APPENDIX B-3: SUMMARY OF DIAMOND DRILLING (to 1979)

NEW HOLE DESIGNATION	OLD HOLE DESIGNATION	LOCATION	COORDINATES	DATE COLLARED (DRILLED BY)	COLLAR ELEVATION(m)	DEPTH(m)	DEPTH OF OVERBURDEN(m)	MAXIMUM TEMPERATURE(°C)	BIT GRADIENT AT BOTTOM (°C/km)	COMMENTS
n.a.	301-1	Meager Creek hot springs	5,602,540N 467,160E	March 74 (EMR)	587	45	18	60	n.a.	- hole inclined at -70° - making water at 6 l/s - temperature inversion, -ve gradient at bottom
n.a.	301-2	Meager Creek hot springs	5,602,640N 467,200E	March 74 (EMR)	583	118	0	33	44	- making water at 1.7 l/s
n.a.	303-1	Lillooet Valley	5,608,510N 471,970E	Sept 77 (EMR)	580	213	0	15.5	48	- making water at less than 1 l/s
M1-74D	74-H-1	South Reservoir Outflow Plume	5,601,440N 466,350E	Nov 74 (B.C. Hydro)	635	347	124	68.9	27.7	- making water at 3 l/s - temperature inversion in overburden section
M2-75D	75-H-1	South Reservoir	5,601,610N 465,200E	Sept 75 (B.C. Hydro)	774	91	11	15.4	112	- making water at 0.3 l/s
M3-75D	75-H-2	South Reservoir	5,601,200N 464,015E	Sept 75 (B.C. Hydro)	770	87	65	35.0	365	
M4-75D	75-H-3	South Reservoir	5,601,770N 463,000E	Sept 75 (B.C. Hydro)	808	60	12	20.8	289	- inclined at -70°
L1-78D	78-H-1	North Lillooet Valley	5,614,630N 463,090E	Sept 78 (Joint Venture)	760	603	47	102.8	211	- temperature inversion between 387 and 450m
M5-78D	78-H-2	South Reservoir	5,601,310N 463,160E	Oct 78 (Joint Venture)	822	250	250	103.7	n.a.	- temperature inversion in bottom section
M6-79D	79-H-1	South Reservoir	5,602,280N 464,280E	July 79 (B.C. Hydro)	885	321	15.6	140.8	n.a.	- temperature inversion in mid section - near isothermal in bottom section
M7-79D	79-H-2	South Reservoir	5,601,850N 463,060E	Oct 79 (B.C.Hydro)	900	367	26	202.2	225	- gradient inflection near 300m.
M8-79D	79-H-3	South Reservoir	5,601,870N 461,630E	Nov 79 (B.C. Hydro)	875	290.4	10	26.8	156	- extension planned for 1980

Summary of geochemical Data

all Rd 1-200

	Maximum	Minimum	Mean	standard deviation
Na	29,100	1030	23,090	4,648
K	31,900	9,460	8,045	4,522
Ca	74,900	5,210	43,320	8,125
Mg	22,300	1,510	9,378	2,173
Fe	62,300	6,450	32,650	5,572
Al	114,000	44,000	82,820	10,380
Ti	4,140	335	2,587	417
P	1,530	44	868	159
Sr	1,600	147	695	120
Ba	2,030	135	559	241
Cr				
Mn	23,100	459	1,220	1,466
Co	101	6	41	13
Ni				
Cu				
Pb				
Zn	21,500	24	120	1,516
Li	218	3	9	4
Be	1.87	.67	1.11	.13
Zr				
La				
Ce				
As*				
Hg				

PROJECT: Meager Creek 9, 10, 13 — Operator: Bakke

Input 10/15/81 BKM

ppb Hg Data — Date: 9/81

(1)

	Sample #	ppb		Sample #	ppb		Sample #	ppb	
			M-9			M-10			M-10
1	1010	5		500	(25R) 25		1000	<5	
2	1013	5		520	<5		1020	<5	
3	1050	5		540	<5		1040	<5	
4	1070	35		560	<5		1060	<5	
5	1090	(65R) 65		580	<5		40	20	M-13
6	1110	(<5R) <5		600	<5		60	20	
7	1130	5		620	<5		80	60	
8	140	<5	M-10	640	5		100	(140R) 190	
9	160	<5		660	<5		120	20	
10	180	<5		680	<5		140	10	
11	200	<5		700	<5		160	10	
12	220	<5		720	<5		180	5	
13	240	<5		740	<5		200	10	
14	260	<5		760	<5		220	(400R) 470	
15	280	25		780	40		240	30	
16	300	<5		800	5		260	5	
17	320	<5		820	<5		280	40	
18	340	<5		840	(800R) 750		300	5	
19	360	65		860	95		320	(280R) 260	
20	380	<5		880	(90R) 90		340	10	
21	400	<5		900	15		360	1000	
22	420	<5		920	(130R) 140		380	30	
23	440	<5		940	10		400	10	
24	460	<5		960	<5		420	10	
25	480	<5		980	30		440	10	

PROJECT: Meager Creek 9,10,13
ppb Hg Data

Operator: Bakke
Date: 9/81

(2)

	Sample #	ppb		Sample #	ppb		Sample #	ppb		
1	460	5	M-13							
2	480	5								
3	500	10								
4	520	<5								
5	540	35								
6	560	10								
7	580	<5								
8	30	<5	M-10							
9	50	10								
10	70	5								
11	90	15								
12	110	650(R) 750								
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										

PROJECT: Meager Creek 7,8,9,12 PPb Hg Data

Operator: DAKR

Date: 9/8/81

9/29/81 compiled into file

(1)

	Sample #	ppb		Sample #	ppb		Sample #	ppb	
			M-7			M-7			M-8
1	40	<5		300	5		200	5	
2	50	(<5) R <5		310	10		210	<5	
3	60	<5		320	<5		220	<5	
4	70	<5		330	20		230	<5	
5	80	<5		340	<5		240	<5	
6	90	<5		350	<5		250	<5	
7	110	<5		360	<5		260	<5	
8	120	20		20	5	M-8	270	<5	
9	130	<5		30	(45 R) 40		280	<5	
10	140	<5		40	5		290	<5	
11	150	25		50	<5		300	<5	
12	160	10		60	<5		310	<5	
13	170	(10) R 15		70	<5		320	<5	
14	180	150		80	<5		330	<5	
15	190	5		90	<5		340	<5	
16	200	<5		100	<5		350	<5	
17	210	<5		110	<5		360	<5	
18	220	10		120	<5		370	<5	
19	230	(25) R 30		130	10		380	<5	
20	240	10		140	<5		390	<5	
21	250	<5		150	<5		400	<5	
22	260	<5		160	(10 R) 10		410	(150 R) 140	
23	270	<5		170	<5		420	<5	
24	280	<5		180	<5		430	<5	
25	290	<5		190	<5		440	<5	

PROJECT: Meager Creek 7, 8, 9, 12
ppb Hg Data

Operator: Bakke
Date: 9/15/81

(2)

	Sample #	ppb		Sample #	ppb		Sample #	ppb	
			M-8			M-9			M-12
1	450	<5		530	5		30	5	
2	460	<5		550	<5		40	5	
3	470	<5		570	<5		50	<5	
4	480	<5		590	<5		60	(10 R) 10	
5	490	<5		610	(500 R) 550		70	10	
			M-9						
6	130	<5		630	5		80	<5	
7	150	<5		650	<5		90	<5	
8	170	<5		670	<5		100	5	
9	190	<5		690	<5		110	<5	
10	210	<5		710	<5		120	<5	
11	230	(75 R) 80		730	5		130	<5	
12	250	<5		750	<5		140	5	
13	270	<5		770	<5		150	10	
14	290	(10 R) 10		790	<5		160	<5	
15	310	<5		810	<5		170	<5	
16	330	<5		830	<5		180	25	
17	350	<5		850	<5		190	5	
18	370	<5		870	<5		200	<5	
19	390	<5		890	<5		210	5	
20	410	<5		910	<5		220	<5	
21	430	<5		930	<5		230	<5	
22	450	<5		950	<5		240	20	
23	470	5		970	<5		250	<5	
24	490	<5		990	<5		260	10	
						M-12		(10 R)	
25	510	<5		20	10		270	5	

PROJECT: Meager Creek 7, 8, 9, 12

ppb Hg Data

Operator: Bakke

Date: 9/15/81

(3)

	Sample #	ppb		Sample #	ppb		Sample #	ppb
			M-12			M-12		
1	280	<5		530	<5			
2	290	<5		540	<5			
3	300	<5		550	5			
4	310	<5		560	<5			
5	320	<5		570	25			
6	330	5		580	10			
7	340	5		590	<5			
8	350	<5		600	5			
9	360	5						
10	370	15 (5R)						
11	380	5						
12	390	10						
13	400	5						
14	410	5						
15	420	40						
16	430	10						
17	440	15						
18	450	10						
19	460	5						
20	470	5						
21	480	5						
22	490	10						
23	500	5						
24	510	5						
25	520	5						

FOR SELECTED INTERVALS

Subfile 2 (M7)
4 intervals
2-9
12-12
17-19
22-33

Subfile 4 (M12)
4 intervals
2-18
21-32
36-54
57-60

Subfile 5 (M9)
7 intervals
2-18
20-21
24-24
26-33
35-35
37-45
47-49

Subfile 6 (M8)
2 intervals
36-40
42-49

Subfile 7 (M10)
6 intervals
2-9
11-13
20-23
25-30
32-33
35-36

MEAGER-CREEK

Subfile 8 (M13)
5 intervals
2-4
6-13
15-21
24-24
27-28

#	depth	cat	Qd	poor	and	with N	two N	#	depth	cat	Qd	tuned	and	with N	two N
	300	15	+						220	11	+				
	310	16	+						240	12	+				
	320	17	+						260	13	+				
	450	18	+						280	14		?			–
	460	19		–	–		–		300	15		?			–
	490	20	+						320	16		?			–
	570	21	+						340	17		?			–
	530	22		–			–		360	18				?	–
	550	23		–			–		380	19				?	–
	580	24	+						400	20	+				
	590	25		–			–		420	21	+				
	610	26	+						440	22	+				
	630	28	+						460	23	+				
	650	24	+						480	24		?			–
	670	29	+						500	25	+				
	680	30	+						520	26	+				
	710	31	+						540	27	+				
	730	32	+						560	28	+				
	750	33	+						580	29	+				
	770	34		–			–		600	30	+				
	790	35	+						620	31		?			–
	810	36		–			–		640	32	+				
	830	37	+						660	33	+				
	850	38	+						680	34		?			–
	870	39	+						700	35	+				
	890	40	+						720	36	+				
	910	41	+						740	37		?			–
	930	42	+						760	38		?			–
	950	43	+						780	39		?			–
	970	44	+						800	40				?	–
	990	45	+						820	41		?			–
	1010	46			⊙		–		840	42		?			–
	1030	47	+						860	43		?			–
	1050	48	+						880	44				?	–
	1070	49	+						900	45				?	–
	1090	50		–			–		920	46				?	–
	1110	51		–			–		940	47		?			–
	1130	52		–			–		960	48				?	–
	0	1	+						980	49				?	–
	30-305	2	+						1000	50				?	–
	50	3	+						1020	51				?	–
	70	4	+						1040	52		?			–
	90	5	+						1060	53				?	–
	110	6	+												
	130	7	+												
	160	8	+												
	180	9	+												
	200	10		?			–								

#	Depth	Cut	Qd	Por	and	Wgh No	Two No	Mus						#	Depth	Cut	Qd	Sugar	and	Wgh No	Two No		
	0	1													160	16						Amph. gneiss & migmat	
	40. – 40.5	2	+												170	17							
	50	3	+												180	18							
	60	4	+												190	19							
	70	5	+												200	20							
	80	6	+												210	21		?					
	90	7	+												220	22		?					
	100	8	+												230	23						gneiss	
	110	9	+												240	24						Amph. gneiss & migmatite	
	120	10		(+)				–							250	25							
	130	11		(+)				–							260	26							
	140	12	+												270	27							
	150	13		(+)				–							280	28							
	160	14		(+)				–							290	29							
	170	15		?				–							300	30						Amph & migmatite	
	180	16		(+)				–							310	31							
	190	17	+												320	32							
	200	18	+												330	33							
	210	19	+												340	34							
	220	20			?			–							350	35							
	230	21		(+)				–							360	36	+						
	240	22	+												370	37	+						
	250	23	+											–	380	38	+						
	260	24	+												390	39	+						
	270	25	+												400	40	+						
	280	26	+												410	41		?			–		
	290	27	+												420	42	+						
	300	28	+												430	43	+						
	310	29	+												440	44	+						
	320	30	+												450	45	+						
	330	31	+												460	46	+						
	340	32	+												470	47	+						
	350	33	+												480	48	+						
	0	1													490	49	+						
	20 – 20.5	2				–		–	gneiss						0	1	*						
	30	3		?				–							170 – 170.5	2	+						
	40	4			?			–							180	3	+						
	50	5				–		–	gneiss & migmat						190	4	+						
	60	6				–		–							200	5	+						
	70	7				–		–							210	6	+						
	80	8					–	–	Amphibolite & migmatite						220	7	+						
	90	9					–	–							230	8	+						
	100	10					–	–							240	9	+						
	110	11					–	–							250	10	+						
	120	12					–	–							260	11	+						
	130	13					–	–							270	12	+						
	140	14					–	–							280	13	+						
	150	15					–	–							290	14	+						

#	Depth		Qd	Pore	and	High K	Low K			#	Depth		Qd	Unique	and	Wet	Dry		
	0	1	X								200	20			(-)		-		
	40 - 40.5	2	+								210	21	+						
	60	3	+								220	22	+						
	80	4	+								230	23	+						
	100	5		?				-			240	24	+						
	120	6	+								250	25	+						
	140	7	+								260	26	+						
	160	8	+								270	27	+						
	180	9	+								280	28	+						
	200	10	+								290	29	+						
	220	11	+								300	30	+						
	240	12	+								310	31	+						
	260	13	+								320	32	+						
	280	14		?				-			330	33			(-)		-		
	300	15	+								340	34	+						
	320	16	+								350	35	+						
	340	17	+								360	36	+						
	360	18	+								370	37	+						
	380	19	+								380	38	+						
	400	20	+								390	39	+						
	420	21	+								400	40	+						
	440	22			?			-			410	41	+						
	460	23					?	-			420	42	+						
	480	24	+								430	43	+						
	500	25		?				-			440	44	+						
	520	26			?			-			450	45	+						
	540	27	+								460	46	+						
	560	28	+								470	47	+						
	580	29		?				-			480	48	+						
											490	49	+						
	0	1	X								500	50	+						
	20.0 - 20.5	2	+								510	51	+						
	30	3	+								520	52	+						
	40	4	+								530	53	+						
	50	5	+								540	54	+						
	60	6	+								550	55			(-)		-		
	70	7	+								560	56			(-)		-		
	80	8	+								570	57	+						
	90	9	+								580	58	+						
	100	10	+								590	59	+						
	110	11	+								600	60	+						
	120	12	+																
	130	13	+																
	140	14	+																
	150	15	+																
	160	16	+																
	170	17	+																
	180	18	+																
	190	19			(-)			-											

Vuggy
+ 180
- 90
270

15	Cr	2 ✓
18	Ni	5 ✓
19	Cu	5 ✓
21	Pb	10 ✓
34	Zr	5 ✓
37	La	5 ✓
38	Ce	10 ✓
41	As*	1 ✓
40	Hg	5 ✓

Selected interval Measures

Well #	Suffile	Fall Cd		Tyler Cd		# 9 270-?
! SN-7	2	5	2-9 40-110 12-12 140 15-15 170 17-20 190-220 22-33 240-350	3	19-19 210 24-26 260-280 32-32 340	
SN-12	4	4	2-18 20-120 21-32 240-320 34-54 340-540 56-60 560-600	9	5-5 50 50-57 560-570 8-8 80 59-60 590-600 10-10 100 12-12 120 16-16 160 36-36 360 46-46 440	
SN-9	5	5	2-18 120-450 20-21 450-570 24-33 570-750 35-35 790 37-45 830-950	9	40-41 390-510 66 210 43-45 950-990 9-12 280-420 20-21 450-570 24-24 570-580 27-27 630 31-31 710 37-38 830-850	1. 9-18 ?
SN-8	6	2	36-46 360-380 48-48 480	1	36-38 360-380	
SN-10	7	6	2-9 30-120 11-11 220 13-13 260 17-37 340-740 42-42 840 44-53 880-1060	4	2-2 30 26-26 520 35-36 700-720 49-50 980-1000	
SN-13	8	2	2-25 40-500 27-28 540-560	2	13-13 260 24-24 480	

1000 ft
21

① selected inferreals ④ ③ Meager Creek

subbl	fresh N-111		altered N-89		#12 fresh N-48
6 #8	2	✓ 36-38 ✓ 43-43	3	✓ 39-42 ✓ 44-46 ✓ 48-48	
8 #13	6	✓ 9-10 ✓ 13-13 ✓ 17-17 ✓ 20-20 ✓ 24-24 ✓ 27-27	7	✓ 2-8 ✓ 11-12 ✓ 14-16 ✓ 18-19 ✓ 21-23 ✓ 25-25 ✓ 28-28	
2 #7	6	✓ 2-7 ✓ 17-19 ✓ 22-22 ✓ 24-26 ✓ 30-30 ✓ 32-33	7	✓ 8-9 ✓ 12-12 ✓ 15-15 ✓ 20-20 ✓ 23-23 ✓ 27-29 ✓ 31-31	
7 #10	8	✓ 13-13 ✓ 20-20 ✓ 22-23 ✓ 26-28 ✓ 35-35 ✓ 52-52	10	✓ 3-9 ✓ 11-11 ✓ 17-19 ✓ 21-21 ✓ 24-25 ✓ 29-34 ✓ 36-37 ✓ 42-42 ✓ 44-51 ✓ 53-53	
5 #9	9	✓ 3-3 ✓ 6-6 ✓ 8-18 ✓ 20-21 ✓ 24-24 ✓ 27-27 ✓ 31-32 ✓ 37-41 ✓ 43-45	8	✓ 2-2 ✓ 4-5 ✓ 7-7 ✓ 25-26 ✓ 28-30 ✓ 33-33 ✓ 35-35 ✓ 42-42	
4 #12	7	✓ 2-8 ✓ 10-17 ✓ 21-23 ✓ 26-32 ✓ 34-41 ✓ 43-54 ✓ 58-60	5	✓ 9-9 ✓ 18-18 ✓ 24-25 ✓ 42-42 ✓ 56-57	7 ✓ 2-8 ✓ 10-17 ✓ 21-23 ✓ 26-32 ✓ 34-41 ✓ 43-54 ✓ 58-60

Selected intervals

I Fresh dacite

sbf 2 ① 12-12

sbf 5 ④ 19-19
22-23
34-34
36-36

2, 3, 4, 5, 6, 8, 10
11, 12, 13, 15, 16, 17, 18, 19
21, 22, 24, 25, 31, 33, 34
40, 41

mean
s.D.

altered dacite

sbf 5 ① 50-50 #9 1090

II Porphyry fresh

sbf 2 ② 9-10
13-13

Porphyry altered

sbf 2 ① 15-15 #7 180

V andesit fresh (11)

sbf 4 ③ 19-20
33-33
55-55

III

sbf 5 ① 46-46

sbf 7 ③ 10-10
12-12
15-16

sbf 8 ② 26-26
29-29

not done for 22, 24, 25, 31, 33, 34
V V

andesit fresh (4)

IV sbf 4 ③ 19-20
33-33
55-55

Zn, Y, Li
22 33

— andesite altered (2)

V sbf 7 ② 14-14
43-43 not andesite

VI andesit altered (2)

sbf 5 ① 46-46

sbf 7 ④ 10-10
12-12
14-16
43-43

sbf 8 ② 26-26
29-29

MCG-2

100 M
280 M
350 M
550 M
750 M
810 M
950 M
1140 M
1190 M
1250 M
1380 M
1450 M
1600 M
1680 M
1800 M
1850 M
1900 M
2020 M
2070 M
2130 M
2300 M
2500 M
2630 M
2700 M
2750 M
2800 M
2850 M
2900 M
2950 M split

3000 M split
3050 M
3100 M
3150 M
3190 M
3195 M
3200 M
3250 M
3300 M
3500 M

XRAY and Thin Section Splits for Mike Adams 6/6/84

MCG-3

1250 M split
1300 M
1325 M
1350 M
1375 M
1400 M
1425 M
1450 M
1475 M
1500 M
1550 M
2650 M
2700 M
2725 M
2750 M
2775 M
2850 M
2875 M
2900 M
2950 M