



Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-1  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

Datum	Hammer Wt.	140 Lbs.	Hole Diameter	8.0 In.	Foreman	W. Hunter	
Surf. Elev.	6.10 Ft.	Hammer Drop	30 In.	Rock Core Dia.	N/A	Inspector	N. Richardson
Date Started	7/10/97	Spoon Size	3.0 In.	Boring Method	HSA	Date Completed	7/10/97

**SAMPLER TYPE**

### GROUNDWATER DEPTH

## BORING METHOD

S - DRIVEN SPLIT SPOON  
 PT - PRESSED SHELBY TUBE  
 CA - CONTINUOUS FLIGHT AUGER  
 RC - ROCK CORE

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

AT COMPLETION 5.0 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. 3.0 FT.  
CAVED AT \_\_\_\_\_ FT.

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-2  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 8.97 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/10/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/10/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Yellowish orange, dry, SILT, little gravel (FILL)				D	9-25-20-10	1	DS	17	1. Pieces of asphalt and hydrocarbon odor in soil at 8.0 feet.
	Black, sandy CLAY, little gravel (FILL)				D	1-4-2-5	2	DS	8	
	Black, organic, sandy CLAY (FILL)				D	12-4-5	3	DS	24	
	Gray, sandy GRAVEL (FILL)				D	12-4-5	4	DS	12	
-1.0		10.0		10						
	Gray, wet, very loose, fine SAND, little clay				D	1-1-2	5	DS	18	
-5.5		14.5		5	D/I	WOH/6"-1-2	6	DS	12	
	Greenish gray to greenish brown, most to wet, very soft CLAY, little sand									
-11.0		20.0		20	1	1-1-1	7	DS	17	
	Bottom of Boring at 20.0 Feet									
				25						
				30						
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 11.0 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. 5.9 FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-3  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

## SAMPLER

Datum	Hammer Wt. 140 Lbs.	Hole Diameter	8.0 In.	Foreman	W. Hunter
Surf. Elev. 6.06 Ft.	Hammer Drop 30 In.	Rock Core Dia.	N/A	Inspector	N. Richardson
Date Started 7/10/97	Spoon Size 3.0 In.	Boring Method	HSA	Date Completed	7/10/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
1.8	Brown to light brown, moist, medium stiff, clayey SILT, some fine sand (FILL)	4.5	[Symbol]	5	D	1-3-4-4	1	DS	17	I. Encountered water at 7.75 feet.
					D	2-3-2-5	2	DS	4	
-5.4	Greenish gray to grayish brown, moist to wet, very soft to soft CLAY, trace vegetation	11.5	[Symbol]	10	I	WOH/12"-2-	3	DS	18	
					I	6-2-3	4	DS	18	
					I	WOH/6"-1-2	5	DS	18	
	Bottom of Boring at 11.5 Feet			15						
				20						
				25						
				30						
				35						
				40						

**SAMPLER TYPE**

S - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 8.4 FT  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. 4.0 FT.  
CAVED AT \_\_\_\_\_ FT.

## BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-4  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 12.1 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/9/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/9/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Brown, silty SAND, little brick (FILL)				D	5-9-8-15	1	DS	8	1. Encountered water at 10.0 feet.
	Yellowish SILT, some clay (FILL)				D/I	13-7-6-9	2	DS	18	
5.6	Brown to orange, mottled CLAY (FILL)	6.5		5	1	14-7-11-9	3	DS	19	
	Brown to rusty brown, moist, loose, fine SAND, little clay				1	3-3-3	4	DS	18	
-9	Greenish brown, wet, very loose, fine SAND, little clay, trace gravel	13.0		10	1	1-1-2	5	DS	18	
-2.9	Greenish gray to yellowish orange, wet, dense, gravelly SAND	15.0		15		13-20-15	6	DS	18	
	Bottom of Boring at 15.0 Feet									
				20						
				25						
				30						
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 13.0 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. 11.9 FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



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Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-5  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 11.35 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/9/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/9/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Brown and gray CINDER, RED BRICK (FILL)				D	6-15-14-9	1	DS	12	1. Encountered water at 13.0 feet.
	Gray, sandy CLAY, little asphalt (FILL)				D/I	6-4-5-5	2	DS	18	
	Brown, clayey SAND, little red brick (FILL)				D/I	6-3-4-3	3	DS	15	
1.8	Brown, sandy CLAY, trace asphalt, brick (FILL)	9.5			I	3-2-3	4	DS	2	
	Brown, moist, loose, clayey SAND, trace gravel					2-4-3	5	DS	18	
-3.7	Yellowish orange, wet, medium dense, sandy GRAVEL	15.0				15-11-10	6	DS	12	
	Bottom of Boring at 15.0 Feet									
				20						
				25						
				30						
				35						
				40						

### SAMPLER TYPE

S - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 12.0 FT.  
AFTER        HRS.        FT.  
AFTER 24 HRS 10.8 FT.  
CAVED AT        FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-6  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 7.39 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/9/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/9/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
4.9	Brown, little green CLAY, CINDER (FILL)	2.5		0	D/I	8-6-3-3	1	DS	18	1. Encountered water at 9.5 feet.
-6.8	Greenish gray, moist, soft to medium stiff CLAY, little black vegetation	8.0		5	I	WOH/12"-2-2	2	DS	18	
					I	WOH/6"-2-2-6	3	DS	18	
				10	D	7-20-26	4	DS	18	
-12.6	Gray to yellowish orange, moist to wet, dense to medium dense, gravelly SAND  Brown, wet, medium dense SAND, little clay, trace gravel  Yellowish orange, wet, medium dense SAND, some gravel	20.0		15	D	6-6-7	5	DS	18	
					D	2-4-10	6	DS	14	
				20	I	3-8-13	7	DS	18	
	Bottom of Boring at 20.0 Feet			25						
				30						
				35						
				40						

### SAMPLER TYPE

### SAMPLE CONDITIONS

### GROUNDWATER DEPTH

### BORING METHOD

- DRIVEN SPLIT SPOON  
 - PRESSED SHELBY TUBE  
 - CONTINUOUS FLIGHT AUGER  
 - ROCK CORE

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

AT COMPLETION 7.5 FT.  
AFTER        HRS.        FT.  
AFTER 24 HRS. 7.4 FT.  
CAVED AT        FT.

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

TANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

### RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-15  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

#### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 7.52 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/10/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/10/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Brown, moist, very stiff SILT, some clay and red brick (FILL)				D	3-5-9-12	1	DS	8	1. Encountered water at 9.5 feet.
	Yellow CLAY, some brick (FILL)				D	41-29-14-13	2	DS	15	
2.0		5.5		5						
	Greenish gray, some brown, moist, stiff, mottled CLAY				I	6-5-5-6	3	DS	12	
-5		8.0								
	Gray, wet, loose, fine SAND, little clay				D	1-3-3	4	DS	7	
-3.5		11.0		10						
	Gray to greenish gray, wet to moist, very soft CLAY, some fine sand				D	WOH/18"	5	DS	6	
-7.5		15.0		15						
	Bottom of Boring at 15.0 Feet				I	1-1-2	6	DS	18	
				20						
				25						
				30						
				35						
				40						

#### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

#### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

#### GROUNDWATER DEPTH

AT COMPLETION 8.0 FT.  
AFTER        HRS.        FT.  
AFTER 24 HRS. 5.2 FT.  
CAVED AT        FT.

#### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-16  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

Datum	Hammer Wt.	140 Lbs.	Hole Diameter	8.0 In.	Foreman	W. Hunter	
Surf. Elev.	6.59 Ft.	Hammer Drop	30 In.	Rock Core Dia.	N/A	Inspector	N. Richardson
Date Started	7/10/97	Spoon Size	3.0 In.	Boring Method	HSA	Date Completed	7/11/97

SAMPLER TYPE	SAMPLE CONDITIONS	GROUNDWATER DEPTH	BORING METHOD
DS - DRIVEN SPLIT SPOON	D - DISINTEGRATED	AT COMPLETION <u>8.7</u> FT.	HSA - HOLLOW STEM AUGERS
PT - PRESSED SHELBY TUBE	I - INTACT	AFTER _____ HRS. _____ FT.	CFA - CONTINUOUS FLIGHT AUGERS
CA - CONTINUOUS FLIGHT AUGER	U - UNDISTURBED	AFTER 24 HRS. _____ FT.	DC - DRIVING CASING
RC - ROCK CORE	L - LOST	CAVED AT _____ FT.	MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS





THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-7  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 7.15 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/9/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/9/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
4.7	Black, sandy GRAVEL, trace cinder, glass (FILL)	2.5		5	D	1-4-43-15	1	DS	9	1. Encountered water at 10.0 feet.
	Gray to brown, moist, medium stiff, mottled CLAY			5	D/I	40-6-4-6	2	DS	16	
.7	Greenish gray, moist, stiff CLAY, trace gravel	6.5		10	I	WOH/6"-2-2 -9	3	DS	18	
	Gray to brown, moist to wet, dense, sandy GRAVEL			10	D	15-18-20	4	DS	14	
-4.3		11.5		10		11-23-23	5	DS	15	
	Bottom of Boring at 11.5 Feet			15						
				20						
				25						
				30						
				35						
				40						

### SAMPLER TYPE

JS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION \_\_\_\_\_ FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. 5.9 FT.  
CAVED AT 7.5 FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-8  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Massey  
Surf. Elev. 7.01 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/8/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/8/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
5.5	Brown, small black CLAY, little gravel (FILL)	1.5	X X X X	1	D/I	19-18-5-2	1	DS	8	1. Encountered water at 7.5 feet.
	Greenish gray, moist, soft CLAY, trace black vegetation			5	I	2-1-2-2	2	DS	18	
					I	2-1-2-2	3	DS	18	
-1.5		8.5		10	I/D	14-10-7	4	DS	18	
-4.5	Greenish gray to yellowish orange, moist to wet, medium dense, gravelly SAND to sandy GRAVEL, some clay	11.5		15	D	7-11-14	5	DS	18	
	Yellowish orange, wet, medium dense, sandy GRAVEL, trace clay			20						
	Bottom of Boring at 11.5 Feet			25						
				30						
				35						
				40						

#### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

#### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

#### GROUNDWATER DEPTH

AT COMPLETION 4.75 FT.  
AFTER        HRS.        FT.  
AFTER 24 HRS. 3.6 FT.  
CAVED AT        FT.

#### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-9  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 6.01 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/9/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/9/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
4.0	Brown, silty SAND, trace gravel, plastic (FILL)	2.0	XXXX		D/I	7-11-7-6	1	DS	18	1. Encountered water at 9.0 feet.
	Greenish gray, moist, medium stiff to very soft CLAY, little fine sand			5	1	2-2-3-3	2	DS	18	
					1	WOH/6"-1-1-2	3	DS	18	
				10	1	WOH/6"-1-2	4	DS	18	
					1	WOH/6"-1-2	5	DS	18	
				15	1	WOH/18"	6	DS	18	
				20	1	1-2-2	7	DS	18	
-18.0		24.0			1	2-1-4	8	DS	18	
-20.0	Greenish gray, dry, PEAT	26.0	XXXX	25						
	Greenish gray, moist, soft CLAY, trace wood pieces									
-24.0		30.0		30		WOH/6"-2-2	9	DS	18	
	Bottom of Boring at 30.0 Feet									
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 25.5 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. 2.4 FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-10  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 5.22 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/14/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/14/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
-3	Dark brown, silty CLAY with wood (FILL)	5.5			D	3-5-4-3	1	DS	5	1. Encountered water at 7.0 feet.
	Brown SILT, little plastic (FILL)				D	4-4-2-3	2	DS	2	
-8.3	Greenish gray, moist, soft to very soft CLAY	11.5			I	1-1-3-1	3	DS	12	
					I	2-2-2	4	DS	10	
					I	WOH/18"	5	DS	18	
	Bottom of Boring at 11.5 Feet									

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNOISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 8.0 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-11  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

## SAMPLER

Datum _____	Hammer Wt. <u>140 Lbs.</u>	Hole Diameter <u>8.0 In.</u>	Foreman <u>W. Hunter</u>
Surf. Elev. <u>6.07 Ft.</u>	Hammer Drop <u>30 In.</u>	Rock Core Dia. <u>N/A</u>	Inspector <u>N. Richardson</u>
Date Started <u>7/14/97</u>	Spoon Size <u>3.0 In.</u>	Boring Method <u>HSA</u>	Date Completed <u>7/14/97</u>

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Brown, sandy SILT with wood, gravel, plastic (FILL)		XXXXXX		D	1-3-11-4	1	DS	5	1. Encountered water at 5.0 feet.
					D	5 1/3"	2	DS	3	
	Brown, silty SAND with gravel, asphalt (FILL)		5	D	28-11-7-7	3	DS	3		
-1.9		8.0		D/I	4-3-4	4	DS	8		
	Greenish gray, moist to wet, medium stiff to very soft CLAY		10	I	1-1-3	5	DS	18		
-8.9		15.0	15	I	1-1-1	6	DS	18		
	Bottom of Boring at 15.0 Feet									
				20						
				25						
				30						
				35						
				40						

**SAMPLER TYPE**

JS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 8.0 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

## BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-12  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 6.15 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/14/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/14/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Gray to black, silty SAND with asphalt, glass, plastic, wood (FILL)				D	1-2-8-15	1	DS	3	
					D	27-9-2-2	2	DS	5	
.7		5.5		5						
	Greenish gray, moist, soft CLAY, little wood				I	2-1-2-2	3	DS	12	
-2.3	Greenish gray, some black to greenish brown, moist, medium stiff, sandy CLAY	8.5		10	I/D	3-3-3	4	DS	18	
-4.8	Greenish gray, wet to moist, sandy CLAY	11.0			D/I	WOH/18"	5	DS	17	
	Greenish gray, moist, very soft CLAY									
-8.9		15.0		15	I	WOH/12"-1	6	DS	16	
	Bottom of Boring at 15.0 Feet									
				20						
				25						
				30						
				35						
				40						

#### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

#### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

#### GROUNDWATER DEPTH

AT COMPLETION 7.0 FT  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

#### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-13  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 5.70 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/11/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/11/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Brown, sandy SILT (FILL)				D	4-8-5-4	1	DS	7	1. Encountered water at 6.0 feet.
	Brown and gray, gravelly CLAY, wood (FILL)				D	20-2-1-1	2	DS	9	
-3		6.0		5						
-1.8	Gray, wet, loose, fine SAND, little clay	7.5			I/D	1-3-4-3	3	DS	18	
	Greenish gray, moist, very soft CLAY			10	1	WOH/18"	4	DS	18	
					1	WOH/18"	5	DS	18	
-9.3		15.0		15		WOR/12"- WOH/12"	6	DS	18	
	Bottom of Boring at 15.0 Feet			20						
				25						
				30						
				35						
				40						

### SAMPLER TYPE

JS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 7.0 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. 2.8 FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-14  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 4.98 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/10/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/10/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
2.5	Black HUMUS, trace sand (FILL)	2.5	XXXXXX	0	D	1-4-4-10	1	DS	18	1. Encountered water at 5.0 feet.
	Brown to gray, moist, medium stiff CLAY, some silt			5	I	5-3-4-6	2	DS	20	2. 6 inch fine sand layer at 6.0 feet.
	Dark gray to greenish brown, moist to wet, very soft, sandy CLAY			10	I/D	2-1-1-1	3	DS	18	3. 2 inch wood layer 3 inches from end of spoon at 11.5 feet.
-6.5	Greenish gray, moist, very soft CLAY, trace wood	11.5		10	I	WOH/18"	4	DS	18	
	Bottom of Boring at 11.5 Feet			10		WOH/18"	5	DS	18	
				15						
				20						
				25						
				30						
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 8.0 FT.  
AFTER        HRS.        FT.  
AFTER 24 HRS. 2.7 FT.  
CAVED AT        FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS





THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-17  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 6.65 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/11/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/11/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBO	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Brown to black, sandy CLAY with brick, gravel (FILL)				D	4-9-5-4	1	DS	16	
	Yellowish orange, sandy GRAVEL (FILL)				D	1-3-3-2	2	DS	18	
1.1		5.5		5						
	Greenish gray, moist, medium stiff to very soft CLAY, trace gravel, trace fine sand, trace organics				I	2-2-2-4	3	DS	22	
					I	2-1-2	4	DS	18	
				10						
					I	1-1-4	5	DS	5	
-8.4		15.0		15	I	WOH/18"	6	DS	18	
	Bottom of Boring at 15.0 Feet									
				20						
				25						
				30						
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 13.0 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. 3.0 FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-18  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 6.13 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/10/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/10/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
1.8	Grayish brown, moist, clayey SILT, little vegetation, wood, trash (FILL)	4.5		5	I	1-2-1-1	1	DS	12	1. Encountered water at 6.0 feet.  2. 9 inches of fine sand at 5.5 feet.
					D	1-1-1-3	2	DS	4	
	Greenish gray, some brown, moist, soft to very soft CLAY, some fine sand, trace wood, white shells and organic material				I	1-1-2-3	3	DS	20	
					I	WOH/12"-1	4	DS	18	
					I	1-2-2	5	DS	18	
-8.9		15.0		15	I	WOH/18"	6	DS	18	
	Bottom of Boring at 15.0 Feet			20						
				25						
				30						
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNOISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 7.0 FT.  
AFTER        HRS.        FT.  
AFTER 24 HRS. 3.8 FT.  
CAVED AT        FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-19  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 6.58 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/10/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/10/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
1.1	Gray and brown, moist SILT, little clay and wood (FILL)	5.5		5	D	2-7-7-6	1	DS	17	
					I	1-2-2-3	2	DS	22	
-4.9	Greenish gray, moist, medium stiff to very soft CLAY, thin vegetation layer at 6.0 feet	11.5			I	2-1-3-3	3	DS	22	
					I	2-1-1	4	DS	12	
				10	I	NOH/12"-1-1	5	DS	17	
	Bottom of Boring at 11.5 Feet			15						
				20						
				25						
				30						
				35						
				40						

### SAMPLER TYPE

JS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 8.1 FT.  
AFTER        HRS.        FT.  
AFTER 24 HRS. 4.6 FT.  
CAVED AT        FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-20  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 6.13 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/11/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/11/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Brown, dry SILT, little clay (FILL)				0	2-8-14-13	1	DS	20	1. Encountered water at 6.5 feet.
	Brown, moist, clayey SAND, little gravel (FILL)				0	10-7-6-10	2	DS	20	
	Brown, moist SILT, trace asphalt (FILL)				0	7-4-3-3	3	DS	5	
	Black, wet, gravelly SAND, trace cinder, brick (FILL)				0	10-8-4	4	DS	8	
-4.4		10.5		10						
	Greenish gray to greenish brown, moist to wet, soft to very soft CLAY, little sand, trace wood				1	2-2-3	5	DS	5	
-8.9		15.0		5		WOH/6"-2-1	6	DS	18	
	Bottom of Boring at 15.0 Feet									
				20						
				25						
				30						
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

0 - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 4.0 FT.  
AFTER        HRS.        FT.  
AFTER 24 HRS. 3.5 FT.  
CAVED AT        FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-21  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Massey  
Surf. Elev. 4.81 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/8/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/8/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
-3.2	Brown, gravelly SAND, little clay (FILL)	8.0			D	10-10-11-13	1	DS	8	1. Encountered water at 2.5 feet.
	D				39-41-51/4"	2	DS	16		
	D				34-30-17-8	3	DS	18		
-10.2	Dark gray, moist to wet, soft to very soft CLAY, trace fill	15.0			I	3-2-2	4	DS	13	
	I				2-2-2	5	DS	13		
	I				WOH/6"-1-2	6	DS	18		
	Bottom of Boring at 15.0 Feet									

### SAMPLER TYPE

JS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 4.3 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. 1.8 FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



**THOMAS L. BROWN ASSOCIATES, P.C.**  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-22  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97-009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 5.41 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/1/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/1/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Brown, moist, SILT, some gravel (FILL)				D	3-7-5-6	1	DS	11	1. Encountered water between 5.0 and 5.5 feet.
	Brown, moist, gravelly SAND (FILL)				D	9-6-11-12	2	DS	8	
	Brown, wet GRAVEL, little brick (FILL)				D	2-2-24-5 1/5"	3	DS	11	
-2.1		7.5			D	10-3-2	4	DS	4	
-5.1	Brown, wet, very loose, sandy GRAVEL	10.5				1-2-1	5	DS	18	
	Brown, moist, very soft CLAY, trace organics					WOH/12"-1	6	DS	18	
-9.6		15.0								
	Bottom of Boring at 15.0 Feet									
				20						
				25						
				30						
				35						
				40						

#### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

#### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

#### GROUNDWATER DEPTH

AT COMPLETION 2.5 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

#### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS

Boring # SB-23

Project Name Anacostia Station Regional Parking Lot and Access Road

Job # 97009

Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Massey  
Surf. Elev. 7.43 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/7/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/7/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL TESTED	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Brown, sandy SILT, trace gravel (FILL)				D	5-9-12-10	1	DS	17	1. Encountered running sand while trying to take sample at 23.5 feet.
					D	10-5-6-17	2	DS	10	
	Dark brown to light brown, sandy CLAY, trace brick (FILL)				D	6-5-6-7	3	DS	8	
	Brown, sandy CLAY, trace gravel (FILL)				D/I	5-5-4	4	DS	3	
-3.8		11.0			I	3-3-9	5	DS	7	
-6.4	Gray, moist, stiff CLAY, little fill, trace vegetation	13.8								
-9.6	Gray, wet, medium dense, gravelly SAND, trace clay	17.0			D	6-7-5	6	DS	17	
-14.1	Gray, moist, very soft to medium stiff CLAY, trace gravel and sand and vegetation	21.5			I	WOH/12"-3	7	DS	18	
	Bottom of Boring at 21.5 Feet				I	3-2-4	8	DS	18	
				25						
				30						
				35						
				40						

### SAMPLER TYPE

JS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 6.2 FT.  
AFTER 15 HRS. 5.8 FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-24  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 5.66 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/11/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/11/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
1.7	Dark brown, moist CLAY, some gravel (FILL)	4.0	XXXXXX	5	D	1-5-3-1	1	DS	5	1. Encountered water at 2.5 feet.  2. Encountered 5.0 inches of concrete.
			XXXXXX	6	I	1-1-1-1	2	DS	8	
	Greenish gray, moist, very soft CLAY		XXXXXX	7	I	1-1-1-1	3	DS	12	
-3.8		9.5	XXXXXX	10	I	WOH/12"-1-2	4	DS	12	
	Bottom of Boring at 9.5 Feet			15						
				20						
				25						
				30						
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 3.0 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. 2.3 FT.  
CAYED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS





THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-25  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Massey  
Surf. Elev. 6.48 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/3/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/3/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
-1.0	HUMUS	7.5		5	D	3-4-6-4	1	DS	10	1. Encountered water at 3.0 feet.
	Brown, clayey SAND, some gravel (FILL)				D	1-3-5 1/2"	2	DS	14	
	Brown to gray, clayey GRAVEL trace brick (FILL)				D	11-8-5-5	3	DS	7	
-8.5	Grayish brown, moist, very soft CLAY, thin vegetation layer at 8.0 feet	15.0		10	I	1-1-1-2	4	DS	24	
					I	1-1-1	5	DS	18	
					I	1-1-2	6	DS	18	
	Bottom of Boring at 15.0 Feet			15						
				20						
				25						
				30						
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 5.0 FT.  
AFTER 6 HRS. 4.1 FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-26  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 4.91 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/1/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/1/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Brown, moist, sandy GRAVEL, some clay, trace brick (FILL)				1	1-3-3-6	1	DS	14	1. Encountered water at 5.0 feet.
	Gray to brown, moist, CLAY, trace tile (FILL)				1	2-3-3-12	2	DS	19	
-1.1		6.0			1	3-3-2-3	3	DS	18	
-3.1	Tan to grayish brown, moist, soft, sandy CLAY, little gravel	8.0			1	1-1-2	4	DS	18	
	Gray to brown to greenish gray, moist, very soft to soft CLAY				1	1-1-3	5	DS	18	
-10.1		15.0			1	WOH/12"-1	6	DS	18	
	Bottom of Boring at 15.0 Feet									
				20						
				25						
				30						
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 13.0 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MC - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-27  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 10.13 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/2/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/2/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Brown, some gray, sandy CLAY, trace gravel (FILL)			0	D	3-5-6-4	1	DS	6	1. Encountered water at 10.0 feet.
				1		6-5-8-11	2	DS	18	2. Hydrocarbon odor during drilling at 8.0 feet.
	Brown to red, sandy CLAY (FILL)			D/I	4-5-6-8	3	DS	16		3. Encountered concrete at 8.0 feet.
	Brown to black, gravelly CLAY (FILL)			D/I	4-5-18	4	DS	7		
	Dark gray, clayey GRAVEL trace brick (FILL)			D/I	3-3-3	5	DS	8		
-3.4		13.5								
	Gray to brownish gray, moist, very soft CLAY; trace fine to coarse sand			1		2-1-2	6	DS	18	
-9.9		20.0		1	WOH/6"-1-2	7	DS	18		
	Bottom of Boring at 20.0 Feet									
				25						
				30						
				35						
				40						

#### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

#### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

#### GROUNDWATER DEPTH

AT COMPLETION 15.0 FT.  
AFTER 20 HRS. 5.3 FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

#### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-28  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

Datum	Hammer Wt.	140 Lbs.	Hole Diameter	8.0 In.	Foreman	W. Massey
Surf. Elev. 8.78 Ft.	Hammer Drop	30 In.	Rock Core Dia.	N/A	Inspector	N. Richardson
Date Started 7/3/97	Spoon Size	3.0 In.	Boring Method	HSA	Date Completed	7/3/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
-5.7	Greenish brown to brown SILT, little gravel, (FILL)	14.5			D/I	2-1-2-3	1	DS	15	1. Encountered water at 6.5 feet.
	D				18-28-35-18	2	DS	20		
	I				8-5-6-10	3	DS	18		
	D/I				2-2-2	4	DS	12		
	D				4-4-3	5	DS	13		
	Brown, little white, gravelly CLAY (FILL)									
	Brown to gray CLAY (FILL)									
-11.2	Greenish brown, moist, very soft CLAY	20.0			D	2-2-2	6	DS	17	
					I	2-1-2	7	DS	18	
	Bottom of Boring at 20.0 Feet									

## BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-29  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 8.45 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/1/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/1/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Brown to gray, silty SAND, trace brick, asphalt (FILL)		XXXXXX		D/I	3-9-8-8	1	DS	8	1. Encountered water at 4.5 feet.  2. Possible sheen on water.
	Brown GRAVEL, trace asphalt (FILL)			5	D/I	5-10-11-22	2	DS	13	
	Brown GRAVEL, little clay (FILL)				D/I	22-24-16-13	3	DS	12	
	Brown to red GRAVEL, little clay, brick, asphalt (FILL)				D/I	18-19-15	4	DS	12	
	Brown, clayey GRAVEL (FILL)			10	I	7-4-5	5	DS	6	
-3.5		12.0								
	Brown, moist, very soft CLAY			15	I	WOH/6"-1-2	6	DS	18	
-11.8		20.0		20	I	WOH/12"-2	7	DS	18	
	Bottom of Boring at 20.0 Feet									
				25						
				30						
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 3.0 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" O.D. SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-30  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 9.03 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/1/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/1/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Brown to greenish, moist SILT, trace gravel (FILL)				D	1-7-13-13	1	DS	12	1. Encountered water at 9.0 feet.
	Gray to reddish brown, moist, fine SAND, some clay (FILL)			5	D	5-4-5-8	2	DS	15	
	Brown to black, moist, sandy CLAY, little gravel (FILL)				D/I	1-3-5-5	3	DS	13	
-5	Brown, clayey SAND, some vegetation (FILL)	9.5			D/I	6-5-5	4	DS	4	
	Gray to brown, moist, very soft, sandy CLAY, trace gravel, black wood			10	D/I	1-2-1	5	DS	18	
-5.0	Greenish gray to brown, moist, loose, clayey, fine SAND, trace gravel	14.0		5	I	2-3-3	6	DS	18	
	Brownish gray, moist, very soft CLAY									
-11.0		20.0		20	I	WOH/12"-3	7	DS	18	
	Bottom of Boring at 20.0 Feet									
				25						
				30						
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 10.5 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" ; COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-31  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 7.71 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/1/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/1/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Brown to black, sandy SILT (FILL)				I	2-3-4-5	1	DS	12	1. Encountered water at 8.0 feet.
	Black to red, moist, silty SAND (FILL), trace brick				D	7-11-13-12	2	DS	14	
1.7		8.0		5						
	Brown, moist, medium dense, sandy GRAVEL				I/D	4-6-14-15	3	DS	18	
					D	13-7-4	4	DS	10	
-3.3		11.0		10						
	Brown, moist, loose, clayey, fine SAND, trace gravel				D/I	4-4-2	5	DS	18	
	Brown, moist to wet, soft to very soft CLAY				I	1-2-3	6	DS	15	
-12.3		20.0		15						
	Bottom of Boring at 20.0 Feet			20		WOR/6"- WOH/6"-2	7	DS	18	
				25						
				30						
				35						
				40						

### SAMPLER TYPE

JS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 16.0 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-32  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 7.09 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/2/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/2/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
-2.4	Light brown, moist TOPSOIL (FILL)	9.5	XXXXXX	1	1	1-5-7-6	1	DS	16	1. Encountered water at 8.0 feet.
	Brown, wet, sandy GRAVEL, some clay (FILL)			1	1	4-4-4-6	2	DS	16	
	Brown, clayey SAND, some gravel, trace brick (FILL)			1/0	40-42-15-15		3	DS	18	
	Yellowish brown, sandy GRAVEL, trace brick (FILL)			1/0	2-1-2		4	DS	12	
-7.9	Brown, moist, medium stiff CLAY	15.0	XXXXXX			3-3-3	5	DS	13	
						1-2-4	6	DS	18	
	Bottom of Boring at 15.0 Feet									
				20						
				25						
				30						
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 15.0 FT.  
AFTER 18 HRS. 3.1 FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" :COUNT MADE AT 6" INTERVALS





THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS

Boring # SB-33

Project Name Anacostia Station Regional Parking Lot and Access Road

Job # 97009

Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Massey  
Surf. Elev. 4.18 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/3/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/3/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
1.7	Gray CINDER and SAND, little clay FILL	2.5	XXXXXX		I	4-2-4-3	1	DS	20	1. Encountered water at 9.5 feet.
	Gray to greenish gray, moist, very soft CLAY, trace wood, some silt, little fine sand			5	I	WOH/18"-1	2	DS	24	
					I	1-1-1-2	3	DS	24	
					I	WOH/18"	4	DS	18	
				10	I	WOH/18"	5	DS	18	
				15	I	WOH/18"	6	DS	18	
-14.3	Greenish gray to dark brown, moist PEAT, little clay	18.5		20	D	WOH/6"-1-2	7	DS	18	
					D	1-2-2	8	DS	18	
-19.8	Greenish gray, some dark brown, moist, very soft CLAY, little peat Bottom of Boring at 25.0 Feet	24.0		25		WOH/12"-2	9	DS	18	
-20.8		25.0								
				30						
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 19.8 FT.  
AFTER 2 HRS. 3.45 FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-34  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

Datum	Hammer Wt. 140 Lbs.	Hole Diameter 8.0 In.	Foreman W. Massey
Surf. Elev. 6.95 Ft.	Hammer Drop 30 In.	Rock Core Dia. N/A	Inspector N. Richardson
Date Started 7/3/97	Spoon Size 3.0 In.	Boring Method HSA	Date Completed 7/3/97

### SAMPLER TYPE

### SAMPLE CONDITIONS

### GROUNDWATER DEPTH

## BORING METHOD

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

AT COMPLETION 6.0 FT.  
AFTER 5 HRS. 3.3 FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUO DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-35  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Massey  
Surf. Elev. 7.16 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/3/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/3/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
3.7	Black, sandy GRAVEL, some asphalt, brick (FILL)	3.5	XXXXXX	5	D	7-6-10-5	1	DS	7	1. Encountered water at 8.0 feet. 2. Boring filled with bentonite upon completion.
				5	I	2-2-2-3	2	DS	15	
	Greenish gray to tan, moist to wet, very soft to very stiff CLAY, little fill, thin vegetation layer at 6.5 feet				I	WOH/12"-2-	3	DS	12	
-1.3		8.5		10	I/D	5-16-7	4	DS	10	
	Dark gray to light gray to red, moist to wet, medium dense, sandy, clayey GRAVEL			10	D/I	11-9-8	5	DS	12	
-8.3		15.5		15	D/I	5-6-7	6	DS	13	
	Reddish brown, some gray, moist to wet, very stiff to hard, gravelly, mottled CLAY			20	D/I	9-12-16	7	DS	16	
-14.3		21.5		20		14-19-25	8	DS	12	
	Bottom of Boring at 21.5 Feet			25						
				30						
				35						
				40						

#### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

#### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

#### GROUNDWATER DEPTH

AT COMPLETION 6.5 FT.  
AFTER 2.5 HRS. 4.27 FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

#### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-36  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

Datum	Hammer Wt. 140 Lbs.	Hole Diameter 8.0 In.	Foreman W. Massey
Surf. Elev. 10.05 Ft.	Hammer Drop 30 In.	Rock Core Dia. N/A	Inspector N. Richardson
Date Started 7/7/97	Spoon Size 3.0 In.	Boring Method HSA	Date Completed 7/7/97

**SAMPLER TYPE**

### GROUNDWATER DEPTH

## BORING METHOD

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

AT COMPLETION 4.3 FT.  
AFTER 10 HRS. 3.7 FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAYED AT \_\_\_\_\_ FT.

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-36A  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Massey  
Surf. Elev. 11.75 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/7/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/7/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
-12	Brown, sandy GRAVEL trace brick (FILL)	13.0		5	D	6-9-9-7	1	DS	7	1. Encountered water at 2.5 feet.  2. Auger refusal at about 13.0 feet.  3. Steel cable found in hole.  4. Oil sheen on water after removal of augers.
					D	4-3-4-10	2	DS	8	
					D	4-10-10-8	3	DS	8	
					D	4-5-7	4	DS	2	
				10	D	7-3-5	5	DS	5	
	Bottom of Boring at 13.0 Feet			5						
				20						
				25						
				30						
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 6.8 FT.  
AFTER 17 HRS. 4.2 FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-37  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 8.24 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/2/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/2/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
-8	Brown, sandy GRAVEL, some humus (FILL)	9.0		0	0	8-5-12-25	1	DS	15	1. Encountered water at 4.0 feet.
	Brown, some gray, clayey SAND (FILL)			5	0	26-45-30-30	2	DS	16	
	Brown GRAVEL (FILL)			10	0	12-51/3"	3	DS	3	
	Brown, sandy GRAVEL (FILL)			15	0	11-18-21	4	DS	7	
-8.8	Dark greenish gray to brown, moist to wet, soft to very soft CLAY, little fine sand	15.0		20		1-1-3	5	DS	13	
				25		1-1-2	6	DS	18	
	Bottom of Boring at 15.0 Feet			30						
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 3.5 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-38 / (MW-II)  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97-009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 12.0 In. Foreman W. Massey  
Surf. Elev. 9.20 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/8/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 6/30/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Brown to black SILT, some sandy gravel and clay, trace brick  (FILL)  Brown, sandy GRAVEL some clay (FILL)			5	D	2-10-10-35	1	DS	3	1. Encountered water at 11.0 feet.  2. Installed a 17.0-ft deep 4.0-inch diam. monitoring well: -Used 10.0-ft screen -Used 10.0-ft casing -Sand from 17.5 to 6.0 ft. -Bentonite chips from 6.0 to 3.0 ft. -Grout from 3.0 to 0.0 ft. -Installed slick-up manhole cover.
				10	D	37-24-15	2	DS	13	
				10	D/I	5-6-6	3	DS	12	
-5.8		15.0		15	D	3-5-4	4	DS	8	
	Dark gray, wet to moist, soft to medium stiff CLAY			17	I	3-3-2-4	5	DS	7	
-10.8		20.0		20	I	1-2-2	6	DS	17	
	Bottom of Boring at 20.0 Feet			25						
				30						
				35						
				40						

#### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

#### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

#### GROUNDWATER DEPTH

AT COMPLETION 7.5 FT.  
AFTER        HRS.        FT.  
AFTER 24 HRS. 5.5 FT.  
CAVED AT        FT.

#### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



# RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-39  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

## SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 12.0 In. Foreman W. Hunter  
Surf. Elev. 9.65 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 6/27/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 6/27/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
-2.3	Brown, moist to wet, medium dense, fine to medium SAND, some clay, trace brick (FILL)	12.0		5	D	6-3-3	1	DS	5	1. Encountered water between 5.5 and 6.0 feet.
					D	9-10-7	2	DS	3	2. No hydrocarbon odor.
					D	40-51/4"	3	DS	7	3. Possible thin gravel layer between 33.0 and 34.0 feet.
				10	D	5-18-8	4	DS	8	4. Possible gravel layer between 38.0 and 39.0 feet.
					D	11-18-13	5	DS	11	
-30.3	Grayish brown, moist, very soft to medium stiff CLAY, trace vegetation	40.0		15	I	WOH/12"-2	6	DS	17	
				20	I	2-2-3	7	DS	18	
				25	I	WOH/6"-2-2	8	DS	18	
				30	I	2-2-4	9	DS	18	
				35	I	WOH/6"-2-3	10	DS	18	

## SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

## SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

## GROUNDWATER DEPTH

AT COMPLETION 0.58 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

## BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS





## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-39  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 12.0 In. Foreman W. Hunter  
Surf. Elev. 9.65 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 6/27/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 6/27/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
-30.3	Greenish gray, moist, soft CLAY, trace white fossil	40.0			I	WOR/6"- WOH/6"-3	11	DS	18	
-35.8	Dark brown to light brown, moist, medium dense, fine SAND, some clay, little gravel	45.5		45	I/D	4-5-8	12	DS	18	
	Light gray, moist, dense, sandy GRAVEL			50	D	15-18-31	13	DS	18	
	Light gray to tan, wet, very dense, fine, sandy GRAVEL, trace clay			55	D	15-30-45	14	DS	14	
-49.3		59.0								
-50.3	Gray, some brown, moist, hard CLAY, little gravel	60.0		60	I	9-16-21	15	DS	18	
	Bottom of Boring at 60.0 Feet			65						
				70						
				75						
				80						

### SAMPLER TYPE

JS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 0.58 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-40  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Massey  
Surf. Elev. 9.04 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/7/97 Spoon Size 2.0 In. Boring Method HSA Date Completed 7/7/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Red, clayey material (FILL), little sand				D	5-6-7-4	1	DS	10	1. Encountered water at 5.0 feet. 2. Red clayey layer between 8.5 and 10.5 feet.
	Brown to red, sandy SILT, some brick (FILL)			5	D/I	8-8-8-6	2	DS	11	
	Brown, sandy CLAY, little gravel (FILL)				I/D	7-9-8-5	3	DS	13	
	Yellow to red CLAY, little sand (FILL)			10	I/D	3-4-4	4	DS	5	
	Red to gray CLAY, some sand, trace pebbles (FILL)				I/D	2-3-3	5	DS	18	
-5.0		14.0		15	I/D	3-2-3	6	DS	18	
	Greenish gray, moist, soft to very soft CLAY			20	I	1-1-1	7	DS	18	
-11.0		20.0								
	Bottom of Boring at 20.0 Feet			25						
				30						
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION \_\_\_\_\_ FT.  
AFTER 15 HRS. 6.3 FT.  
AFTER 24 HRS. 4.4 FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-41  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Massey  
Surf. Elev. 9.26 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/7/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/7/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Brown, sandy GRAVEL, little clay, brick (FILL)		x x x x x x x x x x		D	1-5-19-22	1	DS	18	1. Encountered water at 4.5 feet.  2. Gravel at 6.0 feet at 10.0 feet.
	Dark gray, clayey GRAVEL (FILL)		x x x x x x x x x x		D	7-13-17-36	2	DS	20	
	Dark gray GRAVEL, brick (FILL)		x x x x x x x x x x	5	D	36-20-17-10	3	DS	13	
	Brown, clayey GRAVEL, asphalt, cinder (FILL)		x x x x x x x x x x		D	15-17-13	4	DS	9	
-1.7	Brown and yellow, sandy GRAVEL (FILL)	11.0	x x x x x x x x x x	10	D/I	15-4-4	5	DS	11	
	Greenish gray, moist, very soft to soft CLAY, trace fine sand									
				15	I	1-1-2	6	DS	18	
-10.7		20.0		20	I	2-1-3	7	DS	14	
	Bottom of Boring at 20.0 Feet									
				25						
				30						
				35						
				40						

### SAMPLER TYPE

S - DRIVEN SPLIT SPOON  
T - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 4.75 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. 4.4 FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUO DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS

Boring # SB-42

Project Name Anacostia Station Regional Parking Lot and Access Road

Job # 97009

Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 8.33 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/1/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/1/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
-4.2	Brown, silty SAND with brick, gravel (FILL)  Green to brown to black, moist to wet, clayey SILT, some gravel, brick, glass (FILL)	12.5		0	D	2-10-13-17	1	DS	10	1. Encountered water at 3.5 feet.
				5	D	24-28-22-34	2	DS	18	
				10	D/I	3-8-8-5 1/4"	3	DS	16	
				15	D/I	6-4-10	4	DS	11	
				20	I/D	2-4-5	5	DS	17	
-11.7	Brown, moist, very soft CLAY, trace black wood	20.0		25	I	1-2-1	6	DS	18	
				30	I	WOH/6"-1-2	7	DS	18	
	Bottom of Boring at 20.0 Feet			35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 3.0 FT.  
AFTER        HRS.        FT.  
AFTER 24 HRS.        FT.  
CAVED AT        FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS  
Project Name Anacostia Station Regional Parking Lot and Access Road  
Location Southeast, Washington, D.C.

Boring # SB-43  
Job # 97009

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 8.22 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/8/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/8/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Brown, gravelly CLAY, little cinder (FILL)				D	6-12-8-7	1	DS	16	1. Encountered water at 9.0 feet.
					D	12-8-6-10	2	DS	18	
	Greenish brown, gravelly CLAY (FILL)				D	1-2-4-15	3	DS	8	
					I/D	3-8-15	4	DS	15	
-3.3	Brown, sandy GRAVEL, little clay (FILL)	11.5			D	11-8-6	5	DS	10	
-6.8	Gray, moist to wet, medium dense, gravelly SAND, trace fill Brown, wet, medium dense GRAVEL	15.0			D	2-1-3	6	DS	15	
	Brown to yellowish orange, wet, very loose SAND, little gravel									
	Bottom of Boring at 15.0 Feet									
				20						
				25						
				30						
				35						
				40						

### SAMPLER TYPE

JS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 8.5 FT.  
AFTER 24 HRS. 7.5 FT.  
CAVED AT        FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS

Boring # SB-44

Project Name Anacostia Station Regional Parking Lot and Access Road

Job # 97009

Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 7.02 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/9/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/8/97

ELEV.	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
5.5	Brown, humus CLAY (FILL)	1.5	XXXXX		D/I	WOH/6"-2-1-3	1	DS	15	
	Grayish brown, moist, medium stiff CLAY, some fine sand			5	I	3-3-3-3	2	DS	18	
					I	2-2-4-5	3	DS	18	
	Greenish brown to brown to greenish gray, moist to wet, very soft to stiff CLAY, trace to little sand			10	I/D	1-2-2	4	DS	18	
					I	WOH/12"-1	5	DS	18	
-7.5		14.5		15	I	2-6-5	6	DS	15	
	Yellowish orange to tan, wet, medium dense SAND, little gravel									
-13.0		20.0		20		5-5-3	7	DS	16	
	Bottom of Boring at 20.0 Feet									
				25						
				30						
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 8.5 FT.  
AFTER        HRS.        FT.  
AFTER 24 HRS. 5.4 FT.  
CAVED AT        FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # SB-45  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 8.0 In. Foreman W. Hunter  
Surf. Elev. 9.08 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/2/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 7/2/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
-4	Greenish brown SILT, little gravel (FILL)	9.5		5	I	2-12-9-8	1	DS	15	1. Encountered water at 7.5 feet.
	Brown, clayey SAND (FILL)				I	3-4-7-8	2	DS	14	
	Brown CLAY, some sand and gravel (FILL)					4-10-13-13	3	DS	9	
	Yellowish brown SAND and GRAVEL, some clay (FILL)					1-1-2	4	DS	18	
-10.9	Brown, moist, very soft to soft CLAY, trace roots, trace silt	20.0		15		3-1-1	5	DS	18	
						WOH/12"-2	6	DS	18	
						WOH/6"-2-2	7	DS	18	
	Bottom of Boring at 20.0 Feet			20						
				25						
				30						
				35						
				40						

### SAMPLER TYPE

JS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 9.0 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

***APPENDIX B - SECTION 2***

***Records of Soil Exploration  
- Monitoring Wells -***





THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS

Boring # MW-1

Project Name Anacostia Station Regional Parking Lot and Access Road

Job # 97-009

Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 12.0 In. Foreman W. Hunter  
Surf. Elev. 9.32 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 6/24/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 6/24/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
3.3	Topsoil, brown, silty CLAY with gravel, little brick (FILL)	6.0	XXXXXX	5	D	9-10-18	1	DS	8	1. Encountered water at 10.5 feet. 2. Installed a 38.5-ft deep 4.0-inch diam. monitoring well: -Used 10.0-ft screen -Used 31.5-ft casing -Sand from 38.5 to 28.0 ft. -Bentonite chips from 28.0 to 24.0 ft. -Grout from 24.0 to 0.0 ft. -Installed slick up manhole cover.
					D	9-15-25	2	DS	14	
	Dark gray, moist, soft to very soft CLAY, trace gravel, trace wood			10	D/I	1-2-2	3	DS	7	
	Gray, moist, very soft CLAY				D/I	2-2-2	4	DS	18	
				15	I	2-1-2	5	DS	18	
					I	1-1-2	6	DS	18	
-15.7	Dark brown, moist, medium stiff CLAY, trace mica	25.0		20	I	2-3-4	7	DS	18	
					I	3-4-4	8	DS	18	
-21.7	Dark gray to black, moist to wet, medium stiff CLAY, some vegetation, little gravel	31.0		25	I	3-4-4	8	DS	18	
				30	I/D	4-14-26	9	DS	18	
-29.2	Dark gray to brown, moist, hard CLAY, some gravel			35	I	4-11-16	10	DS	18	
	Light tan, wet, medium dense, fine SAND				I	4-11-16	10	DS	18	
-32.2	Light gray, little brown, moist, hard CLAY	41.5		40		7-15-21	11	DS	18	
	Bottom of Boring at 41.5 Feet			45						

### SAMPLER TYPE

S - DRIVEN SPLIT SPOON  
T - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 14.0 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



Contracted With District of Columbia Department of Public Works - BTCS Boring # MW-2  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97-009  
Location Southeast, Washington, D.C.

## SAMPLER

Datum	Hammer Wt. 140 Lbs.	Hole Diameter 12.0 In.	Foreman W. Hunter
Surf. Elev. 6.27 Ft.	Hammer Drop 30 In.	Rock Core Dia. N/A	Inspector N. Richardson
Date Started 6/24/97	Spoon Size 3.0 In.	Boring Method HSA	Date Completed 6/26/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES	
					Cond	Blows/6"	No.	Type	Rec		
-2.2	Grayish brown, SILT, little fine sand, trace brick, trace gravel (FILL)	8.5		5	D	1-3-3	1	DS	7	1. Encountered water at 6.0 feet.  2. Installed a 53.5-ft deep 4.0-inch diam. monitoring well: -Used 10.0-ft screen -Used 45.0-ft casing -Sand from 53.5 to 40.0 ft. -Bentonite chips from 40.0 to 38.0 ft. -Grout from 38.0 to 0.0 ft. -Installed stick-up manhole cover.	
				5	D	6-5-5	2	DS	10		
					D	2-5-14	3	DS	7		
					D	4-5-5	4	DS	18		
-4.7	Light brown, moist to wet, very loose, sandy GRAVEL	11.0		10	I	1-1-1	5	DS	18		
	Grayish brown to dark brown, moist, very soft to soft CLAY			5	I	1-1-1	6	DS	14		
				20	I	WOH/6"-1-3	7	DS	18		
				25	I	2-2-2	8	DS	18		
				30	I	WOH/6"-2-2	9	DS	18		
				35	I	WOH/12"-2	10	DS	18		
				40	I	WOH/12"-3	11	DS	18		
-38.7				43.0							
				Dark brown to light brown, moist, soft CLAY, some fine sand, trace			45				

SAMPLER TYPE

### SAMPLE CONDITIONS

## GROUNDWATER DEPTH

## BORING METHOD

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

AT COMPLETION 5.2 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" ;COUNT MADE AT 6" INTERVALS



## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # MW-2  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97-009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 12.0 In. Foreman W. Hunter  
Surf. Elev. 6.27 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 6/24/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 6/26/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
-39.7		46.0			I	2-2-3	12	DS	18	
	Light brown, wet, dense GRAVEL			50	D	17-22-28	13	DS	14	
-47.2		53.5		55						
	Gray, brown and red, moist, hard, mottled CLAY				I	20-30-41	14	DS	18	
-50.2		56.5								
	Bottom of Boring at 56.5 Feet			60						
				65						
				70						
				75						
				80						
				85						
				90						

### SAMPLER TYPE

JS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 5.2 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # MW-2A  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97-009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 12.0 In. Foreman W. Hunter  
Surf. Elev. 6.59 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 6/26/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 6/26/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
-1.4	Grayish brown SILT with trace sand, brick and gravel (FILL)	8.0	XXXXXX	5						1. Augered without sampling to 12.5 feet.  2. Installed a 13.0-ft deep 2.0-inch diam. monitoring well: - Used 5.0-ft screen - Used 11.0-ft casing - Sand from 13.0 to 5.0 ft. - Bentonite chips from 5.0 to 3.0 ft. - Grout from 3.0 to 0.0 ft. - Installed Stick Up manhole cover.
-5.9	Brown, sandy GRAVEL	12.5	OOOO	10						
	Bottom of Boring at 12.5 Feet			15						
				20						
				25						
				30						
				35						
				40						
				45						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION \_\_\_\_\_ FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



Contracted With District of Columbia Department of Public Works - BTCS Boring # MW-3  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97-009  
Location Southeast, Washington, D.C.

Datum	Hammer Wt.	140 Lbs.	Hole Diameter	12.0 In.	Foreman	W. Hunter	
Surf. Elev.	8.96 Ft.	Hammer Drop	30 In.	Rock Core Dia.	N/A	Inspector	N. Richardson
Date Started	6/23/97	Spoon Size	3.0 In.	Boring Method	HSA	Date Completed	6/23/97

SAMPLER TYPE	SAMPLE CONDITIONS	GROUNDWATER DEPTH	BORING METHOD
DS - DRIVEN SPLIT SPOON	D - DISINTEGRATED	AT COMPLETION <u>6.2</u> FT.	HSA - HOLLOW STEM AUGERS
PT - PRESSED SHELBY TUBE	I - INTACT	AFTER <u>16</u> HRS. <u>2.9</u> FT.	CFA - CONTINUOUS FLIGHT AUGERS
CA - CONTINUOUS FLIGHT AUGER	U - UNDISTURBED	AFTER 24 HRS. <u>    </u> FT.	DC - DRIVING CASING
RC - ROCK CORE	L - LOST	CAVED AT <u>    </u> FT.	MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # MW-4  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97-009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 12.0 In. Foreman W. Hunter  
Surf. Elev. 6.81 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 6/20/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 6/20/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	ASPHALT, BRICK (FILL)				0	1-3-11	1	DS	13	1. Encountered water at 6.5 feet.
2.8		4.0			1	2-2-1	2	DS	12	2. Installed a 16.0-ft deep 4.0-inch diam. monitoring well.
	Brown, moist, very soft, mottled CLAY			5	1	WOH/1"-1-1	3	DS	18	-Used 10.0-ft screen
	Brown to dark gray, moist, very soft CLAY, trace organics				1	WOH/6"-2-2	4	DS	18	-Used 9.0-ft casing
-4.2	Dark gray to dark brown, wet, soft CLAY, trace gravel, organic layer at 8.0 feet	11.0		10	1	2-5-6	5	DS	17	-Sand from 18.0 to 5.0 ft.
-8.7	Gray to dark tan, wet, stiff CLAY, some fine sand, wood pieces	15.5		15						-Bentonite chips from 5.0 to 2.0 ft.
-9.7	Gray to reddish brown, moist, stiff, mottled CLAY	16.5			D/I	5-5-10	6	DS	18	-Grout from 2.0 to 0.0 ft.
	Bottom of Boring at 16.5 Feet									-Installed stick-up manhole cover.
				20						
				25						
				30						
				35						
				40						
				45						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 5.0 FT.  
AFTER 72 HRS. 4.5 FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



**THOMAS L. BROWN ASSOCIATES, P.C.**  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS

Boring # MW-5

Project Name Anacostia Station Regional Parking Lot and Access Road

Job # 97-009

Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 12.0 In. Foreman W. Hunter  
Surf. Elev. 8.79 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 6/20/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 6/20/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Black, brown, gray, moist, SILT (FILL)				I	1-2-6	1	DS	9	1. Encountered water at 0.5 feet.
4.8		4.0			I	5 1/4"	2	DS	3	2. Installed a 13.0-ft deep 2.0-inch diam. monitoring well.
2.3	Gray to orange, moist to wet, stiff, some mottled, fine, sandy SILT, some clay, trace gravel	6.5			I	4-4-8	3	DS	18	-Used 5.0-ft screen
-7	Gray, wet, loose, fine SAND, little gravel	9.5			D	3-1-7	4	DS	9	-Used 10.0-ft casing
-4.2	Gray to light brown, wet, soft, silty CLAY, little gravel				I	4-3-2	5	DS	18	-Sand from 13.0 to 7.0 ft.
	Bottom of Boring at 13.0 Feet	13.0								-Bentonite chips from 7.0 to 4.0 ft.
										-Grout from 4.0 to 1.0 ft.
										-Installed stick-up manhole cover.
										3. Upon completion of well, surface (city) water continues to flow.

#### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

#### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

#### GROUNDWATER DEPTH

AT COMPLETION 2.5 FT.  
AFTER 72 HRS. 3.5 FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

#### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS







THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # MW-7  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97-009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 12.0 In. Foreman W. Hunter  
Surf. Elev. 9.50 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 6/23/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 6/23/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
4.5	Clay, concrete, brick, asphalt, plastic (FILL)	5.0	XXXXXX	5	D	1-5-4	1	DS	12	1. Encountered water at 9.5 feet.  2. Installed a 35.0-ft. deep 4.0-inch diam. monitoring well: -Used 30.0-ft screen -Used 10.0-ft casing -Sand from 35.0 to 4.0 ft. -Bentonite chips from 4.0 to 2.0 ft. -Grout from 2.0 to 1.0 ft. -Installed stick-up manhole cover.
					D	8-7-10	2	DS	13	
	Brown, moist, very loose to loose, fine SAND, little silt and clay, trace coarse sand		XXXXXX		I	2-2-2	3	DS	18	
-1.0		10.5		10	I	3-4-5	4	DS	14	
	Light brown, wet, very dense to loose, sandy GRAVEL and gravelly SAND		XXXXXX		I	8-21-24	5	DS	9	
				15	D	22-5 1/4"	6	DS	18	
				20	D	22-5 1/6"	7	DS	18	
				25	D	2-1-7	8	DS	18	
-25.5		35.0		30	D	19-17-29	9	DS	18	
				35	I	8-20-29	10	DS	17	
-30.5	Gray and brown, moist, hard to very stiff, mottled CLAY		XXXXXX	40	I	WOH/6"-8-18	11	DS	12	
	Bottom of Boring at 40.0 Feet	40.0		40						
				45						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 12.0 FT.  
AFTER 18 HRS. 8.9 FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS

Boring # MW-8

Project Name Anacostia Station Regional Parking Lot and Access Road

Job # 97-009

Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs.

Hole Diameter 12.0 In.

Foreman W. Hunter

Surf. Elev. 10.23 Ft. Hammer Drop 30 In.

Rock Core Dia. N/A

Inspector N. Richardson

Date Started 6/19/97 Spoon Size 3.0 In.

Boring Method HSA

Date Completed 6/19/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
3.2	Gray, brown, moist, very stiff to stiff, mottled SILT, some clay, brick (FILL)	7.0	XXXXXX	5	D	1-4-6	1	DS	9	1. Encountered water at 7.0 feet.  2. First time no sample second collection after lunch, water at 13.0 ft * Possibility of two aquifers. * Decided to evaluate lower aquifer.  3. Installed a 22.0-ft deep 4.0-inch diam. monitoring well: -Used 10.0-ft screen -Used 15.0-ft casing -Sand from 22.0 to 11.0 ft. -Bentonite chips from 11.0 to 9.0 ft. -Grout from 9.0 to 0.0 ft. -Installed stick-up manhole cover.
					D/I	6-7-11	2	DS	15	
					D	4-1-3	3	DS	9	
-0.8	Brown to red, moist to wet, very loose to loose, sandy, clayey GRAVEL, some red clay	11.0	OO	10	D	WOH/12"-1	4	DS	3	
					I/D	4-2-5	5	DS	17	
				15	I	2-2-2	6	DS	18	
-11.3	Dark greenish gray, moist, soft CLAY, some to trace silt	21.5		20	I	WOH/6"-2-2	7	DS	18	
	Bottom of Boring at 21.5 Feet			25						
				30						
				35						
				40						
				45						

#### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

#### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

#### GROUNDWATER DEPTH

AT COMPLETION 11.0 FT.  
AFTER 16 HRS. 7.0 FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT 5.0 FT.

#### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS

Boring # MW-9

Project Name Anacostia Station Regional Parking Lot and Access Road

Job # 97-009

Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 12.0 In. Foreman W. Hunter  
Surf. Elev. 7.82 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 6/19/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 6/19/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
-2	Brown, moist red brick, glass (FILL)	8.0	XXXXXX	5	I	2-3-5	1	DS	12	1. Encountered water at 2.5 feet.
					D	24-24-23	2	DS	16	2. Encountered obstruction at 4.5 feet and continued boring in a 4-foot offset location.
					D	34-32-39	3	DS	9	
-6.2	Red, moist, medium stiff CLAY, little to some gravel, some black gravel	14.0	XXXXXX	10	I	4-2-4	4	DS	13	3. Installed a 17.0-ft deep 4.0-inch diam. monitoring well: -Used 15.0-ft screen -Used 5.0-ft casing -Sand from 17.0 to 2.0 ft.
					I	15-4-4	5	DS	12	-Benlonite chips from 2.0 to 1.0 ft. -Grout from 1.0 to 0.0 ft.
-9.2	Gray, moist, very soft SILT	17.0	XXXXXX	15	I	WOH/6"-1-2	6	DS	18	4. Installed stick-up manhole cover.
	Bottom of Boring at 17.0 Feet			20						
				25						
				30						
				35						
				40						
				45						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 2.5 FT.  
AFTER        HRS.        FT.  
AFTER 24 HRS. 2.0 FT.  
CAVED AT        FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # MW-10/SB-39  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97-009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 12.0 In. Foreman W. Hunter  
Surf. Elev. 8.30 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 6/27/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 6/27/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
-3.7	Brown, moist to wet, fine to medium SAND, some clay, brick (FILL)	12.0		5	D	6-3-3	1	DS	5	1. Encountered water between 5.5 and 6.0 feet. 2. No hydrocarbon odor. 3. Possible thin gravel layer between 33.0 and 34.0 feet. 4. Possible gravel layer between 38.0 and 39.0 feet.
					D	9-10-7	2	DS	3	
					D	40-51/4"	3	DS	7	
					D	5-18-8	4	DS	8	
					D	11-18-13	5	DS	11	
-31.7	Grayish brown, moist, very soft to medium stiff CLAY, trace vegetation	40.0		15	I	WOH/12"-2	6	DS	17	5. Installed a 58.5-ft deep 4.0-inch diam. monitoring well: -Used 15.0-ft screen -Used 47.0-ft casing -Sand from 58.5 to 40.0 ft. -Bentonite chips from 40.0 to 37.0 ft. -Grout from 37.0 to 0.0 ft. -Installed stick-up manhole cover.
				20	I	2-2-3	7	DS	18	
				25	I	WOH/6"-2-2	8	DS	18	
				30	I	2-2-4	9	DS	18	
				35	I	WOH/6"-2-3	10	DS	18	
-31.7	Greenish gray, moist, soft CLAY, trace white fossil			40	I	WOR/6"- WOH/6"-3	11	DS	18	

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION \_\_\_\_\_ FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # MW-10/SB-39  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97-009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 12.0 In. Foreman W. Hunter  
Surf. Elev. 8.30 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
Date Started 6/27/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 6/27/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
-37.2		45.5			I/D	4-5-8	12	DS	18	
	Dark brown to light brown, moist, medium dense, fine SAND, some clay, little gravel									
	Light gray, wet, dense, sandy GRAVEL			50	D	15-18-31	13	DS	18	
	Light gray to tan, wet, very dense, fine, sandy GRAVEL, trace clay			55	D	15-30-45	14	DS	14	
-50.7		59.0								
-51.7	Gray, some brown, moist, hard CLAY, little gravel	60.0		60	I	9-16-21	15	DS	18	
	Bottom of Boring at 60.0 Feet									
				65						
				70						
				75						
				80						
				85						
				90						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION \_\_\_\_\_ FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

**APPENDIX B - SECTION 3**

***Well Installation Reports***






## RECORD OF SOIL EXPLORATION

Contracted With District of Columbia Department of Public Works - BTCS Boring # MW-10A  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

## SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 12.0 In. Foreman W. Hunter  
 Surf. Elev. 9.65 Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector N. Richardson  
 Date Started 6/30/97 Spoon Size 3.0 In. Boring Method HSA Date Completed 6/30/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Brown, moist to wet, medium dense, fine to medium SAND, some clay, trace brick (FILL)			0	D	16-6-9	3	DS	11	1. Encountered water at 5.5 feet. 2. Possible concrete at 5.5 feet. 3. Installed a 14.0-ft deep 4.0-inch diam. monitoring well: -Used 10.0-ft screen -Used 7.0-ft casing -Sand from 14.5 to 3.0 ft. -Bentonite chips from 3.0 to 1.0 ft. -Grout from 1.0 to 0.0 ft. -Installed stick-up manhole cover.
				5	D	4-7-7	4	DS	16	
				10	D	5-18-51/3"	5	DS	8	
				15	D/I	5-1-2	6	DS	12	
-2.3		12.0		1	I	2-1-2	7	DS	18	
-4.3	Grayish brown, moist, very soft to medium stiff CLAY, trace vegetation	14.0		1	I	5-5-3	8	DS	18	
	Bottom of Boring at 14.0 Feet			15						
				20						
				25						
				30						
				35						
				40						
				45						

**SAMPLER TYPE**

## SAMPLE CONDITIONS

## GROUNDWATER DEPTH

## BORING METHOD

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

AT COMPLETION 3.58 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



## WELL INSTALLATION REPORT

Contracted With District of Columbia Department of Public Works - BTCS

Well # MW-1

Project Name Anacostia Station Regional Parking Lot and Access Road

Job # 97-009

Location Southeast, Washington, D.C.

### BOREHOLE

Datum \_\_\_\_\_ Well Diameter 4.0 In.

Hole Diameter 12.0 In.

Foreman W. Hunter

Surf. Elev. 9.32 Ft.

Boring Method HSA

Rock Core Dia. N/A

Inspector N. Richardson

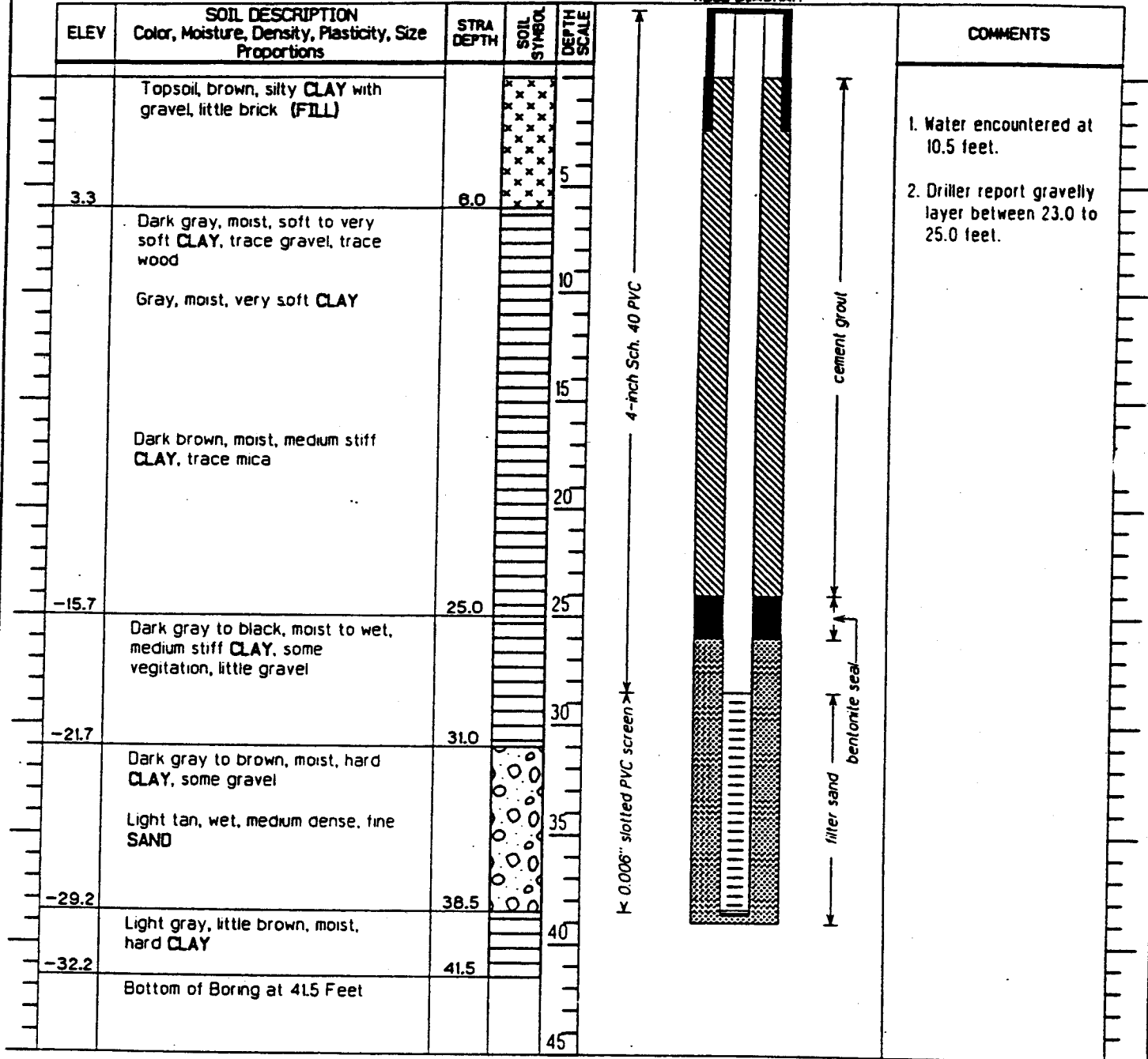
Date Started 6/24/97

Mud Type N/A

Casing Diameter N/A In.

Date Completed 6/24/97

### WELL DIAGRAM



### WELL DETAILS

WELL TIP DEPTH 38.5 FT.  
DEPTH TO TOP OF RISER -3.0 FT.  
SCREEN LENGTH 10.0 FT.  
RISER LENGTH 31.5 FT.  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER \_\_\_\_\_

SAND FILTER:  
FROM 26.0 TO 39.0 FT.  
BENTONITE SEAL:  
FROM 24.0 TO 26.0 FT.  
WELL PERMIT NO. \_\_\_\_\_

### GROUNDWATER DEPTH

AT COMPLETION 14.0 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING





THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## WELL INSTALLATION REPORT

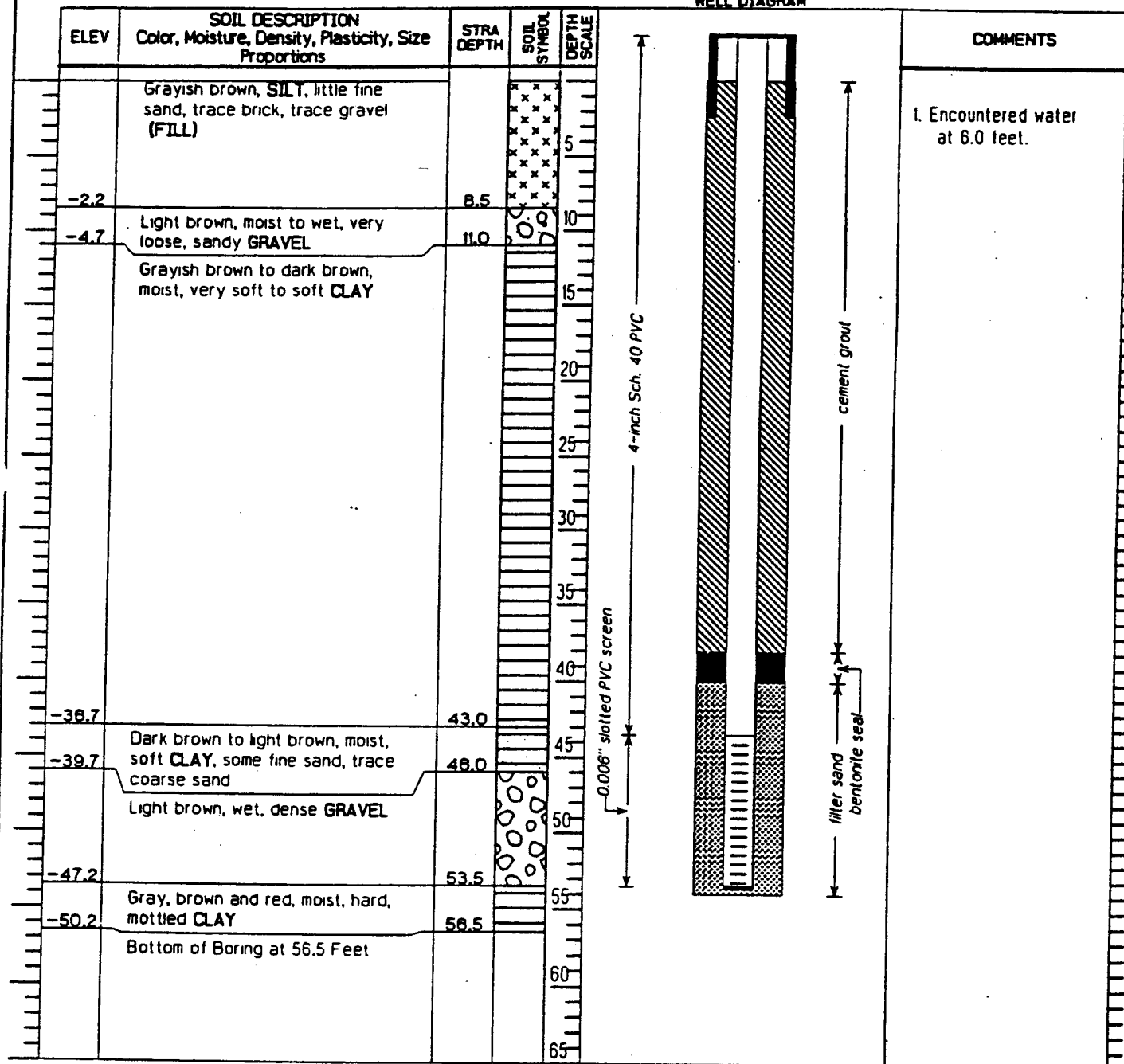
Contracted With District of Columbia Department of Public Works - BTCS  
Project Name Anacostia Station Regional Parking Lot and Access Road  
Location Southeast, Washington, D.C.

Well # MW-2  
Job # 97-009

### BOREHOLE

Datum \_\_\_\_\_ Well Diameter 4.0 In. Hole Diameter 12.0 In. Foreman W. Hunter  
Surf. Elev. 6.27 Ft. Boring Method HSA Rock Core Dia. N/A Inspector N. Richardson  
Date Started 6/24/97 Mud Type N/A Casing Diameter N/A In. Date Completed 6/26/97

### WELL DIAGRAM



### WELL DETAILS

WELL TIP DEPTH 53.5 FT.  
DEPTH TO TOP OF RISER -3.0 FT.  
SCREEN LENGTH 10.0 FT.  
RISER LENGTH 46.5 FT.  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER \_\_\_\_\_

SAND FILTER:  
FROM 40.0 TO 54.0 FT.  
BENTONITE SEAL:  
FROM 38.0 TO 40.0 FT.  
WELL PERMIT NO \_\_\_\_\_

### GROUNDWATER DEPTH

AT COMPLETION 5.2 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

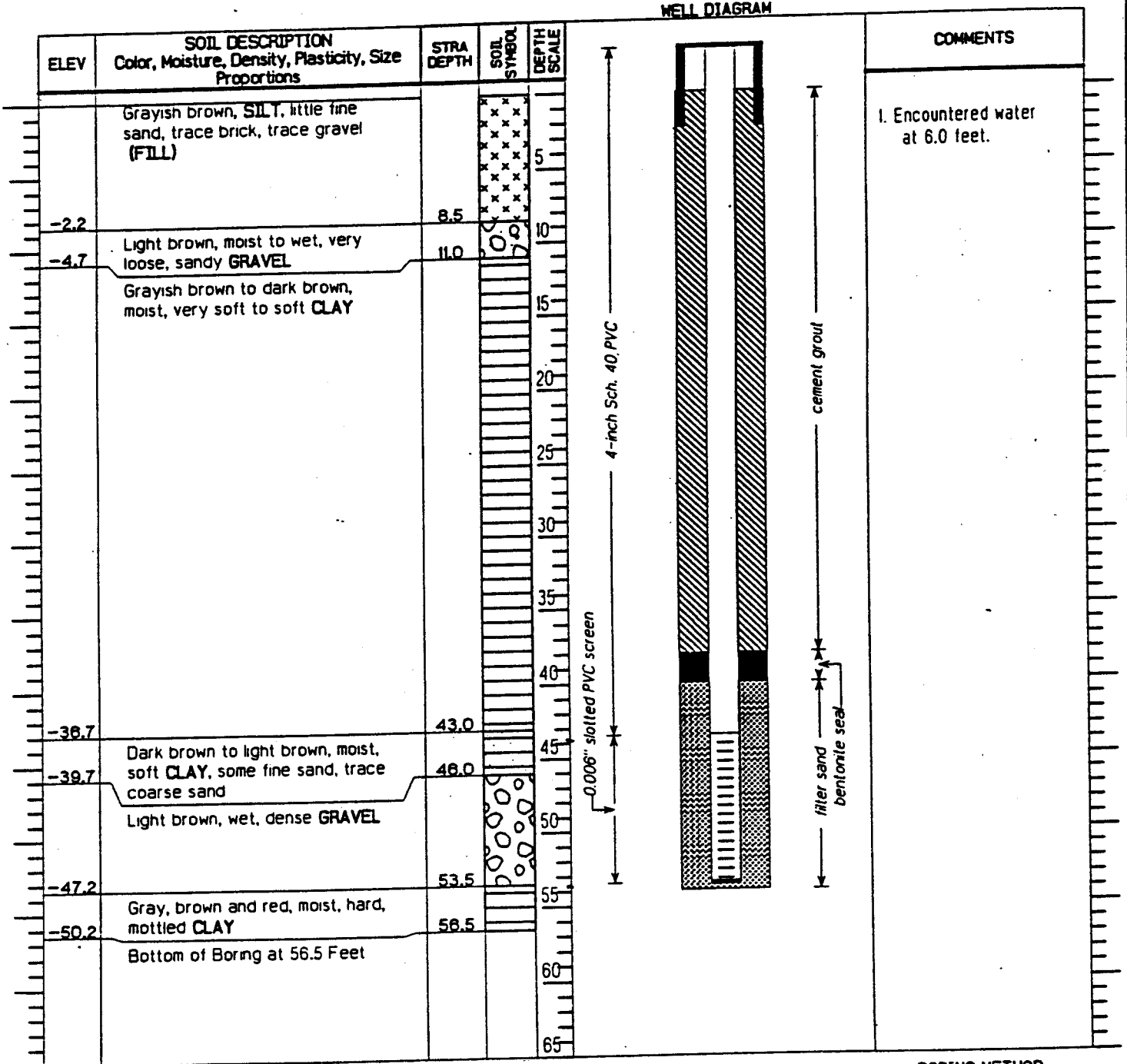
## WELL INSTALLATION REPORT

Contracted With District of Columbia Department of Public Works - BTCS Well # MW-2  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97-009  
Location Southeast, Washington, D.C.

### BOREHOLE

Datum \_\_\_\_\_ Well Diameter 4.0 In. Hole Diameter 12.0 In. Foreman W. Hunter  
Surf. Elev. 6.27 Ft. Boring Method HSA Rock Core Dia. N/A Inspector N. Richardson  
Date Started 6/24/97 Mud Type N/A Casing Diameter N/A In. Date Completed 6/26/97

### WELL DIAGRAM



### WELL DETAILS

WELL TIP DEPTH 53.5 FT.  
DEPTH TO TOP OF RISER -3.0 FT.  
SCREEN LENGTH 10.0 FT.  
RISER LENGTH 46.5 FT.  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER \_\_\_\_\_

SAND FILTER:  
FROM 40.0 TO 54.0 FT.  
BENTONITE SEAL:  
FROM 38.0 TO 40.0 FT.  
WELL PERMIT NO \_\_\_\_\_

### GROUNDWATER DEPTH

AT COMPLETION 5.2 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING



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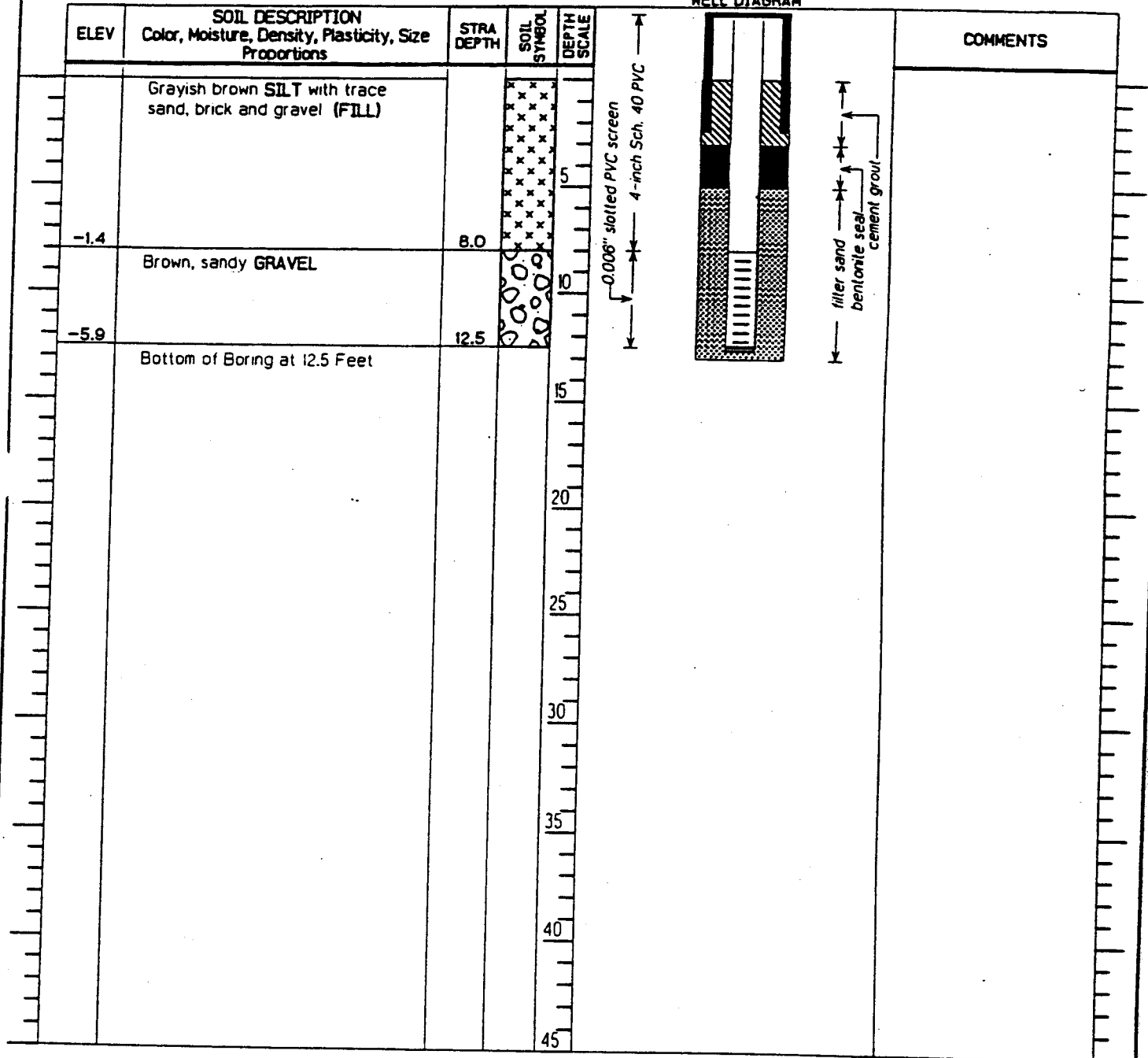
## WELL INSTALLATION REPORT

Contracted With District of Columbia Department of Public Works - BTCS Well # MW-2A  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97-009  
Location Southeast, Washington, D.C.

### BOREHOLE

Datum \_\_\_\_\_ Well Diameter 4.0 In. Hole Diameter 12.0 In. Foreman W. Hunter  
Surf. Elev. 6.59 Ft. Boring Method HSA Rock Core Dia. N/A Inspector N. Richardson  
Date Started 6/26/97 Mud Type N/A Casing Diameter N/A In. Date Completed 6/26/97

### WELL DIAGRAM



### WELL DETAILS

WELL TIP DEPTH 12.5 FT.  
DEPTH TO TOP OF RISER -3.0 FT.  
SCREEN LENGTH 5.0 FT.  
RISER LENGTH 11.0 FT.  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER \_\_\_\_\_

SAND FILTER:  
FROM 5.0 TO 13.0 FT.  
BENTONITE SEAL:  
FROM 3.0 TO 5.0 FT.  
WELL PERMIT NO \_\_\_\_\_

### GROUNDWATER DEPTH

AT COMPLETION \_\_\_\_\_ FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING



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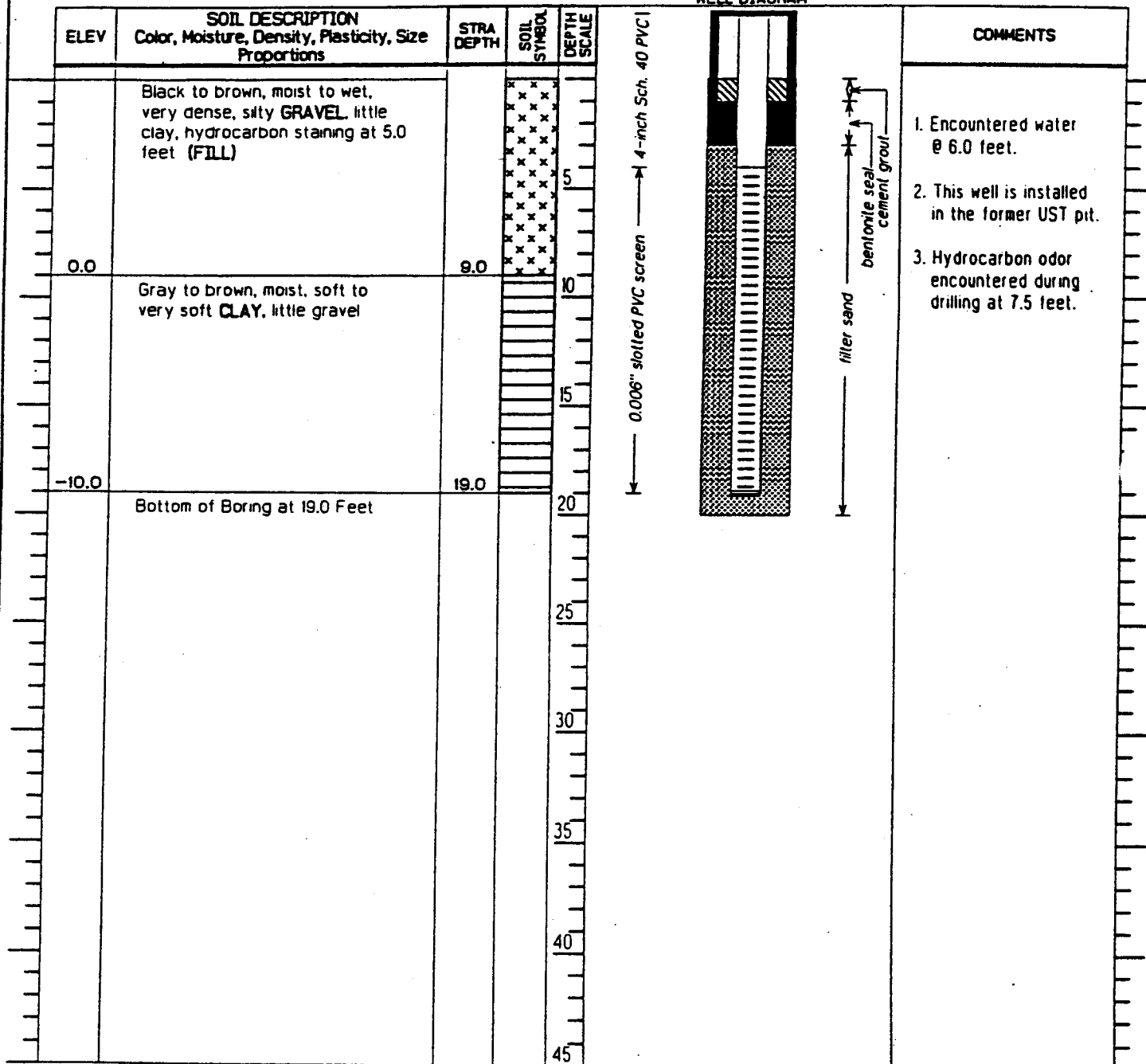
## WELL INSTALLATION REPORT

Contracted With District of Columbia Department of Public Works - BTCS Well # MW-3  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97-009  
Location Southeast, Washington, D.C.

### BOREHOLE

Datum \_\_\_\_\_ Well Diameter 4.0 In. Hole Diameter 12.0 In. Foreman W. Hunter  
Surf. Elev. 8.96 Ft. Boring Method HSA Rock Core Dia. N/A Inspector N. Richardson  
Date Started 6/23/97 Mud Type N/A Casing Diameter N/A In. Date Completed 6/23/97

### WELL DIAGRAM



### WELL DETAILS

WELL TIP DEPTH 19.0 FT.  
DEPTH TO TOP OF RISER -3.0 FT.  
SCREEN LENGTH 15.0 FT.  
RISER LENGTH 7.0 FT.  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER \_\_\_\_\_

SAND FILTER:  
FROM 3.0 TO 19.5 FT.  
BENTONITE SEAL:  
FROM 1.0 TO 3.0 FT.  
WELL PERMIT NO. \_\_\_\_\_

### GROUNDWATER DEPTH

AT COMPLETION 6.2 FT.  
AFTER 16 HRS. 2.9 FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING



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## WELL INSTALLATION REPORT

Contracted With District of Columbia Department of Public Works - BTCS

Well # MW-5

Project Name Anacostia Station Regional Parking Lot and Access Road

Job # 97-009

Location Southeast, Washington, D.C.

### BOREHOLE

Datum \_\_\_\_\_

Well Diameter 4.0 In.

Hole Diameter 12.0 In.

Foreman W. Hunter

Surf. Elev. 8.79 Ft.

Boring Method HSA

Rock Core Dia. N/A

Inspector N. Richardson

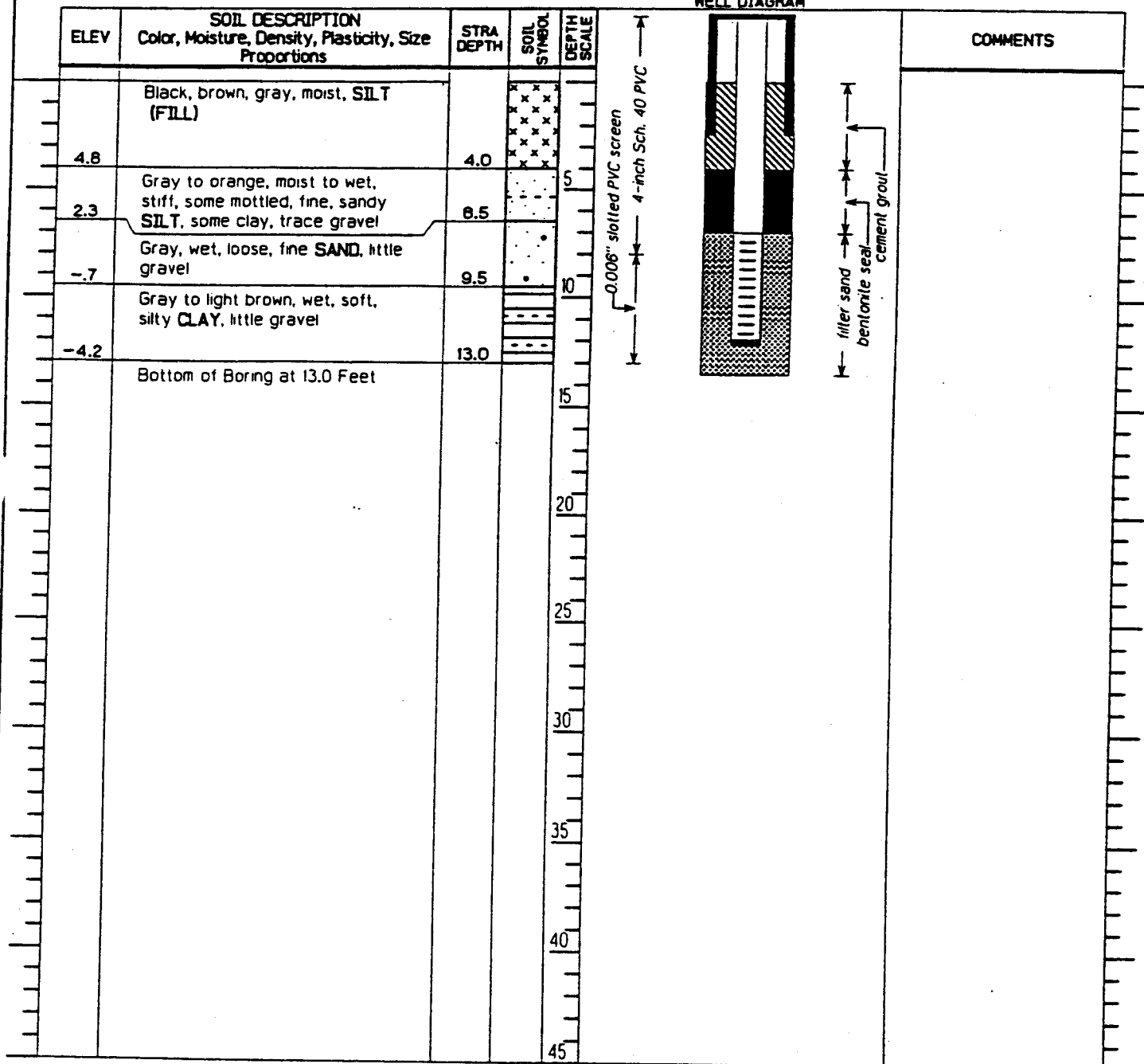
Date Started 6/20/97

Mud Type N/A

Casing Diameter N/A In.

Date Completed 6/20/97

### WELL DIAGRAM



### WELL DETAILS

WELL TIP DEPTH 13.0 FT.  
DEPTH TO TOP OF RISER -3.0 FT.  
SCREEN LENGTH 5.0 FT.  
RISER LENGTH 10.0 FT.  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER \_\_\_\_\_

SAND FILTER:  
FROM 7.0 TO 13.0 FT.  
BENTONITE SEAL:  
FROM 4.0 TO 7.0 FT.  
WELL PERMIT NO \_\_\_\_\_

### GROUNDWATER DEPTH

AT COMPLETION 2.5 FT.  
AFTER 72 HRS. 3.5 FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING



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## WELL INSTALLATION REPORT

Contracted With District of Columbia Department of Public Works - BTCS

Well # MW-4

Project Name Anacostia Station Regional Parking Lot and Access Road

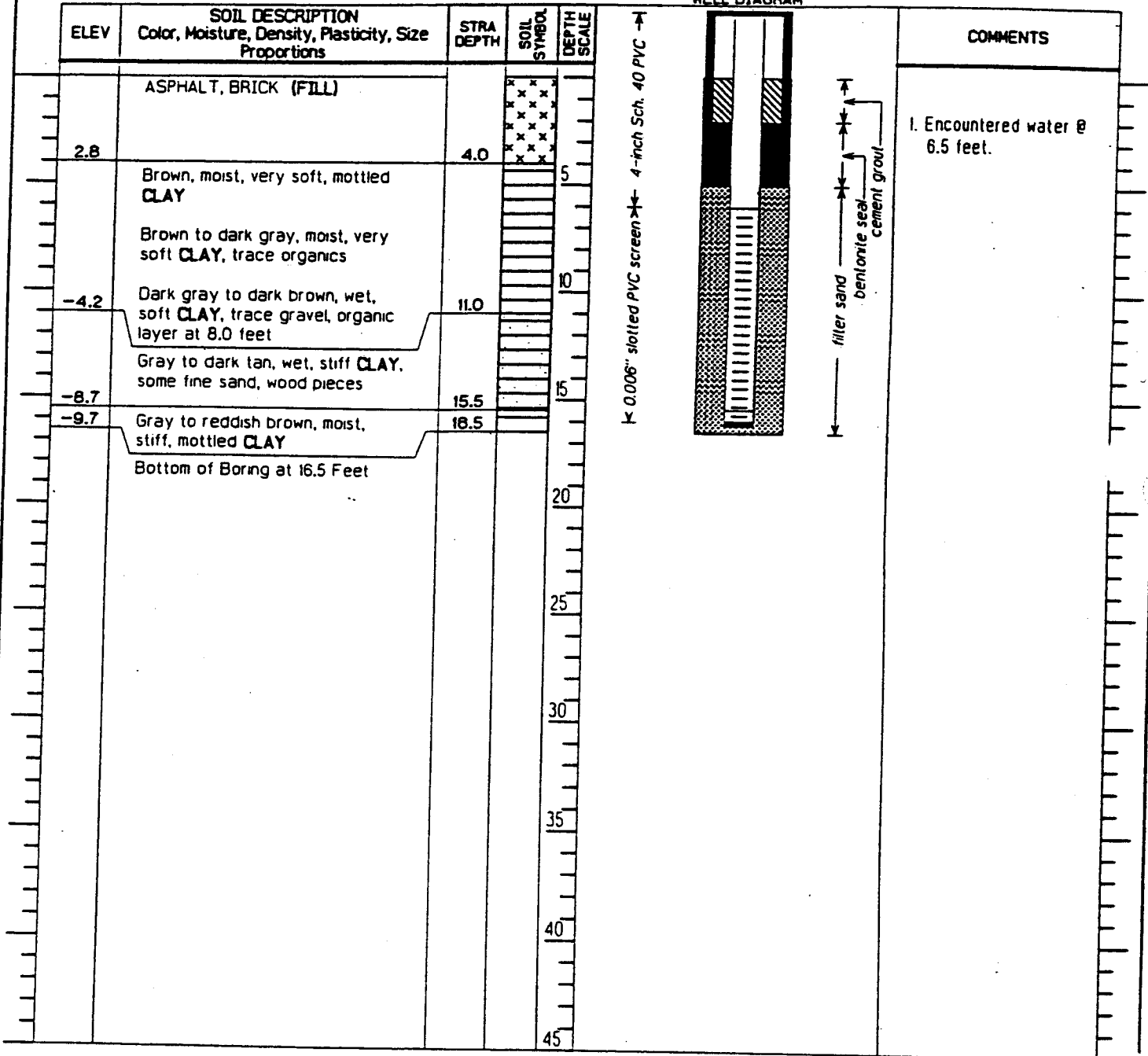
Job # 97-009

Location Southeast, Washington, D.C.

### BOREHOLE

Datum \_\_\_\_\_ Well Diameter 4.0 In. Hole Diameter 12.0 In. Foreman W. Hunter  
Surf. Elev. 6.81 Ft. Boring Method HSA Rock Core Dia. N/A Inspector N. Richardson  
Date Started 6/20/97 Mud Type N/A Casing Diameter N/A In. Date Completed 6/20/97

### WELL DIAGRAM



### WELL DETAILS

WELL TIP DEPTH 16.0 FT.  
DEPTH TO TOP OF RISER -3.0 FT.  
SCREEN LENGTH 10.0 FT.  
RISER LENGTH 9.0 FT.  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER \_\_\_\_\_

SAND FILTER:  
FROM 5.0 TO 16.5 FT.  
BENTONITE SEAL:  
FROM 2.0 TO 5.0 FT.  
WELL PERMIT NO \_\_\_\_\_

### GROUNDWATER DEPTH

AT COMPLETION 5.0 FT.  
AFTER 72 HRS. 4.5 FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

## WELL INSTALLATION REPORT

Contracted With District of Columbia Department of Public Works - BTCS Well # MW-6  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97-009  
Location Southeast, Washington, D.C.

## BOREHOLE

Datum	Well Diameter	4.0 In.	Hole Diameter	12.0 In.	Foreman	W. Hunter
Surf. Elev. 7.03 Ft.	Boring Method	HSA	Rock Core Dia.	N/A	Inspector	N. Richardson
Date Started 6/20/97	Mud Type	N/A	Casing Diameter	N/A In.	Date Completed	6/20/97

### WELL DIAGRAM

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	WELL DIAGRAM	COMMENTS
1.0	Brown, moist, silty, fine SAND, trace gravel, brick (FILL)	6.0	[Symbol: Crosses]	5		1. Encountered water at 6.0 feet.
-0.5	Gray, moist to wet, stiff, gravelly CLAY	7.5	[Symbol: Horizontal lines]	10		
	Dark gray to tan, moist, very soft to medium stiff CLAY, trace plant fragments near bottom		[Symbol: Horizontal lines]	15		
-8.5		15.5	[Symbol: Horizontal lines]	20		
-9.5	Dark gray to tan, moist, soft CLAY	16.5	[Symbol: Horizontal lines]	25		
	Bottom of Boring at 16.5 Feet			30		
				35		
				40		
				45		

## WELL DETAILS

WELL TIP DEPTH 16.0 FT  
DEPTH TO TOP OF RISER -3.0 FT  
SCREEN LENGTH 10.0 FT  
RISER LENGTH 9.0 FT  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER

SAND FILTER:  
FROM 5.0 TO 16.5 FT.  
BENTONITE SEAL:  
FROM 3.0 TO 5.0 FT.  
WELL PERMIT NO. \_\_\_\_\_

### GROUNDWATER DEPTH

AT COMPLETION 5.0 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. 4.5 FT.

## BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING



Contracted With District of Columbia Department of Public Works - BTCS Well # MW-7  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97-009  
Location Southeast, Washington, D.C.

Datum	Well Diameter	4.0 In.	Hole Diameter	12.0 In.	Foreman	W. Hunter
Surf. Elev. 9.50 Ft.	Boring Method	HSA	Rock Core Dia.	N/A	Inspector	N. Richardson
Date Started 6/23/97	Mud Type	N/A	Casing Diameter	N/A In.	Date Completed	6/23/97

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE		COMMENTS
4.5	Clay, concrete, brick, asphalt, plastic (FILL)	5.0	[Symbol: X's]	5	<p>4-inch Sch. 40 PVC</p> <p>0.006" slotted PVC screen</p> <p>bentonite seal cement grout</p> <p>filter sand</p>	1. Encountered water at 9.5 feet.
-1.0	Brown, moist, very loose to loose, fine SAND, little silt and clay, trace coarse sand	10.5	[Symbol: Dots]	10		
-25.5	Light brown, wet, very dense to loose, sandy GRAVEL and gravelly SAND	35.0	[Symbol: Circles]	35		
-30.5	Gray and brown, moist, hard to very stiff, mottled CLAY	40.0	[Symbol: Horizontal lines]	40		
	Bottom of Boring at 40.0 Feet			45		

WELL TIP DEPTH 35.0 FT.  
DEPTH TO TOP OF RISER -3.0 FT.  
SCREEN LENGTH 30.0 FT.  
RISER LENGTH 8.0 FT.  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER \_\_\_\_\_

AT COMPLETION 12.0 FT.  
AFTER 18 HRS. 8.9 FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING





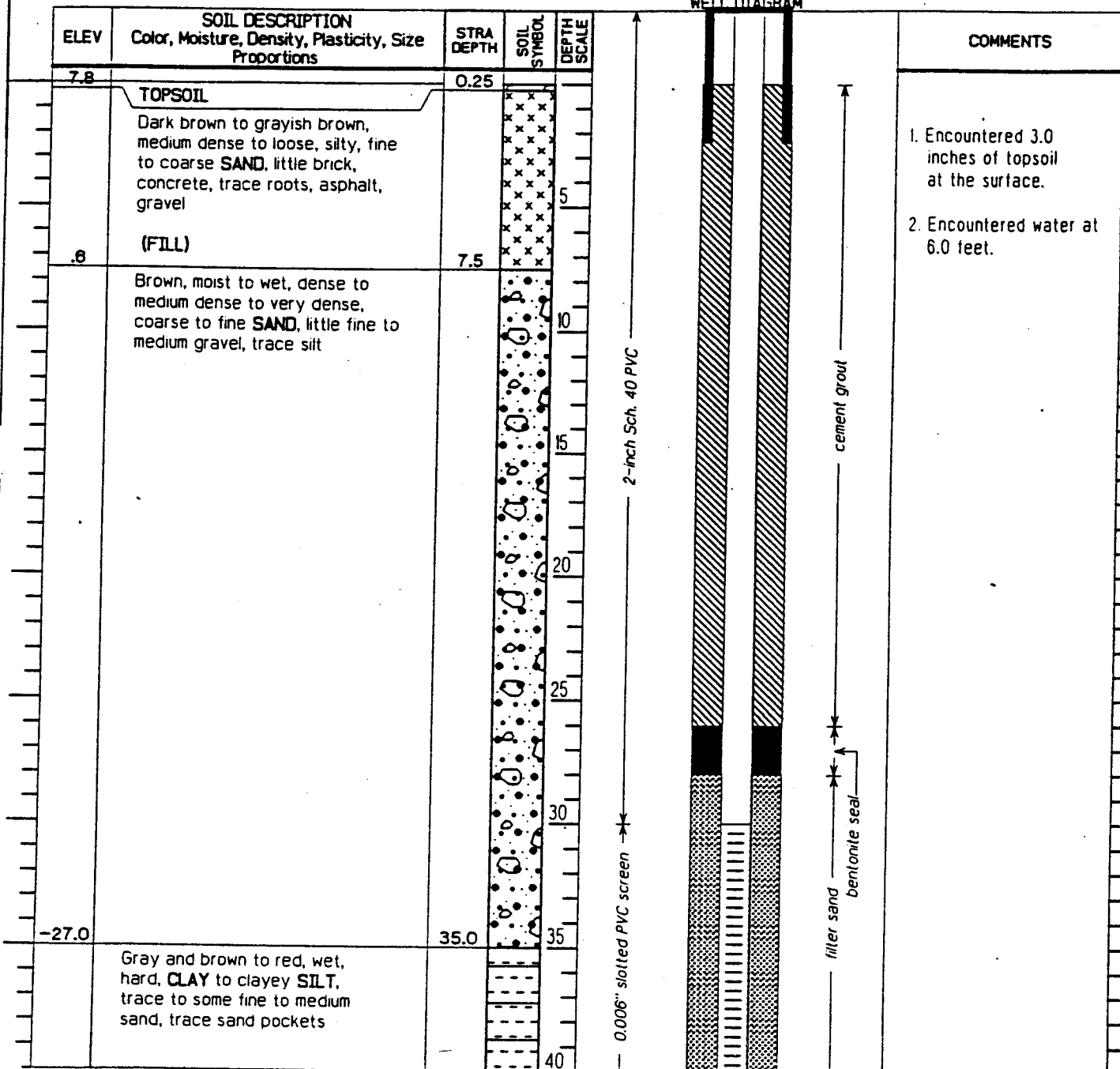
## WELL INSTALLATION REPORT

Contracted With DC-DPW - Department of Transportation Well # MW-23B  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### BOREHOLE

Datum \_\_\_\_\_ Well Diameter In. Hole Diameter 8.0 In. Foreman W. Mashev  
Surf. Elev. 8.05 Ft. Boring Method HSA Rock Core Dia. N/A Inspector \_\_\_\_\_  
Date Started 1/25/99 Mud Type N/A Casing Diameter N/A In. Date Completed 1/26/99

### WELL DIAGRAM



### WELL DETAILS

WELL TIP DEPTH 16.0 FT.  
DEPTH TO TOP OF RISER -3.0 FT.  
SCREEN LENGTH 20.0 FT.  
RISER LENGTH 33.0 FT.  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER \_\_\_\_\_

SAND FILTER:  
FROM 28.6 TO 60.0 FT.  
BENTONITE SEAL:  
FROM 26.0 TO 28.0 FT.  
WELL PERMIT NO \_\_\_\_\_

### GROUNDWATER DEPTH

AT COMPLETION 6.75 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING



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## WELL INSTALLATION REPORT

Contracted With District of Columbia Department of Public Works - BTCS

Well # MW-8

Project Name Anacostia Station Regional Parking Lot and Access Road

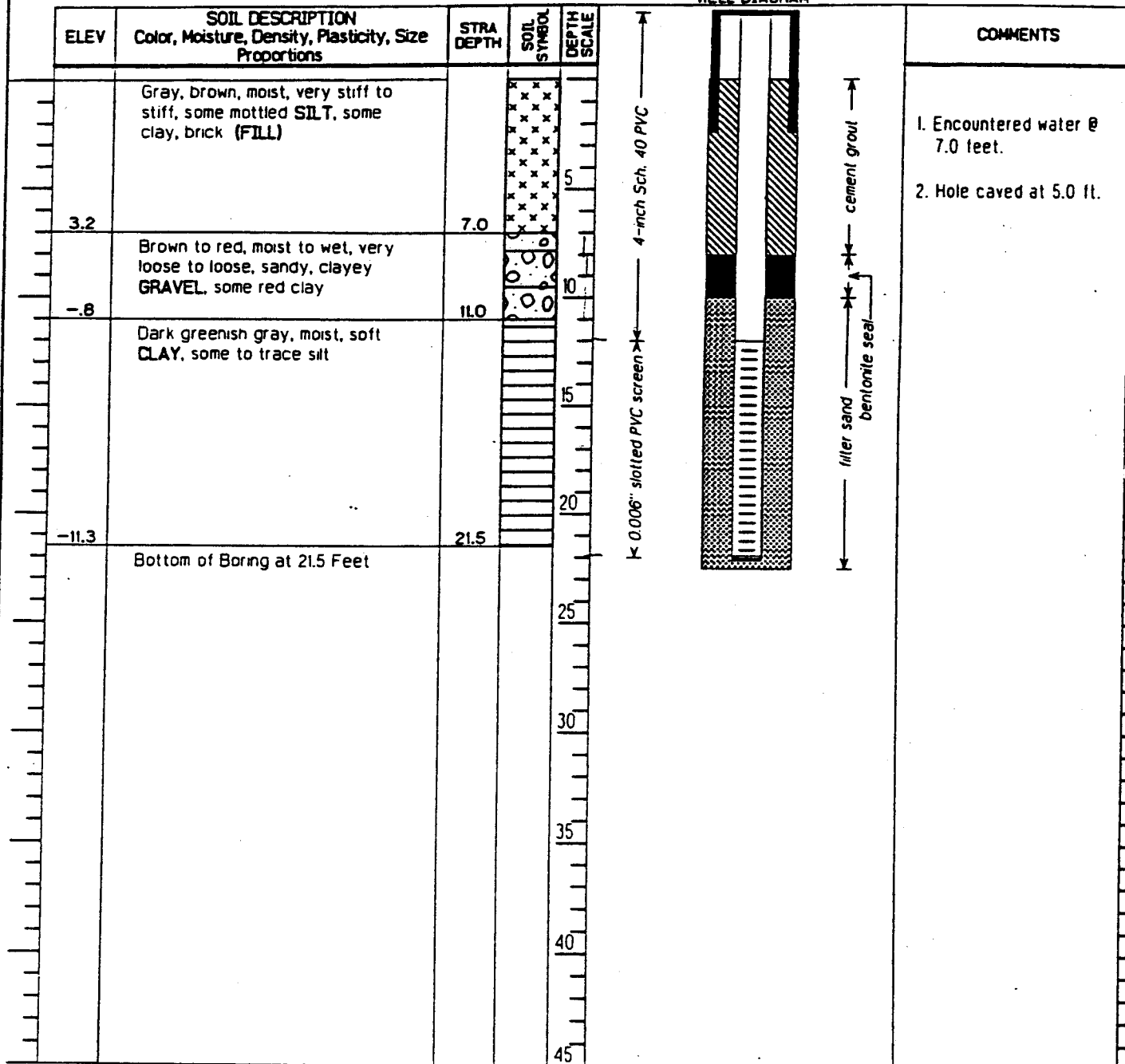
Job # 97-009

Location Southeast, Washington, D.C.

### BOREHOLE

Datum \_\_\_\_\_ Well Diameter 4.0 In. Hole Diameter 12.0 In. Foreman W. Hunter  
Surf. Elev. 10.23 Ft. Boring Method HSA Rock Core Dia. N/A Inspector N. Richardson  
Date Started 6/19/97 Mud Type N/A Casing Diameter N/A In. Date Completed 6/19/97

### WELL DIAGRAM



### WELL DETAILS

WELL TIP DEPTH 22.0 FT.  
DEPTH TO TOP OF RISER -3.0 FT.  
SCREEN LENGTH 10.0 FT.  
RISER LENGTH 15.0 FT.  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER \_\_\_\_\_

SAND FILTER:  
FROM 10.0 TO 22.5 FT.  
BENTONITE SEAL:  
FROM 8.0 TO 10.0 FT.  
WELL PERMIT NO \_\_\_\_\_

### GROUNDWATER DEPTH

AT COMPLETION 11.0 FT.  
AFTER 16 HRS. 7.0 FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING



Contracted With	District of Columbia Department of Public Works - BTCS	Well #	MW-9
Project Name	Anacostia Station Regional Parking Lot and Access Road	Job #	97-009
Location	Southeast, Washington, D.C.		

Datum	Well Diameter 4.0 In.	Hole Diameter 12.0 In.	Foreman W. Hunter
Surf. Elev. 7.82 Ft.	Boring Method HSA	Rock Core Dia. N/A	Inspector N. Richardson
Date Started 6/19/97	Mud Type N/A	Casing Diameter N/A In.	Date Completed 6/19/97

WELL DIAGRAM					COMMENTS	
ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE		
-2	Brown, moist red brick, glass (FILL)	8.0	[Symbol: cross-hatch]	5	<p>4-inch Sch. 40 PVC</p> <p>0.006" slotted PVC screen</p> <p>filter sand</p> <p>bentonite seal</p> <p>cement grout</p>	
-6.2	Red, moist, medium stiff CLAY, little to some gravel, some black gravel	14.0	[Symbol: horizontal lines]	10		
-9.2	Gray, moist, very soft SILT	17.0	[Symbol: dots]	15		
	Bottom of Boring at 17.0 Feet			20		
				25		
				30		
				35		
				40		
				45		

WELL TIP DEPTH 17.0 FT.  
DEPTH TO TOP OF RISER -3.0 FT.  
SCREEN LENGTH 15.0 FT.  
RISER LENGTH 5.0 FT.  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER \_\_\_\_\_

AT COMPLETION 2.5 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. 2.0 FT.

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING



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## WELL INSTALLATION REPORT

Contracted With District of Columbia Department of Public Works - BTCS

Well # MW-10/SB-39

Project Name Anacostia Station Regional Parking Lot and Access Road

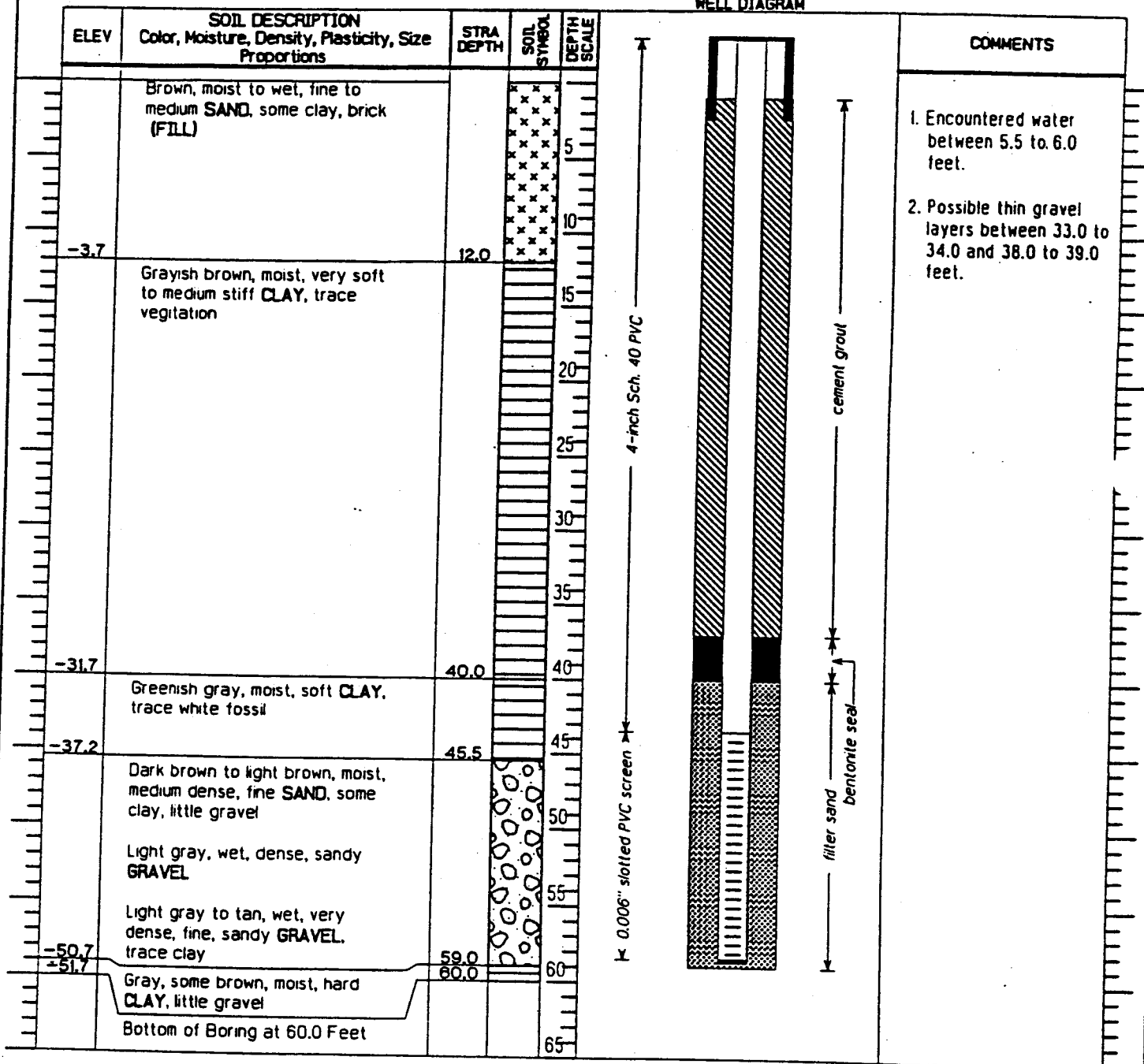
Job # 97-009

Location Southeast, Washington, D.C.

### BOREHOLE

Datum \_\_\_\_\_ Well Diameter 4.0 In. Hole Diameter 12.0 In. Foreman W. Hunter  
Surf. Elev. 8.30 Ft. Boring Method HSA Rock Core Dia. N/A Inspector N. Richardson  
Date Started 6/27/97 Mud Type N/A Casing Diameter N/A In. Date Completed 6/27/97

### WELL DIAGRAM



### WELL DETAILS

WELL TIP DEPTH 58.5 FT.  
DEPTH TO TOP OF RISER -3.0 FT.  
SCREEN LENGTH 15.0 FT.  
RISER LENGTH 46.5 FT.  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER \_\_\_\_\_

SAND FILTER:  
FROM 41.0 TO 59.0 FT.  
BENTONITE SEAL:  
FROM 37.0 TO 41.0 FT.  
WELL PERMIT NO. \_\_\_\_\_

### GROUNDWATER DEPTH

AT COMPLETION \_\_\_\_\_ FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

# WELL INSTALLATION REPORT

Contracted With	District of Columbia Department of Public Works - BTCS	Well #	MW-10A
Project Name	Anacostia Station Regional Parking Lot and Access Road	Job #	97009
Location	Southeast, Washington, D.C.		

## BOREHOLE

Datum	Well Diameter	4.0 In.	Hole Diameter	12.0 In.	Foreman	W. Hunter
Surf. Elev. 9.65 Ft.	Boring Method	HSA	Rock Core Dia.	N/A	Inspector	N. Richardson
Date Started 6/30/97	Mud Type	N/A	Casing Diameter	N/A In.	Date Completed	6/30/97

### WELL DIAGRAM

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	WELL DIAGRAM	COMMENTS
-2.3	Brown, moist to wet, medium dense, fine to medium SAND, some clay, trace brick (FILL)	12.0				<p>1. Encountered water @ 5.5 feet.</p> <p>2. Possible concrete layer at 5.5 feet.</p>
-4.3	Grayish brown, moist, very soft to medium stiff CLAY, trace vegetation Bottom of Boring at 14.0 Feet	14.0				

## WELL DETAILS

WELL TIP DEPTH 14.0 FT.  
DEPTH TO TOP OF RISER -3.0 FT.  
SCREEN LENGTH 10.0 FT.  
RISER LENGTH 7.0 FT.  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER \_\_\_\_\_

**SAND FILTER:**

FROM 3.0 TO 14.5 FT.  
BENTONITE SEAL:  
FROM 1.0 TO 3.0 FT.  
WELL PERMIT NO. \_\_\_\_\_

### GROUNDWATER DEPTH

AT COMPLETION 3.58 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

## BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING



## WELL INSTALLATION REPORT

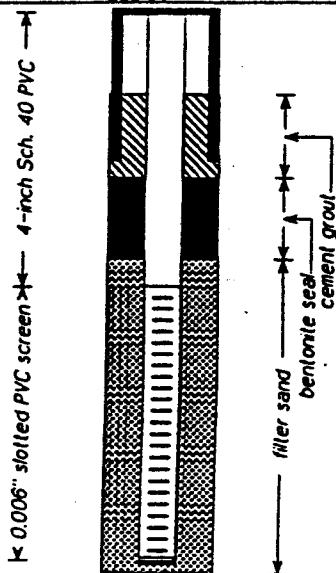
Contracted With District of Columbia Department of Public Works - BTCS Well # SB-38 / (MW-11)  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97-009  
Location Southeast, Washington, D.C.

### BOREHOLE

Datum \_\_\_\_\_ Well Diameter 4.0 In. Hole Diameter 12.0 In. Foreman W. Massey  
Surf. Elev. 9.20 Ft. Boring Method HSA Rock Core Dia. N/A Inspector N. Richardson  
Date Started 7/8/97 Mud Type N/A Casing Diameter N/A In. Date Completed 6/30/97

### WELL DIAGRAM

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE		COMMENTS
	Brown to black SILT, some sandy gravel and clay, trace brick  (FILL)			5		
	Brown, sandy GRAVEL some clay (FILL)			10		
-5.8		15.0		15		
	Dark gray, wet to moist, soft to medium stiff CLAY			20		
-10.8		20.0		20		
	Bottom of Boring at 20.0 Feet			25		
				30		
				35		
				40		
				45		



### WELL DETAILS

WELL TIP DEPTH 17.5 FT.  
DEPTH TO TOP OF RISER -3.0 FT.  
SCREEN LENGTH 10.0 FT.  
RISER LENGTH 10.0 FT.  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER \_\_\_\_\_

SAND FILTER:  
FROM 6.0 TO 17.5 FT.  
BENTONITE SEAL:  
FROM 3.0 TO 6.0 FT.  
WELL PERMIT NO. \_\_\_\_\_

### GROUNDWATER DEPTH

AT COMPLETION 7.5 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING



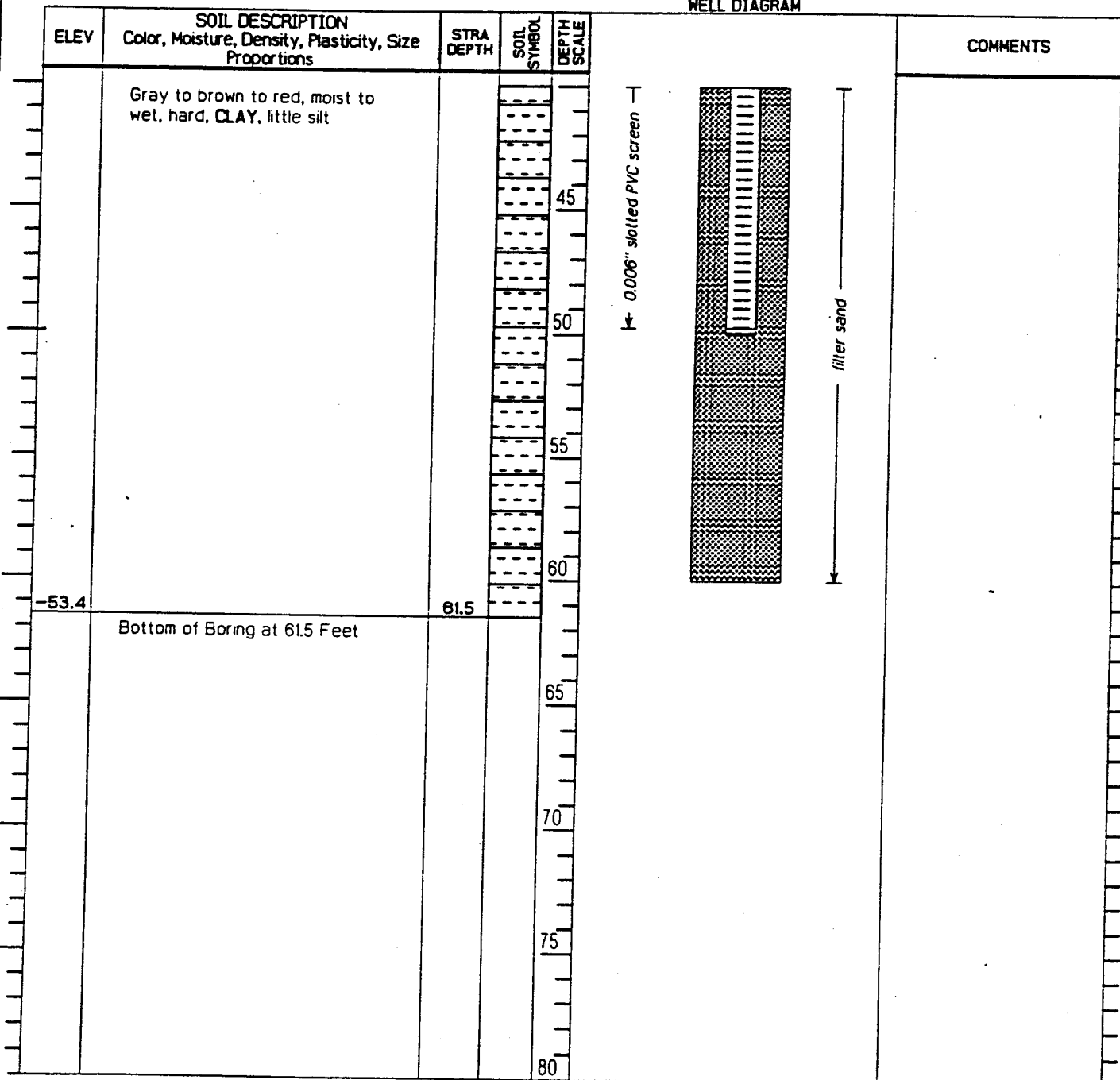
## WELL INSTALLATION REPORT

Contracted With DC-DPW - Department of Transportation Well # MW-238  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### BOREHOLE

Datum \_\_\_\_\_ Well Diameter 1 in. Hole Diameter 8.0 in. Foreman W. Massey  
Surf. Elev. 8.05 Ft. Boring Method HSA Rock Core Dia. N/A Inspector \_\_\_\_\_  
Date Started 1/25/99 Mud Type N/A Casing Diameter N/A in. Date Completed 1/26/99

### WELL DIAGRAM



### WELL DETAILS

WELL TIP DEPTH 16.0 FT.  
DEPTH TO TOP OF RISER -3.0 FT.  
SCREEN LENGTH 20.0 FT.  
RISER LENGTH 33.0 FT.  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER \_\_\_\_\_

SAND FILTER:  
FROM 28.6 TO 60.0 FT.  
BENTONITE SEAL:  
FROM 26.0 TO 28.0 FT.  
WELL PERMIT NO. \_\_\_\_\_

### GROUNDWATER DEPTH

AT COMPLETION 6.75 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

**APPENDIX B - SECTION 4**

***Logs and Photos of Test Pits***





THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With DC-DPW - Department of Transportation Boring # MW-20  
Project Name Anacostia Stn.'s Reg. Parking Lot & Access Rd-Phase II Final ESA Study Job # 98-051  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 12.0 In. Foreman W. Massey  
Surf. Elev. 7.95± Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector \_\_\_\_\_  
Date Started 1/27/99 Spoon Size 3.0 In. Boring Method HSA Date Completed 1/27/99

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
7.7	ASPHALT	0.25			D	22-46-48	1	DS	18	1. Encountered 3.0 inches of asphalt at the surface.
3.0	(FILL)	5.0		5	D	7-9-11	2	DS	11	2. Encountered water at 8.0 feet.
-2.5	(POSSIBLE FILL)	10.5		10	I/D	7-2-3	3	DS	0	3. Installed a 21.5-ft deep 4.0-mch diam. monitoring well: -Used 10.0-ft screen -Used 10.0-ft casing -Sand from 21.5 to 5.0 ft. -Bentonite chips from 5.0 to 3.0 ft. -Grout from 3.0 to 0.0 ft. -Installed slick-up manhole cover.
-13.5	Greenish brown to dark gray, wet, very soft, organic SILT, trace clay	21.5		15	1	2-2-3	4	DS	18	4. Samples PPM Readings: S-1 7.7 PPM S-2 8.8 PPM S-3 8.0 PPM* S-4 8.9 PPM S-5 9.5 PPM *From cutting while drilling
	Bottom of Boring at 21.5 Feet			20	1	1-1-1	5	DS	18	5. Background was 6.5 PPM.
				25						
				30						
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 2.5 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With DC-DPW - Department of Transportation Boring # MW-21  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 12.0 In. Foreman W. Massey  
Surf. Elev. 10.49: Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector \_\_\_\_\_  
Date Started 1/28/99 Spoon Size 3.0 In. Boring Method HSA Date Completed 1/28/99

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
10.2		0.25								
9.5	TOPSOIL	1.0			I/D	1-2-6	1	DS	12	1. Encountered 3.0 inches of topsoil at the surface.
	Dark gray, moist, very soft, organic SILT, trace brick, roots									2. Encountered water at 6.5 feet.
	(FILL)			5						
	Brown, moist, loose to medium dense, silty, fine SAND, trace fine gravel				I/D	5-8-6	2	DS	18	3. Installed a 21.5-ft deep 4.0-inch diam. monitoring well: -Used 10.0-ft screen -Used 10.0-ft casing -Sand from 21.5 to 5.0 ft. -Bentonite chips from 5.0 to 3.0 ft. -Grout from 3.0 to 0.0 ft. -Installed stick-up manhole cover.
3.5	(FILL)	7.0		10						
	Brown, gray, black, brick red, wet, dense, fine to coarse SAND, some concrete, trace brick, silt				D	13-16-29	3	DS	18	
-2.5	(FILL)	13.0		15						
	Greenish brown to dark gray, wet, soft to very soft, organic SILT				I	3-3-2	4	DS	14	4. Sample PPM Readings: S-1 7.3 PPM S-2 7.7 PPM S-3 8.2 PPM S-4 8.0 PPM S-5 8.3 PPM
-11.0		21.5		20						
	Bottom of Boring at 21.5 Feet				I	2-2-2	5	DS	18	5. Background was 6.5 PPM.
				25						
				30						
				35						
				40						

#### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

#### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

#### GROUNDWATER DEPTH

AT COMPLETION 5.5 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

#### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With DC-DPW - Department of Transportation

Boring # MW-22

Project Name Anacostia Stn.'s Reg. Parking Lot & Access Rd - Phase II Final ESA Study

Job # 98-051

Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 12.0 In. Foreman W. Massey  
Surf. Elev. 8.92± Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector \_\_\_\_\_  
Date Started 1/27/99 Spoon Size 3.0 In. Boring Method HSA Date Completed 1/27/99

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
8.7	TOPSOIL	0.25			D	1-4-5	1	DS	10	1. Encountered 3.0 inches of topsoil at the surface. 2. Encountered water at 2.0 feet. 3. Installed a 21.5-ft deep 4.0-mch diam. monitoring well: -Used 10.0-ft screen -Used 10.0-ft casing -Sand from 21.5 to 3.0 ft. -Bentonite chips from 3.0 to 1.0 ft. -Grout from 1.0 to 0.0 ft. -Installed stick-up manhole cover. 4. Sample PPM Readings: S-1 6.8 PPM S-2 7.2 PPM S-3 7.5 PPM S-4 8.0 PPM S-5 8.2 PPM 5. Background was 6.5 PPM.
	Dark brown, moist to wet, loose to medium dense, clayey, fine to coarse SAND, little gravel, trace to little brick, trace asphalt in S-1, trace silt			5	D	11-9-9	2	DS	18	
(FILL)										
-1		9.0		10	I	3-3-4	3	DS	18	
	Dark gray, black, wet, medium stiff to soft, organic SILT, trace clay			15	I	2-2-3	4	DS	16	
				20						
-12.6		21.5			I	1-3-2	5	DS	18	
	Bottom of Boring at 21.5 Feet			25						
				30						
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 1.5 FT.  
AFTER \_\_\_\_\_ HRS \_\_\_\_\_ FT.  
AFTER 24 HRS \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

## RECORD OF SOIL EXPLORATION

Contracted With DC-DPW - Department of Transportation Boring # MW-23A  
Project Name Anacostia Stn.'s Reg. Parking Lot & Access Rd - Phase II Final ESA Study Job # 98-051  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 12.0 In. Foreman W. Massey  
Surf. Elev. 8.32± Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector \_\_\_\_\_  
Date Started 1/26/99 Spoon Size 3.0 In. Boring Method HSA Date Completed 1/26/99

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
8.1	TOPSOIL	0.25								1. Encountered 3.0 inches of topsoil at the surface.
	Dark brown, moist to wet, silty, fine to medium SAND, wood and concrete			5						2. Augered with out sampling to 20.0 Ft.
	(POSSIBLE FILL)									3. Encountered water at 7.5 feet.
.8		7.5		10						4. Installed a 20.0-ft deep 4.0-inch diam. monitoring well: -Used 10.0-ft screen -Used 10.0-ft casing -Sand from 20.0 to 5.0 ft. -Bentonite chips from 5.0 to 3.0 ft. -Grout from 3.0 to 0.0 ft. -Installed stick-up manhole cover.
	Brown, wet, fine to coarse SAND, little fine to medium gravel			15						5. PPM Readings through Auger:
-11.7		20.0		20						0.0 - 5.0 ft: 8.8 PPM 5.0 - 10.0 ft: 8.9 PPM 10.0 - 15.0 ft: 8.8 PPM 15.0 - 20.0 ft: 8.8 PPM
	Bottom of Boring at 20.0 Feet			25						6. Background was 7.0 PPM.
				30						Note: Had trouble with running sand when plug was knocked out of augers.
				35						
				40						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 6.83 FT  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT  
AFTER 24 HRS. \_\_\_\_\_ FT  
CAVED AT \_\_\_\_\_ FT

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



## RECORD OF SOIL EXPLORATION

Contracted With DC-DPW - Department of Transportation Boring # MW-23B  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 12.0 In. Foreman W. Massey  
Surf. Elev. 8.05± Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector \_\_\_\_\_  
Date Started 1/25/99 Spoon Size 3.0 In. Boring Method HSA Date Completed 1/26/99

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
7.8	TOPSOIL	0.25			D	5-12-15	1	DS	14	1. Encountered 3.0 inches of topsoil at the surface.
					D	12-9-8	2	DS	16	2. Encountered water at 7.5 feet.
					D	4-2-3	3	DS	14	3. Installed a 60.0-ft deep 4.0-nch diam. monitoring well: -Used 20.0-ft screen -Used 33.0-ft casing -Sand from 80.0 to 28.0 ft. -Bentonite chips from 28.0 to 26.0 ft. -Grout from 26.0 to 0.0 ft. -Installed slick-up manhole cover.
.6	(FILL)	7.5			D	10-13-27	4	DS	18	
					D	19-18-14	5	DS	16	
					D	10-10-10	6	DS	14	
					D	5-5-8	7	DS	16	4. Began having problems with running sand at 12.5 feet.
					D	10-50-51/3"	8	DS	16	
					D	16-23-31	9	DS	18	5. Began filling auger with water at 15.0 feet.
					D	44-51/4"	10	DS	10	6. Reamed boring to 60.0 feet with 6 5/8" augers.
					D	19-18-27	11	DS	18	7. Sample PPM Readings: S-1 8.5 PPM S-2 11.5 PPM S-3 14.5 PPM S-4 8.1 PPM S-5 7.9 PPM S-6 8.3 PPM S-7 8.3 PPM S-8 8.3 PPM S-9 8.3 PPM S-10 8.1 PPM S-11 8.1 PPM S-12 8.7 PPM S-13 8.8 PPM S-14 8.6 PPM S-15 8.8 PPM S-16 8.5 PPM S-17 8.8 PPM
-27.0	Gray and brown to red, wet, hard, CLAY to clayey SILT, trace to some fine to medium sand, trace sand pockets	35.0			I	15-17-23	12	DS	16	

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 6.75 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS



## RECORD OF SOIL EXPLORATION

Contracted With DC-DPW - Department of Transportation Boring # MW-23B  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### SAMPLER

Datum \_\_\_\_\_ Hammer Wt. 140 Lbs. Hole Diameter 12.0 In. Foreman W. Massey  
Surf. Elev. 8.05± Ft. Hammer Drop 30 In. Rock Core Dia. N/A Inspector \_\_\_\_\_  
Date Started 1/25/99 Spoon Size 3.0 In. Boring Method HSA Date Completed 1/26/99

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
					Cond	Blows/6"	No.	Type	Rec	
	Gray to brown to red, moist to wet, hard, CLAY, little silt			45	I	15-20-30	13	DS	18	8. Background was 7.0 PPM.
					I	48-23-26	14	DS	18	
				50	I	18-23-35	15	DS	18	
				55	I	25-17-26	16	DS	18	
				60	I	25-40-51	17	DS	18	
-53.4	Bottom of Boring at 61.5 Feet	61.5		65						
				70						
				75						
				80						

### SAMPLER TYPE

DS - DRIVEN SPLIT SPOON  
PT - PRESSED SHELBY TUBE  
CA - CONTINUOUS FLIGHT AUGER  
RC - ROCK CORE

### SAMPLE CONDITIONS

D - DISINTEGRATED  
I - INTACT  
U - UNDISTURBED  
L - LOST

### GROUNDWATER DEPTH

AT COMPLETION 6.75 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.  
CAVED AT \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

**APPENDIX E SECTION 2**  
***1999 Well Installation Reports***



Contracted With DC-DPW - Department of Transportation Well # MW-20  
Project Name Anacostia Str.'s Reg. Parking Lot & Access Rd-Phase II Final ESA Study Job # 98-051  
Location Southeast, Washington, D.C.

Datum \_\_\_\_\_ Well Diameter 1in. Hole Diameter 8.0 In. Foreman W. Massey  
 Surf. Elev. 7.95 Ft. Boring Method HSA Rock Core Dia. N/A Inspector \_\_\_\_\_  
 Date Started 1/27/99 Mud Type N/A Casing Diameter N/A In. Date Completed 1/27/99

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE		COMMENTS
7.7	<b>ASPHALT</b> Brown, red, moist, very dense, gravelly, coarse to fine <b>SAND</b> , little brick, trace clay	0.25	[Pattern: X's]	0	<p>4-inch Sch. 40 PVC</p> <p>0.006" slotted PVC screen</p> <p>bentonite seal</p> <p>cement grout</p> <p>filler sand</p>	<p>1. Encountered 3.0 inches of asphalt at the surface.</p> <p>2. Encountered water at 8.0 feet.</p>
3.0	<b>(FILL)</b> Dark brown to brown, trace black, wet, medium dense, clayey, fine to coarse <b>SAND</b> , little gravel, roots	5.0	[Pattern: Horizontal lines with dots]	5		
-2.5	<b>(POSSIBLE FILL)</b> Greenish brown to dark gray, wet, very soft, organic <b>SILT</b> , trace clay	10.5	[Pattern: Wavy lines]	10		
			[Pattern: Wavy lines]	15		
			[Pattern: Wavy lines]	20		
-13.5	Bottom of Boring at 21.5 Feet	21.5	[Pattern: Wavy lines]	21.5		
				25		
				30		
				35		
				40		

WELL TIP DEPTH 16.0 FT.  
DEPTH TO TOP OF RISER -3.0 FT  
SCREEN LENGTH 10.0 FT.  
RISER LENGTH 10.0 FT  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER

AT COMPLETION 2.5 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING





THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

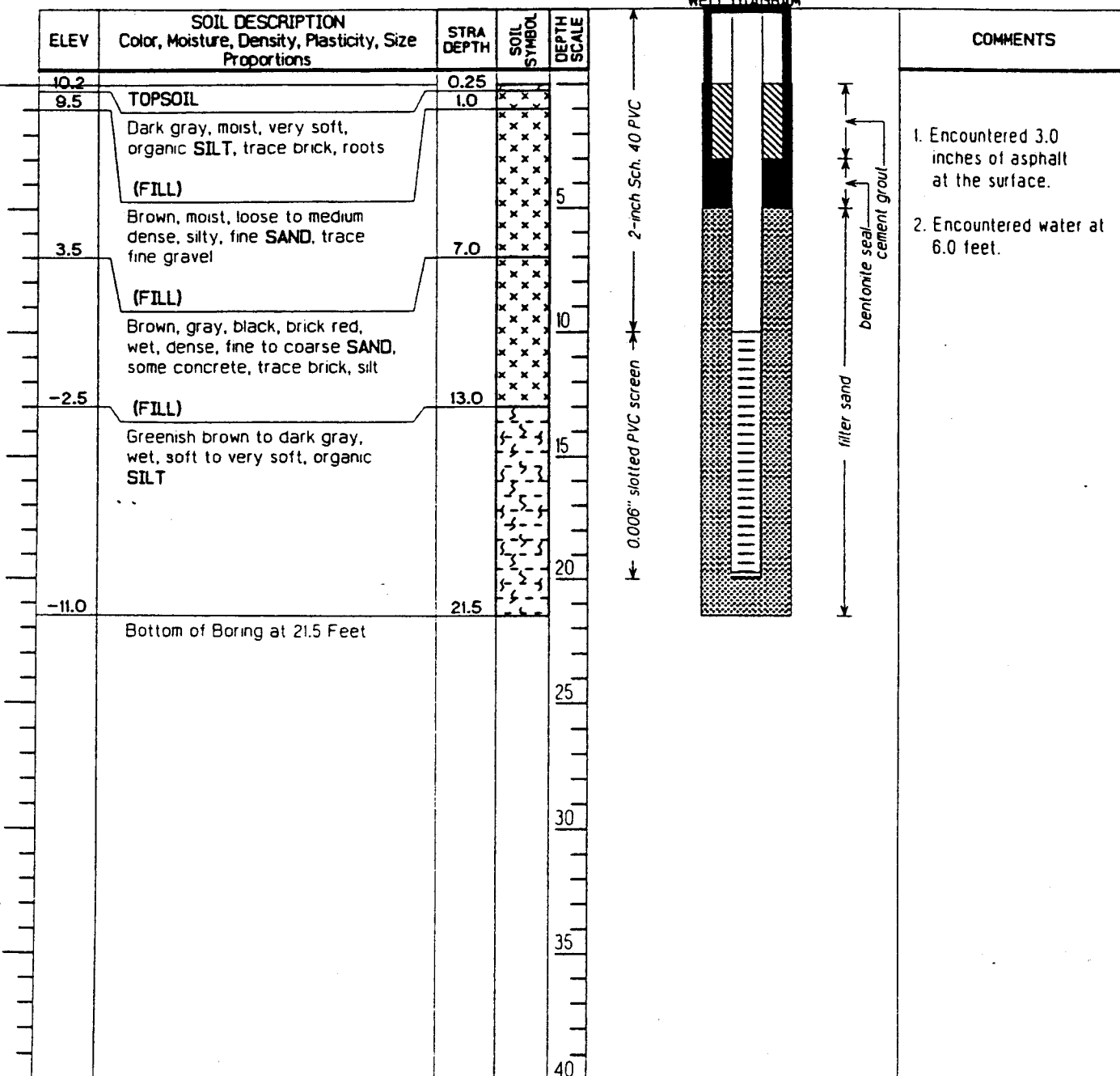
## WELL INSTALLATION REPORT

Contracted With DC-DPW - Department of Transportation Well # MW-21  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### BOREHOLE

Datum \_\_\_\_\_ Well Diameter 1 in. Hole Diameter 8.0 in. Foreman W. Mashev  
Surf. Elev. 10.49 Ft. Boring Method HSA Rock Core Dia. N/A Inspector \_\_\_\_\_  
Date Started 1/28/99 Mud Type N/A Casing Diameter N/A in. Date Completed 1/28/99

### WELL DIAGRAM



### WELL DETAILS

WELL TIP DEPTH 16.0 FT  
DEPTH TO TOP OF RISER -3.0 FT  
SCREEN LENGTH 10.0 FT  
RISER LENGTH 10.0 FT  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER \_\_\_\_\_

SAND FILTER:  
FROM 5.0 TO 21.5 FT.  
BENTONITE SEAL:  
FROM 3.0 TO 5.0 FT.  
WELL PERMIT NO. \_\_\_\_\_

### GROUNDWATER DEPTH

AT COMPLETION 5.5 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING



THOMAS L. BROWN ASSOCIATES, P.C.  
Washington, D. C.

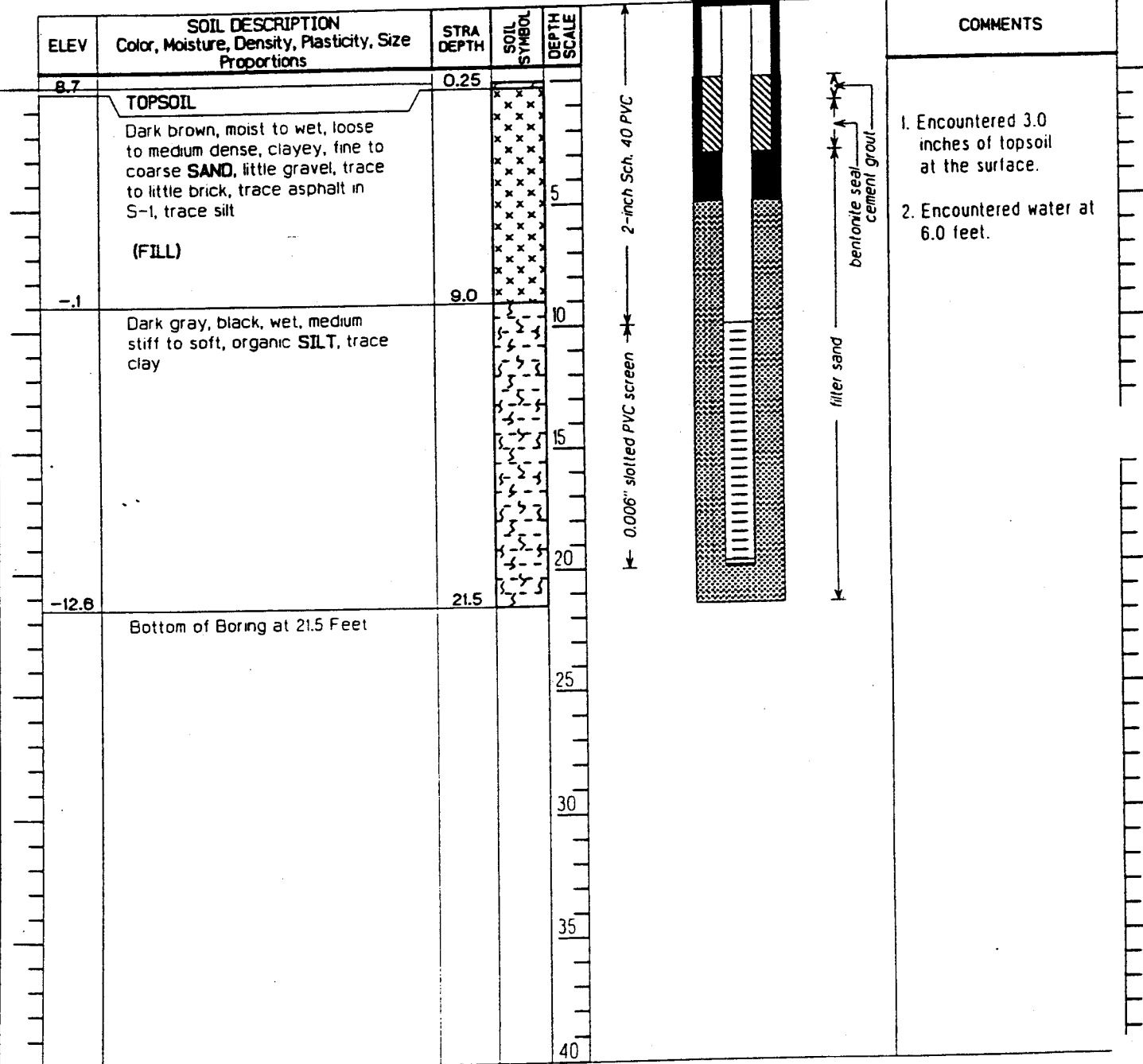
## WELL INSTALLATION REPORT

Contracted With DC-DPW - Department of Transportation Well # MW-22  
Project Name Anacostia Stn's Reg. Parking Lot & Access Rd - Phase II Final ESA Study Job # 98-051  
Location Southeast, Washington, D.C.

### BOREHOLE

Datum \_\_\_\_\_ Well Diameter 1 in. Hole Diameter 8.0 in. Foreman W. Massey  
Surf. Elev. 8.92 Ft. Boring Method HSA Rock Core Dia. N/A Inspector \_\_\_\_\_  
Date Started 1/27/99 Mud Type N/A Casing Diameter N/A in. Date Completed 1/27/99

### WELL DIAGRAM



### WELL DETAILS

WELL TIP DEPTH 16.0 FT.  
DEPTH TO TOP OF RISER -3.0 FT.  
SCREEN LENGTH 10.0 FT.  
RISER LENGTH 10.0 FT.  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER \_\_\_\_\_

SAND FILTER:  
FROM 30 TO 21.5 FT.  
BENTONITE SEAL:  
FROM 10 TO 30 FT.  
WELL PERMIT NO \_\_\_\_\_

### GROUNDWATER DEPTH

AT COMPLETION 1.5 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING



# WELL INSTALLATION REPORT

Contracted With DC-DPW - Department of Transportation Well # MW-23A  
Project Name Anacostia Stn.'s Reo. Parking Lot & Access Rd - Phase II Final ESA Study Job # 98-051  
Location Southeast, Washington, D.C.

## BOREHOLE

Datum	Well Diameter	In.	Hole Diameter	8.0 In.	Foreman	W. Massey
Surf. Elev. 8.32 Ft.	Boring Method	HSA	Rock Core Dia.	N/A	Inspector	
Date Started 1/26/99	Mud Type	N/A	Casing Diameter	N/A In.	Date Completed	1/26/99

### WELL DIAGRAM

ELEV	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH	SOIL SYMBOL	DEPTH SCALE		COMMENTS
8.1	<b>TOPSOIL</b> Dark brown, moist to wet, silty, fine to medium <b>SAND</b> , wood and concrete  (POSSIBLE FILL)	0.25		5	 2-inch Sch. 40 PVC  0.006" slotted PVC screen	1. Encountered 3.0 inches of topsoil at the surface.  2. Encountered water at 6.0 feet.
.8	Brown, wet, fine to coarse <b>SAND</b> , little fine to medium gravel	7.5		10		
-11.7	Bottom of Boring at 20.0 Feet	20.0		20		
				25		
				30		
				35		
				40		

### WELL DETAILS

WELL TIP DEPTH 16.0 FT.  
DEPTH TO TOP OF RISER -3.0 FT.  
SCREEN LENGTH 10.0 FT.  
RISER LENGTH 10.0 FT.  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER \_\_\_\_\_

SAND FILTER:

FROM 5.0 TO 20.0 FT.  
BENTONITE SEAL  
FROM 3.0 TO 5.0 FT.  
WELL PERMIT NO. \_\_\_\_\_

## GROUNDWATER DEPTH

AT COMPLETION 6.83 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

## BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING



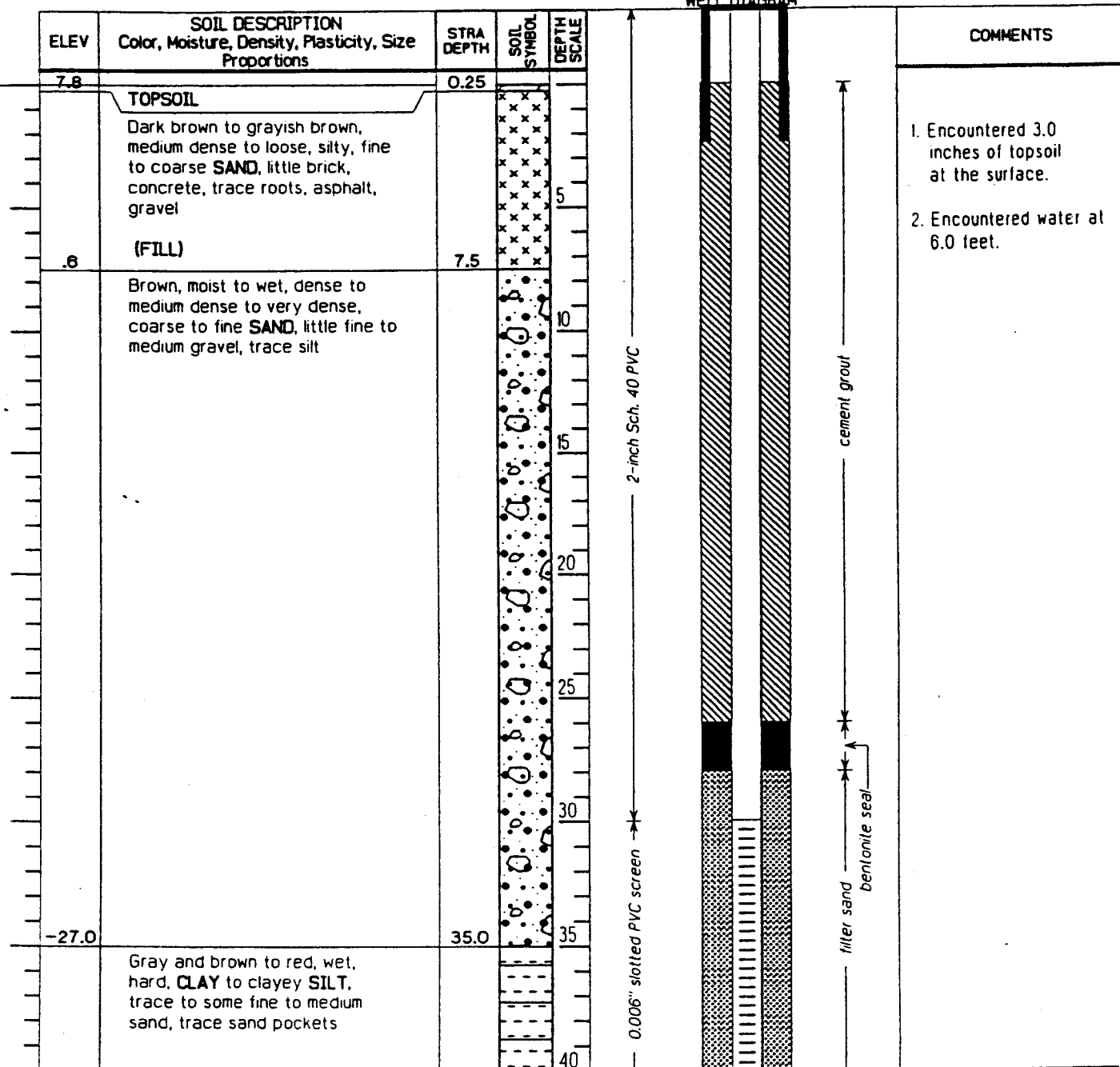
## WELL INSTALLATION REPORT

Contracted With DC-DPW - Department of Transportation Well # MW-23B  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast, Washington, D.C.

### BOREHOLE

Datum \_\_\_\_\_ Well Diameter In. Hole Diameter 8.0 In. Foreman W. Massey  
Surf. Elev. 8.05 Ft. Boring Method HSA Rock Core Dia. N/A Inspector \_\_\_\_\_  
Date Started 1/25/99 Mud Type N/A Casing Diameter N/A In. Date Completed 1/26/99

### WELL DIAGRAM



### WELL DETAILS

WELL TIP DEPTH 16.0 FT.  
DEPTH TO TOP OF RISER -3.0 FT.  
SCREEN LENGTH 20.0 FT.  
RISER LENGTH 33.0 FT.  
TYPE OF WELL COVER Stick Up  
LOCK NUMBER \_\_\_\_\_

SAND FILTER:  
FROM 28.6 TO 60.0 FT.  
BENTONITE SEAL:  
FROM 26.0 TO 28.0 FT.  
WELL PERMIT NO \_\_\_\_\_

### GROUNDWATER DEPTH

AT COMPLETION 6.75 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGER  
DC - DRIVING CASING  
MD - MUD DRILLING



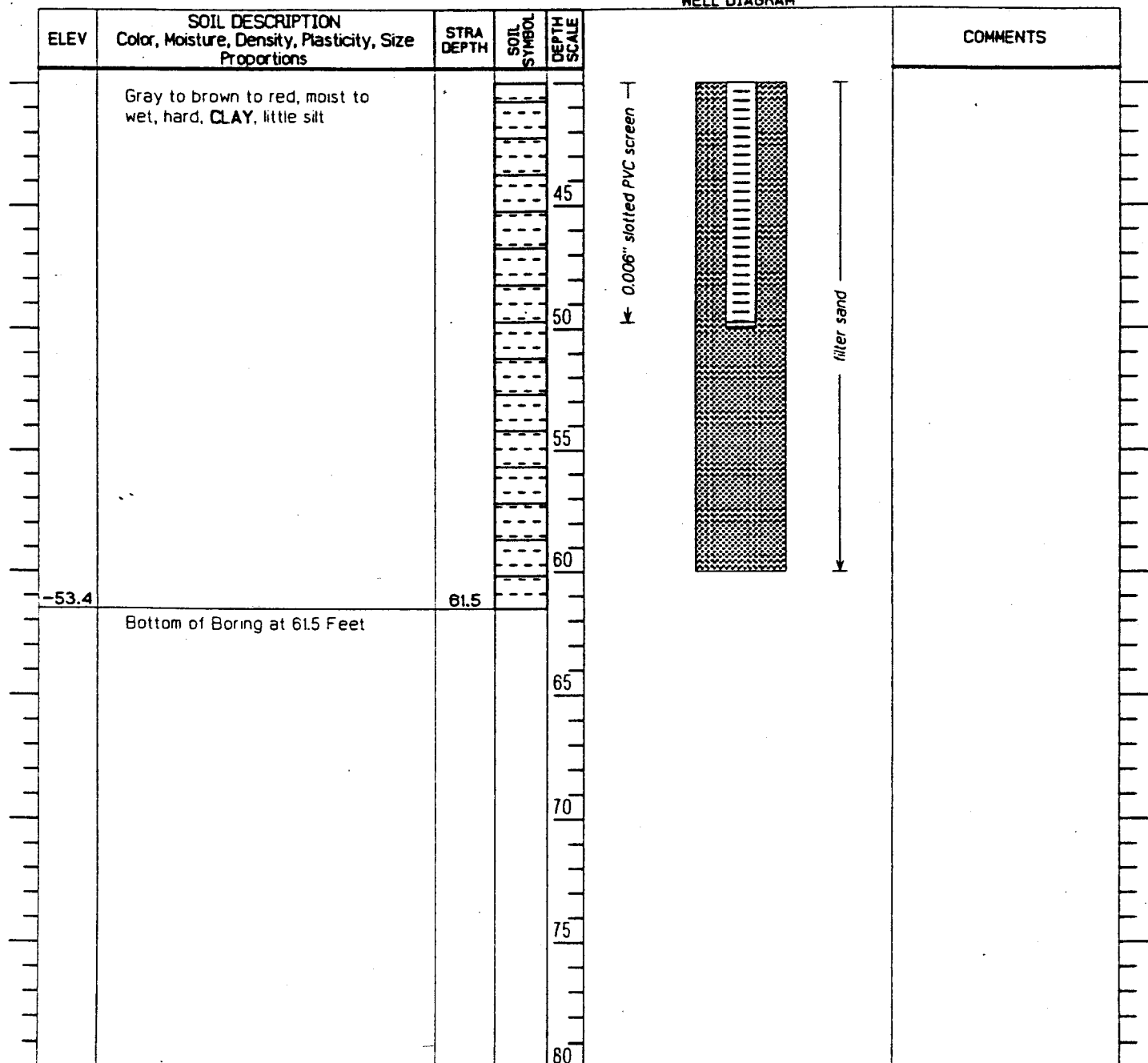
## WELL INSTALLATION REPORT

Contracted With DC-DPW - Department of Transportation Well # MW-23B  
Project Name Anacostia Station Regional Parking Lot and Access Road Job # 97009  
Location Southeast Washington, D.C.

### BOREHOLE

Datum \_\_\_\_\_ Well Diameter 1 in. Hole Diameter 8.0 in. Foreman W. Massey  
Surf. Elev. 8.05 Ft. Boring Method HSA Rock Core Dia. N/A Inspector \_\_\_\_\_  
Date Started 1/25/99 Mud Type N/A Casing Diameter N/A in. Date Completed 1/26/99

### WELL DIAGRAM



### WELL DETAILS

WELL TIP DEPTH 16.0 FT.  
DEPTH TO TOP OF RISER -3.0 FT.  
SCREEN LENGTH 20.0 FT.  
RISER LENGTH 33.0 FT.  
TYPE OF WELL COVER Slick Up  
LOCK NUMBER \_\_\_\_\_

SAND FILTER:  
FROM 28.6 TO 60.0 FT.  
BENTONITE SEAL:  
FROM 26.0 TO 28.0 FT.  
WELL PERMIT NO. \_\_\_\_\_

### GROUNDWATER DEPTH

AT COMPLETION 6.75 FT.  
AFTER \_\_\_\_\_ HRS. \_\_\_\_\_ FT.  
AFTER 24 HRS. \_\_\_\_\_ FT.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
CFA - CONTINUOUS FLIGHT AUGERS  
DC - DRIVING CASING  
MD - MUD DRILLING