

1149A-2H 4.2-13.7 mbsf								
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	
							DESCRIPTION	
1	1	[Pattern]	[Symbol]				XRD SS	ASH- AND BIOGENIC SILICA-BEARING CLAY ASH-BEARING SILICEOUS CLAY
2	2	[Pattern]	[Symbol]				WR SS	
3	3	[Pattern]	[Symbol]				WR SS	Dominant lithology is dark gray (5Y 4/1) to very dark gray (5Y 3/1) ASH- AND BIOGENIC SILICA-BEARING CLAY and ASH-BEARING SILICEOUS CLAY. Minor lithologies: light greenish gray (5Y 7/1) and gray (5Y 6/1) to dark greenish gray (10 GY 4/1) CLAY-BEARING ASH layers in Sections 1 (10-14, 51-56 cm), 2 (94-119 cm), 3 (54-57, 86-89 cm), 4 (61-74 cm), and 6 (0-12, 29-34 cm). Very dark ASH in very clear-cut pockets in Section 4 (104-112, 125-126 cm). Vivid green CLAY layers in Sections 4 (61-74 cm), 5 (24-26, 99-101 cm) and 6 (89-90 cm). Very dark, almost black, Mn-NODULE SILT in Section 2, (134-138 cm).
4	4	[Pattern]	[Symbol]				WR SS	
5	5	[Pattern]	[Symbol]				SS WR	
6	6	[Pattern]	[Symbol]				SS WR	
7	7	[Pattern]	[Symbol]				SS WR	
8	8	[Pattern]	[Symbol]				WR	
9	9	[Pattern]	[Symbol]				PAL	

Core Photo

1149A-3H 13.7-23.2 mbsf									
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE
DESCRIPTION									
1	1								SS
2	2								SS
3	3								WR
4	4								WR
5	5								SS
6	6								SS
7	7								WR
8	8								WR
9	9								SS
10	10								WR
11	11								SS
12	12								WR
13	13								SS
14	14								WR
15	15								SS
16	16								WR
17	17								SS
18	18								WR
19	19								SS
20	20								WR
21	21								SS
22	22								WR
23	23								SS
24	24								WR
25	25								SS
26	26								WR
27	27								SS
28	28								WR
29	29								SS
30	30								WR
31	31								SS
32	32								WR
33	33								SS
34	34								WR
35	35								SS
36	36								WR
37	37								SS
38	38								WR
39	39								SS
40	40								WR
41	41								SS
42	42								WR
43	43								SS
44	44								WR
45	45								SS
46	46								WR
47	47								SS
48	48								WR
49	49								SS
50	50								WR
51	51								SS
52	52								WR
53	53								SS
54	54								WR
55	55								SS
56	56								WR
57	57								SS
58	58								WR
59	59								SS
60	60								WR
61	61								SS
62	62								WR
63	63								SS
64	64								WR
65	65								SS
66	66								WR
67	67								SS
68	68								WR
69	69								SS
70	70								WR
71	71								SS
72	72								WR
73	73								SS
74	74								WR
75	75								SS
76	76								WR
77	77								SS
78	78								WR
79	79								SS
80	80								WR
81	81								SS
82	82								WR
83	83								SS
84	84								WR
85	85								SS
86	86								WR
87	87								SS
88	88								WR
89	89								SS
90	90								WR
91	91								SS
92	92								WR
93	93								SS
94	94								WR
95	95								SS
96	96								WR
97	97								SS
98	98								WR
99	99								SS
100	100								WR
101	101								SS
102	102								WR
103	103								SS
104	104								WR
105	105								SS
106	106								WR
107	107								SS
108	108								WR
109	109								SS
110	110								WR
111	111								SS
112	112								WR
113	113								SS
114	114								WR
115	115								SS
116	116								WR
117	117								SS
118	118								WR
119	119								SS
120	120								WR
121	121								SS
122	122								WR
123	123								SS
124	124								WR
125	125								SS
126	126								WR
127	127								SS
128	128								WR
129	129								SS
130	130								WR
131	131								SS
132	132								WR
133	133								SS
134	134								WR
135	135								SS
136	136								WR
137	137								SS
138	138								WR
139	139								SS
140	140								WR
141	141								SS
142	142								WR
143	143								SS
144	144								WR
145	145								SS
146	146								WR
147	147								SS
148	148								WR
149	149								SS
150	150								WR
151	151								SS
152	152								WR
153	153								SS
154	154								WR
155	155								SS
156	156								WR
157	157								SS
158	158								WR
159	159								SS
160	160								WR
161	161								SS
162	162								WR
163	163								SS
164	164								WR
165	165								SS
166	166								WR
167	167								SS
168	168								WR
169	169								SS
170	170								WR
171	171								SS
172	172								WR
173	173								SS
174	174								WR
175	175								SS
176	176								WR
177	177								SS
178	178								WR
179	179								SS
180	180								WR
181	181								SS
182	182								WR
183	183								SS
184	184								WR
185	185								SS
186	186								WR
187	187								SS
188	188								WR
189	189								SS
190	190								WR
191	191								SS
192	192								WR
193	193								SS
194	194								WR
195	195								SS
196	196								WR
197	197								SS
198	198								WR
199	199								SS
200	200								WR
201	201								SS
202	202								WR
203	203								SS
204	204								WR
205	205								SS
206	206								WR
207	207								SS
208	208								WR
209	209								SS
210	210								WR
211	211								SS
212	212								WR
213	213								SS
214	214								WR
215	215								SS
216	216								WR
217	217								SS

1149A-4H 23.2-32.7 mbsf							
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS
							DESCRIPTION
0 1 2 3 4 5 6 7 8							
							— SS ~ SS ~ WR — WR — SS — WR — SS — WR — SS — WR — WR ~ SS — PAL
				ASH- AND BIOGENIC SILICA-BEARING CLAY			
				Dominant lithology is dark greenish gray (10Y 4/1) ASH- and BIOGENIC SILICA-BEARING CLAY.			
				Minor lithologies: ASH layers in Sections 1 (87-90 cm), 3 (varicolored, 91-98 cm), 6 (99-102 cm), and 7 (22-24 cm). 1 cm pieces of PUMICE in Sections 1 (55-61 cm) and 5 (138-139 cm).			
				Alternations of light greenish gray (10Y 7/1) to greenish black (5GY 2.5/1) CLAY and layers with diffuse to sharp boundaries occur in Sections 1 (27-31, 34-35, 40-45, 40-50 and 91 cm), 2 (12-13, 19, 22, 24, 26, 68-74 and 77-84 cm), 3 (8-14, 108-109 and 138-139 cm), 4 (7-9 cm), 5 (41-42 and 83-94 cm), 6 (34-45, 58-60 and 102-103 cm), and 7 (19-20 and 28-19 cm).			

Core Photo

1149A-5H 32.7-42.2 mbsf									
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE
DESCRIPTION									
1								ooo	SS
2									SS
3									WR
4									SS
5									WR
6									WR
7									XRF
8									SS
9									WR
10									WR
11									WR
12									SS
13									PAL

ASH- AND BIOGENIC SILICA-BEARING CLAY

Dominant lithology is dark gray (10YR 4/1) ASH- AND BIOGENIC SILICA-BEARING CLAY.

Minor lithologies: layers or patches of light gray (7.5YR 6/1) to white (7.5YR 7/1) and pink (7.5YR 7/3) ASH were observed in Sections 2 (17-21 cm), 3 (25-35 cm), 4 (as thin, 1-8 mm, bands at 2, 8, 11, 14.5, 16.5, 19.0, 22.5, and 85 cm), and 6 (42-55 cm diffuse top and sharp bottom). PUMICE fragments in Sections 5 (97-101 cm) and 7 (0-3 cm). Brown (10YR 4/2) to grayish brown (10YR 5/2) ASH- AND CLAY-BEARING DIATOM OOZE in Sections 2 (87-90 cm), 4 (114-123 cm), 5 (47-57 cm), and 6 (120-139 cm). Intervals of diffusely banded, poorly indurated to sharply bound, well indurated dark greenish gray CLAY and ASH occur in Sections 1 (130-132 cm), 3 (47-48, 55-59 cm), 4 (111-113, 123-124 cm), 5 (57-64, 83-84 cm), and 6 (20-25, 120-121 cm). Layers rich in Mn-micronodules occur in Sections 4 (117-119 cm) and 5 (54-55.5 cm).

1149A-6H 42.2-51.7 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
0	1				(P)				SS	ASH- AND BIOGENIC SILICA-BEARING CLAY Dominant lithology is brown (5YR 3/1) to dark gray (10YR 4/1) ASH- AND BIOGENIC SILICA-BEARING CLAY. Slight to moderate mottling occurs throughout core. Minor lithologies: ASH layers in Sections 1 (8-13, 85-100 cm), 2 (10-12 cm), 3 (60-61 cm), 5 (53-54 cm), and 7 (36-39 cm). ASH-BEARING SILTY SAND layer composed largely of plagioclase and pyroxene grains encountered in Section 5 (119-120 cm). PUMICE fragments in Sections 1 (100-104 cm), 2 (43-46 cm), and 3 (101-102 cm). Darker bands enriched in Mn-micronodules in Sections 1 (33-35 cm), 2 (114-115 cm), 4 (45-74), and 6 (35-36 cm), usually associated with lighter colored bands extending 5-10 cm in either direction. Layer of disperse Mn-micronodules in Section 4 (3-6 cm).
2	2				(P)				SS WR	
4	3								WR	
6	4								WR SS	
8	5								WR SS SS WR	
10	6				(P)				WR	
12	7								WR	
14	8								PAL	

7

1149A-7H 51.7-61.2 mbsf								
METERS	SECTION	GRAPHIC LITH.	BIO TURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	
								DESCRIPTION
0 1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7							ASH-BEARING SILICEOUS CLAY ASH-BEARING SILICEOUS SILTY CLAY Dominant lithology is grayish brown (10YR 5/4) to dark gray (10YR 4/1) ASH-BEARING, SILICEOUS CLAY, from top of core to Section 4 at 30 cm. Below to base of the core is a dark grayish green (10Y 4/1) ASH-BEARING SILICEOUS SILTY CLAY. Minor lithologies: ASH layers observed in Sections 3 (52 cm), 5 (0-27 and 97-103 cm), and 7 (45-51 cm). Varicolored 1-3 cm bands in Section 3 (40-52 cm). Thin (1-3 cm) bands of grayish green (5G 4/2) CLAY (and ASH?) in Sections 4 (62-63 cm) and 6 (103-105 and 111.5-112.5 cm). Intercalated yellowish brown (10YR 5/4) CLAY in Sections 1 (42.5-49.5 and 65-80 cm), 2 (59-60 cm), and 3 (8-40 and 126-140 cm). — WR — XRF — WR — WR ↘ SS — SS ↘ WR — WR — WR — PAL

1149A-8H 61.2-70.7 mbsf								
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	
								DESCRIPTION
1	1	[Pattern]		[Symbol]				— SS
2	2	[Pattern]		[Symbol]				— SS
3	3	[Pattern]		[Symbol]				— SS
4	4	[Pattern]		[Symbol]				— SS
5	5	[Pattern]		[Symbol]				— SS
6	6	[Pattern]		[Symbol]				— SS
7	7	[Pattern]	(P)	[Symbol]				— SS
8	8	[Pattern]		[Symbol]				— PAL
BIOGENIC SILICA- AND ASH-BEARING CLAY RADIOLARIAN-BEARING CLAYEY ASH Dominant lithologies are brown (10YR 5/3-5/2) BIOGENIC SILICA- AND ASH-BEARING CLAY and dark grayish brown (10YR 4/2) RADIOLARIAN-BEARING CLAYEY ASH. Minor lithologies: ASH layers in Sections 1 (67 cm), 2 (43-46, 51-53.5, 58-63, and 145-150 cm), 3 (87-97 cm), 4 (38-41 cm), 6 (70-74 and 138-150 cm), 7 (16-21 cm). PUMICE fragment in Section 7 (21-23 cm).								

9

1149A-9H 70.7-80.2 mbsf								
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	
				DISTURB.	SAMPLE	DESCRIPTION		
1 2 3 4 5 6 7 8	1 2 3 4 5 6							ASH-BEARING, SILICEOUS CLAY CLAY- AND ASH-BEARING SILICEOUS OOZE This core consists of an irregular alternation of two lithologies, dark gray (10YR 4/1) CLAY-and ASH-BEARING SILICEOUS OOZE, and brown (10YR 5/3) ASH-BEARING SILICA-RICH CLAY. Contacts are usually gradational and mottling is common. Minor lithologies: ASH layers in Sections 1 (70-71 cm), 2 (105-122, 132-137 cm), 3 (35-40, 115-117 cm), 4 (50-60 cm), 5 (62-72 cm), 6 (5-35 cm), 7 (0-10 cm). PUMICE fragment in Section 6, (55-57 cm).
								— SS — SS — WR — XRF — SS — PAL

Core Photo

1149A-11H 89.7-99.2 mbsf									
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE
DESCRIPTION									
1				(P)					SS
2				~ ~ ~					
3									WR
4									XRD
5				~ ~ ~					XRF
6				~ ~ ~					SS
7									
8				(P)					THS
9									PAL

DIATOMACEOUS CLAY

Dominant lithology is brown (10YR 5/3) DIATOMACEOUS CLAY. Faint layering and weak mottling observed throughout core.

Minor lithologies: ASH layers, typically with a sharp base and diffuse upper boundary that may be slightly mottled-bioturbated into overlying sediment, in Sections 1 (90-92 cm), dark reddish gray (5YR 4/2); 3 (126-139 cm), light-colored (10YR 6/2); and 5 (80-84 cm), dark grayish brown (10YR 3/2). PUMICE fragments in Sections 1 (106 and 123 cm) and 6 (72-74 cm).

1149A-12H 99.2-108.7 mbsf									
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS		
								DESCRIPTION	
1 2 3 4 5 6 7 8	1 2 3 4 5 6 7							XRF XRD SS WR SS PAL	ASHEY CLAY Dominant lithology is brown (7.5YR 5/4 to 5/2) ASHEY CLAY. Faint mottling observed in most sections of the core. Minor lithologies: ASH layers in Sections 2 (117-119 and 123-124 cm); 3 (40-44 cm), almost white (7.5YR 8/1), with irregular/erosional base and sharp upper boundary; 4 (77-93 cm), very dark brown ASH; 4 (116-117 cm); and 6 (69-82 cm) pinkish gray (7.5YR 7/2) ASH with sharp base that grades upward into mottled brown ASH near the upper boundary. PUMICE fragment in Section 6 (94-95 cm).

Core Photo

1149A-13H 108.7-118.2 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1										SILT-BEARING CLAY Dominant lithology is SILT-BEARING CLAY. In Section 3 (65-78 cm) there is a gradational color change, from a yellowish brown (10YR 4/4) to a grayish brown (10YR 5/2) not associated with a lithologic change. Minor lithologies: Light gray (10YR 7/1) ASH layer in Section 3, 107-119 cm with a sharp basal contact and fining-upward. Light gray (10YR 7/1) to light brownish gray (2.5Y 6/2) ASH layer in Section 7 (107-113 cm), with a sharp/erosional upper contact. Mn-micronodule-rich layer in Section 1 (10-11 cm).
2									SS	
3										
4									SS	
5									XRF	
6										
7										
8									PAL	

Core Photo

1149A-14H 118.2-127.7 mbsf									
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHO.	FOSSILS	DISTURB.	SAMPLE
DESCRIPTION									
1	1								SS
2	2								XRD
3	3								SS
4	4								WR
5	5								
6	6								
7	7								
8	8								
9	9								
10	10								PAL

ASH-BEARING CLAY
CLAY

Dominant lithologies are ASH-BEARING CLAY and CLAY. Color changes from olive gray (5Y 4/2) in Section 1 (0-150 cm), to reddish brown (2.5YR 5/3) in Sections 2 and 3 (0-116 cm), to a dark reddish brown (5YR 3/3) in Sections 3 (116-150 cm) and 4 (0-56 cm), to a dark reddish gray (5YR 4/2) from Section 4, 56 cm to base of core. Mottling/bioturbation common throughout core.

Minor lithology: Mn-nodule (1 cm diameter) in Section 4, 96 cm.

1149A-15H 127.7-137.2 mbsf							
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE ACCESSORIES ICHNO. FOSSILS	DISTURB.	SAMPLE	
DESCRIPTION							
1 2 3 4 5 6 7 8	1 2 3 4 5 6 7					CLAY SS XRD XRF SS PAL	Dominant lithology is dusky red (2.5YR 3/2) CLAY. Mn-micronodules distributed throughout, but locally concentrated in areas of intense bioturbation. Mottling/bioturbation is common throughout core. Minor lithologies: areas showing obvious bioturbation structures include Sections 1 (95-110, 126-129, 137-139 cm), 2 (20-25, 42-59, 80-104, 112 cm), 3 (17-26, 34, 60-73, 86-111, 124-126, 134, 136, 146 cm), 4 (1-2, 10, 85-86 cm), 5 (25-30, 72, 98-115 cm), and 6 (9, 43, 53 cm).

1149A-16H 137.2-146.7 mbsf							
METERS	SECTION	GRAPHIC LITH.	BIO TURB.	STRUCTURE ACCESSORIES	ICHNO. FOSSILS	DISTURB.	SAMPLE DESCRIPTION
0	1	[Pattern]					CLAY Dominant lithology is dark brown (7.5YR 3/3) to brown (7.5YR 5/4) CLAY. Mottling and bioturbation common throughout core. Minor lithologies: light gray (7.5YR 5/4) ASH layers, typically with sharp bases and diffuse upper contacts in Sections 2 (89-90 cm), 3 (18-37, 110-120 cm), 3 (136-138 cm), 4 (61-72 cm). Dark band with high abundance of micromodules in Section 6, 126-127 cm. Layers, 1-3 mm thick of darker material in Sections 1 (102-110 cm) and 5 (115-150 cm). Areas of obvious bioturbation, e.g., recognizable burrows, include Sections 1 (37-130 cm), 2 (10, 112-138 cm), 3 (37-41 cm), 4 (8-39, 71-78, 136-138 cm), 5 (5-10, 63-68, 120-127 cm), Section 6 (26-38, 118-130 cm), 7 (6-10 cm), and the Core Catcher (0-25 cm). — SS — SS — SS — WR — SS — PAL

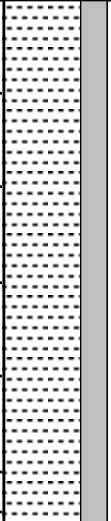
Core Photo

1149A-17H 146.7-156.2 mbsf									
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE
DESCRIPTION									
1									SS
2									SS
3									
4									
5									
6									
7									XRF
8									SS
									PAL

CLAY

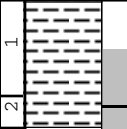
Dominant lithology is dark brown (7.5YR 3/2) CLAY with accessory (c. 5%) ash particles disseminated throughout that grades into a very dark brown (10YR 2/2) to black (5YR 2.5/1) CLAY barren of ash and other sand- or silt-sized constituents. Mottling/bioturbation common throughout core. In Section 2 (122-136 cm) two layers of brown (7.5YR 5/3) material, about 2 cm thick, are affected by a fracture that displaces bottom contact of lower layer by about 1 cm.

Core Photo

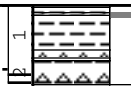
1149A-18H 156.2-164.4 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1										CLAY Dominant lithology is very dark brown CLAY (5YR 3/1 to 3/2). Occasional burrows filled with lighter colored, reddish brown (5YR 4/4) to yellowish red (5YR 4/6) CLAY. Burrow-fill CLAY is of similar composition as surrounding sediment, but slightly coarser and contains minor ash. Steep fault trace in Section 4 (14-48 cm); no associated displacement visible.
2									SS	
3									SS	
4									WR	
5									SS	
6										
7										
8									PAL	

1149A-19X 164.4-169.8 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
										SILT-BEARING CLAY Core consists of dark reddish brown (5YR /2) SILT-BEARING CLAY. SS XRD XRF PAL

Core Photo

1149A-20X 169.8-179.1 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1 2	1 2								— SS — WR — PAL	SILT-BEARING CLAY Dominant lithology is dark reddish brown (5YR 3/2) SILT-BEARING CLAY. Faint layering of lighter and darker (dusky red, 2.5YR 4/4) material in Sections 1 (111- 120 cm), and 2 (23-27 cm). Visible bioturbation above and below very dark gray (5YR 3/1) and underlying dusky red (2.5 YR 4/4) CLAY layer in Section 2, (20-23 cm).

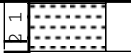
Core Photo

1149A-21X 179.1-188.7 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
	1								SS SS SS XRD XRF SS PAL	ZEOLITE-RICH CLAY RADIOLARIAN CHERT CLAY-BEARING RADIOLARIAN PORCELANITE Core consists of alternating intervals of ZEOLITE-RICH CLAY and CLAY-BEARING RADIOLARIAN PORCELANITE. ZEOLITE-RICH CLAY shows thin, planar lamination of alternating lighter (7.5YR 3/3) and darker (7.5YR 4/3) material without and with ash, respectively. CLAY-BEARING RADIOLARIAN PORCELANITE and RADIOLARIAN CHERT occur in Section 1 (9-15 cm), alternating with ZEOLITE-RICH CLAY below Section 1, 69 cm, and in the Core Catcher.

Core Photo

1149B-1W 151.1-160.6 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1 2 3										This core consists of a mixture of lithologies drilled in the overlying 160 m interval. An intact piece of PUMICE was found in Section 1 (0-5 cm).

Core Photo

1149B-2R 160.6-170.3 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
P 1										SILT-BEARING CLAY Core consists of dark reddish brown (5YR 3/3) SILT-BEARING CLAY that has been strongly disturbed by drilling.

Core Photo

1149B-3R 170.3-180 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1	1									CLAY Dominant lithology is very dark brown (7.5YR 2.5/2) CLAY. Drilling disturbance is strong in Section 1 and decreases downcore. Moderate drilling disturbance in Sections 2 through 7 is limited to narrow intervals. Slight drilling-related deformation at core edges is evident by bending of lighter and darker alternating bands. Minor lithologies: alternating bands of brown (7.5YR 4/3) ZEOLITE-BEARING CLAY and black (7.5YR 2.5/1) ZEOLITIC CLAY with about 5% Mn-micronodules in Sections 2 (95-107 and 135-140 cm), 4 (63-80 cm), 5 (0-7, 35-40, 124-130 cm), and 6 (15-17, 75-100 cm).
2	2									
3	3									
4	4									
5	5									
6	6									
7	7									
8	8									
										SS SS WR XRD XRF PAL

Core Photo

1149B-4R 180-189.4 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1									PAL CAR XRD	RADIOLARIAN CHERT RADIOLARIAN PORCELANITE PORCELANITE WITH NANNOFOSSILS Core consists of 8 pieces of RADIOLARIAN CHERT and RADIOLARIAN PORCELANITE. Most pieces are dominantly dark brown (7.5YR 4/3) with brown (7.5YR 4/6) laminae. Piece 5 (17-21 cm) is light brown (7.5YR 6/4). Piece 8 is yellowish brown (10YR 5/6) with no obvious banding, but with a marginal embayment filled with white soft PORCELANITE.

1149B-5R 189.4-198.7 mbsf							
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS
						DISTURB.	SAMPLE
DESCRIPTION							
1.0							
						XRD PAL	RADIOLARIAN CHERT RADIOLARIAN PORCELANITE
							Yellowish brown (10YR 5/6) RADIOLARIAN CHERT and RADIOLARIAN PORCELANITE. White, soft material on some surfaces probably marks bedding planes.

Core Photo

1149B-6R 198.7-203.7 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1									PAL	RADIOLARIAN CHERT RADIOLARIAN PORCELANITE Core consists of pieces of RADIOLARIAN CHERT and RADIOLARIAN PORCELANITE that display a variety of colors including yellowish brown (10YR 5/6), olive (5Y 5/4), light gray (5Y 7/2), brown (7.5YR 5/8), dark brown (7.5YR 3/2 and 3/1), and black (7.5YR 2.5/1). Pieces 8 and 9 (33-44 cm) show wavy lamination.

Core Photo

1149B-7R 203.7-208.1 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1									XRD SS SS SS PAL	RADIOLARIAN PORCELANITE RADIOLARIAN CHERT ZEOLITE-BEARING CLAY Core consists of several pieces of pinkish gray (7.5YR 6/2) to brown (7.5YR 5/2) RADIOLARIAN CHERT and RADIOLARIAN PORCELANITE. Also recovered are several intact pieces of dark brown (7.5YR 3/2) ZEOLITE-BEARING CLAY.

1149B-8R 208.1-217.4 mbsf								
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	
								DESCRIPTION
								PAL RADIOLARIAN CHERT Core consists of three pieces of very dark brown (7.5YR 2.5/1) RADIOLARIAN CHERT.

Core Photo

1149B-9R 217.4-226.8 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1									XRD XRD XRF PAL	RADIOLARIAN CHERT Core consists of several pieces of brown to dark brown RADIOLARIAN CHERT with mottled intervals and irregular tan patches.

Core Photo

1149B-10R 226.8-236.3 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1										PAL RADIOLARIAN CHERT RADIOLARIAN PORCELANITE Core consists of very thinly laminated, very dark brown (7.5 YR 2.5/1) RADIOLARIAN CHERT part of which have RADIOLARIAN PORCELANITE haloes.

1149B-11R 236.3-245.4 mbsf								
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	
				DISTURB.	SAMPLE	DESCRIPTION		
1							SS XRD SS SS PAL	RADIOLARIAN CHERT RADIOLARIAN PORCELANITE This core consists of very dark brown (7.5YR 2.5/2) RADIOLARIAN CHERT and RADIOLARIAN PORCELANITE. Some pieces show distinct, wavy lamination. Dark sub-mm sized spots in both lithologies are Mn- oxihydroxide replaced radiolarian tests.

1149B-12R 245.4-254.6 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
										RADIOLARIAN PORCELANITE ZEOLITE-BEARING CLAY The core consists of very dark brown (7.5YR 2.5/2) RADIOLARIAN PORCELANITE and strong brown (7.5YR 5/6) ZEOLITE-BEARING CLAY that contains traces of calcareous nannofossils.

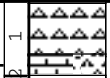
1149B-13R 254.6-263.9 mbsf							
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE ACCESSORIES ICHNO. FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
							PAL RADIOLARIAN CHERT RADIOLARIAN PORCELANITE The core consists of tree pieces of interlaminated dark brown (7.5 YR 3/2) RADIOLARIAN CHERT and RADIOLARIAN PORCELANITE.

1149B-14R 263.9-273.3 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
										XRD XRD PAL SS RADIOLARIAN CHERT RADIOLARIAN PORCELANITE CLAYEY ZEOLITE SILT This core consists of very pale brown (10YR 8/2) RADIOLARIAN PORCELANITE, dark brown (10YR 3/3) RADIOLARIAN CHERT, and pale yellow (5Y 7/4) CLAYEY ZEOLITE SILT. Indurated pieces are cut by clear chalcedony veins and veins filled with yellow material.

Core Photo

1149B-15R 273.3-282.3 mbsf							
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE ACCESSORIES ICHNO. FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
							Core is one piece of brown (7.5YR 4/2) RADIOLARIAN CHERT with pink (7.5YR 8/4) RADIOLARIAN PORCELANITE layers and spots.

Core Photo

1149B-16R 282.3-292 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1									 SS SS SS XRD XRF SS SS SS SS WR SS PAL	RADIOLARIAN PORCELANITE CLAY-BEARING RADIOLARIAN PORCELANITE CLAY-, ASH- and RADIOLARIAN-BEARING NANNOFOSSIL MARL ASH BEARING CALCAREOUS RADIOLARIAN MARL The upper part of the core (0-50 cm) is carbonate-free and consist of of pinkish gray (5YR 7/2) brown (7.5YR 4/2) laminated RADIOLARIAN PORCELANITE that grades downward into structureless or faintly laminated pinkish gray (7.5YR 6/2) CLAY-BEARING RADIOLARIAN PORCELANITE with abundant opal-CT. One smear slide from 47 cm contains abundant plant remains. Below 50 cm, the core consists of different carbonate-bearing lithologies, including pink (5YR 7/3) fragments of CLAY-, ASH- and RADIOLARIAN-BEARING NANNOFOSSIL MARL, slightly darker ASH BEARING CALCAREOUS RADIOLARIAN MARL, and dark reddish brown (5YR 2.5/2) chips of CHERT.

1149B-17R 292-301.6 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
										— PAL — RADIOLARIAN PORCELANITE This core consists of cobbles of dark reddish brown (5YR 4/2) laminated and gray (5YR 5/1) structureless to faintly laminated RADIOLARIAN PORCELANITE.

Core Photo

1149B-18R 301.6-311.3 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1										XRD XRF PAL RADIOLARIAN MARLSTONE RADIOLARIAN CHERT RADIOLARIAN PORCELANITE This core consists of pink (7.5YR 7/3) and light brown (7.5YR 6/4) irregularly laminated and bioturbated RADIOLARIAN MARLSTONE. Reddish brown (5Y 4/4) cobbles of RADIOLARIAN CHERT and RADIOLARIAN PORCELANITE occur at 0-4, 52-58, and 109-130 cm (Pieces 1, 7, and 16-19, respectively).

Core Photo

1149B-19R 311.3-320.9 mbsf											
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	FRACTURES	DESCRIPTION
1									    	  	CALCEROUS RADIOLARIAN MARLSTONE RADIOLARIAN CHERT/PORCELANITE This core consists of irregular alternation of dark cobbles of CHERT/PORCELANITE and yellowish brown (10YR 5/4), irregularly laminated CALCAREOUS RADIOLARIAN MARLSTONE. A darker interval occurs at 17-20 cm. This sediment contains euhedral barite crystals, dolomite rhombs, and common phosphatic fish remains. Subvertical and oblique dissolution seams are common in the more indurated calcareous lithologies.

Core Photo

1149B-20R 320.9-330.5 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1									XRD XRF WR PAL	CALCAREOUS RADIOLARIAN MARLSTONE RADIOLARIAN CHERT RADIOLARIAN PORCELANITE This core consists of irregular alternation of dark RADIOLARIAN CHERT, RADIOLARIAN PORCELANITE, partly with calcareous haloes, and of yellowish brown (10YR 5/4) CALCAREOUS RADIOLARIAN MARLSTONE.

Core Photo

1149B-21R 330.5-330.7 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
	1								XRD PAL	RADIOLARIAN CHERT This core consists of RADIOLARIAN CHERT with irregular reddish brown (5YR 4/4) and dark brown (7.5YR 3/2) lamination.

Core Photo

1149B-22R 340.1-349.7 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
	1								SS WR SS XRD XRF PAL	NANNOFOSSIL CHALK NANNOFOSSIL-BEARING MARLSTONE RADIOLARIAN CHERT This core consists of an irregular alternation of finely laminated, light reddish brown (5YR 6/4) and whitish pink (5YR 8/2) NANNOFOSSIL CHALK, NANNOFOSSIL-BEARING MARLSTONE, and laminated dusky red (10YR 3/4) RADIOLARIAN CHERT. Some RADIOLARIAN CHERT pieces contain irregular (1-10 mm) patches of calcareous material.

Core Photo

1149B-23R 349.7-359.2 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1										SS PAL RADIOLARIAN CHERT RADIOLARIAN-BEARING CLAYEY NANNOFOSSIL MARL This core dominantly consists of pieces of dusky red (10R 3/2) to weak red (10R 5/4) RADIOLARIAN CHERT with irregular patches and discontinuous laminations of carbonate. Piece 1 (0-3 cm), consists of a finely laminated RADIOLARIAN-BEARING CLAYEY NANNOFOSSIL MARL.

Core Photo

1149B-24R 359.2-368.7 mbsf									
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE
DESCRIPTION									
1									RADIOLARIAN CHERT RADIOLARIAN-RICH NANNOFOSSIL MARL The core consists of pale red to weak red (10R 6/5-4/4) RADIOLARIAN CHERT with haloes and lenses of RADIOLARIAN-RICH NANNOFOSSIL MARL.

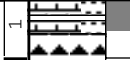
Core Photo

1149B-25R 368.7-378.1 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1 PAL RADIOLARIAN CHERT This core consists of 5-8 cm pieces of RADIOLARIAN CHERT exhibiting a wide range of colors, from red (2.5YR 4/6), reddish brown (2.5YR 4/3), to light olive brown (2.5Y 5/4). Haloes and streaks of carbonate-rich material are abundant.										

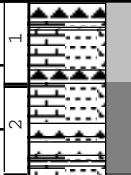
Core Photo

1149B-26R 378.1-387.6 mbsf											
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	FRACTURES	DESCRIPTION
1									SS SS XRD XRF PAL		RADIOLARIAN CHERT CLAYEY NANNOFOSSIL CHALK This core consists of two main lithologies: a mostly brown (10YR 5/3), but also olive or reddish brown, RADIOLARIAN CHERT with "swiss-cheese" structure (9-14 , 24-28, 35-40, and 54-87 cm) and a light reddish brown (2.5YR 7/3) to reddish brown (2.5YR 5/3) irregularly laminated CLAYEY NANNOFOSSIL CHALK (0-9, 14-24, 28-35, and 40-54 cm). Oblique and randomly orientated dissolution seams common throughout the CLAYEY NANNOFOSSIL CHALK.

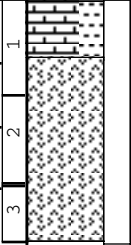
Core Photo

1149B-27R 387.6-397.1 mbsf											
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	FRACTURES	DESCRIPTION
1											CLAY-BEARING NANNOFOSSIL CHALK RADIOLARIAN CHERT This core has two main lithologies: light reddish brown to reddish brown (2/5YR 7/3 to 5/3) laminated CLAY-BEARING NANNOFOSSIL CHALK (0-20 and 35-55 cm) and light olive brown (2.5Y 5/4) and reddish brown (5YR 5/4) RADIOLARIAN CHERT with nannofossil-rich haloes and lenses (30-35, and 60-95 cm). Sub-vertical and oblique dissolution seams are common in the more indurated calcareous lithologies.

Core Photo

1149B-28R 397.1-406.8 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1 2										SS XRD XRF SS PAL RADIOLARIAN CHERT RADIOLARIAN-BEARING NANNOFOSSIL MARL This core consists of two main lithologies: black, olive and reddish brown pieces of RADIOLARIAN CHERT partially preserving original bedding surfaces in Sections 1 (0-32, 42-46, 60-65, 104-114, 119-130 cm) and 2 (64-81, 90-110, 120-132 cm). A finely laminated, sparsely to moderately bioturbated, light red (2.5YR 6/6) to pale brown (10YR 6/3) RADIOLARIAN-BEARING NANNOFOSSIL MARL occurs in Sections 1 (32-42, 46-60, 65-104, 114-119, 122-126 cm) and 2 (0-64, 81-90, 110-120, 132-140 cm). Minor lithologies: Calcite-filled, bedding parallel veins in Section 1 (85-92 cm). Mn-micronodules were observed throughout core, regardless of lithology.

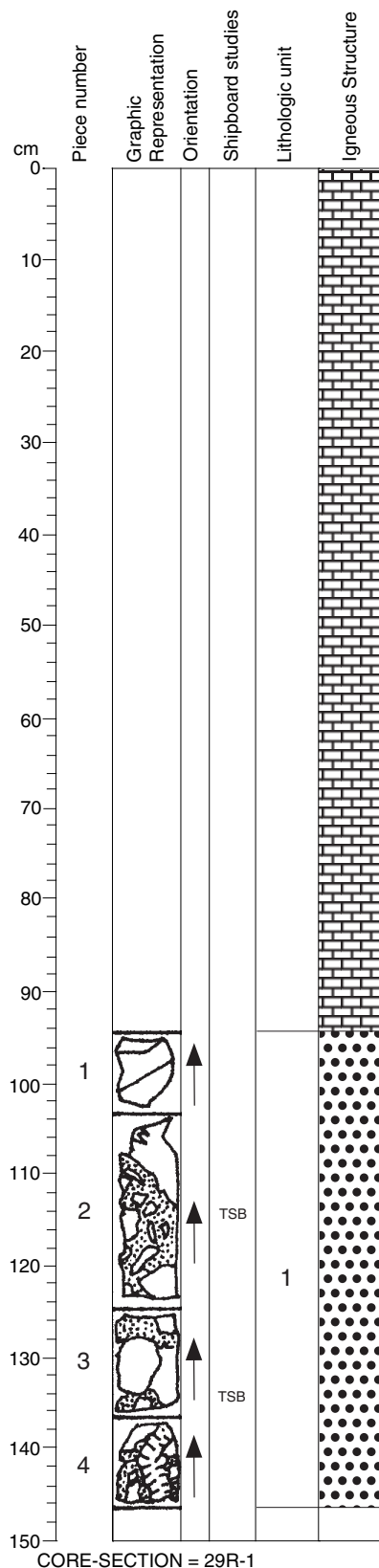
Core Photo

1149B-29R 406.8-416.4 mbsf									
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE
DESCRIPTION									
1 2 3									SS WR XRD SS THS THS XRD THS XRF XRF NANNOFOSSIL MARL NANNOFOSSIL CHALK BASALT This core consists of thinly laminated reddish brown (5YR 5/4) to dusky red (10R 4/6-3/3) NANNOFOSSIL MARL that grades into a very pale brown (10YR 8/3) NANNOFOSSIL CHALK between 80-93 cm. Lamination steepens below Section 1, 80 cm. However, it is unclear whether this is related to drilling or if it is a primary sedimentary feature. Mn-micronodules are present throughout the sedimentary portion of the core. Below 93.5 cm is BASALT. Recrystallized sediments fill fractures in BASALT and form the matrix of brecciated BASALT in Sections 1 (105-150 cm) and 2 (0-25 cm).

Core Photo

185-1149B-29R-1

Section top: 406.8 (mbsf)



UNIT1: APHYRIC BASALT

Pieces: 1-4

CONTACTS: None observed.

PHENOCRYSTS: None observed.

GROUNDMASS: Microcrystalline.

COLOR: Reddish gray basalt with dark bluish gray halos. Dark reddish gray along veins (e.g. piece 1).

VESICLES: 1-2%; 0.1 mm in size; filled with saponite.

STRUCTURE: Breccia.

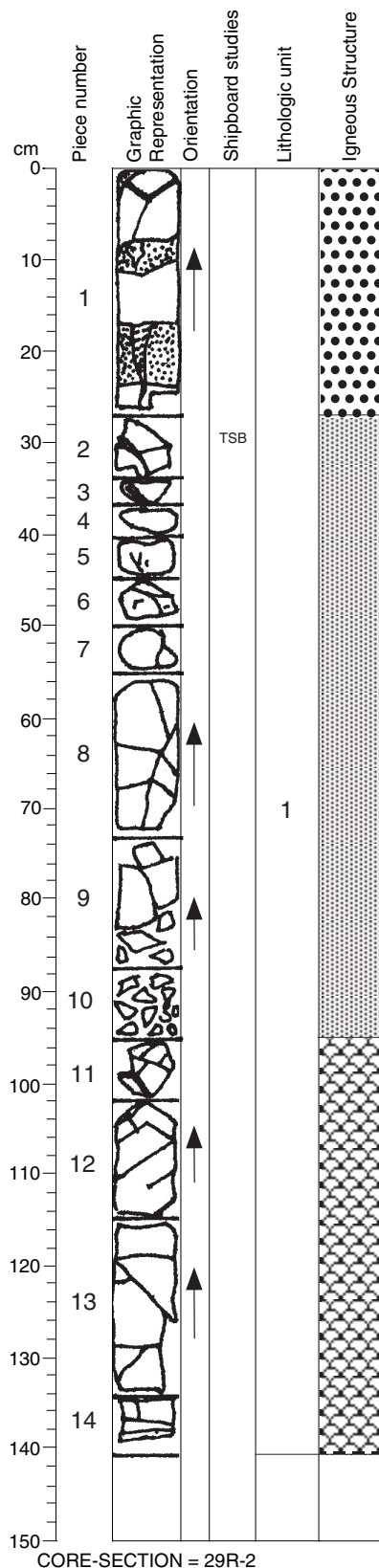
ALTERATION: Dusky red coloration in with vein controlled dark halo (c.15% alteration)

VEINS/FRACTURES: 3 thin veins in piece 1 (<0.4mm) filled mostly by carbonate, saponite/smectite and lesser iron oxyhydroxides. 5 mm dark/brown halo along veins. Piece 2-4 are breccia with 30 to 80 % of matrix principally composed of sediments.

COMMENTS: Top of section consists of sediments (marl). Basalt starts at 407.74 mbsf.

Core Photo

Section top: 408.26 (mbsf)



UNIT1: APHYRIC BASALT

Pieces: 1-14

CONTACTS: Chilled clast in piece 14.

PHENOCRYSTS:

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	0-1	0.4	0.2	0.2	euhedral
Pyroxene	<1	0.4	0.2	0.2	euhedral
Olivine	<1	0.2	0.1	0.1	euhedral

GROUNDMASS: Microcrystalline.

COLOR: Reddish gray basalt with dark bluish gray halos.

VESICLES: 1%; 0.1-0.2 mm in size; filled with saponite.

STRUCTURE: Breccia (piece 1); Pillows (piece 2-14).

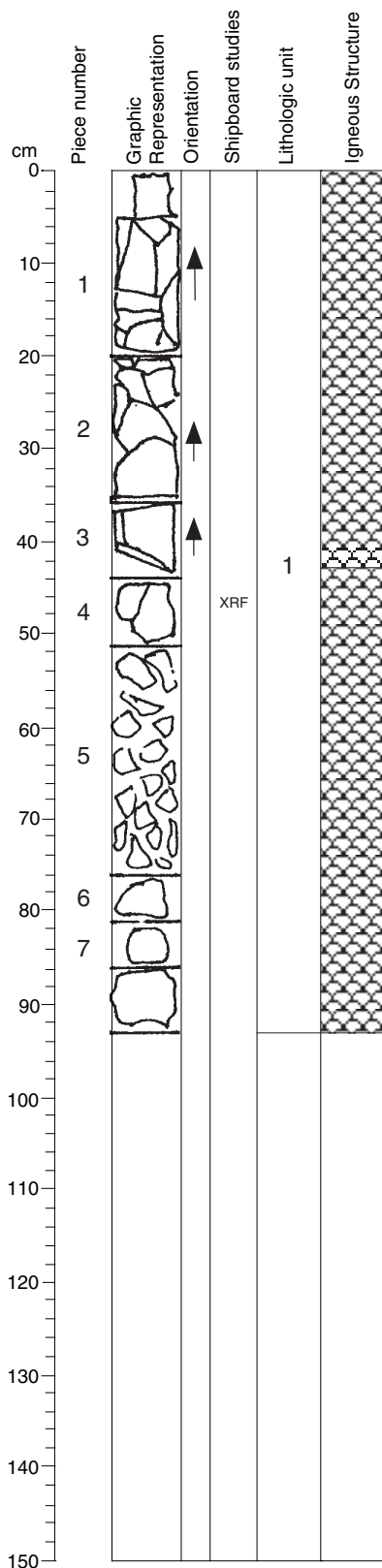
ALTERATION: Dusky red coloration in with vein controlled dark halo (c.15% alteration)

VEINS/FRACTURES: Piece 1 is breccia with 50% of matrix principally composed of sediments. In piece 2 to 14 occur 47 veins with an average width of 0.8mm. The veins are randomly oriented and are filled with saponite or carbonate with lesser iron oxyhydroxides. Carbonate occurs mostly in the lower part. All veins are lined with a dark brown halo.

Core Photo

185-1149B-29R-3

Section top: 409.67 (mbsf)



UNIT1: APHYRIC BASALT

Pieces: 1-8

CONTACTS: Chilled margin at the bottom of piece 3.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
		Mode	Max	Min	
Plagioclase	1	0.4	0.2	0.2	euhedral
Olivine	<1	0.5	0.1	0.4	euhedral

GROUNDMASS: Microcrystalline.

COLOR: Reddish gray basalt with dark bluish gray halos.

VESICLES: 2%; 0.1 mm in size; filled with saponite.

STRUCTURE: Pillows.

ALTERATION: Dusky red coloration with vein controlled dark halo (~15% alteration)

VEINS/FRACTURES: 27 veins randomly oriented with an average width of 0.6mm. Veins filled with saponite and/or carbonate with lesser iron oxyhydroxides. Veins are lined with a dark+brown halo.

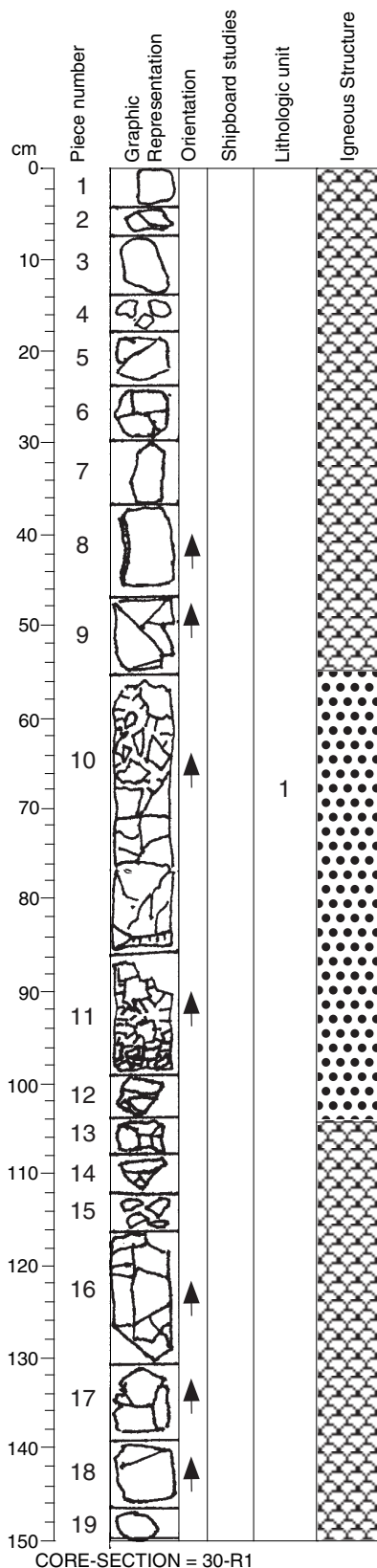
COMMENTS:

CORE-SECTION = 29R-3

Core Photo

185-1149B-30R-1

Section top: 416.4 (mbsf)



UNIT 1: APHYRIC BASALT

Pieces: 1-19

CONTACTS: None observed.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	<1	1	0.2	0.2	euhedral
Olivine	<<1	0.5	0.2	0.2	euhedral

GROUNDMASS: Microcrystalline.

COLOR: Dark greenish to reddish gray basalt with dark gray and dusky red clasts in breccia.

VESICLES: 0-2%; 0.1 mm in size; filled with saponite.

STRUCTURE: Pillow (piece 1-9 and 13-19); Breccia (piece 10A-12).

ALTERATION: Dusky red coloration with variable light brown gray mottling, vein controlled dark halo (c.15-20% alteration)

VEINS/FRACTURES: 54 veins randomly oriented with an average width of 0.5mm. Veins filled with saponite and/or carbonate with lesser iron oxyhydroxides. Carbonate occurs mostly in piece 1-9. Veins are lined with dark+brown or dark halo. The breccia matrix in piece 10-12 is dominantly composed of carbonate.

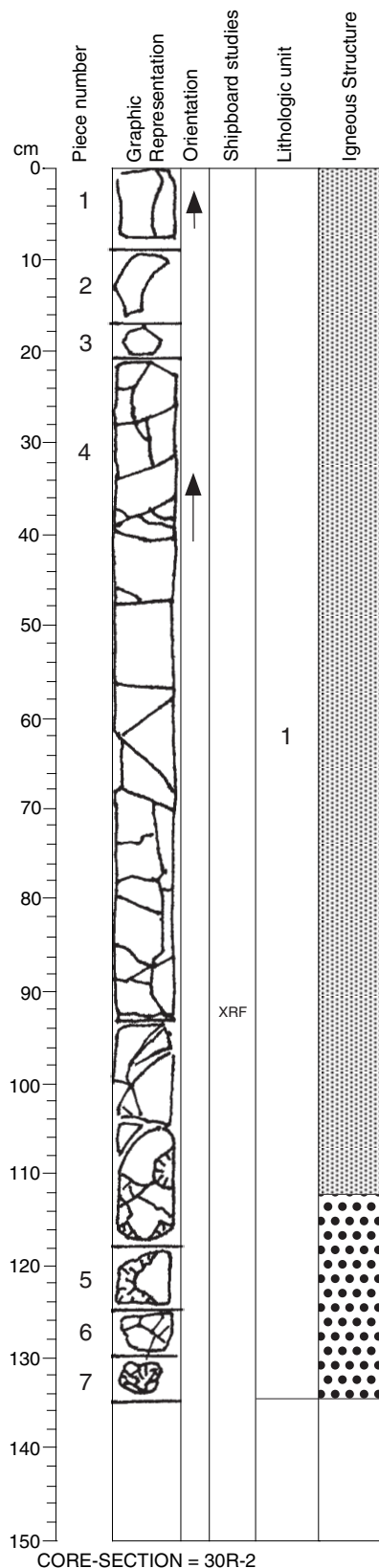
COMMENTS: Recrystallized interpillow material in pieces 10 to 11.

CORE-SECTION = 30-R1

Core Photo

185-1149B-30R-2

Section top: 417.9 (mbsf)



UNIT 1: APHYRIC BASALT

Pieces: 1-7

CONTACTS: Chilled pillow rims in pieces 4, 5 and 7.

PHENOCRYSTS:	% Mode	Grain Size (mm):			Shape/Habit
		Max	Min	Avg.	
Olivine	<1	1	0.5	0.8	euhedral

GROUNDMASS: Fine grained to hypocrySTALLINE at bottom.

COLOR: Reddish gray with dark bluish gray halos.

VESICLES: 1-3%; 0.2-0.5 mm in size; filled with saponite.

STRUCTURE: Pillows.

ALTERATION: Dusky red coloration with variable light brown gray mottling, vein controlled dark halo (c.15-20% alteration)

VEINS/FRACTURES: 48 veins randomly oriented with an average width of 0.9 mm. Veins filled with saponite and/or carbonate with lesser iron oxyhydroxides. Veins are lined with mostly dark+brown halo. Breccia in piece 7 and hyaloclastite in piece 4 is composed of clasts of altered glass and a matrix of carbonate (minor saponite).

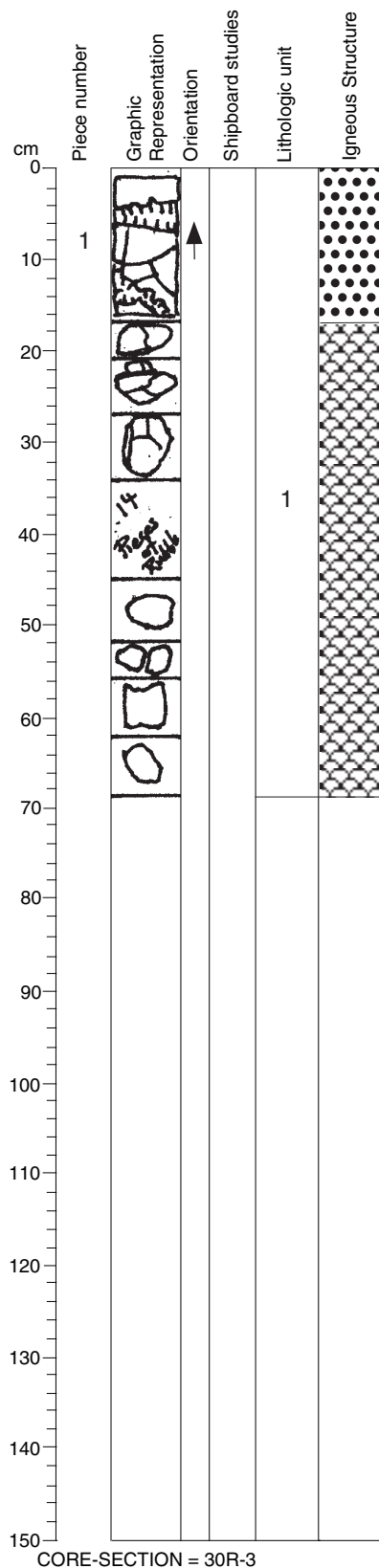
COMMENTS: Maybe one big pillow. Recrystallized interpillow material in piece 4,5 and 7.

CORE-SECTION = 30R-2

Core Photo

185-1149B-30R-3

Section top: 419.25 (mbsf)



UNIT 1: APHYRIC BASALT

Pieces: 1-9

CONTACTS: Chilled margin in clast at top of piece 1.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
		Mode	Max	Min	
Plagioclase	<1	1	0.2	0.5	euhedral
Olivine	<1	0.5	0.5	0.5	euhedral

GROUNDMASS: Microcrystalline to hypocrystalline.

COLOR: Reddish gray with dark bluish gray halos. Dark greenish gray veins, dusky red along clast rims in piece 1.

VESICLES: <1%; 1 mm in size; filled with saponite.

STRUCTURE: Pillows.

ALTERATION: Dusky red coloration with limited light brown gray mottling, vein controlled dark halo (c.15-20% alteration)

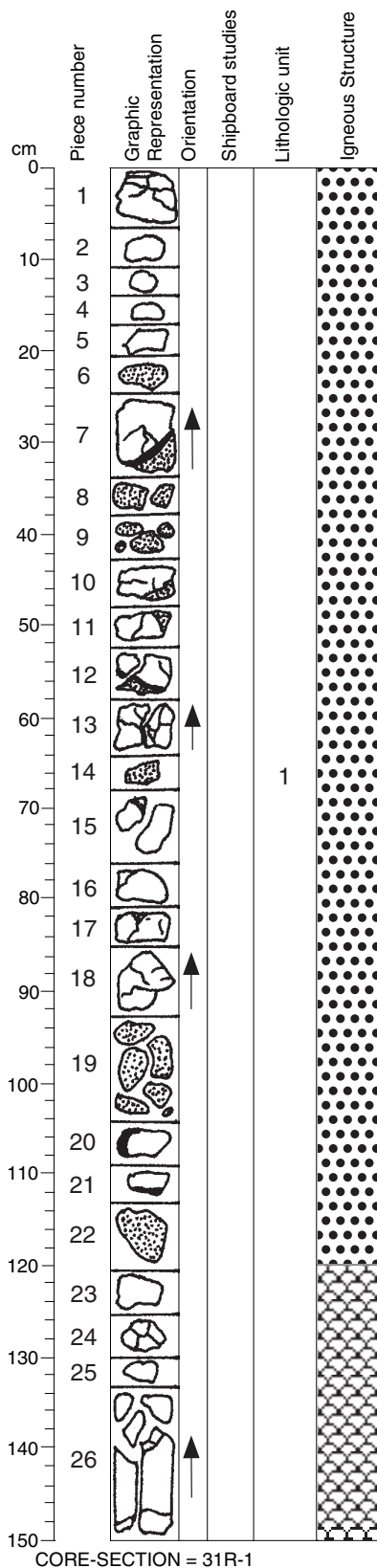
VEINS/FRACTURES: 18 veins randomly oriented with an average width of 0.5mm. Veins filled with saponite or carbonate with lesser iron oxyhydroxides. Veins are lined with mostly dark+brown halo. Breccia in piece 1 is composed of clasts of altered glass and a matrix of carbonate (minor saponite).

COMMENTS:

Core Photo

185-1149B-31R-1

Section top: 426.0 (mbsf)



UNIT 1: APHYRIC BASALT

Pieces: 1-26

CONTACTS: Chilled pillowrims in pieces 7 and 20.

PHENOCRYSTS:

	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	<1	1	0.2	0.5	euhedral

GROUNDMASS: Microcrystalline to hypocrySTALLINE.

COLOR: Dark reddish gray with dark greenish gray halos.

VESICLES: <1%; 1mm in size; filled with calcite.

STRUCTURE: Pillows.

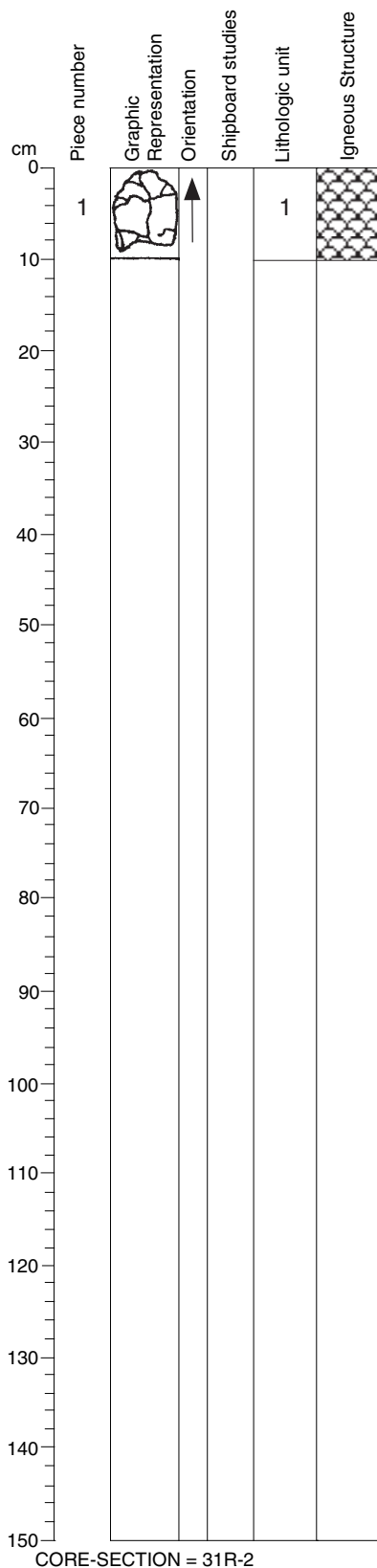
ALTERATION: Dusky red coloration with variable light brown gray mottling, vein controlled multi-colored halo, consisting of an early dark halo and cross cutting brown halo (c. 15-20% alteration).

VEINS/FRACTURES: 50 veins randomly oriented with an average width of 0.8mm. Veins filled with saponite and/or carbonate with lesser iron oxyhydroxides. Some veins are lined with dark+brown halo. Hyaloclastites in pieces 6-9, 12, 18 and 22 are composed of clasts of altered glass and a matrix (between 10 and 50%) of saponite, iron oxyhydroxides and carbonate.

Core Photo

185-1149B-31R-2

Section top: 427.49 (mbsf)



UNIT 1: APHYRIC BASALT

Pieces: 1

CONTACTS: None observed.

PHENOCRYSTS: None observed.

GROUNDMASS: Fine grained.

COLOR: Gray to light brownish gray.

VESICLES: None observed.

STRUCTURE: Pillow .

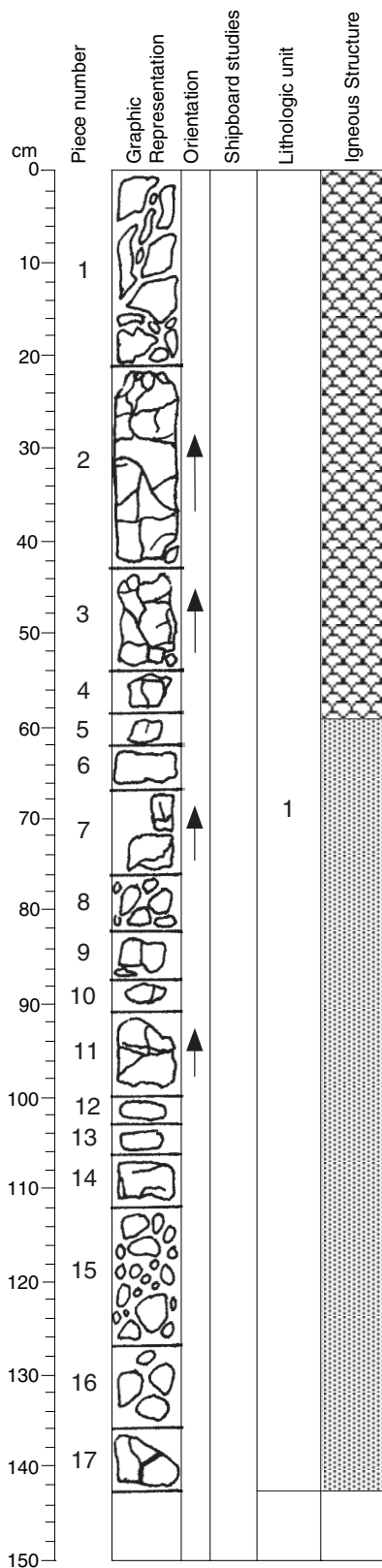
ALTERATION: Dusky red coloration with variable light brown gray mottling, vein controlled multi-colored halo, consisting of an early dark halo and cross cutting brown halo (c.15-20% alteration).

VEINS/FRACTURES: 5 veins randomly oriented with an average width of 1.8mm. Veins filled with mostly carbonate and are lined with dark+brown halo.

Core Photo

185-1149B-32R-1

Section top: 435.6 (mbsf)



UNIT 1: APHYRIC BASALT

Pieces: 1-17

CONTACTS: None observed.

PHENOCRYSTS:

	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	<1	1.0	0.1	0.4	euhedral

GROUNDMASS: Microcrystalline.

COLOR: Reddish gray basalt interior with greenish gray halos.

VESICLES: 1%, 0.1 mm in size; filled with saponite and Fe-Oxides.

STRUCTURE: Pillows.

ALTERATION: Dusky red coloration with variable light brown gray mottling, vein controlled multi-colored halos, consisting of an early dark halo and cross cutting brown halo (c.15-20% alteration).

VEINS/FRACTURES: 48 veins randomly oriented with an average width of 0.7mm. Veins filled with saponite and carbonate with lesser iron oxyhydroxides. Most veins are lined with dark and/or brown halo.

COMMENTS:

CORE-SECTION = 32R-1

1149C-1W 0-237 mbsf							
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE ACCESSORIES ICHNO. FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
							ASH- AND SILICEOUS MICROFOSSIL-BEARING CLAY RADIOLARIAN PORCELANITE RADIOLARIAN CHERT
						— SS	This core contains a mixture of lithologies found between 0-237 mbsf.

Core Photo

1149C-2W 237-283.6 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1										RADIOLARIAN PORCELANITE RADIOLARIAN CHERT This wash core contains various pieces of RADIOLARIAN PORCELANITE and RADIOLARIAN CHERT.

Core Photo

1149C-3R 283.6-293.2 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1									SS SS PAL	RADIOLARIAN CHERT RADIOLARIAN PORCELANITE CLAY-BEARING CALCAREOUS PORCELANITE CLAY-BEARING SILICEOUS MARL This core consists of two major groups of lithologies: the more indurated pieces are pinkish gray (7.5YR 7/2), dark brown (7.5YR 3/2) and light gray (7.5YR 7/1) RADIOLARIAN CHERT and RADIOLARIAN PORCELANITE. These lithologies partly have light colored patches and haloes of calcareous sediment. The less indurated lithologies include pink (7.5YR 8/3) CLAY-BEARING CALCAREOUS PORCELANITE and brown to dark brown CLAY-BEARING SILICEOUS MARL. Although a minor lithology in the recovered section, the calcareous lithologies may represent a dominant lithology of the cored interval.

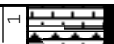
Core Photo

1149C-4R 293.2-302.8 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1								 		RADIOLARIAN CHERT RADIOLARIAN PORCELANITE CLAY-BEARING CALCAREOUS PORCELANITE The core consists of pieces of dark reddish brown (5YR 3/2) RADIOLARIAN CHERT (0-6, 9-24, and 33-39 cm), pinkish white CLAY-BEARING CALCAREOUS PORCELANITE (6-9 cm), and pinkish gray RADIOLARIAN PORCELANITE with wavy lamination (24-33 cm).

Core Photo

1149C-5R 302.8-312.4 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1										PAL RADIOLARIAN CHERT NANNOFOSSIL CHALK This core consists dominantly of RADIOLARIAN CHERT. Pieces 2-4 (4-27 cm) are black (7.5YR 2.5/1) to brown (7.5Y 4/2). Pieces 5 and 6 (27-36 cm) are brown (7.5YR 4/2) to reddish brown (5YR 5/4) and are crudely laminated (possibly flattened burrows). Piece 1 (0-4 cm) is a tan colored NANNOFOSSIL CHALK.

Core Photo

1149C-6R 312.4-322 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1									SS SS PAL	NANNOFOSSIL CHALK RADIOLARIAN CHERT This core consists of two dominant lithologies: heavily bioturbated light gray to light brownish gray (2.5 Y 7/2 to 6/2) NANNOFOSSIL CHALK (0-35 cm and 58-64 cm) and bioturbated, crudely laminated, light reddish brown to dark reddish gray (5 YR 6/4 to 4/2) RADIOLARIAN CHERT (34-42 cm) most of which show contacts to the calcareous lithologies .

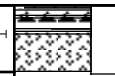
Core Photo

1149C-7W 322-388.2 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1									PAL	RADIOLARIAN CHERT NANNOFOSSIL CHALK/MARL This core consists of two dominant lithologies: a tan, irregularly laminated and bioturbated piece of NANNOFOSSIL CHALK (0-5 cm) and pieces of mostly brown (7.5YR 3/2) to light reddish brown (2.5YR 6/4) RADIOLARIAN CHERT (5-52 cm) with clear rims and light reddish brown (2.5YR 7/4) encrustations of NANNOFOSSIL CHALK/MARL.

Core Photo

1149C-8R 388.2-397.9 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1										RADIOLARIAN-BEARING CLAYEY MARLSTONE RADIOLARIAN-BEARING CALCAREOUS MARLSTONE RADIOLARIAN CHERT Two dominant lithologies make up this core: less indurated pieces are irregularly laminated, bioturbated, alternating bluish gray (5PB 6/2) RADIOLARIAN-BEARING CLAYEY MARLSTONE and grayish green (10G 8/1) RADIOLARIAN-BEARING CALCAREOUS MARLSTONE. Fully indurated sediment is variously colored, olive (5Y 4/3), bluish gray (5B 5/2), light olive brown (2.5Y 5/4), light yellowish brown (2.5Y 6/4), brown (10YR 5/3), and very light (N8) to medium light gray (N6), RADIOLARIAN CHERT often containing light colored calcareous rims and haloes. RADIOLARIAN CHERT pieces from 78-110 cm display roughly planar arrangement of spots containing less indurated material.

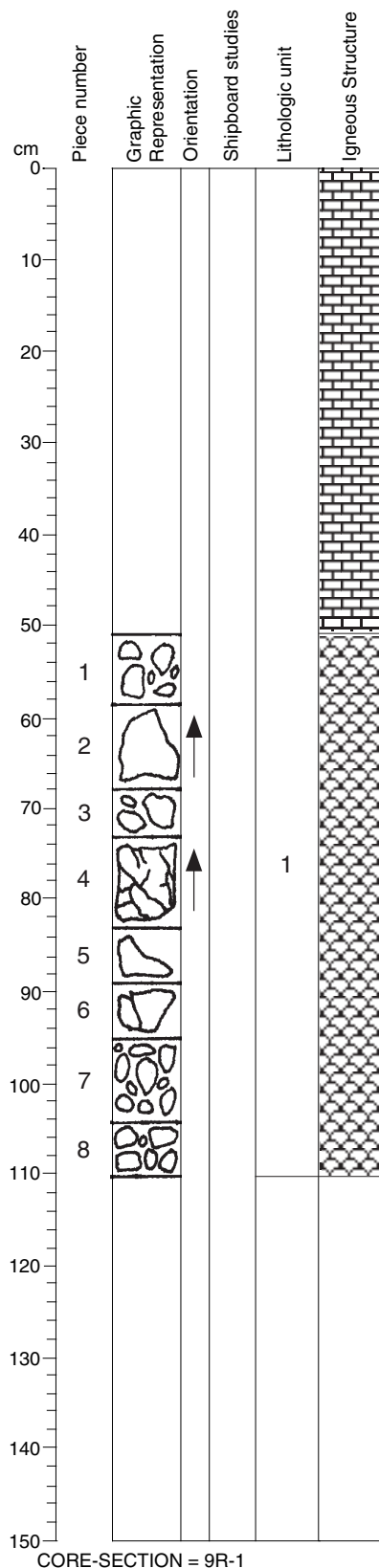
Core Photo

1149C-9R 397.9-407.5 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1										 RADIOLARIAN CHERT CLAY-BEARING NANNOFOSSIL CHALK CLAY- AND RADIOLARIAN-BEARING NANNOFOSSIL CHALK NANNOFOSSIL CHALK BASALT This core consists of several different lithologies: RADIOLARIAN CHERT with irregular, alternating bands of weak red (7.5R 4/2) and pale red (7.5R 6/2) [0-5 cm] or brown (7.5YR 3/3) chert, and 1-3 mm patches and discontinuous lamina of clear carbonate (13-17, 26-29, 47-51 cm); pale red (7.5R 6/4) to brown (7.5YR 5/3) CLAY-BEARING NANNOFOSSIL CHALK with thin, irregular lamination (5-13 cm); pink (7.5YR 8/3) to brown (7.5YR 5/3) CLAY- AND RADIOLARIAN-BEARING NANNOFOSSIL CHALK with thin, wispy, irregular lamination and < 2mm Mn-mirconodules (17-26 and 29-41 cm); interlaminated dusky red (10R 3/4) to red (10R 4/6) CHERT, and white NANNOFOSSIL CHALK (41-47 cm). Below 51 cm is BASALT.

Core Photo

185-1149C-9R-1

Section top: 397.9 (mbsf)



UNIT 1: APHYRIC BASALT

Pieces: 1-8

CONTACTS: None observed.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	<1	0.8	0.2	0.4	euhedral
Olivine	<<1	0.5	0.2	0.3	euhedral

GROUNDMASS: Microcrystalline to hypocrySTALLINE.

COLOR: Dark greenish gray basalt with dark reddish gray halos.

VESICLES: 2%; 0.1 mm in size; filled with smectite and Fe-oxide.

STRUCTURE: Pillows.

ALTERATION: Dusky red coloration with a light brown gray mottling occurring in pieces 2, 5, & 6, vein controlled multi-colored halo, consisting of an early dark halo and occasional cross cutting brown halo (c.15-20% alteration).

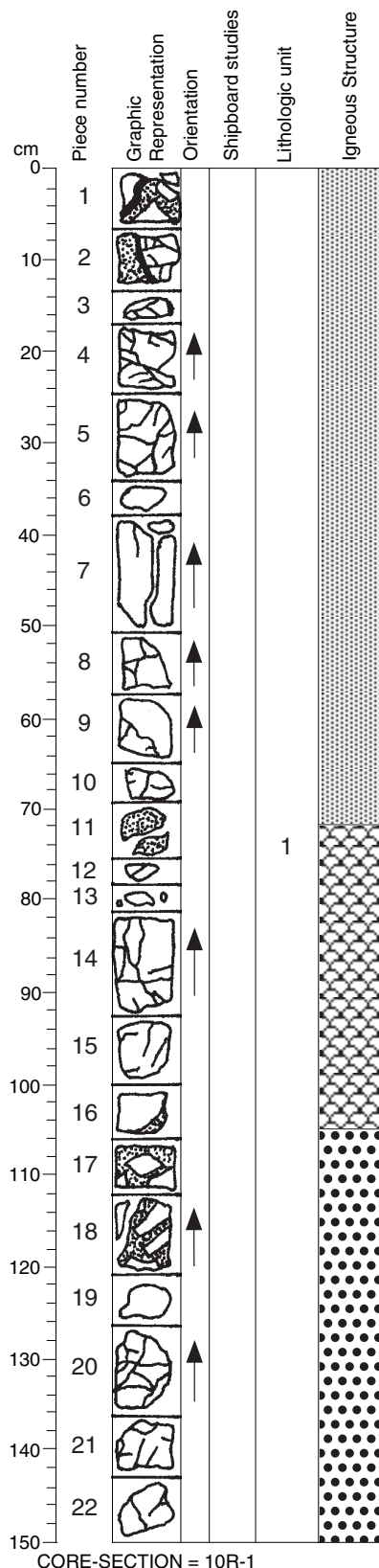
VEINS/FRACTURES: 10 veins randomly oriented with an average width of 0.5mm. Veins filled with saponite and/or carbonate with lesser iron oxyhydroxides. Most veins are lined with dark halo.

COMMENTS: Basement starts at 398.42 mbsf.

Core Photo

185-1149C-10R-1

Section top: 407.5 (mbsf)



UNIT 1: APHYRIC BASALT

Pieces: 1-22

CONTACTS: Chilled margin in piece 1.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
		Mode	Max	Min	
Plagioclase	<1	0.5	0.1	0.1	euhedral
Olivine (pieces 1, 22)	<<1	0.2	0.1	0.1	euhedral

GROUNDMASS: Microcrystalline to hypocrystalline.

COLOR: Dark gray, slightly greenish and reddish.

VESICLES: 1%; <0.1 mm in size; filled with smectite.

STRUCTURE: Pillows, Breccia.

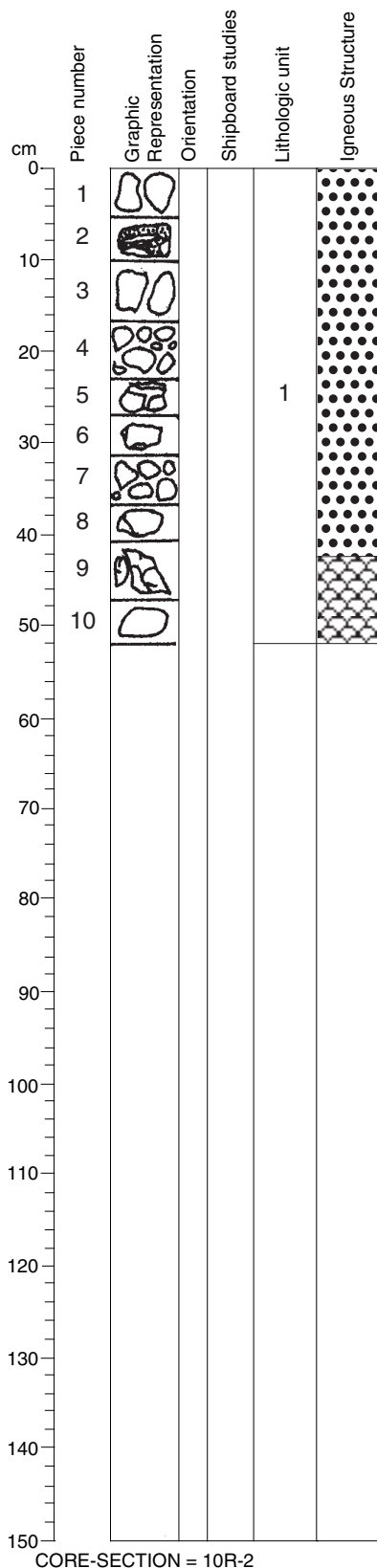
ALTERATION: Dusky red coloration with a light brown gray mottling of variable intensity, vein controlled multi-colored halo, consisting of an early dark halo and occasional cross cutting brown halo (c.15-20% alteration).

VEINS/FRACTURES: 55 veins randomly oriented with an average width of 1.7mm. Veins filled with saponite and/or carbonate with lesser iron oxyhydroxides. Thicker veins are enriched in carbonate. Some veins are lined with dark halo. Breccia in pieces 17-19 are composed of clasts of basalt and a matrix (between 20 and 40%) of carbonate.

Core Photo

185-1149C-10R-2

Section top: 409.0 (mbsf)



UNIT 1: APHYRIC BASALT

Pieces: 1-10

CONTACTS: None observed.

PHENOCRYSTS:

	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	<1	0.8	0.1	0.1	euhedral

GROUNDMASS: Microcrystalline to hypocrystalline.

COLOR: Dark gray, slightly greenish and reddish.

VESICLES: <1%; 0.1 mm in size; filled with smectite.

STRUCTURE: Breccia.

ALTERATION: Dusky red coloration with a light brown gray mottling of variable intensity, vein controlled multi-colored halo, consisting of an early dark halo and occasional cross cutting brown halo (c.15-20% alteration).

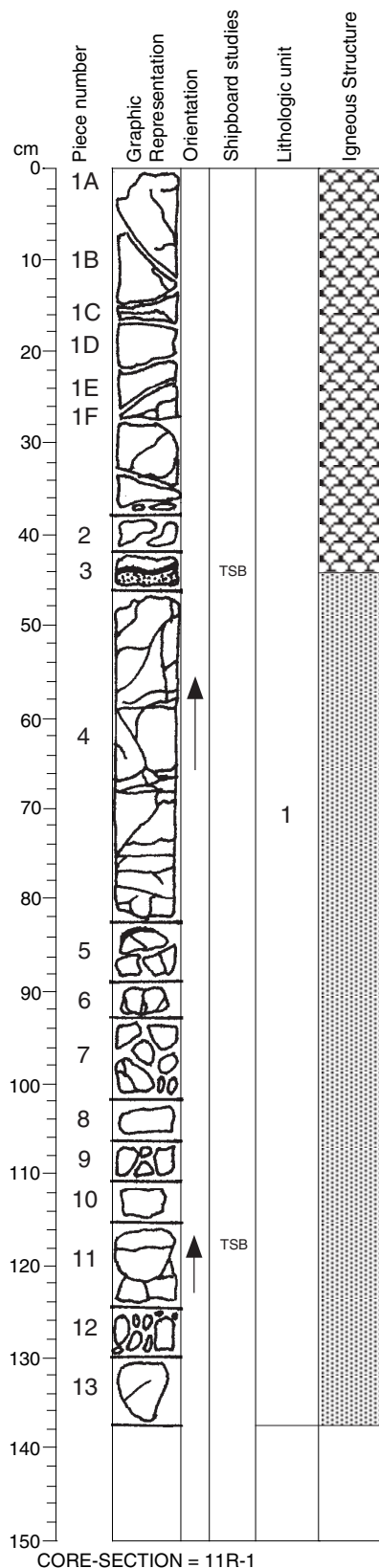
VEINS/FRACTURES: 11 veins randomly oriented with an average width of 2mm. Veins filled mostly by carbonate with lesser saponite and iron oxyhydroxides. Hyaloclastite in pieces 2 and 7 are composed of clasts of altered basalt and a matrix of carbonate.

COMMENTS:

Core Photo

185-1149C-11R-1

Section top: 417.1 (mbsf)



UNIT 1: APHYRIC BASALT

Pieces: 1A-13

CONTACTS: Chilled margin (slightly brecciated in piece 3).

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
		Mode	Max	Min	
Plagioclase	<1		1.2	0.1	euhedral
Olivine	<<1		0.3	0.1	euhedral

GROUNDMASS: Microcrystalline, hypocrySTALLINE in chilled margin.

COLOR: Dark gray with reddish interior and greenish halos.

VESICLES: <1%; <0.1 mm in size; filled with calcite, Fe-oxide and smectite.

STRUCTURE: Pillows.

ALTERATION: Dusky red coloration with a light brown gray mottling of variable intensity, with the mottling in piece 6 completely obliterating the dusky red alteration. Vein controlled multi-colored halo, consisting of an early dark halo and occasional cross cutting brown halo (c.15-20% alteration).

VEINS/FRACTURES: 33 veins randomly oriented with an average width of 0.7mm. Veins filled with saponite and/or carbonate with lesser iron oxyhydroxides. Most veins are lined with dark or dark+brown halo. Breccia in piece 3 is composed of clasts of altered basalt and a matrix (between 20 and 40%) of carbonate+saponite (minor iron oxyhydroxides).

COMMENTS:

Core Photo

1149D-2R 272.2-281.6 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1									SS PAL	RADIOLARIAN CHERT NANNOFOSSIL CHALK This core consists of several pieces of red (2.5YR 4/3) RADIOLARIAN CHERT. The first two pieces (0-4 and 4-9 cm) are dark reddish brown (2.5YR 3/4) and dark reddish gray (2.5YR 3/1), respectively. Piece#1 is encrusted with NANNOFOSSIL CHALK and contains common calcite-replaced radiolarians. Mn-micronodules are finely disseminated throughout RADIOLARIAN CHERT, but also occur concentrated in thin, irregular black lamina. Light bluish gray (10B 8/1) chert/chalcedony filled veins occur from 20-23 cm and 29-38 cm. Most pieces are slightly to moderately mottled with patches of pale-yellow carbonate material, possibly reflecting bioturbation.

Core Photo

1149D-3R 281.6-290.9 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1 </										

Core Photo

1149D-4R 290.9-300.3 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1									SS SS SS PAL	RADIOLARIAN CHERT CLAY- AND RADIOLARIAN-BEARING NANNOFOSSIL CHALK This core consists of two dominant lithologies: RADIOLARIAN CHERT and CLAY- AND RADIOLARIAN BEARING NANNOFOSSIL CHALK, largely recovered as either encrustations or as irregular patches in the chert. RADIOLARIAN CHERT is dominantly red (2.5YR 4/6) to dark reddish brown (2.5YR 2.5/3). One piece of RADIOLARIAN CHERT at 61-66 cm, is characterized by irregular, but subparallel, elongated, mottled patches of dark reddish brown (10R 4/1), dusky red (10R 3/4), and light red (2.5YR 6/6) color. The interval between 32-41 cm is characterized by an unusual light grayish green mottling (5GY 8/1) and also vein fill by silica and Mn-oxyhydroxide. The CLAY- AND RADIOLARIAN BEARING NANNOFOSSIL CHALK is pink (7.5YR 8/3-7/3) and one discrete piece, with thin irregular laminations, occurs between the interval of 0-5 cm.

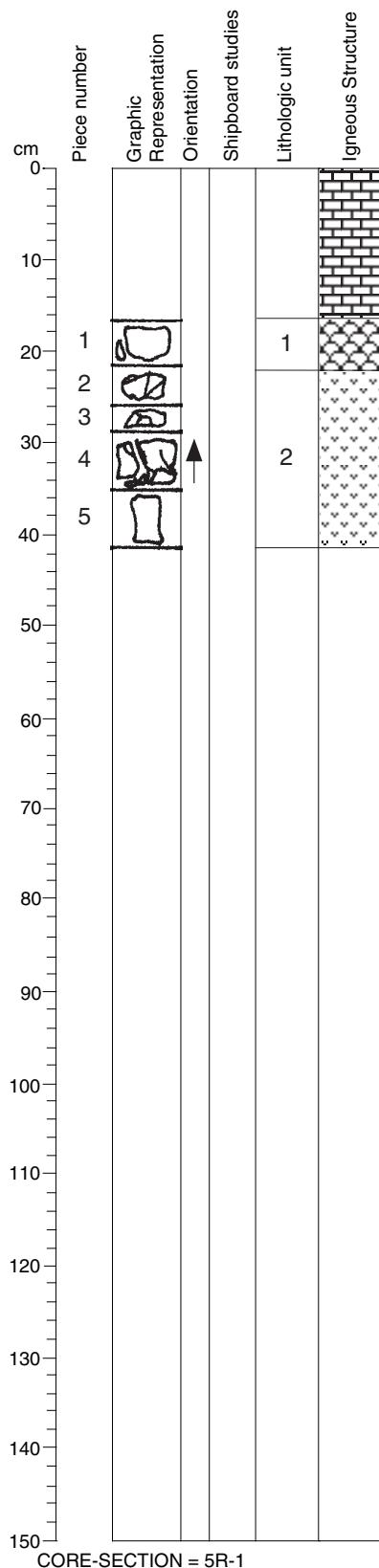
Core Photo

1149D-5R 300.3-310 mbsf										
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	DESCRIPTION
1									SS SS SS	RADIOLARIAN CHERT CHALK CALCAREOUS CLAY BASALT Sediments of this core consist of red (2.5YR 4/6) and dark reddish brown (2.5YR 2.5/3) RADIOLARIAN CHERT (0-14 cm) with mottles of pale yellow calcareous sediment. Soft purple material present in a vug in the top piece of chert is an ashey nannofossil chalk. Three small pieces of light reddish brown (2.5YR 6/3) CHALK and reddish brown (2.5YR 4/3) CALCAREOUS CLAY (14-17 cm) occur between CHERT and BASALT; reddish color is from iron-oxide staining. Below 17 cm is BASALT.

Core Photo

185-1149D-5R-1

Section top: 300.3 (mbsf)



UNIT 1: SLIGHTLY OLIVINE PHYRIC BASALT

Pieces: 1

CONTACTS: None observed.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	<1	0.5	0.2	0.2	euhedral
Olivine	>1	0.8	0.2	0.4	euhedral

GROUNDMASS: Microcrystalline.

COLOR: Dark greenish gray.

VESICLES: <1%; 0.1-0.2 mm in size; filled with smectite and Fe-oxides.

STRUCTURE: Pillows or flow.

ALTERATION: Dark grey and dusky red alteration with variable mottling.

VEINS/FRACTURES:

COMMENTS: Basement starts at 300.47 mbsf.

UNIT 2: APHYRIC BASALT

Pieces: 2-5

CONTACTS: None observed.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	<1	1.2	0.2	0.2	euhedral
Olivine	<1	0.2	0.1	0.2	euhedral

GROUNDMASS: Microcrystalline.

COLOR: Reddish gray basalt with greenish gray halos.

VESICLES: <1%; 0.1-0.2 mm in size; filled with smectite and Fe-oxides.

STRUCTURE: Pillows or Flow.

ALTERATION:

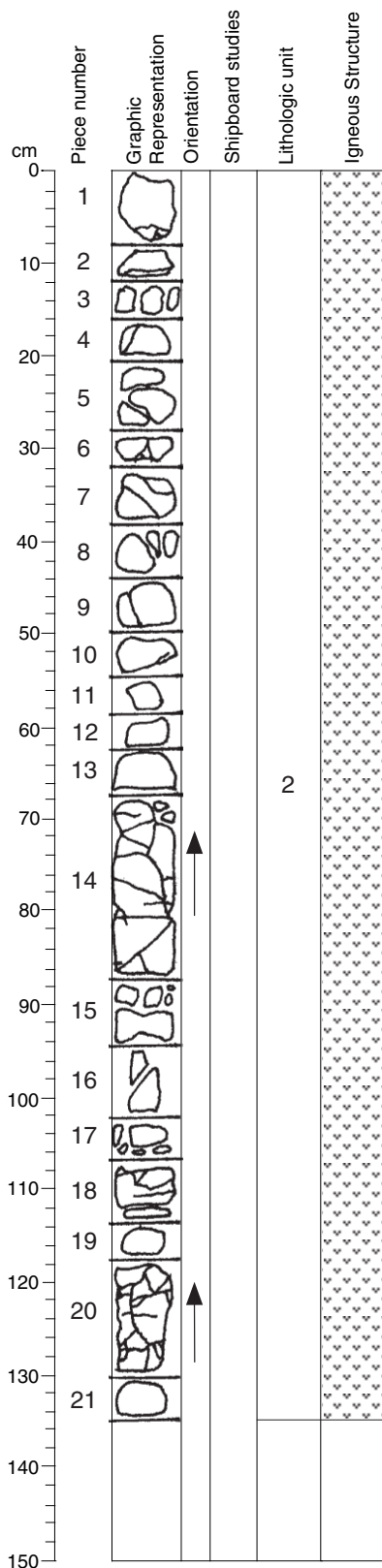
VEINS/FRACTURES: 9 veins randomly oriented with an average width of 0.6mm. Veins filled mostly with saponite and iron oxyhydroxides. Thicker veins are enriched in carbonate. Most veins are lined with dark green halos.

COMMENTS: Basement starts at 300.47 mbsf. Piece 1 contains about 3% of patchy olivine.

Core Photo

185-1149D-6R-1

Section top: 310.0 (mbsf)



CORE-SECTION = 6R-1

UNIT 2: APHYRIC BASALT

Pieces: 1-21

CONTACTS: None observed.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	<1-1	1.5	0.2	0.5	euhedral
Olivine	<1-1	0.2	0.1	0.1	euhedral

GROUNDMASS: Microcrystalline.

COLOR: Reddish gray basalt interiors with greenish gray halos.

VESICLES: <1%; 0.1 mm in size; filled with Fe-oxide and smectite.

STRUCTURE: Pillows or flows.

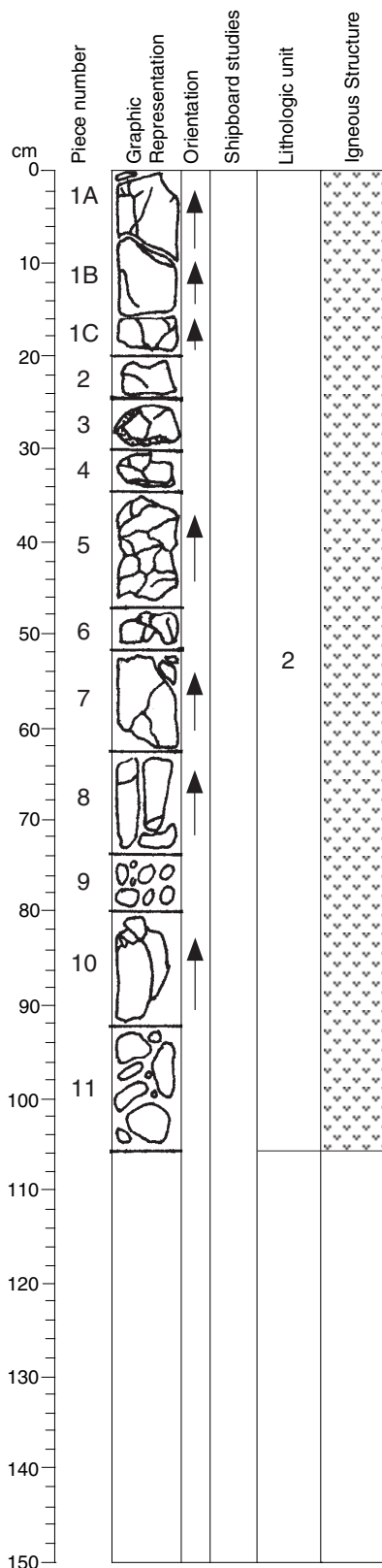
ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling. Dark halos common with some later superimposed brown halos.

VEINS/FRACTURES: 47 veins randomly oriented with an average width of 0.5mm. Veins filled mostly with saponite and lesser iron oxyhydroxides. Thicker veins are enriched in carbonate. Most veins are lined with a 5 mm dark green halo.

Core Photo

185-1149D-6R-2

Section top: 311.35 (mbsf)



UNIT 2: APHYRIC BASALT

Pieces: 1A-11

CONTACTS: None observed.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
		Max	Min	Avg.	
Plagioclase	<1-1	1.0	0.5	0.5	euhedral
Olivine	<1	0.4	0.1	0.1	euhedral

GROUNDMASS: Microcrystalline.

COLOR: Reddish gray basalt interiors with greenish gray halos.

VESICLES: <1-1%; 0.1 mm in size; filled with Fe-oxide and smectite.

STRUCTURE: Pillows or flows.

ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling. Dark halos common with some later superimposed brown halos.

VEINS/FRACTURES: 33 veins randomly oriented with an average width of 0.6 mm. Veins filled mostly with saponite and/or carbonate and lesser iron oxyhydroxides. Most veins are lined with a 5 mm dark green and/or brown halo.

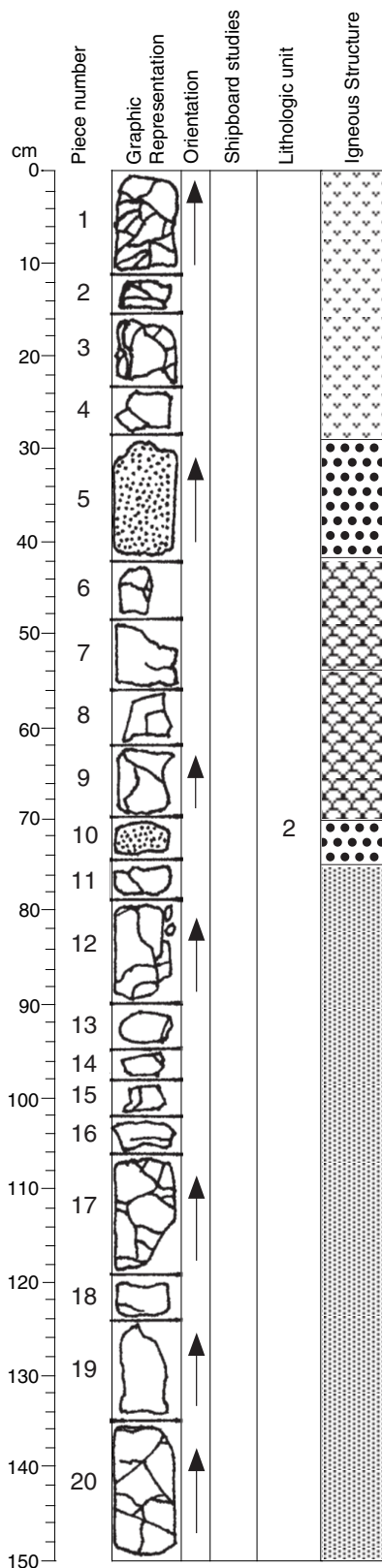
COMMENTS:

CORE-SECTION = 6R-2

Core Photo

185-1149D-7R-1

Section top: 319.7 (mbsf)



CORE-SECTION = 7R-1

UNIT 2: APHYRIC BASALT

Pieces: 1-20

CONTACTS: Hyaloclastites in pieces 5 and 10.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	<1	2.0	0.4	0.5	euhedral
Olivine	<1	0.1	0.6	0.1	euhedral

GROUNDMASS: Microcrystalline. Hyaloclastite.

COLOR: Reddish gray basalt with bluish gray halos. Hyaloclastites are dark green.

VESICLES: $\leq 1\%$; ≤ 0.1 mm in size; filled with smectite and Fe-xide.

STRUCTURE: Pillows.

ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling. Dark halos common with some later superimposed brown halos. The hyaloclastites are composed of 30-50% altered glass in a mixed smectite / calcite matrix.

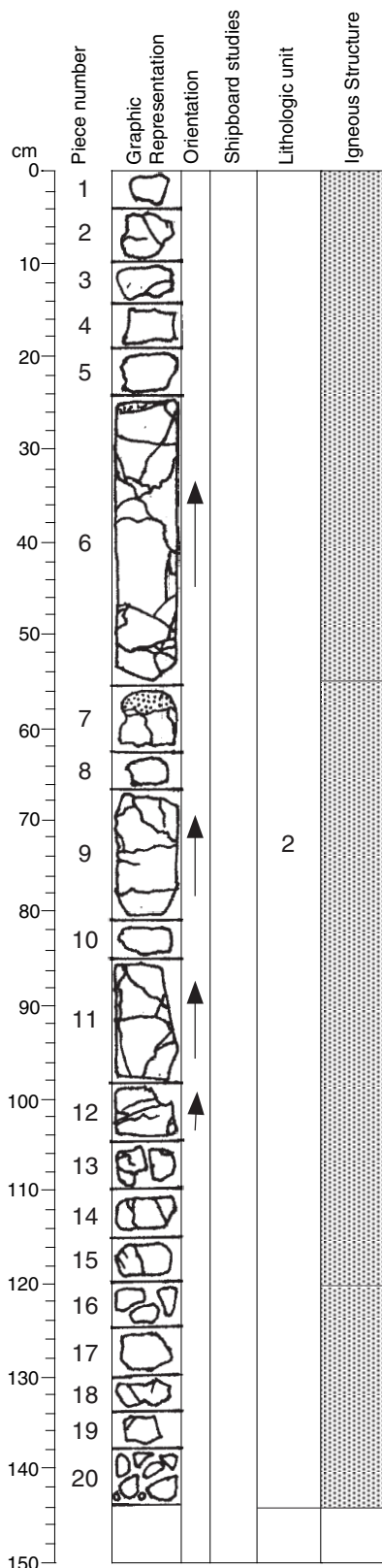
VEINS/FRACTURES: 68 veins randomly oriented with an average width of 0.4 mm. Veins filled mostly with saponite and/or carbonate and lesser iron oxyhydroxides. Most veins are lined with a 5 mm dark green halo. Pieces 5 and 10 are hyaloclastites composed of ~30 % clasts of altered basalt and a matrix of carbonate and green clay (mostly saponite).

COMMENTS: Basalt contains >1% microphenocrysts and glomerocrysts of elongated plagioclase laths.

Core Photo

185-1149D-7R-2

Section top: 321.2 (mbsf)



CORE-SECTION = 7R-2

UNIT 2: APHYRIC BASALT

Pieces: 1-20

CONTACTS: Chilled margins in pieces 7 and 16.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	<1	1.0	0.2	0.4	euhedral
Olivine	<1	0.5	0.1	0.1	euhedral

GROUNDMASS: Microcrystalline.

COLOR: Reddish gray basalt with bluish gray halos.

VESICLES: $\leq 1\%$; ≤ 0.1 mm in size; filled with smectite and Fe-oxide.

STRUCTURE: Pillows or flow.

ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling. Dark halos common with some later superimposed brown halos.

VEINS/FRACTURES: 56 veins randomly oriented with an average width of 0.6 mm. Veins filled mostly with saponite and carbonate and lesser iron oxyhydroxides ($<20\%$). Most veins are lined with a 5 mm dark green and brown halo.

COMMENTS: Basalt contains $>1\%$ microphenocrysts and glomerocrysts of elongated plagioclase laths.

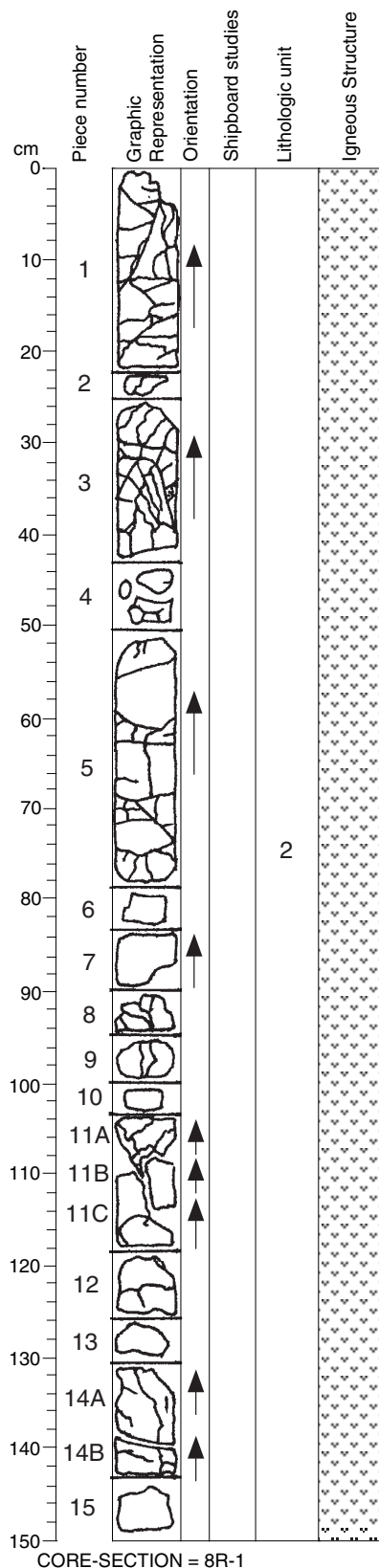
Section top: 322.65 (mbsf)

CORE-SECTION = 7R-3

Core Photo

185-1149D-8R-1

Section top: 329.3 (mbsf)



UNIT 2: APHYRIC BASALT

Pieces: 1-15

CONTACTS: None observed.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	<1	1.1	0.3	0.5	euhedral
Olivine	<1	0.8	0.3	0.5	subhedral

GROUNDMASS: Microcrystalline.

COLOR: Reddish gray basalt with bluish gray halos.

VESICLES: <1%; 0.1-0.5 mm in size; filled with smectite, Fe-oxide and calcite.

STRUCTURE: Pillows or flow.

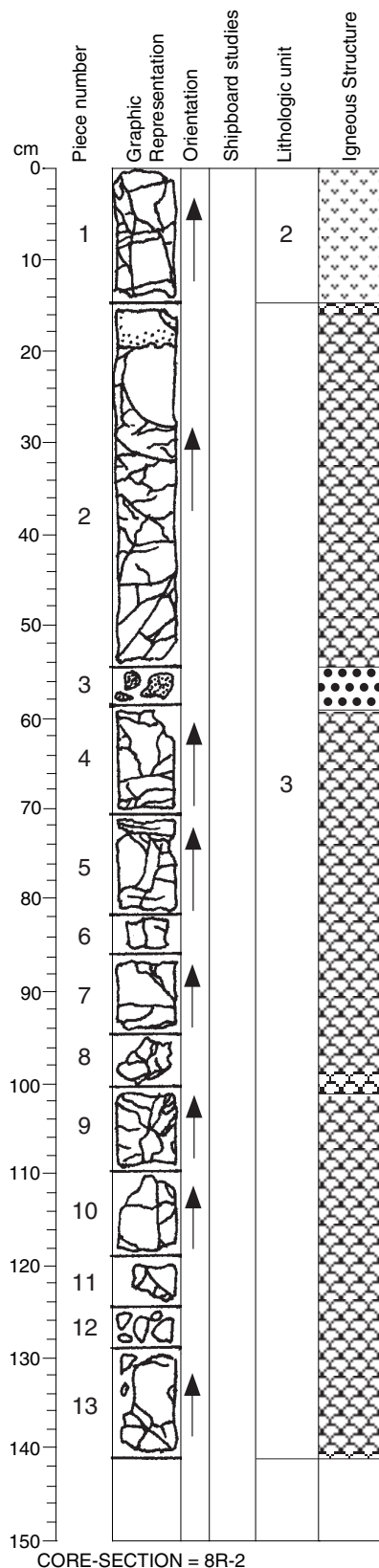
ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling. Dark halos common with some later superimposed brown halos.

VEINS/FRACTURES: 64 veins randomly oriented with an average width of 0.5 mm. Veins filled mostly with saponite and carbonate with lesser iron oxyhydroxides. Thicker veins are enriched in carbonate. Most veins are lined with a 6 mm dark green and brown halo.

Core Photo

185-1149D-8R-2

Section top: 330.79 (mbsf)



UNIT 2: APHYRIC BASALT

Pieces: 1

CONTACTS: None observed.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
		Mode	Max	Min	
Plagioclase	<1		1.0	0.2	euhedral
Olivine	<1		0.2	0.1	euhedral

GROUNDMASS: Microcrystalline.

COLOR: Reddish gray basalt with bluish gray halos.

VESICLES: <1%, 0.1 mm in size, filled with smectite and Fe-oxide.

STRUCTURE: Pillows.

ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling. Dark halos common with some later superimposed brown halos.

VEINS/FRACTURES:

COMMENTS: Basalt contains >1% microphenocrysts and glomerocrysts of elongated plagioclase laths.

UNIT 3: APHYRIC BASALT

Pieces: 2-13

CONTACTS: Chilled margins in piece 2, hyaloclastite in piece 3.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
		Mode	Max	Min	
Olivine	<1		1.0	0.1	subhedral

GROUNDMASS: Microcrystalline.

COLOR: Reddish gray basalt with bluish gray halos.

VESICLES: <1%; 0.1-0.5 mm in size; filled with Fe-oxide and smectite.

STRUCTURE: Pillows.

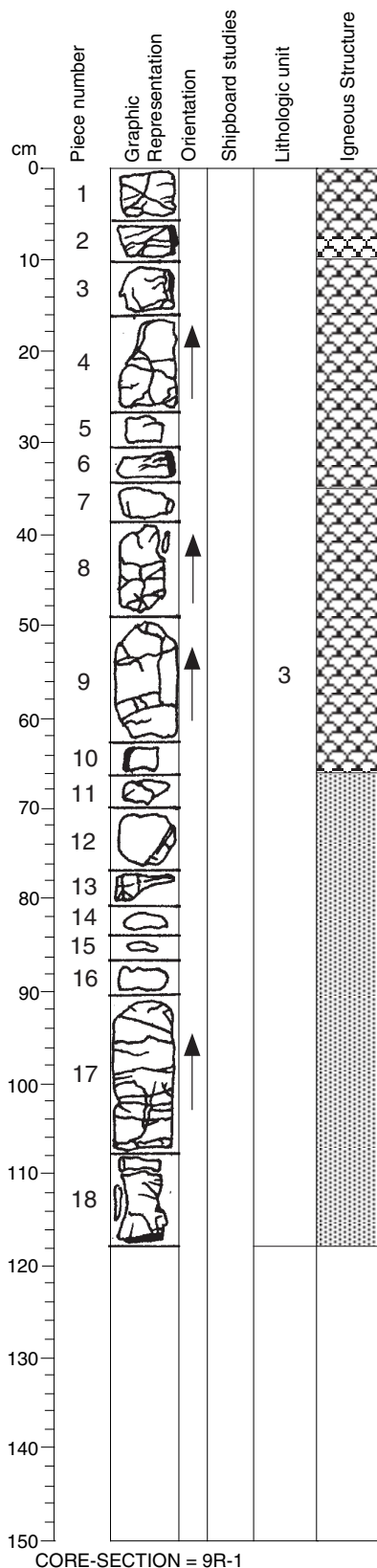
ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling. Dark halos common with some later superimposed brown halos.

VEINS/FRACTURES: 55 veins randomly oriented with an average width of 0.5 mm. Veins filled mostly with saponite and carbonate with lesser iron oxyhydroxides. Thicker veins are enriched in carbonate. Most veins are lined with a 4 mm dark halo or dark/brown halo. Hyaloclastite in piece 3 is composed of clasts of altered basalt and a matrix of carbonate (minor green clay). Interpillow material in piece 2 (mostly carbonate).

Core Photo

185-1149D-9R-1

Section top: 338.8 (mbsf)



UNIT 3: APHYRIC BASALT

Pieces: 1-18

CONTACTS: Chilled margin in pieces 2, 6, 10 and 18.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
		Mode	Max	Min	
Plagioclase	<1		1.3	0.3	euhedral
Olivine	<1		1.0	0.3	subhedral

GROUNDMASS: Microcrystalline to fine grained.

COLOR: Reddish gray basalt with bluish to greenish gray halos.

VESICLES: ≤1%; 0.1-0.5 mm in size; filled with Fe-oxide and smectite.

STRUCTURE: Pillows.

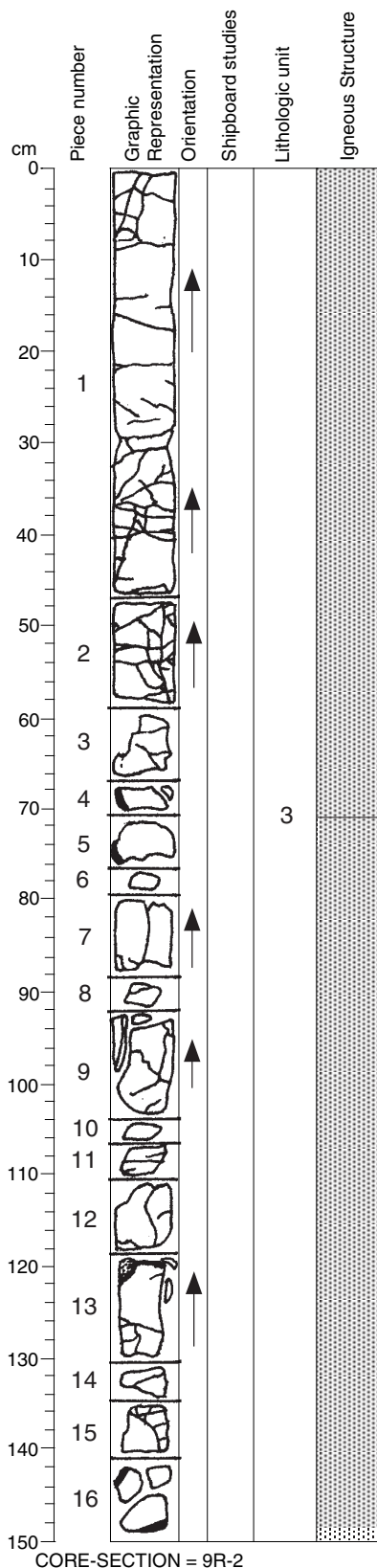
ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling. Dark halos common with some later superimposed brown halos. Altered glass in pieces 3,4 & 10

VEINS/FRACTURES: 50 veins randomly oriented with an average width of 0.4 mm. Veins filled mostly with saponite and carbonate with lesser iron oxyhydroxides. Thicker veins are enriched in carbonate. Most veins are lined with a 6 mm dark halo or dark/brown halo.

Core Photo

185-1149D-9R-2

Section top: 339.98 (mbsf)



UNIT 3: APHYRIC BASALT

Pieces: 1-16

CONTACTS: Chilled margin in pieces 4 and 16.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	<1	1.0	0.5	0.8	euhedral
Olivine	<1	0.8	0.1	0.2	euhedral-subhedral

GROUNDMASS: Microcrystalline to fine grained.

COLOR: Reddish gray basalt with bluish to greenish gray halos.

VESICLES: ≤1%; 0.1-0.3 mm in size; filled with smectite and Fe-oxide.

STRUCTURE: Pillow/flow.

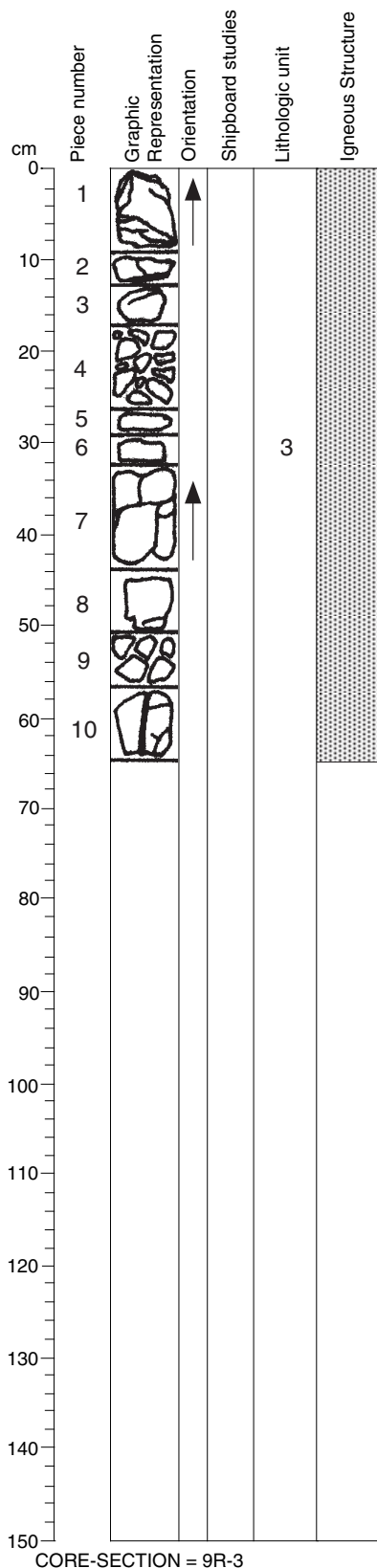
ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling. Dark halos common with some later superimposed brown halos.

VEINS/FRACTURES: 58 veins randomly oriented with an average width of 0.4 mm. Veins filled mostly with saponite and carbonate with lesser iron oxyhydroxides. Thicker veins are enriched in carbonate. Most veins are lined with a 6 mm dark halo or dark/brown halo.

Core Photo

185-1149D-9R-3

Section top: 341.47 (mbsf)



UNIT 3: APHYRIC BASALT

Pieces: 1-10

CONTACTS: None observed.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
		Mode	Max	Min	
Plagioclase	<1		1.2	0.4	euhedral
Olivine	<1		0.4	0.1	euhedral

GROUNDMASS: Microcrystalline.

COLOR: Gray to reddish gray basalt with bluish to greenish gray halos.

VESICLES: <1%; 0.1-0.2 mm in size; filled with smectite and Fe-oxide.

STRUCTURE: Pillow/flow.

ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling. Dark halos common with some later superimposed brown halos.

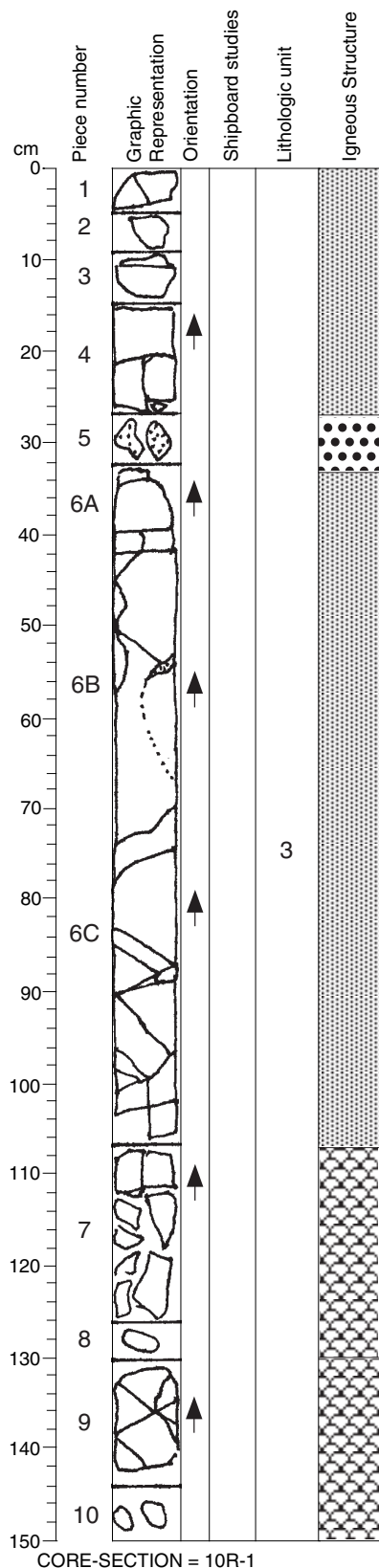
VEINS/FRACTURES: 19 veins randomly oriented with an average width of 0.6 mm. Veins filled mostly with saponite and carbonate with minor iron oxyhydroxides. Thicker veins are enriched in carbonate. Most veins are lined with a 7 mm dark halo or dark/brown halo.

COMMENTS:

Core Photo

185-1149D-10R-1

Section top: 348.4 (mbsf)



UNIT :

Pieces: 1-10

CONTACTS: Hyaloclastite in piece 5.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	0-1	1.5	1.0	1.0	euhedral
Olivine	0-1	0.1	0.1	0.1	euhedral

GROUNDMASS: Microcrystalline, fine grained in pillow/flow interior.

COLOR: Greenish gray and gray, hyaloclastite is dark greenish gray.

VESICLES: <1%; ≤0.1 mm in size; filled with Fe-oxide, smectite and calcite.

STRUCTURE: Pillows/flow.

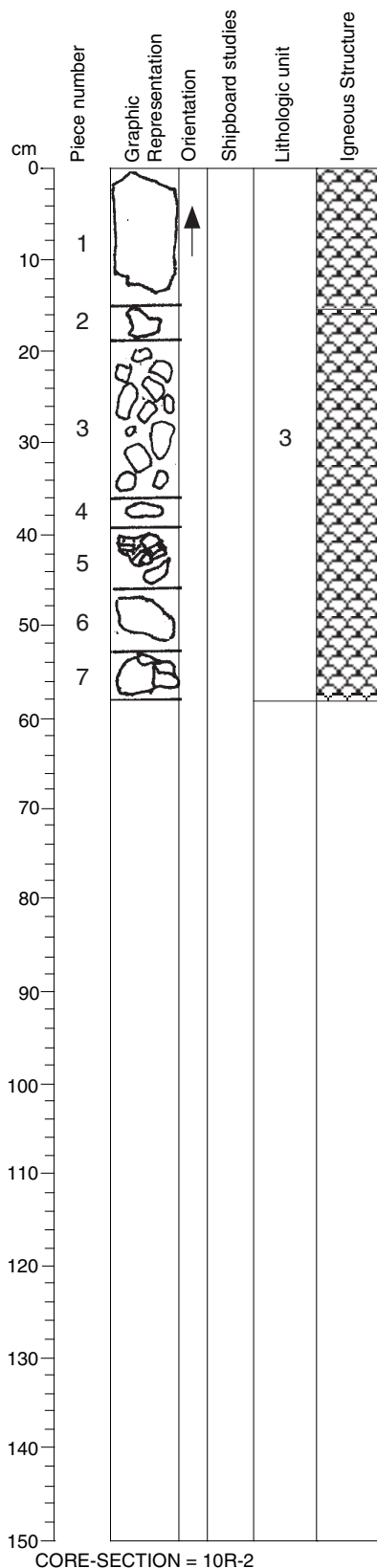
ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling. Dark halos common with some later superimposed brown halos. The hyaloclastite in piece 5 contains ~50% altered glass in a matrix of celadonic phyllosilicates.

VEINS/FRACTURES: 40 veins randomly oriented with an average width of 0.4 mm. Veins filled mostly with saponite and carbonate with minor iron oxyhydroxides. Thicker veins are enriched in carbonate. Most veins are lined with a 7 mm dark halo or dark/brown halo.

Core Photo

185-1149D-10R-2

Section top: 349.9 (mbsf)



UNIT 3:

Pieces: 1-7

CONTACTS: None observed.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	<1	1.6	0.4	0.5	euhedral
Olivine	<<1	0.2	0.1	0.1	euhedral

GROUNDMASS: Microcrystalline.

COLOR: Greenish gray and gray.

VESICLES: <1%; ≤0.1-0.5 mm in size; filled with Fe-oxide and smectite.

STRUCTURE: Pillows/flow, breccia.

ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling. Dark halos common with some later superimposed brown halos.

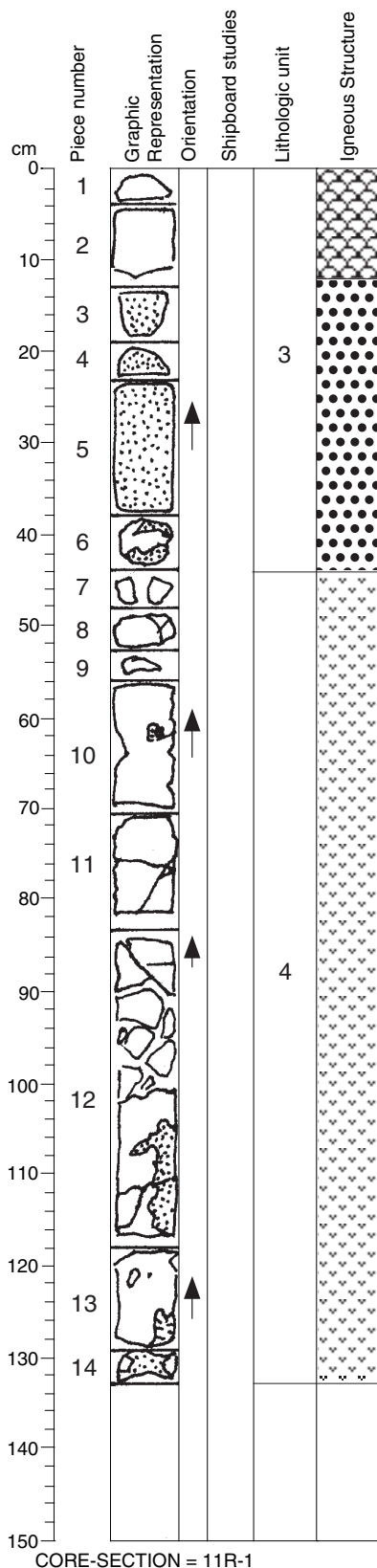
VEINS/FRACTURES: 12 veins randomly oriented with an average width of 0.4 mm. Veins filled mostly with saponite and carbonate with lesser iron oxyhydroxides. Thicker veins are enriched in carbonate. Most veins are lined with a 7 mm dark halo or dark/brown halo. Breccia in piece 5 is composed of 25% of matrix of carbonate.

COMMENTS:

Core Photo

185-1149D-11R-1

Section top: 357.9 (mbsf)



UNIT 3: APHYRIC BASALT

Pieces: 1-6

CONTACTS: Hyaloclastites in pieces 3 to 6.

PHENOCRYSTS: None observed.

GROUNDMASS: Microcrystalline to hypocrySTALLINE in hyaloclastite.

COLOR: Gray basalt with bluish gray halos. Hyaloclastite is dark grayish green with weak red and light greenish gray matrix.

VESICLES: <1%; 0.2 mm in size; filled with Fe-oxide and smectite.

STRUCTURE: Pillows, breccia.

ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling. Dark halos and the later superimposed brown halos are chaotic obliterating much of the dusky red / gray alteration. The hyaloclastites contain up to 60% of altered glass in a celadonic phyllosilicate matrix.

VEINS/FRACTURES: 34 veins randomly oriented with an average width of 0.7 mm. Veins filled mostly with saponite and carbonate with lesser iron oxyhydroxides. Thicker veins are enriched in carbonate. Most veins are lined with a 6 mm dark halo or dark/brown halo. Breccia in pieces 11 and 13 are composed of a matrix of carbonate. Pieces 3,4,5 and 6 are hyaloclastites.

COMMENTS:

UNIT 4: APHYRIC BASALT

Pieces: 7-14

CONTACTS: None observed.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	<1	0.2	0.05	0.1	euhedral

GROUNDMASS: Microcrystalline to hypocrySTALLINE.

COLOR: Gray to very dark gray with brown to very dark brown "rusty" veins and alteration and white calcite.

VESICLES: <1%; 0.1-0.2 mm in size; filled with Fe-oxide and smectite.

STRUCTURE: Breccia.

ALTERATION: Dark halos and the later superimposed brown halos are chaotic in nature obliterating much of the dusky red / gray body alteration.

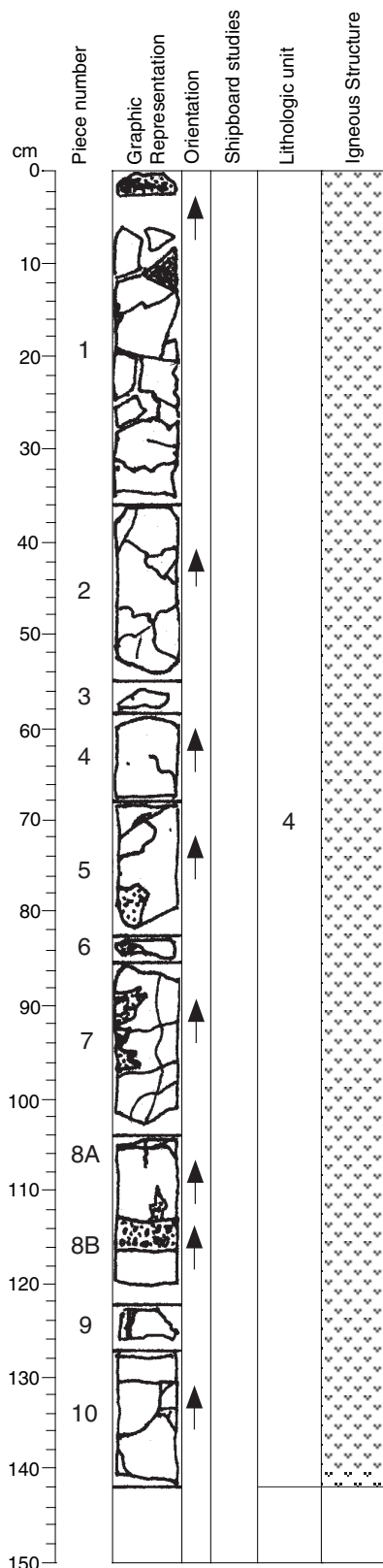
VEINS/FRACTURES: 34 veins randomly oriented with an average width of 0.7 mm. Veins filled mostly with saponite and carbonate with lesser iron oxyhydroxides. Thicker veins are enriched in carbonate. Most veins are lined with a 6 mm dark halo or dark/brown halo. Breccia in pieces 11 and 13 are composed of basalt clasts cemented by carbonate. Pieces 3,4,5 and 6 are hyaloclastites.

CORE-SECTION = 11R-1

Core Photo

185-1149D-11R-2

Section top: 359.24 (mbsf)



CORE-SECTION = 11R-2

UNIT 4: APHYRIC BASALT

Pieces: 1-10

CONTACTS: None observed.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
		Mode	Max	Min	
Plagioclase	<1		0.5	0.2	euhedral

GROUNDMASS: Microcrystalline to hypocrySTALLINE.

COLOR: Gray to very dark gray with big white calcite filled open spaces.

VESICLES: <1%; 0.1-0.2 mm in size; filled with Fe-oxide and smectite.

STRUCTURE: Breccia.

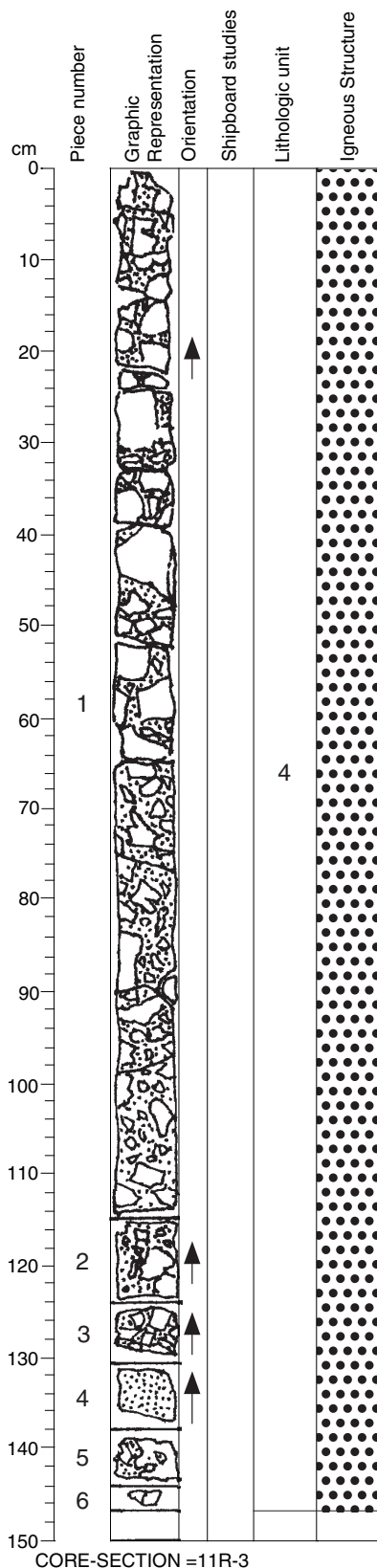
ALTERATION:

VEINS/FRACTURES: 66 veins randomly oriented with an average width of 0.8 mm. Veins filled mostly with saponite and carbonate with minor iron oxyhydroxides. Thicker veins are enriched in carbonate. Most veins are lined with a 5 mm dark/brown halo. Breccia in pieces 1 and 8 are composed of basalt clasts cemented by carbonate and saponite.

Core Photo

185-1149D-11R-3

Section top: 360.67 (mbsf)



UNIT 4: APHYRIC BASALT

Pieces: 1A-6

CONTACTS: Some chilled margins in clasts of breccia.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
		Mode	Max	Min	
Plagioclase	<1	1.0	0.2	0.4	euhedral

GROUNDMASS: Microcrystalline to hypocrystalline.

COLOR: Gray to very dark gray, hyaloclastite is dark greenish gray.

VESICLES: 1%; 0.1 mm in size, filled with Fe-oxide and smectite.

STRUCTURE: Breccia.

ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling. Dark halos and the later superimposed brown halos are chaotic in nature obliterating much of the dusky red / gray alteration. The hyaloclastites in piece 4 contain up to 60% altered glass in a celadonic phyllosilicate matrix.

VEINS/FRACTURES: 3 vertical veins with a width of about 1.3 mm filled mostly with carbonate and lesser saponite. Breccia in pieces 1, 2, 3 and 5 are composed mostly of a matrix of carbonate (5 to 30% of matrix)

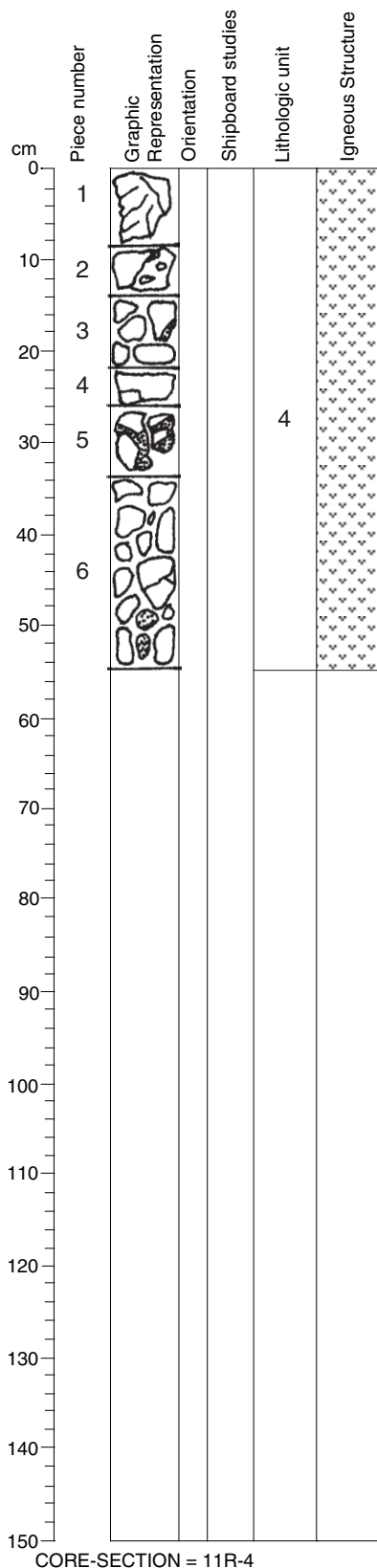
COMMENTS: Hyaloclastite that looks like the ones in core 11R-1 in piece 4.

CORE-SECTION =11R-3

Core Photo

185-1149D-11R-4

Section top: 362.14 (mbsf)



UNIT 4: APHYRIC BASALT

Pieces: 1-6

CONTACTS: None observed.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	<1	1.0	0.5	0.5	euhedral
Olivine	0-<1	0.5	0.4	0.2	euhedral-subhedral

GROUNDMASS: Microcrystalline.

COLOR: Gray to very dark gray, some bluish gray halos with brownish parts.

VESICLES: <1%; 0.1-0.5 mm in size; filled with Fe-oxide and smectite.

STRUCTURE: Pillow/Flow.

ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling. Dark halos and the later superimposed brown halos are chaotic in nature obliterating much of the dusky red / gray alteration.

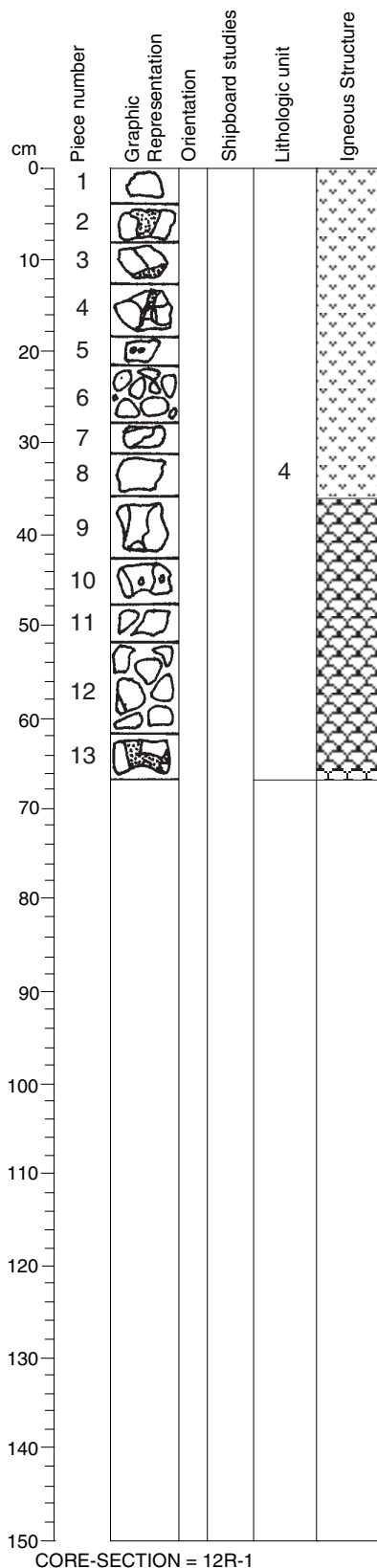
VEINS/FRACTURES: 10 veins randomly oriented with an average width of 0.6 mm. Veins filled mostly with saponite and carbonate with minor iron oxyhydroxides. Thicker veins are enriched in carbonate. All veins are lined with a 3 mm dark/brown halo. Breccia in pieces 3 and 5 are composed of basalt clasts cemented by mostly carbonate (10% of cement).

COMMENTS:

Core Photo

185-1149D-12R-1

Section top: 367.4 (mbsf)



UNIT 4: APHYRIC BASALT

Pieces: 1-13

CONTACTS: Chilles margin in pieces 9 and 13.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	<1	1.5	0.4	0.9	euhebral
Olivine	<<1	0.1	0.1	0.1	euhebral

GROUNDMASS: Microcrystalline.

COLOR: Gray to very dark gray, some bluish gray halos with brownish parts.

VESICLES: <1%; ≤0.1 mm in size; filled with Fe-oxide and smectite.

STRUCTURE: Pillows/flow.

ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling. Dark halos and the later superimposed brown halos are chaotic in nature obliterating much of the dusky red / gray alteration.

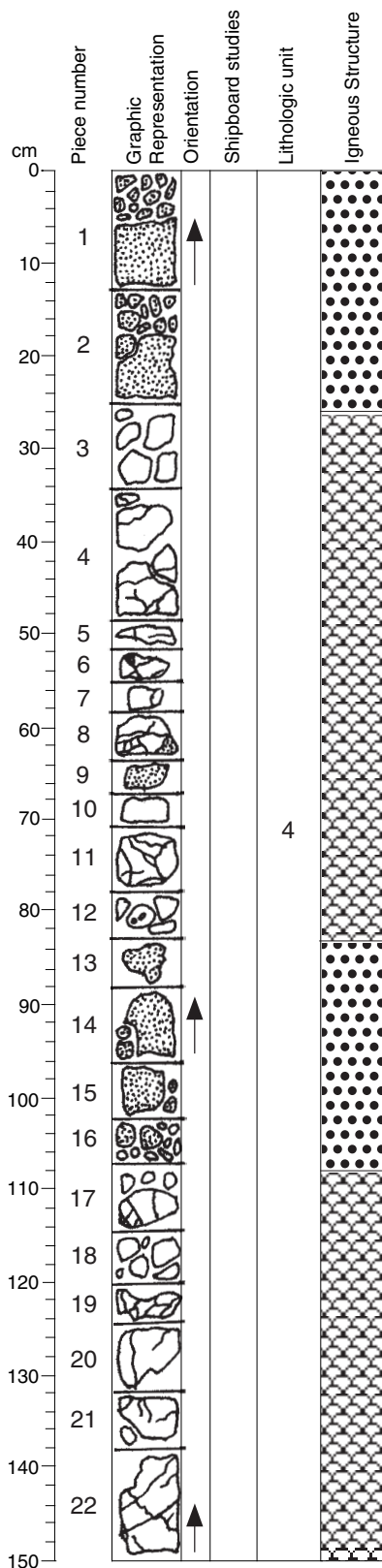
VEINS/FRACTURES: 20 veins randomly oriented with an average width of 0.8 mm. Veins filled mostly with saponite and carbonate with minor iron oxyhydroxides. Thicker veins are enriched in carbonate. Most veins are lined with a 4 mm dark/brown halo. Breccia in pieces 13 is composed of basalt clasts cemented by carbonate (18% of cement).

COMMENTS:

Core Photo

185-1149D-13R-1

Section top: 377.0 (mbsf)



CORE-SECTION = 13R-1

UNIT 4: APHYRIC BASALT

Pieces: 1-22

CONTACTS: Hyaloclastites in pieces 1 to 3 and 13 to 16.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
		Mode	Max	Min	
Plagioclase	<1	1.3	0.1	0.2	euhedral

GROUNDMASS: Microcrystalline to hypocrystalline.

COLOR: Pillows are gray to very dark gray, breccia is very dark green.

VESICLES: <1%; 0.1-0.5 mm in size; filled with Smectite and Fe-oxide.

STRUCTURE: Pillows, breccia.

ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling. Dark halos and the later superimposed brown halos are chaotic in nature obliterating much of the dusky red / gray alteration. The hyaloclastites contain up to 60% altered glass in a celadonic phyllosilicate cement.

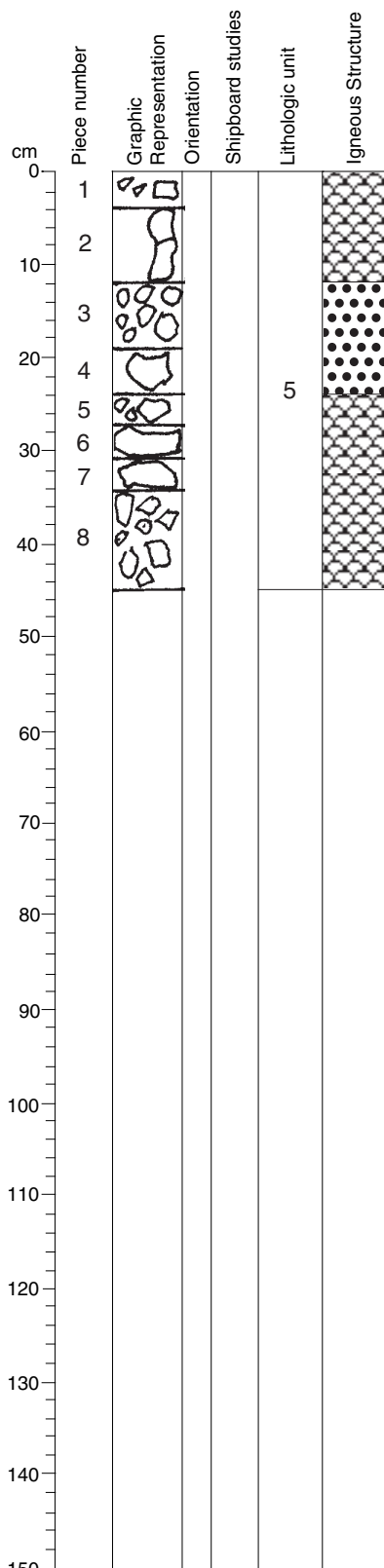
VEINS/FRACTURES: 49 veins randomly oriented with an average width of 0.5 mm. Veins filled mostly with saponite and carbonate with minor iron oxyhydroxides. Thicker veins are enriched in carbonate. Most veins are lined with a 4 mm dark/brown halo.

COMMENTS:

Core Photo

185-1149D-14R-1

Section top: 386.6 (mbsf)



UNIT 5: APHYRIC BASALT

Pieces: 1-8

CONTACTS: Hyaloclastites in pieces 3 and 4.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
		Mode	Max	Min	
Plagioclase	≤1		1.0	0.2	euhedral
Olivine	0- <1		0.5	0.2	euhedral-subhedral

GROUNDMASS: Microcrystalline.

COLOR: Gray basalt with bluish gray halos.

VESICLES: 1%, 0.1-0.5 mm in size; filled with Fe-oxide, smectite and calcite.

STRUCTURE: Pillows, breccia.

ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling. Dark halos and the later superimposed brown halos are chaotic obliterating much of the dusky red / gray alteration. The hyaloclastites contain up to 60% altered glass in a celadonic phyllosilicate matrix.

VEINS/FRACTURES: 12 veins randomly oriented with an average width of 0.7 mm. Veins filled mostly with saponite and carbonate with trace iron oxyhydroxides. Most veins are lined with a 6 mm dark/brown halo.

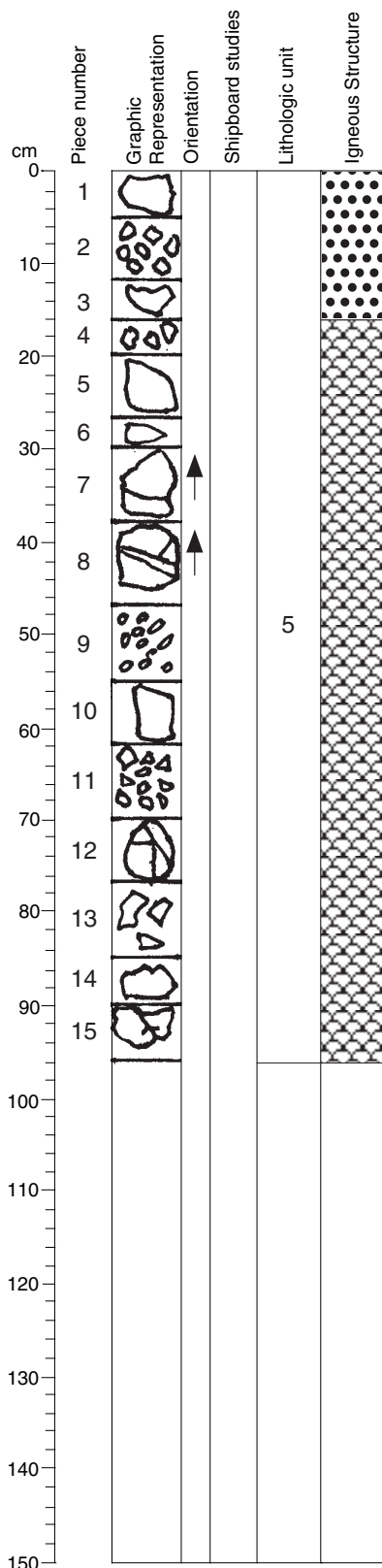
COMMENTS:

CORE-SECTION = 14R-1

Core Photo

185-1149D-15R-1

Section top: 396.3 (mbsf)



UNIT 5: APHYRIC BASALT

Pieces: 1-15

CONTACTS: None observed.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
		Max	Min	Avg.	
Plagioclase	<1	1.0	0.2	0.5	euhedral
Olivine	<<1	0.6	0.1	0.2	euhedral

GROUNDMASS: Microcrystalline.

COLOR: Gray basalt with bluish gray halos.

VESICLES: <1%; <0.1-0.2 mm in size; filled with Fe-oxide and smectite.

STRUCTURE: Pillows/flow.

ALTERATION:

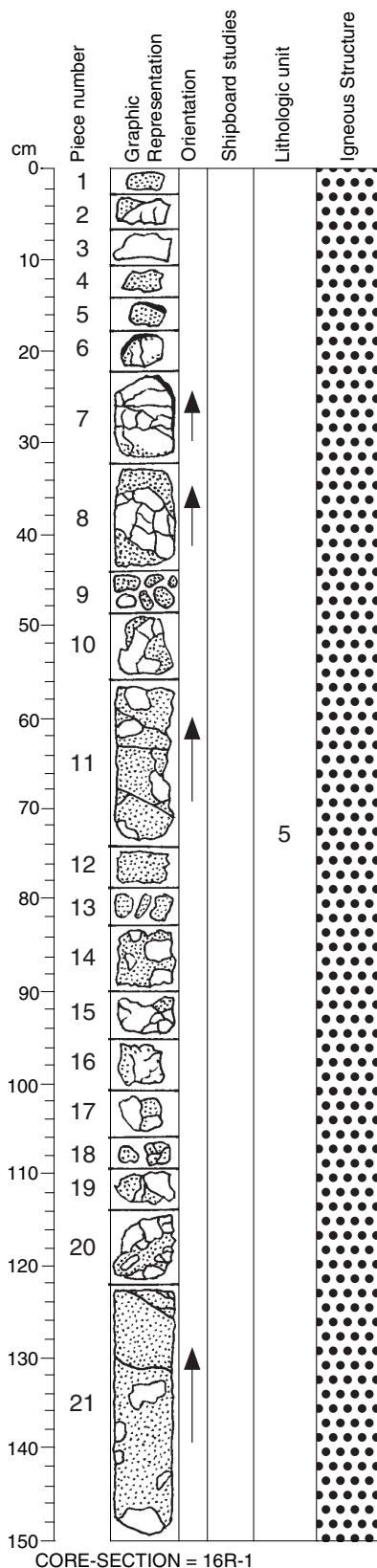
VEINS/FRACTURES: 34 veins randomly oriented with an average width of 0.3 mm. Veins filled mostly with saponite and carbonate with trace iron oxyhydroxides. Most veins are lined with a 7 mm dark/brown halo.

COMMENTS:

Core Photo

185-1149D-16R-1

Section top: 405.9 (mbsf)



UNIT :

Pieces: 1-21

CONTACTS:

PHENOCRYSTS:

	%	Grain Size (mm):			
	Mode	Max	Min	Avg.	Shape/Habit
Plagioclase	<1	1.2	0.1	0.5	euhedral
Olivine	<1	0.1	0.1	0.1	euhedral

GROUNDMASS: Microcrystalline to hypocrySTALLINE.

COLOR:

VESSICLES: <1%; <0.1-0.5 mm in size; filled with Fe-oxide, smectite or calcite.

STRUCTURE: Breccia.

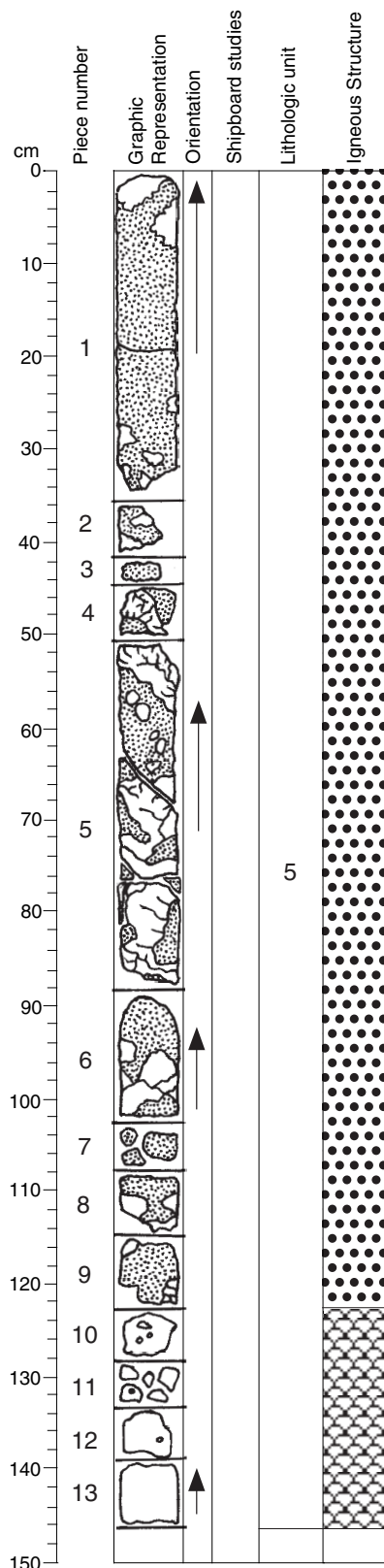
ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling, with dark halos and the later superimposed brown halos.

VEINS/FRACTURES: 30 veins randomly oriented with an average width of 0.5 mm. Veins filled mostly with saponite and carbonate with lesser iron oxyhydroxides. Thicker veins are enriched in carbonate. Most veins are lined with a 4 mm dark halo or dark/brown halo. Hyaloclastites in piece 7, 8 and 10 are composed of clasts of altered basalt cemented by carbonate and saponite (10 to 20% of matrix).

Core Photo

185-1149D-16R-2

Section top: 407.38 (mbsf)



CORE-SECTION = 16R-2

UNIT :

Pieces: 1-13

CONTACTS: Many chilled margind, sometimes brecciated throughout.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
		Mode	Max	Min	
Plagioclase	<1		1.6	0.1	euhedral
Olivine	<1		0.7	<0.1	euhedral

GROUNDMASS: Microcrystalline to hypocrySTALLINE.

COLOR:

VESICLES: ≤1%; 0.1-3.0 mm in size; filled with Fe-oxide, smectite or calcite.

STRUCTURE: Breccia, pillow/flow.

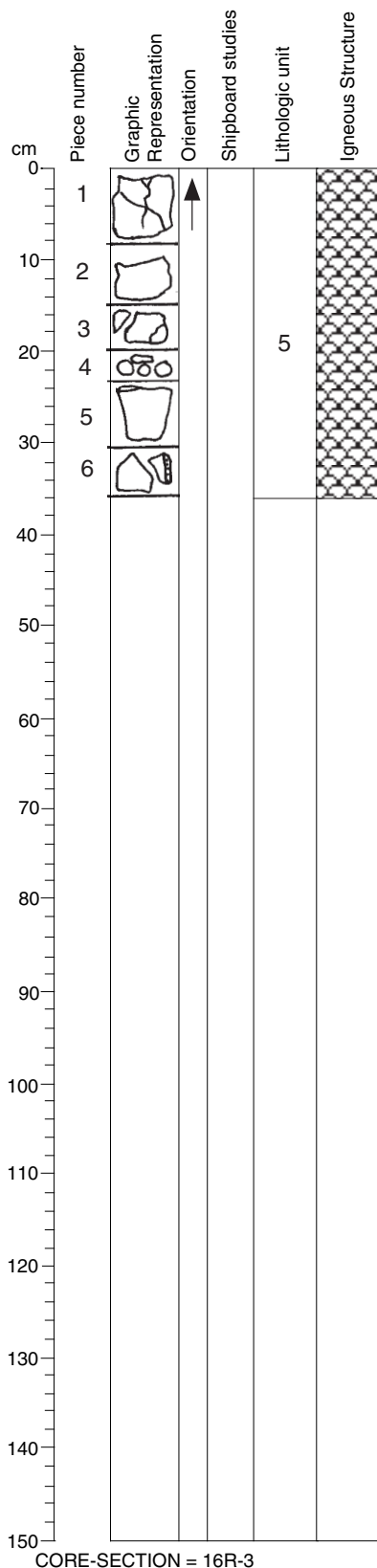
ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling, with dark halos and the later superimposed brown halos.

VEINS/FRACTURES: 2 veins in piece 13 filled mostly with saponite and lined with a dark halo. Breccia in piece 1-8 and 12 are composed of clasts of altered basalt cemented by carbonate and saponite (~10% of matrix).

Core Photo

185-1149D-16R-3

Section top: 408.85 (mbsf)



UNIT :

Pieces: 1-6

CONTACTS:

PHENOCRYSTS:

	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	<1	2.0	0.5	0.8	euhedral
Olivine	<1	0.1	1.5	0.4	euhedral

GROUNDMASS: Microcrystalline.

COLOR:

VESICLES: <1%; 0.1-1.5 mm in size; filled with Fe-oxide, smectite or calcite.

STRUCTURE: Pillow/flow.

ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling, with dark halos and the later superimposed brown halos.

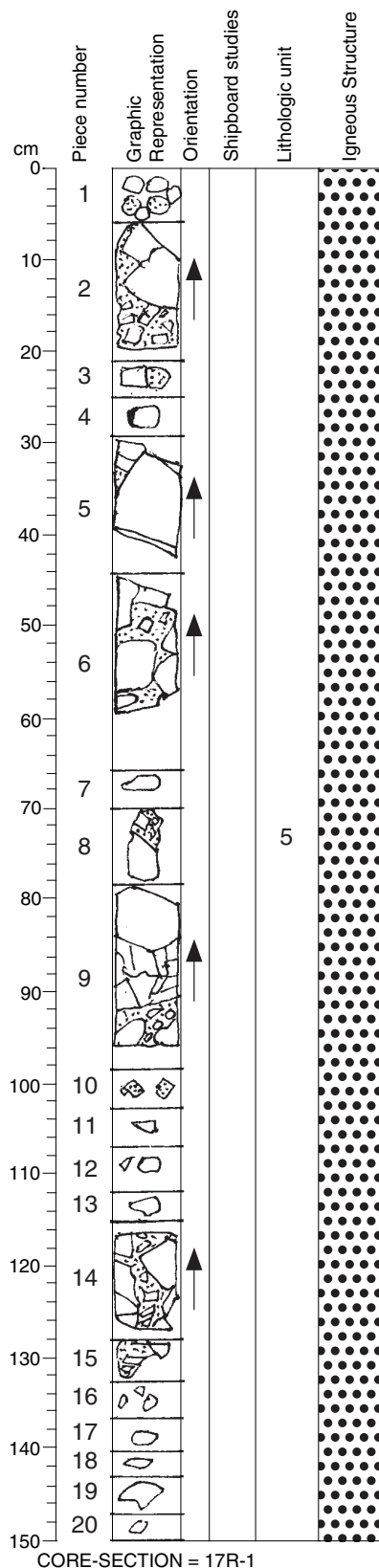
VEINS/FRACTURES: 18 veins randomly oriented with an average width of 0.6 mm. Veins filled mostly with saponite and carbonate with trace iron oxyhydroxides. Thicker veins are enriched in carbonate. Most veins are lined with a 7 mm dark/brown halo. Breccia in pieces 13-15, 18, 20 and 21 are composed of clasts of altered basalt cemented by saponitic/celadonic phyllosilicates and lesser carbonate (~10% of matrix).

COMMENTS:

Core Photo

185-1149D-17R-1

Section top: 415.5 (mbsf)



UNIT 5: APHYRIC BASALT

Pieces: 1-20

CONTACTS: None observed.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
		Mode	Max	Min	
Plagioclase	~1		3.0	0.3	euhedral
Olivine	<1		0.5	0.2	subhedral

GROUNDMASS: Microcrystalline.

COLOR: Dark gray with dark greenish gray brecciated parts.

VESICLES: $\leq 1\%$; 0.2-1 mm in size; filled with calcite, smectite or Fe-oxide.

STRUCTURE: Breccia.

ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling, with dark halos and the later superimposed brown halos.

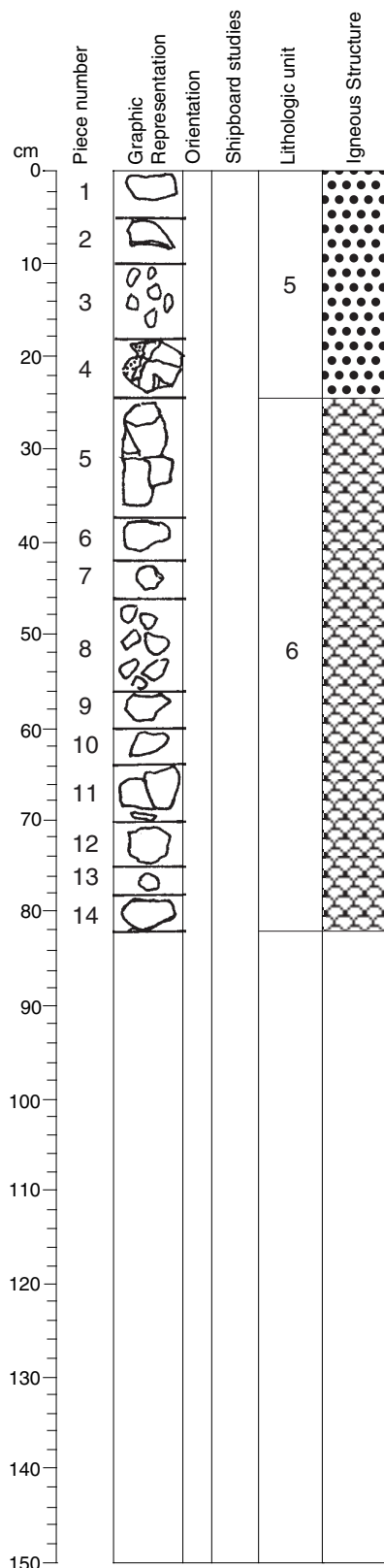
VEINS/FRACTURES: 26 veins randomly oriented with an average width of 1.3 mm. Veins filled mostly with saponite and carbonate with trace iron oxyhydroxides. Thicker veins are enriched in carbonate. Most veins are lined with a 7 mm dark and brown halo. Breccia in pieces 1-3, 6, 8, 9, 14 and 15 are composed of clasts of altered basalt cemented by saponitic/celadonic phyllosilicates and carbonate.

COMMENTS:

Core Photo

185-1149B-17R-2

Section top: 417.0 (mbsf)



UNIT 5: APHYRIC BASALT

Pieces: 1-5

CONTACTS: None observed.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	<1	1.0	0.3	0.6	euhedral
Olivine	<1	0.5	0.2	0.3	subhedral

GROUNDMASS: Microcrystalline to fine grained.

COLOR: Dark gray.

VESICLES: ≤1%; 0.3-1 mm in size; filled with calcite, smectite or Fe-oxide.

STRUCTURE: Breccia, pillow/flow.

ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling, with dark halos and the later superimposed brown halos.

VEINS/FRACTURES: 14 veins randomly oriented with an average width of 0.8 mm. Veins filled mostly with saponite and carbonate with trace iron oxyhydroxides. Thicker veins are enriched in carbonate. Most veins are lined with a 8 mm dark and brown halo.

COMMENTS:

UNIT 6: SLIGHTLY OLIVINE PHYRIC BASALT

Pieces: 6-14

CONTACTS: None observed.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
	Mode	Max	Min	Avg.	
Plagioclase	≤1	2.0	0.3	0.6	euhedral
Olivine	1	0.5	0.2	0.3	subhedral

GROUNDMASS: Microcrystalline to fine grained.

COLOR: Dark gray.

VESICLES: ≤1%; 0.3-1 mm in size; filled with calcite, smectite or Fe-oxide.

STRUCTURE: Pillow/flow.

ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling, with dark halos and the later superimposed brown halos.

VEINS/FRACTURES: 7 veins randomly oriented with an average width of 0.2 mm. Veins filled mostly with saponite, lesser carbonate and trace iron oxyhydroxides. Most veins are lined with a 6 mm dark and brown halo.

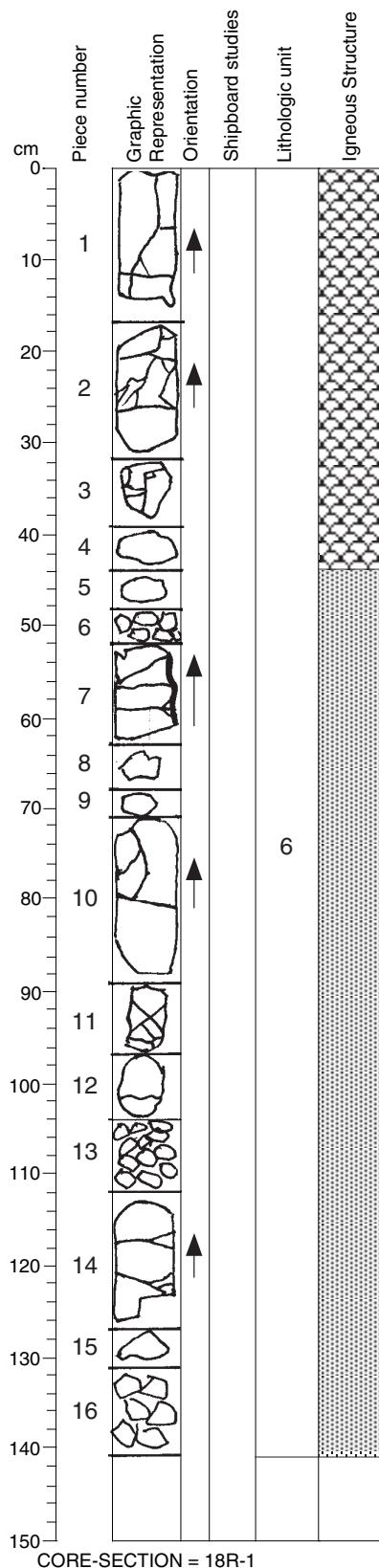
COMMENTS:

CORE-SECTION = 17R-2

Core Photo

185-1149D-18R-1

Section top: 425.1 (mbsf)



UNIT 6: SLIGHTLY OLIVINE PHYRIC BASALT

Pieces: 1-16

CONTACTS: Chilled margins in pieces 4,5 and 16.

PHENOCRYSTS:	%	Grain Size (mm):			Shape/Habit
		Mode	Max	Min	
Plagioclase	≤1		1.0	0.5	euhedral
Olivine	≤1		0.8	0.1	euhedral

GROUNDMASS: Microcrystalline, hypocrySTALLINE in chilled margins.

COLOR: Dark gray.

VESICLES: <<1%; 0.1-1 mm in size; filled with calcite, smectite or Fe-oxide.

STRUCTURE: Pillows/flow.

ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling, with dark halos and the later superimposed brown halos.

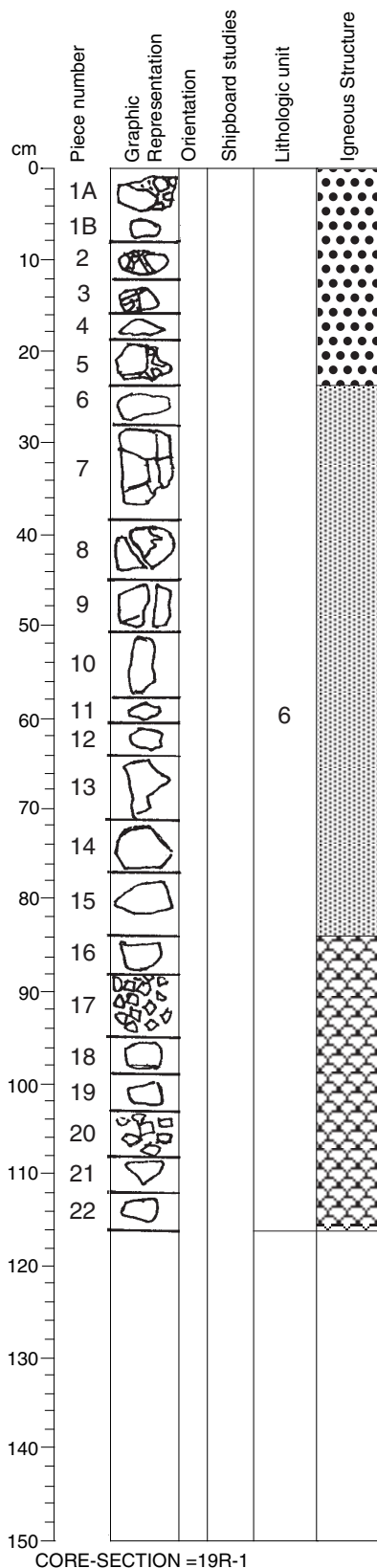
VEINS/FRACTURES: 57 veins randomly oriented with an average width of 0.6mm. Veins filled mostly with saponite and carbonate and trace iron oxyhydroxides. Most veins are lined with a 6 mm dark green halo.

COMMENTS:

Core Photo

185-1149D-19R-1

Section top: 434.7 (mbsf)



UNIT 6: SLIGHTLY OLIVINE PHYRIC BASALT

Pieces: 1A-22

CONTACTS: Chilled margin in piece 15.

		% Mode	Grain Size (mm):			Shape/Habit
			Max	Min	Avg.	
	Plagioclase	1	3.0	0.5	0.8	euhrdal
	Olivine	1	0.5	0.1	0.2	euhrdal

GROUNDMASS: Microcrystalline to hypocrySTALLine in chilled margin.

COLOR: Gray to dark gray.

VESICLES: <1%; 0.1-0.5 mm in size; filled with smectite and Fe-oxide.

STRUCTURE: Pillows/flow, breccia

ALTERATION: Dark gray to dusky red alteration, with variable intensities of light brown mottling, with dark halos and the later superimposed brown halos.

VEINS/FRACTURES: 34 veins randomly oriented with an average width of 0.8 mm. Veins filled mostly with saponite and carbonate with trace iron oxyhydroxides. Thicker veins are enriched in carbonate. Most veins are lined with a 8 mm dark or dark brown halo.

COMMENTS:

Sample						Texture			Calcareous			Siliceous				Silicate										Accessory													
Core	Coretype	Section	Top	Depth	Dominant/Minor	Sand	Silt	Clay	Calc. Nannofossils (132)	Sparry Carbonate (35)	Dolomite (62)	Diatoms (58)	Radiolarians (173)	Silicoflagellates (189)	Sponge Spicules (199)	Opal-CT/diagen. Quartz (139)	Clinoptilolite (48)	Quartz (172)	Clay (47)	Mica (118)	Chlorite (45)	Glauconite (82)	Feldspar (71)	Accessory Minerals (1)	Amphibole (8)	Pyroxene (171)	Volcanic Glass (81)	Volcanic Fragments (220)	Opaques (140)	Manganese Oxide (124)	Fe Oxide (68)	Barite (17)	Fish Remains (74)	Plant Debris (161)					
1149A																																							
1	H	1	55	0.55	M	2	80	18										20												70	1				Mn-micronodule silt				
1	H	1	100	1	D	15	45	40		2								10	35				10				20				2				Ash- and biogenic silica-bearing clay				
1	H	1	135	1.35	M	20	60	20										21	1								15								Clay- and ash-bearing diatom ooze				
1	H	2	56	2.06	M	10	70	20										20					10			8	60				2				Clay-bearing ash				
1	H	2	110	2.6	D	10	30	60										55	1	1							15				2				Ash- and radio larian-bearing clay				
1	H	3	97	3.97	M	10	30	60										52	1				2			1	30				1				Radiolarian-bearing ashy clay				
2	H	1	40	4.6	D	10	40	50										56					5				20				2				Radiolarian- and ash-bearing clay				
2	H	2	45	6.15	D	20	40	40										52	1								15				1				Ash-bearing biogenic silica-rich clay				
2	H	2	63.5	6.34	M	80	20	0															3				97								Ash				
2	H	3	83	8.03	M	60	30	10															5			1	94								Ash				
2	H	4	108	9.78	M	20	70	10										5					13				15	65			2				Ash				
2	H	5	90	11.1	M	10	30	60										70	1				3				10				1				Ash- and radio larian-bearing clay				
3	H	1	15	13.85	M													87					5				5				1				Clay				
3	H	1	83	14.53	D	10	30	60	3									55							1		12		1	1					Biogenic silica-bearing clay				
3	H	3	36	17.06	M	20	78	2										2					5		5		87								Ash				
3	H	3	60	17.3	M	37	58	5										3	5						1		90		1						Ash				
3	H	4	111	19.31	M	10	30	60										60					5	4			30				1				Ashy clay				
3	H	6	50	21.7	M	5	60	35										30						1			15				1				Clayey radiolarian ooze				
4	H	1	24	23.44	D	2	43	55										10	20													1			Ash- and biogenic silica-bearing clay				
4	H	1	90	24.1	M	20	70	10															10	7	3			80								Ash			
4	H	1	91	24.11	M	10	50	40																3				55								Clayey ash			
4	H	3	81	27.01	M	15	85																8	10				80		1						Ash			
4	H	4	85	28.55	M	5	15	80															7	2				10								Ash-bearing Clay			
4	H	5	42	29.62	M	1	19	80										3	70					5				11			1					Biogenic silica- and ash-bearing clay			
4	H	7	21.5	32.42	M	3	85	12										1									79								Ash				
5	H	1	20	32.9	M	3	27	70											30	2				1			7								Radiolarian clay				
5	H	1	82	33.52	D	5	25	70											5	15		1			5	2		10	3			1		1		Ash- and biogenic silica-bearing clay			
5	H	2	96	35.16	M		85	15										1	12					2					30							Clay- and ash-bearing siliceous ooze			
5	H	4	118	38.38	M	1	59	40										13	5		2			2			17			20					Mn-micronodule-bearing clayey silt				
5	H	6	58	40.78	M	2	98																				96	3			1				Ash				
6	H	1	30	42.5	M	1	39	60											7	13		2					22				1				Biogenic silica-and ash-bearing clay				
6	H	1	97	43.17	M	30	70												1	7				2				90								Ash			
6	H	4	50	47.2	M	2	33	65											15	2	5	5					6			10	1		1		Mn-micronodule- and biogenic silica-bearing clay				
6	H	5	80	49	D	5	45	50											5	15	3	3			5	2		22				1		1		Biogenic silica- and ash-bearing clay			
6	H	5	120	49.4	M	70	30												1	1				23			40	30		5					Ash				
7	H	4	25	56.45	D	10	40	50											15	10	1	5			3		1	10				1				Ash-bearing siliceous clay			
7	H	4	130	57.5	D	10	60	30											15	10	2	5					1	10	5			1			Ash-bearing siliceous silt				
8	H	3	86	65.06	M	70	20	10											2	6	1						1	80			2				Ash				
8	H	3	95	65.15	M	70	20	10																15			5	80								Ash; green			
8	H	4	101	66.71	D	5	45	50											5	5		1						10			1				Ash- and biogenic silica-bearing clay				
8	H	6	110	69.8	D	5	65	30	1										5	10	1						10	25			1				Radiolarian-bearing clay- and ash-rich silt				
9	H	1	140	72.1	D	30	50	20											25	25	1	5					15	5			1					Clay- and ash-bearing siliceous ooze			

Sample	Core	Coretype	Section	Top	Depth	Dominant/Minor	Texture			Calcareous	Siliceous			Silicate										Accessory														
							Sand	Silt	Clay	Calc. Nannofossils (132)	Sparry Carbonate (35)	Dolomite (62)	Diatoms (58)	Radiolarians (173)	Silicoflagellates (189)	Sponge Spicules (199)	Opal-CT/diagen. Quartz (139)	Clinoptilolite (48)	Quartz (172)	Clay (47)	Mica (118)	Chlorite (45)	Glauconite (82)	Feldspar (71)	Accessory Minerals (1)	Amphibole (8)	Pyroxene (171)	Volcanic Glass (81)	Volcanic Fragments (220)	Opaques (140)	Manganese Oxide (124)	Fe Oxide (68)	Barite (17)	Fish Remains (74)	Plant Debris (161)	Comments		
9	H	3	120	74.9	D	10	40	50					15	15	1	5			1	46	1				3				10	2			1			Ash-bearing siliceous clay		
9	H	5	72	77.42	M	20	70	10												15	1						2	25	50	5		2				Clay-bearing ash		
10	H	1	80	81	D	10	40	50					15	15	1	3			1	48					5				10	1		1				Ash-bearing siliceous clay		
10	H	1	90	81.1	M	10	30	60					15	15	1	5			1	47		1		2			1	10		1		1				Ash-bearing siliceous clay		
10	H	4	130	86	D	10	40	50		1			15	15	2				2	47	1			5					10		1		1			Ash-bearing siliceous clay		
11	H	1	100	90.7	D	5	45	50					20	10	2	7				50	1			3					6			1				Diatomaceous clay		
11	H	4	142	95.62	M	5	25	70					10	10						69									10			1				Ash- and biogenic silica-bearing clay		
12	H	1	70	99.9	D	25	15	60					3	1		2				57				1					35			1				Ash-rich clay		
12	H	4	40	104.15	D	2	48	50					2	2		1			15	50				18								2				Ash-bearing silty clay		
13	H	2	80	111	D		30	70						1		2			5	83	1			6							1		1				Silt-bearing clay	
13	H	4	59	113.79	D		30	70						1		1			5	82	1			6					3			1				Silt-bearing clay		
14	H	1	110	119.3	D		10	90											1	83				3					10		1		2				Ash-bearing clay	
14	H	2	110	120.8	D		13	87								5				80									10			5					Ash-bearing clay	
14	H	4	110	123.8	D		3	97											1	87				3	1				6			2					Clay	
15	H	2	90	130.1	M	5	5	90											1	82				2					5			7	3				Clay	
15	H	4	130	133.5	D	1	6	93											1	90				2					4				3				Clay	
16	H	2	93	139.63	M		4	96								1				90				1					6			2					Clay	
16	H	2	114	139.84	M		1	99												96				1					2			1					Clay; green burrow fill; fecal pellets?	
16	H	3	35	140.55	M		60	40												40				1					59								Clay-bearing ash	
16	H	6	100	145.7	D		6	94											1	89				3					5			2					Clay	
17	H	1	90	147.6	D		5	95												88									5		5	2					Clay	
17	H	2	134	149.54	M	1	16	83											1	83				3					8		3	2					Clay	
17	H	7	70	155.45	D		2	98											1	93									1			5					Clay	
18	H	1	70	156.9	D	1	2	97											1	90	1			1							2	5					Clay	
18	H	2	10	157.8	M		10	90											1	90				2					5			2					Clay	
18	H	4	50	161.2	D		10	90											2	91				1			1						5				Clay	
19	X	CC	17	165.41	D		30	70											14	75	1			5	1		1				1	2						Silt-bearing clay
20	X	1	112	170.92	M		20	80											1	10	82				1				3			2		1				Silt-bearing clay
21	X	1	19	179.29	D		50	50											40	2	53								3			2						Zeolitic clay
21	X	1	19	179.29	D	5	45	50											40	2	50								6			2						Zeolitic clay
21	X	1	59.5	179.7	M	10	60	30						10			66		2	1	20											1						Clay-bearing radiolarian porcelanite
21	X	1	65.5	179.76	M		50	50											47	1	50											2						Zeolitic clay
1149B																																						
2	R	CC	5	161.24	D		30	70											2	95						1						2						Silt-bearing clay
3	R	2	60	172.4	D		30	70												2	87				1				2		5	2		1				Clay
3	R	4	76	175.56	M		40	60											25	2	67	1							1		2	2						Zeolite-bearing clay
3	R	4	78	175.58	M		50	50											30	1	59										5	5						Zeolitic clay with Mn-micronodules
4	R	1	29	180.29	M		60	40		1	1						96														1	1						Porcelanite with traces of nannofossils
7	R	1	16	203.86	D	2	38	60										76	20					1					2			1						Zeolite-bearing clay
7	R	1	20	203.9	D	1	40	59										71	25	1									1			2						Zeolite-bearing clay
7	R	1	23	203.93	D		40	60										63	35													2						Zeolite-bearing clay
11	R	1	6	236.36	D		70	30										95	1										1		2	1						Claystone/porcelanite
11	R	1	18	236.48	D		70	30										96	1	1									1			1		1				Porcelanite
11	R	1	20	236.5	D		70	30										95	1							1		1		1		1	1					Porcelanite
12	R	CC	4	245.44	D		30	70										15	1	78					1								5					Zeolite-bearing clay
12	R	CC	5	245.45	M		20	80		1								10	1	86									1				1					Zeolite-bearing clay
14	R	CC	0	263.9	D		80	20						2			98																					Radiolarian porcelanite

Sample						Texture		Calcareous		Siliceous				Silicate										Accessory												
Core	Coretype	Section	Top	Depth	Dominant/Minor	Sand	Silt	Clay	Calc. Nannofossils (132)	Sparry Carbonate (35)	Dolomite (62)	Diatoms (58)	Radiolarians (173)	Silicoflagellates (189)	Sponge Spicules (199)	Opal-CT/diagen. Quartz (139)	Clinoptilolite (48)	Quartz (172)	Clay (47)	Mica (118)	Chlorite (45)	Glauconite (82)	Feldspar (71)	Accessory Minerals (1)	Amphibole (8)	Pyroxene (171)	Volcanic Glass (81)	Volcanic Fragments (220)	Opagues (140)	Manganese Oxide (124)	Fe Oxide (68)	Barite (17)	Fish Remains (74)	Plant Debris (161)	Comments	
16	R	1	1	282.31	D		40	60								97	1			1										1				Porcelanite		
16	R	1	3	282.33	D		60	40								92	3										1		4					Porcelanite		
16	R	1	16	282.46	D		50	50								73	5	20											1	1				Clay-bearing porcelanite		
16	R	1	43	282.73	D		50	50								70	5	20		1									3	1				Clay-bearing porcelanite		
16	R	1	46	282.76	M		50	50								74	3	20											1	2				Clay-bearing porcelanite		
16	R	1	46	282.76	M		65	35								59	5	20											1				15	Clay-bearing porcelanite with plant debris		
16	R	1	46	282.76	D		50	50								75		1	20					1					2	1				Clay-bearing porcelanite		
16	R	1	46	282.76	M		50	50								70	3	1	20				1						5					Clay-bearing porcelanite		
16	R	1	60	282.9	D	30	30	40		1			30			41	5	1	20				1				1				1				Clay-bearing radiolarian porcelanite	
16	R	1	86	283.16	D	15	55	30	45	10			15				5		10				5			2	5				3				Ash- clay and radiolarian-bearing nanno marl	
16	R	1	100	283.3	D	30	60	10	20	24			35					5				5					10				1				Ash-bearing calcareous radiolarian marlstone	
19	R	1	18	311.48	M	40	40	20	36	10	2		40				2	5													1	2	2		Radiolarian-rich nannofossil marl	
19	R	1	60	311.9	D	35	40	25	60				37				2														1				Calcareous radiolarian marlstone	
22	R	1	2	340.12	D		80	20	94	5																					1				Nannofossil chalk	
22	R	1	30	340.4	D		20	80	15				5																						Nannofossil bearing marl/claystone	
23	R	CC	1	349.71	M		20	80	59									40													1				Clayey nannofossil marl	
24	R	1	20	359.4	D	30	60	10	64	3			30				2					1													Radiolarian nannofossil marl	
24	R	1	80	360	D	30	60	10	59	10																						1			Radiolarian-rich nannofossil marl	
26	R	1	3	378.13	M	1	70	29	67	10							1	20											1		1				Clayey nannofossil chalk	
26	R	1	6	378.16	D		70	30	68	10							1	20											1						Clayey nannofossil chalk	
27	R	1	20	387.8	D		70	30	64	15								20														1			Clayey nannofossil chalk	
28	R	1	35	397.45	D	10	60	30	44	15								30													1				Radiolarian-bearing nannofossil marl	
28	R	1	95	398.05	D	10	60	30	49	10								30													1				Radiolarian-bearing nannofossil marl	
29	R	1	17	406.97	D		60	40	63									35													2				Clayey nannofossil chalk	
29	R	1	91	407.71	D		90	10	97	3																									Nannofossil chalk	
29	R	2	80	409.1	D		90	10	94									5													1				Nannofossil chalk	
1149C																																				
3	R	1	10	283.7	D		70	30	5	40						35		20																	Siliceous clay-bearing marlstone	
3	R	1	54	284.14	D		80	20	5	30						48	5	10					1								1				Clay-bearing calcareous porcelanite	
4	R	1	6	293.26	D		70	30	5	15	1					51		25					1					1			1				Clay-bearing calcareous porcelanite	
5	R	1	0	302.8	D		70	30	39	60																					1				Nannofossil chalk/limestone	
6	R	1	11	312.51	D		90	10	70	30																									Nannofossil chalk	
6	R	1	31	312.71	D		75	25	60	40																									Nannofossil chalk	
8	R	1	15	388.35	D	15	65	20	20	30			17					30										3							Radiolarian-bearing clayey marlstone; purple	
8	R	1	32	388.52	M	40	50	10	10	32			50					5										2				1			Radiolarian marlstone; dark green layer	
8	R	1	60	388.8	M	15	65	20	20	30			17					30										3							Radiolarian-bearing clayey marlstone	
8	R	1	76	388.96	D	10	80	10	10	53			15					20										2							Rad.-bearing calcareous marlstone; blue-green	
9	R	1	9	397.99	D		70	30	81	3								15													1				Clay-bearing nannofossil chalk	
9	R	1	22	398.12	D	15	70	15	70	5			15					10																	Clay- and radiolarian-bearing nannofossil chalk	
9	R	1	45	398.35	D		90	10	90	4								5													1				Nannofossil chalk	
1149D																																				
2	R	1	4	272.24	M		60	40	98	1																						1				Nannofossil chalk
3	R	1	12	281.72	D	5	65	30	82	10			5					3																	Nannofossil chalk	

Sample						Texture			Calcareous			Siliceous					Silicate								Accessory										
Core	Coretype	Section	Top	Depth	Dominant/Minor	Sand	Silt	Clay	Calc. Nannofossils (132)	Sparry Carbonate (35)	Dolomite (62)	Diatoms (58)	Radiolarians (173)	Silicoflagellates (189)	Sponge Spicules (199)	Opal-CT/diagen. Quartz (139)	Clinoptilolite (48)	Quartz (172)	Clay (47)	Mica (118)	Chlorite (45)	Glauconite (82)	Feldspar (71)	Accessory Minerals (1)	Amphibole (8)	Pyroxene (171)	Volcanic Glass (81)	Volcanic Fragments (220)	Opagues (140)	Manganese Oxide (124)	Fe Oxide (68)	Barite (17)	Fish Remains (74)	Plant Debris (161)	Comments
4	R	1	2	290.92	M	20	60	20	71	6								2												1				Radiolarian-bearing nannofossil chalk	
4	R	1	10	291	M	20	55	25	60	1			24					13												2				Clay- and radiolarian-bearing nannofossil chalk	
4	R	1	52	291.42	D	15	60	25	80	5			15																					Radiolarian-bearing nannofossil chalk	
5	R	1	3	300.33	M		75	25	53	3			2					5						35							2				Ashy chalk; ash is unknown accessory mineral
5	R	1	15	300.45	D		80	20	30	62								7													1				Chalk; near contact
5	R	1	15	300.45	M		30	70	5	40								50													5				Calcareous clay; near contact

185-1149A 11H-6 71-73			#85			Unit: 1		OBSERVER:		AS, Alt	
ROCK NAME:		Dacite									
WHERE SAMPLED:		Pumice within ash layer									
GRAIN SIZE:		Heterogeneous									
TEXTURE:		Porphyric									
PRIMARY MINERALOGY		PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)			APPROX. COMP.	MORPHOLOGY		COMMENTS	
PHENOCRYSTS				min.	max.	av.					
Plagioclase		2	2	0.1	1.4	0.6		euhedral		maybe 2 generations: one zoned, one not	
Clinopyroxene		1	1	0.2	1	0.4		euhedral			
GROUNDMASS											
Glass		87	87					holohyalin		colorless= acid glass	
Sediment fractions		10	10							within large vesicles	
Opaques		<1	<1					subhedral			
SECONDARY MINERALOGY		PERCENT		SIZE (mm)				REPLACING / FILLING		COMMENTS	
				min.	max.	av.					
VESICLES/ CAVITIES		PERCENT	LOCATION	SIZE (mm)				FILLING / MORPHOLOGY		COMMENTS	
				min.	max.	av.					
vesicular		80		0.05	6	0.1		big vesicles filled with sediment			
COMMENTS :		Unaltered rock contains sediment fractions.									



185-1149B 29R-1 133-136, 3			#91	Unit: 1	OBSERVER:	AS, Alt		
ROCK NAME:	Aphyric basalt							
WHERE SAMPLED:	Pillow interior							
GRAIN SIZE:	Microcrystalline							
TEXTURE:	Holocrystalline							
PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)			APPROX. COMP.	MORPHOLOGY	COMMENTS
			min.	max.	av.			
PHENOCRYSTS								
	None							
GROUNDMASS								
Plagioclase	30	52			0.1		subhedral to euhedral	
Pyroxene	2	21			0.06		anhedral to subhedral	
Olivine	0	2	<0.05	0.1	0.05		euhedral	
Magnetite	5	5			<0.05		subhedral to euhedral	
Interstitial material	38	20						
SECONDARY MINERALOGY	PERCENT		SIZE (mm)				REPLACING / FILLING	COMMENTS
			min.	max.	av.			
Fe oxide	15						filling pores, replacing olivine and interstitial material	
Smectite	5						filling pores, replacing olivine and interstitial material	
Celadonite	5						filling pores, replacing olivine and interstitial material	
VESICLES/CAVITIES	PERCENT	LOCATION	SIZE (mm)				FILLING / MORPHOLOGY	COMMENTS
			min.	max.	av.			
vesicular	1		0.1	0.2	0.15		filled with smectite, Fe-oxide and celadonite	
COMMENTS : Reddish basalt containing 25% secondary minerals, with large fractures filled by sediment (calcite and smectite). A 1 mm wide band along the edges of rock fragments is 80% altered to smectite. A 1 mm wide red band just inside the grey band is rich in Fe-oxide.								

185-1149B 29R-2 27-32, 2			#92		Unit: 1	OBSERVER:	AS, Alt	
ROCK NAME:	Aphyric basalt							
WHERE SAMPLED:	Pillow interior							
GRAIN SIZE:	Microcrystalline							
TEXTURE:	Holocrystalline							
PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)			APPROX. COMP.	MORPHOLOGY	COMMENTS
			min.	max.	av.			
PHENOCRYSTS								
Plagioclase	<<1	<<1			0.4		euhedral	only one observed, almost completely altered
Olivine	<<1	<<1			0.2		euhedral, diamond shaped	only one observed, completely altered
GROUNDMASS								
Plagioclase	20	45			0.1		euhedral to subhedral	
Pyroxene	5	26			0.02		anhedral	
Olivine	0	1			0.1		euhedral	
Magnetite	4	4			<0.01		subhedral	
Interstitial material	45	24						
SECONDARY MINERALOGY	PERCENT		SIZE (mm)				REPLACING / FILLING	COMMENTS
			min.	max.	av.			
celadonite	15						replacing olivine and interstitial material, filling pore space	
Iron oxyhydroxide	5						replacing olivine and interstitial material, filling pore space	
smectite	5						replacing pyroxene	
VESICLES/CAVITIES	PERCENT	LOCATION	SIZE (mm)				FILLING / MORPHOLOGY	COMMENTS
			min.	max.	av.			
vesicular	1		0.07	0.22	0.1		Filled with celadonite, iron oxide, and rare saponite.	
COMMENTS : Reddish basalt containing 25% secondary minerals. 2 mm wide red band along edges of basalt clasts contains 35% secondary minerals, pyroxene is cloudy and partly altered to smectite. No sulfide minerals observed, magnetite is apparently intensely altered.								

185-1149C 11R-1 43-45, 3			#94			Unit: 1	OBSERVER:	AS, Alt	
ROCK NAME:	Slightly plagioclase and olivine phyric basalt								
WHERE SAMPLED:	Pillow rim								
GRAIN SIZE:	Cryptocrystalline (at altered chilled margin) to microcrystalline in pillow interior								
TEXTURE:	Porphyric at chilled margin								
PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)			APPROX. COMP.	MORPHOLOGY	COMMENTS	
			min.	max.	av.				
PHENOCRYSTS									
Plagioclase	2	2	0.08	0.2	0.1		euhedral		
Olivine	0	1	0.04	0.1	0.05		euhedral		
GROUNDMASS									
Glass	0	94						altered, adjacent to variolitic zone	
Magnetite	3	3			<0.01		subhedral		
SECONDARY MINERALOGY	PERCENT		SIZE (mm)				REPLACING / FILLING	COMMENTS	
			min.	max.	av.				
tan smectite	20						replacing and cementing glass		
celadonite/nontronite	2						filling vesicles		
Fe-oxide	10						replacing glass, disseminated in groundmass, cementing glass fragments		
VESICLES/CAVITIES	PERCENT	LOCATION	SIZE (mm)				FILLING / MORPHOLOGY	COMMENTS	
			min.	max.	av.				
vesicular	1		0.05	0.15	0.1		filled with celadonite, iron oxide,and rare saponite.		
COMMENTS : Altered pillow rim and hyaloclastite. Glass is completely altered to palagonite, tan smectite, iron oxyhydroxide, and minor zeolite, Vesicles in rock filled with iron oxide and celadonite, and rare saponite.									

T85-1149C 11R-1 116-118, 11			#95			Unit: 1	OBSERVER:	AS, Alt
ROCK NAME:	Aphyric basalt							
WHERE SAMPLED:	Pillow interior							
GRAIN SIZE:	Microcrystalline							
TEXTURE:								
PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)			APPROX. COMP.	MORPHOLOGY	COMMENTS
			min.	max.	av.			
PHENOCRYSTS								
Plagioclase	<<1	<1	0.1	0.15	0.15		euhedral	highly altered, only outermost rim intact
GROUNDMASS								
Plagioclase	30	35	0.1	0.2	0.15		subhedral	
Pyroxene	20	23			<0.05		anhedral	
Magnetite	4	4			<0.01		subhedral	
Olivine	0	1	0.05	0.1	0.08		euhedral	
Interstitial materials	46	37						cryptocrystalline
SECONDARY MINERALOGY	PERCENT		SIZE (mm)				REPLACING / FILLING	COMMENTS
			min.	max.	av.			
saponite	5						Replacing olivine and interstitial material, filling pore spaces	
iron oxyhydroxide	5						Replacing olivine and interstitial material, filling pore spaces	
celadonite/ nontronite	5						Replacing olivine and interstitial material, filling pore spaces	
VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm)				FILLING / MORPHOLOGY	COMMENTS
			min.	max.	av.			
vesicular	1		0.05	0.15	0.1		filled with celadonite, iron oxide, and saponite	
COMMENTS :								
Dark alteration halo and adjacent dusky red basalt, both 15% altered. Ten mm dark halo contains celadonite and iron oxide filling pores, and common disseminated iron oxide. Dusky red host rock contains common disseminated iron oxides, and pore spaces are filled with saponite. A 1 mm red band separates the dark halo from the host rock, and is characterized by abundant disseminated iron oxides. A 3 mm wide brown halo occurs superimposed on the dark halo on the outer edge of the sample, and is similar to the dark halo but contains a greater proportion of iron oxides filling pores, staining celadonite, and disseminated in the groundmass.								

Leg 185 ALTERATION LOG 1149B											Rock Color/Alteration Type										Phenocrysts						Gms	Comments	Vesicles	
Unit	Core	Section	Pc no.	Top	Base	Length (cm)	Depth coretop	% Lava	% Other	% Dark grey	% Grey-brown	% Brown	% Green	% Grey green	% Green grey	% Pale green	% Fawn	% Dusky red	% Dark halo	Black halo	% Altrd glass	Olivine		Plagioclase		Pyroxene			% Alt	
																						% Alt	2nd min	% Alt	2nd min	% Alt	2nd min			
1-1	29	1	1	94	102	8	407.74	100										40	60									ROCK MASS ALTERED TO DUSKY RED W. LARGE D. HALO OVER PRINT		
1-1	29	1	2	104	123	19	407.82	35	65 B									12	23											
1-1	29	1	3	124	135.5	11.5	408.01	65	35 B									14	51											
1-1	29	1	4	136.5	145	8.5	408.13	15	85 B									0	15											
1-1	29	2	1	0	26	26	408.30	60	40									30	30											
1-2	29	2	2	27	34	7	408.56	100										80	20											
1-2	29	2	3	34	36.5	2.5	408.63	100										70	30											
1-2	29	2	4	37	40	3	408.66	100										60	40											
1-2	29	2	5	40.5	45	4.5	408.69	100										90	10											
1-2	29	2	6	45	49	4	408.73	100										30	30											
1-2	29	2	7	50	55	5	408.77	100										60	40											
1-2	29	2	8	56	72	16	408.82	100										60	40											
1-2	29	2	9	74	87	13	408.98	100										50	50											
1-2	29	2	10	87.5	95	7.5	409.11																					RUBBLE		
1-3	29	2	11	95.5	102	6.5	409.19	100										20	80											
1-3	29	2	12	102	115	13	409.25	100										30	70											
1-3	29	2	13	115	133	18	409.38	100										25	75											
1-3	29	2	14	134	141	7	409.56	80	20									50	30											
1-4	29	3	1	0	18	18	409.71	100										50	50											
1-4	29	3	2	20	35	15	409.89	100										30	70											
1-4	29	3	3	36	43	7	410.04	91	9 V									50	41											
1-5	29	3	4	43.5	50	6.5	410.11	100										65	35											
1-5	29	3	5	51	76.5	25.5	410.18																					RUBBLE		
1-5	29	3	6	76.5	82	5.5	410.43	100										50	50											
1-5	29	3	7	81.5	85	3.5	410.49	100										65	65											
1-5	29	3	8	86	92	6	410.52	100										100	100											
1-6	30	1	1	0	4	4	416.40	99	1 V									75	24											
1-6	30	1	2	4.5	6.5	2	416.44	100										85	15											
1-6	30	1	3	7	11.5	4.5	416.46	99	1 B									50	49									MOTTLED		
1-6	30	1	4	14	18	4	416.51																					RUBBLE		
1-6	30	1	5	18	23.5	5.5	416.55	100										60	40									MOTTLED		
1-6	30	1	6	23.5	29	5.5	416.60	95	5 V									15	80									DARK DUSKY RED		
1-6	30	1	7	30	36	6	416.66	100										50	50									MOTTLED		
1-6	30	1	8	36.5	46	9.5	416.72	90	10 V									45	45									MOTTLED		
1-6	30	1	9	47	54.5	7.5	416.81	99	1 V									35	64									MOTTLED		
1-7	30	1	10	57	87	30	416.89	85	15 V									35	50									MOTTLED		
1-7	30	1	11	86.5	97.5	11	417.19	50	50 B									20	30											
1-7	30	1	12	98.5	102.5	4	417.30	90	10 B									70	20											
1-7	30	1	13	103.5	107.5	4	417.34	100										30	70											
1-7	30	1	14	107.5	112	4.5	417.38	100										25	75											
1-7	30	1	15	112	116	4	417.42																					RUBBLE		
1-8	30	1	16	116.5	130	13.5	417.46	100										40	60											
1-8	30	1	17	131	137.5	6.5	417.60	100										65	35									MOTTLED		
1-8	30	1	18	139	145.5	6.5	417.66	99	1 V									65	34									V. RED		
1-8	30	1	19	146	151	5	417.73	100										65	35											
1-9	30	2	1	0	7	7	417.90	99	1 V		60							39										V.MOTTLEED		
1-9	30	2	2	9	16	7	417.97	100			70							30										LOCALISED MOTTLING		
1-9	30	2	3	17	20	3	418.04	100			100																			
1-9	30	2	4A	21	106	85	418.07	99	1V		40							59										SOME MOTTLING		
1-9	30	2	4A-7	106	134.5	28.5	418.92	84	16 B									25	54	5								MOTTLED		
1-10	30	3	1	0	15.5	15.5	419.25	80	20 B									17	53	10										

Leg 185 ALTERATION LOG 1149B											Rock Color/Alteration Type											Phenocrysts						Gms	Comments	Vesicles		
Unit	Core	Section	Pc no.	Top	Base	Length (cm)	Depth coretop	% Lava	% Other	% Dark grey	% Grey-brown	% Brown	% Green	% Grey green	% Green grey	% Pale green	% Fawn	% Dusky red	% Dark halo	Black halo	% Altrd glass	Olivine		Plagioclase		Pyroxene		% Alt				
																						% Alt	2nd min	% Alt	2nd min	% Alt	2nd min					
1-11	30	3	2	17.5	21	3.5	419.41	100										65	35													
1-11	30	3	3	21	26	5	419.44	97	3 V									60	37													
1-11	30	3	4	27	34	7	419.49	95	5 V									60	35													
1-11	30	3	5	34	45	11	419.56																									
1-11	30	3	6	45.5	49.5	4	419.67	100										50	50													
1-11	30	3	7	52	53	1	419.71	100										50	50													
1-11	30	3	8	56	60.5	4.5	419.72	100										50	50											MOTTLED		
1-11	30	3	9	63	66.5	3.5	419.77	100										80	20													
1-12	31	1	1	0	6	6	426.00	90	10 V									20	70													
1-12	31	1	2-5	6	21	15	426.06																								RUBBLE	
1-12	31	1	6	21	24	3	426.21		100 HY												95											
1-12	31	1	7	24.5	32.5	8	426.24	65	35 HY									65	10												MULTI-COLOURED HALO	
1-12	31	1	8	34	38.5	4.5	426.32		100 HY										20	80											MULTI-COLOURED HALO	
1-12	31	1	9	38.5	43	4.5	426.37																								RUBBLE	
1-12	31	1	10	43	47	4	426.41	95	5 HY									95	5												MULTI-COLOURED HALO	
1-12	31	1	11-18	48	93	45	426.45	95	5 HY																							RUBBLE
1-12	31	1	19	93	104	11	426.90														85											
1-12	31	1	20	105	108	3	427.01	80	20									80	20												MULTI-COLOURED HALO	
1-12	31	1	21	109	112	3	427.04	100										99	1												MULTI-COLOURED HALO	
1-12	31	1	22	113	119	6	427.07		100 HY										85												MULTI-COLOURED HALO	
1-13	31	1	23	121	125	4	427.13	100										50	50													
1-13	31	1	24-25	125	132	7	427.17																									RUBBLE
1-13	31	1	26	133	144	11	427.24	100										10	90												MULTI-COLOURED HALO	
1-13	31	2	1	0	9	9	427.50	90	10 V									10	80												MULTI-COLOURED HALO	
1-13	32	1	1-17	0	143	143	435.60	97	3 V									60	37													

Leg 185 ALTERATION LOG 1149C										Rock Color/Alteration Type										Phenocrysts						Gms	Comments	Vesicles			
Unit	Core	Section	Pc no.	Top	Base	Length (cm)	Depth coretop	% Lava	% Other	% Dark grey	% Grey-brown	% Brown	% Green	% Grey green	% Green grey	% Pale green	% Fawn	% Dusky red	% Dark halo	Black halo	% Altrd glass	Olivine		Plagioclase		Pyroxene		% Alt			
																						% Alt	2nd min	% Alt	2nd min	% Alt			2nd min	% Alt	
1-1	9	1	1	51	59	8	397.9												75	25									RUBBLE 6 PIECES		
1-1	9	1	2	59	67	8	397.98	100																					MOTTLED		
1-1	9	1	3	68	73.5	5.5	398.035																						4 PIECES		
1-1	9	1	4	73.5	81.5	8	398.115	98	2 V										75	23									NO MOTTLING		
1-1	9	1	5	83	89	6	398.175	100											80	25									MOTTLED		
1-1	9	1	6	89.5	95	5.5	398.23	99	2 V										64	35									MOTTLED		
1-1	9	1	7	95	110	15	398.38																						RUBBLE		
1-2	10	1	1	0	5.5	5.5	407.5	90	10 V											90											
1-2	10	1	2	6	12	6	407.56	80	20 V									5	70		5								MOTTLED		
1-2	10	1	3	14	17	3	407.59	99	1 V									30	62		8								MOTTLED		
1-2	10	1	4	17	24	7	407.66	90	10 V									5	85										MOTTLED		
1-2	10	1	5	24.5	33	8.5	407.745	90	10 V									55	35										NOT MOTTLLED		
1-2	10	1	6	34	37	3	407.775																						RUBBLE		
1-2	10	1	7	38	50	12	407.895	100										15	84										MOTTLED		
1-2	10	1	8	50.5	56	5.5	407.95	99	1 V									40	60										MOTTLED		
1-2	10	1	9	57.5	65	7.5	408.025	100										60	40										MOTTLED		
1-2	10	1	10	65	68	3	408.055	99	1 V									40	59										MOTTLED		
1-2	10	1	11	69	75	6	408.115	50	50 V										50												
1-3	10	1	12	75	78	3	408.145	100										40	60										MOTTLED		
1-3	10	1	13	78	81	3	408.175																						RUBBLE		
1-3	10	1	14	81	93	12	408.295	100										50	50										MOTTLED		
1-3	10	1	15	93.5	99	5.5	408.35	99	1 V									29	70										MOTTLED		
1-3	10	1	16	100	105	5	408.4	90	10 V									80	10										MOTTLED		
1-4	10	1	17-19	106	126	20	408.6	70	70 B									5	65										MOTTLED		
1-4	10	1	20	126	136	10	408.7	95	5 V									60	35										MOTTLED		
1-4	10	1	21	136	141	5	408.75	93	7 V									30	70										MOTTLED		
1-4	10	1	22	143	147	4	408.79	100										65	35										MOTTLED		
1-4	10	2	1	0	5.5	5.5	409																						RUBBLE		
1-4	10	2	2	5.5	9	3.5	409.035	40	60 B										40												
1-4	10	2	3-4	9	22.5	13.5	409.17																						RUBBLE		
1-4	10	2	5	22.5	27	4.5	409.215	88	12 V									35	53										MOTTLED		
1-4	10	2	6	27	31	4	409.255	85	15 V									50	35										MOTTLED		
1-4	10	2	7	31	37	6	409.315																						RUBBLE		
1-4	10	2	8	37	41	4	409.355	90	10 V									50	40										MOTTLED		
1-5	10	2	9	41	48	7	409.425	90	10 V									50	40										MOTTLED		
1-5	10	2	10	47	51	4	409.465	100											100												
1-5	11	1	1	0	37	37	417.1	99	1									60	40										MOTTLED		
1-5	11	1	2	37	42.5	5.5	417.155																						RUBBLE		
1-5	11	1	3	42.5	45	2.5	417.18	45	55 PM?									5	40										MOTTLED		
1-6	11	1	4	46	83	37	417.55	100										50	50										MOTTLED		
1-6	11	1	5	83	89	6	417.61																						RUBBLE		
1-6	11	1	6	89	93	4	417.65	98	2									30	68										COMPLETELY MOTTLLED		
1-6	11	1	7	93	102	9	417.74																						RUBBLE		
1-6	11	1	8	102	105.5	3.5	417.775	100										40	60										MOTTLED		
1-6	11	1	9	105.5	111	5.5	417.83																						RUBBLE		
1-6	11	1	10	111	114.5	3.5	417.865	100										70	30										MOTTLED		
1-6	11	1	11	115	123	8	417.945	100										75	25										MOTTLED		
1-6	11	1	12	123	130	7	418.015																						RUBBLE		
1-6	11	1	13	130	137	7	418.085	100										70	25										MOTTLED		

Leg 185 ALTERATION LOG 1149D											Rock Color/Alteration Type										Phenocrysts						Gms	Comments	Vesicles			
Unit	Core	Section	Pc no.	Top	Base	Length (cm)	Depth coretop	% Lava	% Other	% Dark grey	% Grey-brown	% Brown	% Green	% Greygreen	% Green grey	% Pale green	% Fawn	% Dusky red	% Dark halo	Black halo	% Altrd glass	Olivine		Plagioclase		Pyroxene			% Alt			
																						% Alt	2nd min	% Alt	2nd min	% Alt	2nd min					
1	SWR	1	1	16	21	5	300.3	100		50									50			100	SM							MOTTLED	<1	SM 100
1	SWR	1	2	21	24.5	3.5	300.335	100										50	50											MOTTLED		
2-1	SWR	1	3	25	30	5	300.385																							RUBBLE		
2-1	SWR	1	4	30	36	6	300.445	95	5 V									50	45											MOTTLED		
2-1	SWR	1	5	37	40	3	300.475	100		60									40											MOTTLED		
2-1	6R	1	1	0	8	8	310	100		50									50											MOTTLED		
2-1	6R	1	2	8	12	4	310.04	99	5V	30									69											MOTTLED		
2-1	6R	1	3	12	16	4	310.08																							RUBBLE		
2-1	6R	1	4	16	20	4	310.12	100		40									60											MOTTLED		
2-1	6R	1	5	20	28	8	310.2																							RUBBLE		
2-1	6R	1	6	28	31	3	310.23	100		60									40											MOTTLED		
2-1	6R	1	7	32	38	6	310.29	95	5V	45									50											MOTTLED		
2-1	6R	1	8	38	45	7	310.36																							RUBBLE		
2-1	6R	1	9	45	51	6	310.42	100		65									35											MOTTLED		
2-1	6R	1	10	51	55	4	310.46	100		75									25											MOTTLED		
2-1	6R	1	11	55	59	4	310.5	100		88									12											MOTTLED		
2-1	6R	1	12	59	63	4	310.54	100		85									15											MOTTLED		
2-1	6R	1	13	63	67	4	310.58	100		50									50											MOTTLED		
2-1	6R	1	14	67.5	87.5	20	310.78	100		50									50											MOTTLED		
2-1	6R	1	15	87	91	4	310.82	100		50									50											MOTTLED		
2-1	6R	1	16-17	91	107	16	310.98																							RUBBLE		
2-1	6R	1	18	107	111	4	311.02	95	5V	47.5									47.5											MOTTLED		
2-1	6R	1	19	113	117	4	311.06	100		50									50											MOTTLED		
2-1	6R	1	20	117	130	13	311.19	98	2V	40									58											MOTTLED		
2-1	6R	1	21	130	134	4	311.23	100		25									75											MOTTLED		
2-1	6R	2	1	0	19	19	311.35	100		50									50											MOTTLED		
2-1	6R	2	2	20	25	5	311.4	100		60									40											MOTTLED		
2-1	6R	2	3	25	30	5	311.45																							RUBBLE		
2-1	6R	2	4	30	34	4	311.49	90	10	70									20											MOTTLED		
2-1	6R	2	5	35	47	12	311.61	100		40									60											MOTTLED		
2-1	6R	2	6	48	52	4	311.65	100		50									50											MOTTLED		
2-1	6R	2	7	52	62	10	311.75	100		40									60											MOTTLED		
2-1	6R	2	8	63	73.5	10.5	311.855	100		40									60											MOTTLED		
2-1	6R	2	9	74	80	6	311.915																							RUBBLE		
2-1	6R	2	10	80	92	12	312.035	100		60									40											MOTTLED		
2-1	7R	1	1	0	10	10	319.7	100		35									65											MOTTLED		
2-1	7R	1	2	11	14	3	319.73	100		20									80											MOTTLED		
2-1	7R	1	3	15.5	22	6.5	319.795	100		75									25											MOTTLED		
2-1	7R	1	4	23.5	29	5.5	319.85	100		70									30											MOTTLED		
2-2	7R	1	5	29	41	12	319.97		100HY											30										70% SMECTITE + CELADONITE(?)		
2-3	7R	1	6	42	48	6	320.03	100		50									50											MOTTLED		
2-3	7R	1	7	48	56	8	320.11	100		60									40											MOTTLED		
2-4	7R	1	8	56	60.5	4.5	320.155	100		50									50											MOTTLED		
2-4	7R	1	9	62	69	7	320.225	100		40									60											MOTTLED		
2-5	7R	1	10	70	74	4	320.265		50HY											50										50% CALCITE		
2-6	7R	1	11	74	79.5	5.5	320.32																							RUBBLE		
2-6	7R	1	12	79.5	90	10.5	320.425	100		30									70											MOTTLED		
2-6	7R	1	13	90	94	4	320.465	100		70									30											MOTTLED		
2-6	7R	1	14	95	97.5	2.5	320.49	100		75									25											MOTTLED		
2-6	7R	1	15	98	101.5	3.5	320.525	100		45									55											MOTTLED		
2-6	7R	1	16	102	105	3	320.555	100		50									50											MOTTLED		
2-6	7R	1	17	106	119	13	320.685	100		60									40											MOTTLED		

Leg 185 ALTERATION LOG 1149D											Rock Color/Alteration Type										Phenocrysts						Gms	Comments	Vesicles		
Unit	Core	Section	Pc no.	Top	Base	Length (cm)	Depth coretop	% Lava	% Other	% Dark grey	% Grey-brown	% Brown	% Green	% Greygreen	% Green grey	% Pale green	% Fawn	% Dusky red	% Dark halo	Black halo	% Altrd glass	Olivine		Plagioclase		Pyroxene			% Alt		
																						% Alt	2nd min	% Alt	2nd min	% Alt	2nd min				
3-5	9R	1	2	6	10	4	338.84	90	10G	100										93									MOTTLED		
3-6	9R	1	3	10	15	5	338.89	90	10G	40																			RUBBLE		
3-6	9R	1	4	16	27	11	339	99	1V	25									74		5								MOTTLED		
3-6	9R	1	5	27	31	4	339.04	100		50									50										MOTTLED		
3-6	9R	1	6	31	34	3	339.07	100		50									50										MOTTLED, MIAROLITIC VOIDS	1	SM 100
3-7	9R	1	7	34	38	4	339.11	100		75									25										MOTTLED		
3-7	9R	1	8	38	49	11	339.22	99	1V	40									59										MOTTLED		
3-7	9R	1	9	50	62	12	339.34	99	1V	45									54										MOTTLED		
3-7	9R	1	10	63	65	2	339.36	85	15G	60									15		12								MOTTLED		
3-7	9R	1	11	65	70	5	339.41	100											100										MOTTLED		
3-8	9R	1	12	70	76	6	339.47	100		70									30										MOTTLED		
3-8	9R	1	13	77	80	3	339.5	100		20									80										MOTTLED		
3-8	9R	1	14-15	80	87	7	339.57																						RUBBLE		
3-8	9R	1	16	87	89.5	2.5	339.595	100		75									25										MOTTLED		
3-8	9R	1	17	90	107	17	339.765	99	1V	30									69										MOTTLED		
3-8	9R	1	18	107	117	10	339.865	100		75									25										MOTTLED		
3-9	9R	2	1	0	47	47	339.98	99	1V	60									40										MOTTLED		
3-9	9R	2	2	48	59	11	340.09	100		20									80										MOTTLED		
3-9	9R	2	3	60	66	6	340.15	100		50									50										MOTTLED		
3-9	9R	2	4	68	70	2	340.17	100		35									65										MOTTLED		
3-10	9R	2	5	72	76	4	340.21	100		50									50										MOTTLED		
3-10	9R	2	6	76	80	4	340.25																						RUBBLE		
3-10	9R	2	7	80	89	9	340.34	90	10V	50									50										MOTTLED		
3-10	9R	2	8	89	93	4	340.38																						RUBBLE		
3-10	9R	2	9	93	104	11	340.49	85	15V	15									70										MOTTLED		
3-10	9R	2	10	105	108	3	340.52	100		75									25										MOTTLED		
3-10	9R	2	11	108	111	3	340.55	100		25									75										MOTTLED		
3-10	9R	2	12	111.5	119	7.5	340.625	100		50									50										MOTTLED		
3-10	9R	2	13	120	131	11	340.735	100		75									25										MOTTLED		
3-10	9R	2	14	131	136	5	340.785																						RUBBLE		
3-10	9R	2	15	136	142	6	340.845	100		30									70										MOTTLED		
3-10	9R	2	16	142	150	8	340.925																						RUBBLE		
3-11	9R	3	1	0	8	8	341.48	98	2V	3									95										MOTTLED		
3-11	9R	3	2	9.5	13	3.5	341.515	88	12V	10									78										MOTTLED		
3-11	9R	3	3	13.5	17.5	4	341.555	100		50									50										MOTTLED		
3-11	9R	3	4-5	17.5	30	12.5	341.68																						RUBBLE		
3-11	9R	3	6	30	33	3	341.71	100		25									75										MOTTLED		
3-11	9R	3	7	33	43	10	341.81	100		80									20										MOTTLED		
3-11	9R	3	8	44	48	4	341.85	100		60									40										MOTTLED		
3-11	9R	3	9	48	57	9	341.94																						RUBBLE		
3-11	9R	3	10	57	65	8	342.02	95	5V	55									40										MOTTLED		
3-11	10R	1	1	0	5	5	348.4	100		85									15										MOTTLED		
3-11	10R	1	2	5	8	3	348.43	100		80									20										MOTTLED		
3-11	10R	1	3	10	15	5	348.48	100		50									50										MOTTLED		
3-11	10R	1	4	15	26	11	348.59	100		50									50										MOTTLED		
3-12	10R	1	5	27	32	5	348.64		100HY												50								10% SM 40% CALCITE MTRIX		
3-13	10R	1	6	33	107	74	349.38	100		50									50										MOTTLED		
3-14	10R	1	7	108	127	19	349.57	100										40	60										MOTTLED		
3-14	10R	1	8	127	130	3	349.6																						COBBLE		
3-15	10R	1	9	130	143	13	349.73	100										25	75										MOTTLED		
3-15	10R	2	1	0	14	14	349.9	100		75									25										MOTTLED		
3-16	10R	2	2-4	15	39	24	350.14																						CALCITE MATRIX IN BRECCIA		
3-16	10R	2	5	39.5	43	3.5	350.175	75	25B	50									25										MOTTLED		
3-16	10R	2	6	46	52	6	350.235	100		40									60										MOTTLED		

Leg 185 ALTERATION LOG 1149D											Rock Color/Alteration Type										Phenocrysts						Gms	Comments	Vesicles			
Unit	Core	Section	Pc no.	Top	Base	Length (cm)	Depth coretop	% Lava	% Other	% Dark grey	% Grey-brown	% Brown	% Green	% Greygreen	% Green grey	% Pale green	% Fawn	% Dusky red	% Dark halo	Black halo	% Altrd glass	Olivine		Plagioclase		Pyroxene			% Alt			
																						% Alt	2nd min	% Alt	2nd min	% Alt	2nd min					
3-16	10R	2	7	53	57	4	350.275	100		45									65										MOTTLED			
3-16	11R	1	1	0	3	3	357.9	100										75	25										MOTTLED			
3-16	11R	1	2	4	10.5	6.5	357.965	100		60									40										MOTTLED			
3-17	11R	1	3,-5	13	38	25	358.215		100HY												60								40% MATRIX CELAD +FEOXIDE			
3-17	11R	1	6	38	43.5	5.5	358.27	40	60HY									40		40									20% MATRIX CELAD +FEOXIDE			
3-17	11R	1	7	43.5	48	4.5	358.315																						RUBBLE			
4-1	11R	1	8	48	53	5	358.365	100										100											MOTTLED			
4-1	11R	1	9	53	56	3	358.395	98	2V									20	78										MOTTLED			
4-1	11R	1	10	56	71	15	358.545	100										50	50										MOTTLED			
4-1	11R	1	11	71	82	11	358.655																						RUBBLE			
4-1	11R	1	12	84	117	33	358.985	93.5	7.5B									93.5											MATRIX CALCITE			
4-1	11R	1	13	118	130	12	359.105	90	10B									3	87										MATRIX CALCITE			
4-1	11R	1	14	129	133	4	359.145	27	63B										27										MULTI-COLOURED HALO			
4-1	11R	2	1-10	1	142	141	359.24	96.4	2.6B 1V									70	26.4										MOTTLED	2	SM70% CO3 30%	
4-2	11R	3	1-3	0	129	129	360.67	75	35B									35	35										CALCITE MATRIX			
4-2	11R	3	4	130	137	7	360.74		100HY												35								35% CLEDONITIC MATRIX			
4-2	11R	3	5	138	142	4	360.78	82	18B									30	52										CALCITE MATRIX			
4-2	11R	3	6	143	146.5	3.5	360.815	100										30	70										MOTTLED			
4-3	11R	4	1	0	7.5	7.5	362.14	100										5	95										MOTTLED			
4-3	11R	4	2	9	14	5	362.19	92	8V									30	62										MOTTLED			
4-3	11R	4	3	14	22	8	362.27																						RUBBLE			
4-3	11R	4	4	22	26	4	362.31	99	1V									70	29										MOTTLED			
4-3	11R	4	5	26.5	32.5	6	362.37	93	7V									15	88										MOTTLED			
4-3	11R	4	6	34	54	20	362.57																						RUBBLE			
4-3	12R	1	1-7	0	32	32	367.4	99	1V									20	79										MOTTLED BROWN			
4-3	12R	1	8	32	36	4	367.44	100										75	25										MOTTLED BROWN			
4-4	12R	1	9	36	40	4	367.48	100				60							40										MOTTLED BROWN			
4-4	12R	1	10	43	46	3	367.51	98	2V									25	73										MOTTLED BROWN			
4-4	12R	1	11	46	52	6	367.57																									
4-4	12R	1	12	52	62	10	367.67	100										60	40										MOTTLED BROWN			
4-4	12R	1	13	62	66	4	367.71	82	18									60	40										MOTTLED BROWN			
4-5	13R	1	1	0	12	12	377		100HY											60										CELADONITIC MATRIX		
4-5	13R	1	2	13	26	13	377.13	25	75HY											35										CELADONITIC MATRIX		
4-6	13R	1	3	26	34	8	377.21																							RUBBLE		
4-6	13R	1	4-13	34.5	88.5	54	377.75	90	10B									10	80										MOTTLED BROWN, INSITU B+B MATRIX 9%SM 1%CO3			
4-7	13R	1	14	88.5	95	6.5	377.815	10	90HY									2	8	60										CELADONITIC MATRIX		
4-7	13R	1	15	96	101	5	377.865	10	90HY									2	8	60										CELADONITIC MATRIX		
4-7	13R	1	16	102	107	5	377.915																							RUBBLE		
4-8	13R	1	17-22	107.5	150	42.5	378.34	99	1V									15	84											MOTTLED BROWN		
5-1	14R	1	1	0	1.8	1.8	386.6	90	10V									50	40											MOTTLED		
5-1	14R	1	2	4	11	7	386.67	96	4V									46	50											MOTTLED		
5-2	14R	1	3	12	19	7	386.74											50	50											MOTTLED		
5-2	14R	1	4	19	23	4	386.78	96	4V									71	25											MOTTLED		
5-3	14R	1	5	24	27	3	386.81	100										60	40											MOTTLED		
5-3	14R	1	6	27.5	31.5	4	386.85	100										30	70											MOTTLED		
5-3	14R	1	7	31.5	35	3.5	386.885	100										20	80											MOTTLED		
5-3	14R	1	8	35	45	10	386.985	100										50	50											8 PIECES, MOTTLED		
5-4	15R	1	1	0	3	3	396.3	100										70	30											MOTTLED BROWN		
5-4	15R	1	2	4	12	8	396.38																							RUBBLE		
5-4	15R	1	3	12	15	3	396.41	100										100												MOTTLED BROWN		
5-5	15R	1	4	16.5	19	2.5	396.435	100										50	50											3 PIECES		
5-5	15R	1	5	20	25	5	396.485	100										40	60											MOTTLED BROWN		
5-5	15R	1	6	27	29	2	396.505	100											100											MOTTLED BROWN		

Leg 185 ALTERATION LOG 1149D											Rock Color/Alteration Type										Phenocrysts						Gms	Comments	(%)	Vesicles					
Unit	Core	Section	Pc no.	Top	Base	Length (cm)	Depth coretop	% Lava	% Other	% Dark grey	% Grey-brown	% Brown	% Green	% Greygreen	% Green grey	% Pale green	% Fawn	% Dusky red	% Dark halo	Black halo	% Altrd glass	Olivine		Plagioclase		Pyroxene				% Alt					
																						% Alt	2nd min	% Alt	2nd min	% Alt	2nd min								
5-5	15R	1	7	30	37	7	396.575	100										50	50												MOTTLED BROWN				
5-5	15R	1	8	38	45	7	396.645	100										50	50												MOTTLED BROWN				
5-5	15R	1	9	45	55	10	396.745																								RUBBLE				
5-5	15R	1	10	55	60	5	396.795	100										40	60												MOTTLED BROWN				
5-5	15R	1	11	60	70	10	396.895																								RUBBLE				
5-5	15R	1	12	70	76	6	396.955	99	1V									10	89												3 PIECES				
5-5	15R	1	13	77	83	6	397.015	100										75	25												MOTTLED BROWN				
5-5	15R	1	14	85	88	3	397.045	100										50	50												MOTTLED BROWN				
5-5	15R	1	15	91	95	4	397.085	100										25	75												MOTTLED BROWN				
5-6	16R	1	1	0	3	3	405.90																												
5-6	16R	1	2	3	6	3	405.93	99	1V									50	49												MOTTLED				
5-6	16R	1	3	7	9.5	2.5	405.955	100										30	70												MOTTLED				
5-6	16R	1	4-7	10	33	23	406.185	96	4B										94	3											INSITU BRECCIA SM+CO3 MATRIX				
5-6	16R	1	8-13	33	83	50	406.685	80	20PRB									30	50	15											BRECCIA CO3+SM				
5-6	16R	1	14-20	83	122	39	407.075	95	5B									10	85												RUBBLE				
5-6	16R	1	21	122	147.5	25.5	407.33	80	20V										55	25											SOME GLASSY CRUST				
5-6	16R	2	1-9	0	123	123	407.38	85	15B									4	81												BRECCIA CO3+SM MATRIX				
5-7	16R	2	10	123	127	4	407.42	100										60	30												MOTTLED	10	CO3 100		
5-7	16R	2	11	127	133	6	407.48																								RUBBLE				
5-7	16R	2	12	133.5	138	4.5	407.525	99	1V									50	50												MIXED UP HALOS	<1	CO3 >SM		
5-7	16R	2	13	139.5	147	7.5	407.6	100										60	40												MOTTLED				
5-7	16R	3	1	0	8	8	408.88	100		100											100	SM							5						
5-7	16R	3	2	9	13	4	408.92	100										50	50		100	SM									MOTTLED				
5-7	16R	3	3	15	18	3	408.95	100										100														MOTTLED			
5-7	16R	3	4	18	24	6	409.01																									RUBBLE			
5-7	16R	3	5	24	29	5	409.06	99	1V									75	24												MOTTLED				
5-7	16R	3	6	31	35	4	409.1	100										85	15												MOTTLED				
5-8	17R	1	1	0	6	6	415.50																									RUBBLE			
5-8	17R	1	2-15	6	132.5	126.5	416.765	80	20B									25	55												SM + CO3 MATRIX MOTTLED				
5-8	17R	1	16-20	133	150	17	416.935																									RUBBLE			
5-8	17R	2	1	0	3	3	417.00	100										50	50												MOTTLED				
5-8	17R	2	2	5	7	2	417.02	100										50	50												MOTTLED				
5-8	17R	2	3	10	18	8	417.1																									RUBBLE			
5-8	17R	2	4	18	24	6	417.16	80	20V									40	40													MOTTLED			
6-1	17R	2	5	25	36	11	417.27	100										50	50		100	SM										MOTTLED			
6-1	17R	2	6	37	41	4	417.31	100										10	90													MOTTLED			
6-1	17R	2	7-8	42	56	14	417.45																										RUBBLE		
6-1	17R	2	9-10	57	62	5	417.5	100		100																									
6-1	17R	2	11	64	68	4	417.54	100		10								70	20		100	SM									MOTTLED				
6-1	17R	2	12	70	74	4	417.58	100		100																									
6-1	17R	2	13	75	77	2	417.6																									RUBBLE			
6-1	17R	2	14	78	82	4	417.64	100										75	25												MOTTLED				
6-2	18R	1	1	0	14.5	14.5	425.10	95	5V									40														MOTTLED			
6-2	18R	1	2	15.5	29	13.5	425.235	99	1V									5														MOTTLED			
6-2	18R	1	3	30	37	7	425.305	90	10V	25									65													MOTTLED			
6-2	18R	1	4	38	42	4	425.345	100										20	80													MOTTLED			
6-3	18R	1	5	42.5	46	3.5	425.38	100											100																
6-3	18R	1	6	46	50	4	425.42																									RUBBLE			
6-3	18R	1	7	50.5	61.5	11	425.53	99	1V									20	80													MOTTLED			
6-3	18R	1	8	62	65	3	425.56	100										20	80													MOTTLED			
6-3	18R	1	9	66	69	3	425.59	100										40	60													MOTTLED			
6-3	18R	1	10	70	86	16	425.75	97	3V									70	30													MOTTLED			
6-3	18R	1	11	88	95	7	425.82	100										65	22													MOTTLED			

Leg 185 ALTERATION LOG 1149D														Rock Color/Alteration Type										Phenocrysts						Gms	Comments	Vesicles	
Unit	Core	Section	Pc no.	Top	Base	Length (cm)	Depth coretop	% Lava	% Other	% Dark grey	% Grey-brown	% Brown	% Green	% Greygreen	% Green grey	% Pale green	% Fawn	% Dusky red	% Dark halo	Black halo	% Altrd glass	Olivine		Plagioclase		Pyroxene		% Alt	Gms			Minerals % and (%)	
																						% Alt	2nd min	% Alt	2nd min	% Alt	2nd min						
6-3	18R	1	12	95.5	102.5	7	425.89	100										30	70												MOTTLED		
6-3	18R	1	13	103	109	6	425.95																								RUBBLE		
6-3	18R	1	14	110.5	125	14.5	426.095	99	1V									40	59												MOTTLED		
6-3	18R	1	15	126	129	3	426.125	100										80	20												MOTTLED		
6-3	18R	1	16	130	139	9	426.215																								RUBBLE		
6-4	19R	1	1	0	5.5	5.5	434.70	80	20B									20	60												MOTTLED		
6-4	19R	1	2	8	12	4	434.74	90	10B									65	25												MOTTLED		
6-4	19R	1	3	13	16	3	434.77	85	15B									25	60												MOTTLED		
6-4	19R	1	4	16	19	3	434.8	100											100														
6-4	19R	1	5	19	23.5	4.5	434.845	90	10B									45	45												MOTTLED		
6-5	19R	1	6	24	27.5	3.5	434.88	100										50	50												MOTTLED		
6-5	19R	1	7	28	38	10	434.98	100										95	5												MOTTLED		
6-5	19R	1	8	39	44	5	435.03	100										95	5												MOTTLED		
6-5	19R	1	9	44	45	1	435.04	100										92	8												MOTTLED		
6-5	19R	1	10	51	55	4	435.08	100										96	4												MOTTLED		
6-5	19R	1	11.-12	56	64	8	435.16																								RUBBLE		
6-5	19R	1	13	64.5	69	4.5	435.205	100										40	60												MOTTLED		
6-5	19R	1	14	72	76.5	4.5	435.25	100											100														
6-6	19R	1	15	77	81	4	435.29	100										40	60												MOTTLED		
6-6	19R	1	16	84	88	4	435.33	100	100																								
6-6	19R	1	17	88	95	7	435.4																								RUBBLE		
6-6	19R	1	18	95	98	3	435.43	100										40	60												MOTTLED		
6-6	19R	1	19	99.5	103	3.5	435.465	100										2	98												MOTTLED		
6-6	19R	1	20	103	108	5	435.515																								RUBBLE		
6-6	19R	1	21	108	111	3	435.545	100										5	95												MOTTLED		
6-6	19R	1	22	112	115	3	435.575	100										40	60												MOTTLED		

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149B																					
29R	1	1		94	102	0	v									V	4	dk+br halo			0
29R	1	1		94	97	0.2		90							10	V	6	dk halo			100
29R	1	1		102	102	0.1						90			10	V	8	dk+br halo			10
29R	1	1		97	101	0.4		70		20					10	V	5	dk+br halo			100
29R	1	2		104	123	Br				2			98			B		Breccia with sediment, dk halo	50	40	2
29R	1	3		123	136	Br							100			B		Breccia with sediment, dk halo	30	80	0
29R	1	4		137	146	Br				60			40			B		Breccia with sediment, dk+br halo	80	95	60
29R	2	1		0	26	Br				10			90			B		Breccia with sediment, dk+br halo	50	50	10
29R	2	2		29	33	0.2	v	100								V	5	dk+br halo			100
29R	2	2		29	34	3	v	5			5		90			V	8	dk+br halo			10
29R	2	2		31	31	0.8		100								V					100
29R	2	3		34	37	1.5	v	100								V					100
29R	2	4		38	40	0.1		90							10	V	5	dk+br halo			100
29R	2	4		37	38	1		90							10	V	5	dk+br halo			100
29R	2	5		42	44	0.4		100								V	5	dk+br halo			100
29R	2	6		46	47	0.2		90							10	V	5	dk+br halo			100
29R	2	6		46	50	0.2	v	90							10	V	7	dk+br halo			100
29R	2	6		49	49	0.4		90							10	V	5	dk+br halo			100
29R	2	7		50	55	0										V	5	dk+br halo			0
29R	2	7		55	55	0.2		90							10	V	5	dk+br halo			100
29R	2	7		50	55	0.3	v	100								V	8	dk+br halo			100
29R	2	8		72	73	0										V	5	dk+br halo			0
29R	2	8		56	59	0										V	5	dk+br halo			0
29R	2	8		57	63	0.1	v	90							10	V	4	dk+br halo			100
29R	2	8		56	67	0.2	v	90							10	V	8	dk+br halo			100
29R	2	8		68	69	0.4				100						V	8	dk+br halo			100
29R	2	8		62	66	1		8		90					2	V	6	dk+br halo			100
29R	2	8		63	69	0.2		100								V					100
29R	2	8		64	69	1.5	v			100						V					100
29R	2	9		74	79	0										V	8	dk+br halo			0
29R	2	9		77	85	0.5	v	5		90					5	V	5	dk+br halo			100
29R	2	9		77	85	1	v	3		95					2	V	5	dk+br halo			100
29R	2	10														R		Rubble			0
29R	2	11		95	98	0.2	v	90							10	V	2	dk+br halo			100
29R	2	11		96	101	0.2	v	100								V	10	dk+br halo			100
29R	2	11		96	101	0.8	v	80		10					10	V	4	dk+br halo			100
29R	2	11		97	100	1				95					5	V	3	dk+br halo			100
29R	2	11		101	101	1.5				100						V	2	dk+br halo			100
29R	2	12		110	112	0.1		100								V	2	dk+br halo			100
29R	2	12		102	105	0.2		100								V	4	dk+br halo			100
29R	2	12		103	109	0.3		90							10	V	3	dk+br halo			100
29R	2	12		103	108	0.4		90							10	V	3	dk+br halo			100
29R	2	12		102	107	0.8	v			90					10	V	3	dk+br halo			100
29R	2	12		106	112	1.2				95					5	V	7	dk+br halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149B																					
29R	2	12		113	115	2.5		15		80					5	V	6	dk+br halo			100
29R	2	13		120	120	0.2		90							10	V	9	dk+br halo			100
29R	2	13		115	117	0.2		90							10	V	5	dk+br halo			100
29R	2	13		133	133	0.3		80		15					5	V	5	dk+br halo			100
29R	2	13		128	134	1	v			95					5	V	10	dk+br halo			100
29R	2	13		126	134	1	v			95					5	V	7	dk+br halo			100
29R	2	13		128	129	1.8				95					5	V	7	dk+br halo			100
29R	2	13		119	126	2.5				95					5	V	8	dk+br halo			100
29R	2	14		135	139	0.2	v	90							10	V	6	dk+br halo			100
29R	2	14		134	139	0.2	v	90							10	V	6	dk+br halo			100
29R	2	14		139	140	6		15		80					5	V	8	dk+br halo			100
29R	2	14		137	138	3		100								V					100
29R	3	1		0	2	0										V	5	dk+br halo			0
29R	3	1		5	5	0.2		100								V	7	dk halo			100
29R	3	1		14	15	0.4		15		80					5	V	6	dk halo			100
29R	3	1		17	19	0.4				90					10	V	3	dk halo			100
29R	3	1		14	16	0.8				95					5	V	3	dk halo			100
29R	3	1		1	11	0.2	v	90							10	V	5	dk+br halo			100
29R	3	1		0	20	0.2	v	100								V	5	dk+br halo			100
29R	3	1		5	13	0.4	v	90							10	V	5	dk+br halo			100
29R	3	2		22	29	1				100						V	8	dk halo			100
29R	3	2		22	30	0.2	v	90							10	V	5	dk+br halo			100
29R	3	2		29	33	1				95					5	V	15	dk+br halo			100
29R	3	2		20	22	1		100								V					100
29R	3	2		20	24	1.5		18		80					2	V					100
29R	3	2		23	27	2		100								V					100
29R	3	3		37	39	3		12		80				5	3	V	10	dk halo			100
29R	3	3		39	43	1		8		90					2	V	10	dk+br halo			100
29R	3	4		44	45	0										V	4	dk halo			0
29R	3	4		44	50	0.8	v	15		80					5	V	7	dk halo			100
29R	3	5														R		Rubble			0
29R	3	6		77	80	0.2	v	95		5						V	5	dk halo			100
29R	3	6		80	80	0.4				95					5	V	5	dk halo			100
29R	3	7		82	86	0	v									V	2	dk halo			0
29R	3	7		82	83	0.1		90							10	V	2	dk halo			100
29R	3	7		84	84	0.3		95							5	V	2	dk halo			100
29R	3	8		87	87	0										V	5	dk halo			0
29R	3	8		87	92	0.4		40		50					10	V	5	dk halo			100
29R	3	8		92	92	0.3		5		90					5	V	6	dk+br halo			100
29R	3	8		86	92	1	v			95					5	V	7	dk+br halo			100
30R	1	1		0	4	1	v	5		95						V	3	dk halo			100
30R	1	1		0	5	0.4		90							10	V	5	dk+br halo			100
30R	1	2		4	7	0.8		100								V	2	dk halo			100
30R	1	3		12	14	0.1		90							10	V	2	dk halo			100
30R	1	3		8	13	0.1	v	100								V	4	dk halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149B																					
30R	1	3		8	12	0.1	v	100								V	4	dk+br halo			100
30R	1	3		8	9	1				100						V	10	dk+br halo			100
30R	1	3		8	14	0.5	v	5		95						V					100
30R	1	4		14	17	0.1		90							10	V	6	dk halo			100
30R	1	5		18	23	0.1	v	90							10	V	4	dk+br halo			100
30R	1	5		18	23	0.2	v	90							10	V	6	dk+br halo			100
30R	1	5		18	23	0.2		100								V					100
30R	1	6		24	30	0.2	v	25		70					5	V	2	dk halo			100
30R	1	6		24	27	0.5	v	75							25	V	6	dk halo			100
30R	1	6		27	28	0.3		90							10	V	5	dk+br halo			100
30R	1	6		27	27	2				100						V	7	dk+br halo			100
30R	1	6		27	30	0.1	v	40		60						V					100
30R	1	7		30	36	0.2	v	90							10	V	5	dk+br halo			100
30R	1	7		30	37	1	v	2		98						V	5	dk+br halo			100
30R	1	8		37	47	3	v	5		95						V	15	dk+br halo			100
30R	1	8		41	43	0.2		90							10	V					100
30R	1	8		44	47	0.2	v			100						V					100
30R	1	8		42	46	0.2		100								V					100
30R	1	9		51	56	0.8		80							20	V	10	dk halo			100
30R	1	9		48	54	0.4		60		30					10	V	8	dk+br halo			100
30R	1	9		50	50	0.2		90							10	V					100
30R	1	9		48	50	0.2		15		80					5	V					100
30R	1	9		48	52	0.2	v	15		80					5	V					100
30R	1	9		52	55	1	v			100						V					100
30R	1	10		56	86	Br		5		95						B		Breccia with halo br+dk	12	70	100
30R	1	11		87	97	Br		8		90				2		B		Breccia with halo br+dk	60	10	100
30R	1	12		99	103	Br		5		95						B		Breccia with altered glass	3		100
30R	1	13		104	108	0.2	v	90							10	V	3	dk+br halo			100
30R	1	13		104	108	1.2	v	95							5	V	8	dk+br halo			100
30R	1	13		106	106	0.2		100								V					100
30R	1	14		110	111	0.2		90							10	V	3	dk+br halo			100
30R	1	14		108	111	0.2	v	100								V	3	dk+br halo			100
30R	1	14		109	110	1		100								V	4	dk+br halo			100
30R	1	15														R		Rubble			0
30R	1	16		117	122	0.1	v	100								V	15	dk+br halo			100
30R	1	16		123	126	0.2		90							10	V	3	dk+br halo			100
30R	1	16		118	125	0.2	v	80							20	V	5	dk+br halo			100
30R	1	16		125	130	0.4	v	90							10	V	5	dk+br halo			100
30R	1	16		117	129	0.4	v	90							10	V	8	dk+br halo			100
30R	1	16		123	123	0.5		80							20	V	5	dk+br halo			100
30R	1	16		121	122	0.5		80							20	V	5	dk+br halo			100
30R	1	16		127	129	0.6		100								V	6	dk+br halo			100
30R	1	16		124	128	1.5		100								V	3	dk+br halo			100
30R	1	16		117	119	0.2		100								V					100
30R	1	17		132	136	0.2	v	90							10	V	5	dk+br halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti-cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149B																					
30R	1	17		132	139	0.2	v	90							10	V	5	dk+br halo			100
30R	1	17		135	136	0.4		90							10	V	4	dk+br halo			100
30R	1	17		136	137	0.2		100								V					100
30R	1	17		136	138	0.2		10		90						V					100
30R	1	18		141	144	0.1	v	95							5	V	3	dk+br halo			100
30R	1	18		144	146	0.7		80							20	V	4	dk+br halo			100
30R	1	18		140	143	1		95							5	V	6	dk+br halo			100
30R	1	19		147	151	0										V	5	dk+br halo			0
30R	1	19																No veins			0
30R	2	1		0	8	1.2	v	5		95						V	5	dk+br halo			100
30R	2	1		1	2	1.5	v	100								V	10	dk+br halo			100
30R	2	2		13	16	0.2		100								V	5	dk+br halo			100
30R	2	2		9	14	0.5	v	5		95						V	5	dk+br halo			100
30R	2	4		105	110	0.2		90							10	V	3	dk halo			100
30R	2	4		115	117	0.4		20		80						V	4	dk halo			100
30R	2	4		62	63	0.1		90							10	V	2	dk+br halo			100
30R	2	4		106	108	0.1		90							10	V	2	dk+br halo			100
30R	2	4		108	111	0.1		90							10	V	2	dk+br halo			100
30R	2	4		57	63	0.1	v	80							20	V	2	dk+br halo			100
30R	2	4		88	90	0.2				100						V	6	dk+br halo			100
30R	2	4		66	69	0.2		80		10					10	V	4	dk+br halo			100
30R	2	4		77	80	0.2		90							10	V	3	dk+br halo			100
30R	2	4		58	65	0.2		90							10	V	3	dk+br halo			100
30R	2	4		49	50	0.3		10		90						V	5	dk+br halo			100
30R	2	4		43	57	0.3		15		80					5	V	10	dk+br halo			100
30R	2	4		67	71	0.4		20		75					5	V	8	dk+br halo			100
30R	2	4		111	115	0.4				90					10	V	4	dk+br halo			100
30R	2	4		52	53	0.5		5		95						V	5	dk+br halo			100
30R	2	4		110	112	0.5		80		10					10	V	5	dk+br halo			100
30R	2	4		27	30	0.5		40		50					10	V	6	dk+br halo			100
30R	2	4		32	36	0.5		40		50					10	V	6	dk+br halo			100
30R	2	4		37	41	0.5		40		50					10	V	6	dk+br halo			100
30R	2	4		110	116	0.5	v	80		10					10	V	3	dk+br halo			100
30R	2	4		85	88	0.6				100						V	5	dk+br halo			100
30R	2	4		68	79	0.6	v	20		75					5	V	5	dk+br halo			100
30R	2	4		41	42	0.8		5		90					5	V	4	dk+br halo			100
30R	2	4		74	75	0.8		10		85					5	V	15	dk+br halo			100
30R	2	4		112	114	0.8		80		10					10	V	5	dk+br halo			100
30R	2	4		21	39	0.8	v	5		90					5	V	6	dk+br halo			100
30R	2	4		47	48	1		10		90						V	5	dk+br halo			100
30R	2	4		22	23	1.5		5		95						V	10	dk+br halo			100
30R	2	4		63	68	1.5		20		75					5	V	6	dk+br halo			100
30R	2	4		96	107	1.5				95					5	V	10	dk+br halo			100
30R	2	4		68	100	1.5	v	5		95						V	4	dk+br halo			100
30R	2	4		55	64	2				95					5	V	5	dk+br halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149B																					
30R	2	4		107	112	Br		20		80						H		Hyaloclastites with altered glass	25		100
30R	2	4		57	61	0.1	v								100	V					100
30R	2	4		81	83	0.2		100								V					100
30R	2	4		38	40	0.3		100								V					100
30R	2	4		40	41	0.8		100								V					100
30R	2	4		38	41	1		100								V					100
30R	2	4		116	118	5				100						V					100
30R	2	5		119	121	0.1		100								V	5	dk halo			100
30R	2	5		123	123	0.1		90							10	V	3	dk+br halo			100
30R	2	5		120	125	0.1		90							10	V	3	dk+br halo			100
30R	2	5		119	125	13	v	3		95					2	V					100
30R	2	6		126	129	0.4	v	30		60					10	V	2	dk+br halo			100
30R	2	6		126	128	0.5		60		30					10	V	2	dk+br halo			100
30R	2	7		130	135	Br		10		90						B		Breccia with altered glass	90		100
30R	3	1		0	17	Br		10		90						B		Breccia, br+dk halo	25		100
30R	3	2		17	21	0.1	v	90							10	V	1	dk halo			100
30R	3	2		19	21	0.2		80							20	V	2	dk halo			100
30R	3	3		23	26	0.2		80							20	V	2	dk+br halo			100
30R	3	3		22	25	2.5		15		80					5	V	3	dk+br halo			100
30R	3	3		21	26	0.3	v	80		10					10	V					100
30R	3	4		27	34	0.2	v	90							10	V	3	dk halo			100
30R	3	4		27	29	0.4	v	90							10	V	3	dk+br halo			100
30R	3	4		27	34	2	v	5		90					5	V	4	dk+br halo			100
30R	3	4		29	30	0.2		100								V					100
30R	3	5														R		Rubble			0
30R	3	6		49	50	0.2		90							10	V	5	dk+br halo			100
30R	3	6		46	46	0.5		10		90						V	2	dk+br halo			100
30R	3	6		48	48	0.1		100								V					100
30R	3	7		52	55	0.1	v	90							10	V	4	dk+br halo			100
30R	3	7		53	53	0.5		5		95						V	4	dk+br halo			100
30R	3	8		56	60	1	v	100								V	3	dk halo			100
30R	3	8		56	61	0.2	v	90							10	V	5	dk+br halo			100
30R	3	8		56	56	0.5		10		80					10	V	10	dk+br halo			100
30R	3	9		63	67	0	v									V	5	br+dk halo			0
31R	1	1		3	3	1				100						V	5	dk halo			100
31R	1	1		0	5	0.5				95					5	V					100
31R	1	1		0	1	3				100						V					100
31R	1	2		8	10	0.2	v	100								V					100
31R	1	2		10	10	1		100								V					100
31R	1	3		11	13	0.1		90							10	V					100
31R	1	4		14	16	0.4		100								V	3	dk+br halo			100
31R	1	5		17	20	0.2		100								V	3	dk+br halo			100
31R	1	5		17	21	0.2		100								V	3	dk+br halo			100
31R	1	5		17	21	0.2	v	100								V	3	dk+br halo			100
31R	1	6		21	24	Br		75		25						H		Hyaloclastites with altered glass	10		100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149B																					
31R	1	7		25	28	Br		80		5					15	H		Hyaloclastites	25		100
31R	1	7		28	32	0.1		100								V					100
31R	1	7		27	31	0.2		100								V					100
31R	1	7		27	28	0.5		20		80						V					100
31R	1	7		30	32	2				100						V					100
31R	1	8		34	38	Br		70							30	H		Hyaloclastites	25		100
31R	1	9		39	42	Br		70							30	H		Hyaloclastites	25		100
31R	1	10		43	48	0.1	v	100								V					100
31R	1	10		43	48	0.2	v	80							20	V					100
31R	1	10		46	47	2		100								V					100
31R	1	11		48	52	0.1	v	100								V	3	dk+br halo			100
31R	1	11		48	50	2	v	100								V					100
31R	1	12		56	57	Br		90							10	H		Hyaloclastites	50		100
31R	1	12		53	57	0.2	v	100								V					100
31R	1	12		53	54	0.3		100								V					100
31R	1	13		59	60	0.2		100								V					100
31R	1	13		58	64	0.2	v	100								V					100
31R	1	13		59	64	0.6	v	90							10	V					100
31R	1	13		60	62	0.8		90							10	V					100
31R	1	13		63	64	1		90							10	V					100
31R	1	13		60	64	1	v	90							10	V					100
31R	1	14		65	67	0.5		100								V	2	dk+br halo			100
31R	1	14		65	67	1	v	100								V					100
31R	1	15		70	71	0.6		100								V	3	dk+br halo			100
31R	1	15		68	76	1	v	100								V	3	dk+br halo			100
31R	1	16		76	80	0.4	v	90							10	V					100
31R	1	17		88	89	0.1		100								V					100
31R	1	17		81	85	0.1	v	90							10	V					100
31R	1	17		81	85	0.6	v	80		10					10	V					100
31R	1	17		83	84	1	v	95							5	V					100
31R	1	17		91	92	1		100								V					100
31R	1	17		89	91	1		20		80						V					100
31R	1	18		93	104	Br		40		50					10	H		Hyaloclastites	15		100
31R	1	19		106	109	0.1		100								V					100
31R	1	19		108	108	1.5				100						V					100
31R	1	19		104	109	3		100								V					100
31R	1	21																No veins			0
31R	1	22		114	118	Br		10		85					5	H		Hyaloclastite	15		100
31R	1	23		124	125	0										V	1	dk+br halo			0
31R	1	24		125	129	1	v	8		90					2	V	4	dk halo			100
31R	1	24		128	129	0.3				100						V					100
31R	1	24		126	128	0.4	v			100						V					100
31R	1	24		126	128	1.5	v			100						V					100
31R	1	25		130	132	0.1	v	80							20	V	5	dk+br halo			100
31R	1	25		130	132	4	v			100						V					100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149B																					
31R	1	26		137	139	0.2		30		60					10	V	8	dk+br halo			100
31R	1	26		133	137	0.2	v	30		60					10	V	8	dk+br halo			100
31R	1	26		144	145	0.8		10		90						V	10	dk+br halo			100
31R	1	26		139	140	1				95					5	V	8	dk+br halo			100
31R	2	1		1	9	2	v			100						V	6	dk halo			100
31R	2	1		0	3	1		5		95						V	8	dk+br halo			100
31R	2	1		4	7	2.5				100						V	4	dk+br halo			100
31R	2	1		0	7	2.5	v	5		95						V	5	dk+br halo			100
31R	2	1		8	8	0.8				100						V					100
32R	1	1		5	8	0.2		90							10	V	5	br halo			100
32R	1	1		10	13	0.2		90							10	V	5	br halo			100
32R	1	1		18	21	0.2	v	80		10					10	V	3	br halo			100
32R	1	1		2	6	0.2		90							10	V	5	br halo			100
32R	1	1		1	19	0.2	v	90							10	V	5	br halo			100
32R	1	1		17	21	0.2	v	90							10	V	3	dk+br halo			100
32R	1	1		10	15	0.4		10		90						V	5	dk+br halo			100
32R	1	1		13	17	1		80							20	V	5	dk+br halo			100
32R	1	1		20	20	0.1		90							10	V					100
32R	1	1		18	19	0.2		90							10	V					100
32R	1	1		15	17	0.4		50		50						V					100
32R	1	2		32	36	0.4		30		60					10	V	3	dk+br halo			100
32R	1	2		31	37	0.4		30		60					10	V	3	dk+br halo			100
32R	1	2		34	42	0.8	v	15		80					5	V	6	dk+br halo			100
32R	1	2		25	26	1				100						V	5	dk+br halo			100
32R	1	2		23	29	1	v			95					5	V	5	dk+br halo			100
32R	1	2		23	29	1		15		80					5	V	5	dk+br halo			100
32R	1	2		29	30	2.5				100						V	5	dk+br halo			100
32R	1	2		22	24	3				100						V	3	dk+br halo			100
32R	1	3		47	48	0.5		30		60					10	V	5	dk+br halo			100
32R	1	3		43	46	0.5		90							10	V	3	dk+br halo			100
32R	1	3		43	52	0.5	v	90							10	V	3	dk+br halo			100
32R	1	3		46	54	1	v	5		90					5	V	5	dk+br halo			100
32R	1	3		50	52	1.5		5		95						V	6	dk+br halo			100
32R	1	4		55	59	0.2	v	90							10	V	6	dk+br halo			100
32R	1	4		55	56	2.5		30		70						V	4	dk+br halo			100
32R	1	5		59	59	0.4		95							5	V	5	dk+br halo			100
32R	1	6		63	63	0.2		10		90						V	3	dk+br halo			100
32R	1	6		62	66	0.4	v	10		90						V	10	dk+br halo			100
32R	1	7		70	71	0.1		90							10	V	5	dk+br halo			100
32R	1	7		67	67	0.4		10		90						V	5	dk+br halo			100
32R	1	7		70	75	1				90					10	V	6	dk+br halo			100
32R	1	8														R		Rubble			0
32R	1	9		82	86	1	v	5		95						V	3	dk+br halo			100
32R	1	9		84	85	1.5				100						V	3	dk+br halo			100
32R	1	10		88	91	1	v	5		95						V	6	dk+br halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149B																					
32R	1	10		88	92	0.1	v	90							10	V					100
32R	1	11		92	95	0.4	v	60		30					10	V	6	dk+br halo			100
32R	1	11		94	96	1		5		95						V	8	dk+br halo			100
32R	1	11		95	98	0.1		100								V					100
32R	1	11		95	97	0.2		80		10					10	V					100
32R	1	12		100	101	0										V	5	dk halo			0
32R	1	13		103	103	0.1		90							10	V	6	dk+br halo			100
32R	1	14		107	107	0.1		90							10	V	3	dk+br halo			100
32R	1	14		106	111	0.5	v	10		90						V	8	dk+br halo			100
32R	1	14		106	110	2				100						V	4	dk+br halo			100
32R	1	15														R		Rubble			0
32R	1	16														R		Rubble			0
32R	1	17		138	140	0.4		20		70					10	V					100
32R	1	17		138	142	1.5		100								V					100
32R	1	17		137	142	1.8				100						V					100
1149C																					
9R	1	1														R		Rubble			0
9R	1	2		67	67	0.5		8		90					2	V	10	dk+br halo			100
9R	1	2		59	67	1	v	8		90					2	V	10	dk+br halo			100
9R	1	3														R		Rubble			0
9R	1	4		74	74	0.1		100								V	1	dk halo			100
9R	1	4		74	76	0.1		100								V	1	dk halo			100
9R	1	4		80	84	0.1	v	95							5	V	2	dk halo			100
9R	1	4		74	79	0.2	v	100								V	1	dk halo			100
9R	1	4		77	82	0.5		30		60					10	V	5	dk halo			100
9R	1	4		76	82	2.5		5		90					5	V	10	dk halo			100
9R	1	4		75	77	0.1		100								V					100
9R	1	5		83	89	0										V	4	dk halo			0
9R	1	6		90	94	0.8		50		40					10	V	12	dk halo			100
9R	1	7														R		Rubble			0
9R	1	8														R		Rubble			0
10R	1	1		1	4	2	v	90							10	V					100
10R	1	1		2	5	4	v			100						V					100
10R	1	1		0	6	5		10		90						V					100
10R	1	2		7	11	0.2	v	100								V					100
10R	1	2		9	9	1.5		5		90					5	V					100
10R	1	2		9	14	1.5		10		85					5	V					100
10R	1	2		7	13	18	v	5		95						V					100
10R	1	3		16	16	0.2		95							5	V					100
10R	1	3		14	16	0.2		95							5	V					100
10R	1	3		14	16	1	v	95		5						V					100
10R	1	3		15	16	2	v	5		95						V					100
10R	1	4		17	23	0.3	v	80		10					10	V					100
10R	1	4		22	22	0.5		80		10					10	V					100
10R	1	4		23	23	0.5		85		5					10	V					100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149C																					
10R	1	4		24	24	0.5		90							10	V					100
10R	1	4		18	19	2.5		3		95					2	V					100
10R	1	4		20	24	2.5		80		15					5	V					100
10R	1	5		25	32	2	v	80							20	V	5	dk halo			100
10R	1	5		26	33	2.5	v	75		5					20	V	10	dk halo			100
10R	1	5		27	27	0.1		100								V					100
10R	1	5		31	33	0.1		100								V					100
10R	1	5		25	25	0.3		100								V					100
10R	1	5		30	31	0.3		100								V					100
10R	1	5		25	30	0.3		100								V					100
10R	1	6		34	37	0.3	v	80		20						V	4	dk halo			100
10R	1	7		39	50	1	v			95					5	V	15	dk halo			100
10R	1	7		38	39	12		30		70						V	8	dk halo			100
10R	1	7		39	44	0.1	v	100								V					100
10R	1	8		50	53	0.3	v	80							20	V	10	dk halo			100
10R	1	8		51	56	0.3	v			90					10	V	10	dk halo			100
10R	1	8		51	53	1		50		40					10	V	10	dk halo			100
10R	1	9		60	65	0.5	v	20		70					10	V	5	dk halo			100
10R	1	10		66	66	0.2		90							10	V	5	dk halo			100
10R	1	10		66	68	0.8	v	5		90					5	V	5	dk halo			100
10R	1	11		69	72	5	v	5		90					5	V					100
10R	1	11		70	75	5	v	15		80					5	V					100
10R	1	12		77	77	0.2		90							10	V					100
10R	1	12		76	78	0.8	v	100								V					100
10R	1	13														R		Rubble			0
10R	1	14		85	92	0.4	v	10		90						V	6	dk halo			100
10R	1	14		83	93	0.8	v	8		90					2	V	6	dk halo			100
10R	1	14		82	86	0.1	v			100						V					100
10R	1	15		94	100	0.4	v	10		90						V	8	dk halo			100
10R	1	15		94	99	0.5	v	80							20	V	5	dk halo			100
10R	1	15		98	100	0.5	v	90		10						V					100
10R	1	16														V					0
10R	1	16		101	103	8				100						V	8	dk halo			100
10R	1	17		107	112	Br				100						B		Breccia	25		100
10R	1	18		112	121	Br				100						B		Breccia	20		100
10R	1	19		122	124	Br				100						B		Breccia	40		100
10R	1	20		133	134	0.5				100						V	5	dk halo			100
10R	1	20		127	130	0.5	v	80							20	V	2	dk halo			100
10R	1	20		130	133	0.5		80							20	V	2	dk halo			100
10R	1	20		127	136	0.5				100						V	5	dk halo			100
10R	1	20		133	137	2.5				100						V	5	dk halo			100
10R	1	21		139	142	0.1	v	90							10	V	2	dk halo			100
10R	1	21		138	143	0.2	v	80							20	V	6	dk halo			100
10R	1	21		138	143	0.5	v	40		50					10	V	6	dk halo			100
10R	1	21		143	148	0.8	v	10		80					10	V	5	dk halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149C																					
10R	1	21		137	138	4				100						V					100
10R	2	1		0	5	2	v			100						V					100
10R	2	1		0	5	2	v			100						V					100
10R	2	2		5	9	Br		3		95					2	B		Breccia alt glass	60		100
10R	2	3														R		Rubble			0
10R	2	4														R		Rubble			0
10R	2	5		23	23	2				100						V	8	br+dk halo			100
10R	2	5		22	26	3	v			98					2	V	8	br+dk halo			100
10R	2	6		27	31	4	v			100						V	5	dk halo			100
10R	2	7		31	37	Br				100						B		Breccia	20		100
10R	2	8		37	41	5	v			100						V	3	dk halo			100
10R	2	8		37	40	2	v	20		80						V	3	dk halo			100
10R	2	9		43	46	0.1		90							10	V	3	dk halo			100
10R	2	9		41	47	0.1	v	90							10	V	3	dk halo			100
10R	2	9		41	42	3				100						V	3	dk halo			100
10R	2	9		43	43	0.1				100						V					100
10R	2	10																No veins			0
11R	1	1		31	34	0.2		100								V	5	dk halo			100
11R	1	1		19	25	0.2		100								V	8	dk halo			100
11R	1	1		14	15	0.4		10		90						V	5	dk halo			100
11R	1	1		0	8	0.4		95							5	V	5	dk halo			100
11R	1	1		15	17	0.8		20		80						V	5	dk halo			100
11R	1	1		23	25	1		10		90						V	8	dk halo			100
11R	1	1		4	15	1.2		10		90						V	8	dk halo			100
11R	1	1		25	27	1.5		100								V	5	dk halo			100
11R	1	1		8	14	0.1		100								V					100
11R	1	1		3	9	0.2		100								V					100
11R	1	2														R		Rubble			0
11R	1	3		44	45	Br		45		45					10	B		Breccia	50		100
11R	1	4		59	66	0.2		100								V	5	dk halo			100
11R	1	4		46	56	0.2		100								V	5	dk halo			100
11R	1	4		57	61	0.4		20		80						V	5	dk halo			100
11R	1	4		57	59	0.5		10		90						V	7	dk halo			100
11R	1	4		66	74	1.5		5		95						V	8	dk halo			100
11R	1	4		79	80	0.1		90							10	V	5	dk+br halo			100
11R	1	4		80	82	0.1	v	90							10	V	5	dk+br halo			100
11R	1	4		46	58	0.1	v	100								V					100
11R	1	4		56	57	0.2		90							10	V					100
11R	1	4		74	74	0.4				100						V					100
11R	1	4		68	70	1.5				100						V					100
11R	1	4		67	67	2		90		10						V					100
11R	1	5		83	88	0.2		80							20	V	5	dk+br halo			100
11R	1	5		82	85	2.5	v	80							20	V	5	dk+br halo			100
11R	1	6		91	92	0.3		90							10	V	3	dk+br halo			100
11R	1	6		89	92	0.4	v	90							10	V	3	dk+br halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149C																					
11R	1	6		89	93	2.5	v	90							10	V	3	dk+br halo			100
11R	1	7														R		Rubble			0
11R	1	8		102	103	0										V	3	dk+br halo			0
11R	1	9														R		Rubble			0
11R	1	10		111	114	0										V	3	dk+br halo			0
11R	1	11		119	123	0.8	v	5		90					5	V	5	dk halo			100
11R	1	11		118	120	3		5		80					15	V	5	dk halo			100
11R	1	11		117	117	0.2		100								V					100
11R	1	12		131	134	0										V	7	dk+br halo			0
11R	1	12		125	125	0.1		90		10						V	5	dk halo			100
11R	1	12		126	126	0.1		90		10						V					100
11R	1	12		133	134	0.1				100						V					100
1149D																					
05R	1	1																No veins			0
05R	1	2		21	25	0.8	v	60							40		8	dk halo			100
05R	1	2		21	25	0.2	v	100													100
05R	1	3		27	28	0.5		60							40		7	dk halo			100
05R	1	3		27	28	0.5	v	60							40						100
05R	1	4																			0
05R	1	4																			0
05R	1	4		29	32	0.2		80							20		4	dk halo			100
05R	1	4		32	35	1		10		80					10		8	dk halo			100
05R	1	4		29	34	1.2	v	10		80					10		4	dk halo			100
05R	1	5																			0
05R	1	5		40	40	0.2		60							40						100
05R	1	5		35	40	0.5	v	60							40		4	dk halo			100
06R	1	1																			0
06R	1	1		6	7	0.5		20		60					20		10	br+dk halo			100
06R	1	1		0	3	0.5		5		90					5		3	dk halo			100
06R	1	1		2	7	0.5	v	80							20		5	dk halo			100
06R	1	2		11	11	0.5		10		90							5	dk halo			100
06R	1	2		8	8	0.1		80							20		5	dk halo			100
06R	1	3		12	12	0.5		100									15	dk halo			100
06R	1	3		14	17	0.4		80							20						100
06R	1	3		12	16	1.2	v	10		90							5	dk halo			100
06R	1	4		17	20	0.2	v	80							20		5	dk halo			100
06R	1	4		16	20	0.5	v	80							20		5	dk halo			100
06R	1	5																Rubble			0
06R	1	6		29	31	0.5	v	80							20		5	dk halo			100
06R	1	6		28	31	0.8	v	60		20					20		5	dk halo			100
06R	1	6		28	31	0.4	v	80							20		2	dk halo			100
06R	1	7		32	35	0.2	v	80							20		5	dk halo			100
06R	1	7		33	38	2		5		90					5		7	dk halo			100
06R	1	7		32	37	0.2	v	80							20		5	dk halo			100
06R	1	7		32	37	0.1	v	100													100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
06R	1	8																			0
06R	1	9		44	45	0											3	dk halo			0
06R	1	9		45	47	0.2		80						20			5	dk halo			100
06R	1	9		45	50	0.1	v	80						20			5	dk halo			100
06R	1	10		51	51	0.4		90						10			3	dk halo			100
06R	1	11		55	59	0	v										3	dk halo			0
06R	1	12		59	63	0	v										4	dk halo			0
06R	1	12		63	63	0.2		80						20			4	br+dk halo			100
06R	1	12		59	63	0.2	v	80						20			4	dk halo			100
06R	1	13		67	67	0											5	br+dk halo			0
06R	1	13		63	67	0.2	v	80						20			10	br+dk halo			100
06R	1	14		75	77	1		80						20			6	dk halo			100
06R	1	14		78	80	0.4		80						20			6	dk halo			100
06R	1	14		79	82	0.4		80						20			6	dk halo			100
06R	1	14		84	87	1.2				90				10			20	dk halo			100
06R	1	14		69	73	0.1		80						20			3	dk halo			100
06R	1	14		81	86	0.8				90				10			6	dk halo			100
06R	1	14		72	80	0.4		80						20			6	dk halo			100
06R	1	14		68	81	0.2	v	80						20			5	dk halo			100
06R	1	15		90	91	0.5				90				10			5	br+dk halo			100
06R	1	16		96	96	1.2		10		90							5	dk halo			100
06R	1	17																rubble			0
06R	1	18		112	112	1		80						20			6	br+dk halo			100
06R	1	18		108	109	0.1		100													100
06R	1	18		110	112	1.5		80						20			6	br+dk halo			100
06R	1	19		114	114	0.2		80						20			6	br+dk halo			100
06R	1	19		114	117	0.2	v	80						20			6	br+dk halo			100
06R	1	20		127	128	0.8		80						20			6	br+dk halo			100
06R	1	20		119	121	0.5		10		80				10			3	br+dk halo			100
06R	1	20		118	121	1.5		15		80				5			5	br+dk halo			100
06R	1	20		119	122	1		80						20			3	dk halo			100
06R	1	20		124	128	1.2				100							4	dk halo			100
06R	1	20		125	129	0.4		80						20			4	br+dk halo			100
06R	1	20		121	131	0.4	v	80						20			5	br+dk halo			100
06R	1	20		118	130	0.4	v	10		80				10			2	dk halo			100
06R	1	21		131	131	0.5		60		20				20			10	br+dk halo			100
06R	2	1		15	15	0.5		80						20			6	br+dk halo			100
06R	2	1		16	20	0.8	v			90				10			5	br+dk halo			100
06R	2	1		0	5	0.4	v	10		80				10			10	br+dk halo			100
06R	2	1		15	20	0.8	v			90				10			5	dk halo			100
06R	2	1		0	11	0.5	v	10		80				10			10	br+dk halo			100
06R	2	2		21	21	0.8				90				10			4	dk halo			100
06R	2	2		25	25	0.2		80						20			4	dk halo			100
06R	2	2		20	24	0.2	v	80						20			4	dk halo			100
06R	2	2		21	25	0.1		100													100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
06R	2	3		27	28	1		10		90							2	dk halo			100
06R	2	3		26	30	0.4		80							20		3	dk halo			100
06R	2	3		26	30	2.5		20		80							2	dk halo			100
06R	2	4		31	33	0.2		80							20		3	dk halo			100
06R	2	4		30	34	1.5	v			100							2	dk halo			100
06R	2	4		31	35	2				100							2	dk halo			100
06R	2	5		44	45	0.1		80							20		5	dk halo			100
06R	2	5		45	48	0.4		10		80					10		3	dk halo			100
06R	2	5		37	41	0.2		80							20		4	dk halo			100
06R	2	5		35	41	0.5		20		60					20		4	dk halo			100
06R	2	5		40	46	0.4		60		20					20		4	dk halo			100
06R	2	5		40	48	0.5	v	80							20		5	dk halo			100
06R	2	6		48	52	1	v	80							20		5	dk halo			100
06R	2	6		48	52	0.1	v	80							20		2	dk halo			100
06R	2	6		48	53	0.8		80							20		4	dk halo			100
06R	2	7		59	63	0.2	v	90							10		6	dk halo			100
06R	2	7		52	61	0.2		80							20		5	dk halo			100
06R	2	7		53	63	0.8		10		80					10		5	dk halo			100
06R	2	8		70	71	0.2		80							20		10	br+dk halo			100
06R	2	8		70	74	0.5		10		80					10		5	dk halo			100
06R	2	8		63	74	0.4	v	40		40					20		5	dk halo			100
06R	2	8		63	74	1	v			95					5		5	br+dk halo			100
06R	2	9																rubble			0
06R	2	10		83	84	0.1		90							10		8	dk halo			100
06R	2	10		81	92	0.5	v	10		90							5	dk halo			100
06R	2	11																rubble			0
07R	1	1		4	6	0.2		80							20		3	dk halo			100
07R	1	1		9	11	0.4		80							20		3	dk halo			100
07R	1	1		6	10	0.2		80		10					10		3	dk halo			100
07R	1	1		0	5	0.2	v	80							20		3	dk halo			100
07R	1	1		2	7	0.5		60		20					20		3	dk halo			100
07R	1	1		4	11	0.4	v	80							20		3	dk halo			100
07R	1	1		0	11	0.5	v	40		40					20		5	dk halo			100
07R	1	2		14	15	0.5		80							20		8	dk halo			100
07R	1	2		12	15	0.5		80							20		8	dk halo			100
07R	1	3		21	22	0.2		80							20		3	dk halo			100
07R	1	3		16	18	0.8		10		80					10		3	dk halo			100
07R	1	3		16	20	0.5		10		80					10		3	dk halo			100
07R	1	3		20	24	1	v	5		90					5		4	dk halo			100
07R	1	3		16	22	2	v	5		90					5		4	dk halo			100
07R	1	4		24	25	0.5		10		80					10		4	dk halo			100
07R	1	4		24	29	0.5		80							20		5	dk halo			100
07R	1	4		24	29	0.5		80							20		5	dk halo			100
07R	1	5		29	42	Br		85		15								Hyaloclastites	70		100
07R	1	6		45	46	0.2		80							20		6	dk halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
07R	1	6		43	45	0.2		80							20		6	dk halo			100
07R	1	6		42	48	0.5	v	10		80					10		6	dk halo			100
07R	1	7		53	56	0.5		90							10		10	dk halo			100
07R	1	7		49	55	0.2		80							20		4	dk halo			100
07R	1	7		49	56	0.2	v	15		70					15		5	dk halo			100
07R	1	7		48	56	0.1		90							10		1	dk halo			100
07R	1	8		58	61	0.4		80							20		5	dk halo			100
07R	1	8		57	61	0.1	v	80							20		5	br+dk halo			100
07R	1	8		56	62	0.2	v	80							20		5	dk halo			100
07R	1	9		67	68	0.1		100									3	dk halo			100
07R	1	9		62	67	0.2		80							20		5	dk halo			100
07R	1	9		63	69	0.5	v	80							20		10	dk halo			100
07R	1	9		62	69	0.2	v	80							20		5	dk halo			100
07R	1	10		70	74	Br		20		80								Hyaloclastites	75		100
07R	1	11		74	79	0	v										10	dk halo			0
07R	1	11		75	78	0.2	v	90							10		5	dk halo			100
07R	1	12		80	81	1		40		40					20		15	br+dk halo			100
07R	1	12		87	88	0.4		80							20		5	dk halo			100
07R	1	12		88	90	0.4		60		30					10		3	dk halo			100
07R	1	12		81	86	0.2		90							10		6	br+dk halo			100
07R	1	12		83	90	0.1	v	90							10		4	dk halo			100
07R	1	12		80	90	0.2	v	80							20		6	dk halo			100
07R	1	13		94	94	0.5		60		20					20		3	dk halo			100
07R	1	13		90	91	0.1		80							20		3	dk halo			100
07R	1	13		91	94	0.1	v	80							20		5	dk halo			100
07R	1	14		95	98	0.8	v	80							20		4	dk halo			100
07R	1	14		95	98	0.1		80							20		3	dk halo			100
07R	1	15		98	98	0.5		5		90					5		4	dk halo			100
07R	1	15		98	101	0.8	v	5		90					5		4	dk halo			100
07R	1	15		98	102	0.4		80							20		4	dk halo			100
07R	1	16		102	102	0.2		90							10		3	dk halo			100
07R	1	16		104	104	0.2		90							10		3	dk halo			100
07R	1	16		102	105	0.2	v	90							10		3	dk halo			100
07R	1	17		118	119	0.5		10		80					10		3	br+dk halo			100
07R	1	17		111	113	0.2		90							10		4	dk halo			100
07R	1	17		110	114	0.4	v	60		20					20		5	dk halo			100
07R	1	17		114	118	0.4		5		90					5		4	dk halo			100
07R	1	17		115	119	0.2		90							10		4	dk halo			100
07R	1	17		107	112	0.2		60		20					20		4	dk halo			100
07R	1	17		106	111	0.1		80							20		4	dk halo			100
07R	1	17		111	119	1.5	v	10		80					10		8	br+dk halo			100
07R	1	18		120	121	0.2		80							20		5	dk halo			100
07R	1	18		122	124	0.5		10		80					10		5	br+dk halo			100
07R	1	19		133	134	0.1		80							20		5	dk halo			100
07R	1	19		124	130	0.2		80							20		15	dk halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
07R	1	19		124	133	0.5	v	10		80					10		15	dk halo			100
07R	1	20		135	137	0.5		80							20		5	dk halo			100
07R	1	20		145	147	0.2		80							20		4	dk halo			100
07R	1	20		143	146	1		10		80					10		5	dk halo			100
07R	1	20		146	149	0.1	v	100									3	dk halo			100
07R	1	20		136	144	2		5		90					5		8	br+dk halo			100
07R	1	20		137	145	0.5		80							20		6	dk halo			100
07R	2	1		0	1	0.8				90					10		2	dk halo			100
07R	2	1		3	4	0.1		80							20		2	dk halo			100
07R	2	1		0	3	0.5	v			90					10		3	dk halo			100
07R	2	1		0	4	0.1	v	90							10		3	dk halo			100
07R	2	2		6	10	0.1	v	100													100
07R	2	2		4	9	0.5		10		80					10		5	dk halo			100
07R	2	2		4	9	0.2		90							10		4	dk halo			100
07R	2	3		12	14	0.8		80							20		5	dk halo			100
07R	2	3		10	13	0.1		80							20		5	dk halo			100
07R	2	4		14	19	0.2	v	80							20		5	dk halo			100
07R	2	5		19	24	0.1	v	80							20		5	dk halo			100
07R	2	5		19	24	0.5	v	10		80					10		5	dk halo			100
07R	2	6		25	27	3		18		80					2		8	br+dk halo			100
07R	2	6		29	31	0.1				100											100
07R	2	6		51	53	1		70		10					20		5	dk halo			100
07R	2	6		49	52	0.8	v	80							20		8	dk halo			100
07R	2	6		32	37	2				100							12	br+dk halo			100
07R	2	6		37	43	0.1		100									4	dk halo			100
07R	2	6		45	51	0.8		80		10					10		6	dk halo			100
07R	2	6		50	56	0.1		100									3	dk halo			100
07R	2	6		41	48	1	v	30		60					10		3	dk halo			100
07R	2	6		25	35	1.2		10		90							8	br+dk halo			100
07R	2	7		58	59	2.5		10		90							5	dk halo			100
07R	2	7		58	62	0.2	v	90							10		4	dk halo			100
07R	2	7		57	62	1.5	v	30		60					10		3	dk halo			100
07R	2	8		64	65	0.1		80							20		2	dk halo			100
07R	2	8		64	67	0.4		80		10					10		3	dk halo			100
07R	2	8		63	67	0.1	v	90							10		2	dk halo			100
07R	2	9		68	69	0.1		80							20		6	dk halo			100
07R	2	9		73	74	0.5				100							5	br+dk halo			100
07R	2	9		78	79	0.2		80							20		8	br+dk halo			100
07R	2	9		68	71	1	v	10		80					10		7	br+dk halo			100
07R	2	9		71	74	0.8		5		90					5		5	dk halo			100
07R	2	9		75	79	0.1	v	90							10		8	br+dk halo			100
07R	2	9		68	73	0.1	v	100									3	dk halo			100
07R	2	9		67	74	1		10		80					10		7	br+dk halo			100
07R	2	10		81	85	1.5	v	10		80					10		6	dk halo			100
07R	2	11		92	93	0.5		10		80					10		4	br+dk halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
07R	2	11		93	98	0.2	v	90							10		4	br+dk halo			100
07R	2	11		85	91	1	v	10		90							5	dk halo			100
07R	2	11		93	99	1.5		5		90					5		6	br+dk halo			100
07R	2	11		85	93	2.5		5		90					5		12	br+dk halo			100
07R	2	12		101	103	1.5		10		80					10		6	br+dk halo			100
07R	2	12		99	105	0.3	v	10		80					10		15	br+dk halo			100
07R	2	13		106	107	0.6		80							20		4	dk halo			100
07R	2	13		105	110	0.5		60		20					20		3	dk halo			100
07R	2	14		111	115	0.1	v	80							20		3	dk halo			100
07R	2	14		111	115	0.2	v	80							20		4	dk halo			100
07R	2	15		116	120	0.1	v	80							20		3	dk halo			100
07R	2	16																Rubble			0
07R	2	17		126	130	0.4	v	80							20		3	dk halo			100
07R	2	17		126	130	0.4	v	80							20		3	dk halo			100
07R	2	18		131	132	0.2		80							20		4	dk halo			100
07R	2	18		132	134	0.5		40		40					20						100
07R	2	18		131	134	0.4	v	80							20		4	dk halo			100
07R	2	19		137	137	0.4		30		50					20		3	dk halo			100
07R	2	19		134	137	0.1	v	80							20		3	dk halo			100
07R	2	20																Rubble			0
07R	3	1		0	6	1		75		10					15		4	dk halo			100
07R	3	1		1	7	0.1	v	80							20		4	dk halo			100
07R	3	1		4	10	4		5		95							5	br+dk halo			100
07R	3	1		9	15	0.5		5		95							5	br+dk halo			100
07R	3	1		9	15	0.1		80							20		5	dk halo			100
07R	3	1		1	10	0.5		10		80					10		4	dk halo			100
07R	3	2		16	20	0.1		100													100
07R	3	2		18	23	0.1	v	100									2	dk halo			100
07R	3	2		15	22	0.1	v	90							10		4	dk halo			100
07R	3	2		15	22	0.1	v	90							10		4	dk halo			100
07R	3	3		24	24	0.2		60		20					20		3	dk halo			100
07R	3	3		27	29	0.4		10		80					10		4	dk halo			100
07R	3	3		22	25	0.1		80							20		3	dk halo			100
07R	3	3		24	29	0.1	v			100											100
07R	3	3		22	28	1	v	5		90					5		4	dk halo			100
08R	1	1		15	15	0.1		90							10		5	br+dk halo			100
08R	1	1		6	8	1		5		90					5		6	br+dk halo			100
08R	1	1		19	22	0.1		90							10		4	br+dk halo			100
08R	1	1		10	14	0.5		18		80					2						100
08R	1	1		0	5	0.8		15		80					5		4	br+dk halo			100
08R	1	1		0	5	0.3		90							10		4	br+dk halo			100
08R	1	1		0	7	0.5		10		80					10		4	br+dk halo			100
08R	1	1		9	16	0.4	v	80		10					10		5	br+dk halo			100
08R	1	1		11	18	0.5	v	10		90											100
08R	1	1		9	22	2		15		80					5		6	br+dk halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
08R	1	1		7	22	0.5	v	50		40					10		5	br+dk halo			100
08R	1	2		23	24	0.6		5		95								br+dk halo			100
08R	1	2		22	25	0.2	v	70		20					10		5	br+dk halo			100
08R	1	3		30	32	0.8		5		95											100
08R	1	3		42	45	0.1		90							10		8	br+dk halo			100
08R	1	3		41	44	0.1		90							10		4	br+dk halo			100
08R	1	3		25	31	0.1	v	100													100
08R	1	3		34	40	0.4	v	90							10		6	br+dk halo			100
08R	1	3		36	42	0.2	v	70		20					10		10	br+dk halo			100
08R	1	3		34	42	0.4	v	20		70					10		10	br+dk halo			100
08R	1	3		26	36	0.8		35		60					5		8	br+dk halo			100
08R	1	3		28	41	0.4	v	30		60					10		10	br+dk halo			100
08R	1	3		28	43	0.3		95							5		6	br+dk halo			100
08R	1	4		47	48	0.2		80							20		5	dk halo			100
08R	1	4		44	48	0.5	v	5		90					5		5	dk halo			100
08R	1	4		44	48	0.2	v	90		10							3	dk halo			100
08R	1	5		60	61	0.2		80							20		5	dk halo			100
08R	1	5		67	68	0.1				100											100
08R	1	5		62	64	0.2				100											100
08R	1	5		60	63	0.1	v	90							10		5	br+dk halo			100
08R	1	5		68	72	0.2		90							10		6	br+dk halo			100
08R	1	5		73	77	1.5		8		90					2		15	br+dk halo			100
08R	1	5		75	79	0.5	v	20		75					5		6	br+dk halo			100
08R	1	5		51	58	1		5		90					5		10	br+dk halo			100
08R	1	5		69	79	0.3	v	60		20					20		5	br+dk halo			100
08R	1	5		61	74	1.5	v	5		90					5		8	br+dk halo			100
08R	1	6		80	83	0.2		80							20		8	br+dk halo			100
08R	1	6		80	83	1	v	5		90					5		5	dk halo			100
08R	1	7		84	86	0.2		80							20		10	br+dk halo			100
08R	1	7		87	90			80							20		6	dk halo			100
08R	1	8		91	93	0.1		80							20		2	br+dk halo			100
08R	1	8		90	94	0.4	v	60		20					20		5	br+dk halo			100
08R	1	8		90	95	0.3	v	80							20		4	dk halo			100
08R	1	9		97	99	0.1	v	90							10		2	dk halo			100
08R	1	9		95	99	1	v	90							10		5	dk halo			100
08R	1	9		95	99	0.2	v	90							10		3	dk halo			100
08R	1	10		100	102	0.5	v	80							20		3	dk halo			100
08R	1	11		115	118	0.3		80							20		8	br+dk halo			100
08R	1	11		104	108	0.5	v	80							20		5	dk halo			100
08R	1	11		104	109	0.4	v	10		80					10		10	br+dk halo			100
08R	1	11		112	117	1.5		15		80					5		10	dk halo			100
08R	1	11		105	115	2.5		3		95					2		12	dk halo			100
08R	1	12		119	120	1		10		80					10		8	br+dk halo			100
08R	1	12		120	123	0.1		90							10		2	dk halo			100
08R	1	12		121	127	0.2		90							10		10	dk halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
08R	1	13		126	131	0.2		80							20		10	br+dk halo			100
08R	1	14		139	140	0.5		80							20		9	dk halo			100
08R	1	14		136	139	0.1		90							10		5	dk halo			100
08R	1	14		140	143	0.2		80							20		10	br+dk halo			100
08R	1	14		138	142	0.2	v	80							20		8	dk halo			100
08R	1	14		136	140	0.1		80							20						100
08R	1	14		132	139	0.2	v	80							20		7	br+dk halo			100
08R	1	14		131	139	0.1		80							20		6	br+dk halo			100
08R	1	15		143	144	0.2		80							20		4	dk halo			100
08R	1	15		146	147	0.2		80							20		6	dk halo			100
08R	1																				0
08R	1																				0
08R	2	1		7	10	0.4				100											100
08R	2	1		7	10	0.1		80		10					10		4	dk halo			100
08R	2	1		4	8	0.4	v	10		80					10		5	dk halo			100
08R	2	1		0	5	0.1	v	90							10		3	dk halo			100
08R	2	1		0	8	0.1	v	90							10		3	dk halo			100
08R	2	1		0	15	0.3	v	90							10		5	dk halo			100
08R	2	2		28	29	0.1		90							10		3	dk halo			100
08R	2	2		30	31	0.6		10		90							6	dk halo			100
08R	2	2		36	38	0.2		80							20		6	dk halo			100
08R	2	2		35	38	0.4		90							10		3	dk halo			100
08R	2	2		43	46	0.1		90							10		7	dk halo			100
08R	2	2		15	19	int		10		90							6	br+dk halo - interpillow sedim	100		100
08R	2	2		32	36	0.4		80							20		5	dk halo			100
08R	2	2		33	37	0.5	v			100											100
08R	2	2		49	54	1.5		10		80					10		4	dk halo			100
08R	2	2		44	51	0.2		20		80							4	dk halo			100
08R	2	2		20	28	0.1		100									5	dk halo			100
08R	2	2		38	46	0.2		90							10		3	dk halo			100
08R	2	2		46	54	1.5		20		80							5	dk halo			100
08R	2	3		55	58	Br		10		90								Hyaloclastite	50		100
08R	2	4		69	70	0.1		100													100
08R	2	4		65	67	0.8		10		90							6	br+dk halo			100
08R	2	4		59	62	0.4		80		20							2	br+dk halo			100
08R	2	4		61	64	0.5	v	10		80					10		5	dk halo			100
08R	2	4		60	66	0.2	v	95							5		5	br+dk halo			100
08R	2	4		63	70	1	v	10		80					10		2	br+dk halo			100
08R	2	4		60	69	0.2	v	90							10		3	br+dk halo			100
08R	2	5		71	72	0.2		100													100
08R	2	5		73	76	0.6		60		20					20		5	br+dk halo			100
08R	2	5		74	80	0.8		60		20					20		5	br+dk halo			100
08R	2	5		75	82	0.8		80							20		4	dk halo			100
08R	2	6		82	85	0.8	v	10		90							3	br+dk halo			100
08R	2	6		82	85	1.2	v			100							4	br+dk halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
08R	2	7		92	92	1		5		90					5		4	br+dk halo			100
08R	2	7		94	94	0.5		5		95							3	br+dk halo			100
08R	2	7		92	94	0.5		5		95							3	br+dk halo			100
08R	2	7		86	91	1		5		95											100
08R	2	7		86	91	0.2		80							20		6	br+dk halo			100
08R	2	8		96	98	0.4		80							20		3	dk halo			100
08R	2	8		95	98	0.5	v	10		80					10		3	dk halo			100
08R	2	8		97	100	0.1		80							20		2	dk halo			100
08R	2	8		95	100	1		10		80					10		4	dk halo			100
08R	2	9		108	110	0.3		80							20		3	br+dk halo			100
08R	2	9		101	104	0.1		100									3	br+dk halo			100
08R	2	9		105	108	0.2		10		80					10		1	br+dk halo			100
08R	2	9		101	110	0.2	v	90							10		3	br+dk halo			100
08R	2	9		101	110	1.5	v	10		90							5	br+dk halo			100
08R	2	10		114	114	0.8		5		90					5		4	br+dk halo			100
08R	2	10		117	119	0.5		10		80					10		3	br+dk halo			100
08R	2	10		114	118	0.6		5		90					5		4	br+dk halo			100
08R	2	10		110	119	1.5	v	5		95							4	br+dk halo			100
08R	2	11		119	123	0.1		100													100
08R	2	11		119	124	0.2		80							20		10	br+dk halo			100
08R	2	12																Rubble			0
08R	2	13		135	139	0.1		90							10						100
08R	2	13		134	139	0.5		60		10					30		10	br+dk halo			100
08R	2	13		129	136	0.4		10		80					10		5	br+dk halo			100
08R	2	13		132	140	0.1		100													100
09R	1	1		5	5	0.8				100											100
09R	1	1		0	1	0.1		100													100
09R	1	1		2	3	0.1		100													100
09R	1	1		1	4	0.5		90							10		3	br+dk halo			100
09R	1	1		0	5	0.5		90							10		3	br+dk halo			100
09R	1	2		7	8	0.4		80		10					10						100
09R	1	2		6	8	0.1		90							10		3	br+dk halo			100
09R	1	2		6	8	0.1		100													100
09R	1	2		7	10	0.1		100													100
09R	1	3		11	11	1		5		95											100
09R	1	3		11	12	0.6		80		10					10		3	br+dk halo			100
09R	1	3		10	15	0.4	v	80							20		5	dk halo			100
09R	1	3		10	16	0.1	v	95							5						100
09R	1	4		16	20	0.2	v	80							20		5	br+dk halo			100
09R	1	4		22	27	0.8		10		85					5		4	br+dk halo			100
09R	1	4		17	23	0.5	v	8		90					2		5	br+dk halo			100
09R	1	4		19	27	1.5	v	8		90					2		10	br+dk halo			100
09R	1	5		28	28	0											4	dk halo			0
09R	1	6		31	32	0											5	dk halo			0
09R	1	7		35	37	0.6	v	10		90							8	dk halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
09R	1	7		35	37	0.2		80							20		10	br+dk halo			100
09R	1	8		39	40	0.2		80							20		5	br+dk halo			100
09R	1	8		43	44	0.6		5		90					5		5	dk halo			100
09R	1	8		47	49	0.1		90							10		3	br+dk halo			100
09R	1	8		44	49	2.5	v	25		70					5		5	br+dk halo			100
09R	1	8		39	49	1	v	20		70					10		5	dk halo			100
09R	1	9		54	56	0.1		100									4	dk halo			100
09R	1	9		58	60	0.5		80							20		10	dk halo			100
09R	1	9		59	62	0.8		10		80					10		7	br+dk halo			100
09R	1	9		50	58	2	v	15		75					10		15	dk halo			100
09R	1	10		63	63	0.4		10		80					10		2	dk halo			100
09R	1	10		65	66	0.1		80							20		3	dk halo			100
09R	1	10		63	66	0.2	v	80							20		2	dk halo			100
09R	1	11		67	70	0.3		90							10		5	dk halo			100
09R	1	11		66	70	0.2		80							20		10	dk halo			100
09R	1	12		71	72	0.2		90							10		4	br+dk halo			100
09R	1	12		72	73	0.2		90							10		4	dk halo			100
09R	1	13		77	78	0.4		80							20		10	br+dk halo			100
09R	1	13		78	81	0.2		95							5						100
09R	1	13		78	81	0.1		100													100
09R	1	13		77	81	0.4	v	80		10					10		12	br+dk halo			100
09R	1	14																Rubble			0
09R	1	15																Rubble			0
09R	1	16		87	90	0.2		10		80					10		10	br+dk halo			100
09R	1	17		100	101	1		5		95											100
09R	1	17		101	102	0.2		80							20		20	br+dk halo			100
09R	1	17		106	107	0.3		80							20		5	br+dk halo			100
09R	1	17		91	94	0.8		10		80					10		8	dk halo			100
09R	1	17		100	107	2		10		85					5		15	br+dk halo			100
09R	1	18		108	110	0											10	br+dk halo			0
09R	1	18		112	114	0.1		100													100
09R	1	18		108	112	0.2		100													100
09R	1	18		108	117	0.2	v	80							20		7	br+dk halo			100
09R	2	1		29	29	0.4				100											100
09R	2	1		19	20	0.1				100											100
09R	2	1		34	35	0.2		90							10						100
09R	2	1		35	36	0.8		5		95											100
09R	2	1		46	47	0.1		100									5	dk halo			100
09R	2	1		7	9	1.5		5		90					5		15	dk halo			100
09R	2	1		12	14	0.1		98							2		1	dk halo			100
09R	2	1		15	17	0.4		5		95											100
09R	2	1		25	27	0.1		90							10						100
09R	2	1		38	40	1		70							30		3	br+dk halo			100
09R	2	1		16	19	0.2		95							5		3	dk halo			100
09R	2	1		23	26	0.2				100							5	br+dk halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
09R	2	1		17	21	0.1		60		20					20		10	br+dk halo			100
09R	2	1		29	34	0.1		90							10		5	br+dk halo			100
09R	2	1		34	39	1	v	70							30						100
09R	2	1		0	7	0.1	v	80							20		3	dk halo			100
09R	2	1		0	8	0.1	v	80							20		10	dk halo			100
09R	2	1		8	16	0.1	v	98							2		1	dk halo			100
09R	2	1		20	34	0.2		90							10		5	br+dk halo			100
09R	2	2		53	54	0.6				100											100
09R	2	2		54	55	0.6		10		90							4	br+dk halo			100
09R	2	2		58	59	1		60		20					20		4	dk halo			100
09R	2	2		48	52	0.5		10		80					10		12	dk halo			100
09R	2	2		50	54	0.1		60		20					20		8	br+dk halo			100
09R	2	2		54	58	0.3		90							10		4	br+dk halo			100
09R	2	2		52	59	0.2		90							10		3	br+dk halo			100
09R	2	2		48	60	0.2	v	10		80					10		3	br+dk halo			100
09R	2	3		62	64	0.1		90							10		1	dk halo			100
09R	2	3		60	67	0.4		60		20					20		6	dk halo			100
09R	2	3		60	67	0.1	v	80							20		5	dk halo			100
09R	2	4		69	69	0.1		90							10		5	dk halo			100
09R	2	5		74	76	0.1		90							10		4	dk halo			100
09R	2	5		71	77	1		15		80					5		4	dk halo			100
09R	2	6		77	78	0.2		80							20		3	dk halo			100
09R	2	7		88	89	0.4		10		80					10		10	dk halo			100
09R	2	7		80	89	1	v	5		90					5		8	dk halo			100
09R	2	8		90	92	0.2	v	80							20		10	br+dk halo			100
09R	2	9		94	95	0.4		10		80					10		6	dk halo			100
09R	2	9		103	104	0.1		100													100
09R	2	9		100	102	0.5		80		10					10		6	br+dk halo			100
09R	2	9		96	100	0.1		95							5		10	dk halo			100
09R	2	9		93	99	2	v	5		95							10	br+dk halo			100
09R	2	9		93	100	1	v	5		90					5		5	br+dk halo			100
09R	2	9		94	104	0.3	v	80		10					10		5	dk halo			100
09R	2	10		105	106	0											5	dk halo			0
09R	2	11		108	111	0.1	v	90							10		5	br+dk halo			100
09R	2	11		108	111	0.1	v	90							10		10	br+dk halo			100
09R	2	12		117	118	0.2		90							10		6	dk halo			100
09R	2	12		111	119	0.4		60		20					20		10	dk halo			100
09R	2	13		128	128	0.2		60		20					20		5	dk halo			100
09R	2	13		131	131	0.2		100									4	dk halo			100
09R	2	13		120	122	1		5		90					5		8	dk halo			100
09R	2	13		120	131	0.2	v	80							20		6	dk halo			100
09R	2	13		120	131	0.2	v	80							20		6	dk halo			100
09R	2	14		132	132	0.5		80							20		6	br+dk halo			100
09R	2	15		132	135	0.2		80							20		5	br+dk halo			100
09R	2	15		136	139	0.6		60		20					20		6	br+dk halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
09R	2	15		137	142	0.2		80							20		8	br+dk halo			100
09R	2	16		142	146	0.2	v	90							10		7	dk halo			100
09R	3	1		6	9	0.2		95							5		6	br+dk halo			100
09R	3	1		5	9	1		15		80					5		5	br+dk halo			100
09R	3	1		1	8	1		10		80					10		10	br+dk halo			100
09R	3	1		0	7	0.5	v	80		10					10		5	br+dk halo			100
09R	3	2		9	10	0.8		5		90					5		7	dk halo			100
09R	3	2		12	13	2		5		95							6	dk halo			100
09R	3	3		14	14	0.1		100									4	dk halo			100
09R	3	3		13	17	0.1		80							20		5	dk halo			100
09R	3	4																Rubble			0
09R	3	5		27	29	0	v										4	dk halo			0
09R	3	6		30	30	0.6		5		90					5		15	br+dk halo			100
09R	3	6		30	33	0.3	v	10		80					10		10	dk halo			100
09R	3	7		38	38	0.4		80							20		10	dk halo			100
09R	3	7		34	44	0.2	v	80							20		7	br+dk halo			100
09R	3	8		48	50	0.1		100									3	dk halo			100
09R	3	8		44	50	0.5	v	8		90					2		10	br+dk halo			100
09R	3	9		52	53	1		10		80					10		6	dk halo			100
09R	3	9		51	56	0.4	v	5		90					5		6	dk halo			100
09R	3	10		58	59	0.5		5		90					5		4	dk halo			100
09R	3	10		57	65	2		5		90					5		9	dk halo			100
10R	1	1		3	5	0.2		80							20		4	dk halo			100
10R	1	1		0	3	0.2		60		20					20		3	dk halo			100
10R	1	2		5	6	0.2		80							20		4	br+dk halo			100
10R	1	3		11	12	0.2		80							20		5	dk halo			100
10R	1	4		16	17	0											5	dk halo			0
10R	1	4		21	22	1.2		70		10					20		10	dk halo			100
10R	1	4		21	26	0.1		90							10		3	dk halo			100
10R	1	4		15	21	0.1	v	80							20		7	dk halo			100
10R	1	4		21	27	0.1	v	90							10		5	dk halo			100
10R	1	5		27	31	Br		10		90								Hyaloclastite	70		100
10R	1	6		60	64	0.1	v	60									2	dk halo			60
10R	1	6		34	35	0.2		80							20		12	dk halo			100
10R	1	6		37	38	0.1		100													100
10R	1	6		47	49	0.1		100													100
10R	1	6		102	104	0.2		80							20		8	dk halo			100
10R	1	6		77	80	0.2		80							20		15	br+dk halo			100
10R	1	6		84	87	0.1		80							20		6	br+dk halo			100
10R	1	6		97	100	0.2		60		20					20		12	dk halo			100
10R	1	6		50	55	0.8		10		80					10		12	br+dk halo			100
10R	1	6		70	75	0.3		60		20					20		6	br+dk halo			100
10R	1	6		86	91	0.2		60		30					10		6	br+dk halo			100
10R	1	6		98	103	0.2	v	80							20		10	br+dk halo			100
10R	1	6		91	98	0.2		90							10		3	dk halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
10R	1	6		51	59	0.1		90							10		6	br+dk halo			100
10R	1	6		56	64	0.1		80							20		8	br+dk halo			100
10R	1	6		98	107	0.2	v	80							20		10	br+dk halo			100
10R	1	6		67	77	0.2	v	90							10		3	br+dk halo			100
10R	1	6		82	94	0.4		60		20					20		10	br+dk halo			100
10R	1	6		33	46	0.2		80							20		5	dk halo			100
10R	1	6		43	59	2	v	3		95					2		10	br+dk halo			100
10R	1	6		53	69	2		30		60					10		5	br+dk halo			100
10R	1	7		111	112	1.5		3		95					2		4	br+dk halo			100
10R	1	7		112	113	0.4		40		40					20		6	br+dk halo			100
10R	1	7		123	125	0.5		80							20		5	dk halo			100
10R	1	7		124	126	0.2		80							20		5	dk halo			100
10R	1	7		107	112	1.5	v	20		80							5	br+dk halo			100
10R	1	7		114	121	1.5		20		80							5	br+dk halo			100
10R	1	7		107	126	1		60		40							5	br+dk halo			100
10R	1	8																Rubble			0
10R	1	9		135	139	0.2		80							20		8	dk halo			100
10R	1	9		137	141	0.2	v	80							20		8	br+dk halo			100
10R	1	9		139	143	0.1		80							20		7	dk halo			100
10R	1	9		132	137	0.1		80							20		6	dk halo			100
10R	1	9		131	143	0.4	v	30		50					20		10	dk halo			100
10R	1	10																Rubble			0
10R	2	1		12	14	0											5	br+dk halo			0
10R	2	1		12	13	0.1		100									2	dk halo			100
10R	2	1		0	3	0.2		80							20		15	dk halo			100
10R	2	1		8	14	0.1		100													100
10R	2	2																Rubble			0
10R	2	3																Rubble			0
10R	2	4																Rubble			0
10R	2	5		39	44	Br		2		98								br+dk halo Breccia	25	75	100
10R	2	6		47	48	0											8	dk halo			0
10R	2	6		50	51	0.1		90							10		6	br+dk halo			100
10R	2	6		50	51	0.4		60		20					20		3	br+dk halo			100
10R	2	6		46	51	0.1	v	95							5						100
10R	2	6		46	51	0.1	v	100													100
10R	2	7		53	57	2.5		10		85					5		15	br+dk halo			100
10R	2	7		54	58	0.8	v	70		20					10		5	br+dk halo			100
10R	2	7		54	58	0.1		100													100
10R	2	7		54	58	0.1	v	100													100
10R																					0
11R	1	10		59	61	0.1		100													100
11R	1	11		97	98	0.1		90							10		5	br+dk halo			100
11R	1	11		72	74	0.1		95							5						100
11R	1	11		89	91	0.1		100									5	br+dk halo			100
11R	1	11		84	92	0.1		90							10		6	dk halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
11R	1	11		71	82	0.1	v	100									8	br+dk halo			100
11R	1	12		118	121	0.1		90							10		5	br+dk halo			100
11R	1	12		121	124	0.1		90		10							4	br+dk halo			100
11R	1	12		118	122	0.1	v	90							10		5	br+dk halo			100
11R	1	12		120	126	0.1	v	90		10							4	br+dk halo			100
11R	1	2		5	11	0.2	v	80							20		15				100
11R	1	10		69	69	0.2		90							10						100
11R	1	10		59	66	0.2	v	100									5	dk halo			100
11R	1	11		77	78	0.3		90							10						100
11R	1	11		74	80	0.3	v	60		40							5	dk halo			100
11R	1	11		91	97	0.3	v	100													100
11R	1	8		48	52	0.4	v	95							5		15	dk halo			100
11R	1	10		61	70	0.4	v	40		50					10		5	br+dk halo			100
11R	1	11		78	82	0.4	v	100													100
11R	1	11		93	98	0.4		90							10						100
11R	1	11		71	77	0.4	v	40		60											100
11R	1	12		125	128	0.4		20		80							6	br+dk halo			100
11R	1	1		0	2	0.5		100									5				100
11R	1	10		66	70	0.5	v	70		20					10		2	dk halo			100
11R	1	10		56	70	0.5		100									5	br+dk halo			100
11R	1	11		77	80	0.5		20		70					10						100
11R	1	8		48	53	0.6	v	100													100
11R	1	10		56	62	0.6	v	100									4	br+dk halo			100
11R	1	11		75	77	0.6		50		50											100
11R	1	8		52	53	0.8				100											100
11R	1	7		44	48	1	v	5		90					5		10	dk halo			100
11R	1	7		44	45	1.5		20		80							10	dk halo			100
11R	1	10		59	64	1.5		20		70					10		6	br+dk halo			100
11R	1	12		125	129	10	v			100											100
11R	1	3		13	18	Br		90							10			Hyaloclasites	8		100
11R	1	4		19	23	Br		90							10			Hyaloclasites	5		100
11R	1	5		23	37	Br		90							10			Hyaloclasites	8		100
11R	1	6		38	44	Br		85		10					5			Hyaloclasites	10		100
11R	1	11		102	117	Br		5		95								br+dk halo Breccia		50	100
11R	1	13		130	133	Br		1		99								Breccia	80		100
11R	1	9																Rubble			0
11R	2	1		15	15	0.1		100													100
11R	2	1		22	23	0.1		100													100
11R	2	1		27	29	0.1		100													100
11R	2	1		12	15	0.1	v	90							10						100
11R	2	1		15	22	0.1		100													100
11R	2	2		38	41	0.1	v	100													100
11R	2	4		59	66	0.1		90							10		5	br+dk halo			100
11R	2	4		60	68	0.1		90							10		4	br+dk halo			100
11R	2	5		74	77	0.1		100													100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
11R	2	5		69	74	0.1		100													100
11R	2	5		68	74	0.1	v	100													100
11R	2	6		82	85	0.1	v	90							10		3	br+dk halo			100
11R	2	7		89	90	0.1		90							10		5	br+dk halo			100
11R	2	7		93	94	0.1		90							10		4	br+dk halo			100
11R	2	7		94	95	0.1		90							10		4	br+dk halo			100
11R	2	8		119	119	0.1		90							10						100
11R	2	8		109	111	0.1		90							10						100
11R	2	8		117	120	0.1		80		20											100
11R	2	9		122	125	0.1		90							10						100
11R	2	10		140	142	0.1		100									7	dk halo			100
11R	2	10		129	132	0.1		90							10						100
11R	2	10		134	137	0.1		100									3	br+dk halo			100
11R	2	1		16	17	0.2		100													100
11R	2	1		30	31	0.2		95							5						100
11R	2	1		20	30	0.2		80							20		3	dk halo			100
11R	2	2		39	46	0.2		90							10		4	br+dk halo			100
11R	2	4		59	60	0.2		90							10		4	br+dk halo			100
11R	2	4		63	64	0.2		10		80					10		3	br+dk halo			100
11R	2	5		79	79	0.2		90							10						100
11R	2	5		76	77	0.2		90							10						100
11R	2	5		74	77	0.2	v	10		80					10						100
11R	2	6		82	82	0.2		100													100
11R	2	7		100	103	0.2		90							10						100
11R	2	7		96	102	0.2	v	90							10		3	br+dk halo			100
11R	2	8		105	107	0.2	v	80							20						100
11R	2	8		106	109	0.2		80							20						100
11R	2	10		131	134	0.2		90							10						100
11R	2	7		96	110	0.3	v	90							10						100
11R	2	1		19	22	0.4		80							20		5	dk halo			100
11R	2	2		36	41	0.4		80							20		6	br+dk halo			100
11R	2	4		61	68	0.4		90							10		4	br+dk halo			100
11R	2	8		105	112	0.4		30		60					10						100
11R	2	10		137	138	0.4		20		70					10		4	dk halo			100
11R	2	1		32	33	0.5		90							10						100
11R	2	1		33	35	0.5		80							20						100
11R	2	2		44	47	0.5		10		80					10						100
11R	2	2		46	50	0.5		60		40											100
11R	2	10		128	128	0.5		80		10					10						100
11R	2	10		128	139	0.5		15		80					5		10	br+dk halo			100
11R	2	2		48	54	0.6		30		60					10						100
11R	2	7		96	97	0.6		10		90							5	br+dk halo			100
11R	2	8		118	121	0.6	v			100											100
11R	2	1		24	26	0.8		10		80					10		3	br+dk halo			100
11R	2	2		41	46	0.8		90							10						100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti-cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
11R	2	5		72	75	0.8		15		80					5						100
11R	2	7		90	92	0.8		95							5		5	br+dk halo			100
11R	2	5		68	73	1		5		95											100
11R	2	8		105	105	1				100											100
11R	2	9		122	126	1	v	5		95											100
11R	2	7		97	99	2	v	5		95											100
11R	2	7		87	92	2	v	5		95							5	br+dk halo			100
11R	2	9		122	124	2	v			100											100
11R	2	10		129	142	3	v	10		90							5	dk halo			100
11R	2	5		77	81	7	v			100											100
11R	2	7		86	96	7	v	3		95					2		4	br+dk halo			100
11R	2	6		82	85	12	v			100											100
11R	2	1		0	14	Br		15		80					5			Breccia	25		100
11R	2	8		111	117	Br		5		95								Breccia	75		100
11R	2	3																Rubble			0
11R	3	5		143	146	0.5	v	5		90					5		5	dk halo			100
11R	3	5		147	150	1.5	v	20		80							4	br+dk halo			100
11R	3	5		147	149	2	v	90		10											100
11R	3	1		0	114	Br		1		99								br+dk Breccia	25	40	100
11R	3	2		115	123	Br		2		98								Breccia	35	0	100
11R	3	3		124	129	Br		1		98					1			br+dk Breccia	15	80	100
11R	3	4		131	137	Br		95							5			Hyaloclastite	5	0	100
11R	3	5		138	142	Br		10		90								br+dk Breccia	20	80	100
11R	3																				0
11R	4	1		2	7	0.1	v	95							5		5	br+dk halo			100
11R	4	1		3	8	0.1	v	90							10		2	br+dk halo			100
11R	4	1		4	8	0.2	v	100													100
11R	4	2		9	13	0.2	v	95							5		4	br+dk halo			100
11R	4	4		22	26	0.2		90							10		3	br+dk halo			100
11R	4	1		0	2	0.4		50		50							5	br+dk halo			100
11R	4	4		23	25	0.4		10		80					10		3	br+dk halo			100
11R	4	1		2	4	0.5		10		80					10		3	br+dk halo			100
11R	4	1		0	8	1		95							5		3	br+dk halo			100
11R	4	2		9	14	2.5				100							3	br+dk halo			100
11R	4	3		14	22	Br		5		95								Breccia	10		100
11R	4	5		26	33	Br		2		98								br+dk Breccia	8	50	100
11R	4	6																Rubble			0
11R																					0
12R	1	9		37	42	0.1	v	100									1	dk halo			100
12R	1	10		43	47	0.1	v	80							20		5	br+dk halo			100
12R	1	3		8	13	0.2	v	100									3	br+dk halo			100
12R	1	7		28	31	0.2		100													100
12R	1	8		32	32	0.2		80							20		6	br+dk halo			100
12R	1	8		32	36	0.2	v	80							20		6	br+dk halo			100
12R	1	9		37	41	0.2	v	80		20							2	br+dk halo			100

LEG 185 VEIN LOG

Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
12R	1	10		43	47	0.2	v	10		80					10		4	dk halo			100
12R	1	1		0	3	0.5	v	10		90							4	dk halo			100
12R	1	9		37	39	0.5		100									8	br+dk halo			100
12R	1	11		48	52	0.6	v	10		80					10		2	br+dk halo			100
12R	1	2		4	8	0.8	v	20		80							5	br+dk halo			100
12R	1	5		20	21	0.8		10		90							4	dk halo			100
12R	1	5		18	21	0.8	v	5		90					5		2	br+dk halo			100
12R	1	7		28	28	1.2		10		80					10		5	br+dk halo			100
12R	1	3		11	11	1.5		10		80					10		5	br+dk halo			100
12R	1	3		12	13	1.5		15		80					5		5	br+dk halo			100
12R	1	4		13	18	1.5	v	80							20		5	br+dk halo			100
12R	1	4		13	17	2.5	v	15		80					5		6	br+dk halo			100
12R	1	2		4	8	3	v			100											100
12R	1	13		62	66	Br				100								dk halo Breccia	18	50	100
12R	1	6																Rubble			0
12R	1	12																Rubble			0
13R	1	4		39	40	0.1		90							10		5	br+dk halo			100
13R	1	6		53	56	0.1	v	95							5						100
13R	1	7		56	57	0.1		100									2	br+dk halo			100
13R	1	7		56	58	0.1	v	100									1	br+dk halo			100
13R	1	10		68	71	0.1	v	95							5		2	br+dk halo			100
13R	1	10		68	71	0.1	v	95							5		2	br+dk halo			100
13R	1	20		128	129	0.1		100													100
13R	1	21		132	138	0.1	v	100													100
13R	1	22		140	142	0.1		100									2	dk halo			100
13R	1	22		140	145	0.1		100													100
13R	1	22		142	146	0.1				100											100
13R	1	22		145	150	0.1				100											100
13R	1	4		36	39	0.2		100									3	dk halo			100
13R	1	4		41	43	0.2		10		90							2	br+dk halo			100
13R	1	4		42	49	0.2		10		90							5	br+dk halo			100
13R	1	4		44	49	0.2		60		30					10		4	br+dk halo			100
13R	1	5		49	51	0.2	v	100									4	br+dk halo			100
13R	1	8		59	61	0.2	v	100									5	br+dk halo			100
13R	1	8		60	64	0.2		90							10		5	br+dk halo			100
13R	1	10		68	69	0.2		100									5	br+dk halo			100
13R	1	11		71	73	0.2		90							10		3	br+dk halo			100
13R	1	11		72	73	0.2		90							10		3	br+dk halo			100
13R	1	11		72	76	0.2		90							10		3	br+dk halo			100
13R	1	11		75	78	0.2		90							10		3	br+dk halo			100
13R	1	11		72	77	0.2	v	90							10		3	br+dk halo			100
13R	1	12		78	81	0.2	v	100									2	br+dk halo			100
13R	1	19		120	125	0.2	v			100											100
13R	1	20		125	126	0.2		90							10		5	br+dk halo			100
13R	1	4		35	40	0.3		100									3	dk halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
13R	1	17		108	113	0.4	v	90		10											100
13R	1	4		38	39	0.5		20		80							5	br+dk halo			100
13R	1	4		43	45	0.5		10		90							6	br+dk halo			100
13R	1	6		52	56	0.5		95							5		10	br+dk halo			100
13R	1	22		139	147	0.5				95					5		2	dk halo			100
13R	1	6		52	54	0.8		80		20							5	br+dk halo			100
13R	1	17		112	113	0.8		100													100
13R	1	19		121	124	0.8		5		95											100
13R	1	20		125	132	0.8	v	90							10		5	br+dk halo			100
13R	1	5		50	51	1	v			100											100
13R	1	12		78	79	1		20		80							4	br+dk halo			100
13R	1	19		121	125	1		90							10						100
13R	1	19		123	125	1				100											100
13R	1	20		127	127	1		60		30					10		5	br+dk halo			100
13R	1	21		122	138	1	v	95							5		8	br+dk halo			100
13R	1	19		121	125	1.2	v	2		98											100
13R	1	4		46	49	1.5		10		90							5	br+dk halo			100
13R	1	8		60	62	1.5		40		60							4	br+dk halo			100
13R	1	8		60	63	1.5	v	80		20							6	br+dk halo			100
13R	1	11		77	78	2.5		30		70											100
13R	1	1		0	12	Br		80							20			Hyaloclastite, altered glass	5		100
13R	1	2		13	26	Br		80							20			Hyaloclastite, altered glass	5		100
13R	1	9		64	68	Br		90		10								dk+br halo, Breccia	4	50	100
13R	1	13		84	88	Br		95		5								br+dk halo, Breccia	5	50	100
13R	1	14		88	96	Br		98							2			Hyaloclastite, altered glass	10		100
13R	1	15		97	102	Br		100										br+dk halo, Breccia	8	80	100
13R	1	3																rubble			0
13R	1	16																			0
13R	1	18																Rubble			0
14R	1	1		2	2	1.2				100							3	br+dk halo			100
14R	1	1		0	1	0.1		100									10	br+dk halo			100
14R	1	2		4	11	0.8		10		80					10		5	br+dk halo			100
14R	1	2		6	9	1.2		10		90							6	br+dk halo			100
14R	1	2		6	11	0.8		20		60					20		5	br+dk halo			100
14R	1	3																Rubble			0
14R	1	4		20	21	3		20		80											100
14R	1	4		22	22	0.4		80		20							3	br+dk halo			100
14R	1	5		24	27	0.2	v	100									5	br+dk halo			100
14R	1	5		25	27			100									5	br+dk halo			100
14R	1	6		27	30	0.2	v	80		20							10	br+dk halo			100
14R	1	6		30	31	0.2		80		20							10	br+dk halo			100
14R	1	7		32	34	0.1		80		20							4	br+dk halo			100
14R	1	7		32	35	0.1		90		10							2	dk halo			100
14R	1	8																Rubble			0
15R	1	1		0	1	0.1		95							5		5	br+dk halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
15R	1	1		2	3	0.1		95							5		5	br+dk halo			100
15R	1	1		0	3	0.1	v	10		90							5	br+dk halo			100
15R	1	1		0	3	0.1	v			100											100
15R	1	3		13	15	0.1		100													100
15R	1	5		25	26	0.1		90							10		4	br+dk halo			100
15R	1	5		20	24	0.1				100											100
15R	1	7		30	34	0.1		90							10		10	br+dk halo			100
15R	1	10		56	57	0.1				100											100
15R	1	10		58	59	0.1				100											100
15R	1	10		59	60	0.1				100											100
15R	1	14		85	89	0.1	v	100									10	br+dk halo			100
15R	1	14		85	85	0.1		90							10		3	br+dk halo			100
15R	1	14		87	88	0.1		100									4	br+dk halo			100
15R	1	15		90	95	0.1	v	90							10		3	br+dk halo			100
15R	1	3		12	15	0.2	v	100									4	dk halo			100
15R	1	5		20	26	0.2		90		10							6	br+dk halo			100
15R	1	7		37	37	0.2		90							10		8	br+dk halo			100
15R	1	7		34	36	0.2		80		10					10		8	br+dk halo			100
15R	1	8		46	47	0.2		100									6	br+dk halo			100
15R	1	8		43	46	0.2		100									5	br+dk halo			100
15R	1	10		55	61	0.2	v	100									12	br+dk halo			100
15R	1	10		55	61	0.2	v	100									12	br+dk halo			100
15R	1	12		75	76	0.2	v	90							10		5	br+dk halo			100
15R	1	6		27	28	0.4		10		90							2	br+dk halo			100
15R	1	8		38	45	0.4	v	20		80							10	br+dk halo			100
15R	1	12		71	74	0.4		50		40					10		10	br+dk halo			100
15R	1	15		95	95	0.4		100									4	br+dk halo			100
15R	1	12		72	76	0.5		5		90					5		15	br+dk halo			100
15R	1	3		13	14	0.8				100											100
15R	1	15		90	95	0.8	v	100									4	br+dk halo			100
15R	1	15		90	93	1	v	100									8	br+dk halo			100
15R	1	5		20	27	1.2		15		85							10	br+dk halo			100
15R	1	15		90	91	2.5	v			100											100
15R	1	2																Rubble			0
15R	1	4																Rubble			0
15R	1	9																Rubble			0
15R	1	11																Rubble			0
15R	1	13																Rubble			0
16R	1	1																Rubble			0
16R	1	7		29	30	0.1		100									6	br+dk halo			100
16R	1	7		24	26	0.1		100									3	dk halo			100
16R	1	7		25	27	0.1		100													100
16R	1	7		24	29	0.1	v	100									6	br+dk halo			100
16R	1	7		23	32	0.1	v	90							10		2	br+dk halo			100
16R	1	8		38	40	0.1		100									3	br+dk halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
16R	1	8		38	43	0.1	v	90							10		3	br+dk halo			100
16R	1	10		53	53	0.1		100									3	br+dk halo			100
16R	1	10		52	53	0.1		100									3	br+dk halo			100
16R	1	10		50	52	0.1		100									3	br+dk halo			100
16R	1	3		7	8	0.2		95							5		6	br+dk halo			100
16R	1	3		9	10	0.2		95							5		6	br+dk halo			100
16R	1	3		8	10	0.2	v	95							5		6	br+dk halo			100
16R	1	6		18	22	0.2	v	100									3	br+dk halo			100
16R	1	10		49	55	0.2		100									3	br+dk halo			100
16R	1	2		3	6	0.4		100													100
16R	1	2		3	6	0.4		95		5											100
16R	1	6		18	22	0.4	v	100									5	br+dk halo			100
16R	1	7		24	29	0.4	v			100											100
16R	1	6		18	18	0.5				100							5	br+dk halo			100
16R	1	7		28	28	0.5		20		80											100
16R	1	8		37	41	0.5		100									4	br+dk halo			100
16R	1	8		36	37	0.8		100									5	dk halo			100
16R	1	4		12	13	1		30		70							4	br+dk halo			100
16R	1	4		11	14	1	v	30		70							4	br+dk halo			100
16R	1	5		14	17	1	v	10		90											100
16R	1	2		5	6	1.2		95		5							5	br+dk halo			100
16R	1	2		3	6	1.2		95		5							5	br+dk halo			100
16R	1	5		15	17	1.5		20		80											100
16R	1	5		14	17	1.5	v	10		90											100
16R	1	7		22	23	Br				90					10			Hyaloclastite, altered glass	10		100
16R	1	8		35	36	Br				90					10			Hyaloclastite, altered glass	10		100
16R	1	8		42	44	Br		80		10					10			Hyaloclastite, altered glass	25		100
16R	1	10		49	50	Br		90							10			Hyaloclastite, altered glass	10		100
16R	1	10		54	55	Br		90		5					5			Hyaloclastite, altered glass	20		100
16R	1	11		56	74	Br		90		10								Pillow rim breccia (15%altered glass)	2		100
16R	1	9																Rubble			0
16R	2	9		123	127	0											20	br+dk halo			0
16R	2	12				0												No veins			0
16R	2	13		141	147	0.2	v	100									6	dk halo			100
16R	2	13		140	147	1	v	90							10		6	dk halo			100
16R	2	1		0	34	Br		40		60								br+dk halo, Breccia	10	90	100
16R	2	2		36	41	Br		95		5								br+dk halo, Breccia	10	90	100
16R	2	3		42	44	Br		10		90								br+dk halo, Breccia	3	100	100
16R	2	4		44	50	Br		70		30								br+dk halo, Breccia	6	60	100
16R	2	5		51	87	Br		20		80								br+dk halo, Breccia	5	60	100
16R	2	6		87	102	Br		30		70								br+dk halo, Breccia	5	30	100
16R	2	7		103	106	Br		20		80								br+dk halo, Breccia	25	100	100
16R	2	8		108	114	Br		25		75								br+dk halo, Breccia	12	100	100
16R	2	8		115	122	Br		80		20								br+dk halo, Breccia	12	90	100
16R	2	12		74	79	Br		100										Pillow rim breccia (5%altered glass)	5		100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
16R	2	11																Rubble			0
16R	3	1		2	6	0.1		100													100
16R	3	3		15	19	0.1	v	90							10		15	br+dk halo			100
16R	3	17		102	102	0.1		100									4	br+dk halo			100
16R	3	19		110	111	0.1		100									5	br+dk halo			100
16R	3	5		25	30	0.2	v	90							10		12	br+dk halo			100
16R	3	6		31	35	0.2		90							10		5	dk halo			100
16R	3	17		102	105	0.2	v	100									5	br+dk halo			100
16R	3	17		103	104	0.2		100									5	br+dk halo			100
16R	3	19		110	114	0.2	v	90		10							3	br+dk halo			100
16R	3	19		110	113	0.2	v	95		5							3	br+dk halo			100
16R	3	19		110	114	0.2	v	100									3	br+dk halo			100
16R	3	1		0	7	0.4	v			100											100
16R	3	2		9	15	0.5		90							10		10	br+dk halo			100
16R	3	16		95	99	0.8	v	100									4	br+dk halo			100
16R	3	16		96	98	1		100									10	br+dk halo			100
16R	3	2		9	15	1.2	v	10		90							10	br+dk halo			100
16R	3	6		31	33	2	v	90		10							4	dk halo			100
16R	3	5		24	25	2.5		5		95							12	br+dk halo			100
16R	3	13		79	82	Br		100										Breccia	5		100
16R	3	14		83	90	Br		95		5								br+dk halo, breccia	8	100	100
16R	3	15		90	94	Br		100										br+dk halo, breccia	2	100	100
16R	3	18		106	109	Br		100										br+dk halo, breccia	2	100	100
16R	3	20		114	122	Br		90		10								br+dk halo, breccia	3	90	100
16R	3	21		122	147	Br		100										dk halo, breccia	20	100	100
16R	3	4																Rubble			0
16R	3	6																			0
17R	1	1		0	3	Br		10		90								dk+br halo, Breccia	80	80	100
17R	1	2		6	21	Br		90		10								Breccia	15		100
17R	1	3		22	24	Br		100										Hyaloclastite, altered glass	30		100
17R	1	4		25	26	0.2		100									3	dk halo			100
17R	1	4		27	28	2.5		80		20							8	br+dk halo			100
17R	1	4		25	28	0.2	v	100									3	dk halo			100
17R	1	5		33	34	0.5		10		90							5	br+dk halo			100
17R	1	5		30	32	1		100									3	br+dk halo			100
17R	1	5		37	40	0.1		100									3	dk halo			100
17R	1	5		40	43	3		10		90							8	br+dk halo			100
17R	1	5		31	35	2		5		95							10	br+dk halo			100
17R	1	5		32	40	2.5	v	5		95							10	dk halo			100
17R	1	5		30	40	1.5		30		70							10	dk halo			100
17R	1	6		45	60	Br		60		40								dk+br halo, Breccia	25	40	100
17R	1	7		66	69	0.2	v	90							10		4	br+dk halo			100
17R	1	7		66	69	0.5		90							10		4	br+dk halo			100
17R	1	8		75	78	0.1	v	90							10		5	dk halo			100
17R	1	8		74	78	0.2	v	90							10		8	br+dk halo			100

LEG 185 VEIN LOG

Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
17R	1	8		70	75	Br		100										Breccia			100
17R	1	9		86	86	2		95		5							8	br+dk halo			100
17R	1	9		79	81	2.5		20		80							12	br+dk halo			100
17R	1	9		87	98	Br		60		40								br+dk halo, Breccia	7	90	100
17R	1	10		99	99	0.4		5		90					5		5	br+dk halo			100
17R	1	10		99	101	0.5	v	100									7	br+dk halo			100
17R	1	11		103	106	10	v	100									15	br+dk halo			100
17R	1	12		107	109	0.8		90							10		10	br+dk halo			100
17R	1	12		107	110	0.2	v	20		80											100
17R	1	13																Rubble			0
17R	1	14		110	128	Br		30		70								br+dk halo, Breccia	10	90	100
17R	1	15		128	133	Br		10		90								br+dk halo, Breccia	40	100	100
17R	1	16																Rubble			0
17R	1	17		138	139	0.1		100									3	dk halo			100
17R	1	17		137	139	0.1		100													100
17R	1	18		140	142	1		20		80							10	br+dk halo			100
17R	1	19		144	146	0.5		100									7	dk halo			100
17R	1	20		148	150	1.5		5		90					5		5	br+dk halo			100
						9															
17R	2	1		0	3	0.4		100									12	br+dk halo			100
17R	2	1		0	3	0.4	v	10		90							4	br+dk halo			100
17R	2	2		5	6	1.5		60		40							3	br+dk halo			100
17R	2	2		6	8	0.1	v	90							10		5	br+dk halo			100
17R	2	2		6	10	0.1	v	90							10		4	br+dk halo			100
17R	2	3																Rubble			0
17R	2	4		19	20	0.1		100													100
17R	2	4		18	19	0.4				100											100
17R	2	4		22	23	5		10		88					2		10	br+dk halo			100
17R	2	4		20	22	1.5		10		90											100
17R	2	4		20	23	0.8	v	20		80							4	br+dk halo			100
17R	2	4		18	23	0.6	v	20		80							10	br+dk halo			100
17R	2	5		31	32	0.2		100									8	dk halo			100
17R	2	5		27	35	0.1	v	100													100
17R	2	5		25	36	0.2	v	90							10		10	dk halo			100
17R	2	6		41	42	0.1		100													100
17R	2	6		38	40	0.1		90							10		8	br+dk halo			100
17R	2	6		28	42	0.2	v	90							10		8	br+dk halo			100
17R	2	7																Rubble			0
17R	2	8																Rubble			0
17R	2	9																No veins			0
17R	2	10		60	63	0.1	v	90							10		4	dk halo			100
17R	2	11		64	70	0.2	v	90		10											100
17R	2	12		71	75	0.1	v	90		10											100
17R	2	13																Rubble			0
17R	2	14		78	81	0.2		90		10							6	dk halo			100

155

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
18R	1	1		9	10	2		80		15					5		5	dk halo			100
18R	1	1		4	6	0.2		100													100
18R	1	1		2	6	0.5	v	45		50					5		8	dk halo			100
18R	1	1		8	13	0.2		100													100
18R	1	1		1	13	1	v	15		80					5		8	dk halo			100
18R	1	2		31	31	0.4		10		90											100
18R	1	2		33	34	0.1		60		30					10		3	br+dk halo			100
18R	1	2		19	20	0.4		20		80											100
18R	1	2		27	28	0.4		10		90							5	dk halo			100
18R	1	2		31	32	0.5		10		90							4	dk halo			100
18R	1	2		31	32	0.8		10		90											100
18R	1	2		32	33	1		40		50					10		3	br+dk halo			100
18R	1	2		24	25	1.5		8		90					2						100
18R	1	2		34	35	2		5		95											100
18R	1	2		25	28	0.1	v	100													100
18R	1	2		20	25	0.5	v			100											100
18R	1	2		30	37	0.8	v	20		75					5		3	br+dk halo			100
18R	1	2		17	26	0.2		80		20							4	br+dk halo			100
18R	1	2		15	24	0.5		30		70							6	br+dk halo			100
18R	1	2		18	28	0.5		60		40							6	br+dk halo			100
18R	1	3		38	39	0.6		10		85					5		4	dk halo			100
18R	1	3		38	42	1	v	100									10	dk halo			100
18R	1	4		37	42	0.1	v	90							10		4	dk halo			100
18R	1	5		42	47	0.1	v	100													100
18R	1	6																Rubble			0
18R	1	7		56	56	0.1		100													100
18R	1	7		54	55	0.1		90							10						100
18R	1	7		55	56	1		60		30					10		8	br+dk halo			100
18R	1	7		56	58	0.1	v	90							10		3	dk halo			100
18R	1	7		58	60	1		60		40							5	br+dk halo			100
18R	1	7		53	55	1.5		50		40					10		4	dk halo			100
18R	1	7		56	59	1.5		10		90							2	br+dk halo			100
18R	1	7		51	61	0.5	v	100													100
18R	1	8		64	66	1				100							3	br+dk halo			100
18R	1	8		62	66	0.4	v	10		90							3	dk halo			100
18R	1	8		62	66	0.4		10		90							3	dk halo			100
18R	1	8		62	66	0.4				100											100
18R	1	9		66	68	0.2		100									10	br+dk halo			100
18R	1	9		66	69	0.2	v	90							10		4	dk halo			100
18R	1	10		78	81	1.5		5		93					2		12	br+dk halo			100
18R	1	10		90	94	0.5		5		95							6	dk halo			100
18R	1	10		73	79	0.2	v	5		95							5	br+dk halo			100
18R	1	10		70	80	1.5	v	5		95							10	br+dk halo			100
18R	1	11		94	94	0.6				100											100
18R	1	11		92	93	0.2				100											100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
18R	1	11		93	94	0.2				100											100
18R	1	11		90	94	0.5		5		95							6	dk halo			100
18R	1	11		87	95	0.5	v	5		95							5	br+dk halo			100
18R	1	12		98	98	0.1		100													100
18R	1	12		102	102	0.1				100											100
18R	1	12		101	101	0.2				100											100
18R	1	13																Rubble			0
18R	1	14		116	117	0.2		80							20		4	br+dk halo			100
18R	1	14		120	124	1.5		5		95							15	br+dk halo			100
18R	1	14		111	116	0.2		80							20		6	br+dk halo			100
18R	1	14		111	117	0.1	v	90							10						100
18R	1	14		118	124	0.8		5		95							5	br+dk halo			100
18R	1	15		126	130	0.2		95							5		3	dk halo			100
18R	1	15		125	129	0.2		95							5		6	br+dk halo			100
18R	1	16																Rubble			0
18R	1	16																			0
19R	1	1		4	6	1.2	v	5		95							5	dk halo			100
19R	1	1		3	7	6		2		98							5	dk halo			100
19R	1	2		9	9	0.2		100									8	br+dk halo			100
19R	1	3		9	12	2	v	5		95							4	br+dk halo			100
19R	1	3		8	12	1.5	v	5		95							4	br+dk halo			100
19R	1	4		17	19	0.2	v			100											100
19R	1	5		19	20	1		5		95							6	dk halo			100
19R	1	5		23	24	2.5		5		95							8	br+dk halo			100
19R	1	5		19	24	0.8	v	90		10							8	br+dk halo			100
19R	1	6		25	25	2.5		95							5		6	dk halo			100
19R	1	6		25	27	0.2		95							5		6	dk halo			100
19R	1	7		36	36	0.4		60		30					10		15	dk halo			100
19R	1	7		30	39	0.4	v	80		10					10		15	dk halo			100
19R	1	7		27	38	0.2	v	90							10		5	dk halo			100
19R	1	8		39	44	1.5	v	5		90					5		15	br+dk halo			100
19R	1	8		39	44	1.5	v	10		90							15	br+dk halo			100
19R	1	9		49	49	0.1		100													100
19R	1	10		51	57	0.2	v	90							10		12	br+dk halo			100
19R	1	11																Rubble			0
19R	1	12		61	64	0.6		10		90							6	br+dk halo			100
19R	1	13		64	65	0.2		90							10		10	br+dk halo			100
19R	1	13		65	71	0.2	v	90							10		10	br+dk halo			100
19R	1	14		72	73	0.2		90							10		10	br+dk halo			100
19R	1	14		72	77	0.1	v	80							20		10	br+dk halo			100
19R	1	14		72	77	0.1	v	80							20		10	br+dk halo			100
19R	1	15		77	83	0.2	v	100									6	dk halo			100
19R	1	15		77	83	0.2	v	80							20		6	dk halo			100
19R	1	16		86	86	0.1		100													100
19R	1	16		84	88	0.1	v	90							10		6	dk halo			100

LEG 185 VEIN LOG																					
Core	Sec.	Piece no.	Piece length	cmt top	cm bot	(mm) Width	Verti- cal?	% Sap	% Cel	% CO3	% Py	% Sm	% Sed	% Qz	% Feox	Type	Halos mm	Comments	%Br matrix	% Halo	Total %
1149D																					
19R	1	17																Rubble			0
19R	1	18		98	98	0.2		100									8	dk halo			100
19R	1	18		95	95	0.4		10		85					5		8	dk halo			100
19R	1	19		100	103	0	v										20	br+dk halo			0
19R	1	20																Rubble			0
19R	1	21		108	109	0.1		90							10		5	br+dk halo			100
19R	1	21		108	111	0.1	v	100													100
19R	1	22		112	114	0.2		90							10		4	br+dk halo			100
19R	1	22		112	114	0.4	v	10		90							4	br+dk halo			100