

Shaw E & I, Inc.				BORING LOG				Boring: LF003-MW1			
Engineering Corporation								Job Number: 136382			
								Sheet: 1		3	
Site:		New Boston Air Force Station				Shaw Geologist/Eng.: Ben Short					
Comments:											
Elev.	Depth	Sample		Blows or Recovery	SPT N Value	PTD/ETD (ppm)	USC Symbol	Sample Description	Remarks		
(feet)	(feet)	Type	No.	RQD				Unified Classification System			
	0'							0-0.25' - Pavement	Sample collected		
	2'	SS	1			0.0		0.25-5' Light brown, medium SAND and coarse SAND some gravel. Loose	0-0.5' below pavement (SIS5-SS-01)		
	4'										
	6'					0.0		5' - Boulder			
	8'										
	10'			11,10,6,2		NA		Blow counts from 10-12' No recovery 10-12'			
	12'										
	14'										
	16'	SB	1A	9,8,6,6		0.0		Blow counts from 15-17', 10" recovery 15-17' - Light brown, fine SAND and GRAVEL	Sample collected 15-17' (SIS5-SB01A)		
	18'										
	20'										
	22'										
	24'	SB	1B	4,9,36,81		0.0		Blow counts from 23-25', 12" recovery 23-25' - Dark brown, fine SAND and GRAVEL, misc. debris over yellowish brown SAND and GRAVEL	Sample collected 23-25' (SIS5-SB01B)		
	26'							24.5-26.5' Large Boulder			
	28'							26.5-27 Overburden 27-28' - Boulder			
	30'							28' - Overburden			
Remarks:											
Note:									Approved	Date	
									RM	11/5/2009	

Shaw E & I, Inc.				BORING LOG				Boring: LF003-MW1			
Engineering Corporation								Job Number: 136382			
								Sheet: 2		3	
Site:		New Boston Air Force Station				Shaw Geologist/Eng.: Ben Short					
Comments:											
Elev.	Depth	Sample		Blows or Recovery	SPT N Value	PTD/ETD (ppm)	USC Symbol	Sample Description	Remarks		
(feet)	(feet)	Type	No.	RQD				Unified Classification System			
	32'			49,48, 53, 100 for 4		0.1		Blow counts from 33-35', 8.5" recovery 33-35'- Light brown, medium SAND and GRAVEL 37-37.5' - Boulder initial water at 37.9' TOC			
	34'										
	36'										
	38'										
	40'										
	42'										
	44'										
	46'										
	48'							48.3' - Bedrock			
	50'										
	52'										
	54'										
	56'										
	58'										
	60'							61' - very competent bedrock			
	62'										
Remarks:											
Note:											
								Approved	Date		
								RM	11/5/2009		

Shaw E & I, Inc.				BORING LOG				Boring: LF003-MW1			
Engineering Corporation								Job Number: 136382			
								Sheet: 3		3	
Site:		New Boston Air Force Station				Shaw Geologist/Eng.: Ben Short					
Comments:											
Elev.	Depth	Sample		Blows or Recovery	SPT N Value	PTD/ETD (ppm)	USC Symbol	Sample Description		Remarks	
(feet)	(feet)	Type	No.	RQD				Unified Classification System			
	64'					0.0		65-76' - Small Fractures			
	66'										
	68'					0.0					
	70'					0.0					
	72'										
	74'					0.0					
	76'										
	78'										
	80'					0.1		80-81' water bearing fracture End of Exploration 81' Set LF003-MW2 at 81'			
	82'										
	84'					NA					
	86'										
	88'										
	90'										
				9,8,6,6							
Remarks:											
Note:											
								Approved		Date	
								RM		11/5/2009	



Shaw Environmental, Inc.

NBAFS



By _____ Date 10/29/04 Subject SURFICIAL SOIL SAMPLING Sheet No. _____ of _____

Chkd. By _____ Date _____ AREA 7 Proj. No. _____

.25 in. X .25 in.

NBPAH SS 015 @ 1320

0.0 - 0.5' bgs

DARK BROWN MED SAND

+ GRAVEL TRACE FINES

LOOSE MOIST - TRACE ASPHALT FRAGMENTS

PID: ~~Ø~~

NBPAH SB 15 A @ 1330

1.5 - 2.0' bgs

LT BROWN FINE SAND

TRACE GRAVEL - MOIST LOOSE

PID: ~~Ø~~

NBPAH SS 014 @ 1400

0.0 - 0.5' bgs

DARK BROWN MED SAND

+ GRAVEL - LOOSE MOIST - TRACE ASPHALT.

PID: ~~Ø~~

NBPAH SB 14 A @ 1420

1.5 - 2.0' bgs

LT BRN FINE SAND +

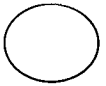
TRACE GRAVEL LOOSE MOIST

PID: ~~Ø~~



Shaw Environmental, Inc.

NBAFS



By _____ Date 10/22/09 Subject SURFICIAL SOIL Sampling Sheet No. _____ of _____

Chkd. By _____ Date _____ Proj. No. _____

.25 in. X .25 in.

NBPAH SS 013 @ 1430

0.0 - 0.5' bgs

LT BROWN MED SAND + GRAVEL

Loose - Dry - TRACE ASPHALT

PID: X.X

NBPAH SB 13A @ 1450

1.5 - 2.0' bgs

DARK BROWN MED SAND

+ GRAVEL - LOOSE MOIST

PID: X.X

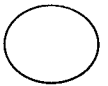
1315 -

SECURED SITE Packed up + OFFSITE



Shaw Environmental, Inc.

NBAFS



By _____ Date 10-30 Subject SURFICIAL SOIL SAMPLING Sheet No. _____ of _____

Chkd. By _____ Date _____ Proj. No. _____ .25 in. X .25 in.

0630 - H+S meeting

Discuss - Saw Fox today

Pickup Equip - ~~FF~~

Weather: Cloudy 50°F
60% exp.

Obj: SURFICIAL SOIL SAMPLING

NBPAH SS 05 @ 0740

0.0 - 0.5 Bgs

DARK BROWN COARSE SAND

+ GRAVEL - LOOSE -

SOME COBBLES IN BORING

PID: Ø.4

NBPAH SB 05A @ 0815

1.5 - 2.0' bgs

LT BROWN FINE SAND

TRACE GRAVEL - COBBLES IN

Boring @ 2'

PID: Ø.4

NBPAH SS 06 @ 0835

0.0 - 0.5' bgs

LT BROWN MEDIUM SAND

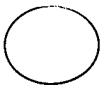
+ GRAVEL - COBBLES - LOOSE

most PID: Ø.Ø



NBAFS

Shaw Environmental, Inc.



By _____ Date _____ Subject _____ Sheet No. _____ of _____

Chkd. By _____ Date _____ Proj. No. _____

.25 in. X .25 in.

NBPAH SBOGA C 0945 + Field Duplicate #3 (SVK)

1.5-2.0' bgs

Lt Brown Coarse Sand + Gravel

- Dark Layer @ 1.75' Possible

Asphalt Fragments

Loose - moist soils - Larger cobbles

+ Boulders in Burial - Possible Reverse @ 2' bgs

PID: Ø.Ø

NBPAH SBOGA C 0930

0.0 - 0.5' bgs

Dark Brown Medium Sand

Some Gravel - Loose moist soils

PID: Ø.Ø

NBPAH SBOGA C 1000

1.5-2.0' bgs

Lt Brn. Coarse Sand

+ Gravel

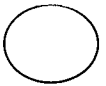
Loose moist soils

Trace Fines PID: Ø.Ø

RFSLC 2' bgs - Boulder



NBAFS

By _____ Date 10-30 Subject _____ Sheet No. _____ of _____

Chkd. By _____ Date _____ Proj. No. _____ .25 in. X .25 in.

NBPAHSS03 e 1020

0.0-0.5' bgs

DARK BROWN COARSE SAND

+ ANGULAR GRAVEL - TRACE

Asphalt Fragments.

PID: Ø.Ø

NBPAH SB03A e 1045

1.5-2.0' bgs

LT BROWN - SO MEDIUM SAND

+ GRAVEL LOOSE MOIST

PID: Ø.Ø

01
NBPAHSS01 e 1100

0.0-0.5' bgs

DARK BROWN COARSE SAND

+ GRAVEL - TRACE FINES

Loose moist soils

PID: Ø.Ø

NBPAH SB02A e 1115

1.5-2.0

LT BROWN COARSE SAND + GRAVEL

Some Fines

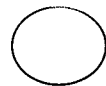
Loose - moist

PID: Ø.Ø



Shaw Environmental, Inc.

NBAFS



By _____ Date _____ Subject _____ Sheet No. _____ of _____

Chkd. By _____ Date _____ Proj. No. _____

.25 in. X .25 in.

NBPAH SS 02 C 1130

0.0 - 0.5' bgs

DARK BROWN COARSE SAND

Trace asphalt fragments

Trace Fines

Some Gravel

Loose - moist

PID: 8.6

NBPAH SB 02A C 1200

1.5 - 2.0

LT BROWN COARSE SAND

Some Gravel

Trace Fines -

Loose + moist soils

PID: 8.8



Drilling Log

Soil Boring **NBPAH-SB01**

Page: 1 of 1

Project New Boston Air Force Station Owner USAF
 Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382
 Surface Elev. NA Total Hole Depth 2.0 ft. North _____ East _____
 Top of Casing NA Water Level Initial NA Static NA Diameter _____
 Screen: Dia NA Length NA Type/Size NA
 Casing: Dia NA Length NA Type NA
 Fill Material Native Rig/Core Air Knife/Vac/Hand Auger
 Drill Co. NHB Method Air Knife/Vac/Hand Auger
 Driller Gregg/Shawn Log By Ben Short Date 10/30/09 Permit # NA
 Checked By _____ License No. _____

COMMENTS
 ND = Not detected
 Samples collected (SS-01 and SB-01A) were sent to the laboratory for analysis.

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0	ND				SP GP	Dark brown, moist, loose, coarse SAND and GRAVEL, trace fine sand
2	ND				SP GP	Light brown, moist, loose, coarse SAND and GRAVEL, some fine sand
4						End of exploration at 2 feet below surface grade.
6						
8						
10						

SHAW_COMMERCIAL Rev: 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

Drilling Log

Soil Boring

NBPAH-SB02

Page: 1 of 1

Project New Boston Air Force Station Owner USAF
 Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382
 Surface Elev. NA Total Hole Depth 2.0 ft. North _____ East _____
 Top of Casing NA Water Level Initial NA Static NA Diameter _____
 Screen: Dia NA Length NA Type/Size NA
 Casing: Dia NA Length NA Type NA
 Fill Material Native Rig/Core Air Knife/Vac/Hand Auger
 Drill Co. NHB Method Air Knife/Vac/Hand Auger
 Driller Gregg/Shawn Log By Ben Short Date 10/30/09 Permit # NA
 Checked By _____ License No. _____

COMMENTS

ND = Not detected

Samples collected (SS-02 and SB-02A) were sent to the laboratory for analysis.

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0	ND				SP	Dark brown, moist, loose, coarse SAND, some gravel, trace fine sand, trace asphalt fragments
2	ND				SP	Light brown, moist, loose, coarse SAND, some gravel, trace fine sand
4						End of exploration at 2 feet below surface grade.
6						
8						
10						

SHAW_COMMERCIAL Rev: 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

Drilling Log

Soil Boring **NBPAH-SB03**


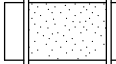
Page: 1 of 1

Project New Boston Air Force Station Owner USAF
 Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382
 Surface Elev. NA Total Hole Depth 2.0 ft. North _____ East _____
 Top of Casing NA Water Level Initial NA Static NA Diameter _____
 Screen: Dia NA Length NA Type/Size NA
 Casing: Dia NA Length NA Type NA
 Fill Material Native Rig/Core Air Knife/Vac/Hand Auger
 Drill Co. NHB Method Air Knife/Vac/Hand Auger
 Driller Gregg/Shawn Log By Ben Short Date 10/30/09 Permit # NA
 Checked By _____ License No. _____

COMMENTS

ND = Not detected

Samples collected (SS-03 and SB-03A) were sent to the laboratory for analysis.

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0	ND				SP GP	Dark brown, coarse SAND and angular GRAVEL, trace asphalt fragments
2	ND				SP	Light brown, moist, loose, medium SAND and GRAVEL
End of exploration at 2 feet below surface grade.						
4						
6						
8						
10						

SHAW_COMMERCIAL Rev: 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

Drilling Log

Soil Boring **NBPAH-SB04**

Page: 1 of 1

Project New Boston Air Force Station Owner USAF
 Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382
 Surface Elev. NA Total Hole Depth 2.0 ft. North _____ East _____
 Top of Casing NA Water Level Initial NA Static NA Diameter _____
 Screen: Dia NA Length NA Type/Size NA
 Casing: Dia NA Length NA Type NA
 Fill Material Native Rig/Core Air Knife/Vac/Hand Auger
 Drill Co. NHB Method Air Knife/Vac/Hand Auger
 Driller Gregg/Shawn Log By Ben Short Date 10/30/09 Permit # NA
 Checked By _____ License No. _____

COMMENTS
 ND = Not detected
 Samples collected (SS-04 and SB-04A) were sent to the laboratory for analysis.

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0	ND				SP	Dark brown, moist, loose, medium SAND, some gravel
2	ND				SP	Light brown, moist, loose, coarse SAND and GRAVEL, trace fine sand
						End of exploration at 2 feet below surface grade (refusal).
4						
6						
8						
10						

SHAW_COMMERCIAL Rev: 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

Drilling Log

Soil Boring

NBPAH-SB05

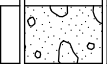
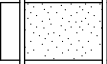
Page: 1 of 1

Project New Boston Air Force Station Owner USAF
 Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382
 Surface Elev. NA Total Hole Depth 2.0 ft. North _____ East _____
 Top of Casing NA Water Level Initial NA Static NA Diameter _____
 Screen: Dia NA Length NA Type/Size NA
 Casing: Dia NA Length NA Type NA
 Fill Material Native Rig/Core Air Knife/Vac/Hand Auger
 Drill Co. NHB Method Air Knife/Vac/Hand Auger
 Driller Gregg/Shawn Log By Ben Short Date 10/30/09 Permit # NA
 Checked By _____ License No. _____

COMMENTS

ND = Not detected

Samples collected (SS-05 and SB-05A) were sent to the laboratory for analysis.

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0	ND				SP GP	Dark brown, loose, coarse SAND and GRAVEL, some cobbles
2	ND				SP	Light brown, fine SAND, trace gravel and cobbles
End of exploration at 2 feet below surface grade.						
4						
6						
8						
10						

SHAW_COMMERCIAL Rev: 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

Drilling Log

Soil Boring

NBPAH-SB06

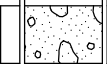
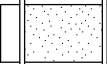
Page: 1 of 1

Project New Boston Air Force Station Owner USAF
 Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382
 Surface Elev. NA Total Hole Depth 2.0 ft. North _____ East _____
 Top of Casing NA Water Level Initial NA Static NA Diameter _____
 Screen: Dia NA Length NA Type/Size NA
 Casing: Dia NA Length NA Type NA
 Fill Material Native Rig/Core Air Knife/Vac/Hand Auger
 Drill Co. NHB Method Air Knife/Vac/Hand Auger
 Driller Gregg/Shawn Log By Ben Short Date 10/30/09 Permit # NA
 Checked By _____ License No. _____

COMMENTS

ND = Not detected

Samples collected (SS-06 and SB-06A) were sent to the laboratory for analysis.

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0	ND				SP GP	Light brown, moist, loose, coarse SAND and GRAVEL, some large cobbles and boulders, dark layer at 1.75' (possible asphalt fragments)
2	ND				SP	Dark brown, moist, loose, medium SAND, some gravel
4						End of exploration at 2 feet below surface grade.
6						
8						
10						

SHAW_COMMERCIAL Rev: 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

Drilling Log

Soil Boring **NBPAH-SB10**

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Project New Boston Air Force Station Owner USAF
 Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382
 Surface Elev. NA Total Hole Depth 2.0 ft. North _____ East _____
 Top of Casing NA Water Level Initial NA Static NA Diameter _____
 Screen: Dia NA Length NA Type/Size NA
 Casing: Dia NA Length NA Type NA
 Fill Material Native Rig/Core Air Knife/Vac/Hand Auger
 Drill Co. NHB Method Air Knife/Vac/Hand Auger
 Driller Gregg/Shawn Log By Ben Short Date 10/29/09 Permit # NA
 Checked By _____ License No. _____

COMMENTS
 ND = Not detected
 Samples collected (SS-10 and SB-10A) were sent to the laboratory for analysis.

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0	ND					Hand cleared to 5'
						Light brown, coarse SAND, trace fine sand, gravel and cobbles
					FILL	
2	ND					Light brown, moist, loose, medium SAND, trace gravel and fine sand
						End of exploration at 2 feet below surface grade.
4						
6						
8						
10						

SHAW_COMMERCIAL Rev: 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

Drilling Log

Soil Boring

NBPAH-SB11

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Project New Boston Air Force Station Owner USAF
 Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382
 Surface Elev. NA Total Hole Depth 2.0 ft. North _____ East _____
 Top of Casing NA Water Level Initial NA Static NA Diameter _____
 Screen: Dia NA Length NA Type/Size NA
 Casing: Dia NA Length NA Type NA
 Fill Material Native Rig/Core Air Knife/Vac/Hand Auger
 Drill Co. NHB Method Air Knife/Vac/Hand Auger
 Driller Gregg/Shawn Log By Ben Short Date 10/29/09 Permit # NA
 Checked By _____ License No. _____

COMMENTS

ND = Not detected

Samples collected (SS-11 and SB-11A) were sent to the laboratory for analysis.

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0	ND					
2	ND					
4						
6						
8						
10						

SHAW_COMMERCIAL Rev: 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

0

2

4

6

8

10

<

SHAW_COMMERCIAL Rev: 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

Drilling Log

Soil Boring

NBPAH-SB12

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Project New Boston Air Force Station Owner USAF
 Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382
 Surface Elev. NA Total Hole Depth 2.0 ft. North _____ East _____
 Top of Casing NA Water Level Initial NA Static NA Diameter _____
 Screen: Dia NA Length NA Type/Size NA
 Casing: Dia NA Length NA Type NA
 Fill Material Native Rig/Core Air Knife/Vac/Hand Auger
 Drill Co. NHB Method Air Knife/Vac/Hand Auger
 Driller Gregg/Shawn Log By Ben Short Date 10/29/09 Permit # NA
 Checked By _____ License No. _____

COMMENTS

ND = Not detected

Samples collected (SS-12 and SB-12A) were sent to the laboratory for analysis.

						Description
						(Color, Texture, Structure)
						Geologic Descriptions are Based on the USCS.
Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	
0	ND					

SHAW_COMMERCIAL Rev: 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

Drilling Log

Soil Boring

NBPAH-SB13



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Project New Boston Air Force Station Owner USAF
 Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382
 Surface Elev. NA Total Hole Depth 2.0 ft. North _____ East _____
 Top of Casing NA Water Level Initial NA Static NA Diameter _____
 Screen: Dia NA Length NA Type/Size NA
 Casing: Dia NA Length NA Type NA
 Fill Material Native Rig/Core Air Knife/Vac/Hand Auger
 Drill Co. NHB Method Air Knife/Vac/Hand Auger
 Driller Gregg/Shawn Log By Ben Short Date 10/29/09 Permit # NA
 Checked By _____ License No. _____

COMMENTS

ND = Not detected

Samples collected (SS-13 and SB-13A) were sent to the laboratory for analysis.

						Description	
						(Color, Texture, Structure)	
						Geologic Descriptions are Based on the USCS.	
Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.		
0	ND				SP GP	Light brown, dry, loose, medium SAND and GRAVEL, trace asphalt fragments	
2	ND			SP GP	Dark brown, moist, loose, medium SAND and GRAVEL		
					End of exploration at 2 feet below surface grade.		
4							
6							
8							
10							

SHAW_COMMERCIAL Rev: 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

Drilling Log

Soil Boring

NBPAH-SB14


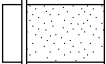
Page: 1 of 1

Project New Boston Air Force Station Owner USAF
 Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382
 Surface Elev. NA Total Hole Depth 2.0 ft. North _____ East _____
 Top of Casing NA Water Level Initial NA Static NA Diameter _____
 Screen: Dia NA Length NA Type/Size NA
 Casing: Dia NA Length NA Type NA
 Fill Material Native Rig/Core Air Knife/Vac/Hand Auger
 Drill Co. NHB Method Air Knife/Vac/Hand Auger
 Driller Gregg/Shawn Log By Ben Short Date 10/29/09 Permit # NA
 Checked By _____ License No. _____

COMMENTS

ND = Not detected

Samples collected (SS-14 and SB-14A) were sent to the laboratory for analysis.

						Description	
						(Color, Texture, Structure)	
						Geologic Descriptions are Based on the USCS.	
Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.		
0	ND				SP GP	Dark brown, moist, loose, medium SAND and GRAVEL, trace asphalt fragments	
2	ND				SP	Light brown, moist, loose, fine SAND, trace gravel	
4						End of exploration at 2 feet below surface grade.	
6							
8							
10							

SHAW_COMMERCIAL Rev: 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

Drilling Log

Soil Boring

NBPAH-SB15

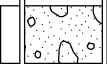
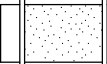
Page: 1 of 1

Project New Boston Air Force Station Owner USAF
 Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382
 Surface Elev. NA Total Hole Depth 2.0 ft. North _____ East _____
 Top of Casing NA Water Level Initial NA Static NA Diameter _____
 Screen: Dia NA Length NA Type/Size NA
 Casing: Dia NA Length NA Type NA
 Fill Material Native Rig/Core Air Knife/Vac/Hand Auger
 Drill Co. NHB Method Air Knife/Vac/Hand Auger
 Driller Gregg/Shawn Log By Ben Short Date 10/29/09 Permit # NA
 Checked By _____ License No. _____

COMMENTS

ND = Not detected

Samples collected (SS-15 and SB-15A) were sent to the laboratory for analysis.

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0	ND				SP GP	Dark brown, moist, loose, medium SAND and GRAVEL, trace fine sand, trace asphalt fragments
2	ND				SP	Light brown, moist, loose, fine SAND, trace gravel
4						End of exploration at 2 feet below surface grade.
6						
8						
10						

SHAW_COMMERCIAL Rev: 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

Drilling Log

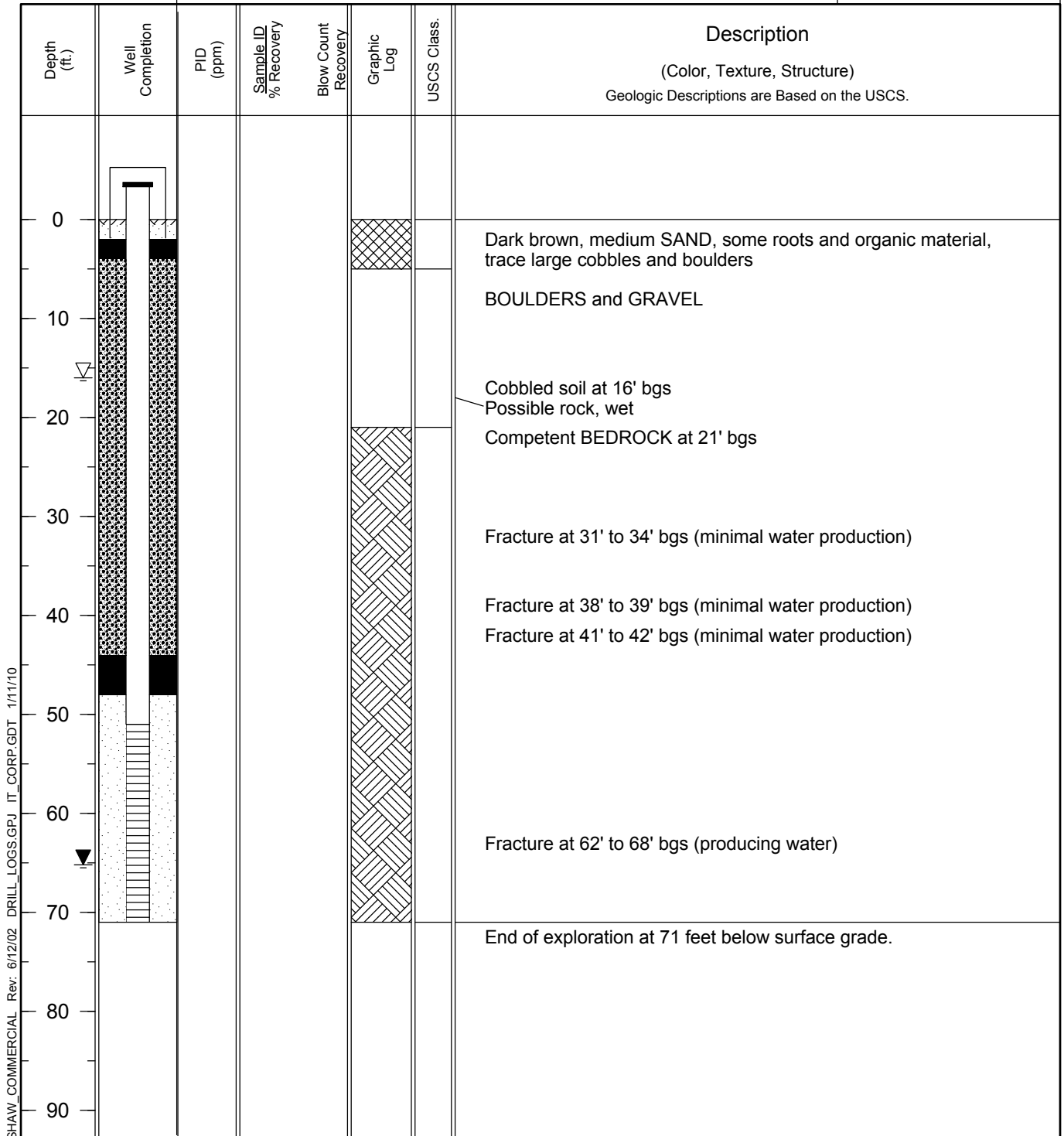
Monitoring Well

SIS18/MW3/SB2

Page: 1 of 1

Project New Boston Air Force Station Owner USAF
 Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382
 Surface Elev. NA Total Hole Depth 71.0 ft. North East
 Top of Casing NA Water Level Initial ▽ 16.0 ft. Static ▽ 65.2 ft. Diameter 4 in.
 Screen: Dia 2 in. Length 20 ft. Type/Size PVC/0.010 in.
 Casing: Dia 2 in. Length 51 ft. Type PVC
 Fill Material Native, Sand, Bentonite, Grout Rig/Core F15
 Drill Co. NHB Method Air Knife/Vac/Drive&Wash/Air Hammer
 Driller Gregg/Shawn Log By Ben Short Date 11/16/09 Permit # NA
 Checked By License No.

COMMENTS
 ND = Not detected
 bgs = Below ground surface
 Cleared to 5' with air knife on 10/26/2009. Well installed on 11/16/2009.



SHAW_COMMERCIAL Rev: 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

Drilling Log

Monitoring Well

SIS18/MW5/SB4

Page: 1 of 1

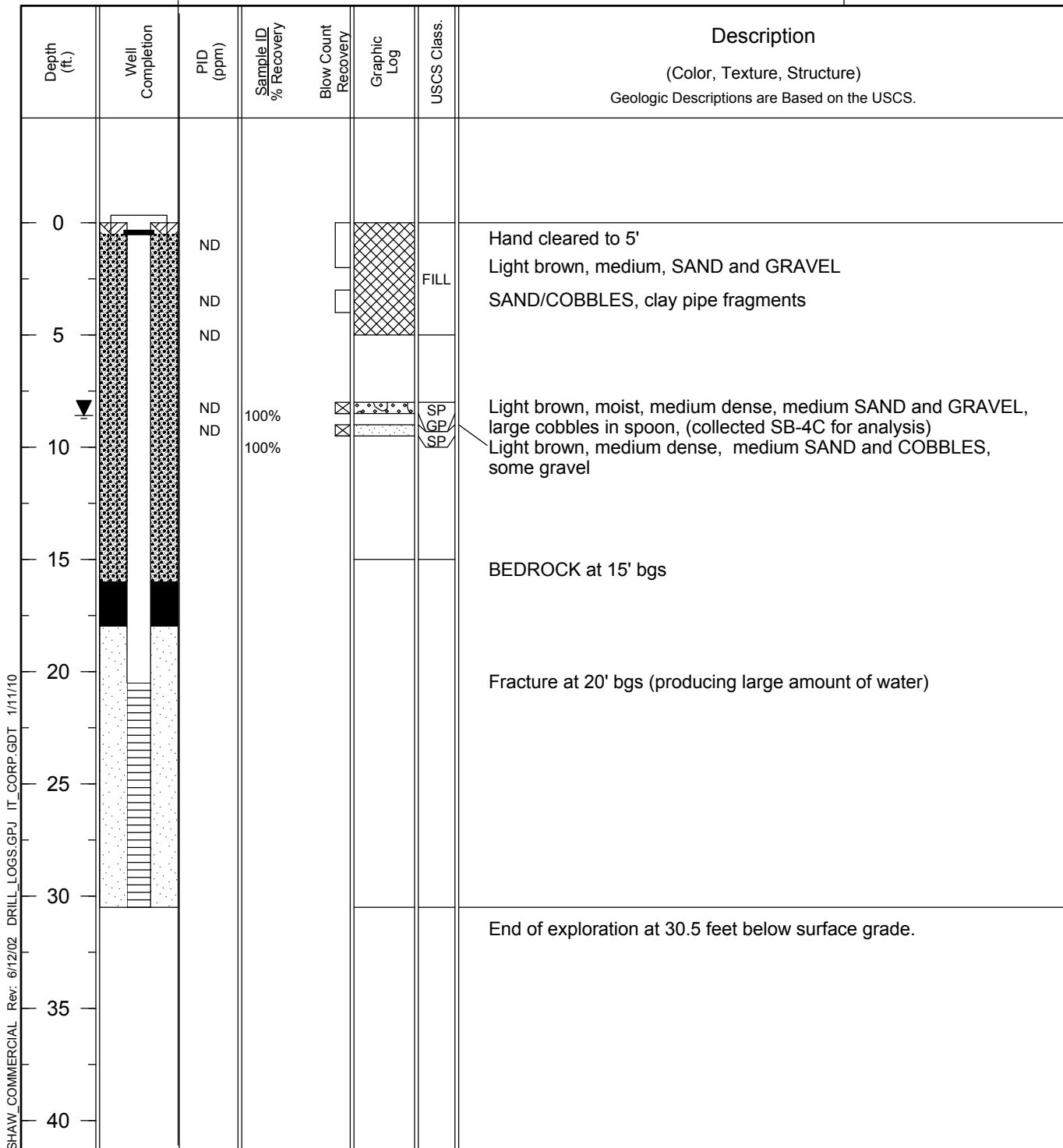
Project New Boston Air Force Station Owner USAF
 Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382
 Surface Elev. NA Total Hole Depth 30.5 ft. North East
 Top of Casing NA Water Level Initial NA Static ▼ 8.6 ft. Diameter 4 in.
 Screen: Dia 2 in. Length 10 ft. Type/Size PVC/0.010 in.
 Casing: Dia 2 in. Length 21 ft. Type PVC
 Fill Material Native, Sand, Bentonite, Grout Rig/Core F15
 Drill Co. NHB Method Air Knife/Vac/Drive&Wash/Air Hammer
 Driller Gregg/Shawn Log By Ben Short Date 11/17/09 Permit # NA
 Checked By License No.

COMMENTS

ND = Not detected

bgs = Below ground surface

Cleared to 5' with air knife on 11/17/2009. Well installed on 11/23/2009.



SHAW_COMMERCIAL Rev: 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

Drilling Log

Soil Boring

SIS18-SB11

Page: 1 of 1

Project New Boston Air Force Station Owner USAF
 Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382
 Surface Elev. NA Total Hole Depth 5.0 ft. North _____ East _____
 Top of Casing NA Water Level Initial NA Static NA Diameter _____
 Screen: Dia NA Length NA Type/Size NA
 Casing: Dia NA Length NA Type NA
 Fill Material Native Rig/Core Hand Auger
 Drill Co. NHB Method Hand Auger
 Driller Gregg/Shawn Log By Ben Short Date 10/28/09 Permit # NA
 Checked By _____ License No. _____

COMMENTS

ND = Not detected

Sample collected at 4' - 4.5' (SIS18-SB11A) was sent to laboratory for analysis.

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Grass & Leaves
	ND					Hand cleared to 5'
2						Light brown, loose SAND and medium GRAVEL
	ND				FILL	Light brown, medium SAND, some cobbles
4						
6						End of exploration at 5 feet below surface grade.
8						
10						

SHAW_COMMERCIAL Rev: 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

Drilling Log

Soil Boring

SIS18-SB04

Page: 1 of 1

Project New Boston Air Force Station Owner USAF
 Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382
 Surface Elev. NA Total Hole Depth 5.0 ft. North _____ East _____
 Top of Casing NA Water Level Initial NA Static NA Diameter _____
 Screen: Dia NA Length NA Type/Size NA
 Casing: Dia NA Length NA Type NA
 Fill Material Native Rig/Core Hand Auger
 Drill Co. NHB Method Hand Auger
 Driller Gregg/Shawn Log By Ben Short Date 10/28/09 Permit # NA
 Checked By _____ License No. _____

COMMENTS

ND = Not detected

bgs = Below ground surface

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Grass & Leaves
	ND					Hand cleared to 5'
2						Light brown, medium SAND and GRAVEL, trace boulders
	ND				FILL	Light brown, medium SAND, trace loose gravel
4						
6						End of exploration at 5 feet below surface grade.
8						
10						

SHAW_COMMERCIAL Rev: 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

Drilling Log

Soil Boring

SIS5-SS01

Page: 1 of 1

Project New Boston Air Force Station Owner USAF
 Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382
 Surface Elev. NA Total Hole Depth 5.0 ft. North _____ East _____
 Top of Casing NA Water Level Initial NA Static NA Diameter _____
 Screen: Dia NA Length NA Type/Size NA
 Casing: Dia NA Length NA Type NA
 Fill Material Native Rig/Core Hand Auger
 Drill Co. NHB Method Hand Auger
 Driller Gregg/Shawn Log By Ben Short Date 10/28/09 Permit # NA
 Checked By _____ License No. _____

COMMENTS

ND = Not detected

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0						Hand cleared to 5'
	ND					Light brown, medium SAND and coarse SAND, some loose gravel
2						Same as above
	ND				FILL	Same as above
4						
						Large boulder at 5'
6						End of exploration at 5 feet below surface grade.
8						
10						

SHAW_COMMERCIAL Rev: 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

Drilling Log

Monitoring Well

SIS8/MW-1

Page: 1 of 1

Project New Boston Air Force Station Owner USAF

Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382

Surface Elev. NA Total Hole Depth 101.0 ft. North _____ East _____

Top of Casing NA Water Level Initial NA Static ▼ 32.0 ft. Diameter 4 in.

Screen: Dia 2 in. Length 20 ft. Type/Size PVC/0.010 in.

Casing: Dia 2 in. Length 81 ft. Type PVC

Fill Material	<i>Native, Sand, Bentonite, Grout</i>	Rig/Core	<i>F15</i>
---------------	---------------------------------------	----------	------------

Drill Co. NHB Method Air Knife/Vac/Drive&Wash/Air Hammer

Driller Gregg/Shawn Log By Ben Short Date 11/10/09 Permit # NA

Checked By _____ License No. _____

COMMENTS

ND = Not detected

bgs = Below ground surface

Cleared to 5' with air knife on 10/26/2009. Well installed on 11/10/2009.

Depth (ft.)		Well Completion	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
0			ND					Grass & Large Cobbles Clear to 5' with air knife Dark brown, medium SAND and GRAVEL, (organics)
10								
20								
30								Running sands to 33' Bedrock encountered at 34' bgs
40								Fracture at 38' bgs (not water bearing)
50								
60								Fracture at 51' bgs (not water bearing)
70								Fracture at 63' bgs (not water bearing)
80								Fracture at 80' bgs (some water) Fracture at 83' bgs (some water)
90								
100								Fracture at 96' bgs (producing large amount of water)
110								End of exploration at 101 feet below surface grade.
120								

Drilling Log

Monitoring Well

SS08/MW-4

Page: 1 of 1

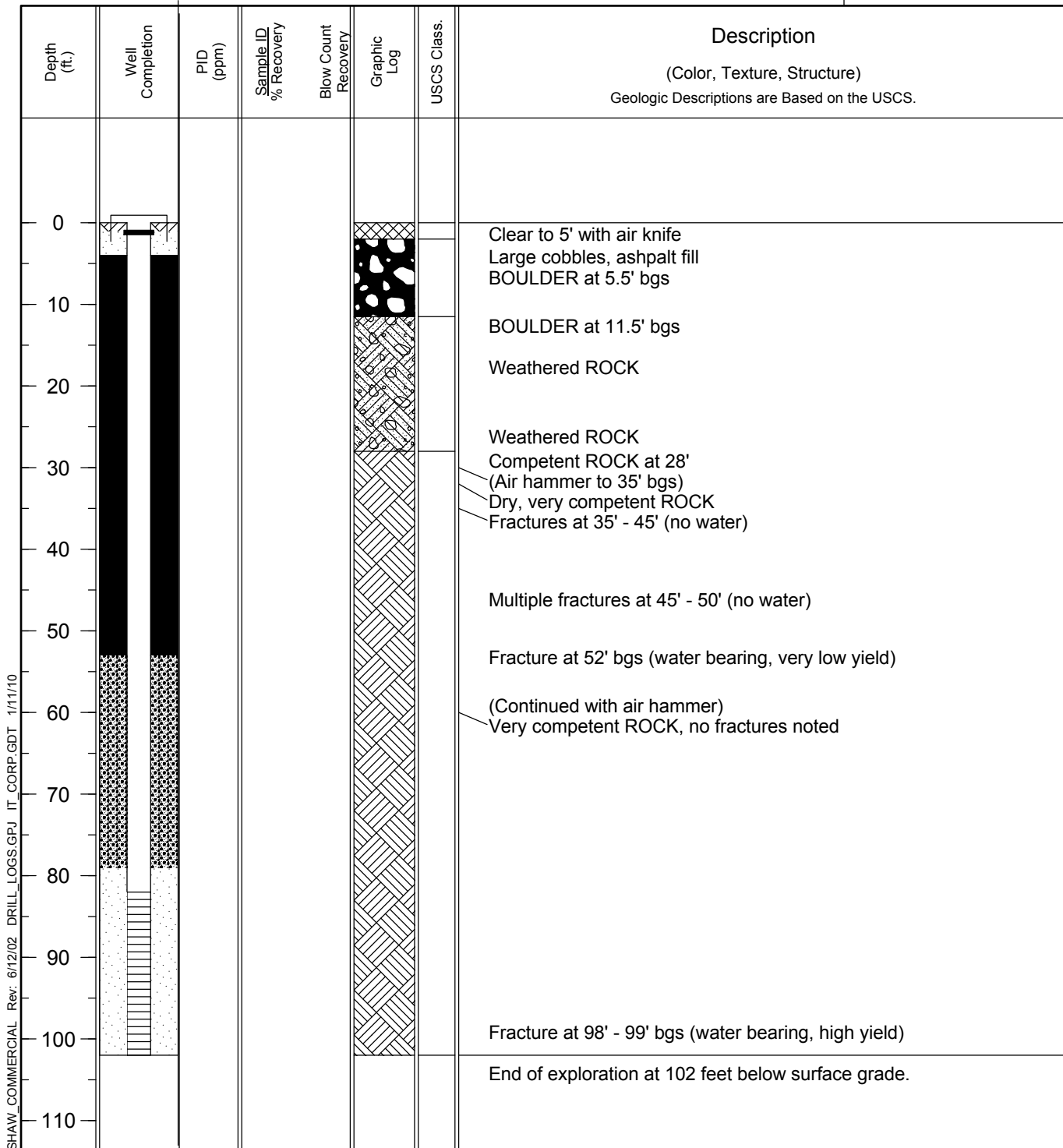
Project New Boston Air Force Station Owner USAF
 Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382
 Surface Elev. NA Total Hole Depth 102.0 ft. North _____ East _____
 Top of Casing NA Water Level Initial NA Static NA Diameter 4 in.
 Screen: Dia 2 in. Length 20 ft. Type/Size PVC/0.010 in.
 Casing: Dia 2 in. Length 82 ft. Type PVC
 Fill Material Native, Sand, Bentonite, Grout Rig/Core F15
 Drill Co. NHB Method Air Knife/Vac/Drive&Wash/Air Hammer
 Driller Gregg/Shawn Log By Ben Short Date 11/11/09 Permit # NA
 Checked By _____ License No. _____

COMMENTS

ND = Not detected

bgs = Below ground surface

Cleared to 5' with air knife on 10/26/2009. Well installed on 11/11/2009.



SHAW_COMMERCIAL Rev: 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

Drilling Log

Monitoring Well

SS09/MW-3

Page: 1 of 1

Project New Boston Air Force Station Owner USAF
 Location 310 Chestnut Hill Road, New Boston, New Hampshire Proj. No. 136382
 Surface Elev. NA Total Hole Depth 76.5 ft. North _____ East _____
 Top of Casing NA Water Level Initial ▽ 70.9 ft. Static NA Diameter 4 in.
 Screen: Dia 2 in. Length 20 ft. Type/Size PVC/0.010 in.
 Casing: Dia 2 in. Length 56.5 ft. Type PVC
 Fill Material Native, Sand, Bentonite, Grout Rig/Core F15
 Drill Co. NHB Method Air Knife/Vac/Drive&Wash/Air Hammer
 Driller Gregg/Shawn Log By Ben Short Date 11/12/09 Permit # NA
 Checked By _____ License No. _____

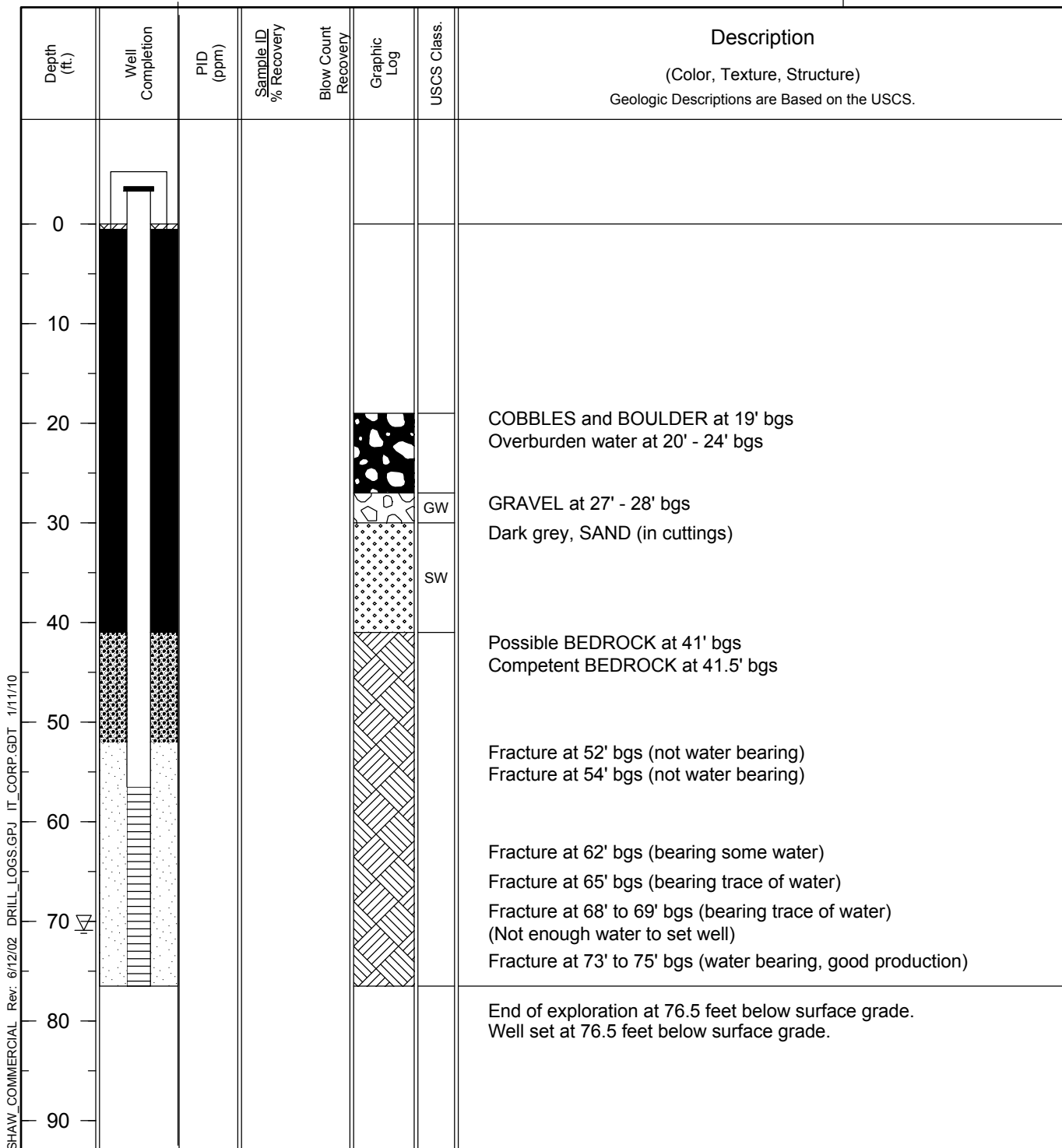
COMMENTS

ND = Not detected

bgs = Below ground surface

Cleared to 5' with air knife on 10/26/2009. Well installed on 11/12/2009.

4" steel casing remained in boring at 1.5' - 41.5' bgs, (could not be removed).



SHAW_COMMERCIAL Rev. 6/12/02 DRILL_LOGS.GPJ IT_CORP.GDT 1/11/10

NOTES:

1. ALL DEPTHS MEASURED AS BGS.
UNLESS OTHERWISE NOTED.
2. DRAWING NOT TO SCALE.

MONITORING WELL LOG
{LF003-MW-2}

632.47'
GROUND SURFACE EL.

632.10'
REFERENCE EL.
(TOP OF PVC)

Approximate Diameter
of Borehole (in): 4"

Well Casing Diameter (in): 2"

Depth to Water (ft):
During Drilling: 37.9'
Date: 11-5-09
Post-Development: 38.88'
Date: 11-9-09

Top of Bentonite Seal (ft): 5'

Top of Filter Pack (ft): 68'

Top of Screen Interval (ft): 71'

Bottom of Screen Interval (ft): 81'

Bottom of Well (ft): 81'

Bottom of Filter Pack (ft): 81'

Bottom of Borehole (ft): 81'

Protective Casing:

Type: Flush Mount
Dimensions (in): 6"
Length (ft): N/A'
Guard Post: No

Ground Seal (Surface Pad):

Type: Concrete
Dimensions (ft): 1.5' X 1.5'

Annular Space Seal:

Type: Bentonite-Cement Grout
Installation: Gravity

Bentonite Seal:

Manufacturer: PDSCO
Type: Pellets
Installation: One Section
Hydration Time (hrs): 1 HR

Filter Pack Material:

Manufacturer: MilPac
Product Name: MilPac
Volume Added (ft³): 41
Installation: Gravity

Well Casing:

Manufacturer: Universal Pipe
Type: PVC
Diameter (in): 2"

Well Screen Casing:

Manufacturer: Universal Pipe
Type: Universal Pipe
Slot Size (in): 10"
Slot Type: Factory Slot

Backfill Material: Sand

PROJECT: NBAFS RI- New Boston, NH

J.O.: 136382 CLIENT: AFCEE

CONTRACTOR: Shaw Environmental Inc.

DRILLER: NH Boring

RIG TYPE / METHOD: HSA/Air-Rotary

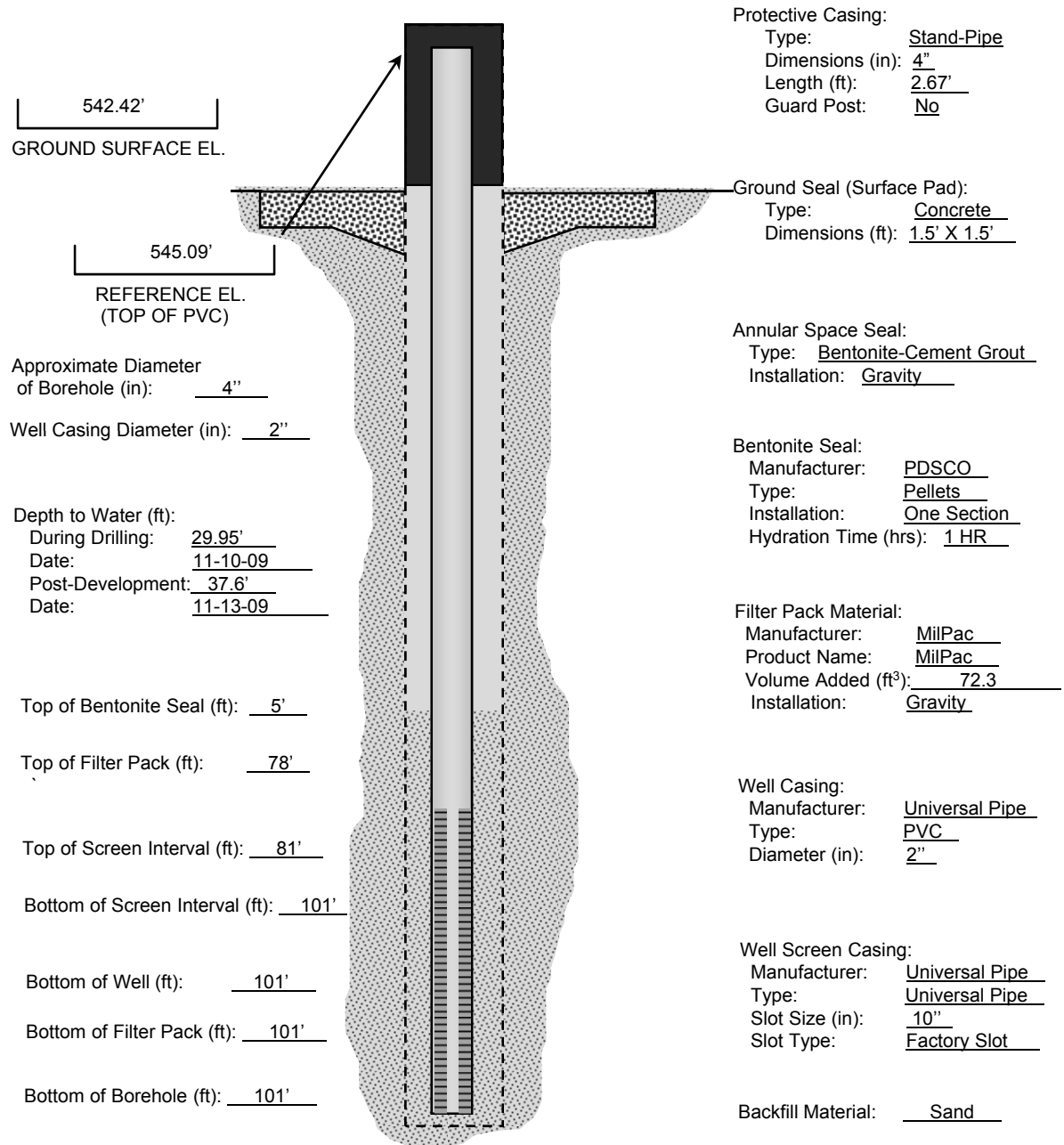
STARTED: 11/5/09 COMPLETED: 11/5/09

NOTES:

1. ALL DEPTHS MEASURED AS BGS.
UNLESS OTHERWISE NOTED.
2. DRAWING NOT TO SCALE.

MONITORING WELL LOG

{SIS8-MW-1}



PROJECT: NBAFS RI- New Boston, NH

J.O.: 136382 CLIENT: AFCEE

CONTRACTOR: Shaw Environmental Inc.

DRILLER: NH Boring

RIG TYPE / METHOD: HSA/Air-Rotary

STARTED: 11/9/09 COMPLETED: 11/10/09

NOTES:

1. ALL DEPTHS MEASURED AS BGS.
UNLESS OTHERWISE NOTED.
2. DRAWING NOT TO SCALE.

MONITORING WELL LOG

{SS008-MW-3}

647.35'
GROUND SURFACE EL.

646.99'
REFERENCE EL.
(TOP OF PVC)

Approximate Diameter
of Borehole (in): 4"

Well Casing Diameter (in): 2"

Depth to Water (ft):
During Drilling: 28.4'
Date: 11-6-09
Post-Development: 28.92'
Date: 11-9-09

Top of Bentonite Seal (ft): 4'

Top of Filter Pack (ft): 24'

Top of Screen Interval (ft): 26.4'

Bottom of Screen Interval (ft): 41.4'

Bottom of Well (ft): 41.4'

Bottom of Filter Pack (ft): 41.4'

Bottom of Borehole (ft): 41.4'

Protective Casing:

Type: Flush Mount
Dimensions (in): 6"
Length (ft): N/A'
Guard Post: No

Ground Seal (Surface Pad):

Type: Concrete
Dimensions (ft): 1.5' X 1.5'

Annular Space Seal:

Type: Bentonite-Cement Grout
Installation: Gravity

Bentonite Seal:

Manufacturer: PDSCO
Type: Pellets
Installation: One Section
Hydration Time (hrs): 1 HR

Filter Pack Material:

Manufacturer: MilPac
Product Name: MilPac
Volume Added (ft³): 54.7
Installation: Gravity

Well Casing:

Manufacturer: Universal Pipe
Type: PVC
Diameter (in): 2"

Well Screen Casing:

Manufacturer: Universal Pipe
Type: Universal Pipe
Slot Size (in): 10"
Slot Type: Factory Slot

Backfill Material: Sand

PROJECT: NBAFS RI- New Boston, NH

J.O.: 136382 CLIENT: AFCCE

CONTRACTOR: Shaw Environmental Inc.

DRILLER: NH Boring

RIG TYPE / METHOD: HSA/Air-Rotary

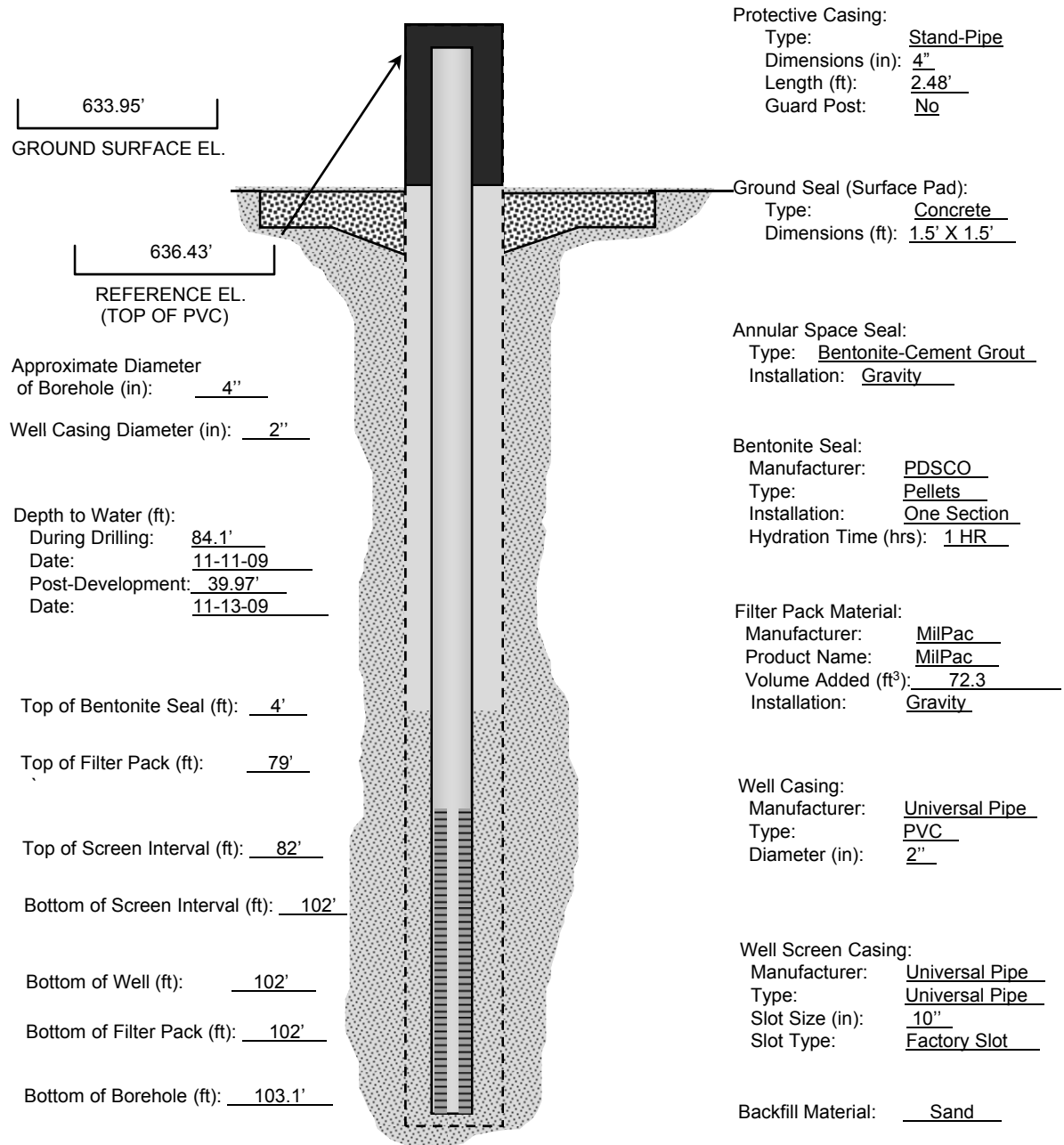
STARTED: 11/5/09 COMPLETED: 11/6/09

NOTES:

1. ALL DEPTHS MEASURED AS BGS.
UNLESS OTHERWISE NOTED.
2. DRAWING NOT TO SCALE.

MONITORING WELL LOG

{SS008-MW-4}



PROJECT: NBAFS RI- New Boston, NH

J.O.: 136382 CLIENT: AFCEE

CONTRACTOR: Shaw Environmental Inc.

DRILLER: NH Boring

RIG TYPE / METHOD: HSA/Air-Rotary

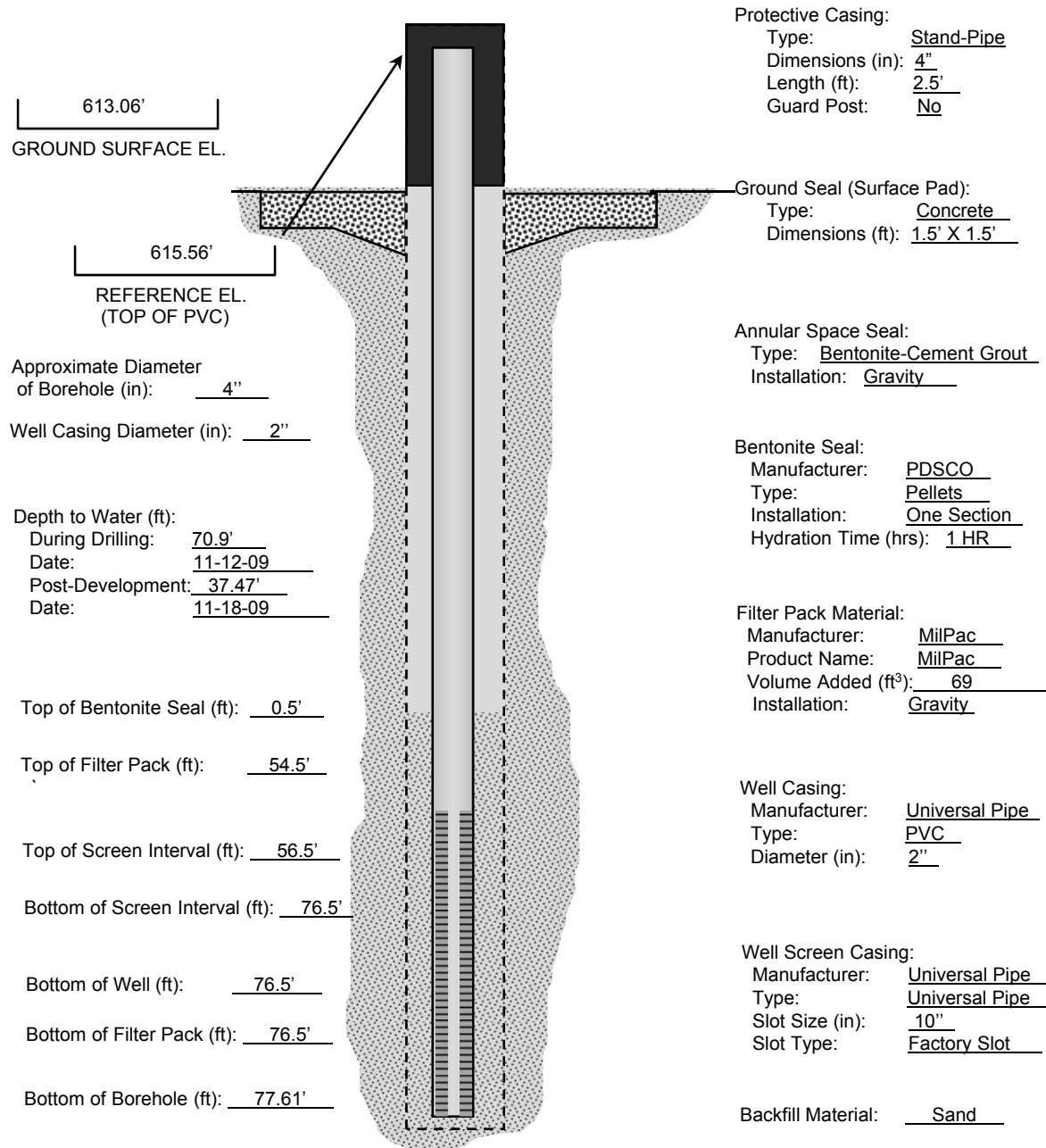
STARTED: 11/11/09 COMPLETED: 11/11/09

NOTES:

1. ALL DEPTHS MEASURED AS BGS.
UNLESS OTHERWISE NOTED.
2. DRAWING NOT TO SCALE.

MONITORING WELL LOG

{SS009-MW-3}



PROJECT: NBAFS RI- New Boston, NH

J.O.: 136382 CLIENT: AFCEE

CONTRACTOR: Shaw Environmental Inc.

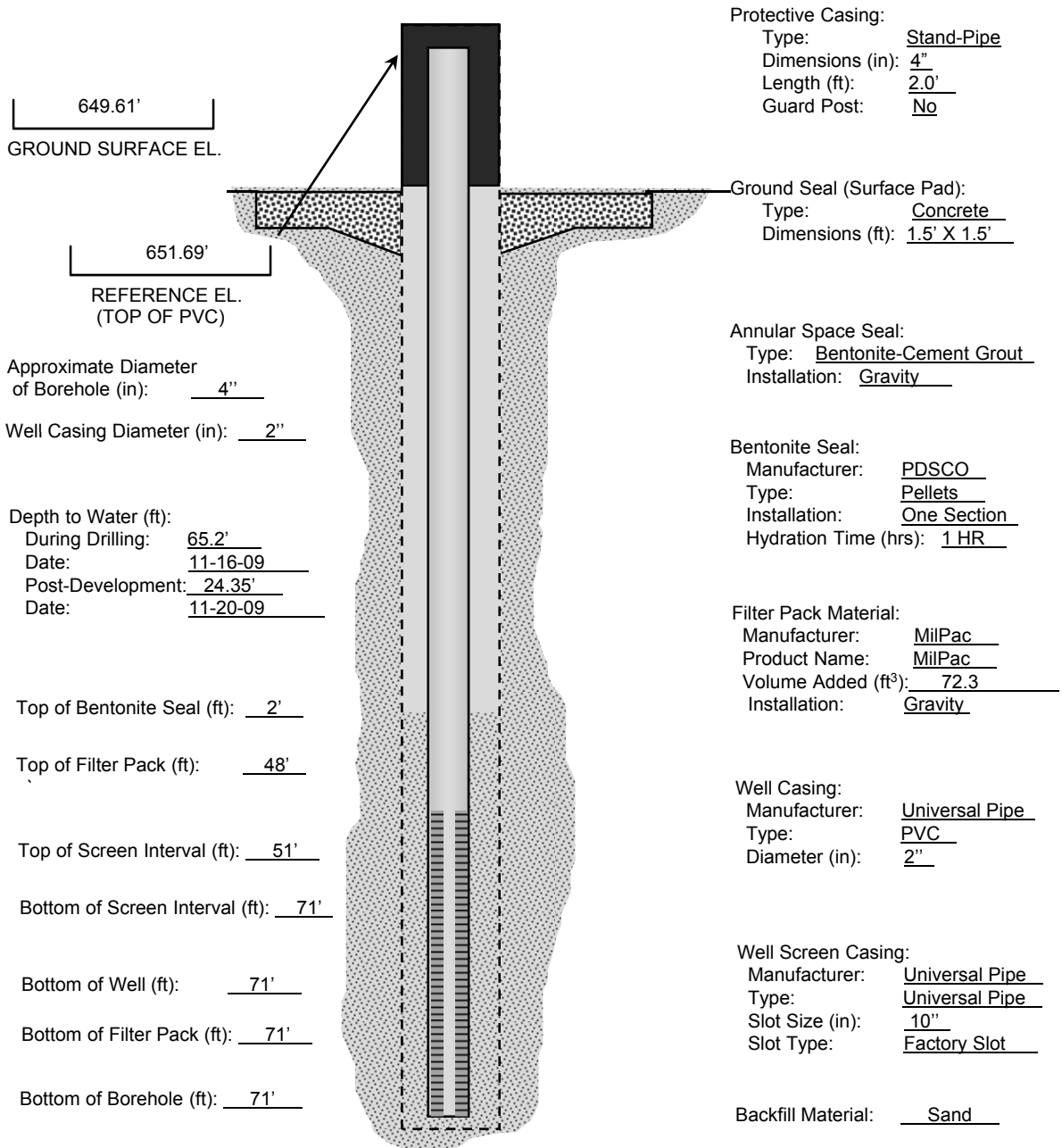
DRILLER: NH Boring

RIG TYPE / METHOD: HSA/Air-Rotary

STARTED: 11/12/09 COMPLETED: 11/12/09

NOTES:

1. ALL DEPTHS MEASURED AS BGS.
UNLESS OTHERWISE NOTED.
2. DRAWING NOT TO SCALE.

MONITORING WELL LOG
{SIS18-MW-3}

PROJECT: NBAFS RI- New Boston, NH

J.O.: 136382 CLIENT: AFCEE

CONTRACTOR: Shaw Environmental Inc.

DRILLER: NH Boring

RIG TYPE / METHOD: HSA/Air-Rotary

STARTED: 11/16/09 COMPLETED: 11/16/09

NOTES:

1. ALL DEPTHS MEASURED AS BGS.
UNLESS OTHERWISE NOTED.
2. DRAWING NOT TO SCALE.

MONITORING WELL LOG

{SIS18-MW-4}

652.73'
GROUND SURFACE EL.

652.39'
REFERENCE EL.
(TOP OF PVC)

Approximate Diameter
of Borehole (in): 4"

Well Casing Diameter (in): 2"

Depth to Water (ft):
During Drilling: 8.57'
Date: 11-19-09
Post-Development: 8.59'
Date: 11-23-09

Top of Bentonite Seal (ft): 2'

Top of Filter Pack (ft): 19'

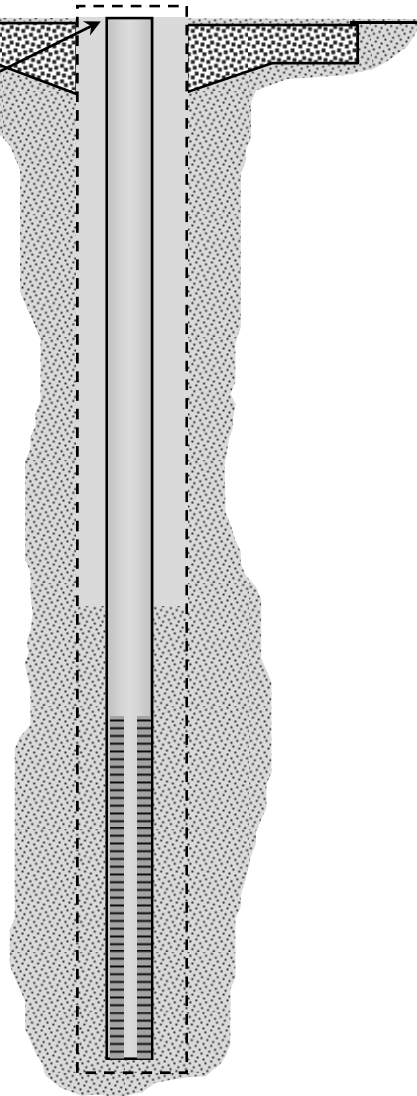
Top of Screen Interval (ft): 21'

Bottom of Screen Interval (ft): 31'

Bottom of Well (ft): 31'

Bottom of Filter Pack (ft): 31'

Bottom of Borehole (ft): 31'



Protective Casing:
Type: Flush Mount
Dimensions (in): 6"
Length (ft): N/A'
Guard Post: No

Ground Seal (Surface Pad):
Type: Concrete
Dimensions (ft): 1.5' X 1.5'

Annular Space Seal:
Type: Bentonite-Cement Grout
Installation: Gravity

Bentonite Seal:
Manufacturer: PDSCO
Type: Pellets
Installation: One Section
Hydration Time (hrs): 1 HR

Filter Pack Material:
Manufacturer: MilPac
Product Name: MilPac
Volume Added (ft³): 37.7
Installation: Gravity

Well Casing:
Manufacturer: Universal Pipe
Type: PVC
Diameter (in): 2"

Well Screen Casing:
Manufacturer: Universal Pipe
Type: Universal Pipe
Slot Size (in): 10"
Slot Type: Factory Slot

Backfill Material: Sand

PROJECT: NBAFS RI- New Boston, NH

J.O.: 136382 CLIENT: AFCEE

CONTRACTOR: Shaw Environmental Inc.

DRILLER: NH Boring

RIG TYPE / METHOD: HSA/Air-Rotary

STARTED: 11/17/09 COMPLETED: 11/19/09

NOTES:

1. ALL DEPTHS MEASURED AS BGS.
UNLESS OTHERWISE NOTED.
2. DRAWING NOT TO SCALE.

MONITORING WELL LOG

{SIS18-MW-5}

651.08'
GROUND SURFACE EL.

650.59'
REFERENCE EL.
(TOP OF PVC)

Approximate Diameter
of Borehole (in): 4"

Well Casing Diameter (in): 2"

Depth to Water (ft):
During Drilling: 8.6'
Date: 11-20-09
Post-Development: 7.57'
Date: 11-30-09

Top of Bentonite Seal (ft): 16'

Top of Filter Pack (ft): 18'

Top of Screen Interval (ft): 20.5'

Bottom of Screen Interval (ft): 30.5'

Bottom of Well (ft): 30.5'

Bottom of Filter Pack (ft): 30.5'

Bottom of Borehole (ft): 30.5'

Protective Casing:

Type: Flush Mount
Dimensions (in): 6"
Length (ft): N/A'
Guard Post: No

Ground Seal (Surface Pad):

Type: Concrete
Dimensions (ft): 1.5' X 1.5'

Annular Space Seal:

Type: Bentonite-Cement Grout
Installation: Gravity

Bentonite Seal:

Manufacturer: PDSCO
Type: Pellets
Installation: One Section
Hydration Time (hrs): 1 HR

Filter Pack Material:

Manufacturer: MilPac
Product Name: MilPac
Volume Added (ft³): 39.3
Installation: Gravity

Well Casing:

Manufacturer: Universal Pipe
Type: PVC
Diameter (in): 2"

Well Screen Casing:

Manufacturer: Universal Pipe
Type: Universal Pipe
Slot Size (in): 10"
Slot Type: Factory Slot

Backfill Material: Sand

PROJECT: NBAFS RI- New Boston, NH

J.O.: 136382 CLIENT: AFCEE

CONTRACTOR: Shaw Environmental Inc.

DRILLER: NH Boring

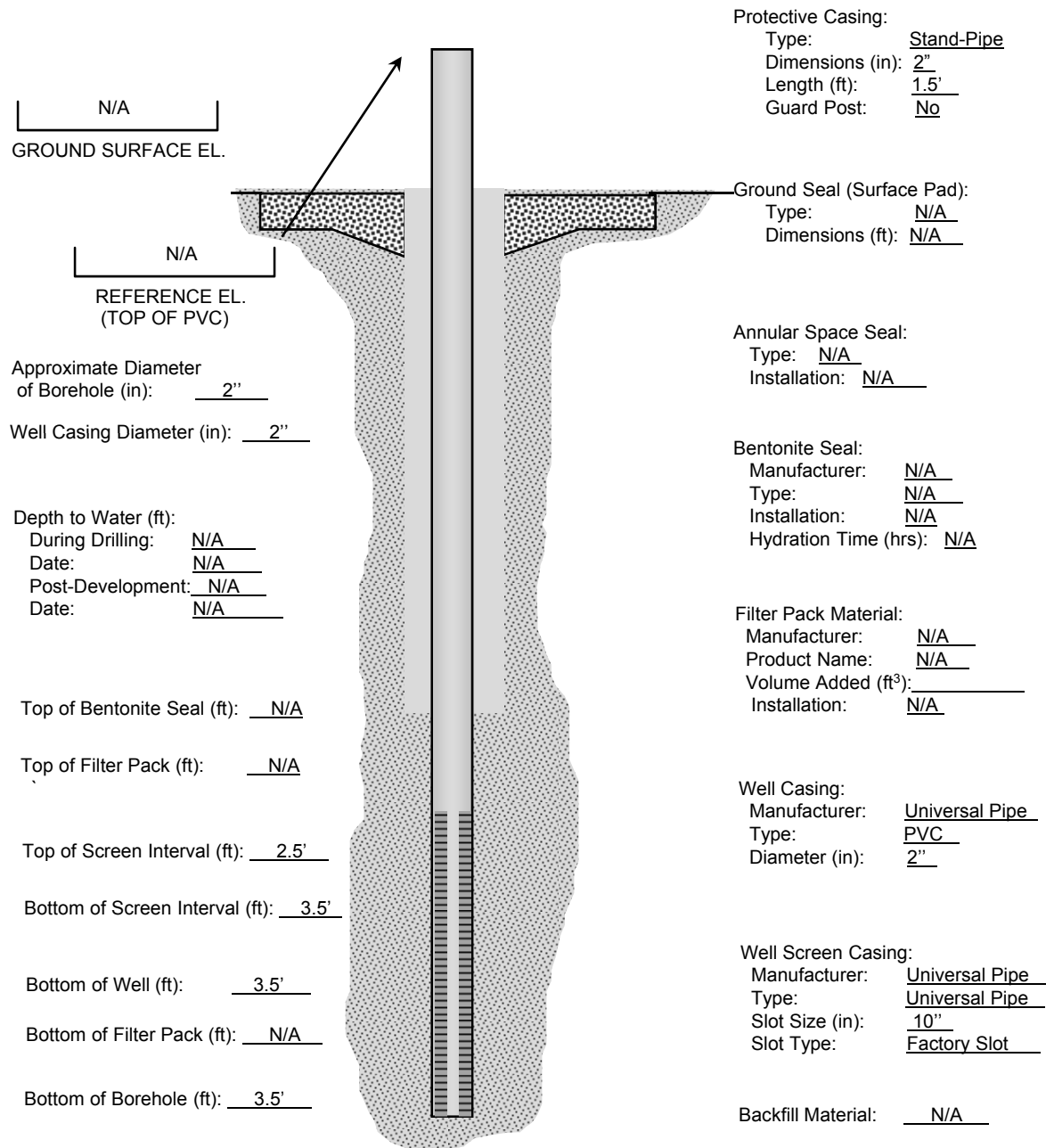
RIG TYPE / METHOD: HSA/Air-Rotary

STARTED: 11/20/09 COMPLETED: 11/20/09

NOTES:

1. ALL DEPTHS MEASURED AS BGS. UNLESS OTHERWISE NOTED.
2. DRAWING NOT TO SCALE.

PIEZOMETER LOG {SIS18-PZ-2}



PROJECT: NBAFS RI- New Boston, NH

J.O.: 136382 CLIENT: AFCEE

CONTRACTOR: Shaw Environmental Inc.

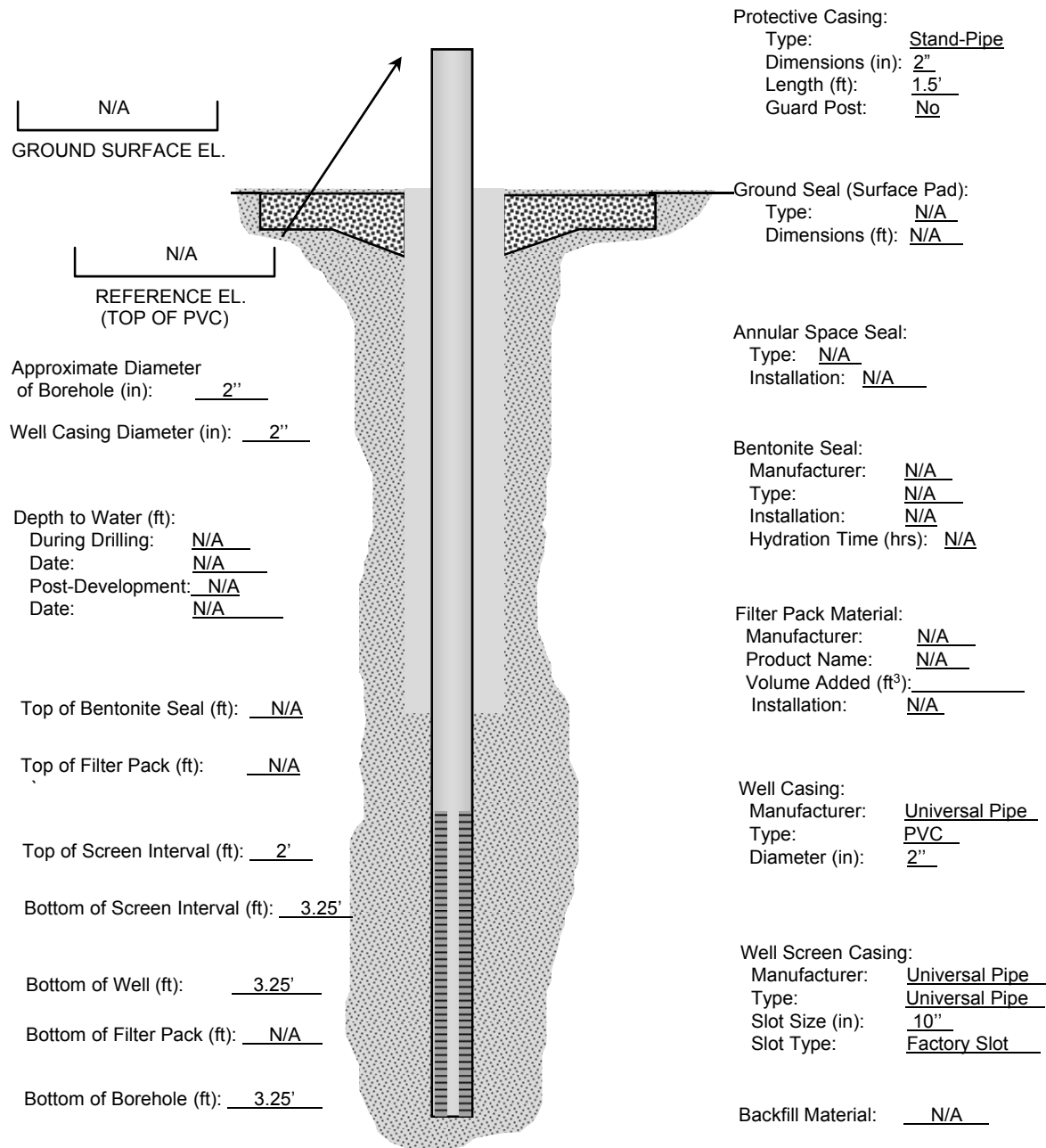
DRILLER: NH Boring

RIG TYPE / METHOD: HSA/Air-Rotary

STARTED: 11/19/09 COMPLETED: 11/19/09

NOTES:

1. ALL DEPTHS MEASURED AS BGS.
UNLESS OTHERWISE NOTED.
2. DRAWING NOT TO SCALE.

PIEZOMETER LOG
{SIS18-PZ-3}

PROJECT: NBAFS RI- New Boston, NH

J.O.: 136382 CLIENT: AFC EE

CONTRACTOR: Shaw Environmental Inc.

DRILLER: NH Boring

RIG TYPE / METHOD: HSA/Air-Rotary

STARTED: 11/19/09 COMPLETED: 11/19/09