

YMI P 00-068

GEOCHEMICAL / GEOLOGICAL REPORT

on the

PACKERSBACK PROPERTY

Quartz Claims PACKERSBACK 1-20
Grant Numbers YC01859 – YC01878
Mayo Mining District
Owner: Gordon G Richards

Claim Sheet No 115P/1
Latitude 63 07 ½' N
Longitude 135 19' W

written by

Gordon G Richards

Work performed July 11,12, 2000
By D Bennett & G Richards

January 17, 2001

~~00-668~~
~~00-070~~

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Figure 1 Location Map

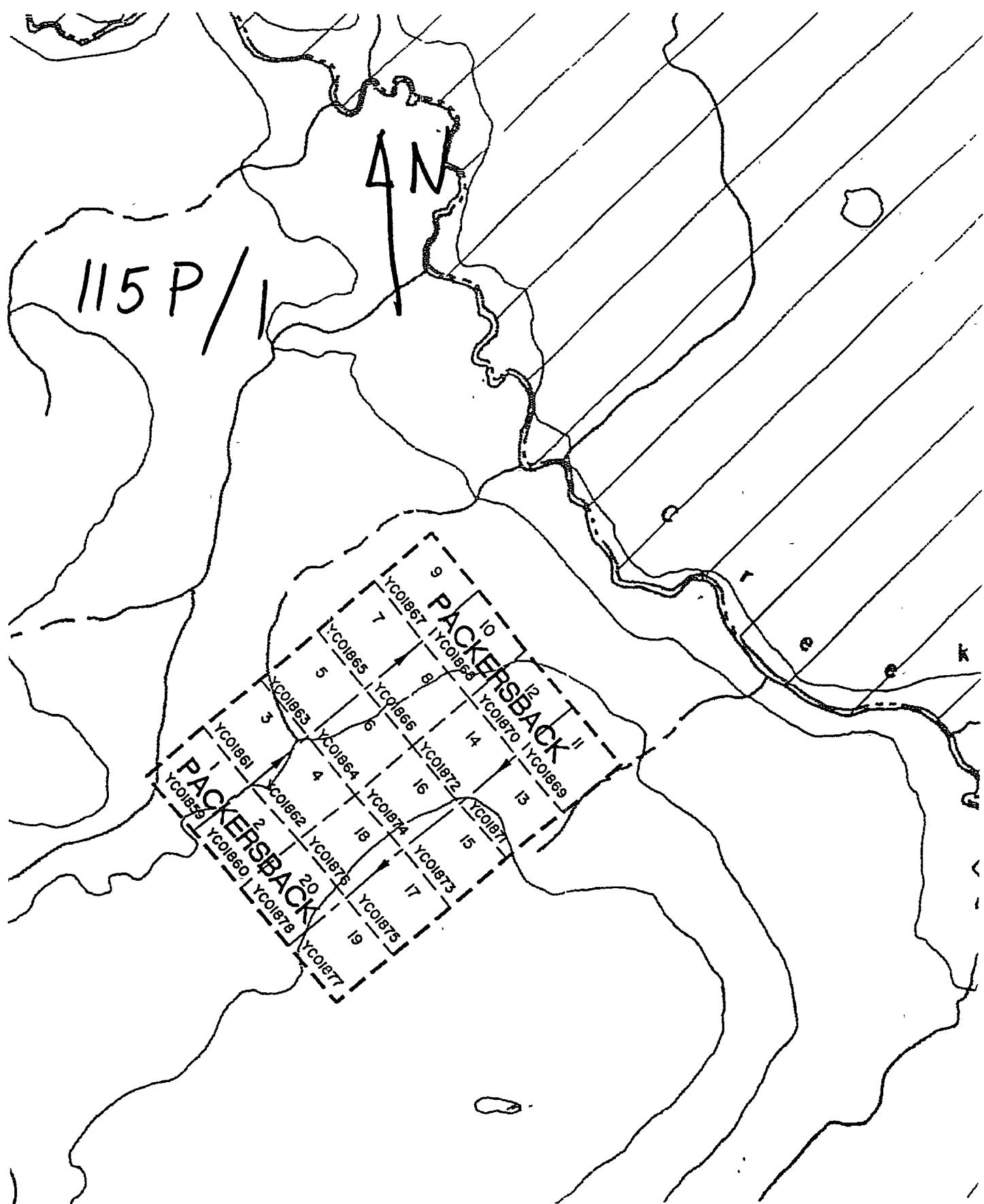


Figure 2 Claim Map

LOCATION AND ACCESS.

The claims are located 40-km northeast of Pelly Crossing and 60-km southwest of Mayo immediately west of Crooked Creek and the Tintina Trench on map sheet 115P/1 (Figure 1.) The property is accessible by helicopter from Mayo or by foot from the Klondyke Highway seven km to the southwest.

CLAIMS.

Quartz claims being renewed include the Packersback 1-20, Grant Numbers YC01859 – YC01878 inclusive Owner is Gordon G Richards. Fieldwork was done by Mr Dave Bennett and Mr. Gordon Richards on July 11 and 12, 2000 for the owner

HISTORY.

RGS data, shown on Figure 3, provided silts variably anomalous for Au, As, and Sb throughout the large area between Crooked Creek and the Klondyke Highway in an area of gentle relief with elevations between 2000 and 3500 feet. Follow-up prospecting in 1999 led to the staking of claims at the time of initial prospecting to cover an area with little outcrop and low but persistent float of crackled to brecciated quartzite An area of angular Kspar-porphyritic granite rubble in the centre of the claims was nearby. See Figure 3

Till samples were collected across presumed westerly to southwesterly flowing ice direction Silts and rocks were collected wherever sensible. Results indicated three areas of interest, one of which occurred on the claims. All Au results are shown on Figure 3 and Au and 32 element ICP results are provided in the Appendix. Two areas outside the claims, N9 to N13 in the south and N27 in the north returned moderately anomalous Au with anomalous As and Sb

On the claims, W52 yielded the highest Au value, 95ppb, together with 92 ppm As, 10ppm Sb and 0.6 ppm Ag, all strongly anomalous values. This sample was near the angular granite rubble and at the downslope limit of sampling. Thus it was thought that a target of gold mineralization existed around and to the west of this sample

In 2000 additional prospecting was conducted in the three targets described, with results provided below.

GEOCHEMISTRY.

Till samples were collected by digging holes with a shovel to a depth of 30 to 60 cm to get beneath a layer of mixed loess and till to as pure a sample of till, or sometimes soil, as possible. About two-kg of material was placed in numbered bags for analyses.

The area lies just beyond the limit of McConnell Glaciation as described in GSC Open File 3694 by A. Duk-Rodkin. This Open File describes a pattern of earliest Pliocene to early Pleistocene Glacial deposits (from ca. 3 Ma) as being present on ridge tops in the area, with Middle Pleistocene Glacial deposits (ca. 200ka) being present at lower elevations with a westerly movement of ice

Mixing of tills with loess, difficulty at some sites of determining sample material make interpretation somewhat of a problem. However, anomalous results probably indicate an up-ice source of mineralization within no more than one or two km particularly when supported by one or more of the pathfinder elements As, Sb and Ag ICP analysis, which was done on all samples, showed no Bi values higher than the threshold level of two ppm. As 0.5 ppm Bi is strongly anomalous, a mass spec analysis was done on nine samples that were anomalous for Au, As, and Sb, in Feb 2000 to determine if this method would yield anomalous Bi values. None were found and thus the cheaper ICP analysis was done on this year's samples.

Interpretation of results is shown on Figure 3 by a contour representing 15 ppb Au. Single +15 ppb Au samples were not contoured. On the claims, a 700 by 1000 meter area of anomalous Au in tills encompasses the area of Kspar porphyritic granite. Although As and Sb results are not shown on the map it is clear from a look at the results in the Appendix, that anomalous As and Sb, strongly correlate with anomalous Au

Rock samples collected from the survey were made up of three to seven chips and placed in numbered kraft sample bags. Eight rock chip samples were collected throughout the 15-ppb Au area with E25, a dark phyllite, providing the high of 14-ppb Au. Other rock chips were -5 ppb Au. All were quartzite with minor muscovite and were limonite stained along fractures with some small hairline quartz veinlets. Sample W11, east of the 15 ppb Au contour ran 40 ppb Au and was similar though crackling was intense enough to provide a breccia texture. Limiting till samples should not be used too aggressively in evaluation of ultimate Au-anomaly size as dilution with loess or

inadvertent sampling of glacial outwash material could falsely limit the extent of anomalous geochemistry.

South of the claims a two-km by one-km zone of 15 ppb Au on the upland ridge and steep southeast slope occurs associated with flat-lying quartzite and quartz-chlorite schist. No intrusive rubble or outcrop was seen. As and Sb are again highly correlatable with anomalous gold as can be seen from the results in the Appendix. Sample density is low and more detail is required to help determine the cause of the anomalous gold. Four rock chips of limonitic crackled quartzite all returned values of -1 ppb Au. The source could be from less resistant and more reactive interbeds of schist and phyllite not exposed as either float or outcrop. Trenching may be necessary to expose such rocks.

GEOLOGY.

Mapping by H S Bostock, 1964, Map 1143A McQuesten shows the immediate area of the claims to be underlain by paragneiss, quartzite, schist, phyllite and limestone of the Yukon Group. The Tintina Trench lies immediately northeast of the claim block and a granodiorite intrusion trending northwest lies between the property and the Klondyke Highway.

All outcrops found were flat-lying quartzites with trace to a few percent muscovite and minor thin carbonaceous quartzite horizons. The steepest attitude was 48° southeast at D83 in the southeast corner of sampling. Elsewhere dips are less than 20°. Some large quartzite boulders on the southeast slope at R54 to R56 displayed tight S-type folding approaching isoclinal folding. Chlorite schist, quartz-muscovite schist and dark phyllite were other metamorphic rock types seen as float, particularly in the area of the southern 15 ppb gold anomaly.

Angular Kspar porphyritic boulders were found across about two hundred meters of the north facing slope near E3 to E5 around a small quartzite outcrop. Quartz content of the granite is 25 percent, Kspar phenocrysts measuring up to two cm long about two percent, biotite about five percent with the balance as groundmass feldspars. A small granite plug is believed to occur nearby.

Quartzite veinlets and veins are common in the quartzite and do not correlate with anomalous gold geochemistry as they are found everywhere.

Stratigraphy has not been previously described although mapping by Maurice Colpron on 105L/13, south of the area, is available in DIAND Open File 1998-3 (G) and of some use in evaluating the stratigraphy on the property. The writer's 2000 prospecting involved working in the area mapped by Colpron and it seems likely that the quartzite on the property is the same as Unit 1 of Colpron. On Pelmac ridge the quartzite is underlain in some areas by dolomitic schists and dolomitic quartzites, both highly reactive rocks to mineralizing fluids and thus excellent hosts for epithermal gold mineralization. Top of such rocks could lie within a few hundred feet of the 15-ppb gold till anomalies.

Main alteration seen on the Packersback claims is limonitic fractures occasionally intense enough to provide a breccia texture. Such alteration occurs as float and in outcrops at R76 and R78. As none of these rocks were very anomalous, the gold in till anomaly is unexplained. Rocks more strongly anomalous for gold may exist but be too recessively weathered to form outcrop or float.

CONCLUSIONS AND RECOMMENDATIONS.

The Packersback 1-20 claim block covers the smaller of two anomalous gold zones defined by 15 ppb Au in tills. High As and Sb correlate well with high gold values. Mass spec analyses, with lower detection levels than ICP analyses, on some 1999 samples anomalous for Au, As and Sb provided low values for other elements such as Bi and W. The 15 ppb Au zone includes a 200-m zone of angular Kspar porphyritic ^{granite} rubble that probably represents a nearby small plug of granite possibly genetically related to gold mineralization. The till anomaly may extend a considerable distance to the northwest as sampling in this direction is difficult. Rock chips of limonite-stained crackled to brecciated quartzite were all low in gold, -7 ppb Au. E25, a dark phyllite, assayed 14 ppb Au.

By analogy with mapped stratigraphy to the south, the flat lying quartzite found throughout the property, may be immediately underlain by dolomitic schists and dolomitic quartzites that would form a highly reactive host for epithermal mineralizing fluids associated with the granite. The thick brittle quartzite would have served as an impermeable cap to ascending mineralizing fluids, with local brittle breaking forming the limonite stained, crackled, brecciated quartzite that is variably anomalous for Au, As, and

Sb This model provides an excellent target for developing significant-grade gold mineralization

More detailed sampling and mapping are required to define the limits of anomalous gold and understand stratigraphy better prior to testing this model. Prospecting along the main creek, west of camp, might find mineralized boulders transported by ice and exposed by development of the creek. Also, digging shallow pits or trenches within the gold anomalous zones is recommended to help discover more strongly gold mineralized rocks than the quartzites. Finally, tighter sampling within and around the 15 ppb Au anomaly is recommended along with an attempt to extend till sampling to the northwest on the more gentle slopes, although permafrost and outwash deposits makes this sampling area difficult.

Induced polarization surveys could be considered soon after the above work to search for a blind sulfide system in the dolomitic metasediments that is proposed to underlie the quartzites.

Respectfully submitted



Gordon G Richards, P Eng

STATEMENT OF COSTS

Wages

D Bennett June 11,12	2 days @ \$600/day	\$1200.00
G Richards June 11	1 day @ \$400/day	400.00

Expenses

Chemex: portion of A0024202, A0024200, A0011649	691.76
Supplies: string, propane, flagging, notes	50.00
Trans North Helicopters: ½ 24690	371.56
Food: 3 man days @ \$35/man day	105.00
Truck: 200 km @ .42 km	82.00

Report

Drafting, writing, reproductions, collating	<u>2500.00</u>
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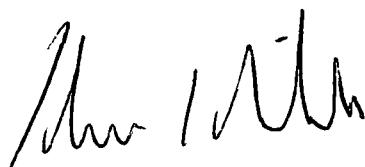
TOTAL	\$ 5400.32
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STATEMENT OF QUALIFICATIONS

I, Gordon G Richards, of 6170 Tisdall Street, Vancouver, B C., Canada do hereby certify that

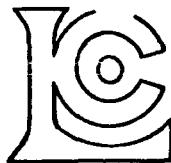
- 1 I am a graduate of The University of British Columbia (B.A.Sc in Geology 1968, M.A.Sc in Geology 1974)
- 2 I am registered as a Professional Engineer in the Province of British Columbia
- 3 I have practiced my profession since 1968
- 4 This report is based on my fieldwork and supervision of Mr D Bennett's fieldwork during July 11,12, 2000 and literature cited

Respectfully submitted,



Gordon G Richards, P Eng.

APPENDIX. GEOCHEMICAL RESULTS.



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave , North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE 604-984-0221 FAX 604-984-0218

To RICHARDS, GORDON

6170 TISDALL ST
 VANCOUVER, BC
 V5Z 3N4

A0011649

Comments ATTN GORDON RICHARDS

CERTIFICATE

A0011649

(NDJ) - RICHARDS, GORDON

Project. TIN
 P O #

Samples submitted to our lab in Vancouver, BC.
 This report was printed on 04-FEB-2000.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
244	9	Pulp; prev. prepared at Chemex
*	NOTE 1:	

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
9201	9	Al %: ICP + ICP-MS package	ICP	0.01	15.00
9202	9	Sb ppm: ICP + ICP-MS package	ICP-MS/ICP	0.1	10000
9203	9	As ppm: ICP + ICP-MS package	ICP-MS/ICP	0.2	10000
9204	9	Ba ppm: ICP + ICP-MS package	ICP	10	10000
9205	9	Be ppm: ICP + ICP-MS package	ICP	0.05	100.0
9206	9	Bi ppm: ICP + ICP-MS package	ICP-MS/ICP	0.01	10000
9235	9	B ppm: ICP + ICP-MS package	ICP	10	10000
9207	9	Cd ppm: ICP + ICP-MS package	ICP-MS/ICP	0.02	500
9208	9	Ca %: ICP + ICP-MS package	ICP	0.01	15.00
9209	9	Cr ppm: ICP + ICP-MS package	ICP	1	10000
9210	9	Co ppm: ICP + ICP-MS package	ICP	0.2	10000
9211	9	Cu ppm: ICP + ICP-MS package	ICP-MS/ICP	0.2	10000
9212	9	Ga ppm: ICP + ICP-MS package	ICP-MS/ICP	0.1	10000
9213	9	Ge ppm: ICP + ICP-MS package	ICP-MS	0.1	500
9214	9	Fe %: ICP + ICP-MS package	ICP	0.01	15.00
9215	9	La ppm: ICP + ICP-MS package	ICP	10	10000
9216	9	Pb ppm: ICP + ICP-MS package	ICP	2	10000
9217	9	Mg %: ICP + ICP-MS package	ICP	0.01	15.00
9218	9	Mn ppm: ICP + ICP-MS package	ICP	5	10000
9219	9	Hg ppm: ICP + ICP-MS package	ICP-MS/ICP	0.01	10000
9220	9	Mo ppm: ICP + ICP-MS package	ICP-MS/ICP	0.2	10000
9221	9	Ni ppm: ICP + ICP-MS package	ICP	1	10000
9222	9	P ppm: ICP + ICP-MS package	ICP	10	10000
9223	9	K %: ICP + ICP-MS package	ICP	0.01	10.00
9224	9	Sc ppm: ICP + ICP-MS package	ICP	1	10000
9237	9	Se ppm: ICP + ICP-MS package	ICP-MS/ICP	0.5	1000
9225	9	Ag ppm: ICP + ICP-MS package	ICP-MS/ICP	0.02	100.0
9226	9	Na %: ICP + ICP-MS package	ICP	0.01	10.00
9227	9	Sr ppm: ICP + ICP-MS package	ICP	1	10000
9236	9	S %: ICP + ICP-MS package	ICP	0.01	5.00
9228	9	Te ppm: ICP + ICP-MS package	ICP-MS	0.05	500
9229	9	Tl ppm: ICP + ICP-MS package	ICP-MS/ICP	0.02	10000
9230	9	Ti %: ICP + ICP-MS package	ICP	0.01	10.00
9231	9	W ppm: ICP + ICP-MS package	ICP-MS/ICP	0.05	10000
9232	9	U ppm: ICP + ICP-MS package	ICP-MS/ICP	0.05	10000
9233	9	V ppm: ICP + ICP-MS package	ICP	1	10000
9234	9	Zn ppm: ICP + ICP-MS package	ICP	2	10000

AA/11



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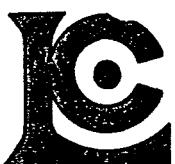
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SAMPLE	PREP CODE	Hg ppm	Mo ppm	Ni ppm	P ppm	K %	Sc ppm	Se ppm	Ag ppm	Na %	Sr ppm	S %	Te ppm	Tl ppm	Ti %	W ppm	U ppm	V ppm	Zn ppm	
99N 4	244 --	0.02	4.0	5	90	0.13	< 1	2.5	0.32	< 0.01	5	< 0.01	0.15	0.02	< 0.01	0.20	0.25	6	14	
99W 39	244 --	< 0.01	0.6	6	40	0.03	< 1	< 0.5	0.06	< 0.01	4	< 0.01	< 0.05	< 0.02	< 0.01	0.15	0.10	< 1	4	
99N 9	244 --	0.05	0.8	25	210	0.03		4	0.5	0.18	< 0.01	14	< 0.01	< 0.05	0.08	0.01	0.25	0.75	32	50
99N 10	244 --	0.01	1.4	28	530	0.07		2	0.5	0.20	< 0.01	10	0.01	0.05	0.08	0.01	0.15	0.85	27	68
99N 11	244 --	0.01	1.2	24	490	0.07		1	< 0.5	0.42	< 0.01	10	0.01	0.05	0.08	0.02	0.20	0.75	30	54
99N 12	244 --	0.01	1.2	27	160	0.06		2	0.5	0.08	< 0.01	9	< 0.01	< 0.05	0.08	0.01	0.15	0.70	25	56
99N 27	244 --	0.08	1.2	17	310	0.04		4	0.5	0.06	0.01	16	< 0.01	< 0.05	0.06	0.03	0.15	1.30	33	44
99W 51	244 --	0.04	1.0	14	480	0.04		2	< 0.5	0.10	0.01	16	< 0.01	< 0.05	0.08	0.03	0.30	0.75	26	42
99W 52	244 --	0.20	1.6	21	590	0.06		3	0.5	0.66	< 0.01	24	< 0.01	0.05	0.18	0.02	0.20	1.65	29	62



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SAMPLE	PREP CODE	Al %	Sb ppm	As ppm	Ba ppm	Be ppm	Bi ppm	B ppm	Cd ppm	Ca %	Cr ppm	Co ppm	Cu ppm	Ga ppm	Ge ppm	Fe %	La ppm	Pb ppm	Mg %	Mn ppm
99N 4	244 --	0.19	69.7	452	80	0.20	0.13	< 10	0.18	0.01	152	1.2	66.3	0.8	< 0.1	1.95	< 10	20	0.01	60
99W 39	244 --	0.03	4.3	41.8	30	< 0.05	< 0.01	< 10	0.02	0.01	133	2.0	17.4	0.1	< 0.1	0.31	< 10	< 2	< 0.01	30
99N 9	244 --	1.17	11.8	64.0	550	0.75	0.13	< 10	0.08	0.28	27	7.8	31.0	3.1	< 0.1	2.53	< 10	8	0.28	475
99N 10	244 --	0.97	26.3	127.0	180	0.50	0.17	< 10	0.10	0.06	20	9.0	38.0	3.1	< 0.1	2.86	10	12	0.28	280
99N 11	244 --	0.90	23.9	133.5	110	0.40	0.17	< 10	0.08	0.07	24	8.8	34.2	3.1	< 0.1	2.66	10	12	0.31	280
99N 12	244 --	1.00	23.5	105.5	180	0.45	0.13	< 10	0.10	0.05	27	9.4	35.2	2.6	< 0.1	2.41	< 10	10	0.33	230
99N 27	244 --	0.92	9.1	64.4	240	0.55	0.14	< 10	0.06	0.13	22	7.6	29.8	3.1	< 0.1	2.36	10	8	0.29	215
99W 51	244 --	0.94	2.6	31.2	250	0.40	0.13	< 10	0.06	0.19	21	4.8	19.2	3.3	< 0.1	1.84	10	6	0.33	160
99W 52	244 --	1.20	17.0	108.5	400	0.50	0.22	< 10	0.10	0.20	25	8.2	44.6	3.9	< 0.1	2.40	10	12	0.33	225



ALS Chemex

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A0024202

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A0024202

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Project: PACKER BACK

P.O. #:

Samples submitted to our lab in Vancouver, BC.
 This report was printed on 04-AUG-2000.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
216	66	sieve to -150 mesh
202	66	save reject
229	66	ICP - AQ Digestion charge

* NOTE 1:

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
3993	66	Au ppb: Fuse 30 gram-EXT-AA fin.	FA-EXT-AA	1	1000
2118	66	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	100.0
2119	66	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	66	As ppm: 32 element, soil & rock	ICP-AES	2	10000
557	66	B ppm: 32 element, rock & soil	ICP-AES	10	10000
2121	66	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	66	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	66	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	66	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	66	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	500
2126	66	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	66	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	66	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	66	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	66	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	66	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	66	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	66	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	66	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	66	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	66	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	66	Na %: 32 element, soil & rock	ICP-AES	0.01	10.00
2138	66	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	66	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	66	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
551	66	S %: 32 element, rock & soil	ICP-AES	0.01	5.00
2141	66	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	66	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	66	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	66	Ti %: 32 element, soil & rock	ICP-AES	0.01	10.00
2145	66	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	66	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	66	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	66	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	66	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000

Comments: ATTN: GORDON RICHARD



ALS Chemex

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 Account: NDJ

CERTIFICATE OF ANALYSIS A0024202

SAMPLE	PREP CODE	Au ppb EXT-AA	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %
D59	216 202	9 < 0.2	1.26	32	< 10	280	< 0.5	< 2	0.19	< 0.5	7	19	21	2.03	< 10	< 1	0.05	10	0.34	
D60	216 202	9 < 0.2	1.16	32	< 10	230	< 0.5	< 2	0.15	< 0.5	8	19	26	2.18	< 10	< 1	0.06	10	0.32	
D61	216 202	15 < 0.2	1.23	30	< 10	300	< 0.5	< 2	0.25	< 0.5	8	21	21	2.11	< 10	< 1	0.06	10	0.37	
D62	216 202	21 < 0.2	1.68	44	< 10	410	0.5	< 2	0.19	< 0.5	12	30	35	2.59	< 10	< 1	0.06	10	0.43	
D64	216 202	26 0.2	1.55	72	< 10	250	< 0.5	< 2	0.10	< 0.5	14	22	35	3.14	< 10	< 1	0.09	10	0.41	
D66	216 202	27 < 0.2	1.64	60	< 10	310	0.5	< 2	0.23	< 0.5	21	33	58	3.52	< 10	< 1	0.12	10	0.79	
D68	216 202	63 0.6	1.70	220	< 10	410	0.5	< 2	0.35	< 0.5	20	28	61	3.18	< 10	< 1	0.26	10	0.52	
D69	216 202	26 < 0.2	1.16	44	< 10	270	< 0.5	< 2	0.24	< 0.5	7	20	17	2.08	< 10	< 1	0.13	10	0.36	
D70	216 202	14 < 0.2	1.14	22	< 10	490	< 0.5	< 2	0.70	< 0.5	12	20	29	2.66	< 10	< 1	0.10	10	0.54	
D74	216 202	7 < 0.2	1.27	50	< 10	200	< 0.5	< 2	0.14	< 0.5	7	21	25	2.43	< 10	< 1	0.06	10	0.28	
D75	216 202	14 < 0.2	1.08	54	< 10	180	< 0.5	< 2	0.12	< 0.5	8	17	23	2.26	< 10	< 1	0.09	10	0.26	
D76	216 202	29 < 0.2	1.58	30	< 10	220	< 0.5	< 2	0.07	< 0.5	6	22	18	2.39	< 10	< 1	0.07	10	0.34	
D77	216 202	16 < 0.2	1.39	82	< 10	310	< 0.5	< 2	0.22	< 0.5	8	26	24	2.52	< 10	< 1	0.08	10	0.37	
D78	216 202	35 < 0.2	0.91	98	< 10	230	< 0.5	< 2	0.27	< 0.5	8	23	42	2.59	< 10	< 1	0.09	10	0.39	
D79	216 202	41 0.2	0.97	122	< 10	270	< 0.5	< 2	0.23	< 0.5	7	15	24	2.07	< 10	< 1	0.09	10	0.25	
D80	216 202	1 < 0.2	1.41	34	< 10	110	< 0.5	2	0.13	< 0.5	7	22	14	2.39	< 10	< 1	0.10	< 10	0.33	
D81	216 202	42 0.2	0.93	302	< 10	230	< 0.5	< 2	0.33	< 0.5	11	18	57	2.88	< 10	< 1	0.08	10	0.34	
D82	216 202	13 0.2	1.14	124	< 10	460	< 0.5	< 2	5.76	< 0.5	11	18	27	2.87	< 10	< 1	0.12	10	0.64	
E3	216 202	18 0.2	1.64	56	< 10	310	< 0.5	< 2	0.24	< 0.5	9	26	20	2.67	< 10	< 1	0.08	10	0.43	
E5	216 202	37 < 0.2	1.62	68	< 10	240	< 0.5	< 2	0.12	< 0.5	12	84	33	2.82	< 10	< 1	0.06	10	0.96	
E7	216 202	20 < 0.2	1.76	40	< 10	200	< 0.5	< 2	0.10	< 0.5	9	27	36	2.80	< 10	< 1	0.06	10	0.37	
E8	216 202	59 < 0.2	0.50	256	< 10	100	< 0.5	< 2	0.23	< 0.5	16	6	42	3.03	< 10	< 1	0.12	30	0.06	
E9	216 202	11 < 0.2	1.39	44	< 10	360	< 0.5	< 2	0.44	< 0.5	13	24	25	2.50	< 10	< 1	0.08	10	0.48	
E10	216 202	19 < 0.2	1.41	40	< 10	440	< 0.5	< 2	0.27	< 0.5	10	28	35	2.69	< 10	< 1	0.09	10	0.41	
E11	216 202	12 < 0.2	1.36	32	10	440	< 0.5	< 2	0.43	< 0.5	11	24	32	2.42	< 10	< 1	0.08	10	0.43	
E12	216 202	8 < 0.2	1.28	14	< 10	600	< 0.5	< 2	0.42	< 0.5	12	24	28	2.57	< 10	< 1	0.05	10	0.50	
E13	216 202	8 < 0.2	1.16	14	< 10	300	< 0.5	< 2	0.45	< 0.5	9	22	17	2.14	< 10	< 1	0.05	10	0.37	
E14	216 202	11 < 0.2	1.32	34	< 10	430	< 0.5	< 2	0.43	< 0.5	10	25	28	2.38	< 10	< 1	0.06	10	0.42	
E15	216 202	9 < 0.2	1.36	14	< 10	340	< 0.5	< 2	0.32	< 0.5	9	25	26	2.32	< 10	< 1	0.06	10	0.46	
E16	216 202	20 < 0.2	0.96	72	< 10	410	< 0.5	< 2	0.18	< 0.5	8	17	29	2.12	< 10	< 1	0.05	10	0.30	
E17	216 202	14 < 0.2	1.35	20	< 10	490	< 0.5	< 2	0.36	< 0.5	12	27	30	2.54	< 10	< 1	0.06	10	0.48	
E18	216 202	6 < 0.2	1.11	36	< 10	380	< 0.5	< 2	0.26	< 0.5	8	22	22	2.05	< 10	< 1	0.05	10	0.36	
E19	216 202	21 < 0.2	0.71	90	< 10	280	< 0.5	< 2	0.21	< 0.5	10	17	34	2.16	< 10	< 1	0.05	10	0.24	
E21	216 202	18 < 0.2	1.10	46	< 10	300	< 0.5	< 2	0.23	< 0.5	9	20	20	2.05	< 10	< 1	0.06	10	0.33	
E22	216 202	23 < 0.2	0.71	128	< 10	200	< 0.5	< 2	0.20	< 0.5	12	22	42	2.77	< 10	< 1	0.11	20	0.30	
E23	216 202	21 < 0.2	0.99	86	< 10	230	< 0.5	< 2	0.26	< 0.5	12	41	39	2.62	< 10	< 1	0.08	10	0.46	
E26	216 202	11 < 0.2	1.22	38	< 10	240	< 0.5	< 2	0.19	< 0.5	7	20	21	2.03	< 10	< 1	0.05	10	0.35	
R50	216 202	12 < 0.2	0.96	82	< 10	140	< 0.5	< 2	0.05	< 0.5	7	14	24	2.19	< 10	< 1	0.06	10	0.21	
R51	216 202	17 < 0.2	1.01	122	< 10	150	< 0.5	< 2	0.04	< 0.5	8	14	39	2.55	< 10	< 1	0.07	10	0.21	
R52	216 202	17 < 0.2	1.15	36	< 10	340	< 0.5	< 2	0.35	< 0.5	8	25	25	2.09	< 10	< 1	0.05	10	0.43	

CERTIFICATION:

Say L. C. M. S.



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S: RICHARDS, GORDON

6170 TISDALL ST.,
 VANCOUVER, BC
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Page No. : 1-B
 Total Pages : 2
 Certificate Date: 04-AUG-2000
 Invoice No. : I0024202
 P.O. Number :
 Account : NDJ

Project : PACKER BACK
 Comments: ATTN: GORDON RICHARD

CERTIFICATE OF ANALYSIS A0024202

SAMPLE	PREP CODE		Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
D59	216	202	160	< 1	0.01	18	520	6 < 0.01	6	3	15	0.02	< 10	< 10	28	< 10	60	
D60	216	202	210	< 1	0.01	23	500	8 < 0.01	2	2	14	0.03	< 10	< 10	29	< 10	56	
D61	216	202	220	< 1	0.01	20	540	6 < 0.01	2	3	21	0.04	< 10	< 10	32	< 10	56	
D62	216	202	250	1	0.01	23	410	8 < 0.01	2	5	18	0.04	< 10	< 10	47	< 10	52	
D64	216	202	310	< 1	0.01	34	340	8 < 0.01	10	3	14	0.02	< 10	< 10	35	< 10	68	
D66	216	202	500	< 1	0.01	51	320	6 < 0.01	10	6	19	0.01	< 10	< 10	48	< 10	72	
D68	216	202	550	< 1	0.01	52	540	10 < 0.04	58	4	35	0.03	< 10	< 10	36	< 10	82	
D69	216	202	215	< 1	0.01	21	370	8 < 0.02	6	2	23	0.03	< 10	< 10	32	< 10	46	
D70	216	202	440	< 1	0.01	30	710	8 < 0.01	2	3	40	0.04	< 10	< 10	31	< 10	84	
D74	216	202	135	< 1	0.01	21	470	8 < 0.01	4	2	17	0.02	< 10	< 10	32	< 10	62	
D75	216	202	145	< 1	0.01	23	400	12 < 0.01	< 2	1	13	0.02	< 10	< 10	29	< 10	56	
D76	216	202	175	< 1	0.01	17	200	22 < 0.01	2	2	11	0.02	< 10	< 10	34	< 10	52	
D77	216	202	160	< 1	0.01	24	390	8 < 0.03	2	3	22	0.04	< 10	< 10	45	< 10	48	
D78	216	202	230	< 1	0.01	30	610	4 < 0.03	10	4	24	0.04	< 10	< 10	39	< 10	48	
D79	216	202	205	< 1	0.01	22	340	6 < 0.01	10	1	23	0.01	< 10	< 10	29	< 10	40	
D80	216	202	135	< 1	0.01	21	660	6 < 0.01	2	2	10	0.03	< 10	< 10	43	< 10	46	
D81	216	202	230	< 1	0.01	39	470	10 < 0.04	24	3	30	0.02	< 10	< 10	27	< 10	56	
D82	216	202	660	1	0.02	26	650	6 < 0.27	14	3	209	0.03	< 10	< 10	26	< 10	80	
E3	216	202	275	< 1	0.01	23	680	10 < 0.01	6	3	20	0.04	< 10	< 10	46	< 10	76	
E5	216	202	370	< 1	0.01	42	270	6 < 0.01	6	6	13	0.03	< 10	< 10	57	< 10	62	
E7	216	202	230	1	0.01	23	370	6 < 0.01	6	1	14	0.03	< 10	< 10	49	< 10	70	
E8	216	202	425	< 1	< 0.01	44	1300	26 < 0.02	12	1	20	< 0.01	10	< 10	10	< 10	106	
E9	216	202	405	< 1	0.01	28	760	8 < 0.01	4	3	31	0.04	< 10	< 10	37	< 10	78	
E10	216	202	285	< 1	0.01	31	450	12 < 0.01	< 2	5	30	0.05	< 10	< 10	45	< 10	74	
E11	216	202	260	< 1	0.01	30	640	10 < 0.01	4	4	30	0.04	< 10	< 10	35	< 10	74	
E12	216	202	325	< 1	0.02	32	700	8 < 0.01	< 2	4	28	0.05	< 10	< 10	41	< 10	94	
E13	216	202	315	< 1	0.01	17	590	4 < 0.01	< 2	3	28	0.05	< 10	< 10	41	< 10	48	
E14	216	202	255	< 1	0.01	26	660	4 < 0.01	2	4	28	0.04	< 10	< 10	39	< 10	64	
E15	216	202	300	< 1	0.01	26	540	4 < 0.01	< 2	4	25	0.06	< 10	< 10	43	< 10	64	
E16	216	202	200	< 1	0.01	25	150	8 < 0.01	6	3	19	0.03	< 10	< 10	27	< 10	60	
E17	216	202	565	< 1	0.02	33	430	8 < 0.01	< 2	5	27	0.06	< 10	< 10	47	< 10	60	
E18	216	202	240	< 1	0.01	23	340	6 < 0.01	4	3	20	0.04	< 10	< 10	33	< 10	50	
E19	216	202	270	< 1	0.01	30	470	10 < 0.01	10	3	17	0.01	< 10	< 10	21	< 10	66	
E21	216	202	230	< 1	0.01	23	540	6 < 0.01	6	2	18	0.03	< 10	< 10	30	< 10	60	
E22	216	202	390	< 1	0.01	37	690	12 < 0.01	16	3	18	0.01	< 10	< 10	19	< 10	96	
E23	216	202	405	< 1	0.01	37	630	10 < 0.01	14	5	19	0.02	< 10	< 10	30	< 10	80	
E26	216	202	185	< 1	0.01	18	430	6 < 0.01	4	3	15	0.03	< 10	< 10	33	< 10	50	
R50	216	202	160	< 1	< 0.01	19	260	8 < 0.01	6	1	9	0.01	< 10	< 10	24	< 10	50	
R51	216	202	180	< 1	< 0.01	25	210	10 < 0.01	16	2	10	0.01	< 10	< 10	24	< 10	62	
R52	216	202	245	< 1	0.01	24	540	4 < 0.01	10	4	27	0.06	< 10	< 10	39	< 10	54	

CERTIFICATION:



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RICHARDS, GORDON

6170 TISDALL ST.,
 VANCOUVER, BC
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Page No.: 2-A
 Total Pages: 2
 Certificate Date: 04-AUG-2000
 Invoice No.: 10024202
 P.O. Number:
 Account: NDJ

Project: PACKER BACK
 Comments: ATTN: GORDON RICHARD

CERTIFICATE OF ANALYSIS A0024202

SAMPLE	PREP CODE	Au ppb EXT-AA	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %
R53	216 202	6 < 0.2	0.2	1.03	102 < 10	130 < 0.5	< 2	0.06	< 0.5	9	17	32	2.46	< 10	< 1	0.07	10	0.29		
R54	216 202	< 1 < 0.2	0.2	1.11	28 < 10	270 < 0.5	< 2	0.24	< 0.5	9	22	17	2.23	< 10	< 1	0.13	10	0.36		
R55	216 202	5 < 0.2	0.2	1.21	32 < 10	230 < 0.5	< 2	0.30	< 0.5	11	28	32	2.54	< 10	< 1	0.13	10	0.40		
R56	216 202	< 1 < 0.2	0.97	34 < 10	130 < 0.5	< 2	0.21	< 0.5	8	23	16	2.03	< 10	< 1	0.12	< 10	0.33			
R57	216 202	11 < 0.2	0.89	88 < 10	200 < 0.5	< 2	0.18	< 0.5	8	17	23	2.06	< 10	< 1	0.16	10	0.27			
R60	216 202	9 < 0.2	1.13	44 < 10	280 < 0.5	< 2	0.28	< 0.5	8	27	22	2.24	< 10	< 1	0.12	10	0.43			
R61	216 202	23 < 0.2	1.38	46 < 10	260 < 0.5	< 2	0.25	< 0.5	9	65	26	2.48	< 10	< 1	0.08	10	0.70			
R62	216 202	4 < 0.2	1.02	20 < 10	190 < 0.5	< 2	0.23	< 0.5	8	30	16	2.15	< 10	< 1	0.07	< 10	0.38			
R63	216 202	2 < 0.2	1.06	36 < 10	170 < 0.5	< 2	0.21	< 0.5	8	28	21	2.33	< 10	< 1	0.07	< 10	0.44			
R64	216 202	8 < 0.2	1.49	62 < 10	170 < 0.5	< 2	0.11	< 0.5	9	26	20	2.56	< 10	< 1	0.08	10	0.46			
R65	216 202	14 < 0.2	1.31	38 < 10	320 < 0.5	< 2	0.13	< 0.5	8	26	27	2.44	< 10	< 1	0.05	10	0.37			
R66	216 202	9 < 0.2	1.60	32 < 10	250 < 0.5	< 2	0.08	< 0.5	10	23	29	2.90	< 10	< 1	0.07	10	0.31			
R68	216 202	12 < 0.2	1.39	24 < 10	470 0.5	< 2	0.26	< 0.5	9	25	29	2.46	< 10	< 1	0.07	10	0.44			
R69	216 202	3 < 0.2	1.37	56 < 10	260 < 0.5	< 2	0.09	< 0.5	9	17	19	2.17	< 10	< 1	0.05	10	0.23			
R71	216 202	4 < 0.2	0.65	42 < 10	140 < 0.5	< 2	0.14	< 0.5	11	10	35	2.76	< 10	< 1	0.11	30	0.10			
R72	216 202	29 < 0.2	0.97	64 < 10	120 < 0.5	< 2	0.13	< 0.5	8	18	32	2.37	< 10	< 1	0.06	10	0.28			
R75	216 202	4 < 0.2	1.64	14 < 10	330 < 0.5	< 2	0.11	< 0.5	9	31	23	2.64	< 10	< 1	0.05	10	0.44			
R77	216 202	7 < 0.2	1.55	28 < 10	260 0.5	< 2	0.07	< 0.5	11	26	39	2.53	< 10	< 1	0.05	10	0.36			
R79	216 202	8 < 0.2	0.41	70 < 10	100 < 0.5	< 2	0.03	< 0.5	5	6	35	2.46	< 10	< 1	0.12	20	0.04			
R80	216 202	9 < 0.2	1.21	56 < 10	230 < 0.5	< 2	0.06	< 0.5	5	18	22	2.01	< 10	< 1	0.04	10	0.20			
R81	216 202	10 < 0.2	1.20	46 < 10	270 < 0.5	< 2	0.11	< 0.5	5	23	28	2.29	< 10	< 1	0.05	10	0.28			
R82	216 202	12 < 0.2	0.56	36 < 10	210 < 0.5	< 2	0.08	< 0.5	4	10	28	2.13	< 10	< 1	0.09	30	0.10			
R83	216 202	6 < 0.2	1.34	42 < 10	130 < 0.5	< 2	0.06	< 0.5	10	15	25	3.03	< 10	< 1	0.05	30	0.50			
R84	216 202	4 < 0.2	1.04	22 < 10	260 < 0.5	< 2	0.15	< 0.5	11	17	22	2.57	< 10	< 1	0.07	10	0.27			
R85	216 202	< 1 < 0.2	1.16	30 < 10	200 < 0.5	< 2	0.12	< 0.5	14	22	30	2.93	< 10	< 1	0.10	20	0.47			
R95	216 202	< 1 < 0.2	0.90	10 < 10	110 < 0.5	< 2	0.77	< 0.5	10	19	19	1.97	< 10	< 1	0.09	< 10	0.44			

CERTIFICATION:



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TO: RICHARDS, GORDON

6170 TISDALL ST.,
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V5Z 3N4

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CERTIFICATE OF ANALYSIS

A0024202

SAMPLE	PREP CODE	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
R53	216 202	200	< 1 < 0.01	26	610	8 0.02	30	2	11	0.02	< 10	< 10	32	< 10	60		
R54	216 202	185	< 1 0.01	25	960	8 < 0.01	8	3	21	0.03	< 10	< 10	35	< 10	52		
R55	216 202	245	< 1 0.01	30	420	2 < 0.01	4	4	21	0.05	< 10	< 10	44	< 10	48		
R56	216 202	165	< 1 0.01	21	230	4 < 0.01	< 2	3	14	0.05	< 10	< 10	39	< 10	38		
R57	216 202	170	< 1 0.01	24	230	12 0.01	4	3	15	0.03	< 10	< 10	26	< 10	56		
R60	216 202	240	< 1 0.01	24	480	8 < 0.01	12	3	20	0.04	< 10	< 10	38	< 10	48		
R61	216 202	245	< 1 0.01	33	280	6 < 0.01	6	6	18	0.04	< 10	< 10	48	< 10	48		
R62	216 202	190	< 1 0.01	22	290	4 < 0.01	6	4	17	0.05	< 10	< 10	43	< 10	40		
R63	216 202	195	< 1 0.01	26	390	6 < 0.01	6	2	16	0.04	< 10	< 10	44	< 10	46		
R64	216 202	200	< 1 0.01	25	260	6 < 0.01	12	3	12	0.04	< 10	< 10	46	< 10	50		
R65	216 202	205	< 1 0.01	29	110	6 < 0.01	6	4	14	0.04	< 10	< 10	42	< 10	58		
R66	216 202	240	< 1 0.01	29	180	12 < 0.01	12	3	11	0.02	< 10	< 10	37	< 10	64		
R68	216 202	270	< 1 0.01	30	270	8 < 0.01	< 2	5	20	0.03	< 10	< 10	36	< 10	60		
R69	216 202	175	< 1 < 0.01	28	400	8 < 0.01	2	2	10	0.01	< 10	< 10	34	< 10	54		
R71	216 202	245	< 1 < 0.01	37	290	14 0.01	6	1	19	< 0.01	10	< 10	21	< 10	68		
R72	216 202	180	1 0.01	22	520	8 0.01	8	2	16	0.03	< 10	< 10	36	< 10	44		
R75	216 202	230	< 1 0.01	24	190	10 < 0.01	< 2	4	14	0.05	< 10	< 10	49	< 10	48		
R77	216 202	185	< 1 < 0.01	36	140	10 < 0.01	2	3	12	0.02	< 10	< 10	34	< 10	60		
R79	216 202	70	< 1 < 0.01	24	580	28 0.01	6	1	14	< 0.01	< 10	< 10	9	< 10	54		
R80	216 202	75	< 1 < 0.01	13	190	12 < 0.01	2	1	11	0.02	< 10	< 10	32	< 10	30		
R81	216 202	110	< 1 0.01	15	180	12 < 0.01	2	4	18	0.03	< 10	< 10	34	< 10	34		
R82	216 202	85	1 < 0.01	16	530	22 0.01	6	1	17	< 0.01	10	< 10	16	< 10	42		
R83	216 202	220	< 1 < 0.01	29	340	14 0.01	< 2	1	11	0.01	10	< 10	15	< 10	70		
R84	216 202	495	< 1 0.01	26	520	10 < 0.01	4	2	15	0.01	< 10	< 10	28	< 10	70		
R85	216 202	340	< 1 < 0.01	37	240	14 < 0.01	2	2	14	0.01	< 10	< 10	21	< 10	74		
R95	216 202	325	< 1 0.01	18	710	8 0.03	2	3	32	0.04	< 10	< 10	26	< 10	50		

CERTIFICATION:



ALS Chemex

Aurora Laboratory Services Ltd

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221 FAX: 604-984-0218

o: RICHARDS, GORDON

6170 TISDALL ST.,
 VANCOUVER, BC
 V5Z 3N4

A0024200

CERTIFICATE

A0024200

(NDJ) - RICHARDS, GORDON

Project: PACKER BACK

P.O. #:

Samples submitted to our lab in Vancouver, BC.
 This report was printed on 04-AUG-2000.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	18	Geochem ring to approx 150 mesh
226	18	0-3 Kg crush and split
3202	18	Rock - save entire reject
229	18	ICP - AQ Digestion charge

* NOTE 1:

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
3993	18	Au ppb: Fuse 30 gram-EXT-AA fin.	FA-EXT-AA	1	1000
2118	18	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	100.0
2119	18	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	18	As ppm: 32 element, soil & rock	ICP-AES	2	10000
557	18	B ppm: 32 element, rock & soil	ICP-AES	10	10000
2121	18	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	18	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	18	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	18	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	18	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	500
2126	18	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	18	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	18	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	18	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	18	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	18	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	18	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	18	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	18	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	18	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	18	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	18	Na %: 32 element, soil & rock	ICP-AES	0.01	10.00
2138	18	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	18	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	18	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
551	18	S %: 32 element, rock & soil	ICP-AES	0.01	5.00
2141	18	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	18	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	18	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	18	Ti %: 32 element, soil & rock	ICP-AES	0.01	10.00
2145	18	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	18	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	18	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	18	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	18	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000



ALS Chemex

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To: RICHARDS, GORDON

6170 TISDALL ST.,
 VANCOUVER, BC
 V5Z 3N4

Page Number : 1-A
 Total Pages : 1
 Certificate Date: 04-AUG-2000
 Invoice No. : I0024200
 P.O. Number :
 Account : NDJ

Project: PACKER BACK
 Comments: ATTN: GORDON RICHARD

CERTIFICATE OF ANALYSIS A0024200

SAMPLE	PREP CODE	Au ppb EXT-AA	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %
D63	205 226	< 1	< 0.2	0.50	20	< 10	110	< 0.5	< 2	0.11	< 0.5	4	140	11	1.04	< 10	< 1	0.23	10	0.13
D65	205 226	< 1	< 0.2	1.68	48	< 10	300	< 0.5	< 2	0.03	< 0.5	7	128	63	3.51	< 10	< 1	0.35	20	0.54
D67	205 226	< 1	< 0.2	0.18	8	< 10	20	< 0.5	< 2	0.03	< 0.5	4	212	41	0.78	< 10	< 1	0.05	< 10	0.04
E1	205 226	5	< 0.2	0.13	6	< 10	110	< 0.5	< 2	< 0.01	< 0.5	1	241	4	0.47	< 10	< 1	0.04	< 10	< 0.01
E2	205 226	< 1	< 0.2	0.08	18	< 10	80	< 0.5	< 2	< 0.01	< 0.5	4	124	16	0.97	< 10	< 1	0.05	< 10	0.01
E4	205 226	2	0.2	0.22	50	< 10	60	< 0.5	< 2	< 0.01	< 0.5	6	168	27	1.12	< 10	< 1	0.17	< 10	0.01
E6	205 226	3	< 0.2	0.08	20	< 10	10	< 0.5	< 2	< 0.01	< 0.5	1	159	17	0.59	< 10	< 1	0.04	< 10	< 0.01
E20	205 226	6	< 0.2	0.07	30	< 10	90	< 0.5	< 2	< 0.01	< 0.5	< 1	120	16	0.69	< 10	< 1	0.05	< 10	< 0.01
E24	205 226	< 1	< 0.2	0.23	12	< 10	60	< 0.5	< 2	< 0.01	< 0.5	4	90	33	1.78	< 10	< 1	0.19	< 10	< 0.01
E25	205 226	14	< 0.2	0.20	40	< 10	90	< 0.5	< 2	< 0.01	< 0.5	3	158	10	0.77	< 10	< 1	0.16	< 10	0.01
E27	205 226	< 1	< 0.2	0.20	14	< 10	40	< 0.5	< 2	< 0.01	< 0.5	1	164	27	0.75	< 10	< 1	0.10	< 10	< 0.01
R58	205 226	3	< 0.2	0.22	108	< 10	290	< 0.5	< 2	0.02	< 0.5	5	155	10	1.20	< 10	< 1	0.18	< 10	0.03
R59	205 226	< 1	< 0.2	0.25	6	< 10	400	< 0.5	< 2	< 0.01	< 0.5	1	187	3	0.48	< 10	< 1	0.18	< 10	0.01
R70	205 226	5	< 0.2	0.16	36	< 10	130	< 0.5	< 2	0.01	< 0.5	3	177	26	0.95	< 10	< 1	0.11	< 10	0.01
R73	205 226	< 1	< 0.2	0.17	4	< 10	50	< 0.5	< 2	< 0.01	< 0.5	< 1	193	1	0.30	< 10	< 1	0.01	< 10	< 0.01
R74	205 226	< 1	< 0.2	0.11	< 2	< 10	170	< 0.5	< 2	< 0.01	< 0.5	< 1	128	1	0.18	< 10	< 1	0.07	< 10	< 0.01
R76	205 226	16	< 0.2	0.17	158	< 10	110	< 0.5	< 2	0.01	< 0.5	4	170	24	2.81	< 10	< 1	0.10	< 10	< 0.01
R78	205 226	2	0.2	0.25	6	< 10	60	< 0.5	< 2	< 0.01	< 0.5	1	173	14	0.72	< 10	< 1	0.15	< 10	0.01

CERTIFICATION:



ALS Chemex

Aurora Laboratory Services Ltd.

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J. RICHARDS, GORDON

6170 TISDALL ST.,
 VANCOUVER, BC
 V5Z 3N4

Page Number :1-B
 Total Pages :1
 Certificate Date: 04-AUG-2000
 Invoice No. :10024200
 P.O. Number :
 Account :NDJ

Project: PACKER BACK
 Comments: ATTN: GORDON RICHARD

CERTIFICATE OF ANALYSIS A0024200

SAMPLE	PREP CODE		Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Tl %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
D63	205	226	125	1	0.01	14	520	12 < 0.01	6	< 1	6 < 0.01	< 10	< 10	6	< 10	48		
D65	205	226	175	< 1	0.01	36	240	< 2 < 0.01	12	1	7 < 0.01	< 10	< 10	23	< 10	82		
D67	205	226	60	1 < 0.01		15	170	< 2 < 0.01	2	< 1	1 < 0.01	< 10	< 10	9	< 10	16		
E1	205	226	20	1	0.01	5	40	< 2 < 0.01	< 2	< 1	8 < 0.01	< 10	< 10	3	< 10	2		
E2	205	226	445	< 1 < 0.01		12	50	< 2 < 0.01	8	< 1	1 < 0.01	< 10	< 10	1	< 10	24		
E4	205	226	45	< 1	0.01	23	160	4 0.01	6	< 1	8 < 0.01	< 10	< 10	3	< 10	40		
E6	205	226	20	12	< 0.01	9	100	10 < 0.01	2	< 1	9 < 0.01	< 10	< 10	21	< 10	24		
E20	205	226	20	3 < 0.01		3	30	< 2 < 0.01	2	< 1	< 1 < 0.01	< 10	< 10	1	< 10	2		
E24	205	226	125	< 1 < 0.01		32	160	< 2 < 0.01	< 2	< 1	3 < 0.01	< 10	< 10	4	< 10	36		
E25	205	226	50	< 1	0.01	11	130	< 2 0.02	2	< 1	31 < 0.01	< 10	< 10	5	< 10	30		
E27	205	226	20	1 < 0.01		6	80	< 2 < 0.01	2	< 1	< 1 < 0.01	< 10	< 10	6	< 10	2		
R58	205	226	60	< 1	0.01	14	90	8 0.03	< 2	< 1	3 < 0.01	< 10	< 10	1	< 10	92		
R59	205	226	75	1 < 0.01		8	50	6 < 0.01	8	< 1	3 < 0.01	< 10	< 10	5	< 10	6		
R70	205	226	265	< 1 < 0.01		12	190	6 < 0.01	12	< 1	< 1 < 0.01	< 10	< 10	5	< 10	20		
R73	205	226	15	1 < 0.01		4	70	< 2 < 0.01	< 2	< 1	4 < 0.01	< 10	< 10	< 1	< 10	< 2		
R74	205	226	5	< 1 < 0.01		3	10	< 2 < 0.01	< 2	< 1	< 1 < 0.01	< 10	< 10	1	< 10	< 2		
R76	205	226	215	< 1 < 0.01		18	400	< 2 0.01	12	< 1	5 < 0.01	< 10	< 10	7	< 10	64		
R78	205	226	25	< 1 < 0.01		6	60	< 2 < 0.01	2	< 1	< 1 < 0.01	< 10	< 10	3	< 10	2		

CERTIFICATION:



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o: RICHARDS, GORDON

6170 TISDALL ST.,
 VANCOUVER, BC
 V5Z 3N4

A0024610

CERTIFICATE

A0024610

(NDJ) - RICHARDS, GORDON

Project: PACKERS BACK
 P.O. #:

Samples submitted to our lab in Vancouver, BC.
 This report was printed on 07-AUG-2000.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	2	Geochem ring to approx 150 mesh
226	2	0-3 Kg crush and split
3202	2	Rock - save entire reject
229	2	ICP - AQ Digestion charge

* NOTE: 1.

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
3993	2	Au ppb: Fuse 30 gram-EXT-AA fin.	FA-EXT-AA	1	1000
2118	2	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	100.0
2119	2	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	2	As ppm: 32 element, soil & rock	ICP-AES	2	10000
557	2	B ppm: 32 element, rock & soil	ICP-AES	10	10000
2121	2	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	2	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	2	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	2	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	2	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	500
2126	2	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	2	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	2	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	2	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	2	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	2	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	2	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	2	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	2	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	2	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	2	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	2	Na %: 32 element, soil & rock	ICP-AES	0.01	10.00
2138	2	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	2	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	2	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
551	2	S %: 32 element, rock & soil	ICP-AES	0.01	5.00
2141	2	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	2	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	2	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	2	Ti %: 32 element, soil & rock	ICP-AES	0.01	10.00
2145	2	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	2	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	2	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	2	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	2	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000

Comments: ATTN: GORDON RICHARD



ALS Chemex

Aurora Laboratory Services Ltd.

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o: RICHARDS, GORDON

6170 TISDALL ST.,
VANCOUVER, BC
V5Z 3N4

Page Number :1-A
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Certificate Date: 07-AUG-2000
Invoice No. :I0024610
P.O. Number :
Account :NDJ

Project : PACKERS BACK
Comments: ATTN: GORDON RICHARD

CERTIFICATE OF ANALYSIS A0024610

SAMPLE	PREP CODE	Au ppb EXT-AA	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %
D83	205 226	< 1 6	< 0.2 < 0.2	0.13 0.31	46 26	< 10 < 10	80 210	< 0.5 < 0.5	< 2 < 2	0.03 0.02	< 0.5 < 0.5	7 8	78 141	27 24	0.51 1.87	< 10 < 10	< 1 < 1	0.06 0.11	< 10 < 10	0.03 0.03
R67	205 226																			

CERTIFICATION:



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to: RICHARDS, GORDON

6170 TISDALL ST.,
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CERTIFICATE OF ANALYSIS

A0024610

SAMPLE	PREP CODE		Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
D83	205	226	50	< 1	< 0.01	19	40	2 < 0.01	2	< 1	1	< 0.01	< 10	< 10	2	< 10	8	
R67	205	226	300	< 1	0.01	24	60	8 < 0.01	2	1	5	< 0.01	< 10	< 10	7	< 10	34	

YUKON ENERGY, MINES
 & RESOURCES LIBRARY
 PO Box 2703
 Whitehorse, Yukon Y1A 2C6

CERTIFICATION:

PACKERS BACK
PROPERTY

QUARTZ CLAIMS YC01859 - YC01878
PACKERS BACK 1-20

ALL GEOCHEM / GEOLOGY

O Till

• Soil

□ Silt

△ Rock

15 ppb Au
in tills &
soils. Defined
by more than
one spot sample

Location of samples by hip chain, compass & topo
bedding attitude

↓ outcrop

All outcrops were quartzite

Angular Kspar porphyritic granite boulders in centre of claims

1999 samples N & W series 5 ppb Au sensitivity

2000 samples E, D & R series 1 ppb Au sensitivity

metres

500

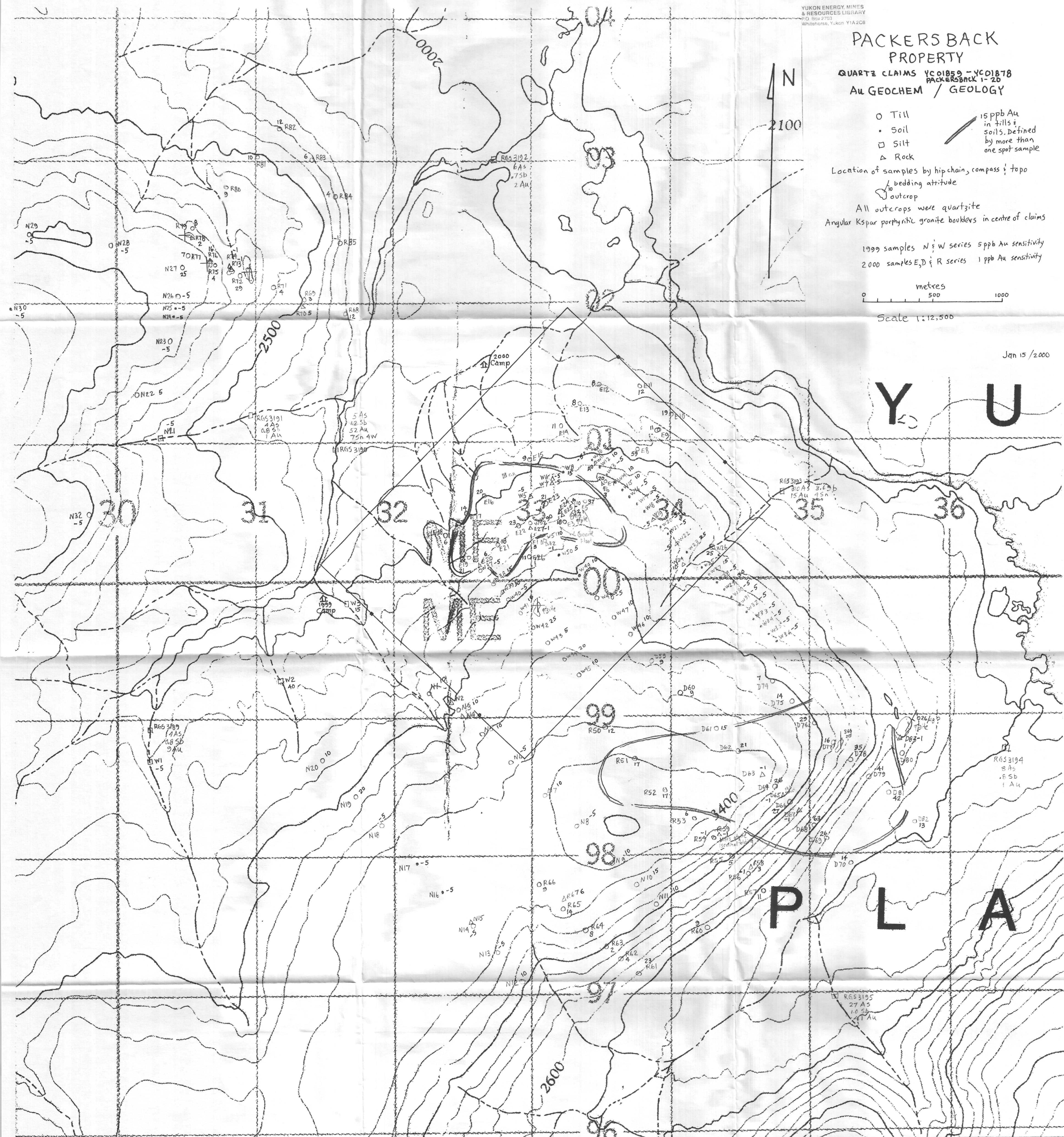
1000

Scale 1:12,500

Jan 15 / 2000

Y U

P L A



FIELD NOTES

2000

YUKON

G. RICHARDS

(D BENNETT)
in back half

0.00
0.00
0.00
0.00

	No 1.	Started chaining
○	RUN RUN	on top of bank
	21	due W of No 1
	S	RUN/RUN 1 plus
○	1500' L	50' N.
	JUNE 18	1530 N. 1 21+22
	2000	
○	G. G. Richards	
	200' string line runs E-W	
	1490 NO 2 21+22 NO 1 23+24	
	2000 base slope flats of ck.	
	2195 neck	
	2180 base slope	
○	2980 NO 2 23+24 NO 1 25+26	
	3170 ^{old} String uphill + downhill	
○	4480 NO 2 25+26 NO 1 27+28	
○	5980 NO 2 27+28 NO 1 29+30	
	Craught dry at 3-serv - schis.	
○	74.80 NO 2 29+30	

North Pacific Supply Corp. 46 Level 4

No 2 29+38 0 ft
 Uphill
 1960 ft string line old
 1929 800 ft ± South
 thin f1^o dark phyllite "green"
 1630 ft string line
 1923 20 ft N.
 2050 0° dark phyllite
 3250 No 1 post RUMRUM 31+32
 10'
 N
 1210 near top run 0°? big silts
 1515 No 2 31+32 No 1 33+34
 2090 slabs big f1^o gneiss
 pscumilli
 2540 s. b. up same
 3000 No 2 33+34 No 1 35+36
 3340 CPS ser-gtz
 3620 musc-f1^o cm
 4590 No 2 35+36 No 1 37+38
 5070 basal slope
 5135 d. rd 5150 end
 560 from last post

North Pacific Supply Corp. 46 Level 1

From ridge top and Mariposa
 South 0 m
 100 m C51 Clay yellow soil
 yellow stained fig intr? - gneiss
 not much talus
 on more trail
 200 C52 some org. very soil
 on more trail
 yellow very big reg + good
 fine granitic
 300 small granite bldrs to 1/2 m
 set in organic gooey
 bldrs gradually go to 50 ft then
 much
 630 snow patch + up muck
 870 C53 Soil org + clay
 carbon moss Fair bldrs
 f1^o + (schist + gns)
 some granitic
 1140 C54 Sandy soil w/ muck
 on brow of hill into thick
 thick willows

- 1340 - creek cut in 8'
 1/1m silt granite & peg
 mina in sandy silt
 C55 silt
- 1400 felsomian slabby
 fulgibl bio. grav.
 + peg.
- 1500± blck hhd kym grns
- 1580 cutbank no silt but
 cps of metam. grns & cherts
- 1635 many blcks big grns
 no colour all 1/m
- 2300 Mungosn Ck old
 walkys downstn 50"
 This area stripped of veg
- C56 Silt. 1/2, n ft
 Sandy much grn & fct
 mina peg
- ~~160~~ Down Ck 0" m
 " gom de alt" agmto
 peg dyke:

North Pacific Supply Com. 46 Level 4

- Variably silic'd chl. grns
-) 144/85 SW w 1/3 mts
 11 + 1 subz fol.
 C57 RC 8 silic'd grns 1/2m
 wide open
- N f silt c57 30th
 silt ck
 2 m peg chl
- head downstream RT Limit
- 450± 2-24" + slake
-) 580 felsomian very dark grns
- 800 C58 Silt marshy
 50' wide mixed area cont
-) 980 C59 Soil on very
 slope (100') low ck
- 1050 Cut trail heads straight
 uphill Much fluv med grns
 Silic'd grns & fct Fairly
 uniform fct

1150 C 60 Good brownish gray soil

1170 Large brown slabs of peat
in green gneiss

1180 cut trail among Q
ATV

off + m to west slabs of
green gray ch-hd fspn

1300 C 6 Fine silt brg cl
meta + granite? cobble

1330 C 62 Side trib silt
fine sandy silt
here sand out (Down) n

1570 foot shaft tail's?
valley 100' + across

1120 start channel area square
first above confluence

Head back to yesterday's end Mariposa Creek

C 63 Coarse silt w/ org's

300^m above ATV road upstream

trib on Right Limit by bike
(64 Bkt big L limit trib (5) in main
cx)

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① C 65 Soil 50P

② C 66 Soil 50P

③ C 67 Soil 50P

④ C 68 Soil 50P

→ Change CR 17P

↓ in CSR
99513 C 69 Soil Rich mas
60P

134/80 NE C 70 Soil gen shale 50P

↓ 150P somewhat weathered

most pure muscovite outcrop along rd

immediately east of big creek ~ 1/2 km

East of old Mariposa Camp. Town

low outcrops of bba 25% bio greens

Muscovite schist started just before

C 65. Soils are good but not

particularly rocky and C 69.

Rocks at old camp are all Qm

(granite monzonite) with steep

fr northwest.

Cross bedding is present but rare

Outcrops down along rd below old Mammoth Camp
are all variably matrix content bbd - bio
gt, fspn gneiss some w garnets small.
Hit QMS rubble in bank just
upstream from forks in rd. Bench
planar dipping out in QMS thickness
toward further west.

At w end bench up in rd is small
gneiss

Dark green grey gn w fine laminations
at fspn white + pink.

OC plane cut by low angle fault
dipping $10^\circ \pm$ E-Wly
Strike difficult.

" Small ck W of JB's camp
on W side OC in rd cut
is QMS 125/40 NE.

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mouth

Mammoth - up Stegg's C

) 100 m 115/80 N dark gn f.g.

gneiss w fine pale to pink lam'ns

115/47 better attitude

) 311-
~ 400 m peg or cug. granite o.c.

tabular piles are all uniform

pale pink cug. nicely fol'd granite

1/2 cm gt, set in c.g. to my pink spn
bb & bio. variably ch.

matrix biot bbd Xmas not common
some lenses are white

JB's running was done fairly hard to
Right Limit. Line of road
left in Left Limit.

) Below blocks in creek at top

end of running is granite

Granite occurs + bubbly continue to

first major trib. Rock contains a
Granite similar Xcept more nepheline

Some mafics. "g" more

Granite to 2nd creek rd continue

C151 Silt and gritty silt. Gran.

Stretch of dk 100-200' wide w/ low
@ upper end & esp in soil are
in. in ft to mg granite or pink green
grind granite / an pbbles nearby shmp

C152 Fine active sandy silt
just beyond bend in dk

Uphill to N

700m ol fig uniform fspn gns
in chl 10% fill

2/3 way up hill top rd w 100% dk
gn gns esp abundant
finely laminated

down other side

C153 Silt good coarse silt
much kln pbbles gns + silt
fair amount mica

C154 fine silt no coarse material
could be problem
3y from next claim post

C155 Coarse silt above Shmp Rd
all granite NP

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6m
Above Mariposa Camp ~ 1000

) red ribbon (silvery) + string like broken
2 old posts w tags lying on ground
flapping first years in place?

) C176 Small sup S side Mariposa

) QMS + peg fit char specimens

Down (Sidehill down 11)

190m C177 ~~top~~ silt good coarse

10cm no ppp in 50,000

first rusty yellow QMS + peg

+ 50m big 1/4 in bldes QMS + bio

+ 100m 5" of big peg bldes

+ 200m 111/99 NE ~~top~~ QMS on edge

crumbly & top tailing

) C178 Silt (me some avg

poorly sorted? Very steep +
Jitterbug to coherent silt

) QMS, REA, + QTZ EYES P+Y

char silt

+ 400m C179 Silt across from Camp

) QMS but wt colour

Fair size dk

- A 100^m F.g. dullish grey gns $f_1^{\frac{1}{2}}$
 180 fspan chl + bi?)
 C 181 RC Camp 1 cm spand stacs
 w weak Sd? strong Fe stain
 181 QMS)
 C 182 RC like 181 Xcept more
 with fms)

 1/2 way from camp to Sing, ic Quarry
 105/146 N in f/g gns
 w pale chl in fspan
 well bedded w fine
 laminations. Pallet
 dark units)

 138/142 N Ecke QMS $f_1^{\frac{1}{2}}$ down from
 shales in lower rd
 above bark cut)

 ()

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- 6
- (corner down from shales above
 bark cut
 Set 0^m
 (N along rd)
 75^m due east of No 2 Post 29+30
 100^m radio flags
 200^m solid ac grey gns
 chl - bi fspan
 weak color on $f_1^{\frac{1}{2}}$
 17/40 N
 fsm - musc. schist on top w Fe sta
 310^m QMS silic. wly along ditch
 Singgir No 1 Post uplink
 down here

 (340 trucklet quarry w gravel abrd
 380 C 182 running from ditch QMS
 (16 wfg grey Sd (S)

 (Fe stained, 50%
 395 less abd fspan quarry
 w travs (w Sd?) // $f_1^{\frac{1}{2}}$

 (405 C 183 RC fibe gns w mln
 grey Sd? Fe stained (2)

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520 - 550 more like it stand
qtzite w. laminations

167/52 NE

Ivy qtzite into bbd fspn grain
minor peg around 450 \rightarrow +

just start of Kolana dk

OC bbd-granit-fspn grains
fresh bed to 3cm long

165/38 E

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RUM RUM 41+42 No 1 just short

) of small peg w. + 45 $^{\circ}$ comp
small OC in rd QMS.

) 960 rd from A-frame

1500' No 1 43+44

2100 A-Frame CIC

C156 Silt yellow gritty
orange color

3050 No 1 45+46

4600 No 1 47+48

Set on this is end of willows
between No 1 + No 2 at 45+46

start open aspect

915 switchback in old road

1380 E rd has sharp turn left

1500 No 1 49+50

2950 + No 2 49+50

down to creek

C157 silt grad by rky dvs

810' down to rd by old gassted

T
Aug 20 - old fuel storage tank

e.g.'s along rd to S are all
granite w prominent diffuse pink
phenocrysts + large phenocrysts

hd to 15mm ksdw to 2cm

most commonly 1 cm. $15-20$ mm mafic

Same bro mostly b/w.

Cut by few peg dykes < 10 cm

T.E.

105 Granite + peg. ol
mostly granite pebbles
in old cut bottom

255^m Comp tr Hds everywhere
with 210 cm peg dykes Since 1-2^m

340 + c peg dykes Gneiss
@ start Chapman embayment
or continue to 410^m

580 Other side Chapman embayment
Gneiss w Peg Dyklets 1m
800 ft

710 C185 Reg bds bedw 35
atg units w low sfg st
Much alt & granite + peg
on slopes starts here
directly opposite camp

750 C186 Granite cut by carbonate
anhydrite vein. Antc alt
very common on talus here
in granite + peg

1000 antc alt 1650 fresh Granite rocks

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Summit ✓

left camp

[South] 0 m

150 base slope

2025 little runoff in snow

2280 R1 Till NOT karstic
compact. Red pebbles numerous

Some atg pebbles others phyllite

2620 R2 Clayey b. till on oxidized
minerals atg pebbles here + boulders
subangular, black, phyllite rich

2950 R3 Till 20% unoxidized
atg pebbles + phyllite mod

Some subangular phyllite

3300 R4 18m + tree gray till
subangular phyllite found?

3500 edge hill into cl

135°

3650 silt or loess dep

3730 R5 Grayish till and
oxidized 30 cm till + silt

Purple clay till

✓
4080 R6 Sandy till under

1/2 m (sand - silt)

1/3 pebbled sub layer sand

4430 R7 Xlent fN, Real

good mixed high in dry

Grey colour (purple colour)
phyllite (S) much clay phyllite

R8

4870 Br grey gritty till few pebbles

5260 R9 Gritty sandy few pebbles
greyish brown grey till much gtz
Phyllite w gtz units (S)

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✓
Up big cut for yesterday
String line + there to R9

060° 0m

780m clay granite w fine

gtz + at tiny ruggs air

1400 R10 Till w much clay mottled
phyllite - schist. much clay gtz and

+ in hole w Fe stain anatz
+ mottled but no sd

335° 0m

420 R11 Col grey till phyllite pebbles

750 R12 1/3 Henry brick brash
not boulders, no fN

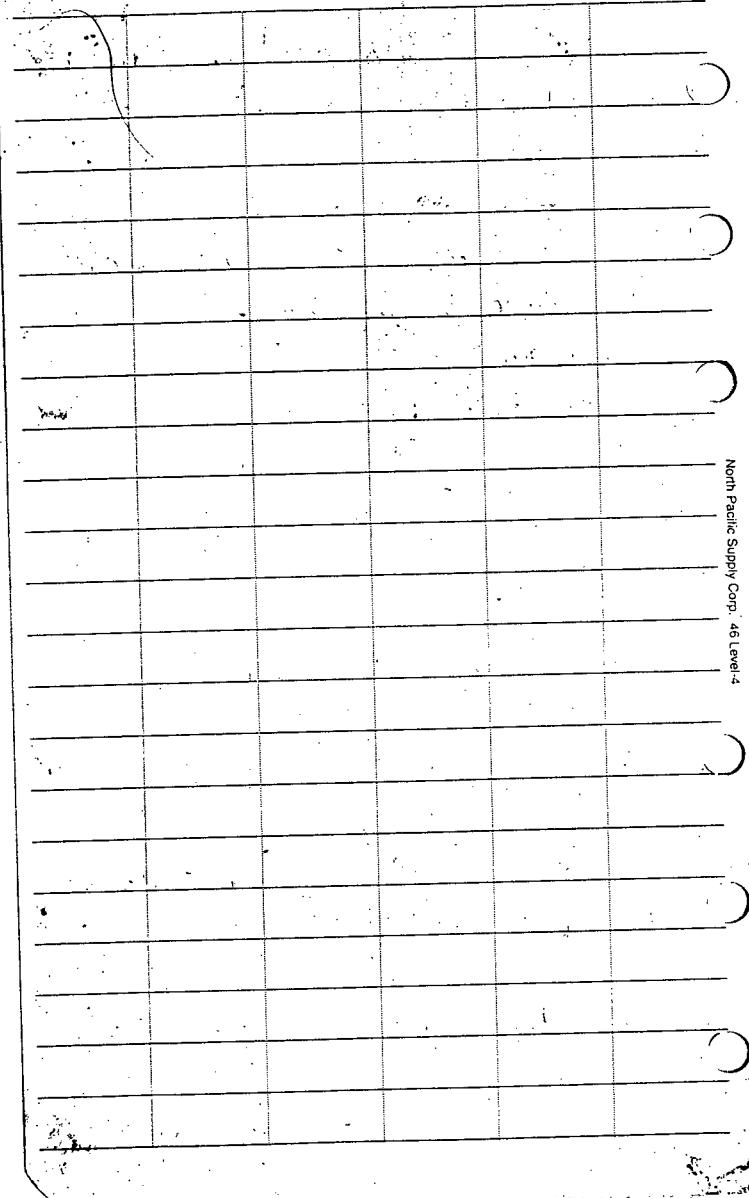
1650 R12 slightly sandy till

at to willy 1/2 base

2020 R13 Till? outwash?

Drown like hill ~~like~~ like

2220 end of another longitudinal
slope side to NW here



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- ✓
 Climbs SW of Sardis
 down west side of summit
 (ake to flat top mtn
 + sunny weather
) R16 0m OK here & flat
 lying ~~200m~~ phyllite with gentle
 folding trends N 10°
 200m R17 Grey soft to till? Some
 lenses? Felsic phyllite w few
 silic Fe stains
 r 15 grey b m till 10-15% sub
 phyllite cgs abundant
 300 R18 Grey till some lenses?
 R19 Ch phyllite
 250m 3 qtz sericitic schist phyllite
 R17 Drilled grey till
 500 phyllite 2cm to 8cm
 till wet grey @ break on slope
 R18 Ch schist - phyllite w few
 300 maf qtz ③
 3 R19 grey till w red to clear
 phyllite Ch qtz phyllite
 R20 Grey till red & ch phyllite

Chits hill to water shed

5 along hi. on

330 C brown soil near
break of hills phyllite

400 oc flat lying phyllite

470 oc pale green phyllite
flat lying weak laminae

500 1 cm qtz lambs

500 oc like above

620 R 22 Crisht gray till yellow
red to clm cps lln phyllite
nr 0L past 200 m

885 R 23 Cr 6n soil to till
musty clm phyllite

Some subbrane phyllite + qtz

10' from Legal Syng Post

1190 R 24 Bn soil w clm cps
Grey phyllite cps + foliolites

1300 Hulipan Pad

1500 R 25 Grey clay with fill
kept all traps 2cm phyllite

1520 trail

Leaving Dine @ D39

(Eastward) along cut line 0m

300m R 26 Gard till w clm
" to subclm cps + pebbles dark
phyllite. Sample just 50m²
above base slope:

few subclm pebbles. Clay rich
water sand

585 R 27 Nuttall clay wet grey
till w clm + subclm phyllite

R 28 5 cm qtz with " (5)
ch. walls + few epy + py

890 R 28 Bn till clm, shd, subclm
phyllite cps + bgrn

1160 R 29 Bn soil - till

2cm cps phyllite floter just

1100 break in hillsides

1310 peak.

Leaving Peak

140° 10'

330 R32 mostly soil with phyllite
cps - chl = slabs Large qtz
bl ds (erratic?) nearby.

10-20 cm loess on top

610 R32 Till bn mostly 2cm
phyllite, some gravel and metamx
900 R33 Bn Till 2cm phyllite qtz

1200 R34 Bn TM 2cm phyllite

slimy met + qtz

Big qtz bl ds Nucleus

1500 R35 Bn till to silt Some loess?
2cm phyllite w traces hm² (5)

+ (5) phyllite

1710 R36 Bn till silt 1.4m (2)
base slope. Stony like chert
Much atq in area

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✓
50m east of camp by pushup from
small dunes along trail

Abundant alt[±] 1cm ftt.

R37 The gneiss cut by itz

all w limonitic traces. difficult to
see original rock type (25) small ps

R38 Clay silic[±] + qtz and lims. Some
yellow carbonate. No sd (25)
fit together

R39 Silica brix w hint of chl phyllite.
Limonite traces locally abundant (5)

R40 chl silic[±] banded sed. Nearly
pure silic[±] (5)

R41 Clay to subplut sili[±] from destroyed
partially w hematite / limonite + silica
dunes. Tr. py (5)

R42 Clay like pieces only shallow.

meta alt[±] ss - high qtz limonite chl (5)

R43 Alt[±] qtzite^w fine hematite + silica
Silica brix texture along one end
sub clay

R 44 Clea silic^c phyllite. None metamorphic looking. It is not complete. Much silica in foliated fol^c. Some free limonite.

R 45 Clea weakly alt. psammite mainly free limonite (S)

R 46 Clea Qtz m + Qtz vein metass^c much limonite (S)

R 47 Clea silic^c Qtz with ss w limonitic veins. From comp

R 48 Till mulg very rich b/c/s to Clea rx. Variety of features Collected 50 m E of comp where most of above were collected

R 49 1 km phyllite weakly silic^c w Qtz units + low limonites from 57 m west end?

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Day 2 Pelorus w Dave 180

025°

) first 150 m granite OC's w alter
frac + lim Fe stain. Carbonate?
Some impure fspn det.
Then Nest Reg in knif^c Qtzite
+ 50 m c187 Till 1/2 m dep
In oxidized red to clea flt.
min sand.

0 m here

25 m Qtzite w 2-6 pyrophy

200 m Fig. metric diaq 7-10 C.I.
to grst. + by 10 m reg

300 deep loess

350 c188 RC metass - Qtzite
w Fe stain Dolomite?

+ free Fe (S)

470 top of hill

500 c189 deep 1 m Till
grsh brsh gray. Good till
subrnd to clea cps

570 OC Qtzite from reg surface
cutting Qtzite low sd. 14

150 ck no silt

other slope S. sandy bds. mg. granite
+ gritty w. Fe stains ± clst.

720 C196 R1 Clean rubble grite
w. frn + some Fe stain

800 C197 Till on sidehill Bn.
Some loess? clay under

1120 80 cm loess over washed
gravel

1280 C192 Grey hard till
beneath 60 cm loess

1400 and organic silt

1590 flat lying grite or msc
partings and Fe stains
redish browns

1650 C193 30 cm loess 10 cm - 20
washed gravel then grey bn +
red to subclay

1940 C194 Till (slightly washed?)
minor loess 50 cm deep

2280 C195 Bn TH slightly in
some red bds. Clay with

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1 Km E + through thick
brown clayey

C196 ck 711 clay ash
ox ± bn much gritty pebbly
wind, submod, subclay
No faces

[South] 1m
350 m R197) wet yell/grey fill
under 50 cm loess + humus

Redo 720 washed gravel
under 60 cm humus

[205] 1m

820 Quick C198 Silt
Some org' Gritty sand + coke

950 C199 Sandy till, No loess

1260 C200 Slightly sandy

till beneath 80 cm loess

1370 top bank int. gully

1470 top alluv. rock

1526 C126 Silt Sandy TH
mixed loess + fill?
30 cm loess

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1940 C 127 RC Qtzite w Fe stain
 Step S slope
 2270 granite OL
 2900 bedrock striy
 +200m AC Qtzite w Fe stain
 +50m granite OC

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10:30am Left Camp w Dave Day &
 Belly River North side

10:45 070' 0m

11:30 1070 0L

11:50 115' 0m?

12:15 1850 head [up hill] (1851?)
 0m

250m C 128 till silt + pebbles +
 cobbles steep greenish hillslopes
 10cm friable on top

500m ridge broken striy + walkway
 tu AC silice pumice Cont like

620 C 129 Till under loess 50cm
 mixed to sub 6in

11:10 - 930 C 130 Till good w shaly
 phyllite cap + slabs w carbonate
 ± 9ft smooth

1240 C 131 Till beneath 30cm
 mixed loess + till

1680 C 132 Till hill some loess.
 North

10pm breakfast

2080 C 133 Same - same
 Much org

2290 Creek sup

2270 creek no silt many H2O

2340 Big Creek C134 Silt granular
much carb nite at.

Dolom? pyrite?: more
lime SS.

C135 RC carb nite SS. ⑤

2:40 to some pyg, + other metam.

3:10 Sub angular black phyllitic
Shaly SS w/ carb
matrix. and veins

[Cretaceous] 100 m

450m Creek C136 Good silt/4

Fairly coarse few pebbles

Shaly phyllitic w/ carb

+ 1/2 sea shell + others

[Marl] no 0 m

900 m

215' 0 m tip ups on humus

250 C137 Till under 30 cm

less than tip up. Slightly weathered
clay holds fast together

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640m C138 + TM 80 cm dep

below 40 cm loess + 30 cm
loess - till mixture

red to grey tan pebbles

pyg + phyllites

C139 RC large bds from hole
carb nite Fe lines (liminit)

silicified rounded pebbles

1000 C140 Grey br till under

few bds - till mixture

Simple gritty but no pebbles

Big red bds 10 cm dep.

Sample 60 cm depth

1300 C141 Dry till Gray 6 m

beneath loess - till mixture

Stony SE tang grassy slope

1510 C142 RC siliceous boulders

052 / 20 SE

2040 stony fr s. 1/2

C143 Silt big dk fo E

siliceous boulders + all others

2nd well carbonated pebbles

has cemented silt

116/48

Up. walk from boat to m Relly Siltin
Dolomitic alite is target
650 m to first carb. Calc? alite

psammite 116/48S

* C144 RC carb alite psam

690 C145 Silt somewhat organic within
ground. Much (40%) carb. alite
phyllite. Some dolc phyllite. Qtz.
grit to blots are common

720 C146 Soil W bank barrow
muscar. shun phyllite w carb
1 ft.

Also taenite? 6xia

? 730 Dk gn?

770 carb phyllite w qtz m

725 green psammite

1000 m t barke lo c qtz + musc protos
metr qtzite

1050 C147 Silt under sand
Summary: 6 ft 1000 m 07

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1200 cross to waste M

1300 C148 Soil on 25m clay
soft att psam. w at 3 m soft
from near much arg layering in this pt
argillite

1320 C149 RC or very silic?
carb att psam w grey sp
+ metal staining

3.0 cm at 3 m in ready

1430 (inside) C150 RC subgray carb
lt schist psam, hint of met
soft (lt + silic?)

1450 C101 RC subgray variably silic
dolc schist (5) hint met + py?
+ grey sp

1460 overlying higher on hill kloric
schist w arg layer

near flat ying 093/15 N

1480 C102 Silic? qtz vs m in
py - py - gray sp? w side
by carb or more soft schist
some grayish schist

094/30 N variable

- 1510 C103 Silt + under coarse
flocular (arb) pebbles
Some org' Much OC toward
below + above
- 1590 grayish green psammitic
no carbonaceous algal.
- 1565 similar OC E side
- 1600 OC arb + siliceous
E side w gray sd?
- 1720 C104 RC OC E side
siliceous qtz and arb w/ silt white (?)
Cave (+ Leach?)
- 1830 Subamp dolomitic schist
" no" Fr stain Some + qtz
- 1850 C105 RC OC E side under
overhanging ledge massive - high carbonaceous
(dol?) cut by qtz veins. Whole OC
like this. Bedding horizontal vertical
to flat qtz veins to 10 cm
- 1900 C106 Silt good More till
pebbles rare + clear dolomitic
schists + dol.

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- 1970 big of shaly dolomites an
w black ch. cut by few large
qtz veins to 10-20 cm.
- 2030 C107 silt main ch Ford
dolomitic? psam? blds sparse
arb + siliceous schist + dolite ch
trh @ 2060 in dry up 80 m
030/96 N bedding thick bedded
10 mm below joints 20 cm hub
Some 2 cm beds
- ~~Contain + climb to S on W side
- creek 130 m 0 m.~~
- 130 m C108. Soil 4 cm cps yellow
290 red OC below in grassy hill
318 OC running dol +
- 925 C109 RC Clear dolomite in N side
side gully to grassy slope
in sd?
- 560 green psammitic subamp
- 616 rusty OC below 20 m

670 OC, C110 RC carb act^d present (?)
fractured Marl?

left boat on ox bow Macmillan

160' 0m Down to west more frost

300 acidic follow up 160° line

420 OC, massive chl-fspn gns +

105/5-10 S

460 C111 Fine silt minor sand

fair amount v fine sand

fair amount organics

690 VCC gray to gray barely phyllitic

160/20 W

750 C112 Good Till clay rich

rnd to sublun. grsts

880 big lln blds subwsp? gns VCC

1100 C113 Scropy gns. Some minor
sand. Some organics

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OC visible in three hills to north

) 1430 C114 Spring org^c silt
some sand

1530 gns t OC 50m

) 160g top of OC lunch
OC is gns but w more
carbonaceous component.

Also pale green chlinate

1750 OC silic pale phyllitic

2000 top of steep hill into willowy flats

SW 0m

210m C115 Wet clay rich good Till
under tip in v deep

) 530 C116 dry till on W^{1/2} rose
of small drumhead?

680 und other side work over

) springs area

W^{1/2} 0m

311 C117 RC sublun subred lit.
brownish bgrn & stain throughout carb?
dark brown gns (3) all red on
recent clay stamp

380 C118 Till wet under

slumped clay bedrock

510 C119 Silt from creek

under pea gravel. Some
calcareous most not

725 C120 + C121 RC's of same
blck subclay submod qtz+carb
w sp frags + blckish patches

Wtq gray sp? (25)

C122 RC silicified blck sandy

All could be silic. lins. Most

735 From next lins. f.t. Some wobbly
similar abit f.t., Some wobbly

744 C123 psam? blched to
light gray w f-g gray sp (5)

772 C124 cherty bedded w gray layers

C125 silic. marble w qtz inlets
+ gray sp.

834 cherty blcks in gray hairline sp.
red hairline (?)

Note! Much quartz blcks in cl

924 R202 Silt under ground

silic. (lms?) w gray sp?

stn p present as boulders

750 C203 Till on E bank w.
alt¹ qtz and blck

970 C204 RC blck pink+white
silica w gray cts PS

1180 part of rock on E bank
@ bank

1680 C205 Silt good under ground
fair wind lens. No churning
quartz cherts s.lic. P.

Mackinaw River bottom from

yesterday along bank w fast marsh water.

[SW] 0 m (uphill zone)

200 rock full

220 phyllitic just w laral
cont frags + dis

270 into bench (cl. a head?)

310 sep

450 grst abvll. oc

550 150/55 N5 oc chphy

627 175/60-80W

big chl phyll. oc,
oyster shell frags

768 oc same

1010 c206 Silt Fair Siz'd cl

Some silic's "clay" w red
sheaths + grey ghosts

Same lns cbbles No big

blocs. On brushy area

[UP rk] no 0

To 30 big red blocs ghostly gray

50 all silic's

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1200 oc w east side
grst phyllite white frags
w mott + dark phyllite

pinkish

1480 ~207 silt + tib frags

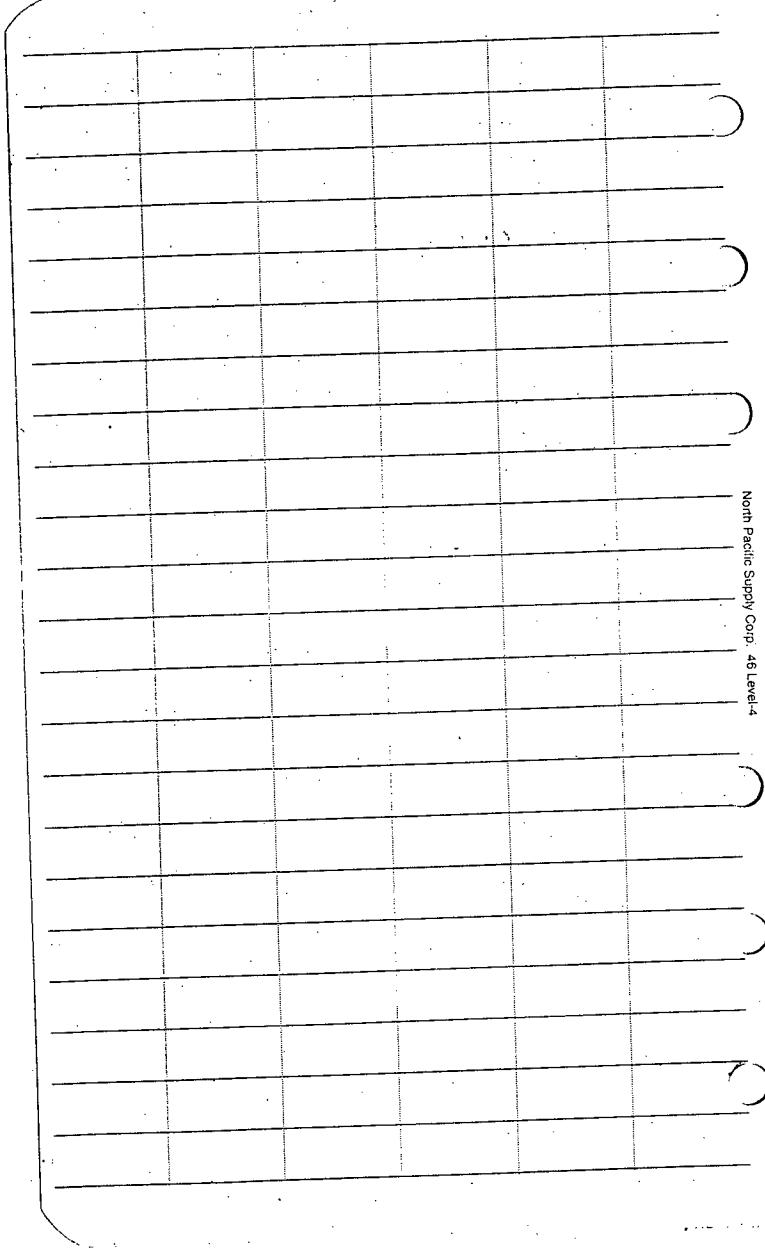
much grst flt

not tib but main cl.
w low wash

green phyllite oc away but

Park camp + wait 2 hr.

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PACKERS BACK ✓

- Wg Camp @ $165^{\circ} \pm$ uphill
- 700 m No 1 PACK 2 + 8
 - 1200 SW cross sample line (999)
 - 1280 NS sample line "
 - 1310 sample pit no fly
 - 1560 sample pit mostly much flatter here soily pit
 - 2100 soil pit dark phyllite
main reddish
 - 2600 soil pit thin QM soil
- ④ D59
- SW 0 m
 - 160 m h.t flat
 - 600 m R 50 Good gray brown till
rich clay dark phyllite
 - Some round pebbles
- ④ SE 0 m
- 360 m R 51 Excellent gray brown till
dark phyllite to red qts
no lenses

- some mixed layers?
- 600 R52 Bn till and loam
under 50 cm loess
- 810 down hill start with weathered
rock breccia, pink + sparsely
grained R53 Bn till, minor loess
under 10 cm loess + till
mixtures
+ some large subangular to subrounded blocks
of carbonaceous layered quartzite w/
X cutting qtz veins + veins
1100 R54 Till - Bn, ~1m dark
phyllite + qtz to rounded pebbles
in open exposure hillsides
Now start blocks of massive
atqz or atqz ms
- 1250 blocks becoming markedly gneissic
- 1300 R55 Dry till beneath mixed
till + loess + soil.
gneissic chl = phyllite blocks
gneissic still qtzite
isoclinal folds in atqz.
- 1400 m +

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- 1500 R56 Dry greyish brown till under
loess. Some mafic? No
blocks in areas.
- 1700 R57 Good grey till beneath
30 cm mixed loess + till.
1m dark phyllite caps slope
to subgrade.
Cobbles size qtz w/ shiny
qtz filling Fe stained.
- 1770+
- 1770 base slope
- 2020 chalk
back up line to R56 where
R58 RC qtz very w/ chl foliation
similar on edges + inside.
Fe stained veins + traces.
- @ R59 collect rock sample
R59 RC qtz w/ weak Fe stain
many blocks with very abundant
strong qtz veins + Fe traces.
- Qtzite blocks high on hill hard ls type
folding almost isoclinal.

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G.A. to end of yesterday's line
Up Valley along base slope

600m R60 gray br till dry

@ base slope

1100 R61 Till plus some loess?

rnd to clean pebbles

all oxid br on surface

below steeper hillside

NW 0m

200m R62 Till ox'd br to br

grish gray w/ rnd to clean vs

mosaic qtz schist (qtzite?)

Hill side here very hummocky

compared to smooth slope

slope of yesterday

400m R63 Good grey till rnd to

1cm pebbles. Much dark

comb² phyllite

Minor loess in hole

600m R64 Excellent Till Grish gray

No loess. In pine tree

Qtzite - Psammite rubble

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800m R65 Good till. Break in

slope @ 710m < 10 cm thick

bottom 10 cm is 100% broken

(schist?) comb² phyllite

(Several s) R67. Samples covered in fine silt
as it a till. Schist and
be till.

990 piece of string

1070 R66 Shiny dark phyllite

subtrop. Soil Some Till

10 cm to subcrop

R67 R68 from R65

0060 no chasm

flat lying slabby white qtzite

0.5 cm ridge line

Eye stained green

344° to camp

Kett camp. w/ Dave to float
prospect near anomalous w52.

Dave went to S1 to start till.

He found w52 Dave took till to w51

w52 - no rusty esp in soil. Dry pits

to 20 cm depth. Caught Dave on granite rubble

Looked for streaked qtzite in granite float. Higher

No qtzite to sample. Qtzite or other quartz

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@ Camp.

286'

0 m

650 bank to main creek

300' 110' m

780 creek

300' 0 m

40 m open bank Minim lenses or
3 ft max weathered sand

240 R68 X-cut Till gray
grey w carb^s phyllite esp to
rounded pebbles

510 R69 Till dry 6m in width
much clear green psammite
to qtzite w atg units X cutting
+ Fe stain frz. (S)

Clear blocks dominant

R70 - RC psammite chl^s (S)

660 1/m blck white qtzite w atg
units + Fe frz^s

780 R71 Till w 1/m cps
carb^s psammite to phyllite
slip slope Almost a soil
Very minor sub rounded pebbles

990 on top of prominent hill. Very
flat lying psammite oc with
numerous carbon fine carbonaceous
laminations. minor qtz units +
Fe staining

1070 in gully

1080 R72 Till in gully under tip up
dark phyllite, qtz ± qtzite
1/m cps

1170 flat lying qc qtzite w fine

carb^s laminations

1180 R73 RC flat qtzite w flat
qtz-fsmt(=ch) vein 5cm wide
silic^s qtzite (S)

R74 nearby QC silic^s qtzite
grey wisps carb^s (+ s d^{>8})

This area is small mound
between main hill side +

hill just poor crossed over
much qtzite here is aplastic
of non remelt? + qtz veins

- ✓
 1240 R75 Soil 1 m at 0°
 to Till? good clay content
 under mixed loam-till 30 cm
 on base of SE facing slope
 1360 R76 RC
 Big OC 1 m flat lying
 at 0° w/ Fe stained frags
 cutting all angles throughout
 Some carb frags (locally)
 1400 Granular 065° ±
 1450 R77 Good till yellowish
 many vnd. pebbles some
 sublun phyllite → felsite.

- [North] 0 m
 280 2 m OC at 0° w/
 Fe frags. Very flat lying
 Fe X frags (locally) + weaker
 than R76
 300 R78 same OC fractic(s)
 430 sand

- North Pacific Supply Corp. 46 Level 4
 056° 0 m
 1 m small or very lobaceous gills
 to phyllitic phyllite w 1-2 cm frags
 in II schistosity No X Fe.
 110 m R79 pale grey clay rich
 Till a soil All loam phyllitic
 No red rind frags
 local? till?
 300 CK damp + wet moss
 380 top ridge running 340°
 400 R80 1 m soil to till
 much clay not much sand
 mostly sublun silic frags?
 of till + phyllite Fair amount
 Fe stain
 500 1 m at 0° s lab
 660 R81 Soil to Till
 all sublun to 1 m frags w high
 clay content cutting frags
 10-20 cm. less over
 frags are phyllitic dark to greyish

810 start steep slope

940 thick size erratic Kspartc
granite.

1000 R82 Very dark grey unxd^d
Till. Llars frags phyllitic dark
+ qtz subclay to clay
Bigrainy w/ dark carb psammitic

(Contin) 0m

275 R83 Till. Llars + subclay chl^s
psammitic also mica.

390 bldrs phyllitic psammitic
OK above?

600 R84 Dry perched till. Steep
more bldrs phyllitic psammitic

920 R85 Dry till. Clay frags
phyllitic psammitic

800 stopped 60m back

(1460) crossed this area string two
10m back +

200m to thin 1m sandy line
when it crosses OK

Little sinkholes with trees for water

R86 Bttm frags only. No sand
locas? Banks flooded. Good flow

[SW] 0m

170m R87 unxd^d bn gray fill

slightly weathered? on
sand margin? running
NE - SW + Rnd nbbles

1800 R88 Sandy clayey
oxidized Tll. Rnd nbbles

900 R89 Till slightly sandy
on prominent ridge

-Rnd nbbles. Under 60cm
-ash + less

1200 R90 Till first new ground
clay with matrix. Only minor
sand. Yellowish grey. Rnd
to sub lln mica phyllite-schist

(or moderate w/ ferruginous)

1480^{ro} Wet Till cluttered over
organic bottom frozen

on steep bank.
Some org

- 1860 R⁹² Rewarded T/M or
presumed buried silt
in small gully on mud slope
Sandy frozen bottom
Culley moss covered.
Deep humus area
- 2050 old Trail
- 2260 R⁹³ RC. 956 ft. elev
silic^{cl} schist. orange colour
(23) sp? from spring on trail
- R⁹⁴ Sandy silt from spring
recent T/M?
- 2440 red sand under ash
just below top small beach
- 2560 R⁹⁵ wet T/M. Various
rnd pebbles no clus. Bottom
dry with lon. on trail
- 2810 washed Sandy gravel

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- With Dave South Braden.
- 2-3 km N along Chudley Hwy line
) Mtns true West on drift 1/2
600 10km to As 5b Ck. Cut trees 5 hrs.
Walk to next ck to drift.
-) Heavy hill 100' wide & good line
prob' fire break at 55°
- [East] @ creek 0m
x 100' follows east bank c/k to 300' m
dig many holes 1m deep in sand
840 C 208 80cm deep till
grey bn w grit + sand
lms rubble same qtz
- 090 C 209 EC silic^{cl} lms. & qtz
vns a few w open space filling
few blks chert pebbles qgl.
much dark phyllit
- W30 firebreak
) N along firebreak 100m onto hill
+ cl in basal matrix dolomite
unmetamorphed Cornicles tip?
dolomites? Badly weathered

② 1110 C210 Till much clay
+ gully w. few pebbles
incl g. gr.

1210 + 1450 71m

9550, 1700 71m

2640 m + 260 P to top of bank

Int. cm sk.

C211 Till X Int. from

nt bank

Next day drove several rods w. Dave until we found
area to top of hill above small lake on map.
Walled N arrow lake on rd - five back roads
P & Lads for short to SW so went back to
begin sampling. Dave Notes.

Took off in back rd and

to rd I drove.

Good rd in CR next traverse.

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Frenchman Lake - Dave

walk around lake to trail + S along

trail to first water. Back up

+ level 260° 570 m to top

of steep hill

[South] 0"

100m dry creek

4700 I cut line

470 still on bank. Meadow

ahead 50 m gully to right

150 across gully to bank

[270°] 0"

3400 m weak gully w. water (no flow)

600 within gully not flow

1020 sandy hill hummock bank

down gully -

[NW] no 0"

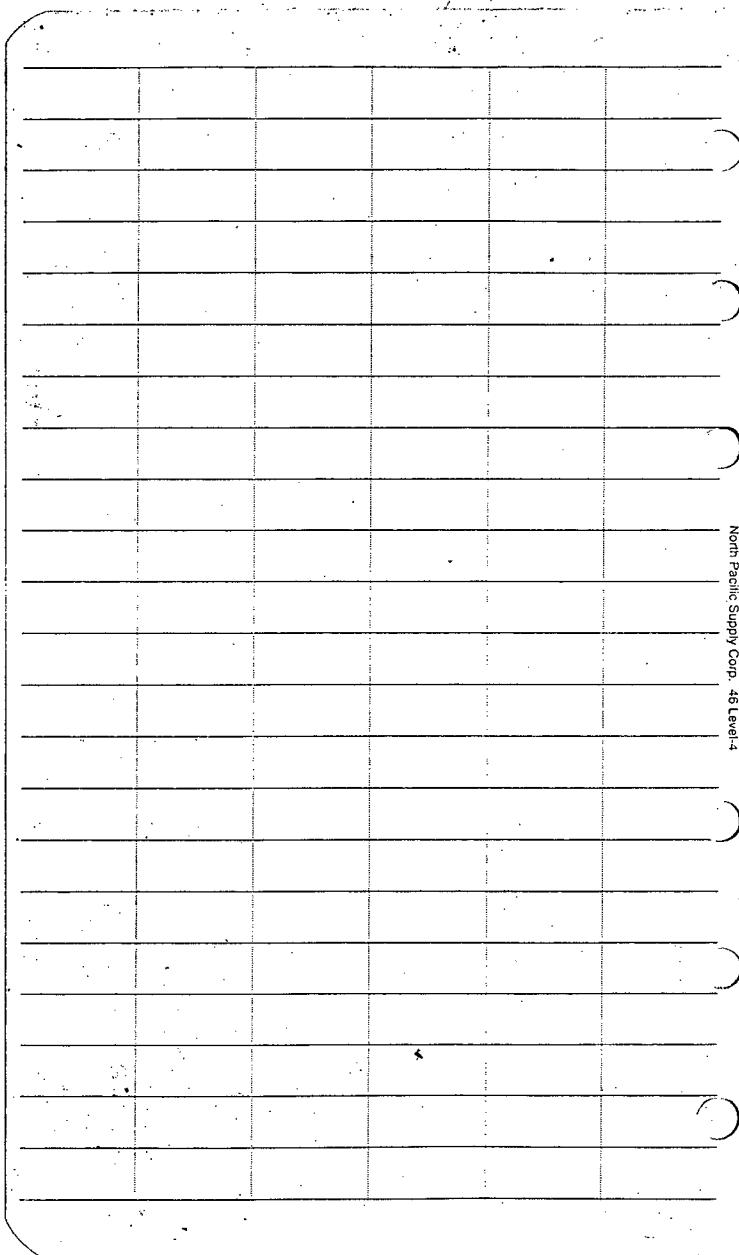
1450 C212 Till under

20 cm loess + 5-10 cm ash

on hummock

[058°] 0"

- 4700 C 213 TM under forest + ash
 840m > 1 m silt + rush
 950 C 214 Dry till and pebbles
 on cut line
 1200 OC flat by basin? gulch?
 1320 meadow
 1350 C 215 Dry till under tree
 1480 river ridge like bed for
 end of talus
 1510 OC surface
 1710 OC surface
 1800 kettle, moraine) and wash
 2290 + 230m to lake



- Aug 27 School of Sprigie supply
on River river 21-40
- to extend + tie on to 41-450
 - calculated in 1999
 - South of airport across river
 - Falling pile found sub angular 1/2 m
Start on pile rocky & by then - 60-6
peg with diss², due 5d³.
 - py - pyrolyc cpy?
 - Also bags w v small X's lining with
5% SP overall
 - Vpnull On bank of Sprigie
 - Followed broken string line up ridge part
N-S claim line from this spring.
 - Ridge string prob'ly Davis location string
for start of Y line supply.
 - At 450 m it + string line 40m S of 41
 - followed this line from 41 to
start of line + ran up 20m to 41
 - At 41 (1999 sample)
Contain to w 0 m.

55 m B1 light brown ground soil
 - angular chrt gts mucus schist
 weakly rusty, ftt also with minor qtz.
 105 m B2 gray red-yellow silty soil
 + lts of angular chips of qtz-schist QMS
 w bgr. Phyllite + schist and angular mucus
 qtz - Some coarse peg.
 130 to 145 - talus + subarp qtz-musc-bio -
 phyllite - schists.
 175 m B3 brown silty soil w angular
 220 m B4 " " "
 angular ftt qtz-musc-sch
 some qtz-fspm-musc peg (rusty)
 285 m B5 brown silty soil
 slightly rusty QMS angular cps
 330 m B6 bn soil QMS
 380 m B7 bn fine some organic
 w angular rusty QMS
 400 m B8 fg slightly nodular
 silt from small
 sep flwg s.

440 m B9 bn soil grid 1/m QMS cps
 500 m B10 red bn silty soil
 abundant 1/m cps + ftt
 subarp to OC rusty QMS w 2-3 %
 fgt chrt by B11 rk chrt QMS
 more qtz-musc rich than previous
 samples.
 B12 strongly rusty QMS thin
 flaky schistosity - silicified w
 5 mm qtz veins almost
 1 schistose. Silic vuggy bgy
 11 schist - 10 % bright red
 mineral throughout hematite?
 - approx - 160/80-90 NWW.
 550 B13 bn soil some 1/m
 QMS frags
 605 m B14 bn soil som 1/m QMS cps
 650 m B15 - same as B13
 731 m B16 - bn silty soil some
 1/m QMS fet.
 740 m crossed drain line (VS)
 780 B17 same as B16

830 m B18 bn soil w angular sch
 frags (soil + frags darker +
 less rusty)

885 m B19 " " " "

930 m - permafrost NS

980 m B20 bn partly organic soil

1030 m permafrost

[270] + to melt. no melt

1130 m red crust frags N

B21 f.g. sandy silt
 80% ft is red - dk gray
 thin f.g. sch

116" bleached, slightly rusty
 "gravelly" ft.

118" slightly rusty muck sch.
 Leaded downwash 300 m

- 180-220 blocky talus subcrop
 f.g. dirt greens

230-240 f.g. gel subcrop

250-255 mixed ghs + gravelly

Put up flag for start
 next transect. Out to Anstrop

At yesterday's flag

[090] 0 m

50 m subcrop brittle ghs - some peg

B22 lt bn soil - much muck in sn't

[Contour] no 0 m

110 m B23 red bn soil lots of muck in soil

205 m B24 ~~bn~~ soil - muck in soil

235 m N-S cleavage like ~30 m N if posts

255 m B25 bn soil 1 cm sch
 frags in soil.

320 m B26 light bn red soil
 - 1 cm cap of rusty, thin f.g.
 QMS.

370 m B27 lt bn red soil
 some organics in sample

450 m B28 lt bn red soil same organics

475-500 m 1 cm ft to subcrop
 if rusty, bleached QMS

505 m B29 lt red bn soil - lots of
 1 cm rusty QMS caps in soil - 20 cm
 carbon ft rusty from peg

550 m B30 similar to B29 only 4 in
 soil not so rusty.

600 m crossed small creek flowing N
 (99 - 22 creek)

605 m B31 1 ft red-brown soil
 - lots of clay rusty QMS cgs

660 m B32 brown soil w/ cgs thin sch.
 690 talus ft of serice-biot-sch
 looks unaltered.

725 m B33 brown soil

815 B34 " "

930 B35 " "

1070 B36 " " slightly org

1170 B37 brown silty soil from
 tip-tp. 2 ft of cgs
 fspn + chl-bio-sch

1230 1 ft clm line NS 20m N
 at RUM RUM 25/26 No 1 posts
 cut to Serapee.

a Post No 2 Rumrum 29+30
 West 0 m Auger

67 m B40 Org highly mica^s rky
 gritty soil under tip up
 1/2 m deep getting frozen
 much clay cgs + pgs chl-mica
 Jl green to grey green w/ pink
 lamination like cut below

Contaminated 0 m

140 m B41 mostly frozen soil gritty
 w minor org

150 pgs QMS in steep

160 B42 much drier yellow gnd soil
 tr org.

210 B43 Wet soil under steep
 ~ 70 cm deep QMS? 1 m up
 Bn w some org. material

215 B44 wet mica^s gritty soil w/
 w fair org? dark br grey
 pgs QMS 1/2 m

fair slope 15-20' slope

- 325 B45 Rich yellow orange soil
w QMS. No org^c
Caribou moss 25°-30° slope
- 375 B46 yellow soil all QMS gr^c
Shallow 30° slope
nearby cl. line
- 385 cl. line
- 425 B47 Bn wet soil 10°-15° slope
caribou moss ~~subset not often~~
QMS cps few in gritty soil
- 475 B48 Bn soil damp. 10° slope
varicitz flt. QMS?
- 525 B49 wet bn soil w QMS
10° slope: Sn) on top of
organic horizon? standing
@ 1/2 m?
- 545 1km QMS mtn (⑤ B49)
- 575 B50 Wet yellow bn soil
Sand org^c 10° slope
QMS cps
- 625 B51 bn soil 5°-10° slope
dry soil as top organic layer

- 675 B52 5-10 slope yellow
bn soil 10-15 cm thick
scattered + lying on org^c layer
partly frozen
- 725 B53 org^c bn grey soil
wet slope 15° slope
Soil over org^c
- 785 B54 yellow Soil 25° slope
have climbed past 100m
to get slope
Soil very w QMS
- 810 no soils in areas mossy
- 915 B55 very wet cold gritty soil
QMS cps 15° slope
small patch caribou moss
Some org^c in soil
- 965 B56 very wet cold gritty soil
15-10° slope QMS grit
difficult soil area much frost +
opposite icekance CK
- 1015 all frozen all around

angled up to big trees.

1160 - 85 organic gritty soil

no samples for much org^c

1115 B 57 wet gritty good soil
w minor esp. Am's

1165 frozen area

1200 B 58 br soil w grey mottled

gneiss same yellow

fair amount at 3

some org' in soil

in bottom old dzer push

@ bush & gentle slope

[East] 0m

35m SW cover small
dzer during in bush

CUT

16m

rd to bank

Bush

35m

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soil very

520

2 B 81 banded gneiss w 1-2" py

very rusty soil

400m

rusty hhd bro fs por gneiss
much rusty blocks 35"

300m

high sp blocks have py & fels in 2" seam

rock is dense with lots of py

8 B 68 gneiss w 25% py, incl 3 seam

2 B 57 gneiss w 2" banding py porphyry

more cl 100m

much rust + 25% f blocks

200m Some x cutting to base

same fine py

same fine gneiss

bright red fs por gneiss

py w py + Fe stain

some py in art

large blocks by B60

110m 25m

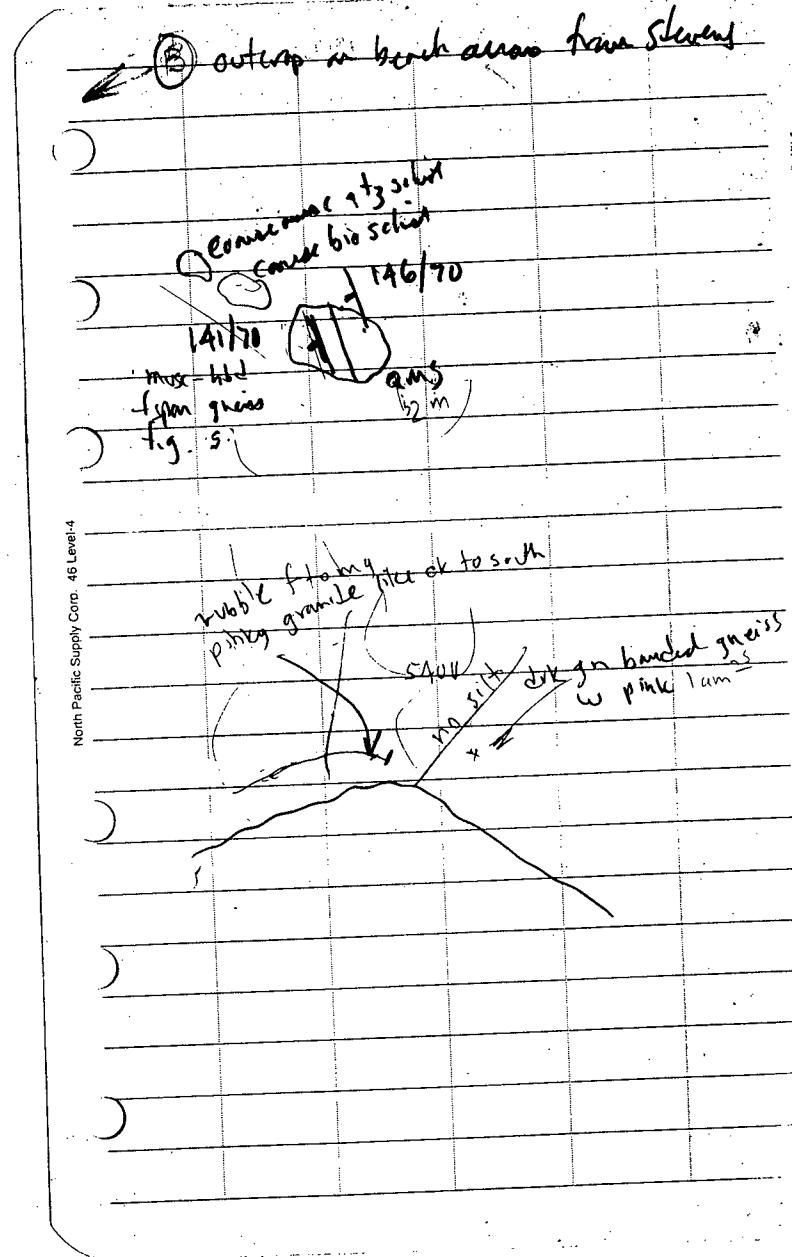
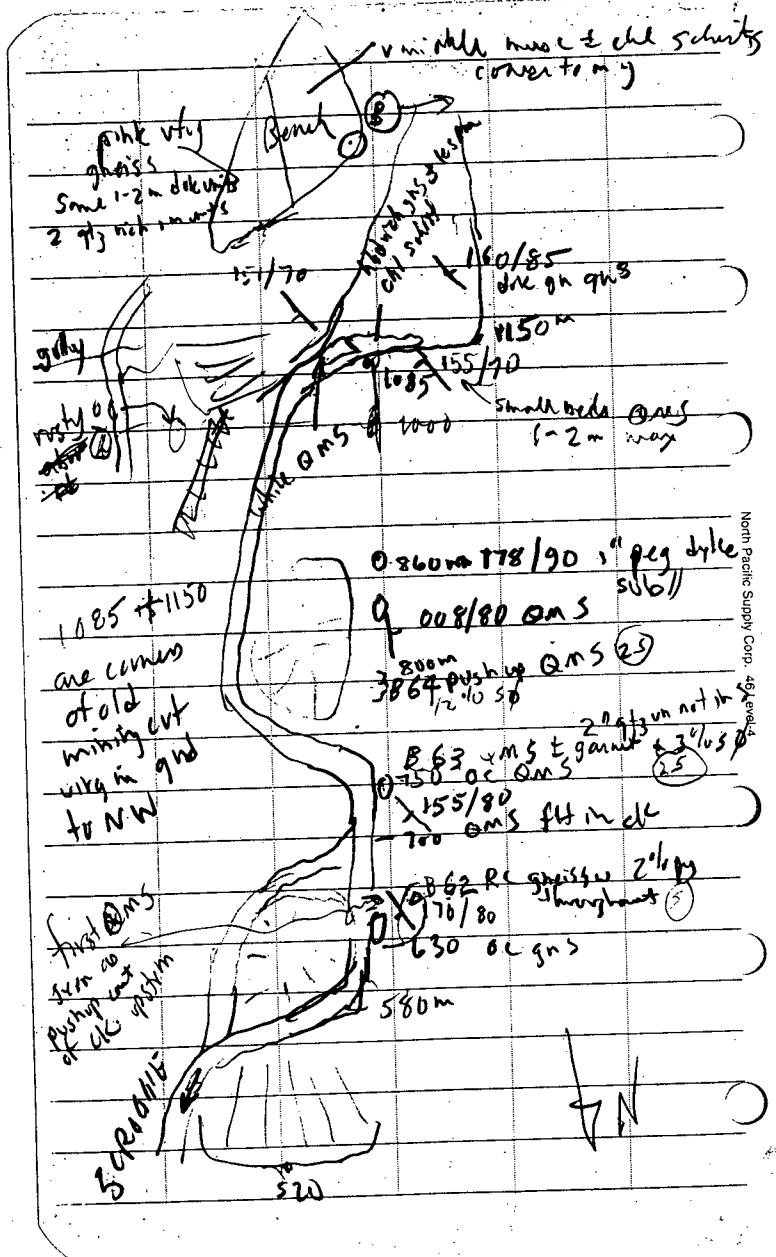
gl fs por
gneiss w 10% py

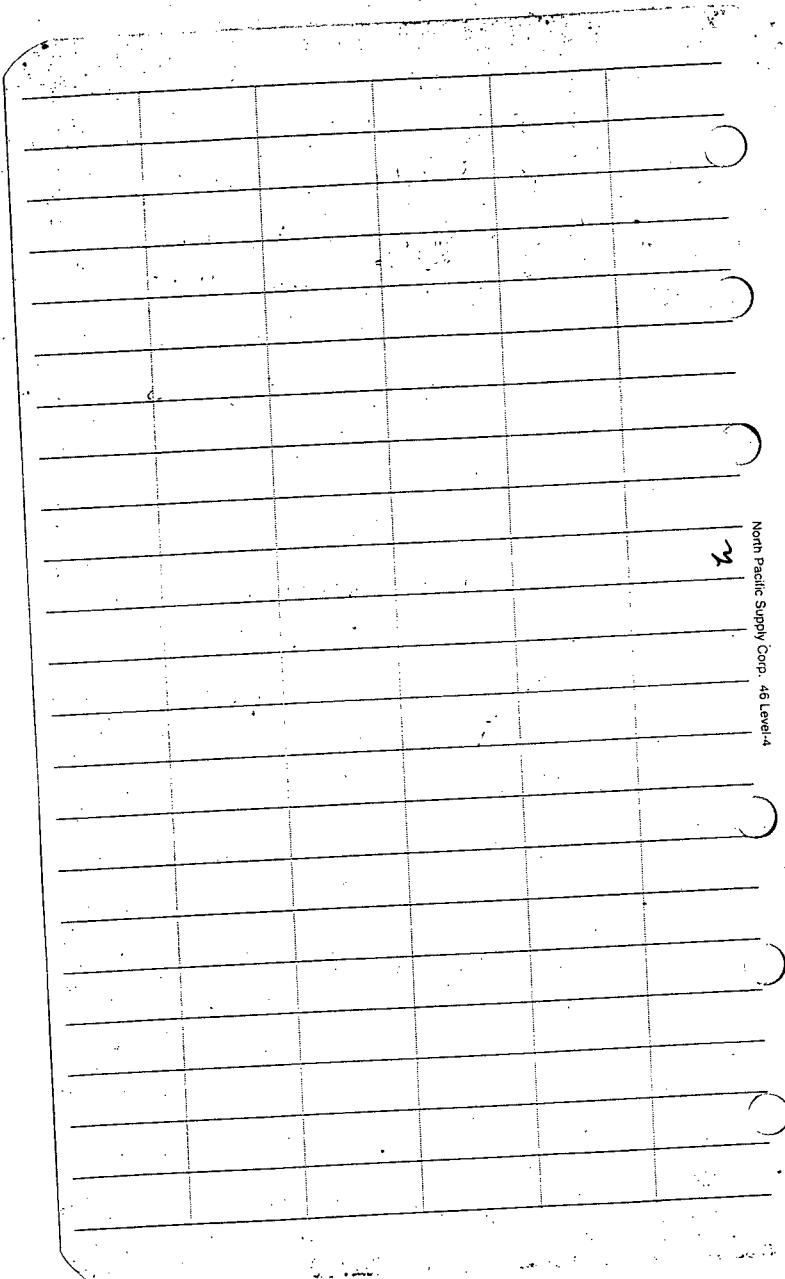
rusty rx

one py
white 35"

+ py 30m

cutting gneiss of Bush





Adj uphill along rd behind JB's camp

50 m E-W cut out like w road
fluffing

No 1 post 1 mile place base
found 500 m SW of here.

115/55 NE QMS along main rd
100 m W of creek that lies W
of JB's camp

old trail well made heads uphill
to west from just below 2 banks

1 mile base No 1 post

1/2 way to JB's camp is a quarry
on uphill side w flat lying QMS

125/48 NE
fig. Camp "l" layering

minor patches Sph stain strong
all rx covered w yellow stain

2 cm overburden 1-2 in

100 m B71 Sph. QMS also visible
rd hdg 335°

200 m B72 soil 0.0m cps
gtz cobble glan

300 B73 soil 0.0m cps
soil brownish
below. Some chl - gtz - fspn - musch
hds 106° part 150 m. Same way
mod. dark. C.I.
Some psammite?

360 B74 R.C. 1km NNE

5-10 m 3 m in bank
silic + limm fintimes (25)

Thick no rk

Thick chl. phyllite

400 B75 soil sporadic 1km white
since B74. Much less fine
limmitic like line.

450 rd hdg around shldr of hill

135 / 25 NE chl fspn fg gneiss
amphibole? Epa fracs

525 B76 Soil bank w/ red

gravelly on musc. gneiss
felsic w/ low felsic intercalations
fractures. Submp area

rd curves to right around hill

610 B77 Soil on fspn-musc-
chl psammite?

700 rd main hds 0.60°
B78 Soil much gtz same
w good limmit. All Fz stain
are small grained reg blck
in 1 km

gentle rd grade

hillside to NW

740 many reg blck & bamp?

800 B79 Soil in rd

felsic gneiss w/ fras

+ reg

820 first flat. Rd swing tow

900 B80 Soil in rd

more gneiss w/ gtz prot 100 m

1015 B81 Soil in rd red bn

1km cps felsic gneiss w/ low

fines... Reg blck

rd hdg 035°

1110 B82 Soil 1km felsic gneiss
w/ low felsic intercalations

- 1210 B83 Soil on rd
 felsic gneiss w/ rock law frags
 clso peg
- 1305 B84 Soil on rd - much
 peg rubble pmt 100 m
- 1405 B85 Soil not much clay go
 Some peg cobbles
- 1490 OC peg in rd
- 1510 B86 Soil on flats " no" rubble
- 1610 B87 Soil " " "
- 1705 B88 Soil mixed peg +
 felsic gneiss some frags
- 1805 B89 Soil not much rd
 Some dead chl amph. (3pm hrs)
- 1910 B90 Soil
- 2050 B91 Soil grey frag mat
 felsic gneiss rubble
- 2200 B92 Soil on top
 f.g. felsic gneiss rubble
 bwn limonitic frags
- 2250 rd bends to 285°
 stash samples; walk back for ATV

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- (P-1, f. Hill behind (N) JB's land
 105° 10m
 910m large OC felsic gneiss
 large hbd latwo to 5 cm
 002°/50° E fol.
- 615 015 / 46 E - f.g. hbd with gneiss
- 790 end of rd above (N) Reeves
 Maniupua camp
 OC hbd fspn gneiss C.g.
 hbd to 5 cm locally
- 15m B93 Soil silic felsic gneiss
 w abundant hairline limonite frags
- 145 B94 Soil rubble here + from
 short musc gtz fspn gneiss
 w atz ms + frags 1m
- 215 hbd some gneiss crosses rd
- 300 B95 Soil mus gtz fspn gneiss
- 430 peg rubble or
- 440 B96 Soil starting hbd gneiss
 + peg low frags 1m
- 715 B97 Soil felsic hbd gneiss
 + peg low frags 1m

- 850 B98 Soil moist frag. 1/8d grns
 + peg on flats between hills
- 930 top of hill grey frag grns
 rd. horiz to right 235°
- 1000 B99 Soil no rubble
 Start peg rubble
- 1140 B100 Soil peg rubble
 + QMS
- 1200 rd. horiz 135°
- 1280 B101 yellow soil on QMS
 Peg stepped 20' back
- 1380 B102 Soil on switchback
 QMS + peg rubble
 lim & frs obvious
- 1480 B103 red orange soil
 Xlt + QMS + peg
- 1560 next switchback
Dawn hill
 1580 B104 yellow soil
- 1680 B105 Soil QMS
 on old jagged
 Plan rusty pig machine block

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- 1780 B106 brown soil
- 1880 B107 yellow brown soil
- 1980 B108 grey soil ch. salt
 rubble CPS
- 2085 E rd. grey grns
 5-6 ins. no soil sample

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FIELD NOTES

2000

YUKON

D. BENNETT

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- ② Silting Drainage basin to the
N of Maniassa Cr
- at end of road up Maniassa
) ① 090° to top of ridge
| level for approx 1600m
③ from ridge to 1000 m
) sub-^ac of granite with lots of +20cm
wide boulders of massive white gneiss.
- approx 1600m
| C1 sieved silt from
small to med creek flowing N
- granite float
- contained contouring Eward around
) 60m C2 f.gr. sandy silt six cm
- 85m crossed N-S cut line
) 255m C3 f.gr. sandy silt
sm creek flowing NW
- mainly granite float, 5-10°
de. phyllite-schist, S° peg

3

- 300m C4 f-med gr sandy silt

Sm creek flowing NW

float 60% granite

10% pegmatite

= 10% extremely mixed seric. schist.

15% pale grey phyll. / schist

- headed N for approx 600m

C-5 silvery silt from main creek
draining off pyroxene mt.

float mainly potassie granite with
minor pegmatite.

- continued N reset to 0m

- 350m dry gully

started following gully down to main ck

reset to 0m

- 500m at main creek

C-6 f.gr. sandy silt.

float mainly potassie granite

- P2.0 - 150m at main trib. flowing N

- 150m further upstream

C-7 f.gr. sandy silt

- 80% granite + pegmatite, 20% phyll. schist
60% white + pink granite, 20% pale grey green to brown

heading W along S side of main valley 3

- approx 600m - hit E-W cut line at stn

) "1-000S 2-650W"

followed to W. - 775W - granite talus
at 2-300m W hit creek.

) C-8 f.gr. sandy silt.

float coarse granite (glaciatr

pegmatitic in places) Some whitish

crs grs-feldspar granite in blk patches

& 3% whitish silver mineral (taus?)

biotite

- reset to 0m

- headed W

- 375m sub-crop biotite schist - slightly
hornfelsed w. thin (1cm) app. H dikes
cttmg

) - 900m C-9 f.gr. sandy silt

from med or. flowing N

float mainly potassie granite

) - 1000m C-10 f.gr. sandy silt from

W. fork flowing E

- float 80% granite (peg) 20% whitish
schist

) C-11 f.gr. sandy silt from 2nd last creek
on Marposa Rd. Flows off of PYREX claim

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17

SHAW STEVENS CR (SOUTH SIDE)

- C 12 i - 3rd trib upstream from Scroggs
- on S. side of Stevens flowing now.
 - f-med gr. sandy silt
- clays in silt appear 70% granular peg.
30% chl biot schist.
 - headed up Stevens Cr. Valley on S. side.
 - 300 m C 13 f.gr. silt collected
from moss mat in creek flow.
 - 575-600 m biotite schist to gneiss sub-crop
 - 725-800 m intermittent sub-crops of foliated
biotite gneiss to granodiorite
 -) - 1000 m biotite orthogneiss sub-crop
 -) - 1100 m C 14 v.f.gr. sandy silt from
med creek flowing north. Silt collected
from moss mat.
 - reset to 0 m → heading upstream on W. side
 - 250 m sub-crop biotite schist gneiss
 -) - 500 m any. lit. potassic granite.
 - 700 m at trib. flowing NE into main creek
C 15 good moss mat silt.
float 85% musc. biot schist, 10% potassic orthogneiss
5% pegmatitic; minor aplite

A

- continuing up main valley on S. side

- reset to 0m

- 600m at trib. flowing due N into main creek

C 16 - f.gr. sandy silt

65% musc. biot. schist

25% potassium orthogneiss

5% aplite

5% massive white interfoliation quartz
(2-3 cm wide)

Note: approx 75% of float in creek

rs rusty - Creek rusty bottom.

- continuing eastward up main valley

- 1200m - main creek curves to South

- C 17 or band in creek

f.gr. sandy silt

- float similar to C 16 creek only

Slightly higher 9% musc. biot. schist

- minor amounts hornblende with long
interwined hornblende veins (1-2 cm long)

- Several spots of stained chalcocyanite < 3"

- Steep slope on SW bank wearing floor in SW
of gneiss w/ 2% f.gr. dress pp.

- reset to 0m - head NE to next valley

< 200m on ridge - 300m C 18 f.gr. & f.sch. from rd ch.
Flowing N. gneiss field.
Float 65% pegmatite, 20% musc. schist, 15% potassium granite

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STEVENS / SCROGGIE CR. SILTING (S. side)

- Approx. 1000m upstream on Stevens Cr.
from Junction w/ Scroggie Creek.

① headed S - climbing ridge just E of
C 18 creek

- 1000m crs gr. gneiss-biot. granite (sub-crop)

- 1325m sub-crop crs gr. gneiss-biot orthogneiss
(foliated granite)

- 1390m sub-crop crs gr. gneiss-biot gran.

- 1455m sub-crop slightly potassium crs gran.

- 1500m at crest of ridge at approx 3000'
headed 090° reset to 0m

- 500m C 19 f.gr. mixed regular and moss

mat & silt - float mainly granite
+ pegmatite - 20% schist (chlorite)

reset to 0m started heading down valley
on E side of C 19 creek.

- 100m C 20 v.f.gr. good silt from

small creek bubbling out from moss

flowing NW - no consistent flow in r.
creek location (mainly dry)

-600m C-21 f. medgr sandy silt

from sm. creek flowing NW

- float mainly granite + pegmatite
10% mafic-biot schist

- 1350m C-22 f.gr. sandy silt from

wash erode (combined regular + mass mat)

C-24 - 40 mm angular boulder (S6-req)
pale pink-feldspar rich intrusive ?? w.
on E bank of vuggy, gr. lined

rusted pyrite (<2%), 10% steel silver

colored biot. and 1-3% disseminated blk. sulf.
(possibly cassiterite?)

- Started contouring around slope towards
Scraggie Cr.

- reset to 0m

+ 750m - C-23 - mass mat silt

float mainly gran. + peg

- 1400m at junction between Stevens
+ Scraggie Cr.

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Sitting circles on SW side of
upper Scraggie.

) At junction w. Murphys Cr.

- heading SE on SW side of Scraggie

- 150m blocky talus subcrop on gr.
potassio granite.

- 50m at first trib. valley

- angular float of pale felsrc biotite
- mafic gneiss - cr. gr.

- 650m C-25 - mass mat silt.

sm. creek flowing NE

- float mainly gran. + gneiss

) - 1150m C-26 - f.gr. sandy silt

from very sm. creek flowing NE

- float mainly potassio granite + peg,

gneiss minor amts. phn/sch.

- 1750m C-27 f.gr. sandy silt from
large creek flowing NE

float - 20% pegmatite (gr-fld.)
Some regular
+ rounded
+ tabular
+ blocky
+ 2-3 ft. blocks

← 25% felsrc - Int. pale cream
masson colored
(some 2-3 eye porphyry, some optic gr-pag,
30% mafic-biot schist, 15% quartz porphyry, 10% gneiss.

b

- 2000 m gtz-biot gneiss Subcrop

- 2350 - C 28 fgr. sandy silt from
med creek flowing NE

- small float to C 27 creek

- 2800 m - good gneiss sub-crop

- 3150 m C 29 fgr. sandy silt from
med-lg. creek flowing N.

- float similar to C 27 creek

only less pegmatite + more felsic vx.

- 3600 - subcrys felsic intrusive (apl/ff)

- 3700 m C 30 fgr. sandy silt + from
med-lg. creek flowing N.

float 35% biotite schist.

25% gtz-biot gneiss

25% felsic-mafic vx. + intrusives

10% andesite porphyry

5% pegmatite

- reset to 0 m - headed West

- 200 m 50 m long x 15 m wide shot

angular float (subcrop) in slide of f.gr.

hbl. gneiss w/ < 1 mm x-cutting white fractures

- aplite + pegmatite dykes cut the

gneiss - pegmatite is white and consists of
very coarse-graphitic textured translucent gtz + plagioclase + clay

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b

- 600 m at C 29 creek (approx 250 m upstream)

- 1600 m C 31 fgr. sandy silt from
med-lg. creek (1 km upstream from
C 28) float same as C 28

- Reset to 0 m - continuing Westward

- 1100 m at upper fork of C 27 creek

- small canyon at creek -

- 60% felsic-muscovite schist with
C 32 rusty massive intercalation quartz up to
30 cm wide foliation 120/80 N

- C 33 fgr. sandy silt from
large creek flowing N.

float 30% felsic-int. vesicular vx but
green-grey porphyry intrusives
some very rusty and maroon colour.

40% schist + gneisses with
purple gt 3 m to 10+ mm.

25% hbl. gneiss w/ augite
varying in size depending on ch.
(up to 25 cm).

headed NNW for 250 m

C 34 moss mat silt from N. Forkatch
med sized creek flowing E. less schist
= lots of pegmatite + potassium granite felsic, less schist

greenish grey

b

reset to 0m - headed NW for 700m to
top of ridge.

headed N down ridge on E side of creek valley
→ reset to 0m
- 300-400m took sub-crop below moss of
gtz-musc.-btz-griss

- 700m C 35 moss mat silt from sun creek

flowing N. - Floor mainly gtz-musc-btz-griss
W. minor pegmatite.

- continuing down valley.

- 1200m C 36 moss mat silt

some float

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Staking Run RUN Claim block.

On main rd N side of Snagga Ch near
junction of Snagga & Mangasa Chs
- headed N.

- 80-90m crossed old rd - slightly rusty
sub-crop of platy musc. silt.

- 280-290m crossed old rd heading NE

- 450m started dropping into creek valley
flowing W.

- 450-680m approx contouring

- 680m C 37 Fgn sandy silt from
sun-creek. flowing SW

float 10% platy br. grey schist

60% musc. gr. schist/griss.

20% light granite

10% potassium pegmatite (gtz-feld)

700-800m sub-crop rusty pegmatite-clay
alt w/ strong rust - some silic +

gtz veins

915m put in ND. 1 post RUM RUN S1+S2

100°

- 135-155m on gtz-br. schist/griss
up to 20cm wide massive white gtz. veins

fol. 160/43 E

- 160m crossed creek flowing SW
- 400m at ridge-top
- 415-420m crossed N-S rd.
- 460m put in NO 1 posts RUMRUM
- 833m C-38 lgr sandy silt +
from small creek flowing S
- float mainly pegmatite, granite, schist
- 910m put in post NO 1 → SS+SG
- 1300-1310m old NW-SE rd.
- sub-crop rubble in rd. - bleached schist
w. rusty pegmatite
- 1360m put in NO 1 posts SG+SS
- 1830m put in NO 2 posts SG+SS
- 2080m C-39 lgr sandy silt from
med creek flowing S (near McPhie)
clay - float 80% dk brown, slightly
rusty schist (house - best), 15% peg.

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- on road heading up to Cabin Ch N side
- 600m up road - Dozer trail heads to N
- At top of Dozer trail. heading S
- 0m - C-40 - red-brown soil over subcrop
of rusty qtz-feldspar pegmatite w.
143% f.g. diss. py.
- 20m - C-41 intense clay alt², fracturing, and
limonite alt² of pegmatite/sericitic schist.
- 25m - C-42 red-brown soil - qtz-rich peg. fit.
- seric. schist float (rusty + fractured)
- 27m start of sub-crop dk. green amphibole,
qtz, feld gneiss (60% mafic index),
mainly hornblende
- 30m folianum attitude 120/50 NE
35m n. n. 123/50 NE
- 37-40m section of bleached schist (ser. sch.)
with qtz-pegmatite center
- 50m C-43 brown soil (lots of flotation in soil)
- At Clam Line RUMRUM 37/38 where it crosses rd.
[360°] following clam line. - 1000' at post 39/40
No. 1
- 1900-1920' angular boulders (sub-crop) rusty &
qtz feldspar pegmatite. looks like trench
- 2050' - 1m boulder 2020 qtz feld pegmatite

15

At RUMBAU 39/10 No. 2 pass

[045] west to 0°

- 265m at ridge top -

C-44 brown silty soil

- subang. flat of grze-gneiss w.
biotite.

- west to 0° = continuing [045°]

- 55m C45 brown silty soil

- 100m C46 " " rock chips

white schist.

- 150m C47 brown silty soil

- 175m angular boulders qtz feldspar pegmatite.

- 200m C48 brown silty soil - ang. peg. chips

- 240-255m sub crop qtz-feld peg.

- 260m C49 light brown soil - ~~pegmatite~~- 305m C50 light brown soil - ang. chips
rusty seric. schist.

- 315-850m boulder qtz feldspar pegmatite talus

- 355m 1t. brown soil - C158

- 400m C159 " " "

- 453m C160 " " "

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7E

500m C161 brown soil

550m C162 brown soil

600m C163 " "

630m hit contour string line 5m

SE of Sample X-11

660m C164 brown soil from tip-ups
boulders rusty pegmatite.

700m C165 brown soil

750m C166 " "

800m C167 " "

850m C168 " "

900m C169 " "

955m hit contour string line

60m NW of Y 78.

) 1015m C170 brown silty soil

1020m at N-S claim line

1050m slope flattening out - possible land

) [0909]

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1 : 1 1 |

Summit Lake Camp

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 - On trail approx 700 m W of SB creek
 - 135° - 500 m small pond so. 100 m E
 - 900 m dry creek
 - 980 m dry creek
 - 3030 m D1 grey brown HM - some subangular qtz + phyllite pebbles
 - rest to 0 m - continued 135°
 - 300 m D² grey brown HM - some angular phyllite fragments
 - 600 m D³ brown grey - mixed sand/HM
 - ang. lt. grey phyll. fragments.
 - Surface float in area - ang. phyll in some interfolc¹ qtz.
 - 125° - 700 - 1100 m massive white qtz fl.
 - 860 m at top of hill - outcrops of D² or bleached, weakly nested + interfolc phyllite with sulfides weathered out - interfoliation D¹ - massive white qtz w. rusty weathered sulfides occurs sporadically throughout e.c.
 - 900 m outcrops 840 - 880 m foliation 025/20E
 - 1100 m started to drop into next valley

- 1175m D 5 grey brown till
- 1300-1350 - massive gneiss
- 1480m D 6 grey brown mixed till/silt
lrs of angular dolomitic phyllite cobbles
- 1780m D 7 grey brown till
- 1835m at small creek flowing NE.
no silt.
- 2090m D 8 grey brown till (partly frozen)
- reset to 0m Started contouring to NE
- 285m - D 9 grey slightly arg. till
- 590m - D 10 grey clayey till
- 700m - crossed sm. reddish creek no silt.
- 900m D 11 grey clayey till
- 1000m reset to 0m started heading
NNW down ridge
- 285m D 12 grey-brown till
mixed rounded boulders appearing on surface.
- 600m D 13 " " "
- 900m D 14 " " "
- 1200m D 15 grey slightly sandy till

- 1500m D 16 grey clayey till
- 1800m no sample.
- 1935m D 17 Ag. Sandy silt from
red creek flowing N float mainly
Anhydrite; granite w. some gneiss.
most float B rounded
- 2200m headed to E for open
150m to 2nd fork of creek
- D 18 fgr. sandy silt
float rounded mixed metamorphic
gneiss w. some gneiss and anhydrite
float

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Sampling hill to N. of camp trail

 - Started heading N along E side of wide valley immediately N of Summit L.
 - 1 km N of Hall - crossed E-W cut line (IR boundary)
 - 2 km N - D 21 f.gri. sandy silt from stream creek.
Plowing W. - float mix of rusty, siliceous phyll/sch and less altered chloritic schist
 - headed E for 2.5 km to top of 2nd hill - reset to 0m
- headed NW along ridge
0m - D 22 grey/grey slightly sandy hill
150m at top of hill - phyllite and massive grt flt.
 - 300m D 23 grey clayey hill
- angular grey phyll. float on surface
 - 600m - D 24 grey brown clayey hill
 - 900m - D 25 grey-brown clayey hill - massive grt float
 - 1200m - D 26 grey brown clayey hill
 - 1500m - D 27 grey brown clayey hill - massive grt flt.
 - 1650m - started dropping into creek valley
 - 1790 - D 28 grey brown slightly sandy hill
 - 2100m - D 29 grey-brown hill
reset to 0m headed W towards creek
 - 240m - D 30 f.gri. Sandy silt from mud creek
Plowing N. (2600' elev) of SE Ch N. side of Camp Hill
 - float 40% bleached rusty sericitic phyll./schist., 40% chloritic schist, 10% rounded obs., 10% rounded mixed float

reged to 0 m

- Contouring to Wear -

100-700m - blocky talus - sub-caps

of chlorite to pale brown phyll/schists
slightly rusty in more place

2000m - back at D 21 creek

Sampling hilly to NE of camp

○ At Sample D 22 - heading S.

-200 m D 31 grey brown clayey b/f

310-310 m angular f/f (sub-caps?) of

D 32-silicified phyllite w/ limonitic fractures and
grt fractures x-cutting foliation

450m D 33 rusty angular grt f/f.
weathered out pyrite cubes

580m D 34 brown-grey sandy b/f

- ang. + sub-round phyll. fragments

880m D 35 grey clayey b/f

- ang. phyll. float in area

1195m D 36 grey clayey b/f

1365m D 37 angular float of
recrystallized lust w/ limonite
weathering & some fractures

1430m slope starts to flatten out

1495m D 38 good clayey b/f

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Sampling along IR cut line due N.
of northernmost point of Summit L.

- D 39 grey clayey loam - angular chips of
phyllite w/ gts.

- headed W. along cut line.

- 305m D 40 brown-grey sandy hill
(under 75cm of loess)
- some rusty, silty, phyll/schist chips mtn

- 475m at low marshy area - no flow.

- 600m D 41 grey-brown slightly sandy bk
under 50cm loess

- 820 to 895m flat slightly marshy area

- 995m D 42 grey clayey hill below
65cm organic clay - rounded phyllite frags.

- 900m - sandy outwash under 60cm loess

- 1120m swampy creek flowing slightly
to S. - no silt.

- 1160m started up small hill

- 1200 - 1375m outwash - no sample.

- 1335m hilltop

- 1400m D 43 - grey brown clayey hill

- 1685m D 44 - " " " "

- 2010m D 45 - grey brown slightly sandy
hill

- 2158m at top of hill

-2310m D 46 grey-brown clayey till

-2530 swampy area

-2550 helipad

-2550-2670 thick organic - no sample

-2720m D 47 grey clay till

-3020m D 48 " " "

-3310m D 49 " " "

-3330-3395m swampy creek flowing no strat.

-3600 D 50 grey clayey till
sub-angular grey chert pebbles

-3750m at plateau elev.

-3900m D 51 brown-grey slightly sandy till

SUMMIT

At R 48 heading S

-95m D 52 - grey brown slightly

sandy HN from beneath 40cm loess

angular chips in soil of bleached,
silicic & weakly hornfelsic schist/phyll.

-160m slope blisters out to Mnile
moss and permafrost.

-reset to 0m

[090]

30m D 53 brown-grey slightly
sandy till - ang. phyll/schist chips
weakly weathered.

500m thick org + loess - no sample

[360]

-reset to 0m

-50m - brown grey sandy HN from
below 70 cm loess

-115m crossed main trail

-145m crossed 2nd trail

-150m D 55 - reddish brown sandy

mixed soil/HN - lots of angular chips
of bleached, limonitic, silicic & phyll?

- 250m D 56 brown grey slightly

sandy 1/1 - ang. chips in soil
slightly less alt^e (Sammie?)

x Back at main trail ~~to S.~~ S. of D 55
headed W along trail

- 250m D 57 brown grey sandy 1/1
alt^e chips in 1/1.

NOTE: angular bleached, limanitic fracture, silic
float with occasional ang. massive white
grt flt. occurs throughout trail
from R 48. to D 55 area

DPR 1 - PELMAC RIDGE (W. end)

Sampling with Grav.

At amonkors creek on SW corner
of Pelmas Ridge region approx 2.5 km

upstream (just above junction with
tributary to S).

26 f.g. sandy silt med. creek
flowing W.

Float 80% granite, 10% weakly
limanitic, beige platy mica schist.

5% pale grt w. some limanitic
fractures, 5% altered limanitic, silic
fl (including grt)

More tributary to S was barely flowing
and swampy in E-W section - Then into

150 pond at corner to N-S stream - O.C. along
NE edge of pond was beige-grey weakly
limanitic granite - angular granite float

2

1020°

- 30m A 27 - brown mixed sand/ll
 - sub ang. grtitic phyllite
 - lots of muscovite in sample
 - 250m Sm buff (orange) of rusty silicified grt. vein system up to 1m wide rusty grt. // to foliation with pale musc.-grt. schist.
 - Folar² 122/36 NE
 - Smaller grt. veins up to 10cm wide X-cut foliation.
- SAMPLE A 28, 29, 30 from NW slope over 15m along dip of sy 80m



≈ 290m at top of steep slope

- 335m A 31 grey brown clayey ll
- Some chl. schist fragments
- 580m A 32 grey-brown clayey ll

3

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- 890m A 33 grey brown clayey ll
 - 1020-1155m across top of hill
 - 1155m at highest point
 - 1160m A 34 brown grey slightly sandy ll
 - 1450m no sample permafrost
 - 1500 " "
 - 1550 " "
 - 1600 " "
 - 1650 " "
 - Reset to 0m - started contouring W
 - 300m - A 35 brown grey clayey ll from top-up,
 - 620m A 36 brown slightly sandy + ll? (very fine - might be loess but has some small pebbles) depth 70 cm
 - 720m crossed sm creek flowing NW no SRA
 - 820m A 37 brown slightly sandy ll
 - 1200' reset to 0m
 - 300m no sample

(4)

- 370m A 38 brown grey clayey m.
10 m above steep slope
- 400m started dropping brown
soil facing slope
- 440m A 39 reddish brown clayey till
[200°]
- 900m no sample 50cm loess,
50cm ash?
- 925m A 40 brown grey HII - along flake
of chlorite/graphite schist.
- 1025m outcrop of bleached & weakly
limonitic musc./ser. schist.
foliation 084/55 N.
- 1190m A 41 brown grey slightly
sandy HII - some subangular granite float.
- 1370m at main creek - no soil
- good flow but mossy organic bottom
- float of granite, musc. & felsic schist
- chlorite schist + some massive white gneiss

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DAY 3 - PELMATE RIDGE

Sampling with Gord.

- Central Section on S. side
approx. 400m NW of wedge of large pond
(pond is SW of 'P' in P.E.W. on trail map)
- [014°] -
- 290m granite outcrops in open
area of hillside
- 300m outcrops of dk. grey granite
- 330m A 42 brown grey HII
- float - sub rounded granite, greenish, yellowish
510m Granite o.s.
- 570m slope levels off
- 605m A 43 gray brown slightly sandy till
below 40cm loess - subangular granite
chips in HII.
- 705m A 44 gray brown clayey till
- sub rounded granite is main float
- also some limonitic siliceous chips
and grey granite.
- [020°] 1200m A 45 gray brown clayey HII
- 1500m A 46 " " " "
- 1660-1690 small pond
- 1805m A 47 gray brown clayey HII

-2100m - A 48 mixed till + bess

-2350-2425 swampy area

-2470 A 49 grey brown clayey till

-2790m A 50 " " "

at top of hill

[100°] reset to 0m

-1000m at middle of broad moosy valley

[200°] - reset to 0m

-0m - thick organics - no sample

-90m - A 64 - brown-grey clayey till

-430m A 65 brown mixed soil/till

lots of ang. musc. phyllite chips in soil

-700m no sample, thick organics

-835m A 66 red-brown clayey till

lots of rusty musc. schist chips in till

-950m swampy creek flowing slightly E.

-1125m A 67 red-brown oxidized till

-1140m A 68 brown grey slightly

standing till under 30 cm trees

-1735m dry gully - trends SW

-1775m ~~A 69~~ granite o.c.

-1800m A 69 brown clayey till

-greenstone and granite ~~bedrock~~ in hill

-1850-1950 several granite o.c.'s

) -2100m A 70 brown mixed soil/till

-at top edge of open hill sides

-2400m A 71 brown mixed soil/till

-granite pebbles in #71

-2790m at base of steep slope - no sample

-dark loess over outwash from 2600-2700

) [Note: Bearing heading straight for sand pond]

DAY 5 - PERMAC RIDGE

Sampling up large creek due S. of higher
peaks on PERMAC RIDGE.

A-126 Strongly silicified, laminated
sub-epoch of foliated chlorite schist
fractures of qtz + limonite throughout
- vuggy in places

A-127 Major sandy soil from large creek
flowing S (at approx. 2050' elev.)
- flood mix of grey & white sand
akaritic msc. schist, greenstones
+ metavolcanics, massive go w/
limonite, minor amts thinly laminated
duney phyllite.

- headed upstream on W. side of valley
- 75m outcrop of very thinly laminated
fol^e dh-grey-blk graphite looking phyllite
with some carbonate veining fractured surfaces
- 95m A-128 15m wide outcrops of akaritic
laminated carbonate overlying graphite phyllite
- fgr. disc. py and some silex occur
- appears to be strongly altered w/ talcines
almost destroyed in sections - granular
is dh-grey and may contain v. high py.

150-175m outcrops of dr grey
thinly laminated phyllite
with carbonate veins and massive
gtz w. coarse foliation + mafic
foliation 156/38 NE

-195m A 129 f.gr. sandy silt
just downstream from outcrops
of silt & carbonatic outcrops.
lots of massive gtz w. foliation, mafic.

- 500m A 130 f.gr. sandy silt
- angular ankeritic and massive gtz. silt
occurring in float but 25% of float
most float is well rounded carbonatic
box and interbeds
- some porphyritic with star shaped
phenocrysts.

= 800m A 131 f.gr. sandy silt
float similar to A 130

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- 1180m at creek junction
headed up NE Fork
- 1230m A 132 f.gr. sandy silt
float approx 50% gtz + granite schists
40% int-mafic interc. +
5% white gtz.
(approx 15% of float is moderately amygdaloid)
Back at creek junction headed up
NW Fork
- 55m A 133 f.gr. sandy silt.
approx 50% float is weakly -
moderately silicified ankeritic marble.
40% float is dr grey dolomitic phyllite.
A 134 - angular float of moderately amygdaloid
ankeritic marble.
- Outcrops on NE bank - 10m high
thinly bedded phyllite inter bedded
with ankeritic marble.
fol^e 073/36 N.
- 350-425m waterfall section of
creek - cts. through ls. of rocks and
ankeritic/pale green phyllite w. some gtz.

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- 485m A 135 large angular boulder
of qtz w. 30% limonitic vugs
oc. on E side of creek is dk green
metavx.
- 675m A 136 f gry sandy silt
lots of arkosic float + qtz in crevts
(note: creek flattens out after 550m)
oc. in crevts of weakly limonitic
grey qtzite
- Headed N.E. to ridge - result to 0
 - 800m on ridge.
 - 205° result to 0m
 - 0m A 137 brown slightly sandy
mixed loess / HII
- 305m A 138 grey brown clayey HII
- 605m A 139 grey brown clayey HII
- some ang. qtzite chips in HII
- 830m small outcrop very phyllitic
fol¹ 138/40 NE
- 900m + 950m outwash - no sample
- 990m A 140 dry grey sandy hill - could be outwash
but has quite bit of clay in it.

Sandy Hill (metavolc & arkosites)

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- DAY 6 - PELMAC RIDGE (NORTH SDE)
- At Macmillan R. - S. end of meander that
was recently cut through by R.
- 020° - 150m crossed mid-creek.
- 340m A 142 grey brown slightly sandy HII
- 490m small oc. of dk. grey calcareous
metastone phyllites. Flat lying.
- 650m A 143 good grey clayey basal HII
- 950m A 144 " " " "
- 1040m sm. oc. med green foliated
A-145 metavolc - weakly limonitic w/
approx 2% wfrag. disc. svlf (grey?)
(sporadic appears
Substrate like in places)
- Fol¹ 136/40 SW.
- 1250m A 146 grey clayey basal HII
- 1360m small oc. qtzite schist.
- 1530m - A 147 grey brown mixed soil/hill
- lots of angular schist chips in soil
- 180° 1850m A 148 grey brown slightly sandy
HII (partly weathered but high clay content)
- 1930m outcrop of bedded (isolated) grey
weakly limonitic rocks - Fol¹ 080/28 N at N edge
of NE-SW structural cleft

- A 149 - section of granite or ark
Stronger linear fracturing and
argillite-style greisenization of granite.
- very dense fracturing w. linearite along fractures
and v. figr. dres + fracture sulfides
- 2000m A 150 fgr. sandy silt
from sm. creek flowing W,
silt mainly sm. off grey phyllitic chips
- ~ 2060m 15m high cliff of well developed
granite bedding / 10° @ 134/25 SW
- linearite fracturing in places.
- 2150m A 151 good grey basal till
Started contouring towards large rock to W.
~ 2450m no sample arg. or ark. grain?
- 2900m started dropping into track
- 3250m A 152 fgr. Sandy silt from
large rock flowing N.
float approx. 45% granite
45% matrix - foliated but not very fissile
(so vx have up to 3% foliation py.)
- minor amounts marble + conglomerate
- 1 pce. of rounded chert pebbles cong. is quite rusty.

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- 65m reset to 0m - headed downstream
-) A 153 - rounded float of strongly
(dk. carbonatized) veined siliceous rk w. linearite fractures
and 5mm veinlets of brownish carbonate (sand?)
-) A 154 - sub-angular float of strongly silicified
w. strong brownish red oxidation
- vuggy in places - gr. voids up to 5mm
- 127m creek drops into small canyon
through very rocky gravelly flat
lying granite rock (10m thickness exposed)
A 155 vuggy with gr. stell. lined vugs
- 280m A 156 - f-med gr. good arkie
silt +
-) - 400m A 157 sub-angular float of
strongly altered mkt - pale grey
carbonate rich rock w. calcite and gr.
filled fractures - carbonate fractures
are aragonitic on weathered surface.
- < 1% vuggy dres grey sulfides (Aspy?)

- 635m - side. rusty
0.5 m. of fine-grained approx

1 m. wide cut through met. grey
phyllite. Att. approx 030 / 75 E.

A 158 - Qtz contains fine pyrite w/
possible sphalerite in rusty Schistose
zones

A 159 - soft below 610.

- 640m o.c. now very friable graphic phyllite,

- 660m A 160 f.g. sandy silt from
main creek. Float similar to upstream

- 680m A 161 Silt from mt. on W side

- silt mainly graphitic phyllite cherts

Float 70% graphitic phyllite

25% boulders of met. mafic.

5% massive sulf.

DAY 7 - PELMAC RIDGE (NORTH SIDE)

- At shore of MacMillan R. just W of cut 161

() 160°

- 175m A 162 grey-brown clayey till

- 695m A 163 grey mottled till

() - 970m - A 164 good grey based till

- 1100m on top of small hill

- 1200m in E-W gully

() - 1245m large angular talus blocks of
green phyllite.

1300 - 1500m no sample - permafrost then outwash

1500m started heading SE.

1600m A 165 brown grey slightly sandy

- 1700m - sub-crop - qtzite (buff white colour)
cherty

- 1850 - 2100m blocky talus at base of
cliffs to N. opposite 40m thick section

() floatated qtzite (gr 2100) 61° att. 020 / 25 ESE

at 2100m A 166 - angular float of

intensely leached oxidized qtzite.

- brown oxidation (may be sphalerite?) replaces
sulfides may be reacting & replacing dolomite
cement in qtzite. > 70% r.h. in places.

Where fresh some dk grey sulfides are visible.

A 167 blocky talus - float similar to
A 166 only much less fracturing - only
3-5% of rk oxidized fractures - 1-2 mm
pyrite cubes (<1%) - traces of grey schist
gtsite has been altered to a shiny
white, sugary textured gtsite.

SE

2490m at anomalous Au. crab.

A 168 f-med gr. sandy silt
creek flows through buck brush/moss
- float 40% dk grey fissile phyllite / chlor.
30% gtsite, 20% metavx, 10% gtsite.

reset to 0m - headed downstream on
E side of creek.

- 0m A 169 grey clayey HM
- 300m artwash - coarse to W side of creek
- 340m A 170 grey brown clayey HM -
lots of gtsite chips in HM
- 390-410m gtsite o.c. 020/23 SE
- 483m A 170 f.gr. sandy silt
float 50% metavx + int-mafic vol. intr.
30% gtsite, 10% dk phyll., 10% metavx
- some rusty

North Pacific Supply Corp. 46 Levels

heading NW through saddle.

reset to 0m

- 75m lg angular boulder of graphitic schist
under lg. hip-up.

- 90-110m o.c. gtsite - dipping approx. 15° ESE

- 210m A 172 brown-grey clayey fill

angular chips graphitic schist.

- 300m no HM - dropped into gul by
between two hills - large o.c. on N.
side 50' high gtsite bluffs

A 173 - silicified, rusty in places w/ vuggy
areas sometimes limonitic (may be weathered
out carbonates) fol c 020/30 E.

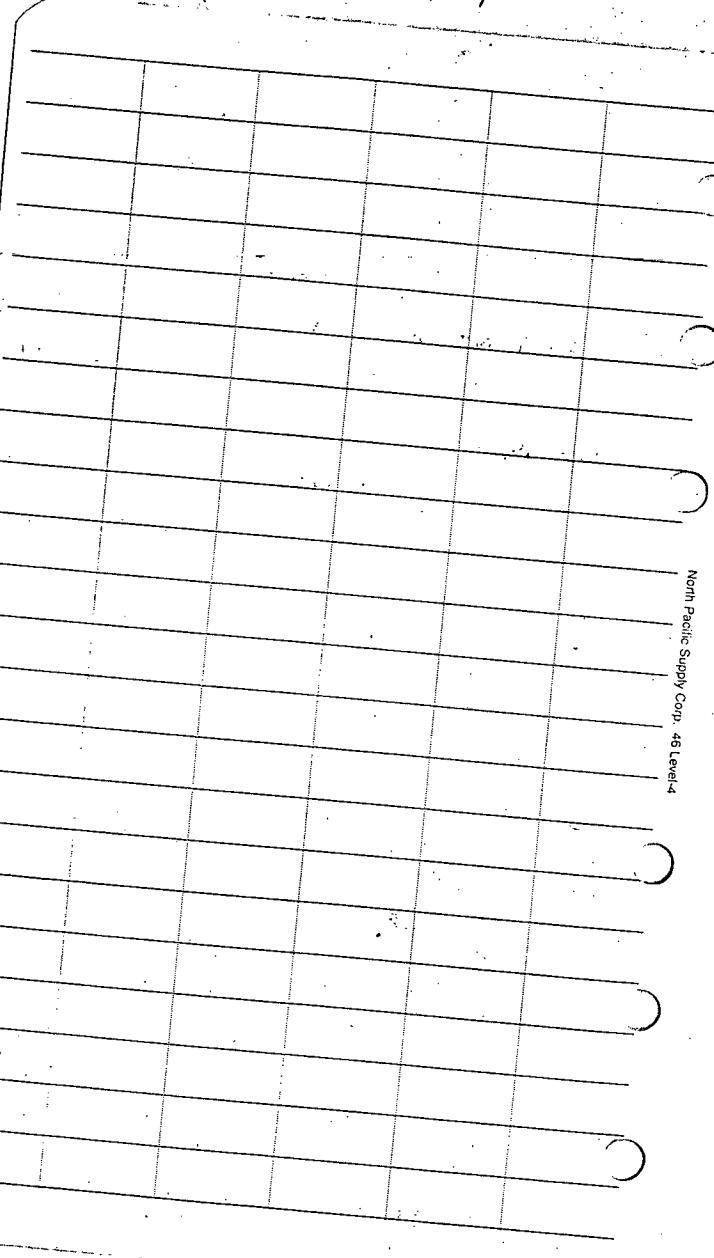
- 600m A 174 brown-grey mixed soft/fid
big gtsite chips.

- ~~175~~ 1

- 1800m A 175 f.gr. sandy silt
from sm creek flowing N.

float dk grey and green phyllite.

gtsite + rusty gtsite.



North Pacific Supply Corp. 46 Level 4

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PACKERS BACK (DAY 1)

At Sample 99-W 46

- 1350' for 300m reset to 0m
-) - 0m - D-59 - good grey clayey basal till - org. chlorite schist chips and mixed ang.-rounded float
-) - 0-230m several angular boulders of pink grey-brown, weakly limonitic gneiss
- 300m D 60 - good basal till
- 600m D 61 " " "
- misc. qtz-schist float
- 615m sub-ang.-boulder of weakly hematite-chert pebble cong.
-) - 790-875m lots of ang. float of gneiss-musc. schist
- 900m D 62 - good basal till
-) - 1025m D 63 - ang. boulder (sub-cap) of ^(pink) qtz-musc. schist w/ secondary strong fol^g of chlorite-carbonate after wavy rusty areas
- 1035m start of steeper slope into next valley.

- 1105m D 64 - gray brown slightly sandy till
- 1170m sub-crop of dk green chlorite schist w. contorted fol²
sections of. 1. brown gneiss
w/ leached ~~oxy.~~ oxy. colors. (H.S.)
- 1200m D 65
Sub-crop similar to D 63 only
stronger bleaching, sericite alt³, and
secondary chlorite fol⁴ (appears to
be ol⁵ meta-silt/shale?) on (monitic) boulders
- 1300m D 66 brown mixed soil H.H.
- sub-crop of D 65 - some w. gr. veins
(interfol⁶ gneiss)
- 1390m D 67 angular 1m boulder of
strongly silic⁷ rock - very low
sulfide gneiss. (more gneiss in front towards
the valley)
- 1450 - 1525m steep slope - sub-crop
same as D 65.
- 1500m D 68 brown sity 90% sand / 10%
within sub-crop zone.
- 1715m D 69 grey clayey basal H.H.
(15m past end of steep, sub-crop slope.)

North Pacific Supply Corp. 46 Level-4

- 2000m D 70 grey clayey hill
from small drainlin feature in main
valley
- 2025m at main creek - slowly flowing
NE - no silt.

PACKERS BACK (DAY 2)

At 99-W-2S (just SE of creek valley)

[135°]

- 995m D-74 good gray basal H.H.
- 1170m D-75 grey clayey hill
some org. chl-schist chips m H.H.
- 1360m D-76 grey clayey H.H.
- 1390m D-77 grey brown mixed
soil - H.H. - lots of chlor. schist chips
- 1600m at top of steep slope
- 1600-1700m sub-crop + d.c. of dk
green chlorite schist interbedded with
gneiss - fol⁸ @ 1600m 360/20 E
Sulfides - fol⁹ @ 1600m
- 1800m D 78 brown sandy loess / hill
looks like mainly loess to 70 cm depth.
seen angular fol w. some clay at 80-90 cm

2000m D 79 fine grey brown silty

mixed till/soil

2200m - D 80 along prominent hill

- 225m-275m sub-crop, rusty silic'd

D 83 + gray w interfoliation and x foliation

qtz. veins - vuggy in places

- 280m start of SO + m o.c. of

above. - D 80 brown silty soil

from near O.C.

fol n ~~026/48 E.~~

- back on line @ 2200m

D 81 grey clayey till - lots of

sub-angular chips of rusty granite in till

- 2270m at break in slope of main valley

- 2400m D 82 grey clayey till

from downlin feature // to main valley

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PACKERS. BACH - SAMPLING WITH GORD

At Sample 79-W 51 (~~1000~~, ~~1000~~, ~~1000~~)

015°

0m - E 1 sub-angular flat from WS2 soil pit
- grey granite? w rusty fractures and
2-3mm qtz veins.

[other floor in pit is eng. rusty chl. schist]

E 2 - 10m down slope from E 1.

ang. boulder (E 2m) of similar rock to

E 1 only / much stronger granulation + silic?

w some open, rusty + lined veins

- deoxidized sulfides in qtz.

190m sub-round to sub-angular boulder of

porphyric granite ~~white~~ feldspar phenos 15mm \times 40
40mm long

200m E 3 good grey basal till - some

ang. dk grey phyll. chips

270m E 4 sub-crop (o.c. fol) \approx 360/100

rusty qtz-muscovite schist - limonitic

fractures + rusty qtz layers in some

places vuggy w qtz veins.

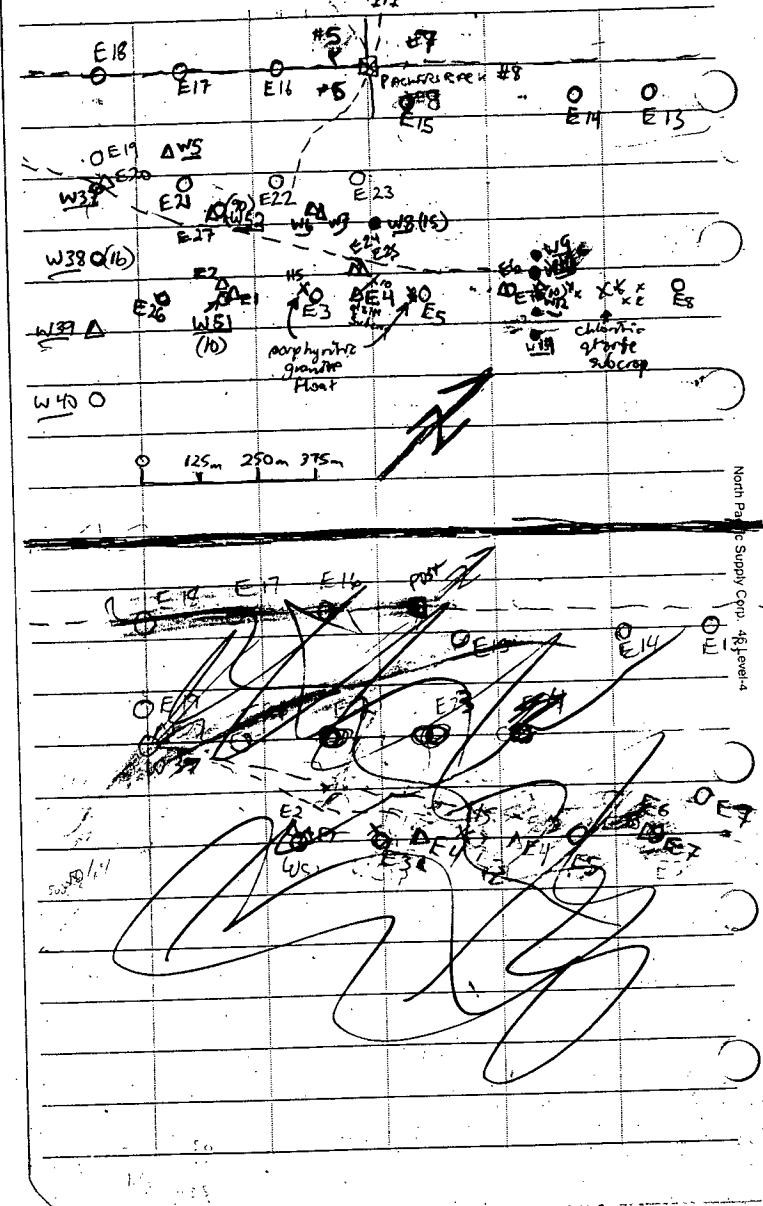
380m Eng. boulders qtz and sub-rounded

granite.

- 400m - E 5 grey clay loam hill
 some ang. granite chips
- 480m ang. granite flt.
- 590m E 6 ang. flt. of dk grey
 locally folded granite or rusty
 gneiss veins up to 1cm wide
- 605m E 7 brown grey clayey hill
 (may have some loess mixed in) 5m down slope
- 640m ang. granite flt.
- 650m crossed strong line (W-sol. in)
- 765m subcrop granite w/ chlorite fol.
- 800-850m " " " "
- 885m E 8 dk grey clay 1:1
 (possible part soil - chloritic granite)
- 1050m small pale colored hill N
- 1100m E 9 grey clayey loam hill
- back @ 1050m - headed NW along
 small hill
- 100-200+ m - granite talus outcrop
 o.c. gneiss veining + rust in places
- n 750 crossed claim boundary strong line
- 1280 - subcrop granite (small hill to S)
- 1315m E 10 - brown grey slightly sandy till

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- reset to 0m [NW]
- 20-70m subcrop talus - granite
- 130m small dry gully N-S
- 300m E 11 - grey clayey hill
- 600m flat marshy valley bottom
 - permafrost in dry - no sample
- [2250] reset to 0m
- 200m E 12 grey clayey hill
- 340m crossed N-S gully
- 410m E 13 grey brown slightly
 sandy hill
- 610m E 14 grey clay hill
- 770-950m N-S marshy gully
 - no sample
- 985m E 15 - grey brown slightly
 sandy hill
- [1315] reset to 0m
- 90m hi! Claim line - ~~fall line~~ SW
- 80m NE of NO. 1 Pack 7/8.



- PACKERS BACK
- At Claim Posts.
- NO. 1 PACKERSBACK 7/18
- 135° following claim line
- 60-90m westerly gully N/S
- 200 m E 16 grey clay hill
- 300-350m N/S gully
- 400 m E 17 grey clay hill - some ang. granite chips in hill.
- 600 m E 18 grey hill
- 135° east to 0m
- 200 m E 19 grey & grey hill
- ang. granite chips in hill
- 280 m at cross line right at sample pit 09-W-37.
- east to 0m 045°
- = 0m E 20 ang. float from soil pit
- rusty granite w. massive type schistosity
- linear fractures and thin gr. veins
- w. w. fol.
- 205m E 21 grey slightly sandy t.
- some ang. & grey granite chips

- 400 m E 22 grey clayey till
- ang. dk grey granite chips in boulders
- 435 m mixed strong like to sand
- 580 m E 23 grey clayey till
- ang. dk grey chlorite granite
and some ang. rocky gneiss chips
- 600 m [1350] near to 0 m
- 190 m crossed 99' cross line
- 208 m E 24 ang. float, rusty
silicified gneiss-mylonite schist.
- E 25 ang. float, rusty, silicified dk grey
- 264 - last sample + line 15 m NE E 4

At Sample E 1 + E 2 (99-W51)

[2250]

- 150 m E 26 - good grey clay till
- ang. to sub ang. chips of felsite and
rusty gneiss.

- Back at 99-W51 [045] 280 m to W52

- E 27 ang. felsite weakly silicified
gneiss or limonite weathering on felsite surface
and limonitic fractures existing 61%

LITTLE SALMON RANGE

- SAMPLING WITH GORD
- At large tributary flowing W
into BEARFEED CREEK approx.
6 km N of Hwy and 3 km
upstream from BEARFEED CR.
- E 28 - f.g. sandy silt.
Major 60% gneiss, 25% psammite
schist, 10% gneiss + massive gneiss.
- minor amounts ankerite that is
moderately silicified E 29. Traces of massive
gneiss w. ankerite matrix? E 30.
- Appear containing NW up E side
of Bearfeed Cr Valley
- 10 m across psammite schist - weakly
recryst. - good folc @ 145/70 SW
- 145 m sub-ang. marble and float like
E 30.
- 1620 m E 31 f.g. sandy silt from
small creek flowing S.
- Floor: 65% psammite schist, 20% gneiss, 10% ankerite
traces of massive gneiss w. ankerite matrix.

- 2000 m crossed overgrown rd. running N/S
+ 2130 m outcrop at SE end of small hill - Qtz vein 015/80 W.

E 32 rusty surface (may be cutting
felsic intrusive? or grade) 1.2 m. lg.
drss py (Arsen?)

E 33 massive gts w. minor epidote?
rusty fractures + 1% f.g. drss py

E 34 - brown + ll from 50 cm over
O.C. - (possibly sand/mud mix).

[360°] near 0 m

- 60 m - 80 m crossed overgrown rd.
- 130 m outcrop dr green chlorite
rock (andesite?)
- 210 m E 35 grey brown clayey ll

Boulders at E 34

[190°] near 0 m

- 140-160 m crossed rd. (heads SSW)
- 210 m E 36 grey brown, slightly sandy ll

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320 - 335 m crossed rd (heads SSE)

) 405 m E 37 brown grey slightly
sandy ll

545 m started following rd

) 610 m E 38 grey clayey ll found
820 m E 39 " "

approx. 30 m W of Rd.

) - 1070 m E 40 grey clayey lN found

- 1400 m outwash - getting into
flat marshy area

- 1600 m rd starts heading SE

Approx 1 km downstream from
E 28.

) Outcrop on SE bank of creek
strongly weathered, silty, alt
alluvial looking soil - 40+ cm

) wide, very gts vein w. mud gr.
drss py (also smaller veins) E 41

E 42 - soil from against O.C.

) Vein at Node 120/80 S.
venning + silty " gravel over 2 m width

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Ray Charles - Birth to Loss

North Pacific Supply Corp. 46 Level 4

BRADEN TARGET AREA

SAMPLING WITH GORD

- ~~at~~ 200m pond approx 3 km NW of largest Von Wilczek Lake on fire break rd. (NW side of lake Swens)
- heading NW along rd.
- 150m junction - new FB rd heads NW old road N.
- following 218 FB rd. to N.
- 200m A 176 grey brown + N
road surface has lots of rounded to sub-angular grt flt. some very
- also sub-angular flt of chert pebble cong.
with silica matrix and leached dist sulfides
1.2%
- 250-300 m to W. 300-500 m N
- 390m bluish and plog. 0-2y. old not see direction
- 400 m A 177 eng. flt rusty, bleached,
strat rock w 3m vuggy open grt & veinlets
500-800 m rd heads NW
- 600m A 178 sub-ang rusty grt flt
top of bluish m. vuggy nodded sections, Ag. grey silt
along small fracture - diss pyrrhotite (1%)
- 725m A 179 dk grey till? lots
of nich - very graphitic from 0-130cm
depth
- almost looks like decomposed graphitic bedrock.

- 1800 - 1800 rd heads W.

1300 - 1550 swampy area near
S. flowing creek @ 1500

Back at A 178 on top of hill

[360°]

1430m A 180 grey clayey hill

1500m [030°] reset to 0m

- 300m A 181 grey brown clayey hill

- graphitic schist chips in hill

- 600m marsh

- 650m A 182 grey brown clayey hill

- 800m started going slightly down hill

- 930m A 183 grey brown slightly
sandy hill.

- 1160m A 184 grey muddy hill

- 1400-1500 permafrost flat area

- 1500-1600 swampy creek (flows between 1510 -
1520m no stn - beaver dam creek)

- 1700m permafrost.

- 1900m A 185 grey slightly sandy hill

- 2050m sub-crop marble (tough tan color)
in places has stellate fractures A 186

A 187 brown soil from against sub-crop

NOTE: AT EDGE OF NWW-SSE FIRE break rd.

- 2200m A 188 brown sandy hill

(possible outwash but some clay)

- 2250-2290 several small outcrops
used to be green andesite mtn.

- 2300m at top hill (E side)

- 2460m A 189 grey brown slightly
sandy hill under 1m. loess

Back at A 186/187 on rd.

- walked out rd to main highway

BRADEN AREA

At Sample A-189

150°

-280m - crossed old fire break rd heading NE

300m A 190 brown grey sandy hill

1430m hit fire break rd coming in from
pond (approx 300m SE of A-186 + 187)

-started following rd SE

500m boulders strong granularite

-580m atwash

-590m A 191 brown grey sandy hill

(could be atwash but some clay contour)

-600-800m rd heads E

800-900m swampy area - rd heads S

900m end of rd in swampy area

continuing @ 150°

-920m A 192 brown grey slightly
sandy hill

-930-1050 recent burned over

-1080m med-creek flowing E - mossy
rocks

135° - 1200m perma frost

-1260m A 193 grey clayey hill

-1500m A 194 " " "

- 1800m A 195 brown grey sandy hill
- 2085m wash
- A-196 grey, fl. under tip-up of
grey-green grass (orthograss?) in
limonitic fractures
- 2130m A 197 grey clayey hill
- 2180-2380 marshy area
- 2410m A 198 grey clayey hill
- 2700m A 199 brown grey sandy hill
- 4900m hit main trap.

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FRENCHMAN LAKE AREA

Sampling with Gord.

-) -100m W. of mouth of creek
flowing into N end of Frenchman
- 270°
-) -250m gully between cokers (N-S)
- 500m " " "
- 400-700 marshy.
-) -810-900m steep slope with bars
A 200? of outcrop of brown graywacke
w. carbonaceous & limonitic fractures
- 860m A 201 brown soil from
near o.c. graywacke.
- 900m on flat slope at top of
o.c. bluffs.
-) -915m A 202 brown sandy hill
- 1130m o.c. graywacke
- 1400m A 203 brown sandy hill
- 1900m A 204 grey brown slightly
sandy hill
- 2300m A 205 grey brown clayey hill
- 2490m - at base of NW-SE cut line
- Started following cut line.
- 2700m A 206 grey slightly sandy hill from 130cm.

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- 2850m - contained up to float in creek.
- A 207 - Lgr sandy silt from E bank of creek.
- Float 65% flaggy bk mst.
35% med to dk flaggy graywacke.
- 10m upstream - o.c. of flaggy bk mst. bedding 154 / 75-80 NE

A 208 - Lgr sandy silt from W bank
(similar to A 207 west) float same as E.

- At junction of creeks healing downstream. rest = 3m
- 85m at cut line.
 - 167m blue flag " EXC 99010
 - 230m A 209 sub-ang. float of arkositic weathered pale grey mkt with limonitic fractures.
(Some ^{magmatic} andesitic tuff float starting to show up in creek)
 - 360m A 210 rusty sub-ang. float poorly sorted graywacke / cong. - calcite + silica? cements

lots of gne + flaggy cal. gneissic rock gives appearance similar to a dolomite.

- 450m completely oxidized float w. organ. calcite lined area.
- 515m A 211 Agr sandy silt float 80% bk. 1 mst. 20% graywacke.

- contouring E.

Prospecting Proposal under the YMIP for Gordon Richards and Dave Bennett

Five areas proposed are:

Macmillan
Frenchman
Braden
Little Salmon Lake
Scroggie

These five areas are described below followed by a general description of issues relating to all areas.

MACMILLAN

- a) Project Location:
 - i) MacMillan (Summit, Middle, Pelmac)
 - ii) Area lies between Klondike Highway and Tintina Trench north of Pelly River on NTS map sheets 105L/13, 105M/04, 115I/16 and 115P/01 within Mayo and Whitehorse Mining Divisions.
 - iii) Refer to Figures 1,2,3,4,5 and 5A. Claim maps have been updated. Only the PACKERSBACK claim block owned by G Richards occurs in the area.
 - iv) Not applicable.
- b) Access to the area will be made by helicopter to the PACKERSBACK claims area and by All Terrain Vehicle along the Summit Lake Trail and Diamin Lake Trail for the establishment of camps in each of these areas and from which traverses will be made.
- c) Prospecting Targets:
 - i) Gold (silver) is the main target with Zn,Pb,Cu, a secondary target.
 - ii) Epithermal gold mineralization within rocks mapped as Carboniferous to Permian metamorphics and related to buried or existing intrusions.
Sedimentary hosted Zn-Pb-Ag like Clear Lake 20-km southeast
Volcanogenic massive sulphide mineralization like Wolverine and Kudz Ze Kayah.
- d) Reason for proposal is to follow up unexplained anomalous RGS data in an area underlain by rocks suitable for hosting epithermal/mesothermal gold mineralization and base metal with precious metal massive sulphide mineralization. Although the geochemical response is not the strongest in the general area, it is considered important for reasons discussed below. Work in a portion of the proposed area in 1999 under a YMIP grant showed that significant anomalous till geochemical patterns were possible in drainages with low order RGS response. Available geological, geochemical, geophysical and minfile occurrences have been researched with pertinent info summarized below:

Geological: Figure 2

- Immediately south of Tintina Trench and fault system
- Carboniferous to Permian quartzite, schists, phyllite and limestone is main rock type
- Above rocks mapped only on 105L (Colpron OF 1998-3). Other references are OF1101 115I; map 1143A 115P; map1997-1 105M
- CPsn (above) intruded by Tatlimain Batholith along south margin of area and a number of stocks and plugs of quartz monz to diorite composition throughout rest of area.
- Upper Cretaceous (?) Carmacks Group andesite, basalt flows and tuffs with some granite boulder cgl overlies and in apparent fault contact (downdrop) with CPsn.
- Late Tertiary quartz feldspar porphyry plugs and a granite to syenite porphyry stock are present. Detailed mapping on 105L indicates folding overturned to north and mappable stratigraphy including felsic to intermediate metavolc rocks – suitable for VMS mineralization. This geology projects along strike onto other map sheets.

- Glacial history provided by map 1999-2 Duk-Rodkin and GSC Yukon Digital Geology. Refer to Figure 4. Youngest glaciation is the Late Pleistocene McConnell ca.22ka ending about 10ka. It is easiest to identify in the field because of its young age. In the area of interest it extended along lower slopes of Tintina trench and MacMillan and Pelly Rivers as indicated on Figure 4. The next oldest glacial period was the Middle Pleistocene Reid ca.200ka which ended about 50ka. It occurred as valley glaciation in the area of interest flowing northwest along Tintina Trench and westerly through east-west valleys to just west of the Klondike Valley. Several stages of pre-Reid glaciation occurred from Pliocene to early Pleistocene time and overrode the hills in the proposed area. Evidence for this glaciation is in general difficult to find. In our area, evidence is occurrence of tills somewhat mixed and variably leached on the upland surfaces above limits of later glacial periods. There is also an apparent glacially smeared geochemical pattern developed in the tills on this upland surface based on last year's results. Inferred direction is to the west.

Geochemical

- 70th and 90th percentile values plotted on Figure 3 for many elements. Drainage patterns are emphasized.
- Northwest elongate trend of anomalous As-Sb measuring 15 km by 50 km with numerous Au anomalous values, many Zn,Cu,Pb anomalies, an area of highly anomalous Hg, and several areas of anomalous Sn , W, and Ag.
- Large areas with no RGS data are coloured yellow. Many of these are significant exploration areas as they abut areas of anomalous geochem.
- Seven drainages have repeated anomalous gold values and are coloured in red to emphasize this occurrence. Six of these drainages are also highly anomalous for As and Sb and many are also anomalous for several other elements.
- Three areas with clusters of drainages anomalous for several elements have been selected for detailed prospecting. From north to south they are referred to as Summit, Middle and Pelmac and are shown on figure 2.

Geophysical

- Figure 5 is a printout of aeromagnetic data on the Yukon Digital Geology CD
- There is a general flat background with few mag high features.
- Comollo Pluton mapped by Colpron has a high magnetic response although the other portion of this pluton, three km NE has no mag high.
- Carmacks Group has a high mag response over some portions of its mapped extent
- The Tatlaymain Batholith has a low mag response.
- The rhyolite porphyry stock in the SE corner of 115P has weak mag highs associated with its north and south contacts.

Minfile Occurrences (Fig 2 for location)

- 115P038 Firebird,Firelord, Firestone,Firedevil. Staked 1981, worked on to 1988 with hand trenching. In qtz musc schist at contact with Cret granite. Staked for gold potential.
- 115P039 Phoenix Staked 1980 in conjunction with nearby placer prospecting.
- 115P022 Gillis. Staked 1950 and 6.4 km SW in 1981 as Raven, Pearl. Gillis on ultramafic. Raven in area extensive overburden.
- Numerous Zn-Pb-Ba occurrences and deposits (Clear Lake) to SE, and E of area.

e) Proposed Work. Areas shown on Figure 2.

Summit Area.

- Till sampling throughout area at 300-m interval on lines roughly perpendicular to ice direction spaced two km apart. Samples will be collected from pits dug by shovel in order to see soil profile and get below oxidation, loess and surficial disturbance.
- Silt samples will also be collected wherever possible.
- Two areas of anomalous values for Au-As-Sb from tills collected last year will be followed up with sample lines spaced one km apart over two or three lines up-ice. Refer to Fig 5A.
- All outcrops will be mapped and sampled if mineralized.
- Control will be by topo map, hip chain or pacing and compass.
- Helicopter camp will be located on the Packersback claim for work around the claims.
- ATV access along the Summit Lake trail will be used to locate a camp for access to the southern half of this area.

Middle Area

- Till sampling throughout area similar to above with the use of soil samples on steeper slopes where tills may be lacking. Silts where possible
- Soils will be collected at 75 m interval where required.
- All outcrops mapped
- Particular attention will be paid to the drainages with repeated 90th percentile gold values, which also contain strong As, Sb, and base metal anomalies associated with metavolcanic clastic rocks within quartzite. Of interest also is the NW trending apparent fault contact between Carmacks Group andesites and CPsn as anomalous geochem appears strung out along this contact. Potential for massive sulphide mineralization will also be examined.
- Control by topo map hip-chain and compass.
- Access by ATV along trail to south side of area for establishing camp.

Pelmac Area

- Till sampling as above and soil sampling on steeper slopes where warranted. Silts where possible.
- Particular attention to massive sulphide potential in two drainages along the north side of area, to epithermal gold potential in large area anomalous for Au-As-Sb-Hg. Of note is low mag response of Tatlimain Batholith with strong Sn anomalies in creeks draining the north contact zone. (18, 13, and 7 Sn from west to east and 4 W from middle sample – See Fig3). Small Tertiary plug in 3532 drainage, westerly of above Sn anomalies, is described as 60 to 70 % phenocrysts. Dolomitic quartzite in drainage of sample 3536 at east end Sn anomalies is associated with strong Au, Sb, As and is an excellent target.
- Control will be by topo map and compass on steeper slopes and by hip chain and compass on flatter terrain.
- Access by helicopter positioned fly camp.

FRENCHMAN

- a) Project Location
 - i) Frenchman Area
 - ii) Area lies west of the north end of Frenchman Lake on NTS map sheets 105L/04, 05 and 115I/01 within Whitehorse Mining Division.
 - iii) Figures 1, 4, 6, 7, &8.
- b) Access to the area will be by vehicle along the Tatchun Lake Road to Kelly Ck Bridge where a field camp will be established as a base for traverses.
- c) Prospecting Targets:
 - i) Gold and base metals
 - ii) Epithermal gold and massive sulphide mineralization.
- d) Reason for work is to follow up unexplained anomalous RGS data in an area of widely spaced data with one notable anomaly, no.3287 on Figure 8, returning high base metals with moderate As, Sb, Au anomalies. Nearby samples are moderately anomalous. Additional information includes the following:
 - Available geology on OF 1101 by Tempelman-Kluit indicates the area to be underlain by mappable units of Lower Jurassic resistant arkose, Lower to Mid Jurassic khaki green dacite tuff and Upper Triassic to Jurassic limestone. See Figure 6. A northwest open synform occurs in the area and northwest faults including the Tatchun Fault cut the rocks described.
 - Late Pleistocene McConnell age glaciation directed to the northwest dominates glacial history of the area. Figure 4.
 - Aeromag response in the area of interest is featureless although strong mag highs lie immediately north. Figure 7.
 - Minfile occurrences do not occur in the area. Nearest ones are coal occurrences in the Laberge Group some 15 or 20-km SW.
- e) Proposed work. Refer to Figure 8.
 - Prospect float and outcrop along drainage sampled by RGS 3287.
 - Collect till samples along northeast lines perpendicular to ice flow at 300-m intervals along lines spaced two km apart.
 - Collect silt samples wherever possible.
 - Record all outcrops.
 - Prospect for altered float along all traverse lines.
 - Control will be by hip chain and compass with aid of topo maps.

BRADEN

- a) Project Area
 - i) Braden
 - ii) Area lies immediately north of Von Wilczek Lakes between Minto and Pelly Crossing within the Whitehorse mining Division on NTS map sheets 115I/10 & 15
 - iii) Figures 1, 4, 9,10 and 11.
- b) Access to the area will be along the Klondike Highway for traverses into the area around RGS sample no 1119. Further access along the secondary road heading north from Minto will provide access to RGS sample no. 1104. The anomalies south of Pelly River near Braden Canyon will be accessed by boat only if a boat is available and time permits.
- c) Prospecting Targets
 - i) Gold and Zn-Cu-Pb-Ag
 - ii) Epithermal & mesothermal gold and massive sulphide mineralization.
- d) Reason for prospecting is to follow up RGS data that is anomalous for As,Sb & Au and base metals. Sample 1119 has moderate As & Sb with duplicate 90th percentile Au values in an area of subdued topography and glacial debris that could be masking a gold deposit. Sample 1104 has a strong Sb result with moderate As & Au adjacent to a large area of subdued topography and no RGS data. Additional information includes the following:
 - Geological information in OF 1101 by Templeton-Kluit indicates the area to be underlain by Carboniferous – Permian metamorphics including much limestone. See Figure 9. Skarn mineralization is possible. RGS data point information indicates Carmacks Group volcanics occur as float at sample sites 1104 and 1105. Jurassic – Cretaceous intrusions lie just east and west of the area shown on Figure 11. Outcrop is sparse in the area making till and float prospecting a good method of prospecting.
 - Glacial history studies indicate the area lies beyond the reaches of Late Pleistocene McConnell Glaciation. The area was last glaciated by the Reid Glaciation which ended 50ka and occurred as low lying valley glaciation directed to the WSW in this area, leaving some upland surfaces above about 3000 ft elevation untouched but still displaying glacial features of Pliocene to Early Pleistocene pre-Reid glaciation. The old age to the glaciation is believed to have attenuated, through leaching and mixing of materials, any strong geochem response that may have existed. See Figure 4.
 - Aeromag data shown on Figure 10 shows some weak to moderate mag highs that have been plotted on Figure 11. One weak mag high is an east-west 5-km long feature that coincides with the high gold geochem values at sample 1119 and may be indicative of pyrrhotitic or magnetic mineralization associated with an epithermal gold system.
 - Minfile occurrences include 115I035, which is a mariposite occurrence, and 115I019 which is a copper – silver occurrence in hornblende gneiss. See Figure 11. Four VMS claims shown on Fig 11 were staked in 1998 and have lapsed with no work recorded.
- e) Proposed Work. Refer to Figure 11.
 - Prospect 1119 drainage for mineralized outcrop and float.
 - Collect till samples at 300-m intervals along lines spaced 2 km apart in vicinity of 1119 and 1104.
 - Collect silt samples wherever possible.
 - Record all outcrops.
 - Control will be by hip chain and compass with aid of topo maps.

LITTLE SALMON LAKE

- a) Project Location
 - i) Little Salmon Lake
 - ii) Area lies on Snowcap Mountain south of the west end of Little Salmon Lake and on low-lying hills north of the west end of Little Salmon Lake in Whitehorse Mining Division on NTS map sheets 105L/03,04,05 &06.
 - iii) Figures 1, 4, 13, 14, 15 &16.
- b) Access is by vehicle along the Carmacks – Faro road to the west end of Little Salmon Lake and then by boat to the shoreline north of Snowcap Mt and by ATV along trails north of the lake.
- c) Prospecting Targets
 - i) Gold and possibly massive sulphide.
 - ii) Epithermal gold. On Snowcap Mt mineralization might be related to the quartz monzonite plug. North of the lake skarn mineralization in the limestone unit is possible and further east mineralization related to the Cretaceous syenite/monzonite is possible.
- d) Reason for prospecting is to follow up anomalous gold geochem reported on RGS data supported by anomalous As & Sb with minor base metal anomalies as shown on Figures 15 & 16. Following support is provided:
 - On Snowcap Mt, Figure 15, a small plug mapped by government geologists, Figure 13, has anomalous Au-Sb-As geochemistry in RGS silts. Of particular interest are the gentle upland slopes above 4500-ft elevation where outcrop may be sparse. Any mineralization on the steep lower slopes would probably already be found.
 - North of the lake, Figure 16, there are two targets: one sampled by 3166 and 3167 where CPsn is apparently intruded by a Cretaceous syenite or monzonite. Here anomalous geochem samples appear to be sampling ground occurring in the intruded roof rocks of the syenite; further east anomalous geochem results occur in an area of limestone and CPsn providing a skarn target for gold mineralization. Both areas have repeated 90th percentile gold in one and two drainages respectively.
 - Westerly directed McConnell Glaciation has occurred through the area with the exception of the ridge underlain by limestone and Snowcap Mt both of which underwent Reid Glaciation. Fig 4.
 - Aeromag data shown on Figure 14 is featureless in the areas of interest. Stock on Snowcap Mt has a low mag response indicative of reduced granites.
 - Two Minfile occurrences occur in general area as shown on Figure 13: 012 lies along the north shore of Little Salmon Lake in CPsn near a small granodiorite stock. Minor Cu mineralization reported by GSC but never located; 060 lies south of the west end Little Salmon Lake. Two broad areas of quartz sericite altered rhyolite contain anomalous gold up to 73 ppb. Recent descriptions of massive sulphide style mineralization are found in YEGS 1998 & 1999 and project NW to the north side of the general map of Figure 16.
- e) Proposed Work. Refer to Figures 15 & 16.
 - Prospect the upland surface around Snowcap Mt and the drainages sampled by 3155 and 3156 and the intervening creek.
 - Collect tills at 300m intervals along lines perpendicular to ice and spaced two km apart.
 - Collect silts where possible.
 - Map all outcrops.
 - Control will be by hip chain and compass with use of topo maps.

SCROGGIE

- a) Project Location
 - i) Scroggie
 - ii) Area is located along the upper drainage of Scroggie Creek south of the Stewart River in Dawson Mining Division on NTS map sheets 115J/15&16 and 115O/01&02
 - iii) Figures 1, 4, 17, 18, 19 & 20.
- b) Fixed wing aircraft provides access to the area from Dawson, 70 km to the north, to a good gravel airstrip on Scroggie Creek where an active seasonal placer mine is in operation. ATV can be rented from the operator for reasonable charge for access to upper Scroggie Creek and Mariposa Creek.
- c) Prospecting Targets
 - i) Gold
 - ii) Epithermal / mesothermal gold mineralization similar to the wide variety of deposits already known in the Tintina Gold Belt.
- d) Reason for prospecting is to continue with last year's successful prospecting program in the same area. The following points are helpful:
 - RGS data provides little and in some cases no indication of mineralization occurring in the area even though some success was achieved last year.
 - Last year's silt samples gave anomalous values only where they were collected within or very close to an area of anomalous gold in soils. Others described this same phenomenon on properties in the Pogo gold camp at the recent Cordilleran Roundup.
 - A two km by two km area containing silts and soils anomalous for As & Pb, with a smaller contained anomalous Bi, Au, S and Sb zone was identified in the general area as was a one and one-half by one km zone of anomalous Au defined by soils and rocks (RUM RUN claims) even though the RGS data was negative.
 - Detailed silting did however identify both zones and it is this style of prospecting that will be used most in the area of interest.
 - The granite is a target for hosting large tonnage low-grade gold like the Fort Knox deposit in Alaska. RUM RUN claims are such a target.
 - The metamorphic rocks provide a target for higher-grade lower tonnage deposits such as Pogo, Donlin Ck and many others found in the Tintina Gold Belt.
 - Several other claims have been staked on spec by local individuals. Their claims are shown on Figures 19 and 20.
 - Extensive placer gold production along Scroggie and Mariposa Creeks.
 - The area has not been glaciated which is assumed to have resulted in deep leaching particularly where sulphides are present. This is probably the biggest factor in explaining the low metal values in the RGS data. Refer to Figure 4.
 - Aeromag data, Figure 18, shows a low mag response to the granite batholith indicative of reduced intrusion and thus good association for Tintina Gold Belt style mineralization. A mag low occurs over the Au-Bi-As-Pb anomaly described above on the west side of Scroggie Creek below Stevens Creek. This mag low extends ten km up Scroggie Creek into the headwaters of Cripple Creek, as does an orange weathering quartz muscovite schist. An intermittent mag high occurs along both sides of this mag low. Interpretation of this pattern is uncertain but may become useful during the course of our prospecting. A pronounced mag low occurs within the granite over ground sampled by Y59 that was anomalous for gold (30ppb).
 - Minfile occurrences in the area and shown on Fig 17 are as follows: J103 staked 1987 – no info; O075 originally staked 1917 over qtz veins (?), restaked 1987 to cover active placer ground; J072 staked 1970 – Cu, Mo, py-mag-qtz veins cut qtz mica schist near Cret qtz monz stock. IP and mag response; 115J104 staked 1987 – no info; 115O116 staked 1987 over peridotite for PGM & Au potential; 115J092 staked 1977 for Uranium potential; 115J106 staked 1988 – no info.

e) Proposed Work. Refer to Figure 20.

- Stake claims over the Au-Bi-As-Pb anomaly discovered last year.
- Follow up on sample Y59 (30 ppb Au) by silting the unsampled easterly flowing creek 700 m south, prospecting both creeks for mineralized float and running a soil line at 75 m intervals along a contour line at mid slope on the hillside.
- Collect silts from all flowing streams within the area outlined on Figure 20.
- Collect soils at 75-m interval along a contour line over the quartz muscovite schist north of Scroggie Creek between Stevens and Mariposa Creeks.
- Map all outcrops.
- Control for silting will be by topo map and compass, for soils by hipchain and compass.

GENERAL FOR ALL AREAS

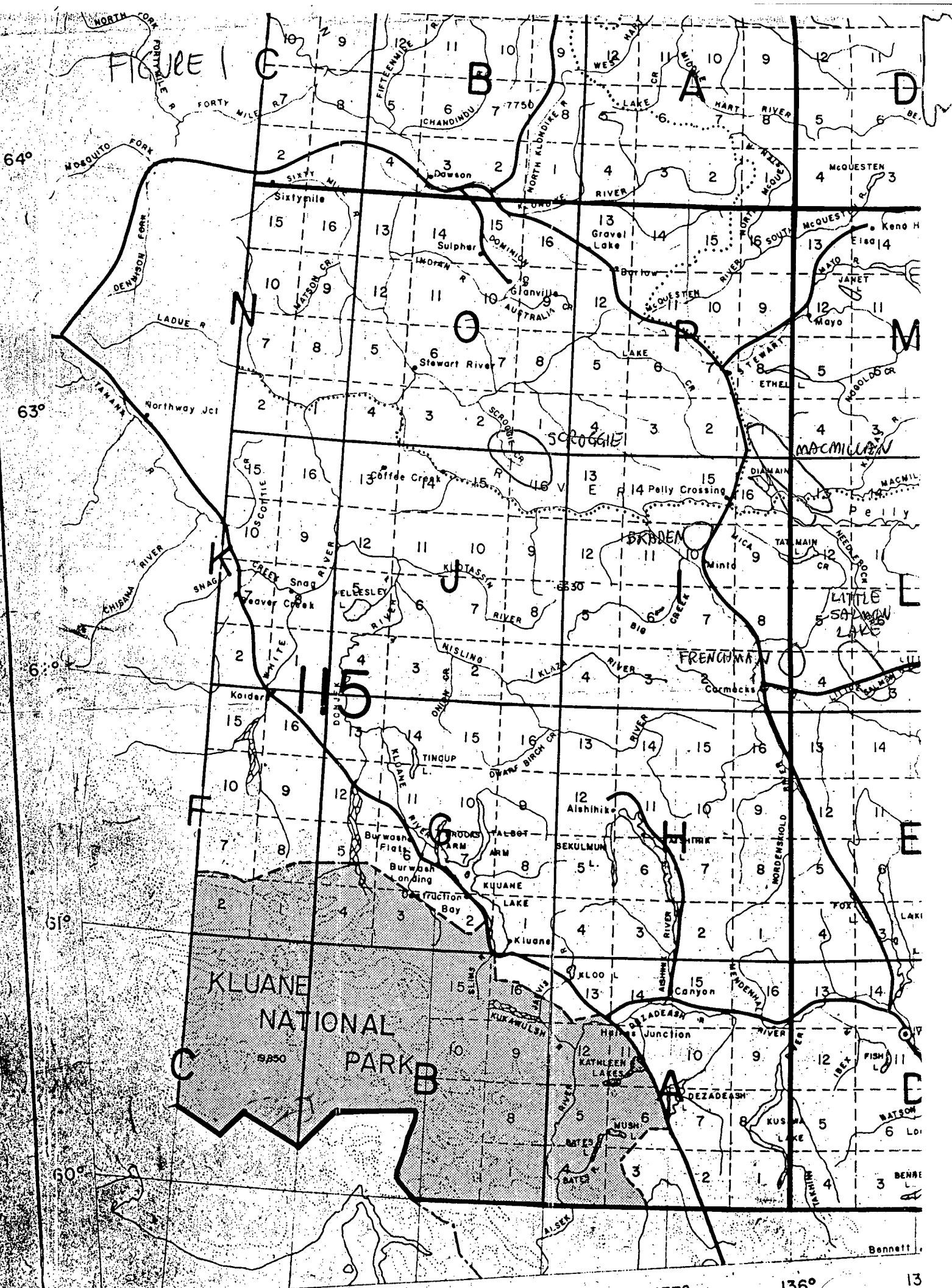
- e) General. Minimal disturbance to land in all areas as only surficial samples will be collected. All garbage will be compacted and carried out of the bush for proper disposal in garbage receptacle or municipal landfill.
- Samples will be sent to Chemex Labs for analysis.
- Till samples weighing approx 2 kg will be dried and screened to -150 mesh.
 - Soil and silt samples weighing approx 1 kg will be dried and screened to - 80 mesh.
 - Rock samples are generally made up of three to seven chips and will be crushed and pulverized for digestion and analysis.
 - All samples will be routinely analyzed for gold using fire assay preconcentration and extractable solution – atomic absorption finish on a 30 gm sample thereby producing limits of 1 – 1,000 ppb Au.
 - All silts will also be routinely analyzed by a 32 element ICP package.
 - Areas with anomalous gold results will have some or all of their till and soil samples selected for ICP or MS-ICP analysis.
- f) Supporting Data. The following will be provided in our Summary or Technical Report.
- Topo map at 1:50,000 scale showing location of all samples and outcrops.
 - Copy of field notes describing all samples and outcrops.
 - Copy of all assays and geochemical data
- g) Estimate of working days in field and number of samples collected provided in the following table;

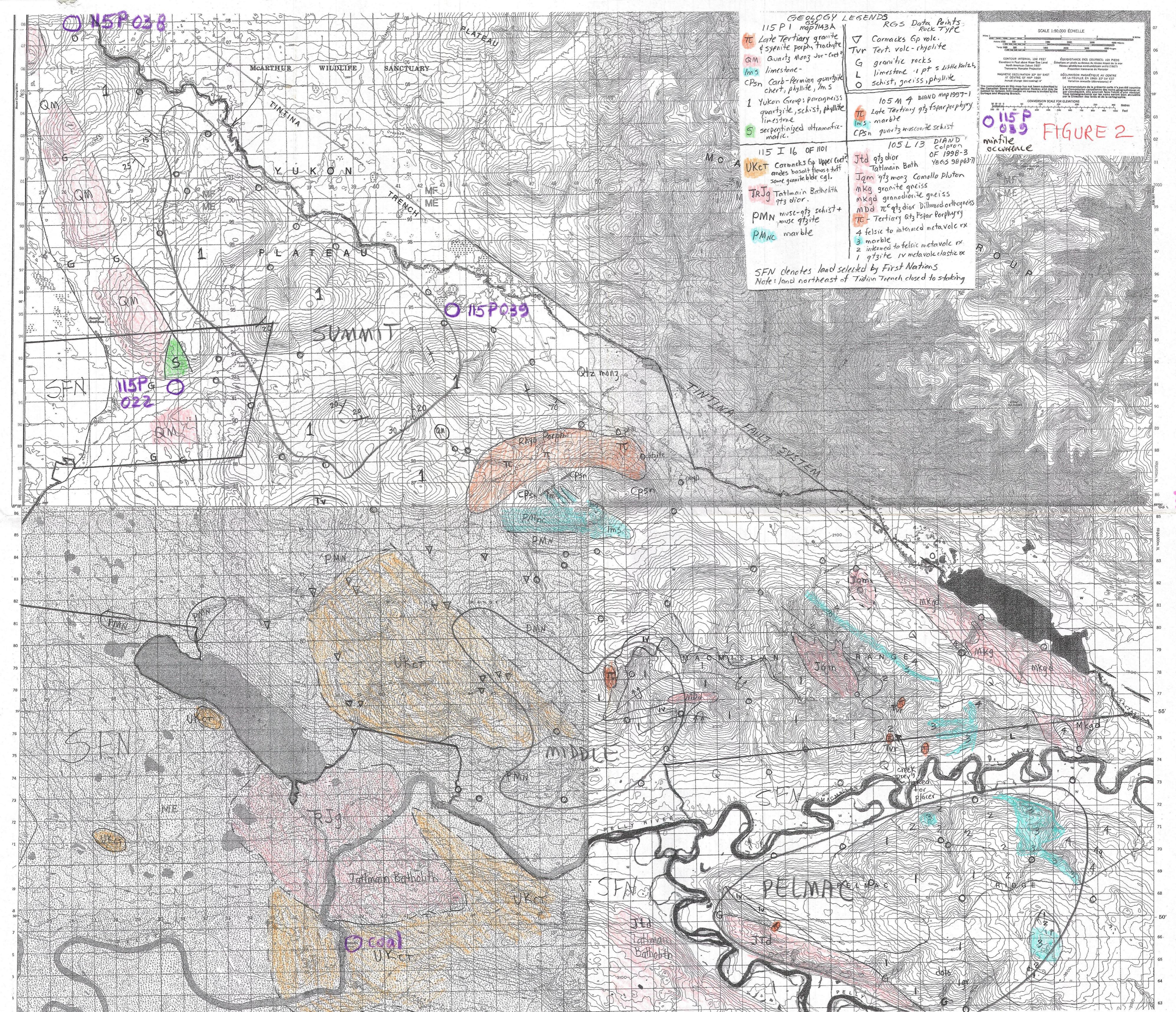
AREA	G R Days	D B Days	# samples
MacMillan	15	15	450
Frenchman	4	4	90
Braden	4	4	90
Little Salmon Lake	4	4	90
Scroggie	5	5	140
TOTAL	32	32	860

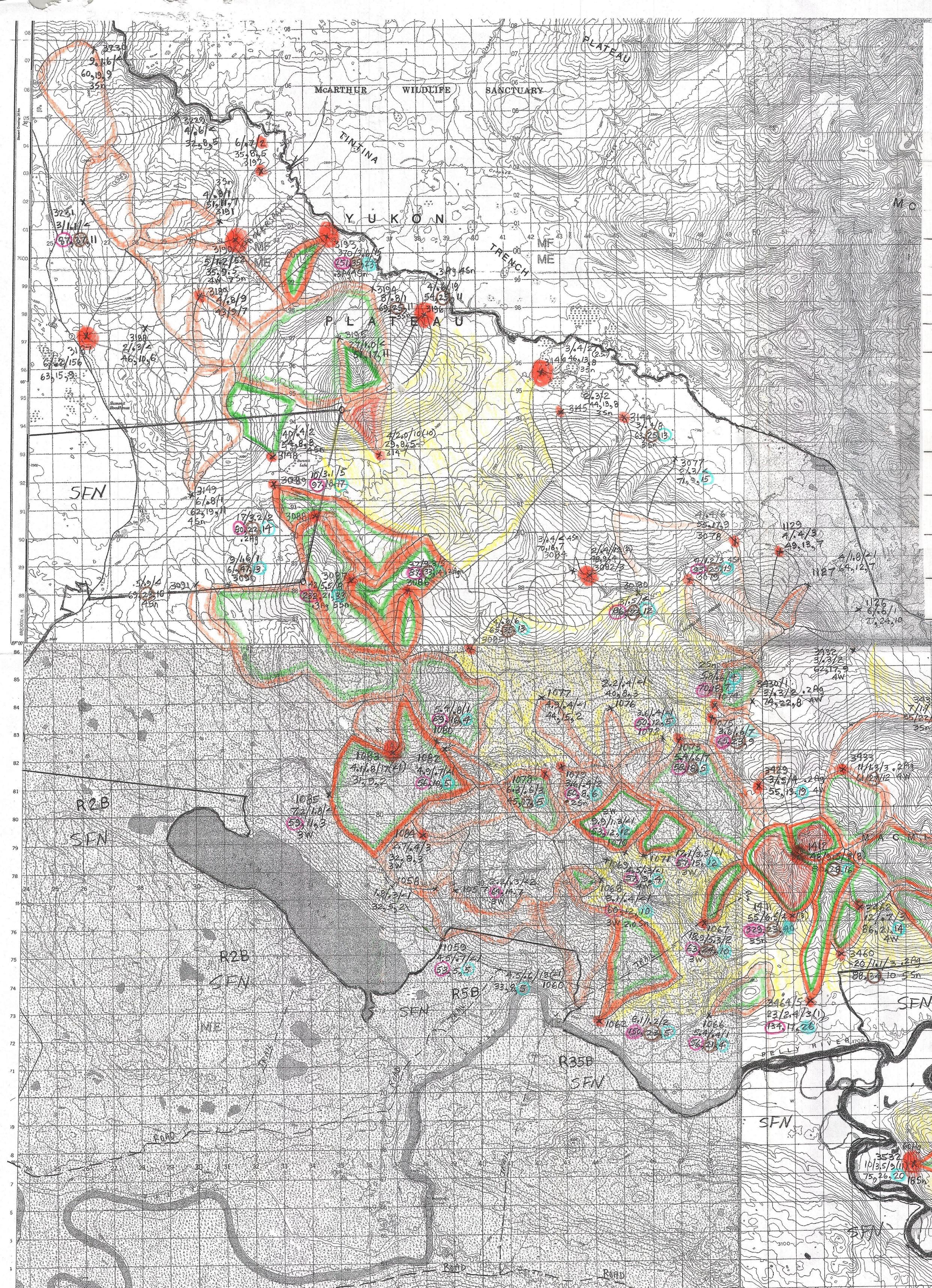
- h) Project budget provided on application form. Gordon Richards and Dave Bennett are proposing to work together on the above proposal under two separate grants as described in section 2 i b ii on page 6 of YMIP outline and discussed with Mr Ken Galambos, coordinator for YMIP, Feb 28, 2000. The area covered and expenses will be divided between the applicants as described therein.

BUDGET SUMMARY for ALL FOUR PROPOSALS

ITEM	Grassroots	Grassroots	Target	Target
	G Richards	D Bennett	Packersba	Rum Run
Daily Living Expense	1120	1120	280	280
Truck 2400km @ \$.42/km =1008 ¼ share	250	250	250	250
Helicopter \$1900 split	950	950	1900	
Fixed Wing to Scroggie Ck				950
ATV Rental split	300	300		
Geochem	7800	7800	6000	3750
Report	500	500	500	500
Freight samples to Chemex Labs Vcr	680	680	300	200
Supplies	600	600	200	200
Wages			3200	3200
TOTALS	\$ 12,200	\$ 12,200	\$ 12,630	\$ 9,330







RGS Geochem Legend

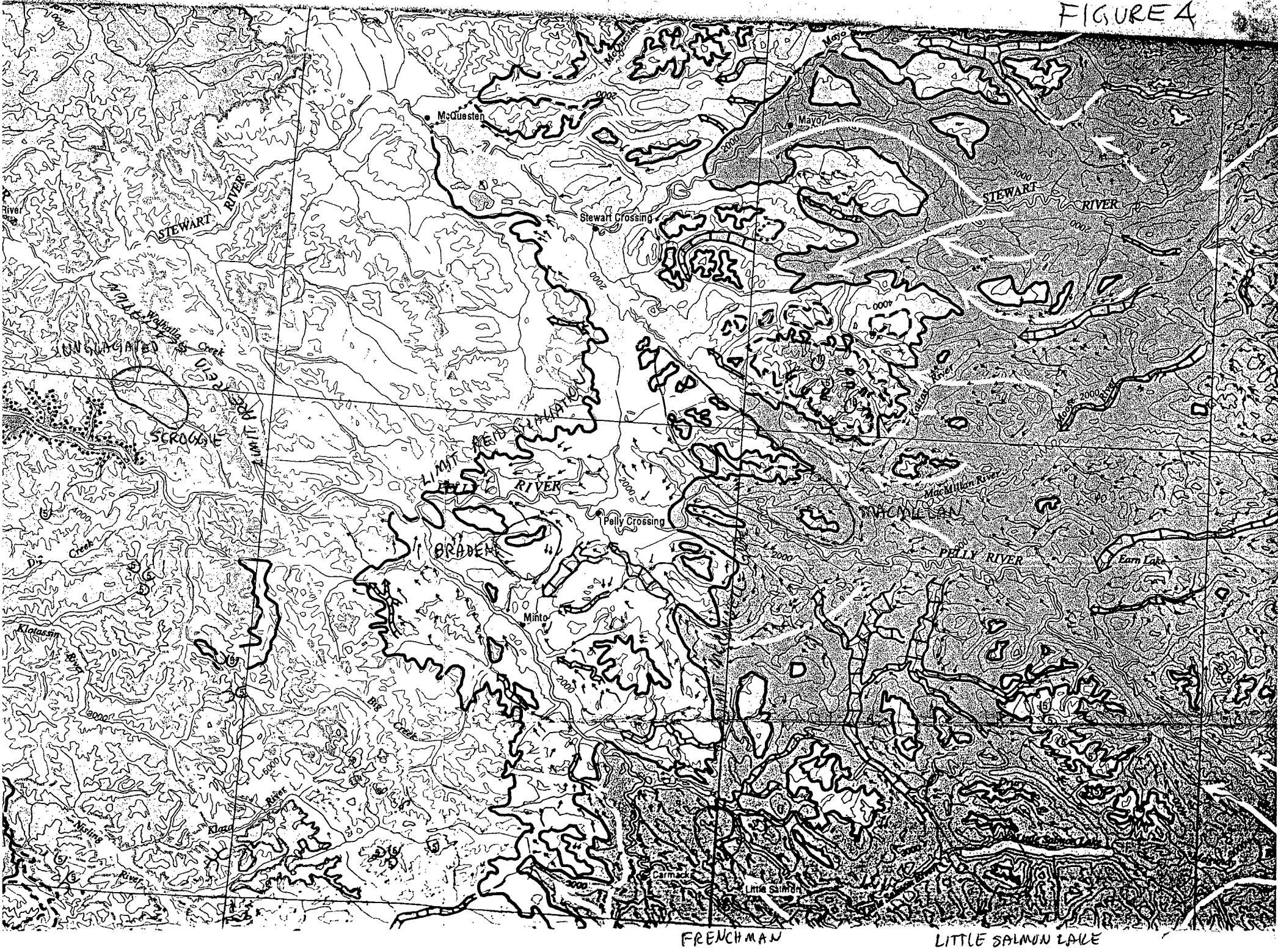
	Sample no.
3193	ppm As / ppm Sb / ppb Au
X 370/3.6/15	ppm Zn / ppm Cu / ppm Pb
X 251, 35, 23	Aig reported if ≥ 2 ppm
+ 3 Ag 4 Sn	Sn reported if ≥ 3 ppm
1411	W reported if ≥ 4 ppm
55/6.5/4(3)	(3) value for 2nd analysis Au

FIGURE 3

	As	Sb	Au	Zn	Cu	Pb						
	70%	90%	70	90	70	90	70	90	70	90	70	90
115P	(4)	(6)	(.4)	(.6)	(2)	(3)	(58)	(77)	(15)	(24)	(8)	(11)
	8	27	.8	2.1	2	14	80	151	22	35	12	20
115I	5.4	9.2	.4	.9	2	3	50	65	16	24	4	6
105L	(8)	(14)	(.6)	(1.4)	(2)	(7)	(70)	(88)	(25)	(38)	(11)	(16)
	9	17	1.0	2.5	3	7	100	208	27	43	13	23
105M	11	30	.9	2.2	3	7	100	169	30	42	15	21

No Data Element	Colour Code for anomalous values	70%tile	90%tile	Au only: if both analyses are anomalous
As				
Sb				
Au				
Zn, Cu, Pb				
Hg				

FIGURE 4



5

1

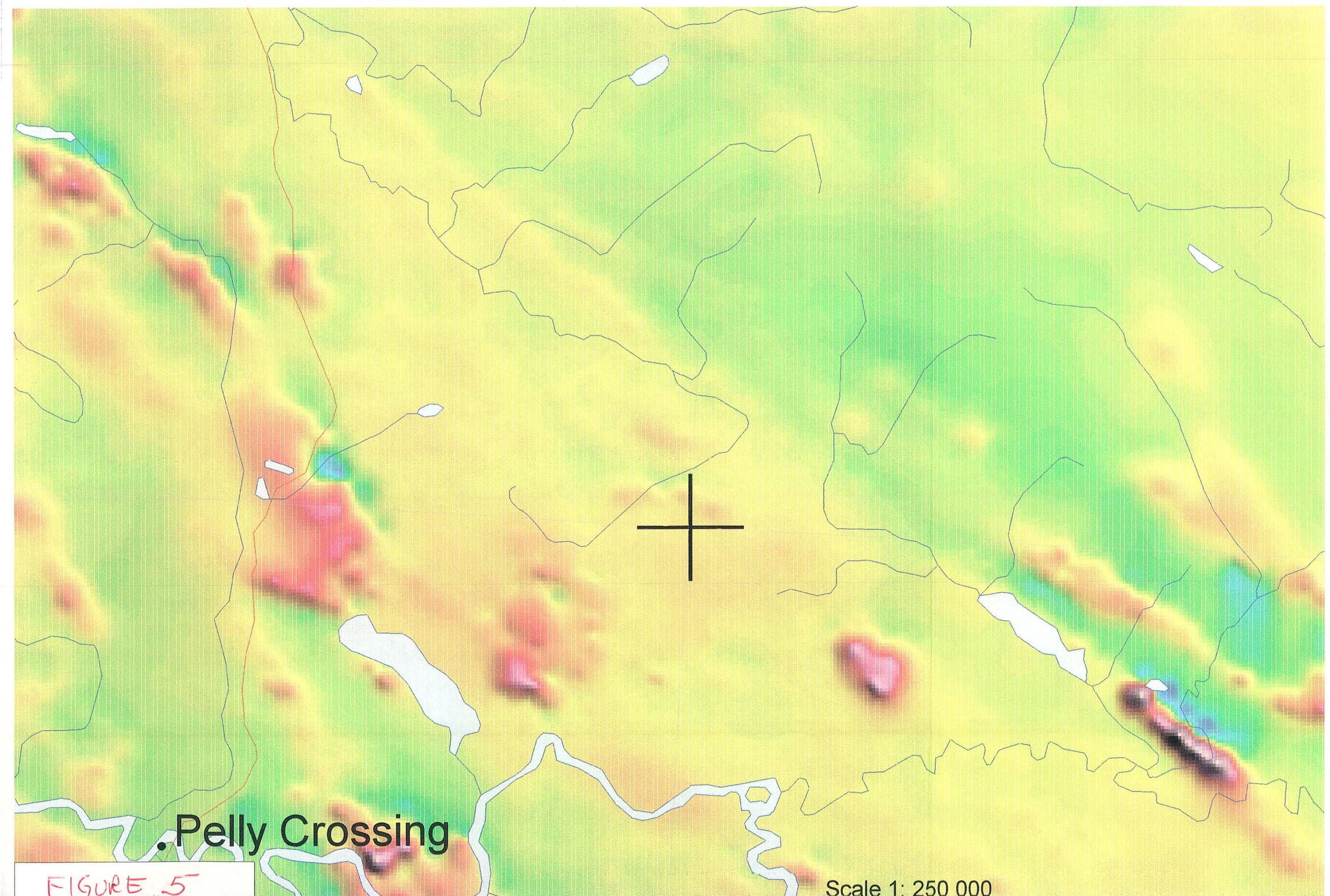


FIG 5A

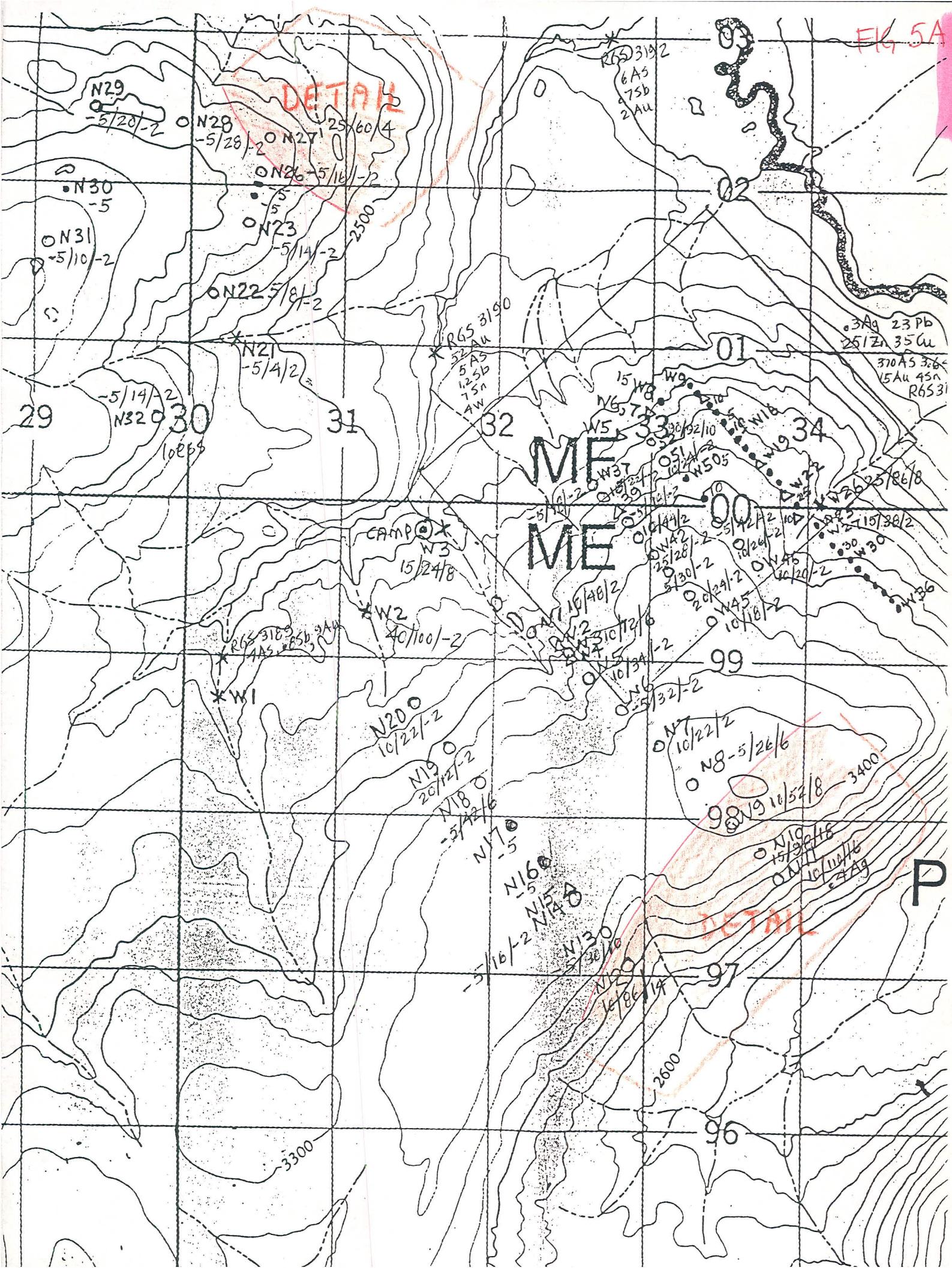


FIGURE 6

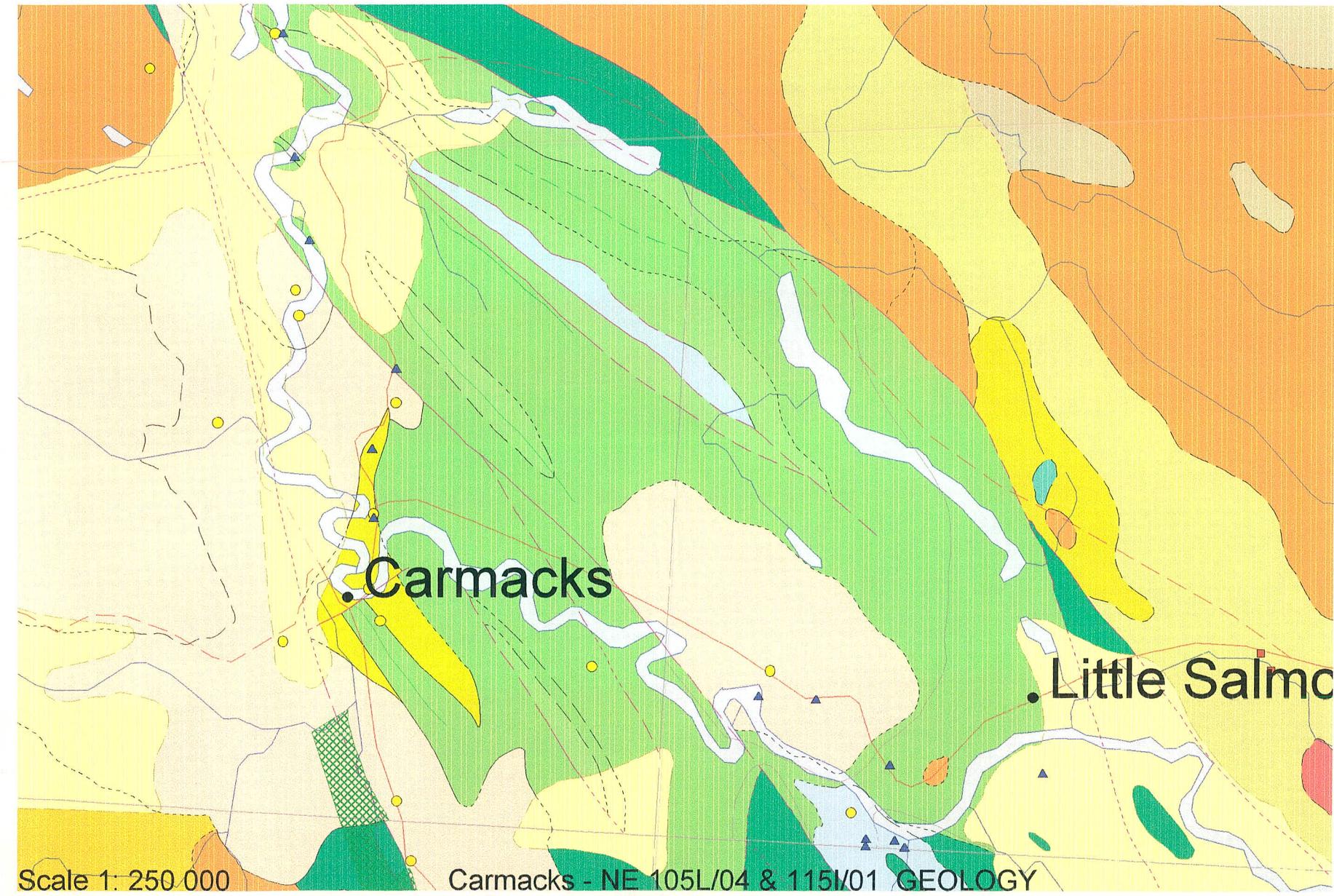


Figure 7

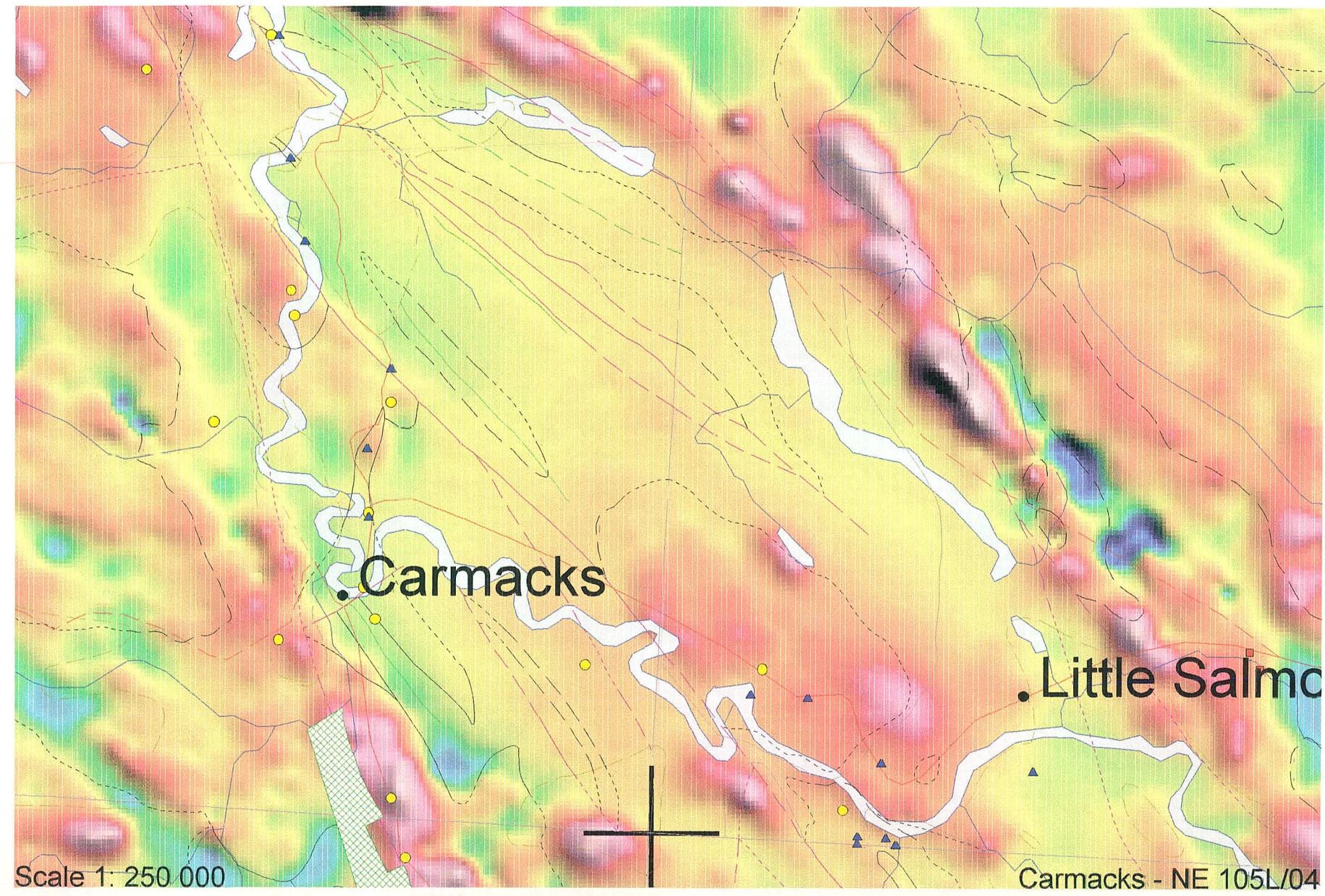


FIGURE 8

RGS Geochem Legend
 X 3087 sample no.
 5.8/3/21 ppm As / ppm Sb / ppb Au

70%tile + 90%tile for As, Sb, Au
 thresholds for Laberge Group on 105L
 believed to be like values for 115I

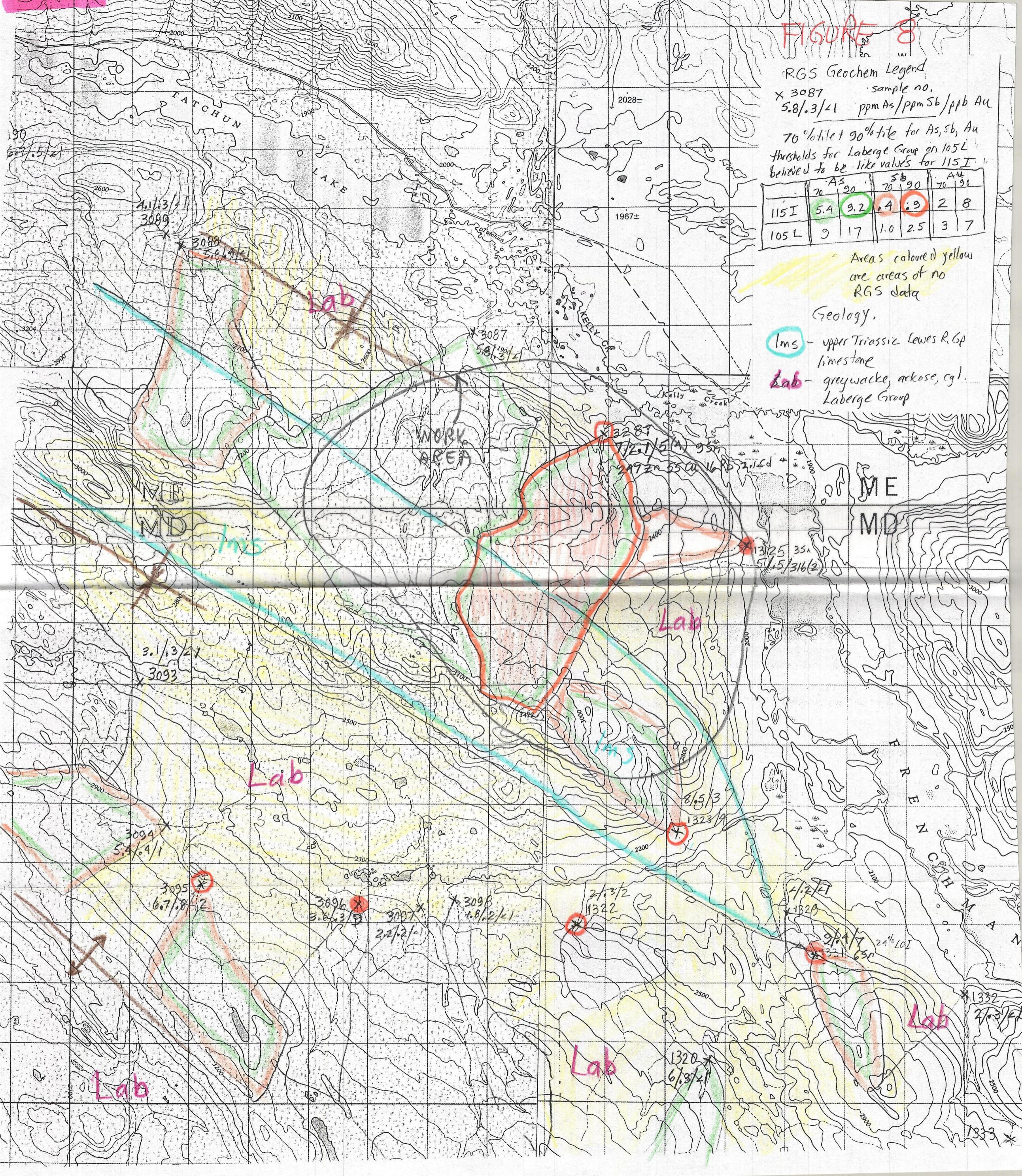
	As	70	90	Sb	70	90	Au	70	90
115I	5.4	9.2	14	0.9	2	8			
105L	9	17	1.0	2.5	3	7			

Areas coloured yellow
 are areas of no
 RGS data

Geology.

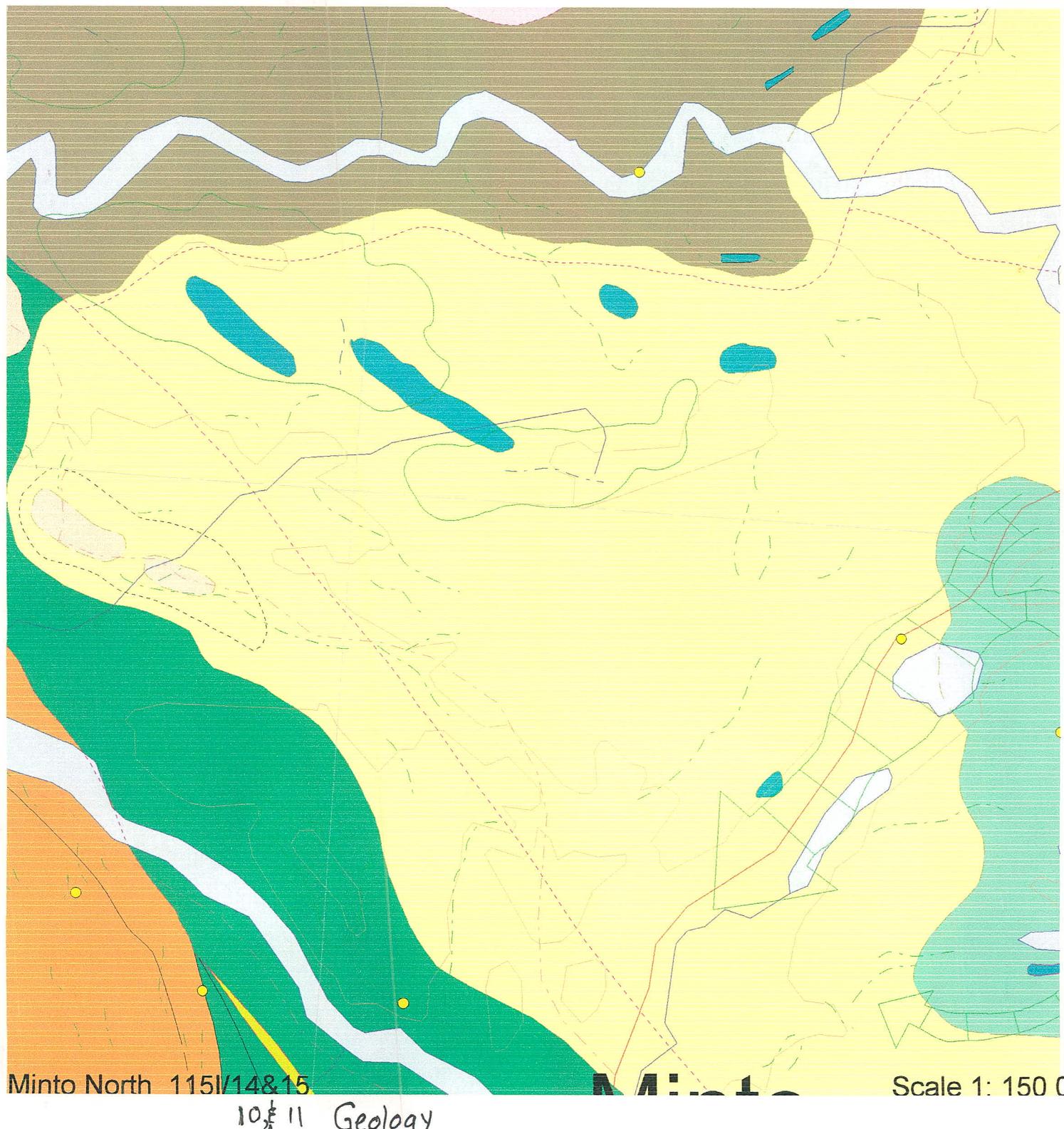
Ims - upper Triassic Lewes R. Gp
 limestone

Lab - greywacke, arkose, cgl.
 Laberge Group



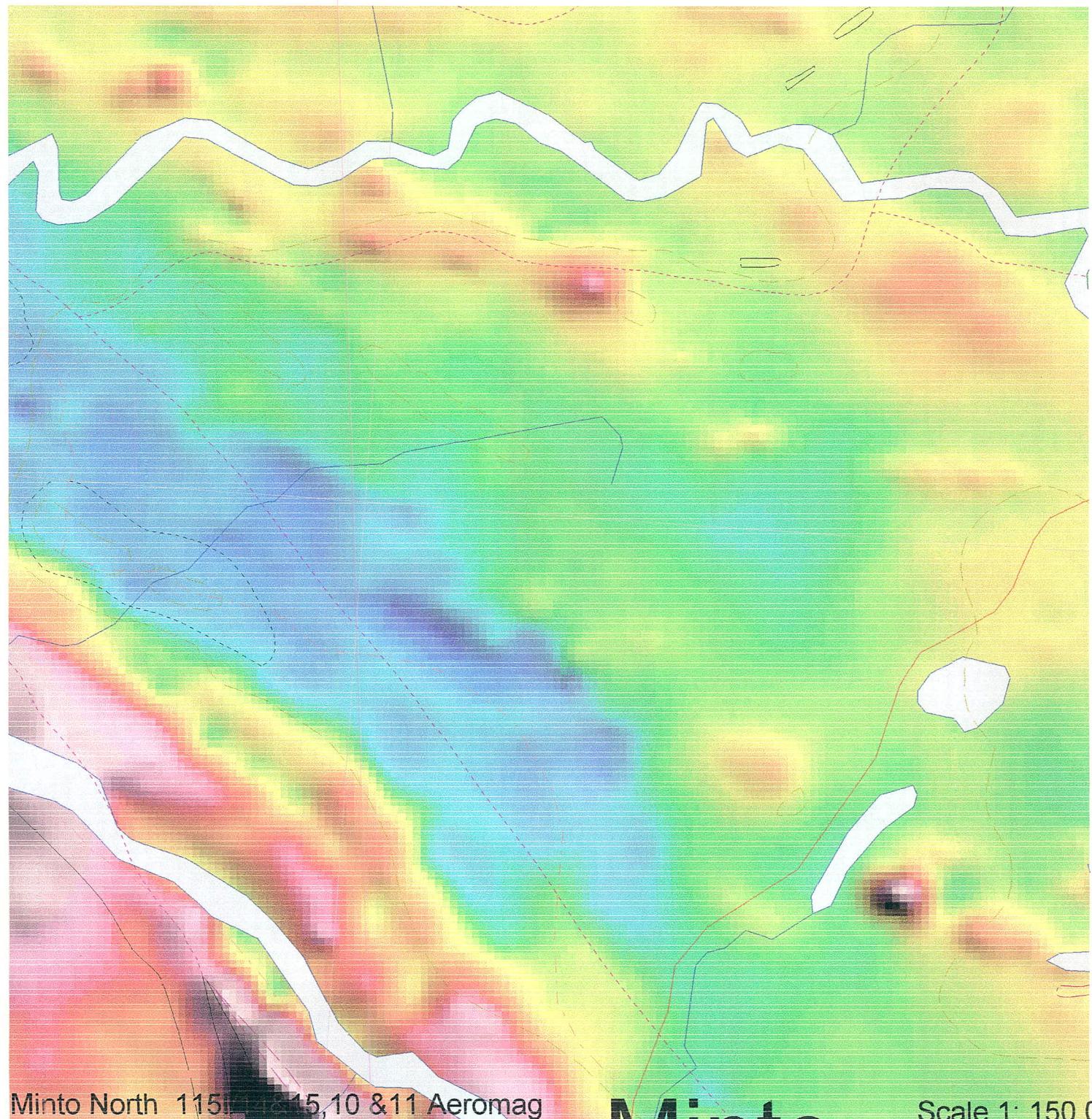
Braden

Figure 9



Braden

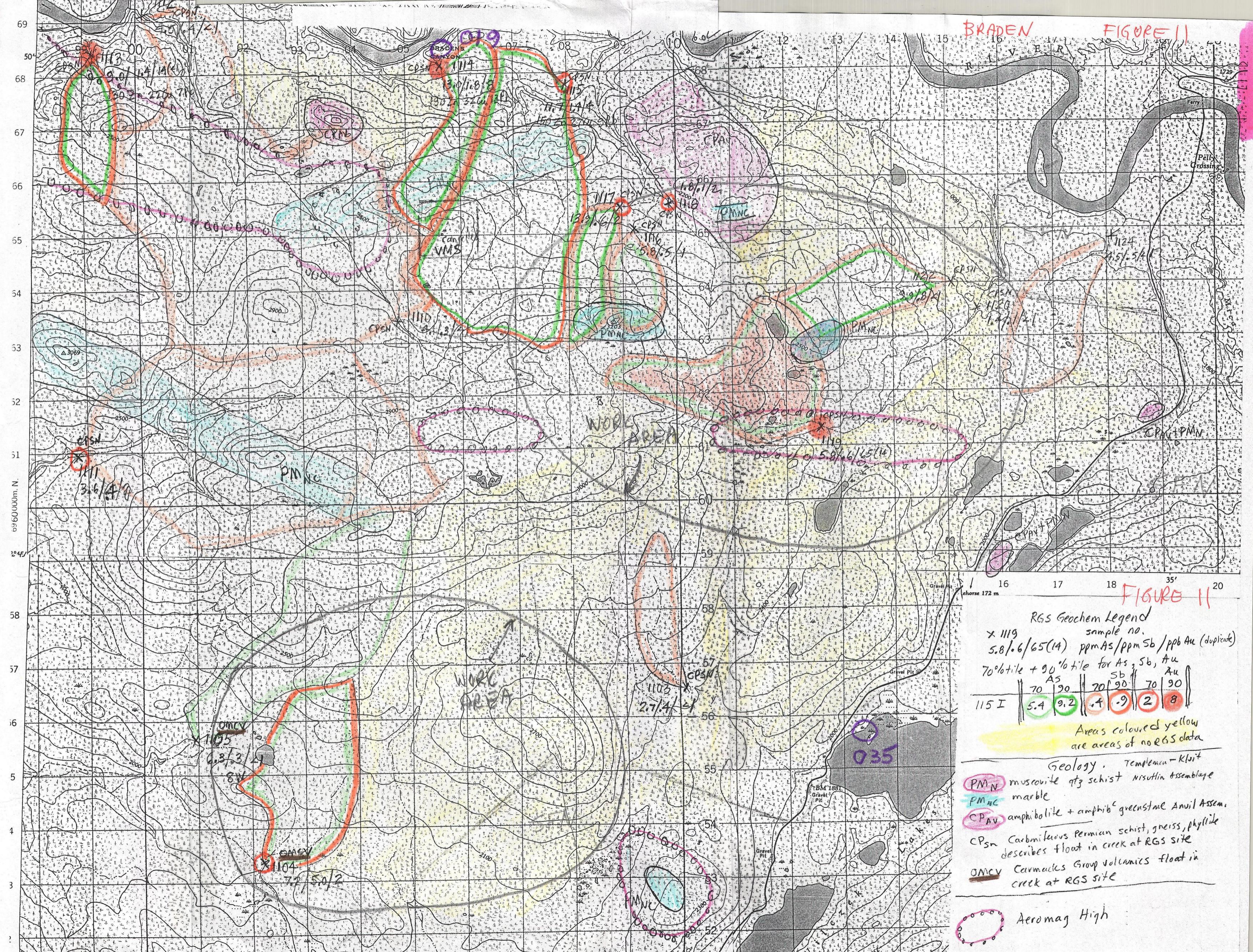
Fig 10



Minto North 115 14 & 15, 10 & 11 Aeromag

NORTH

Scale 1: 150 000



Little Salmon Lake

Figure 13

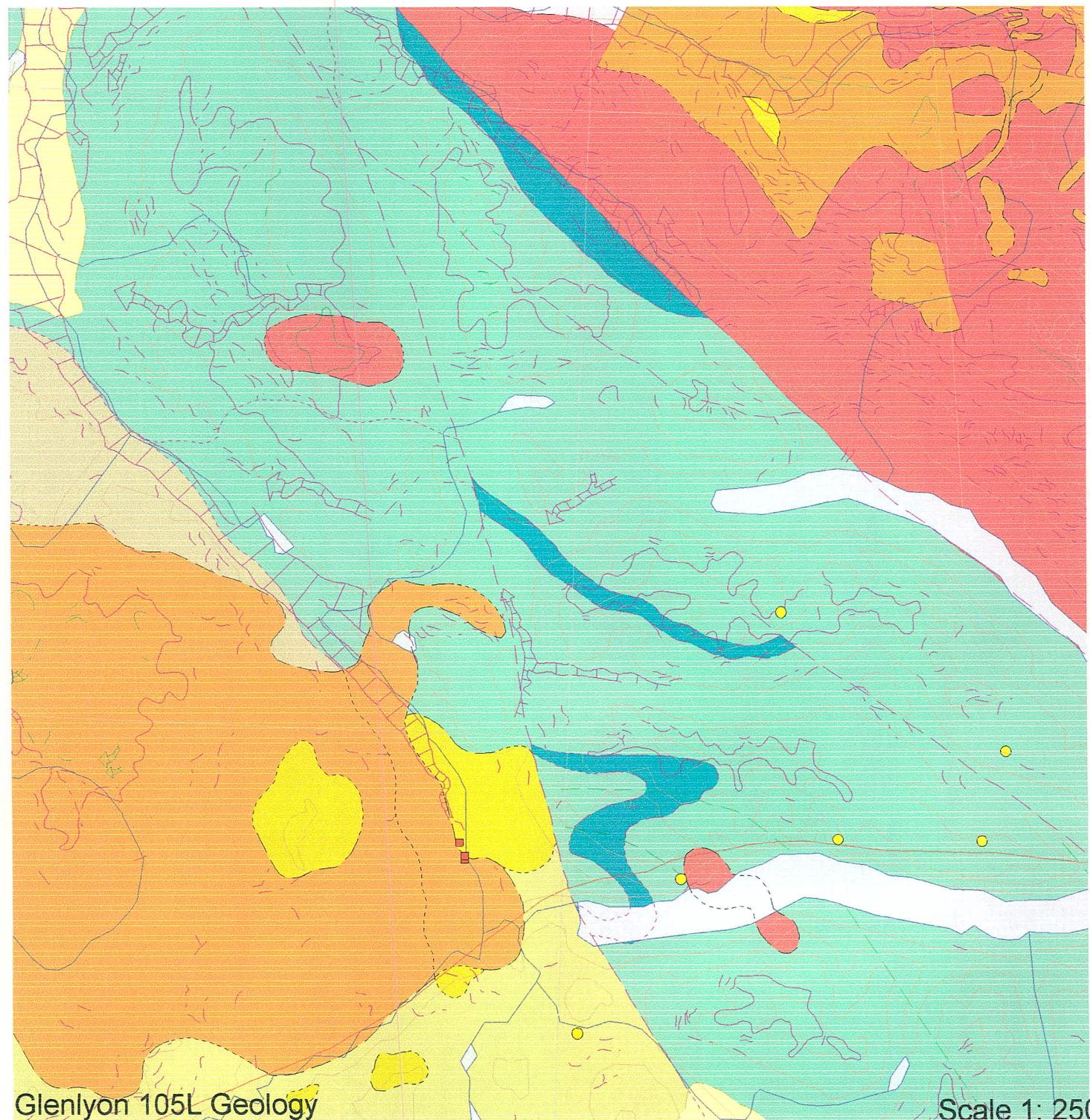
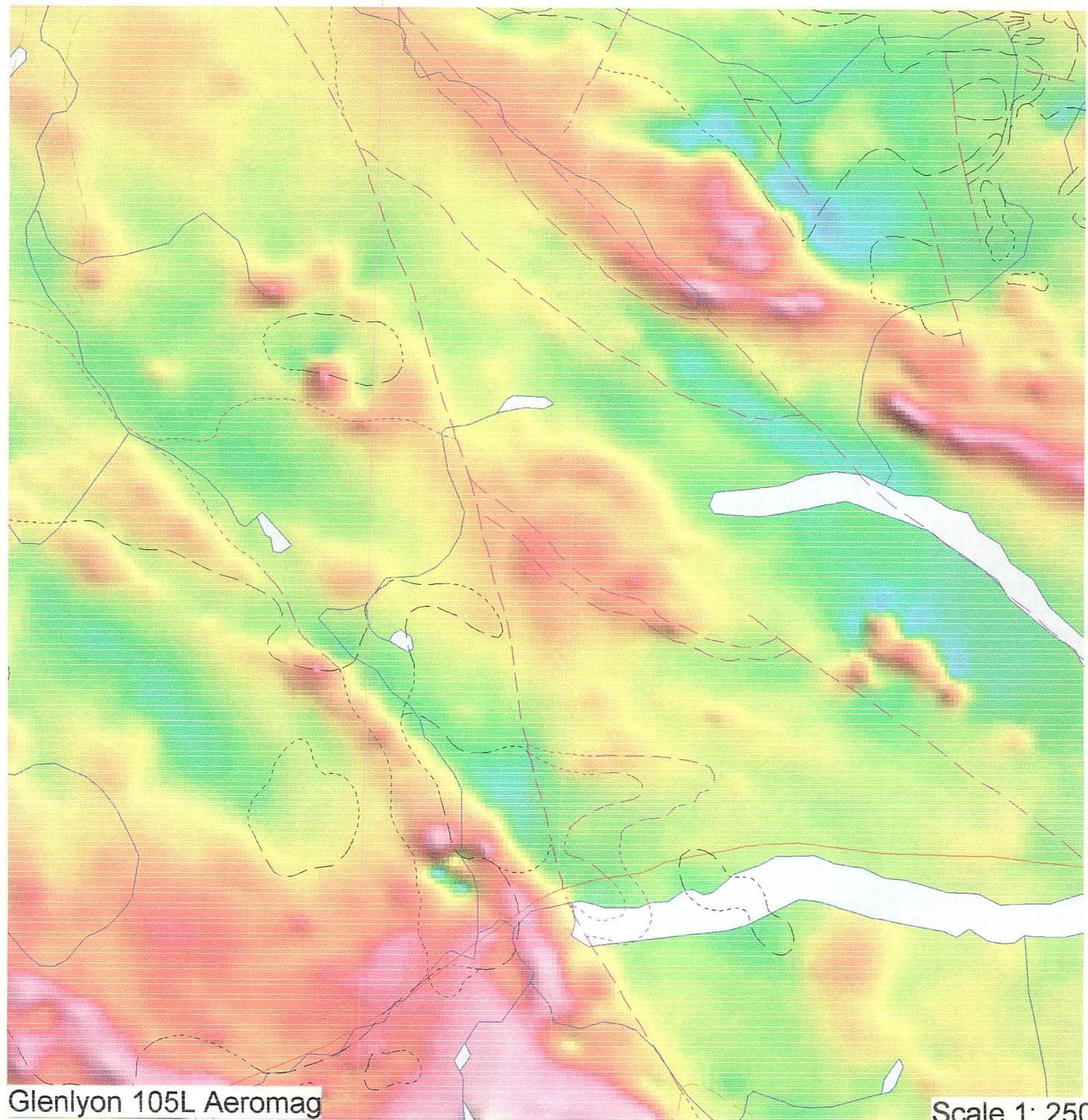


Figure 14

Little Salmon Lake



Glenlyon 105L Aeromag

Scale 1: 250 000

FIGURE 15
LITTLE SALMON
LAKE

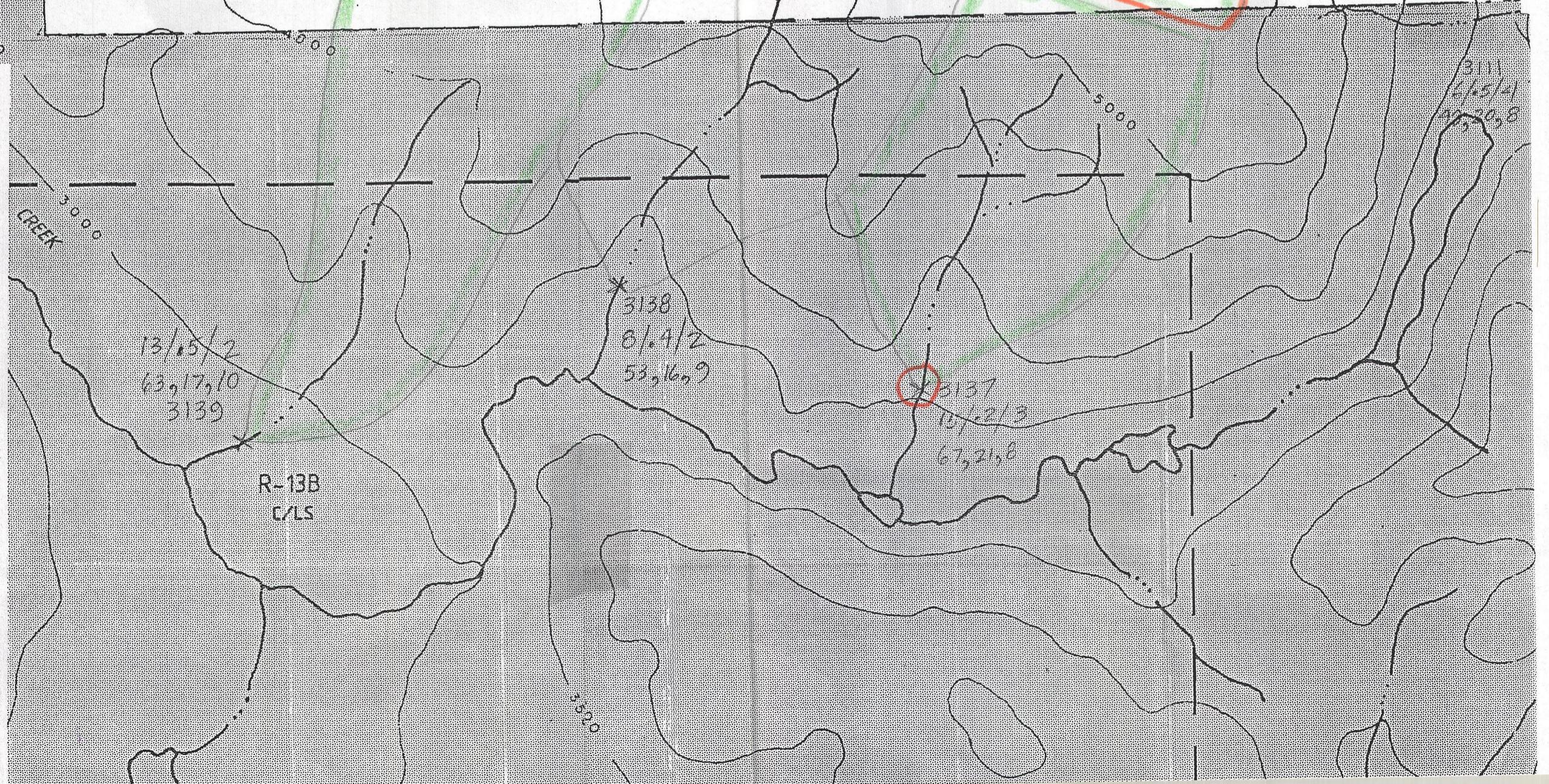
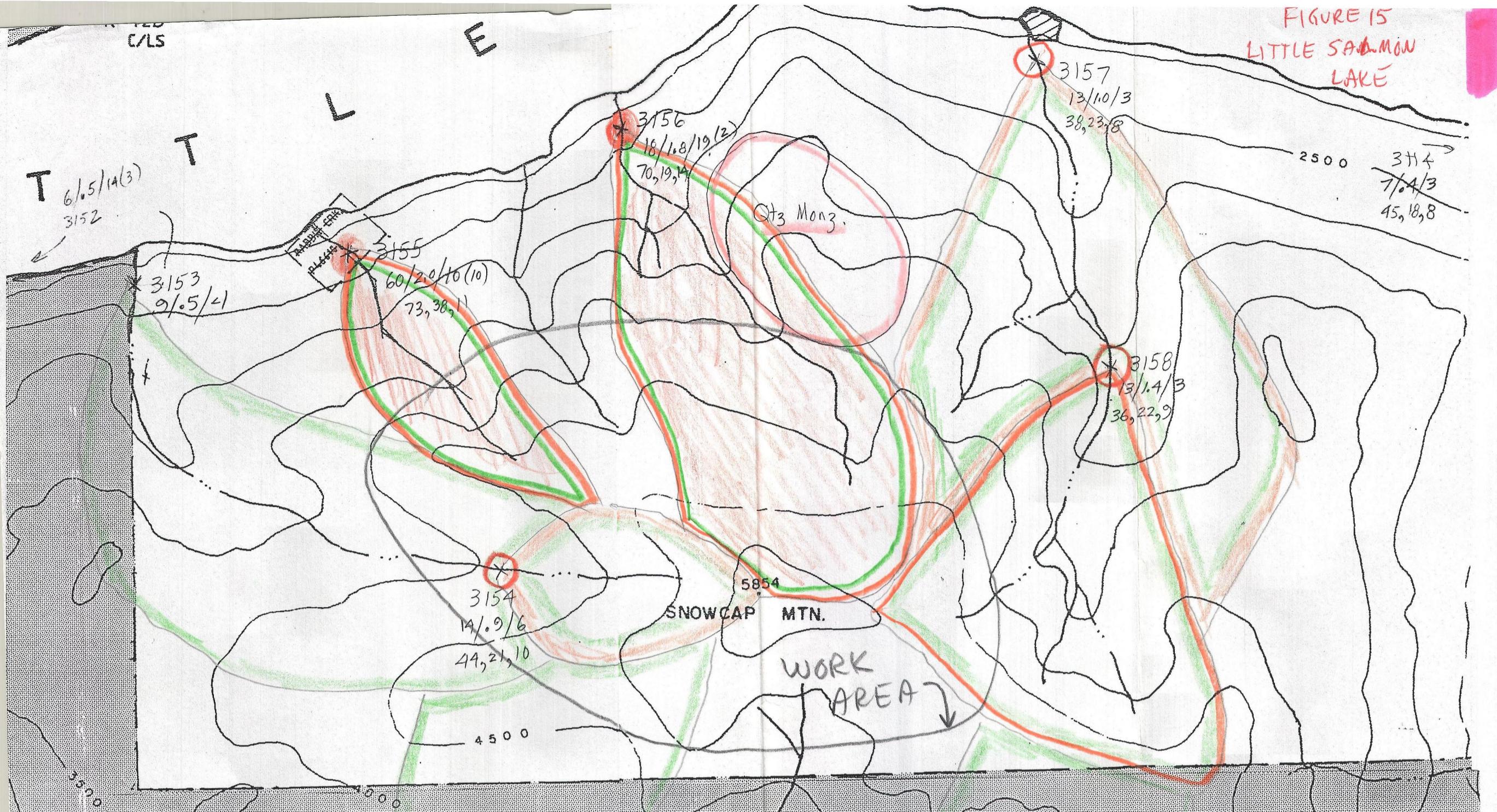


FIGURE 16

LITTLE SALMON LAKE

16

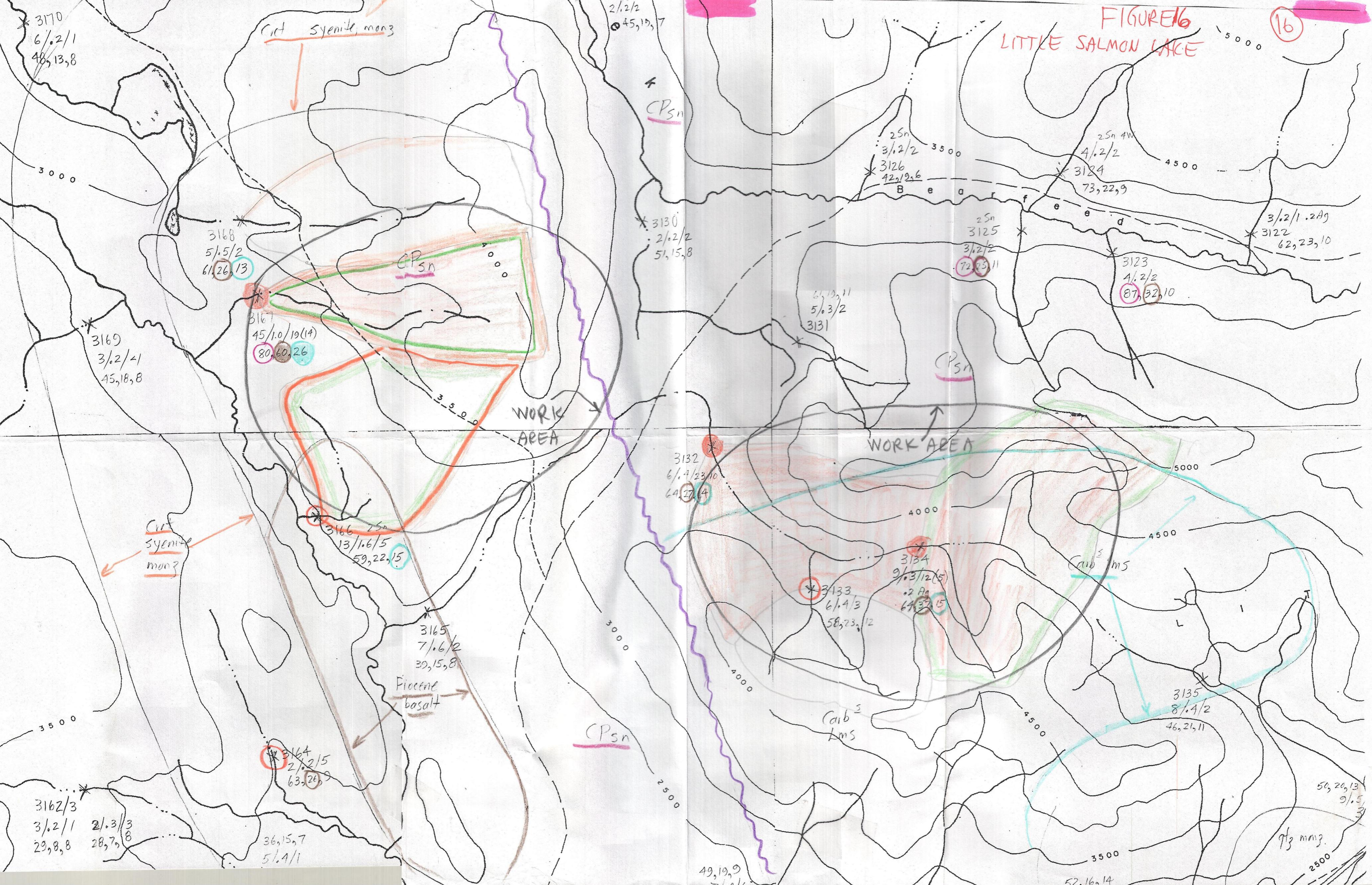


Figure 17

Scroggill

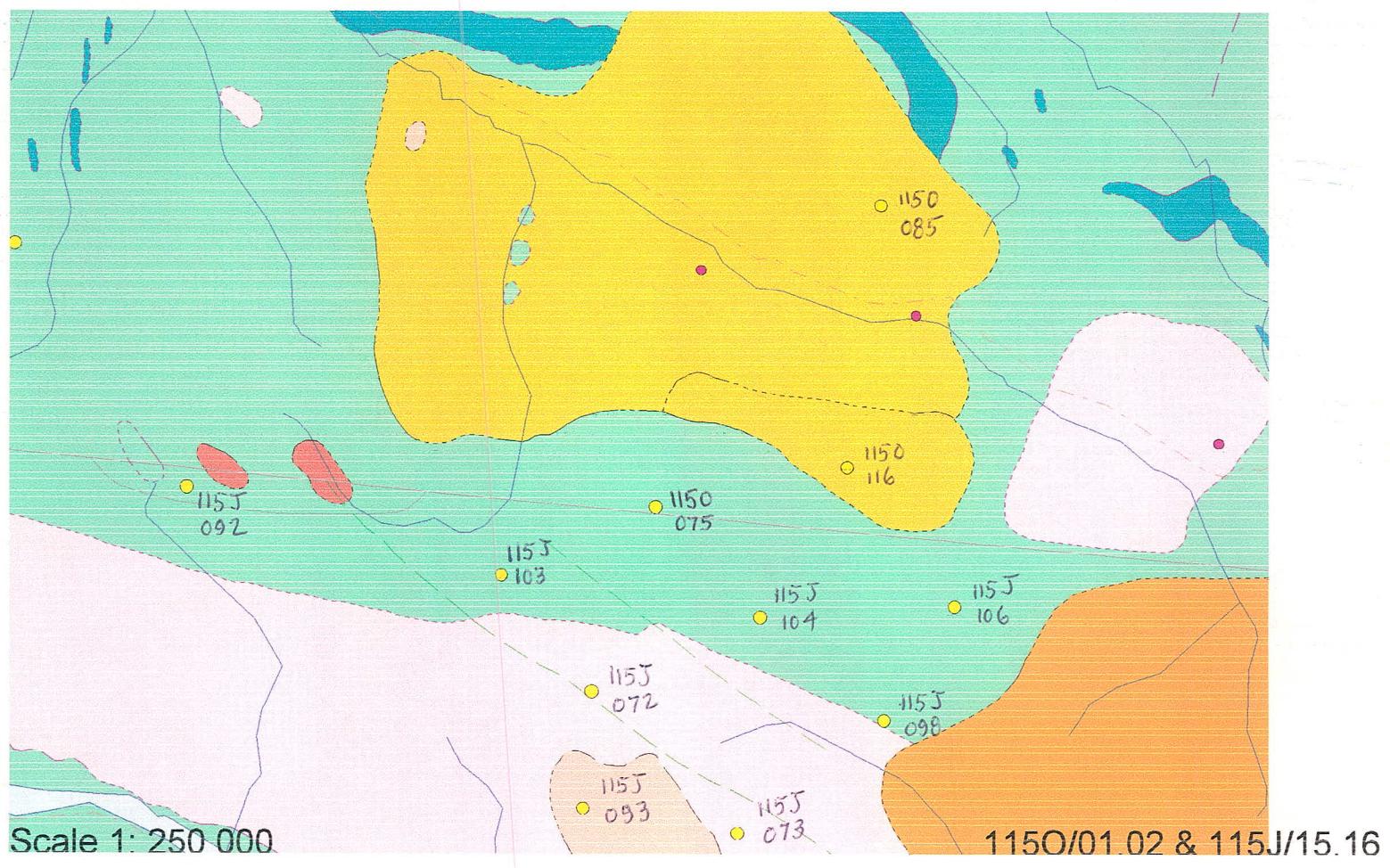
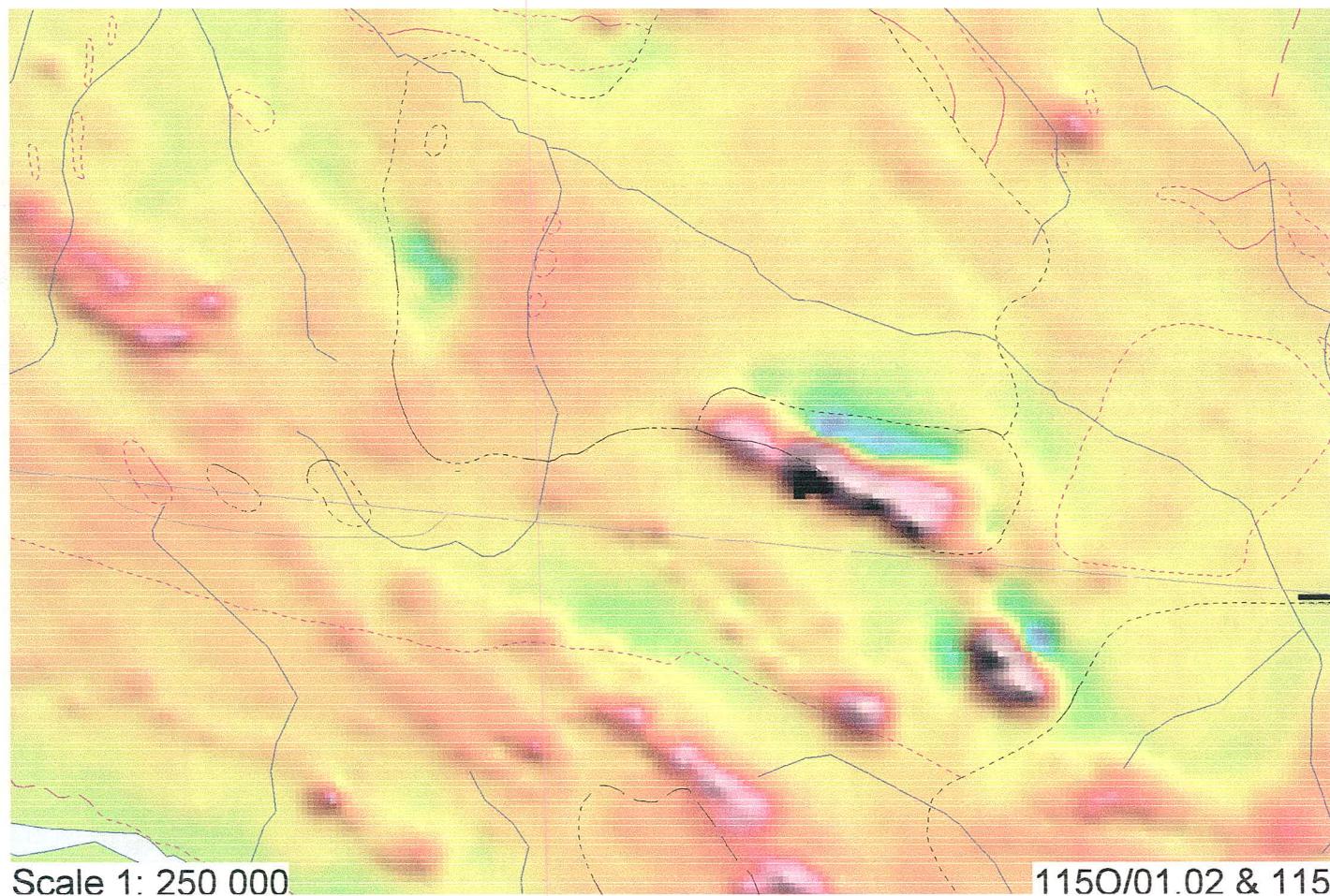


Figure 18
Scroggie



Scale 1: 250 000

115O/01.02 & 115J/15.16

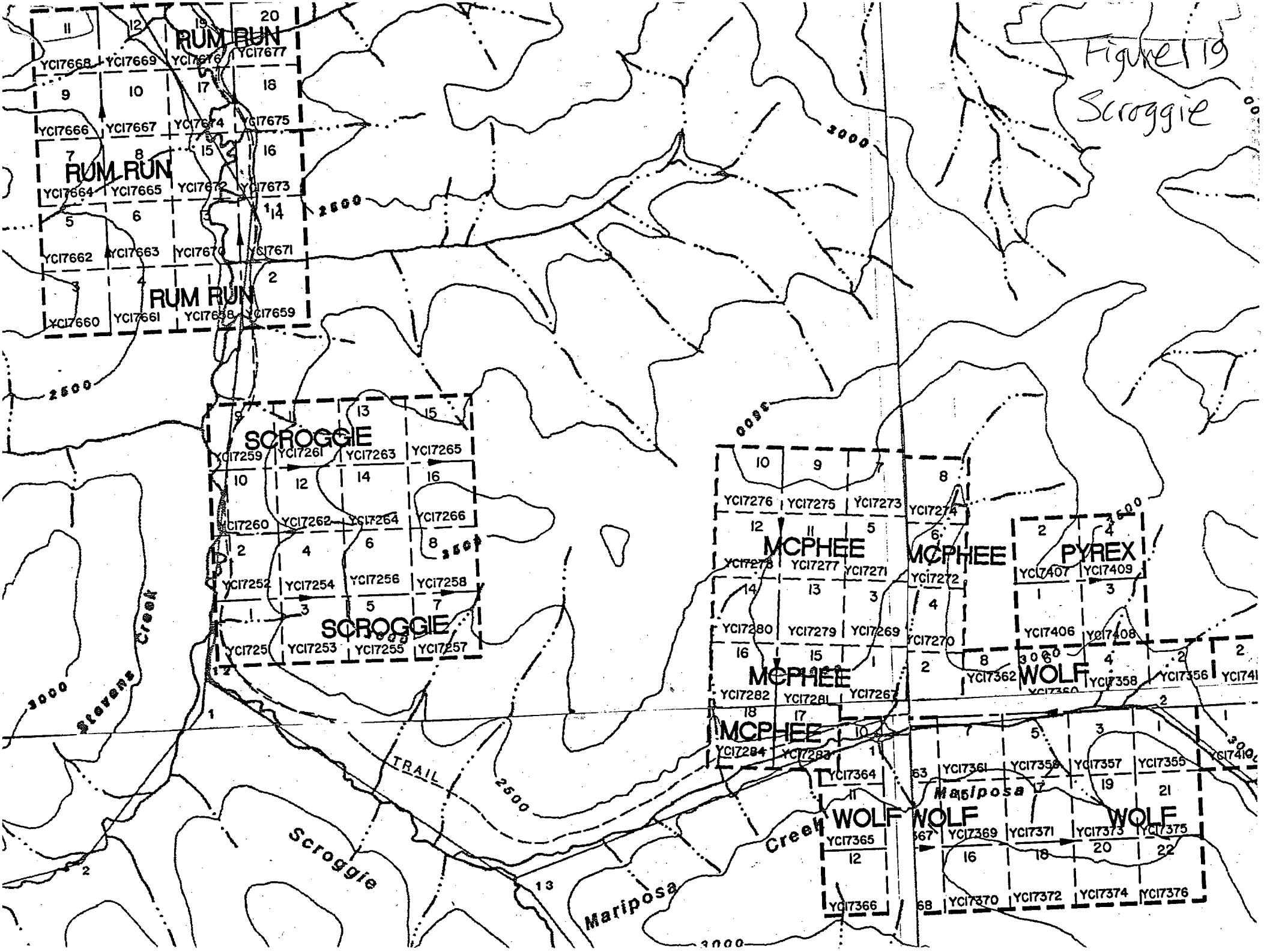


Figure 20 Scroggie

20

