

# DRILL RUNS FOR DRILLHOLE 70-4

Run	Recovery (m)	Character
<u>Box 1 1.83-5.49 m (6'-18')</u> H.S. Bostock Core Library Number 4182 (000726), Section 3C		
1.83-2.44 (6'-8')	0.22	previously sampled, less than half core remaining, recovery obtained by spreading core along core box, all rubble
2.44-3.35 (8'-11')	0.70	previously split, recovery obtained by spreading remaining half along core box, max 11 cm for single piece, rounded rubble in top half, good lengths below
3.35-3.51 (11'-11½')	0.04	previously sampled, all rubble
3.51-3.96 (11½'-13')	0.02	previously sampled, all rubble
3.96-4.57 (13'-15')	0.20	previously split, max 3 cm
4.57-5.79 (15'-19')	1.20	previously split, max 10 cm
	2.38	
<u>Box 2 5.49-8.23 m (18'-27')</u> H.S. Bostock C.L.N. 4183 (000727), Section 3C		
5.79-6.25 (19'-20½')	0.45	previously split, recovery obtained by spreading remaining half along core box, max 8 cm for single piece
6.25-6.40 (20½'-21')	0.15	previously split, max 5 cm
6.40-7.01 (21'-23')	0.60	previously split, max 8 cm
7.01-8.53 (23'-28')	1.52	previously split, max 11 cm
	2.72	
<u>Box 3 8.23-13.72 m (27'-45')</u> H.S. Bostock C.L.N. 4184 (000728), Section 3C		
8.53-10.21 (28'-33½')	0.68	previously split, recovery obtained by spreading remaining half along core box, max 10 cm for single piece; 8.53-8.90 m - good core; rounded and angular rubble below
10.21-10.52 (33½'-34½')	0.20	previously split, max 11 cm, small angular fragments in upper part
10.52-10.97 (34½'-36')	0.28	previously split, max 8½ cm
10.97-11.28 (36'-37')	0.17	previously split, all angular fragments to 2 cm max
11.28-11.73 (37'-38½')	0.40	previously split, max 5 cm
11.73-12.19 (38½'-40')	0.20	previously split, max 5 cm
12.19-13.26 (40'-43½')	0.20	previously split, all rounded rubble
13.26-13.87 (43½'-45½')	0.60	previously split, max 10 cm, all good lengths
	2.73	

# DRILL RUNS FOR DRILLHOLE 70-4 (CONT.)

Run	Recovery (m)	Character
<u>Box 4 13.72-19.51 m (45'-64')</u> H.S. Bostock C.L.N. 4185 (000729), Section 3C		
13.87-14.48 (45½'-47½')	0.60	previously split, recovery obtained by spreading remaining half along core box, max 9½ cm for single piece
14.48-15.54 (47½'-51')	0.76	previously split, max 10 cm
15.54-16.31 (51'-53½')	0.50	previously split, max 10 cm
16.31-16.76 (53½'-55')	0.15	previously split, max 6 cm
16.76-17.07 (55'-56')	0.36	previously split, max 8 cm
17.07-17.83 (56'-58½')	0.62	previously split, max 8 cm
17.83-19.35 (58½'-63½')	1.10	previously split, max 11 cm
	4.09	
<u>Box 5 19.51-27.43 m (64'-90')</u> H.S. Bostock C.L.N. 4186 (000730), Section 3C		
19.35-20.27 (63½'-66½')	0.41	previously split, recovery obtained by spreading remaining half along core box, max 8 cm for single piece
20.27-20.42 (66½'-67')	0.38	previously split, max 10 cm
20.42-20.73 (67'-68')	0.14	previously split, max 11 cm
20.73-21.34 (68'-70')	0.66	previously split, max 9 cm
21.34-21.95 (70'-72')	0.40	previously split, max 10 cm
21.95-22.40 (72'-73½')	0.22	previously split, max 6 cm
22.40-23.47 (73½'-77')	0.44	previously split, max 7 cm
23.47-24.23 (77'-79½')	0.42	previously split, max 4½ cm, mostly rubble
24.23-25.45 (79½'-83½')	0.20	previously split, max 5 cm, mostly rubble
25.45-26.21 (83½'-86')	0.46	previously split, max 5 cm, mostly rubble
26.21-27.13 (86'-89')	0.50	previously split, max 8½ cm, mostly rubble
27.13-27.43 (89'-90')	0.20	previously split, max 5 cm, mostly rubble
	4.43	
<u>Box 6 27.43-34.44 m (90'-113')</u> H.S. Bostock C.L.N. 4187 (000731), Section 3C		
27.43-28.19 (90'-92½')	0.61	previously split, recovery obtained by spreading remaining half along core box, max 6 cm for single piece
29.19-28.96 (92½'-95')	0.42	previously split, max 8 cm, mostly rubble
28.96-29.87 (95'-98')	0.38	previously split, max 7 cm, mostly rubble
29.87-31.09 (98'-102')	0.50	previously split, max 9 cm
31.09-32.00 (102'-105')	0.68	previously split, max 10 cm, 31.09-31.20 m - all rubble, below mostly good lengths
32.00-32.16 (105'-105½')	0.15	previously split, max 10 cm
32.16-32.46 (105½'-106½')	0.30	previously split, max 8 cm
32.46-34.29 (106½'-112½')	1.20	previously split, max 12 cm, mostly good lengths
	4.24	

# DRILL RUNS FOR DRILLHOLE 70-4 (CONT.)

Run	Recovery (m)	Character
<b>Box 7 34.44-40.84 m (113'-134')</b> H.S. Bostock C.L.N. 4188 (000732), Section 3C		
34.29-35.81 (112½'-117½')	0.24	previously split, recovery obtained by spreading remaining half along core box, max 5 cm for single piece
35.81-36.27 (117½'-119')	0.24	previously split, max 9½ cm, rubble in centre third
36.27-36.42 (119'-119½')	0.11	previously split, all rubble
36.42-38.10 (119½'-125')	0.73	previously split, max 11 cm
38.10-38.40 (125'-126')	0.30	previously split, max 5 cm, mostly rubble
38.40-38.86 (126'-127½')	0.69	previously split, max 13 cm
38.86-39.32 (127½'-129')	0.29	previously split, max 5 cm, all rubble
39.32-39.62 (129'-130')	0.31	previously split, max 4 cm, mostly rounded rubble
39.62-39.78 (130'-130½')	0.13	previously split, max 8 cm, good lengths
39.78-40.69 (130½'-133½')	0.71	previously split, max 8 cm, partly rubble and partly good lengths
40.69-40.84 (133½'-134')	0.08	previously split, all rubble
	3.83	
<b>Box 8 40.84-49.38 m (134'-162')</b> H.S. Bostock C.L.N. 4189 (000733), Section 3C		
40.84-41.22 (134'-135½')	0.00	
41.22-41.76 (135½'-137')	0.64	previously split, recovery obtained by spreading remaining half along core box, max 10 cm for single piece, all good lengths
41.76-42.21 (134'-138½')	0.26	previously split, max 7 cm, good lengths
42.21-42.82 (138½'-140½')	0.01	previously split, all rubble
42.82-43.74 (140½'-143½')	0.16	previously split, max 7 cm, rubble in upper two-thirds, good lengths below
43.74-44.81 (143½'-147')	0.35	previously split, max 4 cm, mostly rounded rubble
44.81-45.11 (147'-148')	0.16	previously split, max 6 cm, good lengths
45.11-46.02 (148'-151')	0.24	previously split, max 8 cm, mostly good lengths
46.02-46.33 (151'-152')	0.10	previously split, all rounded rubble
46.33-46.79 (152'-153½')	0.14	previously split, max 6 cm, angular pieces
46.79-47.40 (153½'-155½')	0.60	previously split, max 10 cm, good lengths
47.40-49.38 (155½'-162')	1.62	previously split, max 11 cm, good lengths except rounded rubble in lowest 10 cm
	4.28	
<b>Box 9 49.38-56.69 m (162'-186')</b> H.S. Bostock C.L.N. 4190 (000734), Section 31		
49.38-49.83 (162'-163½')	0.12	previously split, recovery obtained by spreading remaining half along core box, max 5 cm for single piece, all rubble
49.83-53.34 (163½'-175'*)	2.86	previously split, max 11 cm
53.34-53.64 (175'-176')	0.11	previously split, all rubble
53.64-54.56 (176'-179')	0.27	previously split, max 9 cm
54.56-56.69 (179'-186')	1.39	previously split, max 15 cm
	4.75	

\* Footage markers missing between 163½' and 175'.

# DRILL RUNS FOR DRILLHOLE 70-4 (CONT.)

Run	Recovery (m)	Character
<u>Box 10 56.69-63.40m(186'-208')</u> H.S. Bostock C.L.N. 4191 (000735), Section 31		
56.69-58.37 (186'-191½')	1.33	previously split recovery obtained by spreading remaining half along core box, max 10 cm for single piece
58.37-59.13 (191½'-194')	0.66	previously split, max 11 cm
59.13-59.59 (194'-195½')	0.35	previously split, max 10 cm
59.59-60.20 (195½'-197½')	0.40	previously split, max 9 cm
60.20-60.81 (197½'-199½')	0.45	previously split, max 7 cm
60.81-61.42 (199½'-201½')	0.60	previously split, max 8 cm
61.42-62.03 (201½'-203½')	0.42	previously split, max 7 cm
62.03-62.79 (203½'-206')	0.70	previously split, max 11 cm
62.79-63.40 (206'-208'*)	0.60	previously split, max 10 cm
5.51		
<u>Box 11 63.40-83.21 m (208'-273')</u> H.S. Bostock C.L.N. 4192 (000736), Section 31		
This box was discarded some time ago because the core in it was less than 10% of what was drilled, and the footage markers were no longer in their correct positions.		
<u>Box 12 83.21-90.07 m (273'-295½')</u> H.S. Bostock C.L.N. 4193 (000737), Section 31		
83.21-83.67 (273'**-274½')	0.22	max 6 cm for single piece, no cylinder of complete core, rubble of rounded fragments with no fits
83.67-84.05 (274½'-275'9")	0.11	max 6 cm, no cylinder of complete core, rubble of rounded fragments, no fits
84.05-84.58 (275'9"-277½')	0.40	max 6 cm, no cylinder of complete core, all angular fragments, no fits
84.58-85.04 (277½'-279')	0.20	max 6 cm, no cylinder of complete core, all angular rubble, no fits
85.04-85.50 (279'-280½')	0.40	max 14 cm as nearly whole core cylinder, all angular fragments with few fits
85.50-85.95 (280½'-282')	0.40	max 10 cm, no cylinder of complete core, all angular fragments, no fits
85.95-86.41 (282'-283½')	0.32	max 10 cm as whole cylindrical core, about half fit, rest angular fragments
86.41-87.17 (283½'-286')	0.65	max 19 cm as whole cylindrical core, all fit except 86.81-86.89 m and at 87.01 m
87.17-87.93 (286'-288½')	0.50	max 14 cm as whole cylindrical core, 87.17-87.43 m - angular fragments and clay, fit below
87.93-88.24 (288½'-289½')	0.20	max 6½ cm as whole cylindrical core, all angular fragments with no fits
88.24-89.15 (289½'-292½')	0.91	max 20 cm, mostly cylindrical core, few fits, mostly angular fragments
89.15-89.69 (292½'-294¼')	0.36	max 8 cm, no cylinder of complete core, all angular fragments, no fits
89.69-90.07 (294¼'-295½')	0.33	max 10 cm, half cylindrical core, half fit, rest angular fragments
5.00		

\* No marker at 208': end of Box 10 with Box 11 missing.

\*\* No marker at 273': start of Box 12 with Box 11 missing.

# DRILL RUNS FOR DRILLHOLE 70-4 (CONT.)

Run	Recovery (m)	Character
<u>Box 13 90.07-97.13 m (295½'-318'8")</u> H.S. Bostock C.L.N. 4194 (000738), Section 31		
90.07-90.53 (295½'-297')	0.89	max 19 cm for single piece of cylindrical core, 90.07-90.39 m - all fit, below - angular fragments with no fits
90.53-91.14 (297'-299')	0.50	previously split, recovery obtained by spreading remaining half along core box, max 6 cm
91.14-92.05 (299'-302')	0.90	previously split, max 14 cm
92.05-92.35 (302'-303')	0.30	previously split, max 8 cm
92.35-92.96 (303'-305')	0.48	previously split, max 11 cm
92.96-93.42 (305'-306½')	0.35	previously split, max 9 cm
93.42-94.18 (306½'-309')	0.41	previously split, max 8 cm
94.18-94.59 (309'-310'4")	0.20	previously split, max 11 cm
94.59-95.71 (310'4"-314")	0.36	previously split, max 8 cm
95.71-96.82 (314'-317'8")	0.76	max 17 cm as whole cylindrical core; 95.71-96.16 m - large angular fragments with no fits, 96.16-96.47 m - two pieces with no fits, ground end at 96.30 m
96.82-97.13 (317'8"-318'8")	0.29	max 9 cm, most fit
	5.44	
<u>Box 14 97.13-107.42 m (318'8"-352'5")</u> H.S. Bostock C.L.N. 4195 (000739), Section 31		
97.13-97.59 (318'8"-320'2")	0.33	max 8 cm for single piece of cylindrical core, max 10 cm not as cylinder
97.59-98.60 (320'2"-323½')	0.79	max 17 cm as cylindrical core, all fit except for angular fragments 97.59-97.66 m and at 98.09 m
98.60-99.67 (323½'-327')	0.66	max 16 cm as cylindrical core; 98.60-98.76 m - one piece; 98.83-99.22 m - all fit; rest - angular fragments with no fits
99.67-100.20 (327'-328'9")	0.28	max 11 cm as cylindrical core, mostly angular and drill-rounded fragments, no fits
100.20-100.71 (328'9"-330'5")	0.24	max 7 cm as cylindrical core, all angular fragments, no fits
100.71-101.19 (330'5"-332')	0.15	max 6 cm as cylindrical core, all angular fragments, no fits
101.19-103.35 (332'-339'1")	0.24	all rounded fragments, no fits
103.35-104.70 (339'1"-342½')	0.58	max 10 cm as cylindrical core, all rounded fragments except 10-cm piece at bottom, no fits
104.70-105.56 (343½'-346'4")	0.16	max 7 cm, no cylinder of complete core, all angular fragments, no fits
105.56-106.07 (346'4"-348')	0.45	max 9 cm as cylindrical core, max 11 cm not as cylindrical core, all angular fragments
106.07-107.42 (348'-352'5")	0.55	max 14 cm as cylindrical core, angular fragments, no fits
	4.43	

DRILL RUNS FOR DRILLHOLE 70-4 (CONT.)

Run	Recovery (m)	Character
Box 15 107.42-114.00 m (352'5"-374')		H.S. Bostock C.L.N. 4196 (000740), Section 31
107.42-107.75 (352'5"-353½')	0.29	max 13 cm for single piece not cylindrical, all large angular fragments, no fits
107.75-108.25 (353½'-355'2")	0.43	max 10 cm as cylindrical core, most fit
108.25-108.51 (355'2"-356')	0.17	max 10 cm not as cylindrical core, all angular fragments, no fits
108.51-108.97 (356'-357½')	0.17	max 6 cm not as cylindrical core, all angular fragments, no fits
108.97-109.42 (357½'-359')	0.26	max 6 cm as cylindrical core, angular and rounded fragments, no fits
109.42-109.73 (359'-360')	0.12	max 7 cm as cylindrical core, all angular fragments, no fits
109.73-110.03 (360'-361')	0.16	max 11 cm not as cylindrical core, all angular fragments, no fits
110.03-110.79 (361'-363½')	0.51	max 10 cm as cylindrical core; 110.03-110.52 m - all fit; rest - no fits
110.79-111.18 (363½'-364'9")	0.16	max 9 cm as cylindrical core, angular fragments, no fits
111.18-111.76 (364'9"-366'8")	0.71	max 14 cm as cylindrical core; 111.40-111.78 m - all fit; rest - angular fragments with no fits
111.76-111.91 (366'8"-367'2")	0.04	max 4 cm not as cylindrical core
111.91-112.06 (367'2"-367'8")	0.13	max 11 cm as cylindrical core, no fits
112.06-112.32 (367'8"-368½')	0.28	max 11 cm as cylindrical core; 112.06-112.28 - all fit; no fits below
112.32-113.28 (368½'-371'8")	0.48	max 8 cm as cylindrical core, one piece split, rest fit
113.28-113.77 (371'8"-373¼')	0.13	max 4 cm not as cylindrical core, all angular and rounded fragments, no fits
	4.04	

# DRILL RUNS FOR DRILLHOLE 70-4 (CONT.)

Run	Recovery (m)	Character
Box 16 114.00-122.12 m (374'-400'8")	H.S. Bostock C.L.N. 4197 (000741), Section 31	
113.77-114.81 (373¼'-376'8")	0.54	max 15 cm for single piece as cylindrical core; 113.77-113.92 m - all fit; below - angular fragments with no fits
114.81-115.24 (376'8"-378'1")	0.16	all angular fragments to 5 cm, no fits
115.24-115.47 (378'1"-378'10")	0.16	max 6 cm as cylindrical core, few fits
115.47-116.74 (378'10"-383')	0.36	max 11 cm as cylindrical core; 115.47-115.49 m - rubble; 115.49-115.92 m - all fit; 115.92-116.03 m - angular fragments with no fits
116.74-117.42 (383'-385¼')	0.13	max 5 cm not as cylindrical core, all angular and rounded fragments, no fits
117.42-117.55 (385¼'-385'8")	0.13	max 5 cm not as cylindrical core, all rounded fragments, no fits
117.55-118.06 (385'8"-387'4")	0.12	max 6 cm as cylindrical core, mostly angular fragments, no fits
118.06-118.57 (387'4"-389')	0.15	max 5 cm not as cylindrical core, all angular and rounded fragments, no fits
118.57-118.95 (389'-390¼')	0.17	max 5 cm not as cylindrical core, all angular fragments, no fits
118.95-119.25 (390¼'-391¼')	0.18	max 6 cm as cylindrical core, mostly angular fragments with no fits
119.25-119.74 (391¼'-392'10")	0.13	max 5 cm not as cylindrical core
119.74-120.57 (392'10"-395'7")	0.49	max 8 cm as cylindrical core; 119.79-119.93 m and 120.06-120.23 m - all fit; rest - angular rubble with no fits
120.57-121.23 (395'7"-397'9")	0.42	max 20 cm as cylindrical core; 120.57-120.91 m all fit; below - no fits
121.23-122.12 (397'9"-400'8")	0.53	previously split recovery obtained by spreading remaining half along core box, max 12 cm
	3.67	

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100.48\* (329'8"\*) 61.54

Recovery =  $\frac{61.54}{100.48} \times 100 = 61.2\%*$  or  $\frac{61.54}{120.29} \times 100 = 51.2\%$  if Box 11 is included with zero recovery

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\* Excluding 19.81 m (65') for core in missing Box 11.