

DRILL RUNS FOR DRILLHOLE 70-5

Run	Recovery (m)	Character
Box 1 3.05-12.78 m (10'-41'11") H.S. Bostock Core Library Number 4198 (000742), Section 24		
3.05-4.44 (10'-14'7")	0.88	only about half normal core in recovered length, max 8 cm for single piece, rounded rubble, no fits
4.44-4.98 (14'7"-16'4")	0.27	only about half normal core in recovered length, max 5 cm, rounded rubble, no fits
4.98-5.44 (16'4"-17'10")	0.66	only about half normal core in recovered length, max 8 cm, no fits
5.44-5.89 (17'10"-19'4")	0.55	max 12 cm, 5.44-5.87 m - all fit, no fits below
5.89-6.55 (19'4"-21'½')	0.38	max 9 cm; 5.89-6.13 m - 3 pieces about 9 cm each, rounded rubble below
6.55-7.32 (21'½'-24')	0.40	max 11 cm, no fits, 6.55-6.75 m - all rubble
7.32-8.23 (24'-27')	0.64	max 19 cm, 7.32-7.76 m - all fit, rubble below
8.23-8.84 (27'-29')	0.20	all rubble
8.84-9.14 (29'-30')	0.20	all rubble
9.14-9.45 (30'-31')	0.15	all rubble
9.45-9.75 (31'-32')	0.04	all rubble
9.75-10.16 (32'-33'4")	0.04	all rubble
10.16-10.46 (33'4"-34'4")	0.01	one 1-cm fragment only
10.46-11.25 (34'4"-36'11")	0.15	max 7 cm, almost all rubble
11.25-11.73 (36'11"-38'½')	0.08	all rubble
11.73-12.55 (38'½'-41'2")	0.15	all rubble
	4.80	

Box 2 12.78-20.73 m (41'11"-68') H.S. Bostock C.L.N. 4199 (000743), Section 24		
12.55-13.21 (41'2"-43'4")	0.08	all rubble
13.21-13.56 (43'4"-44'½')	0.10	max 6 cm for single piece, no fits, all rubble
13.56-13.64 (44'½'-44'9")	0.04	two pieces that do not fit
13.64-13.94 (44'9"-45'9")	0.10	all rubble
13.94-14.33 (45'9"-47')	0.08	all rubble
14.33-14.48 (47'-47'½')	0.05	all rubble
14.48-14.94 (47'½'-49')	0.09	all rubble
14.94-15.85 (49'-52')	0.14	all rubble
15.85-16.23 (52'-53'3")	0.33	max 14 cm, most fit
16.23-16.84 (53'3"-55'3")	0.33	max 9 cm, no fits, some rubble
16.84-17.12 (55'3"-56'2")	0.16	max 5 cm, all rubble
17.12-17.27 (56'2"-56'8")	0.10	max 8 cm
17.27-17.48 (56'8"-57'4")	0.08	all rubble
17.48-18.14 (57'4"-59'½')	0.50	max 9 cm, no fits; 17.48-17.83 m - 5 pieces 5-9 cm each, rubble below
18.14-18.75 (59'½'-61'½')	0.61	max 12 cm, most fit
18.75-19.20 (61'½'-63')	0.28	max 8 cm, no fits
19.20-20.42 (63'-67')	0.90	max 9 cm; 19.20-19.26 m - small rubble, 19.26-19.40 m - two 7-cm pieces, 19.40-19.81 m - all fit, 19.81-20.00 m - rubble, 20.00-20.10 m - one piece
20.42-20.73 (67'-68')	0.25	max 9 cm, 20.42-20.51 m - mostly rubble, 20.51-20.67 m - all fit
	4.22	

DRILL RUNS FOR DRILLHOLE 70-5 (CONT.)

Run	Recovery (m)	Character
Box 3 20.73-27.05 m (68'-88'9") H.S. Bostock C.L.N. 4200 (000744), Section 24		
20.73-21.34 (68'-70')	0.29	max 17 cm for single piece, two fitting pieces with some rubble from fracture at low angle to core axis
21.34-22.71 (70'-74½')	1.37	max 27 cm, all fit except rubble 21.34-21.41 m and 22.34-22.39 m
22.71-23.16 (74½'-76')	0.22	max 9 cm, all angular rubble which probably could be fitted
23.16-23.47 (76'-77')	0.14	max 5 cm, all angular rubble
23.47-23.62 (77'-77½')	0.05	all angular rubble
23.62-24.38 (77½'-80')	0.75	max 12 cm, 23.62-24.32 m - most fit, rubble below
24.38-24.84 (80'-81½')	0.32	max 16 cm, 24.38-24.62 m - all fit, balance rubble
24.84-25.53 (81½'-83'9")	0.25	max 6 cm, all rubble
25.53-25.83 (83'9"-84'9")	0.25	max 11 cm, large angular pieces that probably could be fitted
25.83-26.44 (84'9"-86'9")	0.32	max 12 cm, no fits
26.44-27.51 (86'9"-90'3")	1.02	max 25 cm, 26.44-27.11 m - all fit, angular rubble below that probably could be fitted
	4.98	
Box 4 27.05-33.07 m (88'9"-108½') H.S. Bostock C.L.N. 4201 (000745), Section 24		
27.51-28.30 (90'3"-92'10")	0.42	max 14 cm for single piece, almost all angular rubble that could be fitted
28.30-28.88 (92'10"-94'9")	0.30	max 6 cm, no fits
28.88-29.29 (94'9"-96'1")	0.25	max 7 cm, all angular rubble with no fits
29.29-29.74 (96'1"-97'7")	0.43	max 8 cm, all angular rubble with no fits
29.74-30.78 (97'7"-101')	0.89	max 18 cm, all fit except at 29.89 m
30.78-32.00 (101'-105')	0.99	max 16 cm, almost all fit except at 31.69 m
32.00-32.39 (105'-106'3")	0.30	max 10 cm, few fits but angular fragments probably could be fitted
32.39-33.07 (106'3"-108½')	0.62	max 18 cm, most fit
	4.20	
Box 5 33.07-39.32 m (108½'-129') H.S. Bostock C.L.N. 4202 (000746), Section 24		
33.07-33.38 (108½'-109½')	0.21	max 13 cm for single piece, all fit
33.38-34.06 (109½'-111'9")	0.69	max 13 cm, all fit
34.06-34.39 (111'9"-112'10")	0.56	max 13 cm, all fit
34.39-35.81 (112'10"-117½')	1.25	max 18 cm, all fit
35.81-36.88 (117½'-121')	0.86	max 14 cm, all fit
36.88-37.34 (121'-122½')	0.49	max 20 cm, all fit
37.34-38.56 (122½'-126½')	1.27	max 21 cm, all fit
38.56-39.01 (126½'-128')	0.23	max 10 cm, no fits - 9 and 10-cm pieces at top and bottom with rubble between
39.01-39.32 (128'-129')	0.17	max 11 cm, no fits - all rubble except one 11-cm piece
	5.73	

DRILL RUNS FOR DRILLHOLE 70-5 (CONT.)

Run	Recovery (m)	Character
<u>Box 6 39.32-48.77 m (129'-160'*)</u> H.S. Bostock C.L.N. 4203 (000747), Section 24		
39.32-39.52	(129'-129'8")	0.10 all rubble
39.52-40.23	(129'8"-132')	0.37 max 16 cm for single piece; 39.52-39.60 m - angular rubble, 39.60-39.89 m - all fit
40.23-41.30	(132'-135½')	0.62 max 25 cm, all fit
41.30-42.21	(135½'-138½')	0.55 max 10 cm, no fits
42.21-43.74	(138½'-143½')	0.05 max 5 cm, no fits, all rounded rubble
43.74-44.20	(143½'-145')	0.18 one 9 cm piece at bottom, rest rubble
44.20-44.42	(145'-145'9")	0.10 all rubble
44.42-44.60	(145'9"-146'4")	0.10 max 6 cm, no fits, mostly rubble
44.60-44.75	(146'4"-146'10")	0.14 max 8 cm, no fits, mostly rubble
44.75-44.91	(146'10"-147'4")	0.12 max 4 cm, no fits
44.91-45.06	(147'4"-147'10")	0.09 one 5 cm piece at bottom, rest rubble
45.06-45.26	(147'10"-148½')	0.14 max 6 cm at bottom; 45.06-45.10 m - rubble, rest fit
45.26-45.64	(148½'-149'9")	0.15 max 6 cm, no fits, all angular rubble
45.64-45.95	(149'9"-150'9")	0.15 all rounded rubble
45.95-46.48	(150'9"-152½')	0.15 max 5 cm, all rubble
46.48-46.94	(152½'-154')	0.15 one 10-cm piece at top, rest rubble
46.94-48.46	(154'-159')	0.11 all rounded rubble
48.46-48.77**	(159'-160'**)	0.13 all rounded rubble

3.40

Boxes 7, 8, and 9 48.77-73.61 m (160'-241½') H.S. Bostock C.L.N. 4204 (000748), 4205 (000749), 4206 (000750), Section 24

These three boxes were discarded some time ago because core in them was less than 10% of what was drilled, and the footage markers were no longer in their correct positions.

<u>Box 10 73.61-80.01 m (241½'-262½')</u> H.S. Bostock C.L.N. 4207 (000751), Section 24		
73.61-74.22	(241½'-243½')	0.57 previously split; recovery obtained by spreading remaining half along core box, max 10 cm for single piece
74.22-75.82	(243½'-248'9")	1.70 previously split, max 11 cm
75.82-76.20	(248'9"-250')	0.60 previously split, max 10 cm
76.20-77.77	(250'-255'2")	1.67 previously split, max 13 cm
77.77-79.37	(255'2"-260'5")	1.29 previously split, max 9 cm, 78.92-79.06 m - rubble

5.83

* Marked 161' on box but Box 7 is missing so footage cannot be checked.

** No marker at 160': end of Box 6 with Box 7 missing.

DRILL RUNS FOR DRILLHOLE 70-5 (CONT.)

Run	Recovery (m)	Character
<u>Box 11 80.01-86.89 m (262½'-285'1") H.S. Bostock C.L.N. 4208 (000752), Section 24</u>		
79.37-80.98 (260'5"-265'8")	0.93	79.37-79.68 m - not split, rest previously split, max 11 cm for single piece
80.98-82.50 (265'8"-270'8")	1.24	previously split, max 13 cm
82.50-83.53 (270'8"-274'½")	0.83	previously split, max 7 cm
83.53-85.19 (274'½"-279½')	1.30	previously split, max 9 cm
85.19-86.18 (279½'-282'9")	1.16	previously split, max 10 cm
86.18-86.89 (282'9"-285'1")	0.81	previously split, max 11 cm
	6.27	
<u>Box 12 86.89-94.87 m (285'1"-311¼') H.S. Bostock C.L.N. 4209 (000753), Section 24</u>		
86.89-88.49 (285'1"-290'4")	1.66	previously split; recovery obtained by spreading remaining half along core box, max 10 cm for single piece
88.49-90.04 (290'4"-295'5")	1.12	previously split, max 12 cm, 89.38-89.61 m - rubble
90.04-91.64 (295'5"-300'8")	0.70	previously split, max 10 cm, 90.04-90.50 m - reasonable pieces, balance rubble
91.64-92.30 (300'8"-302'10")	0.40	previously split, all rubble
92.30-92.86 (302'10"-304'8")	0.40	previously split, 92.30-92.54 m - reasonable pieces, max 10 cm, rest rubble
92.86-94.03 (304'8"-308½')	0.53	previously split, max 6 cm, mostly rubble
	4.81	
<u>Box 13 94.87-100.58 m (311¼'-330') H.S. Bostock C.L.N. 4210 (000754), Section 24</u>		
94.03-95.55 (308½'-313½')	0.42	previously split: recovery obtained by spreading remaining half along core box, max 9 cm for single piece, almost all rubble
95.55-96.19 (313½'-315'7")	0.55	previously split, max 7 cm, some reasonable pieces, about half rubble
96.19-97.38 (315'7"-319½')	0.78	previously split, max 8 cm
97.38-97.84 (319½'-321')	0.35	previously split, max 7 cm, mostly rubble
97.84-98.15 (321'-322')	0.45	previously split, max 7 cm
98.15-98.45 (322'-323')	0.25	previously split, max 8 cm
98.45-99.06 (323'-325')	0.47	previously split, max 11 cm
99.06-99.82 (325'-327½')	0.50	previously split, max 9 cm
99.82-100.58 (327½'-330')	0.75	previously split, max 7 cm, mostly rubble
	4.52	

DRILL RUNS FOR DRILLHOLE 70-5 (CONT.)

Run	Recovery (m)	Character
<u>Box 14 100.58-108.51 m (330'-356') H.S. Bostock C.L.N. 4211 (000755), Section 24</u>		
100.58-101.04 (330'-331½')	0.35	previously split: recovery obtained by spreading remaining half along core box, max 9 cm for single piece, mostly rubble
101.04-102.03 (331½'-334'9")	1.01	previously split, max 10 cm
102.03-102.72 (334'9"-337')	0.72	previously split, max 10 cm, all reasonable pieces - no rubble
102.72-103.94 (337'-341')	0.45	previously split, max 8 cm
103.94-105.16 (341'-345')	0.40	previously split, max 8 cm
105.16-105.77 (345'-347')	0.38	previously split, max 6 cm, mostly rubble
105.77-106.38 (347'-349')	0.60	previously split, max 9 cm, mostly rubble
106.38-107.14 (349'-351½')	0.58	previously split, max 7 cm
107.14-108.51 (351½'-356')	0.30	previously split, max 8 cm
	4.79	
<u>Box 15 108.51-114.00 m (356'-374') H.S. Bostock C.L.N. 4212 (000756), Section 24</u>		
108.51-108.81 (356'-357')	0.30	previously split: recovery obtained by spreading remaining half along core box; max 7 cm for single piece
108.81-109.73 (357'-360')	0.66	previously split, max 7 cm
109.73-110.19 (360'-361½')	0.45	previously split, max 10 cm
110.19-110.72 (361½'-363¼')	0.40	previously split, max 8 cm
110.72-111.40 (363¼'-365½')	0.50	previously split, max 7 cm
111.40-112.47 (365½'-369')	1.08	previously split, max 14 cm
112.47-113.84 (369'-373½')	1.33	previously split, max 10 cm
	4.72	
<u>Box 16 114.00-122.99 m (374'-403½') H.S. Bostock C.L.N. 4213 (000757), Section 24</u>		
113.84-115.21 (373½'-378')	1.04	previously split: recovery obtained by spreading remaining half along core box, max 11 cm for single piece
115.21-115.67 (378'-379½')	0.40	previously split, max 6 cm
115.67-117.14 (379½'-384'4")	1.52	previously split, max 12 cm
117.14-118.26 (384'4"-388')	0.90	previously split, max 12 cm
118.26-119.18 (388'-391')	0.30	previously split, all rubble
119.18-119.49 (391'-392'½")	0.08	previously split, all rubble
119.49-120.40 (392'½"-395')	0.19	previously split, all rubble except one 8-cm piece
120.40-121.01 (395'-397')	0.13	previously split, all rubble except one 6-cm piece
121.01-121.46 (397'-398½')	0.21	previously split, all rubble
121.46-121.92 (398½'-400')	0.24	previously split, all rubble
121.92-122.48 (400'-401'10")	0.09	previously split, all rubble
122.48-122.99 (401'10"-403½')	0.24	previously split, max 6 cm, balance rubble
	5.34	

DRILL RUNS FOR DRILLHOLE 70-5 (CONT.)

Run	Recovery (m)	Character
<u>Box 17 122.99-128.63 m (403½'-422')</u> H.S. Bostock C.L.N. 4214 (000758), Section 24		
122.99-123.62 (403½'-405'7")	0.60	max 16 cm for single piece, most fit but lack of fits at 123.14 and 123.46 m suggests the possibility of uncertainty of order of core in box
123.62-124.97 (405'7"-410')	1.25	max 18 cm, all fit except at 124.22 m
124.97-125.43 (410'-411½')	0.45	max 14 cm, no fits
125.43-125.93 (411½'-413'2")	0.40	max 18 cm, few fits - rubble at top
125.93-127.20 (413'2"-417'4")	1.17	max 19 cm, all fit
127.20-128.27 (417'4"-420'10")	0.75	max 19 cm; 127.20-127.84 m - all fit, rubble below
	4.62	
<u>Box 18 128.63-133.81 m (422'-439')</u> H.S. Bostock C.L.N. 4215 (000759), Section 24		
128.27-129.08 (420'10"-423½')	0.50	max 7 cm for single piece, no fits, all rubble
129.08-129.84 (423½'-426')	0.60	max 10 cm, no fits, mostly angular rubble
129.84-131.06 (426'-430')	1.20	max 10 cm, no fits, angular rubble with many pieces to 7-8 cm
131.06-131.22 (430'-430½')	0.08	all rubble
131.22-131.98 (430½'-433')	0.75	max 16 cm, none fitted but relatively large angular fragments probably could be fitted
131.98-132.13 (433'-433½')	0.03	all rubble
132.13-132.44 (433½'-434½')	0.42	max 20 cm, all fit
132.44-132.94 (434½'-436'2")	0.27	max 6 cm, few fits
132.94-133.81 (436'2"-439')	0.90	max 8 cm, some fits in upper part; gabbroic lower part - all fit
	4.75	
<u>Box 19 133.81-139.83 m (439'-458'9")</u> H.S. Bostock C.L.N. 4216 (000760), Section 24		
133.81-134.42 (439'-441')	0.89	max 15 cm for single piece, rounded at top, rest fit except 134.55-134.70 m
134.42-135.51 (441'-444'7")	0.84	max 19 cm, 134.42-134.52 m - angular fragments with no fits, rest nearly all fit
135.51-136.25 (444'7"-447')	0.86	max 21 cm, angular pieces of good size mostly do not fit; 135.75-136.04 m - all fit
136.25-137.85 (447'-452¼')	1.57	max 17 cm, all fit except at 136.89 m
137.85-139.50 (452¼'-457'8")	1.57	max 31 cm, all fit
	5.73	

DRILL RUNS FOR DRILLHOLE 70-5 (CONT.)

Run	Recovery (m)	Character
Box 20 139.83-146.15 m (458'9"-479½')		H.S. Bostock C.L.N. 4217 (000761), Section 24
139.50-140.89 (457'8"-462¼')	1.42	32 cm for single piece, all fit
140.89-141.12 (462¼'-463')	0.30	max 12 cm, all fit
141.12-142.19 (463'-466½')	0.93	max 14 cm, 141.12-141.62 m - all fit, 141.62-141.81 m - angular pieces without fits, 141.81-142.02 m - all fit
142.19-142.95 (466½'-469')	0.70	max 16 cm, 142.19 m - ground end, 142.19-142.44 m - all fit, 142.44-142.48 m - angular fragments, 142.48-142.84 m - all fit, 142.84-142.89 m - angular fragments
142.95-143.71 (469'-471½')	0.45	max 13 cm, mostly angular fragments, only one 7-cm piece of complete core
143.71-144.32 (471½'-473½')	0.32	all angular fragments to max 5½ cm, no fits
144.32-144.81 (473½'-475'1")	0.32	max 20 cm, almost all fit except at top and bottom
144.81-145.62 (475'1"-477'9")	0.84	max 30 cm, 144.81-145.14 m - large angular fragments that probably can be fitted, below - 2 pieces that fit
145.62-146.15 (477'9"-479½')	0.39	max 16 cm, few fits - mostly angular fragments that could be fitted
	5.67	

Box 21 146.15-152.70 m (479½'-501')		H.S. Bostock C.L.N. 4218 (000762), Section 24
146.15-146.46 (479½'-480½')	0.20	max 14 cm for single piece, large angular fragments with no fits
146.46-147.37 (480½'-483½')	0.45	angular fragments 1-9 cm in size with no fits
147.37-148.03 (483½'-485'8")	0.20	angular fragments ½-10 cm in size with no fits
148.03-148.59 (485'8"-487½')	0.20	max 12 cm, angular fragments with no fits
148.59-149.05 (487½'-489')	0.35	max 18 cm, all fit
149.05-149.43 (489'-490¼')	0.20	max 6 cm, all rubble with no fits
149.43-150.27 (490¼'-493')	0.53	max 14 cm, angular fragments with few fits
150.27-150.95 (493'-495¼')	0.82	max 36 cm, 150.27-150.29 m - no fits, rest all fit
150.95-151.99 (495¼'-498'8")	1.12	max 25 cm, all fit
151.99-152.30 (498'8"-499'8")	0.30	max 8 cm, angular fragments with no fits
152.30-152.60 (499'8"-500'8")	0.28	max 7 cm, angular fragments with no fits
152.60-152.70 (500'8"-501')	0.18	max 7½ cm, angular fragments with no fits
	4.83	

124.81* (409½'*) 89.21

Recovery = $\frac{89.21}{124.81} \times 100 = 71.5\%*$ or $\frac{89.21}{149.65} \times 100 = 59.6\%$ if Boxes 7, 8, and 9 are included with zero recovery each.

* Excluding 24.84 m (81½') for core in missing Boxes 7, 8, and 9.