Energy, Mines and Resources Canada
Geological Survey of Canada Sector

Énergie, Mines et Ressources Canada
Secteur de la Commission géologique du Canada

802675

May 29/91

P. Lougheed
Prime Explorations
11th Floor - Box 10
808 West Hastings Street
Vancouver, B.C.
V6C 2X4

Dear Peter,

Enclosed is a copy of a preliminary sample location map for Tantalus, rough sample descriptions, and a list of samples (with lithogeochem numbers and my KQ - etc field numbers) being analysed by Bondar - Clegg.

Best regards,
Rod Kirkham

TANTALUS - PRIME

TANTALUS - PRIME COPY

	LAB SAMPLE Nº 10HB	KQ - 89
1	899679	105 A
2	899680	105 B
*3	899681	105BB
4	899682	105 C
5	899683	105 D
6	899684	106 A
7	899685	106 B
8	899686	106 C
9	899687	106 D
10	899688	106 E
11	899689	106 F
1	899717	120 A
2	899718	120 B
3	899719	120 C
4	899720	120 D
*5	899721	120E
6	899722	121 A
7	899723	121 B
8	899724	121 C
9	899725	121 D
10	899726	121 E
*11	899727	121F
12	899728	122 A
13	899729	122 B
14	899730	122 C
15	899731	122 D

	LAB SAMPLE Nº 10HB	KQ - 89
16	899732	122E
17	899733	122F
18	899734	122G
19	899735	122H
20	899736	123
21	899737	124
22	899738	125A
23	899739	125B
24	899740	125C
*25	899741	125D
26	899742	126A
27	899743	126B
28	899744	126C
29	899745	127A
30	899746	127B
31	899747	127C
32	899748	128
33	899749	129
34	899750	130A
35	899751	131
36	899752	131A
37	899753	131B
38	899754	131C
39	899755	132A
40	899756	133A
41	899757	134
42	899758	135

	LAB SAMPLE Nº 10HB	KQ - 89
43	899759	136A
44	899760	136B
*45	899761	136C
46	899762	137
47	899763	138
48	899764	139

* CONTROL ('STANDARD') SAMPLES

899681	105BB
899721	120E
899727	121F
899741	125D
899761	136C

	LAB SAMPLE Nº 104B	KQ-90
1	909506	137A
2	909507	137B
3	909508	138A
4	909509	138B
5	909510	138C
6	909511	139
7	909512	140A
8	909513	140B
9	909514	141A
10	909515	141B
11	909516	141C
1	909579	165A
2	909580	165B
3	909581	165C
4	909582	165D
5	909583	165E
6	909584	165F
7	909585	166A
8	909586	167A
9	909587	167B
10	909588	168A
11	909589	168B
12	909590	169A
13	909591	169B
14	909592	169C
15	909593	170A
16	909594	170B

	LAB SAMPLE Nº 104B	KQ-90
17	909595	171B
18	909596	171C
1	909610	179A
2	909611	179B
3	909612	179C
4	909613	180A
5	909614	180B
6	909615	180C
7	909616	180D
8	909617	181A
9	909618	181B
10	909619	182A
11	909620	182B
12	909621	182C
13	909622	182D
14	909623	183A
15	909624	183B
16	909625	183C
17	909626	183D
18	909627	183E
19	909628	184A
20	909629	184B
21	909630	185
22	909631	186
2		

	LAB SAMPLE Nº 104B	OHSA-9
~~1~~	~~909632~~	~~540-1~~
~~2~~	~~909633~~	~~540-2~~
1	909634	545
2	909635	546
3	909636	546 2

1989 SAMPLES 54

1990 SAMPLES 56

TOTAL ~~115~~ SAMPLES

113

4	899682	105 C
5	899683	105 D
6	899684	106 A
7	899685	106 B
8	899686	106 C
9	899687	106 D
10	899688	106 E
11	899689	106 F
1	899717	120 A
2	899718	120 B
3	899719	120 C
4	899720	120 D
*5	899721	120 E
6	899722	121 A
7	899723	121 B
8	899724	121 C
9	899725	121 D
10	899726	121 E
*11	899727	121 F
12	899728	122 A
13	899729	122 B
14	899730	122 C
15	899731	122 D

KQ-89-105 " " " " " Slope above Swhd @ ~20m W of KQ-89-22 — 105A - interbedded black argillite & siltst & med. grey S. S.

" " " " ~150m E of 105A — 105B - pale grn-grey (sl. brn) hornfelsic siltst? (w ~1-3% diss py cp

" " " ~100m E of 105B — 105C - " " " " " " ~5-7%? " py

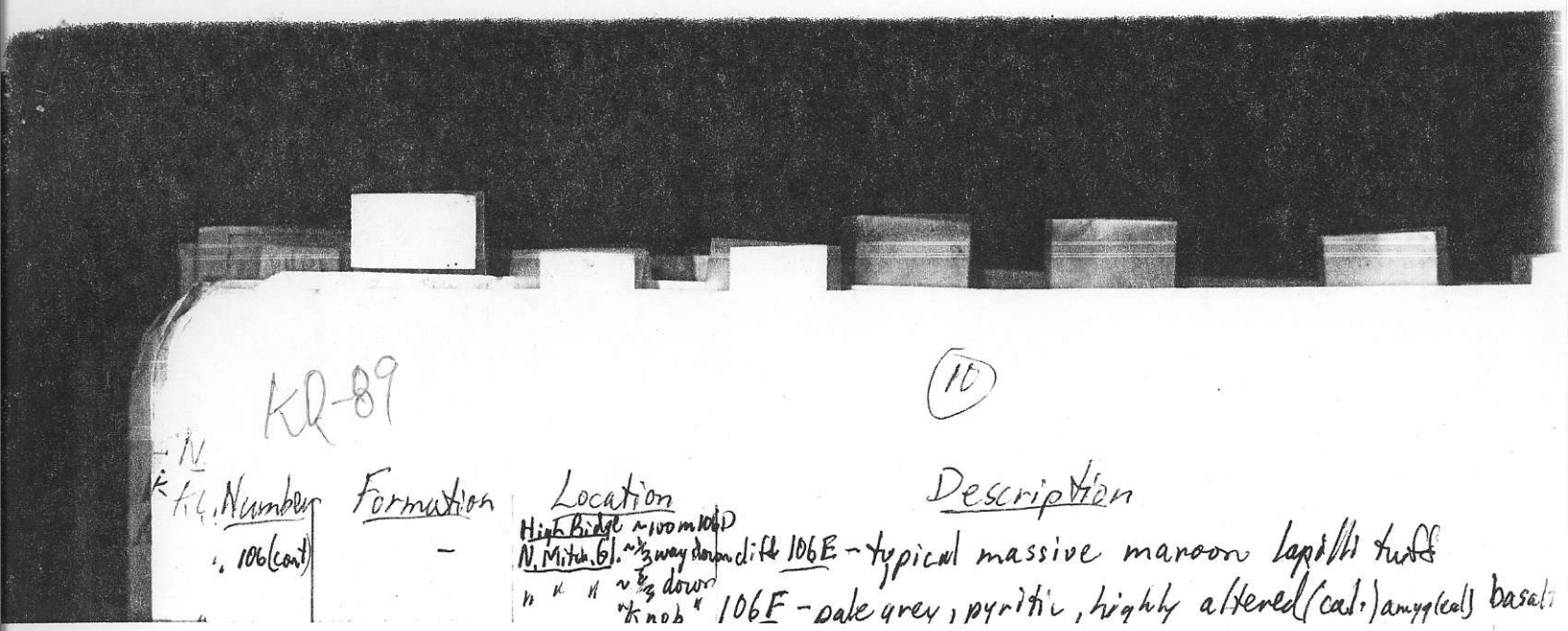
" " " ~120m NE of 105C — 105D - well-bedded black graphitic arg. & grey S. S.

KQ-89-106 U. Hazelton Vol. Rt. High Ridge N. Mitch. Gl. @ KQ89-22 — 106A - highly cleaved pale to med grey mas. siltst. (or dust tuff?)

" " " ~4-6m Strat. lower — 106B - similar to 106A but (w lapilli

" " " ~120m S of 106B — 106C - sl. rusty, white-weath., py (~1%?) pale grey lapilli ash-flow tuff

" " " ~350m? W of 106C — 106D - ~15-2m-thick unit, rusty pale grey, spherulitic or lithophaes "fish-eye" rhyolite



KQ-89

(10)

Number	Formation	Location	Description
106(cont)	–	High Bridge ~100m 106D N. Mitch. 61. ~⅓ way down cliff 106E – typical massive maroon lapilli tuff " " " ~⅔ down "knob" 106F – pale grey, pyritic, highly altered (calc.) amygd(eal) basalt	

KQ-89

above 1300 level a small pocket of high-grade ore or microprobe work
Konkin Zone
" " ~5m S 120B
Tr. #329 5 end 120B-
" " ~4m NE of 120B adit-like 120C-
" " green, pyritic (~30%) chl., ep alt. rock
" " chl ep alt. diorite (pl-hb) porphyry
" " (tr. ep) " " actinolite? alt " ?

KQ-89-132

KQ-89

above 1300 layer of small pieces of sugar-grain stn or microprobe work

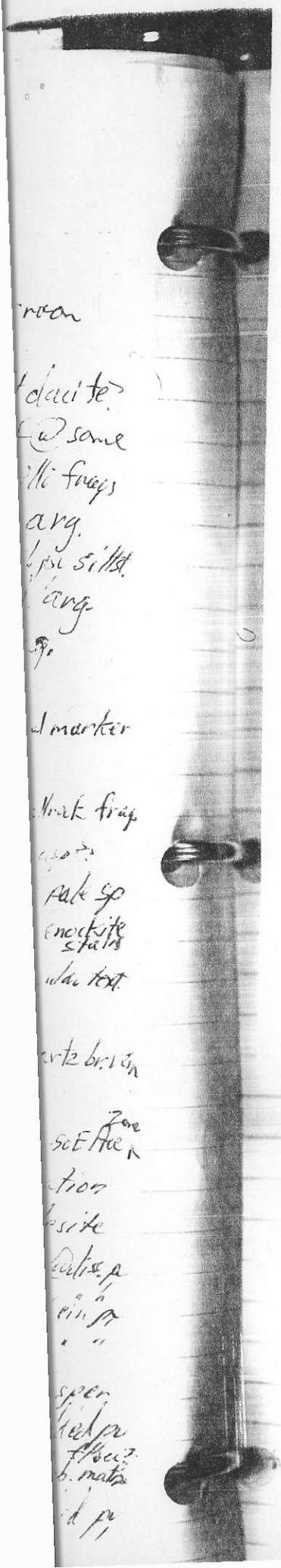
Konkin Zone

~ 5m S of 120B	120A	green, pyritic (~30%) chl., ep alt. rock
Tr. #329	120B	" " chl ep alt. diorite(?) (pl-hb) porphyry
~ 4m NE of 120B	120C	" " (tr. ep) " " actinolite? alt " ?

KQ-89

Formation	Location	Description
alt. intr. and. amyg. flows +seds.	Kontin Zone ~20m N of 120C	120D - med. to dark green py(~15-20%) chl. alt. matrix int.
	Treaty Glacier NE of large gossan ~75m N of R9-36	121A - columnar jointed, grey, alt., amyg. basalt(?) ~10-15% loc qtz & ch
	~120m W @R9-36	121B - pale green-grey altered amyg. basalt or and.?
	~10m N 121B	121C - grey, white-weathering amyg. flow @ ~1% diss. py
	~25m W @R9-38	121D - dark grey, limy, fossiliferous cgl debris flow (plus S-S +silt bd. intercal)
	strat. below 121D	121E - v. rusty fels/sic leached white to sl green subtly bedded tuff?
rhyolite or dacite? alt. and +sil. arg.	Not gossan 20m W @R9-38	122A - white-weath, pale grey, py (~5%) rhyolite cut by qtz veins many (5-10%)
	~120m? W of 122A @R9-39	122B - pale green-grey pyritic carb alt. amyg. and? +plagioclase minute feld. xtls
	~30m W, 122B	122C - white-weath., sl. rusty, pale grey, silicified? rhy @ ~1% diss py
	~20m W 122C	122D - " " " " " " " ~1-3% qtz veinlets alt. amyg. andesite?!?
	~80m W 122D	122E - " " " " " " " " " "
	~85m W 122E	122F - " " " " " " " " " "
	~35m W 122F	122G - silicified?, hard altered dark argillite @ elongate fragments
	~60m W 122G	122H - v. hard, siliceous pale green, flow layered(?), autobreccia rhy
altered and? Bowser Lake Group	@R9-40 ~40m W of hi- High wide to SE ~35m	pale grey, altered (cal., py), amyg. and.(?) pillow lava breccia
	" " ~150m W of fault contact	well-bedded, black, pyritic (~3%) cherts
Haz. dacite and	~45m NW @R9-42	125A - ~6m, rusty, pale grey, v. py (~20% v.f.g.) rhyolite? @ some minute feld. xtls
	~120m W 125B	125B - ~3m, faulted, med. maroon-grey, cherty dacite(?) lap. tuff some qtz frags
	125C	125C - bedded, med. green, sl. alt. (minor py), monomictic (another amyg fragments) matic lapilli tuff (below mas. unit @ another frags,
rhyolite	~150m W 125C	126A - massive, v. hard, siliceous pale green-grey rhyolite @ feld microlites
	~15m NW 126A	126B - autobreccia " " " " " " " tr. py
	~120m W 126B	126C - sl. rusty, white-weath., dense pale grey rhy cut by ~5% qtz veins with trace py
rhyolite (and)	Treaty Glacier base of high ridge to SE ~100m N @R9-43	127A - pale green-grey, v. hard, siliceous rhyolite
	~100m N 122A	127B - " " " " " " " @ ~2-3% diss py
		127C - green andesite cut by minute veinlets (~2% py)
and. lapilli tuff well-bedded arg + silt st	@R9-44 ridge bet. glaciers	massive green-grey andesitic to dacitic lapilli tuff tr. py
	~70m SE @R9-45	well bedded, light & dark grey siltstone & arg. in fish in fault tension vein
mas, lap. tuff Premier Porphyry	@R9-45	massive highly fractured med. grey (sl. grn) tectonically veined lap. tuff
	Main Gossan @R9-46	pale grey, py (+3%), altered Premier Porphyry
	~45 m W	131A - " " " " " " " possibly diss. grey sph as well
	~100m W @R9-47	131B - V. sil. " " " (1%) " " " tr. native sulphur
	~20m E @R9-48	131C - grey py " " " (± grey mineral

Number	Formation	Location	Description
KQ-89-133	sil py rock	Treaty Glacier Ridge - Main Gossan stn	133A - pale grey, lensy, layered, highly strained qz-py rock
KQ-89-134	limy bl. arg	" " ~40m NE	limy black pyritic argillite
KQ-89-135	Pser py schist	" " ~80m SW in fault/zone?	somewhat foliated quartz sericite py schist
KQ-89-136	" " " "	" " ~250m SW	136A - pale qz, ser, py schist
	x-ray?		136B - " " " " " - ~1-2% qz veins
KQ-89-137	Ball pyrite rock	Treaty Glacier base of ridge - head of glacier	137A (collected by Val Van Damme) pale altered anncy. flow
KQ-89-138	qz-py vein	" " near Goat Trail showing	(collected by Marco Van Rammesteinstein) ~80-90% qz veins
KQ-89-139	pale sil py alt. rk	" " ~20m end of trench near Goat Trail shed	" " " " ") pale grey sil. alt. rk. @ ~15-20% py
KQ-89-140	profile through vein	SWP - 340m level	140A - biotite metawacke cut by 2 sets of tension qz veins (~5%)
			140B - crudely layered (deformational) to massive pyrite ore
			140C - typical of crackle quartz ore @ annite in cracks



KQ-90-137	Mount Dilworth	ORO-3 Top high ridge 3m N. of Mtn	137A - med. grey weakly welded ash-f.
		~1.5m lens	137B - " " "fish-eye" (spherulitic?) r.
KQ-90-138	Betty Creek???	~30m S 137B ~12m strat. lower	138A - maroon lapilli tuff (~30m thick uni.
		strat. lower	138B - ~10m thick white-weathering, medium green-g
		~150m NW 138B	138C - maroon lapilli tuff ~30m below top of
KQ-90-139	" " ???	unit above cgl. ~6-7m thick well bedded	(float) - rusty white weath med. gra-grey py
KQ-90-140	amyg. andesite	~55m Vert. bl. grey Soft ORO-4	140A - ~3m-thick med. grey alt. (carb py) ma
		~50m ESE	140B - mas. pale grey f.g. (amygg?) andesite
KQ-90-141	sheared dacite	below bl. talus ORO-5 top of cliff	141A - med. grey py altered schistose da
		~200m S? 141A?	141B - grey sericitic schist
			141C - hard rusty py rhyolitic? welde
KQ-90-142	pale green alt.		

KQ-90-165	Upper Hazelton Grp.	High Matterhorn Peak & Gosch	100m [illegible]
		~100m W 165A	165B - " " " " " " " "
		~70m W 165B	165C - lapill. tuff @ frothy vesiculated & felsic clasts in more
		~100m W 165C	165D - pale grey frothy amygdoidal rhyolite ? @ 95 minor phen
		~15m W 165D	165E - " " " andesite pillow lava @ [illegible]
			[illegible] closely-packed polylithic lapilli tuf

Sul/Number	Formation	Location		Description
KQ-90-166A	Hazelton Group	~250m NW 165E		sheared grn-grey amyg. andesite breccia
KQ-90-167	feldspar porphyry	~80m WNW 166A	167A	rusty-weath. pale grey alt. (sil) py (~2-3%) pl porph (~20-30% pl. phens)
		~100m NW 167A	167B	- med. grey (alter frg. py - ~10%) highly alt. sil. porph.?
KQ-90-168	Dilworth? rhyolite	~200m WNW 167B pt. o/c N side ice	168A	- massive, hard, dense (sil.? alt.?) sl. py rhyolite
		~60m W 168A	168B	- very rusty, very pyritic (~10%) rhyolite? over ~20-30m width
KQ-90-169	sericite-py schist	~30m W 168B	169A	- pale grey, pyrite (~10-15%) - sericite schist
		~125m W 168A	169B	- pale to med. " " (~20%) - " "
		~80m W 169B	169C	- " " " " " " "
KQ-90-170	altered porph.?	~170m W 169C		grey very sil. py altered porph.? (bold o/c)
KQ-90-171	" py pl-hb"	~300m " 170A	171A	- rel. mas. grn-grey py altered pl-hb porphyry
		~100m W 171A	171B	- " " " " " " " " " minor qtz vns.
		~100m W 171B @ ice ORO-17	171C	- " " " " (5-10%) " " " " @ leached pc"
KQ-90-172	" " "	Mitchell-Sulph. Ridge col N side	172A	- " " " " chl. " " @ py + cp 0.3% Cu?
		" " ~100m S 172A	172B	- " " " " " " " " " 0.3% Cu?
		" " " SSW 172B	172C	- " " " " " " " " cp + py 0.5% Cu?
KQ-90-173	hornfelsic Stuhini Grp.	" " ~150m SW 172C base of cliff	173A	highly fractured - med. grn-grey well-bedded hornfelsic sed. rk @ minor qtz vns.
		" " ~150m SW 173A	173B	- " " " " " " " " " @ cp + py ~0.5% Cu?
		" " ~130m W 173B	173C	- " " " " " " " " " " " " ~0.5% Cu?
KQ-90-174	py alt. pl-hb porph	" " in stream ~350m S 173A	174A	- green-grey pyritic altered pl-hb porphyry
KQ-90-175	" " " "	" " " ~350m SW 173B	175A	- pale " " (~7-8%) " " " "
		" " ~130m S 175A	175B	- " " " (~3-4%) carb. " " " "
KQ-90-176	chl graphitic sed. rk?	fault ~200m S @ waterfall 175B	176A	- dark chl. graphitic sheared py (~1%) sed.? fault rk.?
KQ-90-177	py alt. pl-hb porph	~350m S 176A top of bank o/c	177A	- pale pyritic carb altered pl-hb porph.?
		~150m SW 177A	177B	- green " " " " " ?
KQ-90-178	altered pl-hb porph? @ py + cp	Kerr B-Zone DDH87-5	KS67164	- med. green altered rock @ py + cp veinlets
KQ-90-179	Bowser Lk Gp or Fm sediments	W. of Lower Treaty Gl.	179A	- graphitic black argillite
		" " " " ~150m S 179A	179B	- brown weathering, pyritic, grey 50cm thick bed Fe-carb bearing
		" " " " ~100m S 179B	179C	- rusty, oxidized, cleaved, graphitic black arg.
KQ-90-180	Mount Dilworth Fm.	" " " ~15m SW 179C	180A	- med. grey, py (~10% f.g. py) felsic tuff @ f.g./gp. frag.
		" " " ~150m W 180A	180B	- cherty rhyolite @ ~20% f.g. diss. py
		" " " ~90m S 180B	180C	- rhyolite breccia @ pale grey chalcedonic matrix 1-3% f.g. diss. py
		" " " top of ridge ~300m SW 180C	180D	- " " @ flow-layered rhy. clasts (flow dirn. 270/vert) Richfield Speci
KQ-90-181	Hazelton Grp	" " " ~150m S 180D	181A	- pale green-grey, massive amyg. (chl cal py) and.
	amyg. and sed	" " " ~55m S 181A	181B	- black graphitic arg. silt.

Number	Formation	Location	Description
KQ-90-182	Hazelton Group	~200m E small q. NE of Treaty Gl.	182A – green epidotite, pyritic sl. alt., pl. phyric bn and
		~250m S/182A bare rock face " "	182B – green-grey? pyritic altered and. bn
		~150m S/182B " "	182C – grey altered, v. pyritic (~20-25% f.g.) mas. and.?
		~120m S/182C adit " "	182D – " " " " (~15-25% f.g.) mas, pl phyric and.
KQ-90-183	Pb, Zn, Ag, Au showing	N. of Atkins Gl. S of iceberg	183A – ~10ms of 'F Zone' – pyritic unusual carb, alt br, clasts @ feld por
min.		" " " "	183B – gn+sp matrix of bn @ fl. ang. frags.
"		" " " ~70m N	183C – well-bedded, finely bedded pale & dark si/kst. fairly
x-ray stab		" " " ~200m N/183B	183D – "D-Zone" ~10-15cm wide ~9% (py, gn ± stibnite?) vein/ext
"		" " " 183C 183D ~250m SE	183E – "C-Zone" (talus trenches) – blocks of quartz vein (@ stib?) ext
KQ-90-184	Hazelton Group and. + S.S.	E side Treaty Gl. gossan below	184A – pale green-grey amyg. andesite (~1% py)
		" " " ~300m N 183A	184B – " grey, buff-weathering S.S. @ mg non-pc scattered K-spar pleas
KQ-90-185	Premier Porphyry	" " " N/184	mas. med. maroon grey flow-layered pl. porph @ v/c/p large
		" " " ~1km	med green and. bn., cgl. (sple.) & S.S. (clen. anal.) bedd

425000 E

430000 E

435000 E

6275000 N

6270000 N

6265000 N

TREATY CREEK

N

ATKINS GLACIER

TREATY GLACIER

SOUTH TREATY GLACIER

MITCHELL GLACIER

0-179C 0-179A 0-180A 0-180D 0-179B 0-181A 0-180B 0-181B 0-180C

OH-546 OH-545

0-182A 0-182B 0-182C 0-182D

0-183A,B 0-183D 0-183C 0-183E

0-186 0-185

7-88D 7-88C 7-88B 7-88A 7-87A,B,C 7-88 7-85E 7-85F 7-85B,C 7-85D 7-85A 7-84

9-123 0-184B 9-122H

7-83B 7-83A 7-83C 7-82 7-81A,B,C 7-80 7-80A,B

9-122G 9-122F 9-134 9-122E 9-122D 0-184A 9-135 9-122C 9-133A 9-122B 9-122A

9-139 9-138 9-136B 9-136A 9-132A

0-171C 0-171B 0-171A OH-541 9-121D 9-121E 9-121C 9-121B

9-120D 9-120A 9-120C 9-120B 0-170A 0-169B 0-169C 0-168B 9-131B 0-189A 9-131C 0-188A 9-121A 9-131A 0-167B 9-131 9-130A 0-167A 0-168A 9-129

9-128 OH-540 OH-539 OH-538 0-165F 0-165D 0-165B 0-165A OH-537 0-165E 0-165C OH-538

OH-535 OH-534

9-127C 9-127B 9-127A1 9-126A 9-125C 9-125B 9-125A 9-124

9-137

8-43A 8-43B 8-43C

9-106F 0-138A 0-137A,B 9-106A 0-139 9-106D 9-106B 0-138C 0-138B 9-106C 0-140A 9-106E 0-140B 0-141C 0-141A 0-141B

8-44A 8-44B 8-44C 8-44D 8-44E 8-44F

86-58 86-57 86-56 86-55

for sample

Stone of B'field sample

inches 0 1 2 — centimetres 0 1 2 3 4 5

This reference scale bar is accurate for the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

PRELIMINARY G.S.C. SAMPLE LOCATION MAP

TREATY GLACIER AREA, B.C.

104B-9

SCALE: 1:20,000

May 1991 RVK

Locations unchecked - Subject to revision.

R.J. Kirkham May 29/91