Project: Cold Brook Harwich

**Client:** DER **Boring Contractor:** None

Boring Equipment: Hand Auger

Boring No. HW-1

Date: 5/23/2012 Completion Depth: 5.3'

Completion Depth: 5. Elevation:

**Inspector:** NP/GH

Proportions	s Used:				Abbreviations:		
		<u>Co</u>	<u>Color</u>		Misc.	5	<u>Size</u>
trace (trc)	0 - 10%	Blue (Bl)	Green (Gr)	Round (rnd.)	Fragments (frag.)	Fine = (f)	Fine to Coarse $=$ $(f-c)$
little (li)	10 - 20%	Red (R)	Gray (Gy)	Angular (ang.)	Cement (cem.)	Medium = (m)	Very = (v)
some (so)	20 - 35%	Light (lt)	Brown (Br)		Well-Graded Sand (SW)	Coarse = (c)	More/Less = (+/-)
and	35 - 50%	Dark (dk)	Orange (Or)		Poorly-Graded Sand (SP)	Dark = (dk)	
		Rust (Ru)	Black (Blk)		Well-Graded Gravel (GW)		
					Poorly-Graded Gravel (GP)		
					Below Land Surface (BLS) Not Available (N/A)		

Depth					USCS	USCS		Well	Depth
Feet	Description	Down Hole Hammer	Penetration	Recovery	Code	Color	Comments	Details	Feet
0 - 1.5	m-c SAND,some organics				rnd	tan	2" pvc stick up 1.20		
1.5 - 2.7	fibrous Peat					Blk	water at 2.5'		
2.7 - 4.2+	m-c SAND				rnd	Gy	.010 Slot, 10' PVC Screen		
								' <del>V</del>	'

Note:

Boring No.

HW-2

# MONITORING WELL BORING LOG

Project: Cold Brook Harwich

Date: 5/23/2012

Client: DER

completion Depth: 7.1'
ing Contractor: None

Elevation:

Boring Contractor: None Elevation:
Boring Equipment: Hand Auger Inspector: NP/GH

					T		
<b>Proportion</b> :	s Used:				Abbreviations:		
		<u>C</u>	<u>olor</u>	<u>Angular</u>	Misc.		<u>Size</u>
trace (trc)	0 - 10%	Blue (Bl)	Green (Gr)	Round (rnd.)	Fragments (frag.)	Fine = (f)	Fine to Coarse = $(f-c)$
little (li)	10 - 20%	Red (R)	Gray (Gy)	Angular (ang.)	Cement (cem.)	Medium = (m)	Very = (v)
some (so)	20 - 35%	Light (lt)	Brown (Br)		Well-Graded Sand (SW)	Coarse = (c)	More/Less = (+/-)
and	35 - 50%	Dark (dk)	Orange (Or)		Poorly-Graded Sand (SP)	Dark = (dk)	
		Rust (Ru)	Black (Blk)		Well-Graded Gravel (GW)		
					Poorly-Graded Gravel (GP)		
					Below Land Surface (BLS) Not Available (N/A)		

Depth					USCS	USCS		Well	Depth
Feet	Description	Down Hole Hammer	Penetration	Recovery	Code	Color	Comments	Details	Feet
0 - 2	m-c SAND, some organics				rnd	Or/tan	2" pvc stick up 1.60 2" threaded PVC well .010 Slot, 10' PVC Screen		
	fibrous Peat m-c SAND				rnd	Blk Gy			
31					mu	Gy		' ♥	

Note:

Boring No.

HW-3

# MONITORING WELL BORING LOG

**Project:** Cold Brook Harwich **Date:** 5/23/2012

Client: DER **Completion Depth:** 6.8' **Elevation: Boring Contractor:** None

**Inspector:** NP/GH **Boring Equipment:** Hand Auger

<b>Proportions</b>	s Used:				Abbreviations:		
		<u>C</u>	<u>Color</u>	<u>Angular</u>	Misc.		Size
trace (trc)	0 - 10%	Blue (Bl)	Green (Gr)	Round (rnd.)	Fragments (frag.)	Fine = (f)	Fine to Coarse = $(f-c)$
little (li)	10 - 20%	Red (R)	Gray (Gy)	Angular (ang.)	Cement (cem.)	Medium = (m)	Very = (v)
some (so)	20 - 35%	Light (lt)	Brown (Br)		Well-Graded Sand (SW)	Coarse = (c)	More/Less = (+/-)
and	35 - 50%	Dark (dk)	Orange (Or)		Poorly-Graded Sand (SP)	Dark = (dk)	
		Rust (Ru)	Black (Blk)		Well-Graded Gravel (GW)		
					Poorly-Graded Gravel (GP)		
					Below Land Surface (BLS) Not Available (N/A)		

Depth					USCS	USCS		Well	Depth
Feet	Description	Down Hole Hammer	Penetration	Recovery	Code	Color		Details	Feet
	m-c SAND fibrous Peat, some sand				rnd	tan Blk	2" pvc stick up 1.60 2" threaded PVC well ——————————————————————————————————	\	
3.1+	m-c SAND				rnd	Gy			

Note:

Boring No.

HW-4

# MONITORING WELL BORING LOG

Project: Cold Brook Harwich

Date: 5/23/2012

Client: DER Completion Depth: 5'

Boring Contractor: None Elevation:
Boring Equipment: Hand Auger Inspector: NP/GH

Proportions	Used:				Abbreviations:		
		<u>C</u>	<u>Color</u>	<u>Angular</u>	Misc.	<u> </u>	Size
trace (trc)	0 - 10%	Blue (Bl)	Green (Gr)	Round (rnd.)	Fragments (frag.)	Fine = (f)	Fine to Coarse $=$ (f-c)
ittle (li)	10 - 20%	Red (R)	Gray (Gy)	Angular (ang.)	Cement (cem.)	Medium = (m)	Very = (v)
ome (so)	20 - 35%	Light (lt)	Brown (Br)		Well-Graded Sand (SW)	Coarse = (c)	More/Less = (+/-)
nd	35 - 50%	Dark (dk)	Orange (Or)		Poorly-Graded Sand (SP)	Dark = (dk)	
		Rust (Ru)	Black (Blk)		Well-Graded Gravel (GW)		
					Poorly-Graded Gravel (GP)		
					Below Land Surface (BLS) Not Available (N/A)		

Depth					USCS	USCS		Well	Depth
Feet	Description	Down Hole Hammer	Penetration	Recovery	Code	Color		Details	Feet
0 - 2.3	m-c SAND, some organics				rnd	tan	4" pvc stick up 0.2 4" perforated PVC well		
2.3 - 5.3	fibrous Peat					Blk			
5.3+	m-c SAND				rnd	Gy			

Note:

Project: Cold Brook Harwich

**Client:** DER **Boring Contractor:** None

**Boring Equipment:** Hand Auger

Boring No. HW-5

Date: 5/23/2012 Completion Depth: 5.1'

Completion Depth: 5. Elevation:

**Inspector:** NP/GH

<b>Proportions</b>	s Used:				Abbreviations:			
		<u>•</u>	<u>Color</u>		Misc.	5	<u>Size</u>	
trace (trc)	0 - 10%	Blue (Bl)	Green (Gr)	Round (rnd.)	Fragments (frag.)	Fine = (f)	Fine to Coarse = $(f-c)$	
little (li)	10 - 20%	Red (R)	Gray (Gy)	Angular (ang.)	Cement (cem.)	Medium = (m)	Very = (v)	
some (so)	20 - 35%	Light (lt)	Brown (Br)		Well-Graded Sand (SW)	Coarse = (c)	More/Less = (+/-)	
and	35 - 50%	Dark (dk)	Orange (Or)		Poorly-Graded Sand (SP)	Dark = (dk)		
		Rust (Ru)	Black (Blk)		Well-Graded Gravel (GW)			
					Poorly-Graded Gravel (GP)			
					Below Land Surface (BLS) Not Available (N/A)			

Depth					USCS	USCS		Well	Depth
Feet	Description	Down Hole Hammer	Penetration	Recovery	Code	Color	Comments	Details	Feet
0 - 1.8	m-c SAND, some organics			·		Or/tan	4" pvc stick up 1.39		
1.8 - 4	fibrous Peat					Blk			
4+	m-c SAND				rnd	Gy			

Note:

**Project:** Cold Brook Harwich

Client: DER **Boring Contractor:** None

**Boring Equipment:** Hand Auger

HW-6 Boring No.

> **Date:** 5/23/2012 **Completion Depth:** 5.1'

**Elevation:** 

**Inspector:** NP/GH

Proportions	s Used:				Abbreviations:		
		<u>C</u>	<u>Color</u>	<u>Angular</u>	Misc.	<u> </u>	<u>Size</u>
race (trc)	0 - 10%	Blue (Bl)	Green (Gr)	Round (rnd.)	Fragments (frag.)	Fine = (f)	Fine to Coarse $=$ $(f-c)$
little (li)	10 - 20%	Red (R)	Gray (Gy)	Angular (ang.)	Cement (cem.)	Medium = (m)	Very = (v)
some (so)	20 - 35%	Light (lt)	Brown (Br)		Well-Graded Sand (SW)	Coarse = (c)	More/Less = (+/-)
and	35 - 50%	Dark (dk)	Orange (Or)		Poorly-Graded Sand (SP)	Dark = (dk)	
		Rust (Ru)	Black (Blk)		Well-Graded Gravel (GW)		
					Poorly-Graded Gravel (GP)		
					Below Land Surface (BLS) Not Available (N/A)		

Depth					USCS	USCS			Well	Depth
Feet	Description	Down Hole Hammer	Penetration	Recovery	Code	Color		Comments	Details	Feet
0 - 1.8	m-c SAND, some organics				rnd	tan	4" perforated PVC well	4" pvc stick up 0.70'		
1.8 - 4.3	fibrous Peat					Blk				
4.3+	m-c SAND				rnd	tan				

Note:

Project: Cold Brook Harwich

**Client:** DER **Boring Contractor:** None

Boring Equipment: Hand Auger

Boring No. HW-7

**Date:** 5/23/2012 **Completion Depth:** 4.5'

Elevation:

**Inspector:** NP/GH

Bornig Equipment: Hand Auger							: NP/UII	
Proportion	s Used:				Abbreviations:			
			<u>Color</u>	<u>Angular</u>	Misc.	Size		
trace (trc)	0 - 10%	Blue (Bl)	Green (Gr)	Round (rnd.)	Fragments (frag.)	Fine = (f)	Fine to Coarse $=$ $(f-c)$	
little (li)	10 - 20%	Red (R)	Gray (Gy)	Angular (ang.)	Cement (cem.)	Medium = (m)	Very = (v)	
some (so)	20 - 35%	Light (lt)	Brown (Br)		Well-Graded Sand (SW)	Coarse = (c)	More/Less = (+/-)	
and	35 - 50%	Dark (dk)	Orange (Or)		Poorly-Graded Sand (SP)	Dark = (dk)		
		Rust (Ru)	Black (Blk)		Well-Graded Gravel (GW)			
					Poorly-Graded Gravel (GP)			
					Below Land Surface (BLS) Not Available (N/A)			

Depth					USCS	USCS		Well	
Feet	Description	Down Hole Hammer	Penetration	Recovery	Code	Color		Details	Feet
0 - 1.3	m-c SAND, some organics				rnd	tan/Or	4" pvc stick up		
1.3 - 2.5	fibrous Peat					Blk		H	
2.5+	m-c SAND				rnd	Or	4" perforated PVC well		

Note:

Project: Cold Brook Harwich

**Client:** DER **Boring Contractor:** None

Boring Equipment: Hand Auger

Boring No. HW-8

**Date:** 5/23/2012 **Completion Depth:** 4.1'

Elevation:

**Inspector:** NP/GH

Proportions	s Used:				Abbreviations:		
		<u>C</u>	<u>Color</u>	<u>Angular</u>	Misc.	<u> </u>	Size
trace (trc)	0 - 10%	Blue (Bl)	Green (Gr)	Round (rnd.)	Fragments (frag.)	Fine = (f)	Fine to Coarse $=$ $(f-c)$
little (li)	10 - 20%	Red (R)	Gray (Gy)	Angular (ang.)	Cement (cem.)	Medium = (m)	Very = (v)
some (so)	20 - 35%	Light (lt)	Brown (Br)		Well-Graded Sand (SW)	Coarse = (c)	More/Less = (+/-)
and	35 - 50%	Dark (dk)	Orange (Or)		Poorly-Graded Sand (SP)	Dark = (dk)	
		Rust (Ru)	Black (Blk)		Well-Graded Gravel (GW)		
					Poorly-Graded Gravel (GP)		
					Below Land Surface (BLS) Not Available (N/A)		

Depth					USCS	USCS		Well	Depth
Feet	Description	Down Hole Hammer	Penetration	Recovery		Color	Comments	Details	Feet
	m-c SAND, some organics				rnd	tan	4" pvc stick up 0.	25'	
2.5 - 3.5	fibrous Peat, some sand					Blk	4" perforated PVC well	<b>→</b>	
3.5+	c SAND and gravel, li cobbles				rnd	tan			

Note:

**Project:** Cold Brook Harwich

Client: DER
Boring Contractor: None
Boring Equipment: Hand Auger

Boring No. HW-9 **Date:** 5/23/2012

**Completion Depth:** 3.5' (refusal)

**Elevation:** 

**Inspector:** NP/GH

Proportions	s Used:				Abbreviations:		
		<u>C</u>	<u>Color</u>	<u>Angular</u>	Misc.	1	<u>Size</u>
trace (trc)	0 - 10%	Blue (Bl)	Green (Gr)	Round (rnd.)	Fragments (frag.)	Fine = (f)	Fine to Coarse $=$ $(f-c)$
little (li)	10 - 20%	Red (R)	Gray (Gy)	Angular (ang.)	Cement (cem.)	Medium = (m)	Very = (v)
some (so)	20 - 35%	Light (lt)	Brown (Br)		Well-Graded Sand (SW)	Coarse = (c)	More/Less = (+/-)
and	35 - 50%	Dark (dk)	Orange (Or)		Poorly-Graded Sand (SP)	Dark = (dk)	
		Rust (Ru)	Black (Blk)		Well-Graded Gravel (GW)		
					Poorly-Graded Gravel (GP)		
					Below Land Surface (BLS) Not Available (N/A)		

Depth						USCS		Well	Depth
Feet	Description	Down Hole Hammer	Penetration	Recovery		Color	Comments	Details	Feet
								no well	
0 - 2.5	m-c SAND, some organics				rnd	tan			
2.5 - 3.5	fibrous Peat					Blk			
3.5+	m-c SAND, tr gravel, li cobbles				rnd	tan			

Note:

Project: Cold Brook Harwich

Client: DER **Boring Contractor:** None

**Boring Equipment:** Hand Auger

SS-2B Boring No.

**Date:** 5/23/2012 **Completion Depth:** 4.2'

**Elevation:** 

**Inspector:** NP/GH

Proportions	Used:				Abbreviations:		
		<u>C</u>	<u>olor</u>	<u>Angular</u>	Misc.		Size
trace (trc)	0 - 10%	Blue (Bl)	Green (Gr)	Round (rnd.)	Fragments (frag.)	Fine = (f)	Fine to Coarse $=$ (f-c)
little (li)	10 - 20%	Red (R)	Gray (Gy)	Angular (ang.)	Cement (cem.)	Medium = (m)	Very = (v)
some (so)	20 - 35%	Light (lt)	Brown (Br)		Well-Graded Sand (SW)	Coarse = (c)	More/Less = (+/-)
and	35 - 50%	Dark (dk)	Orange (Or)		Poorly-Graded Sand (SP)	Dark = (dk)	
		Rust (Ru)	Black (Blk)		Well-Graded Gravel (GW)		
					Poorly-Graded Gravel (GP)		
					Below Land Surface (BLS) Not Available (N/A)		

Depth					USCS	USCS	Well Depth
Feet	Description	Down Hole Hammer	Penetration	Recovery	Code	Color	Comments Details Feet
0 - 2	m-c SAND, some organics				rnd	tan	no well
2 - 4.2	fibrous Peat					Blk	
4.2+	m-c SAND				rnd	Gy	

Note:

**Project:** Cold Brook Harwich

**Client:** DER **Boring Contractor:** None

Boring Equipment: Hand Auger

Boring No. SS-4C

**Date:** 5/23/2012 **Completion Depth:** 4'

ompletion Depth: 2 Elevation:

**Inspector:** NP/GH

Proportions	s Used:				Abbreviations:		
		<u>C</u>	<u>lolor</u>	<u>Angular</u>	Misc.	1	<u>Size</u>
trace (trc)	0 - 10%	Blue (Bl)	Green (Gr)	Round (rnd.)	Fragments (frag.)	Fine = (f)	Fine to Coarse $=$ $(f-c)$
little (li)	10 - 20%	Red (R)	Gray (Gy)	Angular (ang.)	Cement (cem.)	Medium = (m)	Very = (v)
some (so)	20 - 35%	Light (lt)	Brown (Br)		Well-Graded Sand (SW)	Coarse = (c)	More/Less = (+/-)
and	35 - 50%	Dark (dk)	Orange (Or)		Poorly-Graded Sand (SP)	Dark = (dk)	
		Rust (Ru)	Black (Blk)		Well-Graded Gravel (GW)		
					Poorly-Graded Gravel (GP)		
					Below Land Surface (BLS) Not Available (N/A)		

Depth					USCS	USCS		Well	Depth
Feet	Description	Down Hole Hammer	Penetration	Recovery	Code	Color	Comments	Details	Feet
							no well		
0 - 1.8	m-c SAND, some organics				rnd	tan			
1.75 - 4	fibrous Peat					Blk			
4+	m-c SAND				rnd	Gy			
					1114				

Note: