

2018-73
IPEC
deck book
Bongos

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110 50	BO	51	02	89	127	51 67 0449
140	EN	51	02	89	127	51 66 0453
11418 F	BE	51	09	26	127	50 21 1953
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C-10 22	BE	51	11	77	129	03 46 2004
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2. STATION	VD	START	FINISH	LO	T
11536	1109	26750	26980	5	
11043	140	27315	27620		02 87 51 80
				0	02 87 51 57
				0506	
			0508	0286	5154
11418-F	65	28515			2002
	51 09	23	127 50 21		
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	65	29100	30570		
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	51 09 22	127	50 19		20 14
	51 09 22	127	50 19		20 17
	135				1
11291-F	(125)	30575	31230		
	51 05 42	127	59 93		0215
	51 05 42	127	59 99		0219
	51 05 42	128	00 02		0221
10769-F		31365	32380		
144/135	50 58 61	129	12 35		1702
	50 58 65	129	12 32		1706
	50 58 67	129	12 30		1708

11522-F

32380 33455

147/135

10°C

NET 23

51 11 79

129 03 53

2015

51 11 81

129 03 57

2018

51 11 83

129 03 63

2022

11146F

33455 - 34634

NET 27

51 03 90

129 00 42

0054

142/130

51 03 93

129 00 45

0100

51 03 93

129 00 45

0104

10404F

34634 45300 35300

NET 31

50 52 23

128 30 44

1703

84/75

50 52 19

128 30 41

1708

50 52 18

128 30 40

1709

10534-F

35300

35590

NET 35

50 53 71

126 22 98

2034

50 53 73

126 22 91

2036

50 53 75

126 22 82

2039

10701F

35590

36055

NET 39

50 56 25

128 33 81

0115

61/50

50 56 26

128 33 82

0118

50 56 24

128 33 82

0119

Rite in the Rain

STATION ~~D~~ ~~5500~~ ~~FINISH~~ ~~2'~~ T

11146	51 03 88	129 08 37	0045
CTD 26	51 03 88	129 08 39	0048
14130	51 03 89	129 08 41	0052

10404-F	50 52 27	128 38 47	1656
CTD 30	50 52 27	128 38 46	1657
83/75	50 52 25	128 38 45	1701

10534-F			
CTD 34	50 53 63	128 23 28	2028
47/35	50 53 66	128 23 19	2029
	50 53 67	128 23 14	2030

10781-F	50 56 53	128 33 71	0108
CTD 38	50 56 50	128 33 72	0109
61/50	50 56 48	128 33 75	0112

10/7/10

9900-F	50 43 53	128 52 91	1650
CTD 42	50 43 55	128 52 97	1654
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10148-F			
CTD 46	50 48 00	128 58 77	1937
105/95	50 48 02	128 58 77	1938
	50 48 02	128 58 77	1941

STA	D	START	FINISH	∠°	TIME	5
9900 F		36055	36375			
NET 43	50	43 58	128 52 99		1701	
152/140	50	43 60	128 52 99		1704	
	50	43 61	128 52 99		1706	
		36375	38190			
10148 F	50	48 17	128 58 67		1946	
NET 47	50	48 17	128 58 67		1948	
105/95	50	48 19	128 58 67		1949	
		38190	39230	30°	11/7/19	
91898	50	42 06	128 58 96		0020	
NET 51	50	42 11	128 58 85		0027	
206/200	50	42 13	128 58 78		0031	
11/7/18		39230				
9057 F		NO	RONGO			
NET 55						
4293		NO	RONGO			
10101		40230	40925			
NET 63	50	28 54	127 48 41		1804	
130/120	50	28 56	127 48 41		1807	
	50	28 58	127 48 41		1809	
10102		40925	41800			
NET 66	50	30 02	127 42 21		1931	
12/7/18	50	30 03	127 42 19		1934	
110/110	50	30 04	127 42 18		1935	Rite in the Rain

9898

CTD 50 50 42 01 128 59 09 0008

217/205 50 42 02 128 59 04 0013

50 42 05 128 58 96 0018

11/7/18

9037 50 27 62 128 11 58 1720

CTD 54 50 27 58 128 11 49 1724

94/75 50 27 57 128 11 43 1723

11/7/18

8293

CTD 57 50 14 01 127 52 47 2048

93/70 50 13 96 127 52 47 2051

50 13 95 127 52 45 2053

SVI 01

CTD 62 50 28 50 127 48 36 1755

142/130 50 28 58 127 48 37 1757

50 28 57 127 48 40 1801

SVI 02 50 29 99 127 42 26 1924

CTD 65 50 30 01 127 42 23 1926

12/7/10 50 30 02 127 42 21 1929

118/110

1V1 03

CTD 68 50 27 05 127 31 39 2119

12/7/18 50 27 04 127 31 36 2122

194/190 50 27 02 127 31 29 2126

4202

CTD 72 49 00 76 126 01 60 1656

14/7/18 49 00 77 126 01 57 1657

59/50 49 00 78 126 01 53 1659

3832

48 53 31 125 46 21 1950

CTD 76 48 53 29 125 46 17 1952

14/7/18 48 53 28 125 46 10 1955

106/95

3954

48 57 45 125 57 56 0023

CTD 80 48 57 44 125 57 55 0025

15/7/18 48 57 43 125 57 53 0027

53/45

4444 49 05 68 126 27 88 1658

CTD 84 49 05 66 126 27 85 1701

15/7/18 49 05 67 126 27 79 1704

130/120

8 STA

41800 43525

W1 03	50 27 01	127 31 25	2128
NET 69	50 27 00	127 31 20	2133
12/7/18	50 26 97	127 31 14	2136
195/180			

43525 43910

4202	49 00 78	126 01 45	1701
NET 73	49 00 78	126 01 45	1703
14/7/18	49 00 78	126 01 43	1706
52/40			

43910 44860

3832	48 53 55	125 46 19	2003
NET 77	48 53 51	125 46 11	2006
14/7/18	48 53 49	125 46 03	2011
108/100			

44860 45150

3954			
NET 81	48 57 42	125 57 51	0030
15/7/18	48 57 42	125 57 49	0031
54/45	48 57 41	125 57 48	0032

45425 46610

4444	49 05 65	126 27 75	1707
NET 85	49 05 64	126 27 68	1711
15/7/18	49 05 63	126 27 62	1715

4697	49 09 98	126 17 44	2105
CTD 88	49 09 97	126 17 43	2107
15/7/18	49 09 97	126 17 40	2109
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1033	48 18 88	125 44 75	1653
CTD 92	48 18 87	125 44 70	1656
16/7/18	48 18 85	125 44 66	1659
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1038	48 18 50	125 29 78	2039
CTD 96	48 18 46	125 29 71	2042
131/120	48 18 42	125 29 63	2046
15/7/18			

1709	48 17 73	125 43 25	0104
CTD 100	48 17 69	125 43 23	0108
16/7/18	48 17 64	125 43 18	0111
165/50			

VENT	DATE	BOTTOM DEPTH	WIRE OUT	TIME	LAT	LONG ¹¹
04	18 JUL 18	140	130	4:53 ^{PM}	48° 52.290	126° 16.144
05			30	4:58 ^{PM}	48° 52.287	126° 16.111
			Bot	5:00 ^{PM}	48° 52.259	126° 16.067
05	18 JUL 18	14		EN 5:01 ^{PM}	48° 52.249	126° 16.050
Flowmeter 51403 start						
Stop 52850						
18 July 19						
bottom 140m 130out BE 5:05pm 48° 52.86 126° 15.962						
SD 5:10pm 48° 52.126 126° 15.874						
Wire: 45° 20° EN 5:13pm 48° 52.077 126° 15.822						

Date	18 JUL	GPZ 107	Bottom	108	Wire out	100
BE	18:58	48°	48.016	126°	06.467	
SD	19:02	48°	48.021	126°	06.419	
HE	19:04	48°	48.041	126°	06.396	
IN	19:05	48°	48.043	126°	06.391	

Date	18 JUL	Borgo	108	Bottom	108	Wire out	100
ow	Start	52850	Flow stop	53790	Angle	10	
BE	19:09	48°	48.076	126°	06.352		
SD	19:12	48°	48.095	126°	06.314		
N	19:13	48°	48.103	126°	06.295		

Net tangled → re-done
 next page
 (contents flipped up and over) *Rite in the Rain*

12 Date: 18 Jul Event# 108 Range 108 Bottom 108 Wire out 100
 BE 19:23 48° 48.184 126° 06.175
 BO 19:27 48° 48.217 126° 06.133
 BOTTLE 19:
 EN 19:29 48° 48.224 126° 06.119
 Angle: 5
 53790 54640

Date: 18 July 2018 Event# 110 Range 110 Bottom 110 Wire out 100
 BE 20:55 48° 43.566 126° 03.718
 BO 20:57 48° 43.602 126° 03.654
 BOTTLE 21:00 48° 43.618 126° 03.624
 EN 21:00 48° 43.619 126° 03.614

Date: 18 July 2018 Range: 111 Bottom: 109 Wire out 100
 BE 21:05 48° 43.637 126° 03.526
 BO 21:11 48° 43.676 126° 03.408
 EN 21:13 48° 43.701 126° 03.362
 Flow start 54640 Flow stop: 55825 Angle 5

10
 Date: 19 July 2018 CTD: 116 Sta 3473 Bottom: 107 Wire out: 100
 BE 17:25 48° 46.300 125° 27.135
 BO 17:28 48° 46.219 125° 27.167
 BOTTLE 17:30 48° 46.152 125° 27.181
 EN 17:30 48° 46.143 125° 27.180
 Windy conditions.

Date 20 July 2018 ^(Block) Stn 3341 ^{Event #} 118 ^{Depth} 60 ^{Wire out} 503

BE	19:26	48 ° 44.032	125 ° 16.615
BO	19:27	48 ° 44.018	125 ° 16.615
BOTTLE	19:29	48 ° 43.994	125 ° 16.618
EN	19:29	48 ° 43.987	125 ° 16.616

*replaced cod end (flowmeter side) 253 orange tape

Date 21 July ^(Block) Stn 2720 ^{Event #} 120 ^{Depth} 120 ^{Wire out} 110

E	16:56	48 ° 33.497	125 ° 05.983
BE	16:59	48 ° 33.497	125 ° 06.007

BOTTLE (2) bottom closed (hiskin) so took out of
 EN water to reset in skin
 (1) brought back up part way on cast (went under
 flow stop Flow Stop Angle stop)

*spray nozzle for hose

Date 21 July ^(Block) Stn 2720 ^{Event #} 120 ^{Depth} 120 ^{Wire out} 110

BE	17:02	48 ° 33.590	125 ° 06.045
BO	17:04	48 ° 33.606	125 ° 06.095
BOTTLE	17:06	48 ° 33.617	125 ° 06.124
EN	17:08	48 ° 33.	125 ° 06.

Date 21 July ^(Block) Stn 2720 ^{Event #} 121 ^{Depth} 121 ^{Wire out} 110

BE	17:11	48 ° 33.642	125 ° 06.113
BO	17:15	48 ° 33.722	125 ° 06.053
EN	17:17	48 ° 33.754	125 ° 06.050

55826 end: 57335

*ask about wavy conditions
 total depth (200 ft)

Date 21 July ^{CTD} Event # 123? Depth 142 ^{51.2470} Wire out 132
 BE 19:06 48° 29.734 125° 07.252
 BO 19:09 48° 29.731 125° 07.199
 BOTLE 19:11 48° 29.731 125° 07.172
 EN 19:11 48° 29.737 125° 07.135

Flow Start ~~Flow Stop~~
 moved, risk to ~ 1m above CTD
 (CTD tripping 2m below surface) Angle

Date 21 July ^{Event} # 124 Depth 144 Wire out 134
 BE 19:15 48° 29.757 125° 07.051
 BO 19:19 48° 29.715 125° 07.007
 EN 19:21 48° 29.703 125° 06.940

Sta 2410 :

Flow Start 5739 Flow Stop 5886
 Condition: 4 Angle 5°

Date 22 July ^{Event} # 130 ^{CTD} # 5559 Depth 137 Wire out 125
 BE 16:59 49° 25.487 127° 00.486
 BO 17:01 49° 25.443 127° 00.422
 BOT 17:04 49° 25.400 127° 00.34
 EN 17:05 49° 25.396 127° 00.336

Flow Start ~~Flow Stop~~ Angle
 - changed out other cuddend (crack in it) - need to

Date 22 July 2008 ^{Event} # 131 Depth 135 Wire out 125
 BE 17:08 49° 25.439 127° 00.112
 BO 17:14 49° 25.366 127° 59.120
 EN 17:16 49° 25.405 127° 59.841

Conditions: 3 : ^{really} Wavy when deployed

Flow Start 58864 Flow Stop 61046 Angle

Date: 22 July 2018 Event #134 Depth 95 Wire out: 8515
 BC 19:59 49° 23.181 126° 47.356
 BO 20:00 49° 23.188 126° 47.323
 BOT 20:03 49° 23.194 126° 47.282
 EN 20:03 49° 23.195 126° 47.280

Flow start Flow stop
 Conditions → 3 (fairly weak) Angle

Date: 22 July Event #135 Depth 94 Wire out: 85
 BE 20:07 49° 23.232 126° 47.137
 BO 20:10 49° 23.245 126° 47.048
 EN 20:12 49° 23.256 126° 47.013

Flow start 61048 Flow stop 62235
 Conditions ~~3~~ & windy Angle ~15°

Date: 23 July 2018 Event #136 Depth 96 Wire out: 85
 BE 16:51 49° 43.179 127° 22.585
 BO 16:54 49° 43.188 127° 22.471
 BOT EN 16:55 49° 43.194 127° 22.457
 EN

Flow start didn't get Bot coordinates Flow stop Angle 15°

Date: 23 July Event #137 Depth 96 Wire out: 85
 E 16:59 49° 43.191 127° 22.306
 O 17:01 49° 43.140 127° 22.310
 N 17:03 49° 43.101 127° 22.322

RBE due to skip 81527° cond → 3
 Flow start 62234 Flow stop 64070 Angle 15°

16 Date: 23 July CTD Station: 6430
 Event #: 143 Depth: 122 Wire out: 11C
 BE 18:44 49° 41.124 127° 12.396
 BO 18:46 49° 41.099 127° 12.390
 BOTTLE 18:49 49° 41.062 127° 12.393
 EN 18:49 49° 41.057 127° 12.388

Conditions → 3

Date: 23 July CTD Station: 6430
 Event #: 144 Depth: 123 Wire out: 11C
 BE 18:53 49° 40.974 127° 12.343
 BO 18:56 49° 40.951 127° 12.245
 EN 18:59 49° 40.932 127° 12.104

Con = 3 Angle = $\sim 30^\circ - 45^\circ = 35^\circ$

Flow start: 61070 Flow End: 66266 Angle: 35

Condition

Date: 23 July CTD Station: 6308
 Event #: 146 Depth: 92 Wire out: 8C
 BE 20:28 49° 39.067 127° 02.787
 BO 20:30 49° 39.062 127° 02.757
 BOTTLE 20:32 49° 39.053 127° 02.769
 EN 20:32 49° 39.053 127° 02.768

Condition = 3

Bongo:

Sta. 6308

Date: 23 July Event #: 147 Depth: 92 Wire out: 8C
 BE 20:36 49° 39.040 127° 02.787
 BO 20:38 49° 39.013 127° 02.737
 EN 20:40 49° 38.992 127° 02.698

Conditions → 3

Flow start: 66266 Flow stop: 67429 Angle: 2

Date: 24 July CTD Event: 152 Station 4324 Depth: 75 Wire out: 65
 BE 16:53 49° 02.937 126° 12.070
 BO 16:54 49° 02.925 126° 12.066
 BOTLE 16:55 49° 02.916 126° 12.065
 EN 16:56 49° 02.914 126° 12.064

Conditions → 4.5 Station 4324

Date: July 24 Bongo Event: 153 Depth: 76 Wire out: 65
 17:00 49° 02.905 126° 12.046
 17:02 49° 02.899 126° 12.051
 17:03 49° 02.894 126° 12.050

Flow Start: 67430 Flow Stop: 68045 Angle: 30°

Date: July 24 CTD Event: 155 Station 3950 (Str.) Depth: 96 Wire out: 85
 BE 17:37 48° 56.452 126° 09.409
 BO 17:39 48° 56.463 126° 09.368
 BOT 17:41 48° 56.480 126° 09.321
 EN 17:41 48° 56.481 126° 09.312

Date: July 24 Bongo Event # 156 Conditions → 4.5 Depth: 94 Wire out: 85
 BE 17:44 48° 56.520 126° 09.213
 BO 17:47 48° 56.542 126° 09.118
 EN 17:48 48° 56.555 126° 09.065

Flow Start: 68045 Flow Stop: 69110 Angle: 30°

Rite in the Rain

Date: 24 July CTD event: 158 Station: 3702
 Depth: 76 Wire out: 65
 BE 20:12 48° 52.331 126° 01.908
 BO 20:14 48° 52.343 126° 01.872
 BOTTLE 20:15 48° 52.357 126° 01.834
 EN 20:16 48° 52.359 126° 01.822

conditions → 4

Date: 24 July CTD event: 159 Depth: 76 Wire out: 65
 BE 20:19 48° 52.370 126° 01.
 BO 20:22 48° 52.375 126° 01.6
 EN 20:24 48° 52.394 126° 01.6

Flow start: 69110 Flow stop: 70002 Angle: 0°

Station: 3201

Date: 25 July CTD event: 164 Depth: 119 Wire out: 110
 BE 16:49 48° 43.510 126° 05.757
 BO 16:52 48° 43.453 126° 05.747
 BOTTLE 16:54 48° 43.403 126° 05.739
 EN 16:54 48° 43.394 126° 05.730

Date: 25 July CTD event: 165 Depth: 118 Wire out: 110
 BE 16:59 48° 43.293 126° 05.650
 BO 17:02 48° 43.300 126° 05.511
 EN 17:05 48° 43.317 126° 05.354

Flow start: 69099 Flow stop: 71730 Angle: 20

conditions → 3

Linnea was here!

Date: 25 July 2018 MD event: 167 Depth: 102 WHP: 90
 BE 18:26 48 41.017 126 00.013
 BO 18:28 48 40.982 125 59.926
 BOT 18:29 48 40.942 125 59.878
 EN 18:29 48 40.933 125 59.866

conditions → 3

Date: 25 July 2018 MD event: 168 Depth: 102 WHP: 90
 BE 18:33 48 40.853 125 59.746
 BO 18:35 48 40.833 125 59.615
 EN 18:38 48 40.794 125 59.501

Flow start: 71932 Flow Stop: 73863 Angle: 20°

Station:

Date: 25 July 2018 MD event: 170 Depth: 123 WHP: 110
 BE 20:25 48 34.717 126 01.097
 BO 20:27 48 34.727 126 00.989
 BOT 20:29 48 34.733 126 00.934
 EN 20:29 48 34.735 126 00.920

Flow start: 73863 Flow stop: Angle:

cond → 4

Station:

Date: 25 July 2018 MD event: 171 Depth: 114 WHP: 100
 BE 20:32 48 34.733 126 00.829
 BO 20:36 48 34.749 126 00.749
 EN 20:38 48 34.753 126 00.684

Flow start: 73863 Flow Stop: 75055 Angle: 20

Rite in the Rain

20 Date: 26 July CTD event # 176 Station 2957 Wire out: 50
 BE 16:49 48° 38.833 125° 46.61
 BO 16:49 48° 38.828 125° 46.581
 BOT 16:51 48° 38.810 125° 46.528
 EN 16:53 48° 38.804 125° 46.516

Conditions = 4 (3)

Date: 26 Jul Bongo event: 177 Depth: 64 Wire out: 50
 BE 16:56 48° 38.753 125° 46.415
 BO 16:57 48° 38.738 125° 46.390
 EN 17:00 48° 38.698 125° 46.355
 Flow Start: 75056 Flow Stop: 75620 Angle: 10°

Station 2834

Date: 26 July CTD event: 179 Depth: 60 Wire out: 50
 BE 18:14 48° 36.146 125° 41.295
 BO 18:15 48° 36.145 125° 41.289
 BOT 18:17 48° 36.129 125° 41.250
 EN 18:17 48° 36.127 125° 41.243

Conditions = 3

Date: Bongo event: 180 Depth: 60 Wire out: 50
 BE 18:20 48° 36.117 125° 41.169
 BO 18:22 48° 36.099 125° 41.122
 EN 18:24 48° 36.097 125° 41.096
 EN 18: 48° 36. 125° 41.

Flow Start: 75619 Flow Stop: 76280 Angle: 10°

Date: July 26 CTD event: 182²⁷¹⁰ Depth: 66 wire out: 55.1
 BE 19:32 48° 33.905 125° 38.490
 BO 19:33 48° 33.907 125° 38.477
 BOT 19:34 48° 33.905 125° 38.470
 EN 19:34 48° 33.903 125° 38.465

Date: July 26 Bongo: 183 Depth: 66 wire out: 55m
 BE 19:38 48° 33.874 125° 38.443
 BO 19:40 48° 33.859 125° 38.435
 EN 19:41 48° 33.850 125° 38.431
 Flow start: 76279 Flow stop: 76804 Angle: 10
 conditions → 4

Date: CTD event: Depth: wire out:
 BE
 BO
 BOT
 EN

conditions →

Date: CTD event: Depth: wire out:
 BE
 BO
 EN
 Flow start: Flow stop: Angle:

Rite in the Rain

22 Date: 27 July ^{CTD} event: 188 ^{Station: 190} Depth: 66 ^{Wind} out: 55
 BE 16:54 48° 40.080 125° 27.211
 BO 16:56 48° 40.066 125° 27.208
 BOT 16:57 48° 40.034 125° 27.203
 EN 16:58 48° 40.031 125° 27.204
 Cond → 4

Date: 27 July ^{Bongo} event: 189 ^{Station: 191} Depth: 66 ^{Wind} out: 55
 BE 17:01 48° 39.976 125° 27.237
 BO 17:03 48° 39.929 125° 27.258
 EN 17:05 48° 39.912 125° 27.267
 Flow start 76805 Flow stop 77342 Angle: 20
 Tough

Date: 27 July ^{CTD} event: 191 ^{Station: 296} Depth: 133 ^{Wind} out: 120
 BE 18:41 48° 38.621 125° 35.821
 BO 18:44 48° 38.587 125° 35.808
 BOT 18:46 48° 38.557 125° 35.800
 EN 18:47 48° 38.554 125° 35.801
 Cond → 4

Date: 27 July ^{Bongo} event: 192 ^{Station: 296} Depth: 105 ^{Wind} out: 95
 BE 18:50 48° 38.510 125° 35.781
 BO 18:54 48° 38.451 125° 35.763
 EN 18:56 48° 38.428 125° 35.757
 Flow start 77342 Flow stop 78358 Angle: 20

leg slot

Date: 27 July ^{Station: 2950} ^{Wire: 155 23}
 BM: 20:07 48° 39.760 125° 38.625
 BO: 20:10 48° 39.715 125° 38.669
 BOT: 20:13 48° 39.676 125° 38.690
 EN: 20:14 48° 39.672 125° 38.693

Cond → 4

Date: 27 JULY ^{Range: 195} ^{Depth: 149} ^{Wire: 126}
 BE: 20:20 48° 39.644 125° 38.744
 BO: 20:23 48° 39.563 125° 38.741
 EN: 20:27 48° 39.518 125° 38.758
 Flow start: 78359 Flow stop: 79685 Angle: 20

Rite in the Rain

