.11	66	.30	.068	20.7	24.4	.89	126.8	.157	1	2.05	.008	.40	<.2	2.1	.19	<.01	17	.2	<.02	7.4	<5	<10	<2	30
J-96	1.22	11.15	8.99	57.6	30	12.5	7.2	356	3.61	7.8	.6	2.2	2.9	15.5	.15	.37	.18	64	.13	.032	7.1	25.6	.42	143.8	.041	1	1.91	.009	.06	<.2	4.0	.07	.01	17	.4	.05	9.9	<5	<10	<2	30
J-97	.93	18.60	7.91	51.2	35	20.4	10.3	274	3.22	7.3	.5	1.9	5.5	12.0	.06	.41	.16	59	.13	.021	11.3	36.4	.51	152.7	.072	1	2.90	.010	.06	<.2	4.2	.09	.02	40	.3	.03	8.8	<5	<10	<2	30
J-98	.85	27.65	8.79	56.4	30	25.5	14.2	398	3.12	8.1	.6	1.7	5.7	17.6	.07	.46	.13	71	.20	.028	13.3	45.1	.86	161.2	.105	1	2.56	.009	.06	<.2	3.5	.10	.02	31	.3	<.02	6.8	<5	<10	<2	30
J-99	1.37	118.36	7.82	79.4	20	91.1	38.8	897	5.87	4.2	1.4	1.6	12.0	26.4	.05	.37	.07	151	.39	.063	63.1	498.9	2.77	352.5	.160	1	3.23	.005	.43	<.2	10.4	.27	.02	13	.6	<.02	9.8	<5	<10	9	30
J-100	.49	38.47	8.70	87.7	17	29.4	19.2	631	4.16	5.0	1.1	3.2	8.0	35.9	.05	.27	.09	74	.50	.061	31.5	56.6	1.60	323.9	.150	1	2.47	.016	.55	<.2	5.7	.25	.02	29	.3	.02	8.6	<5	<10	<2	30
K-30	27.59	40.23	20.79	65.3	293	9.4	10.4	527	4.47	5.3	1.1	3.1	4.4	86.8	.11	.21	4.30	96	.21	.093	19.6	25.3	.94	208.0	.148	1	2.26	.065	.36	20.4	3.6	.25	.32	15	1.6	.12	10.3	<5	<10	<2	30
K-31	96.27	98.15	104.58	109.9	563	16.5	16.9	905	4.54	6.4	1.4	3.9	11.4	12.9	.10	.46	62.93	80	.16	.053	19.7	31.2	.85	202.0	.107	<1	2.53	.012	.29	36.3	4.9	.37	.04	31	.8	.45	9.4	<5	<10	<2	30
K-32	8.29	48.87	28.80	99.3	150	16.6	21.5	963	4.61	15.5	.6	6.0	2.4	26.6	.34	.41	6.66	109	.31	.066	7.6	25.5	1.11	191.5	.146	1	2.73	.017	.27	19.5	3.1	.44	.03	17	.3	.19	8.3	<5	<10	<2	30
K-33	8.41	31.86	19.39	59.3	217	19.7	12.7	420	2.65	6.6	1.3	4.2	3.9	23.3	.19	.39	2.09	62	.24	.047	16.0	33.2	.59	199.3	.078	1	1.79	.013	.06	5.9	3.3	.12	.02	22	.3	.08	6.3	<5	<10	<2	30
K-34	1.05	26.13	91.74	113.2	119	21.6	19.7	680	4.13	4.3	.6	9.0	2.6	32.8	.41	.25	.35	77	.34	.077	9.1	34.8	1.50	272.5	.098	<1	2.62	.005	.22	.9	3.5	.14	.01	13	.1	.28	9.8	<5	<10	<2	30
K-35	1.03	55.31	14.99	104.9	376	21.8	28.9	674	6.00	17.7	.6	3.7	3.7	12.0	.12	.50	.23	185	.16	.045	9.2	42.9	1.61	214.6	.135	<1	4.20	.010	.40	<.2	6.3	.23	.03	19	.3	.07	13.3	<5	<10	<2	30
K-36	.69	27.86	6.71	83.1	87	127.7	23.6	494	4.75	5.7	.2	5.0	1.2	31.6	.13	.18	.09	105	.32	.077	4.8	191.4	2.01	222.8	.129	<1	3.03	.010	.11	.3	4.1	.12	.02	13	.1	.63	10.7	<5	<10	<2	30
K-37	1.35	76.07	11.34	63.4	370	20.9	13.9	472	3.67	5.7	.6	4.4	2.8	20.1	.13	.24	.24	68	.25	.056	12.6	29.7	.96	200.4	.091	1	2.33	.007	.19	.2	2.5	.17	.03	19	.1	.08	8.6	<5	<10	<2	30
K-38	1.49	26.75	12.10	74.4	57	21.1	12.8	446	3.59	6.9	.5	4.6	4.7	16.9	.19	.30	.22	83	.19	.045	15.6	44.2	.77	225.0	.123	2	2.03	.007	.16	.2	3.0	.12	.01	13	.1	.04	9.9	<5	<10	<2	30
RE K-45	.51	22.84	6.70	53.0	74	11.9	11.0	257	2.62	3.5	.3	2.9	2.3	41.2	.06	.27	.58	71	.52	.051	8.1	23.7	.71	145.7	.071	1	2.00	.015	.05	<.2	3.5	.07	<.01	11	.1	.04	6.1	<5	<10	<2	30
K-45	.52	23.25	6.68	52.0	77	12.2	11.0	257	2.63	3.6	.4	3.0	2.3	41.6	.06	.26	.61	70	.52	.054	8.1	23.7	.71	146.0	.070	1	2.02	.010	.05	.2	3.7	.07	.02	10	.1	.04	6.2	<5	<10	<2	30
K-46	.84	22.51	18.60	51.2	285	16.2	12.0	257	2.88	7.2	.5	4.4	2.4	25.1	.21	.33	.18	78	.31	.028	9.3	29.4	.63	180.5	.068	1	2.35	.011	.05	<.2	3.1	.10	<.01	38	.3	.09	7.3	<5	<10	<2	30
K-47	.35	13.12	14.82	58.8	173	15.2	14.1	1043	3.00	6.7	1.1	18.3	6.0	13.6	.20	.25	.13	34	.19	.067	18.0	17.5	.27	339.7	.006	2	1.20	.006	.09	.2	4.7	.12	.02	93	.2	.32	3.6	<5	<10	<2	30
K-48	1.06	22.98	19.68	106.2	73	14.8	10.6	448	3.50	6.9	.5	1.6	4.0	17.6	.13	.30	.14	87	.23	.046	10.9	28.5	.78	188.0	.129	1	2.17	.014	.12	<.2	2.9	.15	.01	19	.1	.03	9.0	<5	<10	<2	30
K-49	1.10	27.65	5.79	68.6	47	17.5	16.3	548	4.15	5.3	.4	2.2	3.3	24.1	.11	.21	.11	88	.41	.112	9.1	40.3	1.34	211.0	.137	1	2.39	014	.28	<.2	3.6	.13	.03	14	.1	.02	8.5	<5	<10	<2	30
K-50	.28	10.37	8.61	47.5	17	11.4	8.1	345	2.14	4.1	.4	6.3	3.3	94.5	.07	.16	.07	40	1.23	.045	7.2	16.0	.51	136.5	.092	1	2.62	.014	.15	<.2	1.6	.07	.01	6	<.1	<.02	7.6	<5	<10	<2	30
K-51	.28	9.82	4.81	69.5	12	9.5	15.0	744	3.55	2.8	.4	2.7	5.7	61.5	.10	.11	.03	70	.58	.075	14.8	13.2	1.17	314.0	.142	1	2.45	.012	.56	<.2	2.0	.11	.02	7	.1	<.02	7.9	<5	<10	<2	30
K-52	.60	20.59	9.14	66.8	15	19.5	12.5	504	3.24	7.1	1.0	4.5	9.5	37.6	.03	.40	.12	67	.51	.050	26.3	32.2	.79	252.2	.137	<1	2.35	.021	.12	<.2	3.8	.09	.02	11	.2	.02	7.9	<5	<10	<2	30
K-53	.45	8.04	7.85	80.1	16	9.4	13.2	747	3.50	4.1	.6	2.2	8.4	33.5	.08	.20	.07	66	.42	.079	14.3	18.9	.76	134.0	.163	1	2.31	.009	.32	<.2	1.9	.13	.01	10	<.1	.02	8.8	<5	<10	<2	30
K-54	.58	16.79	6.37	57.0	22	16.7	10.7	371	2.52	5.4	.8	9.4	5.1	30.0	.08	.29	.11	60	.38	.062	18.1	31.0	.67	355.9	.102	1	1.60	.007	.07	<.2	3.1	.06	.01	17	.2	<.02	5.7	<5	<10	<2	30
K-55	.66	13.46	7.41	74.0	20	13.2	16.7	676	3.72	5.3	.7	2.5	8.5	31.0	.07	.59	.08	73	.47	.079	12.9	24.7	.88	304.9	.088	1	2.15	.012	.08	<.2	4.0	.06	.03	13	<.1	.02	8.2	<5	<10	<2	30
K-56	.56	29.52	9.48	74.6	39	9.2	20.3	1477	4.94	4.4	1.1	3.0	12.4	15.1	.06	2.12	.08	93	.45	.067	29.7	14.8	.73	656.8	.005	2	2.15	.006	.16	.7	14.7	.12	.03	40	.1	<.02	7.9	<5	<10	<2	30
STANDARD DS3	9.13	126.88	34.49	154.3	279	36.3	11.5	789	3.09	28.1	5.7	20.3	4.0	27.4	5.45	5.02	5.39	76	.52	.084	17.1	181.6	.57	144.2	.081	3	1.63	.031	.17	3.8	2.8	.95	.04	215	1.2	1.01	6.4	<5	<10	<2	30

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ✓ FA ___

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon PROJECT SCROGGIE File # A102163

6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Os ppb	Pd ppb	Pt ppb	Sample gm
B-125	.92	12.30	3.86	59.3	24	12.1	15.0	947	3.05	4.1	.5	3.3	1.9	23.6	.10	.17	.04	61	.51	.101	6.7	19.6	.72	136.6	.061	<1	1.27	.018	.06	<.2	3.2	.04	<.01	10	<.1	.02	4.9	<5	<10	<2	30
B-131	.77	14.56	6.92	65.5	64	13.6	13.2	779	2.60	6.2	.9	15.1	4.7	37.9	.14	.26	.11	49	.62	.134	14.7	23.3	.66	198.6	.106	1	1.35	.014	.14	.2	2.8	.09	.01	25	.1	.02	4.9	<5	<10	<2	15
E-8	24.01	35.72	28.06	84.8	247	9.9	10.2	550	2.26	3.2	3.0	4.0	2.2	33.9	.44	.29	4.15	55	.43	.074	7.3	18.4	.67	145.2	.117	1	1.25	.013	.20	23.3	2.7	.21	.05	16	.1	.09	4.9	<5	<10	<2	15
E-9	96.38	97.02	45.61	112.3	443	22.2	11.1	647	3.63	4.0	1.4	2.7	1.7	39.4	.13	.30	9.22	125	.33	.071	5.3	51.0	1.35	170.3	.210	<1	2.07	.027	.61	28.9	5.6	.62	.14	15	.4	.21	9.6	<5	<10	<2	15
E-10	55.02	50.39	37.64	71.6	293	7.8	6.4	407	2.28	3.7	1.1	1.3	2.1	32.5	.27	.31	9.21	59	.33	.073	7.4	16.2	.64	132.6	.147	<1	1.09	.019	.24	53.2	2.6	.23	.08	<5	.3	.10	4.7	<5	<10	<2	30
E-21	1.15	12.93	7.54	50.8	44	9.7	12.6	647	2.25	3.1	1.1	3.9	3.2	29.7	.12	.13	.16	47	.49	.092	8.6	17.5	.52	157.9	.073	<1	1.11	.017	.11	.5	2.6	.06	.03	9	.1	.04	4.0	<5	<10	<2	30
E-22	.97	12.91	5.48	48.0	54	6.6	13.4	561	2.55	3.2	.6	28.3	1.8	26.0	.09	.13	.14	57	.43	.108	6.0	12.3	.48	135.5	.082	<1	1.11	.024	.12	.7	3.0	.06	.04	10	.1	.07	4.2	<5	<10	<2	30
E-23	1.40	23.24	8.23	47.5	96	5.4	6.7	226	2.86	3.4	.2	13.7	1.0	52.7	.09	.16	.36	72	.41	.078	4.7	9.0	.49	259.4	.113	<1	1.60	.055	.19	.3	3.5	.08	.25	12	.8	.23	5.2	<5	<10	<2	30
E-24	.75	12.38	6.92	63.0	49	10.9	16.6	992	2.74	3.9	1.0	3.0	3.0	32.9	.11	.16	.09	58	.52	.131	8.0	19.1	.62	165.9	.096	1	1.26	.019	.17	1.1	3.0	.09	.03	13	.1	.05	5.2	<5	<10	<2	15
E-25	.74	11.21	8.58	64.8	55	11.4	13.9	681	2.44	3.8	.7	2.8	3.9	25.2	.11	.15	.11	52	.43	.117	10.5	22.6	.62	127.7	.094	1	1.23	.012	.16	.8	2.5	.09	.01	21	.1	.03	5.2	<5	<10	<2	30
J-78	.49	5.72	6.58	53.0	92	7.9	10.3	619	1.96	2.7	.7	491.5	11.6	33.6	.10	.14	.10	40	.47	.098	23.3	14.4	.49	119.1	.103	<1	1.10	.008	.20	.6	1.6	.09	.01	20	<.1	.02	4.0	<5	<10	<2	30
J-79	.51	6.25	7.43	52.4	49	8.6	14.5	1216	2.05	3.0	.7	1.8	11.8	32.4	.14	.16	.13	40	.48	.099	26.3	16.4	.50	150.3	.102	1	1.15	.008	.20	.4	1.7	.10	.02	27	.1	<.02	4.2	<5	<10	<2	15
J-80	.40	6.33	4.77	54.0	39	7.6	9.0	390	2.18	2.5	.6	91.0	10.3	26.5	.07	.12	.05	41	.38	.099	20.7	14.5	.57	119.0	.112	<1	1.20	.006	.27	.3	1.4	.11	<.01	16	<.1	<.02	4.7	<5	<10	<2	30
J-95	.61	10.63	5.49	45.3	59	10.3	11.3	848	2.61	6.2	2.7	4.5	3.6	24.7	.13	.22	.10	49	.52	.068	11.2	18.4	.41	194.2	.062	1	1.20	.010	.05	<.2	2.5	.05	.03	30	.1	.02	4.2	<5	<10	<2	30
RE K-22	6.29	16.15	19.17	58.4	170	7.7	9.7	386	2.21	2.3	.9	4.2	1.7	22.4	.20	.14	2.27	54	.38	.070	5.9	15.8	.61	121.3	.103	<1	1.23	.011	.17	15.3	2.2	.14	.04	12	.1	.07	4.3	<5	<10	<2	30
K-22	6.32	16.32	19.25	57.7	213	7.9	9.8	369	2.14	2.3	.9	1.9	1.8	23.1	.22	.14	2.82	53	.38	.072	6.2	14.7	.60	116.3	.108	<1	1.19	.013	.18	15.3	2.3	.14	.05	11	.3	.08	4.5	<5	<10	<2	30
K-23	.77	11.69	9.52	42.8	107	6.4	6.7	208	1.80	1.3	.4	1.5	1.1	17.9	.10	.08	.33	47	.26	.035	4.6	14.0	.57	99.6	.101	<1	1.24	.011	.17	3.4	2.0	.11	.02	9	.1	.09	4.3	<5	<10	<2	30
K-24	.82	13.97	11.96	47.2	103	6.8	8.1	215	2.10	1.8	.5	5.2	1.1	19.2	.09	.09	.40	59	.26	.046	4.2	16.5	.65	90.2	.114	<1	1.36	.011	.17	3.2	2.4	.14	.03	9	.3	.12	4.5	<5	<10	<2	30
K-25	.69	7.66	4.36	28.5	51	4.6	3.8	154	1.15	1.6	.2	1.6	.5	13.7	.07	.08	.21	29	.23	.033	3.3	7.5	.36	59.2	.075	<1	.82	.011	.05	1.7	1.5	.06	.03	10	.1	.04	3.1	<5	<10	<2	30
K-26	35.60	35.67	24.53	84.5	307	8.9	17.7	730	3.23	3.4	1.0	3.4	1.6	29.0	.17	.24	12.26	96	.50	.070	3.9	19.0	1.01	112.1	.114	1	1.59	.026	.16	29.4	4.5	.16	.10	18	.4	.13	7.0	<5	<10	<2	15
K-27	3.06	16.78	23.94	67.9	199	11.4	13.8	731	2.42	3.2	.5	33.7	1.6	16.7	.25	.18	6.42	61	.46	.112	6.5	24.6	.67	138.4	.114	1	1.23	.013	.22	34.0	2.6	.18	.04	12	.2	.09	4.8	<5	<10	<2	30
K-28	18.77	28.61	32.36	74.4	389	11.6	12.8	753	2.08	3.1	.7	1.7	1.4	22.0	.32	.19	8.43	50	.39	.064	8.8	27.5	.62	143.3	.104	1	1.19	.011	.14	26.4	3.0	.20	.05	24	.3	.06	5.9	<5	<10	<2	30
K-29	26.28	26.74	13.48	54.0	269	7.5	5.6	327	2.32	2.7	.6	2.1	.8	18.8	.10	.20	7.18	70	.24	.054	3.9	17.3	.76	99.3	.127	1	1.25	.015	.22	39.4	3.1	.22	.07	16	.6	.08	6.2	<5	<10	<2	30
K-39	.90	15.60	7.52	48.8	81	5.9	9.0	405	2.57	2.5	.4	3.1	1.1	53.2	.09	.11	.30	51	.35	.083	5.5	11.3	.48	136.2	.067	<1	1.21	.062	.11	.5	3.0	.06	.22	10	1.2	.11	4.4	<5	<10	<2	30
K-40	.47	15.42	5.44	42.9	75	6.5	7.6	169	2.05	2.2	.3	3.7	.7	31.9	.08	.11	.09	55	.35	.073	4.9	13.0	.48	115.3	.064	1	1.44	.020	.08	.3	2.8	.06	.05	23	.3	.06	5.1	<5	<10	<2	30
K-41	.64	9.79	4.99	29.5	67	4.9	4.2	148	1.48	1.8	.2	6.4	.6	26.0	.07	.09	.06	39	.26	.052	4.4	8.1	.35	105.0	.056	1	.99	.020	.04	.2	1.8	.04	.06	13	.4	.06	3.7	<5	<10	<2	30
K-42	.77	14.12	7.87	48.2	81	6.3	8.4	391	2.54	2.6	.4	4.7	1.2	54.4	.09	.10	.27	46	.37	.097	5.7	12.5	.47	125.1	.065	<1	1.18	.061	.10	1.0	2.9	.06	.24	14	1.3	.10	4.3	<5	<10	<2	30
K-43	.91	13.94	8.59	67.2	173	7.6	8.9	343	2.36	2.8	.6	1.0	.9	25.3	.13	.11	.13	62	.32	.067	4.3	13.0	.62	157.0	.100	1	1.42	.020	.10	<.2	2.4	.09	.06	23	.6	.11	5.2	<5	<10	<2	30
K-44	.80	17.87	9.95	63.9	86	8.3	9.8	477	3.08	2.8	.5	2.6	1.6	69.0	.11	.11	.40	48	.40	.113	7.3	16.9	.59	132.7	.084	<1	1.40	.103	.15	1.3	3.8	.09	.37	12	2.1	.10	5.2	<5	<10	<2	30
STANDARD DS3	9.07	125.31	33.00	155.9	276	35.3	12.2	793	3.06	28.6	6.0	19.9	3.8	26.2	5.33	4.91	4.99	74	.52	.089	16.4	189.6	.58	142.9	.104	2	1.69	.027	.16	3.6	2.7	.92	.05	222	1.3	1.05	6.4	<5	<10	<2	30

GROUP 1F30 - 30.00 GM SAMPLE, 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML, ANALYSIS BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SILT SS80 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 10 2001 DATE REPORT MAILED: July 25/01 SIGNED BY..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ✓ FA ___

ACME ANA_ _ICAL LABORATORIES LTD. 852 E. HASTINGS ST. \ _OUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604_ _-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Richards, Gordon PROJECT SCROGGIE File # A102164

6170 Tisdall St., Vancouver BC V5Z 3N4 Submitted by: Gordon Richards

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm	Os ppb	Pd ppb	Pt ppb	Sample gm
K-57	1.05	14.74	5.92	36.5	46	2.2	.7	266	4.15	2.0	<.1	2.3	.5	113.5	<.01	.04	.99	62	.13	.029	3.1	33.7	.75	47.1	.001	1	1.27	.502	.14	.7	5.7	.05	1.40	9	4.6	.11	6.1	<5	<10	<2	30
K-58	1.75	20.15	5.71	38.5	123	1.5	.9	358	3.90	1.7	<.1	5.3	.4	133.6	.01	.09	1.41	84	.14	.032	5.5	40.6	.80	46.3	.001	1	1.35	.346	.13	.6	8.4	.04	1.02	6	4.3	.21	7.1	<5	<10	<2	30
K-59	2.59	52.55	7.89	52.6	83	4.3	1.5	448	3.78	5.0	.1	4.5	.5	73.7	.01	.05	2.21	113	.14	.023	2.6	67.8	1.20	47.1	.003	<1	2.26	.134	.12	.7	8.2	.05	.33	<5	4.9	.13	10.0	<5	<10	<2	30
RE K-57	1.02	14.79	5.01	39.5	41	2.2	.7	271	4.16	1.5	<.1	2.0	.4	104.9	<.01	.03	.91	63	.13	.027	3.1	32.2	.76	48.5	.001	1	1.30	.463	.13	.6	4.8	.04	1.40	8	4.5	.09	5.7	<5	<10	<2	30
STANDARD DS3	8.87	124.19	36.09	152.7	269	35.9	12.6	776	3.04	29.9	6.2	21.9	3.8	28.8	5.63	5.01	5.72	74	.56	.092	17.0	170.0	.56	141.9	.082	2	1.62	.026	.16	3.6	2.5	.95	.02	224	1.3	1.01	6.4	<5	<10	<2	30

GROUP 1F30 - 30.00 GM SAMPLE, 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML, ANALYSIS BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: ROCK R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 10 2001 DATE REPORT MAILED: July 24/01 SIGNED BY. C. Leong .D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data A FA ___

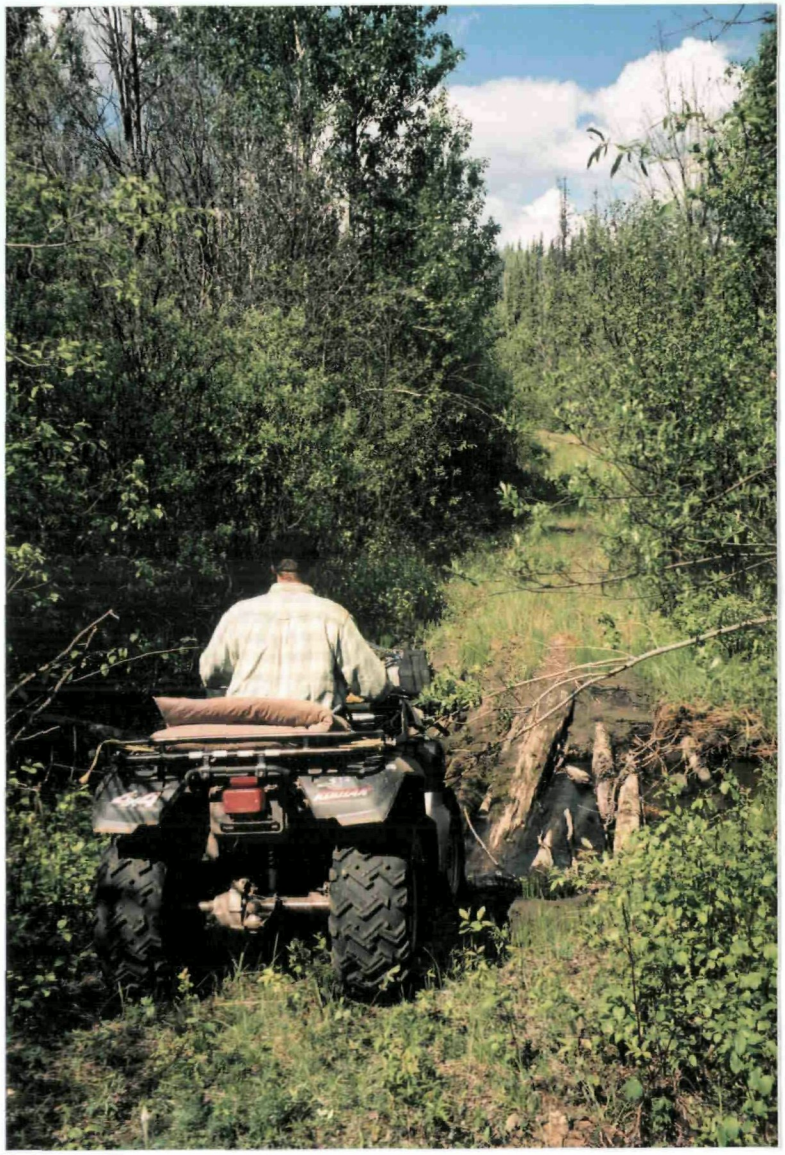
SUMMIT AREA

View Looking East over Summit Lake

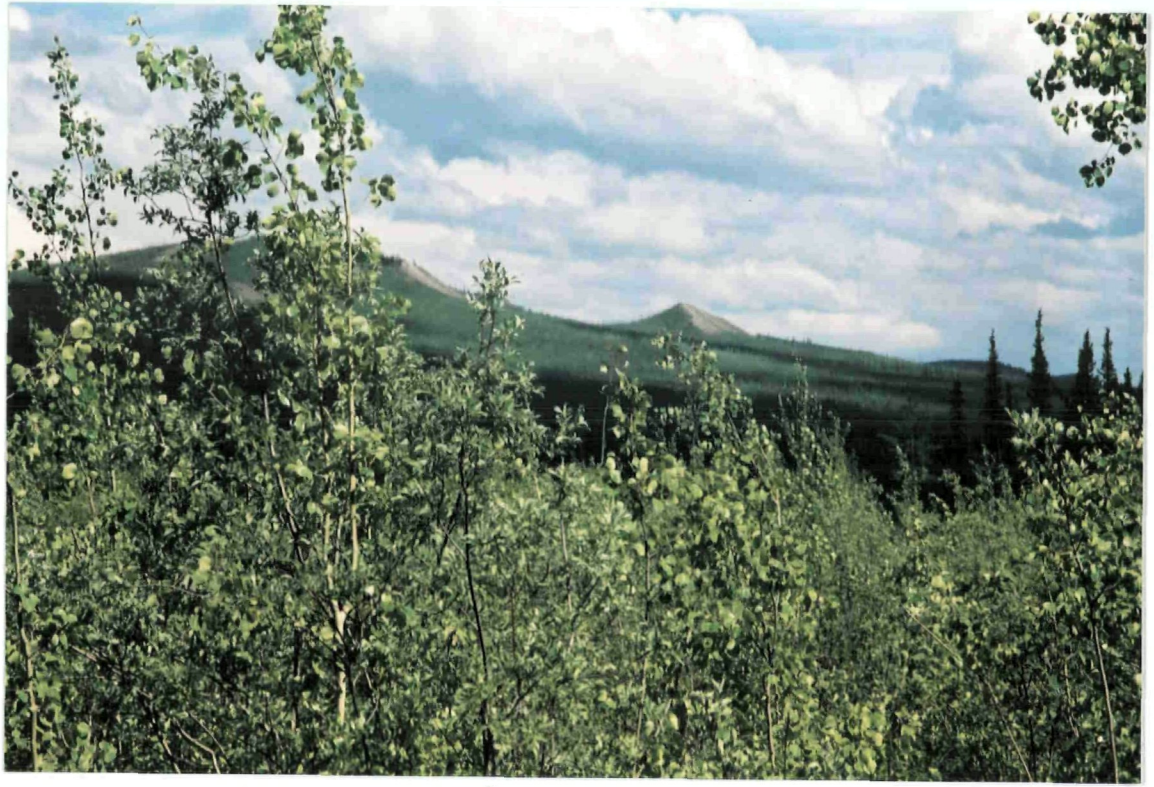
G. Richards on serpentinite OC

ATV trail from Klondyke Highway leads ~~from~~ past here, past 2001 camp to 2000 camp where it starts to deteriorate.

BRADEN AREA



↑ Dave P Bennett on ATV on portion of old Pelly Farm rd which leaves Klondyke Highway near Minto



View looking east from hill in ~~bck~~ old burn on way in from old Pelly Farm Road to J 66 showing carbonate hills above timber. Au-As-Sb-Ag anomaly lies on forested slopes below peaks.

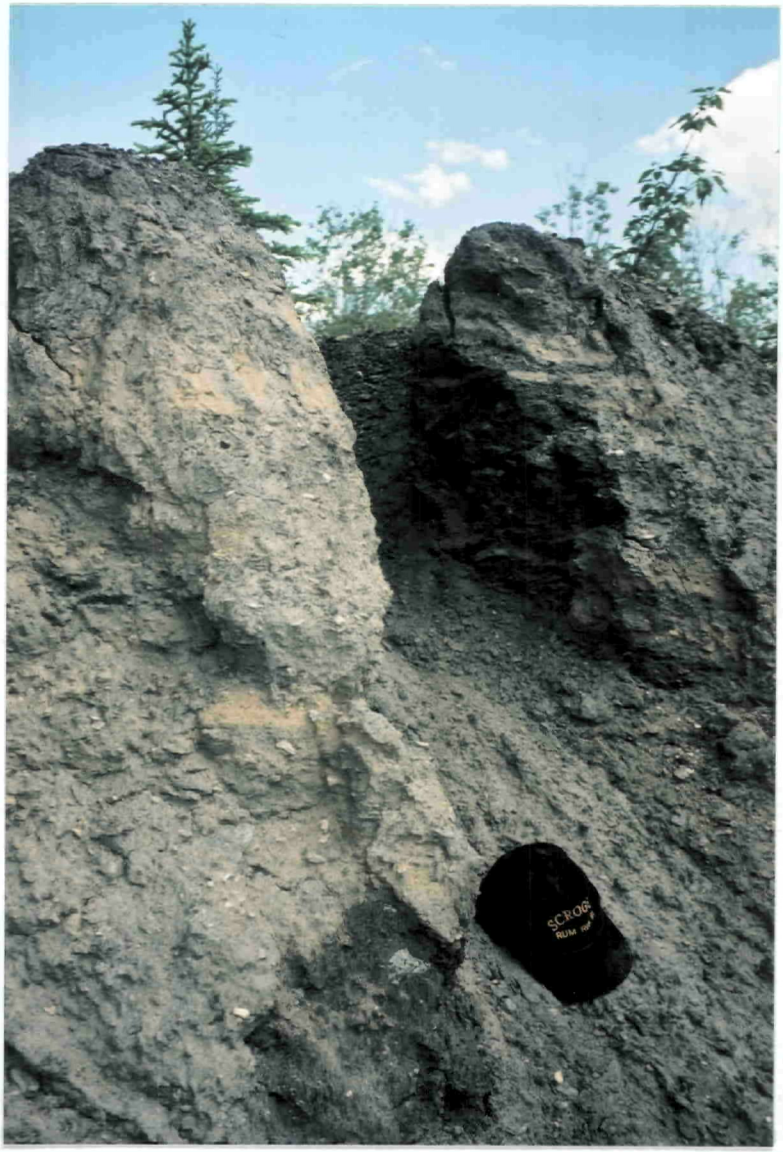
BRADEN AREA

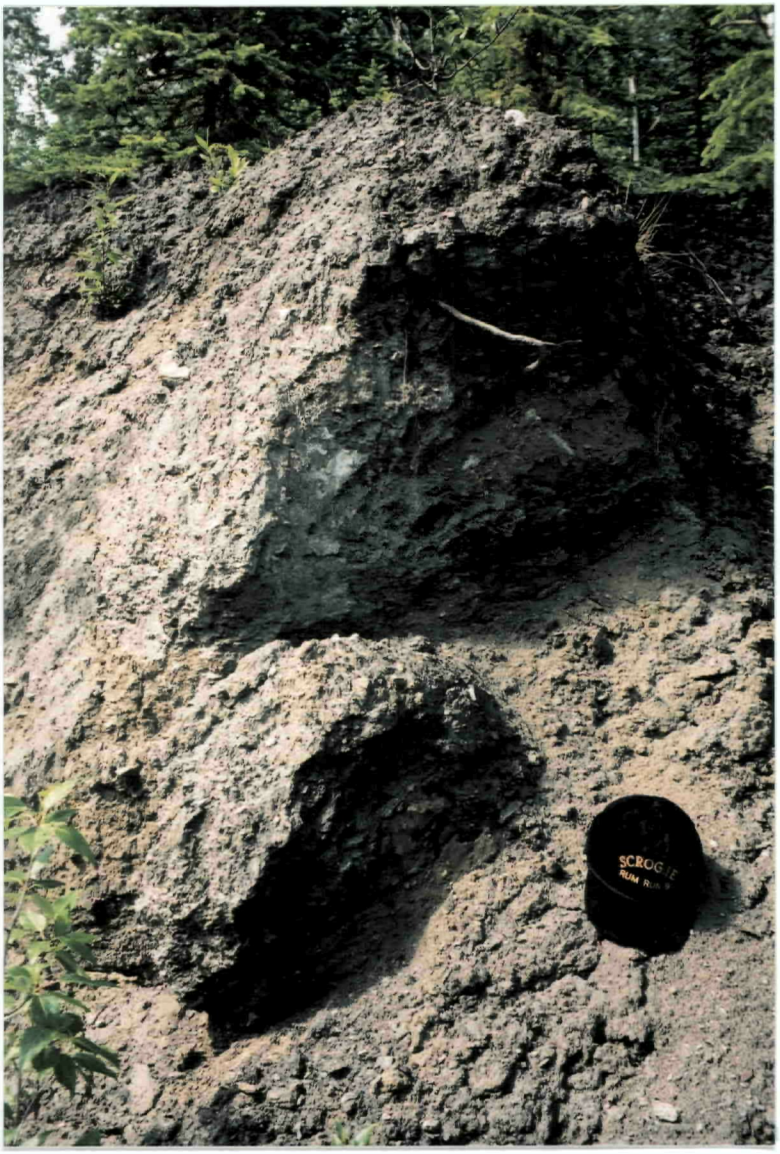
Above - ditch along Klondyke Highway @ J17. exposes good example of pre McConnell till with abundant argillaceous phyllite fragments and other variably coloured fragments. Fragments are nearly completely decomposed to friable material.

Below - closeup of above.

BRADEN AREA

Quarry at side of Klondyke Highway about 8 km north of Minto. Quarry looks like outcrop but is till and washed till with nearly 100% blk arg^s fragments. Some rare round pebbles and layers of sand layers are evident on close inspection - see two photos below. Much of the till samples collected throughout Braden Area are believed to be from similar material. Age of this till is believed to be pre-McConnell as fragments are usually badly decomposed. Loess and/or sand almost always blanket the "till" sometimes well in excess of 1 m.





2001-015/16

P.A.P.

Yukon

Gord Richards

Field Notes.

(Dave Bennetts
follow@back of booklet)

Braden Rd. 2775 km Sut 0 km

08 V 0413119

0 UTM 6955923

007 hwy rd on side rd. near L.

008 car

009 grnstn in rd spur to left
sub crop arg + lemr musc-bio or chl
gns to schist f.g. minor chl sch

010 NW corner lake OC @ SE corner
lake on hill to E

011 last yes sample A176

012 lunch other side creek in valley.

08 V 0410586

UTM 6958729

B1 Sample.

241° 0m along rd first bank rd

200m J1 Till much f.g lemr gns-sch
qtzite-ss.-wacke and arg cps
some qtz, cgl, green chert
cgl is chert pbble cgl like B1 yesterday

226 sub crop musc(± chl) gneiss f.g. lemr

400 J2 Till 10cm loess bottom hrz
in decomposed musc sch.
pbbles mxd in till blk to white

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DUKSBAK WATERPROOF

LEVEL

600 Thin veneer ~~fill~~ mixed till + loess
on decomposed musc chl sch over
big area near big clearing
rd runs heads 272° 1km burn
720 musc rich sch decomposed BR
w thin veneer till – loess
qtz pebble cla here + before
780 J3 Till clay rich fine grnt
+ pbble dark gnish grey. Pebbles
felsic gneiss (migmatite?), blk chert, qtz
gnish sch + gns
decomposed white sch bottom hole
1000 J4 drk gn grey till on top of sand?
or decomposed? (20-30 cm) then
decomposed graphitic shale – phyllite sch
much clay shale – sch blk flt on
surface started @ 980 m ±
Rd runs 252° for 1 km ±
* 1200 m ± forgot to string
start string again J5 uniform gn (chl gn) decomposed
sch to till. Some pbbles
+200 m
1200 m J6 pale chl gn till to
decomposed BR. wet + cold
fine clay gritty

pale chl
1400 m J7 wet clayey gnish grey till,
w blker @ bottom. Flt at
a blk phyll – chert, qtz, gn – grey ss
Sample is sandy gritty
1530 weak ridge w sub crop bedded
tuffs arg + qtz vns. (S) J7+
Rd bends here to 244°
1600 J8 gnish gritty till

1800 J9 Good gnish grey gritty till
Many blders varians grd, qtz dior
Fair amt arg + tuff's arg
1830 creek. Look up creek for gravel
only silt. Loess outcrop?
Didn't sample. Took 2 hours
2000 @ bend in rd. Hds to S to burn
J ? wet gnish grey till
014 Tuff to arg's tuff to tuff's arg?
08V 0408679
also 013? UTM 6955791

LEVEL

@ △ 012. 0m

100m J11 clay rich grnsh grey till wet like all others

300m creek

480 ~~spr~~ @ base slope, spurs to S

520 J12 Dark-grey gritty till wet, dirk phyllite cpo-± qtz

780 J13 Dark-grey gritty till wet

810 rd has been hdg 070° now bending to R.

830m 090° rd

915 J14 Dark-grey gritty till / lr cpo @ clearing spur to S into burn

1060 A179

1170 J15 grnsh grey till Not residual Sil-Srb comp

1190 A178 flag rd still bending gently sharp turn ahead

1230 135° rd + still turning R

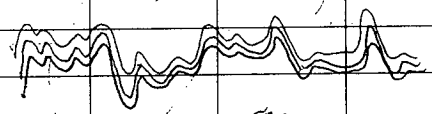
+60m± 185° rd ahead try hill. Subcrop @ SE end lake is, and c lapilli tuff 132/25 NE fol^n in small 2m o/c @ base slope to N

GPS 015 08 0415367 6958432

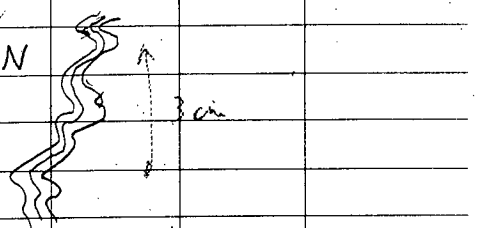
Gravel Pit along Rd S of Pelly Xing

000/55 E fol^n in finely laminated qtz-musc ± fspar layers + black phyllitic layers. Spots of Fe carb throughout

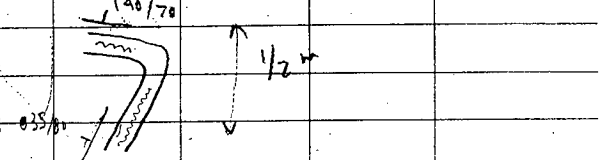
Fine folding 028/35 N



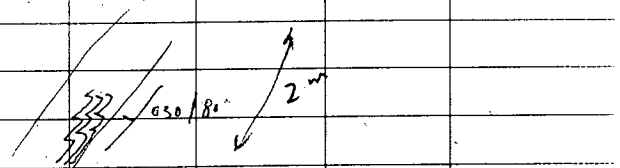
fold also 012/24 N



fol^n also 035/80 NW + 140/70 NE



fol^n 030/80 NW good persistent bedding



further N along strike 5 – 50 cm beds also well laminated musc – phyllite has provided attitude 007/80E with tight fold as pictured above plunging 35°/N

One or two qtzite beds 30 + 40 cm in 20 m w 2 m thick S +30m to OE 014/85E w tight fold structure

Till in back of gravel pit

J16 Good till 2 m deep
Much blk chert pebbles all small,
Much granite blders variable text + comp^n
variable phyllitic schists' qtzite

0 km
.4 Side rd to W &
Set 0km
.4 rd gets wet from around
@ Highway Set 0km
1.7 J17 Till in rd bank Xllent lodc @ old till.
Rnd thinds to Zlen + prown frags: brick range,
bright grn, dull grn, blk, bn frags in
small rnd pebbles + smaller frags in matrix.
Decomposed frags very prown.
2.0 J18 Till in ditch on flats
Grey gritty till good sample
>1m loess
2.30 no Till deep loess
2.30 Spur rd to E to cabin N end Lake
2.60 on corner deep loess over outwash sands + gravel.
2.70 " " " " " "
2.90 1-2 m loess over grey till
J19 Till washed? bank over is not washed
Dark grey rnd pebbles.

3.2 Rd uphill to previous traverse + rd downhill to lake
+ manganese occurrence on island.
3.3 Till bank very exotic fx.
very common Current amphibolite >50% C.F., granites,
other gneisses blk chert pebbles, granites
3.7 another large Till bank w exotic fgt. > 10 m high
just before corner. Two past 2 stops one
similar more totally leached tills in hills
to west. So did not sample

@ Spur to cabin by lake 2.3 km
at [Nath] 0^m
200 frozen ground in alder
300 J20 dry frozen grey + blk till
hillside stepping to gentle slope
420 oc? 030/20 NW
500 J21 muse rich bn till^n pebbles rnd,
700 J22 blk graphitic shale Till? rnd slope
gritty w Zlen grit
900 J23 pale orange bn soil - till? 100^ft
Zlen rky gritty much musc. Qtzite?
@ 800N Soil sand orangy pinky bn
Qtzite subcrop?
@ 750N J24 graphitic shale subcrop to till?
all small cgs same subrnd.
900 650 + 600 frozen loess

LEVEL

Lizard up access rd to W from Manipesaw Lake

.2 km NS 50 cm less than washed gravel rd swings left

.4 km Firebreak rd spur to R. Burn to L
J25 drk grey till. many rnd pebbles

.65 @ rd just swing around to R
@ base slope. Till is weathered thick?
no local exps NS Too difficult
loss 60 cm.

.9 spur to R
J26 grey gritty+rnd pbbly till
Some granite blds
Some blk chert pebbles

1.0 top of hill "blk" till

1.1 turn around.
J27 dark grey blk clay rich till on flats

up rd 0 m

200 m J28 drk grey clayey till w grit, sand + pebbles

275 spur rd to R

300-371 very drk road bed till

400 bright orange decomposed BR
MUSC - fspar destroyed to clays
Sometimes see glassic fabric

530 J29 Med drk grey till. Rnd pbbles
Could be overlying orange unit as orange sediment common along rd

650 Subcrop pale orange felsic gneiss and dk green amphibolite gneiss 1% MUSC

670 Hit Dave @ 180 m

LEVEL

Can ~~015~~ 0402349
6952888

015 0400698
6954492

094°
cross swampy meadow and lake drop
slope w. f. Five Breaks
0402164
6956156
112° 0m
200m J30 med grey till Some decomposed
pebbles, 30-50 cm loess - sand
in burn
400m J31 Grey till beneath 50 cm
Sandy loess Small pebbles edge burn
600m J32 Grey clayey till under sand
50-70 cm Sandy loess Cobble pebbles
800 frozen
850 Sand dep
900 " "
930 J33 grey pebbly clayey till
under 60 cm sand in
Small burn
1120 Deep sand

1160 Deep sand broke string 1 to R 100m
crosses gully onto Knob Deep Sand
1160+ Knob in burn
1300 Deep Sand very in bottom
1400 " " on flats since 1160
1510 " " " "
1640 " " " "
1740 in dip Deep sand
1870 Deep Sand
2050 " "
2100 J34 Grey clay rich till 30cm
2300 Deep Sand
" "
2360
2790 crossed broad gully No dr
All sand evergland

GPS 0404748
6955491

225°

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LEVEL

Car △ GPS 18 Old Pelly Farm Rd
On fire break rd at X line
0m line runs 050° in Fire Break
300 J35 grey bn clayey till under
50 cm sand w 10 cm sand layer
within. Much red chert cobble-
500 sand pebbles felsic intrl blk
520 J36 grey to blk till w pbbls +
cobbles? under 50 cm sand
many blk chert pbbles in sand
on surface, also grey chert
730 J37 unoxid (like before) dk grey till
w rnd to slan cps + pbbles + cbbls
nearing top of "hill"
940 Deep sand on flats
1020 " " Turning pt Fire Break
to 087°
1130 silt + loam Deep flats
1210 Deep Sand
1300 " "
1500 first pbbles on top of sand appear
1540 J38 grey bn clayey till on top of grey bn
sandy pebbly till. Both sampled.
1750 deep Sand turning pt.
050°

1850 start swampy area
1880 Sand w cps 70 cm over humus
1960 in swamp. Pbbly sand. Deep sand w
pebbles + partially oxidized. NS
2000 pbbly Sand on surface
Deep sand NS
2100 " " in clearing
2370 Deep sand still no pbbls
2400 020°
2540 Deep sand
2600 J39 sandy gy-bn pbbly till
079° w Sand below + above
2800 Deep Sand No pbbles
074°
2980 pbbles on sand over small area
Deep Sand NS
3090 J40 Sandy rky gy bn till 70 cm dy
3300 Deep Sand
3350 " " w pbbls
3600 Deep Sand J41 till
△ GPS 019 0404879
6957987
to car 179° 5.77 Km.

LEVEL

Sorted gear Packed Camp Drove to Summit Lake Trailhead. Packed into Summit Lake + set up camp. GPS ⓐ 020

Old Camp, Last Year ⓐ 021
0435077
6992941

1569 Dave sampling me notes
hit swamp @ 250? +50 m
250 water running W
moose trails // Valley both side
400 tried sampling frozen swamp
540 lit tree to ⊏ frozen ground
650 creek cutting bench no silt
720 on top bench J42 wet
washed gravel + clay
possibly not point outwash
90 cm loess + silt on top
1130 back into creek. Has been // line
all frozen ground
1600 creek flows w fine silt no
course ~~did not sample~~
J43 fine silt same org
much musc.
1800 slope onto jackpine ahead

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DUKSBAK WATERPROOF

LEVEL

1860 tip up w mng qtz dio - qtz mons
submat blds (3)
2000 J44 Till 30 cm dep.
Top is silty, On Jackpine area
2600 frozen spongy ground.
Contact 060°t 0m
2900m J45 yllw bn clay rich till
in pines
1/156° 0m
230 on bank overlooking valley
with alcove
much frozen ground no relief
770 J46 Sandy gravelly till?
850 clk flwg R
1170 J47 Sandy till top of bank
- looking into valley w old
Plowed Trail R/t (S)
old string line here
1670 clk in valley

Cross valley to lower slope 8022
0436391 6990638
frozen ground
145° 0m
190 K1 gravelly till fair amount clays
mid pbbl-b
490 K2 bn till in pines
not outwash ground.
850 K3 Bn till under humus
1170 K4 Bn till " "
1350 String broke - retied
1390 K5 on flats
079° 1.0m
55 cut across last yrs string line 1
280m K6 Yllw bn Llan rky soil + till
qtz + phyllite + musc sch.
Δ24, Δ25 480 K7 Frozen yllw bn till soil
325° 0m much musc. M-O-sch
150m K8 grey bn soil + till v wet
Llan flt qtz-musc + chl-bio sch
Sat 0m
10m much rubble Llan chl musc qtz sch
176m K90 Yllw bn soil + till musc Llan rky
225 Lookout area
300 Yllw + gn schist ops in frozen mucky soil
LEVEL

315 K10 Silt Till dark chl. gn soil.
Lm blebs qtz-chl sch.
440 Lim beds into willow
480 frozen
520 frozen
bake strip
650 K11 wet some org' bn till Moose bed
850 K12 wet bn till Good one
1150 K13 Wet sandy till fair frim
flatter here. Could be slide or outwash
underline?
North 0m 930 end.

Summit Lake Approach
25th on outline 76m E of D42
Lm rubbly slabs underlain by
musc-qtz ride + wavy chl schist
very Lm.
North 0m
300m J48 Good till. Lm cgs
schist + like before. Some small
orange decomposed frags
680 J49 Rky dk fg schist frags very
common. Some leached frags.
70 cm deep in Jackpine
1160 J50 Rky icy till in musky
border dots Several hills. Could have loess in sample
Many dark sch cgs Lm
1500 J51 Clay rich till w multi lith
frags Lm to rnd 10% of volume
loess contamination uncertain
1700 J52 Good till rnd to Lm pebbles
some sand
2100 J53 Silt in moss, good thick dk
5m bank chl-qtz-musc sch
2240 J54 till rnd to Lm pebbles
musc rich.

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DUKSBAK WATERPROOF

LEVEL

SE ½ 0m

250 ck no silt

300 frozen

152° 0m

many frozen attempts

1020 J55 Good till near top of slope
rnd to clan pebbles

1360 all frozen samples

0434209

6995039

270° 0m

150m J56 Till rky pebbles rnd to clan
+ some decomposed ½ pings

260° NO 0m

350 J57 yllw bn till rky clan +
rnd pebbles, Some decomposed
clay rich. Some qtz musc sch.

480 tip up rnd + clan blds
Clan and psammite w low ½ g pg
+ musc. chl sch

520 J58 Bn wet till clan to
rnd rk cps

560 big spruce growing on old tip up
big ③ mach qtz musc sch + some
chl-calcite sch
start swamp

960 other side swamp live heart
to South running across swamp

970 J59 clay rich till underlying
Big 1 m blds mvc chl qtz sch
Some smusc sch

1120 stay low

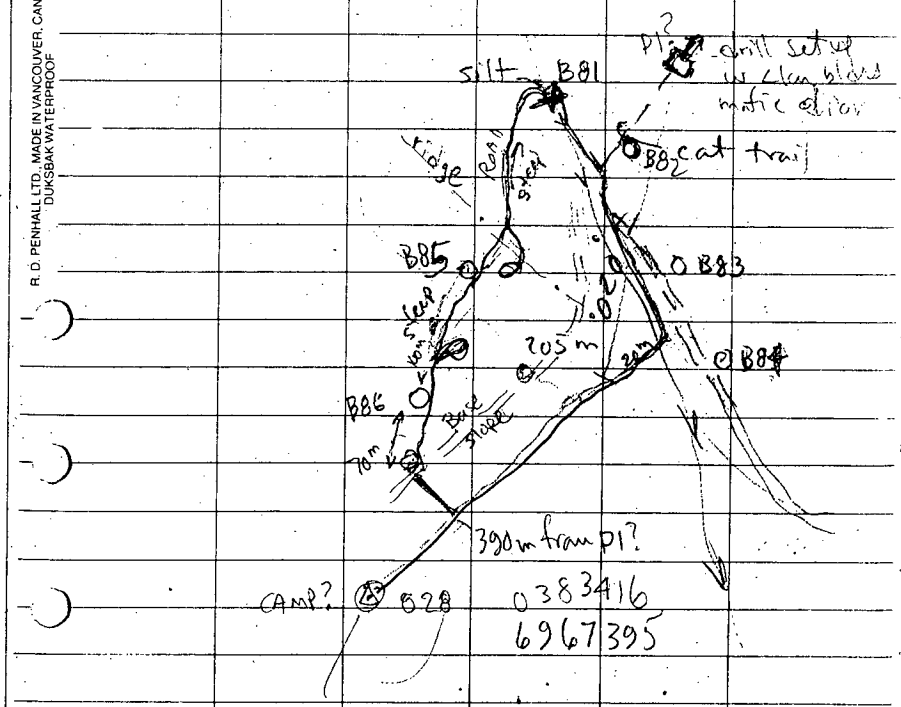
5 0m

60m J49

LEVEL

Pelly Rd.

14.4	4 jct^n	0398210 6555215
17.7	rd to left	
22.3	3rd creek	
24.5	major rd to left	
25.8	" " "	
28.7	major fork	29.6± fork looking back
32.2	" "	
36.8	Y	Ukct hill



Old Rolly Road ~ 10km beyond camp
Backpacking in camp to camp

From Hill overlooking S fork Hallonte take 022° @ Brg on East C peak.
In swamp set 0 m
500 m slope steepens. All deep Sand before this flat fm!
610 JR60 decomposed ox till mod 1th frags & mica rich arg schist
1 m deep under loess,
Pale grey till
810 JR61 Pale grey clay rich sky band till under Sand + loess.
Mica rich frags
1010 JR62 Dark grey micaceous graphitic shale frags in till
1220 JR63 Dark grey micaceous schist frags in till under Sand + loess on flat bench area
1410 JR64 Bn clay rich till under loess No Sand
1620 JR65 Clay rich chl-green till under loess
200m ahead to Ins hill OC.

Climbed up onto open slope of chert, qtz, qtz blds, and Ins cps to 61ds
@ 63,250N 94,600E
also Ins dyke w qtz in contact.
K14 Soil
022° 0 m
200 m K15 clay rich bn till no sand in loess. Qtz comb pebbles
400 K16 50 cm loess 70 cm Sand
10 cm dark chl green clay rich till
600 K17 chl gn - bn till under loess no sand
800 K18 chl gn till gritty w fragments of sand over + 1/2 m loess
1000 K19 Grey bn till under loess hard rnd pebbles + soft gn ↓ blk decomposed ores
1200 K20 Bn clay rich till Decomposed Rx
1420 Loess over Sand N/ till

LEVEL

Leaving bend in rd @ 61 46.80N 88,900E
hdg 064° @ ~ 2K [80'] cut creek into
flat bench topography. in 15 yr old burn.
@ Δ 036 started uphill slope
041° 0m
-366 grn bn till under loess,
ash?, sand. 1.2 m deep.
200m J67 grn chl. clay rich gritty till
40 cm deep under loess
400 J68 Drk grnsh grey clay rich till
under 40 cm loess
600 J69 Drk chl grn clay rich till gritty
under 20 cm sand + 40 cm loess
800 J70 Grnsh bn clay + sand till
under 10 cm sand 50 cm loess
1000 J71 50% blk frags 50% grn + other
in clay rich till under 60 cm
loess
1200 J72 grn - clay rich till
sand under
loess under
Ash
280' 0m
1020m J73 Grn bn clay rich till
gritty w various vk chips
10cm loess then till In brg trees

221' 0m
200m J74 Dark grey friable clay till
20 cm sand over 30 cm loess
Some qtz frags Gritty sample
On flats
400m J75 Drk grey clay rich till
w gritty qtz + drk schist frags
Gritty Under 30 cm loess - Sand
600 m J76 Med grn-grey clay rich
gritty till w decomposed vk frags
800 J77 Med grn-grey-bn clay rich
gritty-clay till under
30 cm sand + 60 cm loess
1000m @ base slope v gentle
N.S. loess over sand.

Crossed 2 roads hdg ~ rd
+ 400m on E fairly Slope
deep sand + loess

Upper Sangaic Clc.

C29 creek near mouth w side recent
strmd w small clan material mostly
chl^{d} granite (Same metamx?)
+300^{m} Klan bldrs qtz eye ft. rhyo
+300^{m} " " " " " "
and some mafic m.g gneiss
+300^{m} qtz eye ft rhyo Klan bldrs
+50^{m} oc same w 3mm white qtz veil
+100^{m} subcrop hbd-plag 3rd% CI gneiss
+300^{m}? K22 silt mainclc garnet-hbd-fspar
△037 gneiss mig C.I 10-20% 30% qtz eye
+ felsic rhyolites 0625491, 6983189
+400^{m} mbedin clc
large bldrs garnet hbd-fspar gr C
abundant rhyo cps + Alt in clc
+200^{m} bedrock w side clc
O.F. 1-2mm blk qtz + fspar eyes
in med beige dacite? N of the boundary
+200^{m} K23 silt sep from N side
ams, rhyo ± hbd gniss cps
+60m K24 micaceous silt no cps
+100m creek rhyo ft qtz eye gneiss, musc sch
+200^{m} E side ams rubble (S)
+70^{m} W side K25 silt
qtz eye rhyo (S) in clc + hbd gneiss
are bleached most yllw

R. D. PENHALL LTD., MADE IN VANCOUVER, CANADA
DUKSBAK WATERPROOF

LEVEL

+200m K26 | Coarse Silt from ≡
Abundant rhyo. cpx + ?, some gneiss,
some qtz, some musc.
@ forks in top of ck
K27 silt right fork (to W) Musc rich
fines. Rhyo v abundant (gd %) ?
hbd ± gar tspar gneiss common
K28 silt left fork as above
~~038~~ 0625219 6981, 889
Contact Right Limit Hillside
140 m Small K26 below rhyo rubble
190 m 144°/? 5 m wide rhyo non ? dyke(?)
forms spine on hillside
has narrow 3 mm qtz vns
320 m KN29 Fine silt grass org rhyo cpx
@ top of small col. as steep
450 blch pkg m.g.
500 K#30 Soil below lip of hill. Rusty
granitic? clan pebbles
700 K#31 Rich red soil @ top of hillside
870 blchd hbd tspar gneiss c.g.
900 more blchd bands going over to lip hill
K#32 orange soil rkty
950 blchd gneiss hbd-tspar ± rhyo

1100 K 33 Wht bn soil w clan rhyo frags
1240 rubble clan hbd tspar gneiss
1300 ~~dot~~ K34 Bn soil w chl sch frags
rhy + hbd tspar gns rubble in area
ridge is narrow now
1341 (S) clan rubble f.g granite unique
1500 K35 rich soil on small knob below saddle
in ridge top clan rubble f.g. granite?
Soil contains decomposed frags
1700 K36 soil clan grant hbd tspar gns
v. f.g.
1960 tspar gneiss NS heart ahead + back + to saw
2000 K37 Soil steep up'y slope
2093 (S) Subcrop f.g granite
2150 rhyo no eyes
2306 K38 Very rkty soil steep w slope
2500 slide w qtz eye tol granite
like in Sawyer JB's cuts
2800 base slope Sawyer valley

R. D. PENHALL LTD., MADE IN VANCOUVER, CANADA
DUKSBAK WATERPROOF

LEVEL

Cut scraped OC just E of first ck along rd from Manitoba

120/50 NE and 114/60 NE

fol^{n} in musc chl or musc brs (chl)

qtz eye granite

strongly foliated

Natural OC just downstream on S side

Scraggy from creek to sample

Up CK W side

+100m Subcrop qtz eye gran

+50 m shaft @ base slope

+400 m Llan blds qtz eye granite fol^{d}.

△038 0624704 6984,435 alt. 739 m

forks 0625,219 6981,889

△037 625,491 6983,199

E N

+200m steepy waterwash path

+300m across flat slumpy area water

+ path steep hillside blds 80% C.J. hbd gns

+50m blds f.g banded gneiss C.J. 10 to 50

+150m qtz + fsper eye π^{c} dacite large blds

+200m many large blds C.g granite in fan

-50m rt fan Subcrop recrystd

gneiss hbd + fspar gns mineral

127/85 SW

⊥ 200m first rhyo rubble △39

⊼ 29,334 83,605

+30m shaley qtz eye fspar π^{c} dacite

+70m K39 silt main clc. much hbd

gns, One large slab Kgranite gns

much mussel in sand

hillside above large rhyo blds

open boulder slide on E side ck

+50m large blds c.g hbd granit gneiss

+50m Subcrop same. Blds white pegmatite.

+200m K40 Seep from W sandy-

organic w much mica. just

short of head in ck

+100m K41 spongy seep sandy silt

+40m K42 main ck silt. Much pebble

bar ⊼ (S) to cobble size mica fspar ± qtz schist,

rhyo, limonitic staining blois ex

intrusive? + metamc?. Big blds

hbd granit gneiss present but not abundant

△040 24064; 82,864

+20m E side ck rhyo rubble π^{c}

+300m below Knob in valley

K43 seepy silt from W

K44 silt main creek (S) 3

RC K57 yllw qtz fsper musc fspar w dk specks

K58 like K57 both metamss textures? (S)

K59 as above except distinct intrud stream (S)

LEVEL

0m Chunk arenaceous slope open w short willows + spruce all through

500m slabby hbd-fs por gneiss cg

to 680

690 K45 wet bn clay rich gritty soil on ridge

761 slabby hbd gns cg

785 double shrimp dyke?

830 many blders hbd gns

920 K46 Bn soil on ridge hbd gn blders

1100 blders gneiss f to cg

1170 rhy + blders

1200 K47 Yllw bn soil musc. rich Rky gritty

1230 blders hbd gns

1390 many blders " "

1430 " " " "

→ 1550 " " " " start musc at ridge down

.. too rocky to sample No need

1670 K48 Bn rky gritty soil step nose

1920 base of rock on flats Stgl stony

+ 200m qtz eye fol± bio-musc gr blders many

@ 1 ant Tyms >1000 Au ck.

75m uphill to pink rhy.

mostly qtz eye gr ftt some qtz + minor metam. Few rnd diorite rhy

Set 0m

Up Ck

50m J78 Silt qtz eye fr ftt w qtz eyes

220m J79 silt " " " " " " "

qtz texture not as obvious in qtz. Mostly fg musc in granitic (metam?) cps

" in silt

385 J80 silt qtz eye fr ftt w qtz eyes

500 J81 Sandy soily silty stony Gr cps

Contour SE 0m

95m J82 wet bn soil no loess no org

190 J83 " " "

280 J84 Rky wet bn soil on rock ridge

Drainage to NE 0m

204m J85 Bn rky soil v. thin to no loess

Contour NW 0m

100 J86 Rky Bn soil

200 J87 " "

300 J88 " " "

400 J89 " " "

460 creek

500 J90 " " " on nose

560 OC granite
600 J91 wet bn soil
700 J92 Rky bn soil
Damshin to N 0m
130 - 150 weak bench
190 frozen ground all around
Cantam SE 0m
90m J93 grey + bn rky soil below bench
on th side valley to to SE
190m J94 Rky bn soil on v. steep
bank below bench.
240 creek below flag of last year

Stewart ck.
△44 19,015 / 86,248
△45 18,665 / 85,098
△46 J95 Silt 18,046 / 84,623
granitic sand + fair matrix
1/2 way up slope Clan rubble hbd with 70% vf.g thinly laminated gneiss and (skpis) impure metass? also thinly lam
J96 Soil on ridge among very rky soil
Rx as above. Soil clay rich upper layer.
Dawn Ridge 0m
200 J97 V/Tw bn soil + rky + clay rich Clan rubble Schist + metic vfg thinly lam gneisses
290 rubble hbd to par gneiss to avg 30% hbd
350-450 much Clan 10 - 30% cut hbd gneiss ± garnet. Much thinly lam white fspm + hbd (chl) layers
560 J98 Rky clay with soil
660 - 700 150/56 NE tal
660 - thinly lam hbd 30% fspar grs on Knob 156/60 NE
740 - 750 more subcomp
790 J99 Rky Soil lunch Knob ahead
840 level OC area

LEVEL

1000 | J100 | Rky bn soil 70 cm deep under clay rich rky ~~soil~~ upper soil

1200 | K49 | Rky bn soil No comps

1900 | K50 | Bn rky soil 50 cm deep much peg cpx

1530 | K51 | Grey bn rky soil ↓ gully

1640 | tip up w cpx-rich ~~from~~ fol^n blk grains

1730 | K52 | Bn deep 50cm rky soil No fit in area

1830 | K53 | Rky bn soil 80 cm deep

2030 | K54 | wet bn rky soil

2230 | K55 | Bn rky soil hbl grns + peg cpx

2430 | K56 | Bn " " in old (soil) pit ?

slope got flatter @ 2350

2530 mouth of creek – ck x-ing thru an old ~~shaft~~ "trench" here –

160/54.NE fol^n in thin banded dark greiss on North side Stevens Creek 500^m± from Seggie 21,441 / 87,670

PELMAC

Pelly River ⌓05V 60,894 / 63,517

⌓052

285° 0^m

100^m swamp N/S

015°

35^m P1 Rky some rusty cpx bn till

85 P2 " bn soil top of small hill

135 P3 yllw bn soil more rich rky. brn next slope

185 P4 pale beige bn soil Monolithic frags Mosc rich schist 80 cm deep

235 P5 Bright salmon pink till Very rky w mica rich + qtz rich frags

285 P6 Till difficult rusty mica cpx bottom hole mxd org^c + rusty cpx

405 walk around

420 P7 Till rky wet on top of organic V. fine green org^c

465 P8 Till X-lam ~~yllw~~ mica rich rky 70 cm deep under loess + org

600 gnrl N/S

285° 0^m

65^m P9 some org^c grey bn till w rusty frags. High org^c - till under

LEVEL

190m P10 Till v lky sme org° rnd to Slan Some rusty frags.

195° 0m

50m P11 Till to sd Hi matrix Rich yllw orange mica chips Under v lky loess - frn mixture

100m flats NS

130 P12 Ox ∫ yllw red to mox gwy till rnd pbles

250 P13 mono lithic till - sdy mtrx with yllw br frn Some rnd pbles on top section Sampld

300 P14 Till poor sample loess? frozen v lky, beneath loess

425 P15 yllw gritty till Musc sch rubble @ surface in swamp (3)s till

475 P16 yllw mngl till + mox yllw rnd to Slan pbles

525 P17 yllwsh till rnd to Slay pbles 2m blck carbonatic tephrilli lft

575 NS > length angle loess flat ahead

285° 0m

135 start creek bed

198m deep v lky loess then sand

015° 0m 198m dk shale lft up bk in swamp

Mackintosh River

from bank grav exp to ck T up ck 300m±

Δ053 OC lowest crick

P18 RC 2.6 5ϕ (½%) limy phyllite + phyllitic lmst

finally silicified ? (5)

P19 RC 3-5% frac ± dun fg, clgy (carby?)

2.5? (25)

118/35S excellent fol^n in green phyllite

w manganese fracs limy locally qtz vns

lmst but resistant, whole unit looks

locally silic^d or skarnified see (5)s

+10m P20 locally higher Sϕ fracs w pinkish Sϕ

fg carby? wi fg carbs ± fg fracs (5)

+20m P21 @ upper limit OC Silic^d carbonate unit

purplish colour w qtz vns + lmst fg units?

Unit is 50 cm thick within phyllitic rocks to

overall NW abt

Up crick 0m

120 P22 silt good, thin gravel, rnd

reworkd till in crk

Many goat bones here

LEVEL

350m walls valley starting to form
500 } blds wavy bedded grey lms
subwp ??
P23 silt sandy. Much lms cgls
+ ovelys blds ± lm blds
700 end C + slightly around Lower Ck

P24 TM was cast bank wet grey,
Dark arg's and pbbls. arg's lms etc
Dawson 0m
300m P25 TM ends up
500m nr CC
back to 500m
Contours + drop to E
nr OC nr TM
△55 limy arg's tuff well bedded
big blds + subwp?
creek to E + last ; carry thru

Frenchman L.
△56 48,905 / 01,115
255° ± 0m
130 mudst arg' silt nr ups
160 P26 Till blk frags. base slope
220 P27 Till blk + bn base next slope
260 Lm blds gullie - (tuff?)
340 P28 Till choc brown
ash - loess - rky FN - till
370 cut-line. FN Boundary
920 P29 choc bn rky till Lm
ash - loess - rky FN
470 P30 Rky bn till. Decomposed
blk, rushy wd + other frgs
520 P31 Dk grey till clay rich
ash - loess - rky till - clay FN
590 base slope hillside (flat behind)
P32 choc bn clay rich till
640 P33 grey dk choc bn till rky
ash - loess - rky till - choc bn till
690 P34 clay rich deep bn till decomposed
wood, blk + other frgs. on flats
on top hill
790 P35 rky choc bn bn till
on flats
800 frozen

LEVEL

950 P36 Dark brn to blk + bn Till under tip up

980 P37 Mxd maroon bn + bn TM on slope again

980 P38 Maroon + bn Till Rky mod slope

1059 (S) outcrop marble white clean

1180 end. NS

Pelly River S shore by Rock Rapids

SE

2½ km to elk – water N silt

Up (SW) hill. base slope Klan white muscovite, silt, pegmatite

150m outwash NS +50m

Contact to NW 0m

P39 very black graphitic till (?) under rky loess + loess

100m P40 Clayey brn till under rky loessy till. Could be loessy too

200 P41 Brn till rky rich under loessy rky till

300 P42 Brn till decomposed with colour rx.

420 P43 Chan brn more lithic till as few rnd pebbles under rky loess. Some All dumpsite trays

550 P44 40cm shallow Till. More lithic blk + grey + mussel ?

frozen

720 P45 frozen rky till shallow 50cm loessy?. clay rich Seem OK

820 P46 Sandy more sand grey frozen till (S)

OC 065/80 S tilt in gabbro. Knobby with dsw. mvg gabbro base OC Bio 3rd hbd grn? 80% dark plag ??

Tr garnet. Amphibolite

LEVEL

R.D. PENHALL LTD. MADE IN VANCOUVER, CANADA DURABAK WATERPROOF

830 - 880 OC big up trucks top above
940 down 1m frozen sand clay till
1070 ~~DK~~ P47 Dk brn vfg TILL some frozen
1250 frozen lumps
1350 " " wavy bnd slope

BUCK 1

PEL 1	P3-45 6 or 467
PEL 2	P3 373 or 385
PEL 3	P3. 475 or 478
PEL 4	P1 337 in 347

LEVEL

2001

P.A.P.

Yukon

Dave Bennett

Field Notes

J-1. BRADEN AREA. DONE

AT YESTERDAYS STN 012 on GPS unit.
– approx 1100m W of A179

3559

0m B-1 Dk grey Hll from road – lots of rounded chert pebbles in surface float and minor chert pebble congl. – argillite chips in Hll. – mixed float andesite – gneiss, etc.

200m B-2 Grey slightly sandy Hll – minor argill.
30cm chert pebbles – pale coloured schist/gneiss

400m B-3 same as B-2 only more argillite pieces
30cm occurring. ~~Sample~~

665m B-4 Grey brown slightly sandy Hll – minor
usem argillite, chert, feldspathic schist.

900m B5 f.gr. sandy silt (good fines) from
Sm creek flowing E.
– float mix of qtz feldspathic schist, arkose, greywacke
w. minor argillite & chert

965m B6 orange-grey slightly sandy Hll
– mainly qtz feldspathic schist chips
minor argillite

LEVEL

1240m B-7 – grey brown slightly sandy till/ rounded to subangular mixed float – chloritic schist-qtz feld sch argillite, chert

45m

1455m B-8 grey brown till – higher % argillite.

1765m B-9 f.gr. sandy silt from sm-med creek flowing E
– float mixed fc/Asphalt schist/gneiss, arkose, chloritic schist, minor argillite-chert

2000m no sample – permafrost

2280m B-10 wet brown grey till from under tp-up.

2430m B-11 green-grey brown till from tp-up – 10% chloritic schist float (25%)

2550m sm creek flowing E – no silt

*2690m B 12 dk grey green good base?
till → rounded dk green pebbles + qtz.
– looks like most of till is decomposed chloritic argillite? with some f.gr disseminated pyrite.

2850m med. creek flowing E mostly over ice → f.gr. slightly organic mat sit B-13

2900m angular float under tp up of dk green foliated mafic intrusive w. carbonate on fracture surfaces (H.S.)

3045m B 14 grey green till w. minor amts of chloritic schist chips. (tp-up)
Most of float under tp-up consists of rounded arkose, granite and grit/arkose/chert pebble conglom

B-15 black argillite sub-crop – weakly silicified, foliated w. f.gr. muscovite (located near top of hill approx 50m W of 2000-A-176.

LEVEL

DONE

J-21 BRADEN AREA

On corner of rd. @ SW corner of small lake (W. side)

B-16 dk grey-green till - decomposed, clay rich bedrock of chloritic-graphite schist

float in rd - rounded orhose, chert, graph sch, qtz thin bedded argillite/sst., qtz. musc-fspar schist

NW up rod. 310°

95m B-17 same as B-16 only more clay rich till and slightly lighter grey colour - still chl sch

140m Y-junction - followed rd heading N

175m at 2000-B-176

270° -245m at sample B-15 on other rd

-345m rd running parallel to main rd (25m E)

sub-crop on rd grey-green porphyroblastic fgr muscovite-chlorite schist - 65% 1-2mm pyroxene porphyroblasts with 30% fgr muscovite-chlorite (mica) making up foliation (mica-chlorite) (possibly originally and. lapilli tuff) H.S. - B 18

-350m B-18 grey green till - decomposed ↑ schistose, mica rich till

Y-junction — keep goes N following left side to NW.

-500m at top of hill - B-19 dk. grey till/sub crop mainly decomposed chloritic-graphite schist - rock chips in till - black, sooty, weakly silic'd, schist

R.D. PENHALL LTD. MADE IN VANCOUVER, CANADA DUKSBAK WATERPROOF

525m reset to 0m 290°

-155m B-20 same as B-19 (near top of small hill)

205m sub-crop near top of pale green alkaline intrusive w. diss blebs of py? 5-10% rusted blebs throughout. Rock is fairly soft - H ~ 4-5.

B-21 - At top of hill

230m sub-crop as above only brecciated with fragments of pale green intrusive in an ankeritic and in some areas qtz matrix. Nearby non-breccia float has weathered surface w. 60% limonitic blebs - 3-5% f.gr. diss Py.

275m outcrop of B-21 (not brecciated) 190°

310m end of sub crop

315m B-22 brown soil - eng. Float of B-21 in soil (at break of slope below small hill)

410m 50cm sub rnd float of chert pebble congl.

435m B-23 light green chloritic till? decomposed bedrock - some ghost textures remain in till

535m B 24 same as B 23 - lots of angular pcs of chloritic or meta-andesite

745m B 25 Same as B-23 (under 30cm well washed sand)

LEVEL

920 m started down slope into creek valley
950 m B 26 - same as B-23
1160 m B 27 " "
1250-1300 m Swampy creek flowing W. no silt.
reset to 0 m [170°]
550 m reset to 0 m [070°]
0 m - B 28 grey-grey clay till - some musc. in till
80 cm depth
195 m - B 29 grey-grey clay till - ang. flk. meta and minor argillite chips
405 m B 30 dk green grey clayey till
- minor ang. chips of argillite (chloritic)
600 m B 31 dk gray green clay till - higher content of argillite chips in till.
780-790 m crossed main road
800 m B 32 green chloritic clay till (decomposed bedrock)
sub-crop of green foliated meta-andesite
900 m [015°]
1000 m B 33 green chloritic clay till
- meta and frag. ments in till

Back on rd. near B 32 - headed S along rd

R. D. PENHALL LTD. MADE IN VANCOUVER, CANADA
DUKSBAK WATERPROOF

DONE

J-3 MINTO - BRADEN AAGA

[315°]

0 m at NW edge of fire break GPS * 56 15 0 N 402160 E
B 34 good grey till - sm. ang chips of pale green phyllite
205 m B 35 " "
400 m no till - thick loess to permafrost
500 m B 36 grey till - small chert pebbles in float.
720 m B 37 grey slightly sandy till - lots of rounded dk grey & qtz pebbles
930 m B 38 f. gr. slightly organic silt from med cr flowing SW. (creek glacio-fluvial)
- f. mica & granite grains in silt.
850-1150 flat marshy area
1190 m B 39 grey slightly sandy till
1390 m B 40 " "
ang. qtz-feld. schist chips - rounded dk grey fl
1470-1600 m swampy gulley 1630 m washed sand
1680 m B 41 - grey clay till below 30 cm loess
ang. grey musc. schist, qtz, float - some rounded float
near sandy layer
1880 m B 42 " " " " "
2100 m - 2150 m creek gulley completely massed over - nothing flowing
2210 m - clean washed outwash sand 50+ cm th
below loess
2310 m " " " "

[180°] reset to 0 m - 50 m and 100 m flk till -
- 500-700 m following ck - 750-1020 m swampy flats - 900 m clean outwash sand to 70+ cm

LEVEL

DONE

J-14 - BRADEN-MINTO (FIRE BREAK)

- 0m at sample J-10 following F.B. blk to W
- 65 m heads WSW
- 190 m bends to NW at SE flowing creek
- 290 m crosses Ck - no silt - heads WSW
- 400m B 43 grey slightly sandy till
  - small argillite chips (< 5%) in till
- 670 m B 44 - good grey till -
  - small chips, qtz, argill., granite
- 750 m heads W
- 900 m starts curving to N
- 980 m B 45 wet grey till (heading N)
- 1150m headed W again - swampy
- 1420 - B 46 good grey till -
  - chips of argillite, qtz-ser. schist + granite
- 1410 - 1600m heads NW
- 1600 heads W to WSW
- 1500 - 1950m swampy
- 2000m B 47 grey slightly sandy till from full auger depth
- 2100m (swing NW) in fire break
- 2200m B-48 good grey till from 1m depth
  - ang chips argillite + meta sandstone, rounded schist, qtzite
  - F.B. does sharp turn to N.

- 2275m back at main F.B. road
- 2375m B 49 good grey till 1m depth - ang chips of argillite + green metavol., sub-rounded - round qtz + mixed Fr.
- 2609m B 50 good dk. grey till from 60 cm depth
  - lots of argillite chips in till
- 2625 - 2700 argillite chips on surface of F.B. rd.
- 2750 - 2850m Subcrop of pale buff-green rhyolite w. 30% limonite spots thru throughout.
- 2775 at top of small hill
- 2820 m B 51 Soil/till - decomposed dk argillite/slate with qtz-musc throughout.
- 2925m clean brush sand to auger length.
- 3000m " " "
- 3095m in broad valley - B 52 grey slightly sandy till
  - argillite, qtz. + other schist chips in till
- 3190 - 3400m F.B. heads NNE up swampy area
- 3400 - 3530m heads NW
- 3530m F.B. continues W
- 3640 m B 53 - grey slightly sandy till -
  - some argillite chips (less than B52), other mixed Fr.
- 3740, 3840, 3940, 4040 clean sand to 1m+
- 4230m at med creek flowing SW. - creek banks 5+m of clean washed sand - no silt in creek, just sand.
- 4230 to 4650m heads NW then N - all thick sand.

4650m F.B. road - heads WSW.
4730m end thick outwash sand
4750m B 54 grey hill - schist, argillite (5mm%), qtz + chips
4950m At Sample J41

R. D. PENHALL LTD., MADE IN VANCOUVER, CANADA
DUKSBAK WATERPROOF

J-6 SUMMIT LAKE AREA (South side)
-ON HORSE TRAIL 2km E of GPS 021
130°
-100m swampy area
-170-300m swampy
-380m started up gentle slope.
-425m E-1 brown slightly sandy till with dk grey argillite chips, interm. metavx,
-650-850 intermittent swampy vies
-1100m E-2 fgr sandy silt (Good sml)
from small creek flowing N
- float chips in silt mainly orange brown qtz-ser. schist, some red green chlorite schist, qtz, + minor blk schist.
-1535 E-3 brown slightly sandy till, lots of dk grey (qtz chl schist?) chips
-2060m E-4 grey brown slightly sandy till
some angular orange-felsic-int metavx.
- started contouring to W
250-300m swampy creek no silt
850m sm creek (no good silt)
1000m reset to 0m 310°
0m E5 brown slightly sandy till Gun drumlin feature trending NE-SW
25m 5m x 50m outcrop of dk grey-black chlorite? graphitic schist w/ interlayered qtz HS
fol^n 025/15 SE. (5m thickness of schist exposed)

LEVEL

550m E 6 grey brown till w ang chips of layered conic musc-qtz schist (dominant fracture)

900-1000m swampy creek flowing ENE

1025m E 7 good brown grey till

R. D. PENHALL LTD., MADE IN VANCOUVER, CANADA
DUKSBAK WATERPROOF

DONE

SUMMIT LAKE AREA (SAM SIDE)

At Sample D17 (2000) in large creek

B 55 grey till near sub crop of grey qtz-musc-chl schist (sub-crops for 20 m radius)

-Sample located 700m SW of 2000-D-17

-headed SSE up west side of large creek

-220m - B 56 grey clay till - lots of ang chips qtz-musc. chl.-schist (more bleached - probably less chl. more musc-sericite)

-350-400' lots of angular float of more gneissic rock (qtz-feldspathic gneiss)

-490m B 57 grey clay till - ang chips of qtz-musc-chl schist + qtz-feldspathic gneiss (some crs massive white qtz in gneiss float).

-700m B 58 grey clay till - schist chips darker + more argillaceous

-925m B 59 grey clay till

-1120 B 60 brown-grey clay till - some lenses could be mixed in (muddy till) - ang. gneissic float.

-1320m B 61 brown grey muddy till - angular chips of chlorite schist, some massive qtz

-1610m B 62 " " " "

-1930m crossed main creek - flowing NE no silt

headed up stream

LEVEL

-50m B 63 - wet grey brown till along moose trail

50-300m - float along moose trail musc-chlorite schist

350m 325° reset to 0m

-30m outcrop (subcrop?) of musc-chlorite schist w. minor qtz. - rusty weathering along fol^n layers fol^n 065/10-20 SE N.S.

B 64 grey-brown mixed soil till from above O.C.

musc-chl-qtz schist

abundant angular frag

-45m 5m wide o.c. musc-chl-schist w. minor qtz fol^n flat to dipping shallowly NW

-220m B 65 grey brown till - lots of ang chips of musc-chl schist

-450m B 66 brown-grey till - ang musc-chl schist

-575m at high point of bearing

-660m B 67 brown grey till - lots of angular leucocratic musc-chl-qtz schist float

900 -860m B 68 " " " "

+1085m B 69 brown grey silty frozen silty ag till (probably insufficient) ang. m-c-q schist Mt. " " " "

-1310m B 70

-1500m permafrost N.S

-1680m B 71 f.gr. sandy silt from sm creek flowing N (GOOD SAT) - angular float mainly leucocrat musc.-qtz schist with lesser green musc-chl-schist & minor argillite

R. D. PENHALL LTD. MADE IN VANCOUVER, CANADA DURSBAN WATERPROOF

DONE

SUMMIT LAKE AREA - (NORTH HALF)

At Sample JS4 (2240m N of LR outline 75m E of D42 (2000))

290°

170-250m - swampy willow area - permafrost

350m B 72 brown slightly sandy till from 60cm depth - angular gtz chl-musc schist chips (decomposed).

530m B 73 grey till - angular chl-qtz-musc schist & rounded pebbles in till.

740m B 74 grey till - lots of angular chl-qtz-musc schist some sub-rounded white qtz flr.

1000m B 75 grey till - angular chips of darker qtz-musc-chl-schist.

reset to 0m started contouring to S (SSW)

-415m B 76 grey till - abundant angular musc-qtz-chl-schist. (almost sub-crop)

-840m B 77 grey till - mainly angular chips musc-qtz-chl-schist, slightly less abund. chl-qtz-musc schist.

(125m permafrost) -1490m B 78 grey brown till w. mixed float

-1530m Leveled 090° reset to 0m

0-300m permafrost

340m B 79 grey brown clay till mainly chl-qtz-musc. schist chips in till

LEVEL

- 420m small creek flowing ENE
  - fine loess - no silt
- 450 - 730m permafrost + thick organic layer
- 730 changed to 120°
  730 - 815m swampy area
- 895 - 1000m thick loess + outwash sand
- 1015m B 80 grey brown slightly sandy silt
  - dark chert + qtz pebbles minor schist
- 1050m started heading 090° again
- 1275m W-E string ends 100m N of string line from the E.
  - 160m N of camp J49

DONE

KELLY FARM (South)

- ~~At middle draft stage creek~~
- B 81 good C gr. sandy silt from small creek flowing N. (50m downslope from highest drill site)
  float - 30% granitic (granodi.),
  40% argillite, tuffaceous argillite
  graphitic schist + minor siltstone
  25-30% intermediate to mafic volc. tuff.
  Minor qtz. lit.

- 65m @ 020° from highest drill site
  B 82 brown clay soil/till
  - mostly angular granite/granodi. frt.
  minor tuffaceous argillite.
  headed down slope on W side of creek (approx 25 m from creek). reset to 0m

- 70m B 83 grey clay till (slightly sandy) mainly granite/granodi. frt (80 cm depth)
- 135m B 84 grey brown slightly silty till mainly granite/granodi frt.
- On drill rd. near camp (base of slope)
- headed up steep drill rd
- 70m - B 86 brown silty mixed soil/till layer 20m below steeper break in slope. above thicker loess/silt/sand (Pelkey) HS
  - angular tuffaceous argillite - large angular pyroxenite frt

LEVEL

B85
170m - grey-brown slightly sandy till
- angular fgr. foliated granite/granodiorite

R. D. PENHALL LTD., MADE IN VANCOUVER, CANADA
DUKSHAK WATERPROOF

(DONE)

MINTO AREA - South Slopes

- At GPS 031 (small hill 2.5 km S. of surveyed peak 3289' (approx UTM 61N, 9[illegible]7 E))

Headed E -
- 550m at small swampy creek flowing SSE
- 800m - on flat ridge between creeks
reset to 0m [025°].
- 0m - B 87 - brown clayey till? - some angular mafic vx, rounded granitoid thru pebbles
below 80cm loess layer + above sandy outwash
- 250m clean washed sand to 1.2 m depth - no sample
- 360m B88 good grey-green basal till below 80cm sand
- lots of angular argillite chips and light brown biotite flakes in till
- lesser pale green chl-musc schist chips
- minor qtz + granite.
- 550m clean washed sand to 1.2 m.
- 675m B 89 grey slightly sandy till below 10cm loess then 80cm clean sand then 10 cm clay till - lots of argillite and dk. grey qtzite
- 880m B90 grey slightly sandy till below 4cm loess then clay till (approx 10cm) - argillite, granite, musc-chl.-schist chips in till.
- 1090m no good till - 10cm loess, 40 cm fine sand, 30 cm clay ash, 5cm clay with some rocks 30+ cm sand

LEVEL

-1150m B 91 grey green slightly sandy till
- lots of musc in till
- argillite, gritty greywacke frags.
-1350m B 92 " " " " "
-1600m slope flattens out
-1650m B 93 grey green clay till
- lots of decomposed schist w. > 5% biotite content in till
-1880m B 94 grey green slightly sandy till
- chips of bluish rock mafic schist + oxidized musc-qtz schist

reset to 0m [115°]
950-1200m swampy area — no creek
1600m B 95 brown silty soil from ?gamet sub crop of musc-qtz schist

reset to 0m [220°]
-220m B 96 grey-green slightly sandy till
- float mainly musc-qtz schist w. mafic rock
-455m B 97 dk grey-black till consists of decomposed chlorite-graphite schist w. rusty qtz
-660m B 98 grey-green slightly sandy till
- some decomposed chl-gra-musc schist

-900m B 99 grey clay till
- SW-round qtz, decomposed musc-qtz schist
-1150m B 100 grey sandy till
argillite, qtz, + schist fragments
-1400m 1+m washed sand
-1500m " " "
-1600m B 101 grey green clay till
- mostly musc-qtz schist frags.
-1600-1775m steep bank into creek
-1810m B 102 f.gr sandy silt (Good sour)
from creek flowing SW (good flow)
- float approx 30% argillite, 30% mafic rx.
30% felsic-interm. schist, 10% granite

LEVEL

- KLONDIKE HWY Between Minto + Pelly Xing
- B 103 graphitic hill from Quarry (Picture)
  - black hill consists of decomposed graphitic argillite w thin bands of interbd qtz
  - 1-3% v.fgr. diss py.
  - Sooty layers appear to have remnant plant structures.

Till here has been reworked by water with sand interlayers among the decomposed graphitic argillite. Also minor amts of granite + dolomitic lmst cobbles.

DONE

PELLY FARM/MINTO - ROAD

On road at UTM 63150 N, 88500 E

035°

1100m at top of small hill - angular subcrop of sheared dacite pyrox porphyry (Carmacks Gp.)

reset to 0m - continuing @ 035°

- 450m at valley bottom - no creek
- 575m B 104 grey brown slightly sandy till from 1m depth - rounded qtz + argillite fm.
- 775m B 105 grey-green clay till from full auger depth - lots of angular argillite chips some rounded qtz pebbles
- 1000m B 106 - black decomposed musc-graphitic schist till - minor qtz. also possible fgr. diss py.
- 1200m B 107 - Same as B 106 only slightly more chloritic.
- 1420m B 108 - Limonitic grey brown slightly sandy till - angular chl-musc-qtz schist minor argillite
- 1470m at top of hill

reset to 0m 305°

800m - reset to 0m 215°

0m B 109 grey brown till w. angular decomposed chl-qtz-musc schist fragments

LEVEL

- 215m B 110 to 2m depth Brown oxidized to dk grey consists of strongly decomposed mix of blk graphitic schist + qtz-musc-schist
- 430m boss + sand to 60 cm then layer of subangular milky white qtz - couldn't get through
- 450m B 111 Same as 430m only under qtz layer is 30cm layer of slightly sandy HM with decomposed musc-qtz-schist then clean sand below
- 650m B 112 blk HM consisting of decomposed graphitic schist mixed with approx 25% sand (Qtz pebbles still at top of)
- 850m B 113 dk grey green basal till
  - Some graphitic schist chips in till
- 1050m clean sand to 1m depth Thin partly frozen
- 1110m " " "
- 1300m at main creek - slight flow but no silt

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UPPER SCROGGIE (Above Marigold)

At C-30 creek (approx 3.5km up from Marigold) on S. side of Scroggie Cr.

Approx 75m upstream from mouth of C-30 cr. - Headed upstream to the S. - set to 0m

- 40-80m blocky talus/subcrop of qtz eye rhyo porph
- 925-950m blocky talus/subcrop of qtz eye rhyo porph
  - minor blocky float of qtz eye muscovite granite
- 975m E 8 f.gr. sandy silt
  - float 30% qtz-eye rhyolite.
  - 30% intermed to mafic gneiss
  - 20% foliated hbld-biot-musc. granite
  - 15% more equigranular qtz eye granite? (appears to have minor aphanitic fraction)
  - 5% mixed metamorphics - garnetiferous felsic gneiss
  - kyanite-musc. schist with 30% 5cm long kyanite xtals, also 3% f.gr. diss. magnetite throughout matrix + xtals. (H.S.)

1350-1400m sub-crop/outcrop of foliated muscovite granite (paragneiss?) - forms flat bench area on W side of creek (Old camp at 1400m - several test holes) Bench continues to approx 1600m

LEVEL

1940m E 9 fgr. sandy silt from small creek on W. side flowing E
float mainly pegmatite with 10-15% felsite & some granite.
- 2010m E 10 f-med gr silt from main creek - predominantly felsite + granite float w. 10% pegmatite.

reset to 0m 045°

- 215m E 11 brown slightly sandy soil with tiny pieces of granite +/- peg
- 415m E 12 " " " "
- 500m 360°
- 600m E 13 " " " "
- 800m E 14 " " " "
- 1010m E 15 brown silty soil + angular biotite + bold rich chips.
On ridge top 360°
- 1210m E 16 brown silty soil
- 1270m subcrop felsite.
- 1400m E 17 brown very sandy soil with lots of biotite in soil - chips of biotite gneiss
- 1600m E 18 brown soil in blocky talus that appears to be muscovite granite

- 1800m E 19 brown silty soil - some angular muscovite granite float
- 2025m E 20 brown silty soil with some organic content - angular granite + peg. chips
- 2150m at break in slope near Scraggy Ck
2210m at Scraggy Ck approx 150m upstream from C 30 creek

(SCROGGIE - RUM RUN) (CONT

Sampling up C27 + C33 Tributaries on South side of upper Scroggie approx. 2 km upstream from Mamposa/Scroggie Confluence

- 0m at base of slope on C27 trib. (735m up from Scroggie)
- headed upstream on W. side of creek.
- 100m angular float of mus-biot-qtz eye gneiss (weakly foliated)
- 150m " " "
- 250m chl-musc-qtz eye gneiss float - less foliated w. minor biotite
- 500m more equigranular chl-musc-qtz eye (less angular float — more potassic with several thin chlorite + potassic rich fractures
- 635m E 21 - f-med gr. sandy silt from main creek - float consists of:

Minor amounts of porphyritic andesite w. plagioclase phenocrysts

- 20% aphanitic rhyolite felsite (some vesicular with qtz-eyes)
- 30% chl-musc-qtz-eye (with foliated) granite
- 10% hbld garnet foliated gneiss (10 mm garnet)
- 15% hbld-garnet paragneiss with
  - 40% 15-20mm hbld xtals, randomly oriented
  - 10-15% 2-3mm dram brown garnet in sugary qtz matrix
- 10-15% thyonite (chl.-pyrox along thin foliations)
- 5-10% musc-feldspar(white)-qtz pegmatite.

- 850m sub-angular flt of chl. musc-qtz eye gn
- 1350m at confluence of C27 + C33 creek
- headed up NW side of C33
- 1370m lots of angular rubble of unaltered slightly vesicular rhyolite
- 1400m creek slope steepens (canyon)
- 1580m at C32, C33 location
- 1600 - 1675m sub crop of hbld-garnet-chl-biot musc-qtz gneiss
  - becomes less micaceous with longer hbld content and sugary qtz matrix
  Sub crop forms large flat bench between the two creeks.
- 1725m crossed creek
- 1785 - 1795m angular rubble (sub-crop) of slightly vesicular rhyolite intrusive (some small qtz eyes) - extends upslope at 160° for 50+ m (looks like possible dyke)
  - forms upstream bend in creek shown on topo map
- 1830m hbld-garnet gneiss angular flt
- 1860m angular rhyolite sub-crop
- 1890 "
- 1900 - 1950m hbld garnet gneiss (HS) (this rock type could be orthogneiss due to contact metamorphism with rhyolite ??).
- 2175m E-22 f gr sandy silt from main creek

Float in creek

- 60% ~~ss~~ st coloured garnetiferous, ~~foliated~~ qtzite? w. 25+% muscovite (f.gr.) and 5-10% 2-3mm greenish brown garnet xtls in a sugary qtz matrix (HS)
- 20% darker coloured chloritic - hbld epidotized musc-biot gneiss w. strong foliation (Sections of ore epidote veinlets)
- 5% aphanitic rhyo (unaltered)
- 10% hbld garnet gneiss with 10-20mm garnet 10-15% and 30% hbld in qtz f-spar matrix (little to no micas)

NOTE: Approx 85% of float is garnetiferous non-gneissic is mainly unaltered rhyo + thinly foliated chl epid-hbl gneiss

3000m E 23 f.gr sandy silt from small tributary flowing W into main creek

Float approx - 60% hbld gneiss. ± up to 40% 3-5mm hbld xtals in f.gr (foliated) granitic groundmass

- 25% andesite tuff (weakly chloritized)
- 5-10% unaltered rhyolite.
- 5% pegmatite (some potassic)

3075m E 24 fgr sandy silt from main creek
- float 30% foliated hbld gneiss
30% musc-qtz-eye gran
15% fgr granite
15% rhyo
10% pegmatite
(hbl, tr no garnet)

3525m E 25 fgr-sandy silt from main creek
- float - 60% weakly metamorphosed andesitic tuff
15% rhyolite
10% pegmatite
5% hbld gneiss
10% other.

reset to 0m - started contouring to NE
-120m rhyolite rubble
-260m E 26 brown slightly sandy soil against angular buried rubble.
-490m crossed sm. creek (E 24 creek)
-500-550m permafrost
-560m E 27 brown silty soil
-800m E 28 " " "
-890m angular rubble felsic intrusive w. muscovite-qtz.

1020m E 29 brown silty soil
1075m at ridge top,
1100-1125m angular rubble of rhyolite (aphanitic)
1200m E 30 brown silty soil
1260-1300m hbld gneiss
30% 10-15mm hbld phenocrysts in fine gr. q/z feldspar - musc. matrix
1365m large angular float leucogranite (possible pegmatite - very crs gr)
musc-q/z-white feldspar
Also garnetiferous Svenn? (fgr. pyroxene, epidote, chl + hbld.)
Garnetiferous float from 1310-1350m
-1400m E 31 brown silty soil against subcrop felsic intrusive
-1600m E 32 brown silty soil
-1800m E 33 " " "
-2000m E 34 " " "
- angular hbld + biot rich chips in soil
-2200m E 35 brown silty soil
-2400m E 36 brown silty soil - lots of musc-biot flakes in soil
-2600m E 37 " " "
-2715m - 2725m sub-angular flr chl-musc-qtz-eye granite
-2800m E 38 brown slightly sandy soil
-3000m E 39 brown slightly rocky soil - chl-musc-qtz eye granite chips

3200m E-40 brown silty soil - some ang. chl-musc-qtz eye granite Plt

3300 steep slope to Scrogge Ck. (Creek right to slope)

3340m at edge of Scrogge Ck.

DONE

UPPER SCROGGIE

Sampling Hill at 1000+ past Fall Creek (C-26)

At C-26 headed upstream (approx 75m from Scrogge Ck) - 500m creek almost dry (At J-81)

Continued upslope at SW bearing reset to 0m

- 140m E 41 - brown soft w- angular brittle-granite chips
  - large angular Plt (30cm x 5cm) well foliated brittle granite (not much K-spar and 20% biotite - could be Quartz diorite)
- 300m E 42 " " " "
  almost-subcrop of brittle granite/qtz-diorite
- 380m in dry gulley (SE trend)
- 450m E 43 brown silty soil w. lots of angular chips of musc-feldspar-qtz-pegmatite (white pegmatite)
- 490m started downslope
- 510m angular rubble/sub-crop of brt granite/qtz-diorite
- 600m E 44 red-brown soil w- ang " " chips

180°

- 750m E 45 browns silty soil - musc-biot in soil headed eastward + contouring around hill

reset to 0m

- 100m E 46 brown silty soil ang. biot-musc granite
- 200m E 47 " " " " "

below 30 cm loess

LEVEL

-300m E 48 brown silty soil
-ang chips of biot-musc granite
(At W edge of gulley)
-400m E 49 brown silty soil
ang chips biot-musc granite
-495m large angular boulder of qtz diorite
with 20% biotite, 30% qtz, 40% white feldspar
-500m E 50 brown soil with chips of qtz diorite
-600m B 114 " " " "
-700m B 115 brown soil chips chl-musc-qtz eye gneiss
-800m B 116 brown soil w chips of
hbld rich gneiss? & limonitic qtz in soil
-900m B 117 brown silty soil
-angular chips chl-biotite-musc-qtz granite
-1000m B 118 " " " " "
-1110m B 119 " " " " "
-1200m B 120 " " " " "
-1300m B 121 " " " "
-1380m hit creek 10m upstream from
J-79.

(STEVENS)

On Ridge near Small hill West of
C-15 creek (approx 3000' elev)
headed down towards upper part of C-15 ck
approx bearing 150°.
- outcrop/sub-crop of well foliated hbld-feldspar gneiss

-75m outcrop fine-gr. hbld-feldspar gneiss
Attitude 153/52 NE
90m → 158/48 NE
-200m B-122 brown-grey clayey soil with
ang chips hbld gneiss
-285-300m outcrop hbld-feldspar gneiss
-400m B-123 brown soil lots of chloritic-hbld-gneiss
chips in soil
-600m B-124 wet brown soil w hbld-gneiss chips
-675m at main Creek (C-15 creek)
B-125 fine-gr. sandy silt
float - 70% sub-angular hbld-fspar gneiss
30% qtz-feldspathic gneiss w. minor hbld.
reset to 0 m - started contouring (slight climb) NE
towards next ridge.
-170m B 126 brown silty soil - angular float of
mod Feldspathic hbld-feldspar gneiss
-275 large angular boulder of coarse-gr., moderately
foliated hbld-feldspar-qtz gneiss (possibly orthogneiss)

LEVEL

-330m Outcrop of thinly foliated hbld-feldspar gneiss
fol^{n} attitude 148/50 NE

-400m B-127 Brown soil from against sub-crop of coarse gr. hbld-feldspar gneiss

-600m B-128 Brown soil - angular chips thinly foliated hbld-feldspar gneiss & coarse qtz-feldspathic gneiss w minor hbld

-690m angular fgr hbld-feldspar gneiss in 3cm wide pegmatite vein

-800m B-129 brown soil angular hbld feldspar gneiss fgr 700m on ridge top

-1010m B-130 brown soil - some angular hornblende chips & mica in soil

-1200m B 131 f.gr. sandy silt from large swale flowing WNW. (50-75m upstream from saddle)
Most moving hbld-feldspar gneiss with 10% qtz-feldspar-musc. pegmatite

reset to 0m continuing NNE to ridge crest

-200m just above break in slope
B 132 brown soil - lots of angular chips of weakly foliated, chloritic crs gr hbld-feldspar gneiss + minor pegmatite chips

-335m sub-crop crs gr. hbld-feldspar gneiss

-395m B-133 brown silty soil
- chips chloritic hbld gneiss

-600m B-134 brown silty soil
- small chips of crs gr chloritic qtz-fspar-hbld. (too small to determine if foliated)

-800m - B-135 brown silty soil noble up
ashy of chlorite, decomposed hbld gneiss

-970m - B-136 grey-brown soil
- angular chips chlor. gr. hbld gneiss

PELMAC (SOUTH) (DONE)

At GPS stn 052 – approx 100 m @ 195°
from Sample 2000-A-67. (approx elev. 3050')

105° – for 100 m
reset to 0m 015°

- 0m L-1 brown sandy till – mixed fit rounded to subrounded dk grey chert + grey qtzite, sub-angular argillaceous material.
- 50m L-2 brown slightly oxidized clay till with subangular – oxidized musc-qtzite chips – some argill. material.
- 100m L-3 red-brown sandy till beneath 30 cm grey brown loess – bits of angular chips weakly oxidized musc-qtzite.
- 150m L-4 brown grey slightly sandy till – angular musc-qtzite (mod grey colour, weakly oxidized) – sub angular dk grey mostly qtzite as possible v.f.gr. diss. sphalerite (approx 2%).
- 200m marshy area – no sample
- 220m L-5 reddish sandy oxidized till below 15 cm grey clayey loess – mostly sub angular musc-qtzite.
- 230-310m marshy area.

320m L-6 brown, slightly oxidized, sandy Hill - sub-angular to rounded musc-qtzite, minor amts. green metavx

330-500m thick organics + permafrost

510m - L-7 (10m NW of line)
brown sandy HM mixed rounded to angular float - mainly musc-qtzite, grey qtzite, dk grey argillaceous matrix

reset to 0m 105°

-175m small pond to S

-200m permafrost

reset to 0m 195°

-10-20m swampy creek flowing to E

-40m L-8 brown grey clayey, pthy frozen HM (could be pthy loess)

-100m L-9 grey-brown clay HM
Flt - sub-angular musc-qtz
- subang to ang. argill. matrix

145m L-10 brown slightly sandy HM
- float same as L-9 only more oxidized and angular

-180-220 thick loess to permafrost level (50cm)

-225 L-11 brown clay HM -
- angular to rounded mixed Flt

295m L-12 - brown Hill
- mostly sub-angular grey qtzite Flt.

350m muskeg - no samples

400m L-13 brown Hill -
mixed Flt. - musc-qtzite, argill. matrix, dk grey chert.

-450m permafrost.

-510m L-14 brown slightly sandy Hill
- mainly musc-qtzite and grey qtzite Flt.

105° for 200m

- reset to 0m 015°

0m L-15 brown grey clay HM + qtzite + chert

50m L-16 " " " oxidized grey qtzite Flt.
minor amts angular argill matrix

100m L-17 " " " "

110-240m thick organics on permafrost

250m L-18 brown clay Hill - strongly oxidized
chip appears to be gritty qtzite.

260-300m no samples thick organics

370m small almost dry creek to SE - no flow.

PELMAC (NORTH) DONE

At North flowing creek near drop off oxbow (approx 100 m E of A 142)
- contouring West to next large N-S creek valley
- 400 m small o.c. qtzite. (dk grey)
- 680 m lg blocks sub crop/outcrop well foliated metavn greenstone
- 1050 - 1150 large qtzite outcrops at base of slope - well foliated 052/20 SE interbedded (foliated) dk grey with lighter grey qtzite.
- 1200 m started contouring to SW up east side of creek valley
- 1355 m at large creek flowing N.
  - Float 30% rounded dk brown basalt
  - 25% rounded to sub-angular greenstone
  - 25% white to dk grey qtzite.
  - 10% smaller cobbles of arg. qtzite.
  - 1 boulder 60 cm diameter qtzite pebble breccia with 40% breccia fragments 5 mm to 10 cm diameter (angular to rounded) of light grey qtzite, 10% brown dacite fragments in dacite matrix

reset to 0m - headed upstream to S

-30m Large rounded boulder of brown bedded chert with white chert nodules (10%) Chert nodules have 1% ufgn disst sulfides. (HS)

-200m L-19 fgr. sandy silt from main creek
30-35% greenstone (5% is thinly bedded aggregate tuff - epidotized)
20-25% brown vx.
15-20% foliated grey gtzite
15% black argillite - some graphitic
5% chert pebble congl.
minor amts aphanitic marble + granite feldspar porphyry w/ 2cm. feldspar (plag?) phenos

-350m (HS) Sub-angular float - thin bedded pale brown to pale green chert - appears to be sulfide lenses within bedding. Traces chert-py on fracture surfaces

-450m Sub-angular float of jasperoid chert with white qtz veinlets (HS)

L-20 Rusty sub-angular float thin bedded and interbedded brown chert (oxidized or weathered surf.) with black cherty argillite. Thin layers of py cite with blk cherty argill.

-660m L-21 fgr. sandy silt
float - 35-40% greenstone (5% aggregate tuff)
20% brown vx.
10% argillite (some graphitic)
5-10% marble
20% grey foliated qtzite minor chert jasper.

925-975m Thick NW bank (Gallmoods type erosion in 75m thick sill

1000-1175m steep marble/limest outcrops on West bank of creek.
bedding attitude 150/60 SW

1160m 1220m+ 10m+ thick section of thinly bedded graphitic argillite on E side of creek fol'o 173/30W - contact with marble cuts across creek at SW-NE trend. (1175m exposure on both sides)

NOTE - large blocks of greenstone up to 5m wide have been in creek from 800 to 1200m

1230m marble bluffs 100m upslope to W.
- float in creek mainly andesite tuffs (greenstone) thin bedded, cherty (brown) greenstone aggregate, marble, brown vx, argillite, minor qtzites (5m at 205°)

1260-1275m graphitic argillite o.c (west side)

1300m Sub rounded float of thin bedded interbedded brown chert (80%) with andesite tuff in contact of thicker section of andesite tuff (soft sediment load structures indicate andesite overlies thin bedded brown chert). (HS)

-1380m Small o.c. graphitic argillite on west side

-1400m at creek junction - headed up SE fork

-1415m at sample A 160 - big blocks of greenstone float in creek

NOTE: A-160 rock is approx 5-10x as large as fist

1440 m at A 158 + A 159
- graphitic argillite o.c. w. qtz. vein (rusty)
Note: A-159 is actually @ soil

reset to 0m 090°

- 25m L-22 - grey clay HM with sub-angular graphitic argillite chips and mixed wooded Plt.
(From near top of 10m HM layer - 3m above o.c.)
- 135m L-23 - brown grey clay HM
- sub-angular argill. + greenstone frt.
- 150 - 465m permafrost - no samples
- 470m L-24 f.gr. sandy silt from small seepy creek flowing NW - lots of argillite chips in silt.

reset to 0m - 360°

- 55m L-25 f.gr. sandy silt from 5m. creek flowing NW (larger than L-24 creek)
floor mainly argillite + greenstone
- 273m L-26 f.gr. sandy silt 5m creek flowing WNW - argillite + greenstone frt.
- 375m L-27 " " " " "
- 670m small o.c. frt grey gritty gtzite
- 690m L-28 brown soil/HM - ang. gtzite chips

DONE

FRENCHMAN LAKE AREA

At fork in A-211 creek.
headed up E fork

- 20m at A-207
- 30-35m outcrop fluggy blk lmst - bedding @ 160/75 E

- 80m arcrop - E bank
thin bedded crumbly lmy argillite
fol° nearly flat lying to dipping gently E.
- 110m slide on E. side - common 20m upslope
diorite - andesite frtf over lying lmy argillite
- 125-130m (W) lmy argillite fol° dipping gently W.
- 140-150m flaggy blk lmst? bedding 150/80 E
possible fault or unconformity? contact between blk lmst and lmy argillite

200-240m - slide bank on west side.
50 to 75m thick sequence thin bedded lmy argillite interbedded with occasional 5cm to 40cm layers of greywacke - bedding 070/25 SE
290-330 Slide on W-side. Same as above only thicker greywacke layers that are more poorly sorted

330 - 440 m Slide o.c on east side
thick sequence 50+m of limy argillite with
greywacke interbeds. Gently folded to flat lying
Section from 330-350m cut by several
1 m and-bas dykes with rusty contact
zones and cs leached out pyrite cubes with
recrystallized calcite surrounding cube spaces
L-29 - rusted limy argillite w. beneath from
leached out pyrite.
440 - 500 m intermittent o.c. of same as above
- bank decreases to < 10 m towards 500 m
540 & 560 m small o.c. of limy argillite
565m end of O.C.
595 m L-30 f. gr. sandy silt - almost all float
chips of limy argillite with 10% brown green andesite

reset to 0 m [270]
110 m L-31 f. gr. sandy silt - same float as
L-30 creek. (Creek flows N)

reset to 0 m [250]
-50 m L-32 grey brown till - angular argillite &
sub ang. grey andesite. (Under 5 cm loess,
10 cm ash, 15 cm till, ash/loess underneath
-100 m permafrost

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115 m L-33 brown till - rounded to sub ang.
Flt - andesite, argillite, qtz.
180 m L-34 brown grey till - rounded
to angular Flt. mostly argillite minor
maroon vc.
-245 m L-35 brown grey till
- angular blk argillite and some rounded
mixed Flt. - rusty streaks in till
-315 m L-36 " " " "
at top of small hill
-365 m L-37 grey brown slightly sandy till.
- angular argillite + argill. andesite tuff
-400 m at bottom of valley
-415 m L-38 brown sandy till -
-450 m 5m o.c. brown andesite - bas. intr.
-465 m L-39 brown grey clay till
- lots of sub angular argillite and andesite chips
- some pale green rounded (cherty?) Flt.
-515 m blocky talus near small gulley - no sample
-520 m at small gulley
-550 m block talus - no sample (brown andesite)
NOTE: Ash layer now 20-30 cm and coarse
-520 - 620 m blocky subcrop on 35° slope of unaltered
andesite (could be post glacial)

LEVEL

270° -650m brown-grey clay hill L-40
- angular andesite to rounded mixed float
- minor argillite, pale green rounded matrix?
- 700m L-41 brown grey clay hill " " " "
- 755m L-42 " " " " " "
- 805m L-43 wet brown hill
- 860m L-44 grey brown hill
- 915m L-45 grey clay hill - Sub angular argillite chips and mixed sub round to rounded pebbles (Pale green round chert pebbles appearing again),
- 1000m L-46 grey clay hill - mixed angular to rounded frag

reset to 0m 045°
- 100m no sample - permo frost
- 120m no sample loess to 60 cm brown clay
- 200m loess to permo frost
- 250m permo frost
- 265m at small gully
- 285m L-47 brown grey clay hill
some angular andesite frag.
- 390m L-48 " " " "
- 510m L-49 brown grey hill
- Sub angular argillite, andesite and sub-rounded maroon vx.

600m L-50 grey-brown hill
- lots of angular argillite chips in hill
700m B-137 " " " "
800m B-138 brown sandy hill
angular andesite + argillite, mixed rounded frags
890m B-139 dk grey scrambly hill
- made up mostly of decomposed bk argillite
950 start of spongy mushy area
1110m at sample A-208 (west fork of creek)
1125m at junction of creek forks

3rd (1)

BRADEN CANYON AREA (1)

- On S. bank of Pelly R. at cut line corner (75m from river)
  approx UTM 6825ON, 1035OE
- 245° – 300m at top of old river bank.
- 1400m small creek flowing NW (intermittent) no strat
- 1650m B-140 – grey brown clay till from 70-85 cm depth.
  – angular argillite and dk grey qtzite, rounded qtz, sub ang – sub round andesite.
- 1855m B-141 f.gr. sandy silt brown mod. creek flowing N (1m wide approx 30 cm depth)
  float – angular to sub rounded bk. argillite, sub-round rhyolite, rounded andesite, chert + qtzite, sub-angular qtz-musc. schist, sub-round chert/argillite/rhyolite breccia (1 type grey matrix)

Reset to 0m – started heading upstream on East bank of creek

LEVEL

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245° DONE (2)

BRADEN CANYON (South Area) Contd

- 95m B 142 – grey green till consists of over 50% decomposed chlorite qtz-musc schist – sub round felt argillite + rhyolite. – minor chert
- 195m B 143 grey green clay till – more angular argillite appearing – still lots of chlorite and muscovite on hill
- 290m 80 cm loess – hit permafrost
- 310m B 144 – light grey silty till (120cm depth) with sub-angular bk. argillite. rounded andesite + qtzite. (only about 5% rock – could be pthy loess)
- 420m B 145 – grey green clay hill (Some chlorite washing) – sub-angular to rounded dk qtzite, argillite. rounded andesite
- 520m B 146 – grey clay till – ang. bk qtzite + argillite along with mixed rounded fltr.
- 630m D 238 – grey brown slightly sandy till – lots of muscovite in till – ang. meta andesite.
- 670m large angular boulder (sub-crop) of weakly rusted metaand.
- 735m D 237 – brown grey slightly sandy till – higher muscovite content than D 238 – ang. chips metaandesite.
- ≈750m 5m outcrop of pyroxenite-gabbro* with 10–25% Augite

LEVEL

- 850 - 890 m outcrops of well foliated musc/biot - qtz - feldspar ± garnet gneiss
  - foliation 150/48 SW
- 895 - D 236 brown soil/till
  lots of ang. musc/biot qtz feldspar gneiss chips
- 950 - 1000 m outcrop bluff upslope of medium gr biotite gabbro.
- 1125 m D 235 f gr sandy silt loam
  non calc flowing NNW
  - float mixed chert, argillite, rhyolite.
  musc/biot-qtz-feldspar gneiss

- 045° reset to 0 m.
  - 170 - 200 m large outcrops extending to the S of f-med gr gabbro
  - 255 m D 234 black-brown till
    made up mainly of decomposed blk gabbro?
  - 540 m D 233 grey-brown slightly sandy till - mixed rounded silt - sub angular andesite + argillite.
  - 730 m outcrops 15-20 m wide f-med gr diorite
  - 850 m D 232 grey brown slightly sandy till - decomposed greenish black bedrock with muscovite.