
Appendix F: Borehole Logs

Construction & Refurbishment of Bay Class

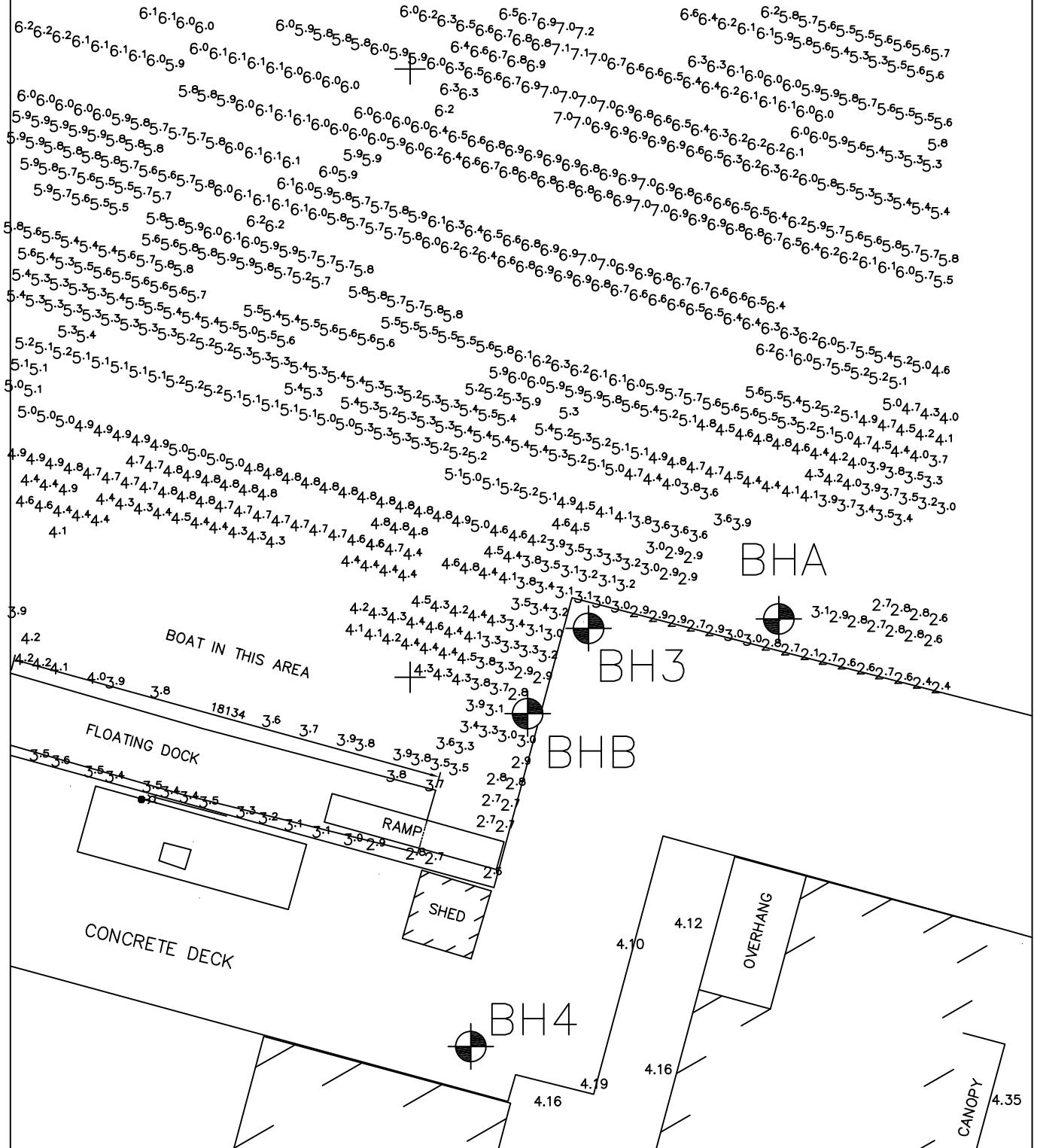
SAR Lifeboat Marine Infrastructures

Burin, NL

R.116548.001

2022-01-27

~ W A T E R S O F L I T T L E B U R I N H A R B O U R ~



Project: Marine Geotechnical Investigation
 Client: Public Works Government Services Canada
 Location: Burin, NL

Log of Borehole: BHA

Project No: 3118
 Date: March 25 - 26, 2018

SUBSURFACE PROFILE				SAMPLE					Standard Penetration Test "N" Value per 300 mm			
Depth below LNT	Symbol	Geologic Description	Elevation (m)	Sample Type	Sample No.	"N" Value	Recovery (%)	RQD (%)				
0		0 m LNT	0									
1												
2												
3												
4												
5												
6												
7												
8												
9												
10		Harbour Bottom (-3.14 m LNT)	-3.14									
11		SPT: 4 / 6 / 9 / 27 Gravel	-3.72	SS	1	15	12					
12												
13		SPT: 13 / 14 / 10 / 8 Gravel with rock chips	-4.3	SS	2	24	19					
14												
15		Gravel		OB	--		25					
16												
17		SPT: 5 / 3 / 4 / 4 Gravelly sand	-5.18									
18				SS	3	7	1					
19			-5.78									
20		Gravel		OB	--		7					
21												
22		SPT: 5 / 7 / 8 / 14 CFEM: Gravel and Sand, trace Silt/Clay Sulfurous odour	-6.72									
23				SS	4	15	27					
24			-7.33									
25		Gravel		OB	--		8					
26												
27			-8.23									
28		SPT: 14 / 22 / 19 / 12 CFEM: Gravelly Sand, trace Silt/Clay		SS	5	41	29					
29			-8.84									
30		Boulders		OB	--		7					
31			-9.32									
32		Bedrock: Metamorphic rock		RC	--		45	0				
33				RC	--		100	22				
34												
35				RC	--		40	0				
36												
37				RC	--		52	0				
38												
39												
40												
41												
42												
43												
44			-13.4									
45		End of Borehole										



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 154 Major's Path
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 Fax: (709) 753-5101

Drilling Method: NW Casing / NQ Coring
 Driller: Formation Drilling Ltd.

Datum: Geodetic
 Sheet: 1 of 1

Project: Marine Geotechnical Investigation
 Client: Public Works Government Services Canada
 Location: Burin, NL

Log of Borehole: BHB

Project No: 3118
 Date: March 27, 2018

SUBSURFACE PROFILE				SAMPLE					Standard Penetration Test "N" Value per 300 mm			
Depth below LNT	Symbol	Geologic Description	Elevation (m)	Sample Type	Sample No.	"N" Value	Recovery (%)	RQD (%)				
0 m		0 m LNT	0									
1												
2												
3												
4												
5												
6												
7												
8												
9		Harbour Bottom (-2.87 m LNT)	-2.87									
10		SPT: 5 / 2 / 1 / 52 for 0.11 m (Refusal) No recovery		SS	1	3	0					
11			-3.43	OB	--	--	8					
12		Boulders SPT: 54 for 0.10 m (Refusal) No recovery		SS	2	54	0					
13												
14												
15												
16												
17		Boulders		OB	--	--	25					
18												
19												
20												
21												
22			-6.79									
23		SPT: 3 / 3 / 4 / 5 CFEM: Sand and Gravel		SS	3	7	35					
24			-7.39									
25		Gravel		OB	--	--	8					
26			-8.08									
27		SPT: 14 / 21 / 16 / 13 Gravel		SS	4	37	6					
28			-8.69									
29		Boulders		OB	--	--	38					
30			-9.19									
31		Bedrock: Metamorphic rock		RC	--	--	100	0				
32				RC	--	--	95	73				
33				RC	--	--	100	51				
34				RC	--	--	100	41				
35												
36			-11.2	RC	--	--	97	0				
37		End of Borehole										
38												



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Drilling Method: NW Coring / NQ Casing
 Driller: Formation Drilling Ltd.

Datum: Geodetic
 Sheet: 1 of 1

Project: Marine Geotechnical Investigations
 Location: Burin, NL
 Client: Public Works Government Services Canada
 Drilling Supervisor: Dave MacKinnon

Log of Geotech Borehole: BH3

Project No: 3023

Date: February 10 - 11, 2012

SUBSURFACE PROFILE				SAMPLE					Standard Penetration Test "N" Value per 300 mm			
Depth below Top of Wharf	Symbol	Geologic Description	Elevation (m)	Sample Type	Sample No.	"N" Value	Recovery (%)	RQD (%)				
0		Top of Wharf	3.95						20	40	60	80
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23		Harbour Bottom (7.39 m below top of wharf / -3.44 m LNT)	-3.44									
24		SPT: 1 / 1 / 2 / 1 Black organic material with cobbles	-4.05	SS	1	3	21					
25												
26												
27												
28												
29			-4.92									



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Drilling Method: NQ Coring / NW Casing

Driller: Formation Drilling Ltd.

Datum: Geodetic

Sheet: 1 of 2

Project: Marine Geotechnical Investigations
 Location: Burin, NL
 Client: Public Works Government Services Canada
 Drilling Supervisor: Dave MacKinnon

Log of Geotech Borehole: BH3

Project No: 3023
 Date: February 10 - 11, 2012

SUBSURFACE PROFILE				SAMPLE					Standard Penetration Test "N" Value per 300 mm					
Depth below Top of Wharf	Symbol	Geologic Description	Elevation (m)	Sample Type	Sample No.	"N" Value	Recovery (%)	RQD (%)						
30		SPT: 3 / 2 / 3 / 5 Black organic material	-5.53	SS	2	5	17							
31														
32														
33	10													
34			-6.52											
35		SPT: 2 / 5 / 4 / 5 Dark brown fines with organics	-7.13	SS	3	9	29							
36	11													
37														
38														
39			-8.01											
40	12	SPT: 11 / 9 / 9 / 9 Top: 0.0 m - 0.19 m; Medium to coarse sand Bottom: 0.19 m - 0.25 m; Fine brown sand	-8.62	SS	4	18	42							
41														
42														
43	13													
44			-9.54	SS	5	50	0							
45		SPT: 50 for 0.0 m (Refusal) SS5: "N" value = 50; Recovery = 0%												
46	14			RC	—		87	32						
47														
48														
49	15													
50		Bedrock: Shale / limy sandstone		RC	—		100	65						
51														
52	16													
53			-12.6											
54														
55		End of Borehole												
56	17													
57														
58														
59														



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Drilling Method: NQ Coring / NW Casing

Driller: Formation Drilling Ltd.

Datum: Geodetic

Sheet: 2 of 2

Project: Marine Geotechnical Investigations

Log of Geotech Borehole: BH4

Location: Burin, NL

Client: Public Works Government Services Canada

Project No: 3023

Drilling Supervisor: Dave MacKinnon

Date: February 8 - 9, 2012

SUBSURFACE PROFILE				SAMPLE					Standard Penetration Test "N" Value per 300 mm
Depth below Top of Wharf	Symbol	Geologic Description	Elevation (m)	Sample Type	Sample No.	"N" Value	Recovery (%)	RQD (%)	
0 m		Top of Wharf	4						20 40 60 80
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12		Harbour Bottom (3.74 m below top of wharf / -0.26 m LNT)	0.26						
13		SPT: 2 / 4 / 7 / 11 Black organic material with snail shells	-0.35	SS	1	11	21		
14									
15		SPT: 11 / 50 for 0.08 m (Refusal) Black organics with gravel	-1.03	SS	2	50	13		
16									
17									
18									
19			-1.95						
20		SPT: 5 / 7 / 5 / 6 Fine to medium brown sand	-2.56	SS	3	12	32		
21									
22									
23									
24			-3.45						
25		SPT: 4 / 12 / 25 / 31 Top: 0.0 m - 0.11 m; Black organic		SS	4	37	54		
26		Bottom: 0.11 m - 0.22 m; Fine to medium brown	-4.06						
27		sand	-4.35						
28									
29		Bedrock: Gray shale / siltstone	-4.96	RC	—		100		
30				SS	5	50	0		



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Drilling Method: NQ Coring / NW Casing

Driller: Formation Drilling Ltd.

Datum: Geodetic

Sheet: 1 of 2

Project: Marine Geotechnical Investigations

Log of Geotech Borehole: BH4

Location: Burin, NL

Client: Public Works Government Services Canada

Project No: 3023

Drilling Supervisor: Dave MacKinnon

Date: February 8 - 9, 2012

SUBSURFACE PROFILE				SAMPLE					Standard Penetration Test "N" Value per 300 mm				
Depth below Top of Wharf	Symbol	Geologic Description	Elevation (m)	Sample Type	Sample No.	"N" Value	Recovery (%)	RQD (%)					
30		SPT: 50 for 0.0 m (Refusal)											
31		SS5: "N" Value = 50; Recovery = 0%											
32				RC	---		96	89					
33	10												
34		Bedrock: Gray green shale / siltstone											
35													
36	11			RC	---		78	67					
37													
38			-7.69										
39	12	End of Borehole											
40													
41													
42													
43	13												
44													
45													
46	14												
47													
48													
49	15												
50													
51													
52	16												
53													
54													
55													
56	17												
57													
58													
59													



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