HARBOURSIDE Geotechnical Consultants

BOREHOLE RECORD

BH 1

CLIENT HARBOURSIDE ENGINEERING CONSULTANTS — PROJECT No. 163521
LOCATION HALLS HARBOUR, NOVA SCOTIA — DATUM CHART
DATES: BORING 16/06/2016 — WATER LEVEL TIDAL — BH SIZE HW

DEPTH (m)	ELEVATION (m)	SOIL/BEDROCK DESCRIPTION	GRAPHIC LOG	WATER LEVEL	TYPE	NUMBER	REC. SOIL (mm) REC. ROCK (%)	BLOWS / 150 mm N VALUE RQD %	OTHER TESTS
0	9.07	Loose to compact, brown, well graded GRAVEL with silt and sand - frequent cobbles - occasional boulders			SS	1	100	1-2-3-5 (5)	
					SS	2	0	5-5-5-5 (10)	
					SS	3	100	12-4-3-4 (7)	
					SS	4	100	6-7-9-6 (15)	
					SS	5	250	18-14-20-15 (34)	
	5.54				SS	6	100	70 / 125 mm	
		Very poor quality grey, vesicular basalt BEDROCK - highly weathered			HQ	7	59%	0%	
					HQ	8	37%	0%	
					HQ	9	33%	0%	
	2.77	End of Borehole							

UNDRAINED SHEAR STRENGTH - kPa (20 40 60 80)
WATER CONTENT & ATTERBERG LIMITS (W_P W W_L)
DYNAMIC PENETRATION TEST, BLOWS/0.3m
STANDARD PENETRATION TEST, BLOWS/0.3m
(0 10 20 30 40 50 60 70 80)

HARBOURSIDE GEOTECHNICAL CONSULTANTS BOREHOLE RECORD 2/9/16

Project: Geotechnical Investigation
Client: Public Works Government Services Canada
Location: Hall's Harbour, NS

Log of Borehole: BH14-2

Project No: 797
Date: April 24 - 25, 2015

SUBSURFACE PROFILE: Depth below Top of Wharf (ft / m); Symbol; Geologic Description; Elevation (m)
SAMPLE: Sample Type; Sample No.; "N" Value; Recovery (%); RQD (%)
Standard Penetration Test "N" Value per 300 mm (20 40 60 80)
Fracture Frequency; Count (2 6)

Depth (ft)	Depth (m)	Geologic Description	Elevation (m)
0	0	Top of Wharf	13
1			
2	1		
3			
4			
5			
6	2		
7			
8			
9	3		

Fracflow Consultants Inc.
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Dartmouth, NS B3B 1E1
Phone: (902) 468-1317
Fax: (902) 468-4704

Drilling Method: HW casing / HQ coring
Driller: Formation Drilling Ltd.
Datum: Geodetic
Sheet: 1 of 5

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Log of Borehole: BH14-2

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Depth (ft)	Depth (m)	Geologic Description	Elevation (m)
10			
11			
12	4		
13			
14			
15	5		
16			
17			
18			
19	6	Harbour Bottom (6.95 m)	

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Location: Hall's Harbour, NS

Log of Borehole: BH14-2

Project No: 797
Date: April 24 - 25, 2015

Depth (ft)	Depth (m)	Geologic Description	Elevation (m)	Sample Type	Sample No.	"N" Value	Recovery (%)	RQD (%)	Standard Penetration Test "N" Value per 300 mm (20 40 60 80)	Fracture Frequency	Count (2 6)
20											
21		SPT: 4 / 3 / 2 / 1 - Broken rock with grey fine grained sand		SS	1	5	8				
			6.35								
22		SPT: 10 / 8 / 10 / 12 - Grey broken rock with fine grained sand - CFEM: Gravel and Sand, trace Silt/Clay		SS	2	18	21				
23	7		5.75								
24		SPT: 9 / 5 / 3 / 2 - No sample recovery		SS	3	8	0				
25											
26			5.14								
27	8	SPT: 2 / 2 / 1 / 6 - No sample recovery		SS	4	3	0				
28			4.53								
29		SPT: 7 / 6 / 6 / 5 - Medium grained, brown gravel and coarse grained sand and silt					23				
	9										

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Depth (ft)	Depth (m)	Geologic Description	Elevation (m)	Sample Type	Sample No.	"N" Value	Recovery (%)	RQD (%)	Standard Penetration Test "N" Value per 300 mm (20 40 60 80)	Fracture Frequency	Count (2 6)
			3.92	SS	5	12	23				
30		SPT: 8 / 2 / 2 / 4 - Top - 0.16 m: Coarse gravel - 0.16 - 0.17 m: Brown silt/clay with fine grained sand		SS	6	4	33				
31			3.31								
32		SPT: 3 / 2 / 7 / 37 - Top to 0.05 m: Coarse gravel with fine to medium grained sand - 0.05 to 0.25 m: Fine to medium grained brown sand		SS	7	9	42				
33	10		2.7								
34		Gravel SPT: 39 / 51 for 0.01 m (Refusal) - Gravel with medium to fine grained brown sand	2.49	SS	8	51	21				
		CFEM: Sand and Gravel, trace Silt/Clay	2.36	OB	-		65	0			
35		Gravel and cobbles 0.05 m of rock core recovered at the bottom		OB	-		37	0			
		Possible bedrock	2.15	SS	9	51	25				
36	11	SPT: 51 for 0.05 m (Refusal) - Coarse gravel SS9; "N" Value = 51; Recovery = 25%									3
37				RC	-		97	59			4
38		Bedrock - Basalt									8
39	12										

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Depth (ft)	Depth (m)	Geologic Description	Elevation (m)	Sample Type	Sample No.	"N" Value	Recovery (%)	RQD (%)	Standard Penetration Test "N" Value per 300 mm (20 40 60 80)	Fracture Frequency	Count (2 6)
40											4
41											1
42		Bedrock - Basalt		RC	-		100	83			4
43	13										3
44			-0.495								4
45		End of Borehole									1
46	14										
47											
48											
49	15										

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Public Works and Government Services Canada / Travaux Publics et Services gouvernementaux Canada

HARBOURSIDE Geotechnical Consultants

revisions		date
0	ISSUED FOR TENDER	08/03 2016

project / projet
HALL'S HARBOUR WHARF RECONSTRUCTION

KING'S COUNTY
NOVA SCOTIA

drawing / dessin
BOREHOLE LOGS (SHEET 1 OF 4)

designed / conçu
date
drawn / dessiné
date
approved / approuvé
date
Tender / Soumission
PWGSC Project Manager / Administrateur de projets TPSGC
project number / no. du projet
R.076836.002
drawing no. / no. du dessin
G2

PWGSC B1 (2004)

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