

DRILLING AND SAMPLING DATA SHEET



Borehole: GSC-BH-SW-07

Core Run: 1

Project:

Drilling Method: Sonic

Date: March 17, 2011

Start Time: 14:13 / 15:21

Logger: Paddock Drilling

End Time: 15:29

Drilling Information:

Initial auger depth: _____ cm Initial tube depth: 10 ft 0' ~~cm~~

Final auger depth: _____ cm Final tube depth: _____ ft ~~cm~~

Feed gauge pressure: _____ psi

Drill stem speed: _____ rpm

Coring Data: Shoe

Inner diameter: _____ mm

Outer diameter: _____ mm

Catcher type: _____

Length of shoe: _____ cm

Coring Data: Core barrel

Inner diameter: _____ mm

Outer diameter: _____ mm

Core retained: 5' ~~cm~~

Core in shoe: _____ ~~cm~~

Total recovery: 5' ~~cm~~

Core sections: _____

Core disturbance: _____

Percent recovery: _____ %

Comments: ONLY 1 BOX SO BOX #'s
are off. FIXED AT END OF DAY

Subsamples:

Photos

Porewater

Moisture
Content

Bulk
Density

DRILLING AND SAMPLING DATA SHEET



Borehole: GSC-BH-SW-07

Core Run: 2.

Project:

Drilling Method: Sonic

Date: March 17, 2011

Start Time:

Logger:

End Time:

Drilling Information:

Initial auger depth: _____ cm Initial tube depth: 10' ft _____ cm

Final auger depth: _____ cm Final tube depth: _____ ft _____ cm

Feed gauge pressure: _____ psi

Drill stem speed: _____ rpm

Coring Data: Shoe

Inner diameter: _____ mm

Outer diameter: _____ mm

Catcher type: _____

Length of shoe: _____ cm

Coring Data: Core barrel

Inner diameter: _____ mm

Outer diameter: _____ mm

Core retained: ~~10~~ '9'8" cm

Core in shoe: _____ cm

Total recovery: ~~10~~ '9'8" cm

Core sections: _____

Core disturbance: _____

Percent recovery: ~~100~~ %

Comments:

Subsamples:

Photos

Porewater

Moisture
Content

Bulk
Density

DRILLING AND SAMPLING DATA SHEET



Borehole: GSC-BH-SW-07

Core Run: 3

Project:

Drilling Method: Sonic

Date: March 17, 2011

Start Time:

Logger:

End Time:

Drilling Information:

Initial auger depth: 20'0" cm

Initial tube depth: 5' 1st drive cm

Final auger depth: 26'4" cm

Final tube depth: ft cm

Feed gauge pressure: psi

Drill stem speed: rpm

~2.5' 2nd drive.
~2.5' 3rd drive

Coring Data: Shoe

Inner diameter: mm

Outer diameter: mm

Catcher type:

Length of shoe: cm

Coring Data: Core barrel

Inner diameter: mm

Outer diameter: mm

Core retained: cm

Core sections:

Core in shoe: cm

Core disturbance:

Total recovery: cm

Percent recovery: %

Comments:

material very hard and took 3
drives to recover full 76"

Subsamples:

Photos

Porewater

Moisture

Content

Bulk

Density

DRILLING AND SAMPLING DATA SHEET



Borehole: GSC-BH-SW-07

Core Run: 4

Project:

Drilling Method: SONIC

Date: MARCH 17, 2011

Start Time: 5:00

Logger:

End Time: 5:30

Drilling Information:

Initial auger depth: 30' 0" cm

Initial tube depth: _____ ft _____ cm

Final auger depth: 39' 0" cm

Final tube depth: _____ ft _____ cm

Feed gauge pressure: _____ psi

Drill stem speed: _____ rpm

Coring Data: Shoe

Inner diameter: _____ mm

Outer diameter: _____ mm

Catcher type: _____

Length of shoe: _____ cm

Coring Data: Core barrel

Inner diameter: _____ mm

Outer diameter: _____ mm

Core retained: _____ cm

Core sections: _____

Core in shoe: _____ cm

Core disturbance: _____

Total recovery: _____ cm

Percent recovery: _____ %

Comments:

Clays swelled and filled barrel so had to stop run 1 foot from bottom.

Subsamples:

Photos

Porewater

Moisture
Content

Bulk
Density

* Had to stop due to water line freezing

DRILLING AND SAMPLING DATA SHEET



Borehole: CSC-BH-SW-07

Core Run: 4 (cont)
and 5

Project:

Drilling Method:

Date: 18 MARCH 2011

Start Time: 9:45 AM

Logger:

End Time:

Drilling Information:

Initial auger depth: _____ cm Initial tube depth: 39 ft _____ cm
Final auger depth: _____ cm Final tube depth: 50 ft _____ cm
Feed gauge pressure: _____ psi
Drill stem speed: _____ rpm

Coring Data: Shoe

Inner diameter: _____ mm
Outer diameter: _____ mm
Catcher type: _____
Length of shoe: _____ cm

Coring Data: Core barrel

Inner diameter: _____ mm
Outer diameter: _____ mm

Core retained: 3" ~~cm~~
Core in shoe: - ~~cm~~
Total recovery: 3" ~~cm~~

Core sections: _____
Core disturbance: _____
Percent recovery: _____ %

Comments: missing 1ft from Run 4 recovered w/ Run 5. Sand in hole - catcher failed

to recover it. Only 3" rock recovered.

Subsamples:

Photos

Porewater

Moisture
Content

Bulk
Density

[illegible]

DRILLING AND SAMPLING DATA SHEET



Borehole: <u>GSC-BH-SLW-07</u>		Core Run: <u>7</u>	
Project:			
Drilling Method: <u>Sonic</u>			
Date: <u>March 18, 2011</u>		Start Time: <u>10:55</u>	
Logger:		End Time: <u>11:22</u>	
Drilling Information:			
Initial auger depth: _____ cm		Initial tube depth: <u>60'</u> ft _____ cm	
Final auger depth: _____ cm		Final tube depth: <u>70'</u> ft _____ cm	
Feed gauge pressure: _____ psi			
Drill stem speed: _____ rpm			
Coring Data: Shoe		Coring Data: Core barrel	
Inner diameter: _____ mm		Inner diameter: _____ mm	
Outer diameter: _____ mm		Outer diameter: _____ mm	
Catcher type: _____			
Length of shoe: _____ cm			
Core retained: <u>8'9"</u> cm		Core sections: _____	
Core in shoe: <u>3'11"</u> cm		Core disturbance: _____	
Total recovery: _____ cm		Percent recovery: _____ %	
Comments:			

Subsamples:			
Photos	Porewater	Moisture Content	Bulk Density
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

34
41

4'10"
3'11"

8'9"

DRILLING AND SAMPLING DATA SHEET



Borehole: GSC-BH-SW-07

Core Run: 8

Project:

Drilling Method: Sonic

Date: March 18, 2011

Start Time: 11:27

Logger:

End Time: 12:05.

Drilling Information:

Initial auger depth: _____ cm Initial tube depth: 70' ft _____ cm
 Final auger depth: _____ cm Final tube depth: 80' ft _____ cm
 Feed gauge pressure: _____ psi
 Drill stem speed: _____ rpm

Coring Data: Shoe

Inner diameter: _____ mm
 Outer diameter: _____ mm
 Catcher type: _____
 Length of shoe: _____ cm

Coring Data: Core barrel

Inner diameter: _____ mm
 Outer diameter: _____ mm

Core retained: 10' 6" cm
 Core in shoe: _____ cm
 Total recovery: 10' 6" cm

Core sections: _____
 Core disturbance: _____
 Percent recovery: _____ %

Comments: *Extra 6" of core put in box
7B to conserve box space*

Subsamples:

Photos

Porewater

Moisture
Content

Bulk
Density

DRILLING AND SAMPLING DATA SHEET



Borehole: GSC-BH-SW-07 Core Run: 9
 Project: _____
 Drilling Method: SONIC

Date: MARCH 18, 2011 Start Time: 12:08 - 12:30
 Logger: _____ End Time: 12:34 - 1:20

Drilling Information:
 Initial auger depth: _____ cm Initial tube depth: 80' - 85'6"
 Final auger depth: _____ cm Final tube depth: 90' - 95'6"
 Feed gauge pressure: _____ psi
 Drill stem speed: _____ rpm

Coring Data: Shoe	Coring Data: Core barrel
Inner diameter: _____ mm	Inner diameter: _____ mm
Outer diameter: _____ mm	Outer diameter: _____ mm
Catcher type: _____	
Length of shoe: _____ cm	

DRIVE
 1st Core retained: 7'6" cm 1st DRIVE
 2nd Core in shoe: 6'4" cm
 Total recovery: 14'0" cm
 Core sections: _____
 Core disturbance: _____
 Percent recovery: _____ %

Comments: Hit a rock - tripping out @ 12:20
and will try again. DROVE 5'6" recovered 7'6"

Subsamples: Second drive was problematic - had to trip out twice

Photos	Porewater	Moisture Content	Bulk Density
<u>Started using bentonite at 80'</u>			
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

* Core in 3 Boxes 9A, 9B, 9C.

DRILLING AND SAMPLING DATA SHEET



Borehole: <u>GSC-BH-SW-07</u>		Core Run: <u>10</u>	
Project:			
Drilling Method: <u>SONIC</u>			
Date: <u>March 18, 2011</u>		Start Time: <u>13:30</u>	
Logger:		End Time: <u>14:05</u>	
Drilling Information:			
Initial auger depth: _____ cm		Initial tube depth: <u>90'</u> ft _____ cm	
Final auger depth: _____ cm		Final tube depth: <u>100'</u> ft _____ cm	
Feed gauge pressure: _____ psi			
Drill stem speed: _____ rpm			
Coring Data: Shoe		Coring Data: Core barrel	
Inner diameter: _____ mm		Inner diameter: _____ mm	
Outer diameter: _____ mm		Outer diameter: _____ mm	
Catcher type: _____			
Length of shoe: _____ cm			
Core retained: <u>10' 10"</u> cm		Core sections: _____	
Core in shoe: _____ cm		Core disturbance: _____	
Total recovery: _____ cm		Percent recovery: _____ %	
Comments: _____			

Subsamples:		Moisture	Bulk
Photos	Porewater	Content	Density
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

* MORE Than 10' recovered - extra 10" in Zip lock bag labelled in e

DRILLING AND SAMPLING DATA SHEET



Borehole: GSC-BH-SW-07

Core Run: 11

Project:

Drilling Method: SONIC

Date: March 18, 2011

Start Time: 14:10

Logger:

End Time: 16:10

Drilling Information:

Initial auger depth: _____ cm Initial tube depth: 100' ft _____ cm
 Final auger depth: _____ cm Final tube depth: 110' ft _____ cm
 Feed gauge pressure: _____ psi
 Drill stem speed: _____ rpm

Coring Data: Shoe

Inner diameter: _____ mm
 Outer diameter: _____ mm
 Catcher type: _____
 Length of shoe: _____ cm

Coring Data: Core barrel

Inner diameter: _____ mm
 Outer diameter: _____ mm

Core retained: _____ cm
 Core in shoe: _____ cm
 Total recovery: _____ cm

* Also ziploc of shale that clogged
 Core sections: stem
 Core disturbance: _____
 Percent recovery: _____ %

Comments: Hit rock boulder, changed bits to drill through. 110" above 110'
Drilled through it with full face bit. Cored to 110' but got about 1' of shale stuck in the casing.

Subsamples:

Photos	Porewater	Moisture Content	Bulk Density
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Box 11A has top 14' plus top of rock plus shale bag
 Box 11B has bottom ~5' of core...

110' - 9' 2"
 100' 10"
 top of rock
 ≈ 1' thick.

DRILLING AND SAMPLING DATA SHEET



Borehole: GSC-BH-SW-07

Core Run: 12

Project:

Drilling Method: SONIC

Date: MARCH 18, 2011

Start Time: 17:00

Logger:

End Time: 17:40

Drilling Information:

Initial auger depth: _____ cm Initial tube depth: 110' ft _____ cm

Final auger depth: _____ cm Final tube depth: 120' ft _____ cm

Feed gauge pressure: _____ psi

Drill stem speed: _____ rpm

Coring Data: Shoe

Inner diameter: _____ mm

Outer diameter: _____ mm

Catcher type: _____

Length of shoe: _____ cm

Coring Data: Core barrel

Inner diameter: _____ mm

Outer diameter: _____ mm

Core retained: 10'9" cm

Core in shoe: _____ cm

Total recovery: 10'9" cm

Core sections: _____

Core disturbance: _____

Percent recovery: _____ %

Comments: In 2 boxes + a ziploc bag labelled 12C
in Box 30

Subsamples:

Photos

Porewater

Moisture

Content

Bulk

Density

DRILLING AND SAMPLING DATA SHEET



Borehole: <u>GSC-BH-SW-07</u>		Core Run: <u>13</u>	
Project:			
Drilling Method: <u>SONIC</u>			
Date: <u>March 19, 2011</u>		Start Time: <u>9:10</u>	
Logger:		End Time: <u>9:30</u>	
Drilling Information:			
Initial auger depth: _____ cm		Initial tube depth: <u>120'</u> ft _____ cm	
Final auger depth: _____ cm		Final tube depth: <u>130'</u> ft _____ cm	
Feed gauge pressure: _____ psi			
Drill stem speed: _____ rpm			
Coring Data: Shoe		Coring Data: Core barrel	
Inner diameter: _____ mm		Inner diameter: _____ mm	
Outer diameter: _____ mm		Outer diameter: _____ mm	
Catcher type: _____			
Length of shoe: _____ cm			
Core retained: <u>11'0"</u> ^{cm} <u>+ what was lost in barrel above.</u>		Core sections: _____	
Core in shoe: _____ ^{cm}		Core disturbance: _____	
Total recovery: _____ ^{cm}		Percent recovery: _____ %	
Comments: <u>Core expended into barrel above run. ^{this} with ^{inner casing} stuck ^{Driller disposed of it before we could take it.}</u>			
Subsamples:	Moisture	Bulk	Estimated length
Photos	Content	Density	~1ft of core,
_____	_____	_____	
_____	_____	_____	
_____	_____	_____	
_____	_____	_____	
_____	_____	_____	
_____	_____	_____	

* Driller said run was sticky

* Core in 3 pieces 13A, 13B, 13C - last piece in box of pieces
Box 30

DRILLING AND SAMPLING DATA SHEET



Borehole: <u>GSC-BH-SW-07</u>		Core Run: <u>14</u>																												
Project:																														
Drilling Method: <u>Sonic</u>																														
Date: <u>March 19, 2011</u>		Start Time: <u>9:36</u>																												
Logger:		End Time: <u>10:25</u>																												
Drilling Information:																														
Initial auger depth: <u>130'</u> <u>cm</u>		Initial tube depth: <u>130'</u> <u>ft</u> <u>cm</u>																												
Final auger depth: <u>140'</u> <u>cm</u>		Final tube depth: <u>140'</u> <u>ft</u> <u>cm</u>																												
Feed gauge pressure: <u> </u> psi																														
Drill stem speed: <u> </u> rpm																														
Coring Data: Shoe		Coring Data: Core barrel																												
Inner diameter: <u> </u> mm		Inner diameter: <u> </u> mm																												
Outer diameter: <u> </u> mm		Outer diameter: <u> </u> mm																												
Catcher type: <u> </u>																														
Length of shoe: <u> </u> cm																														
Core retained: <u>12'9"</u> <u>cm</u>		Core sections: <u> </u>																												
Core in shoe: <u> </u> <u>cm</u>		Core disturbance: <u> </u>																												
Total recovery: <u>10'9"</u> <u>cm</u>		Percent recovery: <u> </u> %																												
Comments: <u>Driller said run was sticky</u>																														
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Subsamples:</th> <th style="width: 25%;">Moisture</th> <th style="width: 25%;">Bulk</th> </tr> <tr> <th>Photos</th> <th>Content</th> <th>Density</th> </tr> </thead> <tbody> <tr><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> </tbody> </table>				Subsamples:	Moisture	Bulk	Photos	Content	Density	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Subsamples:	Moisture	Bulk																												
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*Core in 3 pieces 14A, 14B, 14C ^{Box 20}
 + 14C in separate box of extra pieces

DRILLING AND SAMPLING DATA SHEET



Borehole: <u>GSC-BH SW-07</u>		Core Run: <u>15</u>	
Project:			
Drilling Method: <u>Sonic</u>			
Date: <u>March 19, 2011</u>		Start Time: <u>10:31</u>	
Logger:		End Time: <u>11:12</u>	
Drilling Information:			
Initial auger depth: <u>140'</u> cm		Initial tube depth: _____ ft _____ cm	
Final auger depth: <u>150'</u> cm		Final tube depth: _____ ft _____ cm	
Feed gauge pressure: _____ psi			
Drill stem speed: _____ rpm			
Coring Data: Shoe		Coring Data: Core barrel	
Inner diameter: _____ mm		Inner diameter: _____ mm	
Outer diameter: _____ mm		Outer diameter: _____ mm	
Catcher type: _____			
Length of shoe: _____ cm			
Core retained: <u>11'6"</u> cm		Core sections: _____	
Core in shoe: _____ cm		Core disturbance: _____	
Total recovery: <u>11'6"</u> cm		Percent recovery: _____ %	
Comments: <u>Core went into casing above ~6'-9".</u>			
Subsamples:			
Photos	Porewater	Moisture Content	Bulk Density
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

* Core in 48 pieces - 15A, 15B, 15C, 15D (shoe) Box 30
 * 15C⁴⁰ in box with extra pieces.

DRILLING AND SAMPLING DATA SHEET



Borehole: <u>GSC-BH-SW-07</u>		Core Run: <u>16</u>	
Project:			
Drilling Method: <u>Sonic</u>			
Date: <u>March 19, 2011</u>		Start Time: <u>11:22</u>	
Logger:		End Time: <u>12:35</u>	
Drilling Information:			
Initial auger depth: <u>150'</u> cm		Initial tube depth: _____ ft _____ cm	
Final auger depth: <u>160'</u> cm		Final tube depth: _____ ft _____ cm	
Feed gauge pressure: _____ psi			
Drill stem speed: _____ rpm			
Coring Data: Shoe		Coring Data: Core barrel	
Inner diameter: _____ mm		Inner diameter: _____ mm	
Outer diameter: _____ mm		Outer diameter: _____ mm	
Catcher type: _____			
Length of shoe: _____ cm			
Core retained: <u>18"</u> cm		Core sections: _____	
Core in shoe: _____ cm		Core disturbance: _____	
Total recovery: <u>18"</u> cm		Percent recovery: _____ %	
Comments: <u>Hit rock very soon into drive - poor recovery. Rock sticking out of shoe upon retrieval.</u>			
Subsamples:			
Photos	Porewater	Moisture Content	Bulk Density
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

* Core is a box of short pieces Box 37

DRILLING AND SAMPLING DATA SHEET



Borehole: <u>GSC-BH-SW-07</u>		Core Run: <u>17</u>	
Project:			
Drilling Method: <u>Sonic</u>			
Date: <u>March 19, 201</u>		Start Time: <u>12:35</u>	
Logger:		End Time: <u>13:26</u>	
Drilling Information:			
Initial auger depth: <u>160'</u> cm		Initial tube depth: _____ ft _____ cm	
Final auger depth: <u>170'</u> cm		Final tube depth: _____ ft _____ cm	
Feed gauge pressure: _____ psi			
Drill stem speed: _____ rpm			
Coring Data: Shoe		Coring Data: Core barrel	
Inner diameter: _____ mm		Inner diameter: _____ mm	
Outer diameter: _____ mm		Outer diameter: _____ mm	
Catcher type: _____			
Length of shoe: _____ cm			
Core retained: <u>11'2"</u> cm		Core sections: _____	
Core in shoe: _____ cm		Core disturbance: _____	
Total recovery: <u>11'2"</u> cm		Percent recovery: _____ %	
Comments: <u>Driller said run started out like clay and then soften up before hardening again</u>			
Subsamples: <u>* Core expanded and a fair bit lost out of top of run.</u>			
Photos	Porewater	Moisture Content	Bulk Density
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

*Core in 3 pieces 17A, 17B, 17C - 17C in Ziploc in Box 32

DRILLING AND SAMPLING DATA SHEET



Borehole: <u>GSC-BH-SW-07</u>		Core Run: <u>18</u>	
Project:			
Drilling Method: <u>Sonic</u>			
Date: <u>March 19, 2011</u>		Start Time: <u>13:36</u>	
Logger:		End Time: <u>14:24</u>	
Drilling Information:			
Initial auger depth: <u>170'</u> cm		Initial tube depth: _____ ft _____ cm	
Final auger depth: <u>180'</u> cm		Final tube depth: _____ ft _____ cm	
Feed gauge pressure: _____ psi			
Drill stem speed: _____ rpm			
Coring Data: Shoe		Coring Data: Core barrel	
Inner diameter: _____ mm		Inner diameter: _____ mm	
Outer diameter: _____ mm		Outer diameter: _____ mm	
Catcher type: _____			
Length of shoe: _____ cm			
Core retained: <u>11' 2"</u> cm		Core sections: _____	
Core in shoe: _____ cm		Core disturbance: _____	
Total recovery: <u>11' 2"</u> cm		Percent recovery: _____ %	
Comments:			

Subsamples:			
Photos	Porewater	Moisture Content	Bulk Density
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

* Core in 3 pieces 18A, 18B, 18C
 * 18C in 2:0 log in separate box 27 with pieces.

DRILLING AND SAMPLING DATA SHEET



Borehole: <u>GSC-BH-SW-07</u>		Core Run: <u>19</u>	
Project:			
Drilling Method: <u>Sonic</u>			
Date: <u>March 19, 2011</u>		Start Time: <u>14:33</u>	
Logger:		End Time: <u>15:22</u>	
Drilling Information:			
Initial auger depth: <u>180'</u> cm		Initial tube depth: _____ ft _____ cm	
Final auger depth: <u>190'</u> cm		Final tube depth: _____ ft _____ cm	
Feed gauge pressure: _____ psi			
Drill stem speed: _____ rpm			
Coring Data: Shoe		Coring Data: Core barrel	
Inner diameter: _____ mm		Inner diameter: _____ mm	
Outer diameter: _____ mm		Outer diameter: _____ mm	
Catcher type: _____			
Length of shoe: _____ cm			
Core retained: <u>11'3"</u> cm		Core sections: _____	
Core in shoe: _____ cm		Core disturbance: _____	
Total recovery: <u>11'3"</u> cm		Percent recovery: _____ %	
Comments:			

Subsamples:			
Photos	Porewater	Moisture Content	Bulk Density
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

* Core in 3 segments 19A, 19B, 19C

* 19C boxed and in with other pieces in Box 42

[illegible]

DRILLING AND SAMPLING DATA SHEET



Borehole: GSC-BH-SW-07

Core Run: 21

Project:

Drilling Method: Sonic

Date: March 19, 2011

Start Time: 17:15

Logger:

End Time: 18:09

Drilling Information:

Initial auger depth: 200' cm

Initial tube depth: _____ ft _____ cm

Final auger depth: 210' cm

Final tube depth: _____ ft _____ cm

Feed gauge pressure: _____ psi

Drill stem speed: _____ rpm

Coring Data: Shoe

Inner diameter: _____ mm

Outer diameter: _____ mm

Catcher type: _____

Length of shoe: _____ cm

Coring Data: Core barrel

Inner diameter: _____ mm

Outer diameter: _____ mm

Core retained: 11' 3" cm

Core sections: _____

Core in shoe: _____ cm

Core disturbance: _____

Total recovery: 11' 3" cm

Percent recovery: _____ %

Comments:

More core in casing above run but chucked by driller.

Subsamples:

Photos

Porewater

Moisture
Content

Bulk
Density

* Core in 3 pieces 21A, 21B, 21C
* 21C in box 11.



[illegible]

[illegible]

DRILLING AND SAMPLING DATA SHEET



Borehole: GSC-BH-SW-2011

Core Run: 26

Project:

Drilling Method: Sonic

Date: March 20, 2011

Start Time: 13:10

Logger:

End Time: 14:10

Drilling Information:

Initial auger depth: 250' cm

Initial tube depth: _____ ft _____ cm

Final auger depth: 260' cm

Final tube depth: _____ ft _____ cm

Feed gauge pressure: _____ psi

Drill stem speed: _____ rpm

Coring Data: Shoe

Inner diameter: _____ mm

Outer diameter: _____ mm

Catcher type: _____

Length of shoe: _____ cm

Coring Data: Core barrel

Inner diameter: _____ mm

Outer diameter: _____ mm

Core retained: 11' 1" ~~cm~~

Core sections: _____

Core in shoe: _____ cm

Core disturbance: _____

Total recovery: 11' 1" ~~cm~~

Percent recovery: _____ %

Comments: - Core in 3 pieces 26A, 26B, 26C
- 26C capped & in box # 57

Subsamples:

Photos

Porewater

Moisture
Content

Bulk
Density

Tossed by
driller -
2.5' of
skinny core.
Typical of
these H1 runs

DRILLING AND SAMPLING DATA SHEET



Borehole: GSC-BH-SW-07

Core Run: 27

Project:

Drilling Method: Sonic

Date: March 20, 2011

Start Time: 14:15

Logger:

End Time: 15:15

Drilling Information:

Initial auger depth: 260' cm

Initial tube depth: _____ ft _____ cm

Final auger depth: 270' cm

Final tube depth: _____ ft _____ cm

Feed gauge pressure: _____ psi

Drill stem speed: _____ rpm

Coring Data: Shoe

Inner diameter: _____ mm

Outer diameter: _____ mm

Catcher type: _____

Length of shoe: _____ cm

Coring Data: Core barrel

Inner diameter: _____ mm

Outer diameter: _____ mm

Core retained: 10' 9" cm

Core sections: _____

Core in shoe: _____ cm

Core disturbance: _____

Total recovery: 10' 9" cm

Percent recovery: _____ %

Comments:

- Core in 3 pieces 27A, 27B, 27C
- 27C in bag in box # 57

Subsamples:

Photos

Porewater

Moisture
Content

Bulk
Density

DRILLING AND SAMPLING DATA SHEET



Borehole: GSC-BH-SW-07

Core Run: 28

Project:

Drilling Method: Sonic

Date: March 20, 2011

Start Time: 15:20

Logger:

End Time: 16:52

Drilling Information:

Initial auger depth: 270' cm Initial tube depth: _____ ft _____ cm
 Final auger depth: 280' cm Final tube depth: _____ ft _____ cm
 Feed gauge pressure: _____ psi
 Drill stem speed: _____ rpm

Coring Data: Shoe

Inner diameter: _____ mm
 Outer diameter: _____ mm
 Catcher type: _____
 Length of shoe: _____ cm

Coring Data: Core barrel

Inner diameter: _____ mm
 Outer diameter: _____ mm

SAND!

Core retained: 6' 10" cm
 Core in shoe: _____ cm
 Total recovery: 6' 10" cm

Core sections: _____
 Core disturbance: _____
 Percent recovery: _____ %

Comments:

Hit a rock - may have clogged barrel.
-28B in Box 57

Subsamples:

Photos

Porewater

Moisture
Content

Bulk
Density

DRILLING AND SAMPLING DATA SHEET



Borehole: GSC-BH-SW-07

Core Run: 29

Project:

Drilling Method: Sonic

Date: March 20, 2011

Start Time: 17:05

Logger:

End Time: 18:20

Drilling Information:

Initial auger depth: 280' cm

Initial tube depth: _____ ft _____ cm

Final auger depth: 290' cm

Final tube depth: _____ ft _____ cm

Feed gauge pressure: _____ psi

Drill stem speed: _____ rpm

Coring Data: Shoe

Inner diameter: _____ mm

Outer diameter: _____ mm

Catcher type: _____

Length of shoe: _____ cm

Coring Data: Core barrel

Inner diameter: _____ mm

Outer diameter: _____ mm

Core retained: 9'9" cm

Core sections: _____

Core in shoe: _____ cm

Core disturbance: _____

Total recovery: 9'9" cm

Percent recovery: _____ %

Comments:

Subsamples:

Photos

Porewater

Moisture
Content

Bulk
Density

DRILLING AND SAMPLING DATA SHEET



Borehole: GSC-BH-SW-07

Core Run: 30

Project:

Drilling Method: Sonic

Date: March 20, 2011

Start Time: 8:30 (?)

Logger: 21

End Time: 9:28

Drilling Information:

Initial auger depth: 290' cm

Initial tube depth: _____ ft _____ cm

Final auger depth: 300' cm

Final tube depth: _____ ft _____ cm

Feed gauge pressure: _____ psi

Drill stem speed: _____ rpm

Coring Data: Shoe

Inner diameter: _____ mm

Outer diameter: _____ mm

Catcher type: _____

Length of shoe: _____ cm

Coring Data: Core barrel

Inner diameter: _____ mm

Outer diameter: _____ mm

Core retained: 7' 11" cm

Core sections: _____

Core in shoe: _____ cm

Core disturbance: _____

Total recovery: 7' 11" cm

Percent recovery: _____ %

Comments:

Some clay in the core catcher - driller.
little amount of

Subsamples:

Photos

Porewater

Moisture
Content

Bulk
Density

DRILLING AND SAMPLING DATA SHEET



Borehole: GSC-BH-SW-07

Core Run: 31

Project:

Drilling Method: Sonic

Date: March 21~~st~~, 2011

Start Time: 9:40

Logger:

End Time: 11:15

Drilling Information:

Initial auger depth: 300' cm Initial tube depth: _____ ft _____ cm
 Final auger depth: 310' cm Final tube depth: _____ ft _____ cm
 Feed gauge pressure: _____ psi
 Drill stem speed: _____ rpm

Coring Data: Shoe

Inner diameter: _____ mm
 Outer diameter: _____ mm
 Catcher type: _____
 Length of shoe: _____ cm

Coring Data: Core barrel

Inner diameter: _____ mm
 Outer diameter: _____ mm

Core retained: 7'2" ~~cm~~
 Core in shoe: _____ cm
 Total recovery: 7'2" ~~cm~~

Core sections: _____
 Core disturbance: _____
 Percent recovery: _____ %

Comments:

Subsamples:

Photos

Porewater

Moisture
Content

Bulk
Density

DRILLING AND SAMPLING DATA SHEET



Borehole: GSC-BH-SW-07

Core Run: 32

Project:

Drilling Method: Sonic

Date: March 21~~0~~, 2011

Start Time: 11:50

Logger:

End Time: 13:08

Drilling Information:

Core in liner @ 17:05

Initial auger depth: 310' cm Initial tube depth: _____ ft _____ cm
 Final auger depth: 320' cm Final tube depth: _____ ft _____ cm
 Feed gauge pressure: _____ psi
 Drill stem speed: _____ rpm

Coring Data: Shoe

Coring Data: Core barrel

Inner diameter: _____ mm Inner diameter: _____ mm
 Outer diameter: _____ mm Outer diameter: _____ mm
 Catcher type: _____
 Length of shoe: _____ cm

Core retained: 10' 10" cm
 Core in shoe: _____ cm
 Total recovery: 10' 10" cm

Core sections: _____
 Core disturbance: _____
 Percent recovery: _____ %

Comments:

*Sand at top of run, till at base -
~~could~~ Took forever to extrude.*

Had to use heavy water + vibration to get out of barrel.

Subsamples:

Photos

Porewater

Moisture
Content

Bulk
Density

END OF HOLE